

## LISA2-WW-PIN

~45° wide beam. 7.0 mm high variant with location pin installation.

### SPECIFICATION:

Dimensions	Ø 9.9
Height	7 mm
Fastening	glue, pin
ROHS compliant	yes 

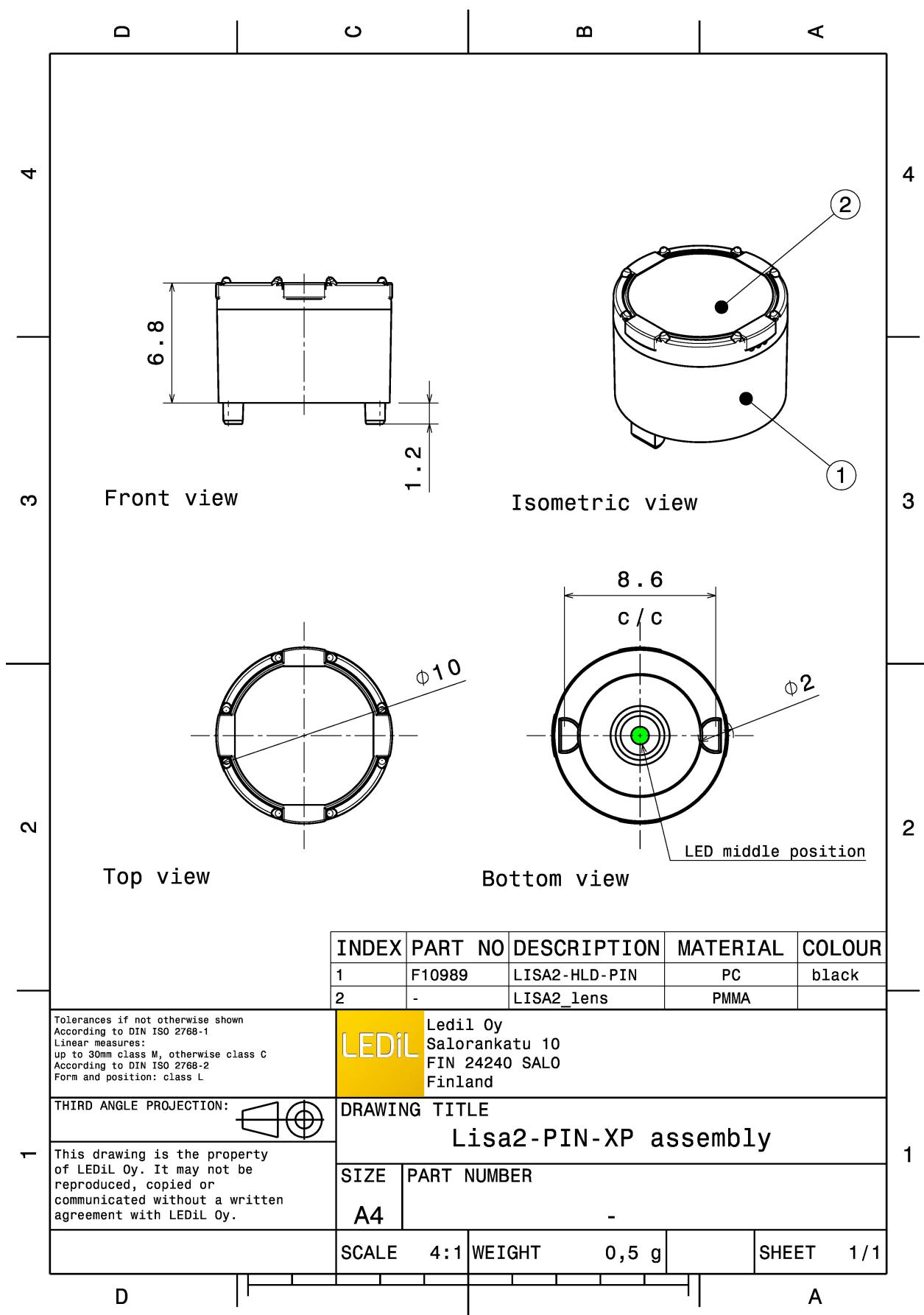


### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
LISA2-WW	Single lens	PMMA	clear		
LISA2-HLD-PIN	Holder	PC	black		

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)	
FP10997_LISA2-WW-PIN » Box size: 310 x 230 x 60 mm	Single lens	2000	300	100	1.4

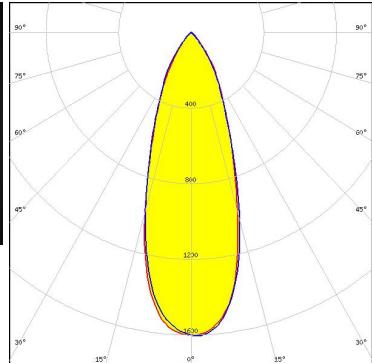
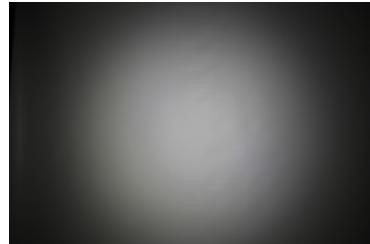


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

## OPTICAL RESULTS (MEASURED):



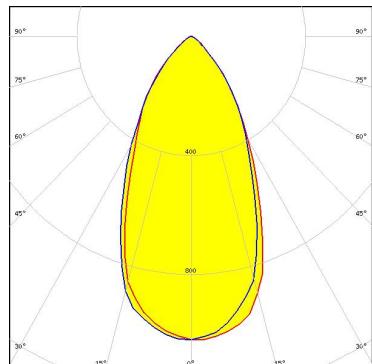
LED XD16  
 FWHM / FWTM 35.0° / 72.0°  
 Efficiency 78 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



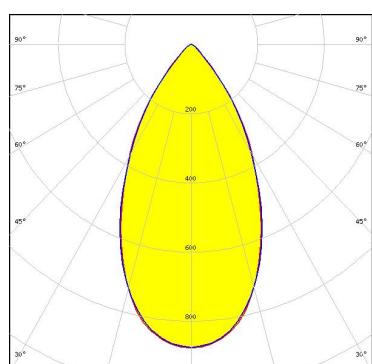
LED XP-E  
 FWHM / FWTM 42.0° / 78.0°  
 Efficiency 91 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-G  
 FWHM / FWTM 54.0° / 88.0°  
 Efficiency 90 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

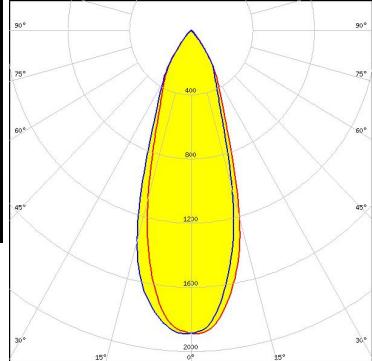


Light distribution files

## OPTICAL RESULTS (MEASURED):



LED LUXEON C  
FWHM / FWTM 34.0° / 72.0°  
Efficiency 88 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

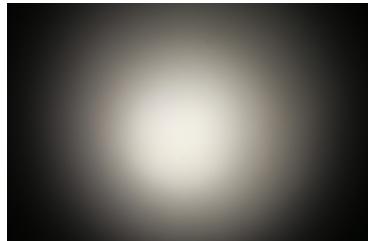


LED LUXEON Rebel ES  
FWHM / FWTM 56.0° / 88.0°  
Efficiency 93 %  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files



LED LUXEON Z  
FWHM / FWTM 28.0° / 70.0°  
Efficiency 87 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

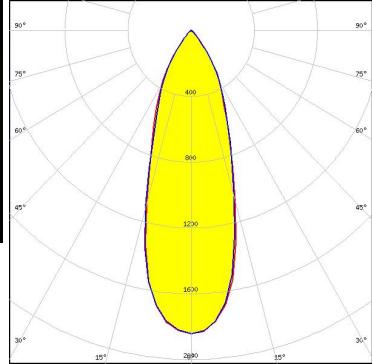
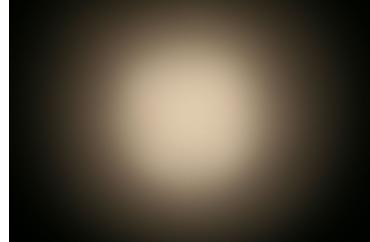


Light distribution files

## OPTICAL RESULTS (MEASURED):



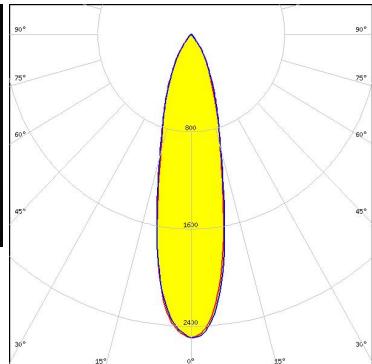
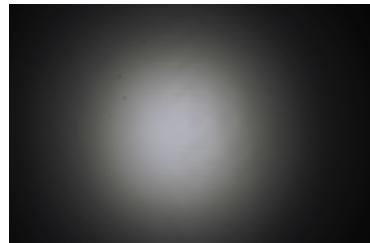
LED LUXEON Z ES  
 FWHM / FWTM 35.0° / 73.0°  
 Efficiency 88 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NCSxE17A  
 FWHM / FWTM 25.0° / 62.0°  
 Efficiency 82 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SFH 4170S  
 FWHM / FWTM 25.0° / 69.0°  
 Efficiency %  
 LEDs/each optic 1  
 Light colour/type IR  
 Required components:

Light distribution files

## OPTICAL RESULTS (MEASURED):

### OSRAM

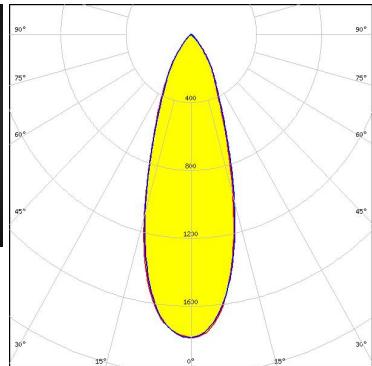
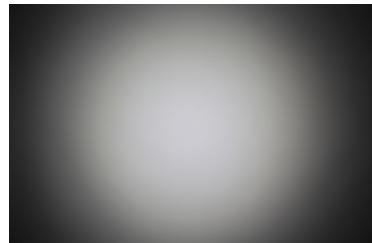
Opto Semiconductors

LED SFH 4180S  
FWHM / FWTM 25.0° / 68.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

Light distribution files

### SAMSUNG

LED LH181B  
FWHM / FWTM 34.0° / 69.0°  
Efficiency 81 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

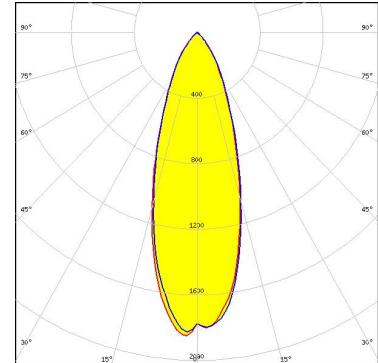


Light distribution files

## OPTICAL RESULTS (SIMULATED):



LED CSP 2323 (BXCP)  
 FWHM / FWTM 34.0° / 72.0°  
 Efficiency 86 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

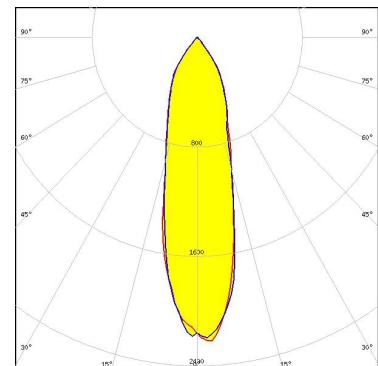


LED XQ-E HD  
 FWHM / FWTM 72.0° / 99.0°  
 Efficiency 90 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

Light distribution files



LED XQ-E HI  
 FWHM / FWTM 27.0° / 72.0°  
 Efficiency 89 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

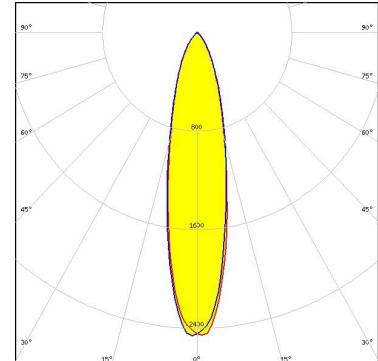


Light distribution files

## OPTICAL RESULTS (SIMULATED):



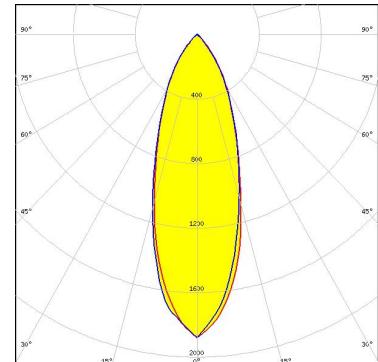
LED LUXEON IR 2720  
FWHM / FWTM 24.0° / 60.0°  
Efficiency 74 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files



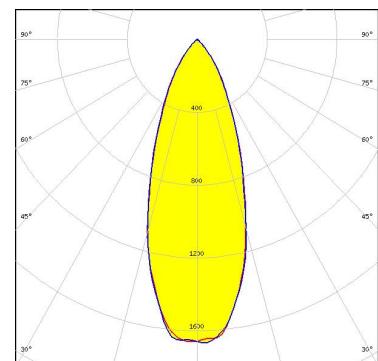
LED LUXEON IR 2720  
FWHM / FWTM 35.0° / 75.0°  
Efficiency 93 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files



LED NVSxE21A  
FWHM / FWTM 37.0° / 75.0°  
Efficiency 88 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

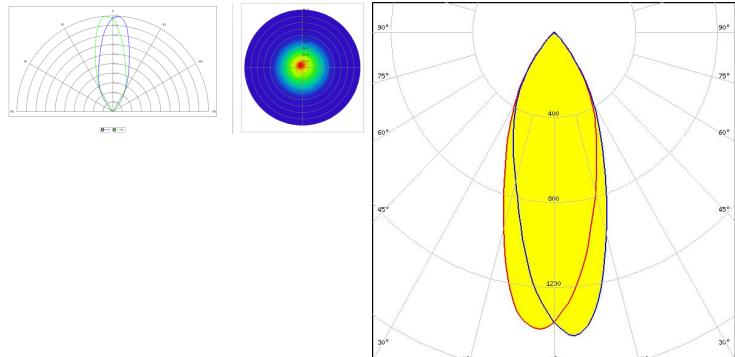


Light distribution files

## OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

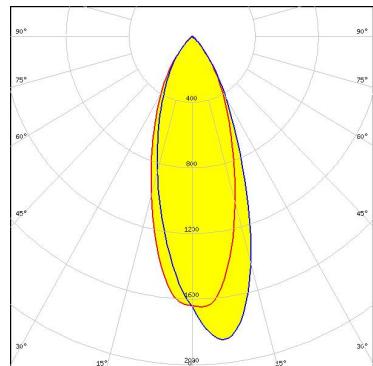
LED SFH 4170S  
FWHM / FWTM 36.0° / 78.0°  
Efficiency 80 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4770S  
FWHM / FWTM 34.0° / 75.0°  
Efficiency 92 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**SHARP**

LED Double Dome (GM2BB)  
FWHM / FWTM 60.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

## GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

## MATERIALS:

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**LEDiL Oy**  
Joensuunkatu 7  
FI-24100 SALO  
Finland

**LEDiL Inc.**  
228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

**Ledil Optics Technology  
(Shenzhen) Co., Ltd.**  
# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

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