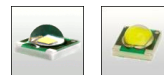


LISA2-PIN-XP MINIATURE LENS FOR CREE XP SERIES OF LEDs



- 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 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)
- Very small and compact dimensions: Diameter 9.9 mm, height 6.8 mm

LENS TYPES

NAME	ORDERING CODE	FWHM Angle
Lisa2-Pin Real Spot	FA11055_Lisa2-RS-Pin-XP	±8°
Lisa2-Pin Medium	FA10995_Lisa2-M-Pin-XP	±12°
Lisa2-Pin Oval	FA11125_Lisa2-O-Pin-XP	±9° x ±24°
Lisa2-Pin Oval-90	FA11851_Lisa2-O-90-Pin-XP	±9° x ±24°
Lisa2-Pin Wide	FA10996_Lisa2-W-Pin-XP	±20°
Lisa2-Pin WW	FA10997_Lisa2-WW-Pin-XP	~±30°
Lisa-2-Pin-WWW	FA11429_Lisa2-WWW-Pin-XP	~±40°

Lisa2-Pin Real Spot	FA11055_Lisa2-RS-Pin-XP-G	±13°
Lisa2-Pin Medium	FA10995_Lisa2-M-Pin-XP-G	±17°
Lisa2-Pin Oval	FA11125_Lisa2-O-Pin-XP-G	±12° x ±23°
Lisa2-Pin Oval-90	FA11851_Lisa2-O-90-Pin-XP	±12° x ±23°
Lisa2-Pin Wide	FA10996_Lisa2-W-Pin-XP-G	±24°
Lisa2-Pin WW	FA10997_Lisa2-WW-Pin-XP-G	~±30°
Lisa-2-Pin-WWW	FA11429_Lisa2-WWW-Pin-XP-G	~±40°

© Ledil Oy – PRELIMINARY - Subject to change without prior notice

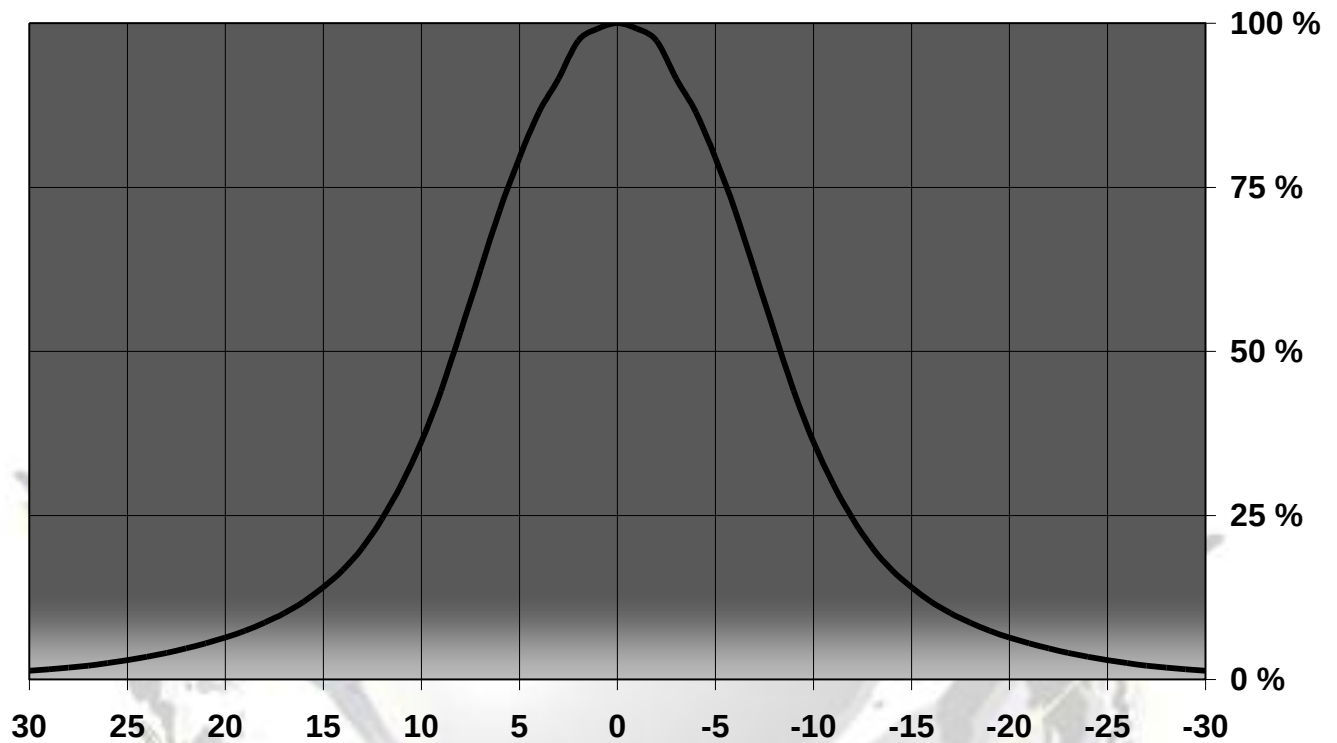
Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

MEASUREMENT DATA FOR CREE XP-E

Relative Intensity of FA11055_Lisa2-RS-Pin-XP



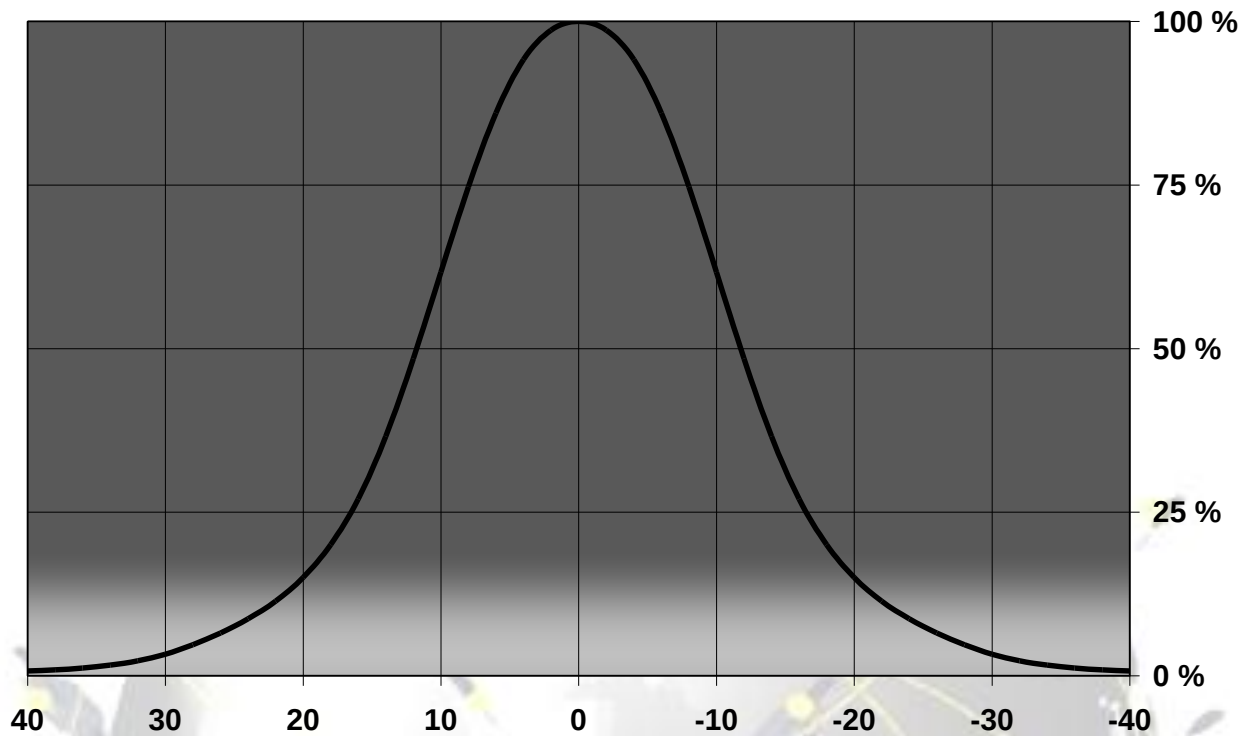
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative Intensity of FA10995_Lisa2-M-Pin-XP



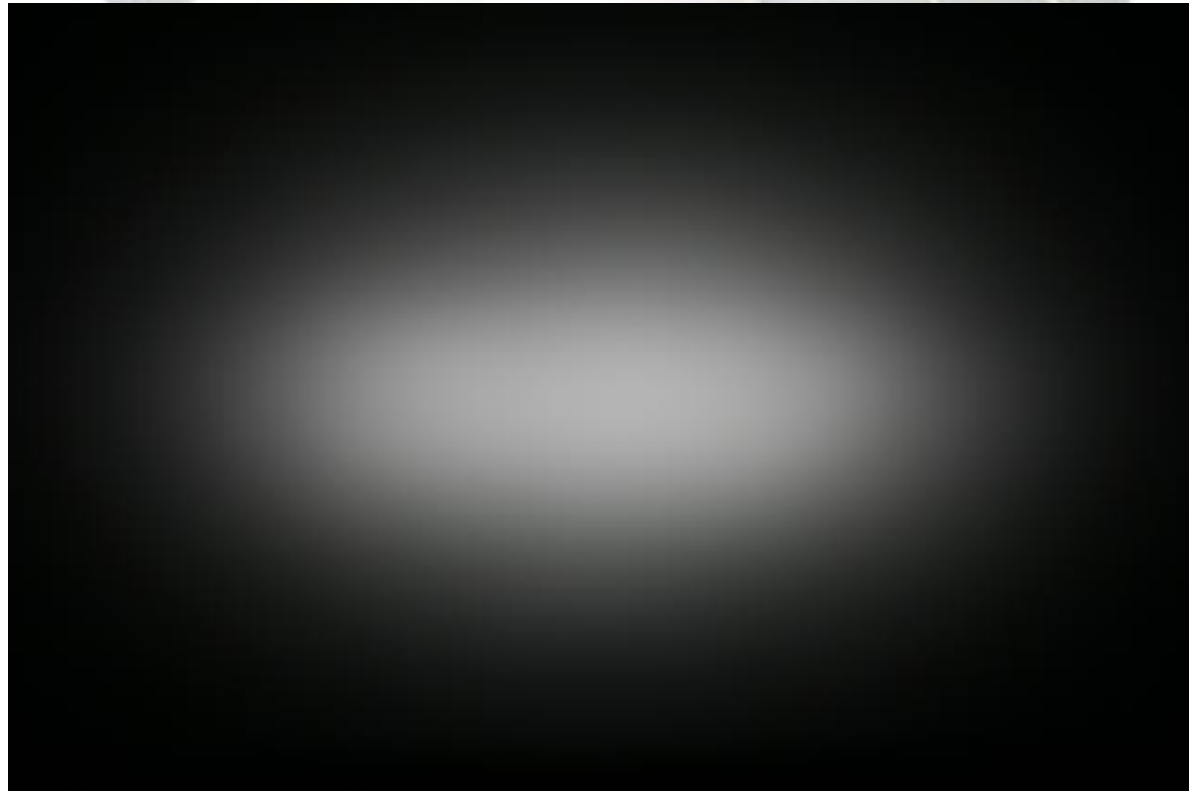
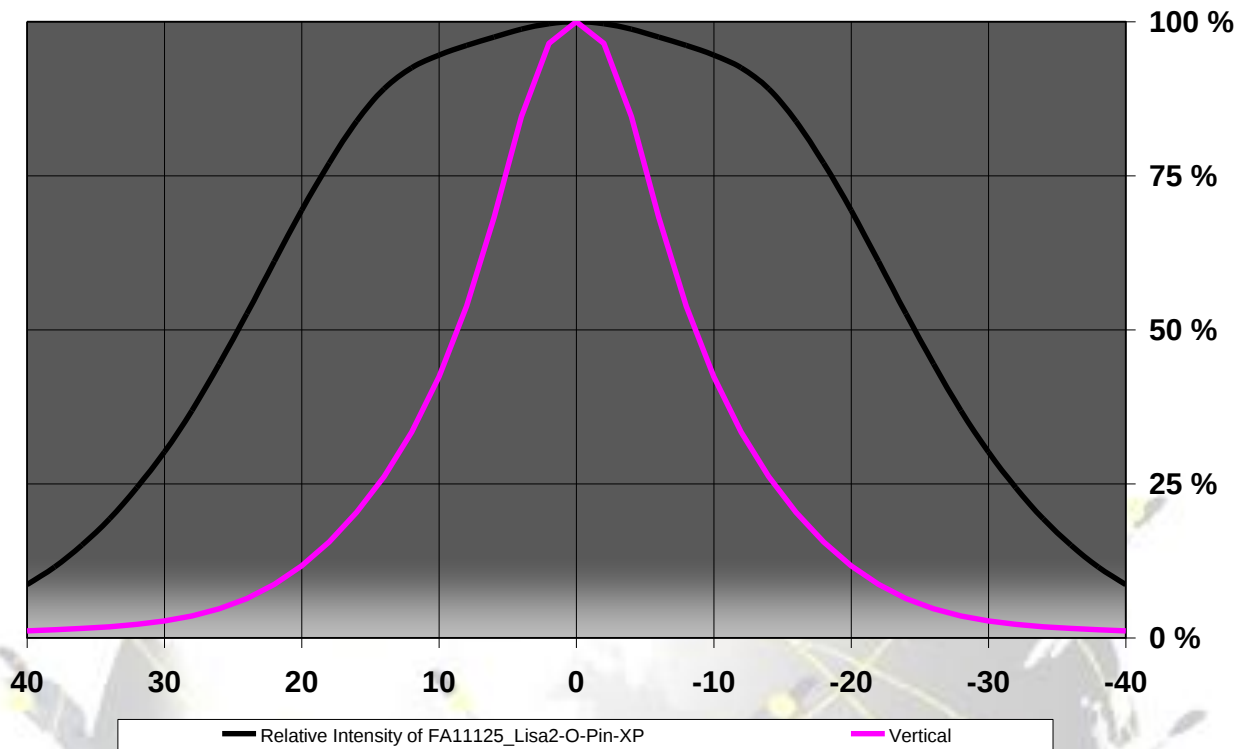
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative intensity of FA11125_Lisa2-O-Pin-XP



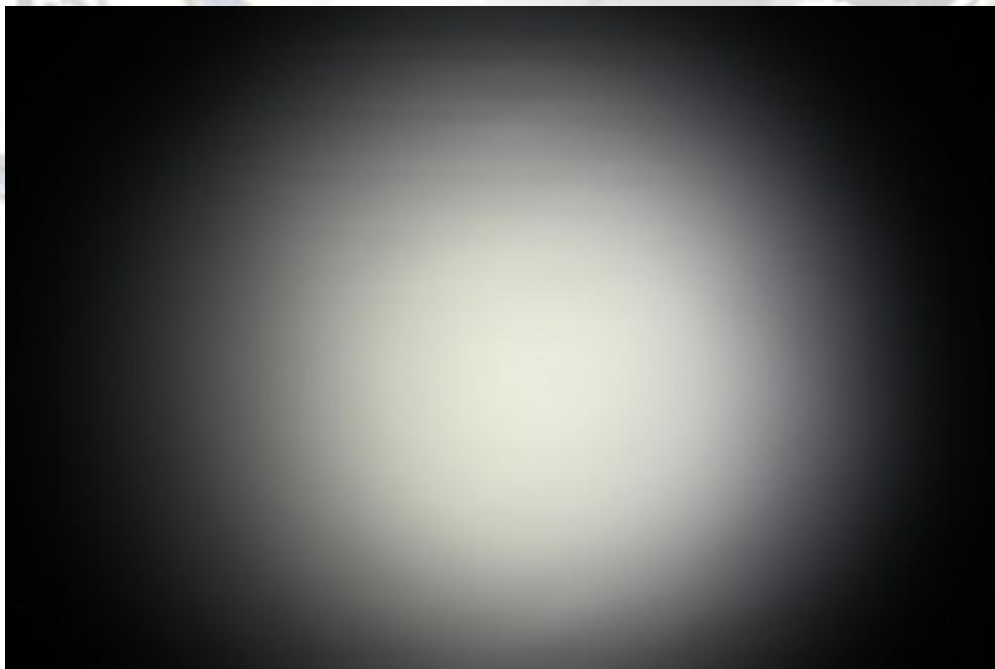
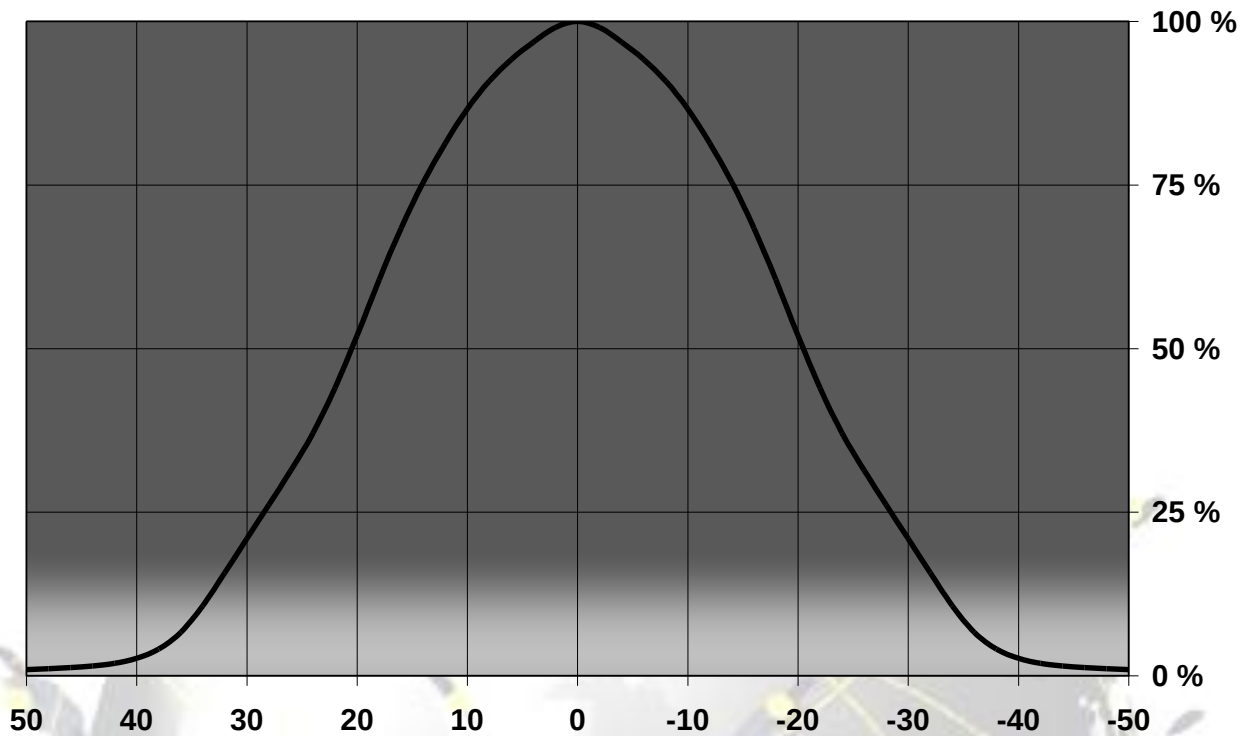
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative Intensity of FA10996_Lisa2-W-Pin-XP



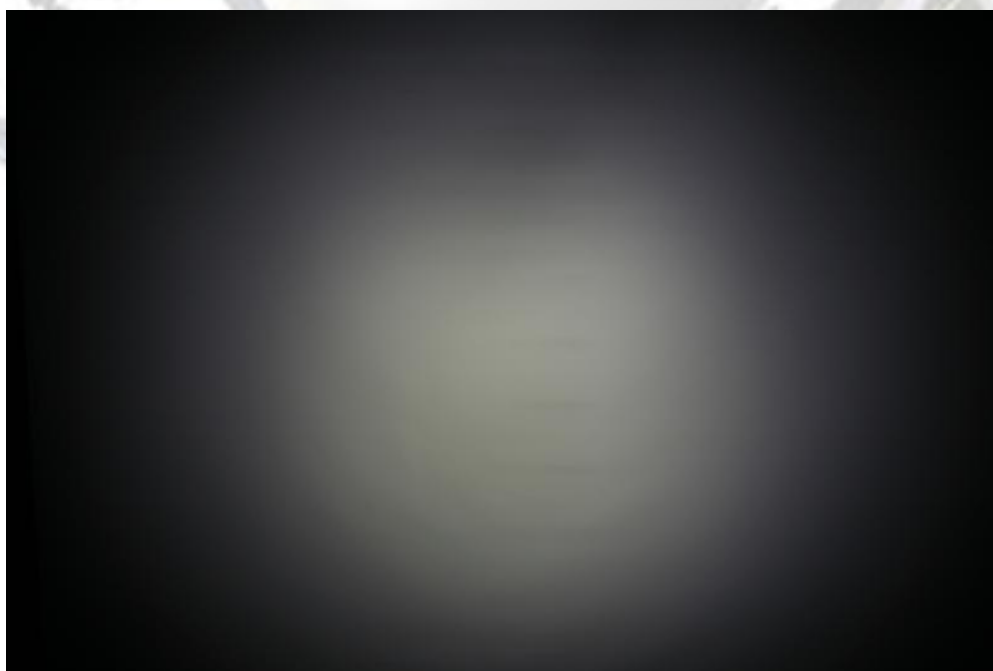
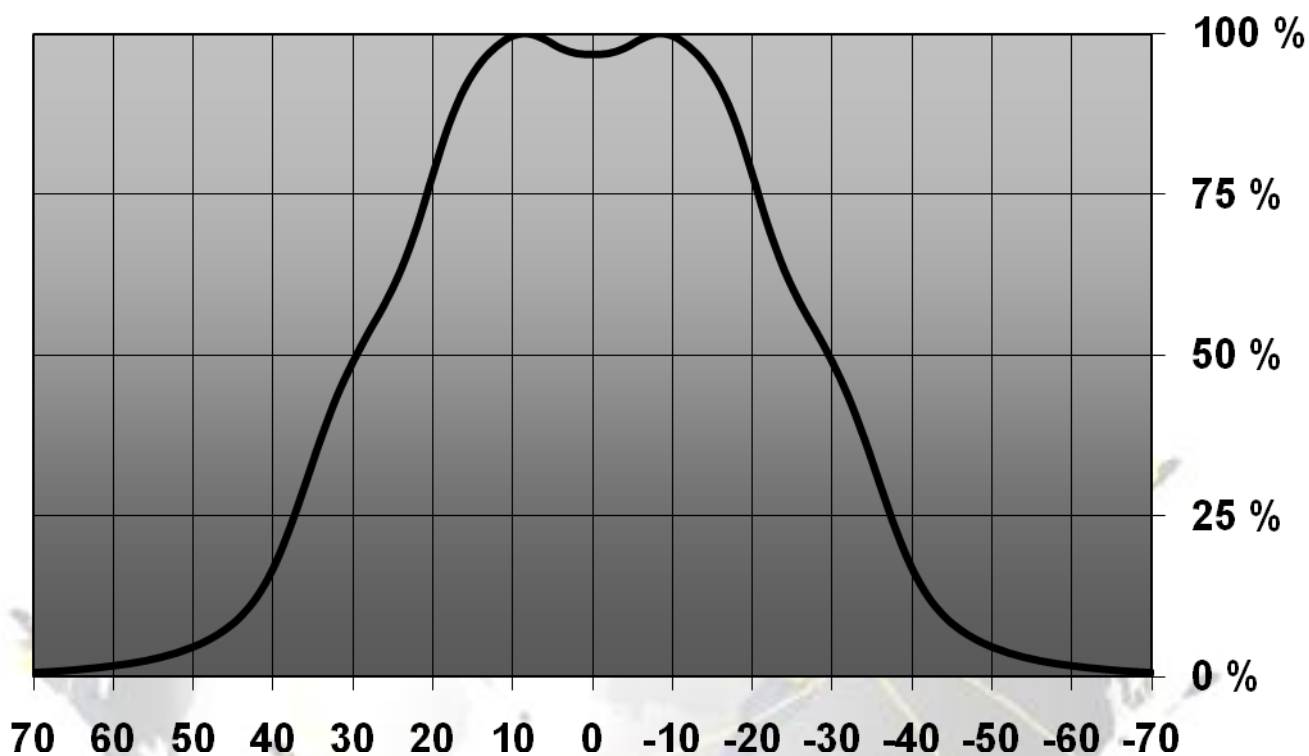
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative intensity of FA10997_Lisa2-WW-Pin-XP



© Ledil Oy – PRELIMINARY - Subject to change without prior notice

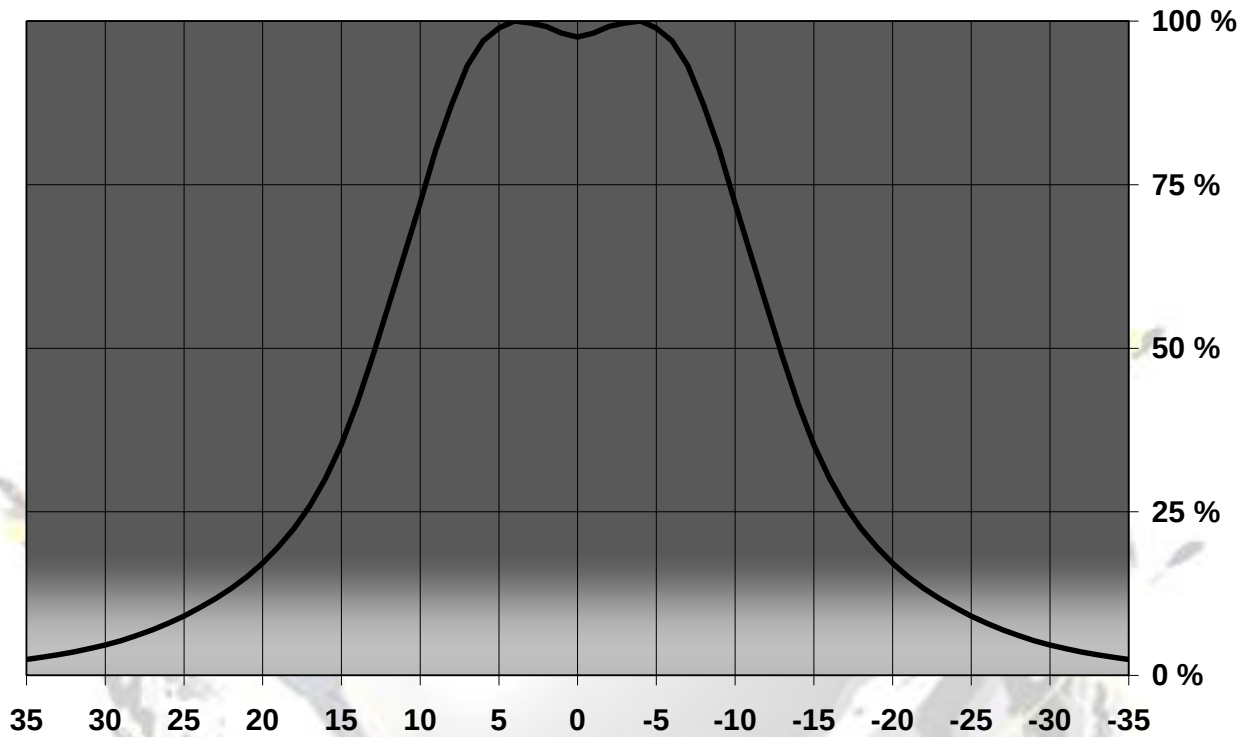
Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

MEASUREMENT DATA FOR CREE XP-G

Relative Intensity of FA11055_Lisa2-RS-Pin-XP-G



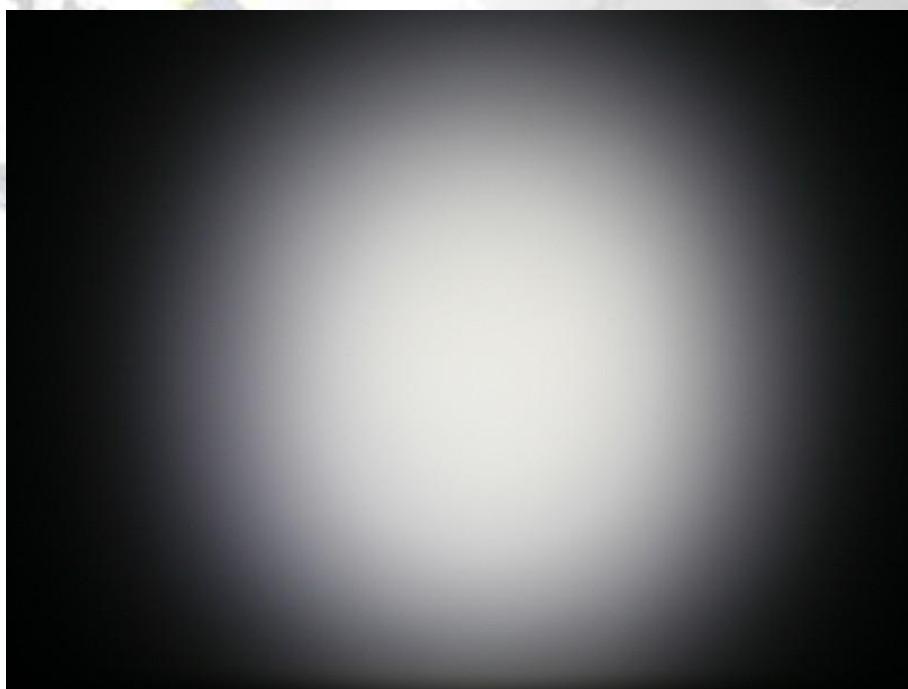
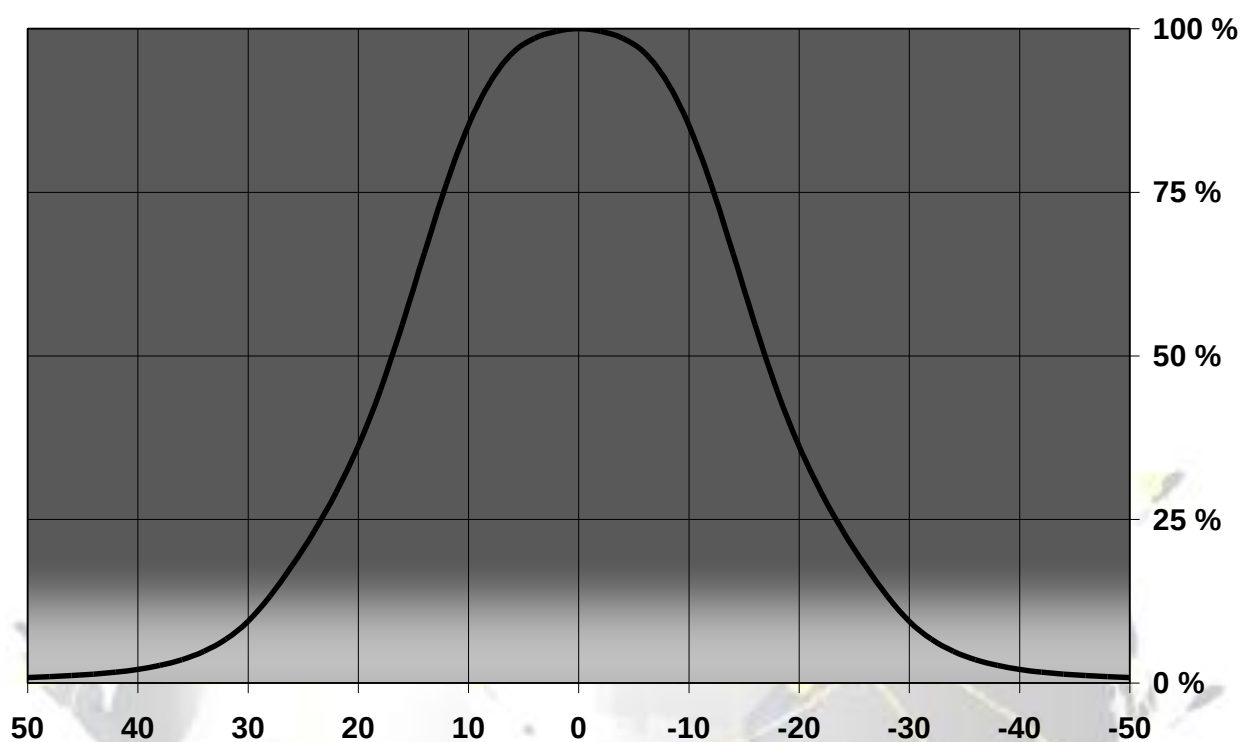
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative Intensity of FA10995_Lisa2-M-Pin-XP-G



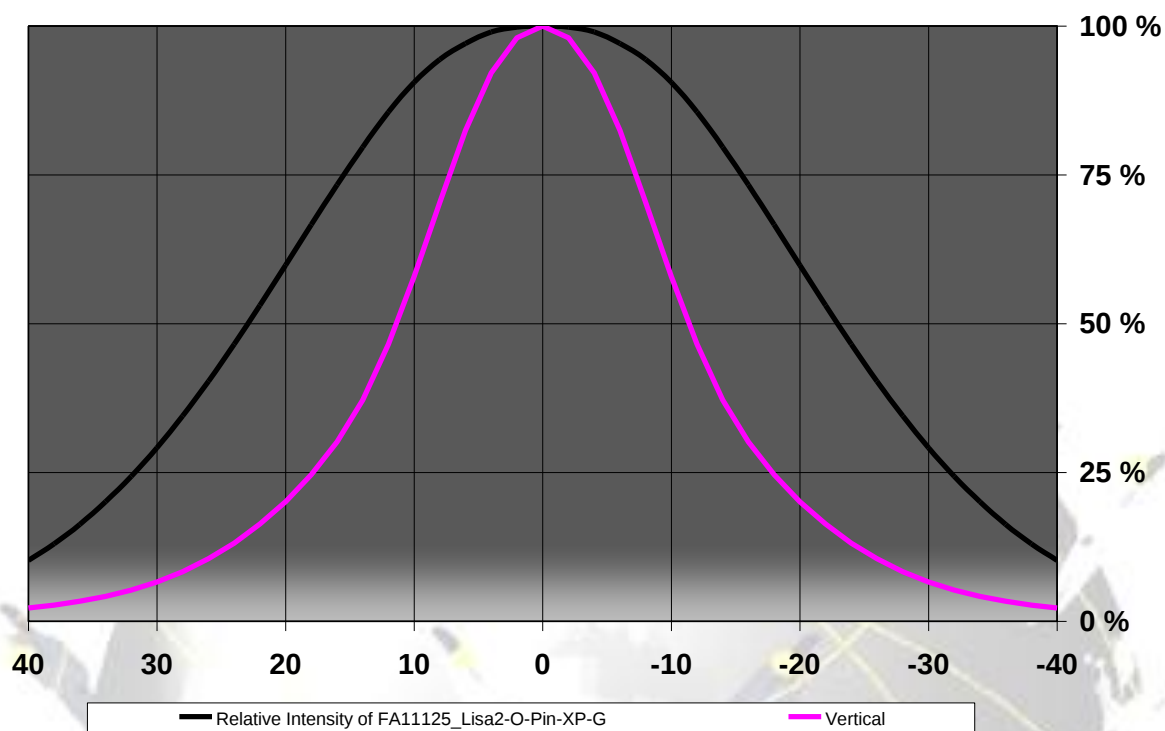
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative intensity of FA11125_Lisa2-O-Pin-XP-G



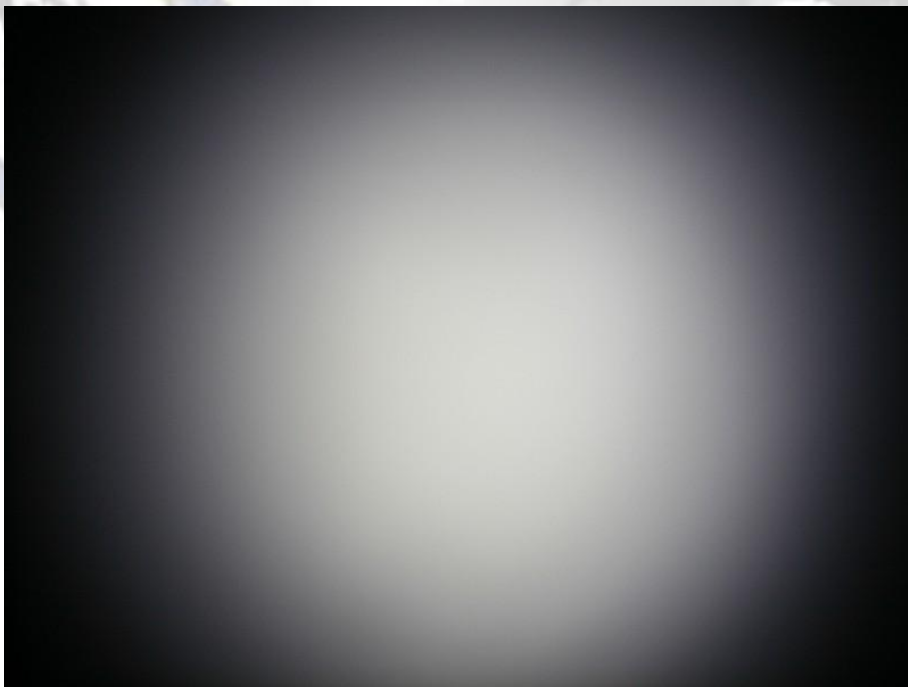
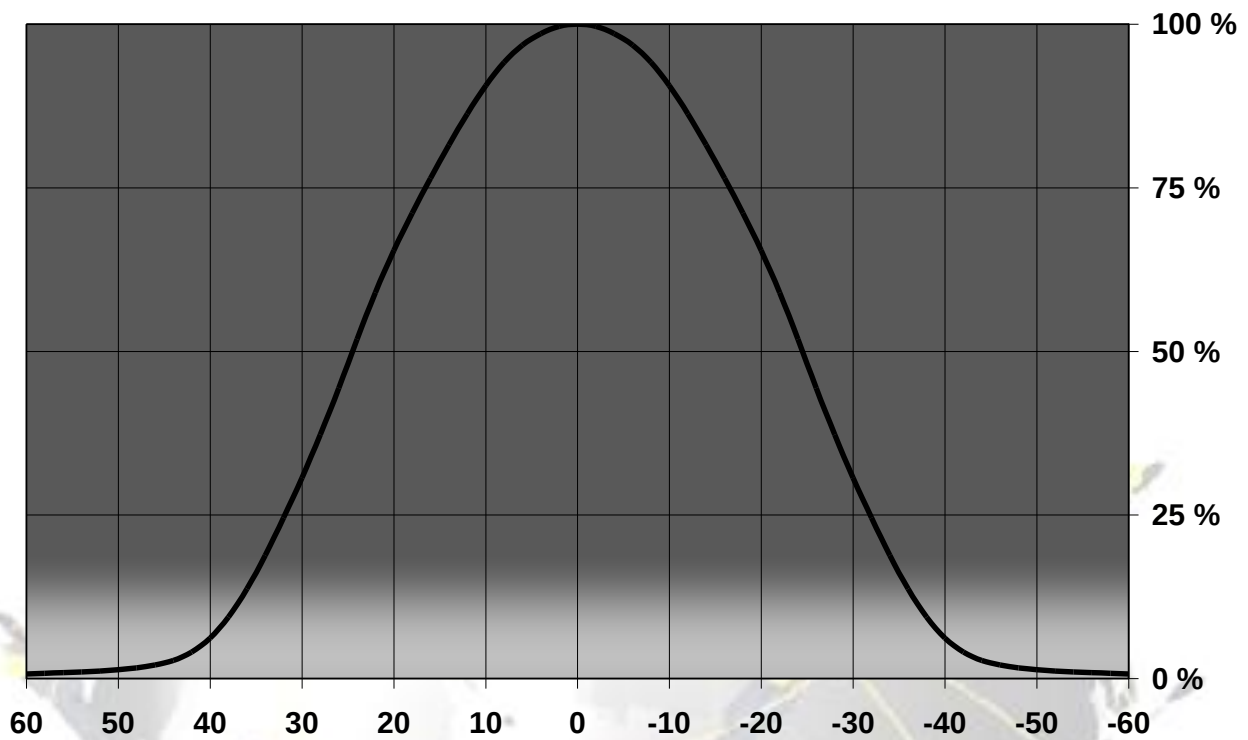
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

Relative Intensity of FA10996_Lisa2-W-Pin-XP-G



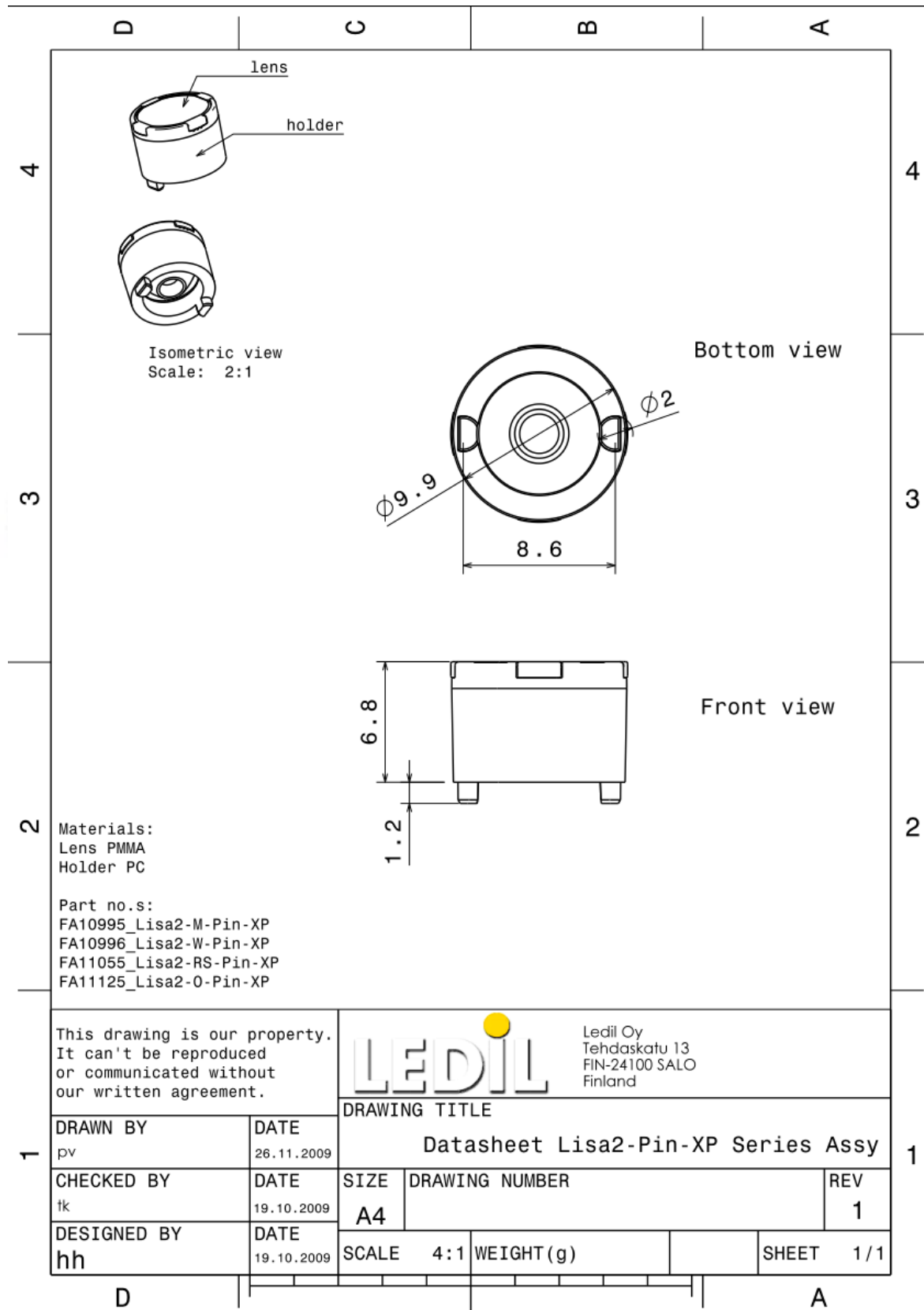
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30

DRAWINGS



© Ledil Oy – PRELIMINARY - Subject to change without prior notice

Ledil Oy
Tehdaskatu 13
FIN-24100 SALO, Finland

www.ledil.com
email: ledil@ledil.com
FAX: +358-2-733 8001

2010-12-30