

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

|                 |                 |                   |            |
|-----------------|-----------------|-------------------|------------|
| Family          | Tuija           | FWHM              | 13 degrees |
| Type            | Lens array      | Efficiency        | 90 %       |
| LED             | LUXEON Rebel ES | cd/lm             | 11.100     |
| 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              | 18 degrees |
| Type            | Lens array      | Efficiency        | 82 %       |
| LED             | LUXEON Rebel ES | cd/lm             | 4.970      |
| 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              | 36 degrees |
| Type            | Lens array      | Efficiency        | 93 %       |
| LED             | LUXEON Rebel ES | cd/lm             | 1.800      |
| 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 C11191\_TUIJA-3-W**

|                 |                 |                   |            |
|-----------------|-----------------|-------------------|------------|
| Family          | Tuija           | FWHM              | 56 degrees |
| Type            | Lens array      | Efficiency        | 86 %       |
| LED             | LUXEON Rebel ES | cd/lm             | 0.870      |
| 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

PHILIPS  
LUMILEDS

**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

PHILIPS  
LUMILEDS

#### GENERAL INFORMATION

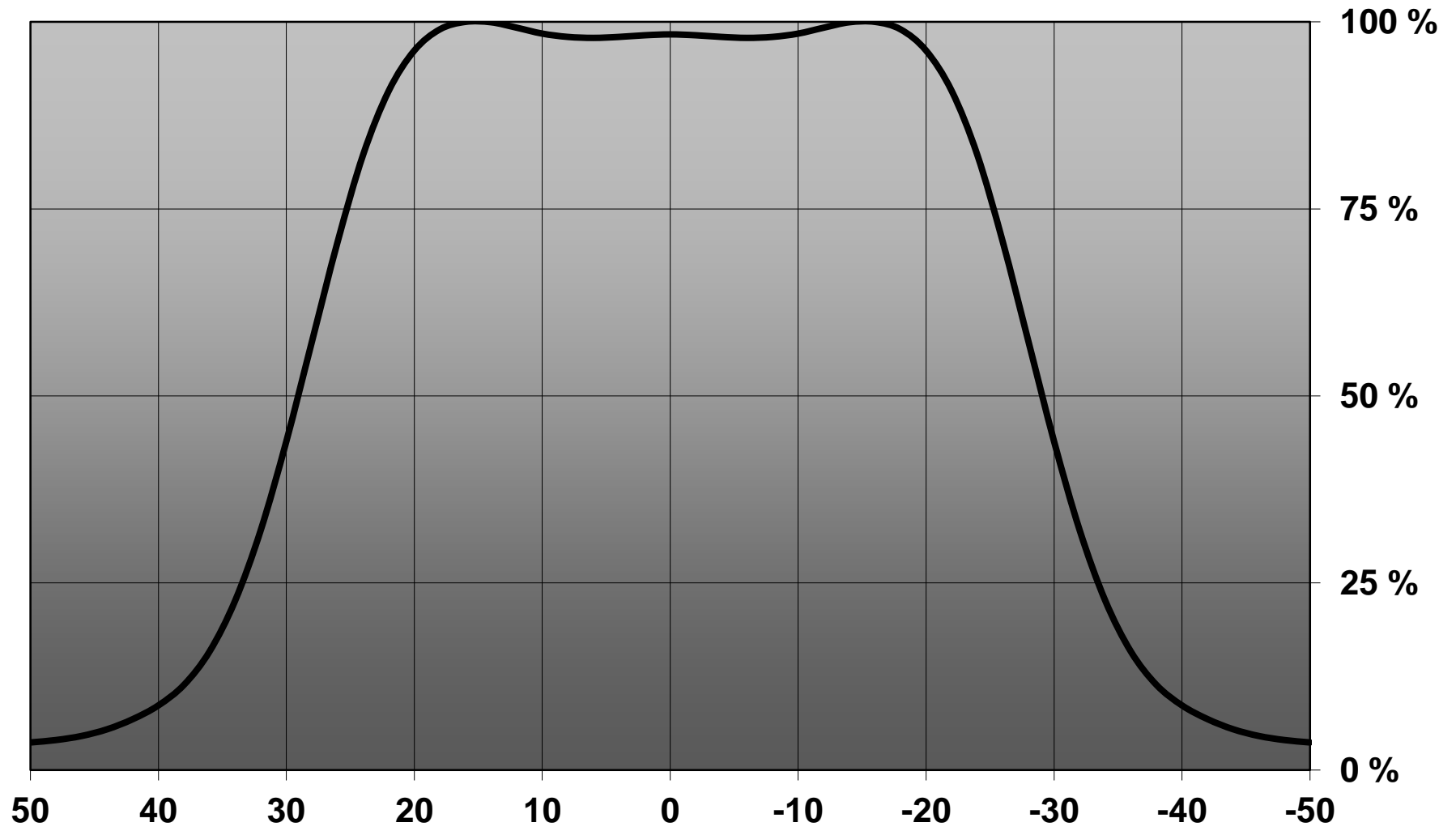
- Product series especially designed & optimized for LUXEON Rebel ES series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance. Allows use of high current and temperature conditions.

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 C11191\_Tuija-3-W-DD



D

C

B

A

4

4

3

3

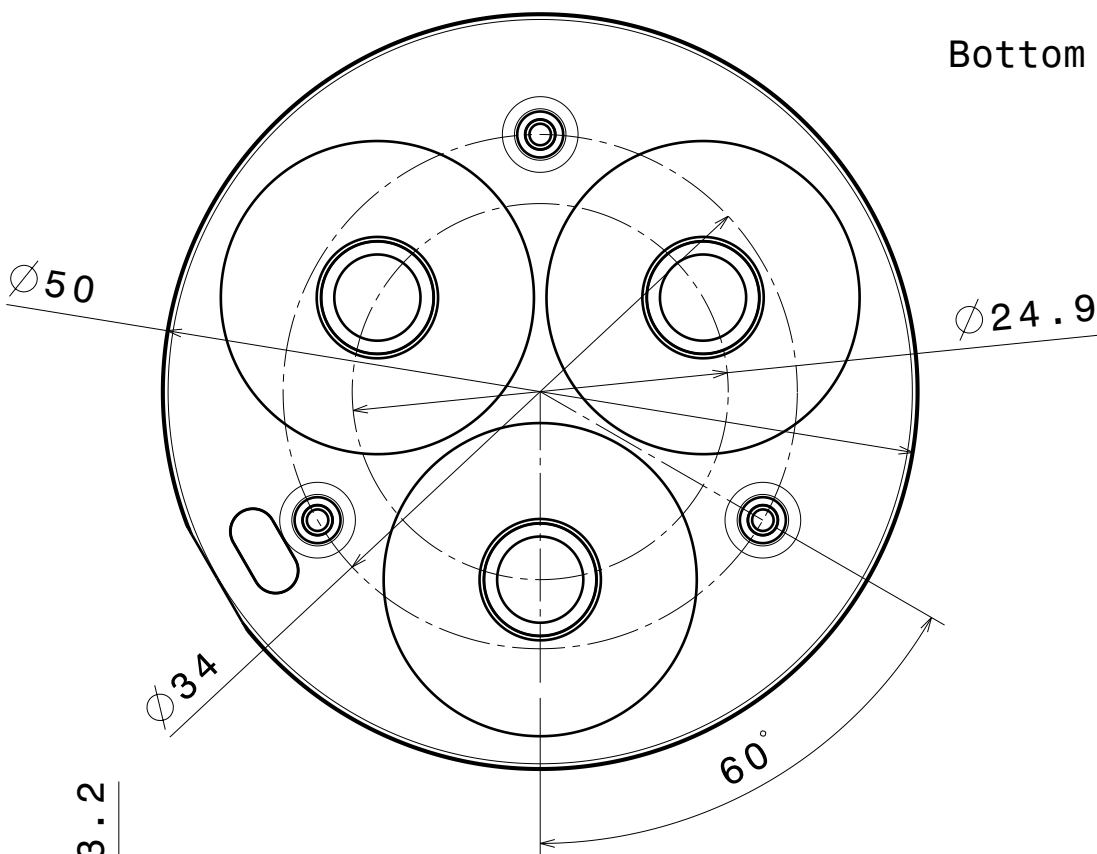
2

2

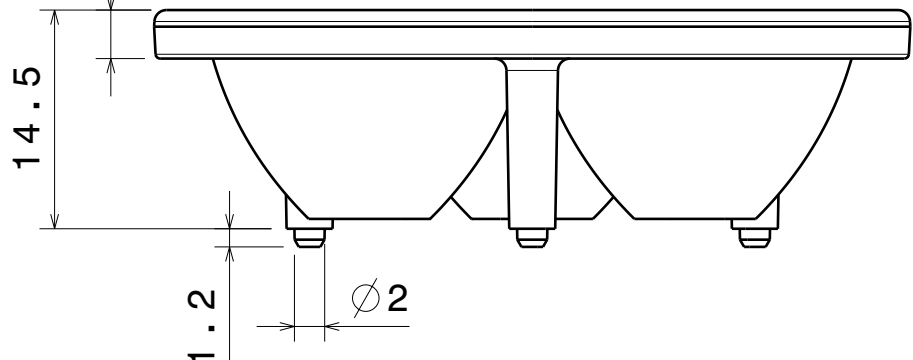
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Bottom view



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  
p

DATE  
12.10.2009

CHECKED BY  
t k

DATE  
09.10.2009

SIZE  
A4

DRAWING NUMBER  
C11191-193

REV  
1

DESIGNED BY  
HH

DATE  
29.05.2007

SCALE 2:1 WEIGHT (g)

SHEET 1/1

D

A