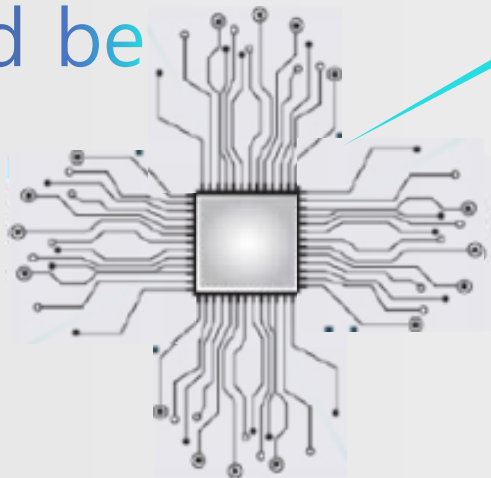


PRODUCTS BROCHURE

2023

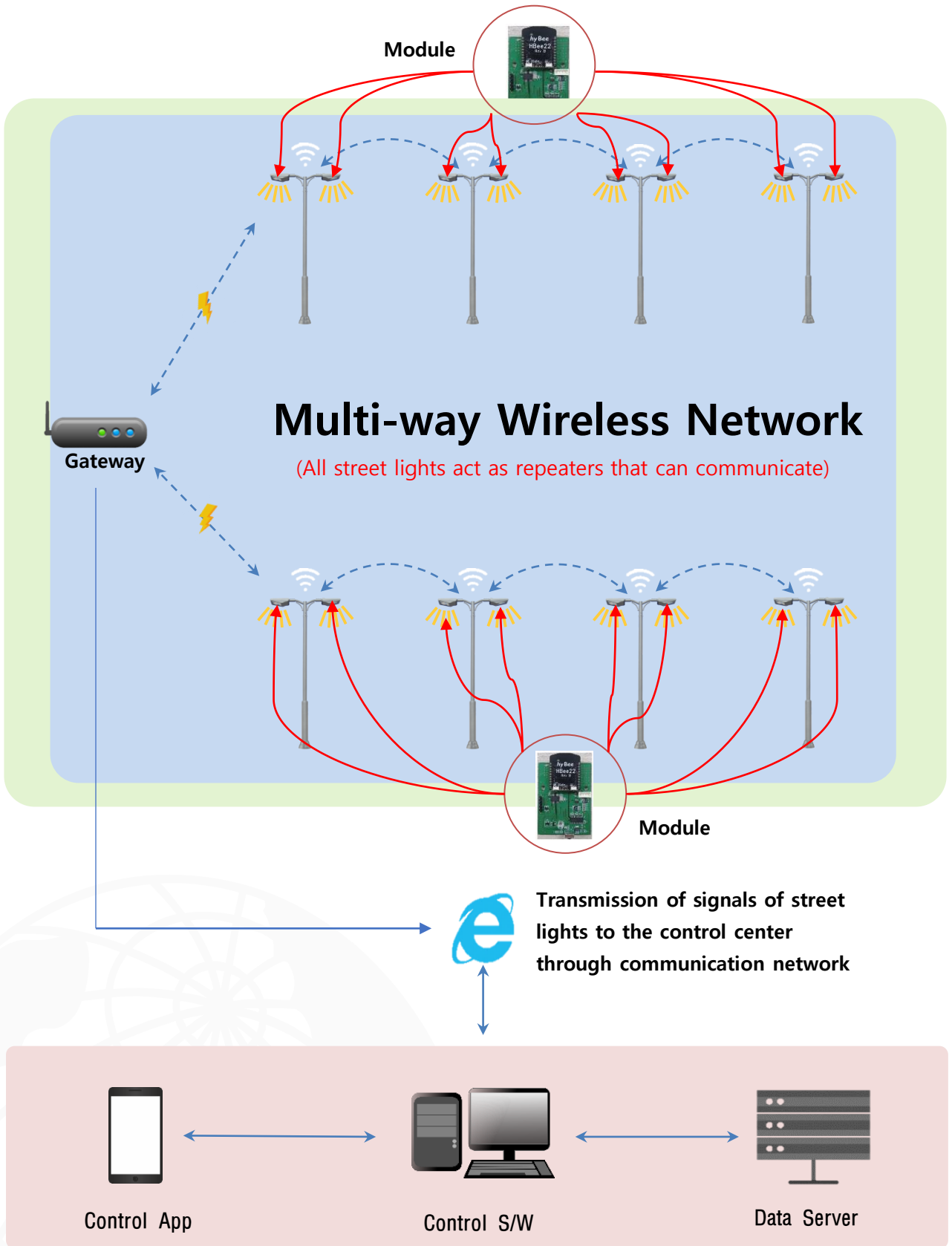
1. Smart Street & Security Light

New Generation of
Light would be
SMART

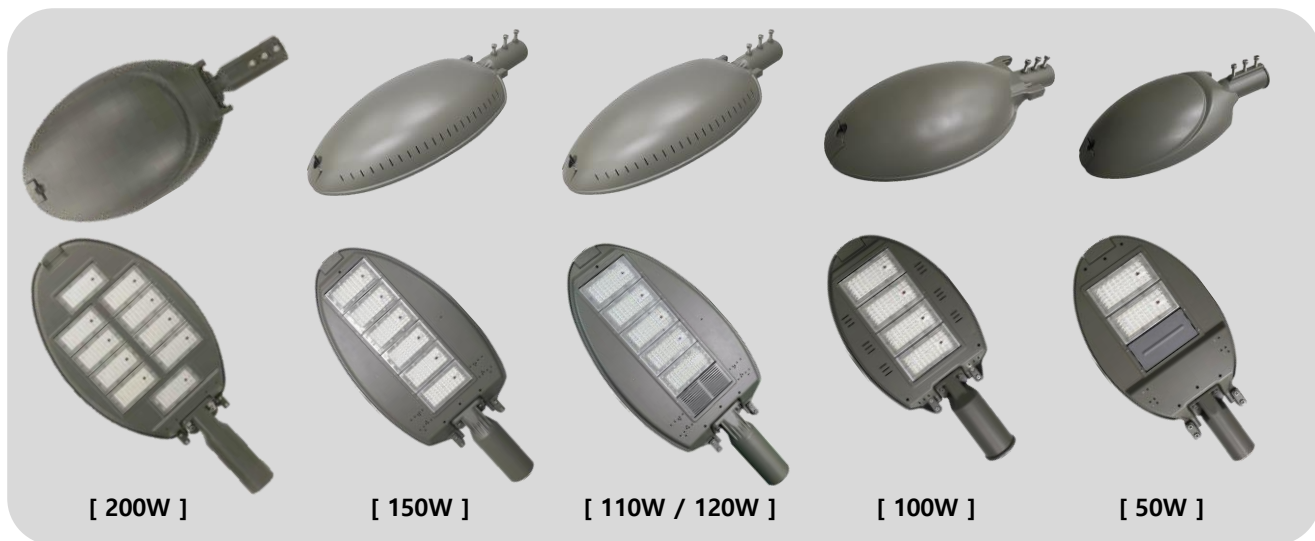


And Key Base Station based on
AI process

1. On/off and dimming for Individual/group/all lights
→ Energy Saving Rate : ↑ 75%
2. Blinking of Individual/group/all lights
→ It's possible to blink specific street light around the location of incidents or where SOS was received
3. Easy expansion of Network/Area
→ It's possible to create a smart city by installation of the necessary sensors.



- ❖ The control system consists of a controller of street light/security light, gateway, control software/smartphone app.
- ❖ 1 gateway can control 100 street lights/security lights.



01 Features

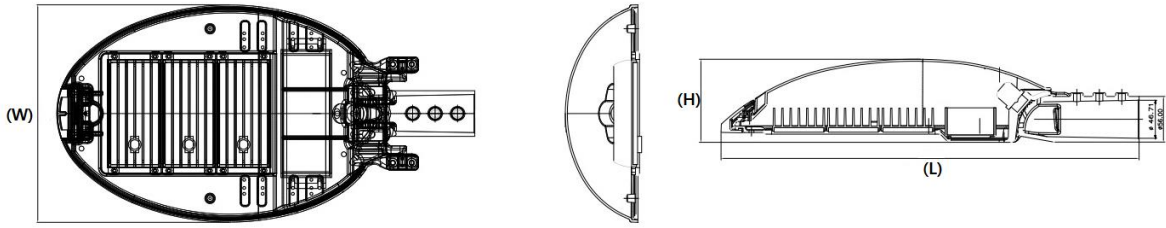
- Interchangeable LED Module
- High efficiency (min. 150 lm/W ~)
- Easy to installation & Maintenance
- Water and Dust proof type

02 Product specifications

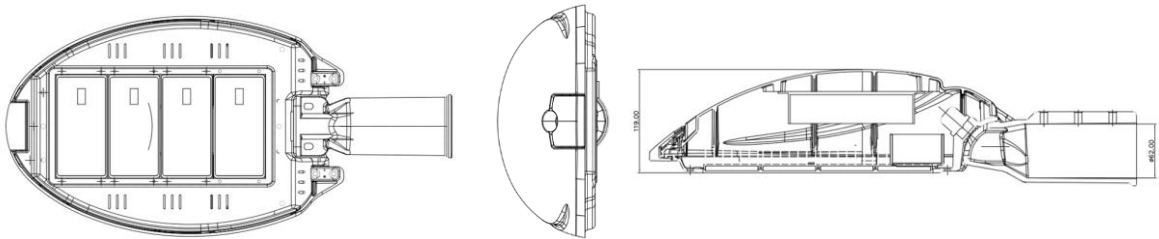
Model	SE-050K30	ST-100K30	ST-110K30	ST-120K30	ST-150K30	ST-200K30
Power consumption	50 W	100 W	110 W	120 W	150 W	200 W
Input voltage	90 ~ 305 Vac					
Light Efficiency	Typ. 150 lm/W	Typ. 150 lm/W	Typ. 150 lm/W	Typ. 150 lm/W	Typ. 150 lm/W	Typ. 150 lm/W
CRI	Ra 80 ↑					
CCT	5,000 K					
Weight	3.6 kg	4.4 kg	6.3 kg	6.3 kg	6.5 kg	7.4 kg
IP code	66					
SPD	N/A					
Beam angle	120 ° x 30 °	120 ° x 30 °	120 ° x 30 °	120 ° x 30 °	120 ° x 30 °	120 ° x 30 °
Size (L x W x H mm)	515 x 267 x 102	568 x 280 x 119	740 x 336 x 127	740 x 336 x 127	740 x 336 x 127	789 x 393 x 141

03 Dimension

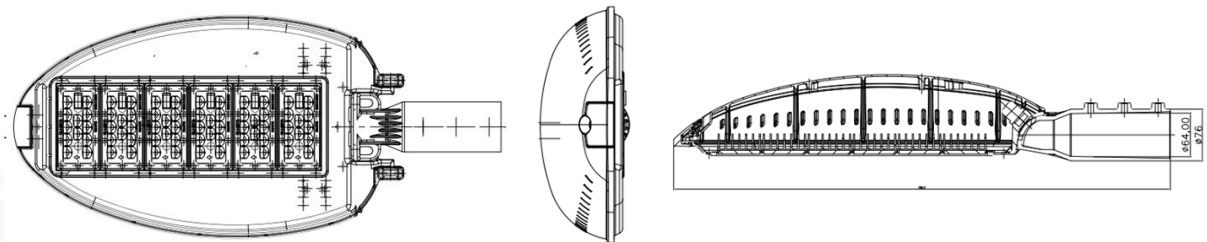
- 50W



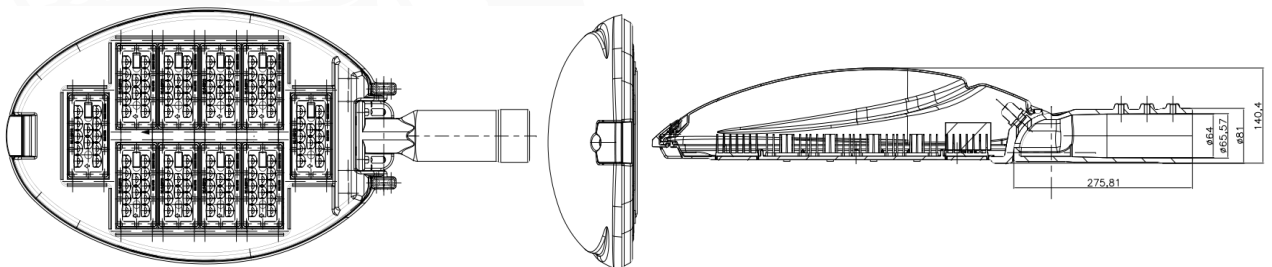
- 100W



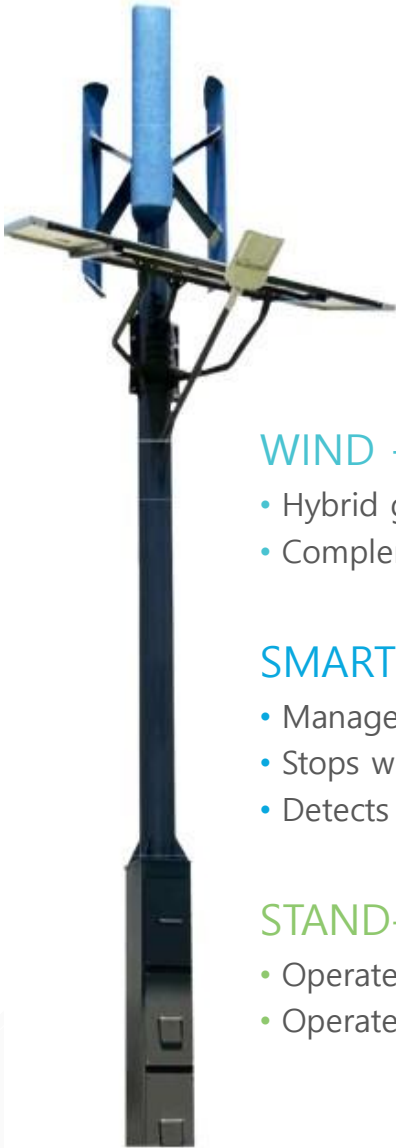
- 110W, 120W, 150W



- 200W



2. Hybrid LED Street Light



WIND + SOLAR

- Hybrid generation using wind and solar energy
- Complementary operation in all weather conditions

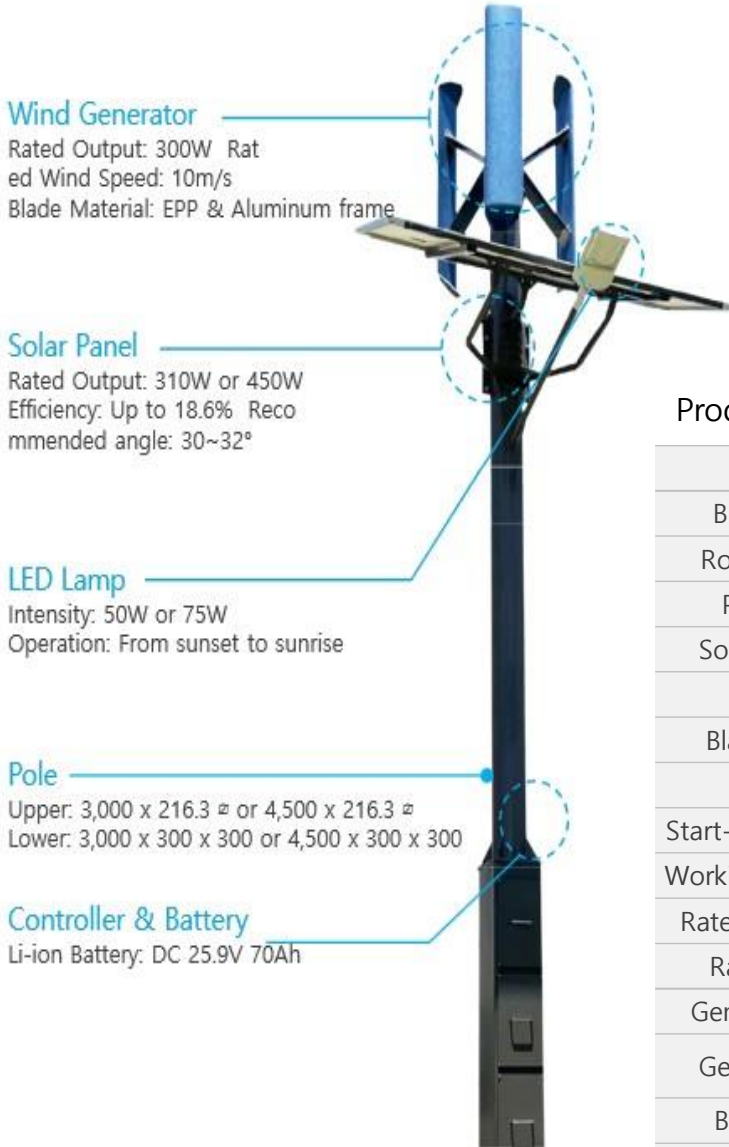
SMART CONTROLLER

- Manages and stores wind and solar energy simultaneously
- Stops wind turbine automatically in case of strong wind and/or gusts
- Detects day and night by PV voltage and automatically operates LED lamp

STAND-ALONE

- Operates independently without external power supply
- Operates up to 4 days without generation (8 hours operation per day)

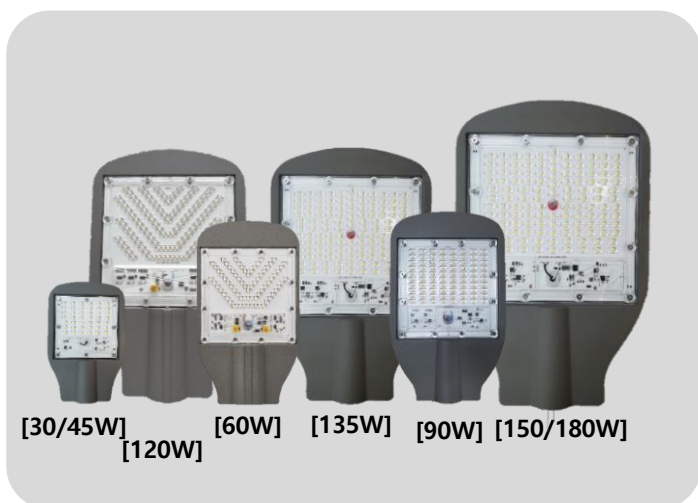
COMPOSITION & SPECIFICATIONS



Product Specifications

MODEL	AH-600-L50	AH-700-L75
Blade Length	1500 mm	
Rotor Diameter	1000 mm	
Pole Height	6m	9m
Solar Generator	310W	450W
LED Lamp	50W	75W
Blade Material	EPP (Expanded Polypropylene)	
Cut-in	2.5 m/s	
Start-up Wind Speed	2.0 m/s	
Working Wind Speed	1.5 m/s	
Rated Wind Speed	10.0 m/s	
Rated Output	300W	
Generator Speed	300 RPM	
Generator Type	Permanent magnet 3-phase AC Generator	
Blast Control	Electric brake	
Li-ion Battery	DC25.9V 70Ah * 2ea	

3. AC LED Street & Security Light



01 Features

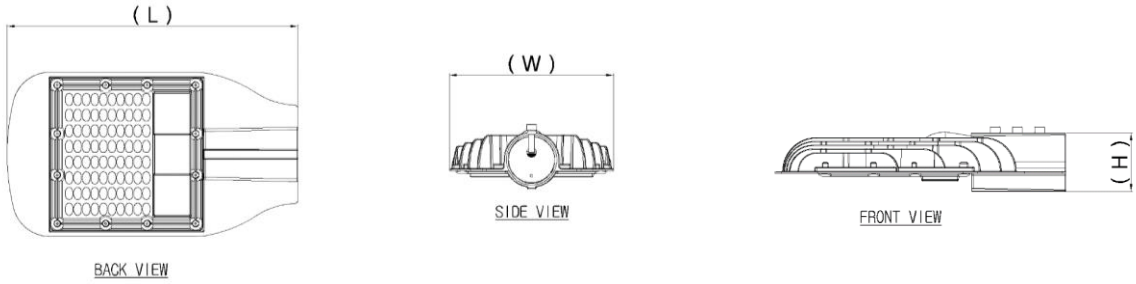


- Direct AC LED Module
- No SMPS
- Various voltages (110, 220, 277, 480 Vac)
- High efficiency (min. 140 lm/W)
- To be small size & light, Easy to install
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Apply Surge Protection Device
- Option : Dimming (MCU, Photosensor, 1-10V)

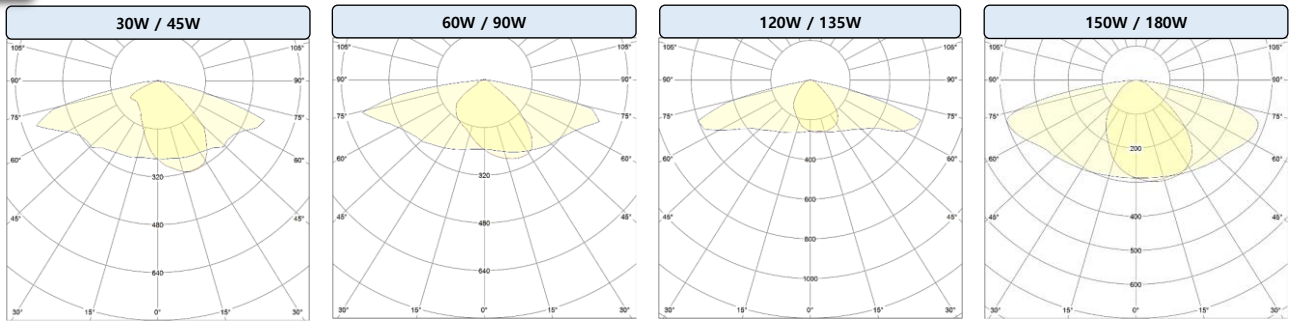
02 Product specifications

Model	SD-30-2.0	SD-45-2.0	SD-60-2.0	SD-90-2.0	SD-120-2.0	SD-135-2.0	SD-150-2.0	SD-180-2.0
Power consumption	30 W	45 W	60 W	90 W	120 W	135 W	150 W	180 W
Input voltage	110 / 220 / 277 / 480 Vac							
Light Efficiency	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W
CRI	Ra 70 ↑							
CCT	5,000 K							
Weight	1.3 kg	1.3 kg	2.1 kg	2.1 kg	2.5 kg	2.5 kg	4 kg	4 kg
IP code	66							
SPD	20 kA (I _{max})							
Light distribution type	Type II	Type II	Type II	Type II	Type II	Type II	Type II	Type II
Size (L x W x H mm)	290 x 185 x 75.5		390 x 220 x 78.5		430 x 270 x 79.5		480 x 330 x 87.4	
Certification	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE	KS, KC, High efficiency energy, CE, PSE

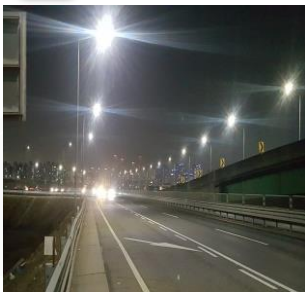
03 Dimension



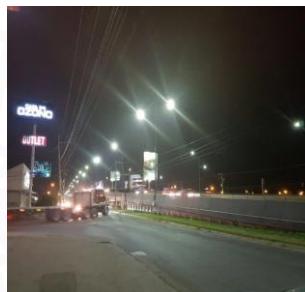
04 Light distribution curve



05 Reference



Republic of Korea



Mexico



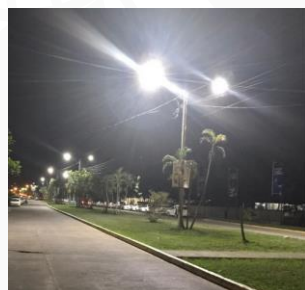
USA



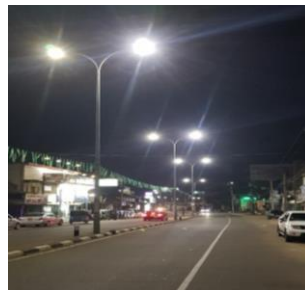
Republic of South Africa



Malaysia



Vietnam



Sri Lanka



Indonesia

4. AC LED Tunnel Light(Ceiling / Wall type)



01 Features

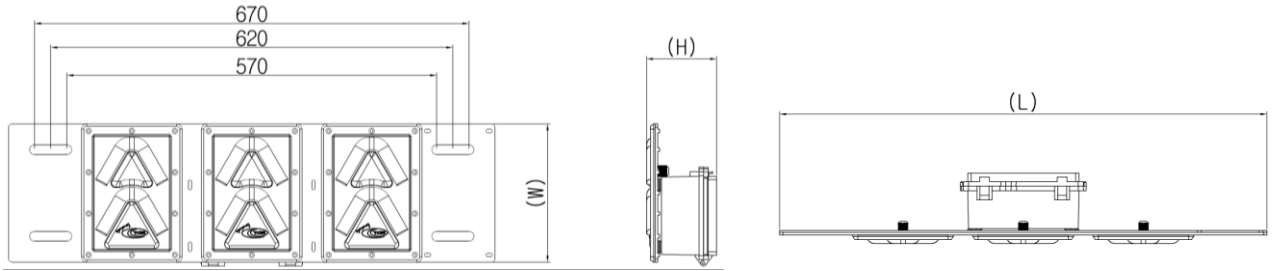


- Direct AC LED Module
- No SMPS
- Bracket can be customized.
- High efficiency (Typ. 140 lm/W ~)
- A slim construction
- Weight lightening
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Apply Surge Protection Device

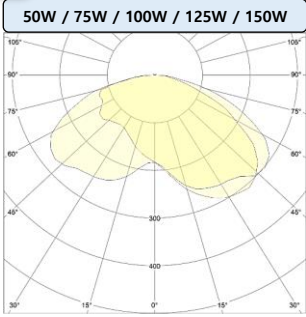
02 Product specifications

Model	TD-050-2.0N	TD-075-2.0N	TD-100-2.0N	TD-125-2.0N	TD-150-2.0N
Power consumption	50 W	75 W	100 W	125 W	150 W
Input voltage	220 Vac	220 Vac	220 Vac	220 Vac	220 Vac
Light Efficiency	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W	Typ. 140 lm/W
CRI	Ra 75 ↑				
CCT	5,000 K				
Weight	5.0 kg	5.4 kg	5.4 kg	5.7 kg	5.7 kg
IP code	66				
SPD	20 kA (I _{max})				
Light distribution type	Type III	Type III	Type III	Type III	Type III
Size (L x W x H mm)	750 x 212.5 x 108 (Exclude Bracket)				
Certification	KS, KC, High efficiency energy ,CE, PSE	KS, KC, High efficiency energy ,CE, PSE	KS, KC, High efficiency energy ,CE, PSE	KS, KC, High efficiency energy ,CE, PSE	KS, KC, High efficiency energy ,CE, PSE

03 Dimension



04 Light distribution curve



05 Reference



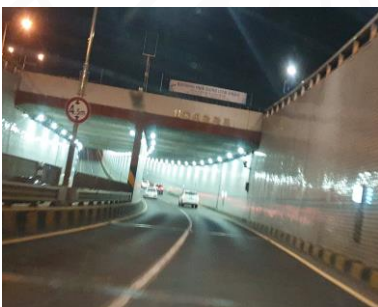
Expressway Tunnel



Expressway Tunnel



Tunnel, Dangjae



Tunnel, Ansan-si



Tunnel, Ansan (Wongok)



Tunnel, Gajae

5. AC LED Factory Light (HD series)



01 Features



- Direct AC LED Module
- No SMPS
- Various voltages (110, 220, 277 Vac)
- High efficiency (Typ. 110 lm/W ~)
- Waterproof type, Weight lightening
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Apply Surge Protection Device
- Installation type (Flange, Pipe, Chain)

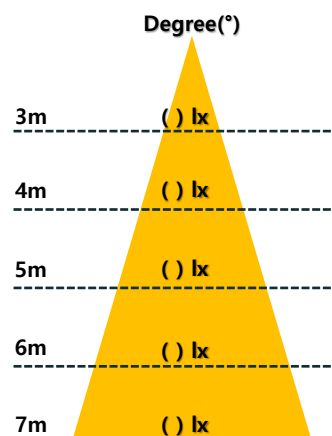
02 Product specifications

Model	HD-60-2.0	HD-90-2.0	HD-135-2.0
Power consumption	60 W	90 W	135 W
Input voltage	110 / 220 / 277 Vac		
Light Efficiency	Typ. 110 lm/W	Typ. 110 lm/W	Typ. 110 lm/W
CRI	Ra 70 / Ra 75		
CCT	5,000 K		
Weight	1.5 kg	1.5 kg	2.5 kg
IP code	65		
SPD	6 kA (I_{max})		
Beam Angle	60°, 100°, 140°	60°, 100°, 140°	60°, 140°
Size (L x W x H mm)	250 x 250 x α		390 x 220 x α
Certification	KC, CE, PSE	KC, CE, PSE	KC, CE, PSE

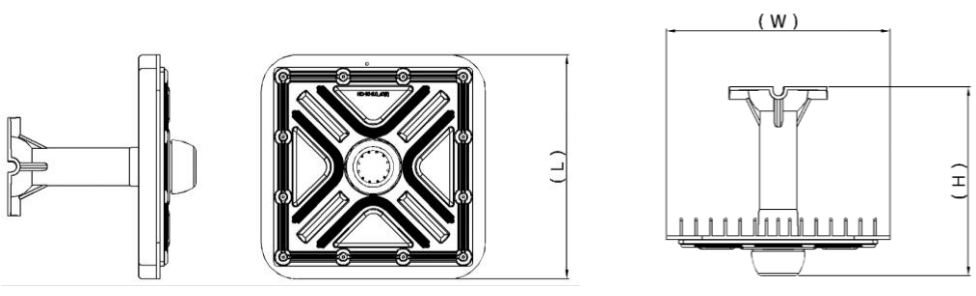
03 Illuminance Cone Diagram

Unit : lx

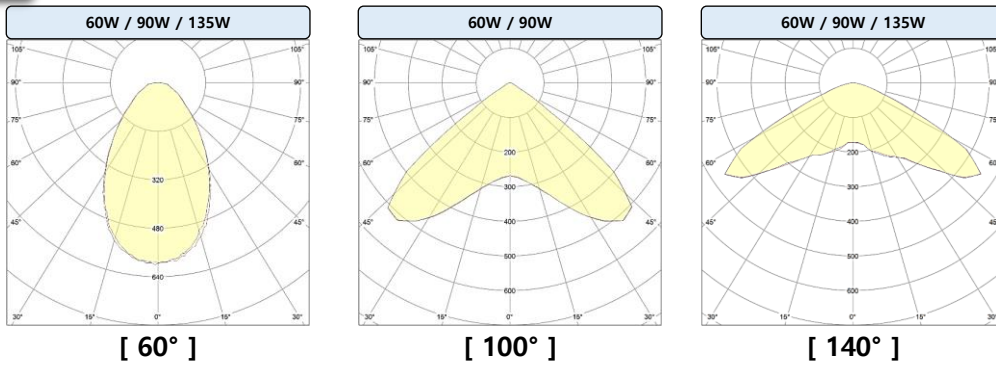
Watt	Deg.	Distance				
		3m	4m	5m	6m	7m
60W	60°	300	196	130	97	78
	100°	160	92	62	43	32
	140°	100	58	37	26	20
90W	60°	530	300	190	130	97
	100°	240	140	93	65	47
	140°	150	86	55	40	30
135W	60°	960	540	350	240	180
	140°	220	126	83	61	46



04 Dimension



05 Light distribution curve



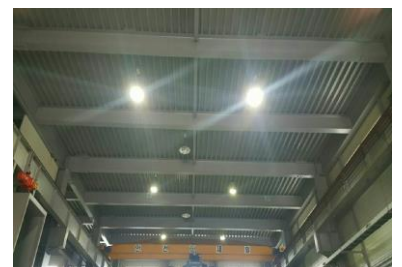
06 Reference



Gas station, Incheon



Factory, Ansan-si



Factory, Incheon



Factory, Incheon



Factory, Bucheon-si



Factory, Japan

6. AC LED Factory Light (HR series)



01 Features

- Direct AC LED Module
- No SMPS
- High efficiency (Typ. 120 lm/W)
- Non-waterproof type
- Weight lightening
- Easy to install
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Installation type (Chain)

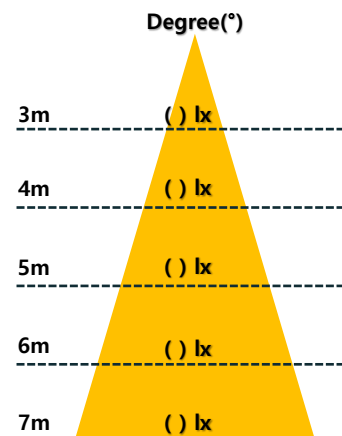
02 Product specifications

Model	HR-100	HR-150	HR-180
Power consumption	100 W	150 W	180 W
Input voltage	220 Vac		
Light Efficiency	Typ. 120 lm/W	Typ. 115 lm/W	Typ. 115 lm/W
CRI	Ra 80		
CCT	5,700 K		
Weight	2.1 kg	2.1 kg	2.1 kg
IP code	N/A		
SPD	N/A		
Beam Angle	120°	120°	120°
Size (L x W x H mm)	Ø365 x 280		
Certification	KC, High efficiency energy	KC, High efficiency energy	KC, High efficiency energy

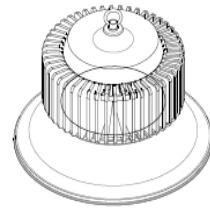
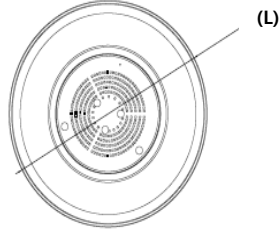
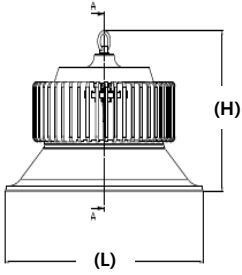
03 Illuminance Cone Diagram

Unit : lx

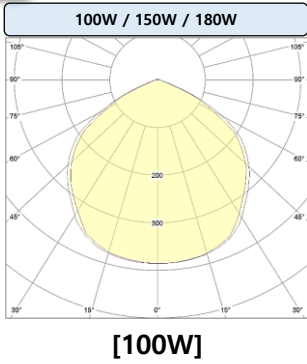
Watt	Distance				
	3m	4m	5m	6m	7m
100W	410	230	150	100	76
150W	590	330	210	150	110
180W	710	400	260	180	130



04 Dimension



05 Light distribution curve



06 Reference



Factory, Namdong-gu



Factory, Namdong-gu



Factory, Namdong-gu



Gas station, Honduras



Factory, Mexico



Factory, Indonesia

7. LED Flood Light



01 Features



- It can be manufactured up to 300~1200W
- High efficiency (Typ. 140 lm/W)
- Waterproof type
- Save Electricity bill due to long life
- Power Factor $\geq 90\%$
- Apply Surge Protection Device
- Option : Dimming

02 Product specifications

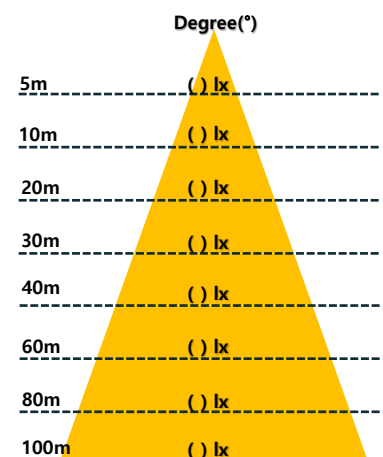
* Size : Including SMPS & Bracket. (Horizontal type)

Model	PS-300W	PS-350W	PS-400W	PS-500W	PS-600W	PS-700W	PS-400W (x2)	PS-600W (x2)
Power consumption	300 W	350 W	400 W	500 W	600 W	700 W	800 W	1,200 W
Input voltage	220 Vac							
Light Efficiency	Typ. 150 lm/W	Typ. 145 lm/W	Typ. 135 lm/W	Typ. 130 lm/W	Typ. 125 lm/W	Typ. 125 lm/W	Typ. 135 lm/W	Typ. 125 lm/W
CRI	Ra 70							
CCT	5,000 K							
Weight	16 kg	17 kg	23 kg	24 kg	24 kg	25 kg	32 kg	32 kg
IP code	66							
SPD	20 kA (I _{max})							
Beam Angle	15°, 30°							
Size (L x W x H mm)	594 x 240 x 380	594 x 240 x 380	594 x 240 x 380	594 x 240 x 380	594 x 240 x 380	594 x 240 x 380	594 x 373 x 650	594 x 650 x 373
Certification	KC, CE, PSE	CE, PSE	KC, CE, PSE	KC, CE, PSE	KC, CE, PSE	KC, CE, PSE	-	-

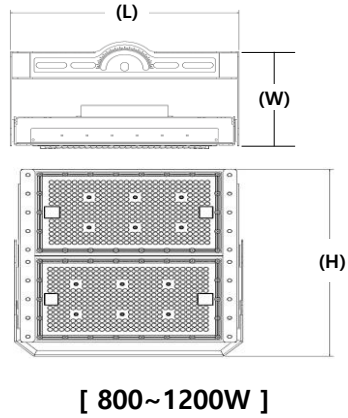
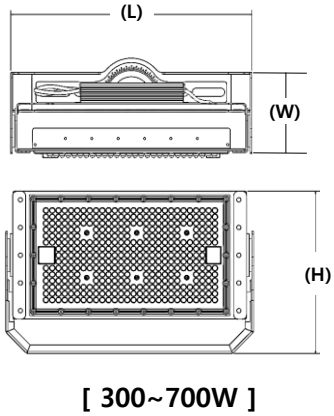
03 Illuminance Cone Diagram

Unit : lx

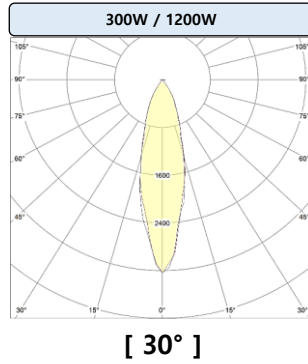
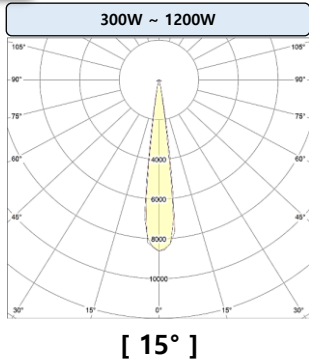
Distance	Deg.	Watt							
		300W	350W	400W	500W	600W	700W	800W	1200W
10m	15°	1,670	1,894	2,005	2,414	2,786	3,770	3,982	5,531
	30°	1,015	1,158	1,219	1,467	1,693	2,291	2,431	3,377
20m	15°	454	515	545	656	757	1,024	1,088	1,512
	30°	281	318	338	407	469	634	673	935
40m	15°	115	131	139	167	193	261	277	385
	30°	71	81	86	104	120	161	172	239
60m	15°	51	58	62	74	86	116	123	171
	30°	32	36	38	46	53	72	76	106



04 Dimension



05 Light distribution curve



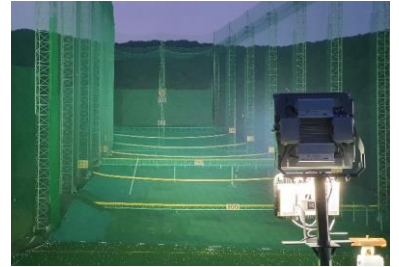
06 Reference



Futsal field



Foot volleyball court



Golf country club



Mexico Soccer stadium



Golf country club



Port

8. AC LED Flood Light (HB series)



01 Features

- Direct AC LED Module
- No SMPS
- High efficiency (Typ. 120 lm/W)
- Waterproof type
- Weight lightening
- Easy to install
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Installation type (Wall, Pipe, Chain)

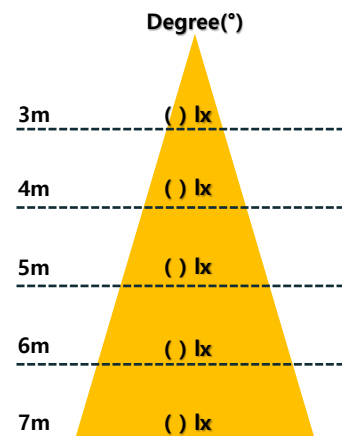
02 Product specifications

Model	HB-100R	HB-100S
Power consumption	100 W	100 W
Input voltage	220 Vac	
Light Efficiency	Typ. 115 lm/W	Typ. 120 lm/W
CRI	Ra 80	
CCT	5,700 K	
Weight	1.8 kg	1.8 kg
IP code	66	
SPD	N/A	
Beam Angle	120°	140°
Size (L x W x H mm)	Ø365 x 248	225 x 225 x 193.5
Certification	KC, High efficiency energy	

03 Illuminance Cone Diagram

Unit : lx

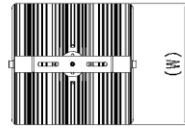
		Distance				
Model	Deg.	3m	4m	5m	6m	7m
HB-100R	120°	394	222	142	99	73
HB-100S	140°	235	133	85	59	44



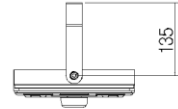
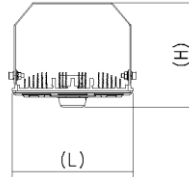
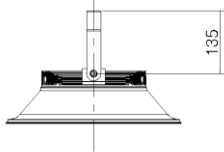
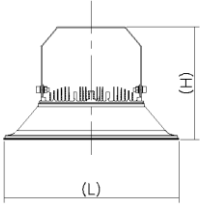
04 Dimension



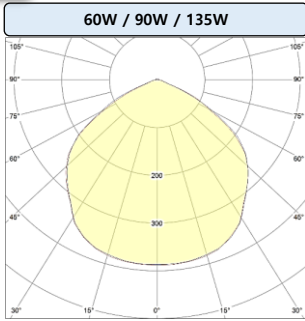
R TYPE



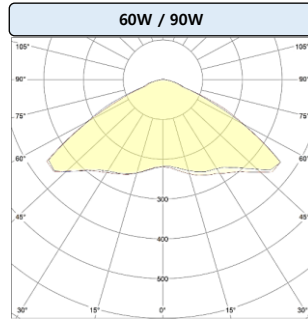
S TYPE



05 Light distribution curve



[120°]



[140°]

06 Reference



Factory, Siheung-si



Korea Mold Center



Factory, Siheung-si



Factory, Mexico



Factory, Mexico



Factory, Mexico

9. AC LED Flood Light (PD series)



01 Features

- Direct AC LED Module
- No SMPS
- High efficiency (Typ. 120 lm/W)
- Waterproof type
- Weight lightening
- Easy to install
- Save Electricity bill due to long life
- Power Factor $\geq 98\%$
- Apply Surge Protection Device

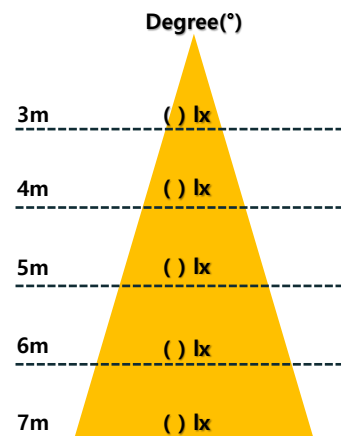
02 Product specifications

Model	PD-200-2.0	PD-200-2.0 (x2)
Power consumption	200 W	400 W
Input voltage	220 Vac	
Light Efficiency	Typ. 120 lm/W	Typ. 120 lm/W
CRI	Ra 70	
CCT	5,000 K	
Weight	3.4 kg	8.2 kg
IP code	66	
SPD	6 kA (I_{max})	
Beam Angle	15°, 30°	15°, 30°
Size (L x W x H mm)	308 x 347.5 x 101	340.5 x 646.5 x 71
Certification	KC, CE, PSE	KC, CE, PSE

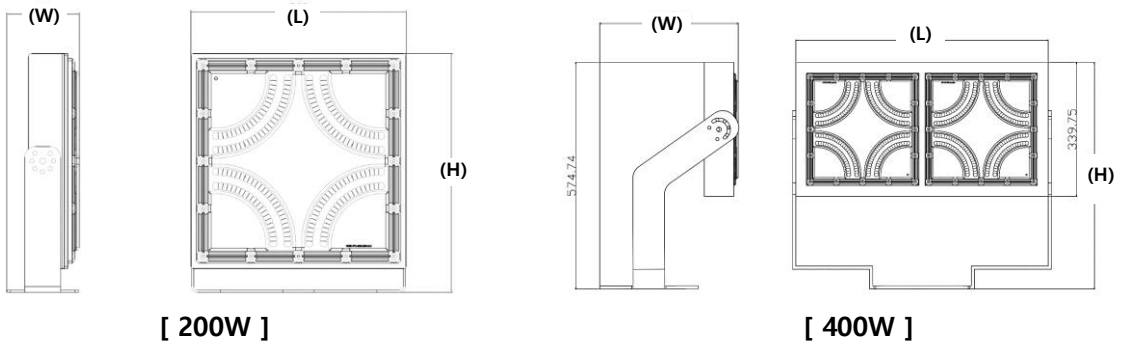
03 Illuminance Cone Diagram

Unit : lx

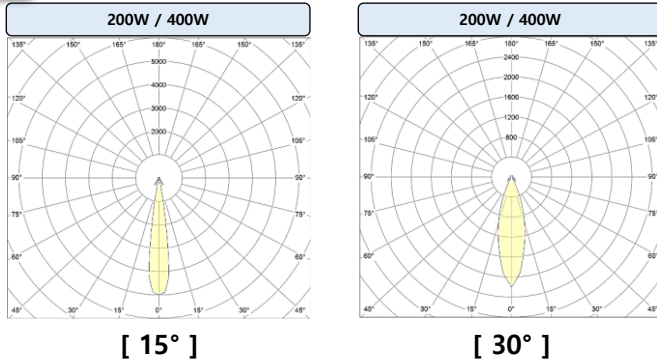
Model		Distance				
Watt	Deg.	5m	10m	20m	30m	40m
200W	15°	3,147	900	230	103	59
	30°	2,013	548	140	64	36
400W	15°	6,607	1,912	495	220	126
	30°	4,671	1,286	332	150	85



04 Dimension



05 Light distribution curve



06 Reference



Golf country club



Tennis court



Outdoor Basketball



Football (Mexico)



Football (Mexico)



Football (Mexico)



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