

TINA2-D

~16° diffused spot beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

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

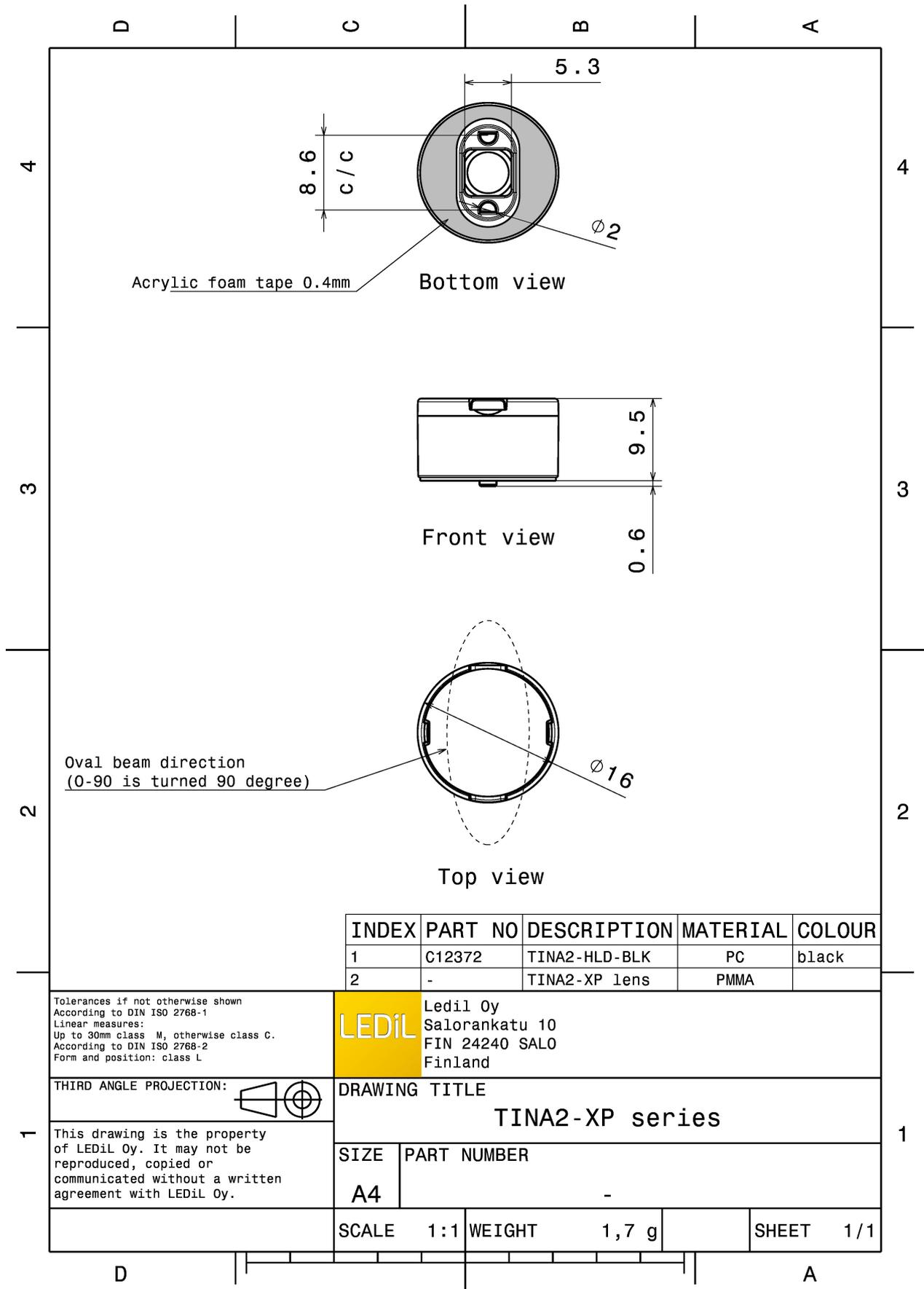


MATERIALS:

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

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12375_TINA2-D	Single lens	4140	230	230	8.1
» Box size: 451 x 241 x 298 mm					

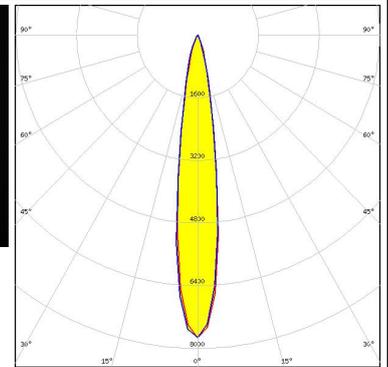


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

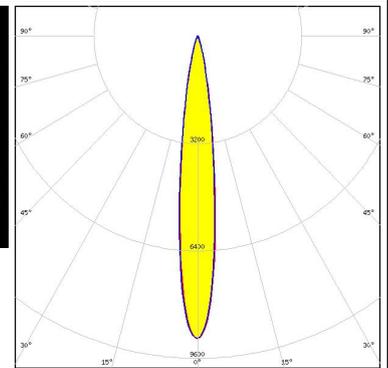
CREE LED

LED XB-H
 FWHM / FWTM 16.0° / 34.0°
 Efficiency 86 %
 Peak intensity 7.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



CREE LED

LED XD16
 FWHM / FWTM 14.0° / 29.0°
 Efficiency 82 %
 Peak intensity 9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



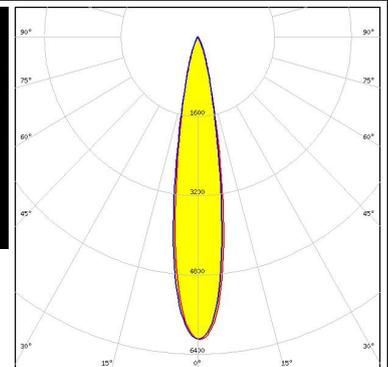
LUMILEDS

LED LUXEON Z ES
 FWHM / FWTM 12.0° / 27.0°
 Efficiency %
 LEDs/each optic 1
 Light colour White
 Required components:



NICHIA

LED NVSxx19B/NVSxx19C
 FWHM / FWTM 18.0° / 36.0°
 Efficiency 87 %
 Peak intensity 6.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

OSRAM

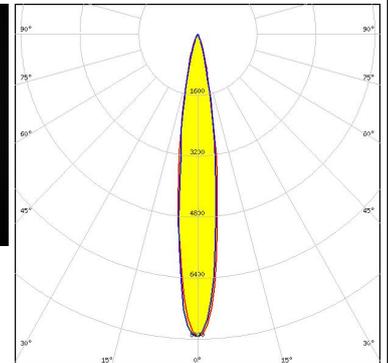
Opto Semiconductors

LED OSLON Square EC
 FWHM / FWTM 16.0° / 34.0°
 Efficiency 87 %
 Peak intensity 6.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

OSRAM

Opto Semiconductors

LED OSLON Square EC
 FWHM / FWTM 16.0° / 33.0°
 Efficiency 82 %
 Peak intensity 7.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

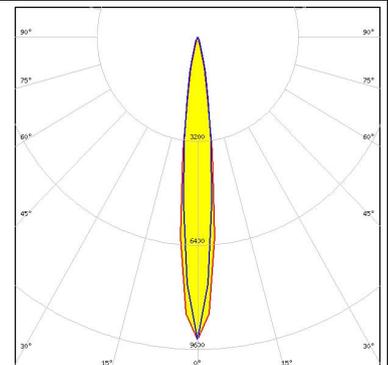
Opto Semiconductors

LED OSLON Square PC
 FWHM / FWTM 13.0° / 32.0°
 Efficiency 87 %
 Peak intensity 6.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

OSRAM

Opto Semiconductors

LED OSLON SSL 150
 FWHM / FWTM 14.0° / 28.0°
 Efficiency 89 %
 Peak intensity 9.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

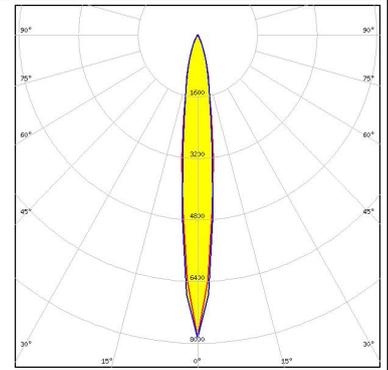


OPTICAL RESULTS (MEASURED):

OSRAM

Opto Semiconductors

LED OSLOM SSL 80
 FWHM / FWTM 12.0° / 35.0°
 Efficiency 87 %
 Peak intensity 7.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

LED SFH 4170S
 FWHM / FWTM 8.0° / 20.0°
 Efficiency %
 LEDs/each optic 1
 Light colour IR
 Required components:

OSRAM

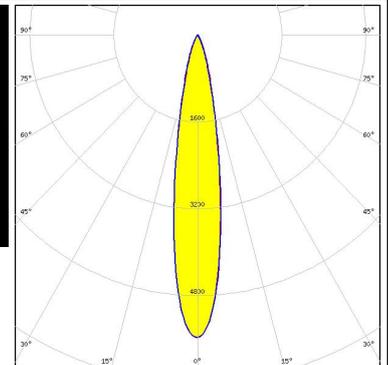
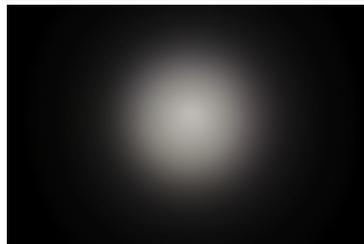
Opto Semiconductors

LED SFH 4180S
 FWHM / FWTM 8.0° / 20.0°
 Efficiency %
 LEDs/each optic 1
 Light colour IR
 Required components:



SEOUL SEMICONDUCTOR

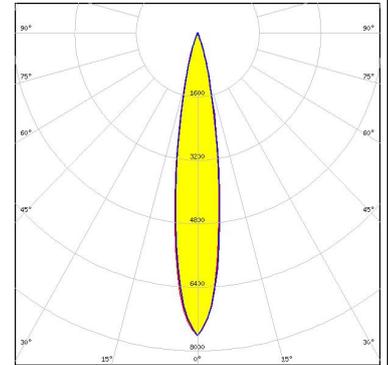
LED Z5M3
 FWHM / FWTM 18.0° / 38.0°
 Efficiency 86 %
 Peak intensity 5.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



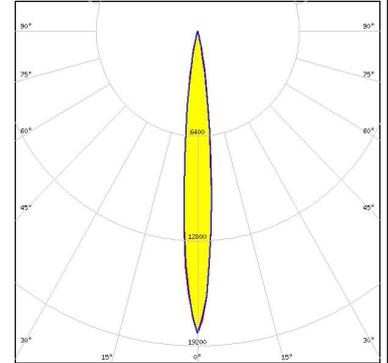
OPTICAL RESULTS (SIMULATED):



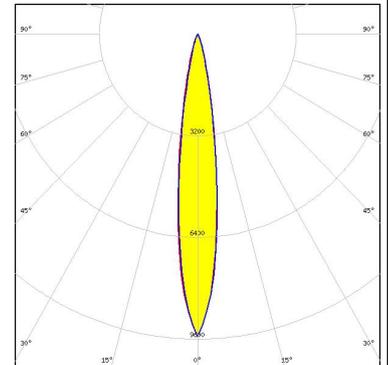
LED XB-D
 FWHM / FWTM 18.0° / 34.0°
 Efficiency 88 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



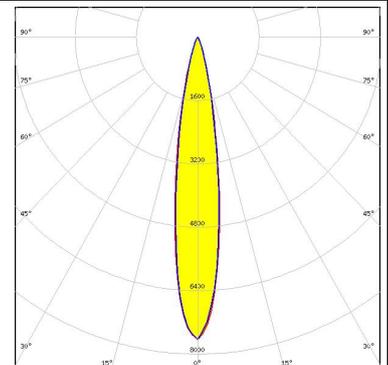
LED XQ-E HI
 FWHM / FWTM 11.0° / 23.0°
 Efficiency 91 %
 Peak intensity 18.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



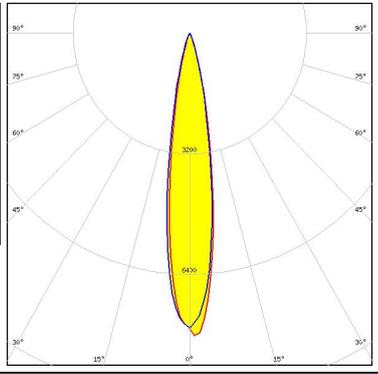
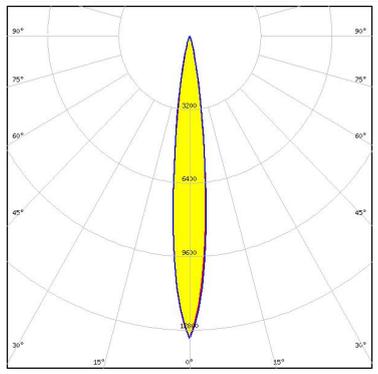
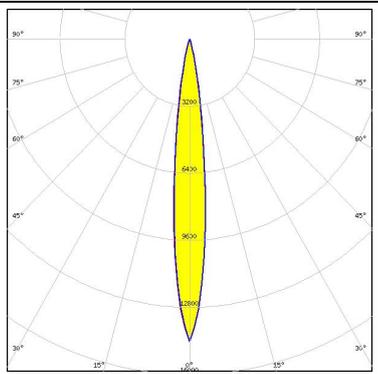
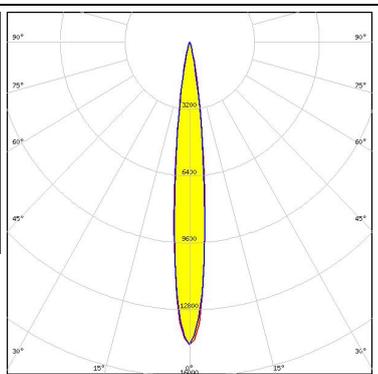
LED LUXEON 2835 Line
 FWHM / FWTM 15.0° / 31.0°
 Efficiency 96 %
 Peak intensity 9.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED Duris E 2835
 FWHM / FWTM 17.0° / 34.0°
 Efficiency 92 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED Duris S5 (2 chip)</p> <p>FWHM / FWTM 17.0° / 33.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 12.0° / 26.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 13.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Blue</p> <p>Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Signal</p> <p>FWHM / FWTM 12.0° / 26.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 14.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Blue</p> <p>Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square Flat</p> <p>FWHM / FWTM 12.0° / 24.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 14.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

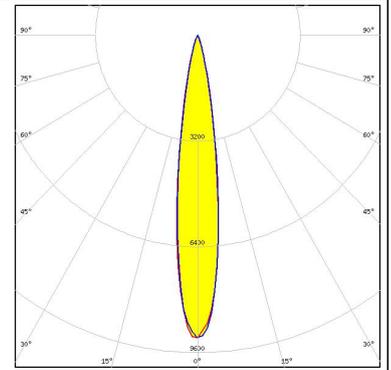
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: OSLO[®] SSL 80</p> <p>FWHM / FWTM: 12.0° / 31.0°</p> <p>Efficiency: 90 %</p> <p>Peak intensity: 9.9 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: Far Red</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSTAR Projection Compact (Kx.CSLNM1.xx)</p> <p>FWHM / FWTM: 12.0° / 24.0°</p> <p>Efficiency: 92 %</p> <p>Peak intensity: 16.9 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: SFH 4715AS</p> <p>FWHM / FWTM: 14.0° / 26.0°</p> <p>Efficiency: 90 %</p> <p>LEDs/each optic: 1</p> <p>Light colour: IR</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: SFH 4770S</p> <p>FWHM / FWTM: 12.0° / 22.0°</p> <p>Efficiency: 92 %</p> <p>LEDs/each optic: 1</p> <p>Light colour: IR</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

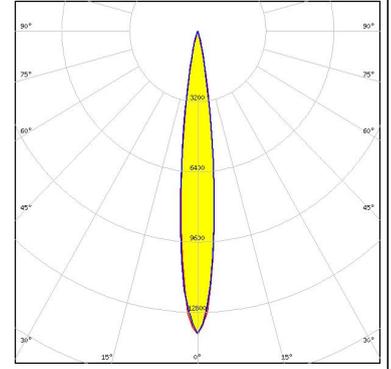
SAMSUNG

LED LH181B
 FWHM / FWTM 16.0° / 30.5°
 Efficiency 92 %
 Peak intensity 9.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SEOUL SEMICONDUCTOR

LED Z8Y15
 FWHM / FWTM 13.0° / 25.0°
 Efficiency 90 %
 Peak intensity 13.8 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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