

## LISA2-PIN-N119 MINIATURE LENS FOR NICHIA 119 SERIES OF LEDS



- Lens material optical grade PMMA with high UV and temperature resistance (105°C/220°F). Lens holder molded of high quality black PC (120°C/248°F)
- High optical efficiency, up to 90%.
- Integrated holder with small position pins, see drawing below for more details. Fastening of holder to PCB with appropriate adhesive, e.c. epoxy or polyurethane based. NOTE: DO NOT USE SUPERGLUE.
- Please check fastening details from this link: ([http://www.ledil.com/datasheets/DataSheet\\_GLUES.pdf](http://www.ledil.com/datasheets/DataSheet_GLUES.pdf))
- Very small and compact dimensions: Diameter 9.9 mm, height 6.8 mm

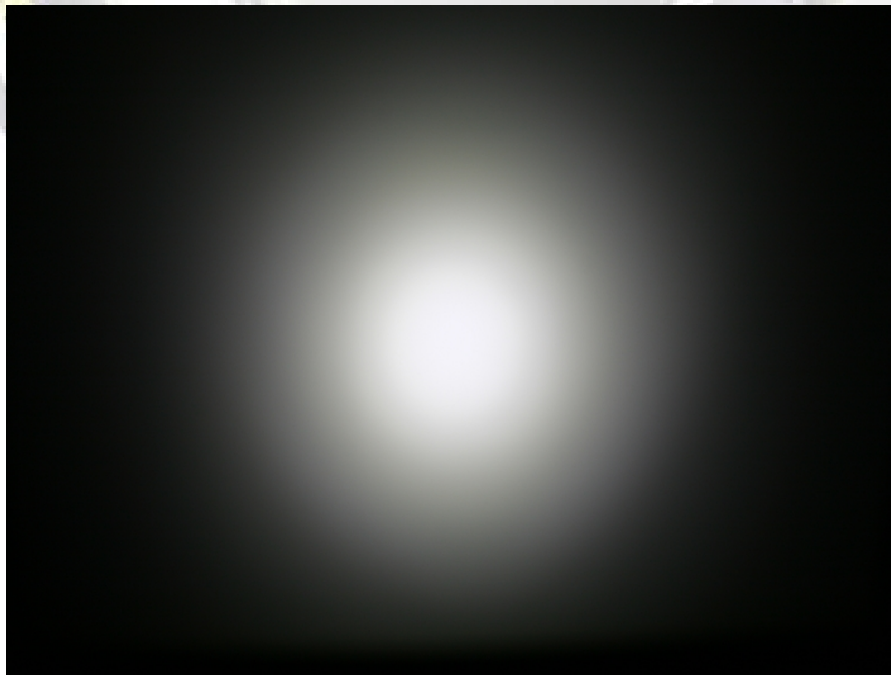
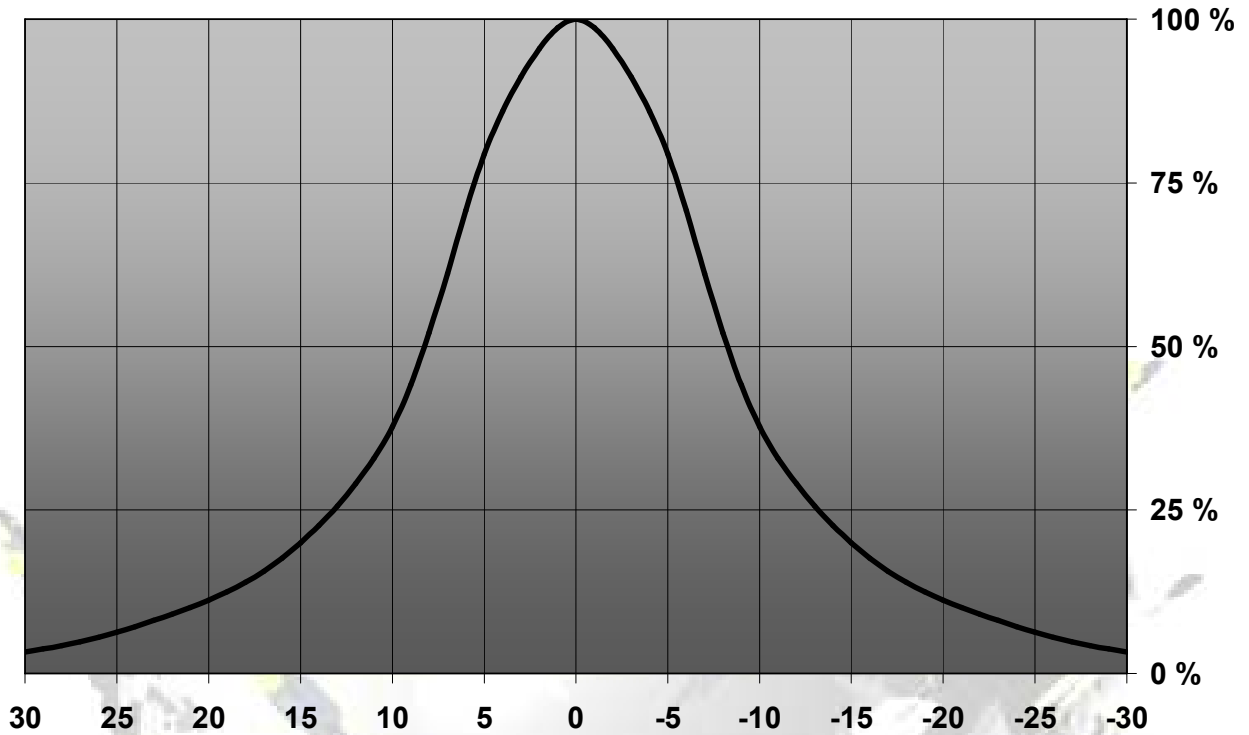
### LENS TYPES

| NAME                | ORDERING CODE            | FWHM Angle  |
|---------------------|--------------------------|-------------|
| Lisa2-Pin Real Spot | FA11554_Lisa2-RS-Pin-N19 | ±8°         |
| Lisa2-Pin Medium    | FA10998_Lisa2-M-Pin-N19  | ±13°        |
| Lisa2-Pin Oval      | FA11127_Lisa2-O-Pin-N19  | ±10° x ±24° |
| Lisa2-Pin Wide      | FA10999_Lisa2-W-Pin-N19  | ±21°        |
| Lisa2-Pin WW        | FA11000_Lisa2-WW-Pin-N19 | Coming soon |

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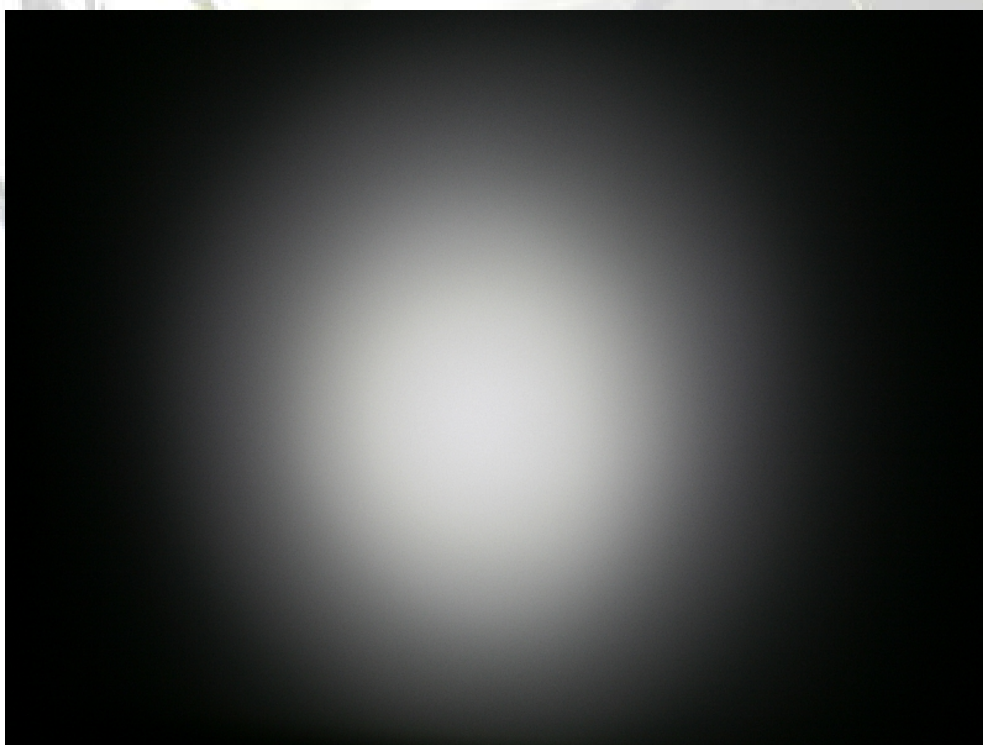
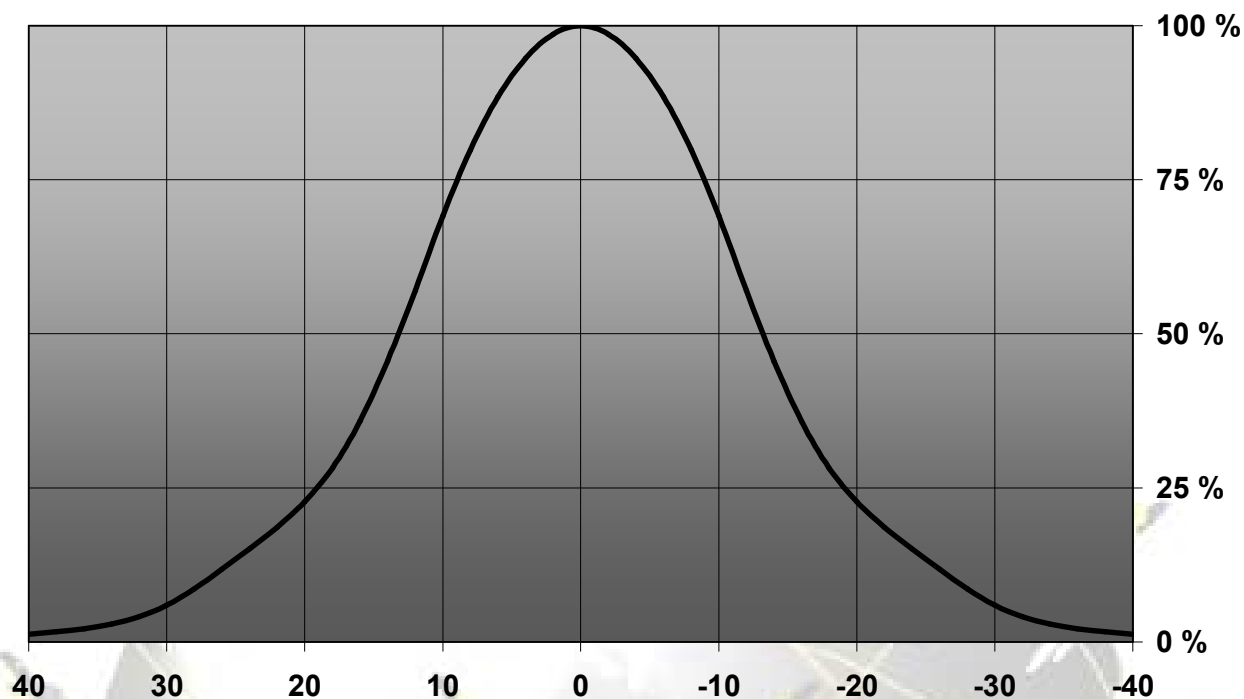
**MEASUREMENT DATA**

Relative Intensity of F11046\_Lisa2-RS-N119



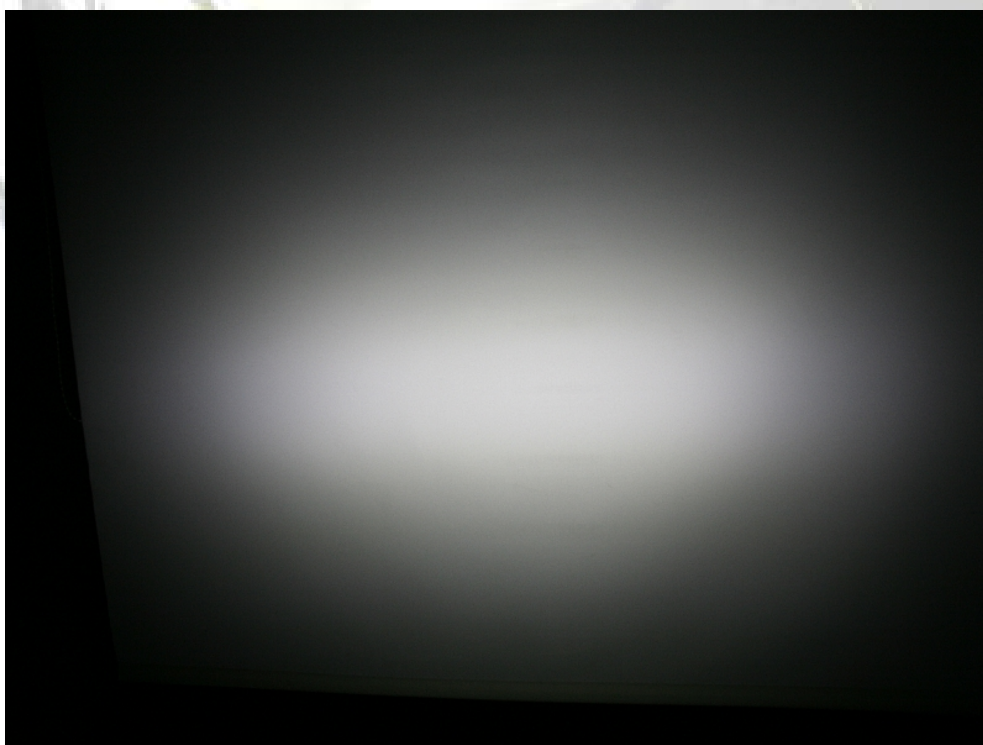
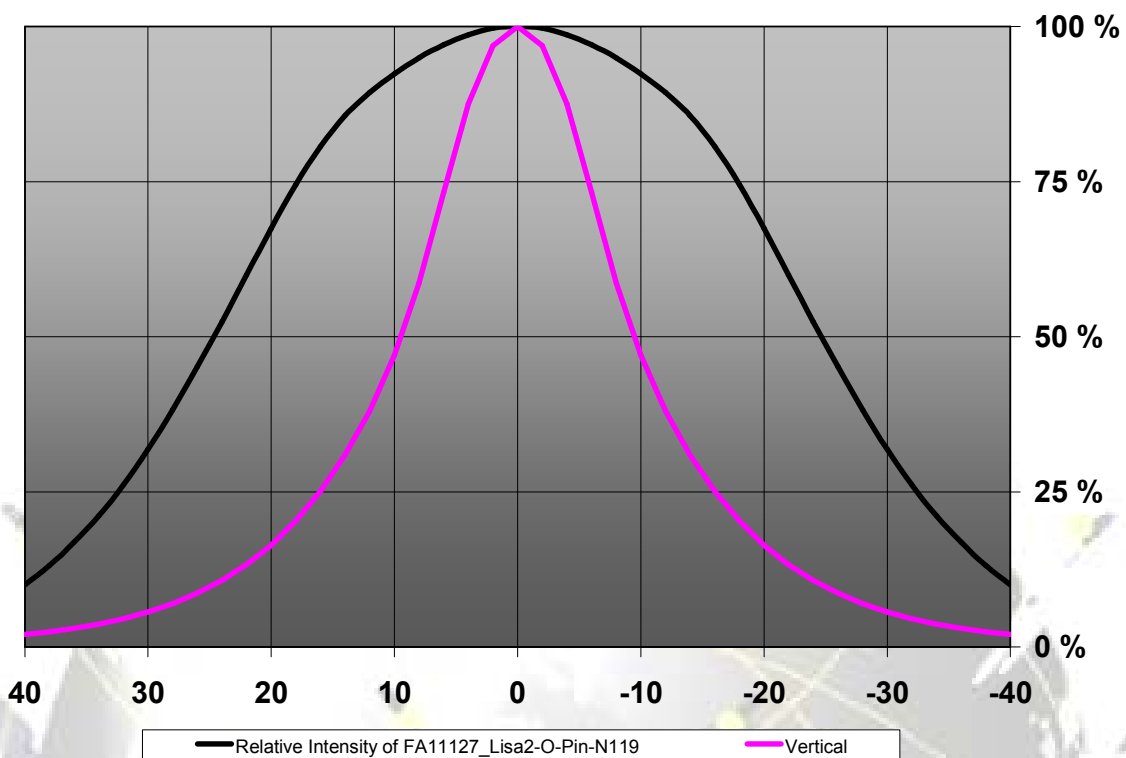
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Relative intensity of FA10998\_Lisa2-M-Pin-N119



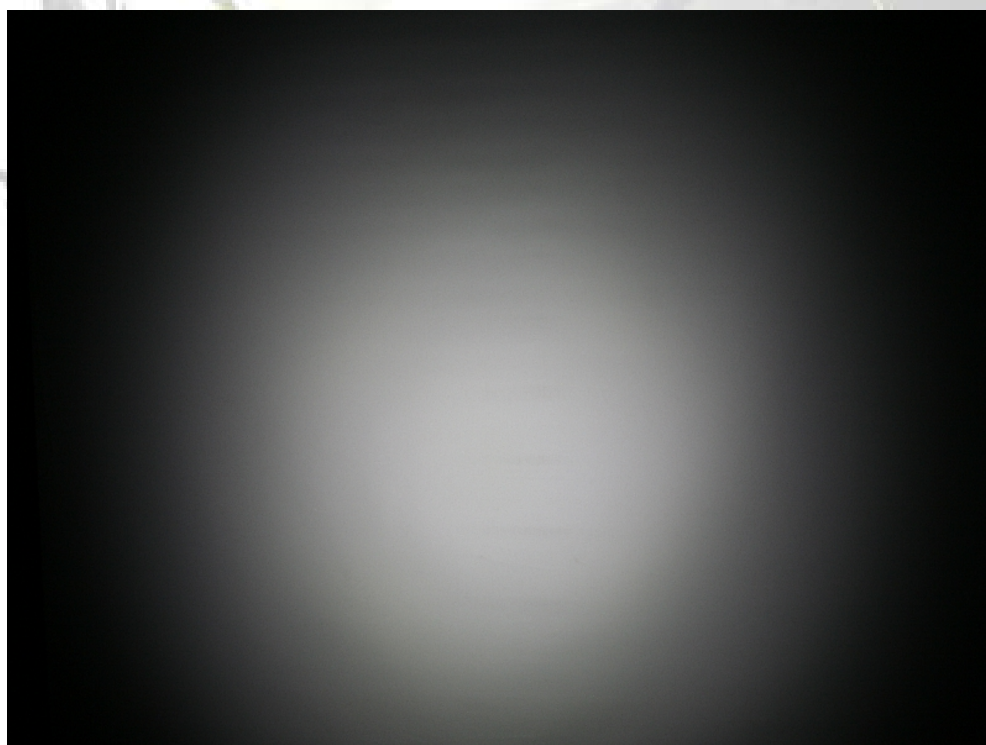
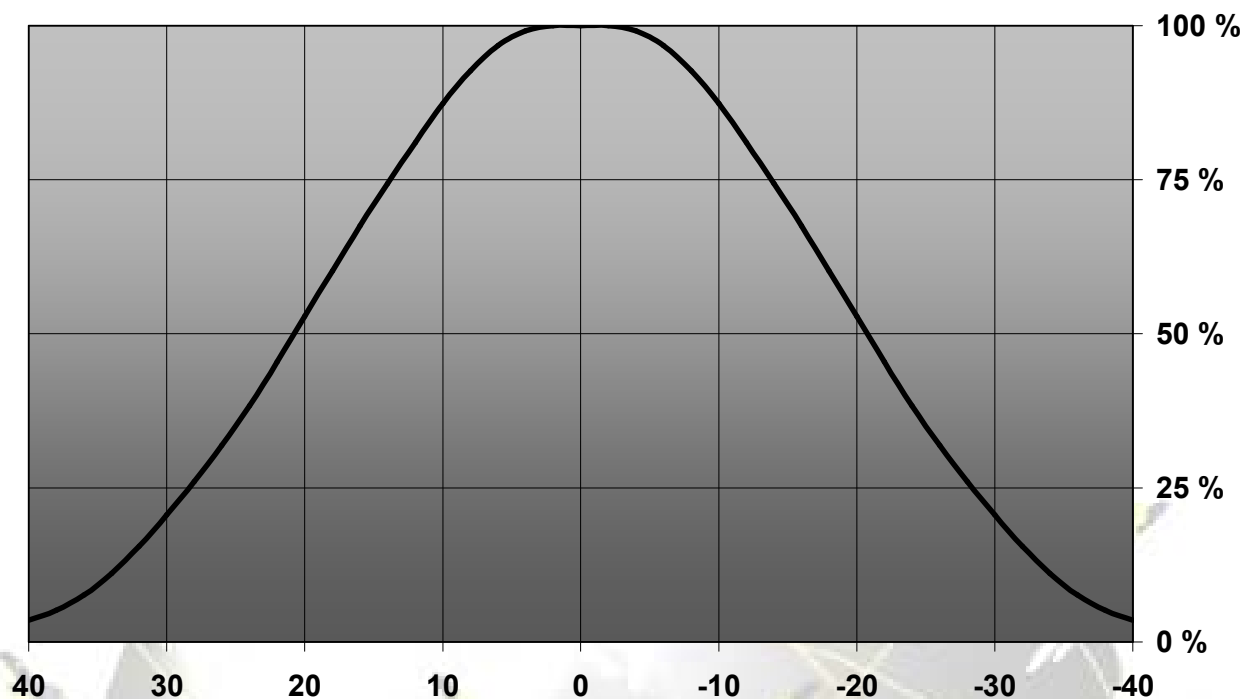
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Relative intensity of FA11127\_Lisa2-O-Pin-N119



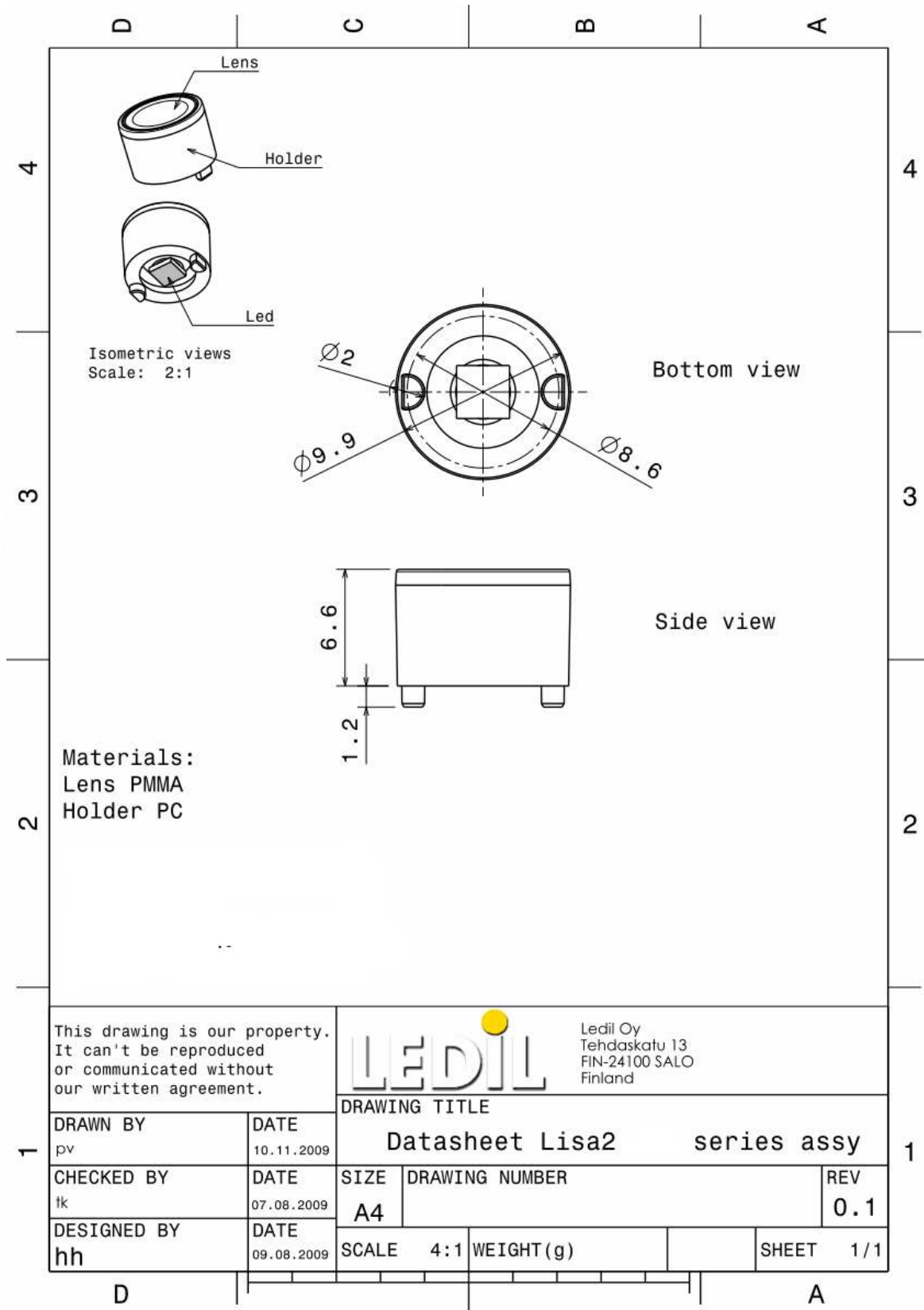
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Relative intensity of FA10999\_Lisa2-W-Pin-N119



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## DRAWINGS



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