

aura
CLEAN ENERGY



||LO2 LED STREET LIGHT
BEST FOR EUROPEAN STREETS

> Features of IL02 Series

IL02 series is design for street lighting, especially for the European market. Precision engineered individual lenses made of optical grade polycarbonate for maximum light intensity, micro-lens systems produce IESNA Type II, Type III, Type IV distributions. Luminaries produces 0% total lumens above 90 ° (BUG Rating, U=0), Delivers improved visual comfort by lower glare and providing a wider smoother and more uniform light output.

- 10KV~20KV surge protection
- Powdering/PC + tempered glass
- Buckle design, easy maintenance
- Fin shape radiator, better heat dissipation
- Optical systems maintain an IP66 rating

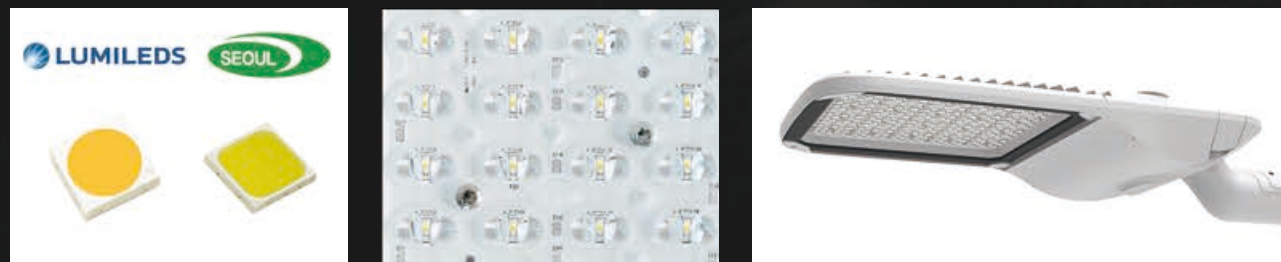
UP TO 155 lm /W	L90B10 >52000hrs @ 25 °C	100-277V 50/60HZ	THD <20%	Class I AND Class II
• 2700K • 3000K • 4000K • 5000K • 5700K • 6500K	CRI 70/80/90	ULR =0	 DIM	SAFETY PROTECTION AUTO TURN-OFF
Working Temperature Environment -40°C~50°C (-40°F~+122°F)	IP66 IK08	3G VIBRATION TESTING		



**Illuminate
Your
Future**

> Photometric Design

- Optimized, premium optical grade Mitsubishi polycarbonate lens, the efficient design of the modules make each light engine highly customizable, allowing the light distribution to be aimed toward the application.
- Optical systems allow for versatility, tight cutoffs, and flexible control for a wide variety of applications.
- We deliver innovation and customization, further expanding the flexibility of the project. Exceptional uniformity and low glare for maximum comfort and neighbor-friendly.



- The photometric engine takes advantage of the latest generation of mid-power LEDs and dedicated optics for professional applications.
- Combined with Lumileds 3030/Seoul 3030 it provides an alternative solution for those who are looking for very cost-effective yet efficient lighting while keeping the same luminaire design.

Distribution

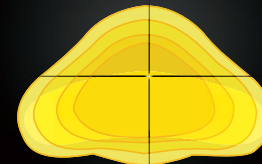
TYPE II (T201)



TYPE II (T211)



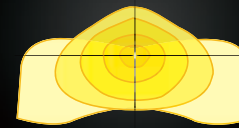
TYPE II (T221)



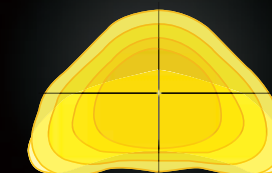
TYPE III (T301)



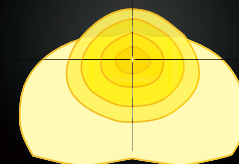
TYPE III (T311)



TYPE III (T321)



TYPE IV (T411)

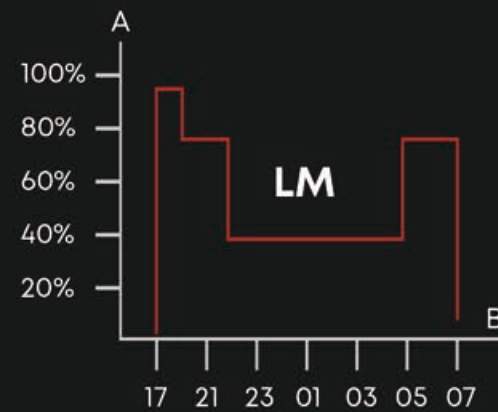


> Control Systems

Custom Dimming Profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. With customized combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



Daylight Sensor / Photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.



Smart standards. Smarter lighting.

LoRaWAN® Luminaire Controller Zhaga

It is an easily installable wireless device for remote control of the LED luminaires. Device is equipped with Zhaga compliant connector and controls the luminaire through DALI or DALI-2 interface. Controller is available now for LoRaWAN®, NB-IoT and LTE-M network. Modern and small design makes it excellent fit to various street lighting modules.

LoRaWAN® Luminaire Controller NEMA

LoRaWAN® Luminaire Controller NEMA is a remote control device for LED luminaires equipped with ANSI C136.41 NEMA receptacle. The luminaire is controlled through DALI or 0..10V analog control interfaces, while providing a reliable power interconnect with three robust twist lock contacts.

Buckle design, tool-less entry hinged removable door for easy maintenance.

Fin shape radiator, better heat dissipation

A sensor mounting hole is reserved on the top to facilitate future installation.



> Application Reference

- Road lighting
- Area lighting
- Perimeter lighting



> Comparison of Project Remodeling



Parameter Table

Electrical Data

Model	20WIL02	30WIL02	40WIL02	50WIL02	60WIL02	70WIL02	80WIL02	90WIL02	100WIL02
Power(W)	20 W	30 W	40 W	50 W	60 W	70 W	80 W	90 W	100 W
Input voltage	100-277VAC								
THD	<20%								
PF	>0.95								
Driver	Meanwell / Inventronics / Philips. Class 1/ Class 2, EU								
Operating temperature	-40°C to 50°C (-40 °F to 122 °F)								
Control Option	DALI, 1-10V/ PWM / timer dimming, Nema, Zhaga, Presence detection sensor. Dim-to-Off with standby power <= 0.5W.								
Surge Protection	10kV / 20kV optional								

Photometric Data

		Efficacy(lm/W) (CRI 70Ra, 5000K) (Std Dev ±3%)									
		T201	T211	T221	T301	T311	T321	T411	T201	T211	T221
		155.3 lm/W	157.2 lm/W	149.8 lm/W	149.3 lm/W	--	--	147.6 lm/W	145.4 lm/W	--	
		153.3 lm/W	151.9 lm/W	148.6 lm/W	146.5 lm/W	--	--	144.9 lm/W	142.7 lm/W	--	
		--	--	--	--	156.3 lm/W	155.2 lm/W	--	--	153.14 lm/W	
		155.45 lm/W	150.2 lm/W	142.1 lm/W	144.68 lm/W	--	--	143.2 lm/W	141 lm/W	--	
		152.6 lm/W	155.2 lm/W	148.95 lm/W	148.64 lm/W	--	--	147 lm/W	144.8 lm/W	--	
		--	--	--	--	158.3 lm/W	157.4 lm/W	--	--	152.6 lm/W	
		161.95 lm/W	157.5 lm/W	147.05 lm/W	149.1 lm/W	--	--	147.45 lm/W	145.1 lm/W	--	
		3106 lm	4716 lm	5993 lm	7464 lm	--	--	11808 lm	13083 lm	--	
		3066 lm	4558 lm	5943 lm	7325 lm	--	--	11595 lm	12847 lm	--	
		--	--	--	--	9378 lm	10861 lm	--	--	15314 lm	
		3109 lm	4505 lm	5685 lm	7234 lm	--	--	11453 lm	12690 lm	--	
		3052 lm	4656 lm	5958 lm	7432 lm	--	--	11760 lm	13030 lm	--	
		--	--	--	--	9500 lm	11017 lm	--	--	15260 lm	
		3239 lm	4724 lm	5882 lm	7455 lm	--	--	11796 lm	13056 lm	--	

ULR	= 0%, @ Luminaire inclination 0°								
CCT	2700K, 3000K, 4000K, 5000K, 5700K, 6500K								
CRI	70Ra, 80Ra, 90Ra optional								
Beam angle	30D/60D/90D/120D/T2/T3/T4								
LED Manufacturer	LUMILEDS/Seoul								
LED model	Lumileds 3030/Seoul3030								
Lens	Polycarbonate+tempered glass(5 mm thick)								

Mechanical Data

IP/IK	IP66/IK08, according to standard EN 60529 and EN 62262								
Vibration resistance	3G, conform to standard IEC 68-2-6.								
SCx	Front: 0.014 m ² ; Side: 0.0214 m ²			Front: 0.0219 m ² ; Side: 0.035 m ²					
Materials	Heavy-duty die-cast aluminum (EN AC-46100)								
Painting	Black, Silver, Custom request								
Surface treatment	Anti-UV thermosetting polyester / 80 micron epoxy primer + Anti-UV thermosetting polyester (for extremely corrosive)								
Cable	Pre-wired with a 30 cm cable (Other lengths on request)								
Mounting	Side Entry/Post Top								

Others

Lifespan	L90B10 > 52000h, @Ta 25°C								
Warranty	5 years (Warranty extension up to 10 years on request)								
Product Size	470*230*79mm				646*240*137mm				
Carton size	520*270*135mm				715*290*200mm				
Net Weight	3.1kg				5.4kg				
Gross weight	4.0kg				6.1kg				
Recommend installation height	General 4-12m, based on actual project requirements								
Application field	Urban and rural street								

Electrical Data

Model	120WIL02	130WIL02	150WIL02	160WIL02	180WIL02	200WIL02	220WIL02	230WIL02
Power(W)	120 W	130 W	150 W	160 W	180 W	200 W	220 W	230 W
Input voltage	100-277VAC							
THD	<20%							
PF	>0.95							
Driver	Meanwell / Inventronics / Philips. Class 1/ Class 2, EU							
Operating temperature	-40°C to 50°C (-40 °F to 122 °F)							
Control Option	DALI, 1-10V/ PWM / timer dimming, Nema, Zhaga, Presence detection sensor. Dim-to-Off with standby power <= 0.5W.							
Surge Protection	10kV / 20kV optional							

Photometric Data

		Efficacy(LM/W) (CRI 70Ra, 5000K) (Std Dev ±3%)									
		T201	T211	T221	T301	T311	T321	T411	T201	T211	T221
		--	148 lm/W	145.5 lm/W	--	--	--	--	--	--	
		--	145.4 lm/W	142.9 lm/W	--	--	--	--	--	--	
		152.7 lm/W	--	--	165.4 lm/W	161 lm/W	155.16 lm/W	152.1 lm/W	152.6 lm/W		
		--	143.6 lm/W	141.12 lm/W	--	--	--	--	--		
		--	147.4 lm/W	144.9 lm/W	--	--	--	--	--		
		152.2 lm/W	--	--	164.3 lm/W	159.9 lm/W	154.93 lm/W	151.3 lm/W	152.2 lm/W		
		--	147.9 lm/W	145.34 lm/W	--	--	--	--	--		
		--	19245 lm	21823 lm	--	--	--	--	--		
		--	18898 lm	21430 lm	--	--	--	--	--		
		18324 lm	--	--	26459 lm	28972 lm	31032 lm	33459 lm	35098 lm		
		--	18667 lm	21168 lm	--	--	--	--	--		
		--	19168 lm	21735 lm	--	--	--	--	--		
		18268 lm	--	--	26287 lm	28790 lm	30986 lm	33294 lm	35011 lm		
		--	19225 lm	21801 lm	--	--	--	--	--		

ULR	= 0%, @ Luminaire inclination 0°							
CCT	2700K, 3000K, 4000K, 5000K, 5700K, 6500K							
CRI	70Ra, 80Ra, 90Ra optional							
Beam angle	30D/60D/90D/120D/T2/T3/T4							
LED Manufacturer	LUMILEDS/Seoul							
LED model	Lumileds 3030/Seoul3030							
Lens	Polycarbonate+tempered glass(5 mm thick)							

Mechanical Data

IP/IK	IP66/IK08, according to standard EN 60529 and EN 62262							
Vibration resistance	3G, conform to standard IEC 68-2-6.							
SCx	Front: 0.0219 m ² ; Side: 0.035 m ²		Front: 0.0263 m ² ; Side: 0.0363 m ²			Front: 0.0285 m ² ; Side: 0.0412 m ²		
Materials	Heavy-duty die-cast aluminum (EN AC-46100)							
Painting	Black, Silver, Custom request							
Surface treatment	Anti-UV thermosetting polyester / 80 micron epoxy primer + Anti-UV thermosetting polyester (for extremely corrosive)							
Cable	Pre-wired with a 30 cm cable (Other lengths on request)							
Mounting	Side Entry/Post Top							

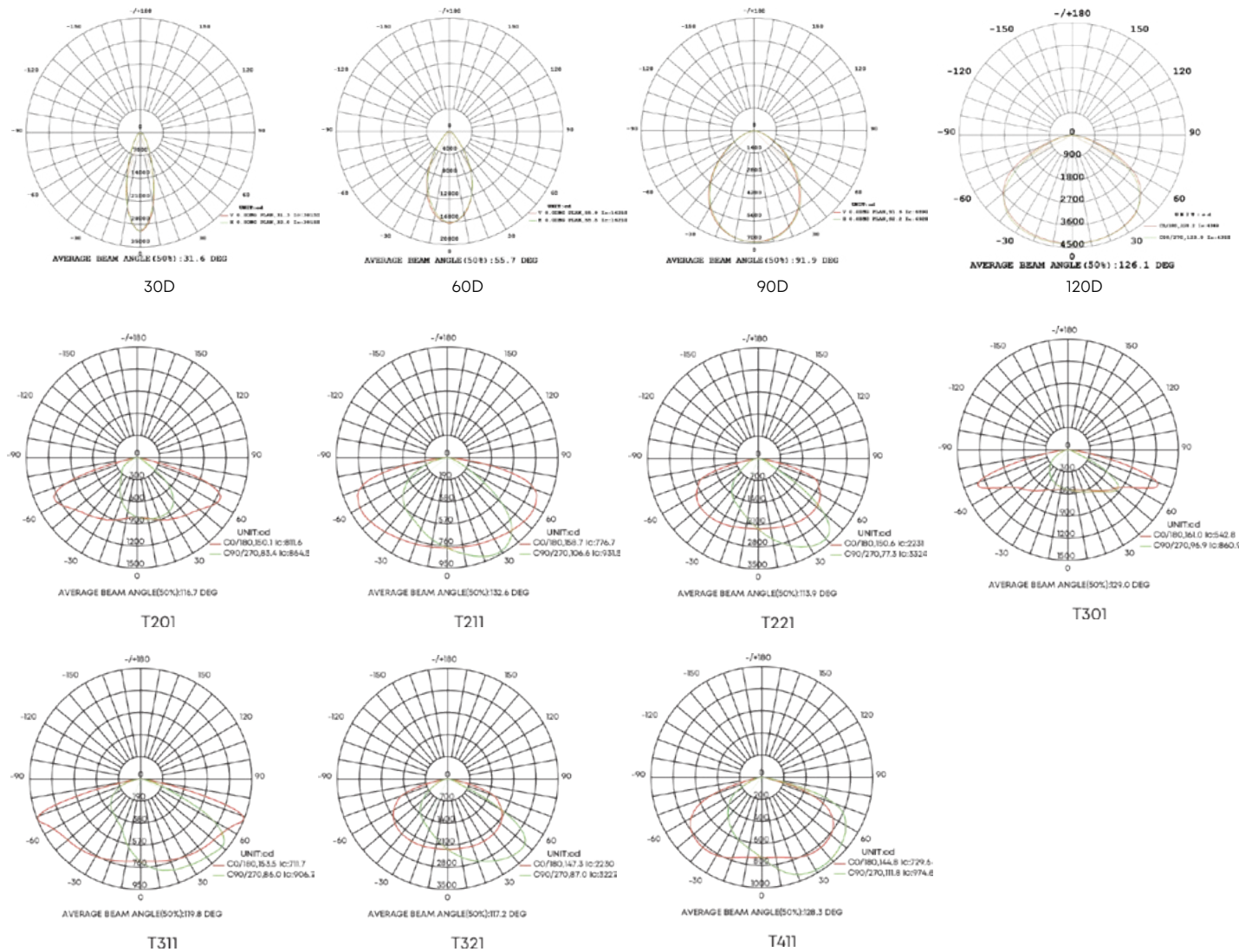
Others

Lifespan	L90B10 > 52000h, @Ta 25°C							
Warranty	5 years (Warranty extension up to 10 years on request)							
Product Size	646*240*137mm		676*290*137mm			756*308*138mm		
Carton size	715*290*200mm		745*340*200mm			825*360*200mm		
Net Weight	5.4kg		6.0kg			6.8kg		
Gross weight	6.1kg		7.2kg			8.3kg		
Recommend installation	General 4-12m, based on actual project requirements							
Application field	Urban and rural street							

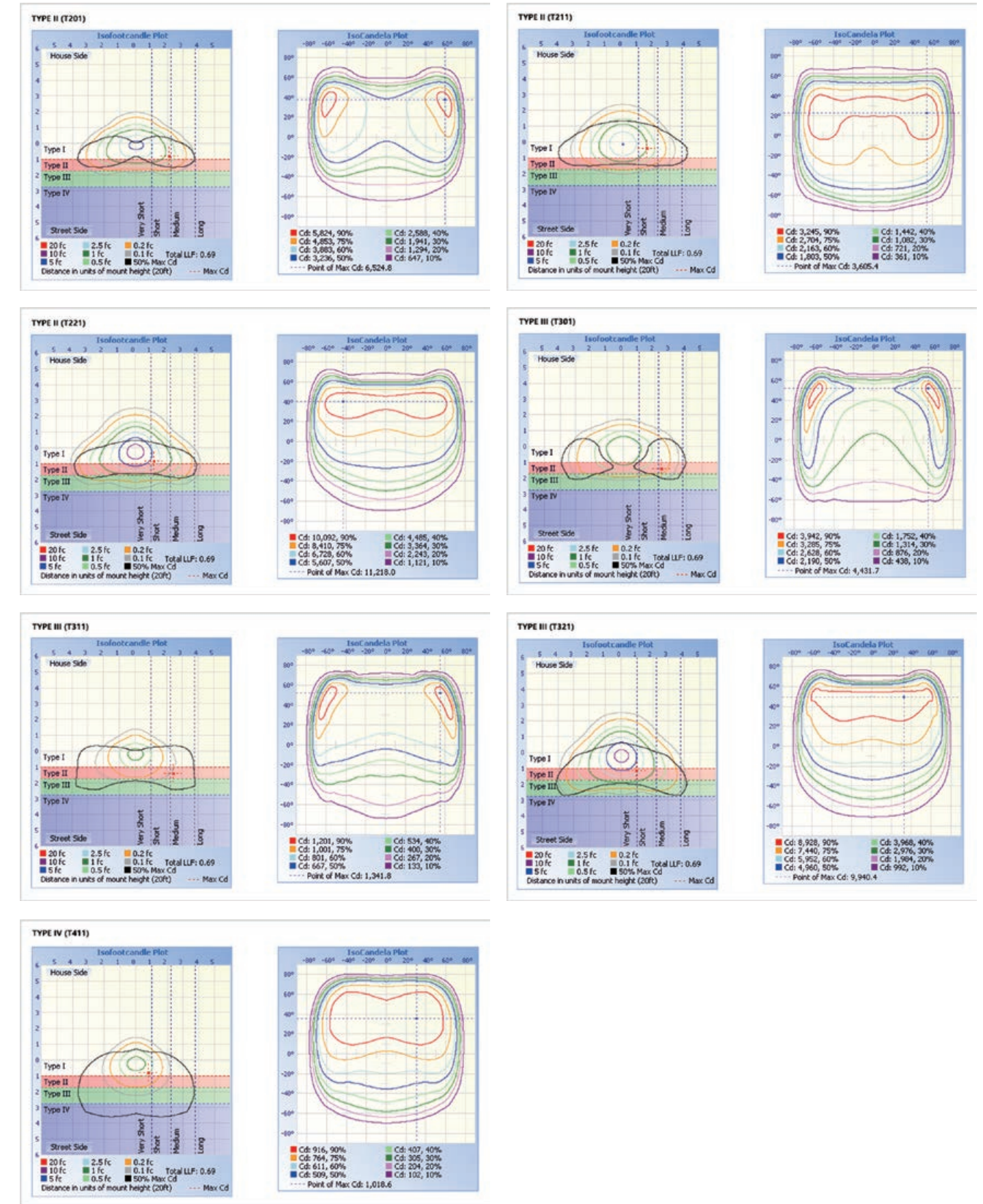
Ordering Information

Aura Renewable Energy							
WATTS	VOLTAGE	LED CHIPS	TYPE OF SENSOR	CCT&CRI	DISTRIBUTION	HOUSING	OPTION
20WiL02	NV=100-277V	L3=LUMILED 3030	00=Without Sensor	2770=2700K 70CRI	30D=30deg	SG=Silver Gray	10KV SPD
30WiL02		S3=Seoul 3030	PH=Photocell	3070=3000K 70CRI	60D=60deg	Custom request	20KV SPD
40WiL02			DV=Dimmable	4070=4000K 70CRI	90D=90deg		
50WiL02				5070=5000K 70CRI	120D=120deg		
60WiL02				5770=5700K 70CRI	T2=Type II		
70WiL02				6570=6500K 70CRI	T3=Type III		
80WiL02				2780=2700K 80CRI	T4=Type IV		
90WiL02				3080=3000K 80CRI			
100WiL02				4080=4000K 80CRI			
120WiL02				5080=5000K 80CRI			
130WiL02				5780=5700K 80CRI			
150WiL02				6580=6500K 80CRI			
160WiL02							
180WiL02							
200WiL02							
220WiL02							
230WiL02							

Photometry



Illuminance Diagram



IL02 Series Specification Sheet

*Due to the constant improvements in product development, individual parameters might change. Please refer to our sales or R&D team for most up-to-date content as specifications are subject to change without notice.

Construction Features



1. Heavy-duty die-cast aluminum housing, UV stabilized polyester powder paint, reserved space for photocell;
2. Buckle design. Tool-less entry for easy maintenance;
3. Class I /Class II Dimmable driver;
4. Isolated removable plate for driver;
5. Auto power cutoff protector, tool free electrical gear tray;
6. Supporting rod;
7. Fin shape radiator design, better heat dissipation to protect lifespan of fixture.

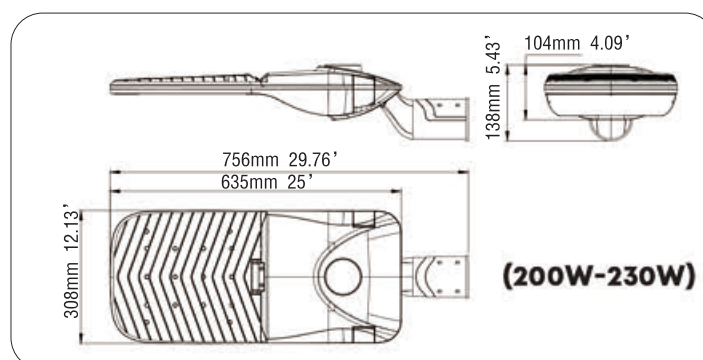
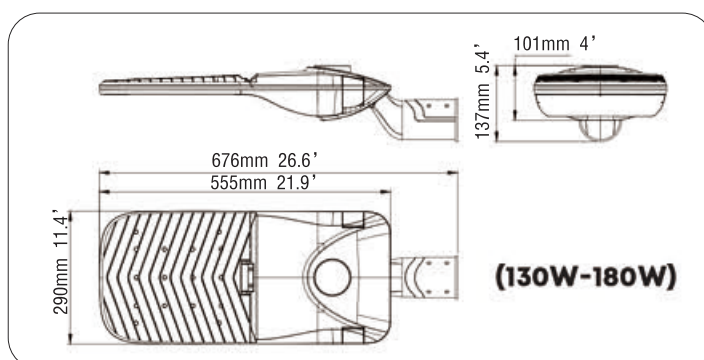
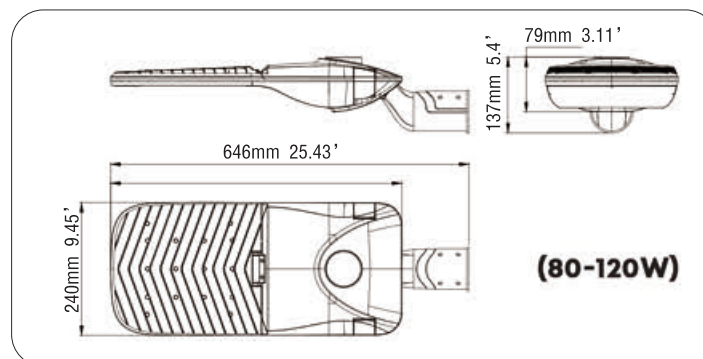
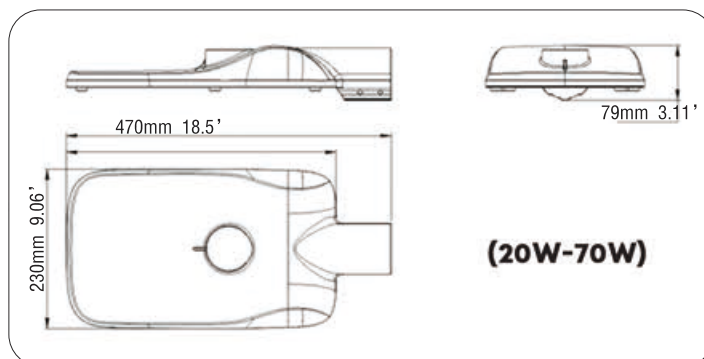
ELECTRICAL

- 1-10V/ PWM/ Timer dimming, 3 Timer Modes, Power Factor (PF) ≥ 0.95 .
- Constant current Class II driver, 100-277Vac, 50-60Hz, Class I optional.
- High efficiency driver: up to 90%, minimum efficiency 85%.
- Input Surge Protection: 6kV line-line, 10kV line-earth, 20KV SPD available.
- Operating temperature rating: -40°F to 122°F (-40°C to 50°C).
- Photocell, Zhaga Base, Zigbee or Lora Lighting Controller available.
- Surge Protective Device 10KV~20KV.

CONSTRUCTION

- Tool-less entry hinged removable door for easy maintenance.
- Auto-electrical disconnection: Built-in circuit breaker, tool free electrical gear tray.
- UV stabilized polyester powder paint finish for durability and corrosion resistance.
- Multiple Mounting options: Post top and side entry installation available.
- Mounting has leveling adjustment from -10° to $+15^{\circ}$.
- 3G vibration rated.

Fixture Dimensions



Accessories

Mounting Options



Post Top



Slide Entry

Control Options



Photocell

Shorting cap

3 pin/7 pin receptacle



*As the products are upgraded, the accessories may differ from those described in the pictures. Please consult with our sales team for updated details and order separately.