

## CRYSTAL-MINE

~4.9° spot beam especially designed for mining headlamps

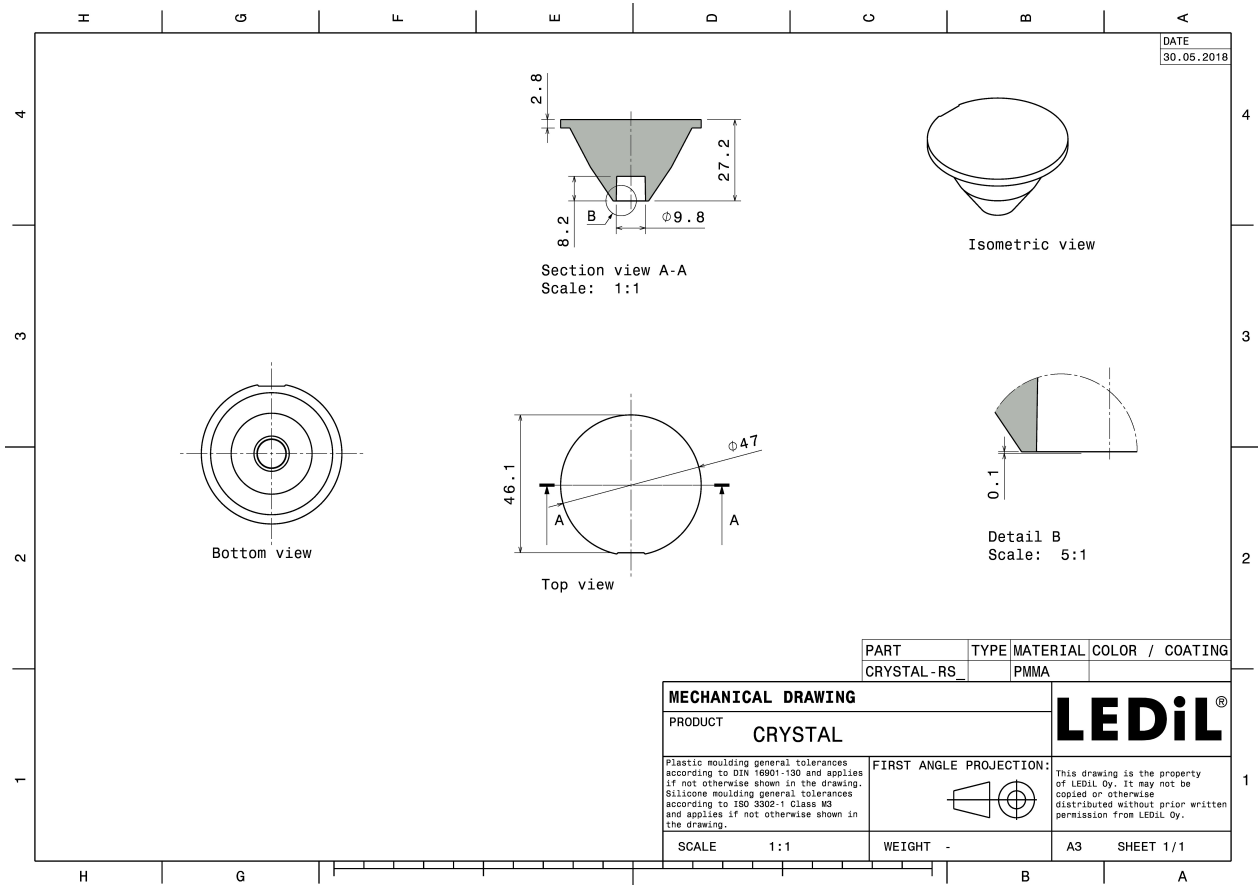
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 46.8 mm
Height	27.4 mm
Fastening	snaps
Colour	clear
Box size	480 x 280 x 300 mm
Box weight	7.1 kg
Quantity in Box	288 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
CRYSTAL-MINE	Lens	PMMA	clear



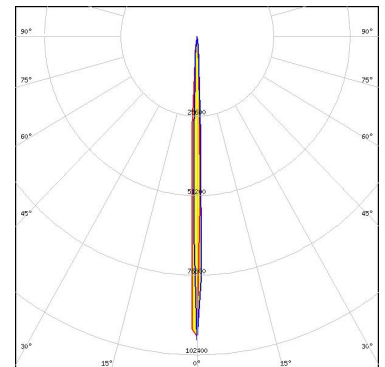
## PHOTOMETRIC DATA (MEASURED):



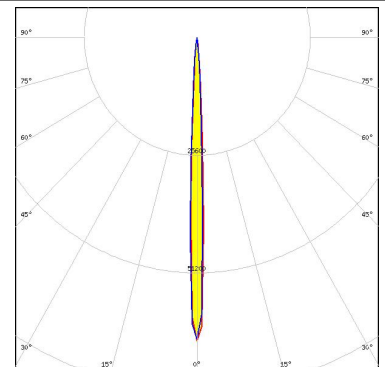
LED XM-L2  
FWHM 6.9°  
Efficiency 90 %  
Peak intensity 35.000 cd/lm  
Required components:



LED XP-E  
FWHM 3.0°  
Efficiency 92 %  
Peak intensity 96.000 cd/lm  
Required components:



LED XP-G  
FWHM 4.7°  
Efficiency 90 %  
Peak intensity 66.900 cd/lm  
Required components:



LED XP-G2  
FWHM 4.6°  
Efficiency 90 %  
Peak intensity 65.200 cd/lm  
Required components:



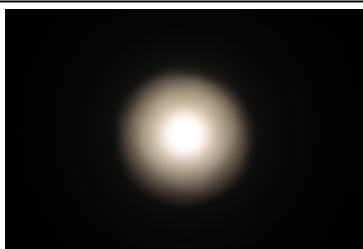
#### PHOTOMETRIC DATA (MEASURED):



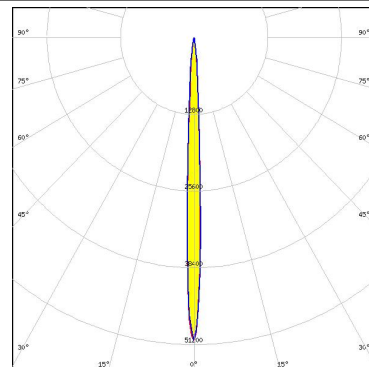
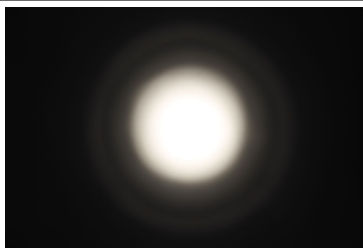
LED LUXEON A  
FWHM 4.9°  
Efficiency 89 %  
Peak intensity 58.200 cd/lm  
Required components:



LED LUXEON T  
FWHM 4.9°  
Efficiency 89 %  
Peak intensity 55.100 cd/lm  
Required components:



LED LUXEON TX  
FWHM 5.0°  
Efficiency 94 %  
Peak intensity 50.600 cd/lm  
Required components:



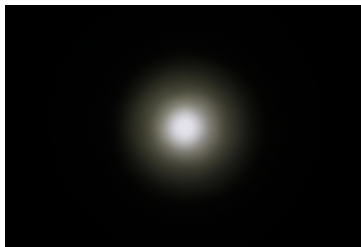
LED NCSxx19B  
FWHM 3.6°  
Efficiency 90 %  
Peak intensity 73.300 cd/lm  
Required components:



## PHOTOMETRIC DATA (MEASURED):

### SAMSUNG

LED LH351B  
FWHM 5.1°  
Efficiency 90 %  
Peak intensity 51.770 cd/lm  
Required components:



### SAMSUNG

LED LH351Z  
FWHM 4.2°  
Efficiency 90 %  
Peak intensity 71.400 cd/lm  
Required components:



### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

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