

## TINA2-RS

~14° spot beam. Assembly with holder, installation tape and location pins.

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.0 mm
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

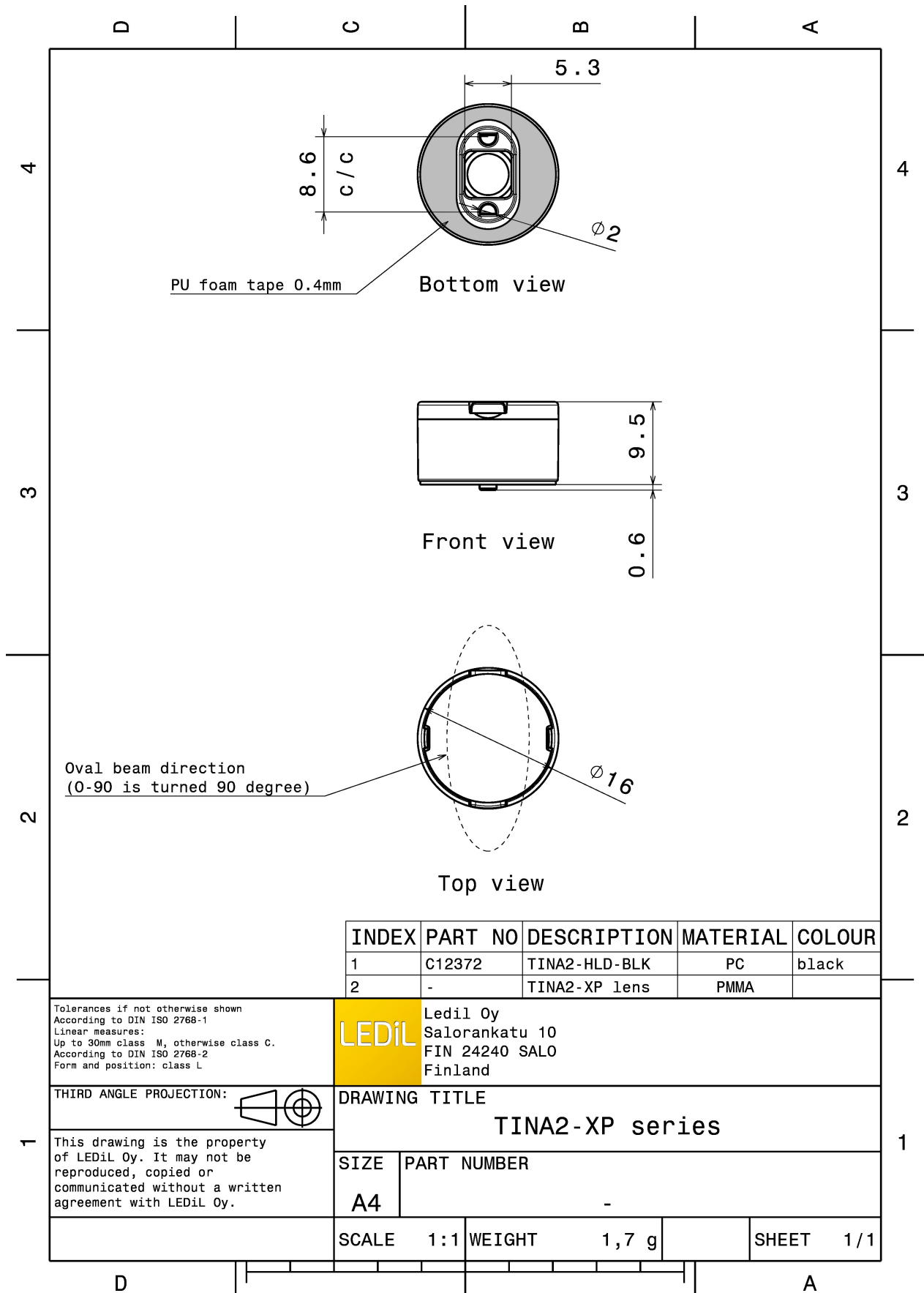
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
TINA2-RS	Single lens	PMMA	clear	
TINA2-HLD-BLK	Holder	PC	black	
TINA-TAPE3	Tape	PU tape	black	



### ORDERING INFORMATION:

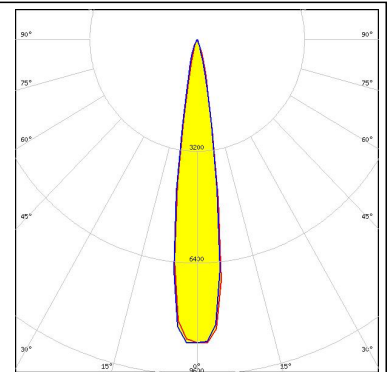
Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12374_TINA2-RS	Single lens	4140	230	230	8.3
» Box size: 451 x 241 x 298 mm					



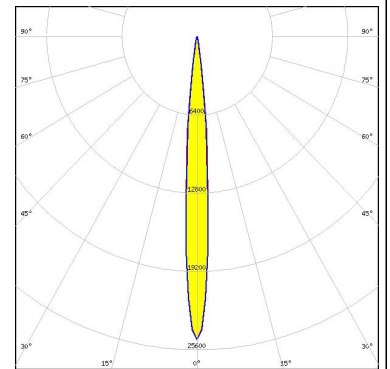
#### PHOTOMETRIC DATA (MEASURED):



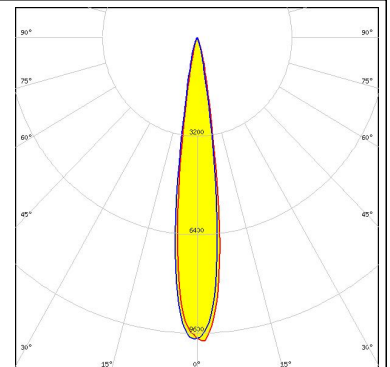
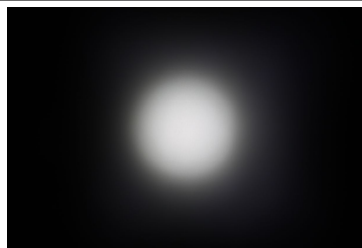
LED XB-H  
 FWHM 17.0°  
 Efficiency 86 %  
 Peak intensity 8.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



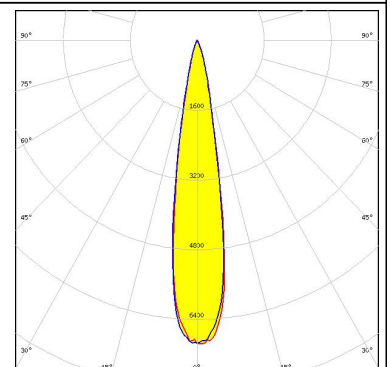
LED XQ-E HI  
 FWHM 9.0°  
 Efficiency 81 %  
 Peak intensity 25 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON TX  
 FWHM 15.0°  
 Efficiency 89 %  
 Peak intensity 9.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



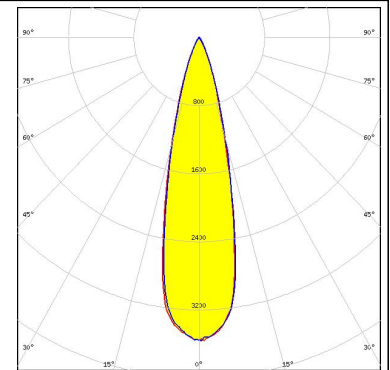
LED NVSxx19B/NVSxx19C  
 FWHM 18.0°  
 Efficiency 88 %  
 Peak intensity 7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):



LED NWSx229A  
FWHM 25.0°  
Efficiency 86 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



Osram Opto Semiconductors

LED OSOLON Square EC  
FWHM 13.0°  
Efficiency 88 %  
Peak intensity 9.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



Osram Opto Semiconductors

LED OSOLON Square PC  
FWHM 12.0°  
Efficiency 88 %  
Peak intensity 9.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



Osram Opto Semiconductors

LED OSOLON SSL 150  
FWHM 11.0°  
Efficiency 90 %  
Peak intensity 19.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

## PHOTOMETRIC DATA (MEASURED):

### OSRAM

Opto Semiconductors

LED OSLON SSL 80  
FWHM 10.0°  
Efficiency 88 %  
Peak intensity 16 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

### OSRAM

Opto Semiconductors

LED SFH 4180S  
FWHM 6.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:

### OSRAM

Opto Semiconductors

LED SFH 4715S  
FWHM 14.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:

### OSRAM

Opto Semiconductors

LED SFH 4716S  
FWHM 11.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:

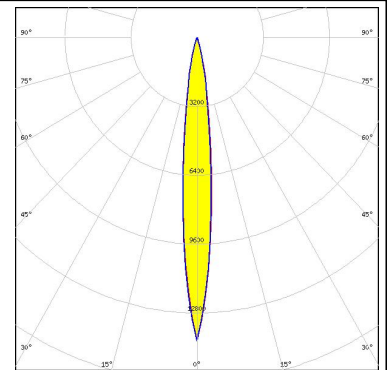
### PHOTOMETRIC DATA (MEASURED):



#### PHOTOMETRIC DATA (SIMULATED):

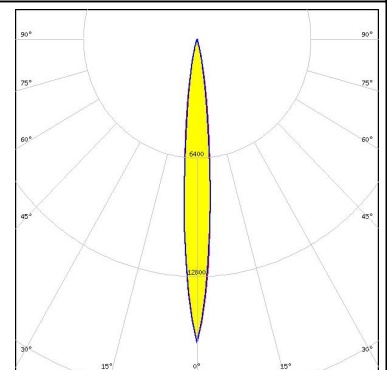
##### LUMILEDS

LED LUXEON C  
 FWHM 11.0°  
 Efficiency 92 %  
 Peak intensity 14 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



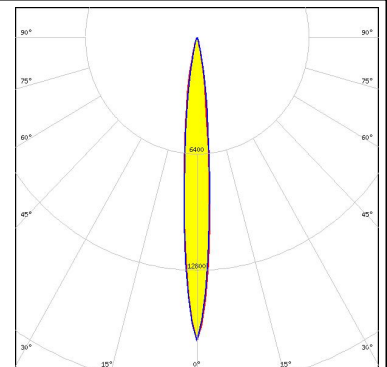
##### LUMILEDS

LED LUXEON IR Compact  
 FWHM 10.0°  
 Efficiency 87 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:



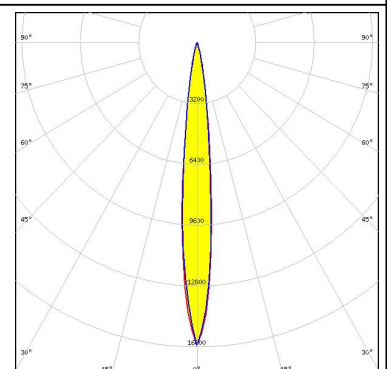
##### NICHIA

LED NFSx757G  
 FWHM 10.0°  
 Efficiency 93 %  
 Peak intensity 16.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM Opto Semiconductors

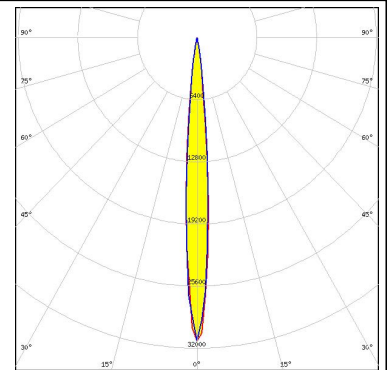
LED OSCONIQ P 3030  
 FWHM 12.0°  
 Efficiency 91 %  
 Peak intensity 16 cd/lm  
 LEDs/each optic 1  
 Light colour Blue  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

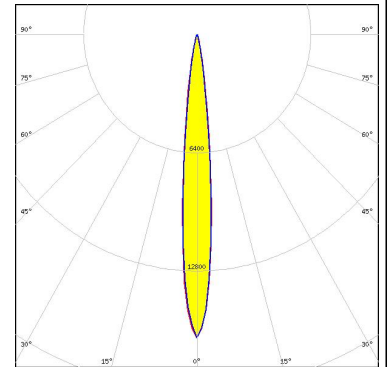
**OSRAM**  
Opto Semiconductors

LED OSLON Black Flat  
 FWHM 8.6°  
 Efficiency 92 %  
 Peak intensity 32.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



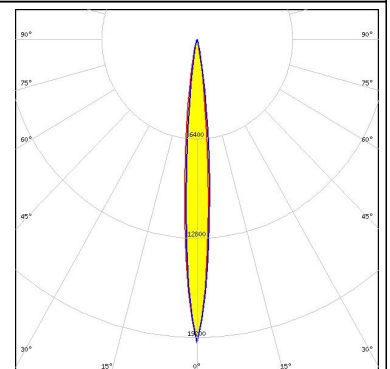
**OSRAM**  
Opto Semiconductors

LED OSLON Square Flat  
 FWHM 11.0°  
 Efficiency 91 %  
 Peak intensity 16.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



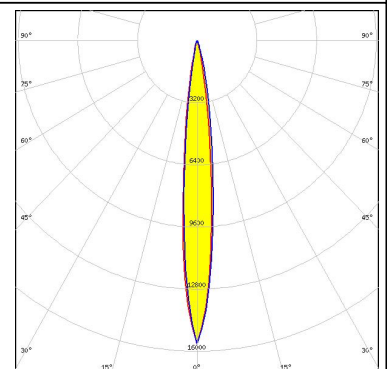
**OSRAM**  
Opto Semiconductors

LED SFH 4170S  
 FWHM 10.0°  
 Efficiency 81 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:



**OSRAM**  
Opto Semiconductors

LED SFH 4770S  
 FWHM 13.0°  
 Efficiency 92 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:

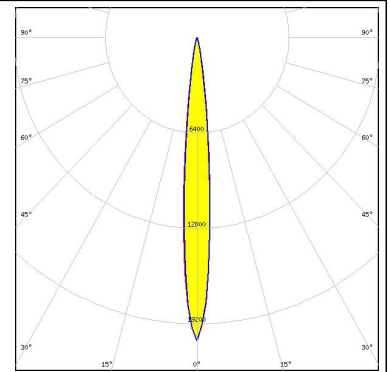




#### PHOTOMETRIC DATA (SIMULATED):

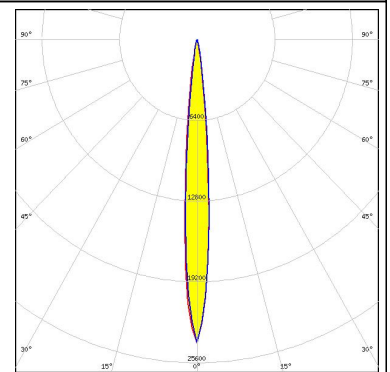
##### OSRAM Opto Semiconductors

LED Synios P2720 1 mm  
 FWHM 10.0°  
 Efficiency 92 %  
 Peak intensity 20.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



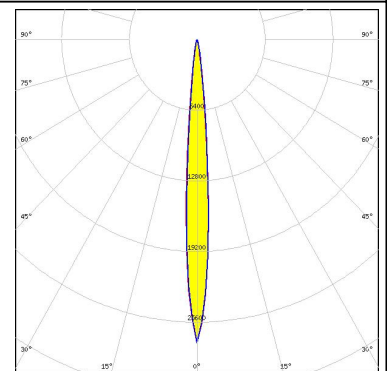
##### OSRAM Opto Semiconductors

LED Synios P2720 1/2 mm  
 FWHM 9.0°  
 Efficiency 92 %  
 Peak intensity 24 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM Opto Semiconductors

LED Synios P2720 1/4 mm  
 FWHM 8.0°  
 Efficiency 92 %  
 Peak intensity 27.5 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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