Outdoor Lighting Solution

WICOP _ Area Lighting Lens

SMJL-1A3S76AA-XX01 (Area Type III Lens)

RoHS

Product Brief

Description

- Type III Lens designed for Area 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

- Area lighting

Material

- PMMA
- Efficiency: 96%

Dimensions

- L(mm)*W(mm)*H(mm) : 19.0*16.0*5.2

Beam Angle

- Type III

Installation

- With holder

### Table 1. Product Selection (Order Code Table)

Part No.	SAP Code	Material	Efficiency	Beam Type	Size(mm)
SMJL-1A3S76AA-XX01	1011563	PMMA	96%	Type III	19.0*16.0*5.2

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
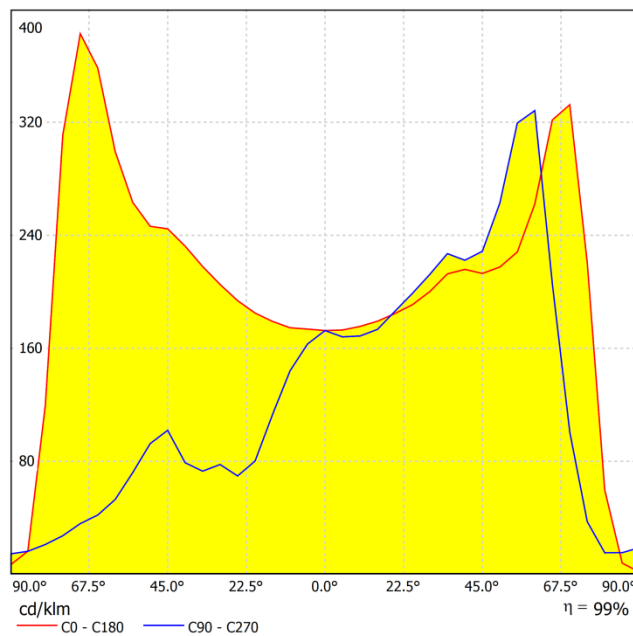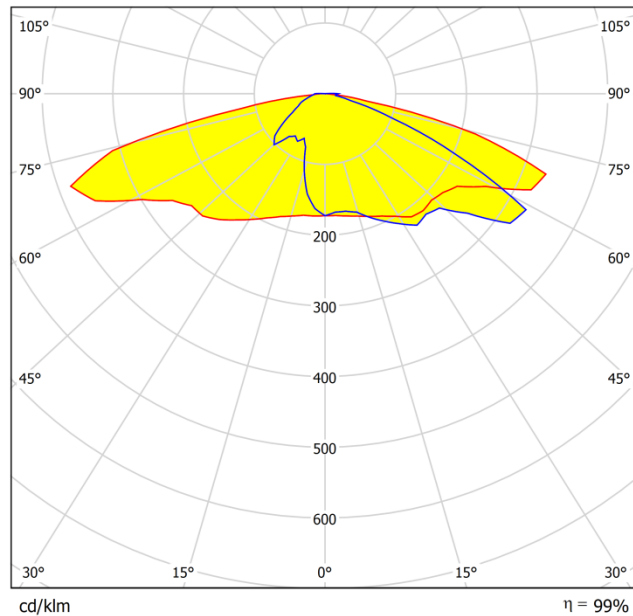
cd/klm   η = 99%

    C0 - C180   C90 - C270

cd/klm   η = 99%

    C0 - C180   C90 - C270

Photometric Characteristics

Characteristics	Properties
IES Classification	Type III
Beam Angle(Degree)	Horizontal 133, Vertical 46
Max. Cd. (Degree)	-55H, 47.5V
Forward Side	22.9%
Cutoff Classification	Semicutoff

Optical Characteristics

Polar Candela Distribution
LED Source: SZ8 – Y22
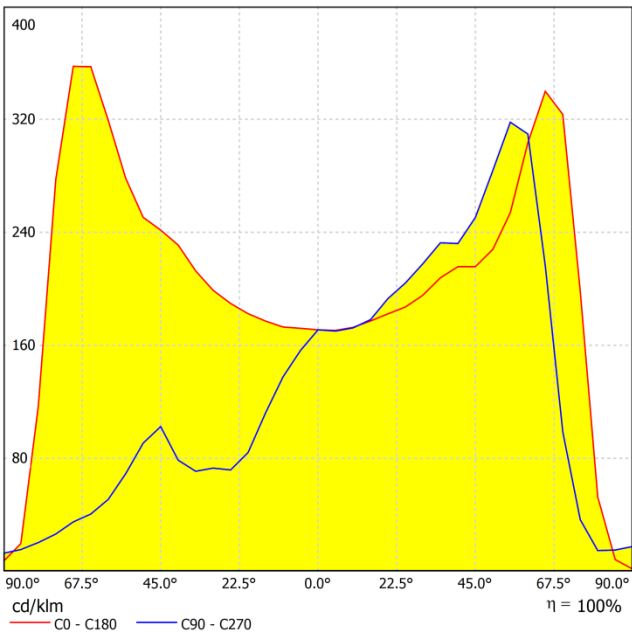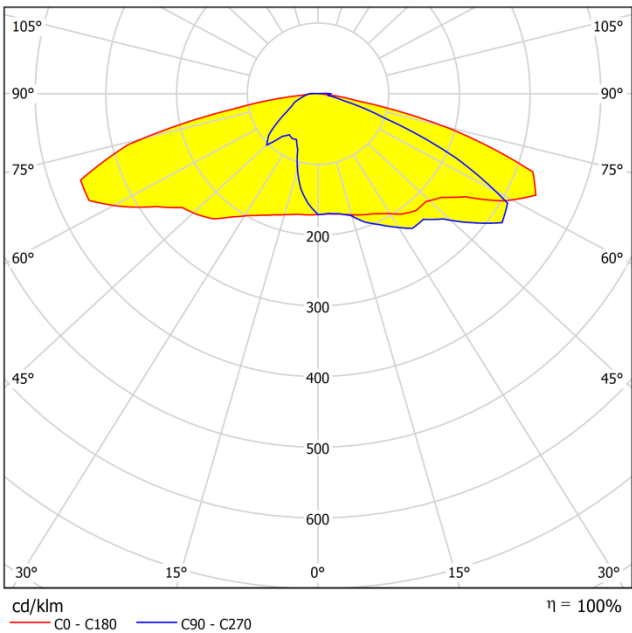
cd/klm η = 100%
C0 - C180   C90 - C270

cd/klm η = 100%
C0 - C180   C90 - C270

Photometric Characteristics

Characteristics	Properties
IES Classification	Type III
Beam Angle(Degree)	Horizontal 138, Vertical 49
Max. Cd. (Degree)	55H, 42.5V
Forward Side	77.1%
Cutoff Classification	Semicutoff

Application Performance

Area Lighting Simulation (Example):

Arrangement: Double row, opposing
Area Width: 30.0 m
Pole Distance: 36.0 m
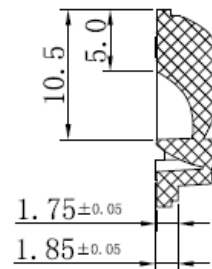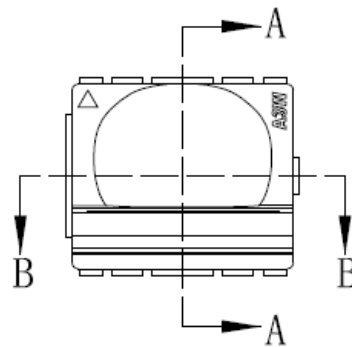Mounting Height: 7.5 m
Luminous Flux: 13016 lm
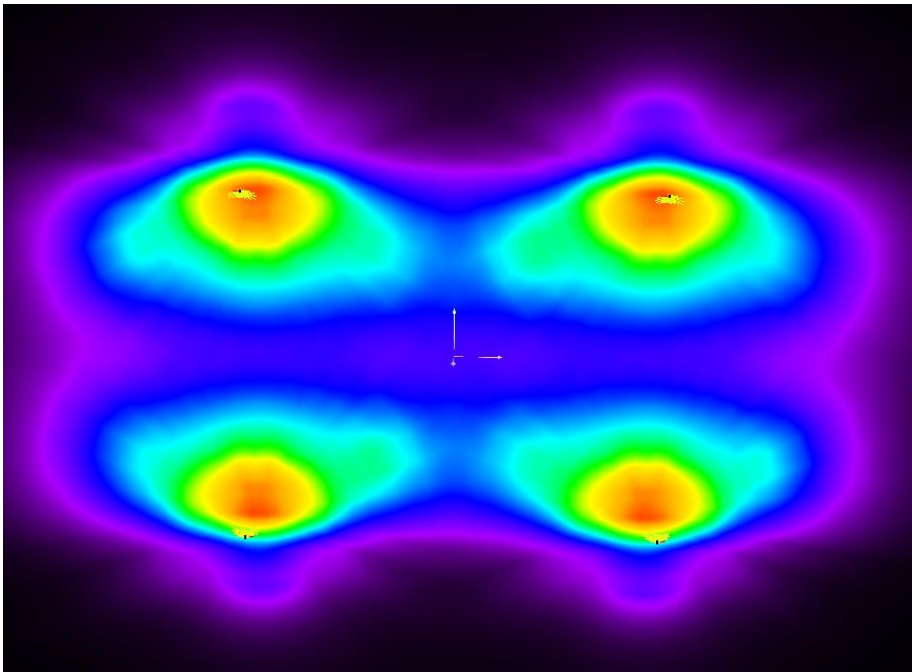
E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0	E_{min} / E_{max}
18	9.43	41	0.528	0.228

Suitable Area Arrangements:

Pole Height	Pole Distance	Area Width
1 H	1H ~ 5H	2H ~ 4H

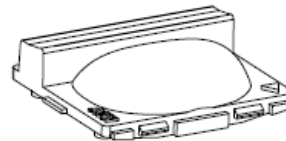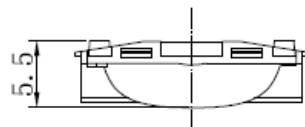# Mechanical Dimensions
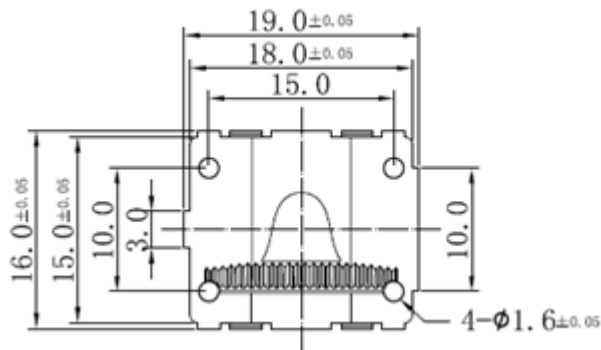
SECTION A-A
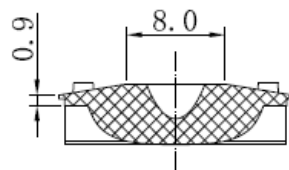
SECTION B-B

Unit: millimeter

Marking Information

- **Table 1. Product Information**

$$\underline{S\ M\ J\ L}\ -\ \underline{1}\ \underline{A}\ \underline{3}\ \underline{S}\ \underline{7}\ \underline{6}\ \underline{A}\ \underline{A}\ -\ \underline{X\ X}\ \underline{0\ 1}$$

①　　　　②　③　④　⑤　⑥　⑦　⑧　⑨　　　⑩　　　⑪

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	A	A: Area 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	S	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°
7	Field Angle – Class 1	1	6	Vertical	4: 47~70° 5: 71~100° 6: 101~130° 7: >130°
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 in a bag in bulk.
Each bag includes 1k pcs lens.

Put two bags into small carton.

Put 4 small cartons into bigger carton.
Total lens quantity: 4 cartons * 2 bags *1k pcs = 8k pcs

Label attached.
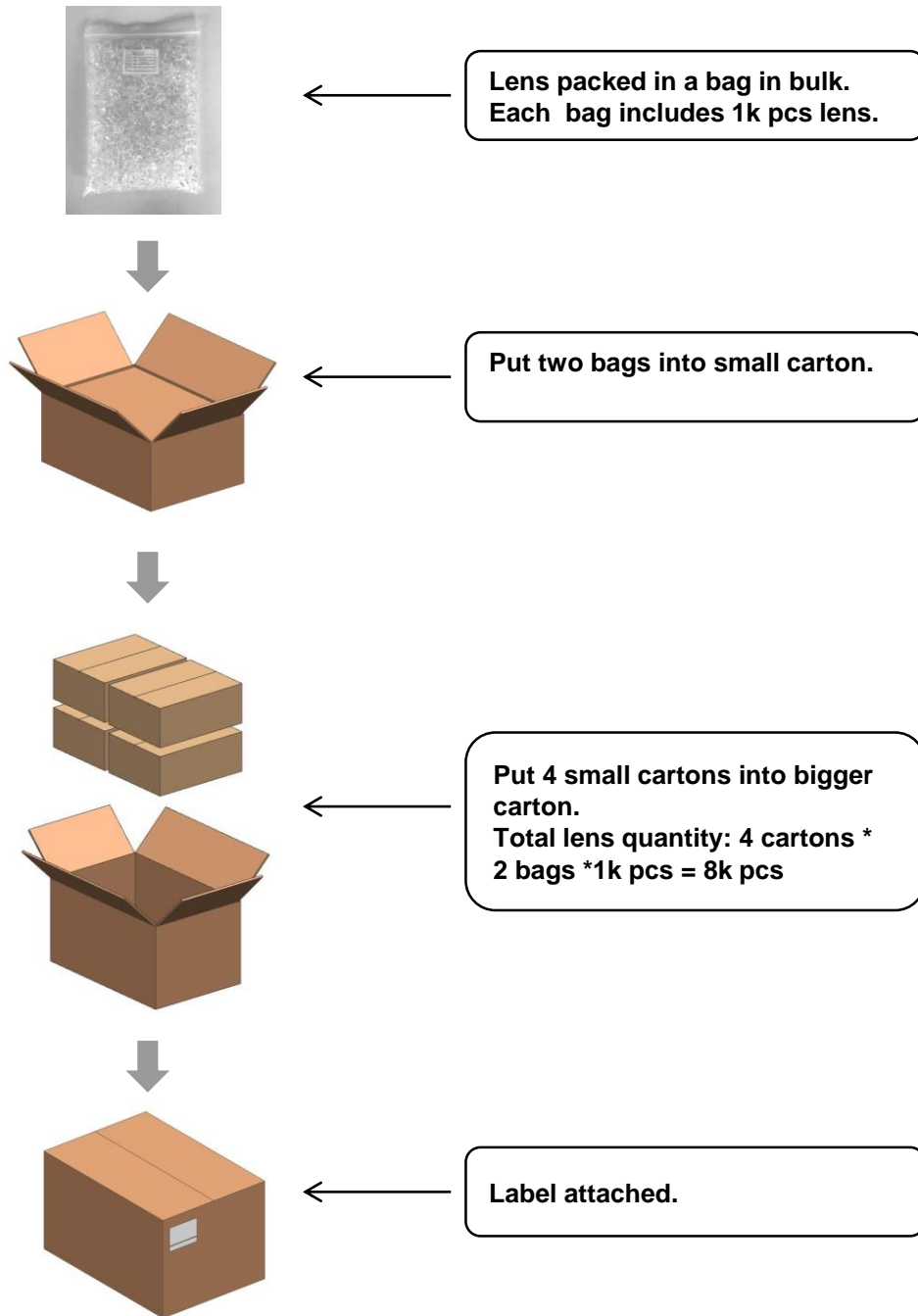
Operation Environment

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 holder

Company Information

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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	April 18, 2018	All	Version R0.1