



**INM** LED ROADWAY LIGHTING  
HIGH MAST LUMINAIRE

**100+** Patent Certificates  
**\$1,000,000+** Annual Energy Saving  
**10,000+** Projects Successfully Installed



## > Features of INM Series

INM features a smart lighting system, lid-latch driver box design easy installation & maintenance. Rugged, weather-tight design and up to 5G Vibration ratings (certain models), corrosion-resistant polyester powder painted. PMMA adopts a matrix full light cutting design. By adding a concave light retaining wall, excess light can be removed and the effect of receiving & blocking can be achieved. The design scheme can meet users' requirements for light seeing range to a greater extent. IP66 protection grade, waterproof structure design, IK10 shake-proof.

- PMMA adopts matrix full light cutting design. By adding a concave light retaining wall, excess light can be removed and the effect of receiving & blocking can be achieved. The design scheme can meet users' requirements for light seeing range to a greater extent.
- The overall streamline of the lamp body is beautiful, generous, and decent. The back adopts a fin-type of heat dissipation structure, with effect. Edge sinking design and convection vents, optimize air convection quality, strengthen heat dissipation, fully ensure the life of the fixture.
- Induction mounting hole is reserved. Offer customers more functional options and more convenience for upgrading in the future.
- IP66 protection grade, waterproof structure design + high resistance wire silicone waterproof ring design, double protection, safer. Better protection of the lamp IP performance.
- Super bracket design, bracket strength can support more than 10 times the weight of the lamp body, the safety factor is higher than counterparts.

<b>UP TO</b> <b>170</b> lm/W	<b>100-277V</b> ON <b>347-480V</b> <b>50/60HZ</b>	<b>THD</b> <b>&lt;20%</b>	<b>ULR</b> <b>=0</b>	<b>L80B10</b> <b>&gt;108000hrs</b> @ 55°C	 <b>DIM</b>
<b>CRI</b> <b>70/80/90</b>	<b>3000K</b> <b>4000K</b> <b>5000K</b> <b>5700K</b> <b>6500K</b>	<b>IP66</b> <b>IK10</b>	<b>5G</b> VIBRATION TESTING	 <b>TOOL FREE</b> MAINTENANCE	



INM01



INM03



# > Photometric Design

iNM light engine using reflective technology to optimize application efficiency and minimize glare. The efficient design of the LED modules makes each light engine highly customizable, allowing the light distribution to be aimed toward the application.

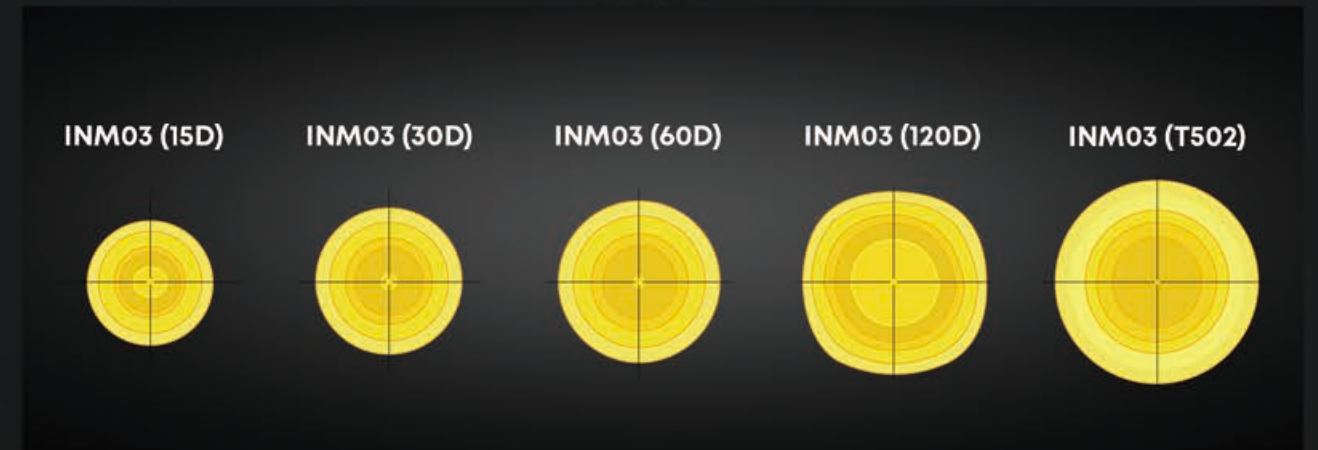
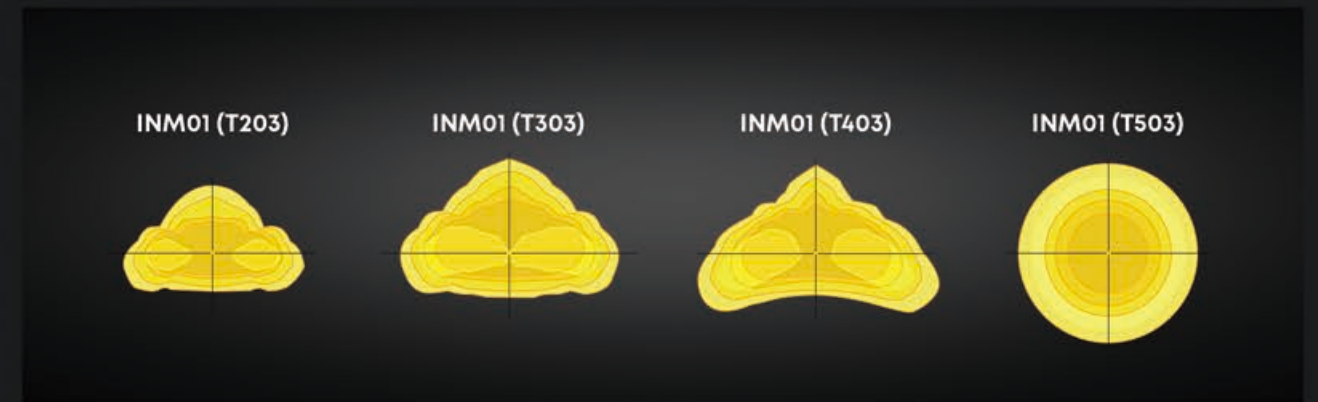
- LM-79 test and report in accordance with IESNA Standard.
- iNM01: 3000K~6500K CCT; iNM03: 2700K~6500K CCT.
- Minimum CRI of 70, 80 and 90 optional.

We deliver innovation and customization, further expanding the flexibility of the project. Exceptional uniformity and low glare for maximum comfort.



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

## Distribution

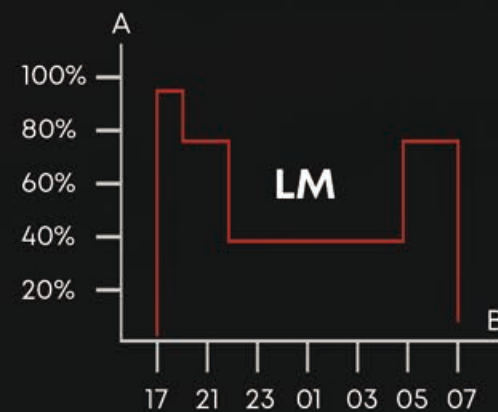


# > Structure & Control Systems

## 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.

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

Driver box heat dissipation, protect the power supply and prolong the lifespan.

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

Fin-shape heat dissipation, fair-shaped design, efficient thermal management to protect the lifespan of the fixture.



High performance modular LED light engine



Easy wiring & installation



3 or 7-pin receptacle with a variety of controls options



Bolt mounting 3G rating

## > Application Reference

- Airport lighting;
- Expressway and freeway interchanges;
- Port facilities;
- Trailer/container yard and rail yard operation area.



## > Project Reference



# Parameter Table

Electrical Specifications								
Model	230WINM	315WINM	380WINM	460WINM	580WINM	720WINM		
Power(W)	230 W	315 W	380 W	460 W	580 W	720 W		
Input voltage	100-277VAC, 50/60Hz, 347/480VAC optional							
THD	<20%							
PF	>0.90							
Control Option	DALI, 1-10V/ PWM/ timer dimming, Nema, Zhaga, Presence detection sensor. 3 or 7 pin receptacle reserved.							
Operating temperature	-40°C to 55°C (-40 °F to 131 °F)							
Driver brand	Inventronics or others							
Surge Protection	20KV Standard							
Photometric Specifications								
Efficacy (lm/W, Std. Dev. ±3%)@CCT=4000K, CRI>70Ra	Y22-T203	145 lm/W	140 lm/W	135 lm/W	145 lm/W	140 lm/W	135 lm/W	
	Y22-T303	145 lm/W	140 lm/W	135 lm/W	145 lm/W	140 lm/W	135 lm/W	
	Y22-T403	*	*	*	*	*	*	
	Y22-T503	*	*	*	*	*	*	
	S5-T202	*	*	*	*	*	*	
	S5-T302	*	*	*	*	*	*	
	S5-T402	*	*	*	*	*	*	
	S5-T502	150 lm/W	145 lm/W	140 lm/W	150 lm/W	145 lm/W	140 lm/W	
	S5-PC-15D	145 lm/W	140 lm/W	135 lm/W	145 lm/W	140 lm/W	135 lm/W	
	S5-PC-30D	165 lm/W	160 lm/W	155 lm/W	165 lm/W	160 lm/W	155 lm/W	
	S5-PC-60D	165 lm/W	160 lm/W	155 lm/W	165 lm/W	160 lm/W	155 lm/W	
	S5-PC-120D	*	*	*	*	173 lm/W	168 lm/W	
	Luminous flux (lm, Std. Dev. ±3%)@CCT=4000K, CRI>70Ra	Y22-T203	33350 lm	44100 lm	51300 lm	66700 lm	81200 lm	97200 lm
		Y22-T303	33350 lm	44100 lm	51300 lm	66700 lm	81200 lm	97200 lm
Y22-T403		*	*	*	*	*	*	
Y22-T503		*	*	*	*	*	*	
S5-T202		*	*	*	*	*	*	
S5-T302		*	*	*	*	*	*	
S5-T402		*	*	*	*	*	*	
S5-T502		33350 lm	45700 lm	53200 lm	69000 lm	84100 lm	100800 lm	
S5-PC-15D		33350 lm	44100 lm	51300 lm	66700 lm	81200 lm	97200 lm	
S5-PC-30D		37950 lm	50400 lm	58900 lm	75900 lm	92800 lm	111600 lm	
S5-PC-60D		33350 lm	44100 lm	58900 lm	75900 lm	92800 lm	111600 lm	
S5-PC-120D		*	*	*	*	99940 lm	120878 lm	
ULOR		= 0%, @ Luminaires inclination 0°						
CCT		iNM01:3000K~6500K; iNM03:2700K~6500K						
CRI	70Ra, 80Ra, 90Ra optional							
Beam angle	iNM01: T2/T3/T4/T5; iNM03: 15D/30D/60D/120D/T5							
Mechanical Specifications								
IP/IK	iNM01: IP66/IK08; iNM03: IP66/IK10							
Vibration resistance	3G/5G vibration rated (please refer for details), conform to standard IEC 68-2-6.							
SCx(EPA)	Top: 0.274064m² (2.95ft²); Side: 0.128206m² (1.38ft²); Front: 0.089187m² (0.96ft²);			Top: 0.339096m² (3.65ft²); Side: 0.136568m² (1.47ft²); Front: 0.096619m² (1.04ft²);				
Housing/Materials	Heavy-duty die-cast aluminum (ENAC-46100)							
Surface treatment	Anti-UV thermosetting polyester / 80 micron epoxy primer + Anti-UV thermosetting polyester (for extremely corrosive environments).							
Painting	Black, Silver gray, Custom request							
Cable	Pre-wired with a 30 cm cable (Other lengths on request)							
Mounting	Slip fitter							
LED								
LED Manufacturer	LUMILEDS/Seoul							
LED model	Seoul 5050/Seoul Y22							
Working current of single LED (mA)	Y22-T203	317 mA	412 mA	436 mA	339 mA	399 mA	465 mA	
	Y22-T303	317 mA	412 mA	436 mA	339 mA	399 mA	465 mA	
	Y22-T403	*	*	*	*	*	*	
	Y22-T503	*	*	*	*	*	*	
	S5-T202	*	*	*	*	*	*	
	S5-T302	*	*	*	*	*	*	
	S5-T402	*	*	*	*	*	*	
	S5-T502	66 mA	90 mA	108 mA	62 mA	78 mA	97 mA	
	S5-PC-15D	55 mA	77 mA	92 mA	67 mA	84 mA	105 mA	
	S5-PC-30D	34 mA	47 mA	56 mA	40 mA	50 mA	63 mA	
	S5-PC-60D	34 mA	47 mA	56 mA	40 mA	50 mA	63 mA	
	Lens	Polycarbonate / Tempered glass						
	Others							
	Lifespan	L80B10 > 108000 h, @Tq 55°C						
Warranty	5 years (Warranty extension up to 10 years on request)							
Certification	UL/cUL/DLC/FCC/CE/ENEC/SAAGS							
Product size(mm)	664*468*224mm	664*468*224mm	664*468*224mm	705*550*218mm	705*550*218mm	705*550*218mm		
Net Weight(kg)	18.5kg	iNM01: 18.5kg iNM03: 20.5kg	iNM01: 18.5kg iNM03: 20.5kg	iNM01: 20.5kg iNM03: 23kg	iNM01: 20.5kg iNM03: 24kg	iNM01: 20.5kg iNM03: 24kg		
Recommended installation height	20M	25M	30M	35M	40M	45M		
Application field	Suitable for port, railway station, highway express							
*** Stands for the lens module is under development, and the specific parameters will be calculated according to the actual project requirement.								

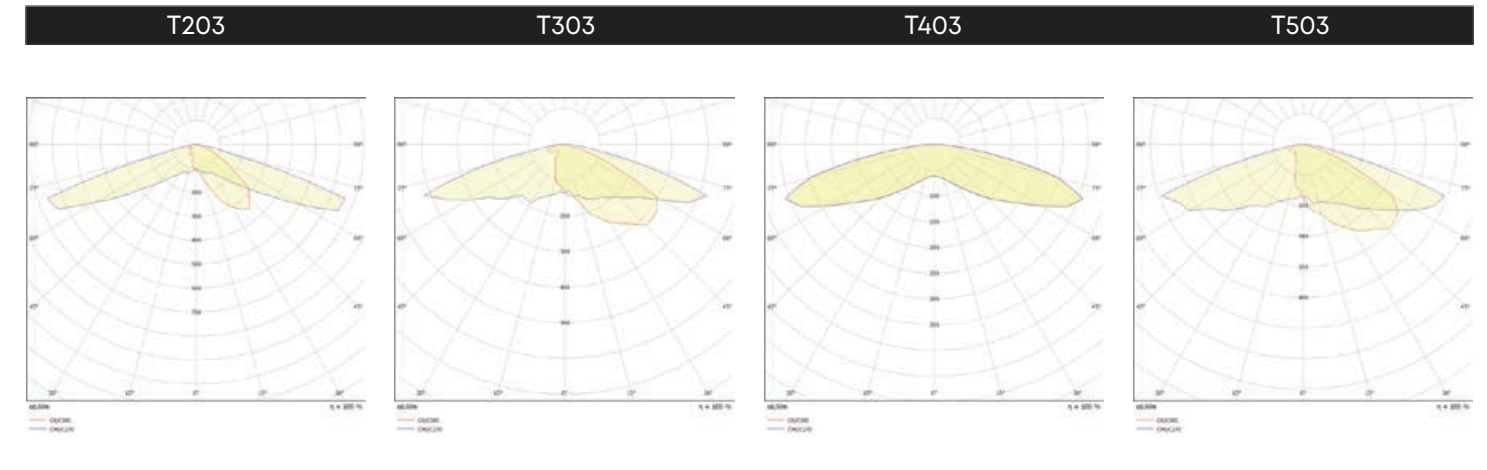
# Ordering Information

Aura Renewable Energy	W ATTS	TYPE	VOLTAGE	LED CHIPS	TYPE OF SENSOR	*CCT&CRI	*DISTRIBUTION	MOUNT	HOUSING
	230W iNM	01	NV=100-277V	S5=Seoul 5050	00=Without Sensor	2770=2700K 70CRI	15D=15°	A=Slip Fitter	BK=Black
	315W iNM	03	HV=347/480V	Y22=Seoul Y22	DV=Dimmable	3070=3000K 70CRI	30D=30°		SL=Silver Gray
	380W iNM				PH=Photocell	4070=4000K 70CRI	60D=60°		
	460W iNM					5070=5000K 70CRI	120D=120°		
	580W iNM					5770=5000K 70CRI	T2=T203		
	720W iNM					6570=6500K 70CRI	T3=T303		
						2780=2700K 80CRI	T4=T403		
						3080=3000K 80CRI	T5= T503		
						4080=4000K 80CRI			
						5080=5000K 80CRI			
						5780=5700K 80CRI			
						6580=6500K 80CRI			

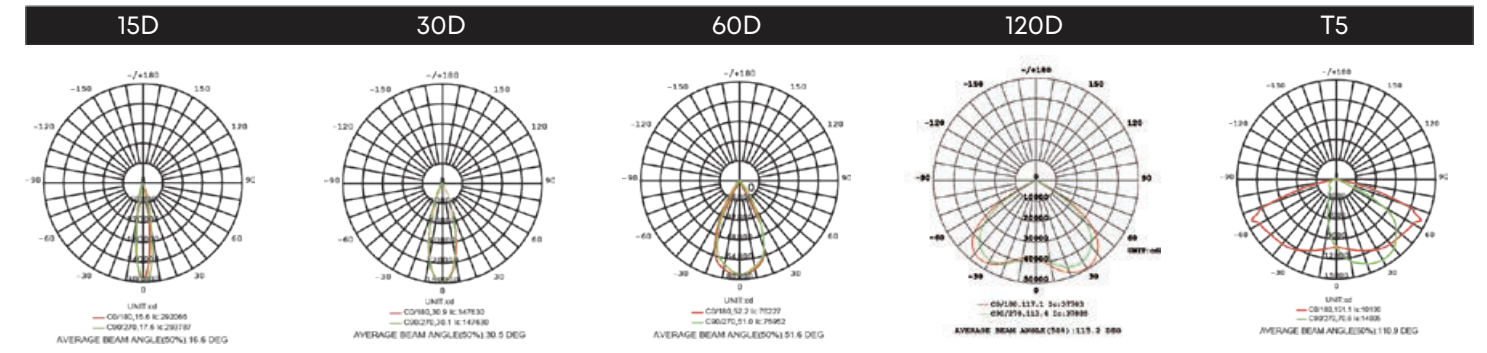
\*CCT&CRI: iNM01: 3000K~6500K CCT; iNM03: 2700K~6500K CCT; \*DISTRIBUTION: iNM01: T2M/T3M/T4M/T5; iNM03: 15D/30D/60D/120D/T5

# Photometry

## iNM01 VERSION PHOTOMETRY



## iNM03 VERSION PHOTOMETRY



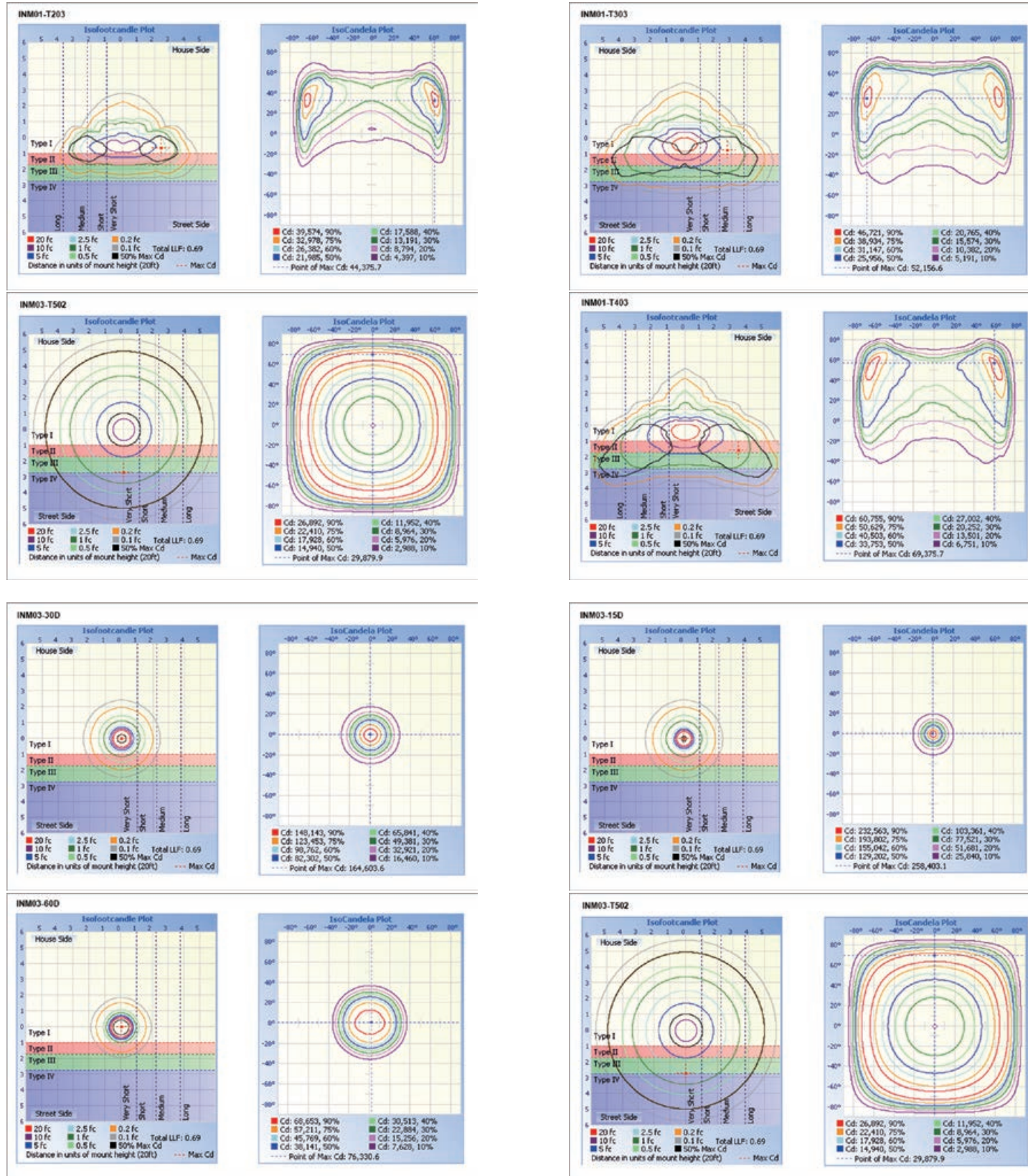
All published Luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited Laboratory.

# INM Series Specification Sheet

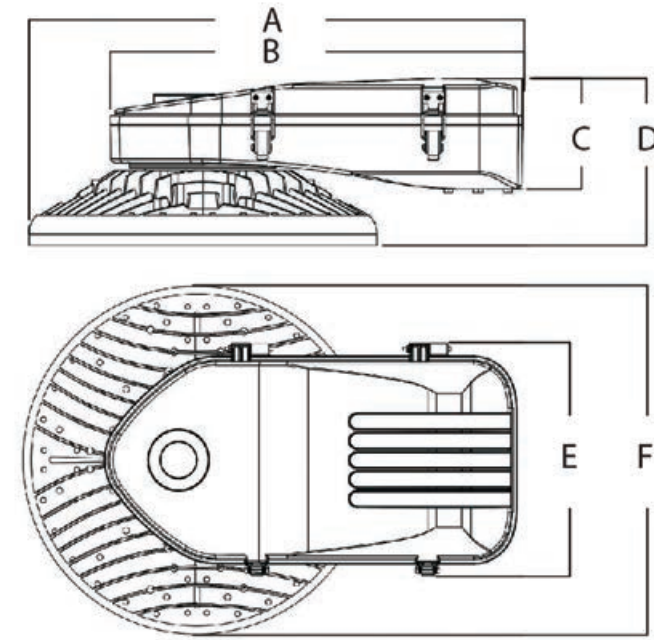
\*Due to the constant improvements in product development, individual parameters might change. Please refer to our sales or R&D team for most up-to-date content as specifications are subject to change without notice.



# Illuminance Diagram



# Fixture Dimensions



	A	B	C
230W	66.4cm/26.0'	55.5cm/21.7'	14.9cm/5.8'
315W	D (INM)	D (INM02)	E
380W	22.4cm/8.8'	21.4cm/8.4'	31.4cm/12.3'
	F	46.8cm/18.3'	
460W	A	B	C
580W	70.5cm/27.6'	55.5cm/21.7'	14.9cm/5.8'
720W	D (INM)	D (INM02)	E
	21.8cm/8.5'	21.1cm/8.3'	31.4cm/12.3'
			46.8cm/18.3'

# Mounting & Accessories



- Heavy-duty die-cast aluminum housing, anti-corrosion.
- Lid-latch driver box design & tool-less entry for easy maintenance.
- Slide entry and bolt mounting installation, easy & fast.
- 3G/5G vibration rated (please request for details), conform to standard IEC 68-2-6.

## 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.