Outdoor Lighting Solution

WICOP _ Street Light Lens

SMJL-3S2M67CA-XX01 (TII M_V90_2X6 Lens)

RoHS

Product Brief

Description

- Type II-Medium_V90_2X6 Array Lens with IP67 Graded
- Designed for Street Lighting
- Suitable for WICOP Y19, Y22
- Clear lens with High precision and Optical Level Material

Features and Benefits

- High Efficiency
- Good Beam Distribution
- Uniform Light Spot
- RoHS Compliant

Key Applications

- Street Lighting

Material

- Polycarbonate (PC)
- Efficiency: 92%

Dimensions

- L(mm)*W(mm)*H(mm) : 196.4*69.7*8.3

Beam Angle

- Type II, Medium

Installation

- With screws

Table 1. Product Selection (Order Code Table)

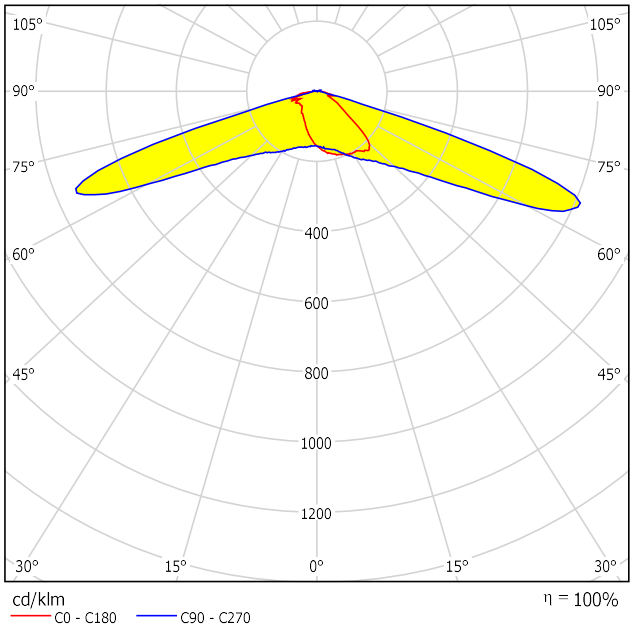
Part No.	Material	Efficiency	Beam Type	Order Code
SMJL-3S2M67CA-XX01	PC	92%	Type II, Medium	SMJL-3S2M67CA-XX01 000000000000

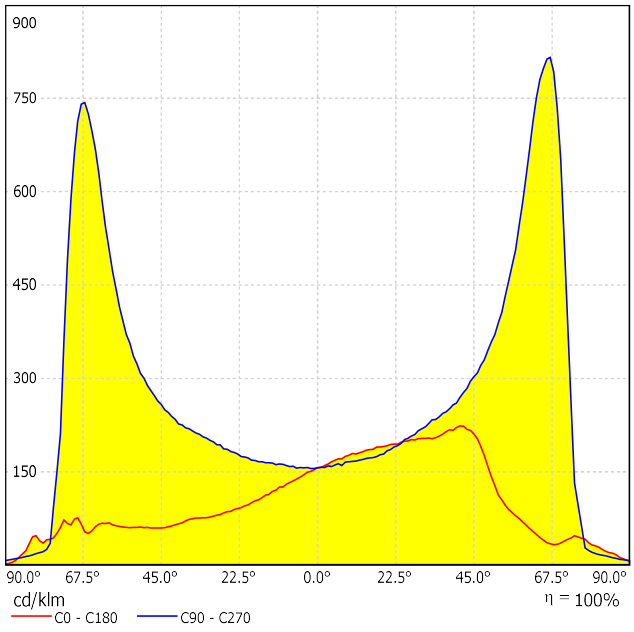
Suitable Led Source	CCT	CRI	View Angle(Degree)	LES(mm)
WICOP SZ8 Y19	2600~7000	70~90	140	1.8*1.8*0.4
WICOP SZ8 Y22	2600~7000	70~90	140	2.2*2.2*0.4

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y19





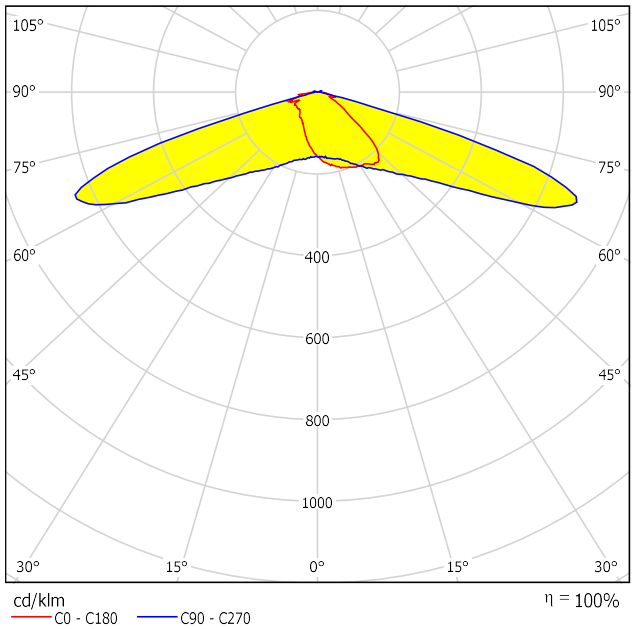
Photometric Characteristics

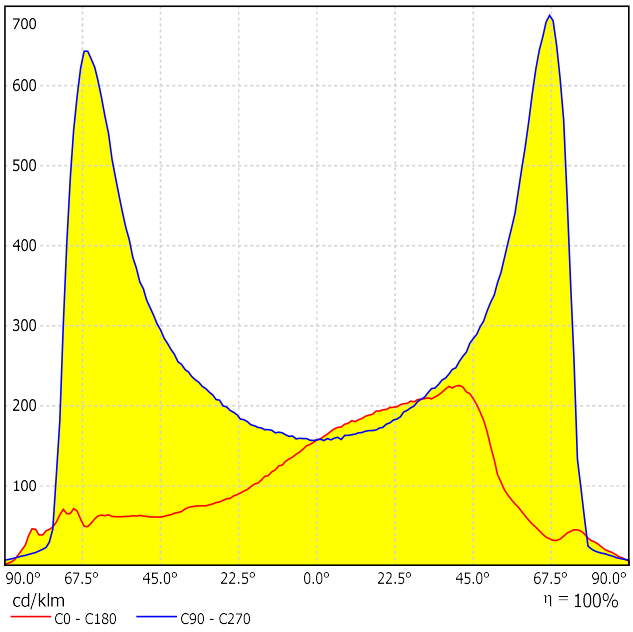
Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	63.5H, 141.3V
Max. Cd. (Degree)	29H, 65V
Street Side	65.5%
Cutoff Classification	Semi-Cutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y22





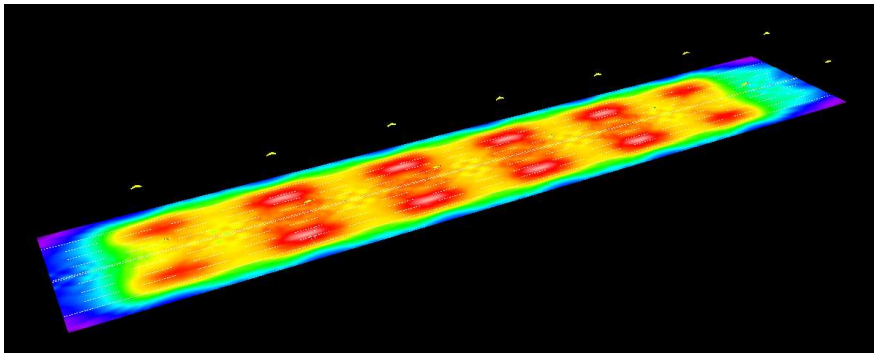
Photometric Characteristics

Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	68.3H, Vertical 141.0V
Max. Cd. (Degree)	37.5H, 65V
Street Side	66.1%
Cutoff Classification	Semi-Cutoff

Application Performance

Street Lighting Simulation (Example):

Arrangement: Double row, opposing
Pole Distance: 35.000 m
Mounting Height: 12.000 m
Overhang: 1.500 m
Boom Angle: 0 °
Boom Length: 2.800 m
Selected Lighting Class: M4



Tarmac: R1, q0: 0.1

L_{av} [cd/m²]	U0	UI	TI [%]	SR
1.08	0.64	0.71	8	0.82
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

Tarmac: R3, q0: 0.070

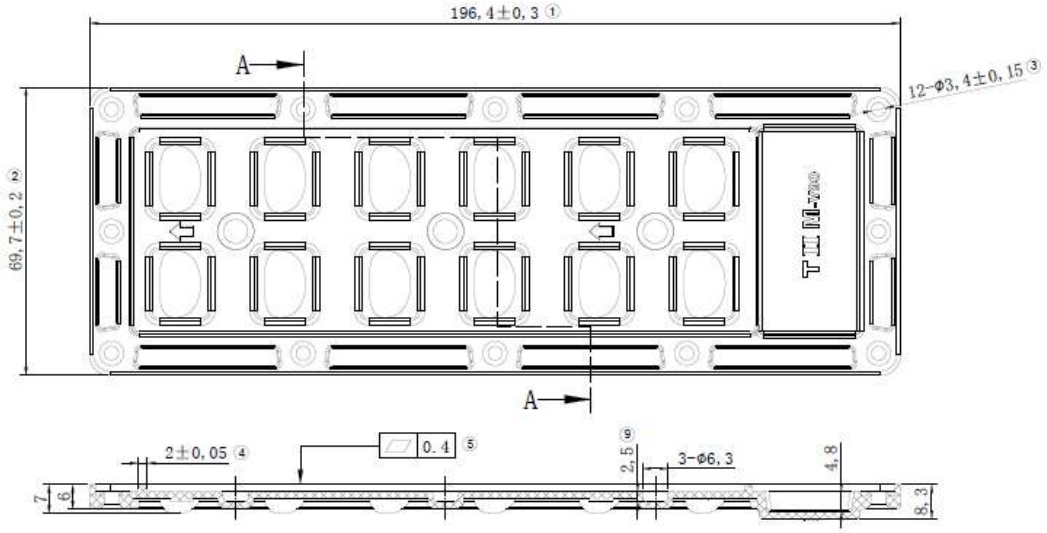
L_{av} [cd/m²]	U0	UI	TI [%]	SR
0.81	0.60	0.65	12	0.83
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

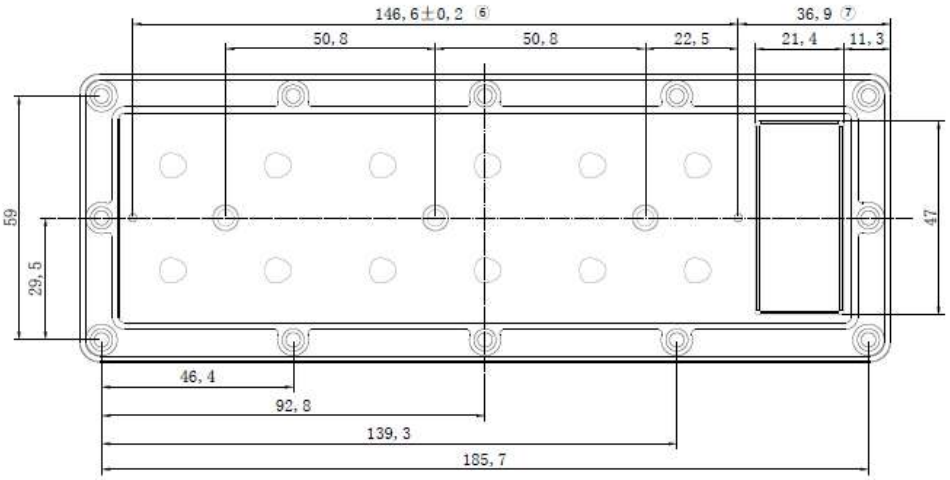
Suitable Street Arrangements:

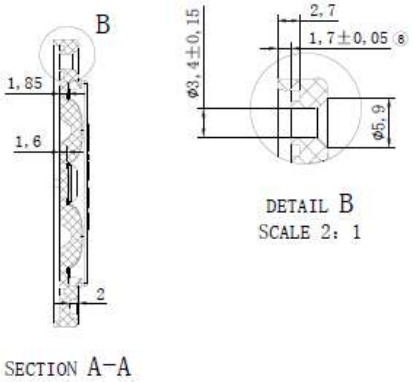
Street Surface	Number of lanes	Pole Height(m)	Pole Distance(m)	Boom Angle(°)	Single Row	Double Row
R1	2 ~ 3	10	≤35	0 ~ 15	S	S
	4 ~ 8	10 ~ 12	25 ~ 60	0 ~ 15	x	S
R3	2 ~ 3	10	≤35	0 ~ 15	S	S
	4 ~ 8	10 ~ 12	25 ~ 45	0 ~ 15	x	S

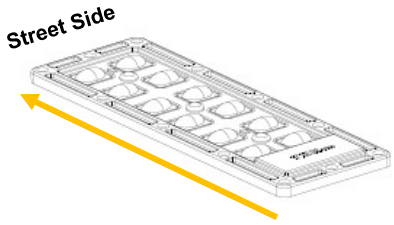
S: Suitable X: Not suitable

Mechanical Dimensions







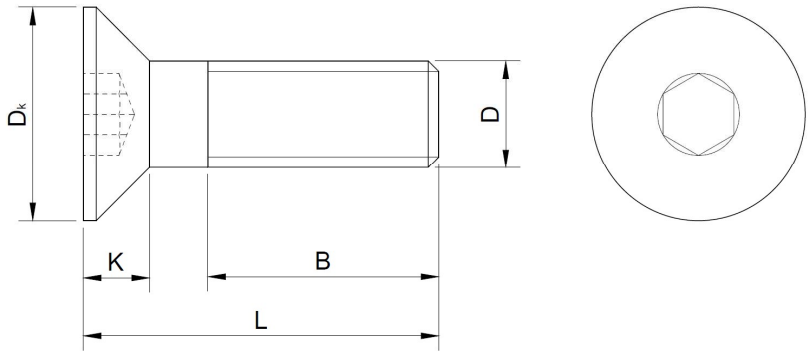


Unit： Millimeter

Mechanical Dimensions

Screw Recommended

Hexagon socket countersunk heat screw – M3



D_k(mm)	$5.54 < D_k < 6.72$
D(mm)	2.86 < D < 3
L(mm)	10/12
B(mm)	> 4
K(mm)	< 1.86

Torque(kg)	<5 kg

Marking Information

- **Table 1. Product Information**

SMJL – 3S2M67CA – XX01

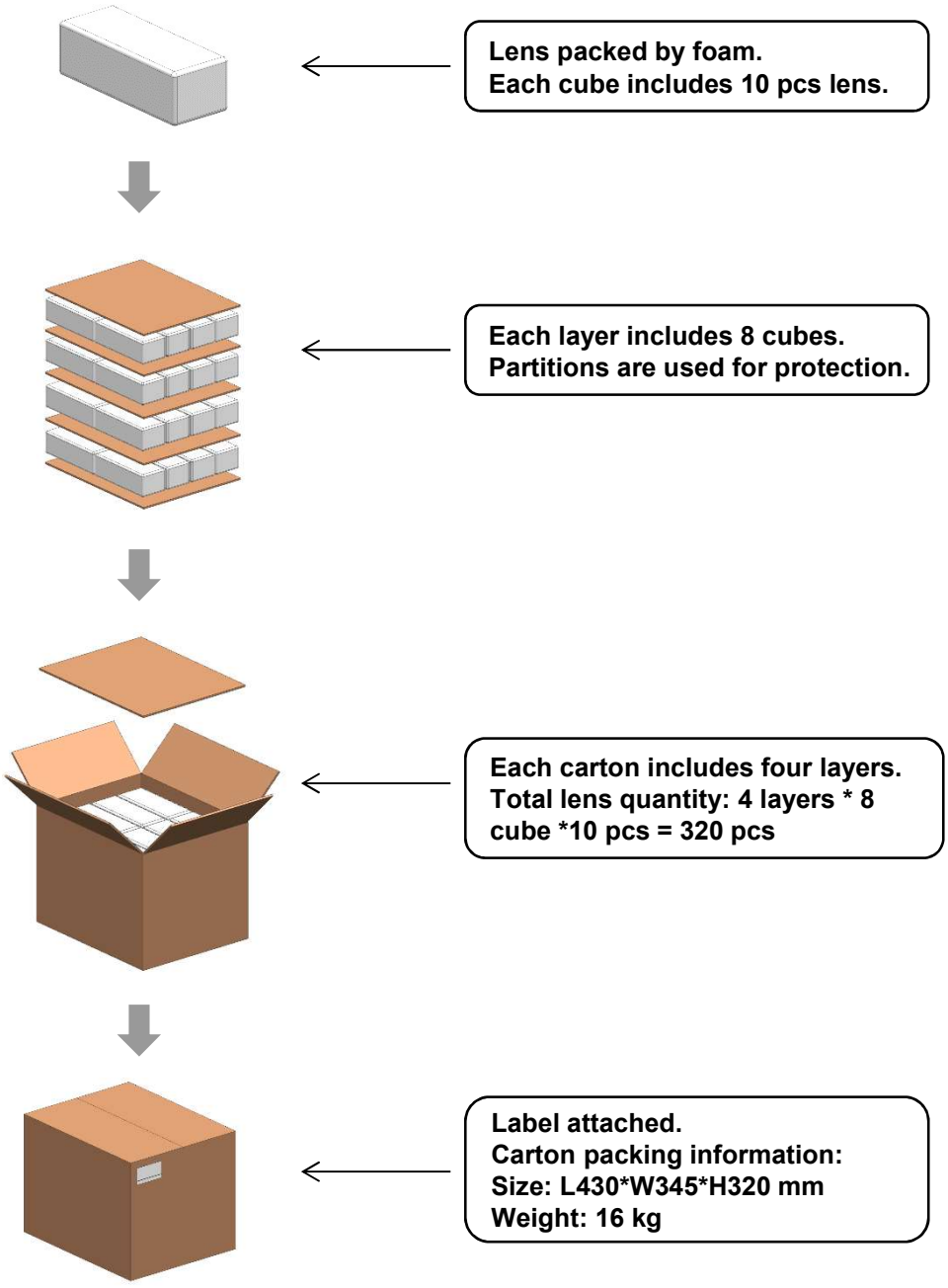
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

000000000000

⑫

No	Data	Digit	Example	Remark	
1	Product Name-1	4	SMJL	SSC Internal Code for Lens	
2	Lens Category	1	3	1: Single Lens 2: 2X2 Array Lens 3: 2X6 Array Lens 4: 2X8 Array Lens	
3	Application Field	1	S	S: Street Lighting	
4	Beam Angle – Class 1	1	2	Light Transverse Distribution: 1: Type I 2: Type II 3: Type III 4: Type IV 5:Type V	
5	Beam Angle – Class 2	1	M	Light Longitudinal Distribution: S: Short M: Medium L: Long	
6	Field Angle – Class 1	1	6	Horizontal	(NEMA Standard) 1: 10~18° 2: 19~29° 3: 30~46° 4: 47~70° 5: 71~100° 6: 101~130° 7: >130°
7	Field Angle – Class 1	1	7	Vertical	
8	Material	1	C	A: PMMA C: PC	
9	Suitable LED Source	1	A	A: WICOP 3030 Module	WICOP Y19/Y22
					WICOP Y11 4in1
				B: WICOP 5050 Module	WICOP Y19 4in1
					WICOP Y22 4in1
					WICOP Y11 Matrix Cell-5/9
10	Notes	2	XX	XX: Reference Design	
11	Version	2	01	01: First Version	
12	Company Code	12	000000000000	Default	

Packing Information



Operation Environment

Item	Standard
Flammability	UL 94-V2
Vicat Softening Temperature	129℃
Recommended Storage Environment	Temperature: -10℃~+40℃ Humidity: < 80%RH
Install Method	With screws

Company Information

Published by

Company Information

Seoul Semiconductor (SeoulSemicon.com) manufacturers and packages a wide selection of light emitting diodes (LEDs) for the automotive, general illumination/lighting, appliance, signage and back lighting markets. The company is the world's fifth largest LED supplier, holding more than 10,000 patents globally, while offering a wide range of LED technology and production capacity in areas such as "nPola", deep UV LEDs, "Acrich", the world's first commercially produced AC LED, and "Acrich MJT - Multi-Junction Technology" a proprietary family of high-voltage LEDs. The company's broad product portfolio includes a wide array of package and device choices such as Acrich, high-brightness LEDs, mid-power LEDs, side-view LEDs, through-hole type LED lamps, custom displays, and sensors. The company is vertically integrated from epitaxial growth and chip manufacture in it's fully owned subsidiary, Seoul Viosys, through packaged LEDs and LED modules in three Seoul Semiconductor manufacturing facilities. Seoul Viosys also manufactures a wide range of unique deep-UV wavelength devices.

Legal Disclaimer

Information in this document is provided in connection with Seoul Semiconductor products. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Seoul Semiconductor hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party. The appearance and specifications of the product can be changed to improve the quality and/or performance without notice.

Revision History

Revision	Date	Page	Remarks
1.1	Feb 13th, 2019	All	Version R1.1