Outdoor Lighting Solution

WICOP _ Street Light Lens

SMJL-3S2M76AA-XX01 (TII M 2x6 Lens)

RoHS

Product Brief

Description

- Type II-Medium 2X6 Array Lens with IP Graded
- Designed for Street Lighting
- Suitable for WICOP Module Cell 3030---Y19, Y22, 4in1 Y11
- 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

- PMMA
- Efficiency: 96%

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)

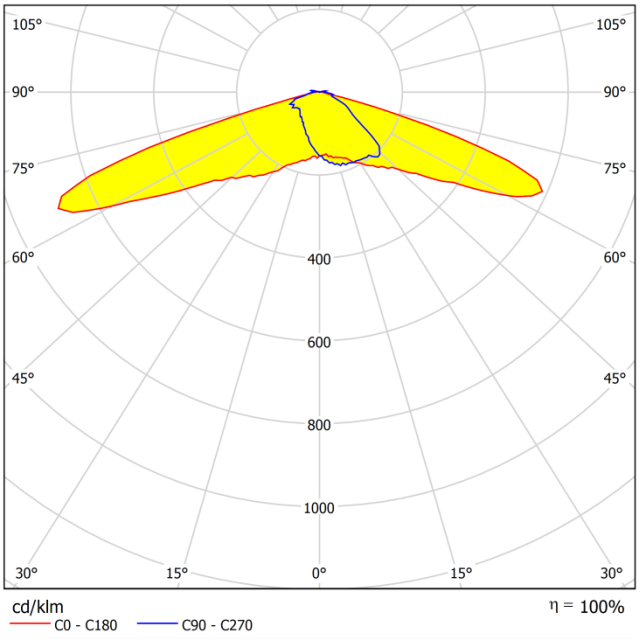
Part No.	SAP Code	Material	Efficiency	Beam Type	Size(mm)
SMJL-3S2M76AA-XX01	1011559	PMMA	96%	Type II, Medium	196.4*69.7*8.3

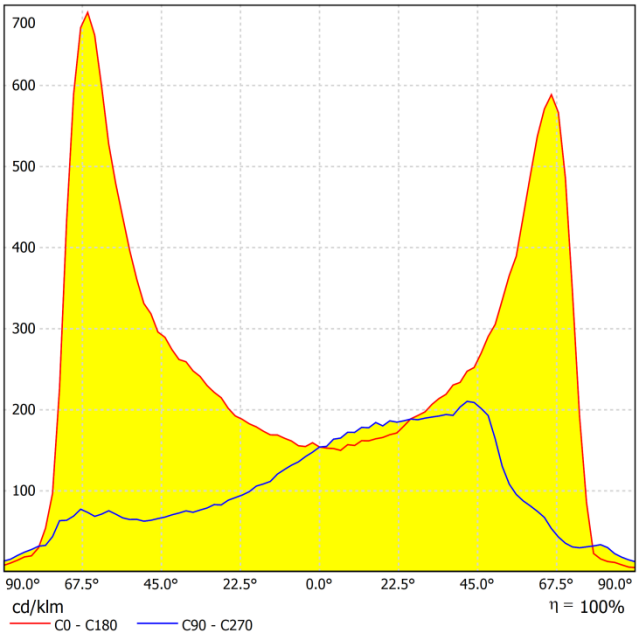
Suitable Leds	CCT	CRI	View Angle (Degree)	LES(mm)	Certificate
WICOP SZ8 Y19	2600~7000	70~90	140	1.8*1.8*0.4	LM80
WICOP SZ8 Y22	2600~7000	70~90	140	2.2*2.2*0.4	LM80
WICOP SZ8 Y11-4in1	2600~7000	70~90	150	2.78*2.78*0.45	LM80

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y19





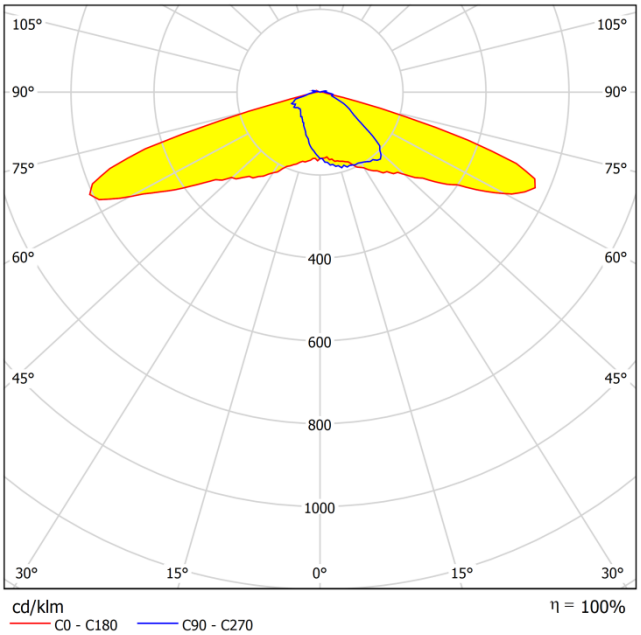
Photometric Characteristics

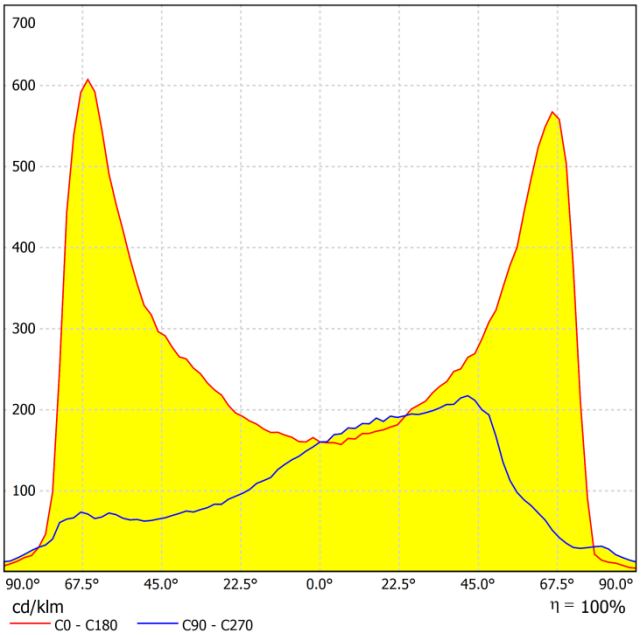
Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	Horizontal 140.8, Vertical 60.0
Max. Cd. (Degree)	65H, 37.5V
House Side	34.7%
Cutoff Classification	Semi-Cutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y22





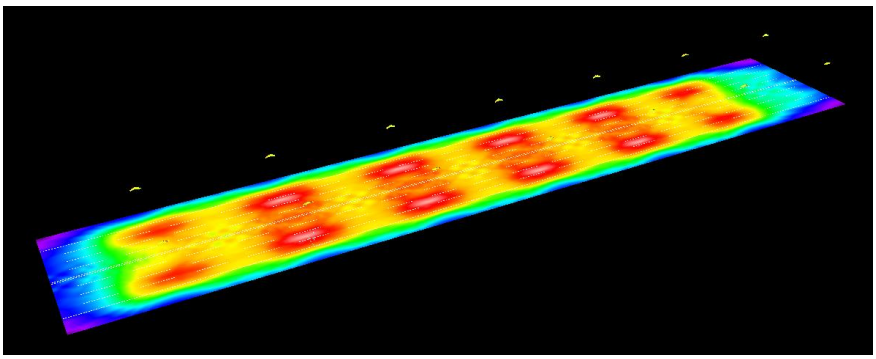
Photometric Characteristics

Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	Horizontal 141.3, Vertical 70.9
Max. Cd. (Degree)	65H, 37.5V
House Side	35.3%
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: ME4a



Tarmac: R1, q0: 0.1

L_{av} [cd/m²]	U0	Ul	Tl [%]	SR
1.17	0.81	0.77	9	0.83
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

Tarmac: R3, q0: 0.070

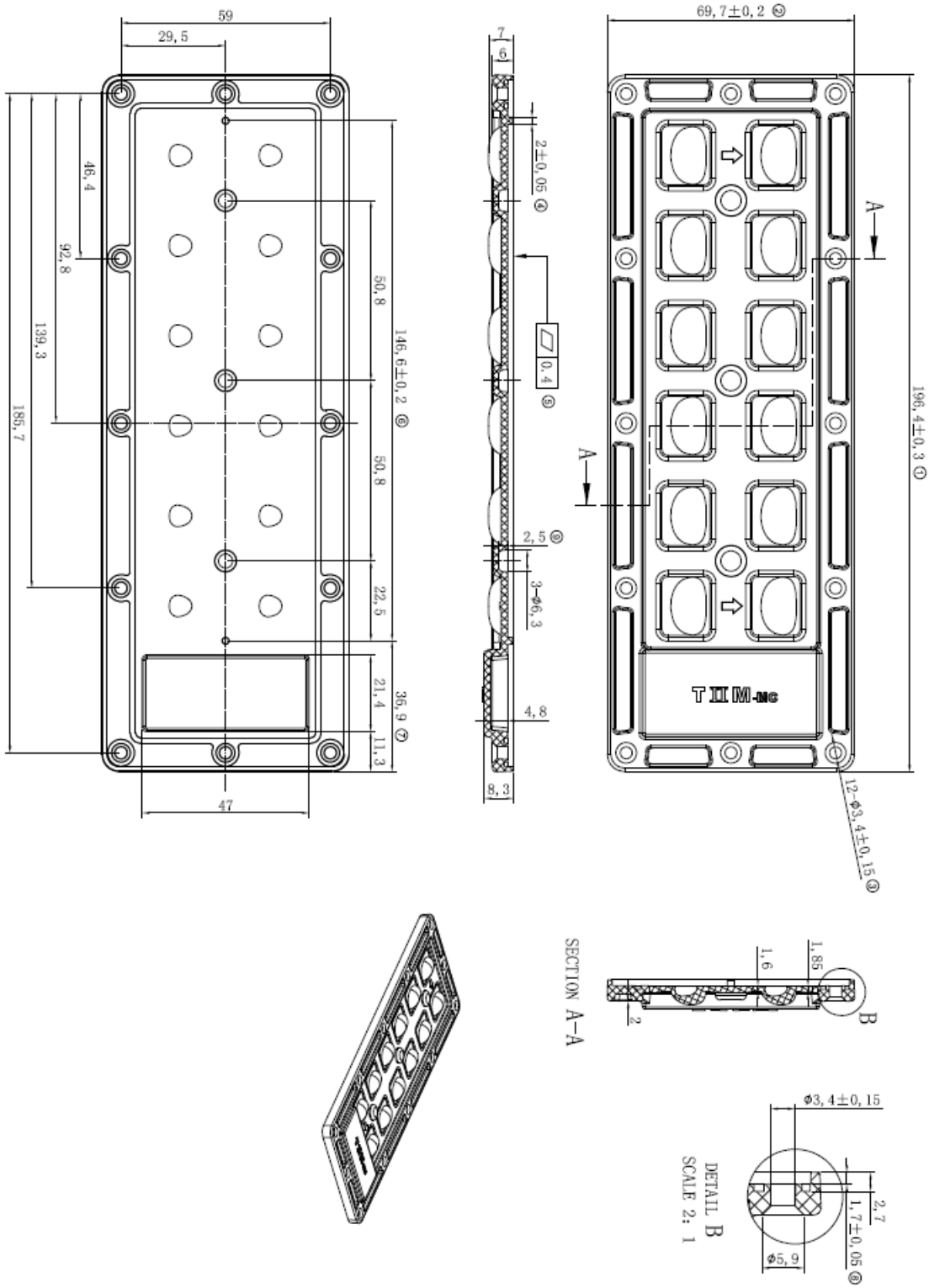
L_{av} [cd/m²]	U0	Ul	Tl [%]	SR
0.81	0.60	0.65	12	0.83
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

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

Marking Information

- **Table 1. Product Information**

SMJL-3S2M76AA-XX01

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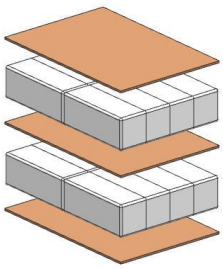
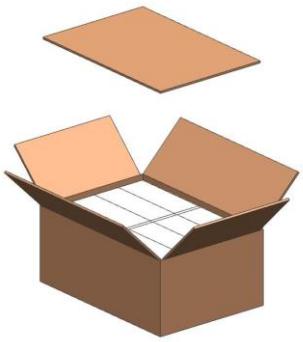
No	Data	Digit	Example	Remark	
1	Product Name-1	4	SMJL	SSC Internal Code for Lens	
2	Lens Category	1	3	1: Single Lens 2: 2X2 Array Lens 3: 2X6 Array Lens 4: 2X8 Array Lens	
3	Application Field	1	S	S: Street Lighting	
4	Beam Angle – Class 1	1	2	Light Transverse Distribution: 1: Type I 2: Type II 3: Type 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	7	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	6	Vertical	
8	Material	1	A	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	

Packing Information

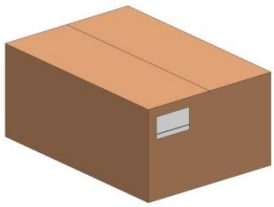
Lens packed by foam.
Each cube includes 10 pcs lens.



Each layer includes 8 cubes.
Partitions are used for protection.



Each carton includes two layers.
Total lens quantity: 2 layers * 8 cube *10 pcs = 160 pcs



Label attached.

Operation Environment

Item	Standard
Flammability	UL 94-HB
Vicat Softening Temperature	108℃
Operation Temp. Range	-10℃~+85℃
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.

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Revision History

Revision	Date	Page	Remarks
0.1	June 21th, 2018	All	Version R0.1