

## TINA-M

~30° medium beam. Assembly with holder, installation tape and location pins.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.1 mm
Height	9.5 mm
Fastening	pin, tape
ROHS compliant	yes ⓘ

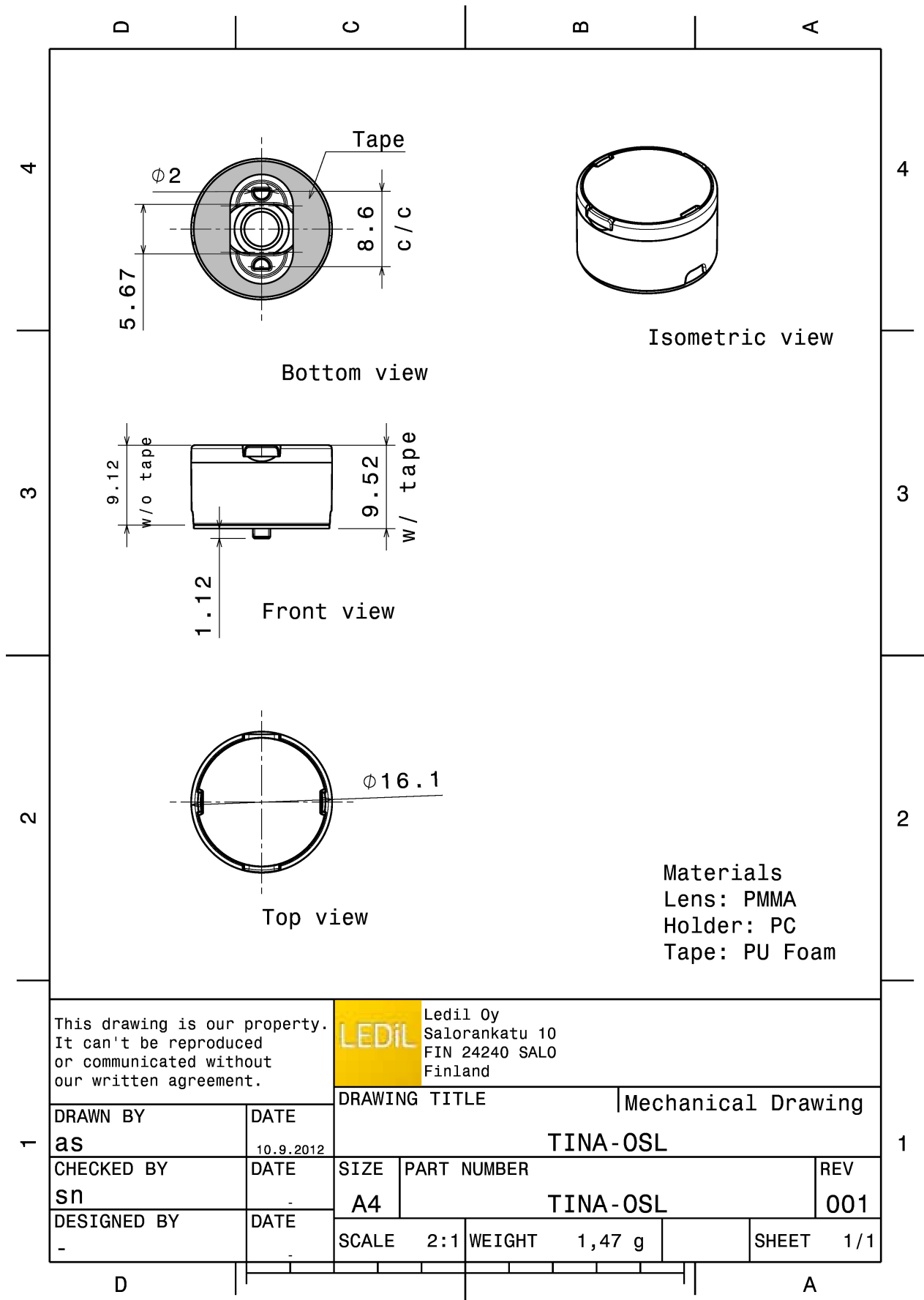


### MATERIAL SPECIFICATIONS:

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

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FA11206_TINA-M	Single lens	2016	288	144	4.1
» Box size:					



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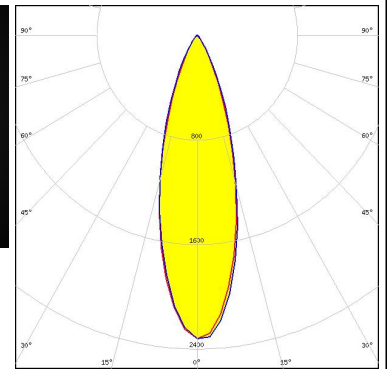
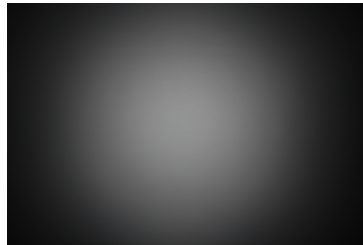
DRAWN BY <b>as</b>		DATE 10.9.2012	DRAWING TITLE <b>TINA-OSL</b>		Mechanical Drawing
CHECKED BY <b>sn</b>	DATE -	SIZE <b>A4</b>	PART NUMBER <b>TINA-OSL</b>	REV <b>001</b>	
DESIGNED BY -	DATE -	SCALE <b>2:1</b>	WEIGHT <b>1,47 g</b>	SHEET <b>1/1</b>	

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

#### PHOTOMETRIC DATA (MEASURED):

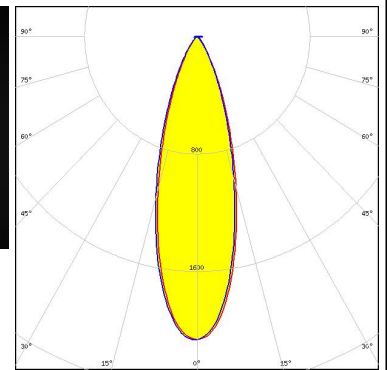
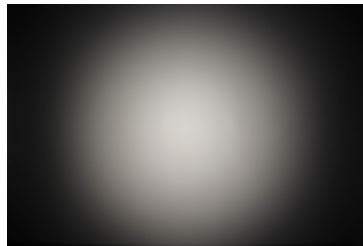
**CREE** 

LED XB-H  
 FWHM / FWTM 31.0° / 58.0°  
 Efficiency 80 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



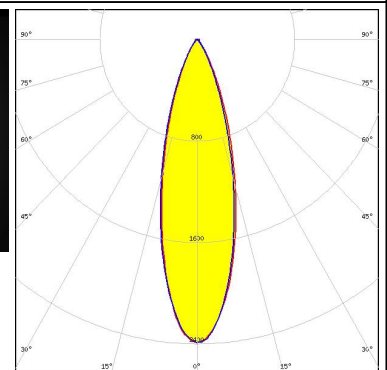
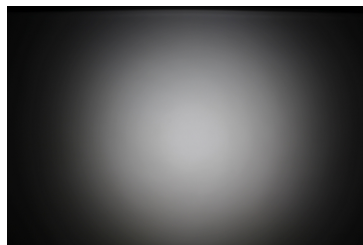
**NICHIA** 

LED NVSW3x9A  
 FWHM / FWTM 31.0° / 60.0°  
 Efficiency 78 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**OSRAM**  
Opto Semiconductors

LED Duris S5 (2 chip)  
 FWHM / FWTM 29.0° / 58.0°  
 Efficiency 82 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**OSRAM**  
Opto Semiconductors

LED OSLOM SSL 150  
 FWHM / FWTM 30.0° / 54.0°  
 Efficiency 85 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

## PHOTOMETRIC DATA (MEASURED):

### OSRAM

Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 24.0° / 56.0°  
Efficiency 83 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

### OSRAM

Opto Semiconductors

LED SFH 4715S  
FWHM / FWTM 28.0° / 56.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:

### OSRAM

Opto Semiconductors

LED SFH 4725S  
FWHM / FWTM 27.0° / 58.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:

### SAMSUNG

LED LH351A  
FWHM / FWTM 32.0° / 60.0°  
Efficiency 91 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

### PHOTOMETRIC DATA (MEASURED):



### PHOTOMETRIC DATA (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON SunPlus 20 Line (150 deg)</p> <p>FWHM / FWTM 30.0° / 53.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NCSxE17A</p> <p>FWHM / FWTM 33.0° / 65.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 4</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C</p> <p>FWHM / FWTM 30.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 2.7 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 SYNIOS S2222 (KW DDLM31)</p> <p>FWHM / FWTM 28.0° / 50.0 + 52.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 3.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

### 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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