Outdoor Lighting Solution

WICOP _ Street Light Lens

SMJL–2S2M76AA–XX01 (TII M Lens)

RoHS

Product Brief

Description

- Type II-Medium 2X2 Array Lens designed for Street Lighting
- Suitable for WICOP Module Cell 3030---Y19, Y22, 4in1 Y11
- Lens has high precision, non-spherical surface 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) : 50*50*5.3

Beam Angle

- Type II, Medium

Installation

- With screws

Table 1. Product Selection (Order Code Table)

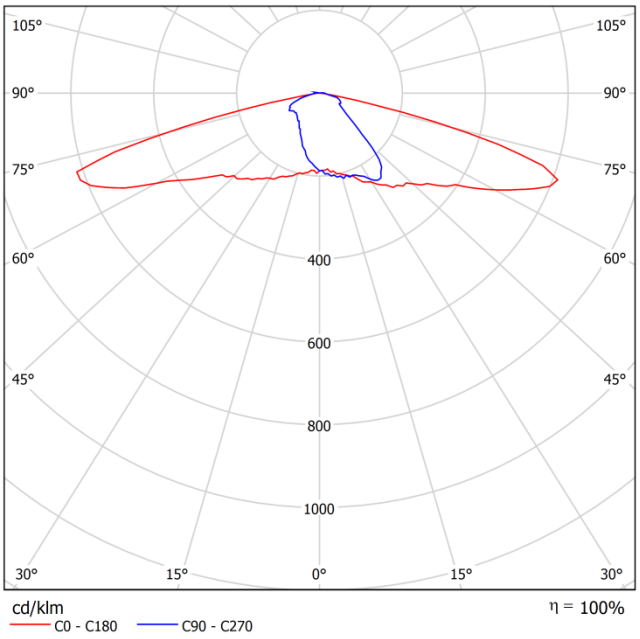
Part No.	SAP Code	Material	Efficiency	Beam Type	Size(mm)
SMJL–2S2M76AA–XX01	1011560	PMMA	96%	Type II, Medium	50*50*5.3

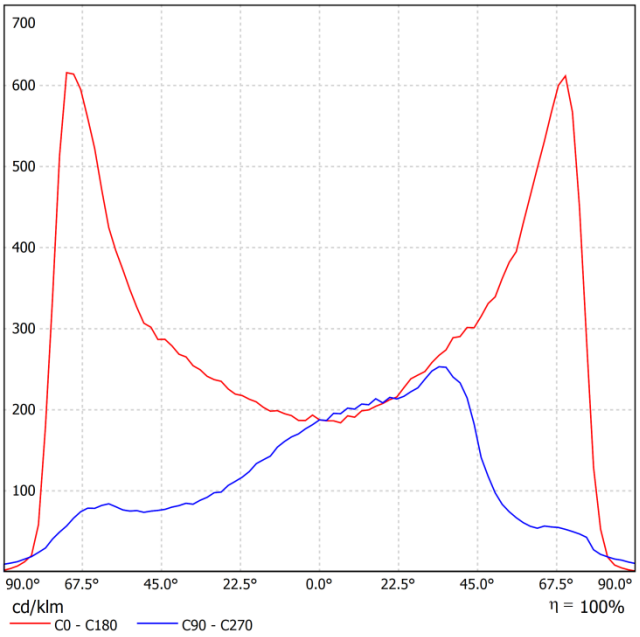
Suitable Leds	CCT	CRI	View Angle (Degree)	LES(mm)	Certificate
WICOP SZ8 Y19	2600~7000	70~90	140	1.8*1.8*0.4	LM80
WICOP SZ8 Y22	2600~7000	70~90	140	2.2*2.2*0.4	LM80
WICOP SZ8 Y11-4in1	2600~7000	70~90	150	2.78*2.78*0.45	LM80

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y19





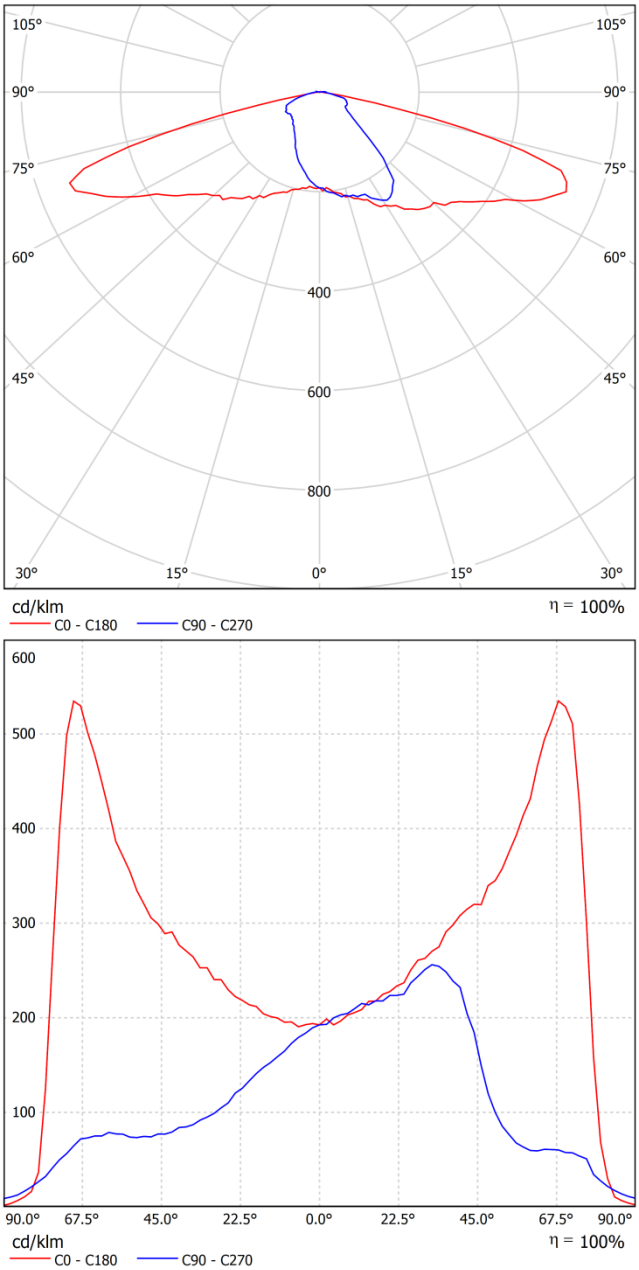
Photometric Characteristics

Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	Horizontal 150, Vertical 87
Max. Cd. (Degree)	65H, 22.5V
House Side	42.3%
Cutoff Classification	Cutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y22



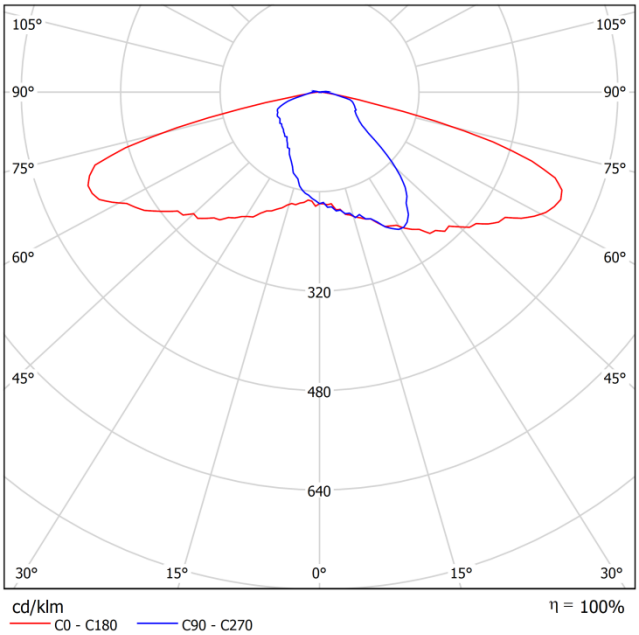
Photometric Characteristics

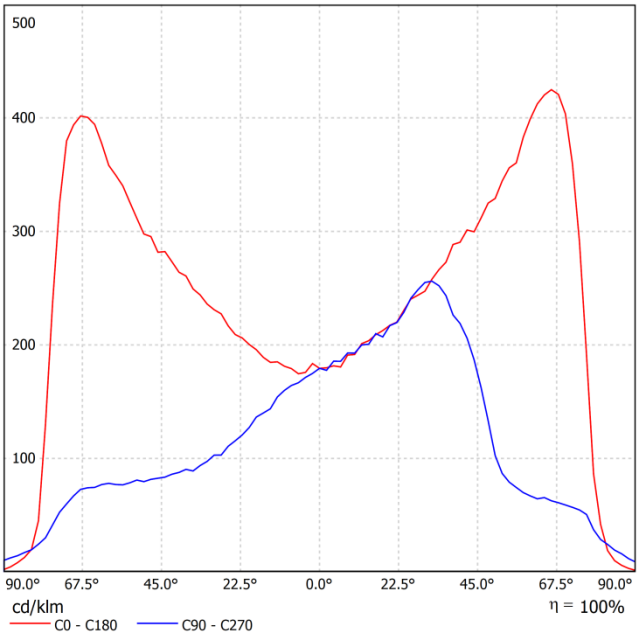
Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	Horizontal 151, Vertical 88
Max. Cd. (Degree)	65H, 22.5V
House Side	47.9%
Cutoff Classification	Cutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y11- 4in1





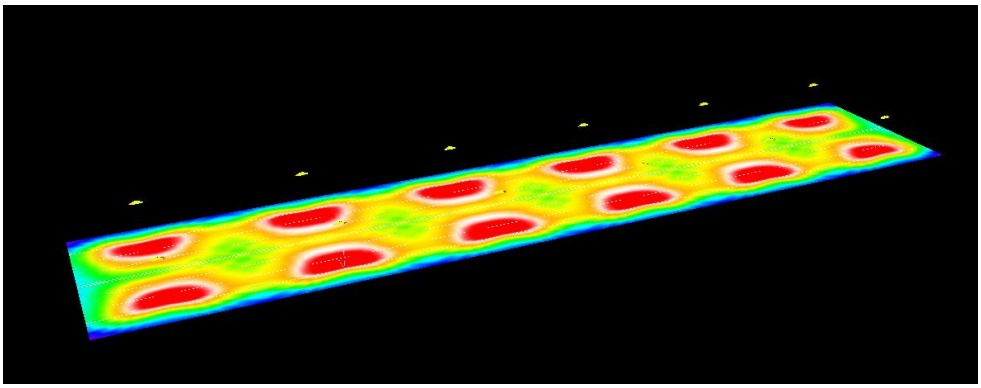
Photometric Characteristics

Characteristics	Properties
IES Classification	Type II, Medium
Beam Angle(Degree)	Horizontal 152, Vertical 89
Max. Cd. (Degree)	65H, 22.5V
House Side	42%
Cutoff Classification	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: 10.0 °
Boom Length: 2.800 m
Selected Lighting Class: ME4a



Tarmac: R1, q0: 0.1

L_{av} [cd/m²]	U0	Ul	Tl [%]	SR
1.17	0.84	0.81	8	0.82
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

Tarmac: R3, q0: 0.070

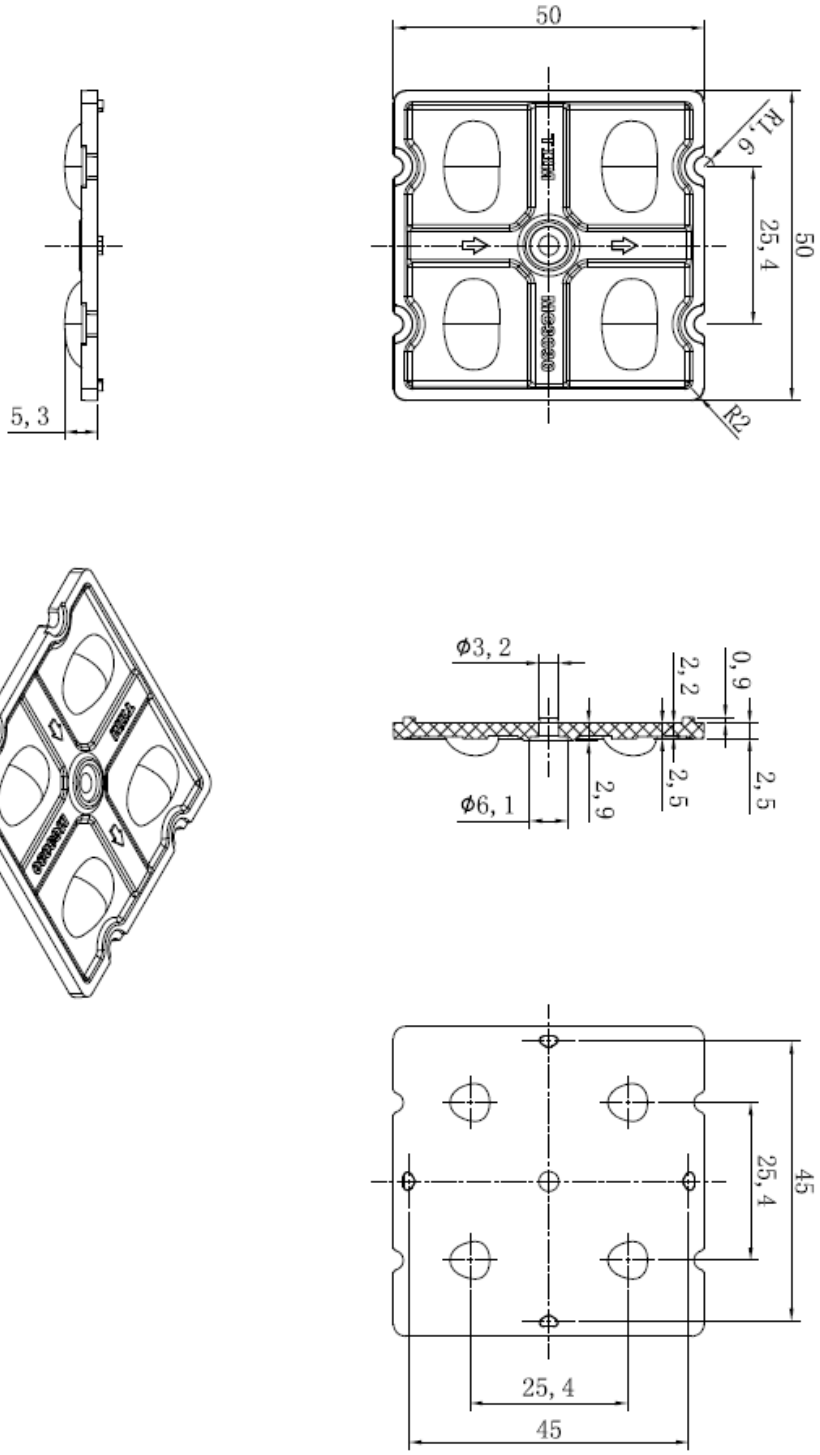
L_{av} [cd/m²]	U0	Ul	Tl [%]	SR
0.82	0.59	0.82	11	0.82
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

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-2S2M76AA-XX01

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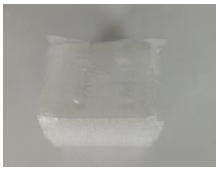
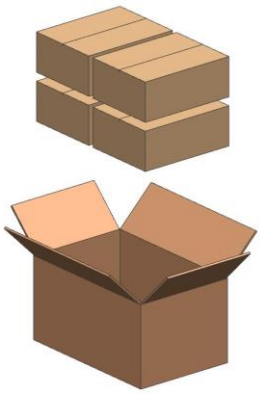
No	Data	Digit	Example	Remark	
1	Product Name-1	4	SMJL	SSC Internal Code for Lens	
2	Lens Category	1	2	1: Single Lens 2: 2X2 Array Lens 3: 2X6 Array Lens 4: 2X8 Array Lens	
3	Application Field	1	S	S: Street Lighting	
4	Beam Angle – Class 1	1	2	Light Transverse Distribution: 1: Type I 2: Type II 3: Type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

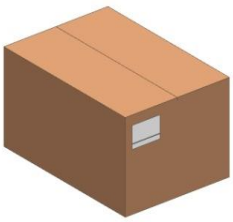


Lens packed by foam.
Each cube includes 10 pcs lens.

Put the cubes into small carton.
Each carton includes 20 cubes.



Put 4 small cartons into bigger carton.
Total lens quantity: 4 cartons * 20 cubes *10 pcs = 800 pcs



Label attached.

Operation Environment

Item	Standard
Flammability	UL 94-HB
Vicar Softening Temperature	108℃
Operation Temp. Range	-10℃~+85℃
Recommended Storage Environment	Temperature: -10℃~+40℃ Humidity: < 80%RH
Install Method	With screws

Company Information

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Company Information

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Revision History

Revision	Date	Page	Remarks
0.1	June 20th , 2018	All	Version R0.1