

## TINA2-W

~45° wide beam optimized for Nichia NCSxx19.  
Assembly with holder, installation tape and location pins.

### SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	9.3 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

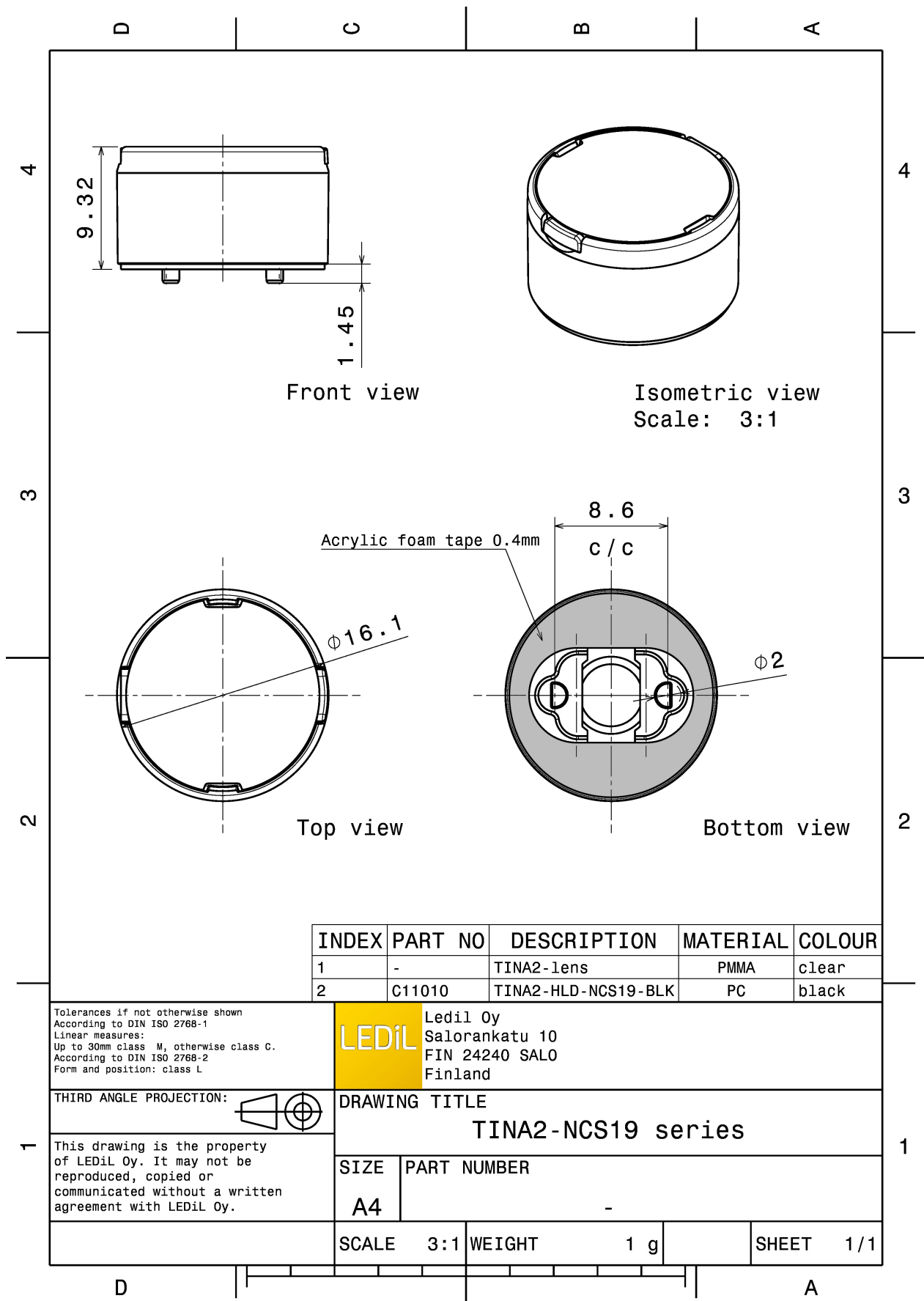


### MATERIALS:

Component	Type	Material	Colour	Finish
TINA2-W-XP	Single lens	PMMA	clear	
TINA2-HLD-NCS19-BLK	Holder	PC	black	
TINA-TAPE3	Tape	Acrylic foam	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA11022_TINA2-W	Single lens	4140		230	8.3
» Box size: 451 x 241 x 298 mm					

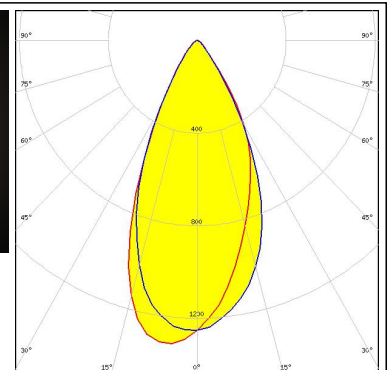
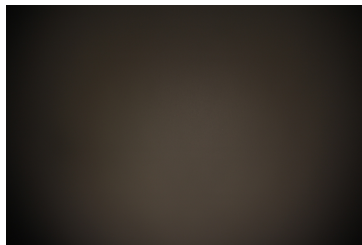


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

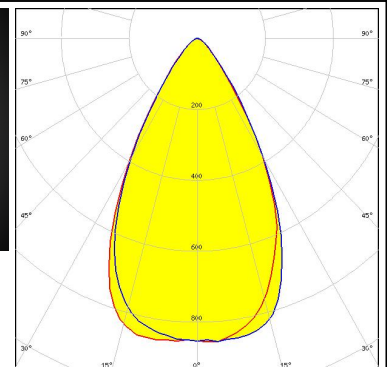
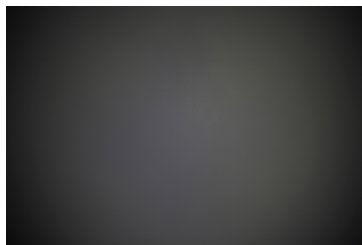
#### OPTICAL RESULTS (MEASURED):



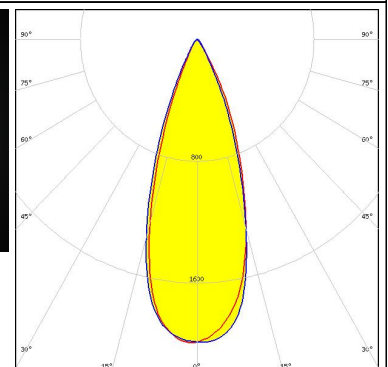
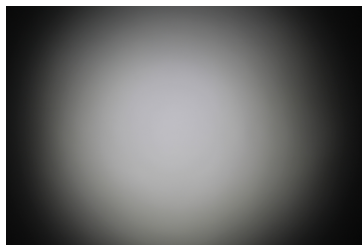
LED NCSxx19A  
FWHM / FWTM 46.0° / 78.0°  
Efficiency 88 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



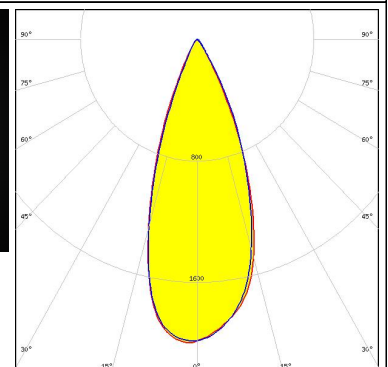
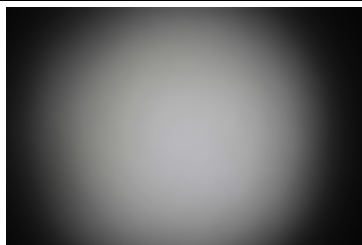
LED NVSxx19A  
FWHM / FWTM 58.0° / 88.0°  
Efficiency 82 %  
Peak intensity 0.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED LH181A  
FWHM / FWTM 36.0° / 58.0°  
Efficiency 84 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



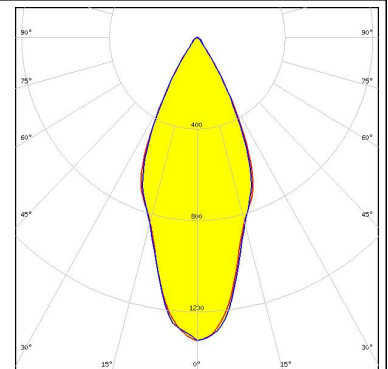
LED LH181B  
FWHM / FWTM 38.0° / 59.0°  
Efficiency 89 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



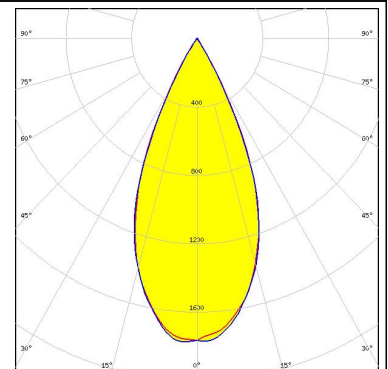
### OPTICAL RESULTS (SIMULATED):



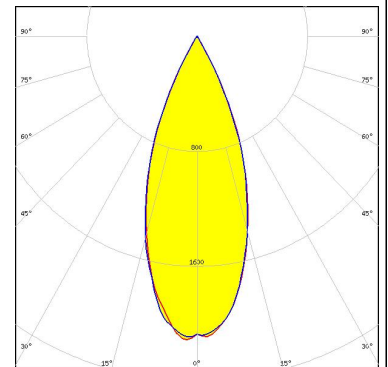
LED NCSxE17A  
FWHM / FWTM 45.0° / 70.0°  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 4  
Light colour White  
Required components:



LED NVSxE21A  
FWHM / FWTM 45.5° / 63.0°  
Efficiency 92 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED NVSxE21A  
FWHM / FWTM 40.0° / 60.0°  
Efficiency 90 %  
Peak intensity 2.1 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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