

## CMC LENSES FOR CREE MC-E LEDs



- Specially designed for Cree MC-E series of LEDs.
- Special care taken to make a uniform white or warm white illumination. Lenses work well with other colors, too.
- Lens material optical grade PMMA with high UV and temperature resistance (105°C/220°F). Allows use of high current and temperature conditions.
- Best available optical efficiency, up to >90%, with an extremely good cutoff of light
- Integrated holder, holder material PC. Fastening to heat sink with a PU foam adhesive tape of automotive grade. Please check fastening details from this link: ([http://www.ledil.com/datasheets/DataSheet\\_TAPE.pdf](http://www.ledil.com/datasheets/DataSheet_TAPE.pdf))
- We advise the customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical, stress, vibration and holes on the surface circuit board weaken the strength of the tape.
- Compact dimensions 21.6 x 21.6 mm. Square form enables easy build of matrix without any gaps between lenses.

## LENS TYPES

NAME	ORDERING CODE	FWHM Angle
CMC REAL SPOT	FA10679_CMC-RS	±10°
CMC SMOOTH SPOT	FA10678_CMC-SS	±10°
CMC DIFFUSER	FA10677_CMC-D	±10°
CMC MEDIUM	FA10676_CMC-M	±15°
CMC OVAL	FA10680_CMC-O	±21° x ±10°
CMC OVAL TURNED 90°	4FA11155_CMC-O-90	±21° x ±10°
CMC WIDE	FA10714_CMC-W	±18°

## \*) IMPORTANT NOTICE:

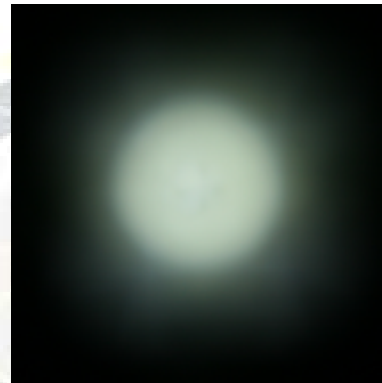
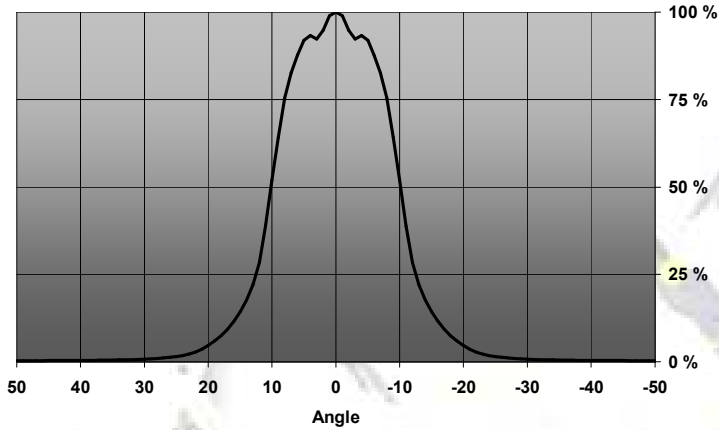
**REAL SPOT** lens is a highly efficient pure collimator lens, which optically functions in an excellent way, giving a high intensity. REAL SPOT lens also reveals the chip level optical structure of the LED. We recommend REAL SPOT lens ONLY for applications, where light intensity is of highest priority, while we do not recommend it for applications, where color uniformity and aesthetics are of high importance.

**SMOOTH SPOT** lens is a pure collimator lens with light mixing properties. It smoothens the beam pattern and makes a uniform color distribution over the whole beam angle. Light intensity is lower than for the REAL SPOT lens. SMOOTH SPOT lens is recommended for white light applications, where pleasant, high-quality illumination is wished.

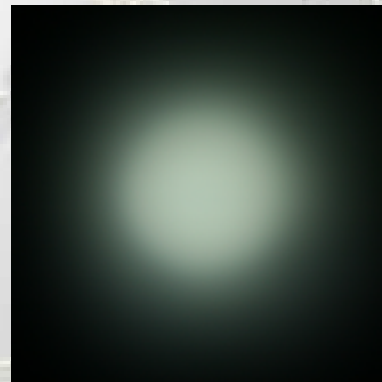
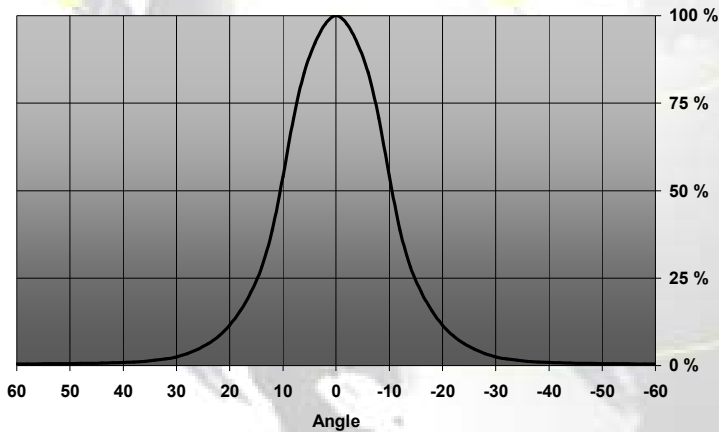
© Ledil Oy – PRELIMINARY - Subject to change without prior notice

## MEASUREMENT DATA

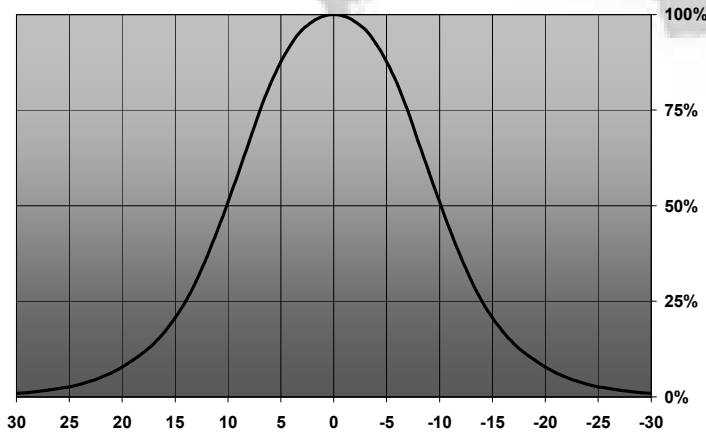
Relative Intensity of CMC-RS



Relative Intensity of CMC-D

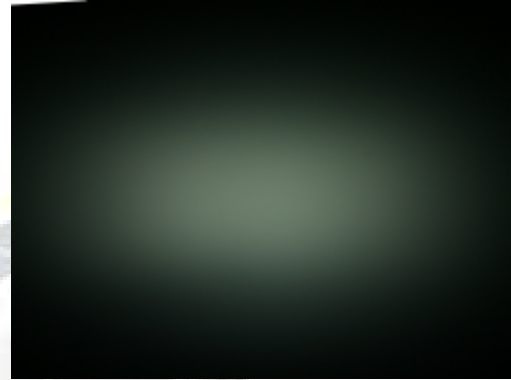
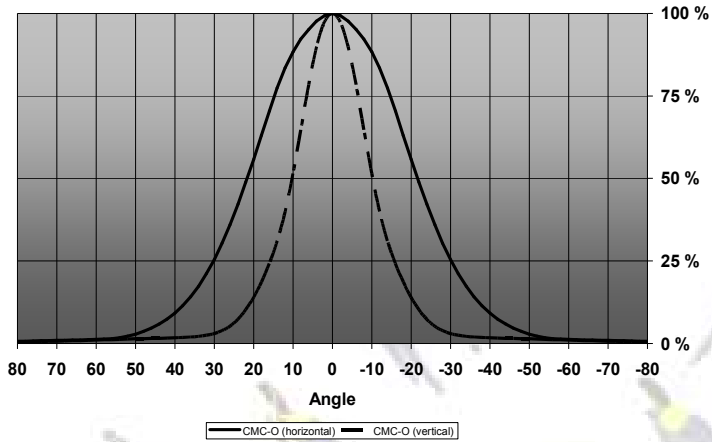


Relative Intensity of CMC-SS

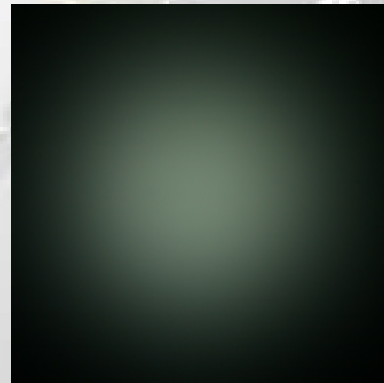
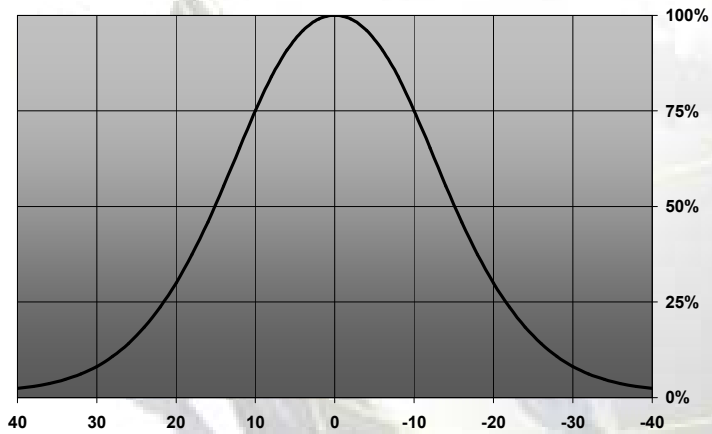


© Ledil Oy – PRELIMINARY - Subject to change without prior notice

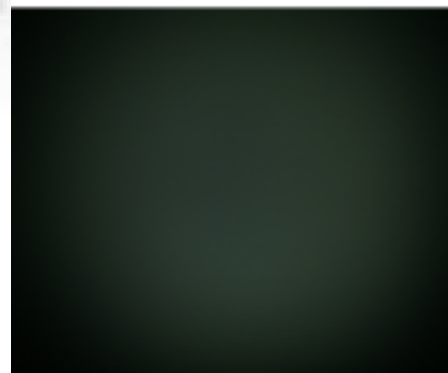
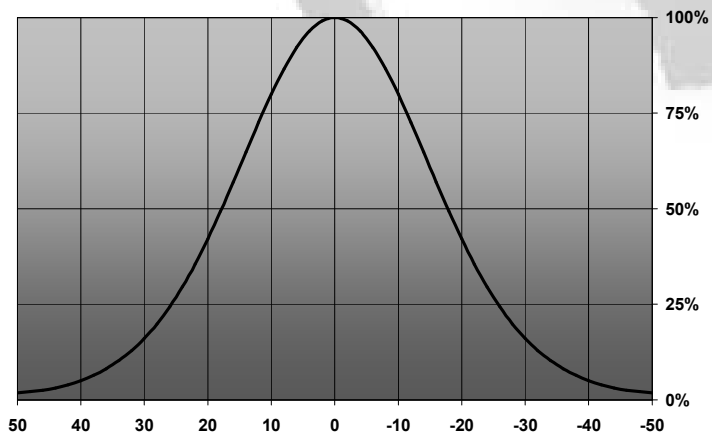
Relative Intensity of CMC-O



Relative Intensity of CMC-M



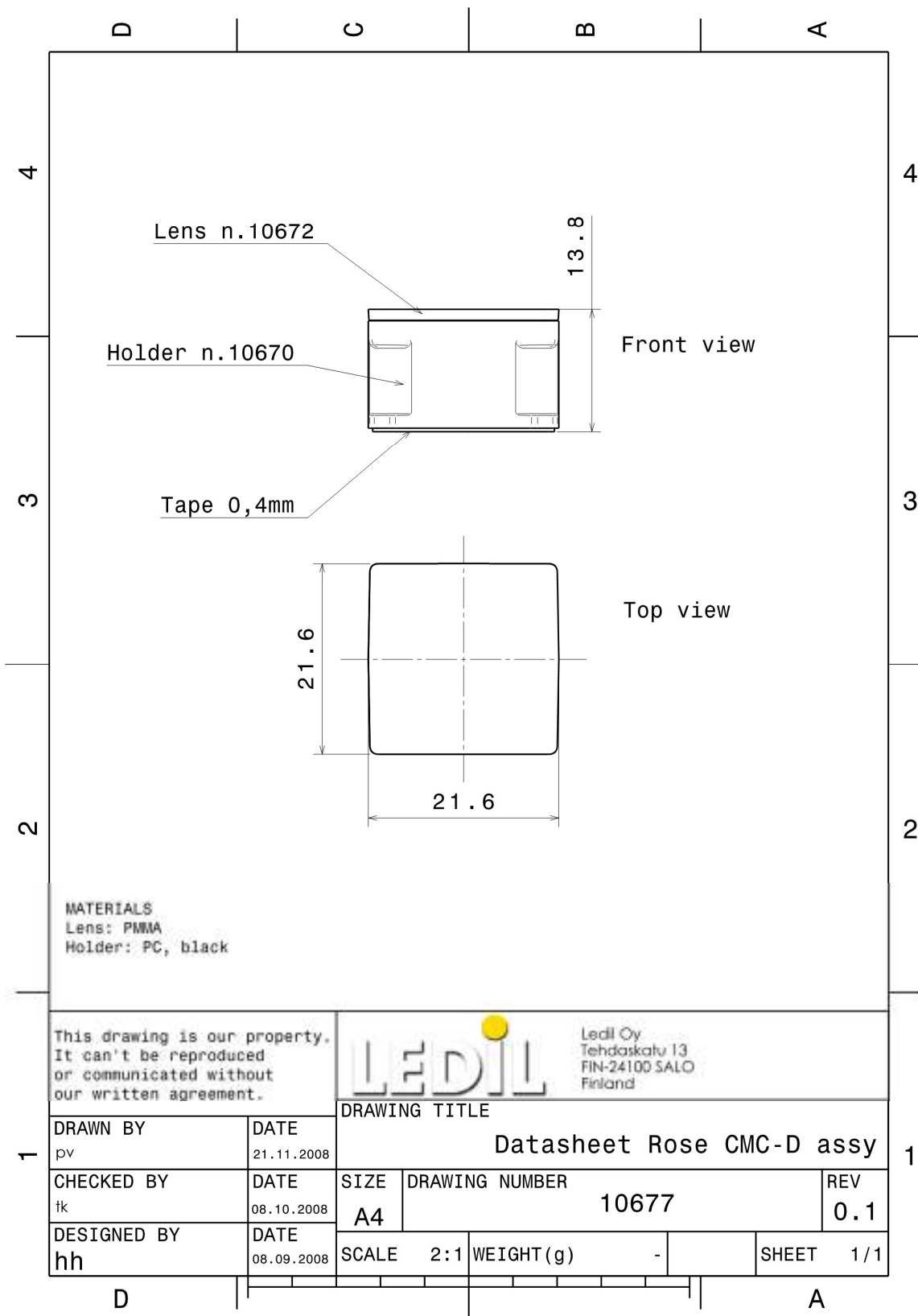
Relative Intensity of CMC-W



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



## DRAWINGS



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