

### CRS SQUARE lenses for CREE XR/-E LED





- Specially designed for Cree XR-E series of LEDs, works also well with other XR types
- Lens material optical grade PC with high UV and temperature resistance (120°C/248°F). Allows use of high current and temperature conditions.
- Best available optical efficiency, up to 90%
- Very even color distribution over the whole beam angle
- Integrated holder. Fastening to heat sink with a PU foam adhesive tape of automotive grade
- We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit boar weaken the strength of the tape.
- Please check fastening details from this link:
- (http://www.ledil.com/datasheets/DataSheet TAPE.pdf)
- Compact dimensions 21.6 x 21.6 mm. Square form enables easy build of matrix without any gaps between lenses.
- Easy build of a complete luminaire using CRS lens, Cree XR-E and heat sink

### CRS SQUARE WIDE UPDATED 20090126

### LENS TYPES

NAME	ORDERING CODE	FWHM Angle
CR SQUARE REAL SPOT*	FA10303_CRS-RS	±6°
CR SQUARE SMOOTH SPOT*	FA10328_CRS-SS	±7°
CR SQUARE DIFFUSER	FA10304_CRS-D	±7°
CR SQUARE MEDIUM	FA10305_CRS-M	±14°
CR SQUARE OVAL	FA10306_CRS-O	±6° x ±24°
CR SQUARE OVAL TURNED 90°	4FA11147_CRS-O-90	±6° x ±24°
CR SQUARE WIDE V5	FA10343_CRS-W-V5	±31°

#### \*) 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 for applications, where light intensity is of highest priority, while we do not recommend it for white light applications, where color uniformity is of high importance.

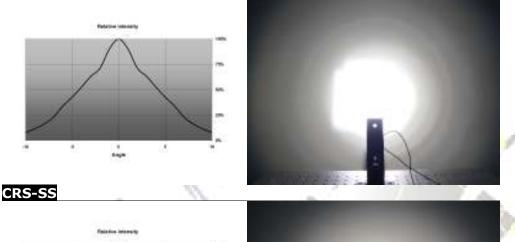
**SMOOTH SPOT** lens is a pure collimator lens with light mixing properties. It smoothens the beam pattern and makes a uniform color distribution over the whole beam angle. Light intensity is lower than for the REAL SPOT lens. SMOOTH SPOT lens is recommended for white light applications, where pleasant,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

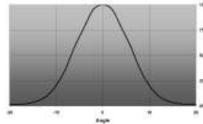
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## MEASUREMENTS

**CRS-RS** 

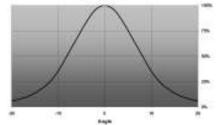








CRS-M





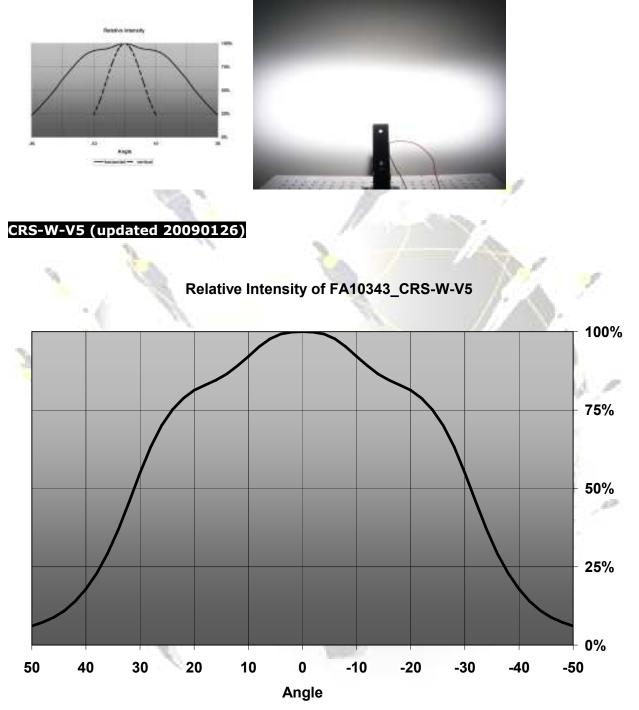
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Ledil Oy Tehdaskatu 13 FIN-24100 SALO, Finland <u>www.ledil.com</u> email: ledil@ledil.com FAX: +358-2-733 8001 400



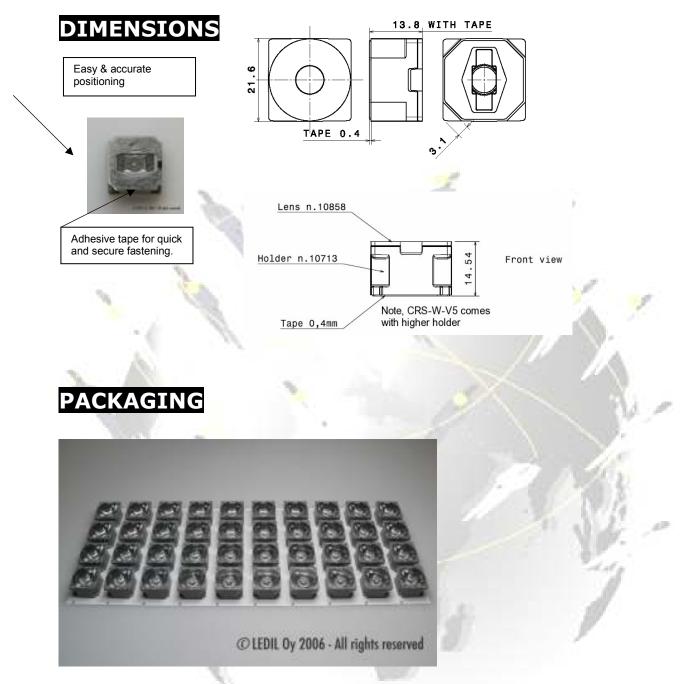
#### CRS-0



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CRS lenses are delivered on adhesive tape liner sheets, each sheet containing 60 lenses.

## SPECIAL VERSIONS

Special versions available on request, e.g. different lens holder colors or packaging sizes.

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