

## TINA2-RS

~14° spot beam optimized for Nichia NS6x83.  
Assembly with holder and installation tape.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.1 mm
Height	11 mm
Fastening	tape
ROHS compliant	yes ⓘ

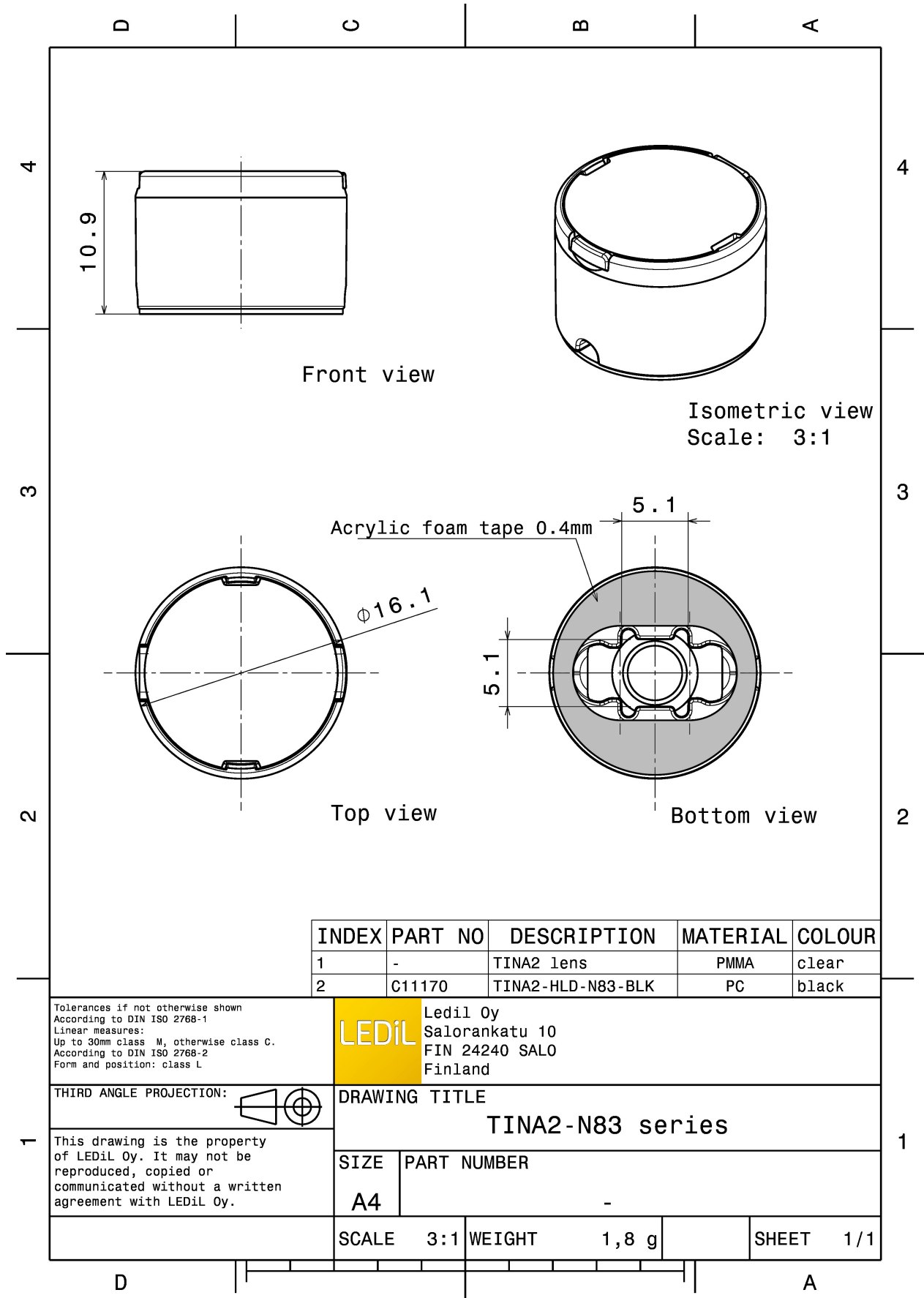


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
TINA2-RS	Single lens	PMMA	clear	
TINA2-HLD-N83-BLK	Holder	PC	black	
TINA-TAPE3	Tape	Acrylic foam	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA11171_TINA2-RS	Single lens	4140	230	230	8.4
» Box size: 451 x 241 x 298 mm					



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2 lens	PMMA	clear
2	C11170	TINA2-HLD-N83-BLK	PC	black

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L

**LEDiL** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**TINA2-N83 series**

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SIZE	PART NUMBER
A4	-

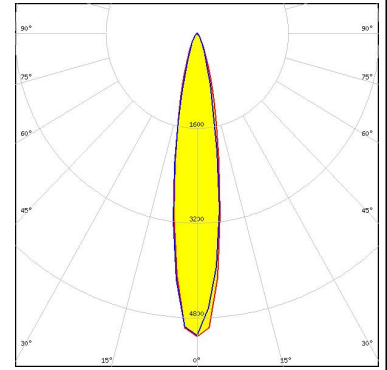
SCALE	3:1	WEIGHT	1,8 g	SHEET	1/1
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See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

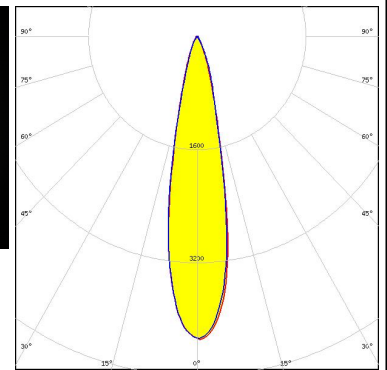
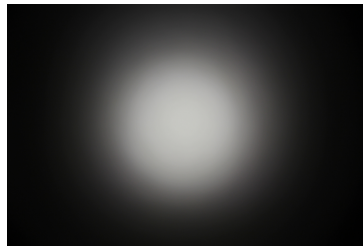
### PHOTOMETRIC DATA (MEASURED):



LED MX-6  
 FWHM / FWTM 18.0° / 40.0°  
 Efficiency 89 %  
 Peak intensity 5.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



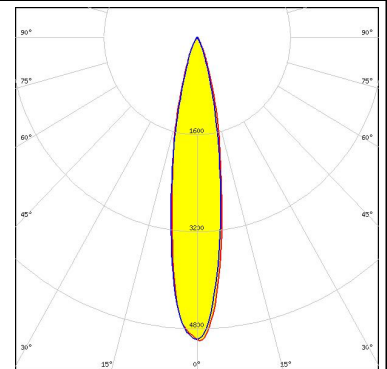
LED LUXEON V  
 FWHM / FWTM 21.0° / 41.0°  
 Efficiency 82 %  
 Peak intensity 4.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NS3x83  
 FWHM / FWTM 15.0°  
 Efficiency 93 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:



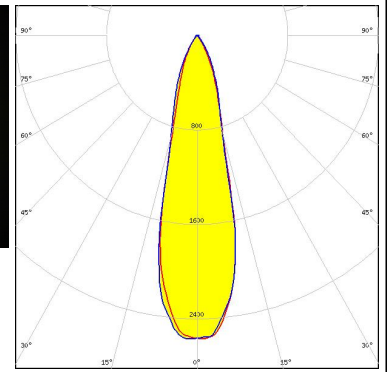
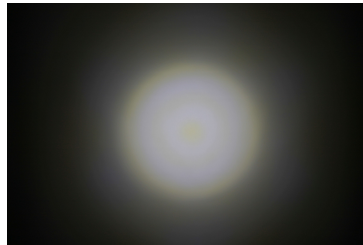
LED NS6x83  
 FWHM / FWTM 19.0° / 42.0°  
 Efficiency 93 %  
 Peak intensity 5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

#### SAMSUNG

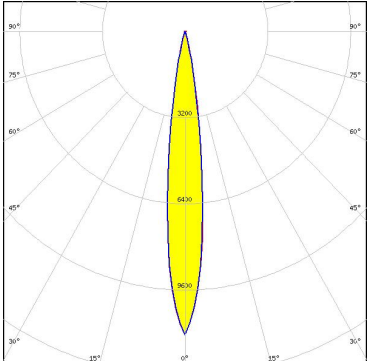
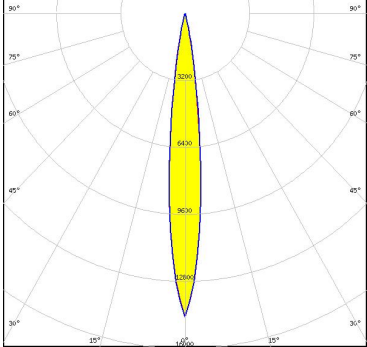
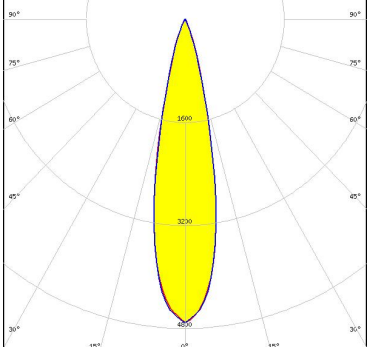
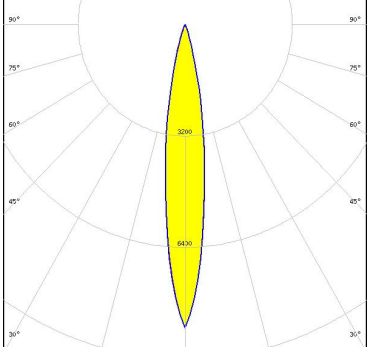
LED LH508A  
FWHM / FWTM 26.0° / 53.0°  
Efficiency 76 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



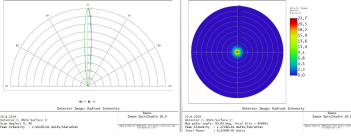
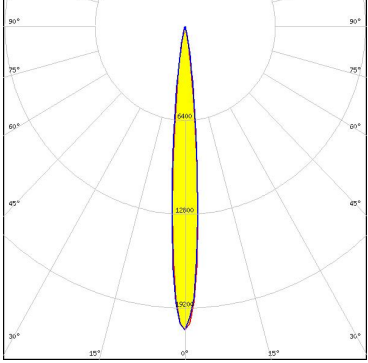
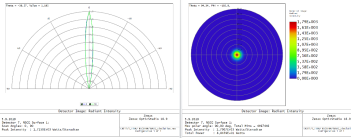
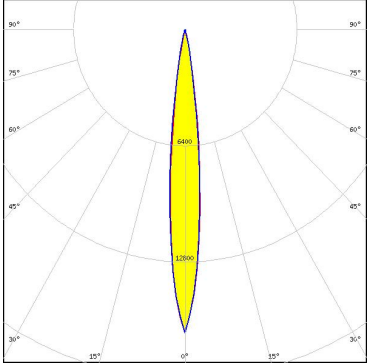
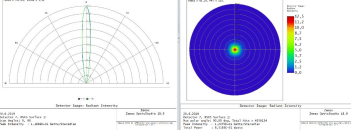
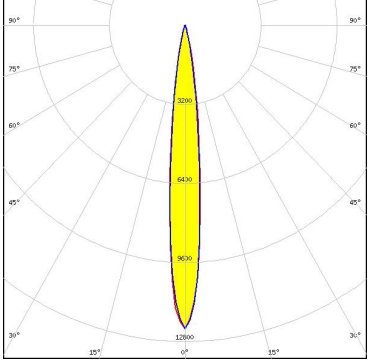
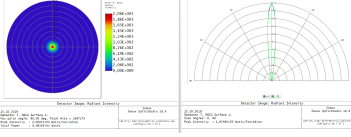
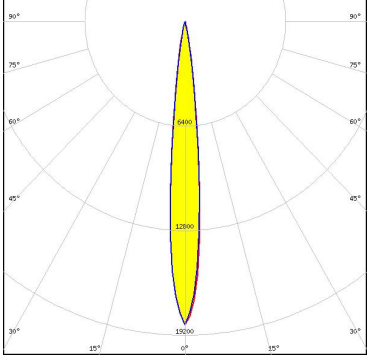
#### PHOTOMETRIC DATA (SIMULATED):

<p><b>CREE LED</b></p> <p>LED: XP-E2            FWHM / FWTM: 12.0° / 22.0°            Efficiency: 91 %            Peak intensity: 18.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE LED</b></p> <p>LED: XP-G2            FWHM / FWTM: 14.0° / 27.0°            Efficiency: 91 %            Peak intensity: 12.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE LED</b></p> <p>LED: XP-G3            FWHM / FWTM: 16.0° / 34.0°            Efficiency: 87 %            Peak intensity: 7.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE LED</b></p> <p>LED: XP-L HI            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 92 %            Peak intensity: 10.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

### PHOTOMETRIC DATA (SIMULATED):

<p><b>CREE</b> LED</p> <p>LED: XT-E            FWHM / FWTM: 14.0° / 26.0°            Efficiency: 85 %            Peak intensity: 11.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMINUS</b></p> <p>LED: SST-20            FWHM / FWTM: 12.0° / 24.0°            Efficiency: 88 %            Peak intensity: 14.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: 22.0° / 40.0°            Efficiency: 89 %            Peak intensity: 4.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSW219F            FWHM / FWTM: 16.0° / 32.0°            Efficiency: 91 %            Peak intensity: 8.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

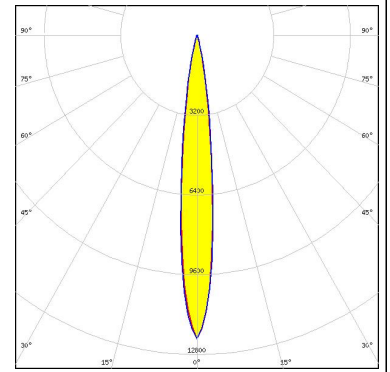
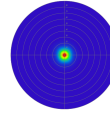
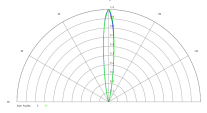
### PHOTOMETRIC DATA (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4715AS FWHM / FWTM 10.0° / 20.0° Efficiency 89 % LEDs/each optic 1 Light colour IR Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4716AS FWHM / FWTM 12.0° / 22.0° Efficiency 88 % LEDs/each optic 1 Light colour IR Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4717AS FWHM / FWTM 12.0° / 25.0° Efficiency 85 % LEDs/each optic 1 Light colour IR Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED SFH 4725S FWHM / FWTM 12.0° / 20.0° Efficiency 89 % LEDs/each optic 1 Light colour IR Required components:</p>		

### PHOTOMETRIC DATA (SIMULATED):

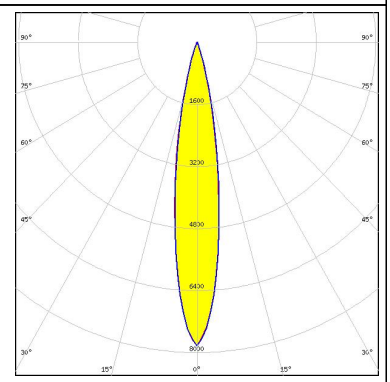
#### OSRAM Opto Semiconductors

LED SFH 4727AS  
FWHM / FWTM 13.0° / 25.0°  
Efficiency 85 %  
LEDs/each optic 1  
Light colour IR  
Required components:



#### SAMSUNG

LED LH351C  
FWHM / FWTM 18.0° / 33.0°  
Efficiency 92 %  
Peak intensity 7.8 cd/lm  
LEDs/each optic 1  
Light colour White  
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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