

## LISA2-WW-CLIP

~45° wide beam optimized for CREE XP-E. 6.8 mm high variant with clip installation.

### SPECIFICATION:

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

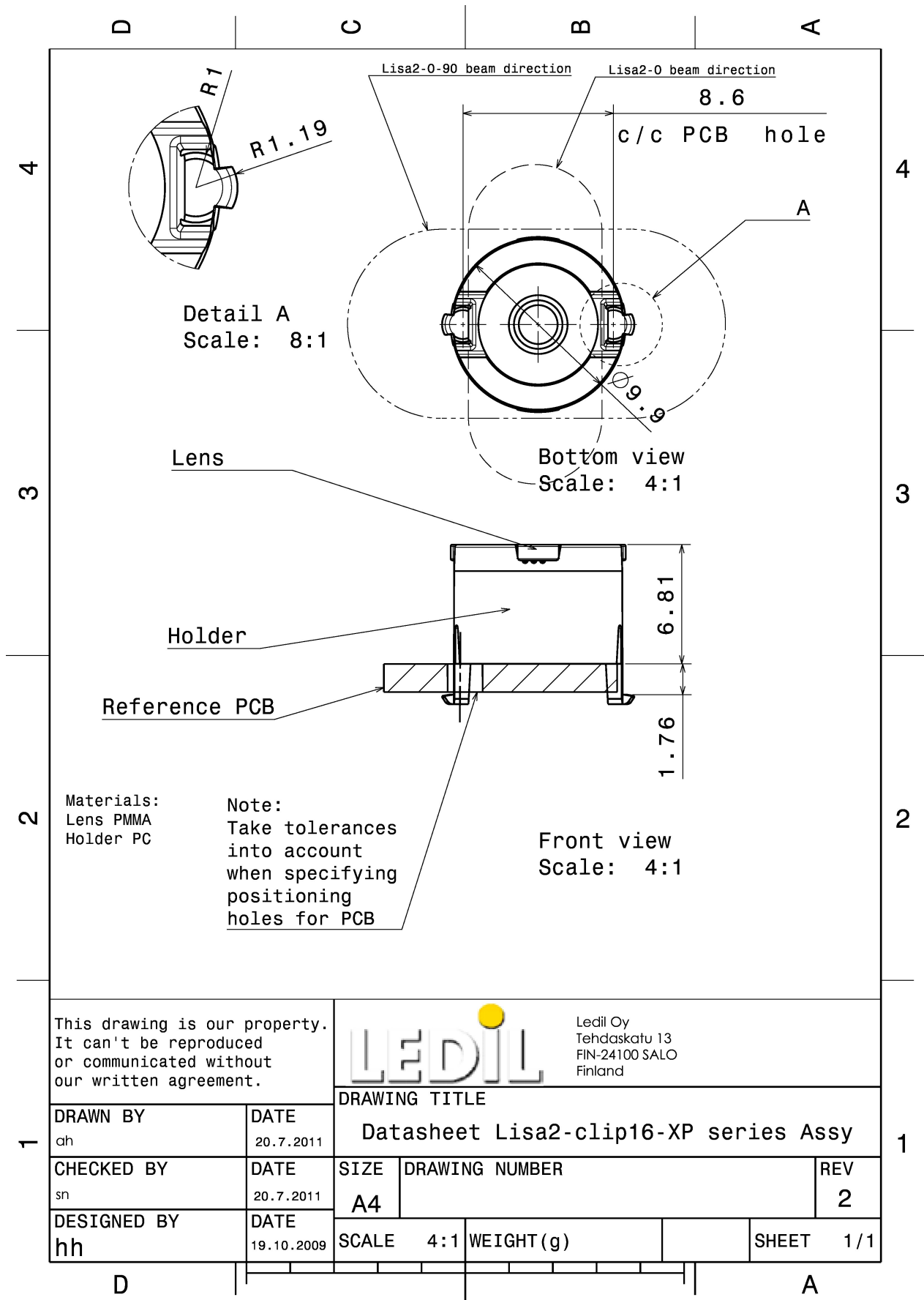


### MATERIALS:

Component	Type	Material	Colour	Finish
LISA2-WW	Single lens	PMMA	clear	
LISA2-HLD-CLIP16-XP	Holder	PC	black	

### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
FP11077_LISA2-WW-CLIP	Single lens	2000		100	1.4
» Box size:					



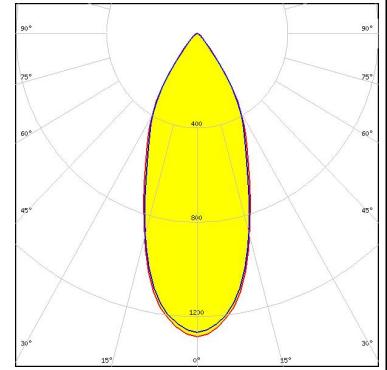
This drawing is our property. It can't be reproduced or communicated without our written agreement.		<b>LEDiL</b>		Ledil Oy Tehdaskatu 13 FIN-24100 SALO Finland	
<b>DRAWN BY</b> ch		<b>DATE</b> 20.7.2011		<b>DRAWING TITLE</b> Datasheet Lisa2-clip16-XP series Assy	
<b>CHECKED BY</b> sn		<b>DATE</b> 20.7.2011		<b>REV</b> 2	
<b>DESIGNED BY</b> hh		<b>DATE</b> 19.10.2009		<b>SCALE</b> 4:1	
		<b>WEIGHT (g)</b>		<b>SHEET</b> 1/1	

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

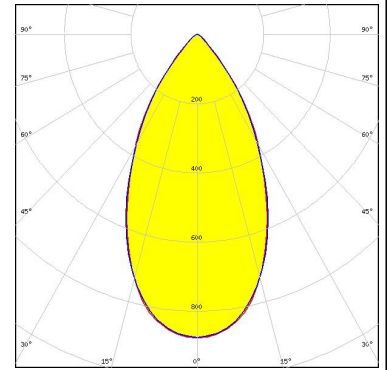
### OPTICAL RESULTS (MEASURED):



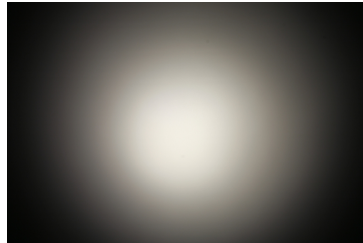
LED XP-E  
 FWHM / FWTM 42.0° / 78.0°  
 Efficiency 91 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



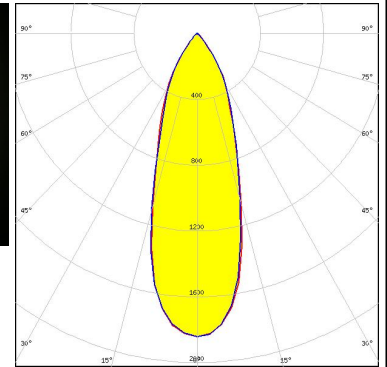
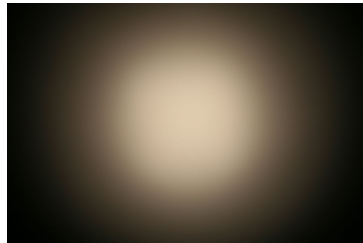
LED XP-G  
 FWHM / FWTM 54.0° / 88.0°  
 Efficiency 90 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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



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



## OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED SFH 4170S  
FWHM / FWTM 29.0° / 73.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:

**OSRAM**  
Opto Semiconductors

LED SFH 4180S  
FWHM / FWTM 27.0° / 71.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:

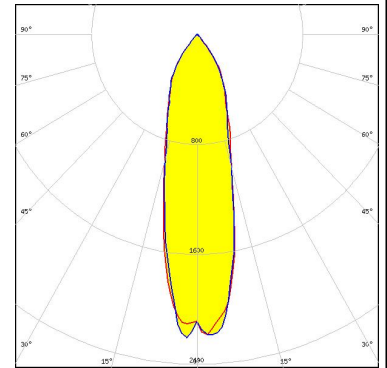
### OPTICAL RESULTS (SIMULATED):



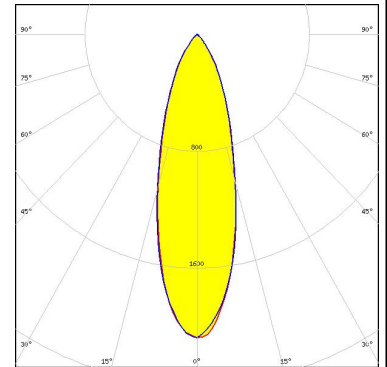
**LED** XQ-E HD  
**FWHM / FWTM** 72.0° / 99.0°  
**Efficiency** 90 %  
**Peak intensity** 0.7 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



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



**LED** NCSxE17A  
**FWHM / FWTM** 31.0° / 68.0°  
**Efficiency** 85 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



#### 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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