

## LISA2-W-PIN

~35° wide beam. 6.8 mm high variant with location pin installation.

### SPECIFICATION:

Dimensions	Ø 9.9 mm
Height	6.8 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

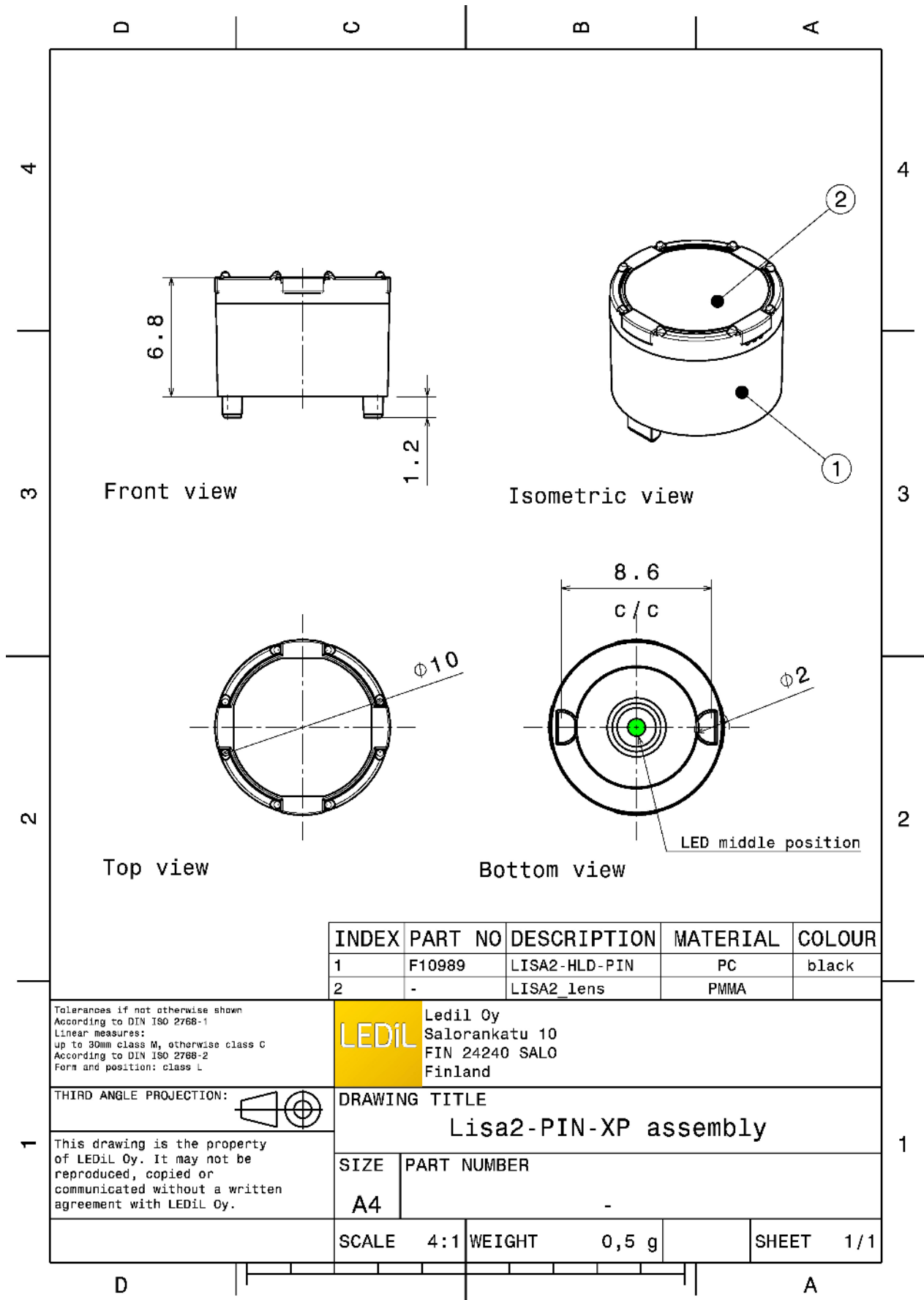


### MATERIALS:

Component	Type	Material	Colour	Finish
LISA2-W	Single lens	PMMA	clear	
LISA2-HLD-PIN	Holder	PC	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP10996_LISA2-W-PIN	Single lens	2000	300	100	1.4
» Box size:					



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	F10989	LISA2-HLD-PIN	PC	black
2	-	LISA2_lens	PMMA	

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
up to 30mm class M, otherwise class C  
According to DIN ISO 2768-2  
Form and position: class L

**LEDiL** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**Lisa2-PIN-XP assembly**

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SIZE	PART NUMBER
A4	-

SCALE	4:1	WEIGHT	0,5 g	SHEET	1/1
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See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

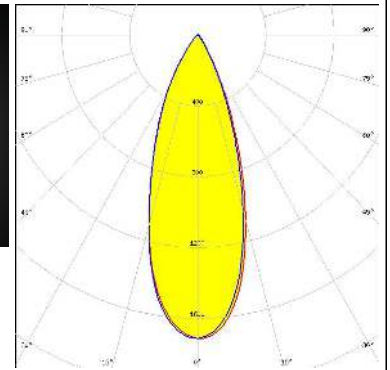
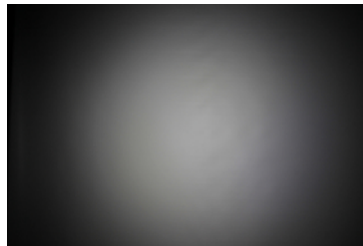
#### OPTICAL RESULTS (MEASURED):

##### CREE ⇄ LED

LED XB-D  
 FWHM / FWTM 32.0°  
 Efficiency 86 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

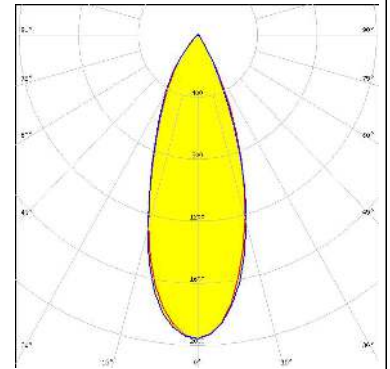
##### CREE ⇄ LED

LED XD16  
 FWHM / FWTM 37.0° / 65.0°  
 Efficiency 77 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### CREE ⇄ LED

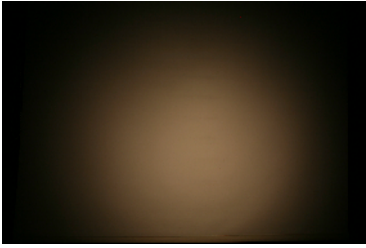
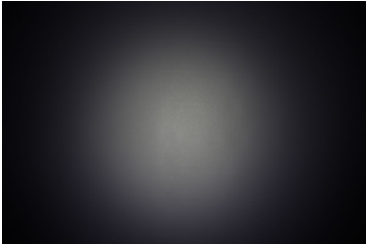
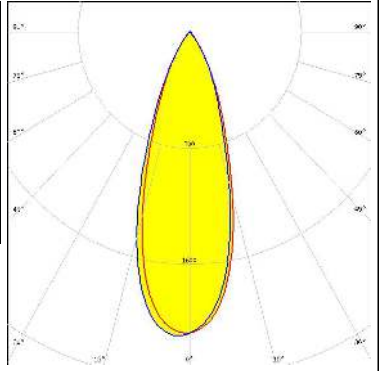

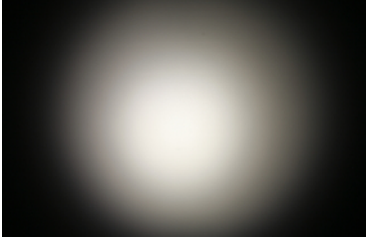
LED XP-E  
 FWHM / FWTM 37.0°  
 Efficiency 90 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



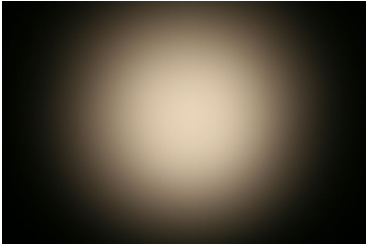
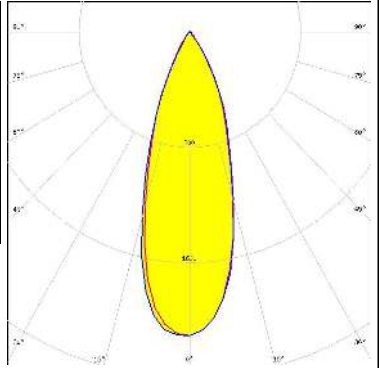

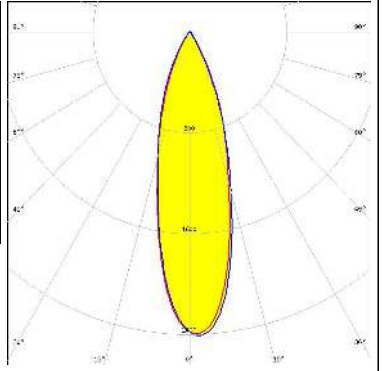
##### CREE ⇄ LED

LED XP-G  
 FWHM / FWTM 48.0° / 76.0°  
 Efficiency 92 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:

### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON A</p> <p>FWHM / FWTM 46.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON C</p> <p>FWHM / FWTM 34.0° / 64.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	 
<p><b>LUMILEDS</b></p> <p>LED LUXEON Rebel ES</p> <p>FWHM / FWTM 46.0°</p> <p>Efficiency 93 %</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON Z</p> <p>FWHM / FWTM 27.0° / 60.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

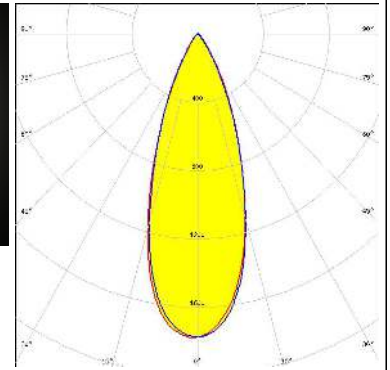
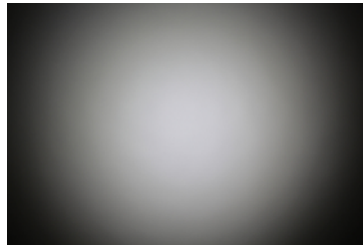
#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON Z ES</p> <p>FWHM / FWTM 35.0° / 64.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NCSxE17A</p> <p>FWHM / FWTM 29.0° / 58.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4170S</p> <p>FWHM / FWTM 26.0° / 60.0°</p> <p>Efficiency %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4180S</p> <p>FWHM / FWTM 25.0° / 60.0°</p> <p>Efficiency %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

LED LH181B  
FWHM / FWTM 36.0° / 64.0°  
Efficiency 80 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### SHARP

LED Double Dome (GM2BB)  
FWHM / FWTM 44.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour White  
Required components:

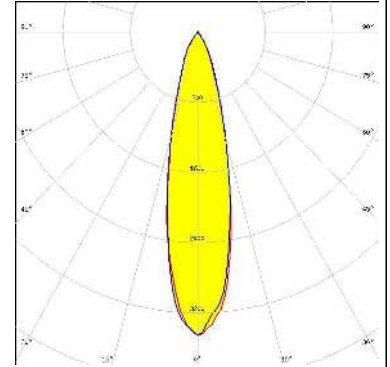
#### OPTICAL RESULTS (SIMULATED):

##### CREE LED

LED XQ-E HD  
 FWHM / FWTM 49.0° / 80.0°  
 Efficiency 90 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

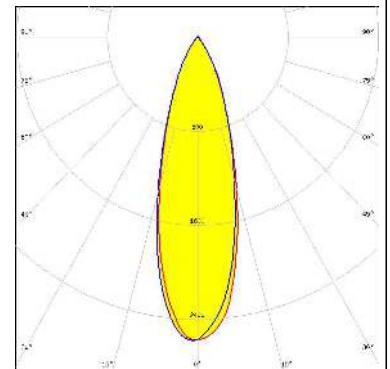
##### CREE LED

LED XQ-E HI  
 FWHM / FWTM 23.0° / 52.0°  
 Efficiency 89 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



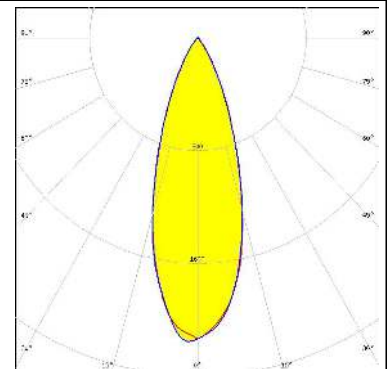
##### LUMILEDS

LED LUXEON IR 2720  
 FWHM / FWTM 30.0° / 62.0°  
 Efficiency 93 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:

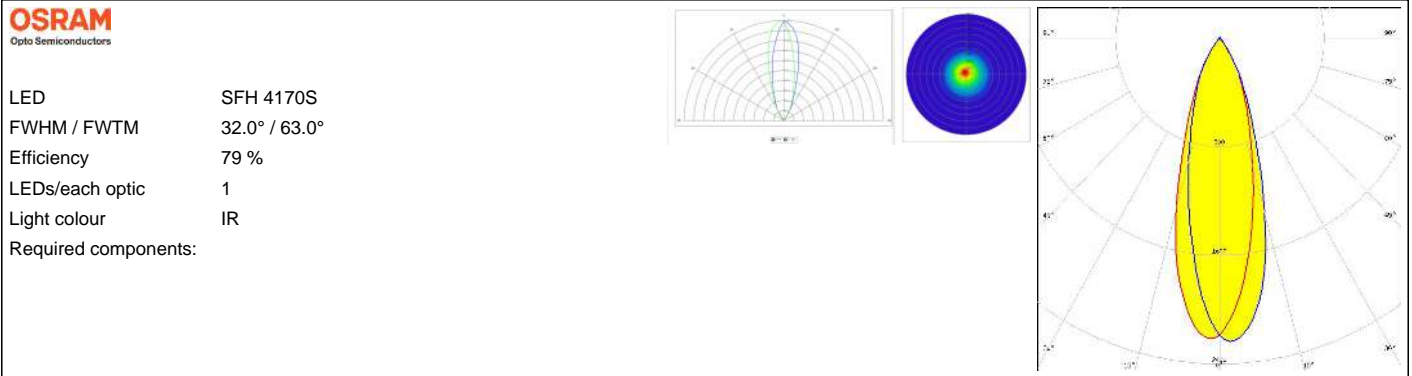


##### NICHIA

LED NVSxE21A  
 FWHM / FWTM 34.0° / 63.0°  
 Efficiency 87 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (SIMULATED):





### 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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