

Outdoor Lighting Solution

WICOP _ Street Light Lens

SMJL-1S3M76AA-XX01 (TIII M Lens)



Product Brief

Description

- Type III-Medium Single 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) : 19.0*16.0*5.2

Beam Angle

- Type III, Medium

Installation

- With holder

Table 1. Product Selection (Order Code Table)

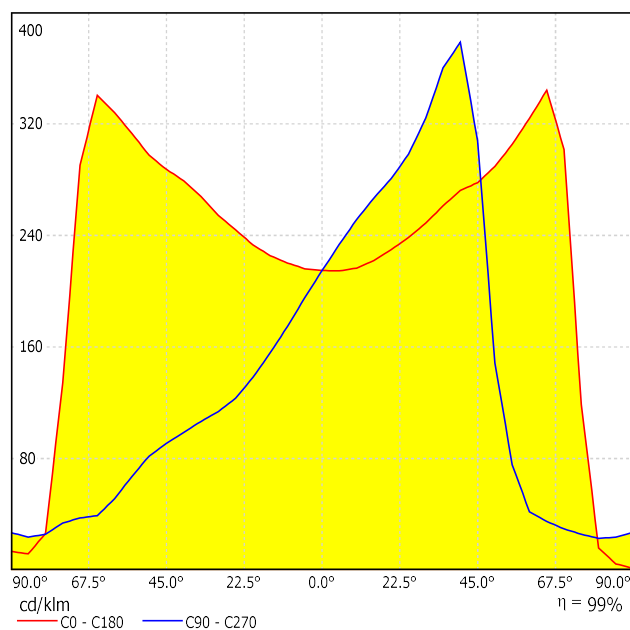
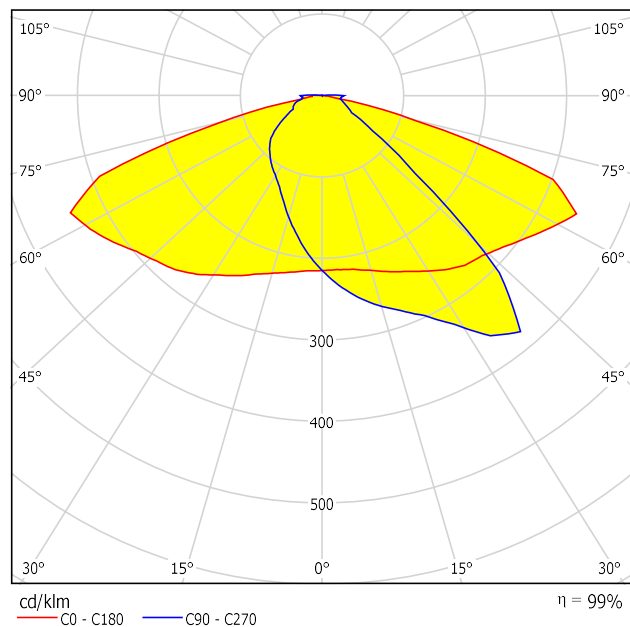
Part No.	SAP Code	Material	Efficiency	Beam Type	Size(mm)
SMJL-1S3M76AA-XX01	1011562	PMMA	96%	Type III, Medium	19.0*16.0*5.1

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



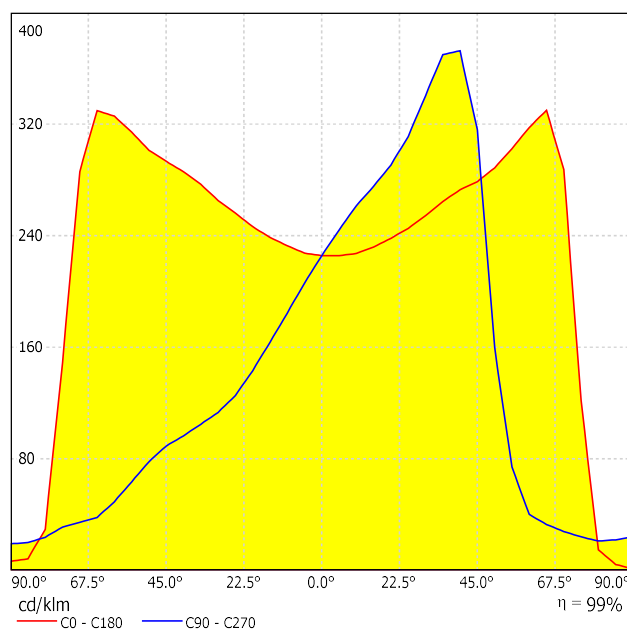
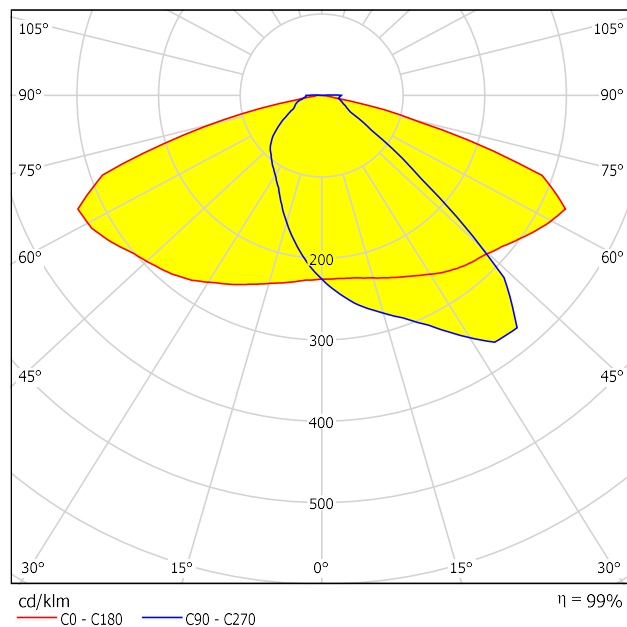
Photometric Characteristics

Characteristics	Properties
IES Classification	Type III, Medium
Beam Angle(Degree)	Horizontal 140, Vertical 79
Max. Cd. (Degree)	55H, 42.5V
House Side	65.4%
Cutoff Classification	Semicutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y22



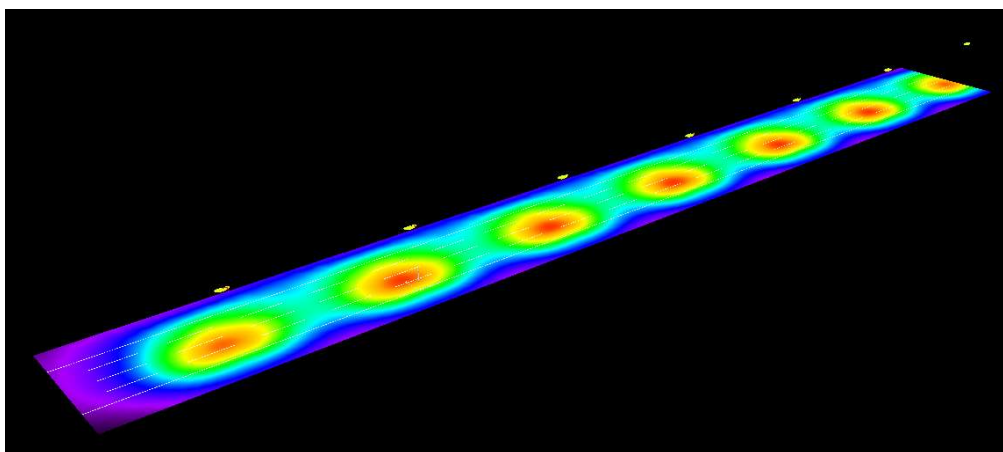
Photometric Characteristics

Characteristics	Properties
IES Classification	Type III, Medium
Beam Angle(Degree)	Horizontal 141, Vertical 81
Max. Cd. (Degree)	55H, 42.5V
House Side	65.4%
Cutoff Classification	Semicutoff

Application Performance

Street Lighting Simulation (Example):

Arrangement: Single row
 Pole Distance: 35.000 m
 Mounting Height: 12.000 m
 Overhang: 1.500 m
 Boom Angle: 10 °
 Boom Length: 2.800 m
 Road Width: 15m
 Road Pavement: R3, q0: 0.07
 Luminous Flux: 15120 lm
 Selected Lighting Class: M4



Tarmac: R3, q0: 0.070

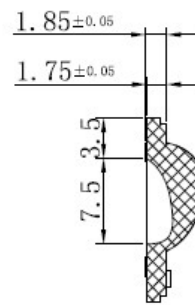
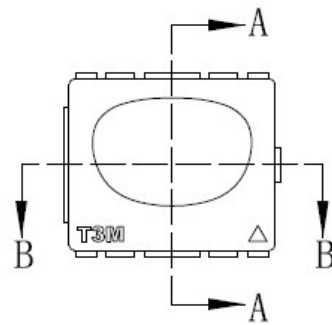
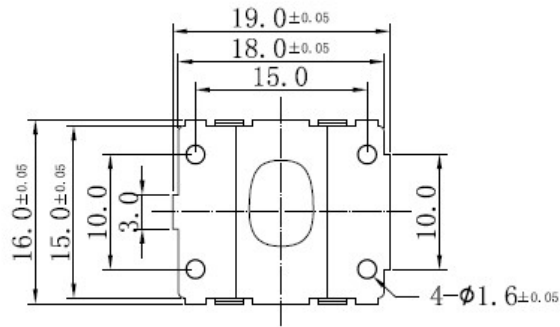
L_{av} [cd/m ²]	U0	UI	TI [%]	SR
0.76	0.55	0.84	9	0.65
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

Suitable Street Arrangements:

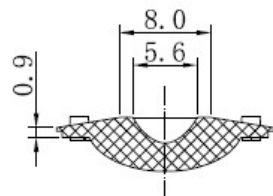
Street Surface	Number of lanes	Pole Height(m)	Pole Distance(m)	Boom Angle(°)	Single Row	Double Row
R1	2 ~ 3	10	≤35	0 ~ 15	S	S
	4 ~ 8	10 ~ 12	25 ~ 45	0 ~ 15	x	S
R3	2 ~ 3	10	≤35	0 ~ 15	S	S
	4 ~ 8	10 ~ 12	25 ~ 45	0 ~ 15	x	S

S: Suitable X: Not suitable

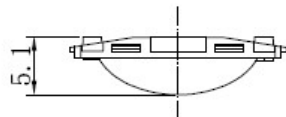
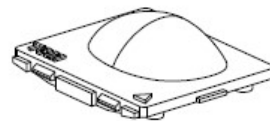
Mechanical Dimensions



SECTION A-A



SECTION B-B



Unit: millimeter

Marking Information

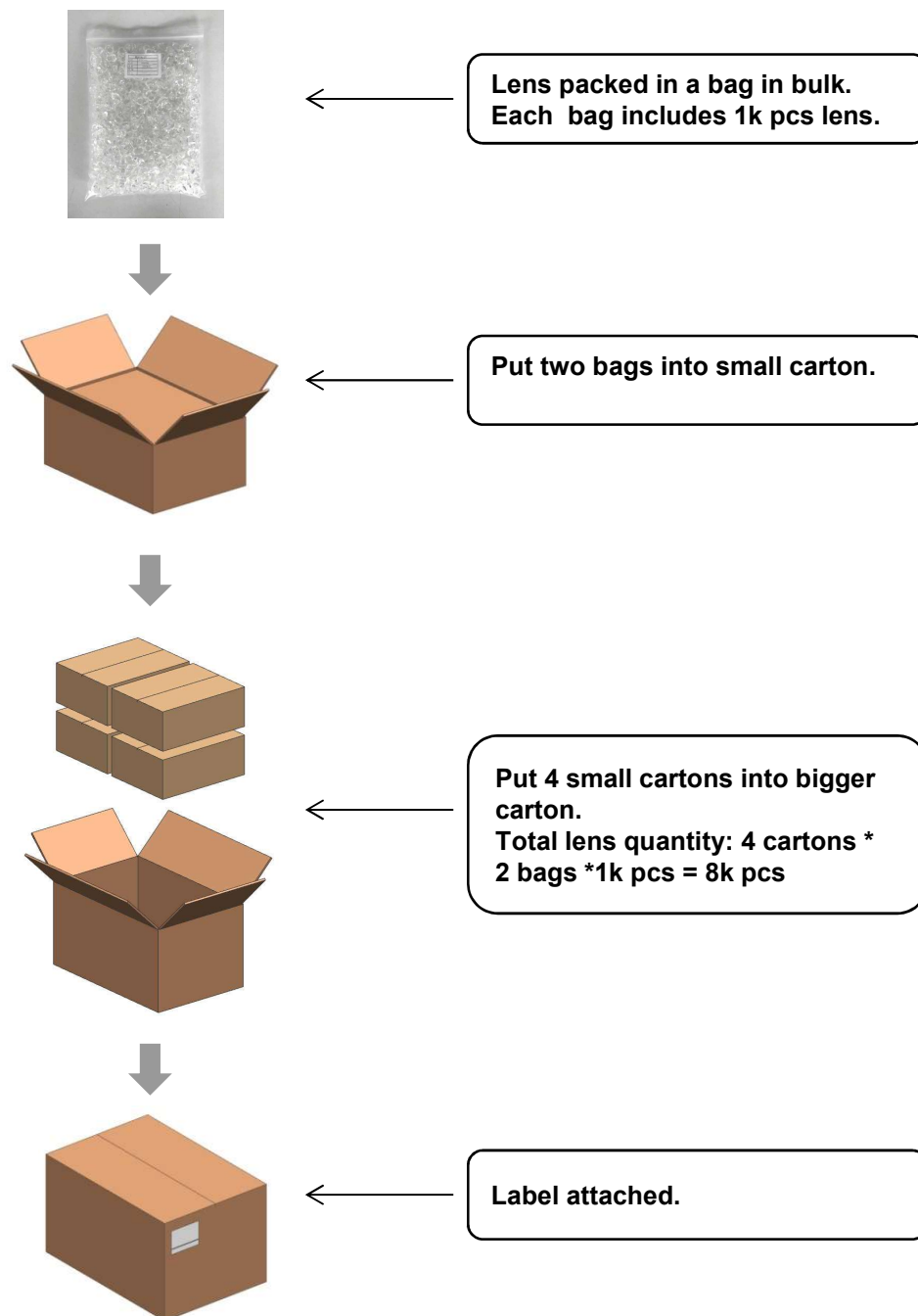
• **Table 1. Product Information**

S M J L - 1 S 3 M 7 6 A A - XX 01

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No	Data	Digit	Example	Remark
1	Product Name-1	4	SMJL	SSC Internal Code for Lens
2	Lens Category	1	1	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	3	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
				WICOP Y19 4in1
				B: WICOP 5050 Module 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



Operation Environment

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



Company Information

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Company Information

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Revision History

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