

## TINA2-W

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

### TECHNICAL SPECIFICATIONS:

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

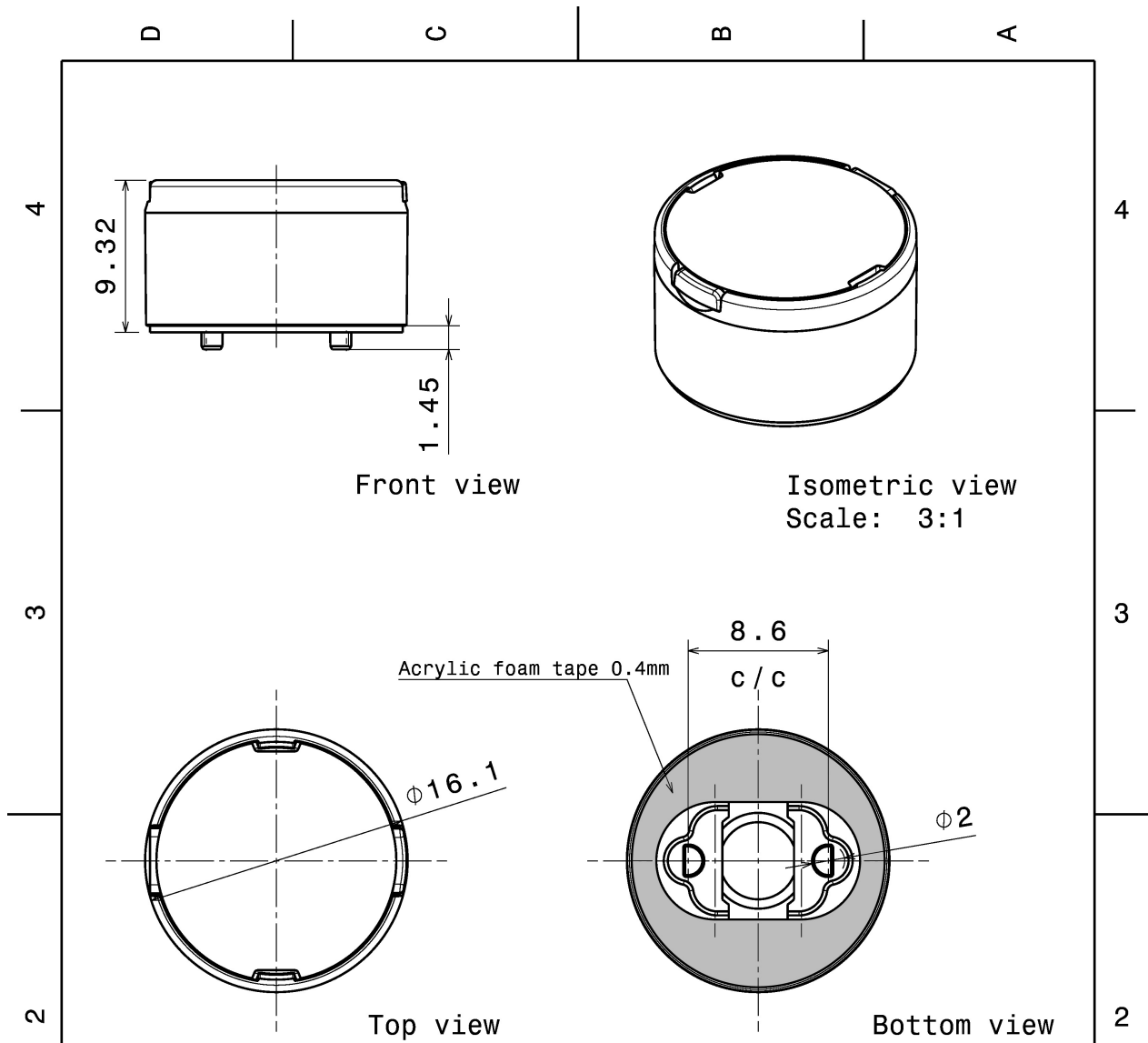


### MATERIAL SPECIFICATIONS:

| 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 |             |            |     |     |                 |



| INDEX | PART NO | DESCRIPTION         | MATERIAL | COLOUR |
|-------|---------|---------------------|----------|--------|
| 1     | -       | TINA2-lens          | PMMA     | clear  |
| 2     | C11010  | TINA2-HLD-NCS19-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

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THIRD ANGLE PROJECTION:

DRAWING TITLE  
**TINA2-NCS19 series**

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| SIZE | PART NUMBER |
|------|-------------|
| A4   | -           |

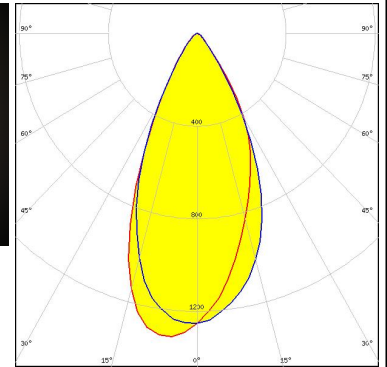
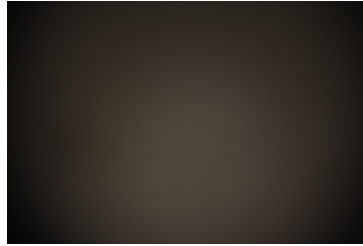
| SCALE | 3:1 | WEIGHT | 1 g | SHEET | 1/1 |
|-------|-----|--------|-----|-------|-----|
|-------|-----|--------|-----|-------|-----|

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

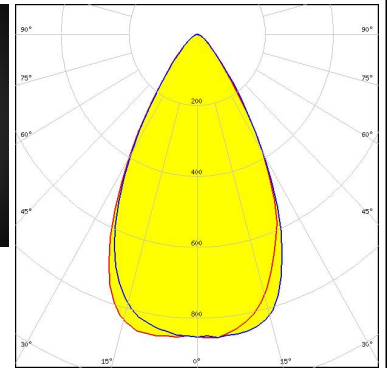
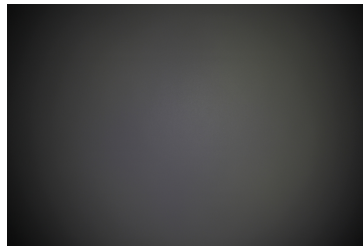
#### PHOTOMETRIC DATA (MEASURED):



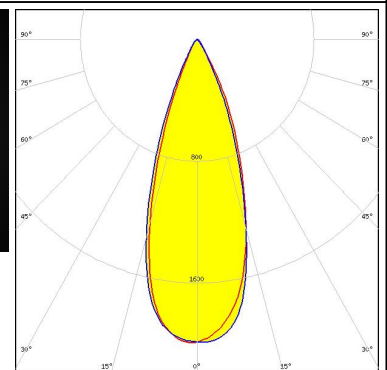
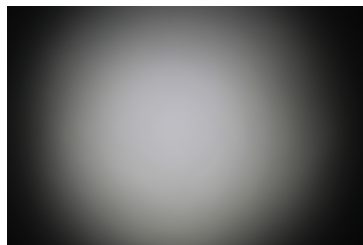
LED NCSxx19A  
 FWHM / FWTM 46.0° / 78.0°  
 Efficiency 88 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



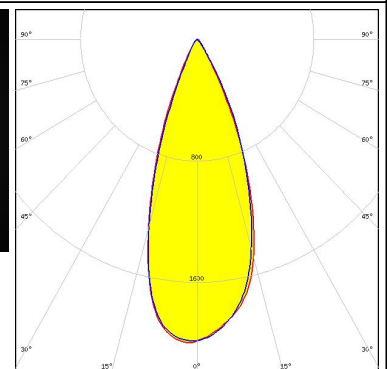
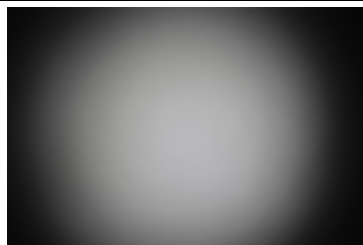
LED NVSxx19A  
 FWHM / FWTM 58.0° / 88.0°  
 Efficiency 82 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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



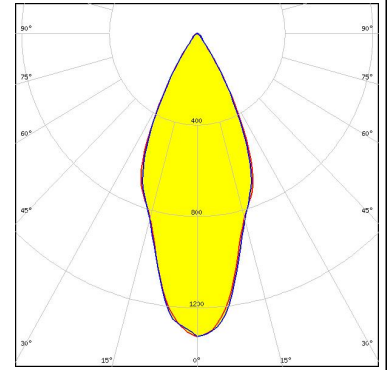
LED LH181B  
 FWHM / FWTM 38.0° / 59.0°  
 Efficiency 89 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



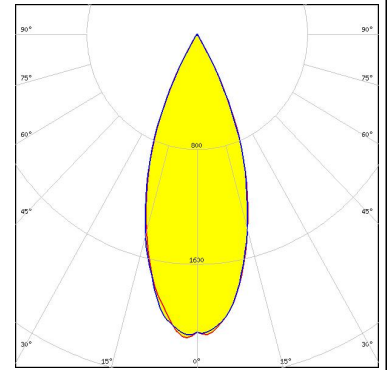
### PHOTOMETRIC DATA (SIMULATED):



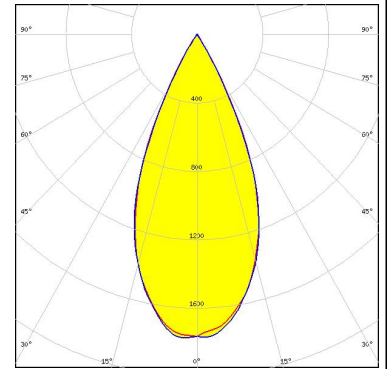
**LED** NCSxE17A  
**FWHM / FWTM** 45.0° / 70.0°  
**Efficiency** 86 %  
**Peak intensity** 1.3 cd/lm  
**LEDs/each optic** 4  
**Light colour** White  
**Required components:**



**LED** NVSxE21A  
**FWHM / FWTM** 40.0° / 60.0°  
**Efficiency** 90 %  
**Peak intensity** 2.1 cd/lm  
**LEDs/each optic** 1  
**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:**



### 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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