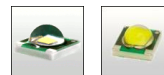


## LISA2-CLIP16-XP MINIATURE LENS FOR CREE XP SERIES OF LEDs



- 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%. Expect Lisa2-O, around 75%.
- Integrated holder with small snap clips. See drawing below for more details. Fastening of holder the lens to PCB.
- Very small and compact dimensions: Diameter 9.9 mm, height 6.8 mm.

## LENS TYPES

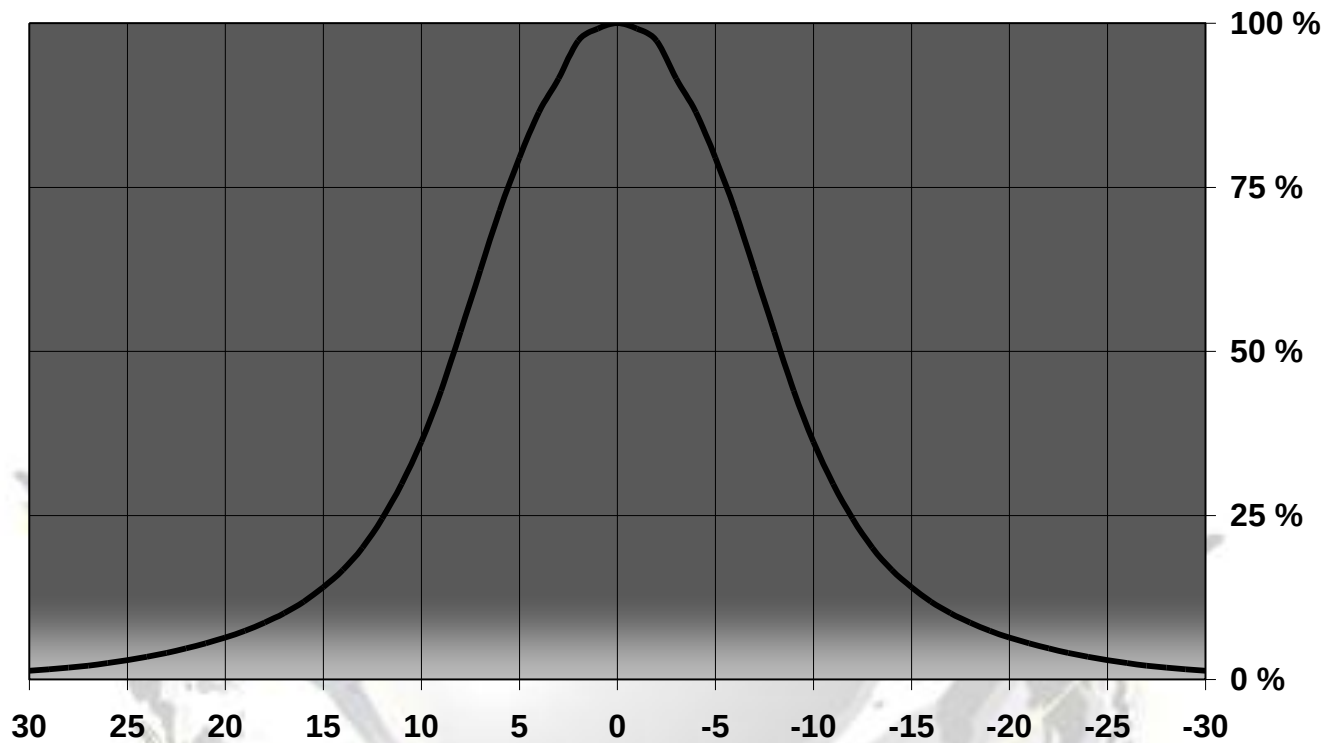
| NAME                   | ORDERING CODE                | FWHM Angle |
|------------------------|------------------------------|------------|
| Lisa2-Clip16 Real Spot | FA11085_Lisa2-RS-clip16-XP   | ±8°        |
| Lisa2-Clip16 Medium    | FA11075_Lisa2-M-clip16-XP    | ±12°       |
| Lisa2-Clip16 Oval      | FA11121_Lisa2-O-clip16-XP    | ±9° x ±24° |
| Lisa2-Clip16 Oval-90   | FA11856_Lisa2-O-90-clip16-XP | ±9° x ±24° |
| Lisa2-Clip16 Wide      | FA11076_Lisa2-W-clip16-XP    | ±20°       |
| Lisa2-Clip16 WW        | FA11077_Lisa2-WW-clip16-XP   | ±30°       |
| Lisa2-Clip16 WWW       | FA11431_Lisa2-WWW-clip16-XP  | ~±34°      |

|                        |                                |             |
|------------------------|--------------------------------|-------------|
| Lisa2-Clip16 Real Spot | FA11085_Lisa2-RS-clip16-XP-G   | ±13°        |
| Lisa2-Clip16 Medium    | FA11075_Lisa2-M-clip16-XP-G    | ±17°        |
| Lisa2-Clip16 Oval      | FA11121_Lisa2-O-clip16-XP-G    | ±12° x ±23° |
| Lisa2-Clip16 Oval-90   | FA11856_Lisa2-O-90-clip16-XP-G | ±12° x ±23° |
| Lisa2-Clip16 Wide      | FA11076_Lisa2-W-clip16-XP-G    | ±20°        |
| Lisa2-Clip16 WW        | FA11077_Lisa2-WW-clip16-XP-G   | ~±30°       |
| Lisa2-Clip16 WWW       | FA11431_Lisa2-WWW-clip16-XP-G  | ~±40°       |

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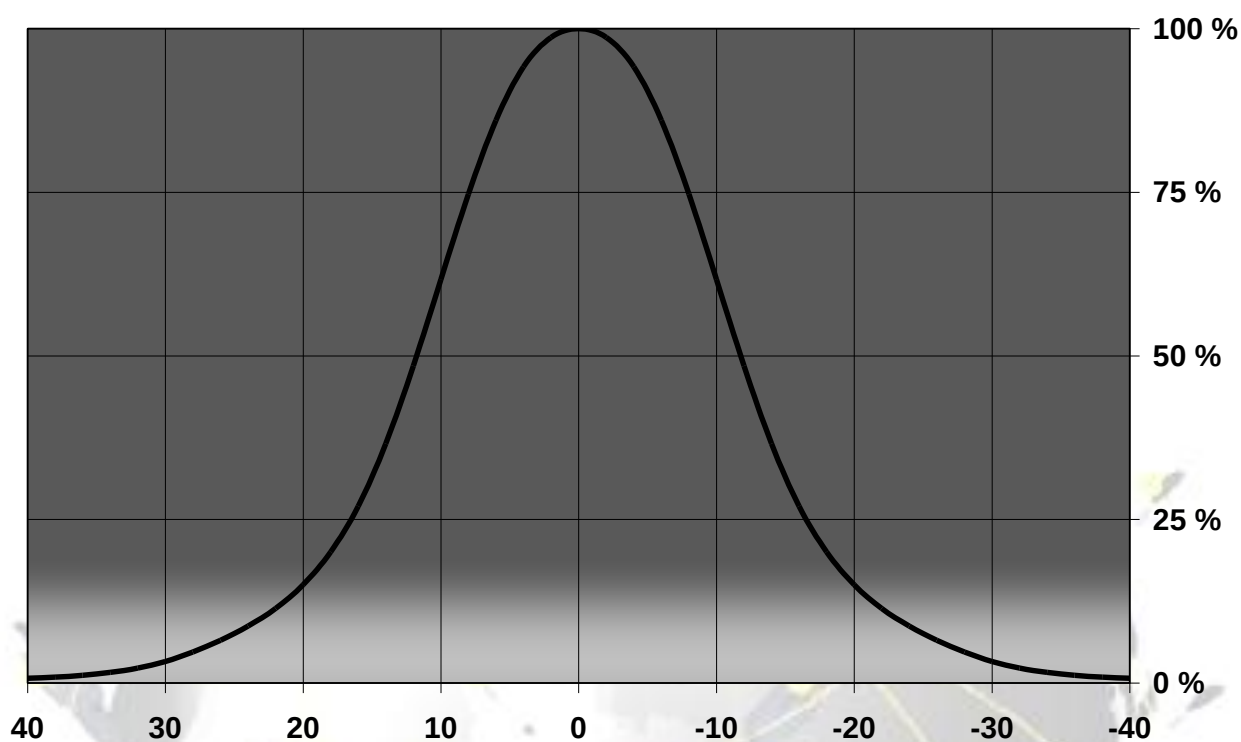
## MEASUREMENT DATA FOR CREE XP-E

Relative Intensity of FA11055\_Lisa2-RS-Pin-XP



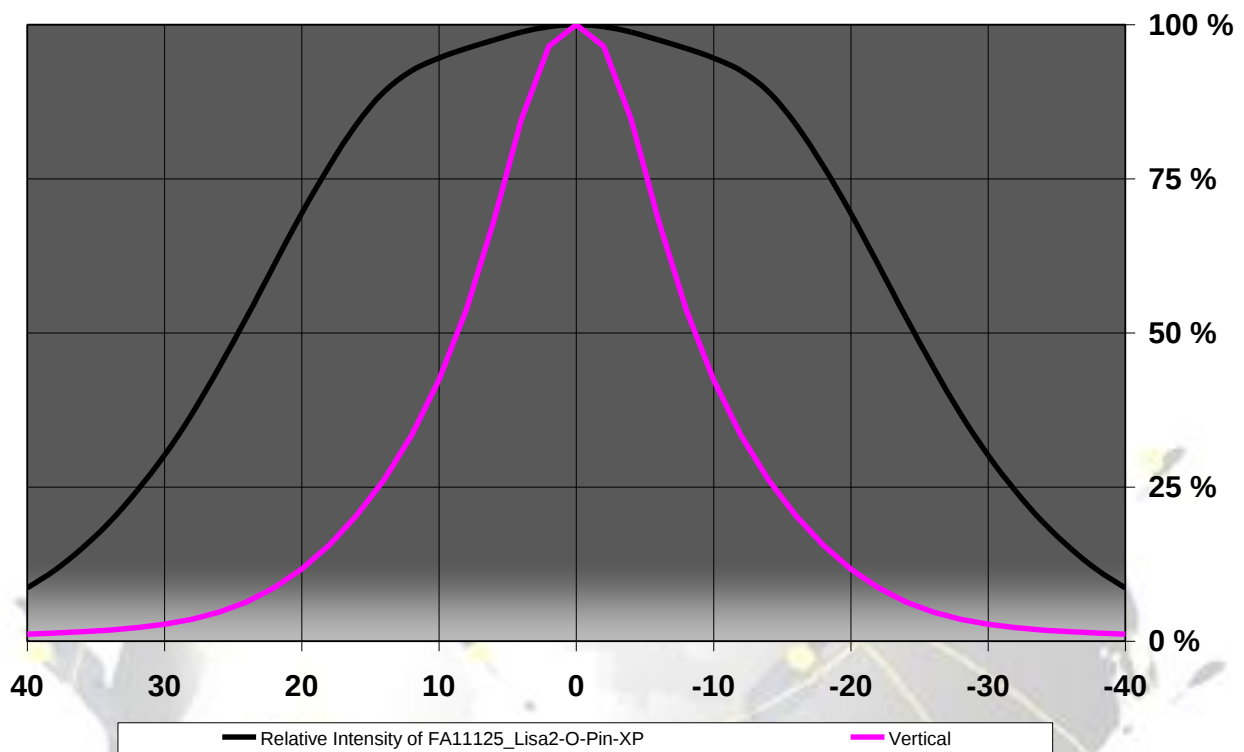
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Relative Intensity of FA10995\_Lisa2-M-Pin-XP



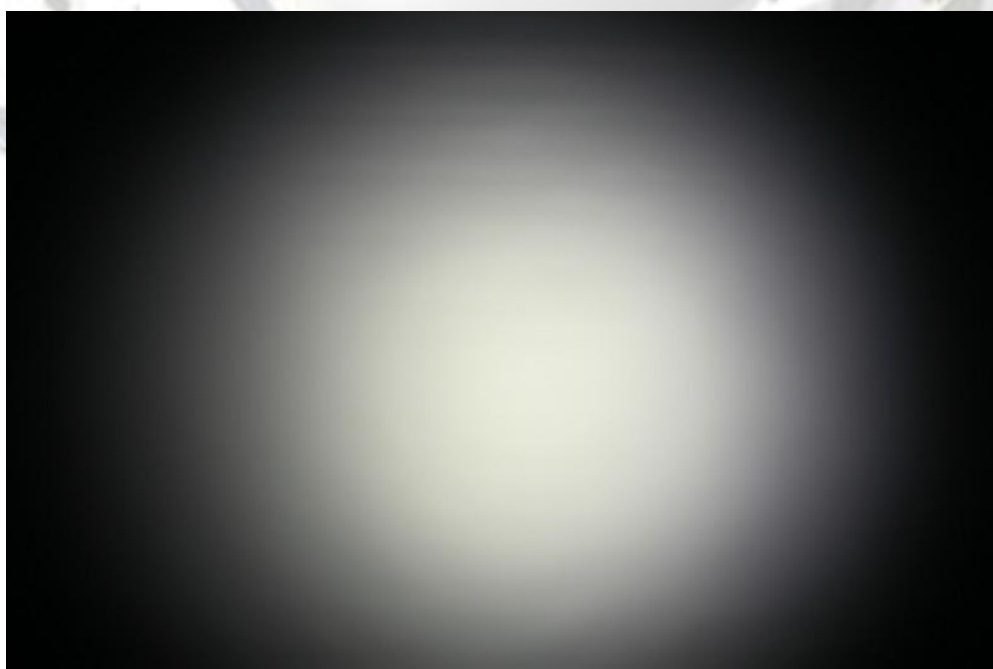
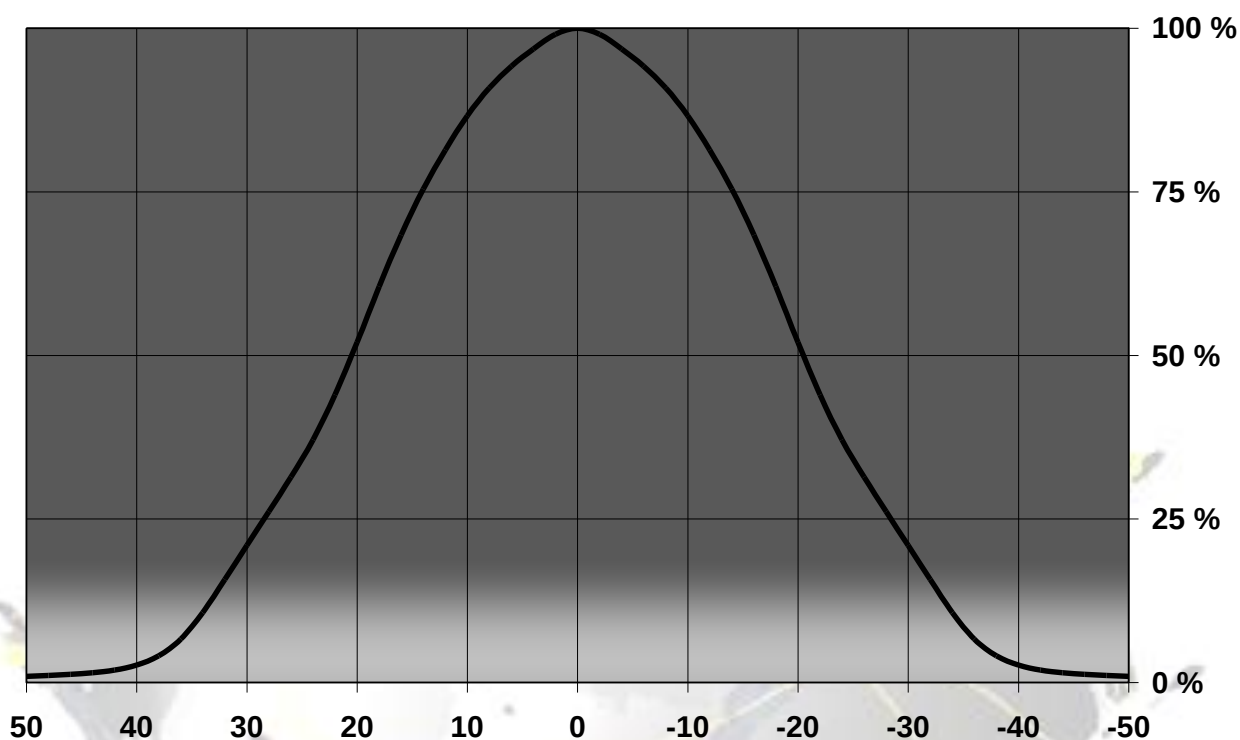
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Relative intensity of FA11125\_Lisa2-O-Pin-XP



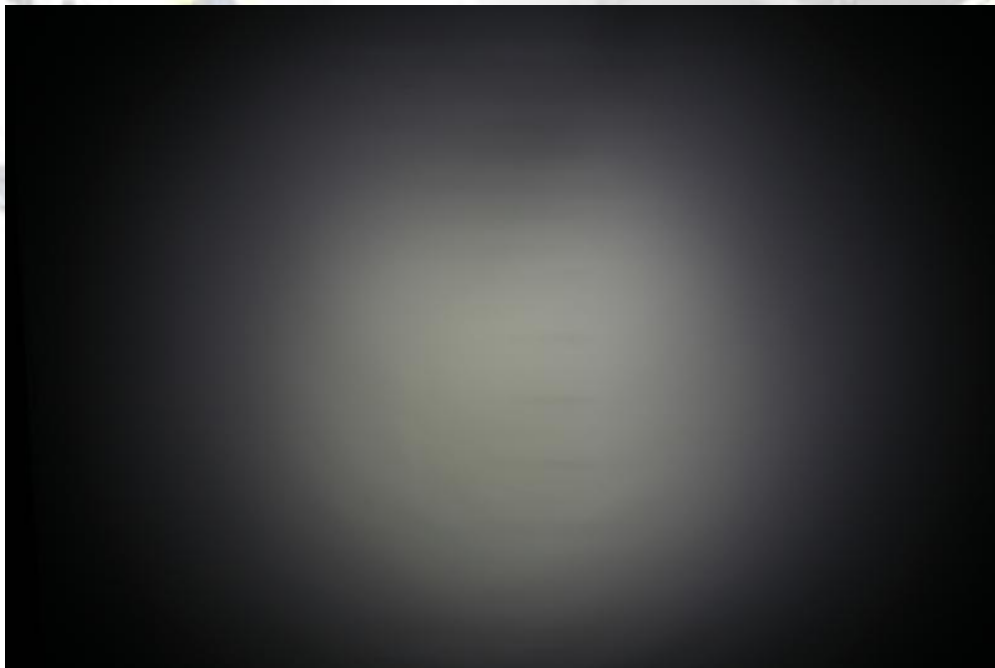
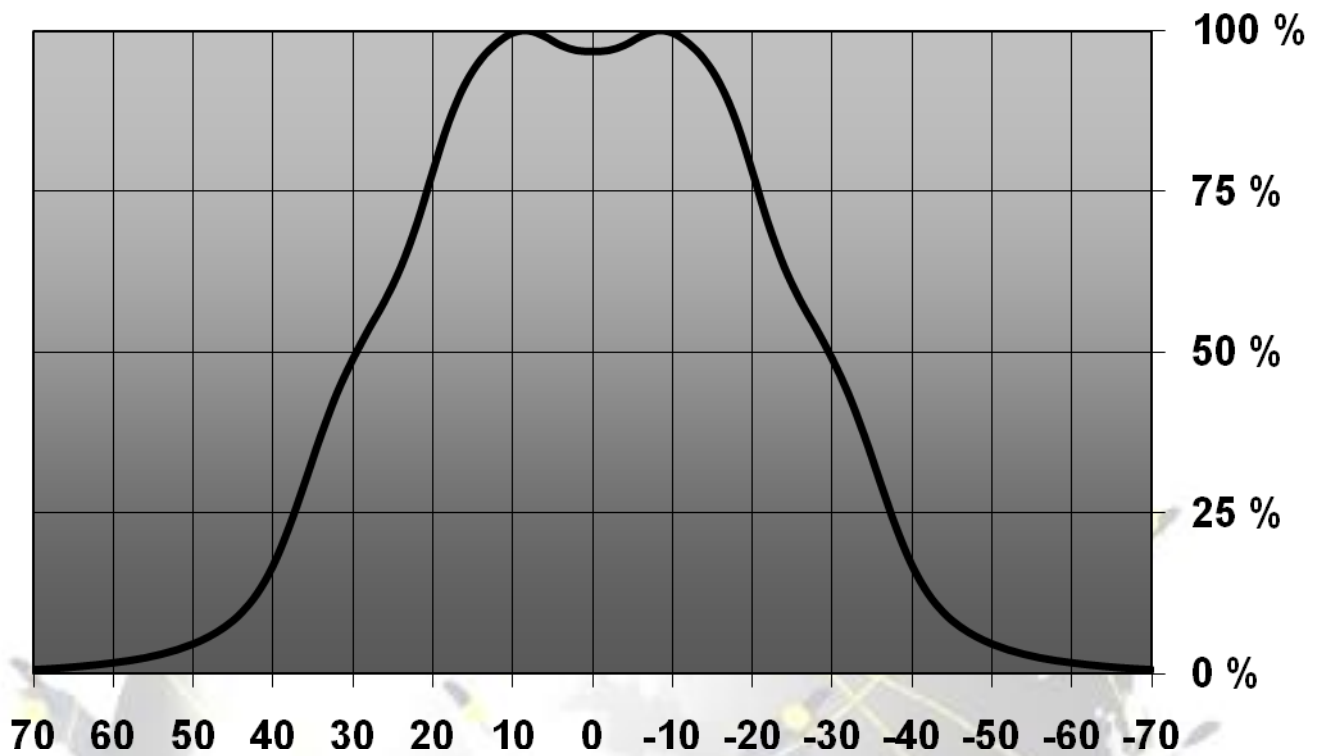
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Relative Intensity of FA10996\_Lisa2-W-Pin-XP



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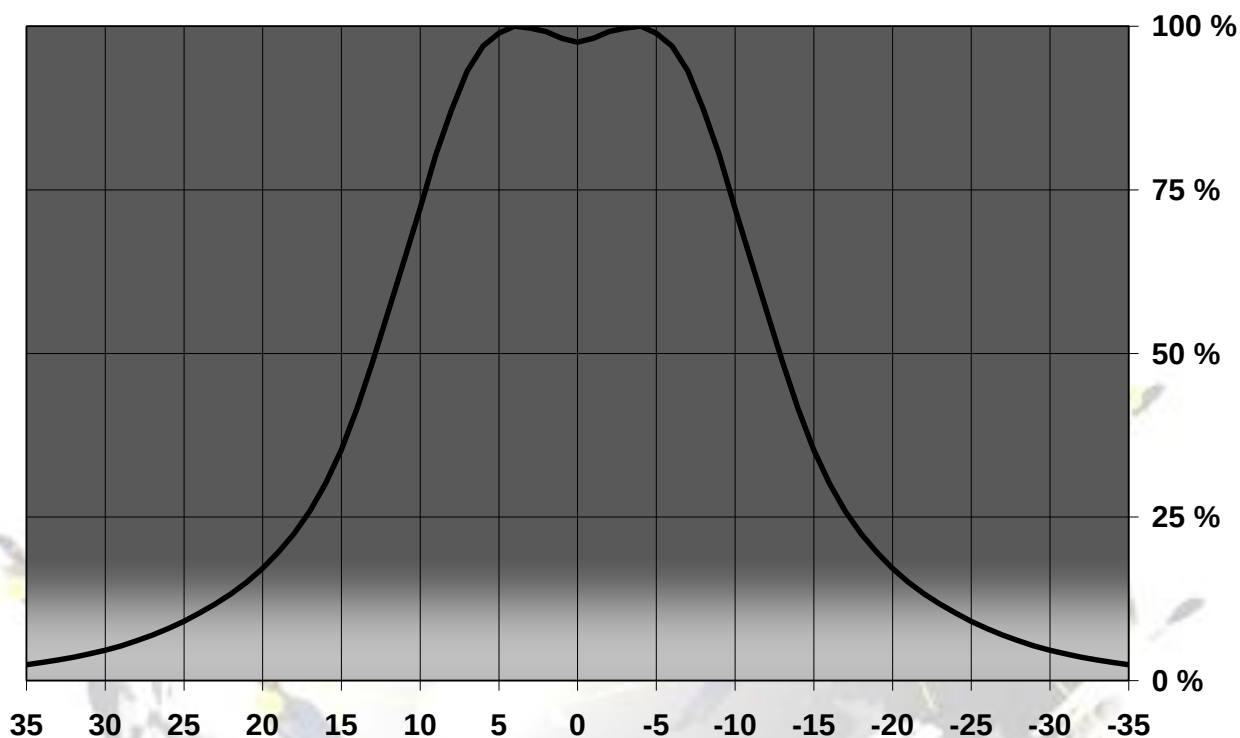
## Relative intensity of FA10997\_Lisa2-WW-Pin-XP



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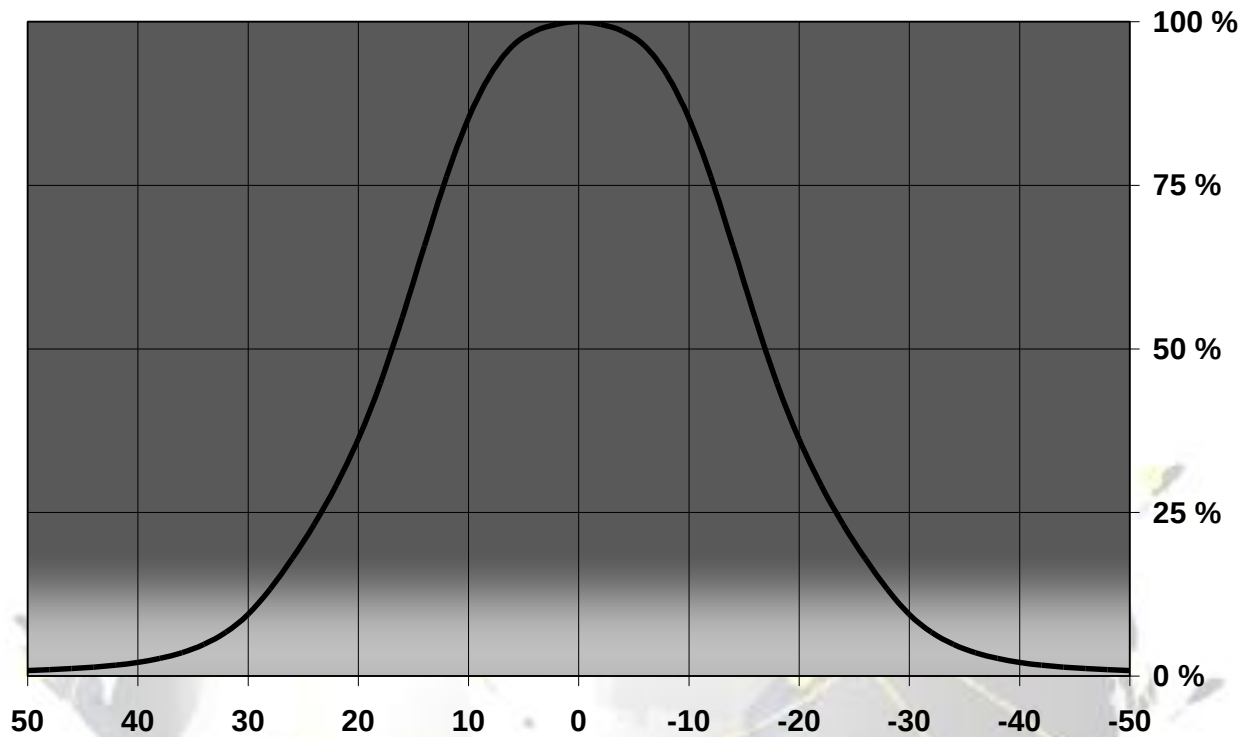
## MEASUREMENT DATA FOR CREE XP-G

Relative Intensity of FA11055\_Lisa2-RS-Pin-XP-G



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Relative Intensity of FA10995\_Lisa2-M-Pin-XP-G



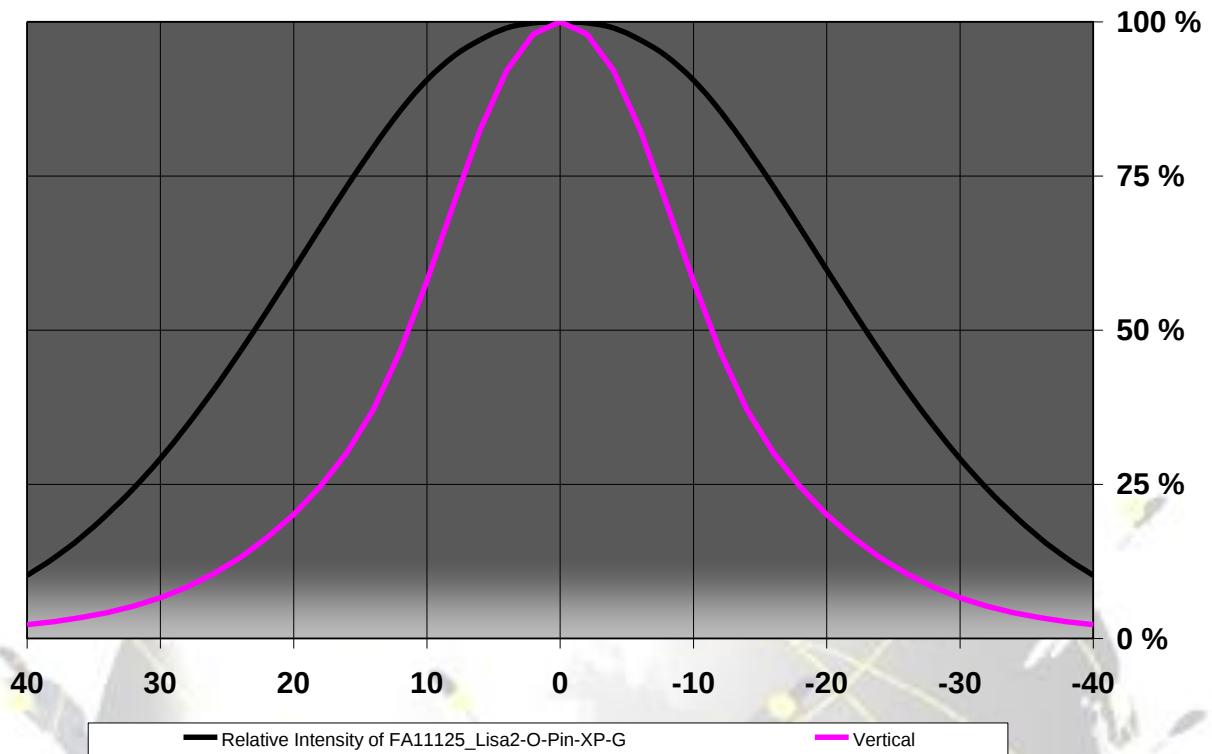
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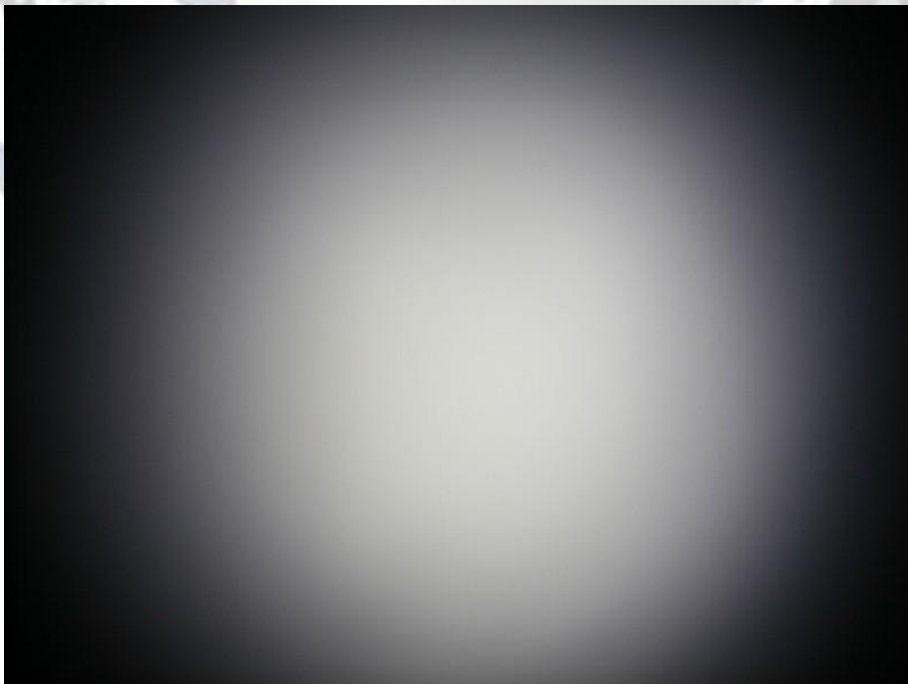
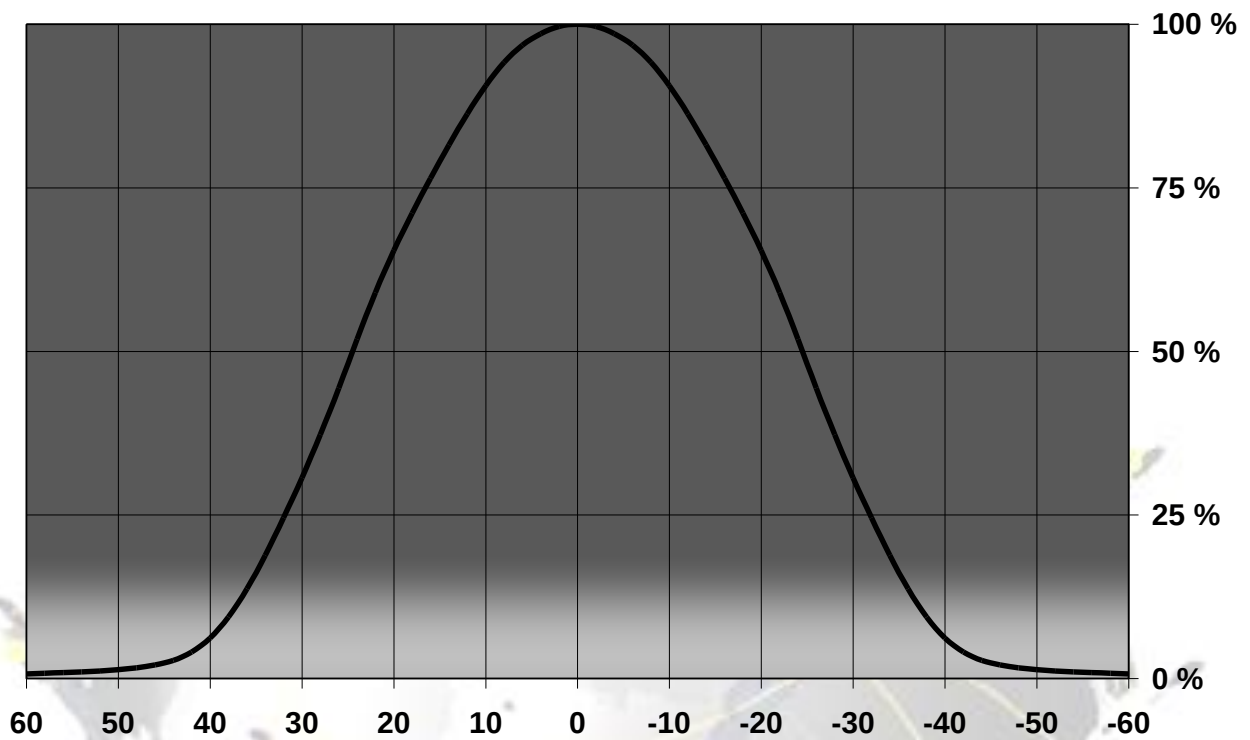
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2010-12-30

Relative intensity of FA11125\_Lisa2-O-Pin-XP-G



Relative Intensity of FA10996\_Lisa2-W-Pin-XP-G



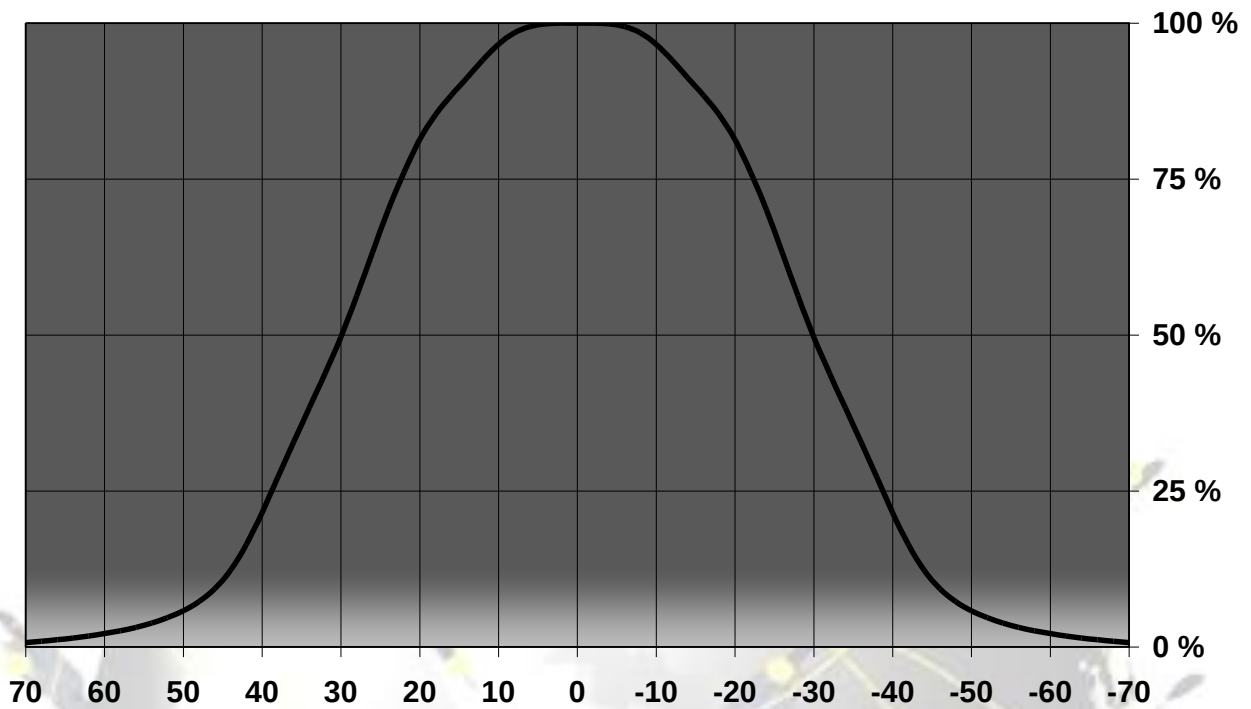
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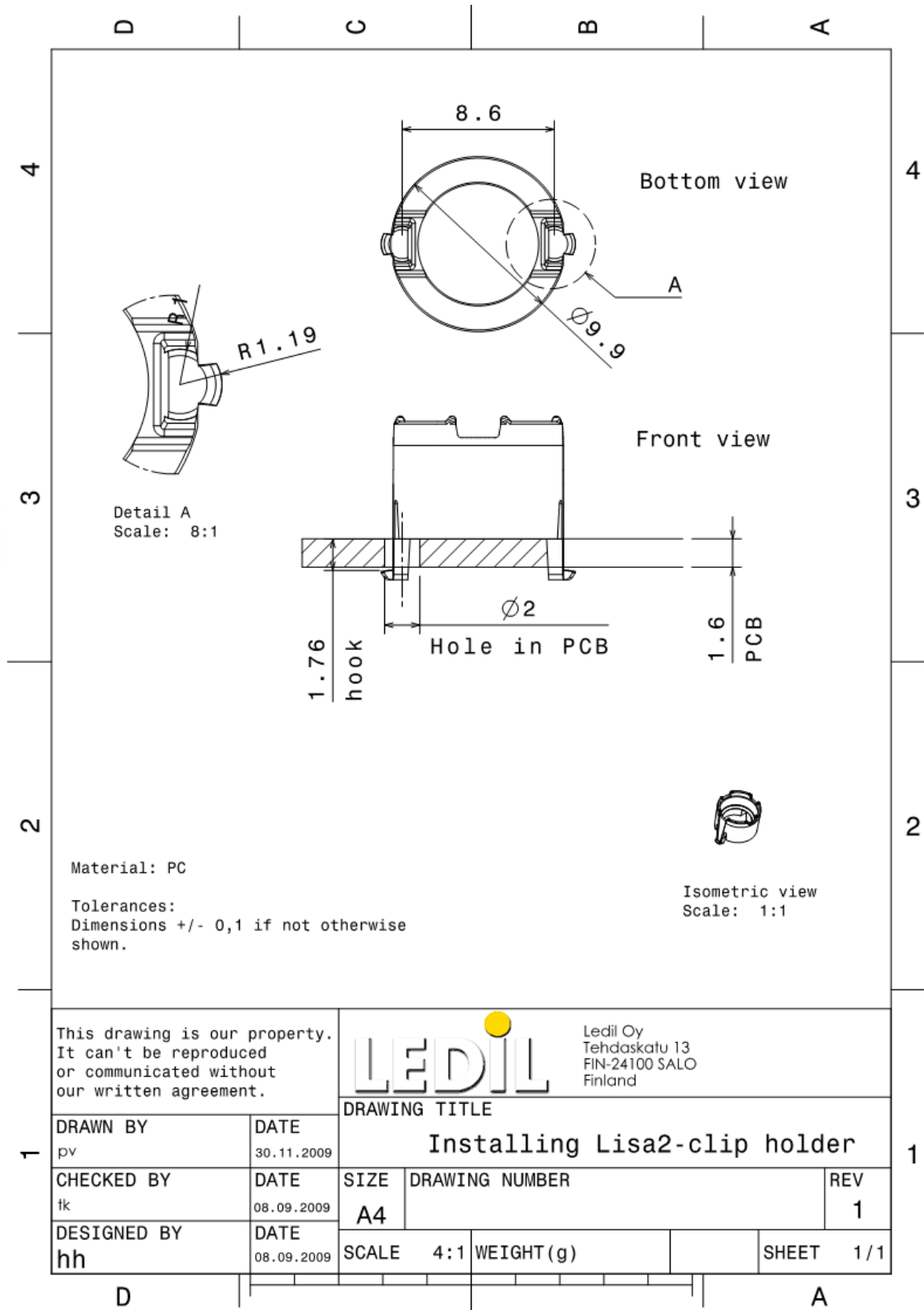
2010-12-30

Relative intensity of FA10997\_Lisa2-WW-Pin-XP-G



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## DRAWINGS



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