

CRYSTAL-MINE

~4.9° spot beam especially designed for mining headlamps. Assembly with holder.

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 50.3 mm
Height	28.7 mm
Fastening	pin, screw
ROHS compliant	yes ⓘ

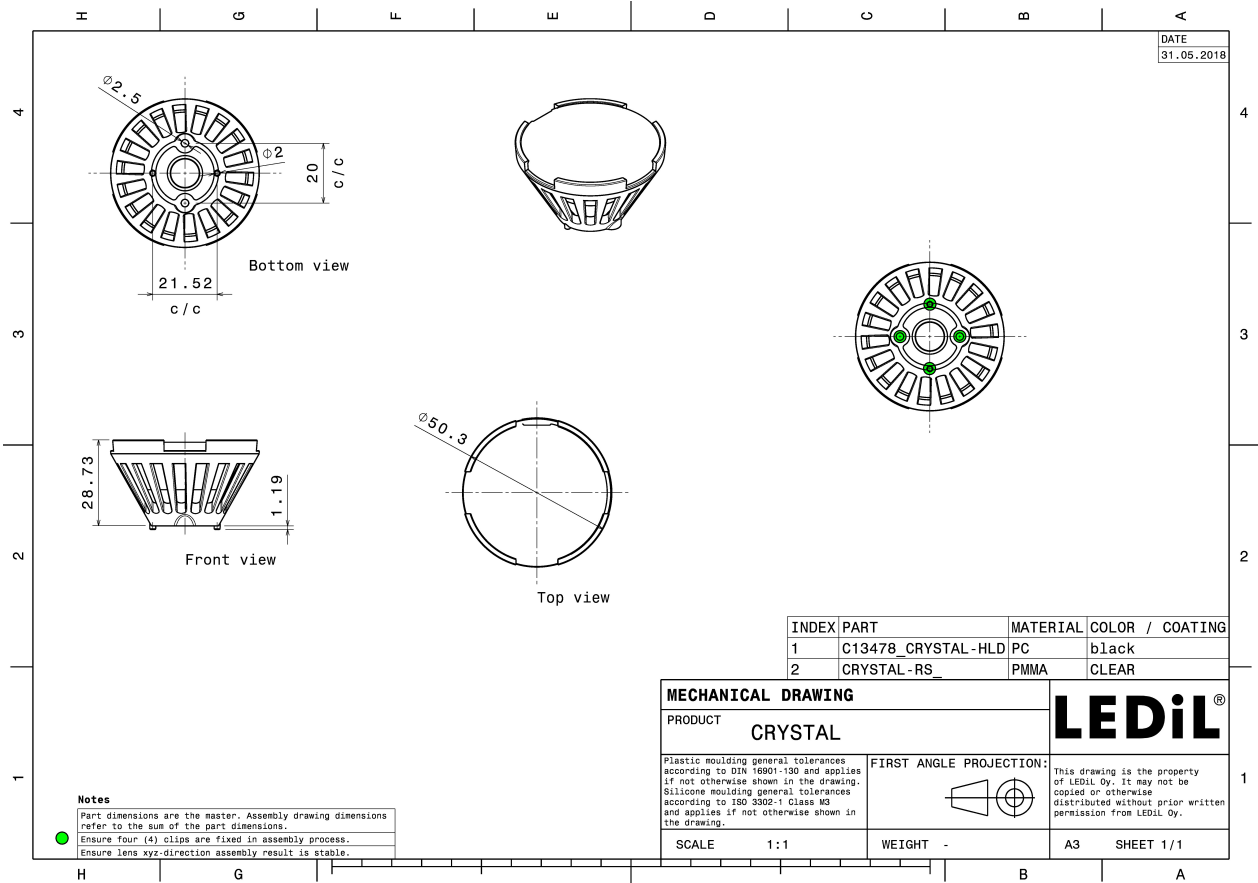
MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
CRYSTAL-MINE	Single lens	PMMA	clear	
CRYSTAL-HLD	Holder	PC	white	



ORDERING INFORMATION:

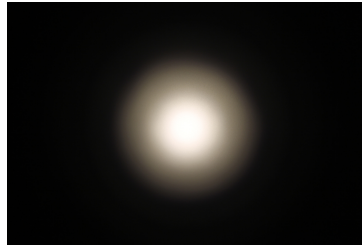
Component		Qty in box	MOQ	MPQ	Box weight (kg)
FCN13595_CRYSTAL-MINE	Single lens	288	64	32	0.0
» Box size:					



PHOTOMETRIC DATA (MEASURED):

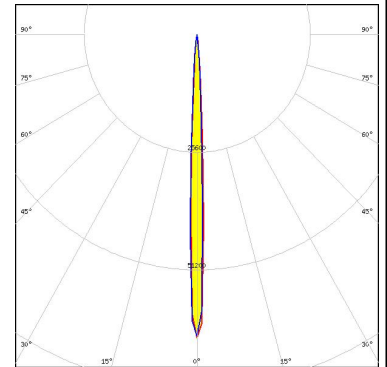
CREE 

LED XM-L2
FWHM 6.9°
Efficiency 90 %
Peak intensity 35 cd/lm
LEDs/each optic 1
Light colour White
Required components:



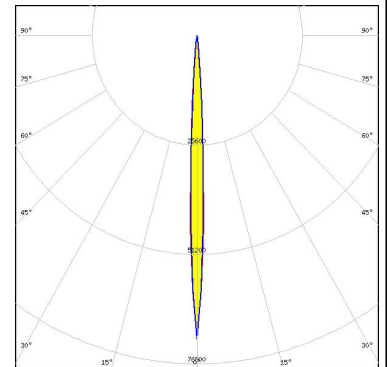
CREE 

LED XP-G
FWHM 4.7°
Efficiency 90 %
Peak intensity 66.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



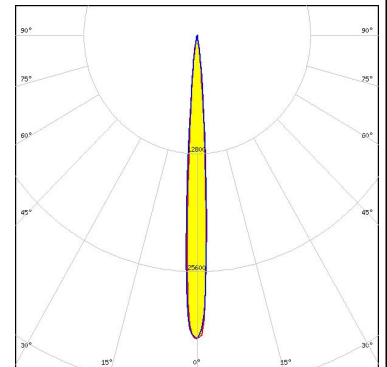
CREE 

LED XP-G2
FWHM 4.6°
Efficiency 90 %
Peak intensity 65.2 cd/lm
LEDs/each optic 1
Light colour White
Required components:



CREE 

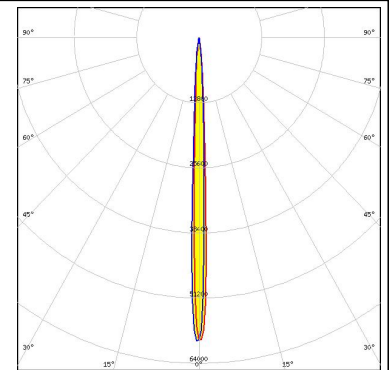
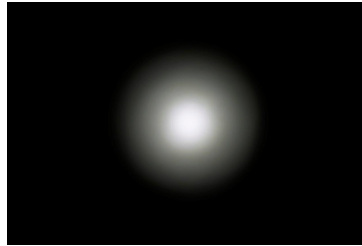
LED XP-L HD
FWHM 7.0°
Efficiency 86 %
Peak intensity 33 cd/lm
LEDs/each optic 1
Light colour White
Required components:



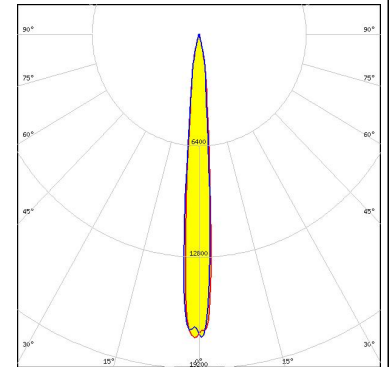
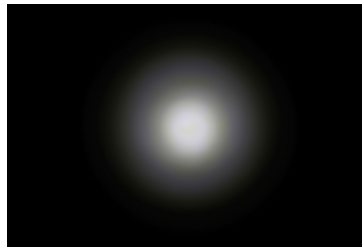
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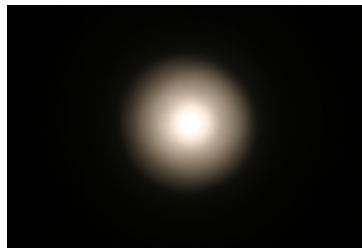
LED XP-L HI
 FWHM 4.5°
 Efficiency 92 %
 Peak intensity 60 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON 5050 Round LES
 FWHM 9.0°
 Efficiency 94 %
 Peak intensity 17.5 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:




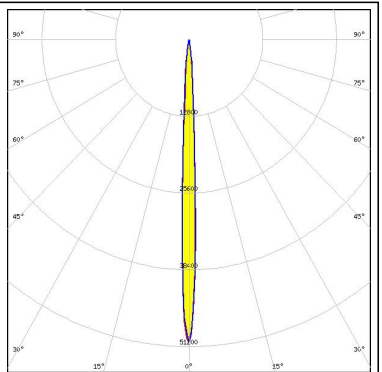

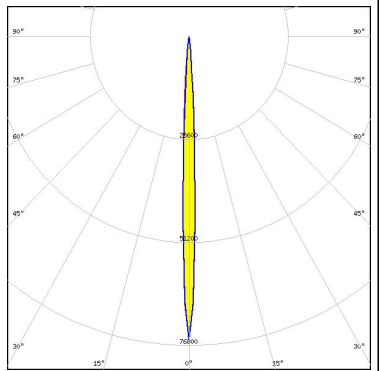

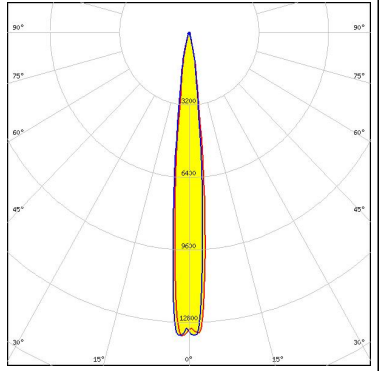
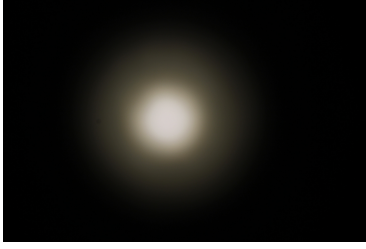
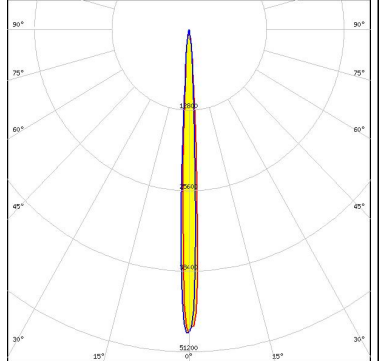
LED LUXEON A
 FWHM 4.9°
 Efficiency 89 %
 Peak intensity 58.2 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:




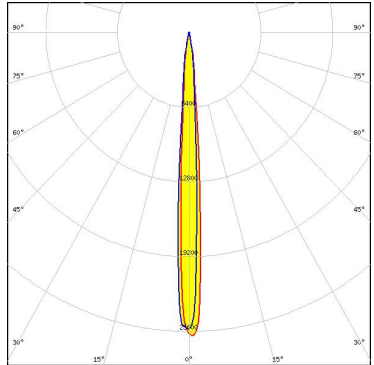

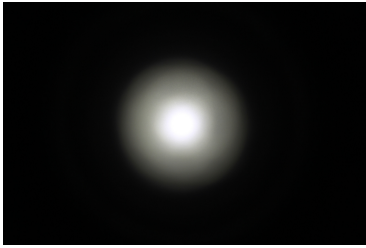

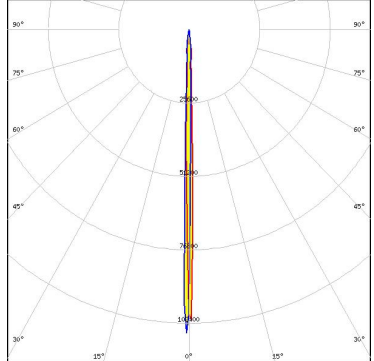
LED LUXEON T
 FWHM 4.9°
 Efficiency 89 %
 Peak intensity 55.1 cd/Im
 LEDs/each optic 1
 Light colour White
 Required components:



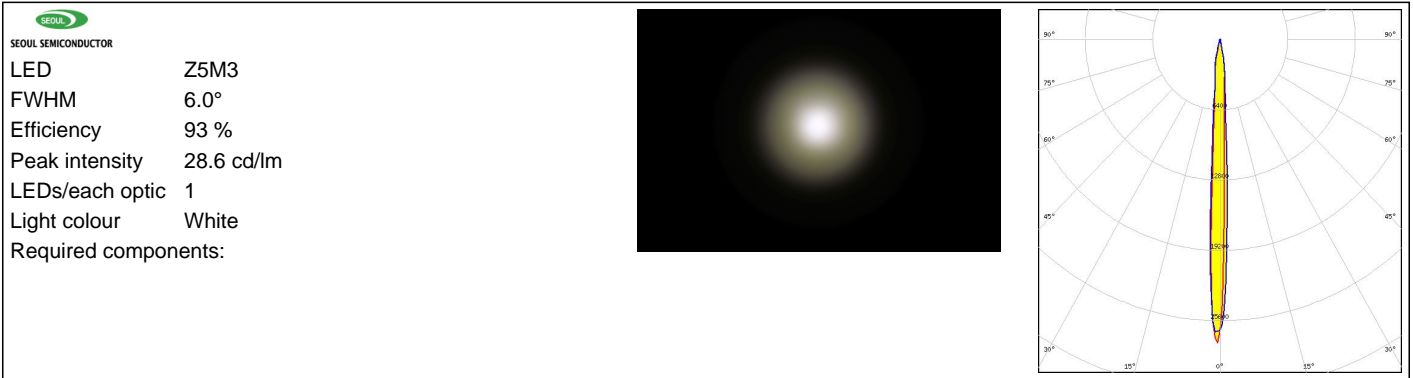
PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON TX FWHM 5.0° Efficiency 94 % Peak intensity 50.6 cd/Im LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NCSxx19B FWHM 3.6° Efficiency 90 % Peak intensity 73.3 cd/Im LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NV4x144A FWHM 11.0° Efficiency 90 % Peak intensity 13.4 cd/Im LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM 6.0° Efficiency 93 % Peak intensity 48 cd/Im LEDs/each optic 1 Light colour White Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

<p>NICHIA</p> <p>LED NWSx229A FWHM 7.0° Efficiency 91 % Peak intensity 26 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SAMSUNG</p> <p>LED LH351B FWHM 5.1° Efficiency 90 % Peak intensity 51.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SAMSUNG</p> <p>LED LH351Z FWHM 4.2° Efficiency 90 % Peak intensity 71.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED nPola FWHM 2.0° Efficiency 94 % Peak intensity 114 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

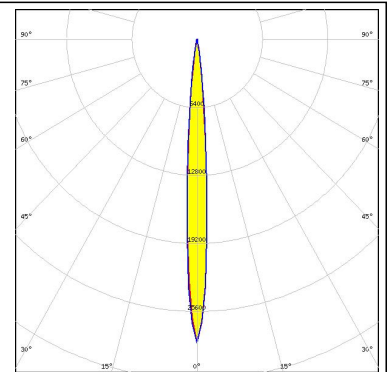
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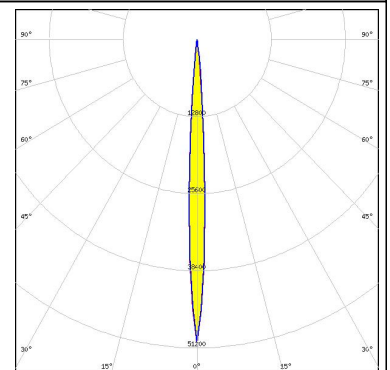
PHOTOMETRIC DATA (SIMULATED):



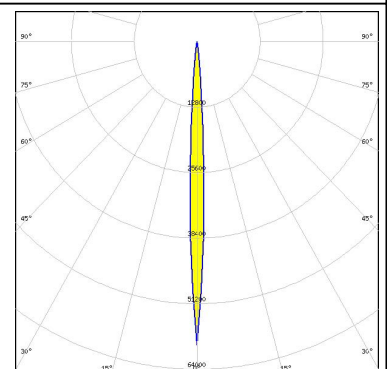
LED XHP35 HD
 FWHM 7.8°
 Efficiency 94 %
 Peak intensity 28.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



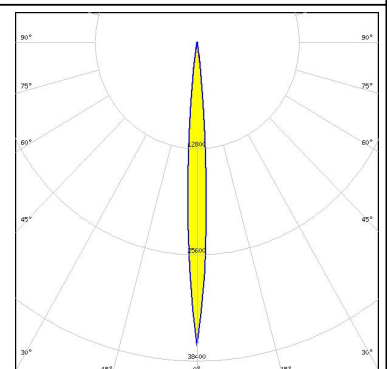
LED XHP35 HI
 FWHM 6.2°
 Efficiency 94 %
 Peak intensity 50.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




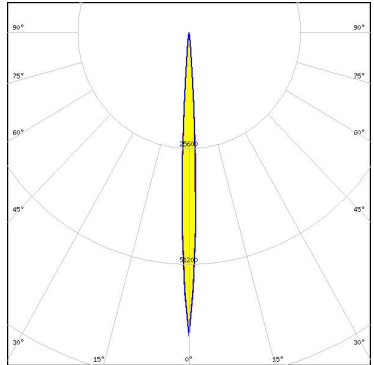
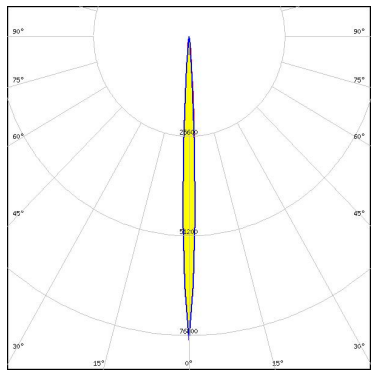
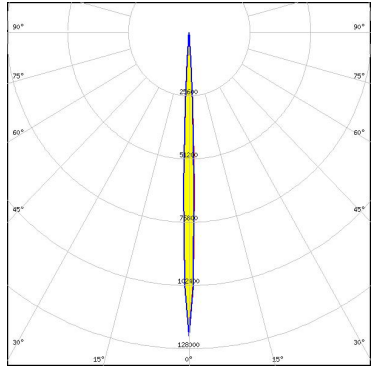
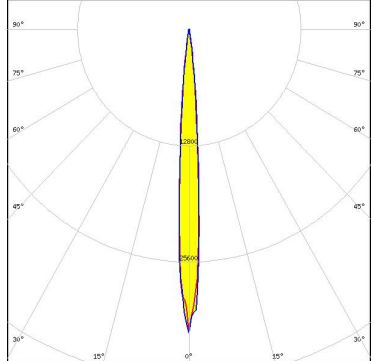
LED OSCONIQ P 3737 (2W version)
 FWHM 5.5°
 Efficiency 94 %
 Peak intensity 59.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:





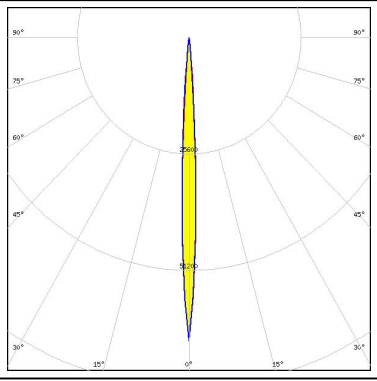

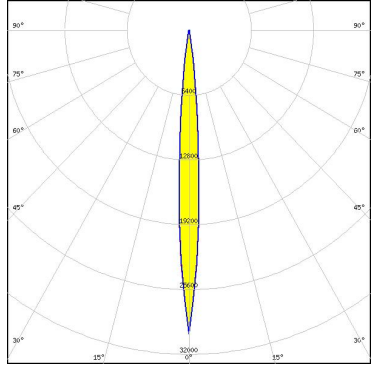
LED OSCONIQ P 3737 (3W version)
 FWHM 5.5°
 Efficiency 94 %
 Peak intensity 59.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSOLON Square CSSRM2/CSSRM3 FWHM 5.4° Efficiency 94 % Peak intensity 67 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSOLON Square Flat FWHM 4.8° Efficiency 94 % Peak intensity 78 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSTAR Projection Compact (Kx.CSLNM1.xx) FWHM 4.0° Efficiency 94 % Peak intensity 122.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SAMSUNG</p> <p>LED LH351D FWHM 7.5° Efficiency 97 % Peak intensity 34.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

PHOTOMETRIC DATA (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2 FWHM 5.4° Efficiency 94 % Peak intensity 66.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM 7.8° Efficiency 94 % Peak intensity 29.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

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