

**Ordering number C11191\_TUIJA-3-W**

Family	Tuija	FWHM	(simulated) 54
Type	Lens array	Efficiency	86 %
LED	NCSxx19A	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	50 mm		
Height	14.5 mm		
Style	Round	MR16 Applications	
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		

**Ordering number C12150\_TUIJA-3-M2**

Family	Tuija	FWHM	(simulated) 35
Type	Lens array	Efficiency	81 %
LED	NCSxx19A	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	50 mm		
Height	14.5 mm		
Style	Round	MR16 Applications	
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		

**Ordering number C11192\_TUIJA-3-SS**

Family	Tuija	FWHM	12 degrees
Type	Lens array	Efficiency	90 %
LED	NCSxx19A	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	50 mm		
Height	14.5 mm		
Style	Round	MR16 Applications	
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		

**Ordering number C11193\_TUIJA-3-M**

Family	Tuija	FWHM	16 degrees
Type	Lens array	Efficiency	82 %
LED	NCSxx19A	cd/lm	-
Color	Clear	Gerber File	Available
Diameter	50 mm		
Height	14.5 mm		
Style	Round	MR16 Applications	
Optic Material	PMMA		
Holder Material	-		
Fastening	Pin, glue		
Status	Ready		



**PRODUCT DATASHEET**  
**Tuija series**  
last update 18/4/2012



**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

### Tuija series

last update 18/4/2012



#### GENERAL INFORMATION

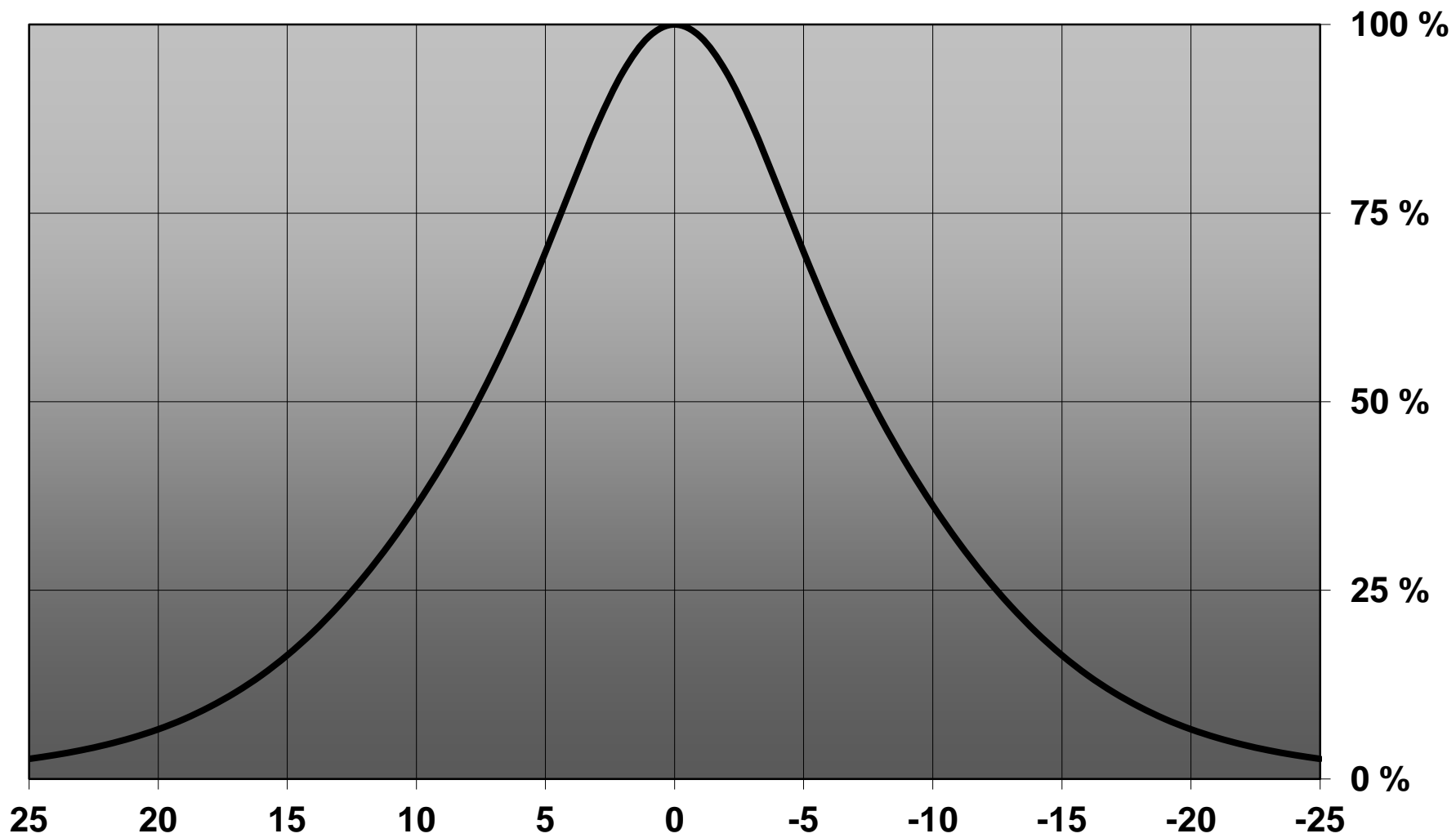
- Product series especially designed & optimized for NCSxx19A series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

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>

Relative Intensity of C11193\_Tuija-3-M-DD



D

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B

A

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3

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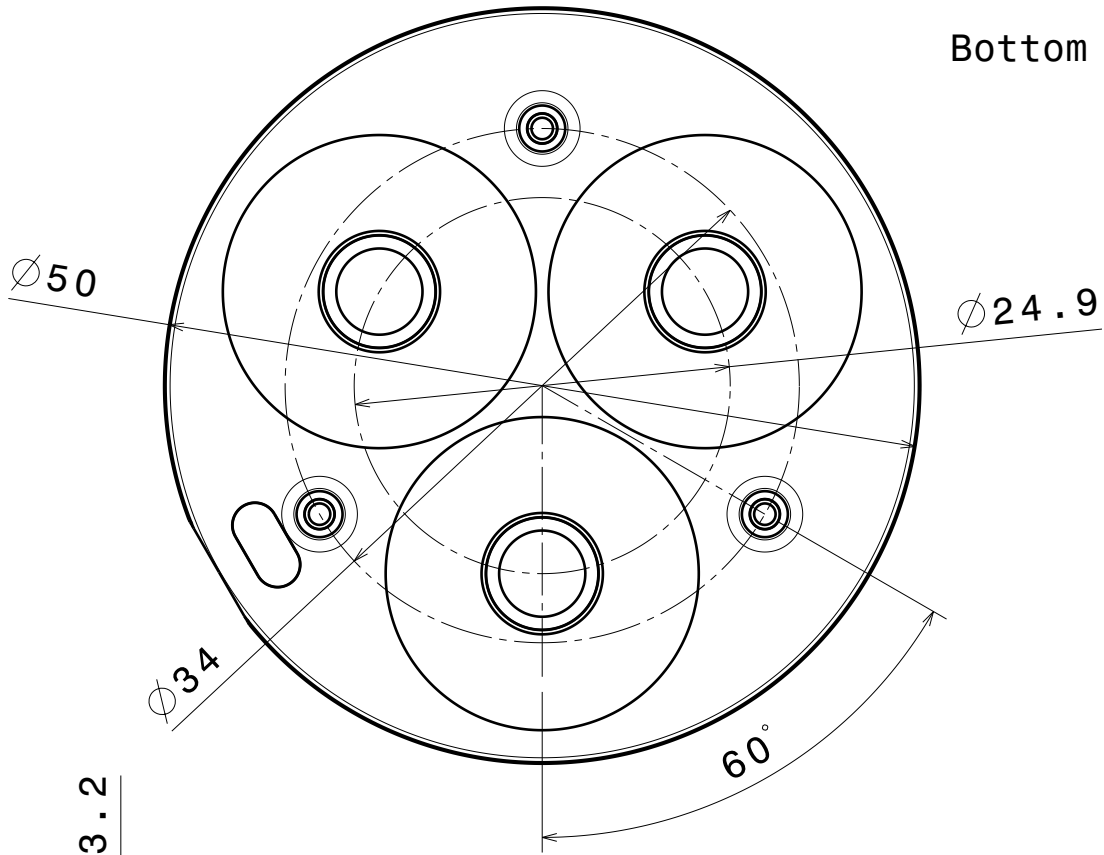
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2

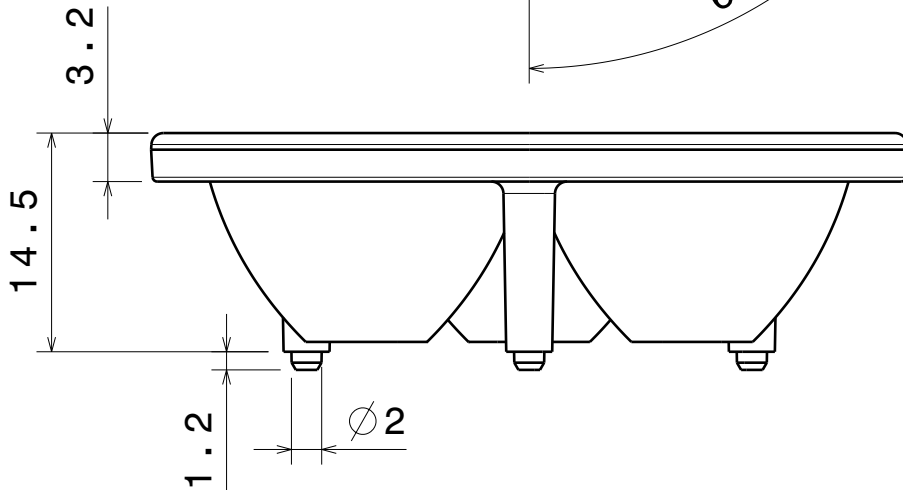
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Bottom view



Front view



Material:  
Lens PMMA

Part no.s:  
C11191\_Tuija-3-W  
C11192\_Tuija-3-SS  
C11193\_Tuija-3-M

Tolerances:  
Dimensions less < 20mm +/-0.1mm  
Dimensions between (21-45)mm +/-0.2mm  
Dimensions between (46-90)mm +/-0.3mm

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DRAWING TITLE

Datasheet Tuija-3 lens

DRAWN BY

DATE

12.10.2009

CHECKED BY

DATE

09.10.2009

DESIGNED BY

DATE

29.05.2007

HH

SIZE

A4

DRAWING NUMBER

C11191-193

REV

1

SCALE

2:1

WEIGHT (g)

SHEET

1/1

D

A