

**EYE IWASAKI**

**LEDioc/SL EY686  
(WD/MD SERIES)  
LED STREET LIGHT**



**ESL**  
LIGHTING

LEDioc/SL EY686 - 22.09

## PRODUCT SUMMARY

### ELECTRICAL SYSTEM

- **Power Consumption** : EY686-1 - 35W, 60W, 75W  
: EY686-2 - 80W, 90W, 100W, 120W  
: EY686-3 - 120W, 135W, 150W,  
170W, 180W, 190W, 200W  
: EY686-4 - 240W, 280W  
: Other power upon request
- **Input Voltage** : 100 - 240Vac (50/60Hz)
- **Power Factor** : > 0.96
- **Insulation Class** : Class I (Class II upon request)
- **LED Driver** : Constant Current  
: Input Surge Protection  
: Water dust proof  
: Programmable (only selected models)  
: Optional 1-10V/PWM/DALI Dimming
- **Surge Protective Device** : 50kV, 25kA (internal SPD)
- **Optional Smart Control Features** : NEMA / Zhaga Shorting Cap  
: NEMA / Zhaga IoT Smart Controller  
: NEMA / Zhaga Photocell (Daylight Sensor)  
(Daylight Sensor)
- **Operating Temperature** : -20°C to +50°C

### FIXTURE SPECIFICATION

- **Housing Material** : ADC 12 Die Cast Aluminum
- **Housing Color** : Akzo Nobel RAL9006 Grey
- **Ingress Protection (IP)** : IP66 water dust proof
- **Impact Resistance (IK)** : IK08
- **Mounting Diameter (Spigot)** : EY686-1 : Ø 35mm-50mm  
EY686-2 : Ø 35mm-50mm  
EY686-3 : Ø 48mm-60mm  
EY686-4 : Ø 48mm-60mm  
: Other upon request
- **Mounting Adjustment** : Post Top / Side Entry  
: Allowable tilt -15° to +15°  
: 5° incremental tilt
- **Nett Weight (kg) (Complete Luminaire)** : EY686-1 : approx. 4.50 kg  
EY686-2 : approx. 6.15 kg  
EY686-3 : approx. 8.10 kg  
EY686-4 : approx. 14.40 kg
- **Gross Weight (kg) (Complete Package)** : EY686-1 : approx. 5.45 kg  
EY686-2 : approx. 7.35 kg  
EY686-3 : approx. 9.23 kg  
EY686-4 : approx. 17.20 kg

### LIGHT SOURCE / OPTIC SPECIFICATION

- **LED Type** : SMD 5050
- **Color Temperature (CCT)** : 3000K  
: Other upon request
- **Color Rendering Index (CRI)** : RA > 70  
: RA > 80 upon request
- **Life Time Residual Flux** : (L70) > 50,000 hours  
@ Ta = 50 °C  
: (L90) > 50,000 hours  
@ Ta = 25 °C
- **LED Compliance Test** : LM80, TM21
- **Optical Lens** : TYPE 1, TYPE 2, TYPE 3  
: Others upon request

### STANDARDS & CERTIFICATION TEST

- **Type Test Compliance (Luminaire)** : IEC 60598-2-3, IEC 60598-1  
: IEC 60598-1
- **EMC Compliance (LED Driver)** : EN 55015, EN 61547  
: EN 61000-3-2 ; EN 61000-3-3  
: EN 61347-1 ; EN 61347-2-13
- **SIRIM Product Certificate** : PC004404 (Malaysia Only)
- **SIJIL EMAL** : EE022009/19/08/11  
: EE02200012/19/08/09  
: EE022009/22/07/26
- **My Hijau Certification** : 90W, 120W, 150W, 180W, 200W
- **LED Compliance Test** : IESNA LM-79, LM-80, TM-21
- **Ingress Protection Test** : IEC 60529
- **Impact Resistance Test** : IEC 62262
- **Luminaire Performance** : IEC 62722-1, IEC 62722-2-1
- **Vibration & Shock Test** : IEC 60068-2-6



EY686-2



EY686-1



EY686-3



EY686-4

PRODUCT TECHNICAL DATA



Model	EY686-1		
	35W	60W-MWD	75W-WD
Power Consumption ±5% (W)	35	60	75
Luminaire Flux ±5% (lm) @ 3000K T2	4,202	7,549	8,637
System Efficacy ±5% (lm/W) @ 3000K T2	116.6	122.9	111.4
Power Factor (PF)	0.98	0.98	0.98
Efficiency %	87%	89%	89%
LED Chips Qty LED (pcs)	16	32	32
Product Dimension L x W x H (mm)	560 x 246 x 114		
Carton Dimension L x W x H (mm)	625 x 310 x 205		
Net Weight (kg)	4.10	4.45	4.50
Gross Weight (kg)	5.15	5.40	5.45
CBM (m <sup>3</sup> )	0.040		

Model	EY686-2							
	80W		90W		100W		120W	
	WD	MD	WD	MD	WD	MD	WD	MD
Power Consumption ±5% (W)	80		90		100		120	
Luminaire Flux ±5% (lm) @ 3000K T2	10,874	10,738	11,458	11,973	11,924	13,374	14,654	14,564
System Efficacy ±5% (lm/W) @ 3000K T2	129.9	135.8	123.4	132.9	122.0	132.6	126.1	124.0
Power Factor (PF)	0.97	0.95	0.97	0.96	0.96	0.97	0.98	0.97
Efficiency %	92%	91.5%	91%	91.5%	93%	91.5%	93%	91.5%
LED Chips Qty LED (pcs)	40	48	48	48	48	48	48	48
Product Dimension L x W x H (mm)	653 x 288 x 127							
Carton Dimension L x W x H (mm)	700 x 340 x 200							
Net Weight (kg)	5.65	5.80	5.80	5.80	6.15	5.80	6.15	5.80
Gross Weight (kg)	6.85	6.30	7.00	6.30	7.35	6.30	7.35	6.30
CBM (m <sup>3</sup> )	0.048							

Model	EY686-3							
	120W		135W		150W		170W	
	WD	MD	WD	MD	WD	MD	MXD	MD
Power Consumption ±5% (W)	120		135		150		170	
Luminaire Flux ±5% (lm) @ 3000K T2	15,540	16,599	17,393	18,228	18,094	19,968	20,776	23,037
System Efficacy ±5% (lm/W) @ 3000K T2	124.1	138.3	125.0	136.0	118.3	132.5	137.2	133.2
Power Factor (PF)	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Efficiency %	93%	91.5%	93%	91.5%	93%	91.5%	92%	92%
LED Chips Qty LED (pcs)	64	80	80	80	80	80	120	120
Product Dimension L x W x H (mm)	763 x 330 x 125							
Carton Dimension L x W x H (mm)	805 x 390 x 200							
Net Weight (kg)	7.52	7.95	7.83	7.95	7.83	7.95	8.10	8.10
Gross Weight (kg)	9.11	8.45	9.23	8.45	9.23	8.45	8.60	8.60
CBM (m <sup>3</sup> )	0.063							

Model	EY686-3			EY686-4	
	180W-MD	190W-MD	200W-MD	240W-WD	280W-WD
Power Consumption ±5% (W)	180	190	200	240	280
Luminaire Flux ±5% (lm) @ 3000K T2	24,415	26,133	26,464	32,496	38,347
System Efficacy ±5% (lm/W) @ 3000K T2	135.5	135.3	131.3	132.2	137.4
Power Factor (PF)	0.98	0.98	0.99	0.99	0.98
Efficiency %	92%	92%	92%	92%	95%
LED Chips Qty LED (pcs)	120			120	144
Product Dimension L x W x H (mm)	763 x 330 x 125			935 x 450 x 155	
Carton Dimension L x W x H (mm)	805 x 390 x 200			1020 x 540 x 225	
Net Weight (kg)	8.10			13.54	14.40
Gross Weight (kg)	8.60			16.40	17.20
CBM (m <sup>3</sup> )	0.063			0.124	



PRODUCT FEATURES



Shorting Cap / Photocell / Smart IoT Lamp controller provision for all model\* c/w internal **pre-wired for Dimming & Smart ready**

**High efficiency LED:**  
Superior Lumen Output\*\*

Special developed lens offering high flexibility and performance to suit different lighting application



**Reliable & Anti-Auto-Open Gear Cover Screw Secure Type:**  
Unlike "Clip Type" Lantern opens after certain period of operation/vibration



**Self-Clean Clear Tempered glass**



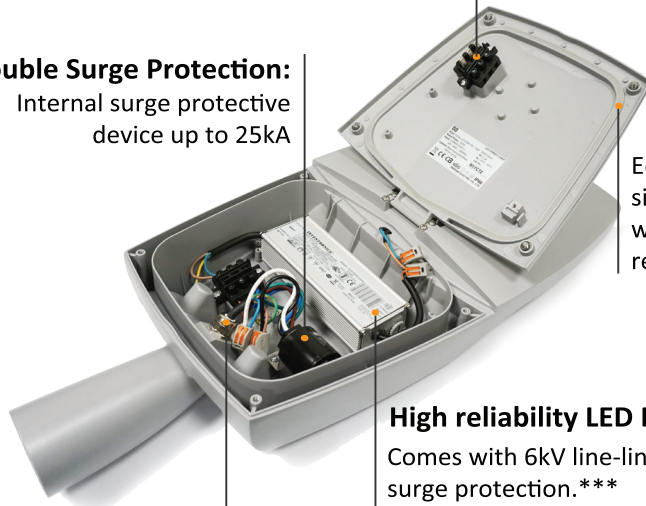
**Thermal Control:**  
External heat sink designed at the top centre of LED light source for better heat dissipation

**ADC-12 High Pressure die-cast aluminum :**

- IP66 water proof
- IK08 impact resistant
- AkzoNobel salt fog grade anti-corrosive powder coating

**Safety cut-off switch:**  
Power supply automatically cut-off when opening up gear cover

**Double Surge Protection:**  
Internal surge protective device up to 25kA



Equipped with pure silicon gasket for weather proof reliability



**Vibration & Shockproof Tested Lantern & Spigot**

**3-Hole Cable Gland:**  
Ensure better waterproofing for cable inlet from pole & prevent cable theft\*



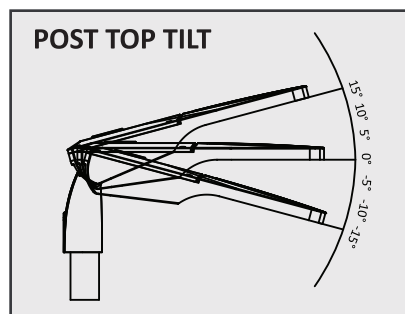
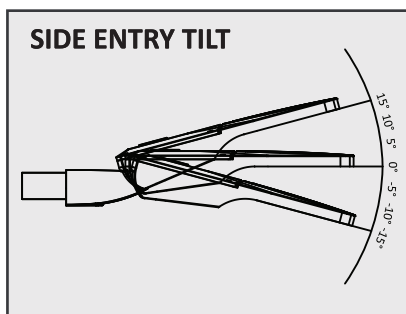
**High reliability LED Driver:**  
Comes with 6kV line-line and 10kV line-earth surge protection.\*\*\*

Protection against output over voltage, short circuit and over temperature

Total harmonic distortion, 4~12% at full load

**Standard across model 3in1 Dimmable driver** for smart IoT lighting ready.

2 x M10 bolts & washers tooth secure mechanism



Side entry or post-top mounting  
Allowable tilt -15° to +15°  
5° Incremental/decremental tilt

Note: \*Optional features; \*\*Efficacy performance varies with lens type, LED CRI & Colour Temperature; \*\*\*Except 280W Model.

PRODUCT DIMENSION

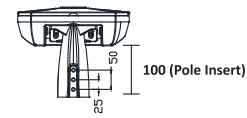
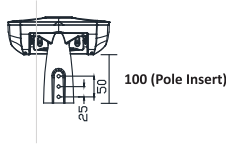
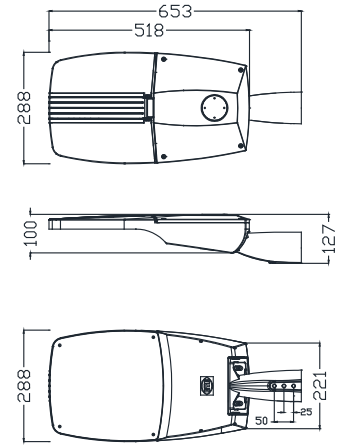
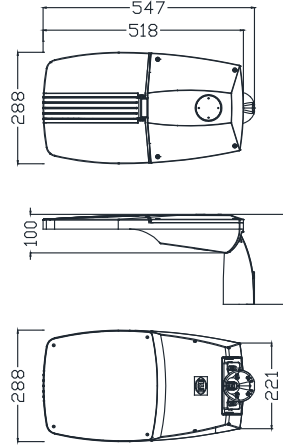
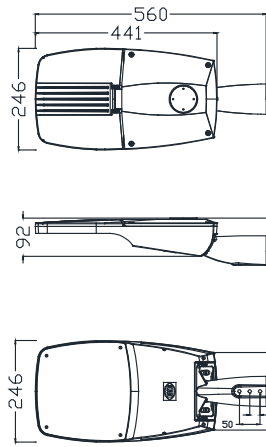
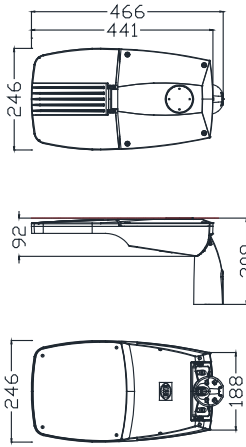
ALL DIMENSION IN MM

Post Top

Side Entry

Post Top

Side Entry



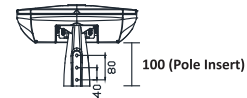
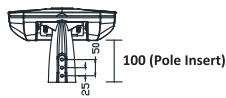
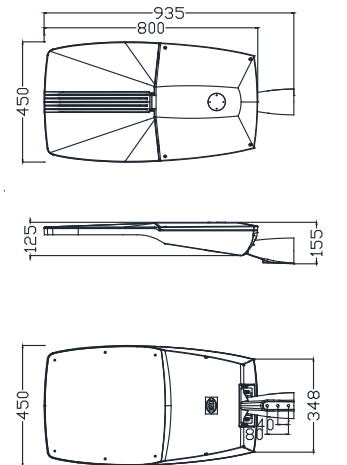
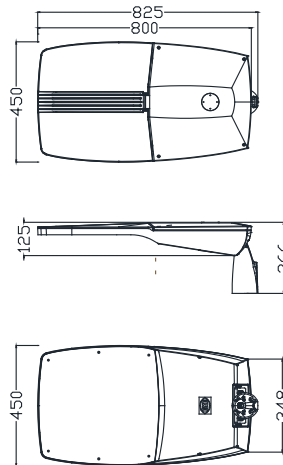
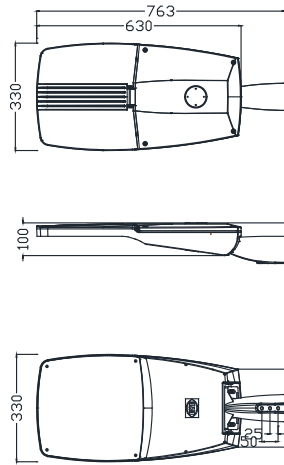
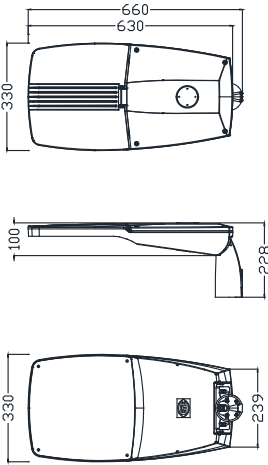
EY686-1	EY686-2
EY686-3	EY686-4

Post Top

Side Entry

Post Top

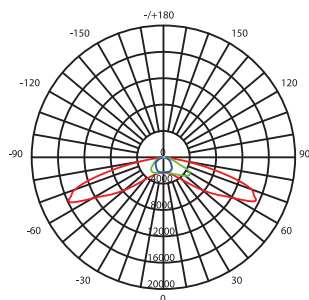
Side Entry



PHOTOMETRY DATA

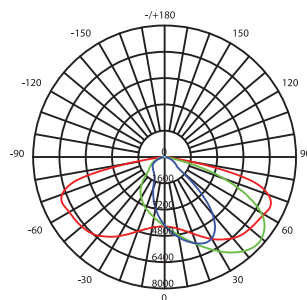
OTHER LENS TYPE AVAILABLE UPON REQUEST

TYPE I :



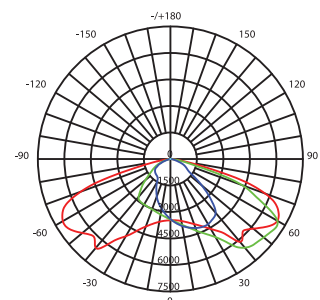
• PEDESTRIAN ROAD

TYPE II :



• URBAN ROAD/MOTORWAY

TYPE III :



• EXPRESSWAY