

## LR2-RS

~9.6° spot beam optimized for LUXEON Rebel ES. 14.8 mm high assembly with installation tape.

### SPECIFICATION:

Dimensions	Ø 21.6 mm
Height	14.8 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

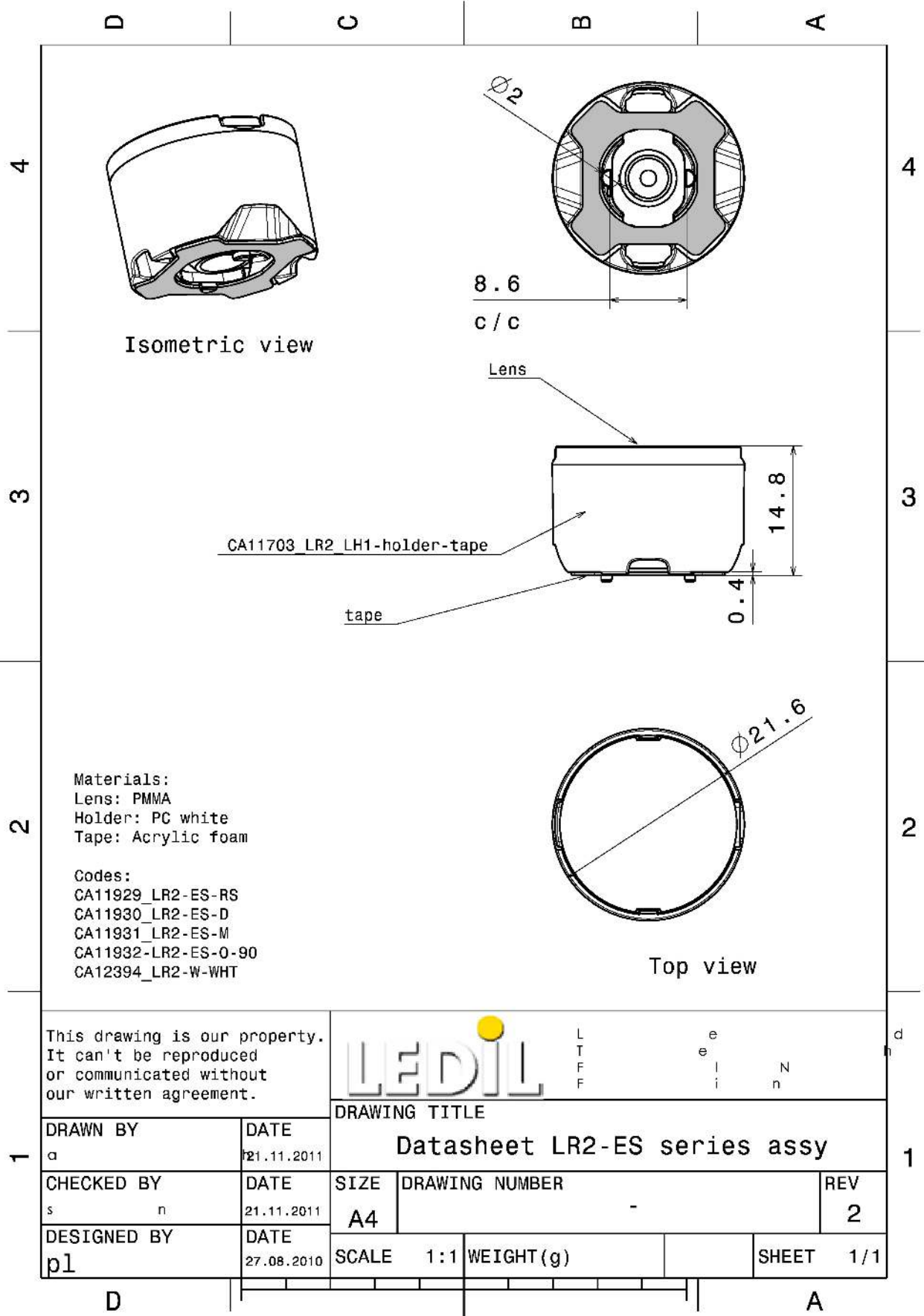
### MATERIALS:

Component	Type	Material	Colour	Finish
LXP2-RS	Single lens	PMMA	clear	
LR2-ES-LH1-HLD	Holder	PC	white	
HEIDI-TAPE	Tape	Acrylic foam	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA11929_LR2-RS	Single lens	1680	336	112	9.3
» Box size: 480 x 280 x 300 mm					



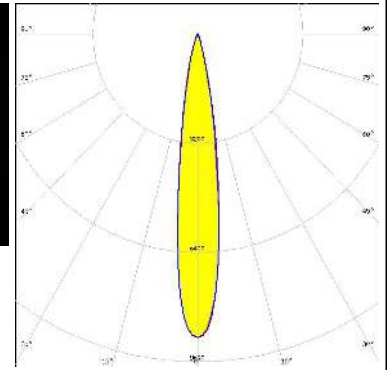


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



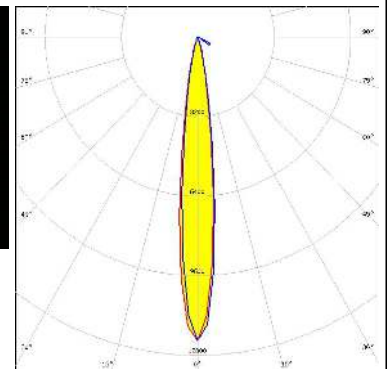
LED XP-L HD  
 FWHM / FWTM 16.0° / 31.0°  
 Efficiency 91 %  
 Peak intensity 8.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



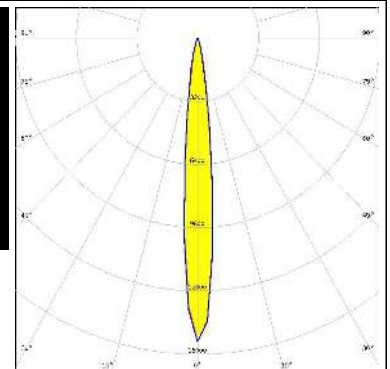
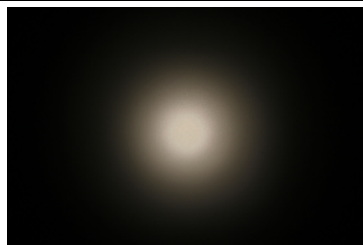
LED LUXEON Rebel ES  
 FWHM / FWTM 11.0°  
 Efficiency 94 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:




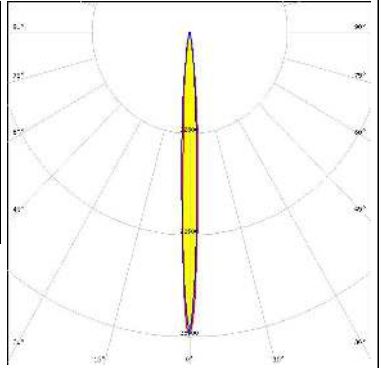
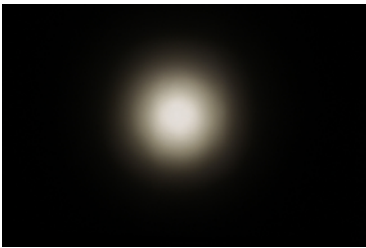
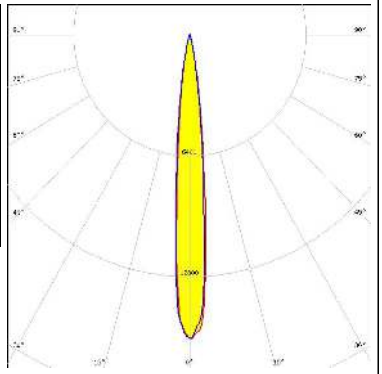

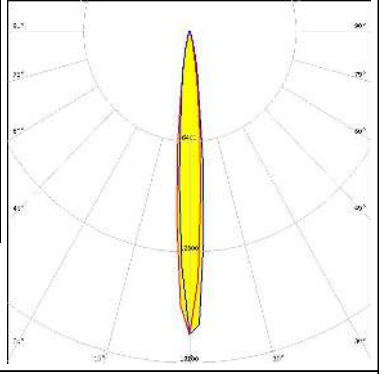


LED LUXEON T  
 FWHM / FWTM 12.0° / 23.0°  
 Efficiency 91 %  
 Peak intensity 12.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON TX  
 FWHM / FWTM 11.0° / 23.0°  
 Efficiency 91 %  
 Peak intensity 15.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



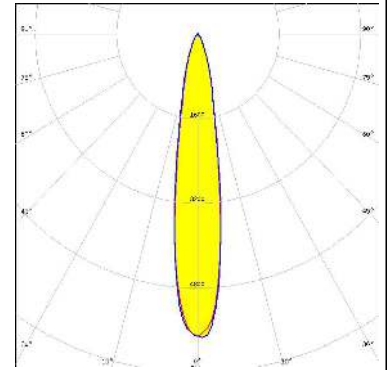
#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON Z ES</p> <p>FWHM / FWTM 6.0° / 16.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 38.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C</p> <p>FWHM / FWTM 11.0° / 23.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 16 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 10.0° / 22.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 17.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED PLPVEC2 850A</p> <p>FWHM / FWTM 5.0° / 12.0°</p> <p>Efficiency %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>		

### OPTICAL RESULTS (SIMULATED):

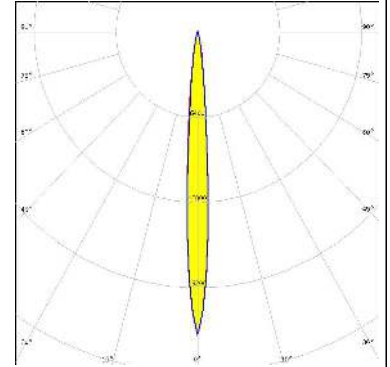
#### CREE → LED

LED J Series 5050 Round LES  
 FWHM / FWTM 18.0° / 41.0°  
 Efficiency 95 %  
 Peak intensity 5.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



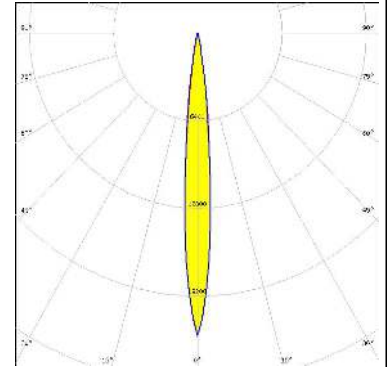
#### CREE → LED

LED XD16  
 FWHM / FWTM 8.0° / 18.0°  
 Efficiency 91 %  
 Peak intensity 22.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



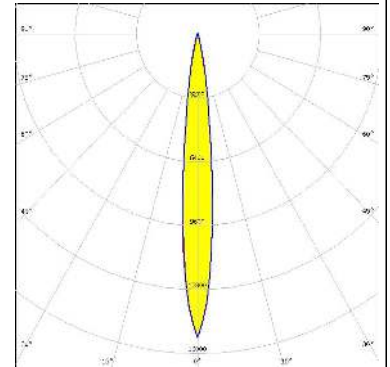
#### CREE → LED

LED XP-G2  
 FWHM / FWTM 10.0° / 20.0°  
 Efficiency 95 %  
 Peak intensity 22.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

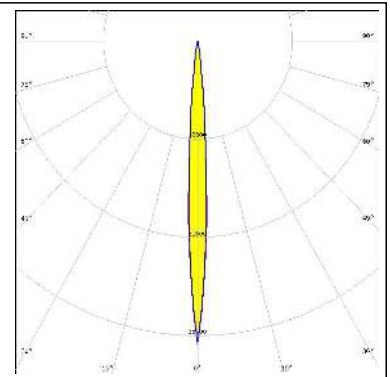
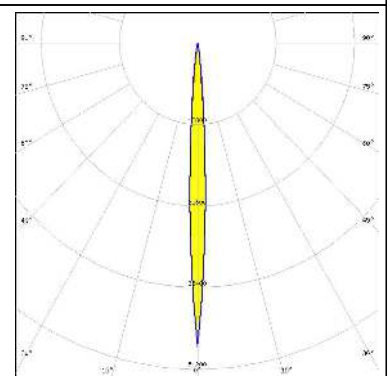
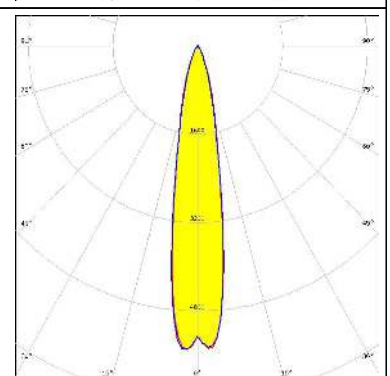
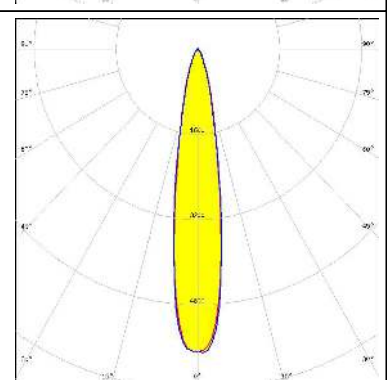


#### CREE → LED

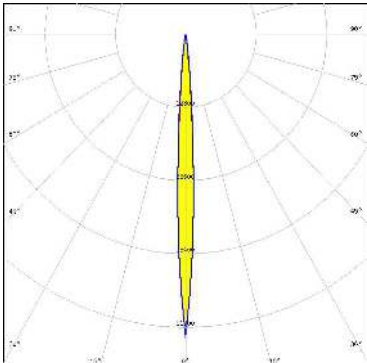
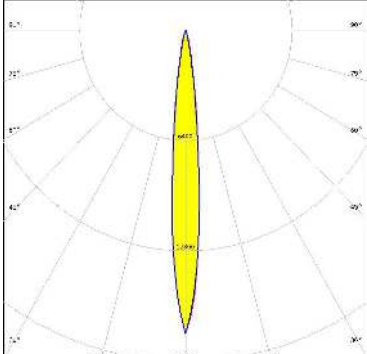
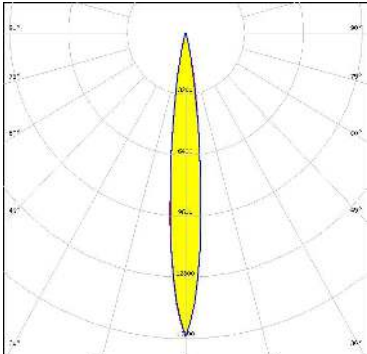
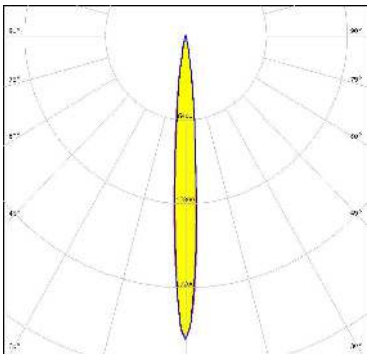
LED XP-G3  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 94 %  
 Peak intensity 15.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → LED</p> <p>LED: XQ-E HD            FWHM / FWTM: 7.0° / 15.0°            Efficiency: 92 %            Peak intensity: 39 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → LED</p> <p>LED: XQ-E HI            FWHM / FWTM: 6.0° / 14.0°            Efficiency: 93 %            Peak intensity: 47.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 5050 Round LES            FWHM / FWTM: 18.0° / 41.0°            Efficiency: 96 %            Peak intensity: 5.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 5050 Square LES            FWHM / FWTM: 18.0° / 40.0°            Efficiency: 97 %            Peak intensity: 5.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

### OPTICAL RESULTS (SIMULATED):

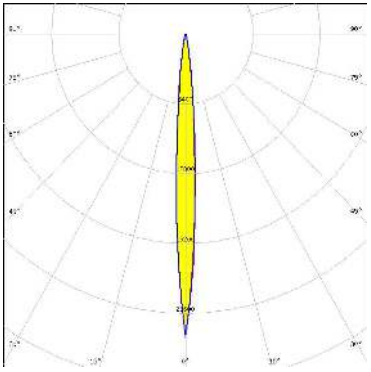
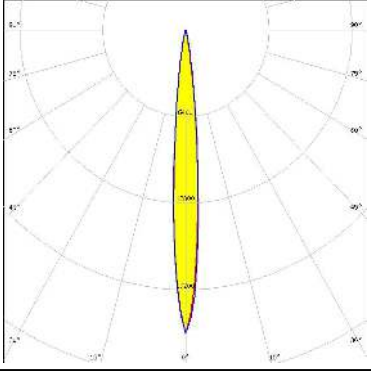
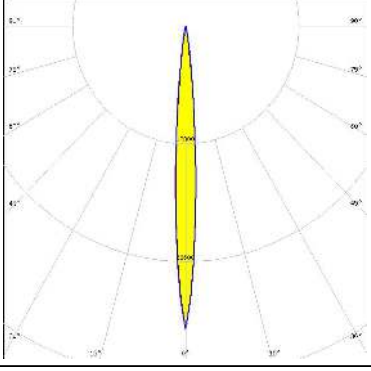
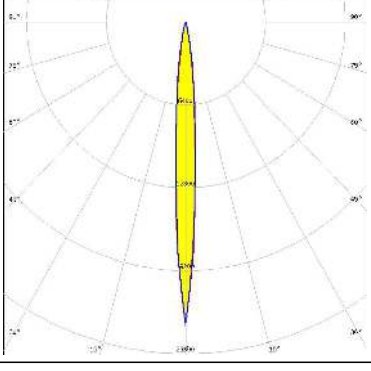
<p><b>LUMILEDS</b></p> <p>LED: LUXEON CZ</p> <p>FWHM / FWTM: 6.0° / 14.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 53 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: Red</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON H50-2</p> <p>FWHM / FWTM: 10.5° / 22.0°</p> <p>Efficiency: 93 %</p> <p>Peak intensity: 17.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON HL2X</p> <p>FWHM / FWTM: 12.0° / 24.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 15.9 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON IR Domed 60 (L110-0xxx060000000)</p> <p>FWHM / FWTM: 8.0° / 20.0°</p> <p>Efficiency: 92 %</p> <p>LEDs/each optic: 1</p> <p>Light colour: IR</p> <p>Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON MZ</p> <p>FWHM / FWTM: 16.0° / 34.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 7.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON V2</p> <p>FWHM / FWTM: 11.0° / 24.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 16.5 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NV4WB35AM</p> <p>FWHM / FWTM: 16.0° / 34.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 8.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSCONIQ C 2424</p> <p>FWHM / FWTM: 8.0° / 20.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 24 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	



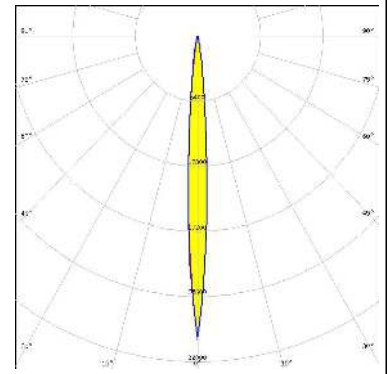
#### OPTICAL RESULTS (SIMULATED):

<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 8.0° / 18.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 27.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Blue</p> <p>Required components:</p>	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 10.0° / 20.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 22.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON SSL 120</p> <p>FWHM / FWTM 8.0° / 16.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 33 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Amber</p> <p>Required components:</p>	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4715AS</p> <p>FWHM / FWTM 8.0° / 20.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 23.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED	SFH 4770S
FWHM / FWTM	8.0° / 18.0°
Efficiency	95 %
Peak intensity	29.9 cd/lm
LEDs/each optic	1
Light colour	IR
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:

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.

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

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