

## TINA-Y-RS

~14° spot beam. Assembly with holder, installation tape and pins.

### SPECIFICATION:

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

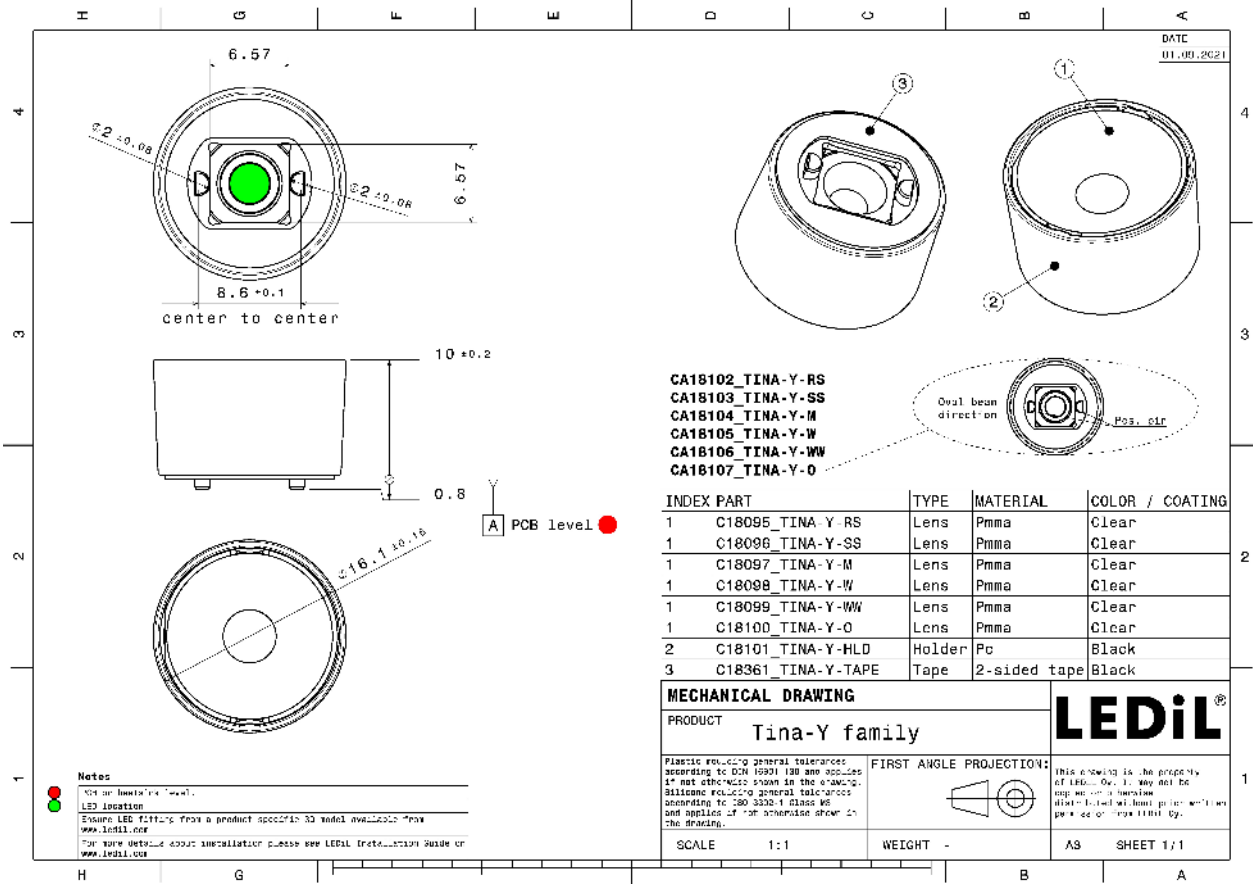
### MATERIALS:

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

### ORDERING INFORMATION:


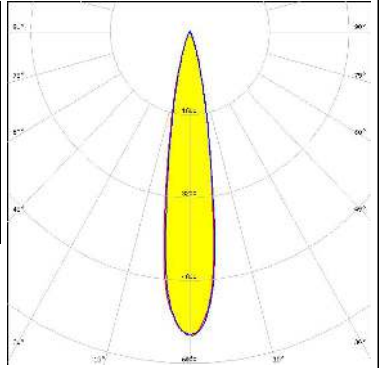

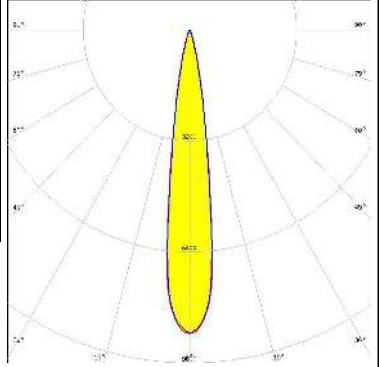
Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA18102_TINA-Y-RS » Box size: 476 x 273 x 197 mm	3900	300	300	5.6




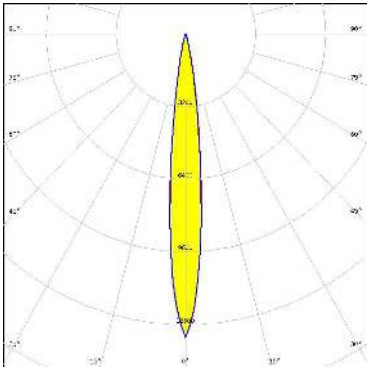

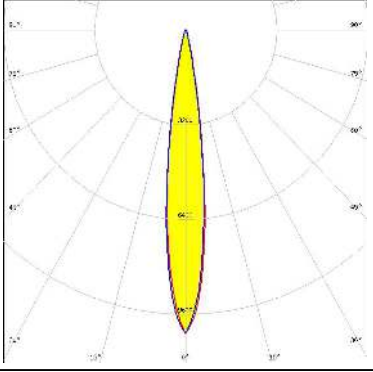

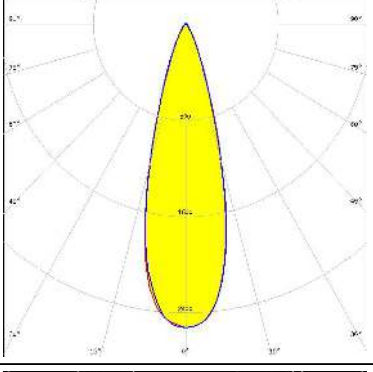

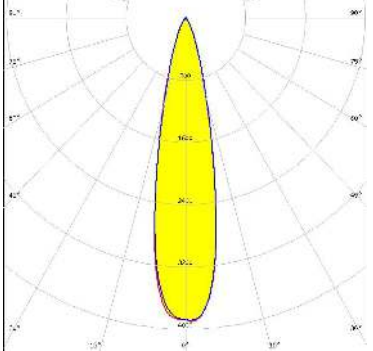


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)


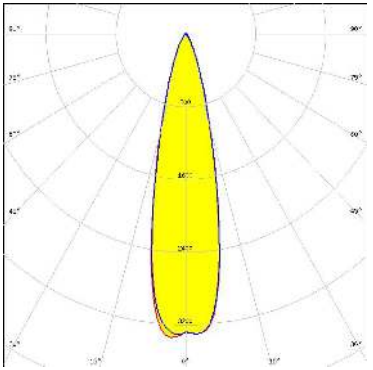

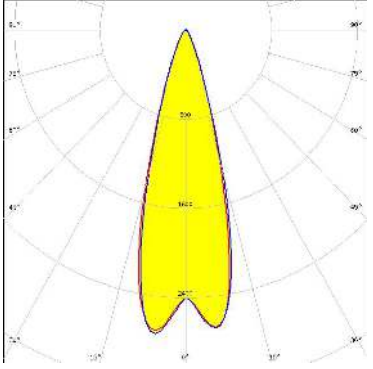

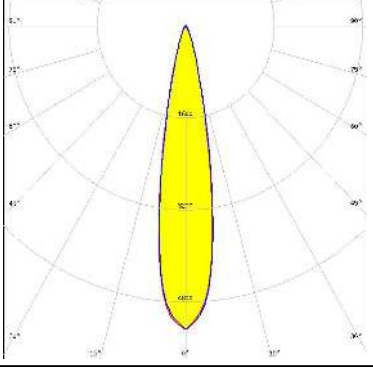

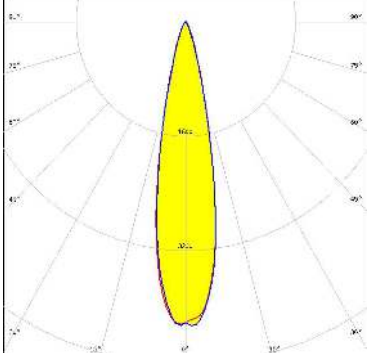
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LED</p> <p>LED: XP-G3            FWHM / FWTM: 18.0° / 35.0°            Efficiency: 81 %            Peak intensity: 5.9 cd/m            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED: NVSW719AC            FWHM / FWTM: 16.0° / 29.0°            Efficiency: 88 %            Peak intensity: 8.8 cd/m            LEDs/each optic: 1            Light colour: White            Required components:</p>		


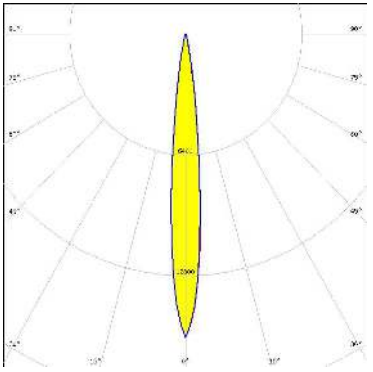

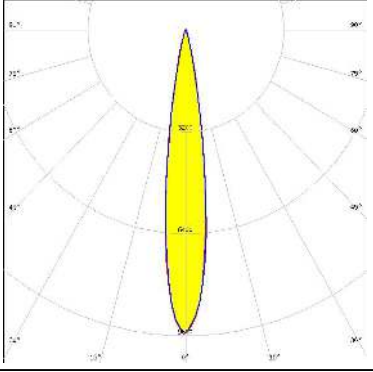

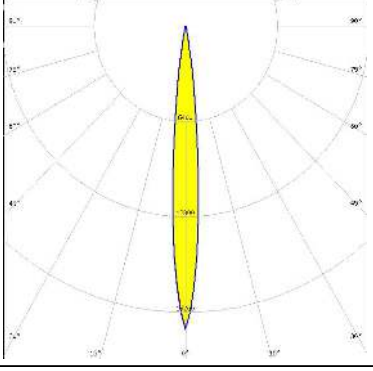

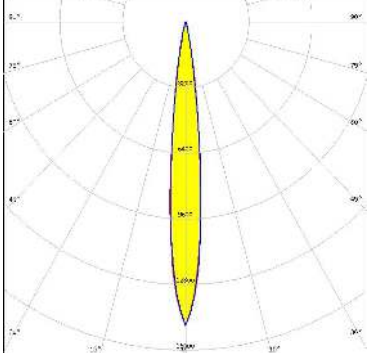
#### OPTICAL RESULTS (SIMULATED):

	<p>LED: XD16 Premium            FWHM / FWTM: 12.0° / 24.0°            Efficiency: 86 %            Peak intensity: 13.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XE-G            FWHM / FWTM: 14.0° / 26.0°            Efficiency: 87 %            Peak intensity: 10.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XHP35.2 HD            FWHM / FWTM: 30.0° / 52.0°            Efficiency: 76 %            Peak intensity: 2.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XHP35.2 HI            FWHM / FWTM: 22.0° / 44.0°            Efficiency: 84 %            Peak intensity: 3.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

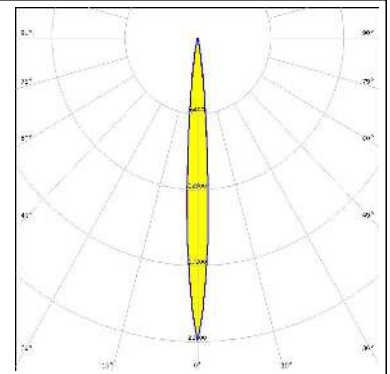
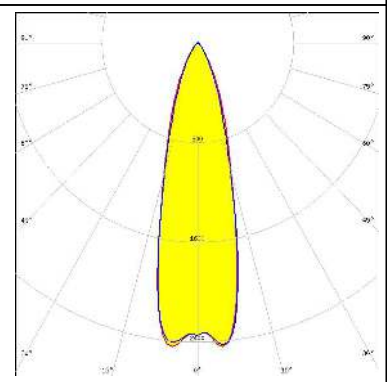
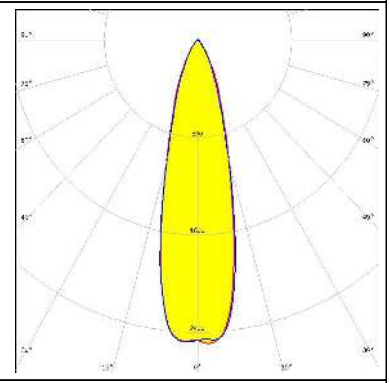
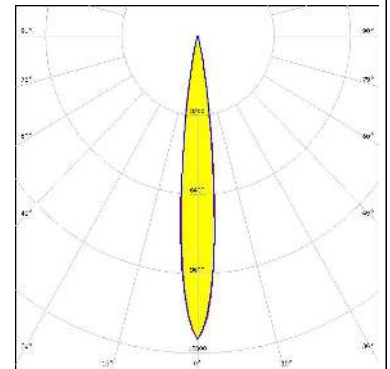
#### OPTICAL RESULTS (SIMULATED):

	<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>LED XM-L RGBW (XMLDCL HD)            FWHM / FWTM 30.0° / 49.0°            Efficiency 85 %            Peak intensity 2.8 cd/lm            LEDs/each optic 1            Light colour RGBW            Required components:</p>	
	<p>LED XM-L RGBW (XMLDCL HI)            FWHM / FWTM 20.0° / 37.0°            Efficiency 85 %            Peak intensity 5.3 cd/lm            LEDs/each optic 1            Light colour RGBW            Required components:</p>	
	<p>LED XM-L3            FWHM / FWTM 21.0° / 40.0°            Efficiency 81 %            Peak intensity 4.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

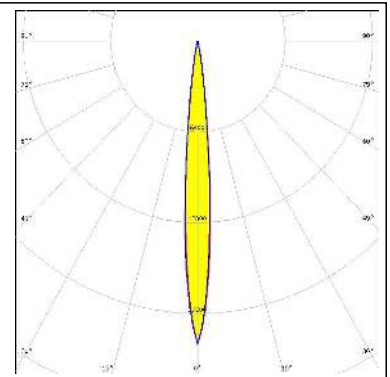
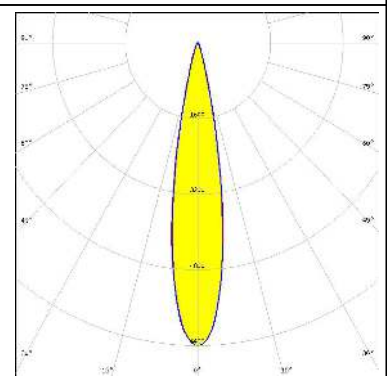
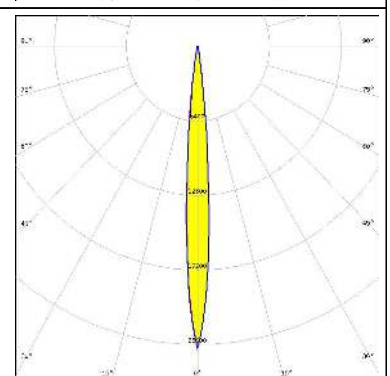
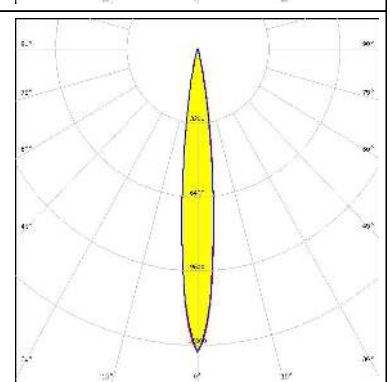
#### OPTICAL RESULTS (SIMULATED):

	<p>LED: XP-E2            FWHM / FWTM: 11.0° / 22.0°            Efficiency: 88 %            Peak intensity: 16 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XP-G2            FWHM / FWTM: 15.0° / 28.0°            Efficiency: 88 %            Peak intensity: 9.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XP-P            FWHM / FWTM: 10.0° / 20.0°            Efficiency: 89 %            Peak intensity: 20.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XQ-E HD            FWHM / FWTM: 12.0° / 22.0°            Efficiency: 87 %            Peak intensity: 14.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

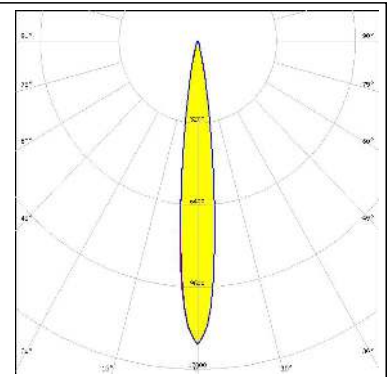
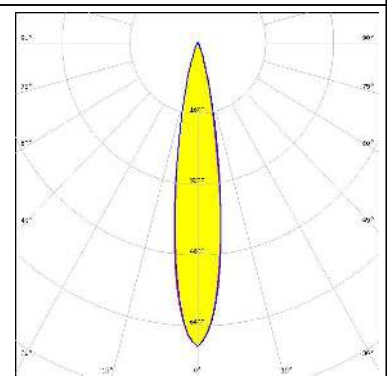
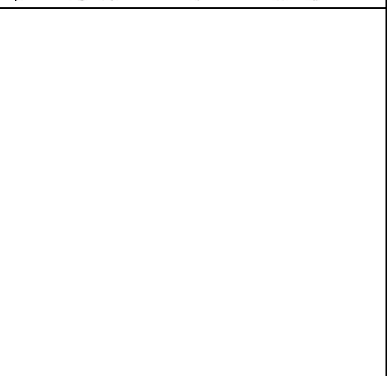
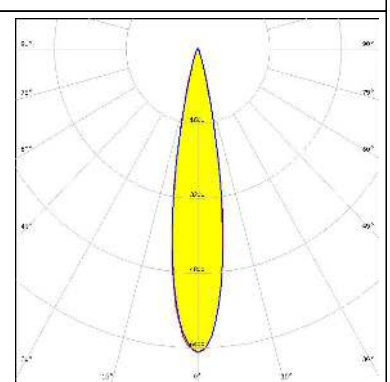
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XQ-E HI            FWHM / FWTM: 8.0° / 18.0°            Efficiency: 87 %            Peak intensity: 25.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 5050 Round LES            FWHM / FWTM: 28.0° / 56.0°            Efficiency: 81 %            Peak intensity: 2.5 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: 26.0° / 56.0°            Efficiency: 80 %            Peak intensity: 2.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON C            FWHM / FWTM: 12.0° / 24.0°            Efficiency: 79 %            Peak intensity: 12.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):


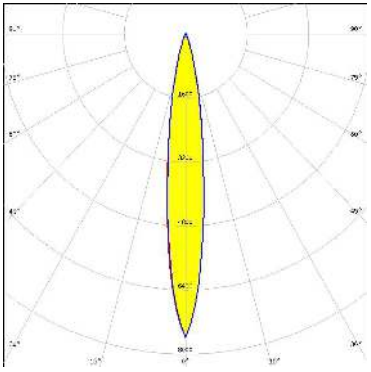

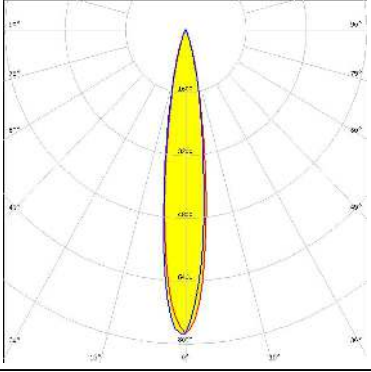

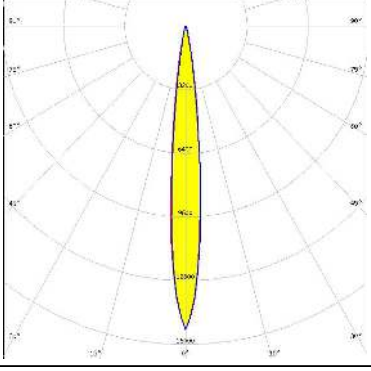

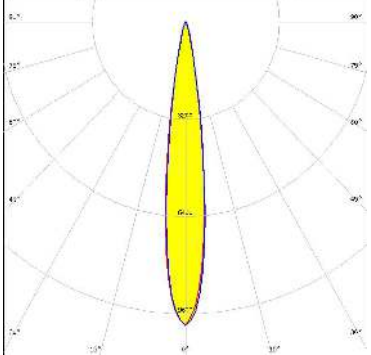
<p><b>LUMILEDS</b></p> <p>LED LUXEON CZ</p> <p>FWHM / FWTM 10.0° / 19.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 21.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Red</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON HL2X</p> <p>FWHM / FWTM 20.0° / 32.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 6.4 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 Rubix</p> <p>FWHM / FWTM 8.0° / 18.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 26.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Blue</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON Z ES</p> <p>FWHM / FWTM 12.0° / 24.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 13.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	



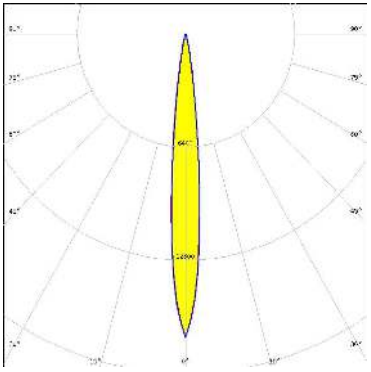
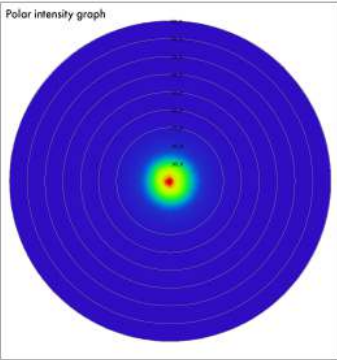
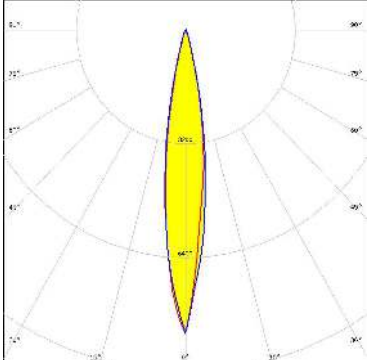
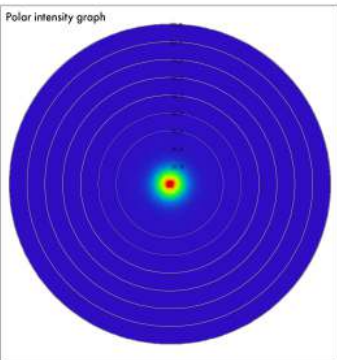
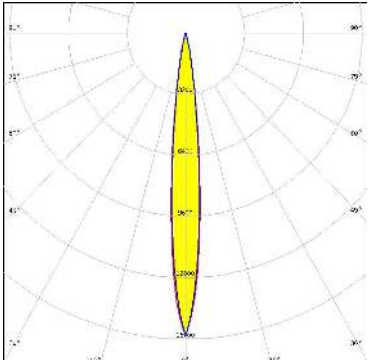
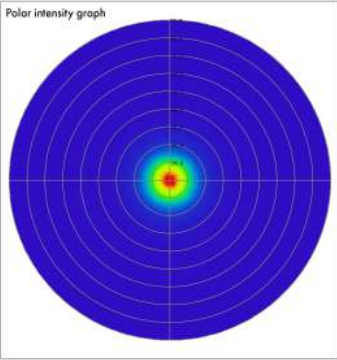
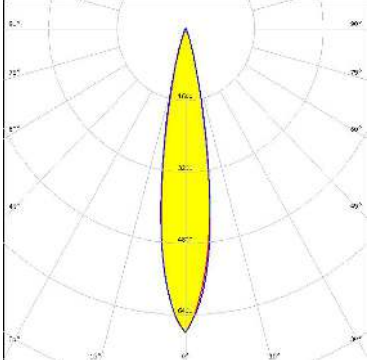
#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMINUS</b></p> <p>LED SST-20            FWHM / FWTM 12.0° / 26.0°            Efficiency 86 %            Peak intensity 11.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NF2W757H            FWHM / FWTM 18.0° / 34.0°            Efficiency 89 %            Peak intensity 6.9 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 86 %            Peak intensity 3.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSW219F            FWHM / FWTM 19.0° / 32.0°            Efficiency 87 %            Peak intensity 6.5 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

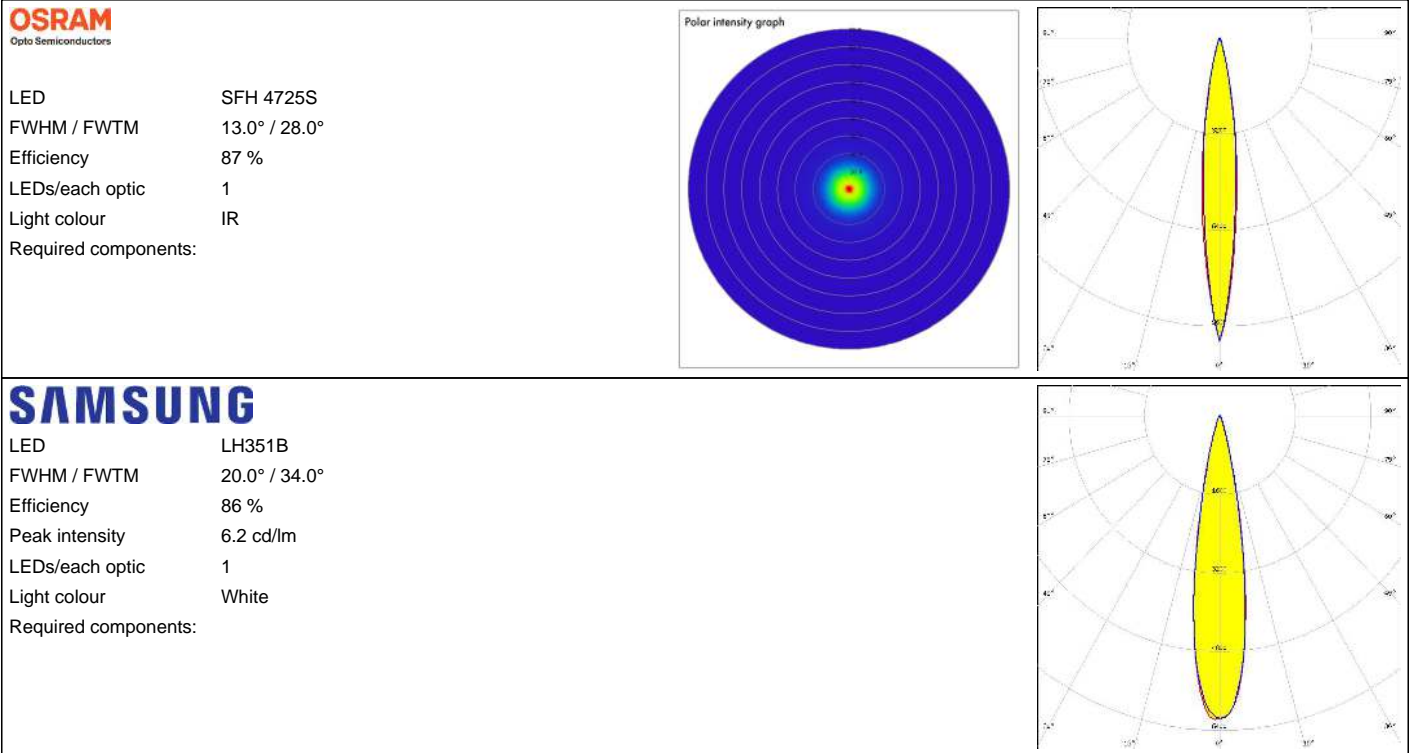
#### OPTICAL RESULTS (SIMULATED):

	<p>LED NVSxE21A            FWHM / FWTM 14.0° / 32.0°            Efficiency 80 %            Peak intensity 7.6 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
	<p>LED Duris S5 (2 chip)            FWHM / FWTM 15.0° / 33.0°            Efficiency 88 %            Peak intensity 7.8 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
	<p>LED OSLON Square CSSRM2/CSSRM3            FWHM / FWTM 12.0° / 23.0°            Efficiency 87 %            Peak intensity 15.3 cd/lm            LEDs/each optic 1            Light colour Far Red            Required components:</p>	
	<p>LED OSLON Square CSSRM2/CSSRM3            FWHM / FWTM 15.0° / 27.0°            Efficiency 88 %            Peak intensity 10 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON SSL 150</p> <p>FWHM / FWTM 11.0° / 22.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 17.2 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 SFH 4715AS</p> <p>FWHM / FWTM 16.0° / 30.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 8.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4716S</p> <p>FWHM / FWTM 11.0° / 22.0°</p> <p>Efficiency 86 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4725AS</p> <p>FWHM / FWTM 18.0° / 32.0°</p> <p>Efficiency 87 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	

### OPTICAL RESULTS (SIMULATED):



### 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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