



OUTDOOR LIGHTING PRODUCT CATALOGUE

2015

Kingsun Company Profile

Kingsun Optoelectronic Co., Ltd. became the first high-power LED lighting company to be listed on the China stock exchange in 2011. LED Lighting manufacturing in China is Kingsun's primary business and results in its maximum revenue.

Honored as a National High-Tech Enterprise and the Chairman of the LED Industrial Alliance in the Guangdong Province, Kingsun owns and operates a China National Accreditation Service for Conformity Assessment testing laboratory as well as a Postdoctoral Research team.

Kingsun is a total lighting solution provider with diversified business models in the fields of LED outdoor, indoor and landscape lighting as well as LED display, transportation, medical and specialty lighting. As one of the earliest pioneers in the LED lighting industry in China, Kingsun has over 17 years LED lighting experience in R&D and LED applications including 10 years of high-power LED lighting solutions. Kingsun has the largest scale solid-state lighting base in R&D and LED production in Asia with integrated resources of production, research & development, capital market, talent, business models and marketing channels. Kingsun has formed a very strong core competence to promote technological innovative LED lighting product applications.

Kingsun possesses strong innovative capabilities in LED technology development, industrial and product application design. The company owns 429 industry patents, which includes 51 invention patents. Kingsun is one of the leading companies in LED lighting R&D technology. Kingsun is an ISO9001 compliant manufacturer. All products are strictly tested inside our own accredited testing laboratory that has more than 160 testing equipment which can perform over 100 tests. Kingsun's products have passed international standards such as UL, CE, CSA and are RoHS compliant.

Kingsun is one of the most advanced lighting application solution and innovative technology providers in the LED lighting industry. Over the past 10 years, Kingsun's financial strength, dedication to human resources, material design and procurement, product innovation has allowed Kingsun to promote its products on 6 continents like North America, South America, Europe, Africa, Asia and Australia. KINGSUN is highly recognized by its reputation and high standards.

With an excellent business model in place, a talented team of dedicated professionals, established channel strategies, LED lighting application solutions and a strong financial base, Kingsun embraces the challenges that lay ahead in the ever-changing world of LED development and opportunity.



Kingsun History

2015 A Total LED Lighting Solution Provider

2011 Listed in China Stock Exchange

2007 Mass Production of High Power LED Lighting Products

2004 Develop High Power LED Lighting

1998 Develop Low Power LED Lighting

1994 Company Established



18 years experiences in LED lighting R&D and application

10 years experiences in high power LED lighting application

429 authorized patents, particular with **51** invention patents

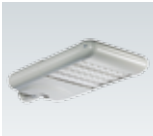
Asia largest scale SSL lighting R&D and production base with **300,000 Sq.M**

More than **1 Million** LED street lights installed around the world

400 lighting experts from national and overseas

Product Catalogue

P5-19 STREET LIGHT



Apollo Series Street Light P7



Apollo 2 Series Street Light P9



Mini Apollo Series Street Light P11



Mini Apollo Series Street Light P13



Jupiter Series Street Light P15



MINI-1 Series Street Light P17



Eagle Series Street Light P19

P20-23 TUNNEL LIGHT



Artemis Series Tunnel Light P21



Apollo 2 Series Tunnel Light P23

P24-27 WALLPACK LIGHT



Venus Series Wallpack Light P25



Artemis Series Wallpack Light P27

P28-31 FLOOD LIGHT



Artemis Series Flood Light P29



Black Diamond Series P31 Flood Light

P32-41 PROJECTION LIGHT



FL1J Projection Light P33



Artemis Series Projection Light P35



FL1K Projection Light P37



FL71 Projection Light P39



FL69 Projection Light P41

P42-45 GARDEN LIGHT



PL1A Garden Light P43



PL1F Garden Light P45

P46-49 BOLLARD LIGHT



BL1B Bollard Light P47



BL1D Bollard Light P49

P50-55 WALLWASH LIGHT



WW11 Wallwash Light P51



WW53 Wallwash Light P53



WW1H Wallwash Light P55

IN-GROUND LIGHT 56-61



IG1D In-ground Light P57



IG1E In-ground Light P59

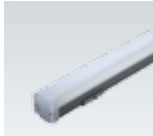


IG65 In-ground Light P61

LINEAR LIGHT P62-67



CL58 Linear Light P63



CL61 Linear Light P65



CS1F Linear Light P67

PIXEL LIGHT P68-71

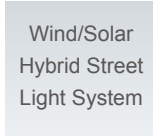


OW55/OW58 Pixel Light P69



OW51 Pixel Light P71

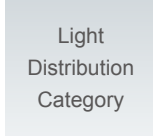
WIND/SOLAR HYBRID STREET LIGHT SYSTEM P72-81



INTELLIGENT LIGHTING CONTROL SYSTEM P82-83



APPENDIX P84-87



Ordering Code **RL 2R 1070 A2 50 SG V27 1 1**
Introduction 1 2 3 4 5 6 7 8 9

1	Lamp Classification	BL: Bollard Light FL: Flood Light PL: Courtyard Light RL: Street Light TL: Tunnel Light WW: Stripe Light IG: In																
2	Lamp Series	Series Code. Example: RL2R refers 2R series of Street Lights																
3	System Power	LED Quantity & Power Consumption																
4	Light Distribution Type	A2 A3 A4 S1 S5 S7 R4 N0																
5	Light Color	For Outdoor Lighting 30: 3000±300K 40: 4000±300K 50: 5000±300K																
		For Landscape Lighting 30: 3045±175K 40: 3985±275K 45: 4503±243K 50: 5028±283K 57: 5665±355K FC: Full Color RR: Red GG: Green BB: Blue YY: Yellow AM: Amber																
6	Housing Color	BK: Black BZ: Bronze CG: Cold Grey DB: Dark Blue DG: Dark Grey MB: Matt Black SG: Silver Grey WH: White GY: Golden Yellow																
7	Input Voltage	A22: AC 220-240V V24: AC 100-240V V27: AC 120-277V D24: DC 24V V48: AC 347-480V																
8	Installation	1: Pole 2: Wall 3: Pendant 4: Ceiling 5: Recessed 6: In-ground 0: Place																
9	Control Mode	0: Without 1: Timer 2: ZigBee 3: DMX512 4: 485 5: Dali 6: Photocell 8: Infrared																

Instructions

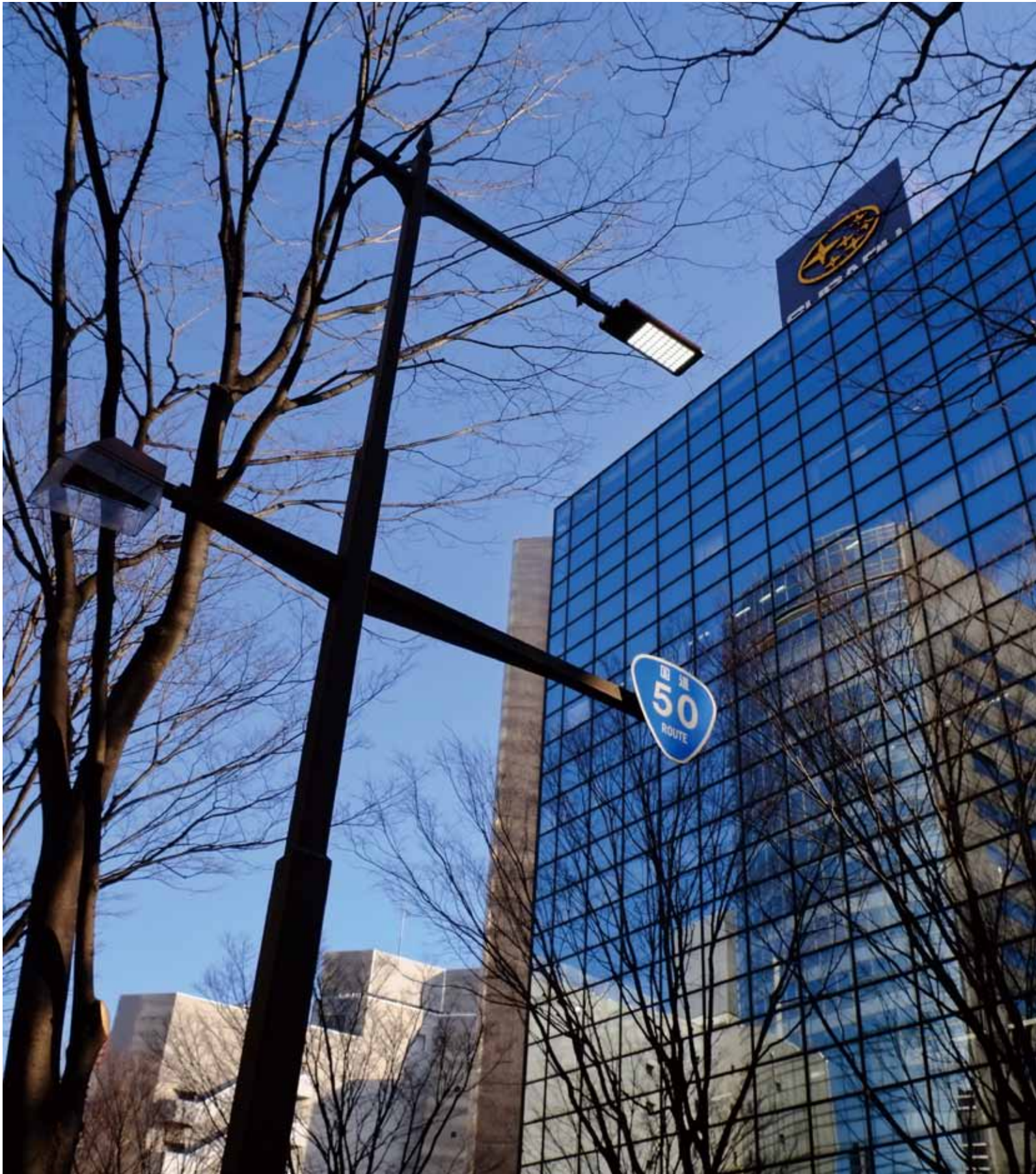
1. Definition of Ordering Code:

Ordering code consists of 19 letters and Arabic numbers, for example:

RL 2R 1070 A2 50 SG V27 1 1
Lamp Lamp Wattage Light Color Housing Input Installation Control
Classification Series Distribution Temperature Color Voltage Mode

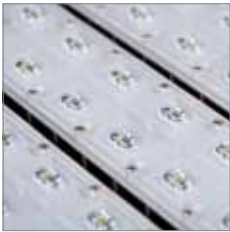
Means the product ordered is RL2R series with power consumption 126w, pole mounted, silver grey housing, A2 light distribution, color temperature ranged 5000±300K, input voltage AC120~277V and timing controller.

2. Products showed in the ordering info. are standard items in our company, and those with underlines are optional. If products with other different specifications or parameters are needed, please feel free to call us at 400 880 0816.



Apollo Series
Street Light

- Replaceable and upgradeable Modular design. Easy assembly, easy installation, and easy maintenance.
- Angle adjustable and applicable different mounting arm.
- Innovative structure of rotating arm branch, applicable for the installation on standard pole of Φ60 and horizontally or vertically.
- Photocell optional.
- Wireless Control optional intelligent wireless lighting management system.



IP 66

Life Time
50,000hrs

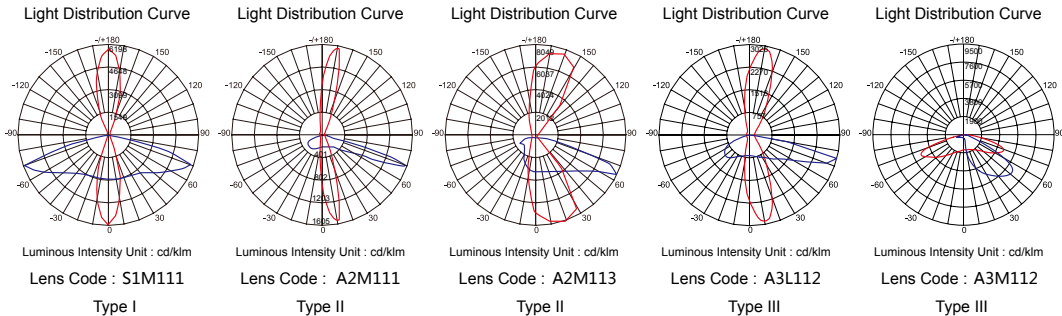
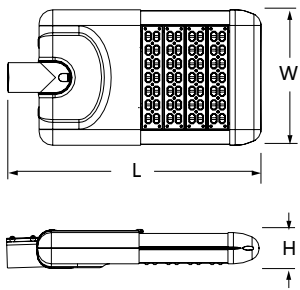
Working Temp
-40°C ~ 55°C

Working Humidity
≤ 95%

Power Factor
> 0.95

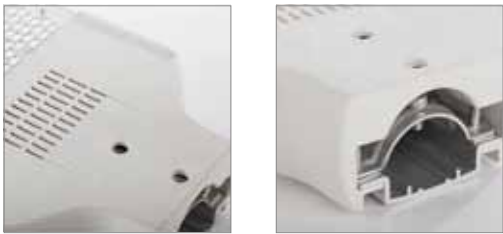
Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2R1014	33	1	3100	5000±300K	>91%	L502×W346×H102
RL2R1028	62	2	5800	5000±300K	>91%	L564×W346×H102
RL2R1042	93	3	8800	5000±300K	>91%	L626×W346×H102
RL2R1056	123	4	12300	5000±300K	>92%	L688×W346×H102
RL2R1070	155	5	15500	5000±300K	>92%	L750×W346×H102
RL2R1084	185	6	18500	5000±300K	>92%	L812×W346×H102
RL2R1098	216	7	21600	5000±300K	>92%	L874×W346×H102
RL2R1112	246	8	24600	5000±300K	>92%	L936×W346×H102
RL2R1126	277	9	27700	5000±300K	>92%	L998×W346×H102
RL2R1140	308	10	30800	5000±300K	>92%	L1060×W346×H102

Ordering Information	RL2R 1070 A2 50 SG V27 1 1					
	1	2	3	4	5	6
1 System Power	1014: 33W 1028: 62W	1042: 93W 1056: 123W	1070: 155W 1084: 185W	1098: 216W 1112: 246W	1126: 277W 1140: 308W	
2 Light Distribution	A2		A3		S1	
3 Color Temp	30: 3000±300K 40: 4000±300K		50: 5000±300K 53: 5300±300K			
4 Housing Color	BZ: Bronze CG: Cold Grey		BK: Black WH: White			
5 Input Voltage	A22: AC 220-240 V		V27: AC 120-277V		V48: AC 347-480V	
6 Control Mode	0: Without	1: Timer	2: ZigBee	Photocell	0-10V Dim	Dali Control PLC



Apollo 2 Series
Street Light

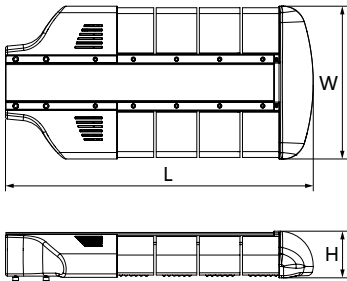
- Beautiful appearance with superior design.
- Adopting modular design, easy to install and maintain.
- Arc-shaped module with surface self-cleaning effect.
- Optimum light distribution, high utilization of light.
- Lightning and surge protection system.



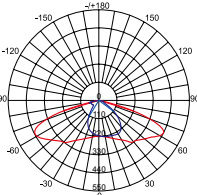
IP 66  Life Time 50,000hrs  Working Temp -40°C ~ 55°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL091080	75	2	7500	4000K	>95%	L436xW301xH92
RL091120	115	3	11500	4000K	>95%	L521xW301xH92
RL091160	150	4	15000	4000K	>95%	L606xW301xH92
RL091200	190	5	19000	4000K	>95%	L691xW301xH92
RL091240	230	6	23000	4000K	>95%	L776xW301xH92

Ordering Information	RL09 <u>1080</u> <u>A3</u> <u>50</u> <u>DB</u> <u>V27</u> 1 <u>1</u>						
	1 2 3 4 5 6						
1 System Power	1080: 75W	1120: 115W	1160: 150W		1200: 190W	1240: 230W	
2 Light Distribution	A3						
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K		
4 Housing Color	CG: Cold Grey		SG: Silver Grey		BK: Black		DB: Dark Blue
5 Input Voltage	A22: AC 220-240 V				V27: AC 120-277V		
6 Control Mode	0: Without	1: Timer	2: ZigBee	6: Photocell	0-10V Dim	Dali Control	PLC



Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : A3L126
Type III

Mini Apollo Series
Street Light

- The Mini Apollo LED street light embraces its solid and slim style, available both in vertical module design and horizontal module design.
- A thermal and optical integrated modular system, multiple options of light distribution.
- Free tool installation and easy maintenance, various control methods, as well as a wide range of applications.



IP 66

Life Time
50,000hrs

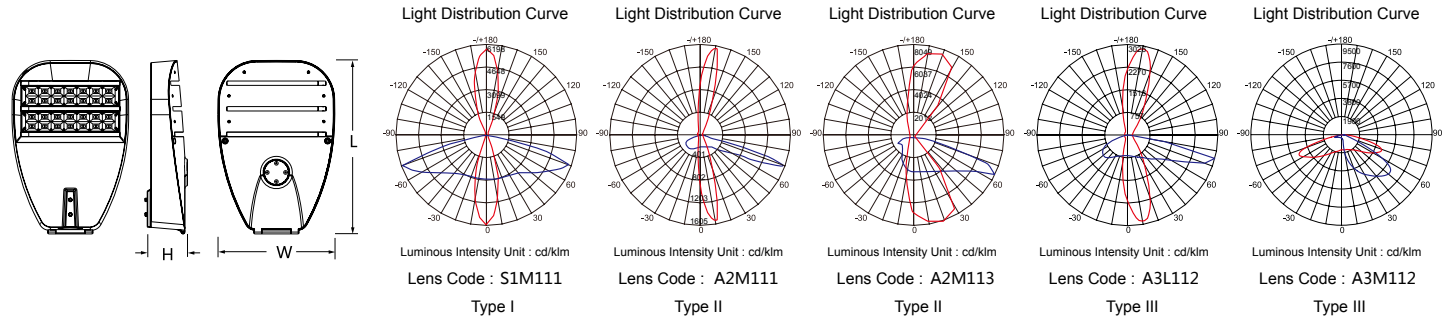
Working Temp
-40°C ~ 55°C

Working Humidity
≤95%

Power Factor
>0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2K2801	33	1	3100	5000±300K	>91%	L474×W319×H110
RL2K2802	62	2	5800	5000±300K	>91%	L474×W319×H110

Ordering Information	RL2K <u>2802</u> <u>A2</u> <u>50</u> CG <u>A22</u> <u>1</u> <u>0</u> 1 2 3 4 5						
1 System Power	2801: 33W		2802: 62W				
2 Light Distribution	A2		A3		S1		
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K		
4 Input Voltage	A22: AC 220-240 V		V27: AC 120-277V		V48: AC 347-480V		
5 Control Mode	0: Without	1: Timer	2: ZigBee	Photocell	0-10V Dim	Dali Control	PLC



Mini Apollo Series
Street Light

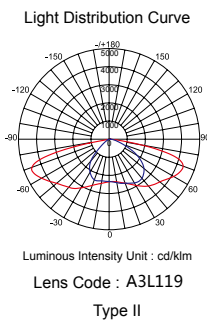
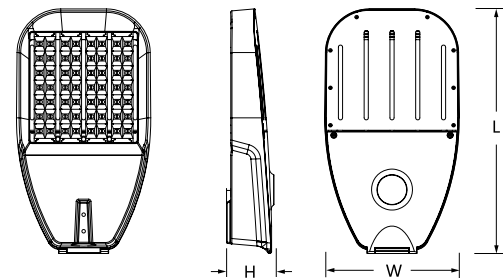
- The Mini Apollo LED street light embraces its solid and slim style, available both in vertical module design and horizontal module design.
- A thermal and optical integrated modular system, multiple options of light distribution.
- Free tool installation and easy maintenance, various control methods, as well as a wide range of applications.



IP 66  Life Time 50,000hrs  Working Temp -40°C ~ 55°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2P2803	93	3	8800	5000±300K	>91%	L589×W323×H114
RL2P2804	123	4	12300	5000±300K	>92%	L589×W323×H114

Ordering Information	RL2P <u>2802</u> <u>A2</u> <u>50</u> CG <u>A22</u> 1 <u>0</u> 1 2 3 4 5						
1 System Power	2803: 93W			2804: 123W			
2 Light Distribution	A3						
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K		
4 Input Voltage	A22: AC 220-240 V		V27: AC 120-277V		V48: AC 347-480V		
5 Control Mode	0: Without	1: Timer	2: ZigBee	Photocell	0-10V Dim	Dali Control	PLC



Jupiter Series
Street Light

- Adopting integrated outline design and the shape is compact and elegant.
- With instant startup and cozy lighting output, it is ensured with excellent performance.
- Long lifespan, high efficiency and economic in cost make it an environmentally friendly product.
- Various applications like roads in countryside, park and residential area.



IP 65

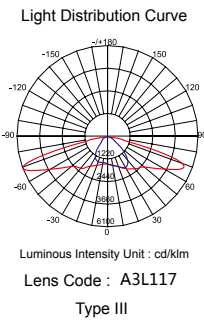
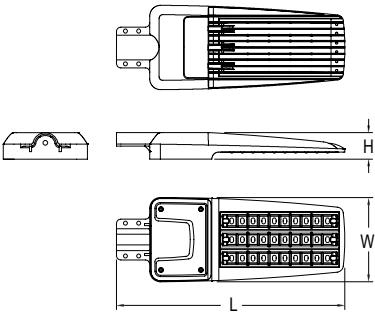
Life Time
50,000hrs

Working Temp
-40°C ~ 55°C

Working Humidity
≤95%

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2N2001	22	1	1800	5000±300K	>92%	L515×W190×H60
RL2N2002	45	2	3600	5000±300K	>92%	L515×W190×H60
RL2N2003	67	3	5400	5000±300K	>92%	L515×W190×H60

Ordering Information	RL2N 2003 A3 50 DB V27 1 1
1 System Power	2001: 22W 2002: 45W 2003: 67W
2 Light Distribution	A3
3 Color Temp	30: 3000±300K 40: 4000±300K 50: 5000±300K
4 Housing Color	CG: Cold Grey SG: Silver Grey BK: Black DB: Dark Blue
5 Input Voltage	A22: AC 220-240 V V27: AC 120-277V
6 Control Mode	0: Without 1: Timer 2: ZigBee 6: Photocell 0-10V Dim Dali Control PLC



MINI-1 Series
Street Light

- Integrated die-casting aluminum design ensures heat dissipation.
- High transmission glass and high-reflection coating increase light output.
- Die-casting aluminum housing and stainless steel screws enhance lamp life span.
- Surge protection device ensures driver and LEDs from being damaged.
- Simple structure gives high lamp performance.



IP 65

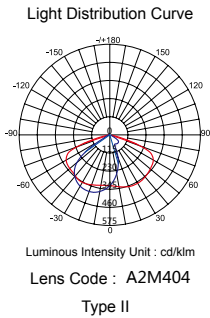
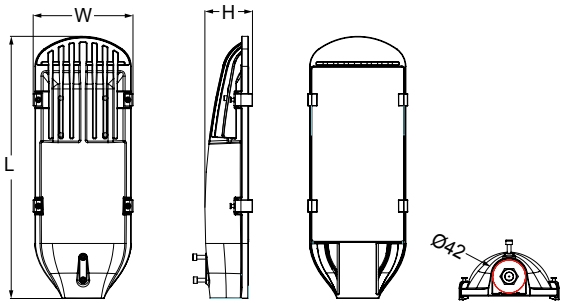
Life Time
50,000hrs

Working Temp
-40°C ~ 55°C

Working Humidity
≤ 95%

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL283001	20	1	2200	5000K	> 92%	L343xW130.6xH62.3
RL283001	30	1	3300	5000K	> 92%	L343xW130.6xH62.3

Ordering Information	RL28 <u>3001</u> <u>A2</u> <u>50</u> <u>DB</u> <u>V27</u> <u>1</u> <u>1</u>							
	1	2	3	4	5	6		
1 System Power	3001: 20W				3001: 30W			
2 Light Distribution	A2							
3 Color Temp	30: 3000±300K			40: 4000±300K		50: 5000±300K		
4 Housing Color	CG: Cold Grey		SG: Silver Grey		BK: Black		DB: Dark Blue	
5 Input Voltage	A22: AC 220-240 V				V27: AC 120-277V			
6 Control Mode	0: Without	1: Timer	2: ZigBee	6: Photocell	0-10V Dim	Dali Control	PLC	



Eagle Series
Street Light

- Light-weight, elegant design.
- High quality COB light engine ensures stable light output.
- Accurate light distribution enables high utilization of light.
- Low-glare, high uniformity.
- High light efficacy, long life span, maintenance-free.



IP 65

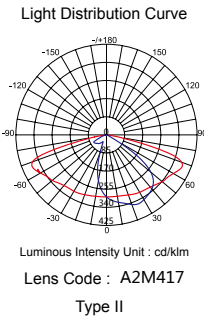
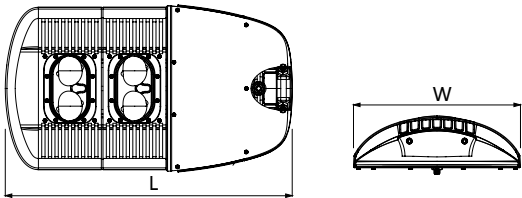
Life Time
50,000hrs

Working Temp
-40°C ~ 55°C

Working Humidity
≤ 95%

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2Y5002	100	4	11000	4000K	> 92%	L539xW313xH94
RL2Y5003	180	6	19500	4000K	> 92%	L656xW317xH94

Ordering Information	RL2Y 5002 A2 50 DB V27 1 1
1 System Power	5002: 100W 5003: 180W
2 Light Distribution	A2
3 Color Temp	30: 3000±300K 40: 4000±300K 50: 5000±300K
4 Housing Color	CG: Cold Grey SG: Silver Grey BK: Black DB: Dark Blue
5 Input Voltage	A22: AC 220-240 V V27: AC 120-277V
6 Control Mode	0: Without 1: Timer 2: ZigBee 6: Photocell 0-10V Dim Dali Control PLC



Tunnel Light



Artemis Series
Tunnel Light

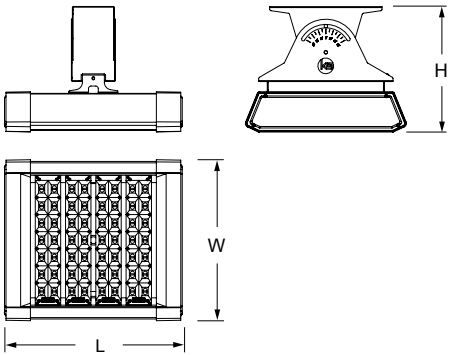
- Aluminum alloy housing and electrostatic sprayed surface give good resistance to corrosion, complying with RoHS standard.
- Built-in chimney effect thermal management system could solute the decrease of heat dissipation ability caused by dirt retention.
- Modular structure could be applied for power variation by the increase or decrease of the modules.
- Glareless lighting with Patented light distribution technology, safe for driving.
- Fast plug-in-out connector ensures a much easier maintenance.



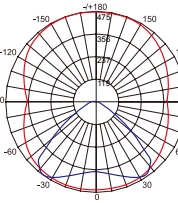
IP 66  Life Time 50,000hrs  Working Temp -40°C ~ 55°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
TL2R2801	33	1	3100	5000±300K	>91%	L221×W330×H267
TL2R2802	62	2	5800	5000±300K	>91%	L253×W330×H267
TL2R2803	93	3	8800	5000±300K	>91%	L315×W330×H267
TL2R2804	123	4	12300	5000±300K	>92%	L377×W330×H267
TL2R2805	155	5	15500	5000±300K	>92%	L439×W330×H267
TL2R2806	185	6	18500	5000±300K	>92%	L501×W330×H267
TL2R2807	216	7	21600	5000±300K	>92%	L563×W330×H267
TL2R2808	246	8	24600	5000±300K	>92%	L625×W330×H267
TL2R2809	277	9	27700	5000±300K	>92%	L687×W330×H267
TL2R2810	308	10	30800	5000±300K	>92%	L749×W330×H267

Ordering Information	TL2R <u>2808</u> <u>A2</u> <u>50</u> <u>MB</u> <u>V27</u> 2 0					
	1	2	3	4	5	
1 System Power	2801: 33W 2802: 62W	2803: 93W 2804: 123W	2805: 155W 2806: 185W	2807: 216W 2808: 246W	2809: 277W 2808: 308W	
2 Light Distribution	A2			S1		
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K	
4 Housing Color	MB: Matt Black			SG: Silver Grey		
5 Input Voltage	A22: AC 220-240 V		V27: AC 120-277V		V48: AC 347-480V	

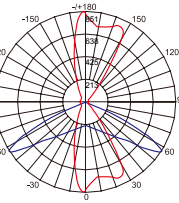


Light Distribution Curve



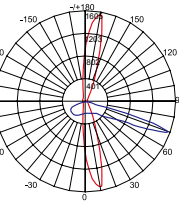
Luminous Intensity Unit : cd/km
Lens Code : S1S112
Type I

Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : A2S111
Type II

Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : A2M111
Type II

Apollo 2 Series
Tunnel Light

- Super industrial design, streamline and elegant appearance.
- Adopt modular design with compact structure, lightness for easy maintenance.
- Circular module with surface self-clean function.
- Light distribution precision, high utilization of light, more energy saving.
- Lightning surge prevention system ensures reliability and stability.



IP 65

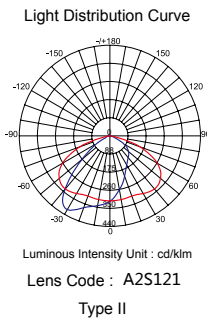
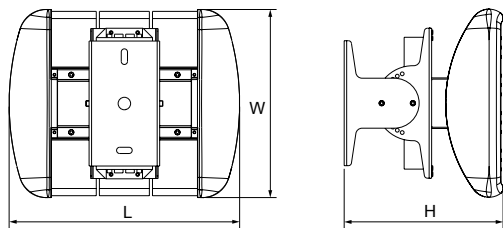
Life Time
50,000hrs

Working Temp
-40°C ~ 55°C

Working Humidity
≤ 95%

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
TL2K1080	75	2	7500	4000K	>92%	L284xW301xH254
TL2K1120	115	3	11500	4000K	>92%	L369xW301xH254
TL2K1160	150	4	15000	4000K	>92%	L454xW301xH254
TL2K1240	230	6	23000	4000K	>92%	L624xW301xH254

Ordering Information	TL2K <u>1080</u> <u>A2</u> <u>50</u> <u>DB</u> <u>V27</u> <u>1</u> <u>1</u>						
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
1 System Power	1080: 75W	1120: 115W		1160: 150W		1240: 230W	
2 Light Distribution	A2						
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K		
4 Housing Color	CG: Cold Grey	SG: Silver Grey		BK: Black		DB: Dark Blue	
5 Input Voltage	A22: AC 220-240 V				V27: AC 120-277V		
6 Control Mode	0: Without	1: Timer	2: ZigBee	6: Photocell	0-10V Dim	Dali Control	PLC



Wallpack Light



Venus Series
Wallpack Light

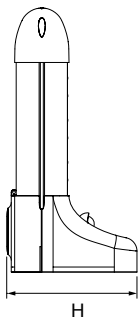
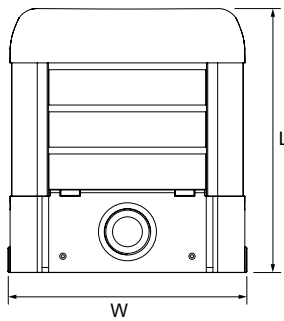
- Applications: Commercial, residential areas, factories, parking lots.
- Modular LED structure of LED light source, maximum up to 90W.
- Optional accessories of photocell and infrared sensor.
- 10%, 30%, 60%, 100% dimming control for saving energy.
- Different light distributions available.



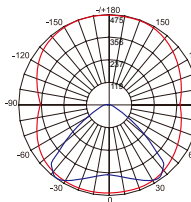
IP 66  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
RL2W2801	33	1	3100	5000±300K	>91%	L264×W352×H192
RL2W2802	62	2	5800	5000±300K	>91%	L326×W352×H192
RL2W2803	93	3	8800	5000±300K	>91%	L388×W352×H192

Ordering Information	RL2W <u>2803</u> <u>A2</u> <u>50</u> DG <u>V27</u> <u>2</u> <u>0</u>								
	1	2	3		4			5	
1 System Power	2801: 33W				2802: 62W			2803: 93W	
2 Light Distribution	S1				S7			A3	
3 Color Temp	30: 3000±300K				40: 4000±300K			50: 5000±300K	
4 Input Voltage	A22: AC 220-240V				V27: AC 120-277V			V48: AC 347-480V	
5 Control Mode	0: Without				Photocell			8: Infrared	

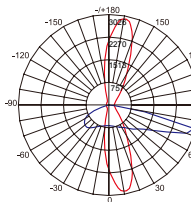


Light Distribution Curve



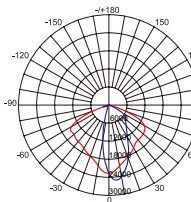
Luminous Intensity Unit : cd/km
Lens Code : S1S112
Type I

Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : A3L112
Type III

Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : S7M111
Type VII

Artemis Series
Wallpack Light

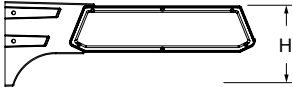
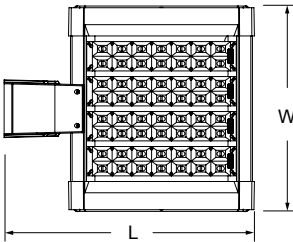
- Uniform luminance, glare-free, applicable for parking lot lighting.
- Aluminum alloy, high corrosion resistance and weather-resistance.
- Built-in chimney effect thermal management system with self-cleaning effect and reliable performance.
- Patented removable-modular design for power variation.



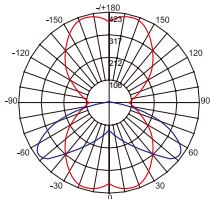
IP 66  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity < 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
FL2F28012	33	1	3100	5000±300K	>91%	L229×W445×H154
FL2F28022	62	2	5800	5000±300K	>91%	L253×W445×H154
FL2F28032	93	3	8800	5000±300K	>91%	L315×W445×H154
FL2F28042	123	4	12300	5000±300K	>92%	L377×W445×H154
FL2F28052	155	5	15500	5000±300K	>92%	L439×W445×H154
FL2F28062	185	6	18500	5000±300K	>92%	L501×W445×H154
FL2F28072	216	7	21600	5000±300K	>92%	L563×W445×H154
FL2F28082	246	8	24600	5000±300K	>92%	L625×W445×H154
FL2F28092	277	9	27700	5000±300K	>92%	L687×W445×H154
FL2F28102	308	10	30800	5000±300K	>92%	L749×W445×H154

Ordering Information	FL2F <u>2806</u> <u>S1</u> <u>50</u> <u>DG</u> <u>V27</u> <u>2</u> <u>0</u>					
	1	2	3	4	5	
1 System Power	2801: 33W 2802: 62W	2803: 93W 2804: 123W	2805: 155W 2806: 185W	2807: 216W 2808: 246W	2809: 277W 2810: 308W	
2 Light Distribution	A2			S1		
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K	
4 Housing Color	MB: Matt Black		DG: Dark Grey		WH: White	
5 Input Voltage	A22: AC 220-240V		V27: AC 120-277V		V48: AC 347-480V	

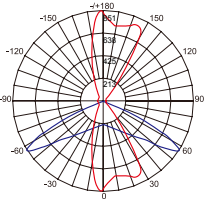


Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S1S113
Type I

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : A2S111
Type II

Flood Light



Artemis Series
Flood Light

- Aluminum alloy, high corrosion resistance and weather-resistance
- Built-in chimney effect thermal management system with self-cleaning effect and reliable performance.
- Patented removable-module design for power variation.
- Mounting bracket with marker for angle adjustment.

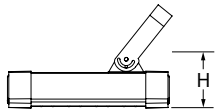
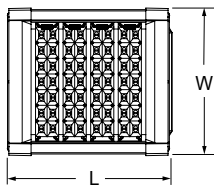


IP 66

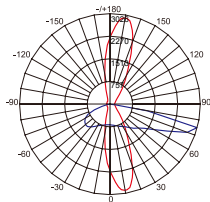
Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
FL2F28010	33	1	3100	5000±300K	>91%	L229×W330×H259
FL2F28020	62	2	5800	5000±300K	>91%	L253×W330×H259
FL2F28030	93	3	8800	5000±300K	>91%	L315×W330×H259
FL2F28040	123	4	12300	5000±300K	>92%	L337×W330×H259
FL2F28050	155	5	15500	5000±300K	>92%	L439×W330×H259
FL2F28060	185	6	18500	5000±300K	>92%	L501×W330×H259
FL2F28070	216	7	21600	5000±300K	>92%	L563×W330×H259
FL2F28080	246	8	24600	5000±300K	>92%	L625×W330×H259
FL2F28090	277	9	27700	5000±300K	>92%	L687×W330×H259
FL2F28100	308	10	30800	5000±300K	>92%	L749×W330×H259

Ordering
Information

Ordering Information	FL2F <u>2803</u> <u>A2</u> <u>50</u> <u>DG</u> <u>V27</u> <u>0</u> <u>0</u>						
	1	2	3	4	5		
1 System Power	2801: 33W 2802: 62W	2803: 93W 2804: 123W	2805: 155W 2806: 185W	2807: 216W 2808: 246W	2809: 277W 2810: 308W		
2 Light Distribution	A3		A7		S1		
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K		
4 Housing Color	MB: Matt Black				DG: Dark Grey		
5 Input Voltage	A22: AC 220-240V		V27: AC 120-277V		V48: AC 347-480V		

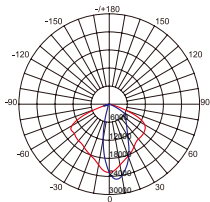


Light Distribution Curve



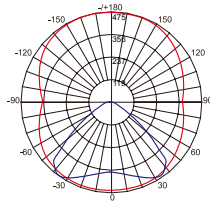
Luminous Intensity Unit : cd/klm
Lens Code : A3L112
Type III

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : A7M111
Type VII

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S1S112
Type IV

Black Diamond Series
Flood Light

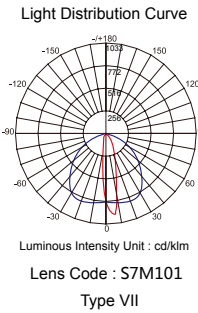
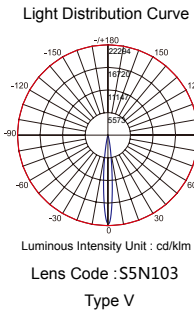
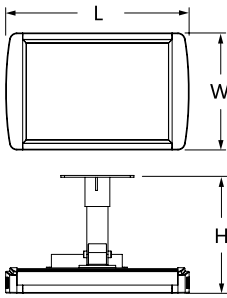
- Rectangular shaped, simple appearance with classic black and white color match providing a comfortable vision
- Patented heat dissipation system guarantees steady performance and long lifespan.
- Narrow light angle, uniform light spots, wide illumination area.
- Projection angle adjustable according to different requirements, convenient and firm installation.



IP 65  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	#of LEDs	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
FL1N1056	64	56	4700	5000±300K	>88%	L308×W320×H321
FL1N1070	78	70	5900	5000±300K	>90%	L356×W320×H321
FL1N1084	93	84	7100	5000±300K	>91%	L405×W320×H321
FL1N1098	108	98	8800	5000±300K	>91%	L453×W320×H321
FL1N1112	123	112	9400	5000±300K	>91%	L502×W320×H321
FL1N1126	139	126	10700	5000±300K	>91%	L550×W320×H321
FL1N1140	154	140	11800	5000±300K	>91%	L599×W320×H321
FL1N1154	169	154	13000	5000±300K	>91%	L647×W320×H321
FL1N1168	185	168	14200	5000±300K	>91%	L696×W320×H321

Ordering Information	FL1N <u>1112</u> <u>S5</u> <u>50</u> MB <u>V24</u> 2 0					
	1	2	3	4		
1 System Power	1056: 64W 1070: 78W	1084: 93W 1098: 108W	1112: 123W 1126: 139W	1140: 154W 1154: 169W	1168: 185W	
2 Light Distribution	S5			S7		
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K	
4 Input Voltage	V24: AC 100-240V			V27: AC 120-277V		

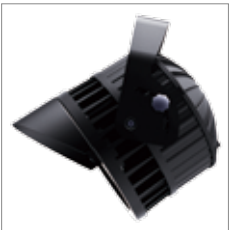


Projection Light



FL1J Projection Light

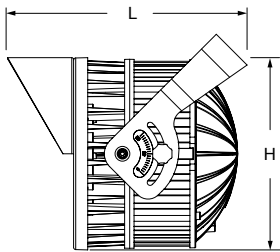
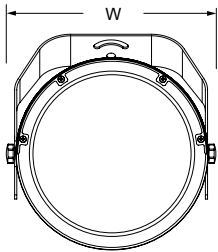
- Matt black appearance, lens shade optional.
- Aluminum alloy adopted, good corrosion and shock resistance with anodized sprayed coating.
- Accurate light distribution design, highly focused light beam.
- Projection angle adjustable according to the height of the object, single color and full color optional solutions.
- High IP rate to adapt in harsh environment.



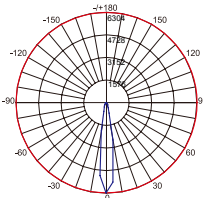
IP 65    

Item No.	System Power (W)	#of LEDs	Light Color	Driver Efficiency	Dimension(mm)
FL1J1036	42	36	Single / FC	>91%	L330×W289×H265
FL1J1048	52	48	Single / FC	>91%	L330×W289×H265
FL1J1060	68	60	Single / FC	>92%	L330×W289×H265
FL1JA060	90	60	Single / FC	>92%	L330×W289×H265

Ordering Information	FL1J 1036 S5 <u>FC</u> <u>MB</u> <u>V24</u> 2 <u>0</u>					
	1	2	3	4		
1 Color Temp/ Light Color	30: 3000±300K 45: 4500±300K 50: 5000±300K RR: Red GG: Green BB: Blue YY: Yellow AM: Amber FC: Full Color					
2 Housing Color	MB: Matt Black SG: Silver Grey					
3 Input Voltage	V24: AC 100-240V					
4 Control Mode	0: Without 3: DMX512					

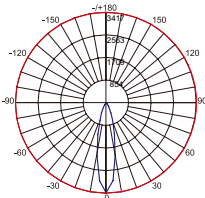


Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : S5001
Type V

Light Distribution Curve



Luminous Intensity Unit : cd/km
Lens Code : S5003
Type V



Artemis Series Projection Light

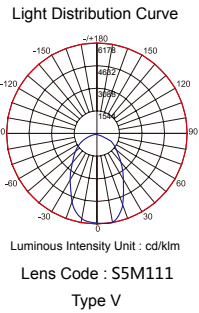
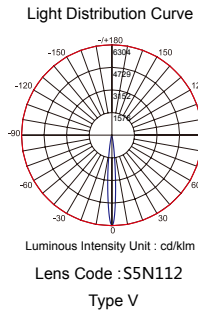
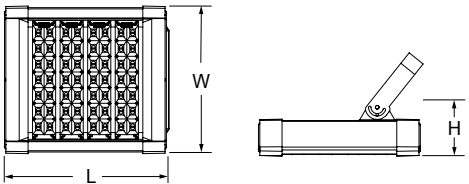
- Aluminum alloy, high corrosion resistance and weather-resistance
- Built-in chimney effect thermal management system with self-cleaning effect and reliable performance.
- Patented removable-module design for power variation.
- Mounting bracket with marker for angle adjustment.



IP 66  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Module Q'ty	Lumen Output 5000K (lm)	CCT	Driver Efficiency	Dimension(mm)
FL2F28010	33	1	3100	5000±300K	>91%	L229×W330×H259
FL2F28020	62	2	5800	5000±300K	>91%	L253×W330×H259
FL2F28030	93	3	8800	5000±300K	>91%	L315×W330×H259
FL2F28040	123	4	12300	5000±300K	>91%	L337×W330×H259
FL2F28050	155	5	15500	5000±300K	>91%	L439×W330×H259
FL2F28060	185	6	18500	5000±300K	>91%	L501×W330×H259
FL2F28070	216	7	21600	5000±300K	>91%	L563×W330×H259
FL2F28080	246	8	24600	5000±300K	>91%	L625×W330×H259
FL2F28090	277	9	27700	5000±300K	>91%	L687×W330×H259
FL2F28100	308	10	30800	5000±300K	>91%	L749×W330×H259

Ordering Information	FL2F <u>2803</u> <u>A2</u> <u>50</u> <u>DG</u> <u>V27</u> 0 0					
	1		2 3		4 5	
1 System Power	2801: 33W 2802: 62W	2803: 93W 2804: 123W	2805: 155W 2806: 185W	2807: 216W 2809: 246W	2809: 277W 2810: 308W	
2 Light Distribution	A3		A4		S1	
3 Color Temp	30: 3000±300K		40: 4000±300K		50: 5000±300K	
4 Housing Color	MB: Matt Black			DG: Dark Grey		
5 Input Voltage	A22: AC 220-240V		V27: AC 120-277V		V48: AC 347-480V	



FL1K Projection Light

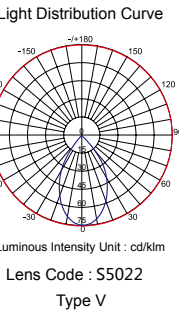
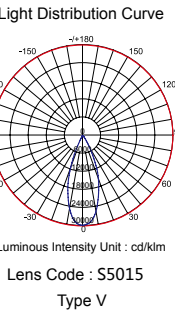
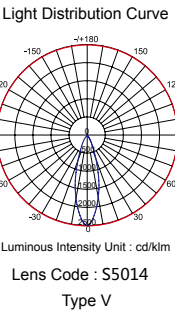
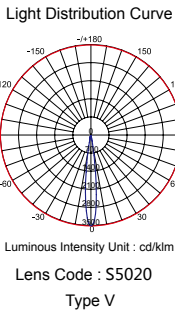
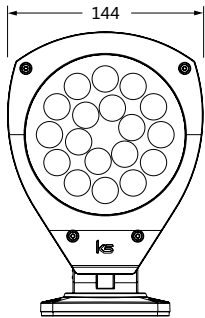
- Small size, easy to hide, beam angle adjustable.
- The angle of the base adjustable.
- Die-casting aluminum material, good sealing performance, uniform heat dissipation.



IP 65  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor >0.95

Item No.	System Power (W)	#of LEDs	Light Color	Driver Efficiency	Dimension(mm)
FL1K1018	20	18	Single / FC	DC24V	L103×W144×H210
FL1KA018	30	18	Single / FC	DC24V	L103×W144×H210

Ordering Information	FL1K 1018 S5 <u>FC</u> MB <u>D24</u> 2 <u>0</u>					
	1 2 3					
1 Color Temp/ Light Color	30: 3000±300K		45: 4500±300K		50: 5000±300K	
	RR: Red	GG: Green	BB: Blue	YY: Yellow	AM: Amber	FC: Full Color
2 Input Voltage	D24: DC 24V					
3 Control Mode	0: Without			3: DMX512		





FL71 Projection Light

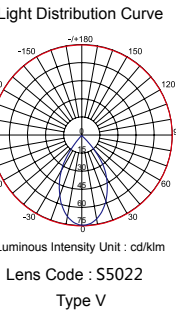
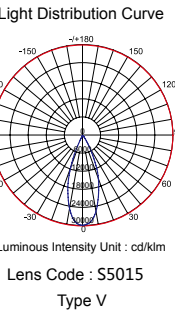
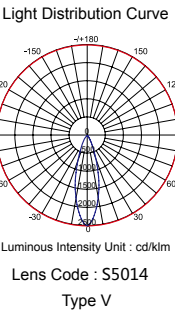
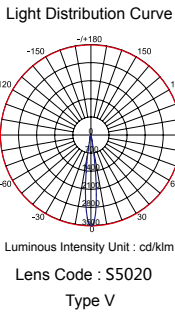
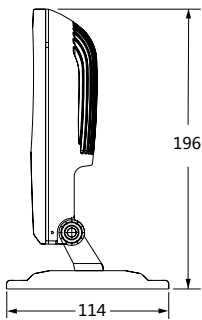
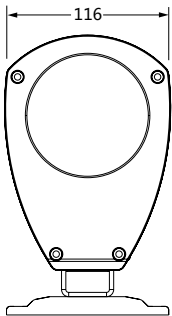
- Unique appearance, angle adjustable.
- Small size, concealed installation.
- Beam angle adjustable.



IP 65  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	#of LEDs	Light Color	Driver Efficiency	Dimension(mm)
FL711009	10	9	Single / FC	DC24V	L114×W116×H196
FL71A009	16	9	Single / FC	DC24V	L114×W116×H196

Ordering Information	FL71 1009 S5 <u>FC</u> <u>MB</u> <u>D24</u> 0 <u>0</u>						
	1234						
1 Color Temp/ Light Color	30: 3000±300K 45: 4500±300K 50: 5000±300K RR: Red GG: Green BB: Blue YY: Yellow AM: Amber FC: Full Color						
2 Housing Color	MB: Matt Black SG: Silver Grey						
3 Input Voltage	D24: DC 24V						
4 Control Mode	0: Without 3: DMX512						





FL69 Projection Light

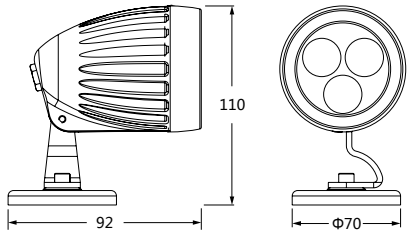
- Unique appearance, angle adjustable.
- Small size, concealed installation.
- Beam angle adjustable.



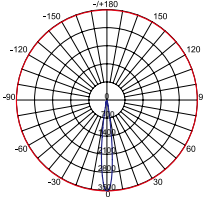
IP 65    

Item No.	System Power (W)	#of LEDs	Light Color	Driver Efficiency	Dimension(mm)
FL691003	4	3	Single	DC24V	Φ70×W92×H110

Ordering Information	FL69 3001 S5 <u>FC</u> MB <u>D24</u> 0 <u>0</u>					
	<u>1</u> <u>2</u> <u>3</u>					
1 Color Temp/ Light Color	30: 3000±300K		45: 4500±300K		50: 5000±300K	
	RR: Red	GG: Green	BB: Blue	YY: Yellow	AM: Amber	Full Color
2 Input Voltage	D24: DC 24V					
3 Control Mode	0: Without					

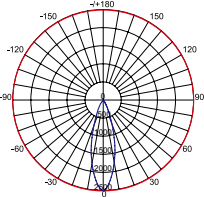


Light Distribution Curve



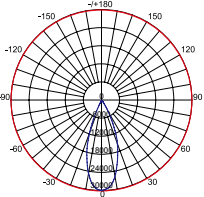
Luminous Intensity Unit : cd/klm
Lens Code : S5020
Type V

Light Distribution Curve



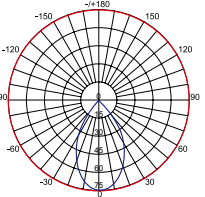
Luminous Intensity Unit : cd/klm
Lens Code : S5014
Type V

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S5015
Type V

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S5022
Type V

Garden Light



PL1A Garden Light

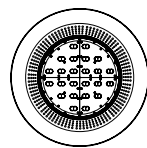
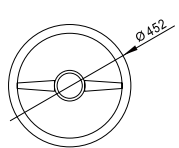
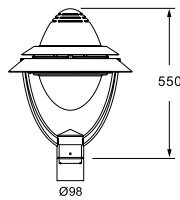
- Olive-shape design increasing vivid atmospheres in parks.
- High uniformity. Create safe atmospheres in the park.
- Solar power available to achieve secondary energy saving.
- Long lifetime design, environment-friendly.



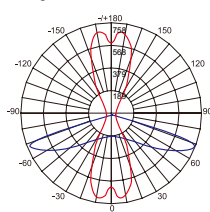
IP 65  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Lumen Output 4000K (lm)	CCT	Driver Efficiency	Dimension(mm)
PL1A1012	12	1100	4000±300K	>88%	Φ452×H550
PL1A1024	24	2200	4000±300K	>88%	Φ452×H550
PL1A1036	36	3300	4000±300K	>88%	Φ452×H550
PL1A1048	48	4400	4000±300K	>88%	Φ452×H550
PL1A1060	60	5500	4000±300K	>88%	Φ452×H550

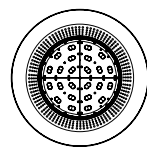
Ordering Information	PL1A <u>1036</u> S1 <u>45</u> <u>A22</u> <u>BK</u> 1 0			
	1	2	3	4
1 System Power	1012: 12W 1024: 24W	1036: 36W 1048: 48W	1060: 60W	
2 Color Temp	30: 3000±300K	40: 4000±300K	45: 4500±300K	50: 5000±300K
3 Input Voltage	A22: AC 220-240V		V27: AC 120-277V	
4 Housing Color	BK: Black	MB: Matt Black	WH: White	SG: Silver Grey



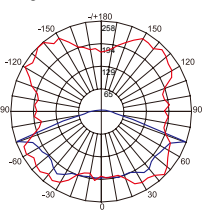
Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S1M201
Type I
Line Arrangement



Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S1M201
Type I
Round Arrangement

PL1F Garden Light

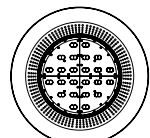
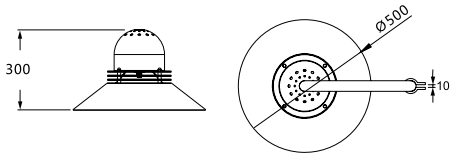
- European classical style , dress-hat shape design.
- Symmetrical light distribution with high uniformity.
- Optional solar-powered driver to achieve energy saving.



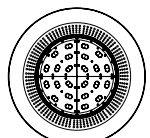
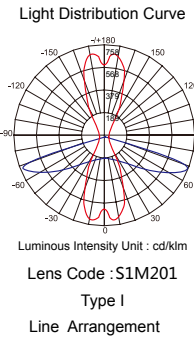
IP 65  Life Time 50,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%  Power Factor > 0.95

Item No.	System Power (W)	Lumen Output 4000K (lm)	Light Color	Driver Efficiency	Dimension(mm)
PL1F1012	12	1100	4000±300K	> 88%	Φ500×H300
PL1F1024	24	2200	4000±300K	> 88%	Φ500×H300
PL1F1036	36	3300	4000±300K	> 88%	Φ500×H300
PL1F1048	48	4400	4000±300K	> 88%	Φ500×H300
PL1F1060	60	5500	4000±300K	> 88%	Φ500×H300

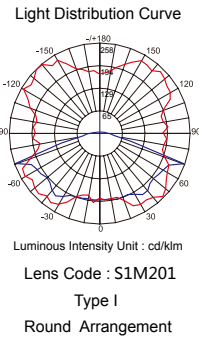
Ordering Information	PL1F <u>1036</u> S1 <u>45</u> <u>A22</u> <u>BK</u> 1 0			
	1	2	3	4
1 System Power	1012: 12W 1024: 24W	1036: 36W 1048: 48W	1060: 60W	
2 Color Temp	30: 3000±300K	40: 4000±300K	45: 4500±300K	50: 5000±300K
3 Input Voltage	A22: AC 220-240V		V27: AC 120-277V	
4 Housing Color	BK: Black	MB: Matt Black	WH: White	SG: Silver Grey



Line



Round



Bollard Light



BL1B Bollard Light

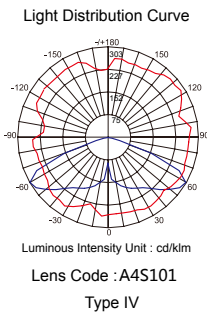
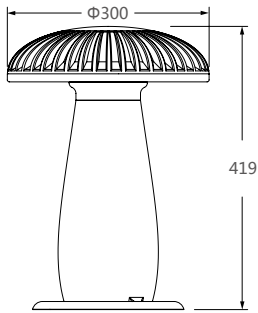
- Patented mushroom design.
- Beautification and illumination functions are available with soft light and asymmetric light distribution for guidance and safety during night time.
- Safety treatment for sharp edges to prevent children injury.



IP 65  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%

Item No.	System Power (W)	#of LEDs	CCT	Input Voltage	Dimension(mm)
BL1B1010	12	10	4000±300K	AC 100-240V	Φ300xH419

Ordering Information	BL1B 1010 A4 <u>50</u> <u>CG</u> V24 0 0				
	<u>1</u> <u>2</u>				
1 Color Temp	30: 3000±300K	40: 4000±300K	45: 4500±300K	50: 5000±300K	
2 Housing Color	MB: Matt Black	CG: Cold Grey	WH: White		



BL1D Bollard Light

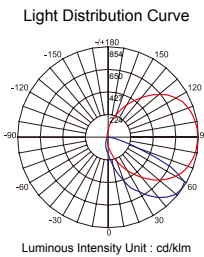
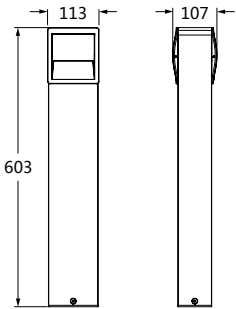
- Super-thin appearance, upright and four-square structure combined with streamline design.
- Module design, easy maintenance. Light can be emitted from single or double side.
- Unique light distribution, slope downward light doesn't affect the night view.
- Easy installation, long lifespan. Environmentally friendly.



IP 67  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%

Item No.	System Power (W)	#of LEDs	CCT	Input Voltage	Dimension(mm)
BL1D1006	6	6	4000±300K	AC 110-240V	L113×W107×H603
BL1DA006	12	6	4000±300K	AC 110-240V	L113×W107×H603

Ordering Information	BL1D <u>1006</u> R4 <u>50</u> <u>CG</u> V24 0 0						
	1		2		3		
1 System Power	1006: 6W			A006: 12W			
2 Color Temp	30: 3045±175K		40: 3985±275K		45: 4503±243K		50: 5028±283K
3 Housing Color	MB: Matt Black			CG: Cold Grey			



Wallwash Light



WW11 Wallwash Light

- Slender shape, lighting large vertical view of the building.
- Two options for light distribution, patented wall washing and narrow beam angle.
- Anodic oxidation process.
- Higher light transmittance with toughened glass.
- The functions of the fixture change with different lens.



IP 65

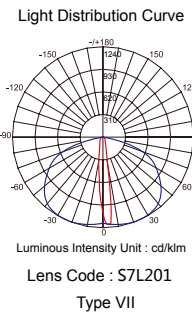
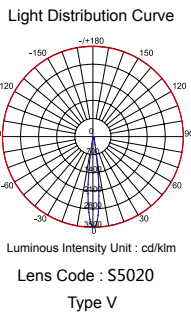
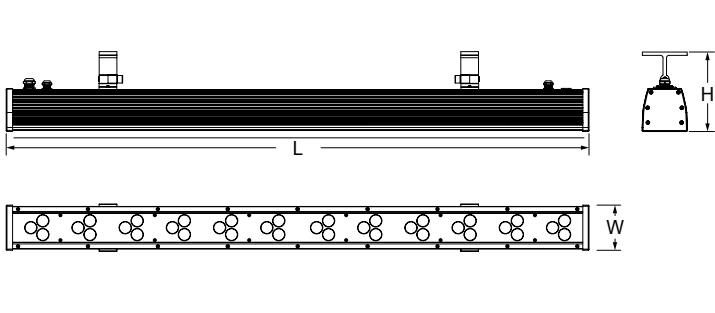
Life Time
30,000hrs

Working Temp
-35°C ~ 50°C

Working Humidity
≤ 95%

Item No.	System Power (W)	#of LEDs	Light Color	Input Voltage	Lamp Dimension(mm)
WW111012	15	12	Single / FC	DC24V	L500×W77×H135
WW111018	22	18	Single / FC	DC24V	L1000×W77×H135
WW111024	30	24	Single / FC	DC24V	L1000×W77×H135
WW111036	42	36	Single / FC	DC24V	L1000×W77×H135
WW111048	55	48	Single / FC	DC24V	L1000×W77×H135

Ordering Information	WW11 1012 S5 40 MB D24 0 0					
	1		2		3	
1 System Power	1012: 15W 1018: 22W		1024: 30W 1036: 42W		1048: 55W	
2 Color Temp/ Light Color	30: 3045±175K RR: Red GG: Green		40: 3985±275K BB: Blue YY: Yellow		50: 5028±283K AM: Amber FC: Full Color	
3 Control Mode	0: Without			3: DMX512		



Types below are to be found in appendix

S5014 Type V

S5015 Type V

S5022 Type V

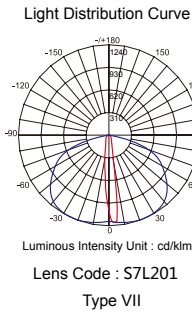
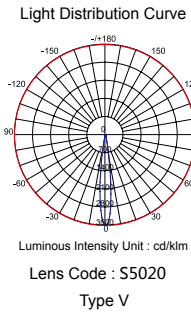
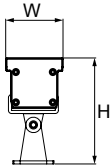
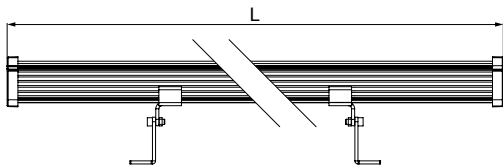
WW53 Wallwash Light

- Higher light transmission, uniform light mixing effect. Top brand high-performance LED chips.
- High-efficiency heat dissipation technology to ensure longer lamp lifespan.
- Aluminium alloy light body, tempered glass cover.



IP 65 Life Time 30,000hrs Working Temp -35°C ~ 60°C Working Humidity ≤ 95%					
Item No.	System Power (W)	#of LEDs	Light Color	Input Voltage	Dimension(mm)
WW531009	10	9	Single / FC	DC24V	L500×W56×H100
WW531012	14	12	Single / FC	DC24V	L500×W56×H100
WW531015	18	15	Single / FC	DC24V	L500×W56×H100
WW531018	20	18	Single / FC	DC24V	L1000×W56×H100
WW531024	27	24	Single / FC	DC24V	L1000×W56×H100
WW531030	34	30	Single / FC	DC24V	L1000×W56×H100
WW531036	40	36	Single / FC	DC24V	L1000×W56×H100

Ordering Information	WW5310 <u>1009</u> S5 <u>40</u> MB D24 2 <u>0</u>					
	1		2		3	
1 System Power	1009: 10W 1012: 14W	1015: 18W 1018: 20W	1024: 27W 1030: 34W		1036: 40W	
2 Color Temp/ Light Color	30: 3045±175K RR: Red	40: 3985±275K GG: Green	BB: Blue	YY: Yellow	50: 5028±283K AM: Amber	FC: Full Color
3 Control Mode	0: Without			3: DMX512		



Types below are to be found in appendix

S5014 Type V
S5015 Type V
S5022 Type V



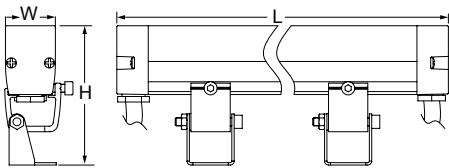
WW1H Wallwash Light

- Slender shape and elegant design to save installation space.
- Adopt integral lens, uniform light output, without dark space.
- Assembling parts angle adjustable to meet different application requirements.

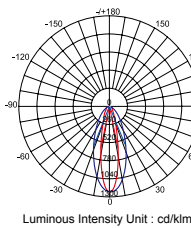


IP 65					
Life Time 30,000hrs Working Temp -35°C ~ 50°C Working Humidity ≤ 95%					
Item No.	System Power (W)	#of LEDs	Light Color	Input Voltage	Dimension(mm)
WW1H4060	20	60	Single / FC	DC24V	L994xW25.4xH71

Ordering Information	WW1H <u>4060</u> S5 <u>40</u> MB D24 2 <u>0</u>
	<u>1</u> <u>2</u> <u>3</u>
1 System Power	4060: 20W
2 Color Temp/ Light Color	30: 3045±175K 40: 3985±275K 50: 5028±283K RR: Red GG: Green BB: Blue YY: Yellow AM: Amber FC: Full Color
3 Control Mode	0: Without 3: DMX512



Light Distribution Curve



In-ground Light



IG1D In-ground Light

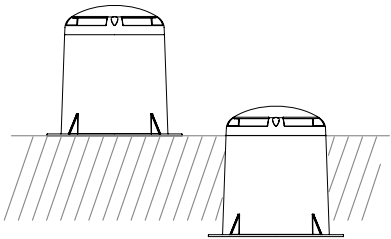
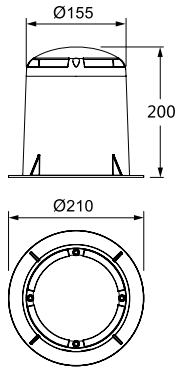
- Long lifespan, low power consumption, low surface temperature
- Aluminum alloy light shell, Corrosion resistance and acid-base resistance.
- Unique light shell structure maintains stable position underground without extrusion for a prolonged period of time.
- Water-proof triple-sealing prevents water or fog penetration in the lights.
- Lighting in four directions to prevent glaring, can bear over 2000kg pressure



IP 68   

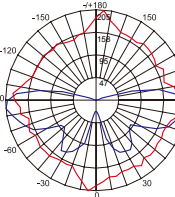
Item NO.	System Power (W)	#of LEDs	Light Color	Input Voltage	LamDimension(mm)
IG1DA004	11	4	Single / FC	AC 110-240	Φ210×H200

Ordering Information	IG1D A004 S5 <u>45</u> SG V24 6 0 1			
1 Color Temp	30: 3045±175K	40: 3985±275K	45: 4503±243K	50: 5028±283K



Two way installation

Light Distribution Curve



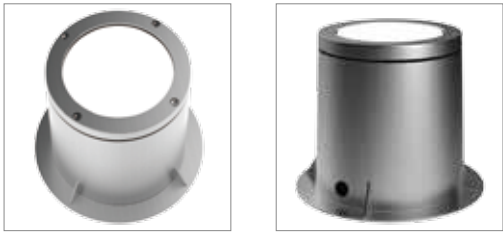
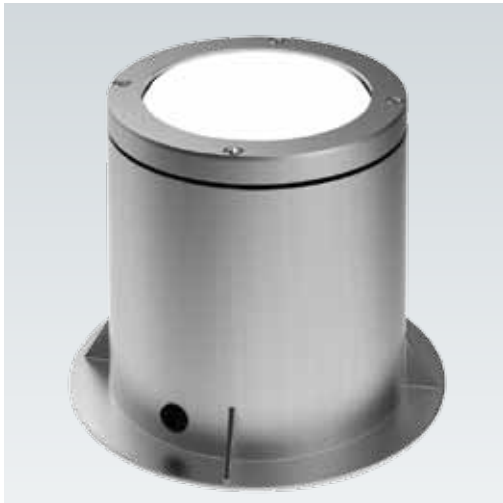
Luminous Intensity Unit : cd/klm

Lens Code : SSN103

Type V

IG1E In-ground Light

- Long lifespan, low power consumption, low surface temperature.
- Alluminum alloy light shell, corrosion resistance and acid-base resistance.
- Unique light shell structure maintains stable position underground without extrusion for a prolonged period of time.
- Water-proof triple-sealing prevents water or fog penetration in the lights.
- Can bear over 1500kg pressure.



IP 68

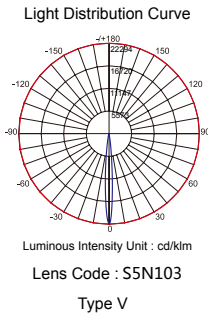
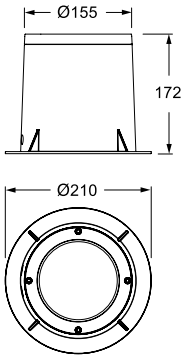
Life Time
30,000hrs

Working Temp
-35°C ~ 50°C

Working Humidity
≤ 95%

Item NO.	System Power (W)	#of LEDs	Light Color	Input Voltage	LamDimension(mm)
IG1EA018	30	18	Single / FC	AC 110-240	Φ210×H172

Ordering Information	IG1E A018 S5 <u>45</u> SG V24 6 0			
	1			
1 Color Temp	30: 3045±175K	40: 3985±275K	45: 4503±243K	50: 5028±283K





IG65 In-ground Light

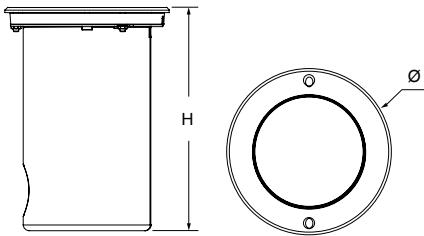
- In ground light emitting area, narrow beam angle, longer lighting distance, much more wider applications.
- Two beam angle available.
- Stainless steel material on the surface , abrasion resistant and anti-corrosion.



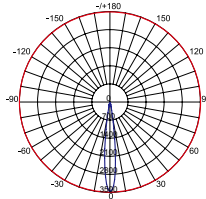
IP 68   

Item NO.	System Power (W)	#of LEDs	Light Color	Input Voltage	Dimension(mm)
IG651003	4	3	Single / FC	DC24V	Φ130×H175
IG651006	9	6	Single / FC	DC24V	Φ130×H175

Ordering Information	IG65 <u>1003</u> S5 <u>45</u> SG D24 6 <u>0</u> 1 2 3					
1 System Power	1003: 4W			1006: 9W		
2 Color Temp	30: 3045±175K RR: Red GG: Green		40: 3985±275K BB: Blue YY: Yellow		50: 5028±283K AM: Amber FC: Full Color	
3 Control Mode	0: without			3: DMX512		

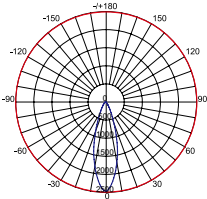


Light Distribution Curve



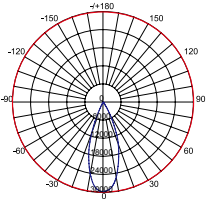
Luminous Intensity Unit : cd/klm
Lens Code : S5020
Type V

Light Distribution Curve



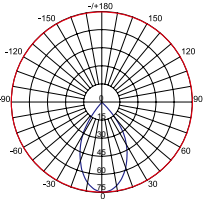
Luminous Intensity Unit : cd/klm
Lens Code : S5014
Type V

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S5015
Type V

Light Distribution Curve



Luminous Intensity Unit : cd/klm
Lens Code : S5022
Type V



CL58 Linear Light

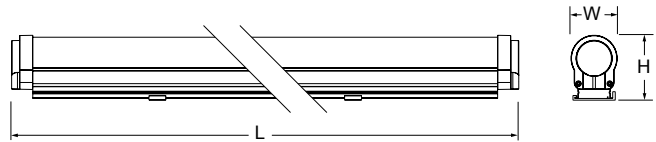
- Milky white lampshade, consistent with architecture style.
- Working in parallel or vertical, different color schemes to create different landscapes via control system.
- Long lifetime, low power, energy-saving and environmentally friendly.
- All in one with high IP protection class.



IP 65   

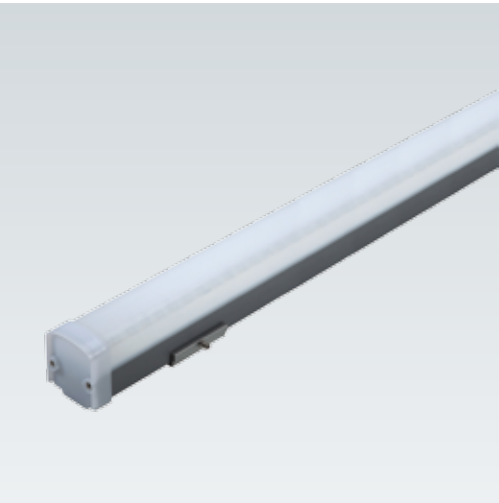
Item NO.	System Power (W)	Light Color	Input Voltage	Dimension(mm)
CL582072	6	Single / FC	DC 24V	L500×W55×H77
CL582144	12	Single / FC	DC 24V	L1000×W55×H77

Ordering Information	CL58 <u>2072</u> S5 <u>45</u> <u>SG</u> D24 0 <u>0</u>					
	1		2		3	
1 System Power	2072: 6W			2144: 12W		
2 Color Temp	30: 3045±175K RR: Red		40: 3985±275K GG: Green		50: 5028±283K BB: Blue YY: Yellow AM: Amber FC: Full Color	
3 Housing Color	WH: White			SG: Silver Grey		
4 Control Mode	0: Without			3: DMX512		



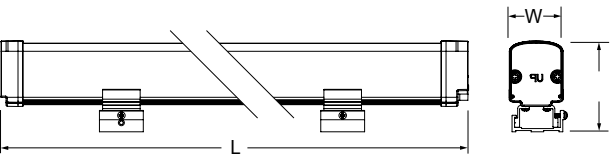
CL61 Linear Light

- Milky white lampshade, consistent with architecture style.
- Working in parallel or vertical, different color schemes to creat different landscapes via control system.
- Long lifetime, low power, energy-saving and environmentally friendly.
- All in one with high IP protection class.



IP 65   				
Item NO.	System Power (W)	Light Color	Input Voltage	Dimension(mm)
CL612072	5	Single / FC	DC 24V	L500×W43×H73
CL612144	10	Single / FC	DC 24V	L996×W43×H73

Ordering Information	CL61 <u>2072</u> S5 <u>45</u> <u>SG</u> D24 0 <u>0</u> 1 2 3 4						
1 System Power	2072: 5W			2144: 10W			
2 Color Temp	30: 3045±175K RR: Red GG: Green		40: 3985±275K BB: Blue YY: Yellow		50: 5028±283K AM: Amber FC: Full Color		
3 Housing Color	WH: White			SG: Silver Grey			
4 Control Mode	0: Without			3: DMX512			



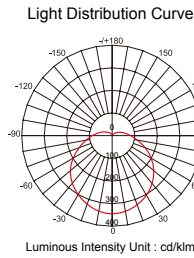
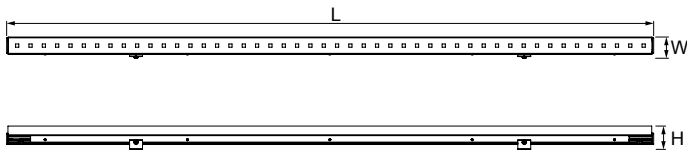
CS1F Linear Light

- Elegant appearance, easy installation, anodized housing.
- SMD5050 light source for super light uniformity. Unique anti-UV cover to create a comfortable visual effect.
- Top-quality components ensure excellent performance.
- Applicable to building decoration with a color-changing and various shape-forming effect.



IP 65  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%					
Item No.	System Power (W)	#of LEDs	Light Color	Input Voltage	Dimension(mm)
CS1F4048	12	48	Single / FC	DC24V	L1000xW32.8xH25
CS1F4060	14.5	60	Single / FC	DC24V	L1000xW32.8xH25

Ordering Information	CS1F <u>4048</u> N0 <u>40</u> SG D24 2 <u>0</u>					
	<u>1</u>	<u>2</u>			<u>3</u>	
1 System Power	4048: 12W			4060: 14.5W		
2 Color Temp	30: 3045±175K		40: 3985±275K		50: 5028±283K	
	RR: Red	GG: Green	BB: Blue	YY: Yellow	AM: Amber	FC: Full Color
3 Control Mode	0: Without			3: DMX512		





OW55/OW58
Pixel Light

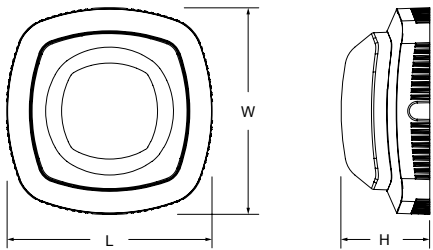
- Compact size and exquisite, easy for installment and several color alternatives.
- Lighting the vertical view of the building
- Several color alternatives, flexible control.
- Safe and easy for installation.
- The cover is anti-UV materials. A better proof for the lifetime.



IP 65   

Item NO.	System Power (W)	Light Color	Input Voltage	Dimension(mm)
OW584018	4	Single / FC	DC 24V	L108×W108×H65
OW554030	6	Single / FC	DC 24V	L202×W202×H82

Ordering Information	<u>OW55</u> <u>4030</u> NO <u>RR</u> DG D24 2 <u>0</u>							
	1	2	3					4
1 Lamp Series	OW55			OW58				
2 System Power	4018: 4W			4030: 6W				
3 Color Temp	30: 3045±175K		40: 3985±275K		50: 5028±283K			
	RR: Red	GG: Green	BB: Blue	YY: Yellow	AM: Amber	FC: Full Color		
4 Control Mode	0: Without			3: DMX512				



OW51 Pixel Light

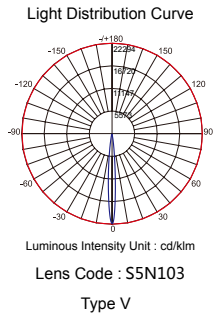
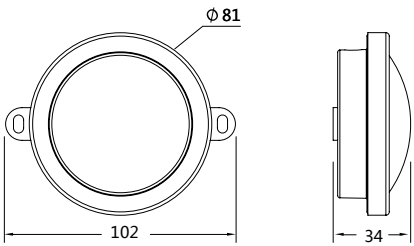
- Adopt integrated heat sink structural design, inner gluing, which speed up the process of heat dissipation, and ensure the luminous efficiency and lifetime.
- Apply 3-in-1 light source SMD5050, with even lighting output, unique anti-UV lampshade of PC and cover of stainless steel, all add up to the totally favorable optical effect.
- With powerful functions, and flexible control, resulting from the unique logarithmic dimming and optical mixing technique.
- Even light output, different CCT optional from single to RGB colors.



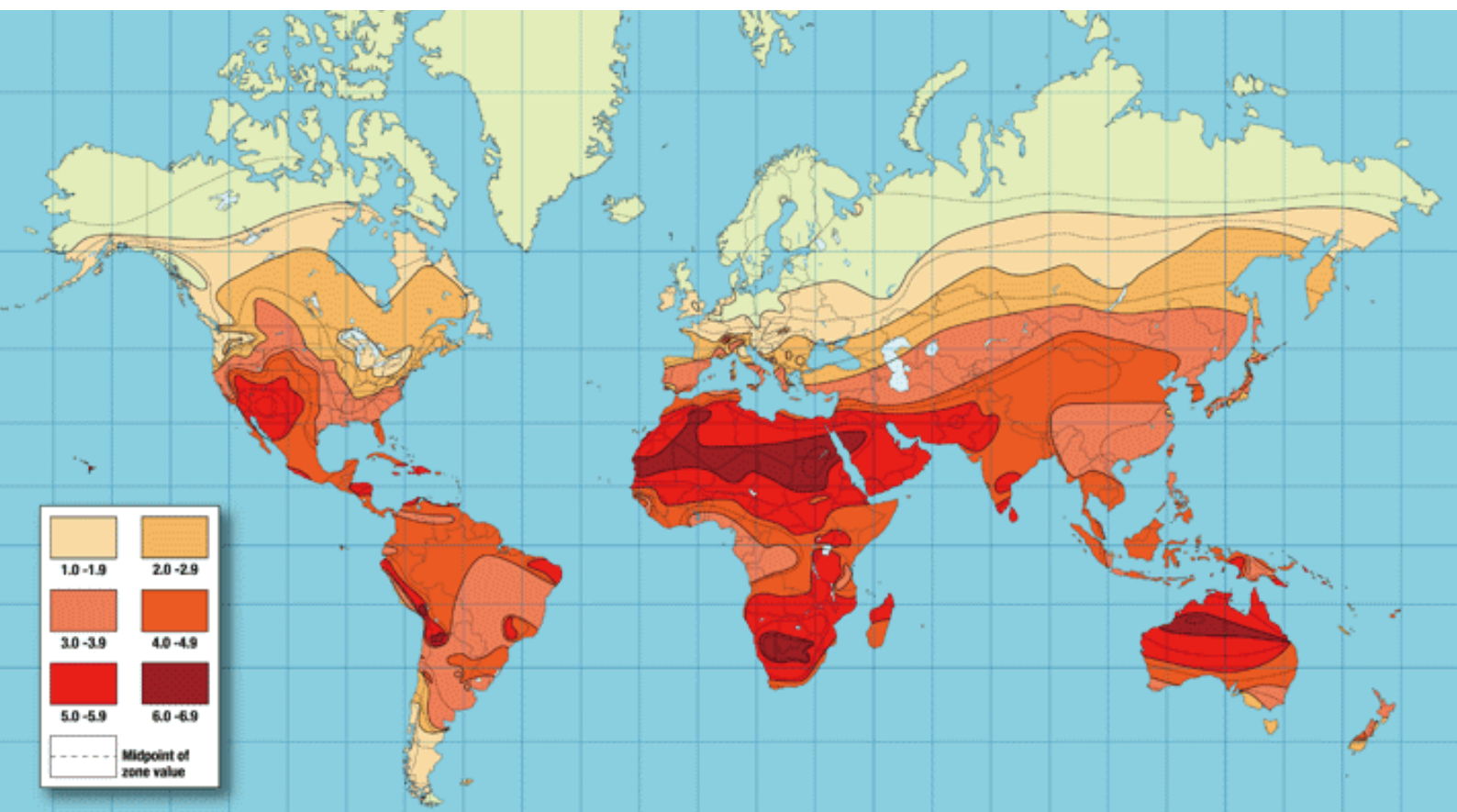
IP 65  Life Time 30,000hrs  Working Temp -35°C ~ 50°C  Working Humidity ≤ 95%

Item NO.	System Power (W)	Light Color	Input Voltage	Dimension(mm)
OW514012	2.5	Single / RGB	DC 24V	L102xH34xW81

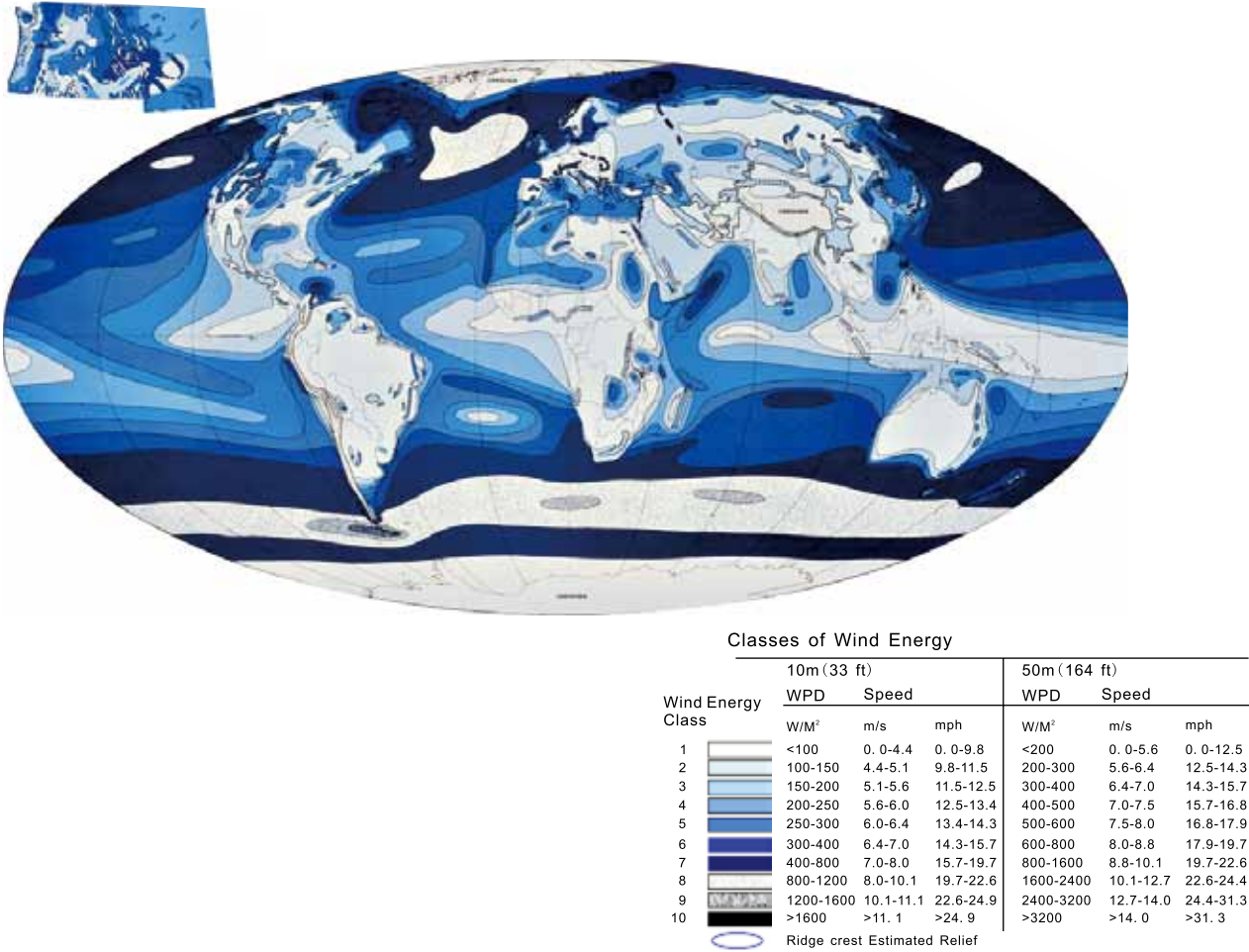
Ordering Information	OW51 4012 NO <u>40</u> DG D24 2 <u>0</u> 1 1 2					
1 Color Temp	30: 3045±175K	40: 3985±275K	50: 5028±283K			
	RR: Red	GG: Green	BB: Blue	YY: Yellow	AM: Amber	FC: Full Color
2 Control Mode	0: Without		3: Serial control			



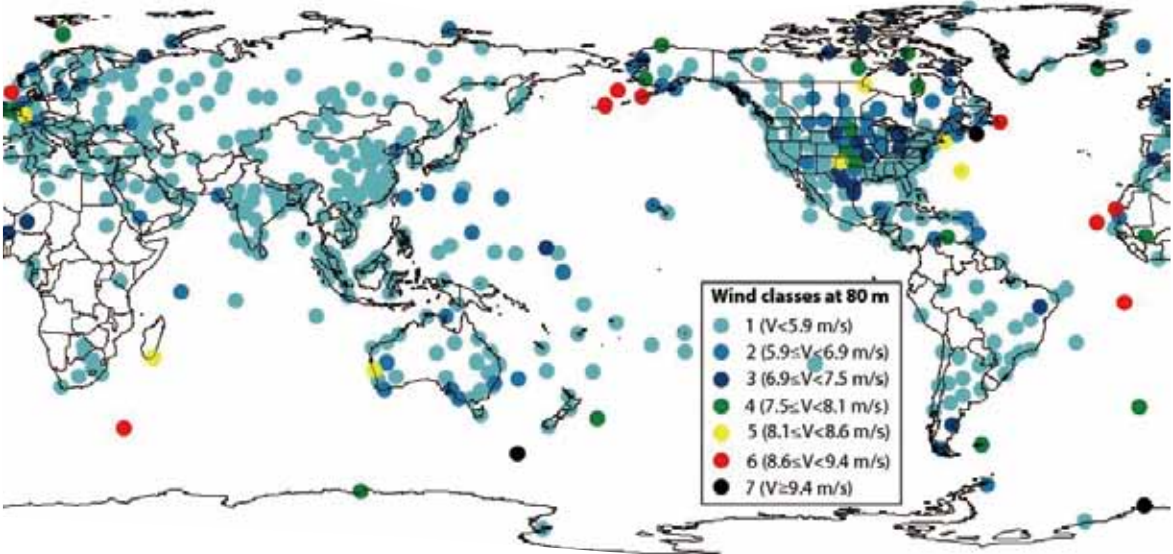
World Solar Energy Map



World-wide Wind Energy Resource Distribution Estimates



VBD at Sounding Stations



Monthly Averaged Insolation Incident On A Horizontal Surface (KWH/M²/day)

Lat 25. 16 Lon 55. 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Nov	Dec	Annual Average
22-year Average	4. 05	4. 95	5. 39	6. 52	7. 32	7. 43	6. 64	6. 5	4. 63	3. 77	5. 74

Monthly Averaged Wind Speed At 50m Above The Surface Of The Earth (m/s)

Lat 25. 16 Lon 55. 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Nov	Dec	Annual Average
10-year Average	4. 93	5. 67	5. 45	5. 49	6. 1	5. 91	5. 57	5. 3	4. 32	4. 88	5. 29

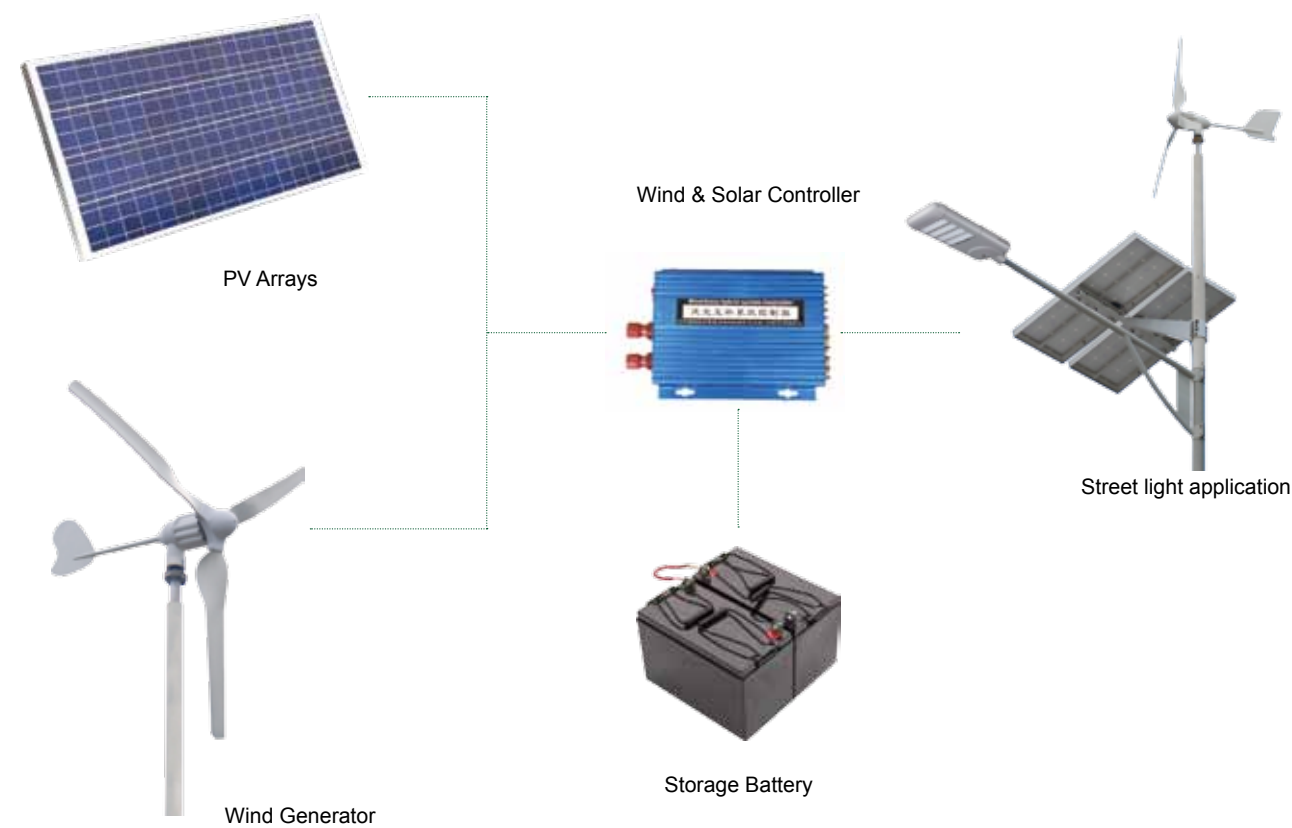
Monthly Averaged Radiation Incident On An Equator-Pointed Tilted Surface (KWH/M²/day)

Lat 25. 16 Lon 55. 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Nov	Dec	Annual Average
SSE HRZ	4. 05	4. 95	5. 39	6. 52	7. 32	7. 43	6. 64	6. 5	4. 63	3. 77	5. 74
K	0. 6	0. 62	0. 57	0. 62	0. 66	0. 65	0. 59	0. 6	0. 66	0. 59	0. 62
Diffuse	1. 06	1. 24	1. 71	1. 86	1. 89	1. 97	2. 18	2	0. 95	1. 01	1. 55
Direct	6. 01	6. 59	5. 85	6. 89	7. 83	7. 87	6. 42	6. 6	7. 13	5. 75	6. 79
Tilt 0	3. 94	4. 91	5. 33	6. 39	7. 29	7. 4	6. 61	6. 3	4. 48	3. 68	5. 67
Tilt 10	4. 51	5. 44	5. 61	6. 49	7. 16	7. 17	6. 46	6. 4	5. 12	4. 25	5. 92
Tilt 25	5. 15	5. 97	5. 79	6. 36	6. 66	6. 53	5. 97	6. 1	5. 83	4. 91	6. 02
Tilt 40	5. 5	6. 18	5. 67	5. 9	5. 83	5. 57	5. 2	5. 6	6. 2	5. 3	5. 81
Tilt 90	4. 43	4. 47	3. 34	2. 59	1. 97	1. 78	1. 88	2. 2	4. 88	4. 41	3. 31
OPT	5. 56	6. 18	5. 79	6. 49	7. 29	7. 4	6. 61	6. 4	6. 25	5. 39	6. 37
OPT ANG	49	41	26	12	0	0	0	7	48	52	24. 4
NOTE:	Diffuse radiation , direct normal radiation and tilted surface radiation are not calculated when the clearness index (K) is below 0. 3 or above 0. 8.										

For global Meteorology and Solar Energy information, pls go to:
Http: //eosweb. larc. nasa. gov/cgi-bin/sse/grid. cgi

Wind/Solar Hybrid Street Light System

- Independent system without external power supply.
- Automatic sensor, intelligent control.
- Energy saving and durable, easy maintenance.



Power Supply System Sketch



Showcase :

Wind-Solar powered LED street light in Shipai Wetland Park, Dongguan, China



System Configuration :

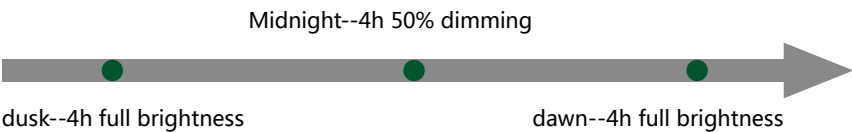
Model	Consumption	Pole height	Solar panel	Wind generator	Solar gel battery	Controller	Working hours	Application
RL2R1014DC	33W	6m	80WP	300-400W	120Ah	10A/12V	10h	Country Road
RL2R1028DC	62W	8m	120WP	300-400W	100Ahx2	10A/12V	10h	Sub Street
RL2R1042DC	93W	8m	200WP	300-400W	150Ahx2	10A/12V	10h	Sub Street
RL2R1056DC	123W	10m	250WP	400-600W	200Ahx2	20A/24V	10h	Sub Street

Note : above configuration are only for reference, each project need special design accordingly.

Pilot Project :

- 1、Light up 12 hours per day, 4 hours full brightness, 4 hours 50% dimming, 4 hours full brightness.
- 2、Minimum 3 days working during raining or cloudy days.
- 3、Luminous Flux 7600lm, 90w, 4500-5300K.
- 4、Customized solution:
 - 1 Streetlight+2 panels+1 wind turbine+1 controller+2 batteries+1 pole (including base and holder).

Steet light	RL2R1042 DC24V 93W
Solar Panel	L1580 x W808 x H45mm x 2pcs
Wind turbine	400L-24V
Controller	10A/24V
Battery	12V/200Ah x 2pcs
Panel Holder	L1580 x W1616 x H50mm
Pole Height	9m
Base Holder	L250 x W250 x H1150mm
Cable	RVV3 x 4mm,L=9m RVV2 x 4mm,L=9m RVV2 x 2.5mm,L=8.5m



Specification:

Apollo LED Street Light:

Model	Voltage	Consumption	Luminous Flux	Size(mm)	IP
RL2R1014	DC12/24V	33W	2500-2600lm	L502 x W346 x H102	65
RL2R1028	DC12/24V	62W	4800-4900lm	L546 x W346 x H102	65
RL2R1042	DC12/24V	93W	7000-7200lm	L626 x W346 x H102	65
RL2R1056	DC12/24V	123W	9400-9500lm	L688 x W346 x H102	65

Solar Controller:

Model	Rated Output Current	PV Maximum Current	Rated Wind Turbine Power	Rated Wind Turbine Maximum Input Current	Rated battery Voltage	Output Protection Voltage
KS-10I	10A	10A	300W	40A	12V	16V
KS-201	10A	10A	600W	40A	24V	32V

Wind Turbine:

Model	Rated Wind Speed	Survival Wind Speed	Rated Output Power	Rated DC Voltage	Diameter	Material
FD1.5-0.3	10m/s	50m/s	300W	12V/24V	1.5m	nylon+glassfiber
FD1.2-0.4	12m/s	50m/s	400W	12V/24V	1.4m	nylon+glassfiber
FD1.9-0.6	11m/s	50m/s	600W	24V	1.9m	nylon+glassfiber
FD2.7-1.0	12m/s	50m/s	1000W	24V/48V	2.7m	nylon+glassfiber

PV Panel:

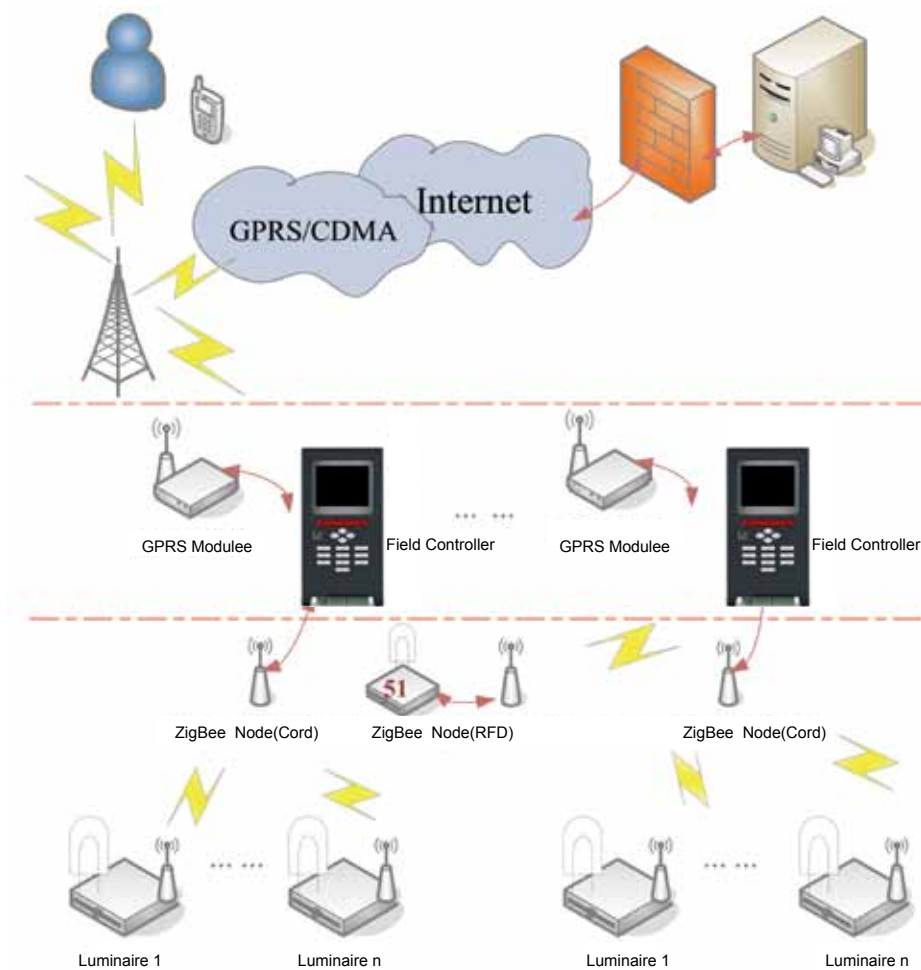
Item	Model	Spec	Panel Size(mm)	Power
1	70(17)P900×660	I	L900 x W660	70-80W
2	80(17)P1010×660	I	L1010 x W660	75-90W
3	80(17)P1172×541	I	L1172 x W541	75-85W
4	80(17)P1210×545	I	L1172 x W541	75-85W
5	130(17)P1010×990	I	L1010 x W990	110-140W
6	120(17)P1470×680	I	L1470 x W680	110-140W
7	120(17)P1480×665	I	L1480 x W665	110-140W
8	170(35)P1580×808	I	L1580 x W808	160-175W
9	170(35)P1600×810	I	L1600 x W810	160-175W
10	180(23)P1310×990	I	L1310 x W990	160-185W
11	180(23)P1335×990	I	L1335 x W990	160-185W
12	190(26)P1495×990	I	L1495 x W990	180-200W
13	220(29)P1650×990	I	L1650 x W990	200-230W
14	220(29)P1650×1030	I	L1650 x W1030	200-230W
15	240(32)P1810×990	I	L1810 x W990	230-250W
16	270(32)P1970×990	I	L1970 x W990	250-280W

Battery:

Model	Max Charging Current	Capacity(Ah)10HR	Size	Weight	Rated Voltage
6-CN-80	0.25C10(A)	80	L329 x W172 x H215	31kg	12V
6-CN-100	0.25C10(A)	100	L329 x W172 x H215	33kg	12V
6-CN-120	0.25C10(A)	120	L483 x W172 x H242	41.5kg	12V
6-CN-150	0.25C10(A)	150	L483 x W172 x H242	44.5kg	12V
6-CN-200	0.25C10(A)	200	L522 x W240 x H220	62.5kg	12V

Remote Control system Scheme :

Computer sends messages including controlling orders, etc. to field controller through internet and GPRS network, then field controller releases messages to each lamp's node by Radio Frequency. One field controller could manage all lamps in its field, and many controllers could be connected to one or more computers with GPRS network to realize remote management. Messages could be sent between computer and each single lamp mutually.



I、System Function

- 1、Control :
 - (1) Group Control: 0%-100% dimming control for a single road or couple roads in a region.
 - (2) Individual Control: For any lamp in one field.
 - (3) Intelligent Control: Adjusting automatically lamps' working time and designated brightness according to the coordinate.
- 2、Detection: Info-collection function for gathering operational parameters such as, current, temperature, etc., which could be analyzed through lamp controller or PC.
- 3、Expert Diagnoses: Instant information could be fed back to PC in case of any abnormality as communication dysfunction, high current or temperature, etc., then PC software would make alarms and records in file.
- 4、Secondary Energy Saving: Lamps could automatically adjust power and brightness by previous designated time settings for secondary energy saving.

II、Main Technical Data

- 1、LED lamp wireless controller covers a range with over 2km diameter;
- 2、Average system response time is 3.13 seconds.
- 3、One LED lamp wireless controller could control 9998 nodes.
- 4、Electricity saving rate is over 20% (Field measurement 24.1%).

III、System Application

- 1、Traffic lighting as expressway, city street, tunnel, etc.
- 2、Stadium lighting as exhibition center, workshop, venue, meeting hall, etc.
- 3、Plaza lighting.

V、Hardware Introduction

- 1、Terminal Module (Picture 1)
- 2、Terminal Module installation sketch (Picture 2)
- 3、Field controller (Picture 3): all terminals in each field are controlled by field controller. Except for controlling and detection function, the controller can be externally fitted to a brightness collection device to adjust lamp dimming in some field.

VI、PC Software

Background PC controlling software could be functioned with detection, controlling and management by secondary programming (Picture 4).

VII、Certifications



Picture 1



Picture 2



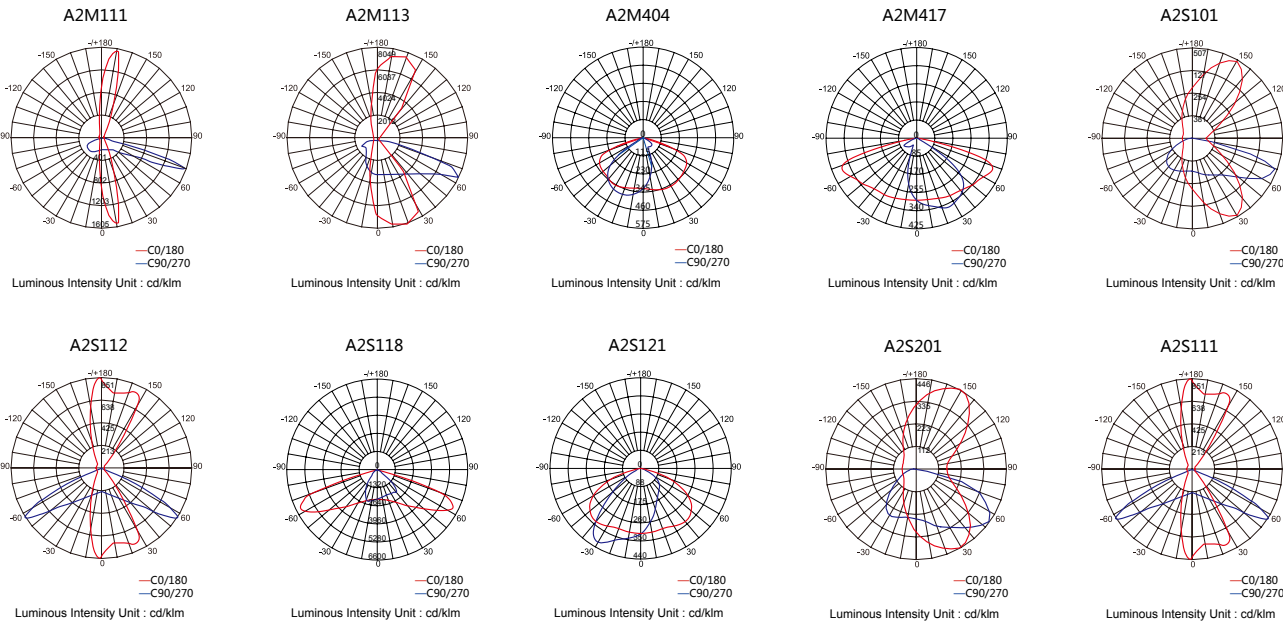
Picture 3



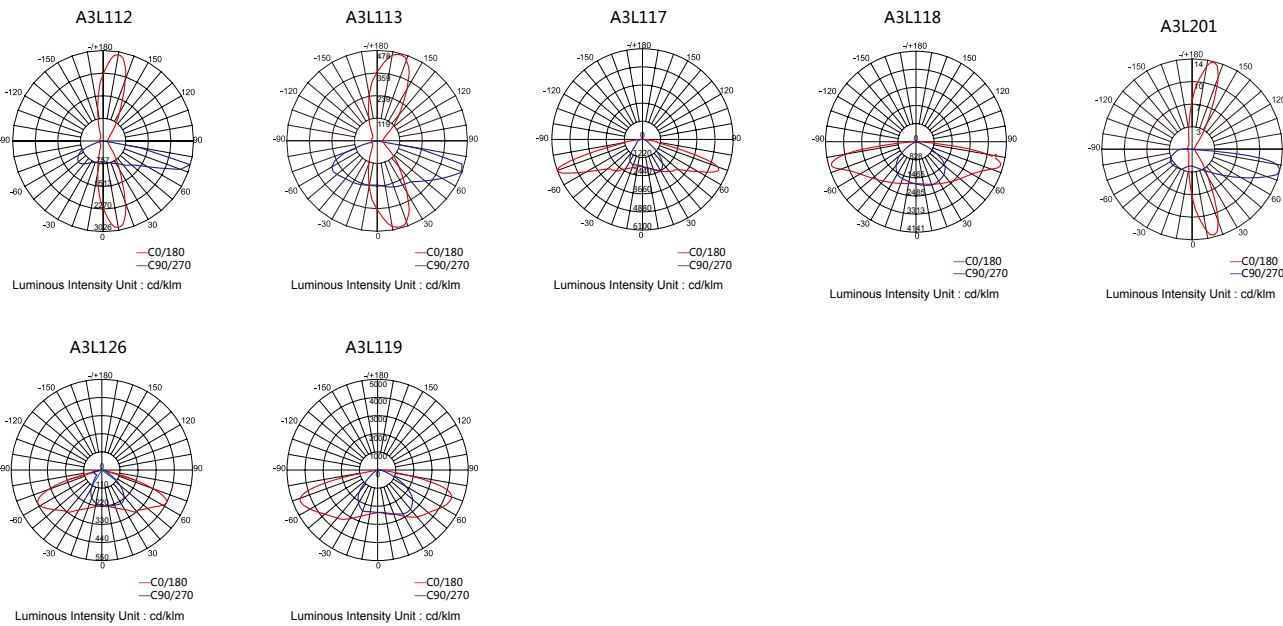
Picture 4



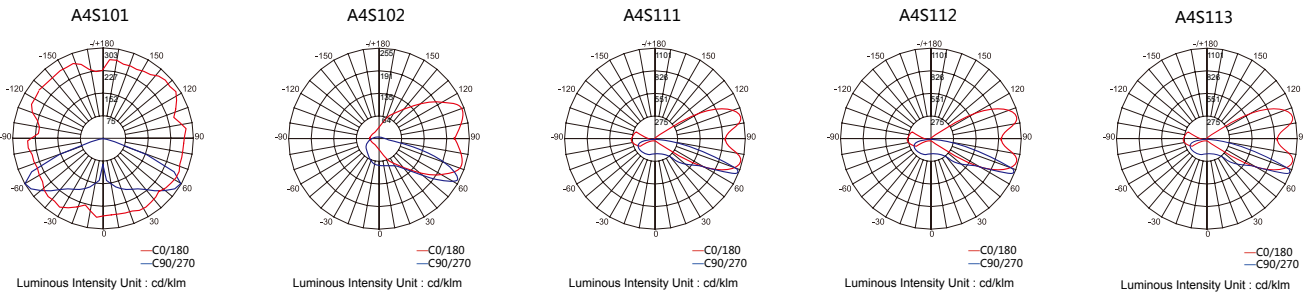
A2 Type II



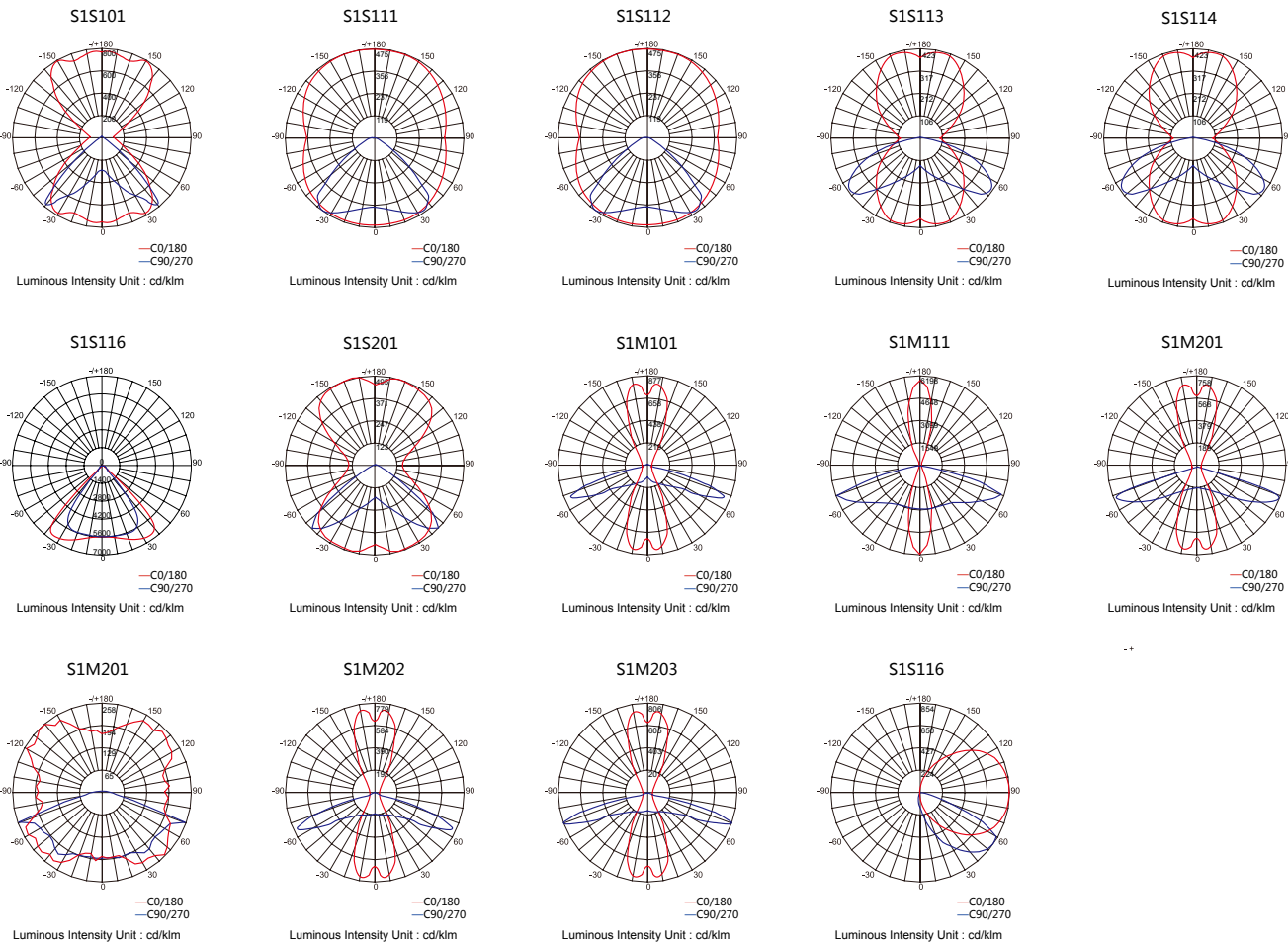
A3 Type III



A4 Type IV



S1 Type I



S5 Type V



S7 Type VII

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