Outdoor Lighting Solution

WICOP _ Spot Light Lens

SMJL-1FCC33AA-XX01 (20D Lens)

RoHS

Product Brief

Description

- Spot 20 degree single lens designed for spot 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

- Spot lighting

Material

- PMMA
- Efficiency: 96%

Dimensions

- L(mm)*W(mm)*H(mm) : 19.0*16.0*6.3

Beam Angle

- 20 Degree

Installation

- With holder

Table 1. Product Selection (Order Code Table)

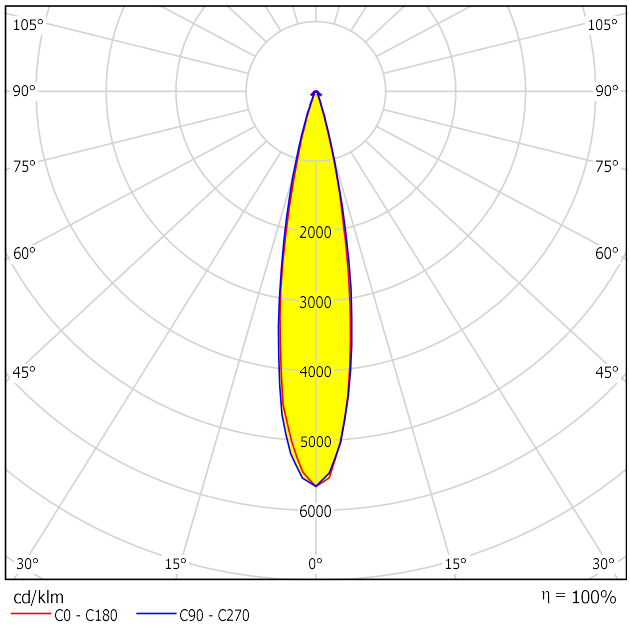
Part No.	SAP Code	Material	Efficiency	Beam Type	Size(mm)
SMJL-1FCC33AA-XX01	1011566	PMMA	96%	20 Degree	19.0*16.0*6.3

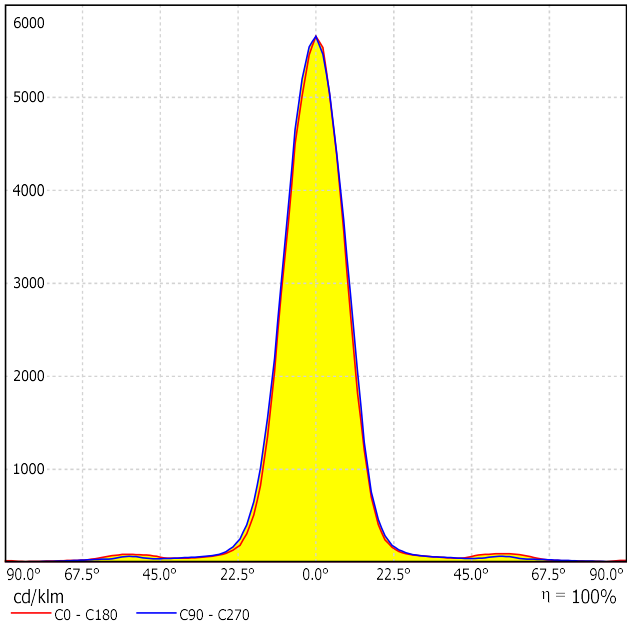
Suitable Leds	CCT	CRI	View Angle (Degree)	LES(mm)	Certificate
WICOP SZ8 Y19	2600~7000	70~90	140	1.8*1.8*0.4	LM80
WICOP SZ8 Y22	2600~7000	70~90	140	2.2*2.2*0.4	LM80
WICOP SZ8 Y11-4in1	2600~7000	70~90	150	2.78*2.78*0.45	LM80

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y19





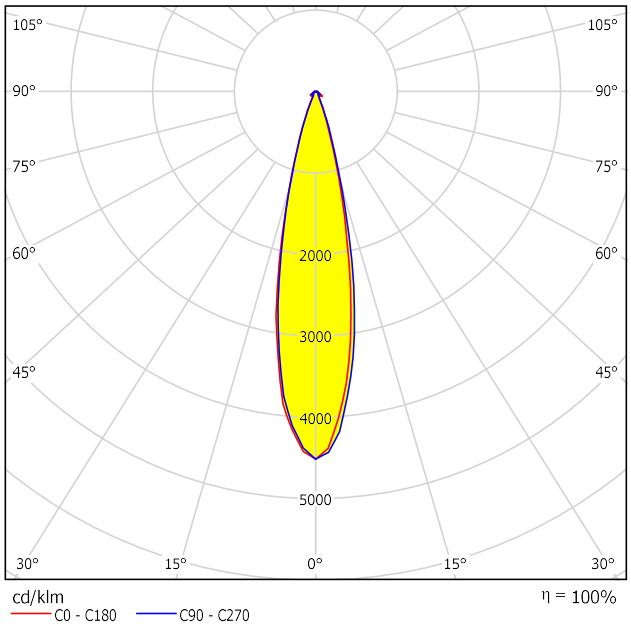
Photometric Characteristics

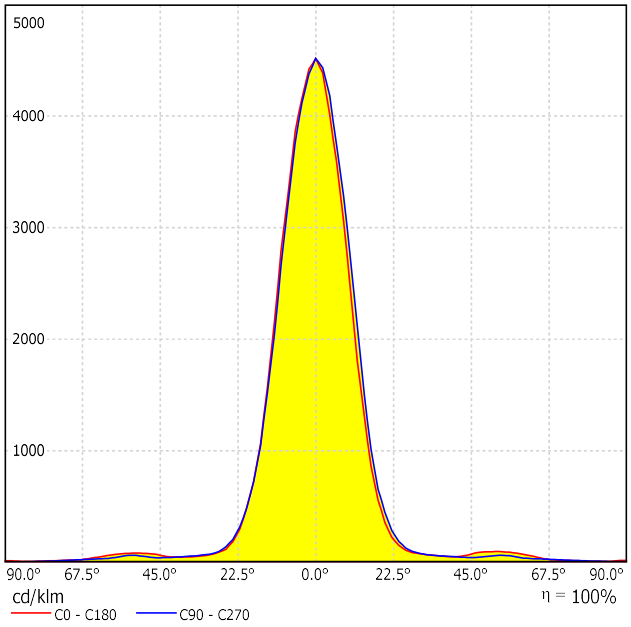
Characteristics	Properties
NEMA Type	3H X 3V
Beam Angle(50%-Degree)	Horizontal 20.6, Vertical 19.8
Max. Cd. (Degree)	0H, 0V
Zonal Lumen(0-60 Degree)	93%
Cutoff Classification	Cutoff

Optical Characteristics

Polar Candela Distribution

LED Source: SZ8 – Y22





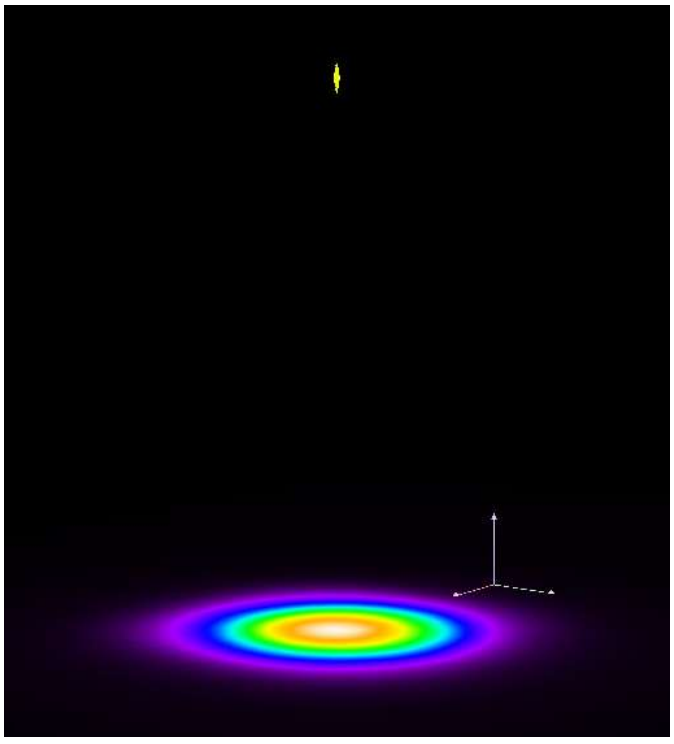
Photometric Characteristics

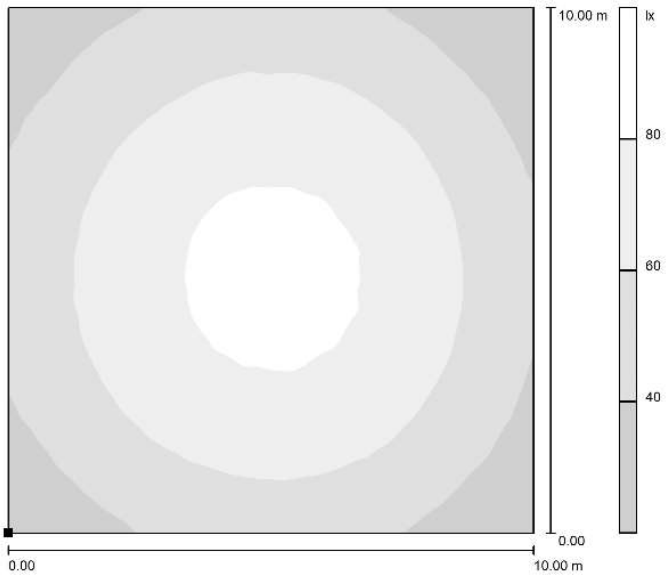
Characteristics	Properties
NEMA Type	3H X 3V
Beam Angle(50%-Degree)	Horizontal 22.9, Vertical 22.3
Max. Cd. (Degree)	0H, 0V
Zonal Lumen(0-60 Degree)	93%
Cutoff Classification	Cutoff

Application Performance

Spot Lighting Simulation (Example):

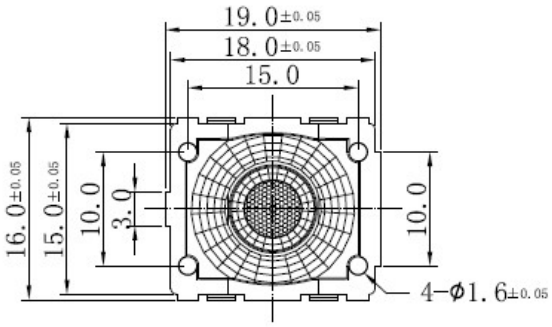
Arrangement: Vertical
Mounting Height: 30 m
Boom Angle: 0 °
Luminous Flux: 16040 lm
Calculation size: 10 m X 10 m

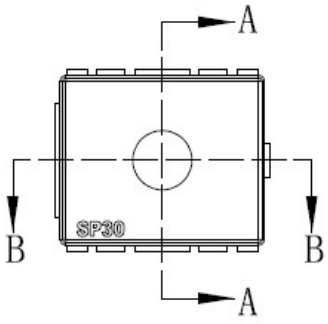


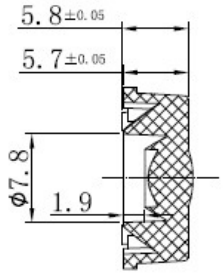


E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0	E_{min} / E_{max}
58	22	87	0.378	0.254

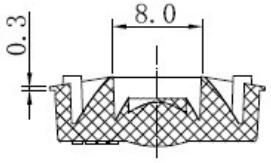
Mechanical Dimensions



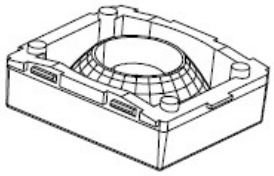


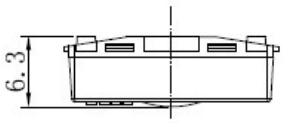


SECTION A-A



SECTION B-B





Unit: millimeter

Marking Information

- **Table 1. Product Information**

SMJL – 1FCC33AA – XX01

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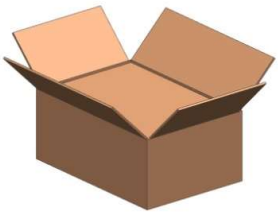
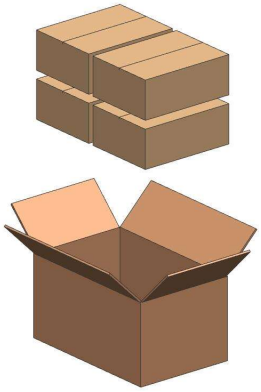
No	Data	Digit	Example	Remark	
1	Product Name-1	4	SMJL	SSC Internal Code for Lens	
2	Lens Category	1	1	1: Single Lens 2: 2X2 Array Lens 3: 2X6 Array Lens 4: 2X8 Array Lens	
3	Application Field	1	F	F: Flood Lighting	
4	Beam Angle – Class 1	1	C	Horizontal: A: <10° B 10~19° C: 20~29° D: 30~39° E: 40~49° F: 50~59° G: 60~69° etc	
5	Beam Angle – Class 2	1	C	Vertical: 1~9: <10° B 10~19° C: 20~29° D: 30~39° E: 40~49° F: 50~59° G: 60~69° etc	
6	Field Angle – Class 1	1	3	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	3	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

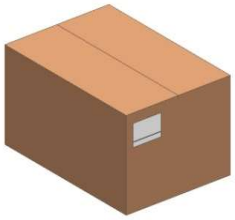
Lens packed in a bag in bulk.
Each bag includes 1k pcs lens.



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

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 20, 2018	All	Version R0.1