HPWINNER

Smart Factory for Precise Customizations and Rapid Deliveries.



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ABOUT HPWINNER

Hangzhou HPWINNER Opto Corporation is committed to building a fully functional customization system for outdoor lighting industry. With advanced energy-saving lighting technology, it could tailor individualized solutions for an enormous variety of different outdoor lighting conditions. It is one of the very few manufacturing enterprises that provides mass customization services.

HPWINNER was established in July, 2011, and has grown up to a staff of over 800. The founder, Mr. Chen Kai, is listed as a Leading Technologist of the National "Ten Thousand Talents Program", a Scientific and Technological Innovative and Entrepreneurial Talents by the government, a member of Zhejiang Provincial People's Congress, and an expert in LED industry. Since its establishment, HPWINNER has been rapidly developing its business all over the world. In 2014, it was entitled as a National High-tech Enterprise. In 2017, it was awarded as "Zhejiang Enterprise Technology Center", "Zhejiang Provincial Enterprise Research Institute" and other honors. In March, 2018, its smart manufacturing base went into operation. Totally, the base is planned to cover a land area of 333,300 square meters, and now it has factory buildings of 90,000 square meters. Based on its self-developed platform Industry 4.0 with AI algorithm, segments of application sites, product solutions, order information, planning & scheduling, production lines, supply chain, and delivery are all connected through the data base on cloud, so that HPWINNER is enabled to enjoy advantages in industrial chain from designing, tooling, die casting, precision machining, SMT, to luminaire assembly, and to share with customers through products and services with precise customization and rapid delivery.

The company owns 675 patents, including 51 inventions. It participated in drafting of over 90 different national, social organizational, industrial, and local standards. It is widely acknowledged as a leading enterprise in the industry, an active inventor of new techniques, and a dominant formulator of national and association standards.



PRODUCTION CAPACITY

ENVIRONMENT-FRIENDLY FACTORY



■ CHENWANG ROAD ZONE

Area: 30,500m²

Function: SMT, Module Production, Luminaire, Assembly, Warehousing, Logistics Center, etc.

Capacity: 30,000pcs modules, 15,000pcs luminaires per day.



■ CHANGXING AVENUE ZONE

Area: 130,000m² (Phase 1)

Function: Accessories Manufacture - Tooling, Die Casting, Precision Machining, Powder Coating, Testing, etc.

Capacity In the Planning: 10,000,000pcs luminaires and accessories per year.



■ TOOLING WORKSHOP

Area: 2,000m²

Capacity: 240 sets of large and medium-sized toolings per year.

Average lead time: 30 days for large and medium-sized tooling.



■ DIE CASTING WORKSHOP

Area: 12,000m²

Current capacity: 2,000,000pcs/year.

Totally 40 sets of die-cast machines to equip with, varying from model 280T to 1250T, with automatic feeding, spraying, differential motion clamping, cooling system, and other processes.

cooling system, and other processes.

Intelligentization, informationization and real-time monitoring in production process.



■ PRECISION MACHINING

Area: 8,000m²

Plan to equip with 40 sets of CNC in total; currently 10 sets in operation.

For machining of boards, plates, tooling, small housings and other complicated components.



POWDER COATING WORKSHOP

Area: 21,000r

Plan to equip with 6 automatic powder coating lines; currently 3 lines in operation.

Capacity: 2,000,000pcs/year.

Equipment of WAGNER imported from Germany, fully intelligent control and automatic coating system



SMT WORKSHOP

Area: 2,100m²

Plan to equip with 6 imported SMT production lines. Capacity: 30,000pcs modules per day.



ASSEMBLY WORKSHOP

Area: 8,000m²

Plan to equip with 18 assembly lines.

Capacity: 15,000pcs luminaires per day.

Japanese standard assembly lines managed by

Japanese experts on Lean Production. Every work

position is equipped with LCD screen for better

access to operation instructions. Several inspection

devices are available for various tests.

Brings in green engineering, techniques and equipment for intensive land-use, clean production, wastes recycling and low-carbon energy utilization.



Powder Coating Wastewater Pretreatment Tank

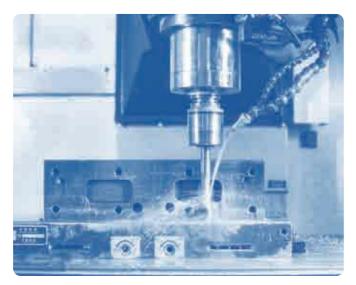


Final Wastewater Treatment Station



Die Casting Exhaust Gas Treatment Equipment

LEAN PRODUCTION







SHOT BLASTING



■ DIE CASTING



■ PRECISION MACHINING



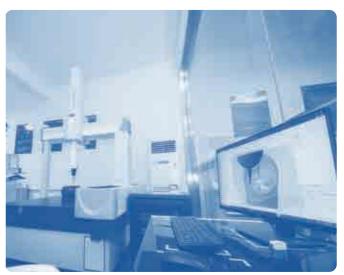
POWDER COATING



FINAL ASSEMBLY

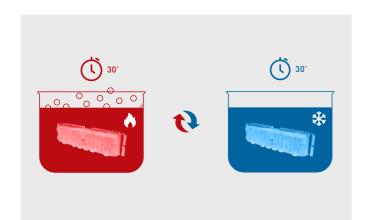


SMT



TESTING

TECHNICAL ADVANTAGES



DOUBLE-COUPLING IP68 PROTECTION

It adopts the screw-free structure to avoid the penetration of water vapor through the screw hole, and its double silicon-rubber rings insulate LED chip from the outside environment completely, thus to protect inner LED components and PCB from any corrosion caused by water vapor or other noxious gas.



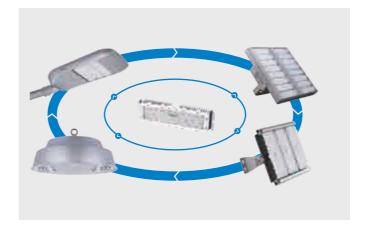
ERGONOMIC LIGHT DISTRIBUTION

The products adopt equal-brightness optical design in full consideration that it is unavailable to detect illumination by eyes because human eyes are sensitive to brightness, thus not only eliminating the visual bright spots and dark spots on road surface, but also bringing visual ease and comfort to road operators, as well as improving lighting illumination and obtaining accurate detected values.



INTELLIGENT LIGHTING

Modular intelligent components with different functions can work in free combination on a modular intelligent street light to meet different purposes.



FREE SERIALIZATION

It is available to freely equip with different numbers of modules to achieve different powers as required.





TYPICAL CASES

FULL COVERAGE OF OUTDOOR LIGHTING APPLICATIONS















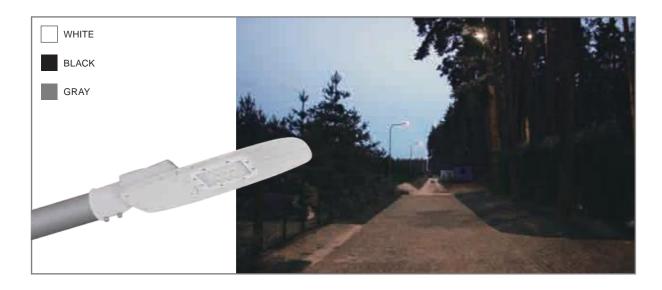
OVERVIEW OF HIGH-POWER APPLICATION SERIES

LED high-power applications, namely semiconductor lighting products, adopt LED as lighting source, and feature environmental protection, low power consumption, high luminous efficiency, as well as long life span. The LED high-power applications independently developed by HPWINNER include LED street lights, LED tunnel lights, LED high bay lights, and LED spot lights / flood lights series.









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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- Unmatched lighting performance desirable lifespan;
- Available for mast-arm of Ø40mm;
- Sensor available (on/off).

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac			
Power	20W/30W/40W			
Power factor	0.95			
Available CCT	3000K/4000K/5000K/5700K			
LED Brand	Lumileds Customized			
Typical Luminous Efficacy	145m/W @20W 140m/W @30W 130lm/W @40W			
Lighting distribution	TYPE I TYPE II			
Lighting distribution	See lighting distribution options on appendix			
Working Temperature	-40~+50℃			
Installation diameter	40-44mm/55-65mm			

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Sensor available (on/off);
- ☐ Available for mast-arm of both Ø40mm & Ø60mm.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac			
Power	20W/30W/40W			
Power factor	0.95			
Available CCT	3000K/4000K/5000K/5700K			
LED Brand	Lumileds Customized			
Typical Luminous Efficacy	145m/W @ 20W 140m/W @ 30W 130lm/W @ 40W			
Lighting distribution	TYPE I TYPE II			
Lighting distribution	See lighting distribution options on appendix			
Working Temperature	-40~+50°C			
Installation diameter	40-44mm/55-65mm			

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







■ MAIN FEATURES

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- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- Unmatched lighting performance, driver stability and desirable lifespan;
- Available for mast-arm of both Ø40mm & Ø60mm.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac					
Power	50W/60W					
Power factor	0.95					
Available CCT	3000K/4000K/5000K/5700K					
LED Brand	Lumileds Luxeon 3030 Lumileds Customized					
Typical Luminous Efficacy	130lm/W @50W 157lm/W @50W 122lm/W @60W 150lm/W @60W					
Lighting distribution	TYPE I TYP	PE II TYPE III				
Lighting distribution	See lighting distribution	See lighting distribution options on appendix				
Working Temperature	-40~+50°C					
Installation diameter	37-43mm	/57-63mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

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- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Available for mast-arm of both Ø40mm & Ø60mm.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac					
Power	80W/90W/100W					
Power factor	0.95					
Available CCT	3000K/4000K/5000K/5700K					
LED Brand	Lumileds Luxeon 3030 Lumileds Customized					
Typical Luminous Efficacy	137lm/W @80W 158lm/W @80W 133lm/W @90W 155lm/W @90W 152lm/W @100W					
Lighting distribution	TYPE I	TYPE II				
Lighting distribution	See lighting distribution options on appendix					
Working Temperature	-40~+50°C					
Installation diameter	37-43mm/57-63mm					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- □ Tool-free access for easy and fast installation.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac				
Power	30W/40W/50W/60W				
Power factor	0.95				
Available CCT		3000K/4000K/5000K/5700K			
LED Brand	Lumileds Luxeon TX Lumileds Luxeon 3030 Lumileds Customized				
Typical Luminous Efficacy	130lm/W @40W 122lm/W @50W 117lm/W @60W	135lm/W @40W 130m/W @50W 122lm/W @60W	168lm/W @40W 163lm/W @50W 155lm/W @60W		
Lighting distribution		TYPE I TYPE II TYPE III			
Lighting distribution	See lighting distribution options on appendix				
Working Temperature	-40~+50℃				
Installation diameter	57-63mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

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- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- □ Tool-free access for easy and fast installation.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac			
Power	80W			
Power factor	0.95			
Available CCT	3000K/4000K/5000K/5700K			
LED Brand	Lumileds Luxeon 3030			
Typical Luminous Efficacy	122m/W @80W			
Lighting distribution	TYPE I			
Lighting distribution	See lighting distribution options on appendix			
Working Temperature	-40~+50℃			
Installation diameter	57-63mm			

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- $\hfill \square$ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power factor	0.95						
Available CCT		3000K/4000K	/5000K/5700K				
Module Type	M1/M2 series	M8 s	eries	M16 series			
Photo							
Module Quantity	1		2				
Power	40W 50W 60W		80W 100W 120W				
Typical Luminous Efficacy	137lm/W @40W/Engine 140lm/W @4 130m/W @50W/Engine 135lm/W @5 122lm/W @60W/Engine 127lm/W @6		50W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine			
Lighting distribution	TYP	EI TYPEII TYP	E III TYPE IV TY	PE V			
Lighting distribution	See lighting distribution options on appendix						
Working Temperature	-40~+50°C						
Installation diameter		57-6	3mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

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WHITE







■ Unique patented IP68 LED light engines;

- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Stainless steel latches provide easy, tool-less access.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac			
Power	40W-120W			
Power factor	0.95			
Available CCT	3000K/4000K/5000K/5700K			
LED Brand	Lumileds Customized			
Typical Luminous Efficacy	175m/W @40W/Engine 170m/W @50W/Engine 163lm/W @60W/Engine			
Lighting distribution	TYPE I TYPE II TYPE V			
Lighting distribution	See lighting distribution options on appendix			
Working Temperature	-40~+50℃			
Installation diameter	57-63mm			

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor	0.95							
Available CCT				3000k	//4000K/5000K/	5700K		
Module Type	M1	/M2 series			M8 series		M16 ser	ies
Photo								
Module Quantity	1	2	3		4	5	6	7
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W
Typical Luminous Efficacy	137lm/W @ 40W/Engine 130m/W @ 50W/Engine 122lm/W @ 60W/Engine			135	m/W @40W/En m/W @50W/En m/W @60W/En	gine	175lm/W @40' 170lm/W @50' 163lm/W @60	W/Engine
	TYPE I TYPE II TYPE IV TYPE V							
Lighting distribution	See lighting distribution options on appendix							
Working Temperature	-40~+50°C							
Installation diameter					57-63mm			

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan; Aluminum alloy extrusion profiles, high mechanical strength;
- Optional upgrade for an IP65 rated electrical compartment configuration.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor	0.95							
Available CCT	3000K/4000K/5000K/5700K							
Module Type	M31A-XA series M31A-XB series M31A-XC series							
Photo								
Module Quantity	2		3	4		5		
Power	80W 100W 120W		120W 150W 180W	160W 200W 240W		200W 250W		
Typical LM/W	137lm/W @40W/Engi 130m/W @50W/Engi 122lm/W @60W/Engi	V @50W/Engine 170lm/W @50W/Engine 135lm/W @50W/Er			0lm/W @40W/Engine 5lm/W @50W/Engine 7lm/W @60W/Engine			
Light distribution	TYPE I TYPE II TYPE IV TYPE V							
Light distribution	See lighting distribution options on appendix							
Working Temperature	-40~+50°C							
Installation diameter			57-6	3mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.





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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- □ IP66 rated electrical compartment;
- □ Optional NEMA receptacle & photocell.

■ TECHNICAL PARAMETERS

Input Volta	ge	100-277Vac					
Power		20W-120W					
Power fact	or	0.95					
Available C	СТ	3000K/4000K/5000K/5700K					
LED Bran	d	Lumileds Customized Lumileds Luxeon 3030					
	145lm/W @20W T29A 140lm/W @30W 130lm/W @40W		_				
Typical Luminous Efficacy	T29B	163lm/W @40W 157lm/W @50W 150lm/W @60W	135lm/W @40W 130lm/W @50W 122m/W @60W				
	175lm/W @80W T29C 170lm/W @100W 163m/W @120W		140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine				
Lighting distrib	oution	TYPE I TYPE III TYPE V					
Lighting distric	JULIOIT	See lighting distribution options on appendix					
Working Tempe	erature	-40~-	-40~+50°C				
Installation diameter 50-60mm							

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Die-cast aluminum housing, solid mechanism and reliable quality;
- ☐ Unique patented IP68 LED light engines protect LEDs from water vapor and hazardous gases;
- □ IP66 rated electrical compartment;
- ☐ Ergonomic and dedicated lighting distributions are available for various roadway applications;
- Whole structure heating dissipation design;
- Optional NEMA receptacle & photocell.

■ TECHNICAL PARAMETERS

Input Volta	ige	100-277Vac					
Power		40W-240W					
Power fact	tor	0.95					
Available C	CT	3000K/4000K/5000K/5700K					
LED Bran	nd	Lumileds Luxeon 3030 Lumileds Customized					
	T33A	135lm/W @40W 130lm/W @50W 122lm/W @60W	150lm/W @40W 145lm/W @50W 140lm/W @60W				
Typical Luminous Efficacy	T33B	138lm/W @80W 134lm/W @90W 129m/W @100W	158lm/W @80W 155lm/W @90W 152lm/W @100W				
	T33C/D/E	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine				
Linkin n dintribution		TYPE I TYPE II TYPE III TYPE V					
Lighting distribution		See lighting distribution options on appendix					
Working Temp	erature	T33A/B/C: -40° C~+50° (C; T33D/E: -40° C~+45° C				
Installation diameter 57-63mm							

Notes: Tolerance of luminous efficacy value: ±5%-±8%. Efficacy of CCT 3000K is lower than above by 5%.







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MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for roadway applications, Tempered glass with impact resistance rating of IK08-IK09;
- Whole structure heating dissipation design with excellent thermal conduction and radiation, Post-top & side-entry with ±15° inclination;
- ☐ Unmatched lighting performance desirable lifespan, Die-cast latches provide easy, tool-less access to the electrical compartment;
- ☐ Available for mast-arm of Ø40mm, Equipped with bubble level for precise installation;
- ☐ Optional NEMA receptacle & photocell, Optional electrical disconnector and fast driver maintenance.

■ TECHNICAL PARAMETERS

Input Volt	age	100-277Vac							
Power	r	40W-240W							
Power fac	ctor		0.95						
Available	ССТ	3000K/4000K/5000K/5700K							
LED Bra	nd	Lumileds Luxeon 3030	Lumileds Customized		Lumileds Luxeon TX	Lumileds Customized			
	T85A	125lm/W @40W 120m/W @50W 115m/W @60W	145lm/W @40W 140lm/W @50W 135lm/W @60W	T85B	120lm/W @80W 115lm/W @100W 110m/W @120W	157lm/W @80W 153lm/W @100W 147m/W @120W			
Typical Luminous Efficacy				-T85C	120lm/W @150W 115m/W @180W	153lm/W @150W 147lm/W @180W			
	T85E	120lm/W @80W 117lm/W @90W 113m/W @100W	140lm/W @80W 137lm/W @90W 133lm/W @100W	T85D	120lm/W @200W 115m/W @240W	153lm/W @200W 147lm/W @240W			
Lighting dist	ibution		TYPE I T	YPE II	TYPE III TYPE V				
Lighting distr	HOIJUGI		See lighting di	stributio	on options on appendix				
Working Tem	perature		-40~+50℃						
Installation d	iameter		40-50m	nm/55-6	65mm/65-75mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

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- $\hfill \square$ Unique patented IP68 LED light engines;
- $\hfill \Box$ Ergonomic and dedicated lighting distributions available for various roadway applications;
- $\begin{tabular}{ll} \hline & Whole structure heating dissipation design with excellent thermal conduction and radiation; \\ \hline \end{tabular}$
- Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- □ IP66 rated electrical compartment;
- Optional driver: class II (standard), class I (optional);
- ☐ Tempered glass with impact resistance rating of IK09;
- ☐ Die-cast latches provide easy, tool-less access to the electrical compartment;
- $\hfill \square$ Optional electrical disconnector, photocell and universal bubble level;
- Post-top & side-entry with ±15° inclination in steps of 3°;
 Optional NEMA receptacle & photocell.
- TECHNICAL PARAMETERS

Input Voltage	100-277Vac										
Power factor		0.95									
Available CCT			3000K/4000K	//5000K/5700K							
Module Type	M7C-XA series	M7	D-XA series	M7C-XB ser	ries	M7D-XB series					
Photo	181										
Module Quantity	1	4			4						
Power	40W 50W 60W		80W 100W 120W			160W 200W 240W					
Typical Luminous Efficacy	123lm/W @40W/Engine 117lm/W @50W/Engine 112lm/W @60W/Engine	117lm/W @50W/Engine 125lm/W @50W/Engine 144lm/W @50W/Engine 156m/W									
1110 1100			TYPE I	TYPE II							
Lighting distribution		Se	e lighting distribution	on options on appe	ndix						
Working Temperature			-40~	+50℃							
Installation diameter			55-6	55mm							

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Two latches provide easy, tool-less access to the IP66 rated electrical compartment;
- □ Die-cast aluminum housing, solid mechanism and reliable quality;
 □ Ergonomic and dedicated lighting distributions for unmatched lighting performance;
- ☐ Fin-less whole structure heating dissipation design;
- □ Tempered glass for easy cleaning;
- Post-top or side-entry installation with ±15° inclination, compatible with a wide range of pole diemater.

 Optional NEMA receptacle & photocell for energy saving.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power	60W-400W						
Power factor	0.95						
Available CCT	3000K/4000K/5000K/5700K						
Module Type	Lumileds Customized						
Typical Luminous Efficacy	146lm/W @60W 153lm/W @240W 146lm/W @100W 155lm/W @300W 153lm/W @120W 153lm/W @360W 153lm/W @180W 150lm/W @400W						
Lighting distribution	TYPE I TYPE II TYPE III See lighting distribution options on appendix						
Working Temperature	-40~+50℃						
Installation diameter	40-50mm/ 55-65mm/ 65-75mm						

Notes 1: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Two latches provide easy, tool-less access to the IP66 rated electrical compartment;
- Die-cast aluminum housing, solid mechanism and reliable quality;
 Ergonomic and dedicated lighting distributions for unmatched lighting performance;
- Fin-less whole structure heating dissipation design;

 Post-top or side-entry installation with ±15° inclination, compatible with a wide range of pole diemater.
- ☐ Optional NEMA receptacle & photocell for energy saving.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac
Power	60W-240W
Power factor	0.95
Available CCT	3000K/4000K/5000K/5700K
Module Type	Lumileds Customized
Typical Luminous Efficacy	160lm/W @60W 160lm/W @100W 167lm/W @120W 167lm/W @180W 167lm/W @240W
Lighting distribution	TYPE I TYPE II TYPE III See lighting distribution options on appendix
Working Temperature	-40~+50°C
Installation diameter	40-50mm/ 55-65mm/ 65-75mm

Notes 1: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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MAIN FEATURES

■ Unique patented IP68 LED light engines;

□ Optional NEMA receptacle & photocell.

- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines; ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan; □ IP66 rated electrical compartment;
- ☐ Die-cast latches provide easy, tool-less access to the electrical compartment;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor	0.95									
Available CCT		3000K/4000K/5000K/5700K								
Module Type	M1/	M2 series			M8 series		M16 ser	ies		
Photo										
Module Quantity	1	2	3		4	5	6	7		
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W		
Typical Luminous Efficacy	130m/W	@40W/Engine @50W/Engine @60W/Engine		135	140lm/W @40W/Engine 175lm/W @40W/Engine 135lm/W @50W/Engine 170lm/W @50W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine					
Lighting distribution			TYP	EI TYPE	II TYPE III TY	PE IV TYPE	V			
Lighting distribution	See lighting distribution options on appendix									
Working Temperature					-40~+50°C					
Installation diameter					57-63mm					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

WHITE BLACK GRAY

■ MAIN FEATURES













- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines; ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan; □ IP66 rated electrical compartment;
- ☐ Die-cast latches provide easy, tool-less access to the electrical compartment;
- ☐ Post-top & side-entry with ±15° inclination in steps of 5°;
- Optional NEMA receptacle & photocell.

■ TECHNICAL PARAMETERS

Input Voltage					100-277Vac						
Power factor	0.95										
Available CCT		3000K/4000K/5700K									
Module Type	M1/	M1/M2 series M8 series M16 series									
Photo											
Module Quantity	1	2	3		4	5	6	7			
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W			
Typical Luminous Efficacy	130m/W	@40W/Engine @50W/Engine @60W/Engine		135	m/W @40W/En m/W @50W/En m/W @60W/En	gine	175lm/W @40 170lm/W @50 163lm/W @60	W/Engine			
I interior distribution			TYP	EI TYPE	II TYPE III TY	PEIV TYPE	V				
Lighting distribution	See lighting distribution options on appendix										
Working Temperature					-40~+50°C						
Installation diameter		40-50mm/55-65mm/65-75mm									

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- $\hfill \Box$ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ IP65 rated electrical compartment, suitable for wet location;
- □ Stainless steel latches provide easy, tool-less access to the electrical compartment;
 □ Built-in ±5° inclination in steps of 2.5° with bubble level;
- Removable power door;
- Optional NEMA receptacle & photocell.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac										
Power factor	0.95										
Available CCT		3000K/4000K/5000K/5700K									
Module Type	M1/M2 se	eries	M8 series	N	M16 series						
Photo			1								
Module Quantity	1	2	3	4	5						
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W	160W 200W 240W	200W 250W 300W						
Typical Luminous Efficacy	137lm/W @40W 130m/W @50W 122lm/W @60W	//Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	W @40W/Engine W @50W/Engine W @60W/Engine							
		TYPE	I TYPE II TYPE III TYPE	IV TYPE V							
Lighting distribution		See	lighting distribution options or	n appendix							
Working Temperature			-40~+50°C								
Installation diameter			55-65mm								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- $\begin{tabular}{ll} \hline \end{tabular} Whole structure heating dissipation design with excellent thermal conduction, radiation and convection; \\ \hline \end{tabular}$
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ IP66 rated electrical compartment, suitable for wet location;
- ☐ Die-cast latches provide easy, tool-less access to the electrical compartment;☐ Built-in ±5° inclination in steps of 2.5° with bubble level;
- □ Removable door of electrical compartment;
- Optional NEMA receptacle & photocell.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor		0.95						
Available CCT	3000K/4000K/5000K/5700K							
Module Type	M1/M2 series	M8 series	3	M16 series				
Photo								
Module Quantity	1	2						
Power	40W 50W 60W		80W 100W 120W					
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W 135lm/W @50W 127lm/W @60W	/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine				
Lighting distribution	TYP	EI TYPEII TYPEIII	TYPE IV TY	PE V				
Lighting distribution	See	e lighting distribution op	tions on appen	ndix				
Working Temperature		-40~+500						
Installation diameter		57-63mm	1					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Stainless steel latches provide easy, tool-less access;

Available for mast-arm of Ø40mm & Ø60mm.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor	0.95									
Available CCT	3000K/4000K/5000K/5700K									
Module Type	M1/	M2 series			M8 series		M16 ser	ries		
Photo										
Module Quantity	1	2	3		4	5	6	7		
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W		
Typical Luminous Efficacy	130m/W	@40W/Engine @50W/Engine @60W/Engine		135	m/W @40W/En m/W @50W/En m/W @60W/En	gine	175lm/W @40 170lm/W @50 163lm/W @60	W/Engine		
Limbato o dinasibustino			TYPE	I TYPE	II TYPE III TY	PE IV TYPE	V			
Lighting distribution	See lighting distribution options on appendix									
Working Temperature					-40~+50°C					
Installation diameter				37	7-43mm/57-63m	m				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
 ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Unmatched lighting performance, driver stability and desirable lifespan;
 Stainless steel latches provide easy, tool-less access to the electrical compartment;
- ☐ IP66 rated electrical compartment;
- Optional NEMA receptacle & photocell;
- □ Post-top & side-entry with ±15° inclination in steps of 5°.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor	0.95									
Available CCT	3000K/4000K/5000K/5700K									
Module Type	M1/M2 series M8 series M16 series							ies		
Photo		The state of the s								
Module Quantity	1	2		3	4	5	6	7		
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W		
Typical Luminous Efficacy	130m/W	@40W/Engine @50W/Engine @60W/Engine		140lm/W @40W/Engine 175lm/W @40W/Engine 135lm/W @50W/Engine 170lm/W @50W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine						
Lighting distribution			TYP	EI TYPE	II TYPEIII TY	PEIV TYPE	V			
Lighting distribution	See lighting distribution options on appendix									
Working Temperature					-40~+50°C					
Installation diameter				40-50r	nm/55-65mm/65	5-75mm				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines; -IP66 rated electrical compartment;
- ☐ Ergonomic and dedicated lighting distributions are available for various roadway applications;
- Whole structure heating dissipation design;
- Post-top & side-entry with ±15° inclination;
- ☐ Die-cast aluminum housing. Die-cast latches provide easy, tool-less access to the electrical compartment;
- □ Optional NEMA receptacle & photocell/shorting cap;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power	80W/100W/120W						
Power factor	0.95						
Available CCT	3000K/4000K/5000K/5700K						
LED Brand	Lumileds Luxeon 3030	Lumileds Customized					
Typical Luminous Efficacy	135m/W @80W 130m/W @100W 122lm/W @120W	175lm/W @80W 170lm/W @100W 163lm/W @120W					
Lighting distribution	TYPE I TYPE II TYPE V						
Lighting distribution	See lighting distribution options on appendix						
Working Temperature	-40~-	+50℃					
Installation diameter	42-48mm/ 57-6	3mm/ 67-73mm					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines; ·IP66 rated electrical compartment;
- ☐ Ergonomic and dedicated lighting distributions are available for various roadway applications;
- ☐ Whole structure heating dissipation design;
- □ Post-top & side-entry with ±15° inclination;
- ☐ Die-cast aluminum housing. Die-cast latches provide easy, tool-less access to the electrical compartment;
- □ Optional NEMA receptacle & photocell/shorting cap;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac								
Power factor	0.95								
Available CCT	3000K/4000K/5000K/5700K								
Module Type	M1/M2 series	M16 series							
Photo									
Module Quantity	3	4	5						
Power	120W 150W 180W	160W 200W 240W	200W 250W 300W						
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine						
Lighting distribution	TYF	EI TYPEII TYPEIII TYPEIV TY	PE V						
Lighting distribution	Se	e lighting distribution options on appen	dix						
Working Temperature		-40~+50°C							
Installation diameter	40-50mm/55-65mm/65-75mm								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

MODULAR LED GARDEN LIGHTS





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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- □ Post top mounting Ø60~70 (mm).

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power factor	0.95						
Available CCT	3000K/4000K/5000K/5700K						
Module Type	M1/M2 series M8 series M16 series						
Photo		The state of					
Module Quantity		1					
Power		30W/40W/50W/60W					
Typical Luminous Efficacy	130lm/W @40W 135lm/W @40W 168lm/W 122lm/W @50W 130lm/W @50W 163lm/W 117llm/W @60W 155lm/W						
11.10. 11.01.0	TYI	PE I TYPE II TYPE III TYPE IV TY	PE V				
Lighting distribution	See lighting distribution options on appendix						
Working Temperature	-40~+50℃						
Installation diameter	60-70mm						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES







- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various roadway applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines; ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Post top mounting Ø60mm.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor	0.95							
Available CCT	3000K/4000K/5000K/5700K							
Module Type	M1/M2 series M8 series M16 series							
Photo								
Module Quantity	2							
Power		80W 100W 120W						
Typical Luminous Efficacy	119lm/W @40W/Engine 113lm/W @50W/Engine 106lm/W @60W/Engine	121lm/W @40W/Engine 117lm/W @50W/Engine 110lm/W @60W/Engine	152m/W @40W/Engine 146lm/W @50W/Engine 141lm/W @60W/Engine					
Linkting distribution	TYP	EI TYPEII TYPEIII TYPEIV TY	PE V					
Lighting distribution	See lighting distribution options on appendix							
Working Temperature		-40~+50℃						
Installation diameter		60-68mm						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







CE RoHS PS







■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various tunnel and underpass applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- $\hfill \square$ Flexible to reach desired power selections by choosing appropriate light engines;
- $\hfill \square$ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ 360° adjustable mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac								
Power factor	0.95								
Available CCT				3000K	/4000K/5000K/	5700K			
Module Type	M1	/M2 series			M8 series		M16 ser	ries	
Photo									
Module Quantity	1	2	2 3		4	5	6	7	
Power	40W 50W 60W	100W 150V		150W 200W 250V		200W 250W 300W	240W 300W 360W	280W 350W 420W	
Typical Luminous Efficacy	130m/W	137lm/W @40W/Engine 140lm/W @40W/Engine 175lm/W @40W 130m/W @50W/Engine 135lm/W @50W/Engine 170lm/W @50W 122lm/W @60W/Engine 127lm/W @60W/Engine 163lm/W @60W						W/Engine	
Linking diatrikution		TYPEI TYPEII 90° 110°							
Lighting distribution		See lighting distribution options on appendix							
Working Temperature					-40~+50°C				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

GRAY

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BLACK





■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various tunnel and underpass applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Angle adjustable of ±60° with flexible brackets;
- Linear design, can be applied as a wall washer;
- ☐ Tempered glass over optical lens, easy for cleaning.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor		0.95						
Available CCT		3000K/4000K	/5000K/5700K					
Module Type	M1/M2 series			M8 series				
Photo	(Contraction)							
Module Quantity	1	2	2	3				
Power	40W 50W 60W	100	OW OW OW	120W 150W 180W				
Typical Luminous Efficacy	126m/W @40W/Engine 128lm/W @40W/Engine 119m/W @50W/Engine 124lm/W @50W/Engine 112lm/W @60W/Engine 116lm/W @60W/Engine							
Lighting distribution	TYPE I TYPE II 90° 110°							
Lighting distribution	See lighting distribution options on appendix							
Working Temperature		-40~-	+50℃					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







CB (RoHS









■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various tunnel and underpass applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Bracket adjustable in ±60°, U-shaped bracket as optional choice;
- ☐ Integrated die-casting whole structure cooling system, compact mechanism;
- ☐ Optional tempered glass over optical lens, easy for cleaning.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor	0.95									
Available CCT		3000K/4000K/5000K/5700K								
LED Brand		Lumileds Luxeon 3030								
Lamp Model	TS21A	TS21C/D/E								
Power	20W/30W/40W	80W-240W								
Typical Luminous Efficacy	117lm/W @20W 117lm/W @30W 107lm/W @40W (Luxeon TX) 115lm/W 115lm/W 127lm/W 2120/180/240W									
Lighting distribution	TYPE I TYPE II Tunnel Lighting									
Lighting distribution	See lighting distribution options on appendix									
Working Temperature		-40~+50℃								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

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- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various tunnel and underpass applications;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Angle adjustable with U-shape bracket;
- ☐ Integrated die-casting whole structure cooling system, compact mechanism;
- ☐ With reflector and driver built-in, an elegant design following traditional appearance;
- □ Tempered glass over optical lens, easy for cleaning.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor	0.95							
Available CCT		3000K/4000K/5000K/5700K						
Module Type	M7A-XA	M7B-XA/XB	M7C-XA/XB	M7D-XA/XB				
Photo								
Lamp Model	TS9B/TS9C		TS9D	TS9E				
Power	30)W	40/50/60/80W	80/100/120/150W				
Typical Luminous Efficacy	103-140lm/W		117-155lm/W @40W 113-150lm/W @50W 107-143lm/W @60W 105-135lm/W @80W	123-162lm/W @80W 117-156lm/W @100W 112-149lm/W @120W 115-138lm/W @150W				
Links and state a		TYPE I TYPE II 90° 110°						
Lighting distribution		See lighting distribution options on appendix						
Working Temperature		-40~+50°C						

Notes: Tolerance of luminous efficacy value: ±5%-±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Maximum 360° adjustable mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor	0.95									
Available CCT		3000K/4000K/5000K/5700K								
Module Type	N	11/M2 series		M8 s	eries		M16 serie	S		
Photo		P. S.		10.00						
Module Quantity	1	2	3	4	5	6	7	8		
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W	160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W	320W 400W 480W		
Typical Luminous Efficacy	130m/V	137lm/W @40W/Engine 140lm/W @40W/Engine 175lm/W @40W/Engine 130m/W @50W/Engine 135lm/W @50W/Engine 170lm/W @50W/Engine 122lm/W @60W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine						//Engine		
	T	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°×90° 90°×40° 110°×40°						40°		
Lighting distribution		See lighting distribution options on appendix								
Working Temperature				-40~	+50°C					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Optional stainless steel bracket for harsh environment; Upgraded and further simplified structure design;
- ☐ Angle adjustable within ±60° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac										
Power factor	0.95										
Available CCT		3000K/4000K/5700K									
Module Type	N	//1/M2 series		M8 s	series		M16 serie	S			
Photo	Ē			W7 1819							
Module Quantity	1	2	3	4	5	6	7	8			
Power	40W 50W 60W	50W 100W 150W		160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W	320W 400W 480W			
Typical Luminous Efficacy	130m/	137lm/W @40W/Engine 140lm/W @40W/Engine 175lm/W @40W/Engine 130m/W @50W/Engine 135lm/W @50W/Engine 170lm/W @50W/Engine 122lm/W @60W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine						/Engine			
Lighting distribution	Т	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°x90° 90°x40° 110°x40°									
			See li	ghting distribution	•	appendix					
Working Temperature				-40~	+50°C						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Angle adjustable within ±60° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor		0.95								
Available CCT				3000k	K/4000K/5000K/	/5700K				
Module Type	M1/	M2 series			M8 series		M16 ser	ies		
Photo										
Module Quantity	1	2		3	4	5	6	7		
Power	40W 50W 60W	100W 1		120W 150W 180W	160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W		
Typical Luminous Efficacy	130m/W	137lm/W @ 40W/Engine 140lm/W @ 40W/Engine 130m/W @ 50W/Engine 135lm/W @ 50W/Engine 122lm/W @ 60W/Engine 127lm/W @ 60W/Engine					175lm/W @ 40\ 170lm/W @ 50\ 163lm/W @ 60\	N/Engine		
Lighting distribution	TYF	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°×90° 90°×40° 110°×40°						×40°		
Lighting distribution		See lighting distribution options on appendix								
Working Temperature					-40~+50°C					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- $\begin{tabular}{ll} \hline & Whole structure heating dissipation design with excellent thermal conduction, radiation and convection; \\ \hline \end{tabular}$
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Angle adjustable within 360° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac								
Power factor			(0.95					
Available CCT			3000K/4000	K/5000K/570	00K				
Module Type	M31A-XA se	eries	M31A-2	XB series		M31A	A-XC series		
Photo									
Module Quantity	1	1 2			4		5		
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W		160V 200V	-	200W		
Typical Luminous Efficacy	137lm/W @40W/Engine 140lm/W @40W/Engine 130m/W @50W/Engine 135lm/W @50W/Engine 122lm/W @60W/Engine				•	170lm/W	@40W/Engine @50W/Engine @60W/Engine		
Lighting distribution	TYPE VS	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°x90° 90°x40° 110°x40°							
		See	lighting distribut	ion options o	n appendix				
Working Temperature			-40	-40~+50℃					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.





CE CB RoHS







■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- $\hfill \square$ Flexible to reach desired power selections by choosing appropriate light engines;
- $\hfill \square$ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Round housing with optional mounting methods: hook, pendent, or surface mount.

■ TECHNICAL PARAMETERS

Input Voltage		100-277Vac								
Power factor	0.95									
Available CCT		3000K/4000K/5000K/5700K								
Module Type	M1/M2 series	M8 series	M16 series							
Photo		7711111								
Module Quantity	2	3	4							
Power	80W 100W 120W	120W 150W 180W	160W 200W 240W							
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine							
Lighting distribution	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°x90° 90°x40° 110°x40°									
Lighting distribution	See lighting distribution options on appendix									
Working Temperature		-40~+40°C								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

TF7C MODULAR LED HIGH BAY LIGHTS











■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ IP65 rated electrical compartment;
- Upgrade die-casting design to achieve high reliability;
- ☐ Round housing with optional mounting methods: hook, pendent, or surface mount.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac									
Power factor		0.95								
Available CCT		3000K/4000K/5000K/5700K								
Module Type	M1/M2 series	M8 series	M16 series							
Photo		77.00								
Module Quantity	5		6							
Power	200W 250W 300W		240W 300W 360W							
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175Im/W @40W/Engine 170Im/W @50W/Engine 163Im/W @60W/Engine							
Lighting distribution	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°x90° 90°x40° 110°x40 See lighting distribution options on appendix									
Working Temperature		-40~+40℃								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







CE CB RoHS (PS)







■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Optional aluminum reflector;
- □ Compact light weight construction for easy installation.

■ TECHNICAL PARAMETERS

Input Voltage		100-277Vac							
Power factor		0.95							
Available CCT		3000K/4000K/5000K/5700K							
Power		60W-200W							
Reflector	60° Aluminum Reflector	60° Aluminum Reflector 90° Aluminum Reflector							
Typical Luminous Efficacy	128lm/W @60W 137lm/W @80W 135lm/W @100W 137lm/W @120/150/200W	135lm/W @60W 145lm/W @80W 143lm/W @100W 145lm/W @120/150/200W	135lm/W @60W 145lm/W @80W 143lm/W @100W 145lm/W @120/150/200W						
Lighting distribution		60° 90°							
Lighting distribution	Sec	e lighting distribution options on appe	ndix						
Working Temperature		-40~+45°C							

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Low-profile, lightweight design provides ease of installation;
- Optional bottom cover offers enhanced up light and maximum uniformity

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor	0	.95						
Available CCT	3000K/4000K	K/5000K/5700K						
Power	60W-200W							
Reflector	PC Reflector with Bottom	PC Reflector						
Typical Luminous Efficacy	114lm/W @60W 123lm/W @80W 121m/W @100W 123lm/W @120/150/200W	130lm/W @60W 140lm/W @80W 138m/W @100W 140lm/W @120/150/200W						
Lighting distribution	60°	90°						
Lighting distribution	See lighting distribution	on options on appendix						
Working Temperature	-40~	+45°C						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







■ MAIN FEATURES

CE CB RoHS







☐ IP66 LED engine;

- ☐ Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc;
- ☐ Whole structure heating dissipation design with best thermal conduction and radiation;
- $\hfill \Box$ Flexible to reach desired power selections by choosing appropriate light engines;
- Unmatched lighting performance, driver stability and desirable lifespan;
- □ Compact light weight construction for easy installation.

■ TECHNICAL PARAMETERS

Input Voltage		200-277Vac									
Power Factor	0.95										
Available CCT		3000K/4000K/5000K/5700K									
Power		60W-200W									
Lamp Model	TF21A	TF21A TF21B TF21C TF21I									
Typical Luminous Efficacy	120lm/W@60W	133lm/W@80W 127lm/W@100W	133lm/W@120W 127lm/W@150W	130lm/W@180W 127lm/W@200W							
Limbting distribution		60°	90°								
Lighting distribution		See lighting distribution	n options on appendix								
Working Temperature		-40~-	+45°C								

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

BLACK SILVER

MAIN FEATURES

CE RoHS







- ☐ Whole structure heating dissipation design with radiator fins, excellent thermal conduction and radiation;
- ☐ Ergonomic and dedicated lighting distributions are available for warehouse, workshop, hall lighting, etc;
- ☐ Unmatched lighting performance, driver stability, and desirable lifespan;
- □ Separable reflector reduces glare;
- Suitable for dry environment.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power factor		0.95						
Available CCT		3000K/4000K/5000K/5700K						
Power		80W-240W						
Model Name	TF28B	TF28D						
Typical Luminous Efficacy	137lm/W@80W 130lm/W@100W	1251m/W@120W 135lm/W@150W	135lm/W@180W 130lm/W@200W 130lm/W@240W					
Lighting distribution		60° 90°						
Lighting distribution	Sec	e lighting distribution options on apper	ndix					
Working Temperature		-40~+50℃						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- $\begin{tabular}{ll} \hline & Ergonomic and dedicated lighting distributions available for warehouse, workshop, hall lighting, etc; \\ \hline \end{tabular}$
- ☐ Whole structure heating dissipation design with best thermal conduction and radiation;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Compact light weight construction for easy installation.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac							
Power Factor		0.95						
Available CCT		3000K/4000K/5000K/5700K						
Power		60W-150W						
Lamp Model	TF9A	TF9A TF9B TF9C						
Typical Luminous Efficacy	136lm/W@60W	145lm/W @80W	144lm/W @100W 145lm/W @120W 145lm/W @150W					
Lighting distribution		60° 90°						
Lighting distribution	See	e lighting distribution options on appea	ndix					
Working Temperature		-40~+45°C						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Whole structure heating dissipation design;
- ☐ Ergonomic and dedicated lighting distributions are available for warehouse, workshop, hall lighting, etc;
- ☐ Unmatched lighting performance, driver stability, and desirable lifespan;
- Suitable for dry environment.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac							
Power factor	0	.95						
Available CCT	3000K/4000K	K/5000K/5700K						
Lamp Model	TF29C	TF29D						
Power	80W/ 100W/ 120W/ 150W	180W/ 200W/ 240W						
Typical Luminous Efficacy	137lm/W @80W 130lm/W @100W 125lm/W @120W 135lm/W @150W	135lm/W @180W 130lm/W @200/240W						
I inhain a dinasih sain a	60° 90°	60° 90° 120						
Lighting distribution	See lighting distribution	on options on appendix						
Working Temperature	-40~	+45°C						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions for unmatched lighting performance;
- ☐ Compact die-cast structure, solid mechanism and reliable quality;
- □ Tempered glass cover, easy for cleaning;
- ☐ Optional installation brackets for recessed mounting/ ceiling mounting/ surface mounting;
- Optional sensor for energy saving.

■ TECHNICAL PARAMETERS

Input Voltage		100-277Vac							
Power factor		0.95							
Available CCT		3000K/4000K/5000K/5700K							
Power		80W-120W							
	Recessed Mounting	Ceiling Mounting	Surface Mounting						
Mounting Style	perminused.								
Model Name	TF69AQ	TF69AZ	TF69AX						
Typical Luminous Efficacy		174lm/W @80W 169lm/W @100W 162lm/W @120W							
linksin malinksik valin		110°							
Lighting distribution	See	e lighting distribution options on appe	ndix						
Working Temperature		-40~+50°C							

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions for unmatched lighting performance;
- ☐ Compact die-cast structure, solid mechanism and reliable quality;
- ☐ Bracket adjustable in ±60°, L-shaped bracket as optional choice;
- Optional tempered glass cover over optical lens, easy for cleaning;

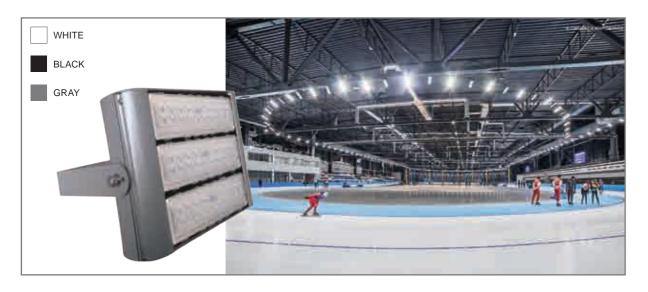
■ TECHNICAL PARAMETERS

Input Volta	ige	100-27	7Vac
Power		30W-2	40W
Power fac	tor	0.9	5
Available C	CT	3000K/4000K/5	5000K/5700K
LED Bran	nd	Lumileds Luxeon 3030	Lumileds Customized
Typical Luminous	FL21B pical Luminous	135lm/W @30W 130lm/W @40W 125lm/W @50W 117lm/W @60W	167lm/W @30W 163lm/W @40W 157lm/W @50W 150lm/W @60W
Efficacy FL21C	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine	
Lighting distril	hution	25° 40° 6	60° 90°
Lighting distri	Julion	See lighting distribution	options on appendix
Working Temp	erature	-40~+;	50°C

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

MODULAR LED FLOOD LIGHTS





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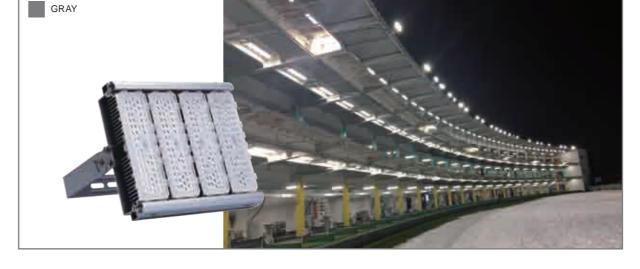
■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for stadium, building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Effectively replaces HID products of 70-2000W.

■ TECHNICAL PARAMETERS

Input Voltage						100-2	277Vac					
Power factor		0.95										
Available CCT		3000K/4000K/5000K/5700K										
Module Type		M1/M2	2 series			M8 s	eries			M16	series	
Photo												
Module Quantity	1	2	3	4	5	6	7	8	10	12	14	16
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W	160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W	320W 400W 480W	400W 500W 600W	480W 600W 720W	560W 700W 840W	640W 800W 960W
Typical Luminous Efficacy	13	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine			140lm/W @40W/Engine 175lm/W @40W/Engine 135lm/W @50W/Engine 170lm/W @50W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine					ine		
Lighting distribution	Т	TYPE VS 12° 2)° 90° 1	10° Lam	bert Type	45°×30	° 80°x60	° 90°×40	° 110°×4	10°
Lighting distribution				Se	e lighting	distribution	on options	on appe	ndix			
Working Temperature						-40~	+50℃					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- □ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for stadium, building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Optional stainless steel bracket for harsh environment;
- Upgraded and further simplified structure design;
- Angle adjustable within ±60° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac										
Power factor	0.95										
Available CCT		3000K/4000K/5000K/5700K									
Module Type	N	M1/M2 series M8 series M16 series									
Photo				47.00							
Module Quantity	1 2 3			4	5	6	7	8			
Power	40W 50W 60W	80W 100W 120W	120W 150W 180W	160W 200W 240W	200W 250W 300W	240W 300W 360W	280W 350W 420W	320W 400W 480W			
Typical Luminous Efficacy	130m/\	N @40W/Engi N @50W/Engi N @60W/Engi	ne	140lm/W @40W/Engine 175lm/W @40W/Eng 135lm/W @50W/Engine 170lm/W @50W/Eng 127lm/W @60W/Engine 163lm/W @60W/Eng							
Lighting distribution	TYPE	VS 12° 25°	40° 60°	90° 110° Lam	bert Type 45	°×30° 80°x60	° 90°×40° 1	10°×40°			
Lighting distribution			See I	lighting distribution	on options on a	appendix					
Working Temperature				-40~	+50℃						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







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- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for stadium, building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Angle adjustable within ±60° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage		100-277Vac										
Power factor	0.95											
Available CCT		3000K/4000K/5000K/5700K										
Module Type	M1	/M2 series			M8 series			M16 se	ries			
Photo								AND MANUAL TO A STATE OF THE ST				
Module Quantity	1 2			3	4	5		6	7			
Power	50W 100W 15		120W 150W 180W	160W 200W 240W	200W 250W 300W	3	240W 300W 360W	280W 350W 420W				
Typical Luminous Efficacy	130m/W	@40W/Engine @50W/Engine @60W/Engine		140lm/W @40W/Engine 175lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine 163lm/W @60W/Engine)W/Engine			
Lighting distribution	TYPE V	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 45°×30° 80°×60° 90°×40° 110°×40° See lighting distribution options on appendix							110°×40°			
Working Temperature					-40~+50°C	spp0						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for stadium, building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;

☐ Angle adjustable within ±360° with mounting brackets.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac										
Power factor	0.95										
Available CCT		3000K/4000K/5000K/5700K									
Module Type	M31A-XA se	eries		M31A-XB series		M31	A-XC series				
Photo											
Module Quantity	1	2 3		4		5					
Power	40W 50W 60W	100W 150W		160W 200W	200W						
Typical Luminous Efficacy	137lm/W @40W/Engine 140lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine 127lm/W @60W/Engine					170lm/W	/ @40W/Engine / @50W/Engine / @60W/Engine				
Lighting distribution	TYPE VS 12°			110° Lambert Type			×40° 110°×40°				
Working Temperature		See lighting distribution options on appendix -40~+50℃									

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for stadium, building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- ☐ Tilt bracket avoids light-blocking by itself;
- ☐ Mounting bracket adjustable in both vertical and horizontal directions;
- ☐ Thickened bracket to strengthen fixture mechanism;
- ☐ Effectively replaces HID products of 70-400W.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power factor		0.95					
Available CCT		3000K/4000K/5000K/5700K					
Module Type	M1/M2 series	M8 series	M16 series				
Photo		77.00					
Module Quantity	1	2	3				
Power	40W 50W 60W	80W 100W 120W	120W 150W				
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine				
Lighting distribution	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 45°x30° 80°x60° 90°x40° 110°x40°						
Lighting distribution	See lighting distribution options on appendix						
Working Temperature	-40~+50℃						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

C€ CB RoHS









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for building and area lighting, etc;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac				
Power Factor		0.95			
Available CCT		3000K/4000K/5000K/5700K			
Power	40W-60W				
LED brand	Lumileds Luxeon TX Lumileds Luxeon 3030 Lumileds Luxeon 50				
Typical Luminous Efficacy	130lm/W @40W 122m/W @50W 117m/W @60W	135lm/W @40W 130lm/W @50W 122lm/W @60W	168lm/W @40W 163lm/W @50W 155lm/W @60W		
Lighting distribution	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 110°x40°				
2.99 3.3(11)3(10)1	See lighting distribution options on appendix				
Working Temperature	-40~+50℃				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







CB (€ RoHS









MAIN FEATURES

- ☐ Unique patented IP68 LED light engines;
- ☐ Compact light weight construction for easy handling and installation;
- ☐ Ergonomic and dedicated lighting distributions are available for various scenic area lighting, wall & billboard lighting, etc;
- Whole structure heating dissipation design;
- ☐ Angle adjustable within 360°;
- ☐ Optional knobs, anti-dropping ropes and stainless steel bracket.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac				
Power	40W/50	0W/60W			
Power factor	0.	95			
Available CCT	3000K/4000K	/5000K/5700K			
Optics	With PC Lens	With Reflectors			
Typical Luminous Efficacy	163lm/W @40W 157lm/W @50W 150m/W @60W	142lm/W @40W 135lm/W @50W 128lm/W @60W			
Lighting distribution	25° 60° 90° 90° x40°	60° x60° 80° x80° 80° x50°			
Lighting distribution	See lighting distribution options on appendix				
Working Temperature	-40~+50℃				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



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■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Compact light weight construction for easy handling and installation;
- ☐ Ergonomic and dedicated lighting distributions are available for various scenic area lighting, wall & billboard lighting, etc;
- Whole structure heating dissipation design;
- Angle adjustable within 360°;
- ☐ Optional knobs, anti-dropping ropes and stainless steel bracket.

■ TECHNICAL PARAMETERS

Input Voltage	100-240Vac				
Power	80W/100)W/120W			
Power factor	0.9	95			
Available CCT	3000K/4000K/	/5000K/5700K			
Optics	With PC Lens	With Reflectors			
Typical Luminous Efficacy	175lm/W @80W 170lm/W @100W 163lm/W @120W	152lm/W @80W 145lm/W @100W 138lm/W @120W			
Lighting distribution	25° 40° 60° 90° 120° 90° x40°	60° x60° 80° x80°			
Lighting distribution	See lighting distribution options on appendix				
Working Temperature	-40~+50℃				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







CE CB RoHS







■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for gas station lighting;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan;
- Customizable housing dimensions.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac						
Power factor		0.95					
Available CCT		3000K/4000K/5000K/5700K					
Module Type	M1/M2 series	M8 series	M16 series				
Photo		771111					
Module Quantity	2	3	4				
Power	80W 100W 120W	120W 150W	160W 200W				
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine				
Lighting distribution	TYPE VS 12° 25° 40° 60° 90° 110° Lambert Type 40°x90° 90°x40° 110°x40°						
Lighting distribution	Se	See lighting distribution options on appendix					
Working Temperature	-40~+50°C						

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES

CE CB RoHS





WHITE



- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for gas station lighting;
- ☐ Whole structure heating dissipation design with excellent thermal conduction, radiation and convection;
- ☐ Unmatched lighting performance, driver stability and desirable lifespan.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac				
Power factor		0.95			
Available CCT		3000K/4000K/5000K/5700K			
Power		80W-120W			
Module Quantity		1-2 Modules			
Module Type	M1/M2 series	M8 series	M16 series		
Photo					
Module Quantity	1	2	3		
Power	40W 50W 60W	80W 100W 120W	120W 150W		
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine		
Lighting distribution	TYPE VS 12° 25° 40°	° 60° 90° 110° Lambert Type 40°	°×90° 90°×40° 110°×40°		
Lighting distribution	See lighting distribution options on appendix				
Working Temperature	-40~+50°C				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.







C€ RoHS







■ MAIN FEATURES

- Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for airport lighting;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- Optimized industrial design against accumulation of water and dust
- □ IP66 rated electrical compartment.
- □ Tempered glass with impact resistance rating of IK09.
- ☐ Stainless steel bracket by option for harsh environment.
- ☐ Laser sight available by option for precise targeting.

■ TECHNICAL PARAMETERS

Input Volt	age	100-277Vac				
Power fac	tor	0.95				
Available C	CT	3000K/4000K	K/5000K/5700K			
Power		100W	/-500W			
LED Bran	ıd	Lumileds Luxeon TX	Lumileds Cutomized			
	FL18A	112m/W @320W 107lm/W @400W	145lm/W @320W 137m/W @400W			
		102lm/W @500W	130lm/W @500W			
Typical Luminous FL18B	107lm/W @200W 102lm/W @240W	137lm/W @200W 132lm/W @240W				
FL18C		107lm/W @100W 102lm/W @120W	137lm/W @100W 132lm/W @120W			
1110 110		12° 25° 60° 90° 90°x40° Sports Lighting				
Lighting distril	Julion	See lighting distribution	on options on appendix			
Working Temperature -40~+45℃		-+45°C				

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.



■ MAIN FEATURES









- ☐ Unique patented IP68 LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for sports facilities lighting;
- ☐ Whole structure heating dissipation design with excellent thermal conduction and radiation;
- ☐ Full power range solutions up to 1500W;
- ☐ Professional lighting distribution design for stadium applications;
- Optimized industrial design against accumulation of water and dust;
- ☐ Thickened stainless steel bracket and gear angle adjusting device ensure long-term stable performance;
- ☐ Mounting bracket 180°adjustable in both vertical and horizontal directions;
 ☐ Ra80,Ra90 chips are available to meet high lighting requirements;
- Optional IP66 driver box.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac				
Power factor	0.95				
Available CCT		3000K/4000K	K/5000K/5700K		
Module Type	M25A-XA series	3		M25A-XB series	
Photo					
Module Quantity	2	4	4	6	
Module Type	300W 400W 500W	80	OW OW OOW	900W 1200W 1500W	
Typical Luminous Efficacy	Lumileds Luxeon TX: Lumileds Cutomized: 112lm/W @150W/Engine 164m/W @150W/Engine 107lm/W @200W/Engine 157lm/W @200W/Engine 102lm/W @250W/Engine 150lm/W @250W/Engine				
Lighting distribution	12° 25° 60° 90° 90°x40° Sports Lighting See lighting distribution options on appendix				
Working Temperature		-40~	+40°C		

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.





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■ MAIN FEATURES

- ☐ Unique patented IP68 (highest protection level) LED light engines;
- ☐ Ergonomic and dedicated lighting distributions available for various retrofit applications;
- ☐ Whole structure heating dissipation design with best thermal conduction, radiation and convection;
- ☐ Flexible to reach desired power selections by choosing appropriate light engines;
- ☐ Tool-free onsite replacements of light engines greatly reduce maintenance cost;
- Unmatched lighting performance, driver stability and desirable lifespan;

Customizable sheet dimensions and finishing color.

■ TECHNICAL PARAMETERS

Input Voltage	100-277Vac					
Power factor	0.95					
Available CCT		3000K/4000K/5000K/5700K				
Module Type	M1/M2 series	M8 series	M16 series			
Photo						
Module Quantity	1					
Power	40W 80W 50W 100W 60W 120W					
Typical Luminous Efficacy	137lm/W @40W/Engine 130m/W @50W/Engine 122lm/W @60W/Engine	140lm/W @40W/Engine 135lm/W @50W/Engine 127lm/W @60W/Engine	175lm/W @40W/Engine 170lm/W @50W/Engine 163lm/W @60W/Engine			
Lighting distribution	TYPE I TYPE II TYPE III TYPE IV TYPE V 90° 110° Lambert Type 40°x90° 90°x40° 110°x40°					
Lighting distribution	See lighting distribution options on appendix					
Working Temperature	-40~+50℃					

Notes: Tolerance of luminous efficacy value: ±5%~±8%. Efficacy of CCT 3000K is lower than above by 5%.

■ TRADITIONAL RETROFIT OPERATION GUIDE



■ RETROFIT CASES









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APPENDIX: LIGHTING DISTRIBUTION

ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	TYPE I	TYPE II	TYPE III	TYPE IV	TYPE V
CURVES	-10 10 10 10 10 10 10 10 10 10 10 10 10 1	-10-(20) -10 -10 -10 -10 -10 -10 -10 -10 -10 -10	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	
M1A	/	/	✓	✓	/
M2A	/	✓			✓
M6A		/			
M6C		/			
M7A/B	/				
M7C/D	/	/			
M8B/M33	/	/	/		/
M12A	/	/	/		
M16B/ M33/ CK16B	/	/	/		/
M18A		/	/		
M19A	/	/	/		/
M20A	/	/	/		~
M35A	/				
CK16BMAX		/			
T1M/T1W/T29A STREET LIGHT	/	~			
T1Q/T28D/T29B T85A/T33 STREET LIGHT	~	~	~		
T1H STREET LIGHT	✓				
T2Q/T33B/T85E	/	/			
T65/T68	/	/	~		

■ SYMMETRIC LIGHTING DISTRIBUTIONS

BEAM ANGLE (50%)	12°	25°	40°	60°	90°	110°	LAMBERTIAN
CURVES			-			-	
M1A		/	/	/		/	/
M2A	/	/	/	/	/		/
M8B/ M33		/	/	/	/		/
M11A					/		/
M15A B C D				/	/		
M12A	/	/	/	/	✓		/
M16B/ M33 CK16B		/	/	/	/		/
M18A			/	/	/		
M19A		/	/	/	/		/
M20A		/	/	/	/		/
M23A							/
M28A	✓	✓	✓	✓	~		/

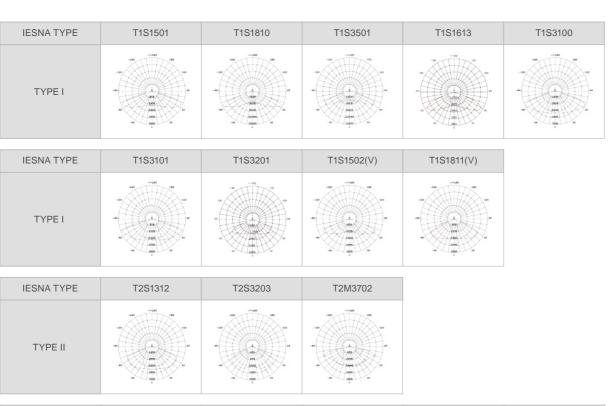
■ SPECIAL LIGHTING DISTRIBUTION

APPLICATION	TUNNEL LIGHTING	SQUARE LIGHTING	BILLBOARD LIGHTING	SPORT LIGHTING	AISLE LIGHTING
CURVES					
M1A	/	/		/	
M2A			/		/
M6A	/				
М7А В С D	/			/	
M8B/ M33	/				
M12A			/	/	
M16B/ M33 CK16B	/	/	/	✓	✓
M28A		/	/		

 $[\]textbf{*} \textbf{More lighting distribution options are in development. Please contact sales for more information.} \\$

APPENDIX: LIGHTING DISTRIBUTION

■ M1A MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS



IESNA TYPE	T3M2701	T3M3910	T3M3701	T3M1910(V)	T3M1911(V)
TYPE III	-10 130 130 130 130 130 130 130 130 130 1	-10 130 130 130 130 130 130 130 130 130 1	100 100 100 100 100 100 100 100 100 100	-10 -10 -10 -10 -10 -10 -10 -10 -10 -10	

IESNA TYPE	T4M5703
TYPE IV	100 100 100 100 100 100 100 100 100 100

IESNA TYPE	T5S3040
TYPE VS	

■ M1A MODULE SYMMETRIC LIGHTING DISTRIBUTIONS

25D1725	40D1540	60D1560	110D1010

■ M2A MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T1S1812	T1S3300
TYPE I		-10 10 10 10 10 10 10 10 10 10 10 10 10 1

IESNA TYPE	T2M1412
TYPE II	

■ M2A MODULE SYMMETRIC LIGHTING DISTRIBUTIONS

12D1908	25D3725	40D3540	60D3560
	199	158 -1480 188	
	- 100 100 100 100 100 100 100 100 100 10	100 man 100 ma	

90D3590	110D3030	LBN1310

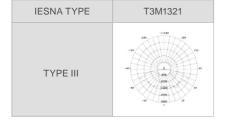
*More lighting distribution options are in development. Please contact sales for more information.

APPENDIX: LIGHTING DISTRIBUTION

■ M8B/M19/M33 MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T1S5323
TYPEI	-0 10 10 10 10 10 10 10 10 10 10 10 10 10

IESNA TYPE	T2S1324	T2S2201	T2S2321	T2S2322(V)	T2S5321
TYPE II	-1-(2) 19 19 19 19 19 19 19 19 19 19 19 19 19	-10 130 130 130 130 130 130 130 130 130 1	100 100 100 100 100 100 100 100 100 100	-10 130 130 130 130 130 130 130 130 130 1	10 10 10 10 10 10 10 10 10 10 10 10 10 1



■ M8B/M19/M33 MODULE SYMMETRIC LIGHTING DISTRIBUTIONS

LBN1310	TL1390	25D1325	40D5340	60D2360	90D5390
-130 130 -130 130	-130 130 -130 130	-189 139 139 139	-100 130 130 130 130 130 130 130 130 130	-199 138 -199 138	
-				-10	-
-00 3200 00 -1000 00 -00 000 00	-00 1000 00 10000 00 10000 00	-00 Jacob 10	-00 13000 00 130000 00	-0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -0 -	-

■ M16B/M20/M33/CK16B MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T1S1107	T1S2125
TYPE I	-131 -131 -131 -131 -131 -131 -131 -131	129 130 130 130 130 130 130 130 130 130 130

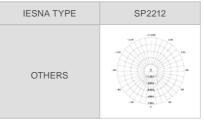
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■ M16B/M20/M33/CK16B MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T2S2105	T2S3106	T2S3108(V)	T2M2111	T2S2128
TYPE II			100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	-128 - 128 -
IESNA TYPE	T3S1113	T3M2109	T3M2127		

IESNA TYPE	T3S1113	T3M2109	T3M2127
TYPE III		100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100

IESNA TYPE	T5S2114	IES
TYPE VS		O



■ M16B/M20/M33/CK16B MODULE SYMMETRIC LIGHTING DISTRIBUTIONS

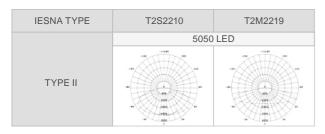
25D3125	40D3140	60D3160	90D2190	90X40D2211	45X30D5209
100 100 100 100 100 100 100 100 100 100	-100 133 135 135 135 135 135 135 135 135 135			100 100 100 100 100 100 100 100 100 100	

LBN2310	TL2123	80X40D3504	70X28D3505
10 10 10 10 10 10 10 10 10 10 10 10 10 1	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100

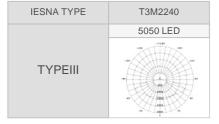
APPENDIX: LIGHTING DISTRIBUTION

■ M12A MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	TIS2213
	3030 LED
TYPE I	10 10 10 10 10 10 10 10 10 10 10 10 10 1







■ M12A MODULE SYMMETRIC LIGHTING DISTRIBUTIONS

12D2012	60D2319	90D2390	90DX40D2316	40DX90D2323
		3535 LED		
				100
25D2225	60D2260	90D2290	90DX40D2216	LBN2214
	3030 LED			

■ M7*-XA MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T1S5892	T1S5882	T1S2841	T1S2861
TYPEI	100 100 100 100 100 100 100 100 100 100		100 100 100 100 100 100 100 100 100 100	-143 137 137 137 137 137 137 137 137 137 13

■ M7*-XB MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T1S1991	T1S1981	T1S1941	T1S1961
TYPEI	100 100 100 100 100 100 100 100 100 100		123 125 125 125 125 125 125 125 125 125 125	10 10 10 10 10 10 10 10 10 10 10 10 10 1

IESNA TYPE	T2S2967	T2S2969	T2S1969
TYPE II			110 110 110 110 110 110 110 110 110 110

IESNA TYPE	T3M2885	
TYPE III		

■ CK16BMAX MODULE LIGHTING DISTRIBUTIONS

IESNA TYPE	T2S1371
TYPE II	100 100 100 100 100 100 100 100 100 100

*More lighting distribution options are in development. Please contact sales for more information.

APPENDIX: LIGHTING DISTRIBUTION

■ M6 MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T2S1414	T2S1415	T2S1614	T2S1616
TYPE II	100 100 100 100 100 100 100 100 100 100	-10 133 -10 13	120 - 120 -	-10 -10 -10 -10 -10 -10 -10 -10 -10 -10

■ M6 MODULE SYMMETRIC LIGHTING DISTRIBUTION



■ M11A MODULE SYMMETRIC LIGHTING DISTRIBUTION

LBN5313	90D5314
100 100 100 100 100 100 100 100 100 100	-14(1) 191 -10

■ M15A MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

60D2960	60D5760	60D5860	90D2990	90D5790	90D2890
130 150 150 150 150 150 150 150 150 150 15	-100 -100 -100 -100 -100 -100 -100 -100	-120 -120 -120 -120 -120 -120 -120 -120	10 10 10 10 10 10 10 10 10 10 10 10 10 1	100 100 100 100 100 100 100 100 100 100	

■ M18A MODULE ASYMMETRIC LIGHTING DISTRIBUTIONS

IESNA TYPE	T2S2231	T2M1232	T3M2237	T2M2233
TYPE II	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100		120 121 121 121 121 121 121 121 121 121

■ M18A MODULE SYMMETRIC LIGHTING DISTRIBUTION

40D1234	60D1235	90D2236
100 100 100 100 100 100 100 100 100 100		100 100 100 100 100 100 100 100 100 100

■ M28A MODULE LIGHTING DISTRIBUTIONS

12D2312	25D2425	LBN2414	T5S2355	T2M2351
100 100 100 100 100 100 100 100 100 100		-10 10 10 10 10 10 10 10 10 10 10 10 10 1		

 $\hbox{*More lighting distribution options are in development. Please contact sales for more information.}$

APPENDIX: LIGHTING DISTRIBUTION

■ T1M/T1W/T29A STREET LIGHT

IESNA TYPE	T1S1209	IESNA TYPE	T2M2223	T2L2209
TYPEI	100 100 100 100 100 100 100 100 100 100	TYPE II	-140 134 135 135 137 137 137 137 137 137 137 137 137 137	

■ T1H STREET LIGHT

IESNA TYPE	T1S2206
TYPEI	-10 10 10 10 10 10 10 10 10 10 10 10 10 1

■ T1Q/T29B/T28D/T33A/T85A STREET LIGHT

IESNA TYPE	TIS2213	TIS1210	IESNA TYPE	T2S1396	T2S2210	T2M2219
	3030 LED	5050 LED		3030 LED	5050	LED
TYPE II	-100 133 -100 133 -10	-101 133 133 133 133 133 133 133 133 133	TYPE II			

IESNA TYPE	T3M2397	T3M2240
	3030 LED	5050 LED
TYPEIII		10 10 10 10 10 10 10 10 10 10 10 10 10 1

■ T2Q/T33B/T85E STREET LIGHT

IESNA TYPE	T1M1856	T1M1853	T1M1852
	5050 LED	3030	LED
TYPEI			10 10 10 10 10 10 10 10 10 10 10 10 10 1

IESNA TYPE	T2S1854	T2M1855	T2S1851
	5050) LED	3030 LED
TYPEI			

■ T1P/ T29C/ T85BCD/ T99C/ T33CDE STREET LIGHT

IESNA TYPE	T1S1107		
TYPEI			

IESNA TYPE	T2S2105	T2S3106	T2S3108	T2S2212	T2S2128	T2M2111
TYPE II	100 100 100 100 100 100 100 100 100 100		138 159 159 159 159 159 159 159 159 159 159	100 100 100 100 100 100 100 100 100 100	-123125	

IESNA TYPE	T3S1113	T3M2109
TYPE III		100 100 100 100 100 100 100 100 100 100

■ T1D STREET LIGHT

IESNA TYPE	T1S1502	T1S3101	T1S2326	
	3535	3030 LED		
TYPEI				

IESNA TYPE	T2S2344	IESNA TYPE	T3M1911	
	5050 LED		3535 LED	
TYPE II		TYPE III	10 10 10 10 10 10 10 10 10 10 10 10 10 1	

■ T65/T68 STREET LIGHT

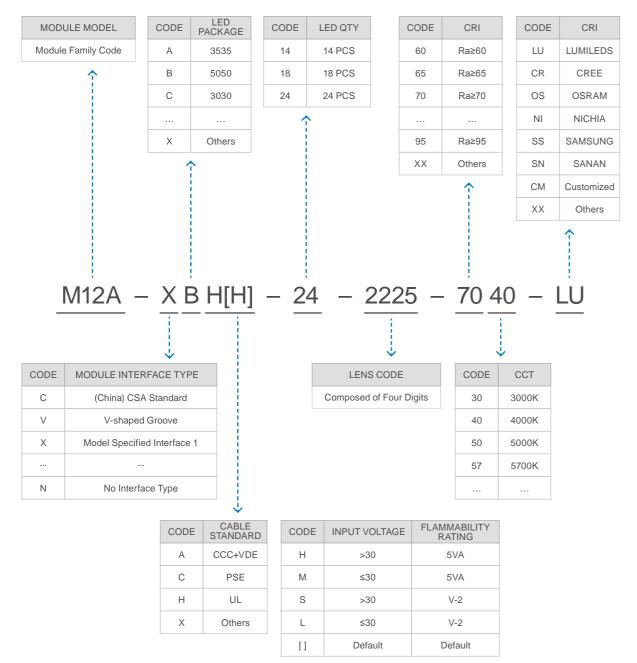
IESNA TYPE	T1S1881/T1S1884	IESNA TYPE	T2S1882/T2S1885	IESNA TYPE	T3S2883/T3S2886	IESNA TYPE	T2S1846 (ONLY T65N1-100)
TYPEI		TYPE II		TYPE III		TYPE III	-10 10 10 10 10 10 10 10 10 10 10 10 10 1

*More lighting distribution options are in development. Please contact sales for more information.

APPENDIX: ORDERING INFORMATION

■ MODULE ORDERING INFORMATION

EXAMPLE: M12A-XBH[H]-24-P12-2225-7040-LU



*Applicable premise: H, i.e. CABLE STANDARD being UL. Otherwise, default.

■ LUMINARY ORDERING INFORMATION

EXAMPLE: T11A-3[B]--180[P]-M1A--18-1501-7040-LU-MW[T]-WH[B]-[CN]

