

## TINA-M

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



### SPECIFICATION:

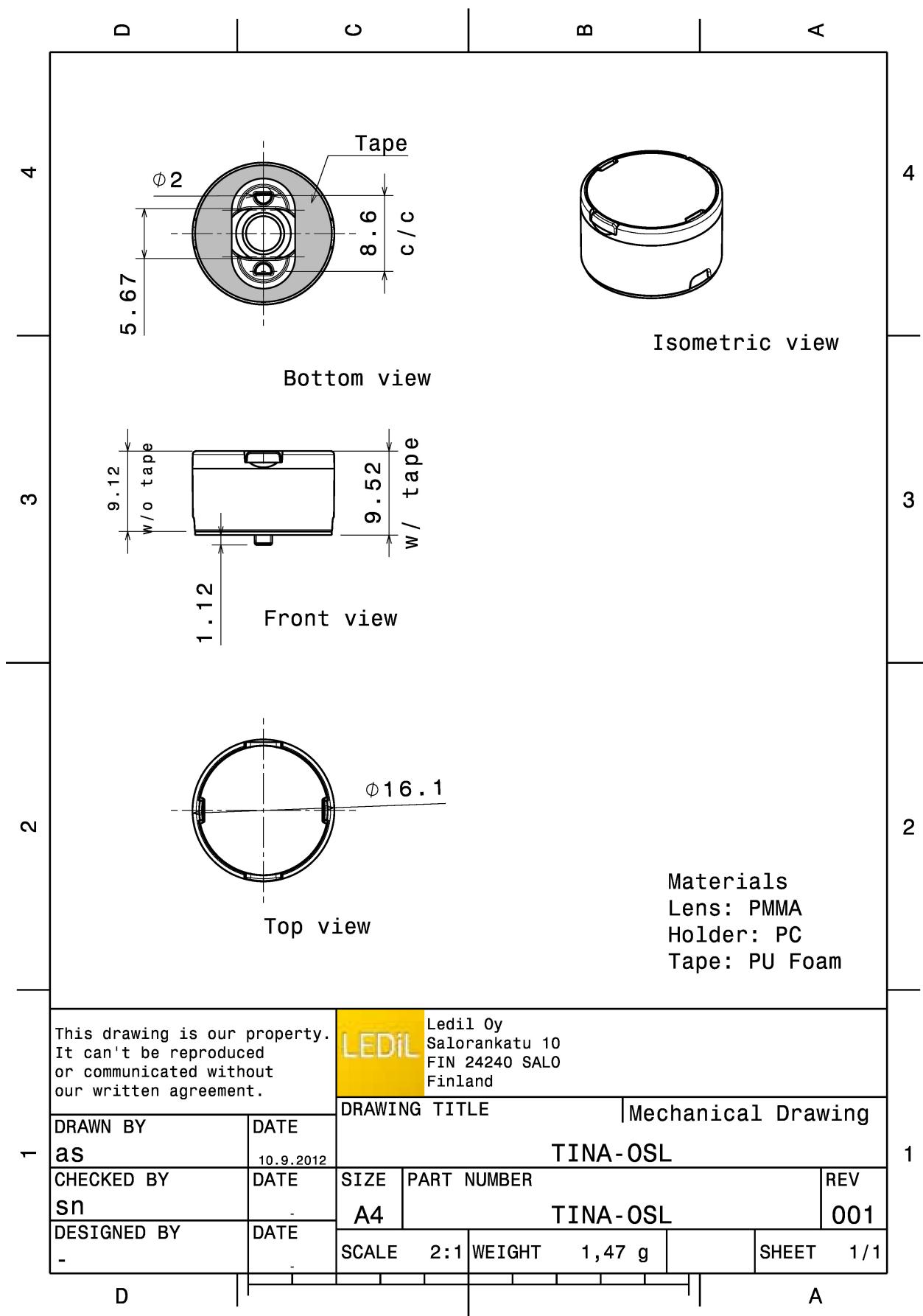
Dimensions	Ø 16.1
Height	9.5 mm
Fastening	pin, tape
ROHS compliant	yes 

### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA-M	Single lens	PMMA	clear		
TINA-HLD-PIN-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acryl tape	black		

### ORDERING INFORMATION:

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

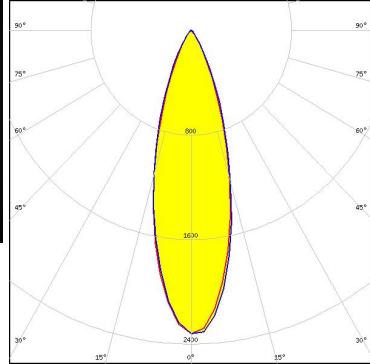
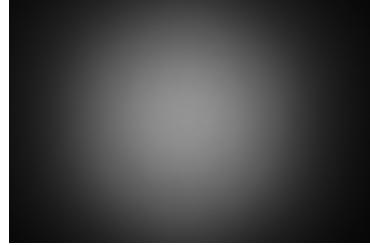


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

## OPTICAL RESULTS (MEASURED):

**CREE**  LEDs

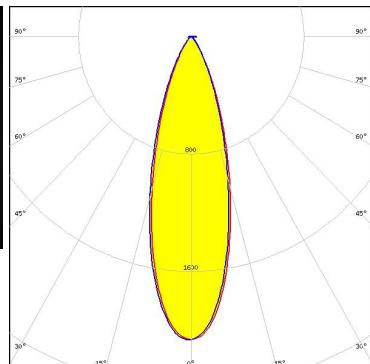
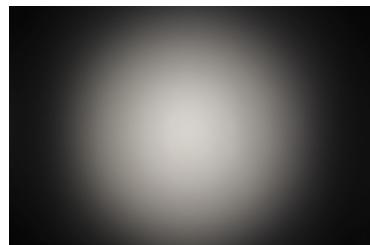
LED XB-H  
FWHM / FWTM 31.0° / 58.0°  
Efficiency 80 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**NICHIA**

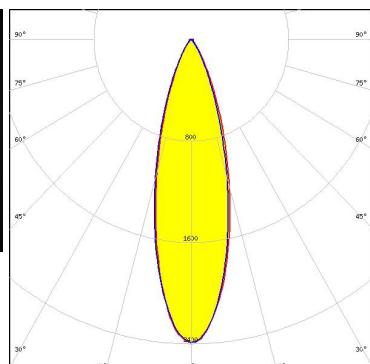
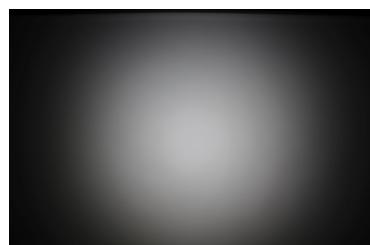
LED NVSW3x9A  
FWHM / FWTM 31.0° / 60.0°  
Efficiency 78 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**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/type White  
Required components:



Light distribution files

## OPTICAL RESULTS (MEASURED):

### OSRAM

Opto Semiconductors

LED OSLON SSL 150

FWHM / FWTM 30.0° / 54.0°

Efficiency 85 %

Peak intensity 2 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:

Light distribution files

### 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/type White

Required components:

Light distribution files

### OSRAM

Opto Semiconductors

LED SFH 4715S

FWHM / FWTM 28.0° / 56.0°

Efficiency %

LEDs/each optic 1

Light colour/type White

Required components:

Light distribution files

## OPTICAL RESULTS (MEASURED):

### OSRAM

Opto Semiconductors

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

Light distribution files

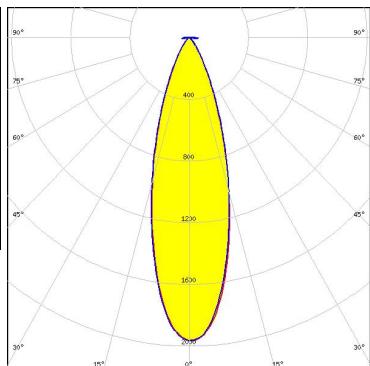
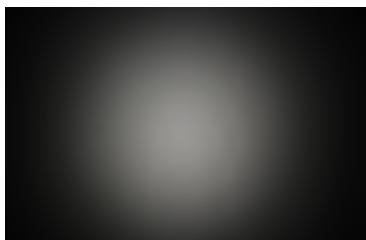
### SAMSUNG

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

Light distribution files

### SEOUL SEMICONDUCTOR

LED Z8Y22P  
FWHM / FWTM 30.0° / 60.0°  
Efficiency 75 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

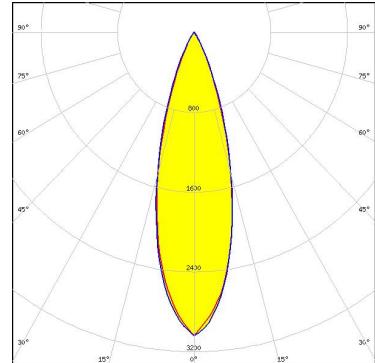


Light distribution files

## OPTICAL RESULTS (SIMULATED):



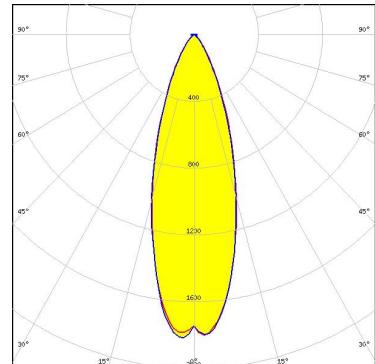
LED LUXEON SunPlus 20 Line (150 deg)  
 FWHM / FWTM 30.0° / 53.0°  
 Efficiency 89 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



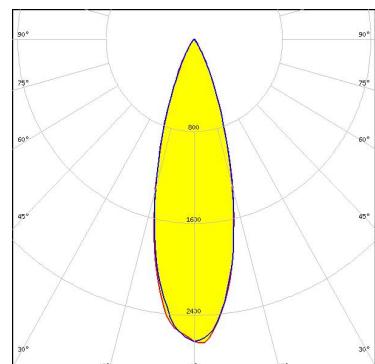
LED NCSxE17A  
 FWHM / FWTM 33.0° / 65.0°  
 Efficiency 79 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 4  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 30.0°  
 Efficiency 86 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

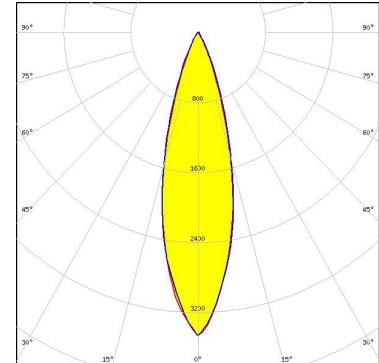


Light distribution files

## OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED SYNIOS S2222  
FWHM / FWTM 28.0° / 50.0 + 52.0°  
Efficiency 97 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

## 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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