

## TINA2-WW

~60° wide beam optimized for Nichia NS6x83.  
Assembly with holder and installation tape.

### SPECIFICATION:

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

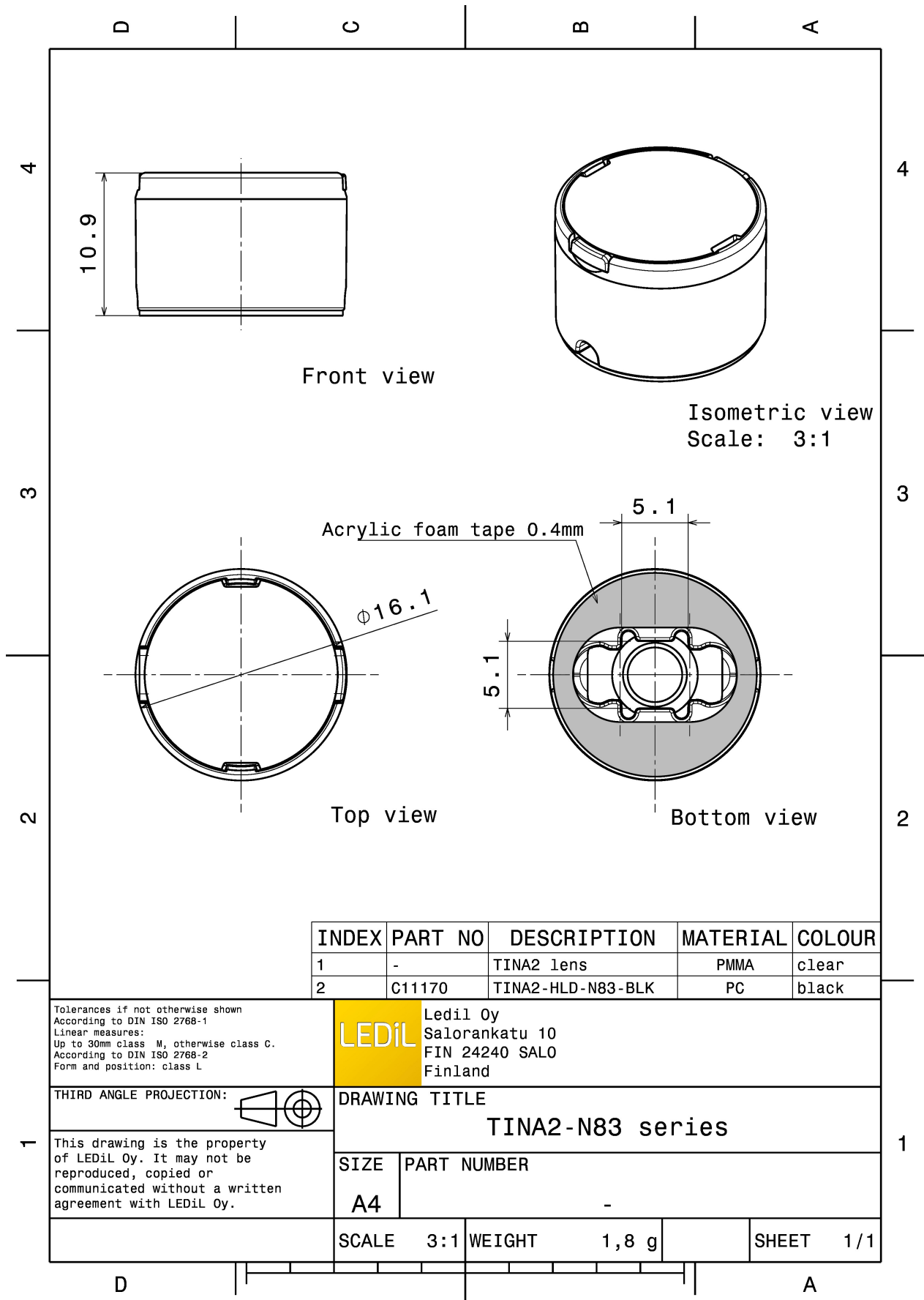


### MATERIALS:

Component	Type	Material	Colour	Finish
TINA2-WW-6N83	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)
CA11176_TINA2-WW	Single lens	4140		230	0.0
» Box size: 451 x 241 x 298 mm					

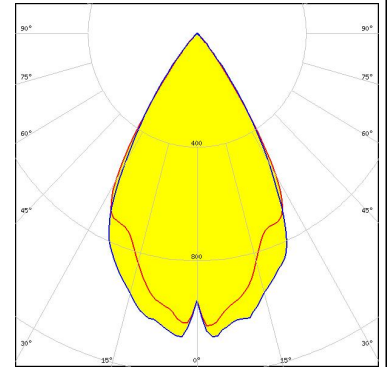


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

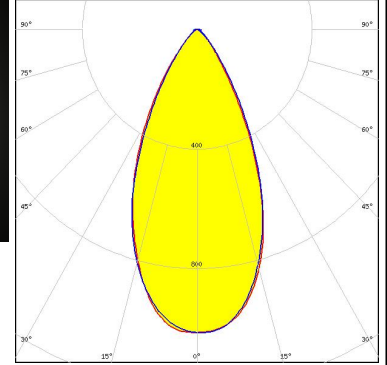
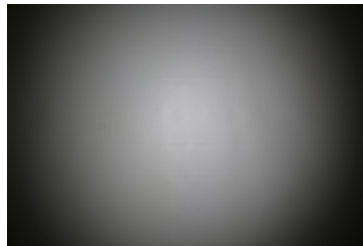
#### OPTICAL RESULTS (MEASURED):



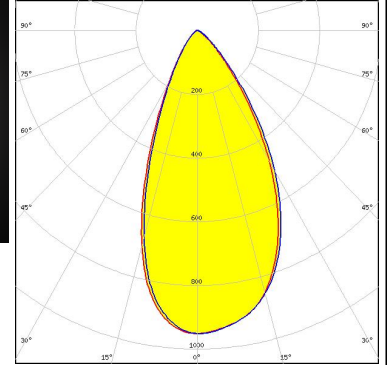
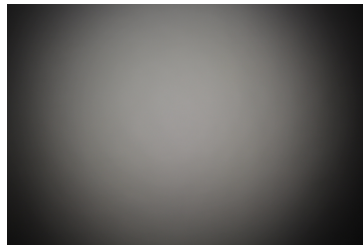
LED MX-6  
 FWHM / FWTM 56.0° / 86.0°  
 Efficiency %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 5050 Round LES  
 FWHM / FWTM 49.0° / 81.0°  
 Efficiency 76 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON V  
 FWHM / FWTM 51.0° / 82.0°  
 Efficiency 76 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NS3x83  
 FWHM / FWTM 60.0° / 90.0°  
 Efficiency 87 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

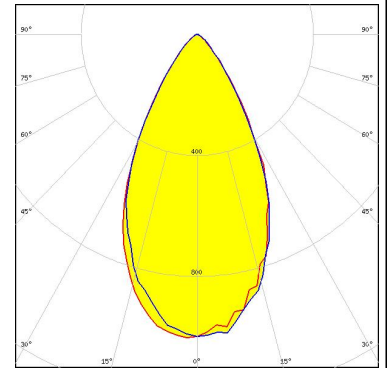
### OPTICAL RESULTS (MEASURED):



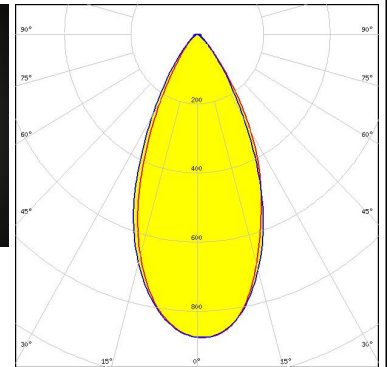
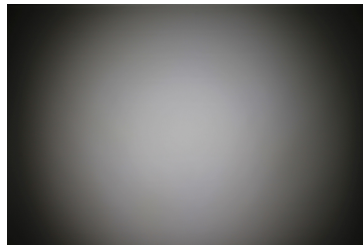
LED NS6x83  
FWHM / FWTM 60.0° / 90.0°  
Efficiency 87 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



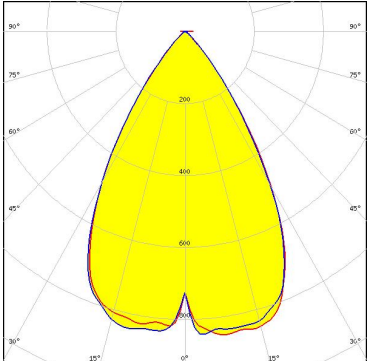
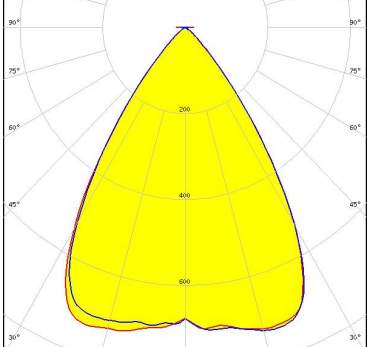
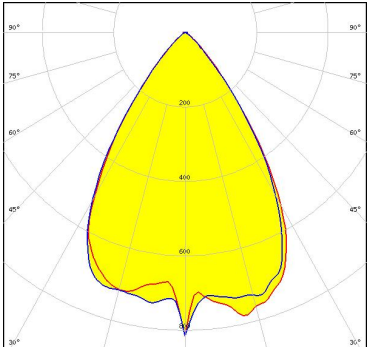
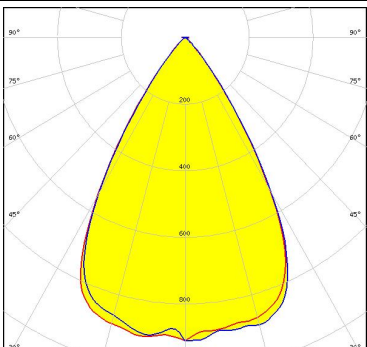
LED OLP-x5050F6L  
FWHM / FWTM 55.0° / 86.0°  
Efficiency 86 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED LH508A  
FWHM / FWTM 48.0° / 80.0°  
Efficiency 64 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



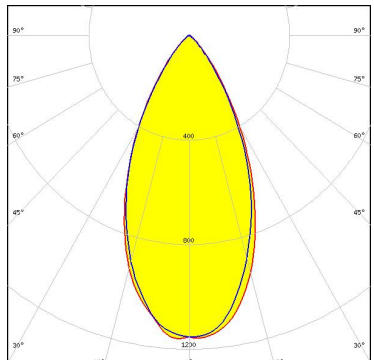
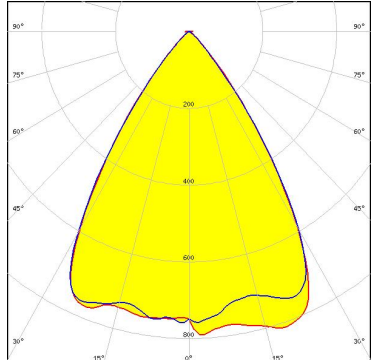
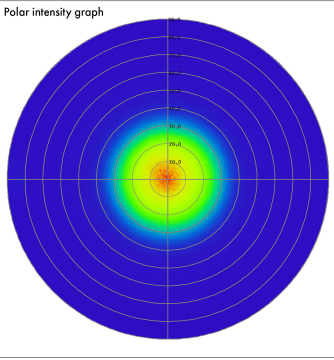
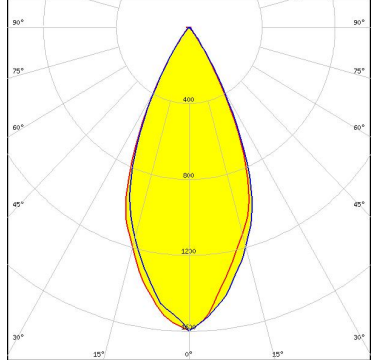
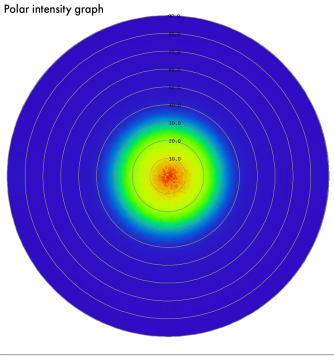
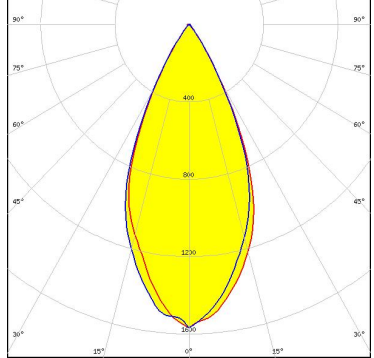
#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> LEDs</p> <p>LED: XHP35 HI            FWHM / FWTM: 63.0° / 86.0°            Efficiency: 87 %            Peak intensity: 0.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> LEDs</p> <p>LED: XP-G3            FWHM / FWTM: 68.0° / 90.0°            Efficiency: 88 %            Peak intensity: 0.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> LEDs</p> <p>LED: XP-L HD            FWHM / FWTM: 67.0° / 91.0°            Efficiency: 89 %            Peak intensity: 0.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> LEDs</p> <p>LED: XP-L HI            FWHM / FWTM: 64.0° / 84.0°            Efficiency: 92 %            Peak intensity: 0.9 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: 58.0° / 78.0°            Efficiency: 83 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON HL2X            FWHM / FWTM: 66.0° / 88.0°            Efficiency: 92 %            Peak intensity: 0.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NCSxE17A            FWHM / FWTM: 42.0° / 70.0°            Efficiency: 85 %            Peak intensity: 1.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NCSxE17A            FWHM / FWTM: 46.0° / 80.0°            Efficiency: 72 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 4            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: Duris S8</p> <p>FWHM / FWTM: 49.0° / 82.0°</p> <p>Efficiency: 86 %</p> <p>Peak intensity: 1.2 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: OSLOM Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM: 70.0° / 88.0°</p> <p>Efficiency: 92 %</p> <p>Peak intensity: 0.8 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: SFH 4715AS</p> <p>FWHM / FWTM: 47.0° / 69.0°</p> <p>Efficiency: 91 %</p> <p>LEDs/each optic: 1</p> <p>Light colour: IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: SFH 4725AS</p> <p>FWHM / FWTM: 47.0° / 69.0°</p> <p>Efficiency: 90 %</p> <p>LEDs/each optic: 1</p> <p>Light colour: IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	



### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

LED LH181B  
FWHM / FWTM 49.1° / 74.2°  
Efficiency 88 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### SAMSUNG

LED LH351B  
FWHM / FWTM 70.0° / 92.0°  
Efficiency 90 %  
Peak intensity 0.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

