

## TINA-Y-SS

~16° smooth spot beam. Assembly with holder, installation tape and pins.

### SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	10 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

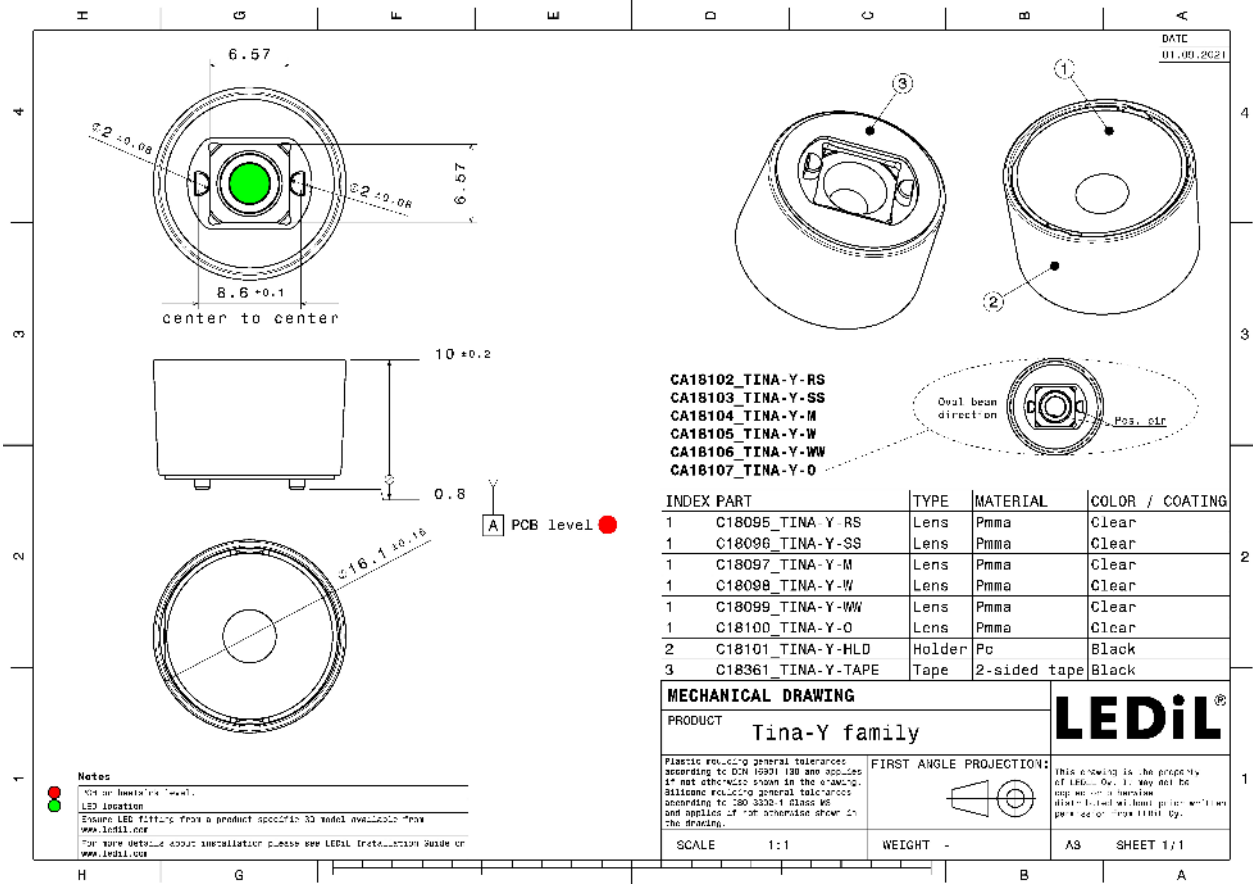
### MATERIALS:

Component	Type	Material	Colour	Finish
TINA-Y-SS	Single lens	PMMA	clear	gloss
TINA-Y-HLD	Holder	PC	black	gloss
TINA-Y-TAPE	Tape	Acrylic foam		

### ORDERING INFORMATION:


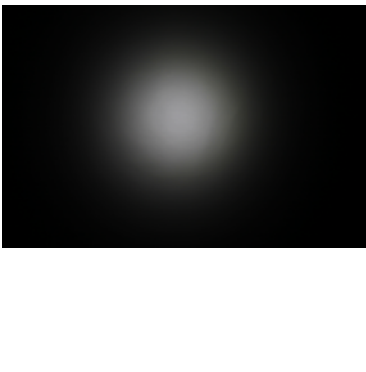
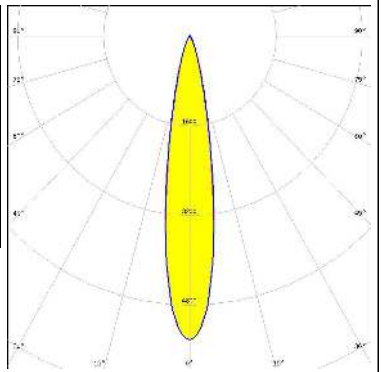

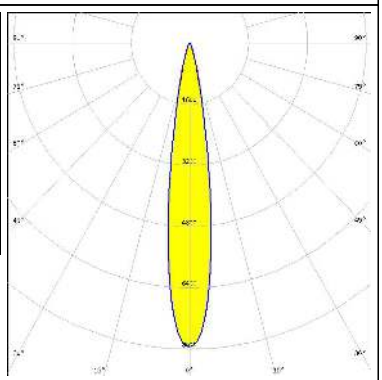
Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA18103_TINA-Y-SS » Box size: 476 x 273 x 197 mm	3900	300	300	5.7




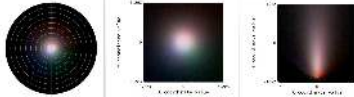
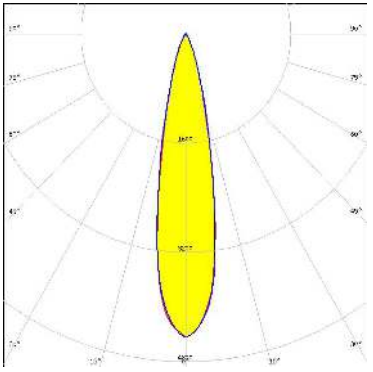

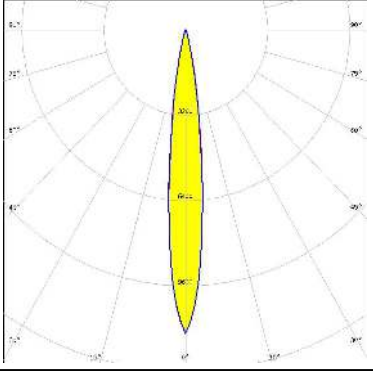

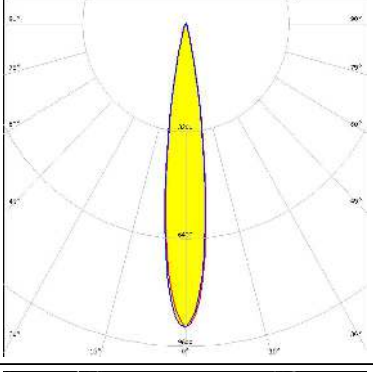

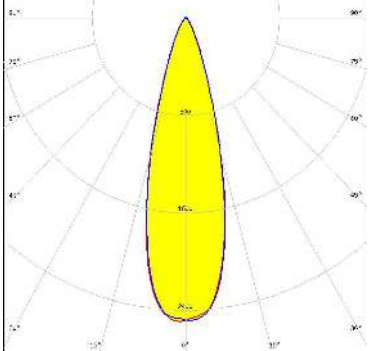


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

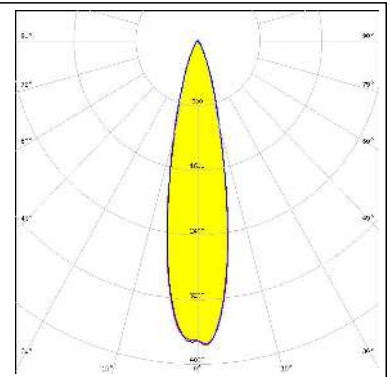
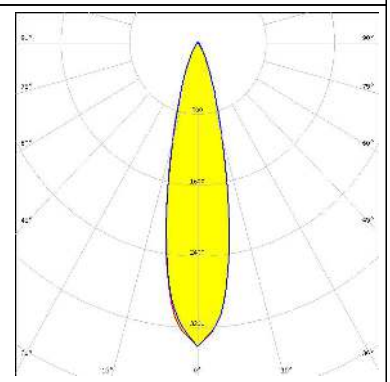
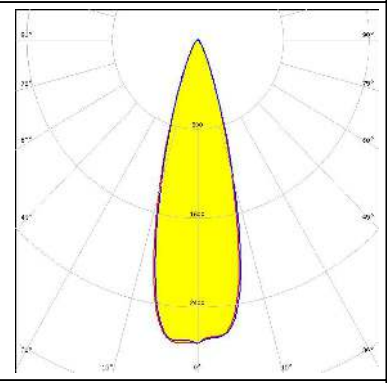
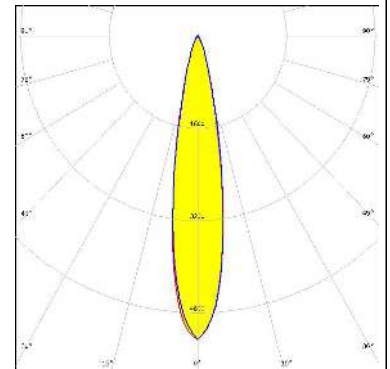
## OPTICAL RESULTS (MEASURED):

<p><b>CREE</b>  <b>LED</b></p> <p>LED: XP-G3            FWHM / FWTM: 18.0° / 37.0°            Efficiency: 81 %            Peak intensity: 5.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED: NVSW719AC            FWHM / FWTM: 17.0° / 31.0°            Efficiency: 87 %            Peak intensity: 7.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		


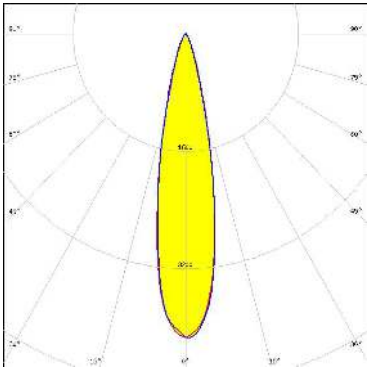

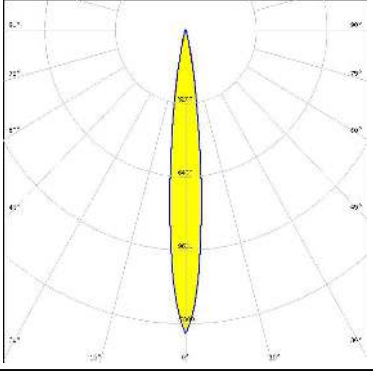

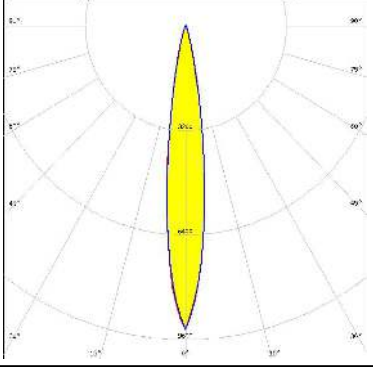

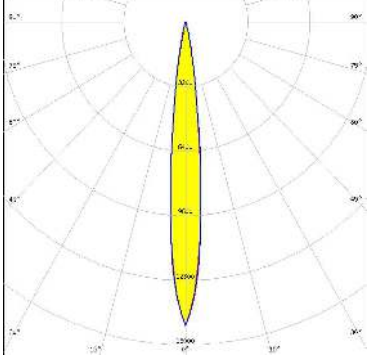
#### OPTICAL RESULTS (SIMULATED):

	<p>LED CLR6A-TKW            FWHM / FWTM 21.0° / 42.0°            Efficiency 86 %            Peak intensity 4.5 cd/lm            LEDs/each optic 1            Light colour RGBW            Required components:</p>		
	<p>LED XD16 Premium            FWHM / FWTM 14.0° / 26.0°            Efficiency 86 %            Peak intensity 11.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
	<p>LED XE-G            FWHM / FWTM 16.0° / 28.0°            Efficiency 87 %            Peak intensity 9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
	<p>LED XHP35.2 HD            FWHM / FWTM 28.0° / 52.0°            Efficiency 75 %            Peak intensity 2.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

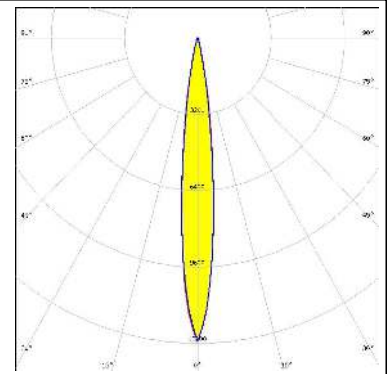
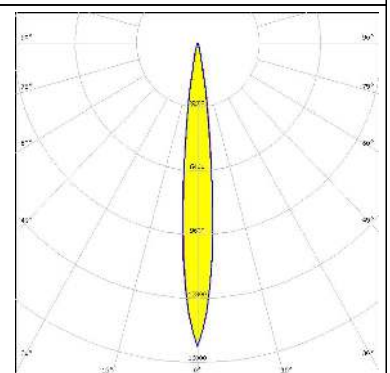
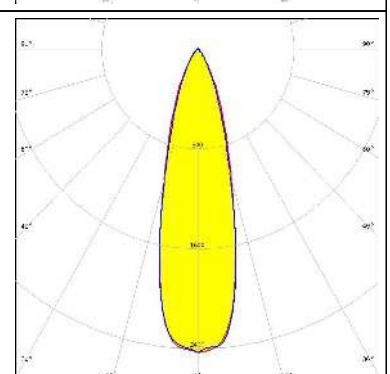
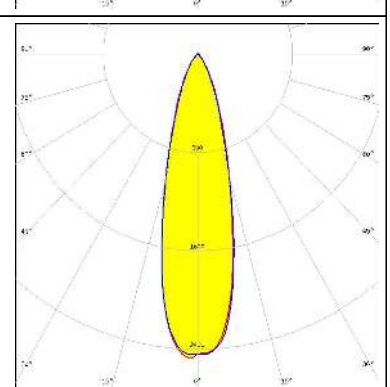
#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → <b>LED</b></p> <p>LED: XHP35.2 HI            FWHM / FWTM: 22.0° / 46.0°            Efficiency: 83 %            Peak intensity: 3.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XHP50.3 HI            FWHM / FWTM: 24.0° / 48.0°            Efficiency: 82 %            Peak intensity: 3.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XM-L RGBW (XMLDCL HD)            FWHM / FWTM: 30.0° / 50.0°            Efficiency: 85 %            Peak intensity: 2.7 cd/lm            LEDs/each optic: 1            Light colour: RGBW            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XM-L RGBW (XMLDCL HI)            FWHM / FWTM: 20.0° / 38.0°            Efficiency: 85 %            Peak intensity: 5.3 cd/lm            LEDs/each optic: 1            Light colour: RGBW            Required components:</p>	

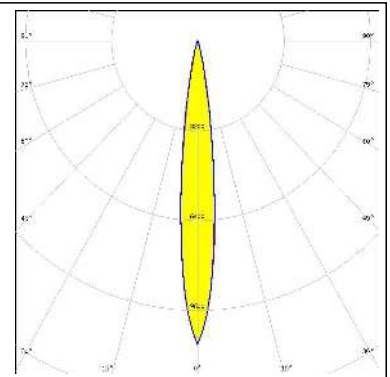
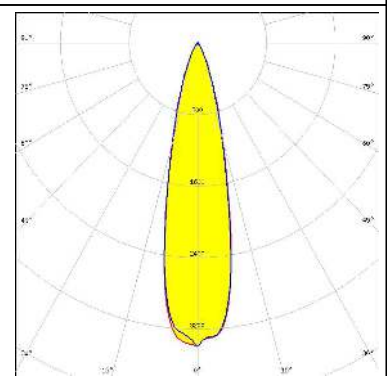
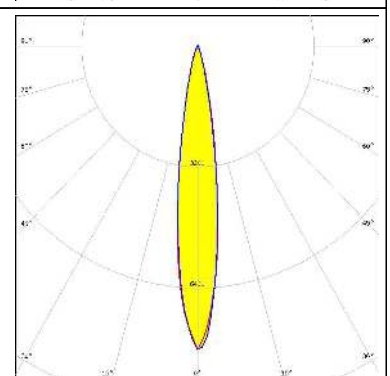
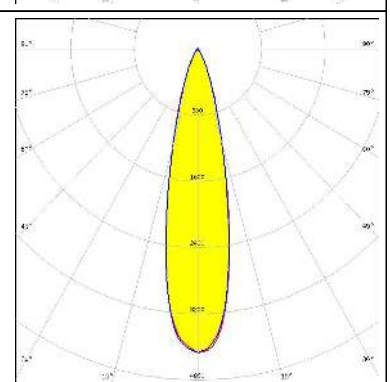
#### OPTICAL RESULTS (SIMULATED):

	<p>LED XM-L3            FWHM / FWTM 21.0° / 42.0°            Efficiency 80 %            Peak intensity 4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
	<p>LED XP-E2            FWHM / FWTM 12.0° / 24.0°            Efficiency 88 %            Peak intensity 13 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
	<p>LED XP-G2            FWHM / FWTM 15.0° / 28.0°            Efficiency 87 %            Peak intensity 9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
	<p>LED XP-P            FWHM / FWTM 12.0° / 22.0°            Efficiency 89 %            Peak intensity 15.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

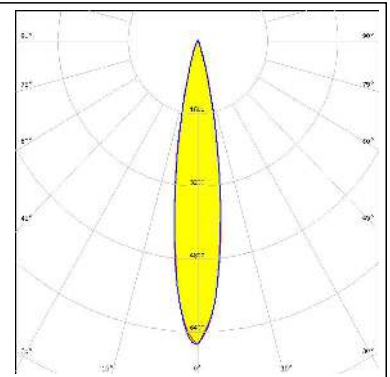
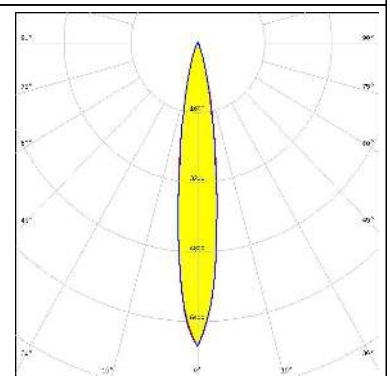
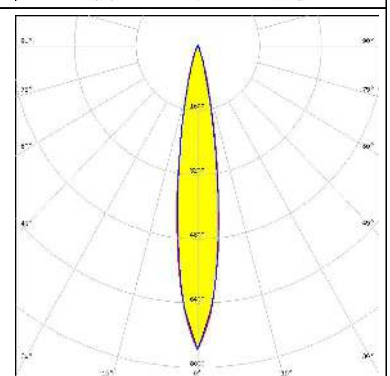
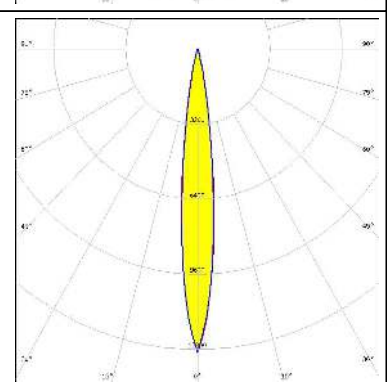
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XQ-E HD            FWHM / FWTM: 12.0° / 24.0°            Efficiency: 87 %            Peak intensity: 12.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XQ-E HI            FWHM / FWTM: 12.0° / 22.0°            Efficiency: 87 %            Peak intensity: 15.2 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: 28.0° / 56.0°            Efficiency: 80 %            Peak intensity: 2.4 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: 26.0° / 56.0°            Efficiency: 78 %            Peak intensity: 2.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

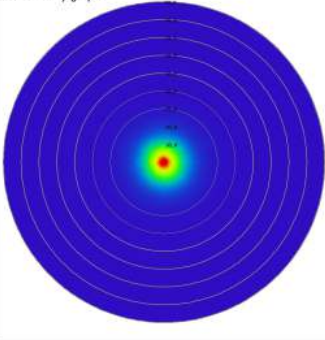
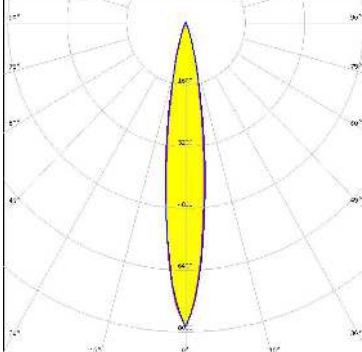
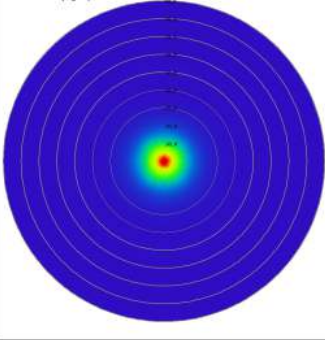
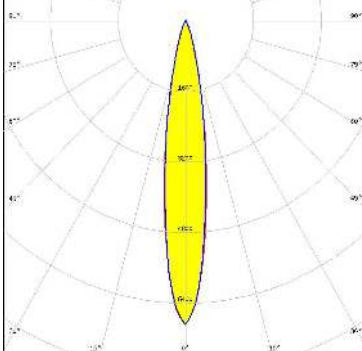

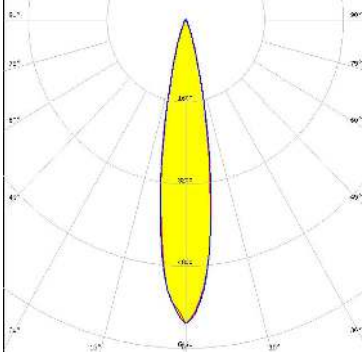
<p><b>LUMILEDS</b></p> <p>LED: LUXEON C            FWHM / FWTM: 14.0° / 26.0°            Efficiency: 79 %            Peak intensity: 10.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON MZ            FWHM / FWTM: 24.0° / 47.0°            Efficiency: 81 %            Peak intensity: 3.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON TX            FWHM / FWTM: 15.0° / 30.0°            Efficiency: 84 %            Peak intensity: 8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: 24.0° / 46.0°            Efficiency: 85 %            Peak intensity: 3.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	



#### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED NVSW219F            FWHM / FWTM 18.0° / 33.0°            Efficiency 87 %            Peak intensity 6.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSxE21A            FWHM / FWTM 16.0° / 34.0°            Efficiency 79 %            Peak intensity 7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSOLON Square CSSRM2/CSSRM3            FWHM / FWTM 16.0° / 32.0°            Efficiency 86 %            Peak intensity 7.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSOLON SSL 150            FWHM / FWTM 13.0° / 25.0°            Efficiency 88 %            Peak intensity 13 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4715AS            FWHM / FWTM 16.0° / 33.0°            Efficiency 86 %            LEDs/each optic 1            Light colour IR            Required components:</p>	<p>Polar intensity graph</p> 	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4725AS            FWHM / FWTM 16.0° / 34.0°            Efficiency 86 %            LEDs/each optic 1            Light colour IR            Required components:</p>	<p>Polar intensity graph</p> 	
<p><b>SAMSUNG</b></p> <p>LED LH351C            FWHM / FWTM 19.0° / 36.0°            Efficiency 87 %            Peak intensity 5.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	<p>Polar intensity graph</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.

### 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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