

# **RES SQUARE lenses for LUXEON Rebel LEDs**



- Designed & optimized for Luxeon Rebel series of LEDs
- Lens material optical grade PC with high UV and temperature resistance (130°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. Fastening to heat sink with a PU foam adhesive tape of automotive grade
- 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
RE SQUARE REAL SPOT*	RES-RS (n. 10332)	±3°
RE SQUARE SMOOTH SPOT*	RES-SS (n. 10283)	±5°
RE SQUARE DIFFUSER	RES-D (n. 10284)	±9°
RE SQUARE MEDIUM	RES-M (n. 10285)	±15°
RE SQUARE WIDE	RES-W (n. 10341)	±30°
RE SQUARE OVAL	RES-O (n. 10286)	±6° x ±22°

#### \*) IMPORTANT NOTICE:

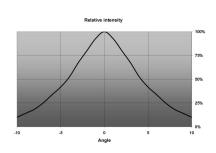
**REAL SPOT** lens is a highly efficient pure collimator lens, which optically functions in an excellent way, giving a high intensity. REAL SPOT lens also reveals the chip level optical structure of the LED. We recommend REAL SPOT lens for applications, where light intensity is of highest priority, while 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.



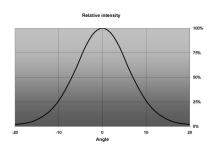
# **MEASUREMENTS**

#### **RES-RS**



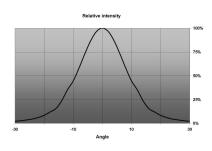


#### **RES-SS**



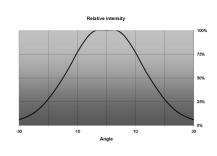


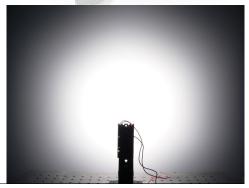
### RES-D





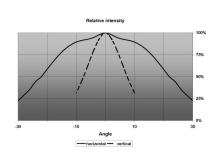
#### **RES-M**

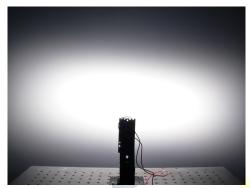




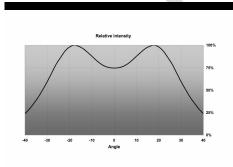


#### RES-O





#### **RES-W**





# **PHOTOS**



**RES-RS** 



**RES-M** 



**RES-SS** 



**RES-W** 



**RES-D** 

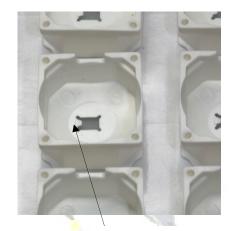


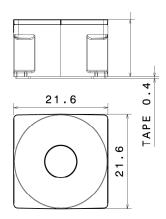
**RES-O** 



### **DIMENSIONS**

12.5





NOTE: this lip prevents assembly of holder 180° in wrong direction

## **PACKAGING**



RES lens holders are delivered on adhesive tape liner sheets, each sheet containing 60 lenses. Lenses are delivered separately. This is to ease the assembly: Rebel ceramic board has so low profile that a proper guidance without seeing is not possible.

## SPECIAL VERSIONS

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