



**Ordering number FP11085\_LISA2-RS-CLIP**

Family	Lisa2	FWHM	16 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11121\_LISA2-O-CLIP**

Family	Lisa2	FWHM	18+48 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11075\_LISA2-M-CLIP**

Family	Lisa2	FWHM	24 degrees
Type	Assembly	Efficiency	92 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11076\_LISA2-W-CLIP**

Family	Lisa2	FWHM	37 degrees
Type	Assembly	Efficiency	90 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		



**Ordering number FP11077\_LISA2-WW-CLIP**

Family	Lisa2	FWHM	42 degrees
Type	Assembly	Efficiency	91 %
LED	XP-E	cd/lm	1.300
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11856\_LISA2-O-90-CLIP**

Family	Lisa2	FWHM	48+18 degrees
Type	Assembly	Efficiency	83 %
LED	XP-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	6.8 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

**Ordering number FP11431\_LISA2-WWW-CLIP**

Family	Lisa2	FWHM	84 degrees
Type	Assembly	Efficiency	77 %
LED	XP-E	cd/lm	0.500
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

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



## PRODUCT DATASHEET

### Lisa2 series

last update 25/10/2012



#### GENERAL INFORMATION

- Product series especially designed & optimized for XP-E series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance (105 degrees of Celcius / 220 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used material from below:

[http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94\\_Yellow%20Card.pdf](http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf)

<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

- Optic holder molded by high quality PC material (120 dergees of Celcius / 248 degrees of Fahrenheit).

- Fastening to PCB with appropriate adhesive. By clicking link below you can find Ledil recommended glue options.

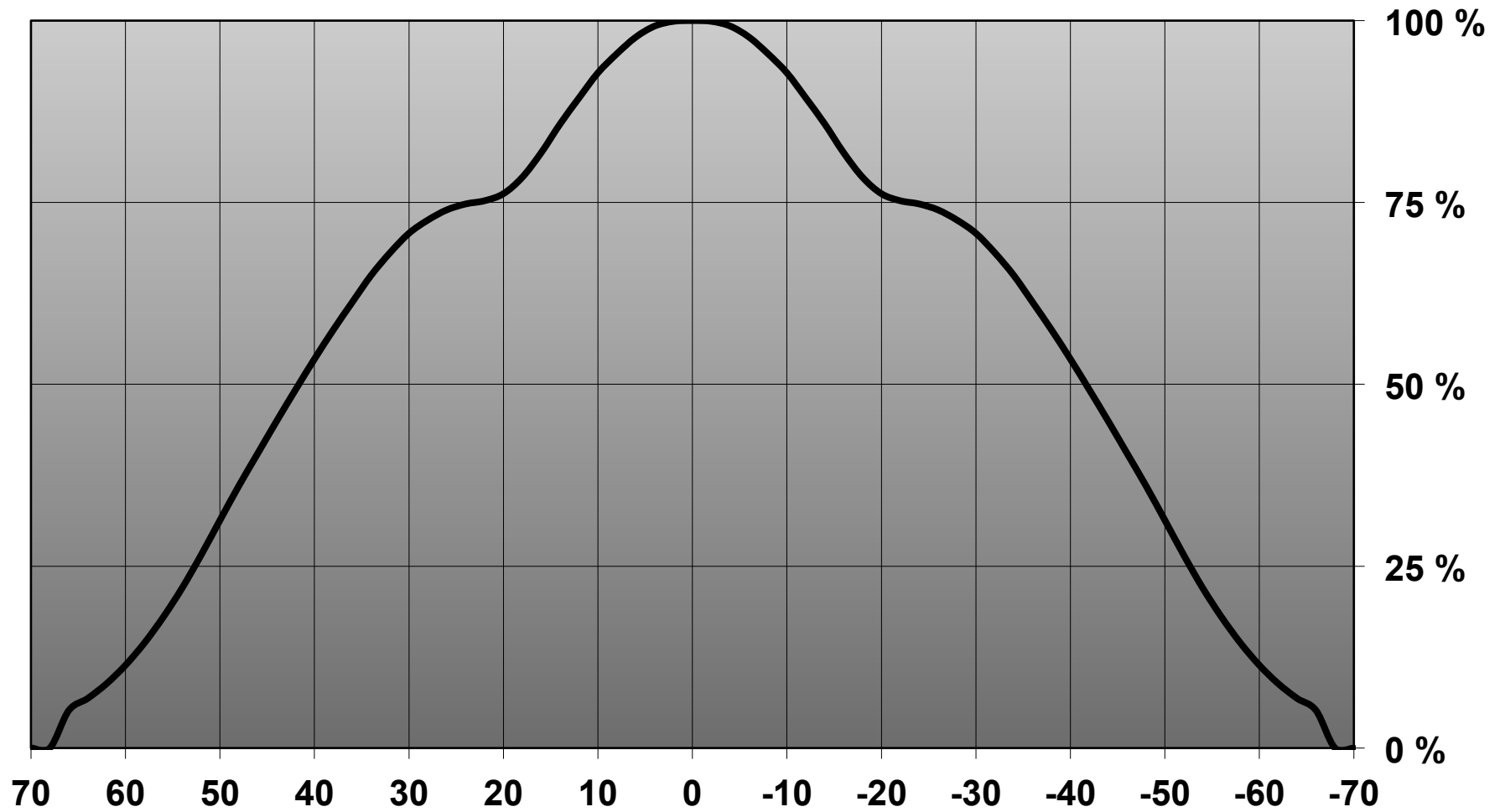
[http://www.ledil.com/datasheets/DataSheet\\_GLUES.pdf](http://www.ledil.com/datasheets/DataSheet_GLUES.pdf)

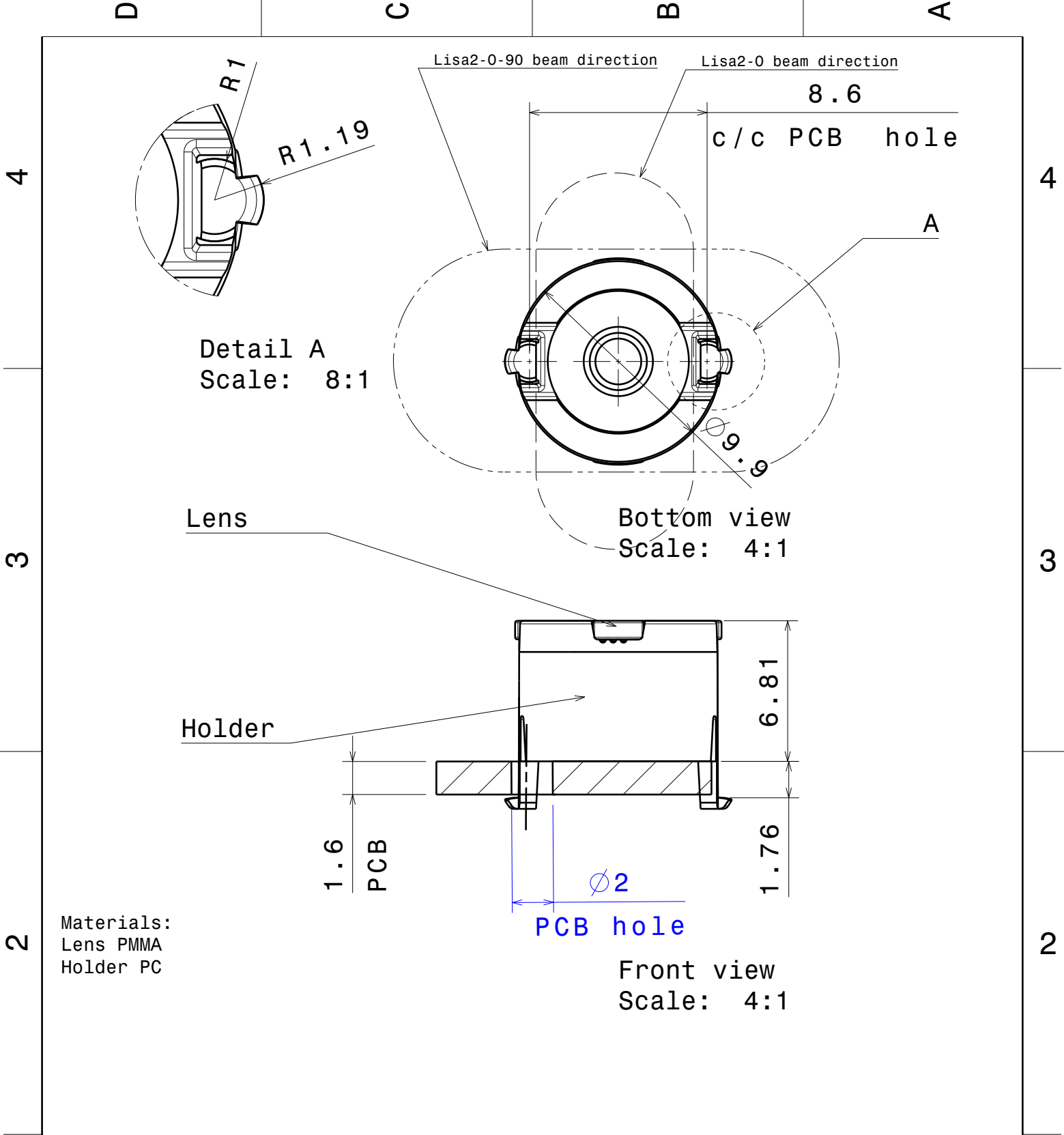
**NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the glue.**

**NOTE 2: All surfaces where glue is applied must be clean, dry and free from grease and dirt. If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer -this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.**

**Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.**

**Relative intensity of FP11431\_LISA2-WWW-CLIP &  
FP11429\_LISA2-WWW-PIN**





Materials:  
 Lens PMMA  
 Holder PC

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 or communicated without  
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DRAWING TITLE

Datasheet Lisa2-clip16-XP series Assy

DRAWN BY a		DATE 20.7.2011		SIZE A4		DRAWING NUMBER		REV 2	
CHECKED BY s n		DATE 20.7.2011		SCALE 4:1		WEIGHT (g)		SHEET 1/1	
DESIGNED BY hh		DATE 19.10.2009							

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