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# About us

SECO is the branding for new lighting ideas to become true. We work with designers and customers to explore and extend the new lighting possibilities and ideas. This is where quality and performance and design come together to maximize the lighting performance and ensure eco-friendly at the same time.

SECO is also the branding of WINSTAR LIGHTING Company Limited. We are Thai company with well established history of producing quality lighting fixtures, inception in 1995 with the start of 5 million Baht capital to 36 million Baht capital in present. We are experience designer, manufacturer, and distributor of lighting products to dealers, contractors, building owners, etc. SECO's product portfolio covers a variety of lighting fixtures including indoor lightings such as fluorescent fixtures, downlights, high bay & low bay to outdoor lightings such as landscape light, street light, flood light, etc. and also customized lighting fixtures to fit our customers' applications and requirements.

We also do ODM and OEM for various brands and customers, especially in fluorescent lighting fixtures and sophisticate reflector design and processing. SECO lighting fixtures are designed and produced according to TISI standards. To ensure quality of our products and services, our production and quality management system have been organized in accordance with ISO9001:2008 including management responsibility, development control, document control, purchasing control, product identification and traceability, process and production control, inspection and testing status, corrective action, quality records, internal quality audits, training and statistical method. We put all affords to ensure quality to accomplish only one ultimate goal which is "customer satisfaction".





# Production

## **FACILITY**

After successful years of services our customers, we has expanded to the larger workshop premises in Prasamut Chedi, Samut Prakarn province, only 15 minutes from Bangkok. Our 18,000 sq.m. facility includes production lines, warehouses, lighting laboratory, and offices for management, sales, engineers, research and development, accounting, and human resource teams. In workshop, we pursue high quality processing machines and equipments which can handle high precision and accuracy production.

# MARKETING & SERVICE TEAM

SECO sales team focuses on delivering information, assistance, and quality services, and products to our customers at the shortest time. We are happy to share knowledge, experience, and expertise with our customers. We are proud to introduce our strength product portfolio with engineering specification sheet and technical data to help you better understand our products' characteristic and achieve design you dream of. We believe in our product quality and our loyalty to all customers to achieve a long-term win-win relationships.

## PRODUCTION TEAM

SECO production team is one of the most experienced team in this field. We focus on safety and quality of the product itself as well as the efficiency and quality of the process. Our staffs are constantly trained in every aspects of their jobs to ensure quality of our products. Furthermore, we bring software to help analyzing our production efficiency, productivity, strength and weakness. Also, in every critical point of the production lines, we have a staff from Quality Assurance team in position to achieve the highest quality possible.

## TOOLING WORKSHOP

SECO has in-house tooling department which provides new tooling for the existing as well as new products. Our skilled staffs keeps developing and improving new tooling that suitable for our production process and speed. In fact, our in-house tooling shop plays an important role in shorten our production time and time-to-market of our new products.





## MATERIAL SHOP

All SECO lighting fixtures are designed and produced according to ISO9001:2008 and required TISI standards. Electrical components like control gear, lamp holder, terminal block, wire are attentively selected from world's leading companies.

# RESEARCH & DEVELOPMENT

SECO lighting fixtures are carefully designed and tested to meet each requirement. We have in-house design team with software to shorten the design process and guarantee the efficiency of the fixtures. We design each fixture under aspects of safety, performance, quality, beauty, and economy. Our design team is equipped with machines and a lighting laboratory which allow us to develop new products in a very short time. Also, we provide lighting simulation service for customers who want light output installation simulation. We have well-trained engineers available to provide instructions and support regarding our products.

# LIGHTING LABORATORY

SECO own a in-house lighting laboratory at our own factory which is compliant to ISO/IEC17025-2005 (General Requirements of The Competence of Testing And Calibration Laboratories). This laboratories allows us to measure photometric parameters of luminaires such as indoor fixtures, street lights, flood light for spatial intensity distribution, intensity distribution curve, luminance curves, effective average intensity map, lighting probability curves, brightness limit curves, glare rating, the total luminous flux, effective flux, etc. The reliable and correctness of testing processes and information are closely controlled by our experienced engineers.

## **TOWARD**

SECO has already put ourselves into the demands and trends of customers' needs of green environment by providing an efficient fixtures with less energy consumption to support the green world. In the past, we had successful developed T5 high efficiency output fixtures awarded 1st prized in 2008 by TIEA and intensively offer the most attracting attention of newest light source, LEDs, to perform its most features of their high brightness and appealing light effect at affordable price.





# TISI Standards







TIS 903-2548



TIS 1955-2551

# ISO 9001-2008





# Award Winning High Efficiency T5 Lighting Fixture

In 2008, the Thai Illumination and Engineering Association (TIEA) held up a competition for high efficiency T5 lighting fixture to find the design that gives the highest efficiency fixture in order to guide the standard for future T5 lighting fixture. The competition was divided into 3 categories: 4x28w Fluorescent high bay, 2x28w Louver luminaire, and 2x28w Industrial type luminaire.

Almost all leading lighting fixture factories joined this competition. Under the same condition, SECO won 2 out of 3 categories which are Fluorescent high bay and Industrial type luminaire.

# 1st Prize



# Consolidate Prize





S&B0 428 FHR / 95 With maximum Light Output Ratio 97%



IT 228 WRAL / 95 With maximum Light Output Ratio



# Project References

For many years in the lighting industry, we have been working on many projects with various types of applications ranging from office buildings, factories and warehouses, government institutes, showrooms, schools and universities, hotels, residences, hospitals, and such. These references should provide you an idea how well we could serve you.

## FACTORIES & WAREHOUSES

- Thai Namtip Co., Ltd.
- Trio-Tech at Ladkrabang Indistrial zone
- Well Grow Indistrial Zone
- Seagate Factory at Chokchai
- · SB Furniture Factory
- Pimdee Factory
- · Double A Factory (Prajinburi)
- Futaya Project
- NationalBattery Factory
- Bangkok Poakapan
- · Bangkok Concrete Co., Ltd.
- Horizon Textiles Co., Ltd.
- Hawa Warehouse
- · S.S.M. Factory
- PTI Wang-noi
- · Uniliver Factories (Renovate)
- · Mitzubishi Factory
- · Suthasini Factory
- · Laemthong Sahakarm Factories
- · S.Paisan Steam Boiler Co., Ltd.
- · Suthani Factory
- . K.T. Thai Local Products Co., Ltd.

# EDUCATIONAL INSTITUTES

- · KIS International School
- · Denla Kindergarten
- · Matthayom Wat nongkhaem School
- · Juthaporn Kindergarten
- · Buddhachinnarajpittaya School
- Panjasap School

- · Wan Thamari School (Nakornsawan)
- · Mahanakorn University
- · Ramkhamhaeng-trang
- · Chandrakasem Rajbhat University
- · Songkra Rajabhat University
- · Nakhon Pathom Rajbhat University
- · Suan Dusit Rajabhat University
- King Mongkut's University of Technology Thonburi
- King Mongkut's Institute of Technology Ladkrabang
- Faculty of Veterinary Medicine of Kraseatsart University
- · Mae Fah Luang University

# OFFICE BUILDINGS

- · Q.House Co., Ltd. (Office Building)
- · Wattajak Newspaper Publishing
- · Siam City Cement Building
- · Thai Namtip Building Rama3
- World Nitting Co., Ltd.
- · Daisin/Nisson Co., Ltd.
- U.M.Tower
- · Chang Office Building
- · TPI Nakornloung Building
- · A.E.C Home Office Ratchada
- · All Season Building
- · Siam Sport Building
- · The Federation of Thai Industries Building
- · H.M.D Rayong
- · Amways Office Building
- · Warner Tower Phase2, Phase3



Veranda Resort & Spa (Hua-Hin)



Dtac Business Center - Jarmiuri Square



Muang Thong Impact Arena - Halls

CONTINUE...



# Project References (cont...)

For many years in the lighting industry, we have been working on many projects with various types of applications ranging from office buildings, factories and warehouses, government institutes, showrooms, schools and universities, hotels, residences, hospitals, and such. These references should provide you an idea how well we could serve you.

## **GOVERNMENT INSTITUTES**

- Office of Chiangmai Election Commission
- Office of Petchanuri Election Commission
- Department of Cultural Promotion Building
- · Supreme Command Headquarter
- Electricity Operating Authority Thailand at Mae Moh
- Several Office Buildings of Post Engineer Department
- Several Office Buildings of Directorate of Operations
- · Post Engineer Department Buildings
- · Ministry of Agriculture and Cooperatives
- · Bangkok Metropolitant Renovation Project
- · Park-kret Municipality Office
- · Pitsanulok Manicipality Office
- · Pravaet Police Station
- · Narathaiwart Police Station
- · Tungkru Police Station
- Magkasan Police Station
- Bang-Prae Police Station
- · Chengsane Police Station
- · Klong-taer Electricity Authority 6th Building
- · Fine Arts Department
- Thai Telecommunication Office at Longmuang
- Thai Telecommunication Office at Bangkoknoi
- · Service Center 41 Kong-taer
- Office of the Registrar
- · Lom Krao Housing Authority
- · Rat Burana District Administration Office
- Dong Mauang Fire Department
- The Federation of Thai Industries

## HOSPITALS

- · Prayathai3 Hospital
- · Nopparat Rajthani Hospital
- Police General Hospital
- · Roumpaet Hospital
- Taksin Hospital
- · Satarin Sri Building
- Maesai Hospital

# HOTELS & RESIDENTIALS

- Narmapichon Resident Project (Land & House)
- Saeree Village Rama9
- Thai Weerawat Building
- VT House Apartment
- Ladprao Garden Resident
- V.I.P Condominium
- Future Place Condominium
- Jutharat Resident
- Veranda Resort & Spa (Hua-Hin)
- Sofital So Bangkok Hotel

# OTHERS

- · Phuket Airport
- · Impact Arena (Muang Tong Thani)
- · Naparai Village Driving Range
- · Gassan Rama2 Driving Range
- · Salolak Complex
- Taxi Moving Ads
- Thai Commercial Bank (40+ branches)
- · Bank of Thailand
- · Dtac Headquarter (Jarmjuri Square)



Dtacc House - Jarmjuri Square

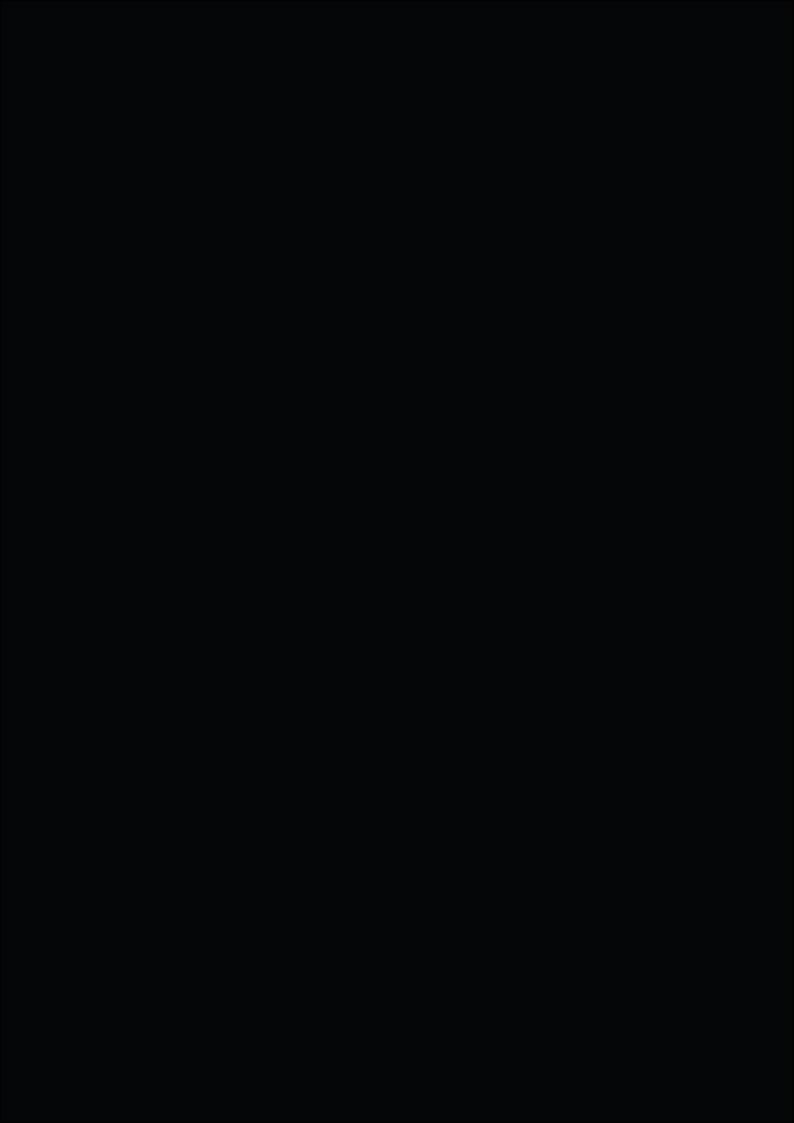


Thai Commercial Bank - Branches Renovate



Phuket Airport

AND MANY MORE ....



# Born Brightening ECO sECO LED





# LED's Key Benefits

# **EFFICIENCY**

LED is the most efficient light source available. LEDs use far less energy to provide the same amount of light as other light sources. Lumens per watt is a way of identifying how much light a bulb provides compared to the amount of energy, or wattage, used. The efficiency of LEDs produces 4 times more light per watt than incandescent bulbs; this is useful in battery powered or emergencysaving devices.

# LIFESPAN

LEDs are solid state and contain no fragile gases or filaments which have a limited lifespan. LEDs can last up to 50,000 hours or more while Metal Halide bulbs are designed to last up to 20,000hrs and High Pressure Sodium bulbs can last up to 24,000 hrs.

## ON/OFF TIME

LEDs light up very quickly. A typical red indicator LED will achieve full brightness in microseconds. LEDs used in communications devices can have even faster response times.

# COLOR

LEDs can emit light of an intended color without the use of color filters that traditional lighting methods require. This is more efficient and can lower initial costs.

LEDs can be very small (smaller than 2mm) and are easily populated onto printed circuit boards.

# COOL LIGHT

In contrast to most light sources, LEDs radiate very little heat in the form of IR that can cause damage to sensitive objects or fabrics. Wasted energy is dispersed as heat through the base of the LED.

LEDs can very easily be dimmed either by Pulse-width modulation or lowering the forward current. Today's technology is now incorporating into its light products that allows intelligent dimming both programmed and remotely configurable.

## SLOW FAILURE

LEDs mostly fail by dimming over time, rather than the abrupt burn-

LEDs, being solid state components, are difficult to damage with external shock, unlike fluorescent and incandescent bulbs which

The solid package of the LED can be designed to focus its light. Incandescent and fluorescent sources often require an external

Most LED lights operate at low voltage so much safer to handle during installation and maintenance and can be exposed to rain

lighting as they do not contain mercury or CO2 or other harmful





# LED's Facts

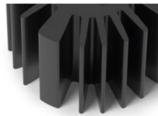
# LED BASIC TECHNOLOGY

LEDs, stands for Light Emitting Diode, are small light source that become illuminated by the movement of electrons through a semiconductor material. A diode is a positive/negative transition which allows electrons to flow in only one direction. When electrons make a transition, they give off a photon of light. For that reason a diode is called a semiconductor. Thus, LED light isn't generated by heating a filament (that could easily break) but by electro-luminescence.



# HEAT EXCHANGER

Even though LEDs do not radiate infrared heat, waste heat is produced during the conversion of electricity into light and, if not properly removed from the lighting system, may potentially damage the LEDS and effect the product lifetime. Thus, thermal management plays an integral part in the length of LED source lifetime and is directly affected by fixture design. This can be achieved through an appropriately design heat sink. The success of heat dissipation involves limiting the operating temperature of the LED light source in the so-called Tj (junction temperature) point.



# DRIVER

Driver maintains proper current and voltage levels to the LEDs within the specific range at which the LEDs are designed to perform. High powered LEDs include anything power at 1-watt or greater and require constant current drivers in order to protect the LEDs from over-current. LED also require a minimum current in order to light. Optimally designed fixtures include drivers that account for compatibility with dimmers.

# **OPTIC**

Optics control the beam spread distribution of light form the point source LEDs and have a dramatic effect on fixture performance. Desiging and specifying the materials to be used for a fixture is vital to achieve the luminous efficiency ratios specified. Quality LED optics deliver over 90% of the light emitted more evenly over the area to be lit, dissipating hot spots, rings and shadows. We design and choose the optic by always think about the benefits of the overall result.



# LIFE SPAN

LEDS have a long source life, but like all light sources, they slowly fade over time. The light output degradation, also known as lumen maintenance, is predicted by testing LEDs over a long period of time in order to determine when a specified percentage of light output is lost. Factors such as the effectiveness of thermal management, ambient temperatures, and electrical drives currents are contribute to lumen depreciation.



LED lighting is creating a revolution in the lighting industry by providing fresh solutions for traditional lighting applications and exciting new applications for lighting that we can currently barely imagine.





# LED-T8

LED T8 Fluorescent Retrofit Tube

T8 Florescent tube has been a conventional tube and widely use for many years. However LED T8 fluorescent tube has the advantages over traditional T8 fluorescent lamp especially longer life hours, more energy saving and more ecologically friendly

# ADVANTAGES

- · 3x longer life hours at least
- · 60% saving on energy consumption
- · 66% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

# **FEATURES**

LED Brand / Type: Brightlux / SMD
 Housing: Aluminium extrusion
 Optics: Polycarbonate (PC)
 End Cap: Polycarbonate (PC)

Lamp holder: G13

Working Voltage: 100 - 240VAC
 Operating Temperature: -10°C - +40°C
 Life Span: 35,000 hrs
 Dimmable: No
 Warranty: 2 years

# APPLICATION

 Showrooms, Shops, Department Stores, Offices, Commercial Building, etc.







MODEL NO	REPLACE- MENT	LENGTH (mm.)	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)	BEAM ANGLE
T8-1-10W645-M-060	T8 - 18w.	600	10	> 0.9	825	4500	> 75	120
T8-1-10W665-M-060	T8 - 18w.	600	10	> 0.9	850	6500	> 75	120
T8-1-19W645-M-120	T8 - 36w.	1,200	19	> 0.9	1800	4500	> 75	120
T8-1-19W665-M-120	T8 - 36w.	1,200	19	> 0.9	1900	6500	> 75	120













Halogen MR16 lamp has been a conventional tube and widely use for many years. However LED Halogen MR16 lamp is an ideal alternatives to conventional halogen MR16 lamp. It has the advantages over traditional T8 fluorescent lamp especially longer life hours, less heat generated through light source, more energy saving and more ecologically friendly

# ADVANTAGES

- · 6x longer life hours
- · 80% saving on energy consumption
- · 83% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

## **FEATURES**

Brightlux / SMD · LED Brand / Type: · Housing: Aluminium · Optics: Polycarbonate (PC)

GU5.3 · Lamp holder: 12VDC · Working Voltage: -10°C - +40°C · Operating Temperature: · Life Span: 35,000 hrs No · Dimmable: · Warranty: 2 years

# APPLICATION

· Showrooms, Shops, Department Stores, Offices, Commercial Building, residenses, etc.





MODEL NO	REPLACEMENT	DIMENSION W x H (mm.)	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)	BEAM ANGLE
HGX-1-3W845-30-ND	MR16 - 20w.	50 x 51	3 x 1w.	> 0.9	165	3000	> 70	30
HGX-1-3W865-30-ND	MR16 - 20w.	50 x 51	3 x 1w.	> 0.9	190	6500	> 70	30
HGX-1-5W845-30-ND	MR16 - 50w.	50 x 51	5 x 1w.	> 0.9	330	3000	> 70	30
HGX-1-5W865-30-ND	MR16 - 50w.	50 x 51	5 x 1w.	> 0.9	380	6500	> 70	30





# LED-QR111 LED QR111 Retrofit Lamp

QR111 lamp has been a conventional tube and widely use to in shop lighting for several years. However LED QR111 lamp is more ecologically friendly due to low energy consumtion, generate much lower heat.

# ADVANTAGES

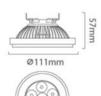
- · 6x longer life hours
- · 60% saving on energy consumption
- · 83% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

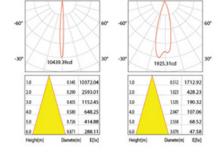
# **FEATURES**

· LED Brand / Type: CREE / SMD · Housing: Aluminium · Optics: Polycarbonate (PC) · Lamp holder: GU5.3 · Working Voltage: 12 VDC -15°C - +50°C · Operating Temperature: · Light Degree: 8, 25 degree · Life Span: 35,000 hrs · Dimmable: No · Warranty: 2 years

# APPLICATION

 Showrooms, Shops, Department Stores, Offices, Commercial Building, residenses, etc.







MODEL NO	REPLACEMENT	DIMENSION W x H (mm.)	WATT (w)	ANGLE	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
QR111-1-12W630-8	QR111 - 100w.	111 x 57	12	8°	720	3000	> 70
QR111-1-12W630-25	QR111 - 100w.	111 x 57	12	25°	720	3000	> 70





E14 Candle bulb has been a conventional tube and widely use for many years. However LED Candle bulb is an ideal alternatives to conventional E14 candle bulb. It has the advantages over traditional E14 candle bulb especially longer life hours, less heat generated through light source, more energy saving and more ecologically friendly

# **ADVANTAGES**

- · 25x longer life hours
- · 50% saving on energy consumption
- · 96% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

## **FEATURES**

Brightlux / SMD · LED Brand / Type: · Housing: Aluminium · Optics: **PMMA** · Lamp holder: E14 100 - 240VAC Working Voltage: -10°C - +60°C · Operating Temperature: · Life Span: 25,000 hrs · Dimmable: No · Warranty: 2 years

# APPLICATION

 Widely used in crystal lamps, chandeliers, candle lamps, and high-end lamps.



MODEL NO	REPLACEMENT	DIMENSION W x H (mm.)	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)	REMARK
CND-1-3W630	Candle - 25w.	36 x 107	3	-	260	3000	> 70	















GLS lamp has been a conventional lamp and widely use for many years. However LED GLS lamp is more eco-friendly and energy saving than the traditional GLS lamp.



- · 6x longer life hours
- · 80% saving on energy consumption
- · 83% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

# **FEATURES**

· LED Brand / Type: Brightlux / SMD · Housing: Aluminium · Optics: Polycarbonate (PC) Lamp holder: E27 100 - 240VAC

 Working Voltage: -10°C - +40°C · Operating Temperature: 35,000 hrs · Life Span: · Dimmable: No · Warranty: 2 years

# APPLICATION

• Showrooms, Shops, Department Stores, Offices, Commercial Building, residenses, etc.





MODEL NO	REPLACEMENT	DIMENSION W x H (mm.)	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
GLS-1-5W645-M	GLS - 25w.	65 x 128	5	> 0.9	450	4500	> 70
GLS-1-5W665-M	GLS - 25w.	65 x 128	5	> 0.9	500	6500	> 70
GLS-1-8W645-M	GLS - 40w.	65 x 128	8	> 0.9	720	4500	> 70
GLS-1-8W665-M	GLS - 40w.	65 x 128	8	> 0.9	770	6500	> 70
GLS-1-10W645-M	GLS - 60w.	65 x 128	10	> 0.9	900	4500	> 70
GLS-1-10W645-M	GLS - 60w.	65 x 128	10	> 0.9	990	6500	> 70













LED G4 Retrofit Lamp

# SPECIFICATION

· Lamp Holder: 12 VDC · Input Voltage: · Wattage: 3 w. · LED Brand: CREE · Color Temperature: 3000K

· Dimension: W: 18mm x H: 50mm.

· Life Span: 40,000 hrs





# LED-G9

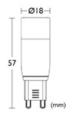
LED G9 Retrofit Lamp

# SPECIFICATION

· Lamp Holder: G9 · Input Voltage: 220 VAC · Wattage: 3 w. CREE · LED Brand: · Color Temperature: 3000K

· Dimension: W: 18mm x H: 57mm.

· Life Span: 40,000 hrs



















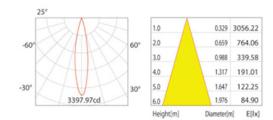
PAR lamp has been a conventional bulb and widely use for many years. However LED PAR lamp is an ideal alternatives to conventional PAR lamp. The longer life hours, less heat generated through light source, more energy saving and more ecologically friendly are benefits over traditional PAR lamp

# **ADVANTAGES**

- · 25x longer life hours
- · 60% saving on energy consumption
- · 96% saving on maintenance cost
- · No UV, no IR, no CO2, no Mercury & lead free

# **FEATURES**

· LED Brand / Type: Brightlux / SMD · Housing: Aluminium **PMMA** · Optics: · Lamp holder: E27 100 - 240VAC · Working Voltage: -15°C - +40°C · Operating Temperature: · Life Degree: 25 degree · Life Span: 25,000 hrs · Dimmable: No



# APPLICATION

· Warranty:

· Widely used for shop lighting, showroom to highlight an object to an area.

2 years





MODEL NO	REPLACEMENT	DIMENSION W x H (mm.)	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	BEAM ANGLE
PAR20-1-9W630-24	PAR20 - 50W.	64 x 90	9	0.95	300	3000K	24°
PAR30-1-12W630-15	PAR30 - 75w.	95 x 100	12	0.95	600	3000K	15°
PAR30-1-12W630-40	PAR30 - 75w.	95 x 100	12	0.95	600	3000K	40°
PAR38-1-18W630-15	PAR38 - 100w.	120 x 130	18	0.95	900	3000K	15°
PAR38-1-18W630-40	PAR38 - 100w.	120 x 130	18	0.95	900	3000K	40°





# FCL-CR

Recessed LED Louver Luminaire









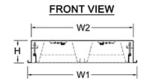
## HOUSING

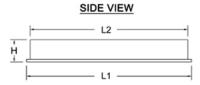
- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

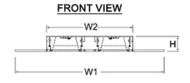
# REFLECTOR & LOUVER

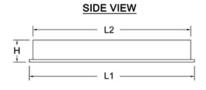
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal.
- · Louver and profiles are applied to anti-glare.

- · For recessed T-bar and Gypsum ceiling installation.
- Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.









MODEL NO REPLACEM	REPLACEMENT		LUMINOUS	COLOR	DIMENSION (mm.)					
MODEL NO	REPLACEMENT	WATT	FLUX (Lumen)	TEMPERATURE (K)	L1	L2	W1	W2	Н	
FCL-CR 42	2 x T5 28w.	LED Module - 42w.	4000	Daylight - 6500	1195	1175	295	275	60	
FCL-CBR 42	2 x T5 28w.	LED Module - 42w.	4000	Daylight - 6500	1195	1175	595	345	60	





# SCL-CR

# Surfaced Mounted LED Louver Luminaire





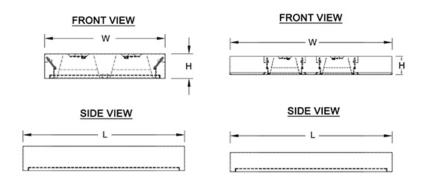
## HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

# REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal.
- · Louver and profiles are applied to anti-glare.

- · For surface mounting or suspention rod installation.
- Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.



MODEL NO REPLACE	DEDI ACEMENT	REPLACEMENT WATT		COLOR	DIN	DIMENSION (mm.)			
MODEL NO	REPLACEMENT	WAII	FLUX (Lumen)	TEMPERATURE (K)	L1	W1	Н		
SCL-CR 42	2 x T5 28w.	LED Module - 42w.	4000	Daylight - 6500	1951	295	60		
SCL-CBR 42	2 x T5 28w.	LED Module - 42w.	4000	Daylight - 6500	1951	295	60		





# FCL-PL

# Recessed LED Prismatic Diffuser Luminaire





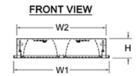


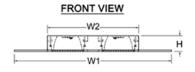
- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

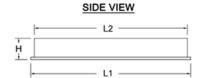
# REFLECTOR & DIFFUSER

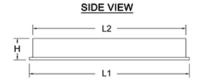
- · Opal prismetic diffuser for smooth light distribution.
- · Spring-lock type for ease of maintenance.

- · For recessed T-bar and Gypsum ceiling installation.
- Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.









MODEL NO. DEDLACEMENT			COLOR		DIME	NSION (r	nm.)		
MODEL NO	REPLACEMENT	WATT	FLUX (Lumen)	TEMPERATURE (K)	L1	L2	W1	W2	Н
FCL-PL 42	2 x T5 28w.	LED Module - 42w.	3800	Daylight - 6500	1195	1175	295	275	60
FCL-PBL 42	2 x T5 28w.	LED Module - 42w.	3800	Daylight - 6500	1195	1175	595	345	60





# SCL-PL Surfaced LED Prismatic Diffuser Luminaire





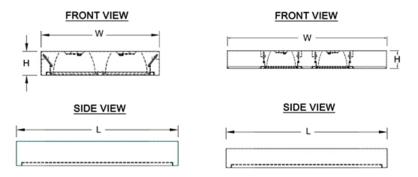
## HOUSING

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

# REFLECTOR & DIFFUSER

- Opal prismetic diffuser for smooth light distribution.
- · Spring-lock type for ease of maintenance.

- · For surface mounting or suspention rod installation.
- · Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.



MODEL NO REPLACEMENT	REPLACEMENT WATT FLUX		COLOR	DIMENSION (mm.)			
MODEL NO	REPLACEMENT	WATI	(Lumen)	TEMPERATURE (K)	L1	W1	Н
SCL-PL 42	2 x T5 28w.	LED Module - 42w.	3800	Daylight - 6500	1195	295	60
SCL-PBL 42	2 x T5 28w.	LED Module - 42w.	3800	Daylight - 6500	1195	295	60





# T&F3-CR LED

Recessed LED Louver Luminaire

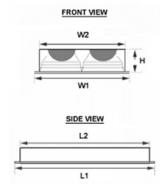
## HOUSING

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

## REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare.
- · Louver and profiles are applied to anti-glare.
- · Clip-lock type for ease of maintenance.

- For recessed T-bar and Gypsum ceiling installation.
- Recommended for commercial buildings, shops, hospitals, department stores, schools,





MODEL NO REPLACEMENT WATT	MATT	LUMINOUS	COLOR	DIMENSION (mm.)					
MODEL NO	REPLACEMENT	WAII	FLUX (Lumen)	TEMPERATURE (K)	L1	L2	W1	W2	Н
T&F3 21 CR	2 x T5 14w.	LED Module - 21w.	4000	Daylight - 6500	595	570	295	270	65
T&F3 42 CR	2 x T5 28w.	LED Module - 42w.	4000	Daylight - 6500	1195	1170	295	270	65





# LIT-CL LED Pendant Louver Luminaire

- · Made of high quality cold-rolled steel sheet
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · 99.85% high purity anodized aluminium reflector
- · For suspension or surface mounted installation.



MODEL NO	MODEL NO REPLACEMENT	WATT	Color Temperature	LUMINOUS FLUX	DIMENSION (mm.)				
MODEL NO REPLACE	REPLACEMENT	WALL	(K)	(Lumen)	L	W	Н		
LIT-CL 21	T5 1x28w	LED Module - 21w	4000K	1680	1170	100	100		
LIT-CL 21	T8 1x36w	LED Module - 21w	6500K	1770	1170	100	100		
LIT-CL 42	T5 2x28w	LED Module - 42w	4000K	3340	1170	100	100		
LIT-CL 42	T8 2x36w	LED Module - 42w	6500K,	3500	1170	100	100		



# LIT-PL

# LED Pendant Acrylic Diffuser Luminaire

- · Made of high quality cold-rolled steel sheet
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Opal acrylic diffuser for smooth light distribution
- · For suspension or surface mounted installation.



MODEL NO REPLACE	REPLACEMENT	MENT WATT	Color Temperature	LUMINOUS FLUX	DIMENSION (mm.)			
	REFLACEMENT	WATT	(K)	(Lumen)	L	W	Н	
LIT-PL 21	T5 1x28w	LED Module - 21w	4000K	1650	1170	100	100	
LIT-PL 21	T8 1x36w	LED Module - 21w	6500K	1750	1170	100	100	
LIT-PL 42	T5 2x28w	LED Module - 42w	4000K	3180	1170	100	100	
LIT-PL 42	T8 2x36w	LED Module - 42w	6500K,	3350	1170	100	100	







# PE2-LED

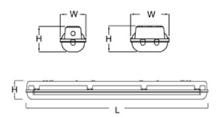
LED Weather proof Luminaire

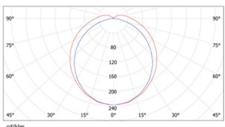
# HOUSING

- Injected polycarbonate (PC) in grey color with injection molded clear prismatic UV stabilized polycarbonate (PC) with curved to anti-glare.
- · Cold-rolled steel plate, finished with high glossy baked white polyester powder coating
- · Diffuser: Opal polycarbonate diffuser for anti-glare
- · Stainless clip lock (SL). Optinal: Polycarbonate (PC) clip lock
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).

## **INSTALLATION & APPLICATION**

· Suitable for semi-outdoor or outdoor application











# S&BL-FPRJ

Acrylic Diffuser Type Fluorescent High Bay



# HOUSING

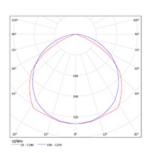
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

## REFLECTOR & DIFFUSER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for high efficiency purpose.
- · High quality clear acrylic diffuser with steel painted frame.
- · Stainless clip-lock type for ease of maintenance.
- · Weather proof gasket seal for higher prevention (Optional).
- · Wire guard cover (Optional).

- · For surface mounted or suspension rods installation.
- · Recommended for warehouses, factories, gymnesium, etc.







MODEL NO. DES	REPLACEMENT	WATT	LUMINOUS	BEAM	COLOR	DIMENSION (mm.)			
MODEL NO	NO REPLACEMENT	WATT	FLUX (Lumen)	ANGLE	TEMPERATURE (K)	L	W	Н	
S&BL 221 FHRJ	2 x T5 28w.	LED Module - 42w.	4200	120	4000K, 6500K	1200	300	94	
S&BL 321 FHRJ	3 x T5 28w.	LED Module - 63w.	6300	120	4000K, 6500K	1200	405	94	
S&BL 421 FHRJ	4 x T5 28w.	LED Module - 84w.	8400	120	4000K, 6500K	1200	525	94	
S&BL 621 FHRJ	6 x T5 28w.	LED Module - 126w.	12600	120	4000K, 6500K	1200	525	94	
S&BL 254 FHRJ	3 x T5 54w.	LED Module - 109w.	11100	120	4000K, 6500K	1200	300	94	
S&BL 354 FHRJ	4 x T5 54w.	LED Module - 164w.	16650	120	4000K, 6500K	1200	405	94	
S&BL 454 FHRJ	6 x T5 54w.	LED Module - 218w	22200	120	4000K, 6500K	1200	525	94	





# WBD

LED Bed Light Luminaires

# SPECIFICATION

Aluminium light head, steel flexible arm. Polycarbonate optic lens Housing:

· Optic:

 Gear Box: Steel gear box at the base for driver

· Installation: Surface mounting with screws

· Application: Designed for bed lamp, living area reading lamp

and rest home.



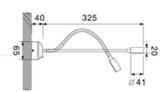


# WBD-001

LED Bed Light Luminaires

LED

1x1W / 1x3W



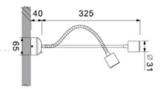


# WBD-002

LED Bed Light Luminaires

LED

1x1W / 1x3W

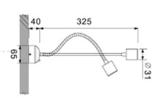




# WBD-003

LED Bed Light Luminaires

LED 1x1W / 1x3W









# DRC-350

LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Diffuser: Polycarbonate lens · Color: 3000K, 4000K, 6500K · Driver: External driver

· Suitable for general decoration such as cabinet, casts, etc.

LED

1.4W







# DRC-360 LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Diffuser: Polycarbonate lens . Color: 3000K, 4000K, 6500K · Driver: External driver

· Suitable for general decoration such as cabinet, casts, etc.











# DRC-370

LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Diffuser: Polycarbonate lens · Color: 3000K, 4000K, 6500K · Driver: External driver

· Suitable for general decoration such as cabinet, casts, etc.











# DRC-380

LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Diffuser: Polycarbonate lens

· Color: 3000K, 4000K, 6500K · Driver: External driver

· Suitable for general decoration such as cabinet, casts, etc.

LED 1.4W

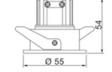






# DRM-772 COB Downlight Luminaire

- · Housing: Die-cast aluminium housing with polyester powder coated
- · Luminous Flux: 230 lumen
- Beam Angle: 24°
- Operating Temperature: -25°C ~ 50°C
- Color Rendering: ≥70
- · Suitable for general decoration such as residential, shop, etc.







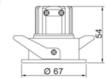






# DRM-792 COB Downlight Luminaire

- · Housing: Die-cast aluminium housing with polyester powder coated
- · Luminous Flux: 230 lumen
- · Beam Angle: 24°
- Operating Temperature: -25°C ~ 50°C
- Color Rendering: ≥70
- · Suitable for general decoration such as residential, shop, etc.





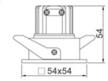




# DRM-782

# COB Downlight Luminaire

- · Housing: Die-cast aluminium housing with polyester powder coated
- · Luminous Flux: 230 lumen
- Beam Angle: 24°
- Operating Temperature:  $-25^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- Color Rendering: ≥70
- · Suitable for general decoration such as residential, shop, etc.



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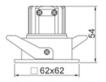
LED 3W



# DRM-802

# COB Downlight Luminaire

- · Housing: Die-cast aluminium housing with polyester powder coated
- · Luminous Flux: 230 lumen
- · Beam Angle: 24°
- Operating Temperature: -25°C ~ 50°C
- Color Rendering: ≥70
- · Suitable for general decoration such as residential, shop, etc.





3W





# DRM-233

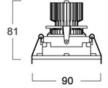
# COB Downlight Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Luminous Flux: 1100 lumen

• Operating Temperature: -20°C ~ 65°C

. Color Rendering: ≥80

· Suitable for general decoration such as residential, shop, etc.





LED 6W / 13W

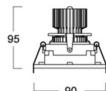


# DRM-273 COB Downlight Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Luminous Flux: 1100 lumen · Operating Temperature: -20°C ~ 65°C

Color Rendering: ≥80

· Suitable for general decoration such as residential, shop, etc.





6W / 13W



# DRM-283

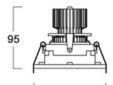
# COB Downlight Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Luminous Flux: 1100 lumen

• Operating Temperature: -20°C ~ 65°C

. Color Rendering: ≥80

· Suitable for general decoration such as residential, shop, etc.





6W / 13W



# 









# DRM-293

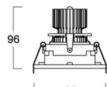
# COB Downlight Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Luminous Flux: 1100 lumen

Operating Temperature: -20°C ~ 65°C

Color Rendering: ≥80

· Suitable for general decoration such as residential, shop, etc.





LED 6W / 13W





# DRV-SR1

SMD LED Round Recessed Downlight

LED Downlight is a low cost lighting typically for commercial lighting applications. It has the advantages over a traditional compact fluorescent lamp (CFL) especially longer life hours, more energy saving, and more ecologically friendly.

# **ADVANTAGES**

- · 2x longer life hours
- · 60% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & leads free

## **FEATURES**

LED Brand / Type: SMD 5630 Epistar LED
Housing: Aluminium
Optics: Opal polycarbonate
Dimmable: Non Dimmable
Working Voltage: 86 - 265VAC 50-60Hz
Operating Temperature: -20°C - +65°C
THD:

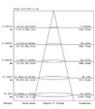
THD: <10%</li>
 Power Factor: >0.95
 CRI (Ra): 70
 Beam Angle: 100
 Life Span: 30,000 hrs
 Warranty: 2 years

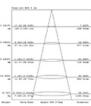
# APPLICATION

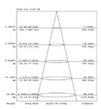
 Widely used in showrooms, shops, department stores, shopping malls, etc













MODEL NO	REPLACE-	WATT (w)	DIMENSION W x H (mm.)	CUT OUT (mm)	LED	LUMINOUS	COLOR TEMP.	LIGHT OUTPUT (Ix)			
	MENT				LLU	(Lumen)	(Kelvin)	@2m	@3m	@4m	
DRV-SR1-12W-WW	PLC - 1 x 18w	12	140x45	125	36 LEDs	830	3000	88.55	39.35	22.14	
DRV-SR1-12W-NW	PLC - 1 x 18w	12	140x45	125	36 LEDS	830	4000	88.55	39.35	22.14	
DRV-SR1-18W-WW	PLC - 2 x 18w	18	190 x 40	170	E4LED:	1320	3000	134.81	59.90	33.70	
DRV-SR1-18W-NW	PLC - 2 x 18w	18	190 x 40	170	54LEDs	1320	4000	134.81	59.90	33.70	
DRV-SR1-24W-WW	PLC - 2 x 26w	24	230 x 60	210	70   50	1690	3000	173.91	77.29	43.48	
DRV-SR1-24W-NW	PLC - 2 x 26w	24	230 x 60	210	72 LEDs	1690	4000	173.91	77.29	43.48	





# DRV-SS1

SMD LED Round Recessed Downlight



LED Downlight is a low cost lighting typically for commercial lighting applications. It has the advantages over a traditional compact fluorescent lamp (CFL) especially longer life hours, more energy saving, and more ecologically friendly.

# ADVANTAGES

- · 2x longer life hours
- · 60% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & leads free

# **FEATURES**

LED Brand / Type: SMD 5630 Epistar LED

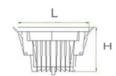
Housing: Aluminium

Optics: Opal polycarbonate
 Dimmable: Non Dimmable
 Working Voltage: 86 - 265VAC 50-60Hz

Operating Temperature: -20°C - +65°C
 THD: <10%</li>
 Power Factor: >0.95
 CRI (Ra): 70
 Beam Angle: 100
 Life Span: 30,000 hrs
 Warranty: 2 years

# APPLICATION

· Widely used in showrooms, shops, department stores, shopping malls, etc





MODEL NO	REPLACE-	WATT	LxWxH	CUT OUT (mm)	LED	LUMINOUS	COLOR TEMP.	LIGHT OUTPUT (Ix)			
WODEL NO	MENT	(w)			LLD	(Lumen)	(Kelvin)	@2m	@3m	@4m	
DRV-SS1-12W-WW	PLC - 1 x 18w	12	140 x 140 x 45	125	36 LEDs	830	3000	88.55	39.35	22.14	
DRV-SS1-12W-NW	PLC - 1 x 18w	12	140 x 140 x 45	125	36 LEDS	830	4000	88.55	39.35	22.14	
DRV-SS1-18W-WW	PLC - 2 x 18w	18	190 x 190 x 40	170	EALED-	1320	3000	134.81	59.90	33.70	
DRV-SS1-18W-NW	PLC - 2 x 18w	18	190 x 190 x 40	170	54LEDs	1320	4000	134.81	59.90	33.70	
DRV-SS1-24W-WW	PLC - 2 x 26w	24	230 x 230 x 60	210	70150-	1690	3000	173.91	77.29	43.48	
DRV-SS1-24W-NW	PLC - 2 x 26w	24	230 x 230 x 60	210	72 LEDs	1690	4000	173.91	77.29	43.48	





# DRV-CR1

COB LED Round Recessed Downlight

LED Downlight is a low cost lighting typically for commercial lighting applications. It has the advantages over a traditional compact fluorescent lamp (CFL) especially longer life hours, more energy saving, and more ecologically friendly.

# **ADVANTAGES**

- · 2x longer life hours
- · 80% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & leads free

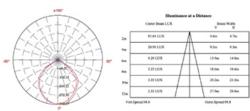
## **FEATURES**

· LED Brand / Type: COB Sharp LED · Housing: Aluminium · Optics: Glass · Dimmable: Non Dimmable Working Voltage: 100 - 240VAC -20°C - +65°C · Operating Temperature: · Life Span: 30,000 hrs · Warranty: 2 years

## APPLICATION

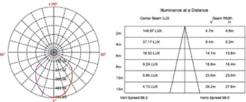
 Widely used in showrooms, shops, department stores, shopping malls, etc.



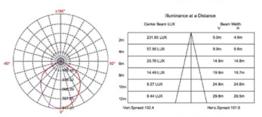


DRV-CR1-10w

| P20 | F | ⊕ | ☐ | ⊕



DRV-CR1-20w



DRV-CR1-30w

MODEL NO RE	REPLACEMENT	DIMENSION W x H (mm.)	CUT OUT	WATT	LUMINOUS FLUX	COLOR TEMP.	CRI (Ra)	LIGHT OUTPUT (IX)		
	REPLACEMENT		(mm)	(w)	(Lumen)	(Kelvin)		@2m	@4m	@6m
DRV-CR1-8W-WW	PLC - 1 x 13w	132x85	120	8	680	3000	70	54	13	6
DRV-CR1-8W-NW	PLC - 1 x 13w	132x85	120	8	680	4000	70	54	13	6
DRV-CR1-10W-WW	PLC - 1 x 18w	165x95	150	10	850	3000	70	83	20	9
DRV-CR1-10W-NW	PLC - 1 x 18w	165x95	150	10	850	4000	70	83	20	9
DRV-CR1-20W-WW	PLC - 2 x 18w	190x110	175	20	1700	3000	70	148	37	16
DRV-CR1-20W-NW	PLC - 2 x 18w	190x110	175	20	1700	4000	70	148	37	16
DRV-CR1-30W-WW	PLC - 2 x 42w	230x110	215	30	2600	3000	70	231	58	14
DRV-CR1-30W-NW	PLC - 2 x 42w	230x110	215	30	2600	4000	70	231	58	14





## DRV-CS1

COB LED Square Recessed Downlight



LED Downlight is a low cost lighting typically for commercial lighting applications. It has the advantages over a traditional compact fluorescent lamp (CFL) especially longer life hours, more energy saving, and more ecologically friendly.

#### **ADVANTAGES**

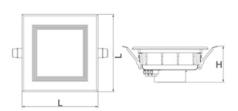
- · 2x longer life hours
- 80% saving on energy consumption
- No UV, no IR, no CO2, no Mercury & leads free

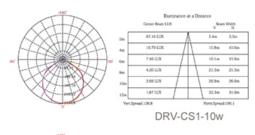
#### **FEATURES**

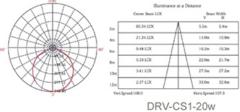
· LED Brand / Type: COB Sharp LED Aluminium · Housing: Glass · Optics: · Dimmable: Non Dimmable 100 - 240VAC Working Voltage: -20°C - +65°C · Operating Temperature: · Life Span: 30,000 hrs · Warranty: 2 years

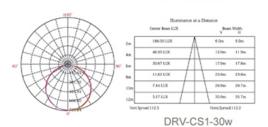
#### APPLICATION

 Widely used in showrooms, shops, department stores, shopping malls, etc.









MODEL NO	REPLACEMENT	DIMENSION W x H	CUT OUT	WATT	LUMINOUS	COLOR TEMP.	CRI	LIGHT OUTPUT (IX)		
MODEL NO	REPLACEMENT	(mm.)	(mm)	(w)	(Lumen)	(Kelvin)	(Ra)	@2m	@4m	@6m
DRV-CS1-8W-WW	PLC - 1 x 13w	132x85	120	8	680	3000	70	54	13	6
DRV-CS1-8W-NW	PLC - 1 x 13w	132x85	120	8	680	4000	70	54	13	6
DRV-CS1-10W-WW	PLC - 1 x 18w	165x95	150	10	850	3000	70	83	20	9
DRV-CS1-10W-NW	PLC - 1 x 18w	165x95	150	10	850	4000	70	83	20	9
DRV-CS1-20W-WW	PLC - 2 x 18w	190x110	175	20	1700	3000	70	148	37	16
DRV-CS1-20W-NW	PLC - 2 x 18w	190x110	175	20	1700	4000	70	148	37	16
DRV-CS1-30W-WW	PLC - 2 x 42w	230x110	215	30	2600	3000	70	231	58	14
DRV-CS1-30W-NW	PLC - 2 x 42w	230x110	215	30	2600	4000	70	231	58	14







# TRK-LPA SMD LED Track Light

SMD LED Track light is a high power track light with lower power consumption than traditional HID track light. With patented design of TRK-LPA, it is suitable for commercial use such as shops, showrooms, etc.

#### **ADVANTAGES**

- · 2x longer life hours
- · 60% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & leads free

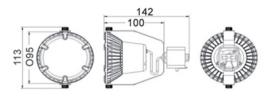
#### **FEATURES**

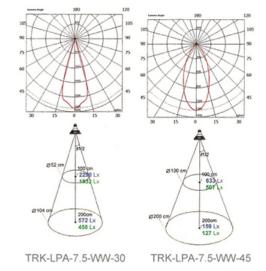
LED Brand / Type: SMD Nichia LED
 Housing: Aluminium (Black, White)
 Adjustable: Vertical 90°, Horizontal 350°
 Beam Angle: 15° / 30° / 45°
 Dimmable: Non Dimmable

Beam Angle.
Dimmable:
Working Voltage:
Operating Temperature:
Life Span:
Warranty:
15 7 30 7 45
Non Dimmable
90 - 240VAC
-20°C - +40°C
50,000 hrs
3 years

#### APPLICATION

 Widely used in showrooms, shops, department stores, shopping malls, etc.





MODEL NO	REPLACEMENT	OUTPUT LUMENS (I)	WATT (w)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
TRK-LPA-7.5W-WW-15	MR16 50w	520	26	680	3000	>70
TRK-LPA-7.5W-NW-15	MR16 50w	416	26	680	5200	>75
TRK-LPA-7.5W-WW-30	MR16 50w	600	37	850	3000	>70
TRK-LPA-7.5W-NW-30	MR16 50w	480	37	850	5200	>75
TRK-LPA-7.5W-WW-45	MR16 50w	467	50	1700	3000	>70
TRK-LPA-7.5W-NW-45	MR16 50w	373	50	1700	5200	>75





## TRK-L60 SMD LED Track Light

SMD LED Track light is a high power track light with lower power consumption than traditional HID track light. With patented design of TRK-L60, it is suitable for commercial use such as shops, showrooms, etc.

#### **ADVANTAGES**

- · 2x longer life hours
- · 60% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & leads free

#### **FEATURES**

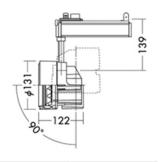
LED Brand / Type: SMD LED

Housing: Aluminium (Black, White)
 Adjustable: Vertical 90°, Horizontal 350°

Beam Angle: 11° / 17° / 25°
Dimmable: Non Dimmable
Working Voltage: 100 - 240VAC
Operating Temperature: -20°C - +40°C
Life Span: 50,000 hrs
Warranty: 3 years

#### APPLICATION

 Widely used in showrooms, shops, department stores, shopping malls, etc.



| IP20 | [F] | (L) | (A) |

MODEL NO	REPLACEMENT	WATT (w)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
TRK-L60-26W-WW	CDM-R 35w	26	1700	3000	>83
TRK-L60-26W-NW	CDM-R 35w	26	1700	5000	>83
TRK-L60-37W-WW	-	37	2830	3000	>83
TRK-L60-37W-NW	-	37	2830	5000	>83
TRK-L60-50W-WW	CDM-R 70w	50	3370	3000	>83
TRK-L60-50W-NW	CDM-R 70w	50	3370	5000	>83





## TRK-423 COB Track Light Luminaire

COB LED Track light is a high power track light with lower power consumption than traditional HID track light. With patented design of TRK-423, it is suitable for commercial use such as shops, showrooms, etc.

#### **FEATURES**

LED Chip: SHARP COBHousing: Extruded aluminium

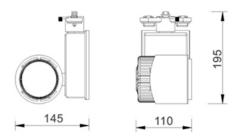
IP Rating: IP20.

Working Voltage:
 Working Temperature:
 Life Span:
 220V DC, 50Hz
 -20°C - 65°C
 25,000 hrs

#### APPLICATION

 Widely used in commercial and interior decoration in medium or high areas, to highlight a specific area or objects.





MODEL NO	REPLACEMENT	WATT (w)	DIMENSION (mm)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)	BEAM ANGLE
TRK-423-23W-WW	CDM-T 35w	23	145 x 195 x 105	>90	1955	3000	70	25
TRK-423-23W-NW	CDM-T 35w	23	145 x 195 x 105	>90	1955	4000	70	25
TRK-423-33W-WW	CDM-T 70w	33	145 x 195 x 105	>90	2805	3000	70	25
TRK-423-33W-NW	CDM-T 70w	33	145 x 195 x 105	>90	2805	4000	70	25
TRK-423-50W-WW	-	50	145 x 195 x 105	>90	4250	3000	70	25
TRK-423-50W-NW	-	50	145 x 195 x 105	>90	4250	4000	70	25
TRK-423-60W-WW	CDM-T 150w	60	145 x 195 x 105	>90	5100	3000	70	25
TRK-423-60W-NW	CDM-T 150w	60	145 x 195 x 105	>90	5100	4000	70	25





# TRK-343 COB Track Light Luminaire

COB LED Track light is a high power track light with lower power consumption than traditional HID track light. With patented design of TRK-343, it is suitable for commercial use such as shops, showrooms, etc.

#### **FEATURES**

SHARP COB · LED Chip: · Housing: Extruded aluminium

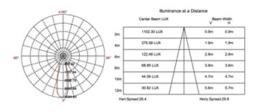
· IP Rating: IP20.

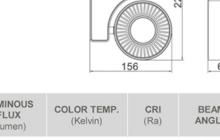
 Working Voltage: 220V DC, 50Hz · Working Temperature: -20°C - 65°C · Life Span: 25,000 hrs

#### APPLICATION

· Widely used in commercial and interior decoration in medium or high areas, to highlight a specific area or objects.

MODEL: TRK-343-23W-WW





MODEL NO	REPLACEMENT	WATT (w)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)	BEAM ANGLE
TRK-343-23W-WW	CDM-T 35w	23	>90	2000	3000	82	24
TRK-343-23W-NW	CDM-T 35w	23	>90	2000	4000	82	24
TRK-343-33W-WW	CDM-T 70w	33	>90	2800	3000	82	24
TRK-343-33W-NW	CDM-T 70w	33	>90	2800	4000	82	24
TRK-343-40W-WW	-	40	>90	3000	3000	82	24
TRK-343-40W-NW	-	40	>90	3000	4000	82	24







### RBN-60/20 SMD LED Ribbon Light

LED Ribbon is a low voltage super bright LED lighting in a flexible thin PCB strip. This LED ribbon uses super flexible PCB board as a base and adopts chips RGB LED as it's luminous body. Designed for the lighting professional, this lighting can be used for architectural lighting sign letter light, concealed lighting perimeter lighting and many other applications. The base is flat and flexible and can be easily mount onto most flat surfaces.



#### **FEATURES**

LED Chip: 5050 (3-in-1 chip or RGB chip)

Beam Angle: 120 Degree
 Housing: PVC Encapsulation

Base: 3M adhersive tape on backside

• IP Rating: IP20

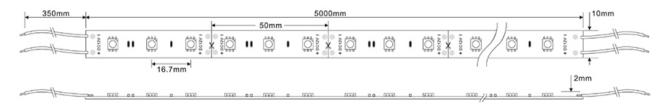
Cuttable Length: 50mm. (every 3 pcs LED)

Working Voltage: 12V DC
 Working Temperature: -40°C - 55°C
 Working Humidity: 10% - 90%
 Life Span: 50,000 hrs

#### APPLICATION

 Widely used in architectural and interior decorativeto highlight areas, in a concealed cove, or cabinet lighting.





MODEL NO	COLOR	LED Qty (per meter)	LIGHT OUTPUT (mcd)	LIGHT OUTPUT (Lumen/m)	WATT (w/m)	COLOR TEMP. (Kelvin)	Package
RBN-60-20-5050-RGB3	RGB	60	30 x 1500	510	14.4	-	5 meter / reel
RBN-60-20-5050-WW3	Warm White	60	30 x 850	480-840	14.4	2700 - 3500	5 meter / reel
RBN-60-20-5050-DL3	Day White	60	30 x 1200	600-960	14.4	6000 - 7000	5 meter / reel
RBN-60-20-5050-GR3	Green	60	30 x 650	720	14.4	515 - 525	5 meter / reel
RBN-60-20-5050-BL3	Blue	60	30 x 250	450	14.4	465 - 475	5 meter / reel
RBN-60-20-5050-YL3	Yellow	60	30 x 600	360	14.4	585 - 595	5 meter / reel
RBN-60-20-5050-RD3	Red	60	30 x 600	360	14.4	620 - 630	5 meter / reel





### RBN-60/54 SMD LED Ribbon Light

LED Ribbon is a low voltage super bright LED lighting in a flexible thin PCB strip. This LED ribbon uses super flexible PCB board as a base and adopts chips RGB LED as it's luminous body. Designed for the lighting professional, this lighting can be used for architectural lighting, sign letter light, concealed lighting perimeter lighting and many other applications. The base is flat and flexible and can be easily mount onto most flat surfaces.



#### **FEATURES**

LED Chip: 5050 (3-in-1 chip or RGB chip)

Beam Angle: 120 Degree
Housing: PVC Encapsulation

IP Rating:

 Cuttable Length:
 Working Voltage:
 Working Temperature:
 Working Humidity:

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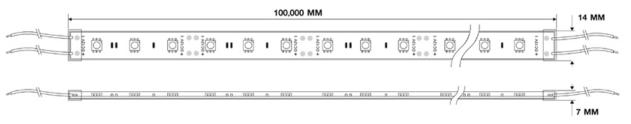
#### APPLICATION

 Widely used in architectural and interior decorativeto highlight areas, in a concealed cove, or cabinet lighting.









MODEL NO	COLOR	LED Qty (per meter)	LIGHT OUTPUT (mcd)	LIGHT OUTPUT (Lumen/m)	WATT (w/m)	COLOR TEMP. (Kelvin)	Package
RBN-60-54-5050-RGB3	RGB	60	30 x 1500	510	14.4	-	100 meter / reel
RBN-60-54-5050-WW3	Warm White	60	30 x 850	480-840	14.4	2700 - 3500	100 meter / reel
RBN-60-54-5050-DL3	Day White	60	30 x 1200	600-960	14.4	6000 - 7000	100 meter / reel
RBN-60-54-5050-GR3	Green	60	30 x 650	720	14.4	515 - 525	100 meter / reel
RBN-60-54-5050-BL3	Blue	60	30 x 250	450	14.4	465 - 475	100 meter / reel
RBN-60-54-5050-YL3	Yellow	60	30 x 600	360	14.4	585 - 595	100 meter / reel
RBN-60-54-5050-RD3	Red	60	30 x 600	360	14.4	620 - 630	100 meter / reel





## RBN-60/68 SMD LED Ribbon Light

LED Ribbon is a low voltage super bright LED lighting in a flexible thin PCB strip. This LED ribbon uses super flexible PCB board as a base and adopts chips RGB LED as it's luminous body. Designed for the lighting professional, this lighting can be used for architectural lighting, sign letter light, concealed lighting perimeter lighting and many other applications. The base is flat and flexible and can be easily mount onto most flat surfaces.



#### **FEATURES**

LED Chip: 5050 (3-in-1 chip or RGB chip)

Beam Angle: 120 Degree
 Housing: PVC Encapsulation

Base: 3M adhersive tape on backside

• IP Rating: IP68

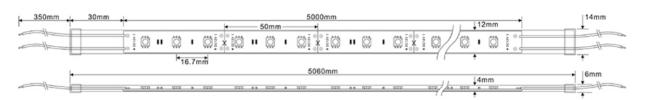
Cuttable Length: 50mm. (every 3 pcs LED)

Working Voltage: 12V DC
 Working Temperature: -40°C - 55°C
 Working Humidity: 10% - 90%
 Life Span: 50,000 hrs

#### APPLICATION

 Widely used in architectural and interior decorativeto highlight areas, in a concealed cove, or cabinet lighting.





MODEL NO	COLOR	LED Qty (per meter)	LIGHT OUTPUT (mcd)	LIGHT OUTPUT (Lumen/m)	WATT (w/m)	COLOR TEMP. (Kelvin)	Package
RBN-60-68-5050-RGB3	RGB	60	30 x 1500	510	14.4	-	5 meter / reel
RBN-60-68-5050-WW3	Warm White	60	30 x 850	480-840	14.4	2700 - 3500	5 meter / reel
RBN-60-68-5050-DL3	Day White	60	30 x 1200	600-960	14.4	6000 - 7000	5 meter / reel
RBN-60-68-5050-GR3	Green	60	30 x 650	720	14.4	515 - 525	5 meter / reel
RBN-60-68-5050-BL3	Blue	60	30 x 250	450	14.4	465 - 475	5 meter / reel
RBN-60-68-5050-YL3	Yellow	60	30 x 600	360	14.4	585 - 595	5 meter / reel
RBN-60-68-5050-RD3	Red	60	30 x 600	360	14.4	620 - 630	5 meter / reel





### BAR-60 SMD LED Aluminium Bar

LED Bar is a low voltage super bright LED lighting in an aluminium case for ease of installation. The LED bar uses slim PCB board as a base and adopts chips RGB LED as it's luminous body. Designed for the lighting professional, this lighting can be used for architectural lighting sign letter light, concealed lighting perimeter lighting and many other applications.

#### **FEATURES**

LED Chip: 5050 (3-in-1 chip or RGB chip)

Beam Angle: 120 Degree
 Housing: Extruded aluminium

IP Rating:

IP65

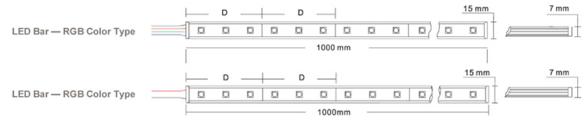
Cuttable Length: 50mm. (every 3 pcs LED)

Working Voltage: 12V DC
 Working Temperature: -40°C - 55°C
 Working Humidity: 10% - 90%
 Life Span: 50,000 hrs

#### APPLICATION

 Widely used for decorative highlight areas such as in concealed cove, or cabinet lighting.

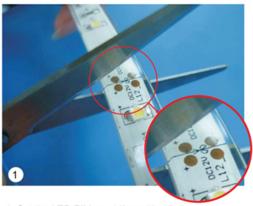




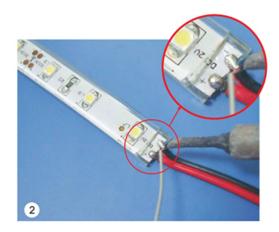
MODEL NO	COLOR	LED Qty (per meter)	LIGHT OUTPUT (Lumen/m)	WATT (w/m)	COLOR TEMP. (Kelvin)
BAR-60-20-5050-RGB3	RGB	60	510	14.4	-
BAR-60-20-5050-WW3	Warm White	60	120-1080	14.4	2700 - 3500
BAR-60-20-5050-DL3	Day White	60	72-1170	14.4	6000 - 7000
BAR-60-20-5050-GR3	Green	60	900	14.4	515 - 525
BAR-60-20-5050-BL3	Blue	60	720	14.4	465 - 475
BAR-60-20-5050-YL3	Yellow	60	450	14.4	585 - 595
BAR-60-20-5050-RD3	Red	60	360	14.4	620 - 630



#### How to cut and rejoin the LED ribbon



1. Cut the LED Ribbon at the cutting line.



2. Rejoin the cables to the ribbon by soldering, CAUTION: please do not reverse the polarity

## DIM-RF-2

#### Dimmer Driver with Remote Control





#### SPECIFICATION

- RF 2.4 GHz
- Dimmer
- · Wireless intuitive touch remote control
- Receiving Range: 30m.

Working voltage: 12VDC 24VDC
 Working Current: 6V / circuit
 Dimension: 85 x 45 x 22 mm.

#### HOW TO USE

- 1. Use your finger to slice along the color ring to adjust the brightness from the highest to the lowest (100%-1%, 50 grades to adjust)
- 2. Resume function. The previous settings will be resumed while power on again.
- 3. Matching code. Press Key 3 once within 3 seconds when power on again, the light will blink 3 times if matching is successful.
- 4. Clearing Code. Press 3 five times within 3 seconds when power on again, the light will blink 6 times if clearing is successful.

## TR12-MW

#### Dimmer Driver with Remote Control

MODEL NO	RATING	DIMENSION
TR12-MW-50	12V DC 50W	129 x 98 x 38
TR12-MW-100	12V DC 100W	159 x 98 x 38
TR12-MW-150	12V DC 150W	199 x 98 x 38





#### **LED WIFI Control System**



## LED-CON-RF

#### RGB Remote Controller / GGB Manual Controller

#### Features:

Working Voltage: 12VDC—24 VCD Rated Current: 8Ax3 CHANNEL

Rated Power: 288W (12VDC), 576W (24VDC)

Working Temperature: -20 - 60°C

Measurement: 120x62x24mm / 112x65x24mm









## STP-350

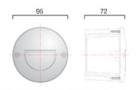
#### LED Step Light Luminaire

Housing: Die-cast aluminium housing
Painting: Polyester powder coated
Gasket: Stainless steel all external screws
Color: 3000K, 6500K, Red, Green Blue

· Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









## STP-360

#### Wallmount Luminaire

Housing: Die-cast aluminium housing
Painting: Polyester powder coated
Gasket: Stainless steel all external screws
Color: 3000K, 6500K, Red, Green Blue

· Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









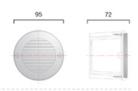
## STP-370

#### LED Step Light Luminaire

Housing: Die-cast aluminium housing
Painting: Polyester powder coated
Gasket: Stainless steel all external screws
Color: 3000K, 6500K, Red, Green Blue

· Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









## STP-380

#### LED Step Light Luminaire

Housing: Die-cast aluminium housing
Painting: Polyester powder coated
Gasket: Stainless steel all external screws
Color: 3000K, 6500K, Red, Green Blue

· Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









### STP-L11

#### LED Step Light Luminaire

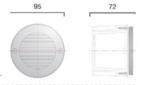
· Housing: Die-cast aluminium housing · Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.







## STP-L12 LED Step Light Luminaire

· Housing: Die-cast aluminium housing Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White)

· Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.











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## STP-L13

#### LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.







### STP-L18

#### LED Step Light Luminaire

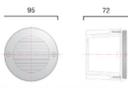
· Housing: Die-cast aluminium housing

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

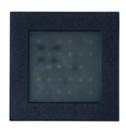
· Suitable for general decoration such as pathway, walk way, etc.





LED 1.4W







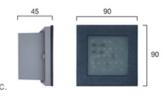
## STP-290

#### LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.







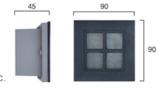


## STP-300 LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









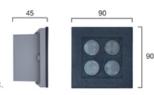
## STP-301 LED Step Light Luminaire

· Housing: Die-cast aluminium housing

· Painting: Polyester powder coated Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.









### STP-L14

#### LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Gasket: Stainless steel all external screws

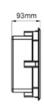
 Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.























## STP-L15 LED Step Light Luminaire

· Housing: Die-cast aluminium housing Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.



1.4W









#### LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.

















#### LED Step Light Luminaire

· Housing: Die-cast aluminium housing · Painting: Polyester powder coated · Gasket: Stainless steel all external screws

· Color: 3000K (Warm White) · Driver: External driver

· Suitable for general decoration such as pathway, walk way, etc.















LED 1.4W







ING-L04 LED Inground Luminaire

· Housing: Die-cast aluminium housing • Frame: Stainless steel 304 from

· Gasket: Stainless steel all external screws

• Color: 3000K (WW), 6400K (DL)

· Voltage: 220VAC

· Suitable for under water applications



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## ING-L05

LED Inground Luminaire

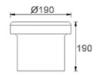
· Housing: Die-cast aluminium housing

· Frame: Stainless steel 304 from

· Gasket: Stainless steel all external screws • Color: 3000K (WW), 6400K (DL)

· Driver: Use with 12VAC external driver

· Suitable for under water applications







[P67] ♥ ♣ ♣

## ING-L06 LED Inground Luminaire

· Housing: Die-cast aluminium housing

• Frame: Stainless steel 304 from · Gasket: Stainless steel all external screws

· Color: 3000K (WW), 6400K (DL), Red, Green, Blue, Yellow, Mix

· Driver: Use with 24VAC external driver

· Suitable for under water applications

LED 15W









## SBM-815

#### LED Under Water Luminaire

- · Housing: Stainless steel housing
- · Gasket: Stainless steel all external screws
- Color: 3000K (WW), 6400K (DL)
- · Driver: Use with 24VAC external driver
- · Adjustable: Virtically adjustable
- · Suitable for under water application s







### SBM-816

#### LED Under Water Luminaire

- · Housing: Stainless steel housing
- · Gasket: Stainless steel all external screws
- Color: 3000K (WW), 6400K (DL), Red, Green, Blue, Yellow, Mix (Color LED only available for 15w.)
- · Driver: Use with 24VAC external driver
- · Adjustable: Virtically adjustable
- · Suitable for under water application s



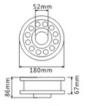


10W / 15W

## SBM-817

#### LED Under Water Luminaire

- Housing: Die-cast aluminium housing
- Frame: Stainless steel 304 from
- · Gasket: Stainless steel all external screws
- · Gasket: Waterproof 3m cable
- · Color: 3000K (WW), 6400K (DL), Red, Green, Blue, Yellow, Mix
- · Driver: Use with 24VAC external driver
- · Suitable for under water application s







15W





## HBA-001-1

LED High Bay

LED High Bay lighting is suitable for industrial applications. It has the advantages over a traditional HID high bay especially longer life hours, more energy saving, and more ecologically friendly.

#### **ADVANTAGES**

- · 2x longer life hours
- 50% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

#### **FEATURES**

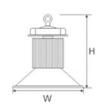
LED Brand / Type: Brightlux / COB LED 1pc 45 x 45mm.
 Driver: Meanwell

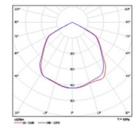
Reflector: Anodized aluminium reflector
 Working Voltage: 100 - 240VAC

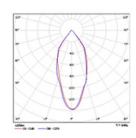
Working Voltage: 100 - 240VAC
 Operating Temperature: -40°C - +55°C
 Life Span: 50,000 hrs
 Warranty: 2 years

#### APPLICATION

 Widely used in factories, warehouses, stadium, halls, etc







IP20 ▼ 🕁 🖒 💠



MODEL NO	DIMENSION W x H	WATT	LUMINOUS FLUX	COLOR TEMP.	CRI	BEAM	LIGHT	OUTPUT	(Ix avg)
MODEL NO	(mm.)	(w)	(Lumen)	(Kelvin)	(Ra)	ANGLE	@6m	@8m	@10m
HBA-001-1-120W845-45	500 x 465	120	8,000	4500	75	45	182	173	166
HBA-001-1-120W665-45	500 x 465	120	8,000	6500	75	45	182	173	166
HBA-001-1-120W845-120	500 x 465	120	8,000	4500	75	120	180	169	159
HBA-001-1-120W665-120	500 x 465	120	8,000	6500	75	120	180	169	159
HBA-001-1-150W845-45	500 x 500	150	12,750	4500	75	45	296	282	271
HBA-001-1-150W665-45	500 x 500	150	12,750	6500	75	45	296	282	271
HBA-001-1-150W845-120	500 x 500	150	12,750	4500	75	120	295	377	361
HBA-001-1-150W665-120	500 x 500	150	12,750	6500	75	120	295	377	361
HBA-001-1-200W845-45	495 x 565	200	20,000	4500	75	45	383	365	349
HBA-001-1-200W665-45	500 x 565	200	20,000	6500	75	45	383	365	349
HBA-001-1-200W845-120	500 x 565	200	20,000	4500	75	120	384	361	339
HBA-001-1-200W665-120	500 x 565	200	20,000	6500	75	120	384	361	339





## CNS-001-1

LED Square High Bay



LED High Bay lighting is suitable for industrial applications. It has the advantages over a traditional HID high bay especially longer life hours, more energy saving, and more ecologically friendly.

#### **ADVANTAGES**

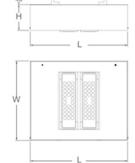
- · 2x longer life hours
- · 50% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

#### **FEATURES**

LED Brand / Type: OSRAM / LED Module 60w
Driver: OSRAM
Housing: Cold-rolled steel
Working Voltage: 100 - 240VAC
Operating Temperature: -30°C - +90°C
Life Span: 50,000 hrs
Warranty: 2 years

#### APPLICATION

· Widely used in factories, warehouses, stadium, halls, etc





MODEL NO	REPLACEMENT	DIMENSION L x W x H (mm.)	WATT (w)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
CNS-001-1-60W840	Metal Halide 150w	310 x 310 x 100	60	2700	4000	70
CNS-001-1-60W865	Metal Halide 150w	310 x 310 x 100	60	3400	6500	70
CNS-001-1-120W840	Metal Halide 250w	380 x 310 x 100	120	5400	4000	70
CNS-001-1-120W865	Metal Halide 250w	380 x 310 x 100	120	6800	6500	70
CNS-001-1-180W840	Metal Halide 360w	470 x 310 x 100	180	8100	4000	70
CNS-001-1-180W865	Metal Halide 360w	470 x 310 x 100	180	10200	6500	70
CNS-001-1-240W840	Metal Halide 400w	540 x 310 x 100	240	10800	4000	70
CNS-001-1-240W865	Metal Halide 400w	540 x 310 x 100	240	13600	6500	70





## COB LED Flood Light

Floodlight is a typically lighting for industrial applications such as billboard, wide area light, architectural lighting, etc. However, LED floodlight has the advantages over a traditional HID floodlight especially longer life hours, more energy saving, and more ecologically friendly.



#### **ADVANTAGES**

- · 2x longer life hours
- · 50% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

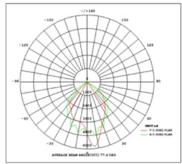
#### **FEATURES**

· LED Brand / Type: Brightlux / COB LED

· Driver: Meanwell

· Houosing: Aluminium body with glass cover

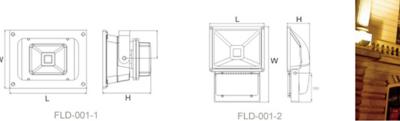
· Working Voltage: 85 - 265VAC · Total harmonic Dist: THD<8% · Operating Temperature: -20°C - +50°C 110° - 120° · Angle Beam: · Life Span: >50,000 hrs · Warranty: 2 years



FLD-001-2-100w

#### APPLICATION

· Widely used in architectural lighting, billboards, stadiums, gymnasium, etc.







6000-6500K







LED Street lighting is a wide-used applications. It has the advantages over a traditional fluorescent lamp especially longer life hours, more energy saving, and more ecologically friendly.



#### **ADVANTAGES**

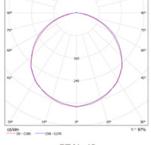
- · 2x longer life hours
- · 60% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

#### **FEATURES**

Driver: PHILIPS
Housing: Aluminium housing
Diffuser: Clear polycarbonate
Working Voltage: 100 - 270VAC
Operating Temperature: -30°C - +45°C
Life Span: 35,000 hrs
Warranty: 2 years

#### APPLICATION

· Widely used for street, local road, pathway, etc.



STAL-40



MODEL NO	REPLACEMENT	WATT (w)	DIMENSION W x L x H (mm.)	POWER FACTOR (PF)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
STAL-20	1 x T8 36w.	LED Module - 21w	345 x 675 x 170	>95	3900	6500	>80
STAL-40	2 x T8 36w.	LED Module - 42w	349 x 743 x 163	>95	12100	6500	>80





## CNP-L01 LED Street Light



LED Street lighting is suitable for area applications. It has the advantages over a traditional HID high bay especially longer life hours, more energy saving, and more ecologically friendly.

#### ADVANTAGES

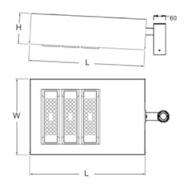
- · 2x longer life hours
- · 50% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

#### **FEATURES**

· LED Brand / Type: OSRAM / LED Module 60w · Driver: OSRAM · Housing: Cold-rolled steel · Working Voltage: 100 - 240VAC -30°C - +90°C · Operating Temperature: · Life Span: 50,000 hrs · Warranty: 2 years

#### APPLICATION

· Widely used for street, highway, area lighting.





MODEL NO	REPLACEMENT	DIMENSION L x W x H (mm.)	WATT (w)	LUMINOUS FLUX (Lumen)	COLOR TEMP. (Kelvin)	CRI (Ra)
CNP-L01-1-60W840	Metal Halide 150w	220 - 335 x 160	60	2700	4000	70
CNP-L01-1-60W865	Metal Halide 150w	220 - 335 x 160	60	3400	6500	70
CNP-L01-1-120W840	Metal Halide 250w	290 x 335 x 160	120	5400	4000	70
CNP-L01-1-120W865	Metal Halide 250w	290 x 335 x 160	120	6800	6500	70
CNP-L01-1-180W840	Metal Halide 360w	470 x 415 x 160	180	8100	4000	70
CNP-L01-1-180W865	Metal Halide 360w	470 x 415 x 160	180	10200	6500	70
CNP-L01-1-240W840	Metal Halide 400w	550 x 416 x 160	240	10800	4000	70
CNP-L01-1-240W865	Metal Halide 400w	550 x 415 x 160	240	13600	6500	70





## STH-901 LED Street Light

LED Street lighting is a wide-used applications. It has the advantages over a traditional HID street light especially longer life hours, more energy saving, and more ecologically friendly. Also, STH-901 series is adjustable for best light output angle to your application.

Cree



#### **ADVANTAGES**

· 2x longer life hours

· LED Brand / Type:

- · 50% saving on energy consumption
- · No UV, no IR, no CO2, no Mercury & lead free

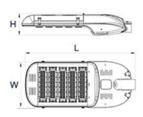
#### **FEATURES**

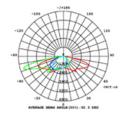
Driver: Meanwell
Housing: Aluminium alloy housing
Working Voltage: 100 - 270VAC
Operating Temperature: -30°C - +45°C
Life Span: 50,000 hrs
Warranty: 2 years



#### APPLICATION

· Widely used for street, highway, area lighting.







MODEL NO	TYPE	DIMENSION W x L x H	WATT	POWER FACTOR	LUMINOUS	COLOR TEMP.	CRI	ILLU	MINANCE SO	COPE
MODEL NO	IIFE	(mm.)	(w)	(PF)	(Lumen)	(Kelvin)	(Ra)	8m	10m	12m
STH-901-120W	IV Long	345 x 675 x 170	120	>95	3900	4000	>70	25.8 lx 14 x 60m	16.5 lx 17 x 75m	11.5 lx 20 x 90m
STH-901-150W	IV Long	349 x 743 x 163	150	>95	12100	4000	>70	36.3 lx 14 x 60m	23.2 lx 17 x75m	16.1 lx 20 x 90m
STH-901-200W	IV Long	349 x 826 x 163	200	>95	15500	4000	>70	46.4 lx 14 x 69m	29.7 lx 17 x 75m	20.6 lx 20 x 90m
STH-901-240W	IV Long	350 x 890 x 92	240	>95	18800	4000	>70	53.9 lx 14 x 60m	34.5 lx 17 x 75m	23.9 lx 20 x 90m





## LWW-001

LED Wall washer is most popular for architectural lighting like façade lighting. It help create dynamic and movement for rigid structure with low energy consumption. It can be controlled to color switching, fading, flashing when using with DMX controller.



#### **FEATURES**

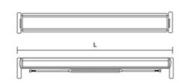
· LED: High-power LED · Driver: Meanwell · Housing: Aluminium alloy 100 - 240 VAC · Working Voltage: -40°C - +60°C · Operating Temperature: · Rotary Angle: 180 Degree · Power Factor > 0.8 · Warranty: 2 years

#### WORKING MODE

- Independent Mode: Choose the effects that you need by button on the back of lighting; Master / Slave
- DMX Mode: International standard DMX512 signal control (3XLR or 5XLR)

#### APPLICATION

· Widely used for architectural light.





MODEL NO	DIMENSION W x L x H (mm.)	LED Quantity	COLOR	BEAM ANGLE	PROJECTION DISTANCE (m)
LWW-001-18	72 x 500 x 76	1 x 18w	R-6, G-6, B-6	25 / 30 / 45 / 60	5 - 8
LWW-001-24	72 x 1000 x 76	1 x 24w	R-8, G-8, B-8	25 / 30 / 45 / 60	8 - 12
LWW-001-36	72 x 1000 x 76	1 x 36w	R-12, G-12, B-12	25 / 30 / 45 / 60	12 - 15





# LWW-011

LED Wall washer is most popular for architectural lighting like façade lighting. It help create dynamic and movement for rigid structure with low energy consumption. It can be controlled to color switching, fading, flashing when using with DMX controller.



#### **FEATURES**

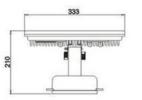
· LED: High-power LED · Driver: Meanwell · Housing: Aluminium alloy Working Voltage: 90 - 256 VAC · Operating Temperature: -40°C - +60°C · Rotary Angle: 180 Degree · Power Factor > 0.8 · Warranty: 2 years

#### WORKING MODE

- Independent Mode: Choose the effects that you need by button on the back of lighting; Master / Slave
- DMX Mode: International standard DMX512 signal control (3XLR or 5XLR)

#### APPLICATION

· Widely used for architectural light.

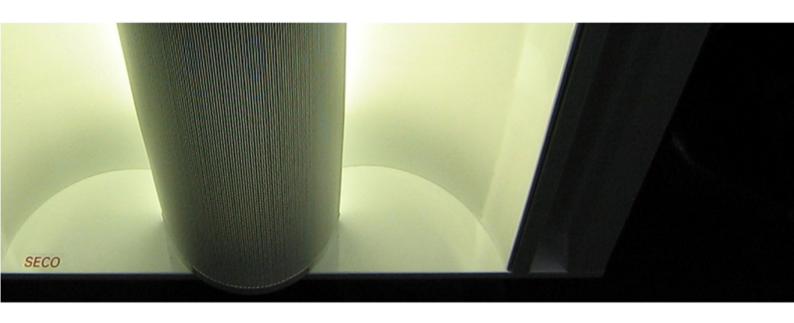






MODEL NO	DIMENSION W x L x H (mm.)	WATT (w)	LED Quantity	COLOR	CURRENT (A)	BEAM ANGLE	PROJECTION DISTANCE (m)
LWW-011-24-25	330 x 147 x 210	36w	1 x 24w	R-8, G-8, B-8	0.22	25	25m
LWW-011-24-45	330 x 147 x 210	36w	1 x 24w	R-8, G-8, B-8	0.22	45	15m
LWW-011-36-25	330 x 147 x 210	48w	1 x 36w	R-12, G-12, B-12	0.15	25	25m
LWW-011-36-45	330 x 147 x 210	48w	1 x 36w	R-12, G-12, B-12	0.15	45	15m

# Tailored Solutions



At SECO ... We're challenged everyday with new requirements from our customers. They come to us with even more and more challenge requirements which pushed us through limitations to come out with better solutions and better products to keep our customers satisfied.



Fluorescent Luminaires

SECO Fluorescent Luminaires are designed for high efficiency and high quality purpose. Each and every piece of our fixture is finely mode and inspected to guarantee customer satisfaction. We are also well-known of designing fixtures for specific requirements.





## T&F2-C

T8 Recessed Louver Luminaire



#### HOUSING

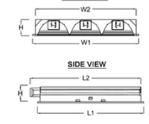
- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G13) lamp holder (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency purpose.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare. Standard 5 blades for 18w. and 10 blades for 36w.
- · Louver and profiles are applied to anti-glare.
- · Spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.



FRONT VIEW





MODEL NO	WATT		DIM	ENSION (n	CUT OUT	REMARK		
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)	KEWIAKK
T&F2 118 CR	1 x T8 18w.	595	620	200	170	90	575 x 185	
T&F2 118 CBR	1 x T8 18w.	595	620	295	265	90	575 x 275	
T&F2 218 CR	2 x T8 18w.	595	620	295	265	90	575 x 275	
T&F2 218 CBR	2 x T8 18w.	595	620	595	565	90	575 x 575	
T&F2 318 CR	3 x T8 18w.	595	620	595	565	90	575 x 575	
T&F2 418 CR	4 x T8 18w.	595	620	595	565	90	575 x 575	
T&F2 136 CR	1 x T8 36w.	1195	1222	200	170	90	1175 x 185	
T&F2 136 CBR	1 x T8 36w.	1195	1222	295	265	90	1175 x 275	
T&F2 236 CR	2 x T8 36w.	1195	1222	295	265	90	1175 x 275	
T&F2 236 CBR	2 x T8 36w.	1195	1222	595	565	90	1175 x 575	
T&F2 336 CR	3 x T8 36w.	1195	1222	595	565	90	1175 x 575	
T&F2 436 CR	4 x T8 36w.	1195	1222	595	565	90	1175 x 575	

ORDERING DATA: T&F2 236 CBR / T6 / 87

A = Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
B = Reflectance of Aluminium Reflector (87 = 87%, 95 = 95%)





S&B2-C

T8 Surface Mounted Louver Luminaire



#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G13) lamp holder (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency purpose.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare. Standard 5 blades for 18w. and 10 blades for 36w.
- · Louver and profiles are applied to anti-glare.
- · Spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rod installation.
- · Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.





FRONT VIEW

SIDE VIEW



MODEL NO	WATT		DIMENSION (mm.	)	REMARK
MODEL NO	WATT	L	W	Н	REWARK
S&B2 118 CR	1 x T8 18w.	615	200	80	
S&B2 118 CBR	1 x T8 18w.	615	295	80	
S&B2 218 CR	2 x T8 18w.	615	295	80	
S&B2 218 CBR	2 x T8 18w.	615	595	80	
S&B2 318 CR	3 x T8 18w.	615	595	80	
S&B2 418 CR	4 x T8 18w.	615	595	80	
S&B2 136 CR	1 x T8 36w.	1245	200	80	
S&B2 136 CBR	1 x T8 36w.	1222	295	80	
S&B2 236 CR	2 x T8 36w.	1222	295	80	
S&B2 236 CBR	2 x T8 36w.	1222	595	80	
S&B2 336 CR	3 x T8 36w.	1222	595	80	
S&B2 436 CR	4 x T8 36w.	1222	595	80	

ORDERING DATA: S&B2 236 CBR / T6 / 87

 $\begin{array}{lll} A &=& Steel\ Thickness\ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ ) \\ B &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 





## T&F1-P

#### T8 Recessed Acrylic Diffuser Luminaire



#### HOUSING

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options.

T&F1: For heavy duty rotary-locked type (TIS.344-1987 Standard) T&S1: For heavy duty spring-locked type (TIS.344-1987 Standard)

#### REFLECTOR & DIFFUSER

- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.
- · Spring-lock type frame for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.









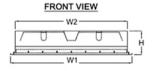




MODEL NO	WATT		DIM	CUT OUT	REMARK			
MODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)	KEWAKK
T&F1 118 PR	1 x T8 18w.	595	620	200	170	100	575 x 185	
T&F1 118 PBR	1 x T8 18w.	595	620	295	265	100	575 x 275	
T&F1 218 PR	2 x T8 18w.	595	620	295	265	100	575 x 275	
T&F1 218 PBR	2 x T8 18w.	595	620	595	565	100	575 x 575	
T&F1 318 PR	3 x T8 18w.	595	620	595	565	100	575 x 575	
T&F1 418 PR	4 x T8 18w.	595	620	595	565	100	575 x 575	
T&F1 136 PR	1 x T8 36w.	1195	1222	200	170	100	1175 x 185	
T&F1 136 PBR	1 x T8 36w.	1195	1222	295	265	100	1175 x 275	
T&F1 236 PR	2 x T8 36w.	1195	1222	295	265	100	1175 x 275	
T&F1 236 PBR	2 x T8 36w.	1195	1222	595	565	100	1175 x 575	
T&F1 336 PR	3 x T8 36w.	1195	1222	595	565	100	1175 x 575	
T&F1 436 PR	4 x T8 36w.	1195	1222	595	565	100	1175 x 575	

ORDERING DATA: T&F1 236 PBR / P / T6 / 87

- A = Lamp Holder Type ( T&F1 = Rotary-locked type, T&S1 = Spring-locked type )
  B = Acrylic Type ( P = Prismatic, M = Opal, O = Stipple, J = Clear )
  C = Steel Thickness ( T6 = 0.6mm. , T8 = 0.8 mm.)
  D = Reflectance of Aluminium Reflector ( 87 = 87% , 95 = 95% )



SIDE VIEW







## S&B1-P

#### T8 Surface Mounted Acrylic Diffuser Luminaire



FRONT VIEW

SIDE VIEW

#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options.

S&B1: For heavy duty rotary-locked type (TIS.344-1987 Standard) S&S1: For heavy duty spring-locked type (TIS.344-1987 Standard)

#### **REFLECTOR & LOUVER**

- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.

#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rod installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.













MODEL NO	WATT	D	IMENSION (mm.)		REMARK
WODEL NO	WAII	L	W	Н	REMARK
S&B1 118 PR	1 x T8 18w.	615	200	82	
S&B1 118 PBR	1 x T8 18w.	615	295	82	
S&B1 218 PR	2 x T8 18w.	615	295	82	
S&B1 218 PBR	2 x T8 18w.	615	595	82	
S&B1 318 PR	3 x T8 18w.	615	595	82	
S&B1 418 PR	4 x T8 18w.	615	595	82	
S&B1 136 PR	1 x T8 36w.	1222	200	82	
S&B1 136 PBR	1 x T8 36w.	1222	295	82	
S&B1 236 PR	2 x T8 36w.	1222	295	82	
S&B1 236 PBR	2 x T8 36w.	1222	595	82	
S&B1 336 PR	3 x T8 36w.	1222	595	82	
S&B1 436 PR	4 x T8 36w.	1222	595	82	

ORDERING DATA: S&B1 236 PBR / P / T6 / 87

- A = Lamp Holder Type ( S&B1 = Rotary-locked type, S&S1 = Spring-locked type )
  B = Acrylic Type ( P = Prismatic, M = Opal, O = Stipple, J = Clear )
  C = Steel Thickness ( T6 = 0.6mm., T8 = 0.8 mm.)
  D = Reflectance of Aluminium Reflector ( 87 = 87%, 95 = 95% )





T&F1-W

#### T8 Recessed Double Parabolic Louver Luminaire

#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options.

T&F1: For heavy duty rotary-locked type (TIS.344-1987 Standard) T&S1: For heavy duty spring-locked type (TIS.344-1987 Standard)

#### REFLECTOR & LOUVER

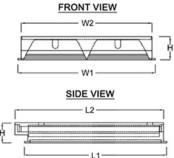
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal
- · 99.85% high purity anodized aluminium cross blade with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) to anti-glare. Standard 2 blades for 18w. and 5 blades for 36w.
- · Louver and profiles are applied to anti-glare.
- · Transparent spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.









MODEL NO	WATT		DIM	ENSION (mr	n.)		CUT OUT	REMARK
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)	KEWIAKK
T&F1 118 WR	1 x T8 18w.	595	620	200	170	90	575 x 185	
T&F1 118 WBR	1 x T8 18w.	595	620	295	265	90	575 x 275	
T&F1 218 WR	2 x T8 18w.	595	620	295	265	90	575 x 275	
T&F1 218 WBR	2 x T8 18w.	595	620	595	565	90	575 x 575	
T&F1 318 WR	3 x T8 18w.	595	620	595	565	90	575 x 575	
T&F1 418 WR	4 x T8 18w.	595	620	595	565	90	575 x 575	
T&F1 136 WR	1 x T8 36w.	1195	1222	200	170	90	1175 x 185	
T&F1 136 WBR	1 x T8 36w.	1195	1222	295	265	90	1175 x 275	
T&F1 236 WR	2 x T8 36w.	1195	1222	295	265	90	1175 x 275	
T&F1 236 WBR	2 x T8 36w.	1195	1222	595	565	90	1175 x 575	
T&F1 336 WR	3 x T8 36w.	1195	1222	595	565	90	1175 x 575	
T&F1 436 WR	4 x T8 36w.	1195	1222	595	565	90	1175 x 575	

ORDERING DATA: T&F1 236 WBR / T6 / 87

- Lamp Holder Type (T&F1 = Rotary-locked type, T&S1 = Spring-locked type)
   Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
   Reflectance of Aluminium Reflector (87 = 87%, 95 = 95%)





**S&B1-W** 

T8 Surface Mounted Double Parabolic Louver Luminaire



#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options.

S&B1: For heavy duty rotary-locked type (TIS.344-1987 Standard) S&S1: For heavy duty spring-locked type (TIS.344-1987 Standard)

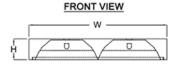
#### REFLECTOR & LOUVER

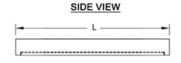
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency purpose.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal
- 99.85% high purity anodized aluminium cross blade with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) to anti-glare. Standard 2 blades for 18w. and 5 blades for 36w.
- · Louver and profiles are applied to anti-glare.
- · Transparent spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rod installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.









MODEL NO	WATT	D	IMENSION (mm.)	)	REMARK
WODEL NO	WATT	L	W	Н	REWARK
S&B1 118 WR	1 x T8 18w.	615	200	90	
S&B1 118 WBR	1 x T8 18w.	615	295	90	
S&B1 218 WR	2 x T8 18w.	615	295	90	
S&B1 218 WBR	2 x T8 18w.	615	595	90	
S&B1 318 WR	3 x T8 18w.	615	595	90	
S&B1 418 WR	4 x T8 18w.	615	595	90	
S&B1 136 WR	1 x T8 36w.	1222	200	90	
S&B1 136 WBR	1 x T8 36w.	1222	295	90	
S&B1 236 WR	2 x T8 36w.	1222	295	90	
S&B1 236 WBR	2 x T8 36w.	1222	595	90	
S&B1 336 WR	3 x T8 36w.	1222	595	90	
S&B1 436 WR	4 x T8 36w.	1222	595	90	

ORDERING DATA: S&B1 236 WBR / T6 / 87

- $\begin{array}{lll} A &=& Lamp\ Holder\ Type\ (\ S\&B1 = Rotary-locked\ type,\ S\&S1 = Spring-locked\ type\ )\\ B &=& Steel\ Thickness\ (\ T6 = 0.6\,mm.\ ,\ T8 = 0.8\,mm.\ )\\ C &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87 = 87\%\ ,\ 95 = 95\%\ ) \end{array}$





## T&F3-C

T5 Recessed Louver Luminaire



#### HOUSING

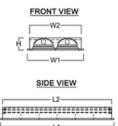
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare. Standard 5 blades for 14w. and 11 blades for 28w.
- · Louver and profiles are applied to anti-glare.
- · Spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.





MODEL NO	WATT		DIM	CUT OUT	REMARK			
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)	TILINATITY .
T&F3 114 CR	1 x T5 14w.	595	570	200	170	65	575 x 185	
T&F3 114 CBR	1 x T5 14w.	595	570	295	270	65	575 x 275	
T&F3 214 CR	2 x T5 14w.	595	570	295	270	65	575 x 275	
T&F3 214 CBR	2 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 314 CR	3 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 414 CR	4 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 128 CR	1 x T5 28w.	1195	1170	200	170	65	1175 x 185	
T&F3 128 CBR	1 x T5 28w.	1195	1170	295	270	65	1175 x 275	
T&F3 228 CR	2 x T5 28w.	1195	1170	295	270	65	1175 x 275	
T&F3 228 CBR	2 x T5 28w.	1195	1170	595	570	65	1175 x 575	
T&F3 328 CR	3 x T5 28w.	1195	1170	595	570	65	1175 x 575	
T&F3 428 CR	4 x T5 28w.	1195	1170	595	570	65	1175 x 575	

ORDERING DATA: T&F3 228 CBR / T6 / 87

 $\begin{array}{lll} A &=& Steel\ Thickness\ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ ) \\ B &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 





S&B3-C

T5 Surface Mounted Louver Luminaire



#### HOUSING

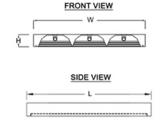
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare. Standard 5 blades for 14w. and 11 blades for 28w.
- · Louver and profiles are applied to anti-glare.
- · Spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rod installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.





MODEL NO	WATT	DIMENSION (mm.)			REMARK	
		L	W	Н	REWARK	
S&B3 114 CR	1 x T5 14w.	595	200	65		
S&B3 114 CBR	1 x T5 14w.	595	295	65		
S&B3 214 CR	2 x T5 14w.	595	295	65		
S&B3 214 CBR	2 x T5 14w.	595	595	65		
S&B3 314 CR	3 x T5 14w.	595	595	65		
S&B3 414 CR	4 x T5 14w.	595	595	65		
S&B3 128 CR	1 x T5 28w.	1200	200	65		
S&B3 128 CBR	1 x T5 28w.	1200	295	65		
S&B3 228 CR	2 x T5 28w.	1200	295	65		
S&B3 228 CBR	2 x T5 28w.	1200	595	65		
S&B3 328 CR	3 x T5 28w.	1200	595	65		
S&B3 428 CR	4 x T5 28w.	1200	595	65		

ORDERING DATA: S&B3 228 CBR / T6 / 87 A B

A = Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
B = Reflectance of Aluminium Reflector (87 = 87%, 95 = 95%)





## T&F3-P

T5 Recessed Acrylic Diffuser Luminaire



#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### **REFLECTOR & DIFFUSER**

- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.
- · Spring-lock type frame for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.

















Prismatic Opal Clear Stipple

MODEL NO	WATT	DIMENSION (mm.)					CUT OUT	DEMARK
	WATI	L1	L2	W1	W2	Н	(mm.)	REMARK
T&F3 114 PR	1 x T5 14w.	595	570	200	170	65	575 x 185	
T&F3 114 PBR	1 x T5 14w.	595	570	295	270	65	575 x 275	
T&F3 214 PR	2 x T5 14w.	595	570	295	270	65	575 x 275	
T&F3 214 PBR	2 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 314 PR	3 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 414 PR	4 x T5 14w.	595	570	595	570	65	575 x 575	
T&F3 128 PR	1 x T5 28w.	1195	1170	200	170	65	1175 x 185	
T&F3 128 PBR	1 x T5 28w.	1195	1170	295	270	65	1175 x 275	
T&F3 228 PR	2 x T5 28w.	1195	1170	295	270	65	1175 x 275	
T&F3 228 PBR	2 x T5 28w.	1195	1170	595	570	65	1175 x 575	
T&F3 328 PR	3 x T5 28w.	1195	1170	595	570	65	1175 x 575	
T&F3 428 PR	4 x T5 28w.	1195	1170	595	570	65	1175 x 575	

ORDERING DATA: T&F3 228 PBR / P / T6 / 87 A B C

 $\begin{array}{lll} A &=& A crylic \ Type \ (\ P=Prismatic,\ M=Opal,\ O=Stipple,\ J=Clear\ ) \\ B &=& Steel\ Thickness \ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ ) \\ C &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 





# S&B3-P

T5 Surface Mounted Acrylic Diffuser Luminaire



#### HOUSING

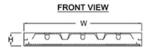
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### **REFLECTOR & LOUVER**

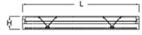
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.

#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rod installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.

















Stipple

MODEL NO	WATT		DIMENSION (mm.	)	REMARK
MODEL NO	WAII	L	W	Н	KEWAKK
S&B3 114 PR	1 x T5 14w.	595	200	65	
S&B3 114 PBR	1 x T5 14w.	595	295	65	
S&B3 214 PR	2 x T5 14w.	595	295	65	
S&B3 214 PBR	2 x T5 14w.	595	595	65	
S&B3 314 PR	3 x T5 14w.	595	595	65	
S&B3 414 PR	4 x T5 14w.	595	595	65	
S&B3 128 PR	1 x T5 28w.	1200	200	65	
S&B3 128 PBR	1 x T5 28w.	1200	295	65	
S&B3 228 PR	2 x T5 28w.	1200	295	65	
S&B3 228 PBR	2 x T5 28w.	1200	595	65	
S&B3 328 PR	3 x T5 28w.	1200	595	65	
S&B3 428 PR	4 x T5 28w.	1200	595	65	

ORDERING DATA: S&B3 228 PBR / P / T6 / 87

 $\begin{array}{lll} A &=& Acrylic\ Type\ (\ P=Prismatic,\ M=Opal,\ O=Stipple,\ J=Clear\ )\\ B &=& Steel\ Thickness\ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ )\\ C &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 





### T&F1-Q

#### Recessed T-bar Clean Room Luminaire



#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Open-back service access is available upon requested.
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options for T8 fluorescent.

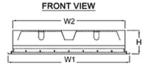
T&F1: For heavy duty rotary-locked type (TIS.344-1987 Standard) T&S1: For heavy duty spring-locked type (TIS.344-1987 Standard)

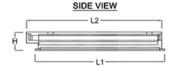
#### **REFLECTOR & DIFFUSER**

- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.
- · Weather proof seal gasket to prevent dust.
- · Spring-lock type frame for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar and gypsum ceiling installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.







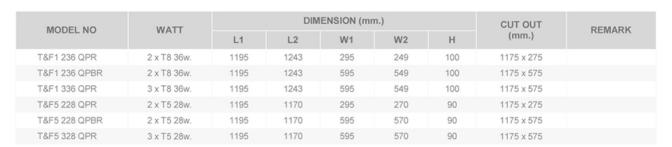












ORDERING DATA: T&F1 236 QPBR / P / T6 / 87

- $\begin{array}{ll} \mbox{Lamp Holder Type ( T&F1 = Rotary-locked type, T&S1 = Spring-locked type ) } \\ \mbox{Acrylic Type ( P = Prismatic, M = Opal, O = Stipple, J = Clear ) } \\ \mbox{Steel Thickness ( T6 = 0.6mm. , T8 = 0.8 mm. ) } \\ \mbox{Reflectance of Aluminium Reflector ( 87 = 87\% , 95 = 95\% ) } \\ \end{array}$





# T&F1-0

T8 Recessed T-bar Open Type Luminaire



#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.
- · Lamp holders are available in 2 options.

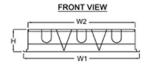
TFB1: For heavy duty rotary-locked type (TIS.344-1987 Standard) TFS1: For heavy duty spring-locked type (TIS.344-1987 Standard)

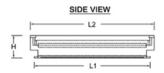
#### REFLECTOR

• 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage. Optional: Total Reflectance of 95% (95) for high efficiency purpose.

#### **INSTALLATION & APPLICATION**

- · For recessed T-bar ceiling installation.
- · Recommended for commercial buildings, hospital, laboratories, schools, etc.









MODEL NO	WATT		DIM	ENSION (mr	CUT OUT	REMARK		
MODEL NO	WATT	L1	L2	W1	W2	Н	(mm.)	KLWAKK
T&F1 218 OR	2 x T8 18w.	595	636	295	249	115	575 x 275	
T&F1 218 OBR	2 x T8 18w.	595	636	595	549	115	575 x 575	
T&F1 318 OR	3 x T8 18w.	595	636	595	549	115	575 x 575	
T&F1 236 OR	2 x T8 36w.	1195	1243	295	249	115	1175 x 275	
T&F1 236 OBR	2 x T8 36w.	1195	1243	595	549	115	1175 x 575	
T&F1 336 OR	3 x T8 36w.	1195	1243	595	549	115	1175 x 575	

ORDERING DATA: T&F1 236 OBR / T6 / 87

A = Lamp Holder Type ( TFB1 = Rotary-locked type, TFS1 = Spring-locked type )
B = Steel Thickness ( T6 = 0.6mm. , T8 = 0.8 mm. )
C = Reflectance of Aluminium Reflector ( 87 = 87% , 95 = 95% )



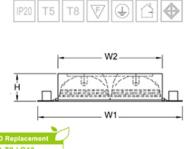
# T&F1-S

### Recess Air Supply Louver Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage with aluminium profile to anti-glare.
- · Hgih quality aluminium extruded air slots to supply air flow.
- · Spring-lock type frame for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)					CUT OUT
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)
T&F5 218 SCBR	2 x T8 18w.	595	615	595	425	90	575 x 575
T&F5 318 SCR	3 x T8 18w.	595	615	595	425	90	575 x 575
T&F5 236 SCBR	2 x T8 36w.	1195	1222	595	425	90	1175 x 275
T&F5 336 SCR	3 x T8 36w.	1195	1222	595	425	90	1175 x 275
T&F5 214 SCBR	2 x T5 14w.	595	575	595	425	90	575 x 575
T&F5 314 SCR	3 x T5 14w.	595	575	595	425	90	575 x 575
T&F5 228 SCBR	2 x T5 28w.	1195	1170	595	425	90	1175 x 275
T&F5 328 SCR	3 x T5 28w.	1195	1170	595	425	90	1175 x 275







## T&F1-T

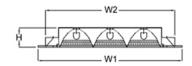
#### Recess Air Return Louver Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage with aluminium profile to anti-glare.
- · Hgih quality steel painted air return slots.
- · Spring-lock type frame for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)					CUT OUT	
WODEL NO		L1	L2	W1	W2	Н	(mm.)	
T&F5 218 TCBR	2 x T8 18w.	595	615	595	425	90	575 x 575	
T&F5 318 TCR	3 x T8 18w.	595	615	595	425	90	575 x 575	
T&F5 236 TCBR	2 x T8 36w.	1195	1222	595	425	90	1175 x 275	
T&F5 336 TCR	3 x T8 36w.	1195	1222	595	425	90	1175 x 275	
T&F5 214 TCBR	2 x T5 14w.	595	575	595	425	90	575 x 575	
T&F5 314 TCR	3 x T5 14w.	595	575	595	425	90	575 x 575	
T&F5 228 TCBR	2 x T5 28w.	1195	1170	595	425	90	1175 x 275	
T&F5 328 TCR	3 x T5 28w.	1195	1170	595	425	90	1175 x 275	









ORDERING DATA: T&F5 236 SCBR / T6 / 87

A = Steel Thickness ( T6 = 0.6mm. , T8 = 0.8 mm. ) B = Reflectance of Aluminium Reflector ( 87 = 87% , 95 = 95% )

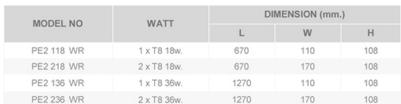




# PE-T8

### T8 Weather Proof Luminaire

- · Injected polycarbonate (PC) in grey color with injection molded clear prismatic UV stabilized polycarbonate (PC) with curved to anti-glare.
- Cold-rolled steel plate, finished with high glossy baked white polyester powder coating
- Optional: Anodized aluminium reflector TR 87% mirror finished or TR = 95%.
- · Stainless clip lock (SL). Optinal: Polycarbonate (PC) clip lock
- Rotary-locked type lamp holder G13 (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for semi-outdoor or outdoor application













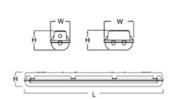
### PE-T5

#### T5 Weather Proof Luminaire

- · Injected polycarbonate (PC) in grey color with injection molded clear prismatic UV stabilized polycarbonate (PC) with curved to anti-glare.
- Cold-rolled steel plate, finished with high glossy baked white polyester powder coating
- Optional: Anodized aluminium reflector TR 87% mirror finished or TR = 95%.
- · Stainless clip lock (SL).
- · Rotary-locked type lamp holder G5 (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for semi-outdoor or outdoor application

MODEL NO	WATT	DI	DIMENSION (mm.)				
MODEL NO	WALL	L	W	Н			
PE5 114 WR / SL	1 x T5 14w.	610	60	80			
PE5 214 WR / SL	2 x T5 14w.	610	100	80			
PE5 128 WR / SL	1 x T5 28w.	1210	60	80			
PE5 228 WR / SL	2 x T5 28w.	1210	100	80			





ORDERING DATA: PE2 118 WR / SL / 87

A = Clip Type ( SL = Stainless Clip, PC = Polycarbonate Clip )
B = Reflectance of Aluminium Reflector ( 87 = 87% , 95 = 95% )





# Cold Room Luminaire











#### HOUSING

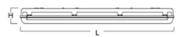
- · Fiber-glass reinforced polyester housing,
- · U.V. stabilized polycarbonate diffuser.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Optional: Anodized aluminium reflector and stainless steel suspension bracket
- Lamp holder is insulated with polycarbonate inner sleeve (TIS Standard)
- · Electric pulse starter to ensure long tube life and reduce cost maintenance with condensed ballast (HPF)
- · Stainless clip
- · 20mm. cable gland at both ends
- Internal wiring terminated at 6mm. 2 ways terminal block with fuse unit.
- · Manufactured in accordance with IEC 598 / AS 3137

#### **INSTALLATION & APPLICATION**

- · For surface mounted suspend.
- · Suitable for reliable operation in ambient temperature -40'C to 25'C









MODEL NO	WATT			REMARK	
MODEL NO	WAII	L	W	Н	KEWIAKK
CLR 118 WR	1 x T8 18w.	705	120	115	
CLR 218 WR	2 x T8 18w.	705	190	115	
CLR 136 WR	1 x T8 36w.	1315	120	115	
CLR 236 WR	2 x T8 36w.	1315	190	115	

ORDERING DATA: CLR 236 WR / 87

A = Reflectance of Aluminium Reflector (87 = 87%, 95 = 95%)





### DRTS

Explosionproof Luminaire

## IP67 T8 ₹ 4 △

#### DESCRIPTION

· Housing:

Type: Ex de IIA T6
 Marking test: Ex112G
 Ambient Temp.(Ta): 20°C - +50°C

Rated Voltage: 220-240VAC 50/60Hz

Lamp: Fluorescent 18/20w or 36/40w, G13 Socket
 Ballast: Rabit-start 20,40w or electronic 18,36w.

• Enclosure entry holes: Direct entry 2 x 3/4" NPT.

• Power Factor: PF ≥95

• Protection class for UL: Class I, Division 1 or 2 Group C,D

Class II, Division 1 or 2 Group E, F, G

Class III

• Protection class for IEC: Zone1 and Zone2

Options: Fixture hangle box 2 way 2x3/4"

Stopping plug 1x3/4" and ceiling saddle 1x3/4" Copper-free aluminium alloy, coated with epoxy

-polyester powder

Diffuser: Heavy-duty borosilicate glass tubes
 Reflector: High grade aluminium anodized reflector

• Standard: IEC 60079-0/1 or UL 60079-1







### **INSTALLATION & APPLICATION**

· For pendant or surface mounting

 Suitable for installation in the hazardous area such as petrochemical plants, paint manufacturing plants, flour mills, or oil refineries.



MODEL NO	WATT	DI	DIMENSION (mm.)			s (Surface)	REMARK
	WAII	L	W	Н	40°C Ta	50°C Ta	REWARK
DRTS 118	1 x T8 18w.	704	305	230	Т6	T6	
DRTS 218	2 x T8 18w.	585	305	240	Т6	T6	
DRTS 136	1 x T8 36w.	1348	305	230	Т6	T6	
DRTS 236	2 x T8 36w.	1195	305	240	Т6	T6	
DRTS 336	3 x T8 36w.	1195	485	240	Т6	T6	





# S&BO-FHR

T5 Open Type Fluorescent High Bay



#### HOUSING

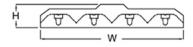
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### **REFLECTOR & LOUVER**

• 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high

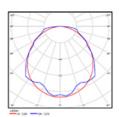
#### **INSTALLATION & APPLICATION**

- · For surface mounted or suspension rods installation.
- · Recommended for warehouses, factories, gymnesium, etc.





MODEL: S&B0 428 FHR/T6/95 won 1st Award Winning for Highest Efficiency in 2008 competition held by TIEA with Light Output Ratio: LOR = 96.6%





MODEL NO	WATT		DIMENSION (mm.)			
MODEL NO	WAII	L	W	Н	REMARK	
S&B0 228 FHR	2 x T5 28w.	1200	300	82		
S&B0 328 FHR	3 x T5 28w.	1200	405	82		
S&B0 428 FHR	4 x T5 28w.	1200	525	82		
S&B0 628 FHR	6 x T5 28w.	1200	525	82		
S&B0 254 FHR	2 x T5 54w.	1200	300	82		
S&B0 354 FHR	3 x T5 54w.	1200	405	82		
S&B0 454 FHR	4 x T5 54w.	1200	525	82		
S&B0 654 FHR	6 x T5 54w.	1200	525	82		

ORDERING DATA: S&B0 428 FHR / T6 / 87 B

A = Steel Thickness (  $T6 = 0.6 \, mm.$  ,  $T8 = 0.8 \, mm.$  ) B = Reflectance of Aluminium Reflector ( 87 = 87% , 95 = 95% )





# S&BO-FPR

T5 Acrylic Diffuser Type Fluorescent High Bay



#### HOUSING

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard). Optional: 105°C 18AWG UL Standard.

#### REFLECTOR & DIFFUSER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J).
- · Painted steel frame with stainless clip-lock type for ease of maintenance.
- · Weather proof gasket seal for higher prevention (Optional).
- · Wire guard cover (Optional).

#### **INSTALLATION & APPLICATION**

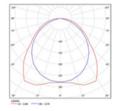
- · For surface mounted or suspension rods installation.
- · Recommended for warehouses, factories, gymnesium, etc.







Optional: Wire guard cover



MODEL NO	WATT		DIMENSION (mm.)	REMARK	
MODEL NO		L	W	Н	KEWAKK
S&B0 228 FPR	2 x T5 28w.	1200	300	94	
S&B0 328 FPR	3 x T5 28w.	1200	405	94	
S&B0 428 FPR	4 x T5 28w.	1200	525	94	
S&B0 628 FPR	6 x T5 28w.	1200	525	94	
S&B0 254 FPR	2 x T5 54w.	1200	300	94	
S&B0 354 FPR	3 x T5 54w.	1200	405	94	
S&B0 454 FPR	4 x T5 54w.	1200	525	94	
S&B0 654 FPR	6 x T5 54w.	1200	525	94	

ORDERING DATA: S&B0 428 FPR / J / T6 / 95 C

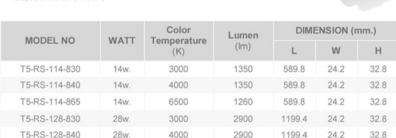
 $\begin{array}{lll} A &=& A crylic \ Type \ (\ P=Prismatic,\ M=Opal,\ O=Stipple,\ J=Clear,\ WG=Wire\ Guard\ )\\ B &=& Steel\ Thickness \ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ )\\ C &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 



# RetroSave T5 Retrofit - RetroSave

- · A retrofit solution that easily replaces the existing T8 standard lamps
- · 35% Energy saving
- · Highly effcient 3-band fluorescent coating
- · Reduce Hg content with solid mercury technology
- · Improved system power factor up to 0.99
- · Color Rendering Ra = 82
- · G13 lamp holder
- · 20,000hrs Life hours

T5-RS-128-865



2700

1199.4

24.2

32.8

6500





# RetroSave Reflector T5 Retrofit - RetroSave Reflector

28w.

- · A retrofit solution that easily replaces the existing T8 standard lamps
- · 35% Energy saving
- · Highly effcient 3-band fluorescent coating
- · Reduce Hg content with solid mercury technology
- · Aluminium reflector to improve efficiency
- · Improved system power factor up to 0.99
- · Color Rendering Ra = 82
- · G13 lamp holder
- · 20,000hrs Life hours

	MODEL NO	WATT	Color Temperature	Luman (lm)	DIMENSION (mm.)			
	WODEL NO	WAII	(K)	Lumen (lm)	L	W	Н	
7	5-RS-R-114-830	14w.	3000	1350	589.8	24.2	32.8	
7	5-RS-R-114-840	14w.	4000	1350	589.8	24.2	32.8	
7	5-RS-R-114-865	14w.	6500	1260	589.8	24.2	32.8	
7	5-RS-R-128-830	28w.	3000	2900	1199.4	24.2	32.8	
7	5-RS-R-128-840	28w.	4000	2900	1199.4	24.2	32.8	
7	5-RS-R-128-865	28w.	6500	2700	1199.4	24.2	32.8	







# Settronic-T5 T5 Complete Set Without Cover

- · T5 electronic fluorescent batten for home decoration
- 20% Less energy than average T8 batten type
- · 11% More light output then traditional batten type
- · High quality PC housing
- · Harmonic <20%
- Color Rendering Ra = 0.99

	IODEL NO	MATT	Color	DIMENSION (mm.)			
IV	IODEL NO	WATT	Temperature (K)	L	W	Н	
T5-	SET-114-830	14w.	3000	628	25	45	
T5-	SET-114-840	14w.	4000	628	25	45	
T5-	SET-114-865	14w.	6500	628	25	45	
T5-	SET-128-830	28w.	3000	1228	25	45	
T5-	SET-128-840	28w.	4000	1228	25	45	
T5-	SET-128-865	28w.	6500	1228	25	45	





# Settronic-T5C T5 Complete Set With Cover

- · Light and mlim T5 electronic fluorescent batten for home decoration
- 20% Less energy than average T8 batten type
- · 10% More light output then traditional batten type
- · High quality PC housing
- Harmonic <20%</li>
- · With acrylic cover
- · Color Rendering Ra = 0.99

MODEL NO	1616 77	Color	DIMENSION (mm.)			
MODEL NO	WATT	Temperature (K)	L	W	Н	
T5-SET-C-114-830	14w.	3000	628	25	45	
T5-SET-C-114-840	14w.	4000	628	25	45	
T5-SET-C-114-865	14w.	6500	628	25	45	
T5-SET-C-128-830	28w.	3000	1228	25	45	
T5-SET-C-128-840	28w.	4000	1228	25	45	
T5-SET-C-128-865	28w.	6500	1228	25	45	







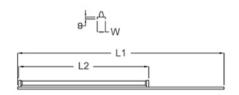


### Cove Light Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty rotary-locked type lamp holder (TIS.344-1987 Standard).
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for cove lighting

MODEL NO	WATT	DIMENSION (mm.)		
MODEL NO		L	W	Н
BTT 118 WR	1 x T8 18w.	915	45	48
BTT 136 WR	1 x T8 36w.	1525	45	48
BTT 114 WR	1 x T5 14w.	915	35	40
BTT 128 WR	1 x T5 28w.	1380	45	40





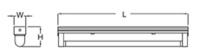
# BTM-T5

### T5 Batten Type Luminaire

- High quality cold-rolled steel housing of thickness 0.4 (T4), 0.5 (T5), 0.6mm.(T6).
- · Polycarbonate end cap
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
   Cable THW 0.5 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
BTM 114 WR	1 x T5 14w.	575	35	55
BTM 128 WR	1 x T5 28w.	1175	35	55

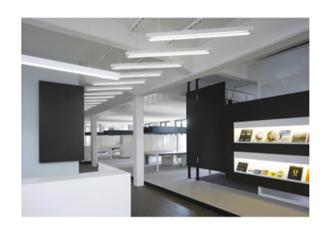




ORDERING DATA: BTM 114 WR / T6

A = Steel Thickness ( T4 = 0.4mm., T5 = 0.5mm. , T6 = 0.6 mm. )





### BT-T8

### T8 Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

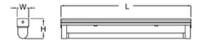
WR = Rotary-locked type lamp holder (G13)

WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
BT 118 WS	1 x T8 18w.	636	60	97
BT 218 WS	2 x T8 18w.	636	120	97
BT 136 WS	1 x T8 36w.	1245	60	97
BT 236 WS	2 x T8 36w.	1245	120	97







# BT-T5

### T5 Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
BT 114 WR	1 x T5 14w.	575	35	55
BT 214 WR	2 x T5 14w.	575	82	55
BT 128 WR	1 x T5 28w.	1175	35	55
BT 228 WR	2 x T5 28w.	1175	82	55





ORDERING DATA: BT 118 WS / T6

A = Lamp Holder Type ( WS = Spring-lock Type, WR = Rotary-lock Type, WP = Waterproof Type) B = Steel Thickness ( T6 = 0.6mm., T8 = 0.8 mm.)



# WG-T8

### T8 Wire Guard Batten Type Luminaire

- . High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted steel wire guard of thickness 2mm.
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

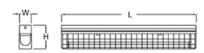
WR = Rotary-locked type lamp holder (G13)

WP = Waterproof type lamp holder

- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard)
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
MODEL NO	WAII	L	W	Н
WG 118 WS	1 x T8 18w.	636	64	112
WG 218 WS	2 x T8 18w.	636	124	112
WG 136 WS	1 x T8 36w.	1245	64	112
WG 236 WS	2 x T8 36w.	1245	124	112







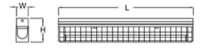
# WG-T5

### T5 Wire Guard Batten Type Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted steel wire guard of thickness 2mm.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
WG 114 WR	1 x T5 14w.	575	35	70
WG 214 WR	2 x T5 14w.	575	82	70
WG 128 WR	1 x T5 28w.	1175	35	70
WG 228 WR	2 x T5 28w.	1175	82	70





ORDERING DATA: WG 118 WS / T6

A = Lamp Holder Type ( WS = Spring-lock Type, WR = Rotary-lock Type, WP = Waterproof Type) B = Steel Thickness (  $T6 = 0.6 \, \text{mm.}$  ,  $T8 = 0.8 \, \text{mm.}$  )





### IT-T8

### T8 Industrial Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted sheel sheet reflector. Optional: 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) or 95% (95)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

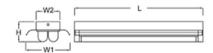
WR = Rotary-locked type lamp holder (G13)

WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)			
		L	W1	W2	Н
IT 118 WS	1 x T8 18w.	636	135	60	101
IT 218 WS	2 x T8 18w.	636	230	120	101
IT 136 WS	1 x T8 36w.	1245	135	60	101
IT 236 WS	2 x T8 36w.	1245	230	120	101







### IT-T5

#### T5 Industrial Type Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted sheel sheet reflector. Optional: 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) or 95% (95)
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard) Other lamp holder typs are available.

WP = Waterproof type lamp holder

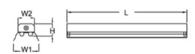
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT		DIMENSION (mm.)			
		L	W1	W2	Н	
IT 114 WR	1 x T5 14w.	577	110	35	70	
IT 214 WR	2 x T5 14w.	577	150	80	70	
IT 128 WR	1 x T5 28w.	1180	110	35	70	
IT 228 WR	2 x T5 28w.	1180	150	80	70	



 $\begin{array}{lll} A &=& Lamp\ Holder\ Type\ (WS = Spring\ lock\ Type, WR = Rotary\ -lock\ Type, WP = Waterproof\ Type) \\ B &=& Steel\ Thickness\ (\ T6 = 0.6mm.\ ,\ T8 = 0.8\ mm.\ ) \\ C &=& Optional:\ Reflectance\ fo\ Aluminium\ (\ 87 = 87\%\ ,\ 95 = 95\%\ ) \\ \end{array}$ 





ORDERING DATA: IT 118 WS / T6 / 87



# BTF-T8

### T8 Taper Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

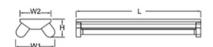
WR = Rotary-locked type lamp holder (G13) WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
MODEL NO		L	W	Н
BTF 118 WS	1 x T8 18w.	636	155	115
BTF 218 WS	2 x T8 18w.	636	155	90
BTF 136 WS	1 x T8 36w.	1245	155	115
BTF 236 WS	2 x T8 36w.	1245	155	90









# BTF-T5

### T5 Taper Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard) Other lamp holder typs are available.

WP = Waterproof type lamp holder

- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
BTF 114 WR	1 x T5 14w.	575	120	40
BTF 214 WR	2 x T5 14w.	575	120	40
BTF 128 WR	1 x T5 28w.	1175	120	40
BTF 228 WR	2 x T5 28w.	1175	120	40







ORDERING DATA: BTF 118 WS / T6

A = Lamp Holder Type ( WS = Spring-lock Type, WR = Rotary-lock Type, WP = Waterproof Type ) B = Steel Thickness ( T6 = 0.6mm., T8 = 0.8 mm.)



# BTV-T8

### T8 Taper Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

WR = Rotary-locked type lamp holder (G13)

WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)			
MODEL NO		L	W	Н	
BTV 218 WS	2 x T8 18w.	636	218	95	
BTV 236 WS	2 x T8 36w.	1245	218	95	









### BTV-T5

### T5 Taper Batten Type Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard) Other lamp holder typs are available.

WP = Waterproof type lamp holder

- . Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	WATT	DIMENSION (mm.)		
MODEL NO	WAII	L	W	Н
BTV 214 WR	2 x T5 14w.	600	150	50
BTV 228 WR	2 x T5 28w.	1200	150	50





ORDERING DATA: BTV 218 WS / T6

A = Lamp Holder Type ( WS = Spring-lock Type, WR = Rotary-lock Type, WP = Waterproof Type ) B = Steel Thickness ( T6 = 0.6mm., T8 = 0.8 mm.)



# BTR-T8

### T8 Asymmetric Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted sheel asymmetry cover. Optional: 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) or 95% (95)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.

WR = Rotary-locked type lamp holder (G13)

WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	WATT	DIMENSION (mm.)				
WODEL NO	WATT	L	W	Н		
BTR 118 WS	1 x T8 18w.	636	60	133		
BTR 136 WS	1 x T8 36w.	1245	60	133		







# BTR-T5

### T5 Asymmetric Batten Type Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Powder painted sheel asymmetry cover. Optional: 99.85% high purity anodizedaluminium reflector with Total Reflectance of 87% (87) or 95% (95)
- Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard) Other lamp holder typs are available.

WP = Waterproof type lamp holder

- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	WATT	DIMENSION (mm.)				
MODEL NO	WAII	L	W	Н		
BTR 114 WR	1 x T5 14w.	575	35	95		
BTR 128 WR	1 x T5 28w.	1175	35	95		





ORDERING DATA: BTR 118 WS / T6 / 87 C

Lamp Holder Type ( WS = Spring-lock Type, WR = Rotary-lock Type, WP = Waterproof Type)
 Steel Thickness ( T6 = 0.6mm., T8 = 0.8 mm. )
 Optional: Reflectance fo Aluminium ( 87 = 87%, 95 = 95% )



### UT-T8

### T8 U-Type Acrylic Diffuser Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.
  - WR = Rotary-locked type lamp holder (G13)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

MODEL NO	MATT	DIMENSION (mm.)				
MODEL NO	WATT	L	W	Н		
UT 118 WS	1 x T8 18w.	636	70	100		
UT 218 WS	2 x T8 18w.	636	120	75		
UT 136 WS	1 x T8 36w.	1245	70	100		
UT 236 WS	2 x T8 36w.	1245	120	75		







### T5 U-Type Acrylic Diffuser Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- · Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general purpose with high efficiency requirement

WATT	DIMENSION (mm.)				
	L	W	Н		
1 x T5 14w.	575	35	55		
2 x T5 14w.	575	82	55		
1 x T5 28w.	1175	35	55		
2 x T5 28w.	1175	82	55		
	2 x T5 14w. 1 x T5 28w.	WATT L 1 x T5 14w. 575 2 x T5 14w. 575 1 x T5 28w. 1175	WATT         L         W           1 x T5 14w.         575         35           2 x T5 14w.         575         82           1 x T5 28w.         1175         35		





ORDERING DATA: UT 118 WS / P / T6

A = Lamp Holder Type (WS = Spring-lock Type, WR = Rotary-lock Type)
B = Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
C = Acrylic Type (P = Prismatic, M = Opal, O = Stipple, J = Clear)



# LT-T8

### T8 L-Type Acrylic Diffuser Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty spring-locked type lamp holder (TIS.344-1987 Standard). Other lamp holder typs are available.
  - WR = Rotary-locked type lamp holder (G13)
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	MATT	DIMENSION (mm.)				
MODEL NO	WATT	L	W	Н		
LT 118 WS	1 x T8 18w.	636	100	100		
LT 136 WS	1 x T8 36w.	1245	100	100		







# LT-T5

### T5 L-Type Acrylic Diffuser Luminaire

- High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- · Heavy duty rotary-locked type (G5) lamp holder (TIS.344-1987 Standard)
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	WATT	DIMENSION (mm.)			
MODEL NO	WAII	L	W	Н	
LT 114 WR	1 x T5 14w.	575	65	65	
LT 128 WR	1 x T5 28w.	1200	65	65	







ORDERING DATA: LT 118 WS / P / T6

Lamp Holder Type (WS = Spring-lock Type, WR = Rotary-lock Type)
 Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
 Acrylic Type (P = Prismatic, M = Opal, O = Stipple, J = Clear)



# LTB-T8

### T8 Bed Top Acrylic Diffuser Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Two acrylic diffusers are available: Prismatic (P), Opal (M)
- · Optional: Anodized aluminium reflector TR 87% mirror finished or TR = 95%.
- · Rotary-locked type starter holder (TIS.344-1987 Standard)
- · Heavy duty rotary-locked type lamp holder (TIS.344-1987 Standard).
- · Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	WATT		DIMENSION (mm.)				
MODEL NO		L	W1	W2	Н		
LTB1 118 P	1 x T8 18w.	615	80	110	130		
LTB1 218 P	2 x T8 18w.	615	80	110	130		
LTB1 136 P	1 x T8 36w.	1220	80	110	130		
LTB1 236 P	2 x T8 36w.	1220	80	110	130		
LTB2 118 P	1 x T8 18w.	615	80	110	130		
LTB2 218 P	2 x T8 18w.	615	80	110	130		
LTB2 136 P	1 x T8 36w.	1220	80	110	130		
LTB2 236 P	2 x T8 36w.	1220	80	110	130		







# LTB-T5

### T5 Bed Top Acrylic Diffuser Luminaire

- · High quality cold-rolled steel housing of thickness 0.6 (T6) or 0.8mm.(T8).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · High quality acrylic diffuser with steel painted frame. Two acrylic diffusers are available: Prismatic (P), Opal (M)
- · Optional: Anodized aluminium reflector TR 87% mirror finished or TR = 95%.
- · Heavy duty rotary-locked type lamp holder (TIS.344-1987 Standard).
- Cable THW 1.0 sq.mm. 70°C (TIS.11-1988 Standard).
- · Suitable for general wall mounting purpose with asymestry light distribution

MODEL NO	WATT	DIMENSION (mm.)					
MODEL NO	***	L	W1	W2	Н		
LTB1 114 P	1 x T5 14w.	580	80	110	130		
LTB1 214 P	2 x T5 14w.	580	80	110	130		
LTB1 128 P	1 x T5 28w.	1195	80	110	130		
LTB1 228 P	2 x T5 28w.	1195	80	110	130		
LTB2 114 P	1 x T5 14w.	580	80	110	130		
LTB2 214 P	2 x T5 14w.	580	80	110	130		
LTB2 128 P	1 x T5 28w.	1195	80	110	130		
LTB2 228 P	2 x T5 28w.	1195	80	110	130		

A = 1 = Downlight only, 2 = Up & down light distribution
B = Reflector added if appreciated
C = Steel Thickness (T6 = 0.6mm., T8 = 0.8 mm.)
D = Acrylic Type (P = Prismatic, M = Opal)
E = Reflectance of Aluminium Refle (87 = 87%, 95 = 95%)





#### Simple Industrial Type Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87)

MODEL NO	WATT	DIMENSION (mm.)			
WODEL NO	WATT	L	W	Н	
SIT 136 WR	1 x T8 36w.	1222	190	100	
SIT 236 WR	2 x T8 36w.	1222	260	100	
SIT 128 WR	1 x T5 28w.	1195	595	100	
SIT 228 WR	2 x T5 28w.	1195	595	100	





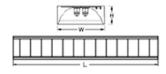


#### Louver Continue Type Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage with aluminium profile to anti-glare.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT		DIMEN	SION (	mm.)		CUT OUT
MODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)
SFB0 136 CCR	1 x T8 36w.	12	220	2	20	90	-
SFB0 236 CCR	2 x T8 36w.	12	220	2	20	90	-
SFB0 138 CCR	1 x T5 28w.	1200		220		90	-
SFB0 228 CCR	2 x T5 28w.	12	200	2	20	90	-
FFB0 136 CCR	1 x T8 36w.	1222	1195	220	195	80	1205 x 205
FFB0 236 CCR	2 x T8 36w.	1222	1195	220	195	80	1205 x 205
FFB0 128 CCR	1 x T5 28w.	1195	1170	220	195	80	1180 x 205
FFB0 228 CCR	2 x T5 28w.	1195	1170	220	195	80	1170 x 205







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ORDERING DATA: SFB0 236 CCR / T6 / 87

 $\begin{array}{lll} A &=& Steel\ Thickness\ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ )\\ B &=& Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 



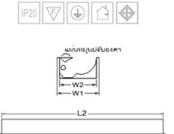


#### Wall Washer Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type lampholder (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.

MODEL NO	WATT		DIMENSION (mm.)				CUT OUT		
WODEL NO	WATT	L1	L2	W1	W2	Н	(mm.)		
SFB0 136 WW	1 x T8 36w.	12	1222		220				
SFB0 236 WW	2 x T8 36w.	1222		220		1222 220		105	
TFB0 136 WW	1 x T8 36w.	1270	1243	220	195	105	1255 x 205		
TFB0 236 WW	2 x T8 36w.	1270	1243	220	195	105	1255 x 205		
SFB0 128 WW	1 x T5 28w.	12	.00	220		105			
SFB0 228 WW	2 x T5 28w.	12	1200		20	105			
TFB0 128 WW	1 x T5 28w.	1195	1170	220	195	105	1175 x 205		
TFB0 228 WW	2 x T5 28w.	1195	1170	220	195	105	1175 x 205		





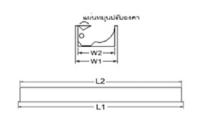


#### Adjustable Wall Washer Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type lampholder (TIS.344-1987 Standard)
- Rotary-locked type starter holder (TIS Standard)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Adjustable reflector for flexible light adjustable

MODEL NO	MODEL NO WATT				DIMENSION (mm.)				
WODEL NO	WATT	L1	L2	W1	W2	Н	(mm.)		
SFB0 136 WA	1 x T8 36w.	12	22	2	20	105			
SFB0 236 WA	2 x T8 36w.	12	22	2	20	105			
TFB0 136 WA	1 x T8 36w.	1270	1243	220	195	105	1255 x 205		
TFB0 236 WA	2 x T8 36w.	1270	1243	220	195	105	1255 x 205		
SFB0 128 WA	1 x T5 28w.	12	1200 220		105				
SFB0 228 WA	2 x T5 28w.	1200		1200 220		105			
TFB0 128 WA	1 x T5 28w.	1195	1170	220	195	105	1175 x 205		
TFB0 228 WA	2 x T5 28w.	1195	1170	220	195	105	1175 x 205		





ORDERING DATA: SFB0 236 WA/T6/87

 $\begin{array}{lll} A & = & Steel\ Thickness\ (\ T6=0.6mm.\ ,\ T8=0.8\ mm.\ ) \\ B & = & Reflectance\ of\ Aluminium\ Reflector\ (\ 87=87\%\ ,\ 95=95\%\ ) \end{array}$ 





### WRN

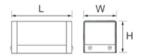
### Red Warning Light Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Porcelain ceramic E27 lampholder
- Red transparent acrylic type diffuser of 2.5mm.

MODEL NO	WATT	DIMENSION (mm.)		
WIODEL NO	WATT	L	W	Н
WRN-001	1 x E27 MAX 60w.	185	84	82









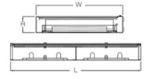
### X-ray Type Luminaire

- Made of high quality stainless steel sheet of thickness 0.6 (T6)
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87)
- · High quality opal acrylic diffuser
- · Rocker switch for separate view.

MODEL NO	WATT	DIMENSION (mm.)			REMARK	
MODEL NO	WAII	L	W	Н	KEWIAKK	
SFB0 215 XRY	2 x T8 15w.	435	540	100	1 view	
SFB0 415 XRY	4 x T8 15w.	810	540	100	2 view	
SFB0 615 XRY	6 x T8 15w.	1190	540	100	3 view	







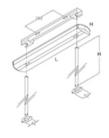




### HGR Hanging Rod

- · High quality cold-rolled steel housing of thickness 0.6 (T6) metal plate,
- Steel rod of diameter 3/4 inch
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · For hanging fixtures

MODEL NO	DIM	DIMENSION (mm.)				
MODEL NO	L	W	Н			
FLU-HR / 050	415	330	50			
FLU-HR / 100	415	330	100			
FLU-HR / 150	415	330	150			
FLU-HR / 200	415	330	200			
FLU-HR / 250	415	330	250			
FLU-HR / 300	415	330	300			









- · White PC housing
- · Standard Compliant (TIS.344-1987 Standard)
- · For T5 lamp to adjustable to fit T8 fixtures.

MODEL NO	FOR	DIMENSION (mm		
MODEL NO	FOR	D	L	
T5A-14	T5 14w.	26	31.5	
T5A-28	T5 28w.	26	36	





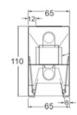


# **UP&DOWN**

### Up & Down Pendant Louver Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Anodized aluminium lover for anti-glare purpose
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87)
- Spring lock type louver for ease of maintenance
- Provide both up light and down light distribution

MODEL NO		DIN	DIMENSION (mm.)	
WODEL NO	WALL	L	W	Н
SFB0 128 UND	1 x T5 28w.	1220	65	110
SFB0 228 UND	2 x T5 28w.	1200	65	110









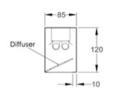
# SLIM-S

### Pendant Acrylic Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Opal Acrylic Diffuser for smooth light distribution

MODEL NO	WATT	DIMENSION (mm.)		
MODEL NO	***	L	W	Н
SFB0 128 SLM	1 x T5 28w.	1190	85	120
SFB0 228 SLM	2 x T5 28w.	1190	85	120



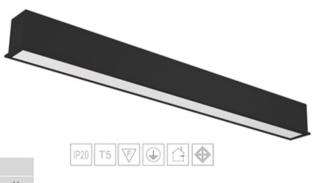


# SLIM-R

### Recessed Acrylic Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- Opal Acrylic Diffuser for smooth light distribution

MODEL NO	WATT	DIMENSION (mm.)					
	MODEL NO	WAII	L1	L2	W1	W2	Н
	FFB0 128 SLM	1 x T5 28w.	1190	1170	100	85	120
	FFB0 228 SLM	2 x T5 28w.	1190	1170	100	85	120









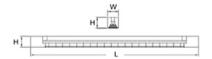
### ARROW-C

#### Pendant Louver Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)		n.)
MODEL NO	WALL	L	W	Н
SFB0 128 ARC	1 x T5 28w.	1380	90	90
SFB0 228 ARC	2 x T5 28w.	1380	110	130





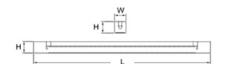
# ARROW-P

### Pendant Acrylic Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Opal acrylic diffuser for smooth light distribution

MODEL NO	WATT	DIMENSION (mm.)				
	WAII	L	W	Н		
SFB0 128 ARP	1 x T5 28w.	1380	90	90		
SFB0 228 ARP	2 x T5 28w.	1380	110	130		









### **FRAME**

### Recessed Mounted with Downlight Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- Dual QR111 downlight on both end (Optional: other downlights are available upon request)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87)
- · Opal acrylic diffuser for smooth light distribubtion

MODEL NO	WATT	DIMENSION (mm.)				
	WAII	L1	L2	W1	W2	Н
FFB0 136 FRM	1 x T8 36w.	1646	1622	206	180	140
FFB0 236 FRM	2 x T8 36w.	1646	1622	206	180	140
FFB0 128 FRM	1 x T5 28w.	1626	1602	206	180	140
FFB0 228 FRM	2 x T5 28w.	1626	1602	206	180	140







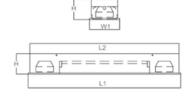
### DOUBLE

### Recessed Mounted with Downlight Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- Dual G12 downlight on both end (Optional: other downlights are available upon request)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87)
- · Opal acrylic diffuser for smooth light distribubtion

MODEL NO	WATT	DIMENSION (mm.)				
	WAII	L1	L2	W1	W2	Н
FFB0 136 DBL	1 x T8 36w.	1646	1622	206	180	140
FFB0 236 DBL	2 x T8 36w.	1646	1622	206	180	140
FFB0 128 DBL	1 x T5 28w.	1626	1602	206	180	140
FFB0 228 DBL	2 x T5 28w.	1626	1602	206	180	140









### MATCH-S

### Pendant Mounted Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- Metal halide (G12) downlingt for decorative lighting (Other downlights are applicable upon requested).
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)		
		L	W	Н
SFB0 136 MAT	1 x T8 36w.	1480	170	140
SFB0 236 MAT	2 x T8 36w.	1480	170	140
SFB0 128 MAT	1 x T5 28w.	1480	170	140
SFB0 228 MAT	2 x T5 28w.	1480	170	140





## MATCH-R

### Recessed Mounted Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- Rotary-locked type starter holder (TIS Standard) for T8 lamp
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- Metal halide (G12) downlingt for decorative lighting (Other downlights are applicable upon requested).
- · Spring-lock type louver for ease of maintenance.

MODEL NO	MATT	DIMENSION (mm.)							
WODEL NO	WATT	L1	L2	W1	W2	Н			
FFB0 136 MAT	1 x T8 36w.	1505	1480	195	154	140			
FFB0 236 MAT	2 x T8 36w.	1505	1480	195	154	140			
FFB0 128 MAT	1 x T5 28w.	1505	1480	195	154	140			
FFB0 228 MAT	2 x T5 28w.	1505	1480	195	154	140			



LED-T8 / G13 10W / 19W





# LINE-S

### Slim Pendant Louver Luminaire

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)					
WODEL NO	WATT	L	W	Н			
SFB0 136 LNE	1 x T8 36w.	1245	120	130			
SFB0 236 LNE	2 x T8 36w.	1245	150	130			
SFB0 128 LNE	1 x T5 28w.	1200	90	90			
SFB0 228 LNE	2 x T5 28w.	1200	100	130			



LED-T8 / G13 10W / 19W

# LINE-R

### Slim Recessed Mounted Louver Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

	MODEL NO	WATT	DIMENSION (mm.)							
	MODEL NO	WAII	L1	L2	W1	W2	Н			
F	FFB0 136 LNE	1 x T8 36w.	1270	1245	150	120	130			
F	FFB0 236 LNE	2 x T8 36w.	1270	1245	180	150	130			
F	FFB0 128 LNE	1 x T5 28w.	1195	1170	120	90	130			
F	FFB0 228 LNE	2 x T5 28w.	1195	1170	130	100	130			







# T&F2-OZ

T8 Recessed T-bar and Gypsum Louver Luminaire



#### HOUSING

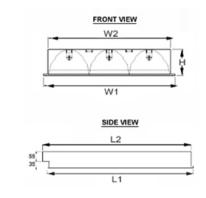
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G13) lamp holder (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70'C (TIS.11-1988 Standard). Optional: 105'C 18AWG UL Standard.

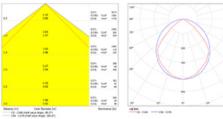
#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency purpose.
- · Spring-lock type for ease of maintenance.

### INSTALLATION & APPLICATION

- · For recessed T-bar and gypsum ceiling installation.
- Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.









MODEL NO	WATT		DIMENSION (mm.)						
MODEL NO	WATT	L1	L2	W1	W2	Н	(mm.)		
T&F2 118 OZB	1 x T8 18w.	595	620	295	265	80	575 x 275		
T&F2 218 OZ	2 x T8 18w.	595	620	295	265	80	575 x 275		
T&F2 218 OZB	2 x T8 18w.	595	620	595	565	80	575 x 575		
T&F2 318 OZ	3 x T8 18w.	595	620	595	565	80	575 x 575		
T&F2 136 OZB	1 x T8 36w.	1195	1222	295	265	80	1175 x 275		
T&F2 236 OZ	2 x T8 36w.	1195	1222	295	265	80	1175 x 275		
T&F2 236 OZB	2 x T8 36w.	1195	1222	595	565	80	1175 x 575		
T&F2 336 OZ	3 x T8 36w.	1195	1222	595	565	80	1175 x 575		





# T&F2-CZ

### T8 Recessed T-bar and Gypsum Louver Luminaire



#### HOUSING

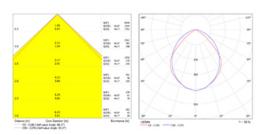
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8mm.(T8),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (G13) lamp holder (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard)
- Cable THW 1.0 sq.mm. 70'C (TIS.11-1988 Standard). Optional: 105'C 18AWG UL Standard.

#### REFLECTOR & LOUVER

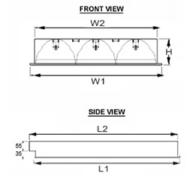
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for normal usage. Optional: TR = 95% (95) for high efficiency purpose.
- 99.85% high purity anodized aluminium louver with Total Reflectance of 87% (87) mirror finished (DIN 5036-2) for longitudinal with aluminium profile to anti-glare. Standard 5 blades for 18w. and 10 blades for 36w.
- · Louver and profiles are applied to anti-glare.
- · Spring-lock type for ease of maintenance.

#### **INSTALLATION & APPLICATION**

- For recessed T-bar and gypsum ceiling installation.
  Recommended for commercial buildings, shops, hospitals, department stores, schools, etc.









MODEL NO	WATT		DIMENSION (mm.)						
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)		
T&F2 118 CZB	1 x T8 18w.	595	620	295	265	80	575 x 275		
T&F2 218 CZ	2 x T8 18w.	595	620	295	265	80	575 x 275		
T&F2 218 CZB	2 x T8 18w.	595	620	595	565	80	575 x 575		
T&F2 318 CZ	3 x T8 18w.	595	620	595	565	80	575 x 575		
T&F2 136 CZB	1 x T8 36w.	1195	1222	295	265	80	1175 x 275		
T&F2 236 CZ	2 x T8 36w.	1195	1222	295	265	80	1175 x 275		
T&F2 236 CZB	2 x T8 36w.	1195	1222	595	565	80	1175 x 575		
T&F2 336 CZ	3 x T8 36w.	1195	1222	595	565	80	1175 x 575		



# **VECTRA**

#### Surface Mounted Louver Luminaire

#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6),
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp

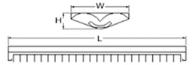
#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type grill for ease of maintenance.

MODEL NO	WATT	DI	n.)	
WODEL NO	WAII	L	W	Н
S&B0 236 VTR	2 x T8 36w.	1237	400	100
S&B0 436 VTR	3 x T8 36w.	1237	400	100
S&B0 228 VTR	2 x T5 28w.	1155	400	100
S&B0 428 VTR	3 x T5 28w.	1155	400	100







# RUGBY

#### Pendant Louver Luminaire

#### HOUSING

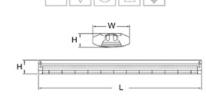
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 Lamp

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT	DIMENSION (mm.)					
MODEL NO	WAII	L	W	Н			
S&B0 136 RBY	1 x T8 36w.	630	295	115			
S&B0 236 RBY	2 x T8 36w.	1240	295	115			
S&B0 128 RBY	1 x T5 28w.	615	295	115			
S&B0 228 RBY	2 x T5 28w.	1155	295	115			









# CURVE1

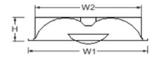
#### Recessed Mounted Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- · Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp
- · Spring-lock type frame for ease of maintenance.

MODEL NO	WATT		DIMEN	CUT OUT			
MODEL NO	WATT	L1	L2	W1	W2	Н	(mm.)
T&F0 118 CR1	1 x T8 18w.	595	615	595	425	115	575 x 575
T&F0 218 CR1	2 x T8 18w.	595	615	595	425	115	575 x 575
T&F0 136 CR1	1 x T8 36w.	1195	1222	595	425	115	1175 x 275
T&F0 236 CR1	2 x T8 36w.	1195	1222	595	425	115	1175 x 275
T&F0 114 CR1	1 x T5 14w.	595	565	595	565	115	575 x 575
T&F0 214 CR1	2 x T5 14w.	595	565	595	565	115	575 x 575
T&F0 128 CR1	1 x T5 28w.	1195	1170	595	565	115	1180 x 575
T&F0 228 CR1	2 x T5 28w.	1195	1170	595	565	115	1180 x 575







### CURVE2

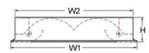
#### Recessed Mounted Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp
- · Spring-lock type frame for ease of maintenance.

MODEL NO	WATT		DIMEN	CUT OUT			
MODEL NO	WALL	L1	L2	W1	W2	Н	(mm.)
T&F0 218 CR2	1 x T8 18w.	595	615	595	425	115	575 x 575
T&F0 236 CR2	2 x T8 36w.	1195	1222	595	425	115	1175 x 275
T&F0 214 CR2	2 x T5 14w.	595	565	595	565	115	575 x 575
T&F0 228 CR2	2 x T5 28w.	1195	1170	595	565	115	1180 x 575
T&F0 236 CR2-PLL	2 x PLL 36w.	595	615	595	425	115	575 x 575









# CURVE-V

#### Recessed Mounted Louver Luminaire

#### HOUSING

- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp

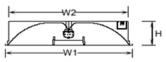
#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT		DIMENSION (mm.)					
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)	
T&F0 218 CRV	2 x T8 18w.	595	620	595	565	100	580 x 605	
T&F0 236 CRV	2 x T8 36w.	1195	1220	595	565	100	1205 x 605	
T&F0 214 CRV	2 x T5 14w.	595	565	595	565	100	575 x 575	
T&F0 228 CRV	2 x T5 28w.	1195	1170	595	565	100	1180 x 575	
T&F0 236 CRV-PLL	2 x PLL 36w.	620	570	595	565	100	580 x 605	









### VIARY

#### Recessed Mounted Louver Luminaire

### HOUSING

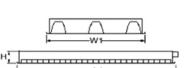
- · Made of high quality cold-rolled steel sheet of thickness 0.6 (T6).
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp

#### REFLECTOR & LOUVER

- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.
- · Spring-lock type louver for ease of maintenance.

MODEL NO	WATT		DIMEN	CUT OUT			
WODEL NO	WAII	L1	L2	W1	W2	Н	(mm.)
T&F0 218 VRY	2 x T8 18w.	595	575	295	265	90	575 x 275
T&F0 318 VRY	3 x T8 18w.	595	575	595	565	90	575 x 575
T&F0 236 VRY	2 x T8 36w.	1195	1222	295	265	90	1180 x 275
T&F0 336 VRY	3 x T8 36w.	1195	1222	595	565	90	1180 x 575
T&F0 214 VRY	2 x T5 28w.	595	575	295	265	90	575 x 275
T&F0 314 VRY	3 x T5 36w.	595	575	595	565	90	575 x 575
T&F0 228 VRY	2 x T5 28w.	1195	1170	295	265	90	1180 x 275
T&F0 328 VRY	3 x T5 36w.	1195	1170	595	565	90	1180 x 575









## WING

## Surface Mounted Luminaire

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- Finished with white polyester powder by two-stage electrostatic method
- Heavy duty rotary-locked type (TIS.344-1987 Standard)
- · Rotary-locked type starter holder (TIS Standard) for T8 lamp

MODEL NO	MATT	DIMENSION (mm.)		
MODEL NO	WATT	L	W	Н
S&B0 218 WNG	2 x T8 18w.	630	295	115
S&B0 236 WNG	2 x T8 36w.	1240	295	115
S&B0 214 WNG	2 x T5 14w.	615	295	115
S&B0 228 WNG	2 x T5 28w.	1155	295	115
S&B0 136 WNG-PLL	1 x PLL 36w.	500	295	115
S&B0 236 WNG-PLL	2 x PLL 36w.	500	295	115







# SFB-32

## Surface Mounted 32w Luminaire

## HOUSING

- Made of high quality cold-rolled steel sheet of thickness 0.6 (T6) or 0.8 (T8)
- · Five-stage zinc phosphate pretreatment for rust resistance.
- · Finished with white polyester powder by two-stage electrostatic method.
- Heavy duty lamp holder (TIS.344-1987 Standard)
- Rotary-locked type starter holder (TIS Standard)

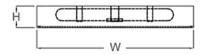
## REFLECTOR & LOUVER

- High quality acrylic diffuser with steel painted frame. Four acrylic diffusers are available: Prismatic (P), Opal (M), Stipple (O), and Clear (J)
- 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% (87) for normal usage.

MODEL NO	MATT	DI	DIMENSION (mm	
MODEL NO	WATT	L	W	Н
S&B0 132 P	1 x TLE 32w.	382	382	70











## ATC

## Porcelain Ceramic Terminal Block

· Material: Porcelain ceramic · Contact Material: Brass

• Operating Temperature: 500°C (max)

· Voltage Rating: 450V

• Termianl: Screw connection 12-way cable entry



MODEL	Cur-	Cable Size	MEAS	SUREN (mm)	IENT	QTY / BOX
140	Tent	(mm)	L	W	Н	DOX
ATC-05-3	5A	2.5-4	30	20	15	50
ATC-10-3	10A	6-10	40	25	20	50
ATC-15-3	15A	16	50	30	22	20



## **ATM**

## Terminal Block

• Mateiral: Nylon PA66UL94V-0 · Contact Material: Brass

• Operating Temperature: 130°C

· Voltage Rating: 450V

· Terminal: Screw connection

12-way cable entry



	MODEL NO	Cur-	Cable Size	MEASUREMENT (mm)		MENT	QTY / BOX
NO	Tent	(mm)	L	W	Н	ВОХ	
	ATM-04	10A	4	117	22.2	19.8	50
	ATM-06	20A	6	140	23.2	21.2	50
	ATM-10	35A	10	175	25.1	27.8	20
	ATM-16	50A	16	175	25.1	27.8	20



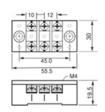
## ATN

## Terminal Block

· Mateiral: Plastic · Contact Material: Brass • Wire section: 0.5-2.5mm<sup>2</sup>

· Rated currnet: 25A • Voltage Rating: 600V

• Terminal: Double row 3 position





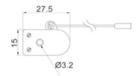
## APS

## Pull Switch

• Material: Polycarbonate Terminal: 0.5-1mm<sup>2</sup> · Rating: 2A/250V • String Material: Nyron

· Mark:









# FL-94

## Magnifier Arm Lamp

A special magnifier lamps FL-94 comes with adjustable arm and a shade handle. FL-94 is best for details visual work. It's available with 3x, 5x, and 8x magnifier. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. Electronic ballast inside for better lighting and no flicker.





## FL-97 Magnifier Table Lamp

A special magnifier lamps FL-97 comes with adjustable stand and a shade handle. FL-97 is best for details visual work. It's available with 3x, 5x, and 8x magnifier. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The white plastic base is designed for clear visible working area. Electronic ballast inside for better lighting and no flicker.

Comp	atible Bulb	
0	TL-E / G10q	
	22W	











## SL-106 Arm Lamp

SL-106 is a classic design arm lamp. It's suitable for every working area or even decorative purpose. SL-106 is easy to install with roomy shade for several bulb types. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature. The lamp is suitable for compact fluorescent bulb.











# AE-5316

Arm Lamp

AE-5316 is a 2-piece shade structured for better heat ventilation. With larger shade, AE-5316 is practical with high wattage bulbs to cover bigger working area. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature.

















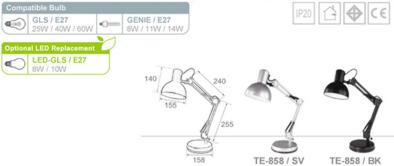
## FL-99 Fluorescent Table Lamp





# TE-858 Table Lamp

TE-5235 is a medium arm length size table lamp with wider lamp shade. Another design for your choice. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature. The lamp is suitable for compact fluorescent bulb.













# TE-254 Table Lamp

TE-5235 is a heavy duty table lamp. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature. The lamp is suitable for compact fluorescent bulb.



TE-254 / BL



## SL-109 Arm Lamp

TE-254 / BK

TE-5235 is a clamp arm lamp designed for multi-purpose functions. Small area is needed and yet could provide light for large area. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature. The lamp is suitable for compact fluorescent bulb.

Compatible Bulb

GLS / E27
25W / 40W / 60W

GENIE / E27
8W / 11W / 14W

160

126

370

126

SL-109 / BK

SL-109 / BL

SL-109 / WH











## TE-2421

## Table Lamp

TE-2421 is a practical table lamp, designed for saving energy purpose. The shade is colorful with white painted reflector for smooth light output. The outer shade and base is plastic with high glossy surface for easily cleaning. The lamp holder is made of porcelain to endure high temperature. The lamp is suitable for compact fluorescent bulb.

Compatible Bulb

GENIE / E27

BW / 11W / 14W

TE-2421 / BL

TE-2421 / OR



# TE-5232

## Table Lamp

TE-5235 is a high quality medium-size table lamp with flexible neck. The metal shade is painted in white for smooth light output. The outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature.







# TE-5240

## Table Lamp

TE-5240 is a mini versatile table lamp for limited area. The shade could be adjustable vertically. The metal shade is painted in white for smooth light output. The outer shade and base are painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature.





# TE-5238 Table Lamp TE-5238 comes with big shade for more light output. The metal shade is painted in white for smooth light output. The inner and outer shade and base is painted with high glossy oil paint with anti-rust surface pre-treatment. The lamp holder is made of porcelain to endure high temperature. Compatible Bulb GLS / E27 SW / 10W / SOW | GENIE / E27 SW / 10W | SW / 11W / 14W | SW / 10W | SW / 11W / 14W | SW / 10W | SW /









## DRM-207

MR16 Recessed Downlight

· Housing: Die-cast aluminium

· Painting: Polyester powder painting

Adjustable: Not adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.











DRM-760 MR16 Recessed Downlight

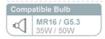
· Housing: Die-cast aluminium

· Painting: Polyester powder painting

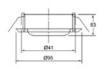
· Adjustable: Not adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.











## DRM-1CT

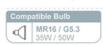
MR16 Recessed Downlight

· Housing: Cold-roll steel sheet housing · Painting: Polyester powder painting

· Adjustable: Adjustable

Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.











# DRM-1CK MR16 Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Painting: Polyester powder painting

Reflector: Anodized aluminium reflector

· Adjustable: Not adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.



















· Housing: Die-cast aluminium

· Painting: Polyester powder painting

· Adjustable: Adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as hotels, restaurants, etc.











DRM-1CB MR16 Recessed Downlight

· Housing: Die-cast aluminium · Painting: Polyester powder painting

· Adjustable: Adjustable

• Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as hotels, restaurants, etc.











# DRM-1TN MR16 Recessed Downlight

· Housing: Die-cast aluminium

· Painting: Polyester powder painting

DRM-1CG MR16 Recessed Downlight

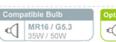
· Housing: Die-cast aluminium · Painting: Polyester powder painting

· Adjustable: Adjustable

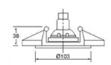
· Adjustable: Adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as hotels, restaurants, etc.





















· Installation: Recessed T-bar or gypsum mounting.











DRM-200 MR16 Square Recessed Downlight

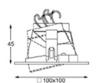
· Housing: Die-cast aluminium · Adjustable: Adjustable

· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.













DRM-201 MR16 Square Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Adjustable: Not adjustable

Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.











# DRM-202 MR16 Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Adjustable: Not adjustable

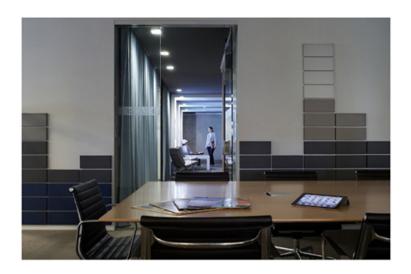
· Installation: Recessed T-bar or gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.

























DRV-430 Recessed 4-inch Vertical Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting.
- · Suitable for general decoration such as residences, hotels, etc.





















DRV-530 Recessed 5-inch Vertical Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting.
- · Suitable for general decoration such as residences, hotels, etc.

Comp	atible Bulb				
1	PLS / G23 7W / 9W	4	PLC / G24d-x 13W / 18W	<b>=</b>	PL / E27 14W / 18W















DRV-630 Recessed 6-inch Vertical Downlight

- Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting.
- · Suitable for general decoration such as residences, hotels, etc.

Compa	tible Bulb				
4	PLS / G23 9W	4	PLC / G24d-x 18W / 26W	<b>4</b> ]==	PL / E27 18W



















DRH-301 Recessed 3-inch Round Downlight

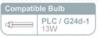
· Housing: Cold-roll steel sheet, coated with white polyester powder

· Reflector: Aluminium reflector

· Diffuser: Glass cover with steel frame

· Installation: Recessed mounting.

· Suitable for general decoration such as hotels, etc.









DRV-431 Recessed 4-inch Vertical Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Diffuser: Glass diffuser

· Installation: Recessed mounting.

· Suitable for general decoration such as hotels, etc.









DRV-531 Recessed 5-inch Vertical Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Diffuser: Glass diffuser

· Installation: Recessed mounting.

· Suitable for general decoration such as hotels, etc.

Compati	ble Bulb				
4	PLS / G23 7W / 9W	4	PLC / G24d-x 13W / 18W	<b>=</b>	PL / E27 14W / 18W









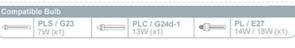


## **DRH-440**

Recessed Square Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as residences, hotels, etc.

Compat	tible Bulb			
Ф——	PLS / G23 7W (x1)	4	PLC / G24d-1 13W (x1)	PL / E27 14W / 18W (x1)







## DRH-540

Recessed Square Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as residences, hotels, etc.

Compatible Bulb							
4	PLS / G23 7W / 9W (x1)	4	PLC / G24d-x 13W / 18W (x1)	<b>d</b> ()===	PL / E27 14W / 18W (x1)		







DRH-640 Recessed Square Downlight

- · Housing: Cold-roll steel chsset, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as residences, hotels, etc.

Compa	atible Bulb				
4	PLS / G23 9W (x2)	4	PLC / G24d-x 18W / 26W (x2)	<b>d</b>	PL / E27 18W (x2)





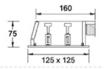




DRH-431 Recessed 4-inch Square Downlight

- · Housing: Cold-roll steel sheet, coated with white polyester powder
- · Reflector: Aluminium anodized reflector
- Diffuser: Glass cover with aluminium die-casting frame
- · Installation: Recessed T-bar and gypsum mounting.
- Suitable for general decoration such as residences, hotels, etc.









DRH-631 Recessed 6-inch Square Downlight

· Housing: Cold-roll steel sheet, coated with white polyester powder

· Reflector: Aluminium anodized reflector

· Diffuser: Glass cover with aluminium die-casting frame

· Installation: Recessed T-bar and gypsum mounting.

· Suitable for general decoration such as residences, hotels, etc.



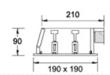




DRH-731 Recessed 7-inch Square Downlight

- · Housing: Cold-roll steel sheet, coated with white polyester powder
- · Reflector: Aluminium anodized reflector
- · Diffuser: Glass cover with aluminium die-casting frame
- · Installation: Recessed T-bar and gypsum mounting.
- · Suitable for general decoration such as residences, hotels, etc.





204 x 204

DRH-831 Recessed 8-inch Square Downlight

- · Housing: Cold-roll steel sheet, coated with white polyester powder
- Reflector: Aluminium anodized reflector
- · Diffuser: Glass cover with aluminium die-casting frame
- · Installation: Recessed T-bar and gypsum mounting.
- · Suitable for general decoration such as residences, hotels, etc.









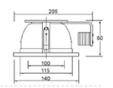
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DRH-487
Recessed 4-inch Horizontal Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, restaurants, etc.

Compatible Bulb					
4	PLS / G23 7W / 13W (x1)	<b>€</b>	PL / E27 8W / 14W (x1)		



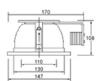




DRH-587 Recessed 5-inch Horizontal Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, restaurants, etc.

DIC LOSS		DIO / COAL		DI / FOR
PLS / G23 7W (x2)	4	PLC / G24d-x 13W / 18W (x2)	<b>4</b> ()==	PL / E27 14W / 18W (x2



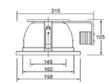




DRH-687 Recessed 6-inch Horizontal Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, restaurants, etc.

Compatible Bulb						
4-	PLS / G23 9W (x2)	<b>⊕</b>	PLC / G24d-2 18W (x2)	<b>€</b>	PL / E27 14W / 18W (x2)	



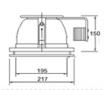




DRH-887 Recessed 8-inch Horizontal Downlight

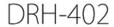
- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, restaurants, etc.

Compatib	ole Bulb				
4	PLS / G23 9W (x2)	4	PLC / G24d-3 26W (x2)	<b>a</b> ()===	PL / E27 18W / 23W (x2)







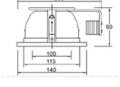


DRH-402 Recessed 4-inch Horizontal Downlight



· Reflector: Aluminium reflector · Control box: Built-in gear tray · Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.































DRH-603 Recessed 6-inch Horizontal Downlight

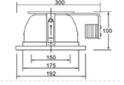
· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Diffuser: Glass cover with steel frame

· Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.



Compa	tible Bulb					
4	PLS / G23 9W (x2)	4	PLC / G24d-x 13W / 18W (x2)	<b>4</b> □	PL / E27 18W (x2)	











DRH-822 Recessed 8-inch Horizontal Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

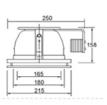
· Reflector: Aluminium reflector

· Diffuser: Glass cover

· Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.











## DRH-614

6-inch Recessed Louver Downlight

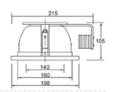
· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.

Compatible Bulb							
4	PLS / G23 7W (x2)	€===	PLC / G24d-x 13W / 18W (x2)	<b>4</b> ()===	PL / E27 14W / 18W (x2)		







DRH-814 8-inch Recessed Louver Downlight

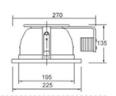
· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.









## **DRH-914**

Square Recessed Louver Downlight

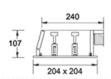
· Housing: Cold-roll steel sheet, coated with polyester powder

· Reflector: Aluminium reflector

· Installation: Recessed mounting

· Suitable for general decoration such as residences, hotels, etc.

Compatible Bulb					
40	PLS / G23 9W (x2)	-(□==	PLC / G24d-x 13W / 18W (x2)	<b>€</b>	PL / E27 18W (x2)





















DRV-905
HID Recessed Downlight

- · Housing: Die-cast aluminium housing with white polyester powder, require separate control gear
- Reflector: Aluminium anodized reflector
- · Diffuser: Glass cover
- · Installation: Recessed mounting.
- · Suitable for malls, shops, or showrooms decoration







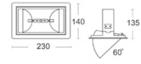




## **DRV-105**

HID Recessed Downlight

- · Housing: Cold-roll steel sheet housing with die-cast aluminium trim, coated with white polyester powder
- · Reflector: Aluminium anodized reflector
- · Diffuser: Tempered glass cover with die cast aluminium frame
- · Installation: Recessed mounting
- · Suitable for shops, hotels, or showrooms decoration













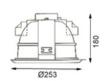


## **DRV-800**

**HID Recessed Downlight** 

- · Housing: Cold-roll steel sheet, coated with white polyester powder
- · Reflector: Aluminium anodized reflector
- Diffuser: Temper glass cover with steel frame
- · Installation: Recessed T-bar or gypsum mounting.
- · Suitable for malls, shops, or showrooms decoration











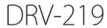










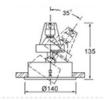


Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- Adjustable: 35 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, shops, etc.



















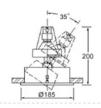


# DRV-319 Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Adjustable: 35 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, shops, etc.

















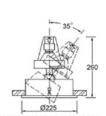


# DRV-419 Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Adjustable: 35 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for general decoration such as hotels, shops, etc.















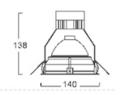






## HID Recessed Downlight

- · Housing: Cold-roll steel sheet housing with die-cast aluminium trim, coated with white polyester powder
- Reflector: Aluminium anodized reflector
- · Diffuser: Tempered glass cover
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, or showrooms decoration











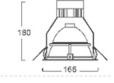








- · Housing: Cold-roll steel sheet housing with die-cast aluminium trim, coated with white polyester powder
- Reflector: Aluminium anodized reflector
- Diffuser: Tempered glass cover
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, or showrooms decoration















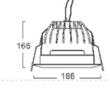




## **DRV-903**

## HID Recessed Downlight

- · Housing: Cold-roll steel sheet housing with die-cast aluminium trim, coated with white polyester powder
- Reflector: Aluminium anodized reflector
- · Diffuser: Tempered glass cover with die cast aluminium frame
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, or showrooms decoration









- · Housing: Cold-roll steel sheet housing with die-cast aluminium trim, coated with white polyester powder
- Reflector: Aluminium anodized reflector
- · Diffuser: Tempered glass cover with die cast aluminium frame
- Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, or showrooms decoration





















## **DSV-004**

4-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.









DSV-006 6-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.











DSV-008 8-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.

Compatible Bulb						
(I)	PLS / G23 9W	4	PLC / G24d-3 26W	<b>4</b> ]==	PL / E27 18W / 23W	







DSV-010 10-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.





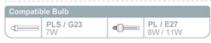




DSV-024 4-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.











DSV-025 5-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.











DSV-026 6-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.



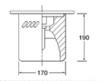
Compatible Bulb				
=	PLC / G24d-x 13W / 18W	<b>4</b> ()===	PL / E27 14W / 18W / 20W	





DSV-016 6-inch Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Diffuser: Frosted glass cover
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, restaurants, etc.



Compati	ompatible Bulb				
-	PLC / G24d-x 13W / 18W	<b>4</b> []	PL / E27 14W / 18W / 20W		





# DSV-101 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant
- · Suitable for general decoration such as shops, hotels, restaurants, etc.











# DSV-102 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- Installation: Surface mounting or pendant
- · Suitable for general decoration such as shops, hotels, restaurants, etc.





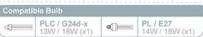






# DSV-201 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant
- · Suitable for general decoration such as shops, hotels, restaurants, etc.









# DSV-202 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Surface mounting or pendant
- · Suitable for general decoration such as shops, hotels, restaurants, etc.

Compa	tible Bulb		
4	= PLC / G24d-x 13W / 18W (x2)	<b>€</b>	PL / E27 14W / 18W (x2)











# DSV-301 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector

QR111 / G5.3 75W / 100W (x1)

- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, hotels, restaurants, etc.



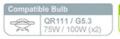






# DSV-302 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, hotels, restaurants, etc.









150

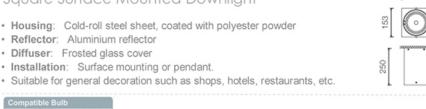




# DSV-901 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Diffuser: Frosted glass cover
- · Installation: Surface mounting or pendant.





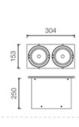




# DSV-902 Square Surface Mounted Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- Reflector: Aluminium reflector
- Diffuser: Frosted glass cover
- · Installation: Surface mounting or pendant.
- · Suitable for general decoration such as shops, hotels, restaurants, etc.









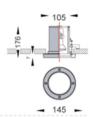


# DRV-312 Weatherproof Recessed Downlight

- · Housing: Die-cast aluminium alloy and extruded aluminium alloy
- · Painting: Epoxy resin coated on top with UV stabilized polyester powder
- · Diffuser: Impact resistant safty tempered glass cover
- Working Temperature: -40°C to +130°C
- · Installation: Recessed T-bar or gypsum mounting.







-175-





# DRV-302 Weatherproof Recessed Downlight

- · Housing: Die cast aluminium alloy and extruded aluminium alloy
- · Painting: Epoxy resin coated on top with UV stabilized polyester powder
- · Diffuser: Impact resistant safty tempered glass cover
- · Working Temperature: -40°C to +200°C
- · Installation: Recessed T-bar or gypsum mounting.





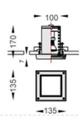




# DRV-332 Weatherproof Recessed Downlight

- · Housing: Die cast aluminium alloy and extruded aluminium alloy
- Painting: Epoxy resin coated on top with UV stabilized polyester powder
- · Diffuser: Impact resistant safty tempered glass cover
- Working Temperature: -40°C to +200°C
- · Installation: Recessed T-bar or gypsum mounting.







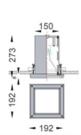


## **DRV-322**

## Weatherproof Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with whtiepolyester powder
- · Reflector: Aluminium anodized reflector
- · Diffuser: Tempered glass cover with die cast aluminium trim
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, showrooms, stores decoration









## DRM-220

## MR16 Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector · Adjustable: Not adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shops, hotels, showrooms, stores decoration







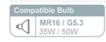


## DRM-221

## MR16 Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

- · Reflector: Aluminium reflector
- Adjustable: Adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, showroom, store decoration











# DRG-051 1-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, showroom, store decoration







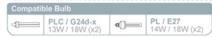




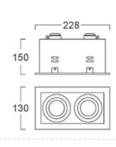
## DRG-052

## 2-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, showroom, store decoration













DRG-711
1-Multiple Recessed Downlight



· Reflector: Aluminium anodized reflector

· Installation: Recessed mounting.

Suitable for shop, hotel, showroom, store decoration











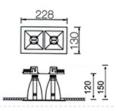


DRG-712 2-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Installation: Recessed mounting.
- · Suitable for shop, hotel, showroom, store decoration

Compatil	ole Bulb			
4	PLC / G24d-x 13W (x2)	<b>a</b> ()===	PL / E27 14W (x2)	









DRG-713
3-Multiple Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

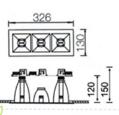
· Reflector: Aluminium anodized reflector

· Installation: Recessed mounting.

· Suitable for shop, hotel, showroom, store decoration

















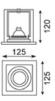


DRG-011
1-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Painting: Polyester power painting
- · Adjustable: 30 degree adjustable
- · Installation: Recessed T-bar or gypsum ceiling mounting
- · Suitable for shop, hotel, showroom, store decoration









DRG-012 2-Multiple Recessed Downlight



- · Painting: Polyester power painting Adjustable: 30 degree adjustable
- · Installation: Recessed T-bar or gypsum ceiling mounting
- Suitable for shop, hotel, showroom, store decoration











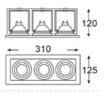


DRG-013
3-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Painting: Polyester power painting
- · Adjustable: 30 degree adjustable
- · Installation: Recessed T-bar or gypsum ceiling mounting
- Suitable for shop, hotel, showroom, store decoration









IP20 🔻 🕒 🗘 📭



DRG-022 4-Multiple Recessed Downlight

· Housing: Cold-roll steel sheet, coated with polyester powder

· Painting: Polyester power painting

· Adjustable: 30 degree adjustable

· Installation: Recessed T-bar or gypsum ceiling mounting

· Suitable for shop, hotel, showroom, store decoration











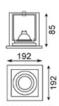


# DRG-811 1-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Adjustable: 30 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration





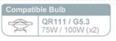


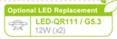




# DRG-812 2-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- Reflector: Aluminium anodized reflector
- · Adjustable: 30 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration











- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Adjustable: 30 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration









IP20 F 4 G 4 970475



# DRG-822 4-Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Adjustable: 30 Degree adjustable
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration













# DRG-911 1 Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- · Reflector: Aluminium anodized reflector
- · Diffuser: Frosted glass diffuser
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration

Compati	ble Bulb	
:8==	CDM-T / G12 35W / 70W (x1)	







## DRG-912 2 Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- Reflector: Aluminium anodized reflector
- Diffuser: Frosted glass diffuser
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration











# DRG-913 3 Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- Reflector: Aluminium anodized reflector
- Diffuser: Frosted glass diffuser
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration









# DRG-922 4 Multiple Recessed Downlight

- · Housing: Cold-roll steel sheet, coated with polyester powder
- Reflector: Aluminium anodized reflector
- Diffuser: Frosted glass diffuser
- · Installation: Recessed T-bar or gypsum mounting
- · Suitable for shop, hotel, restaurant decoration







Track Light Luminaires

Track light luminaires are suitable for shops, showrooms, stores, or department stores decoration. Track light luminaires could emphasize a specific object or space and also create a specific mood and tone of the area.

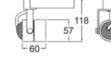






TRA-900 Track Light Luminaire

- · Housing: Corrosion resistant extruded aluminium
- · Painting: Polyester powder coated in white or black
- · Control gear: Built-in electronic transformer 220V 50Hz
- · Suitable for focus lighting such as in shops, restaurants, etc.













# TRA-901 Track Light Luminaire

- · Housing: Corrosion resistant extruded aluminium
- · Painting: Polyester powder coated in white or black
- Control gear: Built-in electronic transformer 220V 50Hz
- · Suitable for focus lighting such as in shops, restaurants, etc.







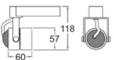




# TRA-902 Track Light Luminaire

- · Housing: Corrosion resistant extruded aluminium
- Painting: Polyester powder coated in white or black
- · Control gear: Built-in electronic transformer 220V 50Hz
- · Suitable for focus lighting such as in shops, restaurants, etc.







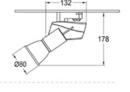


# TRA-009 Track Light Luminaire

- · Housing: Corrosion resistant die casting aluminium
- · Painting: Polyester powder coated in White
- · Gear Box: Built-in die casting aluminium control gear
- · Suitable for general decoration such as showroom, shop, etc.









## TRA-010 Track Light Luminaire

· Housing: Corrosion resistant die casting aluminium

· Painting: Polyester powder coated in White

· Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.









## TRA-014 Track Light Luminaire

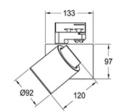
· Housing: Corrosion resistant die casting aluminium

• Painting: Polyester powder coated in White

· Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.





88.5



## TRA-015 Track Light Luminaire

· Housing: Corrosion resistant die casting aluminium

· Painting: Polyester powder coated in White

· Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.









Ø116.5







# TRA-000 Track Light Luminaire

· Housing: Steel metal housing · Painting: Polyester powder coated

· Adjustable: 360 Degree adjustable · Suitable for general decoration such as showroom, shop, etc.











# TRA-001 Track Light Luminaire

· Housing: Steel metal housing · Painting: Polyester powder coated • Adjustable: 360 Degree adjustable

· Suitable for general decoration such as showroom, shop, etc.





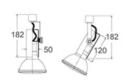




# TRA-002 Track Light Luminaire

· Housing: Steel metal housing · Painting: Polyester powder coated Adjustable: 360 Degree adjustable

· Suitable for general decoration such as showroom, shop, etc.













· Housing: Die-cast aluminium body · Painting: Polyester powder coated · Reflector: Aluminium reflector in prism

· Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.





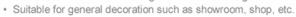


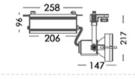


TRA-299 HID Track Light Luminaire

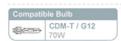
· Housing: Die-cast aluminium body · Painting: Polyester powder coated

· Reflector: Aluminium reflector in prism with glass diffuser · Gear Box: Built-in die casting aluminium control gear











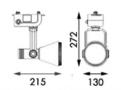


## TRA-302 HID Track Light Luminaire

· Housing: Die-cast aluminium body · Painting: Polyester powder coated

· Diffuser: UV-protection transparent toughen glass · Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.







## TRA-304 HID Track Light Luminaire

· Housing: Die-cast aluminium body · Painting: Polyester powder coated

· Diffuser: UV-protection transparent toughen glass · Gear Box: Built-in die casting aluminium control gear

· Suitable for general decoration such as showroom, shop, etc.

CDM-T / G12	Compatible Bulb						
70W	Series .	*Berne					





TRA-BS1 Surface 1-Phase Circuit Track

· Housing: Extruded aluminium profile Painting: Polyester powder coatedCircuit: 240V, 15A

· Length: 1m, 2m, 3m



Recessed 1-Phase Circuit Track

· Housing: Extruded aluminium profile · Painting: Polyester powder coated

· Circuit: 240V, 15A Length: 1m, 2m, 3m

TRA-1EN















TRA-BS3 Surface 3-Phase Circuit Track

· Housing: Extruded aluminium profile Painting: Polyester powder coated
Circuit: 240V, 15A
Length: 1m, 2m, 3m



TRA-BR3 Recessed 3-Phase Circuit Track

· Housing: Extruded aluminium profile Painting: Polyester powder coated

 Circuit: 240V, 15A Length: 1m, 2m, 3m

TRA-3EN

TRA-3ST





















### CEI-703

Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

Installation: Surface mounting

· Suitable for general decoration in residential areas

Comp	atible Bulb			a
0	TL-E / G10q 22W	<b>4</b> ()—	GENIE / E27 18W (x1)	





## CEI-803 Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas







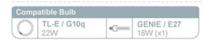
# CEI-024 Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas







## CEI-005 Ceiling 32w Lamp

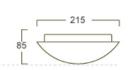
· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas





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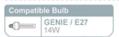
· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas











· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas









# CEI-099-10 Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

GENIE / E27 14W / 18W

· Suitable for general decoration in residential areas

Ø250





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Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal acrylic diffuser Installation: Surface mounting

Suitable for general decoration in residential areas



Comp	atible Bulb			
0	TL-E / G10q 22W	<b>d</b> ()—	GENIE / E27 18W (x1)	

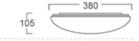


## CEI-042 Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal acrylic diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas



Comp	atible Bulb			
0	TL-E / G10q 32W	<b>4</b> ()===	GENIE / E27 18W (x2)	





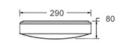
# CEI-061 Ceiling Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal acrylic diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas









### CEI-062

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal acrylic diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas





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# CEI-101 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas







CEI-701 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas









· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas







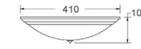


## CEI-005 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas





410







# CEI-006 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

Diffuser: Opal glass diffuser · Installation: Surface mounting

· Suitable for general decoration in residential areas







TL-E / G10q 32W

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser Installation: Surface mounting









# CEI-008 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser · Installation: Surface mounting







## CEI-009 Ceiling 32w Lamp

· Housing: Cold-roll steel sheet, coated with polyester powder

· Diffuser: Opal glass diffuser

· Installation: Surface mounting

· Suitable for general decoration in residential areas



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CP LFD

Self-Contained Emergency LED Lighting











#### SPECIFICATION

- · Non-maintained
- LED spot light (wide beam) with 180° adjustable sets and plastic-cover for anti-dust
- · Aluminium reflector for heat extraction
- · Current and Voltage are controlled by Micro Processor Driver circuit
- · AC 220 Volt, 50 Hz, ±10% Single phase
- · Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof.
- · Sealed lead acid battery, based on ISO9001 and ISO14001 certification
- · Solid state system automatic battery charger
- · Constant voltage charging systems
- · Switching regulated transformer
- · 12-15 hours charging period.

#### SAFETY FEATURES

- Low-high voltage cut-off, prevention battery over charge & discharge
- · AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- · DC fuse-preventing short circuit and overload for charging & load
- · Infrared-remote test
- · AC Plug with ground

### CP Series—Spotlight LED type (ED)

	E	BULBS	DIMENSION	DURATION		
MODEL NO	BATTERY	LED (Watt)	EQUIVELENT TO HA-Watt	L x W x H (cm)	(Hrs-mins) ±10%	
CP 04 - 6 ED	12V. 5.0Ah.	2 x 6w.	2 x 15-20w.	26 x 8.5 x 21.5	4.30	
CP 07 - 9 ED	12V. 7.0Ah.	2 x 9w.	2 x 45-50w.	26 x 8.5 x 21.5	4.30	
CP 07 - 12 ED	12V. 9.0Ah.	2 x 12w.	2 x 75-80w.	26 x 8.5 x 21.5	4.3	





## MB Series

Self-Contained Emergency

### SPECIFICATION

- · Non-maintained
- Dichoroic halogen, with 180° adjustable sets and plastic-cover anti-dust
- · AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof.
- · Sealed lead acid battery, based on ISO9001 and ISO14001 certification
- · Solid state system automatic battery charger
- · Constant voltage charging systems
- · Switching regulated transformer
- · 14-20 hours charging period.

#### SAFETY FEATURES

- · Low-high voltage cut-off, prevention battery over charge & discharge
- · AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- DC fuse-preventing short circuit and overload for charging & load

### MB Series - Dichoroic Halogen (Square)

MODEL NO	BATTERY	BULB (Watt)	DIMENSION L x W x H (cm)	DURATION (Hrs-mins) ±10%
MB 07	12V. 7.0Ah.	2 x 20w.	29.5 x 8.5 x 28	1.40
MB 15	12V. 15.0Ah.	2 x 35w.	31 x 8.5 x 32	2.00
MB 24	12V. 24.0Ah.	2 x 55w.	31 x 8.5 x 32	2.00





### MB LED

Self-Contained Emergency LED Lighting



- · Non-maintained
- LED lamp with 180° adjustable sets and plastic-cover anti-dust
- AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof or Standard ABS casting
- · Sealed lead acid battery, based on ISO9001 and ISO14001 certification
- · Solid state system automatic battery charger
- · Constant voltage charging systems
- Switching regulated transformer
- · 14-20 hours charging period.

#### SAFETY FEATURES

- Low-high voltage cut-off, prevention battery over charge & discharge
- · AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- DC fuse-preventing short circuit and overload for charging & load

### MB Series - LED type (ED)

MODEL NO BATTERY		E	BULBS	DIMENSION	DURATION	
	BATTERY	LED (Watt)	EQUIVELENT TO HA-Watt	(cm)		
MB 04-6 ED	12V. 5.0Ah.	2 x 6w.	2 x 15-20w.	26 x 8.5 x 21.5	4.30	
MB 07-9 ED	12V. 7.0Ah.	2 x 9w.	2 x 45-50w.	26 x 8.5 x 21.5	4.30	
MB 07-12 ED	12V. 9.0Ah.	2 x 12w.	2 x 75-80w.	26 x 8.5 x 21.5	4.30	









### EXIT TUBE

Self-Contained Exit Sign Tube Series



The EXB Exit Sign Light is decoratively designed for convenient operation with single or double side signs complies to E.I.T. and TIS. Standards.

EXA-xxx — without battery (220VAC operation)

EXB-xxx — with battery

#### SPECIFICATION

- Maintained
- · FL Lamp and PL Lamp
- · Lamp life time 50,000 hours
- · AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof
- · Nickle metal hydride battery, high temperature type
- · Solid state system automatic battery charger
- · Constant voltage charging systems
- · Switching regulated transformer
- · 12-15 hours charging period.

#### SAFETY FEATURES

- Low-high voltage cut-off, prevention battery over charge & discharge
- AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- DC fuse-preventing short circuit and overload for charging & load
- · Wall mounting or ceiling mounting
- EXA series without battery charger, safety features and indicator display

### EXB-Box Type

MODEL NO	SIDE	BATTERY	BULBS (Watt)	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)
EXB 111 FL	1		1 x 10	2	38 x 9.5 x 18.5
EXB 121 FL	1		2 x 10	2	38 x 9.5 x 18.5
EXB 112 FL	2	6V. 4.5Ah (SLA)	1 x 10	2	38 x 10 x 18.5
EXB 122 FL	2		2 x 10	2	38 x 10 x 18.5
EXB 211 FL	1		1 x 18	2	70 x 9.5 x 22.5
EXB 212 FL	2	or Ni-MH 6V. 4.5Ah	1 x 18	2	70 x 10 x 22.5
EXB 111 PL	1		1 x 11	2	38 x 9.5 x 18.5
EXB 121 PL	1		2 x 11	2	38 x 9.5 x 18.5
EXB 112 PL	2		1 x 11	2	38 x 10 x 18.5
EXB 122 PL	2		2 x 11	2	38 x 10 x 18.5

#### EXB-303 Slimline Type

MODEL NO	SIDE	BATTERY	BULBS (Watt)	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)
EXB 303 SFL	1		1 x 10	2	37 x 8 x 11
EXB 303 TFL	2	6V. 4.5Ah (SLA) or Ni-MH 6V. 4.5Ah	1 x 10	2	37 x 8 x 11
EXB 303 SPL	1		1 x 11	2	37 x 8 x 11
EXB 303 TPL	2		1 x 11	2	37 x 8 x 11
EXB 303 SFL	1		2 x 10	2	42 x 11.5 x 11
EXB 303 TFL	2		2 x 10	2	42 x 11.5 x 11
EXB 303 SPL	1		2 x 11	2	42 x 11.5 x 11
EXB 303 TPL	2		2 x 11	2	42 x 11.5 x 11















### **EXIT LED**

Self-Contained Exit Sign LED Series

### SPECIFICATION

- · Maintained
- · LED Lamp
- · Lamp life time 50,000 hours
- AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof or ABS casing
- · Nickle metal hydride battery, high temperature type
- · Solid state system automatic battery charger
- · Constant voltage charging systems
- · Switching regulated transformer
- · 12-15 hours charging period.

#### SAFETY FEATURES

- Low-high voltage cut-off, prevention battery over charge & discharge
- AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- DC fuse-preventing short circuit and overload for charging & load
- · Wall mounting or ceiling mounting

### Wall Box Type

		SIDE BATTERY		BULBS	DIMENSION L x W x H (cm)	DURATION	
MODEL NO S	SIDE		LED (Watt)	LUMINOUS INTENSITY (mcd)		(Hrs) ±10%	
EXB 111-LED	1	3.6V. 2100Ah.	2 x 5w.	8,000	38 x 6 x 18.5	3.00	
EXB 112-LED	2	2	2 x 5w.	8,000	38 x 6.5 x 18.5	3.00	

#### Slimline Type

			BULBS		DIMENSION	DURATION
MODEL NO	SIDE	BATTERY	LED (Watt)	LUMINOUS INTENSITY (mcd)	L x W x H (cm)	(Hrs) ±10%
EXB 303 S-ED	1	3.6V. 2100Ah.	2 x 5w.	8,000	39 x 7 x 4.5	3.00
EXB 303 T-ED	2	3.6V. 2100Ah.	2 x 5w.	8,000	39 x 7 x 4.5	3.00









The Central Unit Emergency Lighting is centralized system for 12-24VDC. Load that can install remote head lamp is the wide and separate area.

#### **SPECIFICATION**

- · Non-Maintained
- 12 VDC or 24 VDC
- AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. with epoxy powder and stove enamel coated anti-rust corrosion proof
- Sealed lead acid battery, based on ISO 9001, ISO 14001 certified bettery or single cell-sealed lead acid bettery (2 Volt)
- · Solid state system automatic battery charger
- · 15-20 hours charging period.

#### SAFETY FEATURES

- · Low-high voltage cut-off, prevention battery over charge & discharge
- AC fuse-preventing short circuit and overload for main incoming AC220 Volt
- · DC fuse-preventing short circuit and overload for charging & load
- · DC Load fuse-preventing short circuit and overload for lamp load

#### ACCESSORIES

- · Infrared remote test
- · LED "AC" indicates main income AC 220 Volt
- LED "Change/Full" indicates changing status
- · LED "Backup" indicates backup status
- · LED "Fail" indicates over charge
- · DC Voltmeter indicates DC battery voltage
- DC Ammeter indicates DC charge current

#### CU Series Output 12 VDC

MODEL NO	LOAD DC (Max Load)	BATTERY	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)	OUTPUT CHANNEL	PIC
CU 7 - 12	30 Watt	12V. 7 Ah.				
CU 18 - 12	80 Watt	12V. 18 Ah.	2	29.5 x 8.5 x 20.5	1	
CU 23 - 12	110 Watt	12V. 25 Ah.				В
CU 40 - 12	180 Watt	12V. 40 Ah.	2	37 x 18 x 26.5	1	
CU 75 - 12	350 Watt	12V. 75 Ah.	2	30 x 22 x 52	1	
CU 100 - 12	450 Watt	12V. 100 Ah.	2	44 x 22 x 62	4	А
CU 134 - 12	620 Watt	12V. 134 Ah.	2	44 X ZZ X 0Z	-	

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### BPF-BPL

**Battery Pack** 

The BP Series are battery pack type designed for lighting fixtures that need to recess independently

BPD - for downlight

BPF - for fluorescent

BPL - for PL lamp

#### **SPECIFICATION**

- · Maintained
- Tungsten Halogen, Dichoic Halogen, Fluorescent, Compack Fluorescent
- · AC 220 Volt, 50 Hz, ±10% Single phase
- Electro-galvanized steel sheet 1mm. With epoxy powder and stove enamel coated anti-rust corrosion proof
- · Sealed lead acid battery
- · Solid state system automatic battery charger
- · 12-15 hours charging period.

#### SAFETY FEATURES

 Low-high voltage cut-off, preventing battery over discharge and recharge

#### BPF Series (For Fluorescent Lamp)

MODEL NO	BATTERY	For Bulbs	LAMP	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)	
BPF 10		1 x 10w FL			*A = 39.5 x 5 x 4.7 *B = 27 x 7.5 x 5.5	
BPF 20	12V. 4.5Ah.	1 x 18w FL	Fluorescent	2		
BPF 40		1 x 36w FL				
BPF 14	12V. 4.5Ah.	1 x 14w FL	Fluorescent	2		
BPF 28	12V. 4.5AII.	1 x 28w FL	T5	2		

#### BPL Series (For PL-S Lamp) - 2 Pins type

MODEL NO	BATTERY	For Bulbs	LAMP	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)
BPL 9	12V. 4.5Ah.	1 x 14w FL	PL-S	2	*A = 39.5 x 5 x 4.7
BPL 11	12V. 4.5AII.	1 x 28w FL	PL-S	2	*B = $27 \times 7.5 \times 5.5$

### BPLL Series (For PL-L Lamp) - 4 Pins type

MODEL NO	BATTERY	LAMP	LAMP TYPE	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)	
BPLL 20		1 x 18w PL-L			*A = 39.5 x 5 x 4.7 *B = 27 x 7.5 x 5.5	
BPLL 24	12V. 4.5Ah.	1 x 24w PL-L		2		
BPLL 40		1 x 40w PL-L			D - 27 x 7.5 x 5.5	

### BPLC Series (For PL-C Lamp) - 2 Pins type

MODEL NO	BATTERY	LAMP	LAMP TYPE	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)	
BPLC 13		1 x 13w PL-C 12V. 4.5Ah. 1 x 18w PL-C PL-C 2				
BPLC 18	12V. 4.5Ah.		2	*A = 39.5 x 5 x 4.7 *B = 27 x 7.5 x 5.5		
BPLC 26		1 x 26w PL-C			U - E1 X1.0 X 0.0	

### BPD Series (For Down Light Lamp)

MODEL NO	BATTERY	LAMP	LAMP TYPE	DURATION (Hrs) ±10%	DIMENSION L x W x H (cm)
BPD 20		1 x 20w	Halogen	1.50	*A = 39.5 x 5 x 4.7 *B = 27 x 7.5 x 5.5
BPD 35	12V. 4.5Ah.	1 x 35w		1.00	
BPD 50		1 x 50w		0.45	







# HBP-012 12 Inch Prismatic Low Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E27 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 70 150 w.
   Housing: Prismetic diffuser to provide direct and indirect light distribution.
- · Gasket: Stainless steel gasket
- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Extruded aluminium gear box or aluminium die-casting are recommended. Two models of gear boxes are recommended: GB12 and GB16



· Suitable for low to medium height installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.







### HBP-012A/E27





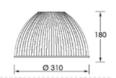






## HBP-012B/E27

12 Inch Prismatic High Bay - Close









## HBP-016

16 Inch Prismatic High Bay

#### **SPECIFICATION**

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
   Housing: Prismetic diffuser to provide direct and indirect light distribution.
   Gasket: Stainless steel gasket

- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.

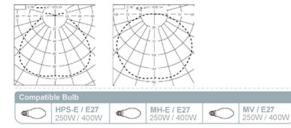


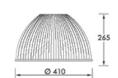




### HBP-016A/GB11

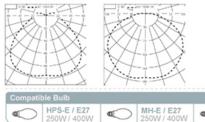
16 Inch Prismatic High Bay - Open







### HBP-016B/GB11 16 Inch Prismatic High Bay - Close



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# HBP-022 22 Inch Prismatic High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
   Housing: Prismetic diffuser to provide direct and indirect light distribution.
- · Gasket: Stainless steel gasket
- Cable: High temperature cable and high voltage pulse cable where applicable
- · Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

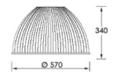
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.









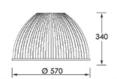








### HBP-022B/GB11 22 Inch Prismatic High Bay - Close









300mm Aluminium Low Bay

#### **SPECIFICATION**

- IP Rating: IP20 for Open Type

- Lamp Holder: E27 porcelain lamp holder
  Lamp: Metal Halide, High Pressure Sodium, Mercury
  Wattage: 70 150 w.
  Housing: Aluminium reflector to provide high efficiency direct light distribution.
- Gasket: Weather proof and durable silicone rubber
   Cable: High temperature cable and high voltage pulse cable where applicable
- · Gear Box: Extruded aluminium gear box with precise fins to allow heat dissipation. Three models of gear boxes recommended: GB16

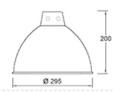
#### APPLICATION

· Suitable for low installation to light up area such as shopping malls, super markets, convenience stores, warehouse, storage.





HBA-121A/E27 300mm Aluminium Low Bay - Open



1	Compatib	ole Bulb			
		HPS-E / E27 70W / 150W	MH-E / E27 70W / 150W	MV / E27 80W / 125W	





395mm Aluminium High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Aluminium reflector to provide high efficiency direct light distribution.
- · Gasket: Weather proof and durable silicone rubber
- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

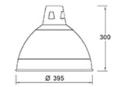
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.







### HBA-160A/GB11 395mm Aluminium High Bay - Open

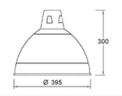






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### HBA-160A/GB12 395mm Aluminium High Bay - Close



1	Compatil	ole Bulb		
		HPS-E / E27 250W / 400W	MH-E / E27 250W / 400W	MV / E27 250W / 400W





460mm Aluminium High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
   Housing: Aluminium reflector to provide high efficiency direct light distribution.
- · Gasket: Weather proof and durable silicone rubber
- Cable: High temperature cable and high voltage pulse cable where applicable
- Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

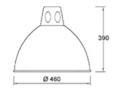
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.







HBA-130A/GB11 460mm Aluminium High Bay - Open

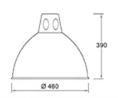






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HBA-130B/GB11 460mm Aluminium High Bay - Close



Compatible Bulb						
	HPS-E / E27 250W / 400W		MH-E / E27 250W / 400W		MV / E27 250W / 400W	





424mm Aluminium High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Aluminium reflector to provide high efficiency direct light distribution.
- · Gasket: Weather proof and durable silicone rubber
- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

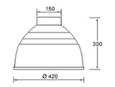
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.





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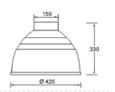
HBA-124A/GB11 424mm Aluminium High Bay - Open







HBA-124B/GB11 424mm Aluminium High Bay - Close



Compatil	ble Bulb		
	HPS-E / E27 250W / 400W	MH-E / E27 250W / 400W	MV / E27 250W / 400W





475mm Aluminium High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- Housing: Aluminium reflector to provide high efficiency direct light distribution.
   Gasket: Weather proof and durable silicone rubber

- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

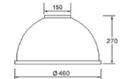
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.





[P20] ₹ (♣) (♣)

HBA-125A/GB11 475mm Aluminium High Bay - Open

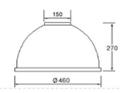








### HBA-125B/GB11 475mm Aluminium High Bay - Close



Compatible Bulb					
	HPS-E / E27 250W / 400W		MH-E / E27 250W / 400W		MV / E27 250W / 400W





520mm Aluminium High Bay

#### **SPECIFICATION**

- IP Rating: IP20 for Open Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
   Housing: Aluminium reflector to provide high efficiency direct light distribution.
   Gasket: Weather proof and durable silicone rubber

- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

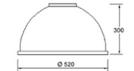
· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.





IP20 ▼ 🕁 🖒 💠

### HBA-126A/GB11 520mm Aluminium High Bay - Open

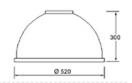








### HBA-126A/GB12 520mm Aluminium High Bay - Close



ĺ	Compatil	ole Bulb		
		HPS-E / E27 250W / 400W	MH-E / E27 250W / 400W	MV / E27 250W / 400W





355mm Aluminium High Bay

#### SPECIFICATION

- · IP Rating: IP20 for Open Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Aluminium reflector to provide high efficiency direct light distribution.
- · Gasket: Weather proof and durable silicone rubber
- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.















HBA-131B/G11 355mm Aluminium High Bay - Close









485mm Aluminium High Bay

#### SPECIFICATION

- IP Rating: IP20 for Open Type and IP65 for Close Type
- Lamp Holder: E40 porcelain lamp holder
   Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Aluminium reflector to provide high efficiency direct light distribution.
- · Gasket: Weather proof and durable silicone rubber
- Cable: High temperature cable and high voltage pulse cable where applicable
   Gear Box: Aluminium die-casting gear box. Three models of gear boxes recommended: GB11, GB12 and GB16

#### APPLICATION

· Suitable for high installation and wide area light distribution such as shopping malls, super markets, convenience stores, warehouse, storage.







### HBA-134A/GB11 485mm Aluminium High Bay - Open

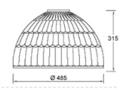






IP65 🕏 🕁 🖒 💠

### HBA-134B/GB11 485mm Aluminium High Bay - Close



Compatible Bulb					
	HPS-E / E27 250W / 400W		MH-E / E27 250W / 400W	$\qquad \qquad \bigcirc$	MV / E27 250W / 400W















- · Housing: Corrosion resistant high pressure die cast aluminium
- · Lock: Special design clip lock for ease of maintenance
- · Lampholder: Porcelain E40.
- · Installation: Loop for pendant installation.













GB-11 Aluminium Gear Box

- · Housing: Corrosion resistant high pressure die cast aluminium
- · Lock: Special design clip lock for ease of maintenance
- · Lampholder: Porcelain E40.
- Installation: Loop for pendant installation.







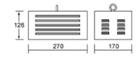






GB-12 Aluminium Gear Box

- · Housing: Corrosion resistant high pressure aluminium extruded cast
- · Lock: Screw lock type
- · Lampholder: Porcelain E40 or E27
- · Installation: Loop for pendant installation.





Aluminium Gear Box

- · Housing: Corrosion resistant high pressure aluminium extruded cast
- · Lock: Screw lock type
- · Lampholder: Porcelain E40 or E27
- · Installation: Loop for pendant installation.







# GB-14 Steel Gear Box

· Housing: High quality cold-rolled steel housing

· Lock: Screw lock type

· Lampholder: Porcelain E40 or E27

· Installation: Loop for pendant installation.







# GB-15 Steel Gear Tray

- · Housing: High quality cold-rolled steel housing
- · Lock: Screw lock type
- · Lampholder: -
- · Installation: -







# GB-16 Aluminium Gear Box

- · Housing: Corrosion resistant high pressure aluminium extruded cast
- · Lock: Screw lock type
- Lampholder: Porcelain E40 or E27
- · Installation: Loop for pendant installation.





SECO accent luminaire is design to emphasize an area or an object. This kind of lighting adds to drama or style by highlighting an specific area as usually used in facade lighting or landscape lighting.





# GDS-002 Accent Luminaire

- · Housing: Corrosion resistant die-cast aluminium finished in black color
- · Diffuser: Thermal shock resistant safty glass
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Remote weatherproof gear box is needed
- · Suitable for focus lighting to a specific object or area such as tree, etc.









### GDS-052

- · Housing: Corrosion resistant die-cast aluminium finished in black color
- · Diffuser: Thermal shock resistant safty glass
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Remote weatherproof gear box is needed
- Suitable for focus lighting to a specific object or area such as tree, etc.







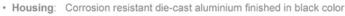


- · Housing: Corrosion resistant die-cast aluminium finished in black color
- · Diffuser: Thermal shock resistant safty glass
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Remote weatherproof gear box is needed
- · Suitable for focus lighting a specific area or an object such







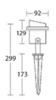


- · Diffuser: Thermal shock resistant safty glass
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- Control Gear: Remote weatherproof gear box is needed
- · Suitable for focus lighting to a specific object or area such as tree, etc.













### GDS-005

Accent Luminaire

· Housing: Corrosion resistant die-cast aluminium finished in black color

· Diffuser: Thermal shock resistant safty glass

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

Suitable for focus lighting a specific area or an object such as trees,
 southtures.







### GDS-055

Accent Luminaire

· Housing: Corrosion resistant die-cast aluminium finished in black color

· Diffuser: Thermal shock resistant safty glass

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

 Suitable for focus lighting a specific area or an object such as trees, sculptures.





### **GDS-006**

Accent Luminaire

Housing: Corrosion resistant die-cast aluminium finished in black color

• Diffuser: Thermal shock resistant safty glass

• Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

 Suitable for focus lighting a specific area or an object such as trees, sculptures.









### GDS-056

Accent Luminaire

· Housing: Corrosion resistant die-cast aluminium finished in black color

· Diffuser: Thermal shock resistant safty glass

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

 Suitable for focus lighting a specific area or an object such as trees, sculptures.









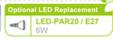






- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- Louver: Concentric extrude aluminium
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- Adjustable: 360 degree rotation and 90 degree elevation
- · Suitable for focus lighting a specific area or an object









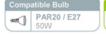


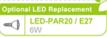






- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- Louver: Concentric extrude aluminium
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- · Adjustable: 360 degree rotation and 90 degree elevation
- · Suitable for focus lighting a specific area or an object

















### GDS-008

Accent Luminaire

- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- Louver: Concentric extrude aluminium
- Gasket: Weatherproof durable silicone rubber with stainless steel screws
- Adjustable: 360 degree rotation and 90 degree elevation
- Suitable for focus lighting a specific area or an object such as trees, sculptures.













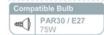




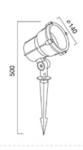
### GDS-058

Accent Luminaire

- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- Louver: Concentric extrude aluminium
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- Adjustable: 360 degree rotation and 90 degree elevation
- Suitable for focus lighting a specific area or an object such as trees, sculptures.











# GDS-101 Accent Luminaire

- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- · Adjustable: 360 degree rotation and 90 degree elevation
- Mounting: Metal plate
- · Suitable for focus lighting a specific area or an object







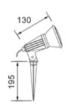


# GDS-151 Accent Luminaire

- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- · Adjustable: 360 degree rotation and 90 degree elevation
- · Mounting: Metal ground spike
- · Suitable for focus lighting a specific area or an object



















- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- · Louver: Concentric extrude aluminium with black finish
- · Gasket: Weatherproof durable silicone rubber with stainless steel
- · Adjustable: 360 degree rotation and 90 degree elevation
- · Suitable for focus lighting a specific area or an object





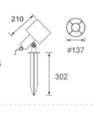


### GDS-152

### Accent Luminaire

- · Housing: Die-cast aluminium housing finished with polyester powder painting in black color
- · Louver: Concentric extrude aluminium with black finish
- · Gasket: Weatherproof durable silicone rubber with stainless steel screws
- · Adjustable: 360 degree rotation and 90 degree elevation
- · Suitable for focus lighting a specific area or an object















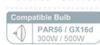


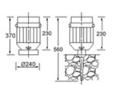






- · Housing: Corrosion resistant extruded aluminium finished in black color
- Reflector: Aluminium anodized reflector
- Diffuser: Thermal shock resistant borosilicate glass lens
   Painting: Polyester powder coated
   Gasket: Stainless steel all external screws







Inground luminaires are designed to illuminate your walkways, decks, or along the edge of your home. This kind of lighting creates a very dramatic and appealing effect at night.









### ING-101-1

### Round Inground Luminaire

- · Housing: Aluminium body and stainless steel trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- Gasket: Stainless steel all external screws
- Suitable for landscape lighting such as pathways, walkways, etc.









# ING-101-2 Square Inground Luminaire

- · Housing: Aluminium body and stainless steel trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for landscape lighting such as pathways, walkways, etc.













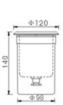
### ING-101-3

### Round Inground Luminaire

- · Housing: Aluminium body and stainless steel trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- Gasket: Stainless steel all external screws
- Adjustable: Adjustable
- Suitable for landscape lighting such as pathways, walkways, etc.











# ING-200 Round Inground Luminaire

- · Housing: Aluminium body and trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for landscape lighting such as pathways, walkways, etc.

Compati	ble Bulb			
48C)	PAR30 / E27 75W	<b>=</b>	PL / E27 15W / 20W	





Ф170





# ING-203 Round Inground Luminaire

- · Housing: Aluminium body and trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for landscape lighting such as pathways, walkways, etc.









# ING-208 Round Inground Luminaire

- · Housing: Aluminium body and trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for landscape lighting such as pathways, walkways, etc.











# ING-206 Round Inground Luminaire

- · Housing: Aluminium body and trim
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for landscape lighting such as pathways, walkways, etc.

















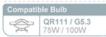
· Housing: Aluminium body and trim

· Diffuser: Thermal shock resistant borosilicate glass lens

· Gasket: Stainless steel all external screws

· Adjustable: Adjustable

Suitable for landscape lighting such as pathways, walkways, etc.

















# ING-205-2 Round Inground Luminaire

Housing: Aluminium body and trim

· Diffuser: Thermal shock resistant borosilicate glass lens

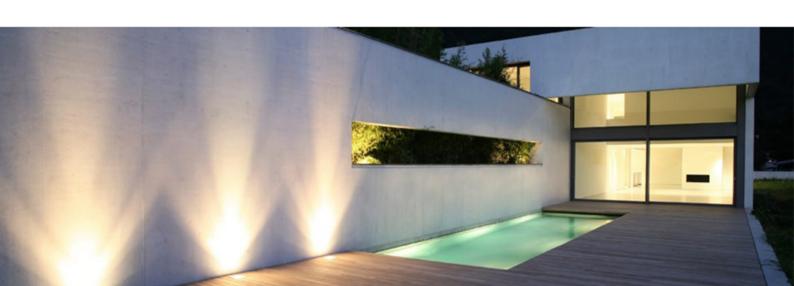
Gasket: Stainless steel all external screws

· Adjustable: Adjustable

· Suitable for landscape lighting such as pathways, walkways, etc.

QR111 / G5.3 75W / 100W







Under water lumaniaire is designed to waterproof in order to be able to create a dramatic and attractive atmosphere for pools, fountains, etc. Coupled with the movement of water, under water lighting can create a fancu and dreamu environment for you place.





# SMB-010 Under Water Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Diffuser: Thermal shock resistant borosilicate glass lens
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool







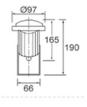


# SBM-100 Under Water Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool











# SBM-101 Under Water Luminaire

- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool







- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool























- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool





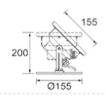




- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- Suitable for general decoration under water landscape such as pool













- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- Diffuser: Thermal shock resistant borosilicate glass lens
- Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool

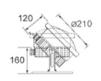




# SBM-401 Under Water Luminaire

- · Housing: 304 grade stainless steel body and 316 grade stainless steel cover
- Diffuser: Thermal shock resistant borosilicate glass lens
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration under water landscape such as pool















- · Housing: Corrosion resistant extruded aluminium finished in black
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws

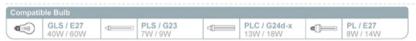
Suitab	ole for genera	I decora	ation such as p	athway,	walk way, etc.		-\ <u></u>	⇒-
Compatil	ble Bulb							
€	GLS / E27 40W / 60W	4	PLS / G23 7W / 9W	4	PLC / G24d-x 13W / 18W	<b>d</b> ()==	PL / E27 8W / 14W	





# STL-311 Step Light Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.

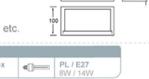






# STL-312 Step Light Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



Compatib	ble Bulb					
<b>(</b>	GLS / E27 40W / 60W	4	PLS / G23 7W / 9W	4	PLC / G24d-x 13W / 18W	





# STL-313 Wallmount Luminaire

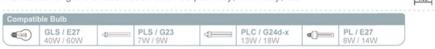
· Housing: Corrosion resistant extruded aluminium finished in black

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

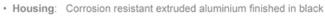
· Suitable for general decoration such as pathway, walk way, etc.











Diffuser: Thermal shock resistant borosilicate glass lens



· Gasket: Stainless steel all external screws

Suitable for general decoration such as pathway, walk way, etc.









# STL-316 Step Light Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black

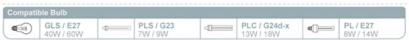
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

Suitable for general decoration such as pathway, walk way, etc.









[P55] F 4 000220

# STL-317 Wallmount Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black · Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.



Compati	ble Bulb						
€	GLS / E27 40W / 60W	4	PLS / G23 7W / 9W	-	PLC / G24d-x 13W / 18W	<b>d</b> )==	PL / E27 8W / 14W



SECO wall mount luminaire comes in various styles from modern to contemporary. The main purpose of the wall lamp is to illuminate the pathway or walkway around the structures. But todays, wall mount luminaires are used to create a dramatic or add a finish touch to an area.







· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.













Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

• Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.











· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

• Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.



Compatit	ole Bulb					Option	al LED Replaceme
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	•	PL / E27 14W / 18W		<b>LED-GLS / E27</b> 8W / 10W





### WMO-024

Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated in black

· Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.



Comp	atible Bulb				
4)	PLS / G23 9W	4	= PLC / G24d-x 13W / 18W	<b>=</b>	PL / E27 14W / 18W







# WMO-102 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass diffuser

· Painting: Polyester powder coated in black Gasket: Stainless steel all external screws

· Suitable for general outdoor area such as pathway, walk way, etc.

Compa	tible Bulb			6	
4	PLS / G23 9W	=	PLC / G24d-x 13W / 18W	<b>4</b> []	PL / E27 14W / 18W



200

320







# WMO-103 Wall Mount Luminaire

· Housing: Die-cast aluminium body

Diffuser: Thermal shock resistant borosilicate opal glass diffuser

Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general outdoor area such as pathway, walk way, etc.









# WMO-104 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass diffuser

· Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general outdoor area such as pathway, walk way, etc.

Compatib	ole Bulb				
4	PLS / G23 9W	-	PLC / G24d-x 13W / 18W	<b>€</b>	PL / E27 14W / 18W







# WMO-107 Wall Mount Luminaire

· Housing: Polycarbonate housing finished in black color

· Diffuser: Opal acrylic divvuser

· Gasket: Stainless steel all external screws

· Suitable for general outdoor area such as pathway, walk way, etc.

Compat	ible Bulb				
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>€</b>	PL / E27 14W / 18W







# WMO-105 Wall Mount Luminaire

· Housing: Stainless steel housing

· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, etc.

Compati	ible Bulb	3				
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>4</b> ()===	PL / E27 14W / 18W	







# WMO-084 Wall Mount Luminaire

· Housing: Die-cast aluminium body

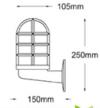
· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Painting: Epoxy-polyester powder coated in black

Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, etc.

Compatil	ble Bulb				
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	•	PL / E27 14W / 18W









# WMO-207 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.



_	atible Bulb			
<b>6</b>	GLS / E27 40W / 60W	<b>4</b> ()===	PL / E27 14W / 18W	



# WMO-208 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.



_	atible Bulb			
<b>€</b>	GLS / E27 40W / 60W	«)—	PL / E27 14W / 18W	













- · Housing: Die-cast aluminium body
- · Diffuser: Thermal shock resistant borosilicate opal glass lens
- · Painting: Polyester powder coated
- Gasket: Stainless steel all external screws
- Suitable for general decoration such as pathway, walk way, etc.



Comp	atible Bulb			
<b>®</b>	GLS / E27 40W / 60W	<b>a</b> ⊕≕	PL / E27 14W / 18W	













## WMO-092 Wall Mount Luminaire

- · Housing: Die-cast aluminium body
- · Diffuser: Thermal shock resistant borosilicate opal glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.





ĺ		atible Bulb		
	€	GLS / E27 40W / 60W	<b>4</b> ()—:	PL / E27 14W / 18W





# WMO-093 Wall Mount Luminaire

- · Housing: Die-cast aluminium body
- · Diffuser: Thermal shock resistant borosilicate opal glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.







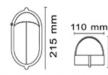




### WMO-094

Wall Mount Luminaire

- · Housing: Die-cast aluminium body
- · Diffuser: Thermal shock resistant borosilicate opal glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



atible Bulb			
GLS / E27 40W / 60W	<b>4</b> )==	PL / E27 14W / 18W	





# WMO-201 Wall Mount Luminaire

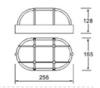
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.

PL / E27 14W / 18W





# WMO-202 Wall Mount Luminaire

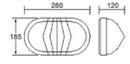
GLS / E27 40W / 60W

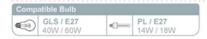
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate opal glass lens

· Painting: Polyester powder coated in black · Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.









# WMO-203 Wall Mount Luminaire

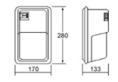
· Housing: Polycarbonate housing

· Diffuser: Injection molded UV stabilized polycarbonate diffuser

· Reflector: Anodized aluminium reflector

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.









### WMO-204

Wall Mount Luminaire

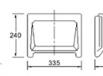
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.









# WMO-301 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.

Compatil	ole Bulb				
Φ==	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>4</b> ()===	PL / E27 14W / 18W



# WMO-302 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.

Compatible	Bulb				
	PLS / G23	4	PLC / G24d-x 13W / 18W	<b>d</b> □==	PL / E27 14W / 18W



# WMO-303 Wall Mount Luminaire

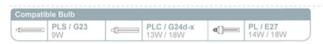
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.





### WMO-304

· Housing: Die-cast aluminium body

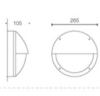
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.

Compati	ble Bulb				
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>d</b> □	PL / E27 14W / 18W









# WMO-321 Wall Mount Luminaire

· Housing: Die-cast aluminium body · Reflector: Aluminium anodized reflector

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, etc.

4	Compatib	ole Bulb				
	4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	•	PL / E27 14W / 18W





# WMO-322 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Reflector: Aluminium anodized reflector

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, etc.

Compatil	ble Bulb					
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>4</b> []==	PL / E27 14W / 18W	





# WMO-323 Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Reflector: Aluminium anodized reflector

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, etc.

	tible Bulb				
49	PLS / G23	4	PLC / G24d-x	<b>4</b> ⊕	PL / E27





### WMO-324

### Wall Mount Luminaire

· Housing: Die-cast aluminium body

· Reflector: Aluminium anodized reflector

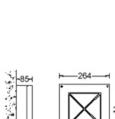
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, etc.

Compa	tible Bulb				
4	PLS / G23 9W	4	PLC / G24d-x 13W / 18W	<b>(</b> )==	PL / E27 14W / 18W



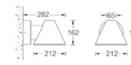






# WMO-351 Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- Suitable for general decoration such as pathway, walk way, etc.







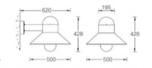




### WMO-352

Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



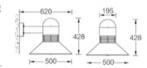
Compatil	ole Bulb						
	PL / E27 18W / 23W	4	PLC / G24d-x 13W / 18W / 26W	$\qquad \qquad \bigcirc$	HPS-E / E27 70W	<b>a</b>	MH-E / E27 70W





### WMO-353

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



Compat	ible Bulb					
<b>a</b> ()==	PL / E27 18W / 23W	4	PLC / G24d-x 13W / 18W / 26W	$\mathbb{Q}$	HPS-E / E27 70W	MH-E / E27 70W





### WMO-354

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated



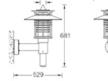






### WMO-355

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, etc.





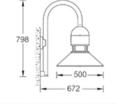






# WMO-356 Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



Compatil	Compatible Bulb								
	PL / E27 18W / 23W	4===	PLC / G24d-x 13W / 18W / 26W	$\qquad \qquad \bigcirc$	HPS-E / E27 70W	<b>(</b>	MH-E / E27 70W		





### WMO-357

### Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.



Compatil	ble Bulb				
<b>d</b>	PL / E27 18W / 23W	4	PLC / G24d-x 13W / 18W / 26W	HPS-E / E27 70W	MH-E / E27 70W







# WMO-411 Wall Mount Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black

· Reflector: Aluminium anodized reflector

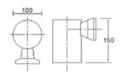
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

Suitable for general decoration such as







### WMO-412

on()

Wall Mount Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black

· Reflector: Aluminium anodized reflector

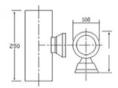
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.









### WMO-413

Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.







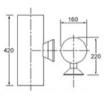
### WMO-414

Wall Mount Luminaire

- · Housing: Corrosion resistant extruded aluminium finished in black
- · Reflector: Aluminium anodized reflector
- · Diffuser: Thermal shock resistant borosilicate glass lens
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for general decoration such as pathway, walk way, etc.













### Wall Mount Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black

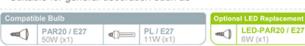
· Reflector: Aluminium anodized reflector

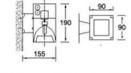
· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as







### WMO-442

### Wall Mount Luminaire

Housing: Corrosion resistant extruded aluminium finished in black

· Reflector: Aluminium anodized reflector

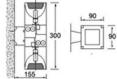
· Diffuser: Thermal shock resistant borosilicate glass lens

Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

Suitable for general decoration such as pathway, walk way, etc.









### Wall Mount Luminaire

· Housing: Corrosion resistant extruded aluminium finished in black

· Reflector: Aluminium anodized reflector

Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as









### WMO-444

### Wall Mount Luminaire

Housing: Corrosion resistant extruded aluminium finished in black

· Reflector: Aluminium anodized reflector

· Diffuser: Thermal shock resistant borosilicate glass lens

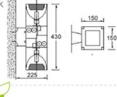
· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

Suitable for general decoration such as











# WMO-171 Wall Mount Luminaire

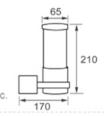
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.





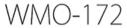












PL / E27

### Wall Mount Luminaire

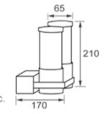
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.



Compatib	ole Bulb	
	PL / E27 14W (x2)	



### WMO-610

### Wall Mount Luminaire

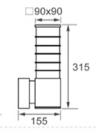
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for general outdoor decoration such as pathway, walk way, etc.







### WMO-611

### Wall Mount Luminaire

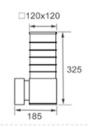
· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass lens

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

Suitable for general outdoor decoration such as pathway, walk way, etc.







Border luminaires enhance visibility and adds immense visual appeal to your landscape. Border luminaires are commonly used to make your area so much more clear in terms of say demarcation of certain areas or boundaries





### BDR-001

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.

1	Comp	atible Bulb			
	<b>(</b>	GLS / E27 40W / 60W	«O	PL / E27 14W / 18W	





### BDR-002

### Border Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.

C	omp	atible Bulb			
•	1	GLS / E27 40W / 60W	<b>4</b> ()===	PL / E27 14W / 18W	





### **BDR-003**

### Border Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.

Comp	atible Bulb			
<b>©</b>	GLS / E27 40W / 60W	<b>4</b> ()==:	PL / E27 14W / 18W	



### IP55 ▼ 🕁 🖒 💠







### **BDR-004**

### Border Luminaire

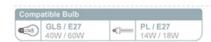
· Housing: Die-cast aluminium body

Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.









### BDR-005

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.

PL / E27 14W / 18W







GLS / E27 40W / 60W

### Border Luminaire

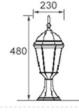
· Housing: Die-cast aluminium body

Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.



Comp	atible Bulb			
<b>(</b>	GLS / E27 40W / 60W	<b>√</b> [===	PL / E27 14W / 18W	





# BDR-199 Border Luminaire

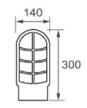
· Housing: Die-cast aluminium body

• Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.



Comp	atible Bulb			
<b>(</b>	GLS / E27 40W / 60W	<>>	PL / E27 14W / 18W	





### BDR-101

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Thermal shock resistant borosilicate glass diffuser
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Suitable for landscape decoration such as terrace, wall, etc.

	atible Bulb			
<b>(</b>	GLS / E27 40W / 60W	<b>4</b> ○—	PL / E27 8W / 11W	



250

390



# BDR-102 Border Luminaire

· Housing: Die-cast aluminium body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.

Comp	atible Bulb			
<b>©</b>	GLS / E27 40W / 60W	<b>«</b> ()—	PL / E27 14W / 18W	



### BDR-108

· Housing: Die-cast aluminium body

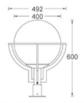
· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Painting: Polyester powder coated

Gasket: Stainless steel all external screws

· Suitable for landscape decoration such as terrace, wall, etc.















### BDR-109

### Border Luminaire

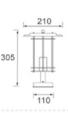
· Housing: Corrosion resistant stainless steel body

· Diffuser: Thermal shock resistant borosilicate glass diffuser

· Gasket: Stainless steel all external screws

· Suitable for general decoration such as pathway, walk way, etc.





# Bollard & Pillar Luminaires

SECO bollard and pillar lights are a type of an architectural outdoor lighting fixture. The term bollard refers to the shape of the vertical post in which the light is enclosed. Bollards and pillars are commonly used as landscape lights to mark the course of a path or walkway and to designate the borders of any area.





# BOL-100 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

Compati	ble Bulb				
4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-101 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear





# BOL-102 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear







# BOL-103 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear







# BOL-104 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear





# BOL-105 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear







# BOL-106 Square Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

-											
-1	Compatil	Compatible Bulb									
	4	PLC / G24d-x 13W / 18W / 26W		PL / E27 11W / 15W / 20W		HPS-E / E27 70W		MH-E / E27 70W		MV-E / E27 80W	



# BOL-107 Square Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated with high corrosion resistance
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

Compatible Bulb									
4	PLC / G24d-x 13W / 18W / 26W	•	PL / E27 11W / 15W / 20W		HPS-E / E27 70W		MH-E / E27 70W		MV-E / E27 80W



# BOL-108 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

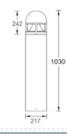






# BOL-109 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

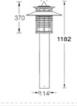


Compati	ble Bulb				
=	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-110 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear



Compat	ible Bulb					
4	PLC / G24d-x 13W / 18W / 26W	<b>(</b> )=	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-111 Round Bollard

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

1	Compatil	ble Bulb				
	4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W





# BOL-500 Round Pillar

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear



1	Compati	ble Bulb				
	4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-501 Round Pillar

· Housing: Corrosion resistant extruded aluminium finished in black color

· Diffuser: Opal glass diffuser

Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

Control Gear: Integrated control gear



Compatil	ble Bulb					
<b>=</b>	PLC / G24d-x 13W / 18W / 26W	•	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-502 Round Pillar

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear







# BOL-503 Square Pillar

- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Opal glass diffuser
- · Louver: Aluminium reflector
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

Compati	ble Bulb				
-	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W



# BOL-504 Square Pillar

· Housing: Corrosion resistant extruded aluminium finished in black color

• Diffuser: Opal glass diffuser

Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Control Gear: Integrated control gear







# BOL-505 Round Pillar

· Housing: Corrosion resistant extruded aluminium finished in black color

 Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser

· Louver: Aluminium reflector

· Painting: Polyester powder coated

· Gasket: Stainless steel all external screws

· Control Gear: Integrated control gear

Compati	ble Bulb				
4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W

218





# BOL-506 Round Pillar

- · Housing: Corrosion resistant extruded aluminium finished in black color
- Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear

Com	patible Bulb					
⊲⊫	PLC / G24d-x 13W / 18W / 26W	<b>=</b>	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70VV	MV-E / E27 80W



- · Housing: Corrosion resistant extruded aluminium finished in black color
- · Diffuser: Injection molded UV stabilized clear vandel resistant polycarbonate diffuser
- · Louver: Aluminium reflector
- · Painting: Polyester powder coated
- · Gasket: Stainless steel all external screws
- · Control Gear: Integrated control gear







150 mm.

₩ 089

3500



## PLT-001 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Clear polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ble Bulb				
4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-002 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ble Bulb					
4	PLC / G24d-x 13W / 18W / 26W	•	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-003 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Reflector: High quality aluminium reflector
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws







## PLT-004

Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Clear polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws







## PLT-401-1 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compat	ible Bulb					
4	PLC / G24d-x 13W / 18W / 26W	40=	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-401-2 Post Top Luminaire

· Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.

- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ble Bulb				
-	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-402-1 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ible Bulb	2 0				
4	PLC / G24d-x 13W / 18W / 26W		PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W





## PLT-402-2 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- Diffuser: Thermal shock resistant borosilicate opal glass
- Control Gear: Integral control gear
- Gasket: Stainless steel all external screws

1	Compati	ble Bulb						
	<b>=</b>	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	<b>a</b>	MV-E / E27 80W / 125W	







## PLT-301-1

#### Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compa	tible Bulb			 		
-	PLC / G24d-x 13W / 18W / 26W	<b>a</b> ()==	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-301-2 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws





## PLT-302-1 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws





## IP54 ♥ ♣ 🖒 �

## PLT-302-2 Post Top Luminaire

· Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.

- Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws









## PLT-303-1

#### Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5 -4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

1	Compati	ble Bulb					
	4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	<b>€</b>	MV-E / E27 80W / 125W





- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- Diffuser: Thermal shock resistant borosilicate opal glass
- Control Gear: I ntegral control gear
- Gasket: Stainless steel all external screws

Compat	tible Bulb			 	 	 
	PLC / G24d-x 13W / 18W / 26W	<b>€</b>	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-403-1 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compa	tible Bulb							
4	PLC / G24d-x 13W / 18W / 26W	<b>√</b>	PL / E27 11W / 15W / 20W	€	HPS-E / E27 70W	<b>₫</b>	MH-E / E27 70W	MV-E / E27 80W / 125W

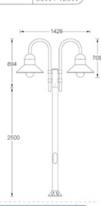


## IP54 ₹ ⊕ 🖒 �

## PLT-403-2 Post Top Luminaire

- · Housing: Die-cast aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated in black
- · Diffuser: Thermal shock resistant borosilicate opal glass
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws









## PLT-101 Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5 -4m and steel base plate.
- Diffuser: Stipple polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

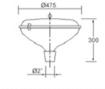
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Compati	ble Bulb						
4	PLC / G24d-x 13W / 18W / 26W	<b>€</b>	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	$\bigcirc\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	MV-E / E27 80W / 125W



## PLT-102 Post Top Luminaire

- · Housing: Aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Painting: Polyester powder coated
- · Diffuser: Opal polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

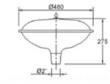


Compatible	e Bulb				
4 P	PLC / G24d-x 3W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W



# PLT-103 Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- Diffuser: Opal polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

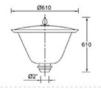


ï	Compati	ble Bulb	 	 			
	4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	<b>₫</b>	MH-E / E27 70W	MV-E / E27 80W / 125W



## PLT-104 Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Diffuser: Opal polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws



Compati	ble Bulb					
4	PLC / G24d-x 13W / 18W / 26W	<b>€</b>	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70VV	MV-E / E27 80W / 125W







IP54 ▼ 🕒 🖒 �

## PLT-105 Post Top Luminaire

- · Housing: Aluminium housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Painting: Polyester powder coated · Diffuser: Opal polycarbonate diffuser · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ible Bulb				
4	PLC / G24d-x 13W / 18W / 26W	PL / E27 11W / 15W / 20W	HPS-E / E27 70W	MH-E / E27 70W	MV-E / E27 80W / 125W





IP54 ▼ 🕁 🖒 💠

# PLT-106 Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Diffuser: Opal polycarbonate diffuser · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws





## PLT-107

#### Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Diffuser: Opal polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compatible Bulb									
=	PLC / G24d-x 13W / 18W / 26W	<b>d</b>	PL / E27 11W / 15W / 20W		HPS-E / E27 70W		MH-E / E27 70W	${}^{\blacksquare}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	MV-E / E27 80W / 125W



## IP54 ▼ 🕁 🖒 �

## PLT-108

#### Post Top Luminaire

- · Housing: Polycarbonate housing with extruded aluminium pole of height 2.5-4m and steel base plate.
- · Diffuser: Opal polycarbonate diffuser
- · Control Gear: Integral control gear
- · Gasket: Stainless steel all external screws

Compati	ble Bulb					 	
4	PLC / G24d-x 13W / 18W / 26W	<b>d</b>	PL / E27 11W / 15W / 20W	<b>₫</b>	HPS-E / E27	MH-E / E27	MV-E / E27 80W / 125W

# Floodlight Luminaires

Floodlight Luminaires

Floodlights are widely used with high intensity discharge lamps when even illumination across a wide area is needed. This type of lighting is most employed for decoration of buildings, public places, monuments, stadiums, airports, advertisement boards, etc.



## FLD-001

Symmetry 150-1500w. Halogen Floodlight

#### SPECIFICATION

- Lamp Holder: Rx7s porcelain lamp holder
- · Lamp: Halogen
- Wattage: 150 1500 w.
- · Housing: Corrosion resistant die cast aluminium body
- Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Light Distribution: Symmetrical light output distribution

#### **APPLICATION**

· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.









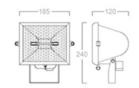


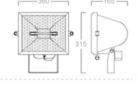
























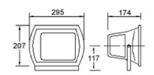


#### SPECIFICATION

- · Lamp Holder: Rx7s or E27 porcelain lamp holder
- Lamp: Metal Halide, High Pressure Sodium
- Wattage: 70 150 w.
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box
- Light Distribution: Symmetrical light output distribution

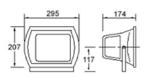
· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.

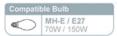




Compatit	ole Bulb			
5	MH-DE / Rx7s 70W / 150W	Q	HPS-DE / Rx7s 70W / 150W	











Asymmetry 70-150w. HID Floodlight











#### **SPECIFICATION**

- · Lamp Holder: Rx7s porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium
- Wattage: 70 150 w.
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box
- · Light Distribution: Asymmetrical light output distribution

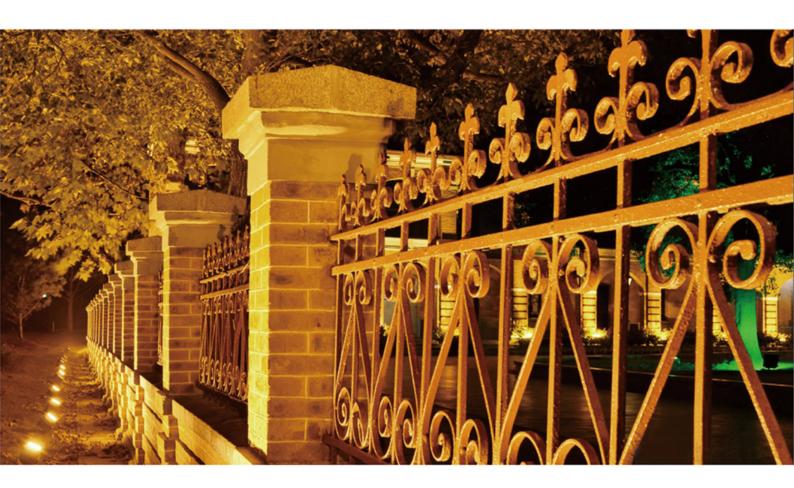
#### APPLICATION

· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.





MHN-TD / RX7s 70W / 150W







## FLD-555

Symmetry 250-400w. HID Floodlight

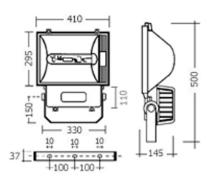
#### SPECIFICATION

- Lamp Holder: E40 porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Die-cast aluminium body and frame finished in black color
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box
- · Light Distribution: Symmetrical light output distribution

#### APPLICATION

 Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.

Compatil	ble Bulb			
	HPS-E / E27 250W / 400W	<b>@</b> ○	MH-E / E27 250W / 400W	MV / E27 250W / 400W



IP55 ▼ 🕒 🖒 💠







[P55] ▼ 🕹 🖒 💠

## FLD-666

Asymmetry 250-400w. HID Floodlight

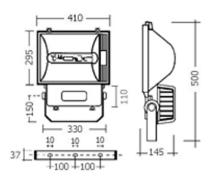
#### SPECIFICATION

- · Lamp Holder: E40 porcelain lamp holder
- Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 250 400 w.
- · Housing: Die-cast aluminium body and frame finished in black color
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box
- Light Distribution: Asymmetrical light output distribution

#### APPLICATION

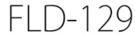
 Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.

Compatible Bulb					
	HPS-E / E27 250W / 400W	€	MH-E / E27 250W / 400W		MV / E27 250W / 400W









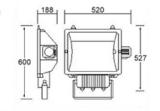
Symmetry 1000w. HID Floodlight

## **SPECIFICATION**

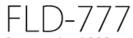
- · Lamp Holder: E40 porcelain lamp holder
- Lamp: Metal Halide, High Pressure Sodium
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box



· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.



Compatit	ole Bulb			
	HPS-T / E40 1000W	(TEGEN)	MH-T / E40 1000W	



Symmetry 1000w. HID Floodlight

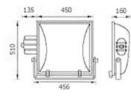
#### **SPECIFICATION**

- · Lamp Holder: E40 porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- Gear Box: Seperated control gear box

#### APPLICATION

· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.







IP65 ▼ 🕁 🖒 💠







Symmetry 1000-2000w. HID Floodlight











#### SPECIFICATION

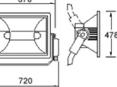
- · Lamp Holder: E40 porcelain lamp holder · Lamp: Metal Halide, High Pressure Sodium
- · Wattage: 1000 2000 w.
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Separate gear-box
- · Light Distribution: Asymmetrical light output distribution

#### APPLICATION

· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots,







Compatib	le Bulb		
(I) (II)	HPS-T / E40 1000W	(ESE)	MH-T / E40 1000W / 2000W

## FLD-200

Symmetry 2000w. HID Floodlight

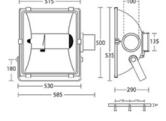
#### SPECIFICATION

- · Lamp Holder: E40 porcelain lamp holder
- · Lamp: Metal Halide · Wattage: 2000 w.
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- · Gear Box: Built-in control gear box
- · Light Distribution: Symmetrical light output distribution

#### APPLICATION

· Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.







MH-T / E40 2000W



## FLD-151

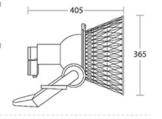
Symmetry 250-400w. HID Floodlight



- IP Rating: IP20 for open type and IP65 for close type
- · Lamp Holder: E40 porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium
- Wattage: 250 400 w.
- Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- Gear Box: Built-in control gear box
- Light Distribution: Asymmetrical light output distribution



 Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.



ı	Compatib	ole Bulb		
		HPS-T / E40 250W / 400W	MH-T / E40 250W / 400W	

## FLD-152

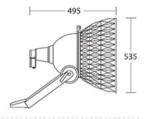
Symmetry 1000w. HID Floodlight

#### SPECIFICATION

- IP Rating: IP20 for open type and IP65 for close type
- Lamp Holder: E40 porcelain lamp holder
- Lamp: Metal Halide, High Pressure Sodium
- Wattage: 250 400 w.
- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw
- Gear Box: Built-in control gear box
- · Light Distribution: Symmetrical light output distribution

#### APPLICATION

 Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.





IP55 ▼ **4** 



Compatible Bulb

MH-T / E40
1000W



## FLD-028 Spot 70-1000w. Floodlight

#### SPECIFICATION

- Lamp Holder: E27, E40 porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 70 1000 w.
- · Housing: Corrosion resistant die cast aluminium body
- Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- Diffuser: Tempered glass with thermal shock resistant in a hinged with stainless steel clips and screw

#### APPLICATION

 Suitable for architectural or general purpose lighting such as building facades, hotels, billboards, parking lots, etc.







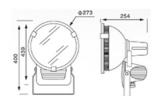


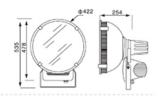


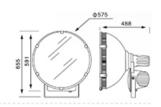












# 18 Street Light Lymingires

Street Light Luminaires

Street light is a raised light source on the edge of a road or walkway to give illumination to large area such as street, parking lot, etc. Today, street lighting often uses high pressure sodium lamps which provides the greatest amount of photonic illumination.





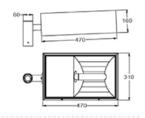
## CNP

#### Area Light Luminaire

- Lamp Holder: E27, E40 porcelain lamp holder
- · Lamp: Metal Halide, High Pressure Sodium, Mercury
- Wattage: 70 400 w.
- · Housing: Die-formed aluminium sheet
- Painting: Polyester powder coated in black or white
- Gasket: Weather proof and durable silicone rubber
- Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- Reflector: 99.85% high purity anodized aluminium reflector with Total Reflectance of 87% with matt finished
- · Control Gear: Built-in control gear

## CNP-011 70-150w Post Top Luminaire

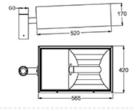




Compati	ble Bulb			
	HPS-E / E27 70W	<b>€</b>	MH-E / E27 70W / 150W	MV / E27 80W / 125W

## CNP-012 250-400w Post Top Luminaire









## CNR-011

HID Recessed Mounting Luminaire



IP65 ₹ ₩ ♣



- · Painting: Polyester powder coated in black or white
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear





## CNR-012

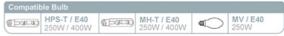
HID Recessed Mounting Luminaire

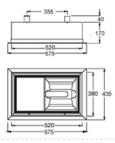


IP65 🕏 🕁 🗘



- · Painting: Polyester powder coated in black or white
- Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear







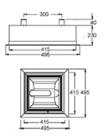
## CNR-022

HID Recessed Mounting Luminaire



- · Housing: Die-formed aluminium
- · Painting: Polyester powder coated in black or white
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear









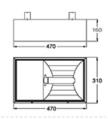
HID Surface Mounting Luminaire



IP65 ▼ **4 4** 



- · Painting: Polyester powder coated in black or white
- Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear



Compatil	Compatible Bulb					
	HPS-E / E27 70W		MH-E / E27 70W / 150W		MV / E27 80W / 125W	

## CNS-012

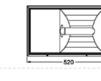
HID Surface Mounting Luminaire



IP65 🕏 🕁 🗘



- · Housing: Die-formed aluminium
- · Painting: Polyester powder coated in black or white
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear



Compatil	ole Bulb		
(E) (E) (E)	HPS-T / E40 250W / 400W	MH-T / E40 250W / 400W	MV / E40 250W

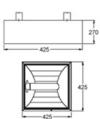
## CNS-022

HID Surface Mounting Luminaire



- · Housing: Die-formed aluminium
- · Painting: Polyester powder coated in black or white
- · Gasket: Weather proof and durable silicone rubber
- · Reflector: Anodized aluminium reflector
- · Diffuser: Clear tempered glass with aluminium extruded frame and stainless steel screws
- · Control Gear: Built-in control gear





[P55] T8] ₹ 🕁 🗘





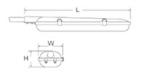
#### T8 Aluminium Fluorescent Street Light



· Painting: Polyester powder coated

Gasket: Weather proof and durable silicone rubber

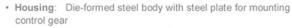
· Diffuser: Clear polycarbonate diffuser



MODEL NO	WATT	DIMENSION (mm.)				
MODEL NO	WAII	L	W	Н	Rod	
STA-118	1 x T8 18w.	735	130	110	33 (1")	
STA-218	2 x T8 18w.	740	180	130	48 (1.5"	
STA-136	1 x T8 36w.	1340	130	110	33 (1")	
STA-236	2 x T8 36w.	1350	180	130	48 (1.5"	

## STS

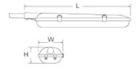
### T8 Steel Fluorescent Street Light



· Painting: Polyester powder coated

Gasket: Weather proof and durable silicone rubber

Diffuser: Clear polycarbonate diffuser



A				
IP55	Т8	\$ <b>(±</b> )	$\Rightarrow$	

MODEL NO	MATT		DIMENS	SION (mm	1.)
MODEL NO	WATT	L	W	Н	Rod
STS-118	1 x T8 18w.	735	130	110	33 (1")
STS-218	2 x T8 18w.	740	180	130	48 (1.5"
STS-136	1 x T8 36w.	1340	130	110	33 (1")
STS-236	2 x T8 36w.	1350	180	130	48 (1.5")

## ST5

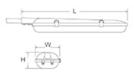
#### T5 Aluminium Fluorescent Street Light





- Housing: Die-formed alumnium body with steel plate for mounting control gear
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Diffuser: Clear polycarbonate diffuser

MODEL NO	MATT		DIMENS	SION (mn	1.)
WODEL NO	WATT	L	W	Н	Rod
ST5-114	1 x T514w.	735	130	110	33 (1")
ST5-214	2 x T5 14w.	740	180	130	48 (1.5")
ST5-128	1 x T5 28w.	1345	120	110	33 (1")
ST5-228	2 x T5 28w.	1370	160	130	48 (1.5")



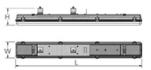


## STP8

T8 Weatherproof Fluorescent Street Light



- Housing: UV Stabilized polycarbonate body
- Gasket: Weather proof and durable silicone rubber
- · Diffuser: Polycarbonate diffuser with stainless clip locks
- Reflector: Anodized aluminium relfector (Optional)
- · Gear Box: Built-in control gear box



			DIMENSION (mm.)					
MODEL NO	WATT	L	W	Н	Rod			
STP8-118	1 x T8 18w.	670	110	160	33 (1")			
STP8-218	2 x T8 18w.	1270	170	175	48 (1.5")			
STP8-136	1 x T8 36w.	670	110	160	33 (1")			
STP8-236	2 x T8 36w.	1270	170	175	48 (1.5")			

## STP5

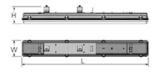
T5 Weatherproof Fluorescent Street Light



[P65] T8 [₹] (♣) (♣)



- Housing: UV Stabilized polycarbonate body
- · Gasket: Weather proof and durable silicone rubber
- Diffuser: Polycarbonate diffuser with stainless clip locks
- Reflector: Anodized aluminium relfector (Optional)
- · Gear Box: Built-in control gear box



MODEL NO	NO WATT		DIMENSION (mm.)					
WODEL NO	WATT	L	W	Н	Rod			
STP5-114	1 x T5 14w.	610	60	130	33 (1")			
STP5-214	2 x T5 14w.	1210	100	150	48 (1.5")			
STP5-128	1 x T5 28w.	610	60	130	33 (1")			
STP5-228	2 x T5 28w.	1210	100	150	48 (1.5")			



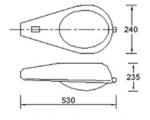
HID Street Light 70-150w

#### **SPECIFICATION**

- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Reflector: High-pure aluminium plate through pressing
- · Gasket: Weather proof and durable silicone rubber
- Diffuser: Borosilicate glass prismatic diffuser
- · Gear Box: Built-in control gear box
- · Connector: Fit to 1.5inch pipe



· Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.



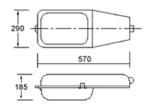
1	Compatil	ole Bulb			
		HPS-E / E27 70W / 150W	$\qquad \qquad \bigcirc$	MH-E / E27 70W / 150W	MV / E27 80W / 125W

#### SPECIFICATION

- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Reflector: High-pure aluminium plate through pressing
- · Gasket: Weather proof and durable silicone rubber
- Diffuser: UV stabilized polycarbonate diffuser
- Gear Box: Built-in control gear box
- · Connector: Fit to 1.5inch pipe

#### APPLICATION

· Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.





IP55 ₹ 4 1 4















## STH-101

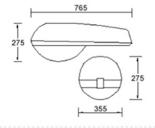
HID Street Light 250-400w

#### SPECIFICATION

- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Reflector: High-pure aluminium plate through pressing
- · Gasket: Weather proof and durable silicone rubber
- · Diffuser: Borosilicate glass prismatic diffuser
- · Gear Box: Built-in control gear box
- · Connector: Fit to 2inch pipe



· Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.







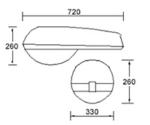
# STH-102 HID Street Light 250-400w

#### SPECIFICATION

- · Housing: Corrosion resistant die cast aluminium body
- · Reflector: High-pure aluminium plate through pressing
- · Painting: Polyester powder coated
- · Gasket: Weather proof and durable silicone rubber
- · Diffuser: UV stabilized polycarbonate diffuser
- · Gear Box: Built-in control gear box
- · Connector: Fit to 2inch pipe

#### APPLICATION

· Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.





IP55 🕏 🕁 🖒 🔷





















STH-555 HID Street Light 70-400w

# IP55 V

#### **SPECIFICATION**

- · Housing: Die-casting aluminium body
- Painting: Polyester powder coated
- · Reflector: High-pure anodized aluminium reflector
- · Gasket: Weather proof and durable silicone rubber
- · Diffuser: Borosilicate glass prismatic diffuser
- · Gear Box: Built-in control gear box
- · Connector: Adjustable joint 90 degree to fit with 1.5inceh pipe
- Maintenance: Top-open cover for ease of maintenance



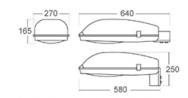
 Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.



## STH-555/1

HID Street Ligt 70-150w



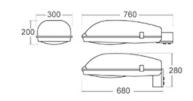


Compati	Compatible Bulb									
	HPS-E / E27 70W / 150W		MH-E / E27 70W / 150W		MV / E27 80W / 125W					

## STH-555/2

HID Street Light 250-400w











#### SPECIFICATION

- · Housing: Corrosion resistant die cast aluminium body
- Painting: Polyester powder coated
- · Reflector: High-pure aluminium plate through
- Gasket: Weather proof and durable silicone rubber
- · Diffuser: UV stabilized polycarbonate diffuser





#### APPLICATION







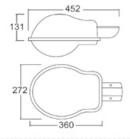
STH-888 Compact Fluorescent Street Light 15-65w

#### SPECIFICATION

- · Housing: Corrosion resistant die cast aluminium body
- · Painting: Polyester powder coated
- · Reflector: High-pure aluminium plate through pressing
- · Gasket: Weather proof and durable silicone rubber
- Diffuser: UV stabilized polycarbonate diffuser
- · Gear Box: Built-in control gear box
- · Connector: Fit to 1Inch pipe



· Suitable for parking lots, residential street, local roads, industrial areas, and other roadway application.











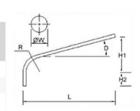


### Street Light Bracket



- · Hot dip galvanized finishing
- · Use with support for wall mounting

MODEL NO	DIAMETER (inches.)	LENGTH (m)	CURVE (R)
STZ-110 / 255 / 15	1"	1.5	255
STZ-115 / 255 / 15	1.5"	1.5	255
STZ-120 / 255 / 15	2"	1.5	255

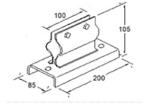




### Fixed Support Clamp

- High quality steel pipe of diameter 1"-1.5"
- · Hot dip galvanized finishing
- · Use with bracket for wall mounting

MODEL NO	DIAMETER	DIMENSION			REMARK
WODEL NO	(inches.)	L	W	Н	KEWIAKK
STZ-410	1"	200	85	105	FIXED
STZ-415	1.5"	240	100	120	FIXED





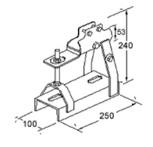
## STZ-5

### Adjustable Support Clamp



- Hot dip galvanized finishing
- · Use with bracket for wall mounting

MODEL NO	DIAMETER	DIMENSION			REMARK	
MODEL NO	(inches.)	L	w	Н	KEWIAKK	
STZ-515	1.5"	250	100	240	ADJUSTABLE	
STZ-520	2"	250	100	240	ADJUSTABLE	





# Lighting Pole & High Mast

Lighting Pole & High Mast
Lighting pole or high mast pole is a tall pole with lighting attached to the top
pointing towards the ground, usually but not always used to light a highway,
or recreation field. Most of lighting pole make of hot-dipped galvanized from
2.5m to 25m. for mounting street light or floodlights to illuminate the large area
such as highways, fields, etc.





## PRP-901

Kinnaree Sculpture Pole

- · Hoursing: Die-cast aluminium coated with gold shade
- · Diffuser: Thermal shock resistant borosilicate lotus-shaped glass
- Pole: Anti-rusted steel pole with aluminium joint and base
- Maintenance: Service door for ease of lighitng installation and maintenance
- Lampholder: E27
- · Remark: Length could be adjustable upon request



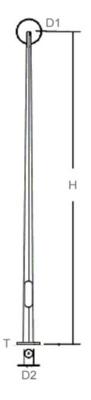
# PRP-902 Swan Sculpture Pole

- Hoursing: Die-cast aluminium coated with gold shade
- · Diffuser: Thermal shock resistant borosilicate lotus-shaped glass
- · Pole: Anti-rusted steel pole with aluminium joint and base
- · Maintenance: Service door for ease of lighiting installation and maintenance
- · Lampholder: E27
- · Remark: Length could be adjustable upon request



Remark: Please contact for more information

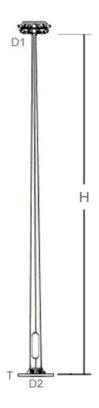




#### Tapered Pole

- · Hot roll steel sheet of thickness 3.5 4.0mm.
- · Hot-dip galvanized finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 3-14m. available
- · Withstand wind load from 120 km/hr to 150 km/hr
- · Yield point strength more than 25 Kg./Sq.mm.
- · Tensile strength more than 41 Kg./Sq.mm.

MODEL NO	SERVICE	DIMENSION (mm.)					
MODEL NO	DOOR (mm.)	Н	D1	D2	Α	В	С
PTP-001 / 03	-	3000	60	103	300	200	22
PTP-001 / 04	55 x 170	4000	60	117	350	250	32
PTP-001 / 05	55 x 170	5000	60	131	350	250	32
PTP-001 / 06	85 x 300	6000	60	146	350	250	32
PTP-001 / 07	85 x 400	7000	60	160	350	250	32
PTP-001 / 08	90 x400	8000	60	174	380	250	32
PTP-001 / 09	90 x400	9000	60	189	400	300	32
PTP-001 / 10	90 x400	10000	76	219	450	350	32
PTP-001 / 12	90 x400	12000	76	247	450	350	32
PTP-001 / 14	90 x400	14000	76	246	600	400	38

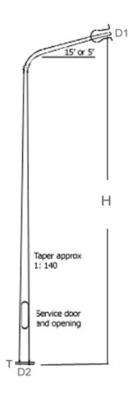


# PHM-001 High Mast Pole

- · Hot roll steel sheet of thickness 4.5 6.0mm.
- · Hot-dip galvanized finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 15-30m. available
- · Withstand wind load from 120 km/hr to 150 km/hr
- · Yield point strength more than 25 Kg./Sq.mm.
- Tensile strength more than 41 Kg./Sq.mm.

	SERVICE		DIMENSION (mm.)							
MODEL NO	DOOR (mm.)	Н	D1	D2	А	В	Thickness			
PHM-001 / 15	240 X 1200	15000	185	410	650	530	4.5			
PHM-001 / 20	240 X 1200	20000	185	488	750	619	4.5			
PHM-001 / 25	240 X 1200	25000	185	488	750	619	4.5			
PHM-001 / 30	240 X 1200	30000	185	600	850	720	6.0			

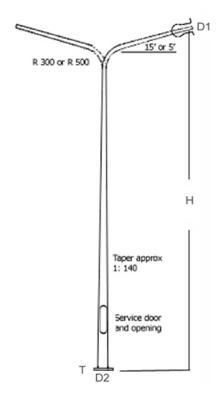




# PBK-001 Tapered Pole with Single Bracket

- · Hot roll steel sheet of thickness 3.5 4.0mm.
- · Hot-dip galvanized finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 3-12m. available
- · Withstand wind load from 120 km/hr to 150 km/hr
- · Yield point strength more than 25 Kg./Sq.mm.
- · Tensile strength more than 41 Kg./Sq.mm.

MODEL NO	SERVICE			DIMEN	ISION (n	nm.)		
MODEL NO	DOOR (mm.)	Н	D1	D2	R	Α	В	С
PBK-001 / 05	55 x 170	5000	60	113	2000	350	250	32
PBK-001 / 06	85 x 300	6000	60	127	2000	350	250	32
PBK-001 / 07	85 x 400	7000	60	141	2000	350	250	32
PBK-001 / 08	90 x400	8000	60	156	2000	350	250	32
PBK-001 / 09	90 x400	9000	60	170	2500	380	300	32
PBK-001 / 10	90 x400	10000	76	200	2500	400	350	32
PBK-001 / 11	90 x400	11000	76	215	2500	450	350	32
PBK-001 / 12	90 x400	12000	76	219	2500	450	350	32



# PBK-002 Tapered Pole with Double Bracket

- · Hot roll steel sheet of thickness 3.5 4.0mm.
- · Hot-dip galvanized finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 3-12m. available
- · Withstand wind load from 120 km/hr to 150 km/hr
- · Yield point strength more than 25 Kg./Sq.mm.
- Tensile strength more than 41 Kg./Sq.mm.

MODEL NO	SERVICE DOOR (mm.)	Dimerror (mm)						
MODEL NO		Н	D1	D2	R	Α	В	С
PBK-002 / 05	55 x 170	5000	60	113	2000	350	250	32
PBK-002 / 06	85 x 300	6000	60	127	2000	350	250	32
PBK-002 / 07	85 x 400	7000	60	141	2000	350	250	32
PBK-002 / 08	90 x400	8000	60	156	2000	350	250	32
PBK-002 / 09	90 x400	9000	60	170	2500	380	300	32
PBK-002 / 10	90 x400	10000	76	200	2500	400	350	32
PBK-002 / 11	90 x400	11000	76	215	2500	450	350	32
PBK-002 / 12	90 x400	12000	76	219	2500	450	350	32

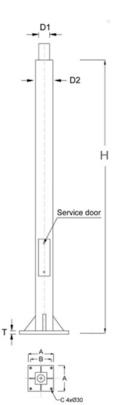




# PRP-001 Round Straight Pole

- · Zinc-coated round steel
- · Power-coated finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 3-9m. available

MODEL NO	SERVICE			DIMENSI	ON (mm.)		
MODEL NO	(mm.)	Н	D2	D1	Α	В	Т
PRP-001 / 25A	60 x 200	2500	60	76	150	120	10
PRP-001 / 30A	60 x 200	3000	60	76	150	120	10
PRP-001 / 35A	60 x 200	3500	60	76	150	120	10
PRP-001 / 40A	60 x 200	4000	60	76	150	120	10
PRP-001 / 30B	80 x 250	3000	60	114	250	200	15
PRP-001 / 35B	80 x 250	3500	60	114	250	200	15
PRP-001 / 40B	80 x 250	4000	60	114	250	200	15
PRP-001 / 45B	80 x 250	4500	60	114	250	300	20
PRP-001 / 50B	80 x 250	5000	60	114	250	300	20
PRP-001 / 60B	80 x 250	6000	60	114	250	300	20
PRP-001 / 50C	85 x 300	5000	60	140	300	250	20
PRP-001 / 60C	85 x 300	6000	60	140	300	250	20
PRP-001 / 70C	85 x 300	7000	60	140	400	300	25
PRP-001 / 80C	85 x 300	8000	60	140	400	300	25

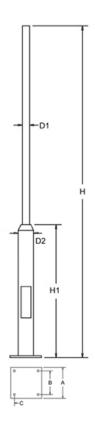


Square Straight Pole

- · Zinc-coated square steel
- · Power-coated finishing
- · Service door for ease of lighting installation and maintenance
- · Length of 3-9m. available

MODEL NO	SERVICE DOOR			DIMENSIO	ON (mm.)		
WODEL NO	(mm.)	Н	D2	D1	Α	В	Т
PSP-001 / 25A	60 x 200	2500	60	76	150	120	10
PSP-001 / 30A	60 x 200	3000	60	76	150	120	10
PSP-001 / 35A	60 x 200	3500	60	76	150	120	10
PSP-001 / 40A	60 x 200	4000	60	76	150	120	10
PSP-001 / 30B	80 x 250	3000	60	114	250	200	15
PSP-001 / 35B	80 x 250	3500	60	114	250	200	15
PSP-001 / 40B	80 x 250	4000	60	114	250	200	15
PSP-001 / 45B	80 x 250	4500	60	114	250	300	20
PSP-001 / 50B	80 x 250	5000	60	114	250	300	20
PSP-001 / 60B	80 x 250	6000	60	114	250	300	20
PSP-001 / 50C	85 x 300	5000	60	140	300	250	20
PSP-001 / 60C	85 x 300	6000	60	140	300	250	20
PSP-001 / 70C	85 x 300	7000	60	140	400	300	25
PSP-001 / 80C	85 x 300	8000	60	140	400	300	25





## PUP-001

- · Hot dip galvanizing round steel pole for rust and corrosion proof
- Built-in control gear compartment
- · Service door for ease of lighting installation and maintenance
- · Length of 2.5-3.5m. available

	SERVICE	DIMENSION (mm.)							
MODEL NO	(mm.)	Н	H1	D1	D2	Α	В	С	Т
PUP-001S / 25	100 x 250	2500	110	48	115	250	190	28	10
PUP-001L / 25	100 x 250	2500	100	60	115	250	190	28	10
PUP-001S / 30	100 x 250	3000	110	48	115	250	190	28	10
PUP-001L/ 30	100 x 250	3000	110	60	115	250	190	28	10
PUP-001L/ 30	100 x 250	3500	110	60	115	250	190	28	10



Cartridge Fuse

- High quality porcelainCopper nickled contact
- · E27 lampholder
- Max current: 25A
- · Max voltage: 500V





Lamp Holders

SECO is an authorized distributer of ARDITI's lampholders which is a well known Italian brand for lighting accessories. We provided a wide range of lighting accessories for various applications with certifications that is applicable for several worldwide standards.



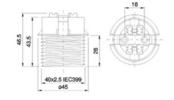


Thermoplastic Lampholder Set



• Description: Spring type for cable 0.5 x 2.5mm<sup>2</sup>

· Material: Thermoplastic · Country: Europe Rating: 4A-250V, T210 · Standard: ENEC03 · Mark:



## E26 Lampholder Set

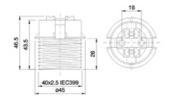
Thermoplastic Lampholder Set



Description: Spring type for cable 0.5 x 2.5mm<sup>2</sup>

· Material: Thermoplastic · Country: United States • Rating: 600W-250V, T150 · Standard: cRUus

· Mark:



## E14 Lampholder Set

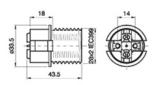
Thermoplastic Lampholder Set



Description: Spring type for cable 0.5 x 2.5mm<sup>2</sup>

· Material: Thermoplastic · Country: Europe • Rating: 4A-250V, T210 · Standard: ENEC03

Mark:



## E12 Lampholder Set

Thermoplastic Lampholder Set

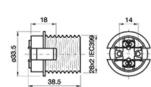


Description: Spring type for cable 0.5 x 2.5mm<sup>2</sup>

· Material: Thermoplastic · Country: United States · Rating: 600W-250V, T150

· Standard: cRUus · Mark:







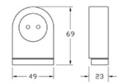


# LWS Spring-Loaded Type Lampholder

• Description: For T8 fluorescent lamp

· Housing: Polycarbonate • Cable: Terminal 0.5 - 1mm<sup>2</sup> • Operating Temperature: 130°C Voltage Rating: 2A/250V

• Standard: TIS 344-1987

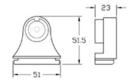




#### Spring-Loaded Type Lampholder

· Description: For T8 fluorescent lamp

· Housing: Polycarbonate • Cable: Terminal 0.5 - 1mm2 • Operating Temperature: 130°C · Voltage Rating: 2A/250V • Standard: TIS 344-1987



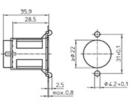


#### Starter Socket

• Description: For starter · Housing: Polycarbonate • Cable: Terminal 0.5 - 1mm<sup>2</sup> · Operating Temperature: 100°C Voltage Rating: 2A/300V

• Standard: TIS 344-1987





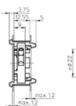


Starter Holder

· Description: For starter · Housing: Polycarbonate · Cable: Terminal 0.5 - 1mm2 · Operating Temperature: 100°C

 Voltage Rating: 2A/300V · Standard: TIS 344-1987





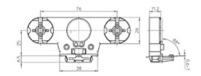






# G13-TW-S0 G13 Twin Lampholder For T8

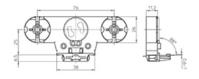
- · Material: PC, white, roter: PBT GF, white
- Rating: T130, 2/500
- · Contact: Rotary-lock Type
- · Base-fit Terminals: Push-fit foot for wall thickness 1mm.
- Push-in Terminals: 0.5 1.0 mm<sup>2</sup>





G13-TW-S1
G13 Twin Lampholder with Starter Holder For T8

- · Material: PC, white, roter: PBT GF, white
- Rating: T130, 2/500
- · Contact: Rotary-Lock Type
- · Base-fit Terminals: Push-fit foot for wall thickness 1mm.
- Push-in Terminals: 0.5 1.0 mm<sup>2</sup>





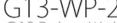
G13-WP-1 G13 Rotary Waterproof Lampholder

- · Material: PC, white, roter: PBT GF, white
- Rating: T140, 2/500
- Terminal Rating: Tm 110°C
- · Contact: Rotary-lock Type
- Push-in Terminals: 0.5 1.0 mm<sup>2</sup>

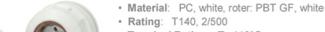






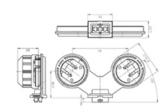


G13-WP-2 G13 Rotary Waterproof Lampholder



• Terminal Rating: T<sub>m</sub> 110°C · Contact: Rotary-lock Type

• Push-in Terminals: 0.5 - 1.0 mm<sup>2</sup>





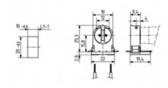




## G5-01

G5 Push-thru Rotary Lampholder

- · Housing: PBT GF, white, · Material: PC, white · Rating: T140, 2/500 • Temperature: T<sub>m</sub> 110°C
- Cable: Push-in twin terminals: 0.5 1 mm<sup>2</sup>
- · Standard: TIS 344-2549



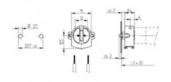


G5-02 G5 Snap-in Rotary Lampholder

· Housing: PBT GF, white, · Material: PC, white · Rating: T140, 2/500 • Temperature: T<sub>m</sub> 110°C

Cable: Push-in twin terminals: 0.5 - 1 mm<sup>2</sup>

• Standard: TIS 344-2549





## G5-TW

G5 Rotary Twin Lampholder

· Housing: PBT GF, white, Material: PC, whiteRating: T140, 2/500 • Temperature: T<sub>m</sub> 110°C

Cable: Push-in twin terminals: 0.5 - 1 mm<sup>2</sup>

• Standard: TIS 344-2549







G5-WP-1 G5 Rotary Waterproof Lampholder

· Housing: PBT GF, white,

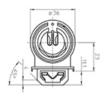
· Material: PC, white with gasket and silicone

• IP Rating: IP65 Rating: T140, 2/500 • Temperature: T<sub>m</sub> 110°C

Cable: Push-in twin terminals: 0.5 - 1 mm<sup>2</sup>

· Standard: TIS 344-2549









## E27-VS

#### E27 Porcelain Ceramic Lampholder

- · Material: Porcelain
- Rating: T270, 4/500/5 kV
- · Contact: Spring loaded central contact
- · Screw Size: Fixing oblong holes for screrws M4
- Screw Terminals: 0.5 2.5 mm<sup>2</sup>







# E40-VS E40 Porcelain Ceramic Lampholder

· Material: Porcelain

• Rating: T270, 18/500/5 kV

· Contact: Spring loaded central contact

· Screw Size: Fixing oblong holes for screrws M5

• Screw Terminals: 1.5 - 4.0 mm<sup>2</sup>







## LH-00-E27

#### E27 Porcelain With Metal Jacket

• Material: Porcelain E27 lamp holder

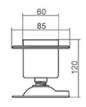
· Housing: Extruded aluminium

Rating: T270, 4/500/5 kV

Contact: Spring loaded central contact

. Screw Size: Fixing oblong holes for screrws M4

Screw Terminals: 0.5 - 2.5 mm<sup>2</sup>





## LH-00-E40

#### E40 Porcelain With Metal Jacket

· Material: Porcelain E40 lamp holder

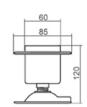
· Housing: Extruded aluminium

· Rating: T270, 18/500/5 kV

· Contact: Spring loaded central contact

· Screw Size: Fixing oblong holes for screrws M5

Screw Terminals: 1.5 - 4.0 mm<sup>2</sup>





# Cordsets

SECO is one stop solution for new lighting developers and new lighting exporters. We have a wide range of cordsets which applicable for several standards worldwide. We also provide free advice for exporters to choose and develop new products that will be applicable to targeted oversea market.





# VDE-2 VDE 2-pin Plug With Cordset



• Cable: Flat 2-core cable (H03VVH2-F 2x0.75mm²)

• Country: Europe · Rating: 2.5A - 250V · Standard: VDE 0281

· Color:

· Mark:

Black, White, Transparent	
<b>♠®®®</b> ® <b>K</b> ₽®	A

MODEL NO	COLOR	LENGTH (m.)
VDE-2 / BK / 200	Black	2.0
VDE-2 / BK / 300	Black	3.0
VDE-2 / WH / 200	White	2.0
VDE-2-/ WH / 300	White	3.0
VDE-2 / TR / 200	Transparent	2.0
VDE-2 / TR / 300	Transparent	3.0

# VDE-3 VDE 2-pin Plug With Ground Cordset



• Description: 2 round-pin plug with 1 hold earth

Cable: Round 3-core cable (H03VV-F 3Gx0.75mm²)

 Country: Europe • Rating: 16A - 250V · Standard: VDE 0281 · Color: Black, White

Mark:



MODEL NO	COLOR	LENGTH (m.)
VDE-3 / BK / 200	Black	2.0
VDE-3 / BK / 300	Black	3.0
VDE-3 / WH / 200	White	2.0
VDE-3-/ WH / 300	White	3.0

# UK-2 UK 3-pin Plug With Cordset



· Description: 3 UK-pin plug

• Cable: Flat 2-core cable (H03VVH2-F 2x0.75mm²)

• Country: England • Rating: 13A - 250V (Fuse 3A) • Standard: BS 1363, KM 7079

· Color: Black, White

• Mark:



MODEL NO	COLOR	LENGTH (m.)
UK-2 / BK / 200	Black	2.0
UK-2 / BK / 300	Black	3.0
UK-2 / WH / 200	White	2.0
UK-2 / WH / 300	White	3.0

# UK-3 UK 3-pin Plug With Ground Cordset



• Description: 3 UK-pin plug

• Cable: Round 3-core cable (H03VV-F 3Gx0.75mm²)

· Country: England

• Rating: 13A - 250V (Fuse 3A) • Standard: BS 1363, KM 7079

· Color: Black, White

Mark:



MODEL NO	COLOR	LENGTH (m.)
UK-3 / BK / 200	Black	2.0
UK-3 / BK / 300	Black	3.0
UK-3 / WH / 200	White	2.0
UK-3 / WH / 300	White	3.0





US-2 US 2-pin Polarized Plug With Cordset



- · Description: Flat 2-core with one polarize plug
- Cable: Flat 2-core cable (SPT-2 AWG18)
- · Country: United States • Rating: 13A - 125V · Standard: UL
- · Color: Black, White, Transparent

Mark:



MODEL NO	COLOR	LENGTH (m.)
US-2 / BK / 200	Black	2.0
US-2 / BK / 300	Black	3.0
US-2 / WH / 200	White	2.0
US-2-/ WH / 300	White	3.0
US-2 / TR / 200	Transparent	2.0
US-2 / TR / 300	Transparent	3.0

US-3 US 3-pin Plug With Ground Cordset



· Description: Flat 2-core with ground • Cable: Flat 2-core cable (SPT-2 AWG18)

· Country: United States Rating: 13A - 125V · Standard: UL · Color: Black, White

· Mark:



MODEL NO	COLOR	LENGTH (m.)
US-3 / BK / 200	Black	2.0
US-3 / BK / 300	Black	3.0
US-3 / WH / 200	White	2.0
US-3 / WH / 300	White	3.0

AUS-2 Australia 2-pin Plug With Cordset



- · Description: 2 AUS-pin plug
- Cable: Flat 2-core cable (H03VVH2-F 2x0.75mm<sup>2</sup>)
- · Country: Australis, New Zealand
- Rating: 7.5A 250V · Standard: AS / NZS 3112 · Color: Black, White

· Mark:



MODEL NO	COLOR	LENGTH (m.)
AUS-2 / BK / 200	Black	2.0
AUS-2 / BK / 300	Black	3.0
AUS-2 / WH / 200	White	2.0
AUS-2 / WH / 300	White	3.0

AUS-3 Australia 3-pin Plug With Ground Cordset



- Description: 3 AUS-pin plug
- Cable: Round 3-core cable (H03VV-F 3Gx0.75mm<sup>2</sup>)
- · Country: Australis, New Zealand
- · Rating: 7.5A-250V • Standard: AS / NZS 3112 · Color: Black, White

· Mark:



MODEL NO	COLOR	LENGTH (m.)
AUS-3 / BK / 200	Black	2.0
AUS-3 / BK / 300	Black	3.0
AUS-3 / WH / 200	White	2.0
AUS-3 / WH / 300	White	3.0





# JP-2 Japan 2-pin Plug With Cordset

· Description: Flat 2-core plug

• Cable: Flat 2-core cable (VFF 2x0.75mm²)

· Country: Japan • Rating: 10A - 125V • Standard: T-Mark · Color: Black, White

B.0 1	^
Mark:	/nc
	∠P_S

MODEL NO	COLOR	LENGTH (m.)
JP-2 / BK / 200	Black	2.0
JP-2 / BK / 300	Black	3.0
JP-2 / WH / 200	White	2.0
JP-2 / WH / 300	White	3.0



# TH-2 Thai 2-pin Plug With Cordset

• Description: Flat 2-core plug

• Cable: Flat 2-core cable (VFF 2x0.75mm²)

• Country: Thailand • Rating: 10A - 250V · Standard: TISI · Color: · Mark:

Blad	ck
1	7)

MODEL NO	COLOR	LENGTH (m.)
TH-2 / BK / 200	Black	2.0
TH-2 / BK / 300	Black	3.0





SECO provides several types of line switches that are suitable for several usages. We offers hand switches, foot switches, and dimmer switches that accordance to several standards worldwide





SW-303 European Standard Switch



• Dimension: L:61.0 x W:26.8 x H:17.9mm

• Cable: Flat 2-core cable (H03VVH2-F 2x0.75mm²)

• Rating: 2A - 250V

• Standard: ENEC 61058, VDE 0630

· Color: Black, White

· Mark:



MODEL NO	COLOR
SW-303 / BK	Black
SW-303 / WH	White



SW-304 Universal Standard Switch

· Country: Europe, United States, Canada, Japan, China

• Dimension: L:61.0 x W:26.8 x H:17.9mm

• Cable: Flat 2-core cable (SPT-1/2)

· Rating: 2A - 250V

• Standard: ENEC 61058, VDE 0630

· Color: Black, White

Mark:



MODEL NO	COLOR
SW-304 / BK	Black
SW-304 / WH	White





· Country: United States, Canada

• Dimension: L:59.0 x W:23.0 x H:19.5mm

· Cable: Flat 2-core cable (SPT-1/2)

 Rating: 2A - 250V · Standard: UL 1054

· Color: Black, White, Transparent

Mark:



MODEL NO	COLOR
SW-305 / BK	Black
SW-305 / WH	White
SW-305 / TR	Transparent



## SW-475

UL Standard Switch

· Country: United States, Canada • Dimension: L:55.0 x W:24.0 x H:15.0mm

· Cable: Flat 2-core cable (SPT-1/2)

Rating: 2A - 125V

· Standard: UL 1054, CSA C22.2

· Color: Black, White

· Mark:

MODEL NO	COLOR
SW-475 / BK	Black
SW-475 / WH	White



#### SW-436

#### European and Australian Standard Switch



• Cable: Flat 2-core cable (H03VVH2-F 2x0.75mm²)

• Rating: 2[2]A - 250V

· Standard: EN 61058, AS 3127

• Color: Black, White
• Mark:

MODEL NO	COLOR
SW-436 / BK	Black
SW-436 / WH	White



#### SW-439

#### European and Australian Standard Switch

Country: Europe, Australia, New Zealand
 Dimension: L:58.1 x W:24.6 x H:17.5mm

· Cable: Round 3-core cable (H03VV-F 3Gx0.75mm²)

Rating: 2[2]A - 250V
Standard: EN 61058, AS 3127

· Color: Black, White

• Mark: /=//



MODEL NO	COLOR
SW-439 / BK	Black
SW-439 / WH	White



## KS-32

#### Japanese Standard Switch

· Country: Japan

• Dimension: L:60.1 x W:23.0 x H:15.0mm

Cable: Flat 2-core cable (VFF)
 Rating: 3A - 250V, 6A/125V

· Standard: JET

· Color: Black, White, Transparent

Mark:



MODEL NO	COLOR
KS-32 / BK	Black
KS-32 / WH	White
KS-32 / TR	Transparent



## KS-30

#### US Standard Switch

· Country: United States, Canada

Dimension: L:35.0 x W:21.4 x H:15.4mm
Cable: Flat 2-core cable (SPT-1)

Rating: 3A - 250V, 6A/125V
Standard: E214722, LR64464

· Color: Black, White

Mark:



MODEL NO	COLOR
KS-30 / BK	Black
KS-30 / WH	White







#### SW-555

#### US Standard Foot Switch

· Country: United States, Canada

· Dimension: D:25.0mm (Button), D:60.5mm (body)

· Cable: Flat 2-core cable (SPT-2) • Rating: 3A - 250V, 6A/125V · Standard: UL 1054, CSA C22.2

· Color: Black, White

Mark:

MODEL NO	COLOR		
SW-555 / BK	Black		
SW-555 / WH	White		

## SW-565

#### European and Japanese Foot Switch

· Country: United States, Canada

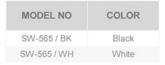
• Dimension: D:31.0mm (Button), D:50mm (body)

· Cable: Flat 2-core cable or Round 2 or 3 core cable

· Rating: 2[2]A - 250V · Standard: EN 61058 · Color: Black, White

Mark:







## SW-317

#### Universal Foot Switch

· Country: Europe, United States, Canada, China • Dimension: D:25.0mm (Button), D:70mm (body)

· Cable: Flat 2-core cable or Round 2 or 3 core cable

• Rating: 6A - 125V, 3A - 250V • Standard: UL 1054, CSA C22.2 · Color Black, Transparent

Mark:



MODEL NO	COLOR
SW-317 / BK	Black
SW-317 / TR	Transparent



## ZE-04

#### US Dimmer Hand Switch

· Country: United States, Canada

Dimension: L:68.0 x W:36,0 x H:32.5mm.

· Cable: SPI-1/2

Rating: 120V/240V (200W max.)

• Standard: E136609 · Color: Black

· Mark:







Lamps & Gear

SECO, as OEM partner of PHILIPS, provides all ranges of PHILIPS's products such as lamp, control gears, modules, etc. Please contact us for more information on PHILIPS's products.







#### Pear-Shaped Incandescent Lamps

- · Clear or frosted lamps sparkling
- Excellent color rendering (Ra = 100)
- · 1000hrs Life hours
- Color Temperature 2,700K
- E27 Lamp holder
- · Dimmable when using with Dimmable switch



MODEL NO	WATT	Luminous Flux (lm)
GLS-CL-E27-25	25w.	230
GLS-CL-E27-40	40w.	430
GLS-CL-E27-60	60w.	730
GLS-CL-E27-100	100w.	1,380



## Candle

Candle-Shaped Incandescent Lamps

- · Clear or frosted lamps sparkling
- Excellent color rendering (Ra = 100)
- 1000hrs Life hours
- · Color Temperature 2,700K
- E14 Lamp holder
- · Dimmable when using with Dimmable switch



MODEL NO	WATT	Luminous Flux (lm)
CAN-CL-E14-25	25w.	215
CAN-CL-E14-40	40w.	415
CAN-FR-E14-25	25w.	215
CAN-FR-E14-40	40w.	415



Lustre Spherical Incandescent Lamps

- · Clear or frosted lamps sparkling
- Excellent color rendering (Ra = 100)
- · 1000hrs Life hours
- Color Temperature 2,700K
- · E27 Lamp holder
- · Dimmable when using with Dimmable switch



MODEL NO	WATT	Luminous Flux (lm)
LUS-CL-E27-25	25w.	205
LUS-CL-E27-40	40w.	395
LUS-FR-E27-25	25w.	205
LUS-FR-E27-40	40w.	395

# Superlux Mushroom-Shaped Incandescent Lamps



- Up to 35% more light
- · Frosted lamps sparkling
- Excellent color rendering (Ra = 100)
- 1000hrs Life hours
- Color Temperature 2,700K
- E27 Lamp holder
- Dimmable when using with Dimmable switch



MODEL NO	WATT	Luminous Flux (lm)
SPL-FR-E27-25	25w.	215
SPL-FR-E27-40	40w.	400
SPL-FR-E27-60	60w.	670
SPL-FR-E27-100	100w.	1280





## PAR38

#### Conventional Reflector Lamps

- Excellent color rendering (Ra = 100)
- · 2000hrs Life hours
- · Color Temperature 2,700K
- · E27 Lamp holder
- Available in flood (FL) 30° or spot (SP) 12° light distribution



MODEL NO	WATT	Luminous Flux (lm)
PAR38-SP-E27-80	80w.	-
PAR38-FL-E27-80	80w.	-
PAR38-SP-E27-120	120w.	1150
PAR38-FL-E27-120	120w.	1150

## MR16

#### Conventional MR16 Essential Lamp



- · Low-voltage operation with 12V supply
- · Excellent color rendering (Ra = 100)
- · 2000hrs Life hours
- Color Temperature 3,000K
- · GU5.3 Lamp holder
- 36° degree of light distribution
- Available with (O) or without (C) front glass
- · Use with transformer
- · Dimmable when using with Dimmable switch



	MODEL NO	WATT	Light Out- put (cd)
ſ	MR16-ESS-O-G53-20	20w.	510
	MR16-ESS-O-G53-50	50w.	1500
	MR16-ESS-C-G53-20	20w.	480
	MR16-ESS-C-G53-35	35w.	1000
	MR16-ESS-C-G53-50	50w.	1450

#### Conventional GU10 Essential Lamp



- High-voltage operation at 230V
- Excellent color rendering (Ra = 100)
- · 2000hrs Life hours
- Color Temperature 3,000K
- · GU10 Lamp holder
- · 40° degree of light distribution
- · With front glass
- · Dimmable when using with Dimmable switch



WATT	Flux (lm)
35w.	400
50w.	650
	35w.



# Halogen Capsule Halogen Capsule Lamp

- · Low-voltage operation with 12V supply
- Excellent color rendering (Ra = 100)
- 2000hrs Life hours
- Color Temperature 3,000K
- G4 lamp holder for 10w and 20w and GY6.35 for 50w.
- · Use with transformer
- · Dimmable when using with Dimmable switch



MODEL NO	WATT	Luminous Flux (Im)
CAP-ESS-G4-10	10w.	100
CAP-ESS-G4-20	20w.	250
CAP-ESS-GY6.35-50	50w.	700





# PAR HalogenA Halogen PAR Lamp



- Excellent color rendering (Ra = 100)
- · 2000hrs Life hours
- · Color Temperature 2,700K
- · E27 Lamp holder
- Available in flood (FL) 30° or spot (SP) 12° light distribution



MODEL NO	WATT	Light Out- put (cd)
PAR20-HAL-25-E27-50	50w.	850
PAR30-HAL-10-E27-75	75w.	5525
PAR30-HAL-30-E27-75	75w.	1700
PAR38-HAL-30-E27-100	120w.	2550

QR111 Halogen Aluline QR111 Lamp



- · Low-voltage operation with 12V supply
- Excellent color rendering (Ra = 100)
- · 3000hrs Life hours
- · Color Temperature 3,000K
- · GU5.3 Lamp holder
- Available with spot (SP) 8° or flood (FL) 24° light distribution
- · Use with transformer
- · Dimmable when using with Dimmable switch



MODEL NO	WATT	Light Out- put (cd)
QR111-SP-G53-50	50w.	23000
QR111-FL-G53-50	50w.	4000
QR111-SP-G53-75	75w.	30000
QR111-FL-G53-75	75w.	5300
QR111-SP-G53-100	100w.	48000
QR111-FL-G53-100	100w.	8500

## Double End

Halogen Double End Line Lamp



- Excellent color rendering (Ra = 100)
- · 2000hrs Life hours
- Color Temperature 2,900K
- · R7x Lamp holder
- · With front glass
- · Ideal for floodlighting construction sites, buildings, outdoor bars. etc

A	
TYPE	Α
100w, 150w	78.3
200w, 300w	117.6
500w	117.6
1000w	189.1
1500w	254.1

MODEL NO	WATT	Luminous Flux (lm)
PSL-C-R7s-100	100w.	1550
PSL-C-R7s-150	150w.	2400
PSL-S-R7s-200	200w.	3000
PSL-S-R7s-300	300w.	5600
PSL-S-R7s-500	500w.	9900
PSL-L-R7s-1000	1000w.	24200
PSL-L-R7s-1500	1500w.	36300

# Transformer Transformer for Low-Voltage Halogen



- One universal driver 220-24-V, 50/60Hz
- · Overload, short circuit & overheating protection
- Quick ignition time (<0.8s)</li>
- · Long life time (30,000 hours @ Tc=65° with 90% survival)
- >0.98 Power Factor
- · Screw Connector

MODEL NO	WATT
ET-S-60	20-60
ET-S-105	35-105
ET-S-150	50-105
ET-C-60	20-60



# T8 TL-D Fluorescent T8 TL-D Lamp

- · Diameter 26 mm.
- 13,000hrs Life hours
- · Color Temperature available in 2 options: 4100K, 6200K
- G13 Lamp holder
- High Color Rendering (Ra) = 63 for 4100K and (Ra) = 72 for 6300K



TYPE	Α
TL-D 18w	604
TL-D 36w	1213.6
TL-D 58w	1514.2

MODEL NO	WATT	Luminous Flux (lm)
TLD-640-G13-18	18w.	1150
TLD-765-G13-18	18w.	1030
TLD-640-G13-36	36w.	2850
TLD-765-G13-36	36w.	2600
TLD-640-G13-58	58w.	4600
TLD-765-G13-58	58w.	4000

# T8 Super TL-D Fluorescent T8 Super TL-D Lamp

- · Diameter 26 mm.
- 15,000hrs Life hours
- · Color Temperature available in 3 options: 3000K, 4000K, 6500K
- · G13 Lamp holder
- High Color Rendering (Ra) = 85



TYPE	Α
STL-D 18w	604
STL-D 36w	1213.6

MODEL NO	WATT	Luminous Flux (lm)
STLD-830-G13-18	18w.	1350
STLD-840-G13-18	18w.	1350
STLD-865-G13-18	18w.	1300
STLD-830-G13-36	36w.	3350
STLD-840-G13-36	36w.	3350
STI D-865-G13-36	36w	3250

T8 TL-E Circular Fluorescent T8 TLD Lamp



- · Diameter 28mm.
- 8,000hrs Life hours
- · Color Temperature available in 2 options: 4100K, 6200K
- · G10q Lamp holder
- High Color Rendering (Ra) = 72



TYPE	Α	
TL-E 22w	199	
TL-E 30w	209	
TL-E 32w	288	
TL-E 40w	390	

MODEL NO	WATT	Luminous Flux (lm)
TLE-765-G10q-22	22w.	1050
TLE-765-G10q-30	30w.	1410
TLE-640-G10q-32	32w.	2050
TLE-765-G10q-32	32w.	1810
TLE-765-G10q-40	40w.	2470





Luminous

WATT

# T5 Essential Fluorescent T5 Essential Lamp

- · Diameter 17 mm.
- 20,000hrs Life hours
- · Color Temperature available in 3 options: 3000K, 4000K, 6500K
- G5 Lamp holder
- Color Rendering (Ra) = 82
- · Use with electronic ballast only



TL-5 21w TL-5 28w

			Flux (lm)
	TL5-ESS-830-G5-14	14w.	1350
_	TL5-ESS-840-G5-14	14w.	1350
Α	TL5-ESS-865-G5-14	14w.	1260
545	TL5-ESS-830-G5-21	21w.	2100
845	TL5-ESS-840-G5-21	21w.	2100
1140	TL5-ESS-865-G5-21	21w.	1900
	TL5-ESS-830-G5-28	28w.	2900
	TL5-ESS-840-G5-28	28w.	2900
	TL5-ESS-865-G5-28	28w.	2700

MODEL NO

# T5 Master HE Fluorescent T5 Master Lamp

- · Diameter 17 mm.
- · 24,000hrs Life hours
- · Color Temperature available in 3 options: 3000K, 4000K, 6500K
- · G5 Lamp holder
- Color Rendering (Ra) = 85
- · Use with electronic ballast only



TYPE	Α
TL-5 14w	545
TL-5 21w	845
TL-5 28w	1140
TL-5 35w	845
TL-5 54w	1140

MODEL NO	WATT	Flux (Im)
TL5-MAS-830-G5-14	14w.	1350
TL5-MAS-840-G5-14	14w.	1350
TL5-MAS-865-G5-14	14w.	1260
TL5-MAS-830-G5-21	21w.	2100
TL5-MAS-840-G5-21	21w.	2100
TL5-MAS-865-G5-21	21w.	1900
TL5-MAS-830-G5-28	28w.	2900
TL5-MAS-840-G5-28	28w.	2900
TL5-MAS-865-G5-28	28w.	2700
TL5-MAS-830-G5-35	35w.	3650
TL5-MAS-840-G5-35	35w.	3650
TL5-MAS-865-G5-35	35w.	3400
TL5-MAS-830-G5-54	54w.	5000
TL5-MAS-840-G5-54	54w.	5000
TL5-MAS-865-G5-54	54w.	4750



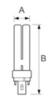




## PIS

#### Compact Fluorescent PLS

- 16% improve on lumen maintenance
- 8,000hrs Life hours
- Color Temperature available in 3 options: 2700K, 4000K, 6500K
- G23 Lamp holder
- High Color Rendering (Ra) = 82
- · Built-in starter and must use with ballast



TYPE	AxB
7w	28x135
9w	28x167
11w	28x236

MODEL NO	WATT	Luminous Flux (lm)
PLS-827-G23-7	7w.	400
PLS-840-G23-7	7w.	400
PLS-865-G23-7	7w.	400
PLS-827-G23-9	9w.	600
PLS-840-G23-9	9w.	600
PLS-865-G23-9	9w.	600
PLS-827-G23-11	11w.	900
PLS-840-G23-11	11w.	900
PLS-865-G23-11	11w.	900



## PI (

#### Compact Fluorescent PLC

- 12% improve on lumen maintenance
- 10,000hrs Life hours
- Color Temperature available in 3 options: 2700K, 4000K, 6500K
- G24 Lamp holder
- High Color Rendering (Ra) >80
- · Built-in starter and must use with ballast
- \* Price for 2 pin
- \*\* 4 pin for using with electronic ballast



TYPE	AxB
10w.	28x118
13w.	28x140
18w.	28x152
26w.	28x173

MODEL NO	WATT	Luminous Flux (lm)
PLC-827-G241-2P-10	10w.	600
PLC-840-G241-2P-10	10w.	600
PLC-865-G241-2P-10	10w.	600
PLC-827-G241-2P-13	13w.	900
PLC-840-G241-2P-13	13w.	900
PLC-865-G241-2P-13	13w.	900
PLC-827-G242-2P-18	18w.	1200
PLC-840-G242-2P-18	18w.	1200
PLC-865-G242-2P-18	18w.	1200
PLC-827-G243-2P-26	26w.	1800
PLC-840-G243-2P-26	26w.	1800
PLC-865-G243-2P-26	26w.	1800



#### PΠ

#### Compact Fluorescent PLL

- 80% Energy Saving more than conventional lamps
- 15,000hrs Life hours
- Color Temperature available in 3 options: 3000K, 4000K, 6500K
- 2G11 Lamp holder
- High Color Rendering (Ra) > 80



TYPE	AxB
18w	38x227
36w	38x417

MODEL NO	WATT	Luminous Flux (Im)
PLL-830-2G11-4P-18	18w.	1200
PLL-840-2G11-4P-18	18w.	1200
PLL-865-2G11-4P-18	18w.	1200
PLL-830-2G11-4P-36	36w.	2900
PLL-840-2G11-4P-36	36w.	2900
PLL-865-2G11-4P-36	36w.	2900





## Essential

Compact Fluorescent Essential

- · 80% Energy Saving more than conventional lamps
- 8,000hrs Life hours
- · Color Temperature available in 2 options: 2700K, 6500K
- · E27 Lamp holder
- High Color Rendering (Ra) = 82 for 2700K and (Ra) = 80 for 6500K



TYPE	AxB
	717.00
5w	44x125
8w	44x140
11w	44x155
14w	44x170
18w	52x165
23w	52x175

MODEL NO	WATT	Luminous Flux (lm)
ESS-WW-E27-5	5w.	275
ESS-CD-E27-5	5w.	260
ESS-WW-E27-8	8w.	460
ESS-CD-E27-8	8w.	440
ESS-WW-E27-11	11w.	650
ESS-CD-E27-11	11w.	620
ESS-WW-E27-14	14w.	860
ESS-CD-E27-14	14w.	820
ESS-WW-E27-18	18w.	1170
ESS-CD-E27-18	18w.	1100
ESS-WW-E27-23	23w.	1460
ESS-CD-E27-23	23w.	1420



Genie Compact Fluorescent Genie

- · 80% Energy Saving more than conventional lamps
- · 8,000hrs Life hours
- · Color Temperature available in 3 options: 2700K, 4100K, 6500K
- · E27 Lamp holder
- High Color Rendering (Ra) = 82 for 2700K and (Ra) = 80 for 4100K and 6500K



TYPE	AxB
5w.	37x105
8w.	44x105
11w.	44x115
14w.	44x130
18w.	48x133

MODEL NO	WATT	Luminous Flux (lm)
GENIE-WW-E27-5	5w.	250
GENIE-CW-E27-5	5w.	235
GENIE-CD-E27-5	5w.	235
GENIE-WW-E27-8	8w.	440
GENIE-CW-E27-8	8w.	415
GENIE-CD-E27-8	8w.	415
GENIE-WW-E27-11	11w.	610
GENIE-CW-E27-11	11w.	600
GENIE-CD-E27-11	11w.	600
GENIE-WW-E27-14	14w.	840
GENIE-CW-E27-14	14w.	790
GENIE-CD-E27-14	14w.	790
GENIE-WW-E27-18	18w.	1100
GENIE-CW-E27-18	18w.	1040
GENIE-CD-E27-18	18w.	1040



## Tornado

Compact Fluorescent Tornado



- · Color Temperature available in 3 options: 2700K, 6500K
- E27 Lamp holder
- High Color Rendering (Ra) = 82



TYPE	AxB
5w	45x76
8w	45x83
11w	45x90
14w	50x104
18w	55x108
2\4w	60x115

MODEL NO	WATT	Luminous Flux (lm)
TND-WW-E27-5	5w.	300
TND-CD-E27-5	5w.	280
TND-WW-E27-8	8w.	500
TND-CD-E27-8	8w.	460
TND-WW-E27-12	12w.	725
TND-CD-E27-12	12w.	690
TND-WW-E27-15	15w.	950
TND-CD-E27-15	15w.	900
TND-WW-E27-20	20w.	1350
TND-CD-E27-20	20w.	1250
TNd-WW-E27-24	24w.	1550
TND-CD-E27-24	24w.	1450
TND-WW-E27-12 TND-CD-E27-12 TND-WW-E27-15 TND-CD-E27-15 TND-WW-E27-20 TND-CD-E27-20 TNd-WW-E27-24	12w. 12w. 15w. 15w. 20w. 20w. 24w.	725 690 950 900 1350 1250









- 220-230 Voltage
- E27 Lamp holder
- · Non-dimmable
- Color Rendering (Ra) = 65
- · Built-in ballast



TYPE	AxB
160w	75x168
250w	90x211
500w	120x282

MODEL NO	WATT	Luminous Flux (lm)
E27 lamp holder		
ML-E27-160	160w.	3000
ML-E27-250	250w.	3400
E40 lamp holder		
ML-E40-250	250w.	5500
ML-E40-500	500w.	13000

# Mercury - HPL-N

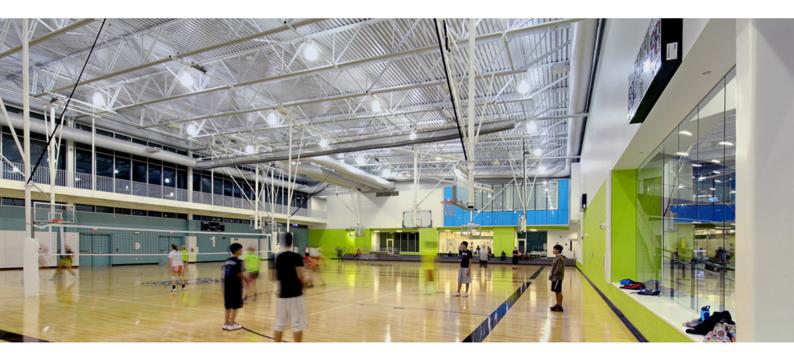


- 20,000hrs Life hours for E27 lamp holder and 15,000 for E40 lamp holder
- · 220-230 Voltage
- E27, E40 Lamp holder
- Color Rendering (Ra) = 45
- · Use with BHL ballast (no ignitor needed)



TYPE	AxB
80w	71x135
125w	76x171.5
250w	91x228
400w	121.5x290
1000w	166.5x299

MODEL NO	WATT	Luminous Flux (Im)
E27 lamp holder		
HPL-N-E27-80	80w.	4200
HPL-N-E27-125	125w.	4100
E40 lamp holder		
HPL-N-E40-250	250w.	4100
HPL-N-E40-400	400w.	3900
NPL-N-E40-1000	1000w.	3900





SON HID High Pressure Sodium Lamp



- 28,000hrs Life hours
- Color Temperature = 2000K
- · E27, E40 Lamp holder
- Color Rendering (Ra) = 25
- SON 70w is built-in ignitor
- · Use with BSN ballast



TYPE	AxB
70w	77x56
150w	91x227
250w	91x227
400w	122x290

MODEL NO	WATT	Luminous Flux (lm)
SON-E27-70	70w.	5600
SON-E40-150	150w.	14500
SON-E40-250	250w.	27000
SON-E40-400	400w.	31000

SON-T HID Turbular High Pressure Sodium Lamp

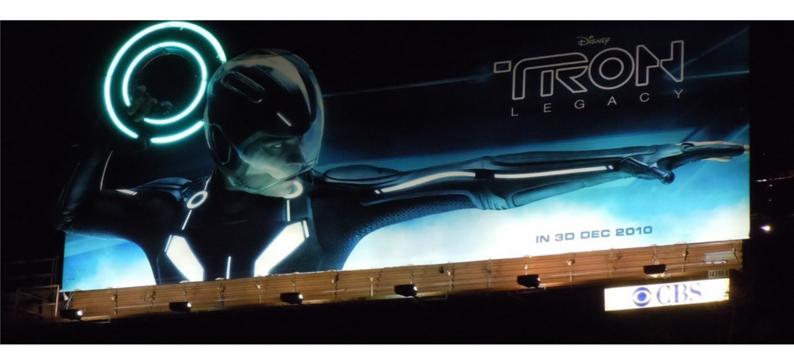


- 28,000hrs Life hours
- Color Temperature = 2000K
- E27, E40 Lamp holder
- Color Rendering (Ra) = 25
- Use with BSN ballast



TYPE	AxB
70w	32x156
150w	47x211
250w	47x257
400w	47x283
1000w	122x290

MODEL NO	WATT	Luminous Flux (lm)
SON-T-E27-70	70w.	6000
SON-T-E40-150	150w.	15000
SON-T-E40-250	250w.	28000
SON-T-E40-400	400w.	48000
SON-T-E40-1000	1000w.	130000







## HPI

#### HID Metal Halide Lamp

- · 20,000hrs Life hours
- Color Temperature = (BU) 4500K with BHL ballast (BU) 4000K with BSN ballast (SLV) 6700K with BHL ballast (SLV) 5400K with BSN ballast
- · E40 Lamp holder
- Color Rendering (Ra) = 69
- · Use with BSN or BHL ballast



TYPE	AxB
250w	91x226
400w	122x290

MODEL NO	WATT	Luminous Flux (lm)
With BHL Ballast		
HPI-PLUS-E40-BU-250	250w	18000
HPI-PLUS-E40-SLV-250	250w	18000
HPI-PLUS-E40-BU-400	400w	35000
HPI-PLUS-E40-SLV-400	400w	35000
With BSN Ballast		
HPI-PLUS-E40-BU-250	250w	25500
HPI-PLUS-E40-SLV-250	250w	25500
HPI-PLUS-E40-BU-400	400w	42500
HPI-PLUS-E40-SLV-400	400w	42500

# HPI-T HID Metal Halide Tubular Lamp



- EPS-40

- 20,000hrs Life hours
- Color Temperature = 4500K
- · E40 Lamp holder
- · Color Rendering (Ra) = 65
- · Use with BSN or BHL ballast



TYPE	AxB
250w	47x257
400w	47x386
1000w	66x382
2000w	102x430

MODEL NO	WATT	Luminous Flux (lm)
With BHL Ballast		
HPI-T-E40-SLV-250	250w.	19000
HPI-T-E40-SLV-400	400w.	35000
HPI-T-E40-863-1000	1000w.	85000
HPI-T-E40-646-2000	2000w.	189000
HPI-T-E40-642-2000	2000w.	200000
With BSN Ballast		
HPI-T-E40-SLV-250	250w.	23000
HPI-T-E40-SLV-400	400w.	38000

## MHN-TD

#### HID Metal Halide Lamp



- Color Temperature = 4500K
- Rx7x Double-end Lamp holder
- · Color Temperature available in 3 options: 3000K, 4200K, 5200K
- High Color Rendering (Ra) = 70-85
- · Use with ballast BSN + Ignitor SN58 for 150w, 250w lamp BMH + Ignitor SN58 for 70w lamp



TYPE	AxB
70w	115x20
150w	115x20

MODEL NO	WATT	Luminous Flux (lm)
MHN-TD-Rx7s-730-70	70w.	6200
MHN-TD-Rx7s-842-70	70w.	5700
MHN-TD-Rx7s-852-70	70w.	5000
MHN-TD-Rx7s-730-150	150w.	13800
MHN-TD-Rx7s-842-150	150w.	12900
MHN-TD-Rx7s-852-150	150w.	11000





## BPL

Magnetic Ballast for Compact Fluorescent



- · Magnetic ballast for compact fluorescent (PL-S, PL-C)
- · 220 Volt, 50 Hz for switch-start
- Tw = 130°C



MODEL NO	WATT	Loss (Watt)
BPL 10L04	PL-S 7,9,11w / 2P	5
BPL 13L04	PL-C 10,13w/2P	4
BPL 18L04	PL-C 18w/2P	6

Magnetic Ballast for T8 Fluorescent Lamps



- · Magnetic ballast for T8 fluorescent lamp18, 32, 36, and 58w.
- · 220 Volt, 50 Hz for switch-start
- Tw = 130°C



MODEL NO	WATT	Loss (Watt)
BTA 18L04	TLD 18w	8
BTA 18L04 P	TLD 18w	8
BTA 36L04	TLD 36w	8.5
BTA 36L04 P	TLD 36w	8.5
BTA 32L04	TLE 32w	8.5
BTA 58L04	TLD 58w	12

## BTA-LW

Low Loss Magnetic Ballast for T8 Fluorescent Lamps



- · Low loss magnetic ballast
- For T8 fluorescent lamp18 and 36w
- · 220 Volt, 50 Hz for switch-start
- Tw = 130°C



MODEL NO	WATT	Loss (Watt)
BTA 18L04 LW	TLD 18w	5.7
BTA 18L04 LW	TLD 36w	5.5



# S2, S10 Starter Starter for T8 Fluorescent Lamp S2, S10

- Switch Starter
- · Using with T8 fluorescent lamp
- -20°C 80°C working temperature
- 220-240 Voltage



MODEL NO	WATT	Use With
S2	4-22	1lamp / 2lamp
S10	4-65	1lamp



# EB-Certalume Electronic Ballast for Fluorescent Lamp



- · Electronic ballast for fluorescent lamp 18, 36w. 1 or 2 lamps
- 30% saving energy more than magnetic
- · 25,000hrs Life hours



TYPE	AxBxC
118	150x40x28
218	150x40x28
136	150x40x28
236	210x40x30

MODEL NO	WATT	Qty of lamp	Power Factor (PF)
EB-C 118 TLD	18w.	1	>0.95
EB-C 218 TLD	18w.	2	>0.95
EB-C 136 TLD	36w.	1	>0.95
EB-C 236 TLD	36w.	2	>0.95

# EB-S EasiDim Electronic Ballast for Fluorescent Lamp



- · Electronic ballast for T8 fluorescent lamp 18, 36, 58w for 1 or 2 lamps and T5 fluorescent lamp 14, 28w for 1 or 2 lamps
- · Dimmable when using with dimmable
- · 50,000hrs Life hours
- · 30% Energy saving than magnetic ballast



TYPE	AxBxC
114,128	360x30x28
214,228	425x30x28
118,136 ,158	360x30x28
218,236 ,258	425x30x28

MODEL NO	WATT	Qty of lamp	Power Factor (PF)
EB-S ED 118 TLD	18w.	1	>0.95
EB-S ED 218 TLD	18w.	2	>0.95
EB-S ED 136 TLD	36w.	1	>0.95
EB-S ED 236 TLD	36w.	2	>0.95
EB-S ED 158 TLD	58w.	1	>0.95
EB-S ED 258 TLD	58w.	2	>0.95
EB-S ED 114 TLD	14w.	1	>0.95
EB-S ED 214 TLD	14w.	2	>0.95
EB-S ED 128 TLD	28w.	1	>0.95
EB-S ED 228 TLD	28w.	2	>0.95







# BMH Magnetic Ballast for HID Lamp



- · Magnetic ballast for low wattage metal halide lamps, such as MHN-TD, CDM-TD, CDM-T, MH
- Tw = 130°C
- Use with ignitor SN58
- · Automtatic thermal switch



MODEL NO	LAMP	WATT	Luminous Flux (lx)	IGNOTIR	CAP (µF/V)	
BMH 35L302ITS	CDM-T 35w/830	38	3300	SN58	6/250	
	MHN-TD 70w	75	5700			
DMILITAL ANALTO	CDM-T 70/830	71	6600	CNIEG	10/050	
BMH 70L302ITS	CDM-T 70/942	72	6600	SN58	12/250	
	MT 70	72	5600			

BSN Magnetic Ballast for HID Lamp



- · Magnetic ballast for SON and MH lamps
- 30% saving energy more than magnetic ballast
- Tw = 130°C



TYPE	AxBxC
BSN 70w	117 x57.1x51.5
BSN 150w	125x75.5x64.5
BSn 250w	150x75.5x64.5
BSN 400w L300I	165x96.5x82

MODEL NO	LAMP	WATT	Luminous Flux (Ix)	IGNITOR	CAP (µF/V)
BSN 70L300I	SON-T 70w	70	6000	SN57	12/250
DCN 4501 20011	SON-T 150w	150	15000	SN58	18/250
BSN 150L300II	CDM-T 150w/830	147	14000	SN58	18/250
	CDM-T 150w/842	146	12700	SN58	18/250
BSN 250L300I	SON-T 250w	250	28000	SN58	32/250
	SON-PLUS 150w	150	16000	SN58	18/250
	HPI PLUS 400w BUS	454	42500	-	50/250
	MHN-TD 250w	252	20000	SN58	32/250
D314 230L3001	SON-T 250w	250	28000	SN58	32/250
	SON-PLUS 150w	150	16000	SN58	18/250
	HPI PLUS 400 BUS	454	42500	-	50/250
	MHN-TD 250w	252	20000	SN58	32/250
	SON-T 400w	392	48000	SN58	50/250
	HPI PLUS 250w BU	302	25500	SN58	32/250
BSN 400L300I	HPI PLUS 400w BU 454 42500 SN58	50/250			
DOIN 400L3001	HPI PLUS 400 BUS-P	454	42500	SN58	50/250
	HPI-T PLUS 250w	295	23000	SN58	32/250
	HPI-T PLUS 400w	445	38000	SN58	50/250



## BHL

#### Magnetic Ballast for HID Lamp



- · Magnetic ballast for HPL and HPI lamps • 30% saving energy more than magnetic ballast
- Tw = 130°C



MODEL NO	LAMP	WATT	Luminous Flux (lx)	IGNITOR	CAP (µF/V)
BHL 80L200	HPL-N 80w	80	3700	-	8/250
BHL 125L200	HPL-N 125w	125	6200	-	10/250
BHL 1000L202	HPL-N 1000w (230V)	1000	58500	-	30/250 x2
BHL 1000L202	HPI-T 1000w	985	85000	SI52	32/250 x2
BHL 1000L202 x2	HPI-T 2000w (230-240V)	1960	189000	SI52	125/250

# Capacitor Capacitor for HID Lamp circuit



- · Correct the power factor of transformers and magnetic ballast in discharge lamps
- · Allow for an improvement of the luminary's power factor to -0.85
- Up to 250v 50H/60Hz -40°C ~85°C



TYPE	AXB
CP 4 MFD	80x25
CP 5 MFD	80x25
CP 6.5 MFD	80x29
CP 8 MFD	90x28
CP 10 MFD	90x29
CP 12 MFD	95x29
CP 18 MFD	120x29
CP 25 MFD	120x34
CP 32 MFD	120x38

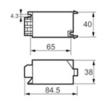
MODEL NO	LAMP	MATERIAL
CP 4 MFD	FL 18w	PLASTIC
CP 5 MFD	FL 36w	PLASTIC
CP 6.5 MFD	CDM 35w	PLASTIC
CP 8 MFD	HPL-N 80w	PLASTIC
CP 10 MFD	HPL-N 125w	PLASTIC
CP 12 MFD	MH 70w, SON 70w	PLASTIC
CP 18 MFD	MH 150w, SON 150w	PLASTIC
	HPL-N 250w, HPI 250w	PLASTIC
CP 25 MFD	HPL-N 400w, HPI400w	PLASTIC
CP 30 MFD x2	HPL-N 1000w	PLASTIC
CP 32 MFD	SON 250w	PLASTIC
CP 32 MFD x2	HPI-T 1000w	PLASTIC
CP 50 MFD	SON 400w	ALUMINIUM

# Ignitor

Electronic Ignitor for HID Lamp circuits



- · Electronic ignitors for (ceramic discharge) metal halide and high pressure sodium lamps
- · Ensure reliable and smooth starting behavior



MODEL NO	LAMP
SN 51 PLUS	HPI 250-1000w
SI 52	HPI 2000w
SN 58	SON 70-400w
	MH 35-150w
SN 58 T5	SON 70-1000w
SN 58 T15	CDM/MH 35-150w





# Lamp Designation

	CODE	WATT	BASE	COLOR TEMP (K)	LIFE SPAN	CRI	LUMINOUS INTENSITY (cd)	DIMENSION	OSRAM	PHILIPS
Incandesce	ent lamps									
	GLS	40W	E27	2700	1000	100	415 lm	99 mm / a 55 mm	CLASS A CL 40	354860
	GLS	60 W	E27	2700	1000	100	710 lm	99 mm / © 55 mm	CLASS A CL 60	354863
	GLS	75 W	E27	2700	1000	100	935 lm	99 mm / a 55 mm	CLASS A CL 75	354594
	PAR 38	120 W	E27	2700	1000	100	3100 - 9300 cd	136 mm / © 121 mm	CONCENTRA	PAR 38
$\bigcirc$	PAR 56	300 W	GX16d	3000	2000	100	10000 cd	127 mm / o 178 mm	ALU PAR56	PAR 56
Halogen Ca	neula									
nalogen ca	JC	10 W	G4	3000	2000	100	140 lm	32 mm / o 9 mm	HALOSTAR	CAPSULELINE
	JC	20 W	G4	3000	2000	100	320 lm	32 mm / o 9 mm	HALOSTAR	CAPSULELINE
	JC	50 W	GY6.35	3000	2000	100	910 lm	44 mm / to 12 mm	HALOSTAR	CAPSULELINE
	JC	90 W	GY6.35	3000	2000	100	1800 lm	44 mm / a 12 mm	HALOSTAR	CAPSULELINE
Halogon Die	hroic Reflect	tor (42\/)								
nalogen Dic	MR 11	20 W	GU4	3000	2000	100	500 - 3200 cd	35 mm / © 34.5 mm	DECOSTAR 35	ACCENTLINE
	MR 11	35 W	Gx5.3	3000	2000	100	900 - 5000 cd	35 mm / © 34.5 mm	DECOSTAR 35	ACCENTLINE
<b>©</b>					2000-					
4	MR 16	35 W	Gx5.3	3000	3000	100	1050 - 6300 cd	46 mm / \alpha 50 mm	DECOSTAR 51	ACCENTLINE
	MR 16	50 W	Gx5.3	3000	2000- 3000	100	1500 - 8200 cd	46 mm / © 50 mm	DECOSTAR 51	ACCENTLINE
Halogen alu	minium refle	ctor (12V)								
<b>\( \)</b>	QR 70	50 W	BA15d	3000	3000	100	2600 - 12500 cd		HALOSPOT 70	ALULINE
harman	QR 111	75 W	G53	3000	3000	100	2000 - 30000 cd	65 mm / s 111 mm	HALOSPOT 111	ALULINE
	QR 111	100 W	G53	3000	3000	100	2800 - 30000 cd	65 mm / © 111 mm	HALOSPOT 111	ALULINE
Halogon dic	hroic PAR (2	201/)								
Transaction one	PAR 16	50 W	GU10	2900	2000	100	900 cd	55 mm / © 50 mm	HALOPAR 16	TWISTLINE ALU
41	PAR 20	50 W	E27	2900	2000	100	1000 - 3200 cd	91 mm / ⊗ 64 mm	HALOPAR 20	HALOGENA
400										
4	PAR 30	75 W	E27	2900	2000	100	2200 - 7500 cd	90 mm / © 97 mm	HALO PAR 30	HALOGENA PAR
	PAR 30	100 W	E27	2900	2000	100	3500 - 10000 cd	90 mm / @ 97 mm	HALO PAR 30	HALOGENA PAR
and I	PAR 38	50 W	E27	2900	2000	100	1200 cd	139 mm / a 123 mm	HALOPAR 38	HALOGENA
	PAR 38	75 W	E27	2900	2000	100	2400 - 7200 cd	139 mm / a 123 mm	HALOPAR 38	
	PAR 38	100 W	E27	2900	2000	100	3100 - 8200 cd	139 mm / o 123 mm	HALOPAR 38	HALOGENA
Tungsten ha	alogen lamps									
	HAL-DE	100 W	R7s	2900	2000	100	1550 lm	78.3 mm	HALOLINE	PLUSLINE C
-	HAL-DE	150 W	R7s	2900	2000	100	2400 lm	78.3 mm	HALOLINE	PLUSLINE C
0———	HAL-DE	200 W	R7s	2900	2000	100	3000 lm	117.6 mm	HALOLINE	PLUSLINE S
	HAL-DE	300 W	R7s	2900	2000	100	5600 lm	117.6 mm	HALOLINE	PLUSLINE S
	HAL-DE	500 W	R7s	2900	2000	100	9900 lm	117.6 mm	HALOLINE	PLUSLINE S
	HAL-DE	1000 W	R7s	2900	2000	100	24200 lm	189.1 mm	HALOLINE	PLUSLINE L
	HAL-DE	15000 W	R7s	2900	2000	100	36300 lm	254.1 mm	HALOLINE	PLUSLINE L
$\Box$	HAL	25 W	G9	2900	2000	100	200 lm	43 mm	HALOPIN	Clicline G9
	HAL	40 W	G9	2900	2000	100	460 lm	43 mm	HALOPIN	Clicline G9
	HAL	60 W	G9	2900	2000	100	980 lm	51 mm	HALOPIN	Clicline G9
€	HAL-T	40 W	E27	2900	2000	100	1050 lm	67 lm	HALOLUX	
	HAL-T	60 W	E27	2900	2000	100	1470 lm	67 lm	HALOLUX	
	HAL-T	70 W	E27	2900	2000	100	2400 lm	86 lm	HALOLUX	-
	HAL-T	100 W	E27	2900	2000	100	4210 lm	86 lm	HALOLUX	-
	HAL-T	100 W	E27	2900	2000	100	4210 lm	86 lm	HALOLUX	



# Lamp Designation

	CODE	WATT	BASE	COLOR TEMP	LIFE SPAN	CRI	LUMINOUS INTENSITY (cd)	DIMENSION	OSRAM	PHILIPS
Metal halide	alamps									
	MH-E	70 W	E27	3700 - 4000	10000	65	5300 - 5600 lm	141 mm / a 56 mm	POWERBALL-TT	CMH
	MH-E	100 W	E27	3700 - 4000	10000	65	8800 - 9000 lm	141 mm / a 56 mm	POWERBALL-TT	CMH
	MH-E	150 W	E27	3700	10000	65	13500 lm	141 mm / a 56 mm	POWERBALL-TT	CMH
	MH-E	250 W	E40	4500	20000	69	18000 - 25500 lm	226 mm / a 91 mm		HPI PLUS BU
	MH-E	400 W	E40	4500	20000	69	35000 - 42500 lm	290 mm / a 122 mm		HPI PLUS BU
	MH-T	250 W	E40	4500	20000	65	19000 - 23000 lm	257 mm / @ 47 mm		HPI-T PLUS
#Farm	MH-T	400 W	E40	4500	20000	65	35000 - 38000 lm	286 mm / a 47 mm		HPI-T PLUS
((P3mb)	MH-T	1000 W	E40	4300	10000	65	85000 lm	382 mm / a 66 mm		HPI-T
	MH-T	2000 W	E40	4600	10000	65	189000 lm	430 mm / a 102 mm		HPI-T
	MH-T	70 W	G12	3000 - 4200	9000	80-89	5800 lm		HQI-T	
	MH-T	150 W	G12	3000 - 4200	9000	80-89	13000 lm		HQI-T	
	MH-DE	70 W	RX7s	3000 - 4200 - 5200	9000	80	5000 - 6200 lm	20 mm x 115 mm	HQI-TS	MHN-TD
<del>(1 &lt;0&gt; \</del> }	MH-DE	150 W	RX7s	3000 - 4200 - 5200	9000	85	11000 - 13800 lm	20 mm x 115 mm	HQI-TS	MHN-TD
	MH-DE	250 W	FC2	4200	9000	80	20000 lm	27.5 mm x 161.6 mm	HQI-TS	MHN-TD
Metal halide	e ceramic lam	0								
	HIT-T-CE	35 W	G12	3000 - 4200	12000	86	3300 lm	103 mm / © 20 mm	HCI-T	CDM-T
_	HIT-T CE	70 W	G12	3000 - 4200	12000	92	6600 lm	103 mm / a 20 mm	HCI-T	CDM-T
::::::::::::::::::::::::::::::::::::::	HIT-T-CE	100 W	G12				9500 lm	103 mm / s 20 mm	HCI-T	
				3000 - 4200	40000	00				CDM T
	HIT-T-CE	150 W	G12	3000 - 4200	12000	96	14000 lm	103 mm / © 20 mm	HCI-T	CDM-T
<b>□□-0+</b>	HIT-TC-CE	35 W	G8.5	3000 - 4200	6000	87	3500 lm	85 mm / to 15 mm	HCI-TC	CDM-TC
	HIT-TC-CE	70 W	G8.5	3000 - 4200	6000	90	6900 lm	85 mm / a 15 mm	HCI-TC	CDM-TC
<b>♦</b>   <b>1</b>   <b>1</b>   <b>1</b>   <b>1</b>	HIT-DE	70 W	Rx7s	3000 - 4200	16000	92	6800 lm	22 mm x 119.63 mm	HCI-TS	CDM-TD
(100)	HIT-DE	150 W	Rx7s-24	3000 - 4200	16000	96	14500 lm	25 mm / 137.43 mm	HCI-TS	CDM-TD
High pressu	ure sodium lar	nps								
	HST-DE	70 W	Rx7s	2000	28000	25	6800 lm	120 mm	NAV-TS SUPER	
	HST-DE	150 W	Rx7s	2000	32000	25	15000 lm	138 mm	NAV-TS SUPER	
(3,o <sub>H</sub> ,30	HST-DE	250 W	Fc2	2000	24000	25	25500 lm	206 mm	NAV-TS	-
	HST-DE	400 W	Fc2	2000	24000	25	48000 lm		NAV-TS	
	HSE-E	70 W	E27	2000	24000	25	5600 lm	56 mm / a 71 mm	NAV-E	SON
	HSE-E	150 W	E40	2000	28000	25	14500 lm	227 mm / @ 91 mm	NAV-E	SON
	HSE-E	250 W	E40	2000	28000	25	27000 lm	227 mm / @ 91 mm	NAV-E	SON
	HSE-E	400 W	E40	2000	28000	25	31000 lm	290 mm / @ 122 mm	NAV-E	SON
	HST-T	70 W	E27	2000	24000	25	6000 lm	156 mm / @ 32 mm	NAV-T	SON-T
	HST-T	150 W	E40	2000	28000	25	15000 lm	211 mm / a 47 mm	NAV-T	SON-T
(E)=3(11)	HST-T	250 W	E40	2000	28000	25	28000 lm	257 mm / o 47 mm	NAV-T	SON-T
	HST-T	400 W	E40	2000	28000	25	48000 lm	283 mm / a 47 mm	NAV-T	SON-T
	HST-T	1000 W	E40	2000	16000	25	130000 lm	390 mm / © 66 mm	NAV-T	SON-T
High pressu	ure mercury la	mps								
	MV	80 W	E27	4000	20000	40-50	3800 lm	135 mm / a 71 mm	HQL DE LUXE	HPL-N
	MV	125 W	E27	4000	20000	40-50	6300 lm	171.5 mm / @ 76 mm	HQL DE LUXE	HPL-N
	MV	250 W	E40	4000	15000	40-50	13000 lm	228 mm / @ 91 mm	HQL DE LUXE	HPL-N
_	MV	400 W	E40	4000	15000	40-50	22000 lm	290 mm / @ 121.5 mm	HQL DE LUXE	HPL-N
	MV	1000 W	E40	4000	15000	40-50	58000 lm	399 mm / a 166.5 mm	HQL DE LUXE	HPL-N



# Lamp Designation

	CODE	WATT	BASE	COLOR TEMP	LIFE SPAN	CRI	LUMINOUS INTENSITY (cd)	DIMENSION	OSRAM	PHILIPS
Fluorescen	nt lamps									
	T5	14 W	G5	3000-4000-6500	20000	82	1260 - 1350 lm	545 mm / a 17 mm	T5 HE	TL5 Essential
	T5	21 W	G5	3000-4000-6500	20000	82	1900 - 2100 lm	845 mm / a 17 mm	T5 HE	TL5 Essential
	T5	28 W	G5	3000-4000-6500	20000	82	2700 - 2900 lm	1140 mm / a 17 mm	T5 HE	TL5 Essential
	T5	35 W	G5	3000-4000-6500	24000	85	3400 - 3650 lm		T5 HO	TL5 Master HE
	T5	49 W	G5	3000-4000-6500	24000	85			T5 HO	TL5 Master HE
	T5	54 W	G5	3000-4000-6500	24000	85	4750 - 5000 lm	1140 mm / @ 17 mm	T5 HO	TL5 Master HE
	T8	10 W	G13	6200	5000	72	425 lm	345 mm / @ 26 mm	Basic T8	TL-D Standard
	T8	15 W	G13	6200	13000	72	830 lm	345 mm / @ 26 mm	Basic T8	TL-D Standard
	T8	18 W	G13	4100-6200	13000	63-72	1030 -1150 lm	604 mm / a 26 mm	Basic T8	TL-D Standard
	T8	30 W	G13	6200	13000	72	1825 lm	908 mm / @ 26 mm	Basic T8	TL-D Standard
	T8	36 W	G13	6000-6500	15000	63-72	2600 - 2850 lm	1213 mm / @ 26 mm	Basic T8	TL-D Standard
	T8	58 W	G13	6500	15000	63-72	4000 - 4600 lm	1514 mm / a 26 mm	Basic T8	TL-D Standard
	T8	18 W	G13	3000-4000-6500	15000	85	1300 - 1350 lm	604 mm / @ 26 mm	Lumilux T8	TL-D Super 80
	T8	30 W	G13	3000-4000-6500	15000	85	2300 - 2400 lm	908 mm / a 26 mm	Lumilux T8	TL-D Super 80
	T8	36 W	G13	3000-4000-6500	15000	85	3250 - 3350 lm	1213 mm / a 26 mm	Lumilux T8	TL-D Super 80
	T8	58 W	G13	3000-4000-6500	15000	85	5000 - 5200 lm	1514 mm / @ 26 mm	Lumilux T8	TL-D Super 80
Circular flu	orescent lam	ps								
	TL-E	22 W	G10q	6200	8000	72	1050 lm	199 mm	Basic Circular	TL-E
	TL-E	30 W	G10q	6200	8000	72	1410 lm	209 mm	-	TL-E
	TL-E	32 W	G10q	4100-6200	8000	72	1810 - 2050 lm	288 mm	-	TL-E
	TL-E	40 W	G10q	6200	8000	72	2470 lm	390 mm		TL-E
Compact F	luorescent la	mps								
-6	PLS	7 W	G23	2700-4000-6500	8000	82	400 lm	114 mm	DULUX S	PL-S 2P
4	PLS	9 W	G23	2700-4000-6500	8000	82	600 lm	144 mm	DULUX S	PL-S 2P
	PLS	11 W	G23	2700-4000-6500	8000	82	900 lm	214 mm	DULUX S	PL-S 2P
	PLC	10 W	G24d-1	3000-4000-6500	10000	82	600 lm	118 mm	DULUX D	PL-C 2P
	PLC	13 W	G24d-1	3000-4000-6500	10000	82	900 lm	140 mm	DULUX D	PL-C 2P
	PLC	18 W	G24d-2	3000-4000-6500	10000	82	1200 lm	152 mm	DULUX D	PL-C 2P
	PLC	26 W	G24d-3	3000-4000-6500	10000	82	1800 lm	173 mm	DULUX D	PL-C 2P
7	PLL	18 W	2G11	3000-4000-6500	15000	82	1200 lm	217 mm	DULUX L	PL-L 4P
	PLL	24 W	2G11	3000-4000-6500	15000	82	1800 lm	317 mm	DULUX L	PL-L 4P
	PLL	36 W	2G11	3000-4000-6500	15000	82	2900 lm	411 mm	DULUX L	PL-L 4P
Compact flo	uorescent lan	nps (For elec	tronic ballast	)						
	PLC-E	10 W	G24q-1	3000-4000-6500	10000	82	600 lm	118 mm	DULUX D/E	PL-C/4P
	PLC-E	13 W	G24q-1	3000-4000-6500	10000	82	900 lm	140 mm	DULUX D/E	PL-C/4P
	PLC-E	18 W	G24q-2	3000-4000-6500	10000	82	1200 lm	152 mm	DULUX D/E	PL-C/4P
	PLC-E	26 W	G24q-3	3000-4000-6500	10000	82	1800 lm	173 mm	DULUX D/E	PL-C/4P
Compact flo	uorescent lan	nps (Self elec	ctronic ballast	()						
	TC-DSE	11 W	E27	3000-4000-6500	6000	80-89	600 lm		DULUX EL	PLE-U
	TC-TSE	15 W	E27	3000-4000-6500	6000	80-89	900 lm	128 mm	DULUX EL	PLE-U
	TC-TSE	20 W	E27	3000-4000-6500	6000	80-89	1080 lm	141 mm	DULUX EL	PLE-U
	Essential	8 W	E27	2700-6500	8000	80-82	440 - 460 lm	140 mm / a 44 mm	-	Essential
a∏—	Essential	11 W	E27	2700-6500	8000	80-82	620 - 650 lm	155 mm / a 44 mm		Essential
	Essential	14 W	E27	2700-6500	8000	80-82	820 - 860 lm	170 mm / o 44 mm	-	Essential
	Essential	18 W	E27	2700-6500	8000	80-82	1100 - 1170 lm	165 mm / a 52 mm		Essential
	Essential	23 W	E27	2700-6500	8000	80-82	1420 - 1460 lm	175 mm / a 52 mm	-	Essential
	Genie	8 W	E27	2700-4100-6500	8000	80-82	415 - 440 lm	105 mm / a 44 mm	-	Genie
	Genie	11 W	E27	2700-4100-6500	8000	80-82	600 - 610 lm	115 mm / a 44 mm	-	Genie
	Genie	14 W	E27	2700-4100-6500	8000	80-82	790 - 840 lm	130 mm / a 44 mm	-	Genie
	Genie	18 W	E27	2700-4100-6500	8000	80-82	1040 - 1100 lm	133 mm / a 48 mm	-	Genie
	Tornado	8 W	E27	2700-6500	8000	80-82	460 - 500 lm	83 mm / a 45 mm	-	Tornado
	Tornado	12 W	E27	2700-6500	8000	80-82	690 - 725 lm	90 mm / a 45 mm	-	Tomado
	Tornado	15 W	E27	2700-6500	8000	80-82	900 - 950 lm	104 mm / a 50 mm	-	Tomado
	Tornado	20 W	E27	2700-6500	8000	80-82	1250 - 1350 lm	108 mm / a 55 mm	-	Tomado
	Tornado	24 W	E27	2700-6500	8000	80-82	1450 - 1550 lm	115 mm / a 60 mm	-	Tomado



## Glossary

#### Ambient Temperature (Ta)

The surrounding temperature within an environment

#### Binning

During fabrication, LEDs grow in the form of a crystal wafer. A 2-inch diameter wafer can crry more than 20,000 LED chips. Color and intensity variations are common across a wafer. LEDs can be "binned" into a various groups by wavelength, luminous intensity, voltage drops, and other characteristics.

#### Candela

A unit of luminous intensity equal to 1/60th of the normal intensity of one square centimeter of a blackbody radiating at the temperature of solidification of platinum

#### **CIE Chromaticity Diagram**

In 1931 (Commission International de l'Eclairage CIE) established the X-Y-Z tristimulus system for measuring color properties, based on the assumption that every color is a combination of three primary colors: red, green, and blue. The CIE Chromatically Diagram is a two dimensional color space that defines all of the colors perceived by the human eye. Pure colors are located on the extreme outer edges of the diagram and white is located in the center.

#### Color Rendering Index (CRI)

The color rendering gives the quality of lighting. It is between o and 100; The higher the CRI is, the higher the quality of the light is good.

#### Color Spectrum / Visible Spectrum

The visible spectrum is the portion of the electromagnetic spectrum that is visible to the human eye, typically between 390nm and 750nm.

#### Color Temperature

White light can take different tones: warm, neutral, cold... The light color temperature characterized this variable. It is expressed in Kelvin. The higher the temperature is, the higher the light is cold.

1800K: Red

2000K: Yellow-orange 2500-3000K: sunset, warm light 4000-5000K sunlight on a clear weather

6000-8000K overcast

10000K: light in the shade in altitude (blue)

Less it is illuminated, the more light must be

warm,

More it is illuminated, the more light can be

cold.

#### Controller

A device that controls the output of color-changing and tunable white light fixtures. Controllers typically have software component for configuring fixtures and designing and editing light shows, and hardware components for sending control data to fixtures.

#### Digital Addressable Lighting Interface (DALI)

A digital communications protocol for controlling and dimming lighting fixtures, originally developed in Europe

#### DMX

A digital communications protocol for controlling lighting fixtures, originally developed to control stage lighting.

#### Driver

Electronics used to power illumination source.

#### Efficacy

The light output of a light source divided by the total electrical power input that source, expressed in lumens per watt (lm/w).

#### Forward Voltage (Vf)

The operating voltage of the LED. The typical rating is the voltage at which the LED will light. The maximum rating is the voltage that, if exceeded, will diminish LED lifetime.

#### Flux

It is the amount of light emitted by a luminous source.

#### LED

LED (acronym of Light Emitting Diode) is an electronic component able to emit light when cross by an electric current.

#### Light Distribution curve

A polar diagram shows the shape of a light beam. It depicts both the light output (Im) and the direction of the light (Cd) at the certain angle. Lighting distribution always remains the same, regardless of which lamp is used.

#### Light Intensity / Lumen

The lumen (lm) measures the total "amount" of visible light emitted by a source

#### Luminance

The luminance is the amount of light reflected from a surface to the eye of an observer. It is expressed in candela per square meter.

#### Level of Illumination

This is the amount of light received per unit area. Some current values: Full moon night: 0.2 lux, Full sun at noon: up to 10000lux in out latitudes, Overcast: 10000 lux

#### Luminous efficiency

The luminous efficiency of a source is characterized by the ratio flux emitted / power needed for its working. This ratio is expressed in lm/w. For each type of source, the efficiency Generally increases with the power.

#### Lumen Maintenance

The luminous flux at a given time in the life of the LED. This is expressed as a percentage of the initial luminous flux.

#### Lux

International System of Unit measuring the luminous flux per unit

#### Operating Current

The amount of the current an LED is designed to draw from the power source.

#### Operating Temperature

The temperature range over which an LED is designed to operate safely.

#### Optics

System composed of reflectors or refractors that direct the light, emitted by the lamps in a luminaire, in the desired direction.

#### Power Factor

The active power divided by the apparent power

#### URG

The URG (Unified Glare Rating) is a worldwide unified method for rating the glare of a lamp



# Illuminance Level Recommendation illuminance for general building areas. Reference: IES Lighting Handbook

GENERAL BUILDING AREAS	AVG LUX
CIRCULATION AREA	
Corridor, Passageway	100
Lift	150
Stairs	150
Escalator	150
External Covered Ways	30
ENTRANCES	
Entrance halls, lobbies	150
Enquiry desk	500
Gate houses	300
KITCHENS	
Foods stores	150
General	500
OUTDOOR	
Controlled entrance halls or exit gate	150
Entrance and exit car park	30
Stores, stock yards	30
Industrial covered ways	50
STAFF RESTAURANTS	
Centre cafeterias, dining room	300
MEDICAL AND FIRST AIDS CENTRE	
Consultant room, treatment areas	500
Medical stores	100
Rest room	150
STAFF ROOM	
Changing locker and cleaner's room	150
Rest rooms	150
STORE AND STOCK ROOMS	
Telecommunication board, switch board rooms	300
Cordless switchboard	300
Teleprinter rooms	500
AIRCRAFT MAINTENANCE HANGERS	
Aircraft engine testing	750
Inspection and repairs (hanger)	500
BOILER HOUSE GENERAL	150
FIRE STATIONS	
Appliance room	300
External apron	30

GENERAL BUILDING AREAS	AVG LUX
GARAGES	
External apron general	50
Pumps	300
Parking areas (interior) general repairs servicing	30
Greasing, pits washing, polishing	500
GAS WORKS	
Exterior walkways and platforms	
Exterior stairs and ladders	
Retort house, oil gas plants, water gas plant purifier, indoor coke, screening and handling plants	100
Booster and exhauster houses	150
GAUGE TOOLS ROOMS	
General	1000
INSPECTION & TESTING SHOP	
Rough work e.g. counting rough Checking of stock parts	300
Medium work gauges sub- assemblies	500
Fine work e.g. radio and telecom- munication equipment, calibrated scales, precision mechanism, instruments	1000
Very fine work e.g. gauging and inspection of small intricate parts	1500
Minute work e.g. very small instruments	3000
LABORATORIES	
(GENERAL	750
LAUNDRIES & DRY CLEANING WORKS	
Receiving, sorting, washing, drying, ironing (cleaning) dis- patch, drying cleaning, bulk ma- chine work	300
Hand ironing, pressing, inspection, mending, spotting	300
MACHINE & FITTING SHOP	
Rough bench and machine work	300
Medium bench and machine work, ordinary automatic ma- chines, rough grinding, medium buffing, polishing	500
Fine bench and machine work, ordinary automatic machines, rough grinding, medium buffing, polishing	1000

750

Inspection

GENERAL BUILDING AREAS	AVG LUX
Grinding, granulating mixing and drying, tabling, sterilizing and washing, preparation of solutions and filling, labeling capping, car- tooning, warping	500
Fine chemical manufacture, plant processing	300
Fine chemical finishing	500
Raw material store	300
Inspection	750
PRINGING WORKS TYPE FOUN- DRIES	
Matrix making, dressing type hand and machine casting	300
Front assembly sorting	750
COMPOSING PRESS	
Hand composing, imposition and distribution	750
Machine, Composition-keyboard	750
Machine composition-casting	300
Proof press	500
Illuminated tables general lighting	300
PRINTING MACHINE ROOM	
Presses	500
Premade ready	500
Printed-sheet inspection	1000
GRAPHIC REPRODUCTION	
General	500
Precision proofing, retouching, etching	1000
RUBBER PROCESSING FACTO-	
RIES	
Preparation needs, dipping mold- ing, compounding calendaring	300
Preparation needs, dipping mold-	300 500
Preparation needs, dipping molding, compounding calendaring	
Preparation needs, dipping molding, compounding calendaring  Tire and tube making	
Preparation needs, dipping mold- ing, compounding calendaring  Tire and tube making  SHEET METAL WORKS	500
Preparation needs, dipping molding, compounding calendaring  Tire and tube making  SHEET METAL WORKS  Bench work, scribing, inspection  Pressing, punching, shearing	500
Preparation needs, dipping molding, compounding calendaring  Tire and tube making  SHEET METAL WORKS  Bench work, scribing, inspection  Pressing, punching, shearing stamping, spinning, folding	500
Preparation needs, dipping molding, compounding calendaring  Tire and tube making  SHEET METAL WORKS  Bench work, scribing, inspection  Pressing, punching, shearing stamping, spinning, folding  WELDING & SOLDERING SHOP  Gas and are welding rough spot	500 750 500
Preparation needs, dipping molding, compounding calendaring  Tire and tube making  SHEET METAL WORKS  Bench work, scribing, inspection  Pressing, punching, shearing stamping, spinning, folding  WELDING & SOLDERING SHOP  Gas and are welding rough spot welding  Medium soldering, brazing spot	500 750 500



## Illuminance Level

Recommendation illuminance for general building areas. Reference: IES Lighting Handbook

GENERAL BUILDING AREAS	AVG LUX
SLAUGHTER HOUSE	
General	500
Inspection	750
WOOD WORKING SHOP	
Rough sawing, benchwork	300
Sizing, planning, rough sanding medium and bench work gluing cooperage	500
Fine bench and machine work fine sanding, finishing	750
OFFICE	
Executive office	500
Computer rooms	500
Punch card rooms	750
Drawing offices drawing boards	750
Reference table and general	500
Print room	300
SHOP	
Conventional with counters	500
Conventional with wall display	500
Self service	500
Supermarkets	500
Hypermarkets	500
General	500
PUBLIC AND EDUCATIONAL BUILDING ASSEMBLY AND CON- CERT HALL	
Theater and concert halls	100
Cinema	50
Multipurpose	500
EDUCATION ESTABLISHMENT	
Lecture theatres general	500
Chalkboard	500
Demonstration benches	500
Examination halls, seminar rooms, teaching spaces	500
Laboratories	500
Workshop	300
Staffrooms, student rooms, students hostel etc.	300
Gymnasium	300
LIBRARIES	
Shelves, book stack	150

Reading table Reading rooms, newspaper and magazines Reference libraries Counters Cataloging and sorting Binding Closed book store MUSEUM AND ART GALLERIES GENERAL Exhibits insensitive to light Light sensitive exhibits Specially light sensitive exhibit SCHOOL Assembly halls general Platform and stage	300 300 500 500 500 100 300 150 50
magazines  Reference libraries  Counters  Cataloging and sorting  Binding  Closed book store  MUSEUM AND ART GALLERIES GENERAL  Exhibits insensitive to light  Light sensitive exhibits  Specially light sensitive exhibit  SCHOOL  Assembly halls general  Platform and stage	500 500 500 500 100
Counters  Cataloging and sorting  Binding  Closed book store  MUSEUM AND ART GALLERIES GENERAL  Exhibits insensitive to light  Light sensitive exhibits  Specially light sensitive exhibit  SCHOOL  Assembly halls general  Platform and stage	500 500 500 100 300 150
Cataloging and sorting Binding Closed book store MUSEUM AND ART GALLERIES GENERAL Exhibits insensitive to light Light sensitive exhibits Specially light sensitive exhibit SCHOOL Assembly halls general Platform and stage	500 500 100 300 150
Binding Closed book store MUSEUM AND ART GALLERIES GENERAL Exhibits insensitive to light Light sensitive exhibits Specially light sensitive exhibit SCHOOL Assembly halls general Platform and stage	500 100 300 150
Closed book store  MUSEUM AND ART GALLERIES GENERAL  Exhibits insensitive to light Light sensitive exhibits  Specially light sensitive exhibit  SCHOOL  Assembly halls general  Platform and stage	300 150
MUSEUM AND ART GALLERIES GENERAL  Exhibits insensitive to light  Light sensitive exhibits  Specially light sensitive exhibit  SCHOOL  Assembly halls general  Platform and stage	300 150
Exhibits insensitive to light Light sensitive exhibits Specially light sensitive exhibit SCHOOL Assembly halls general Platform and stage	150
Light sensitive exhibits  Specially light sensitive exhibit  SCHOOL  Assembly halls general  Platform and stage	150
Specially light sensitive exhibit SCHOOL Assembly halls general Platform and stage	
Assembly halls general Platform and stage	50
Assembly halls general Platform and stage	
Platform and stage	
	300
Tooghing angest general	Spe- cial
Teaching spaces general	300
General where also used for fur- ther education	500
Chalkboard	500
Needlework rooms	500
Laboratories	500
Workshop	300
Gymnasium	300
Music practice rooms	300
TRANSPORTS TERMINAL BUILD- NG	
Airport coach and railway station	500
Reception areas (desk) customs and immigration halls	500
Railway stations booking offices	500
Railway station parcel and left luggage offices counters	300
Circulation area	150
Waiting area	300
HOSPITAL	
Ward unit bed heads general	30-50
General	150
Night	0.1
Nurse station evening	300
Pharmacies dispensing bench	500
Shelves	150
	300

	LUX
Enquiry desk	500
Laboratories	500
Operating theatre suits general	400
Operating area	400
Recovery room and intensive care units	30-50
X-ray department radio-diagnostic and rooms fluoroscopy	500
Dental surgeries	500
HOMES	
Living rooms general	50
Casual reading	150
Sewing darning studies desk	300
Bedroom general	50
Bed lead kitchen	150
Kitchen working area	150
Bathrooms	100
Halls and landings	150
Stairs	100
Workshops	300
Garages	50
INDOOR SPORTS AND RECREATE BUILDING	ONAL
MULTIPURPOSE SPORT HALLS	
Athletics, basketball, bowls, judo	300
Hockey	700
BADMINTON COURTS	300
BILLBOARD ROOMS	
General	100
Table	Spe- cial
CARD ROOMS	300
GYMNASIA GENERAL	500
SWIMMING POOL	
Top poll	500
Spectator areas	150
Club recreational	300
GENERAL	
Changing rooms showers lookers rooms	150
TABLE TENNIS	
Club	300

290

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# IP degrees of Protection

A two-digit number is used to provide a Ingress Protection rating to a piece of electronic equipment or to an enclosure for electronic equipment. The protection class after EN60529 are indicated by short symbols that consist of the two code letter IP and a code numerical for the amount of the protection.

IP numeral	First Digital IP Protection vs. Solid Bodies	Second Digit IP Protection vs. Water
0	Non protected.	Non protected
1	A large surface of the body, such as a hand (but no protection against deliberate access) Solid objects exceeding 50mm in diameter.	Dripping water (vertically falling drops) shall have no harmful effect.
2	Finger or similar objects not exceeding 80mm in length. Solid objects exceeding 12mmm in diameter	Vertically dripping water shall have no harmful effect when the enclosure is titled at any angle up to 15° from its normal position.
3	Tools, wires, etc. of diameter thickness greater than 2.5mm. Solid objects exceeds 2.5mm in diameter.	Water falling as a spray at an angle up to 60° from the vertical shall have no harmful effect.
4	Wires or strips of thickness greater than 1.0mm. Solid objects exceeding 1.0mm diameter.	Water splashed against the enclosure from any direction shall have no harmful effect.
5	Ingress of dust is not prevented but dust does not enter in sufficient quality to interfere with satisfactory operation of the equipment.	Water projected by a nozzle against the enclosure from any direction shall have no harmful effect.
6	No ingress of dust.	Water from heavy seas or water projected in powerful jets shall not enter the enclosure in harmful quantities.
7		Ingress of water in a harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time.
8		The equipment is suitable for continuous submersion in water under conditions which shall be specified by the manufacturer.

## **Protection Class**

All electrical appliances using mains voltage have to provide at least 2 levels of protection to the user. This is to ensure that if one of the protection layers were to fail, there is the backup of the second layer still in place. This makes electrical equipment very safe to use.

Protection Class	Symbol	Definition
Class I	<u></u>	Luminaires in this class are electrically insulated and provided with connection with earth. Exposed metal parts that could become live in the event of basic insulation failure are protected by earthing.
Class II		Class II luminaires are designed and constructed so that protection against electric shock does not rely on basic insulation only. This can be achieved by means of reinforced by double insulation. No provision for earthing is provided.
Class III	<b>(III)</b>	Protection against electric shock relied on supply at Safety Extra - Low Voltage (SELV) and in which voltages higher than those of SELV are not generated (max. 50V AC rms).
F		Luminaires applicable on normally inflammable surfaces



## Safety Inspection Marks

Below is a listing of the various safety marks from several countries. Many SECO products and their components such as power cords are also certified to appropriate international standards EN60598 / EN60570 indicated by the following symbols.

Mark	Country Compliant	Mark	Country Compliant
$\Diamond$	B.S.I. Kite Mark (UK)	<b>₽</b>	VDE (Germany)
$\bigcirc$	NEMKO (Norway)	KEMA	KEMA (Holland)
D	DEMKO (Denmark)	CEBEC	CEBECK (Belgium)
$\bigcirc$	SEMKO (Sweden)		IMQ (Italy)
FI	SETI (Finland)		GOSSTANDART (Russia)
<b>3</b>	ENEC	(II)	UL (USA)
( <del>\$</del> )	SEV (Switzerland)	<b>(P</b>	CSA (Canada)
GS	TUV (Germany)	PS	PSE (Japan)
	TISI (Thailand)	<b>(W)</b>	CCC (China)



The CE mark signifies that a product conforms with the relevant ECC directives requirements. The CE marking is compulsory to indicate LVD and EMC conformity. The CE mark is also a self certification that the manufacturer claims that the product is safe. The value of such claim is directly related to the standing of the manufacturer. In the case of SECO Lighting: All products are designed, developed, manufactured under the scope of the ISO 9001:2008 quality systems and TISI product standards.

# **NOTE**





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