

## TINA2-M

~30° medium 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 ⓘ

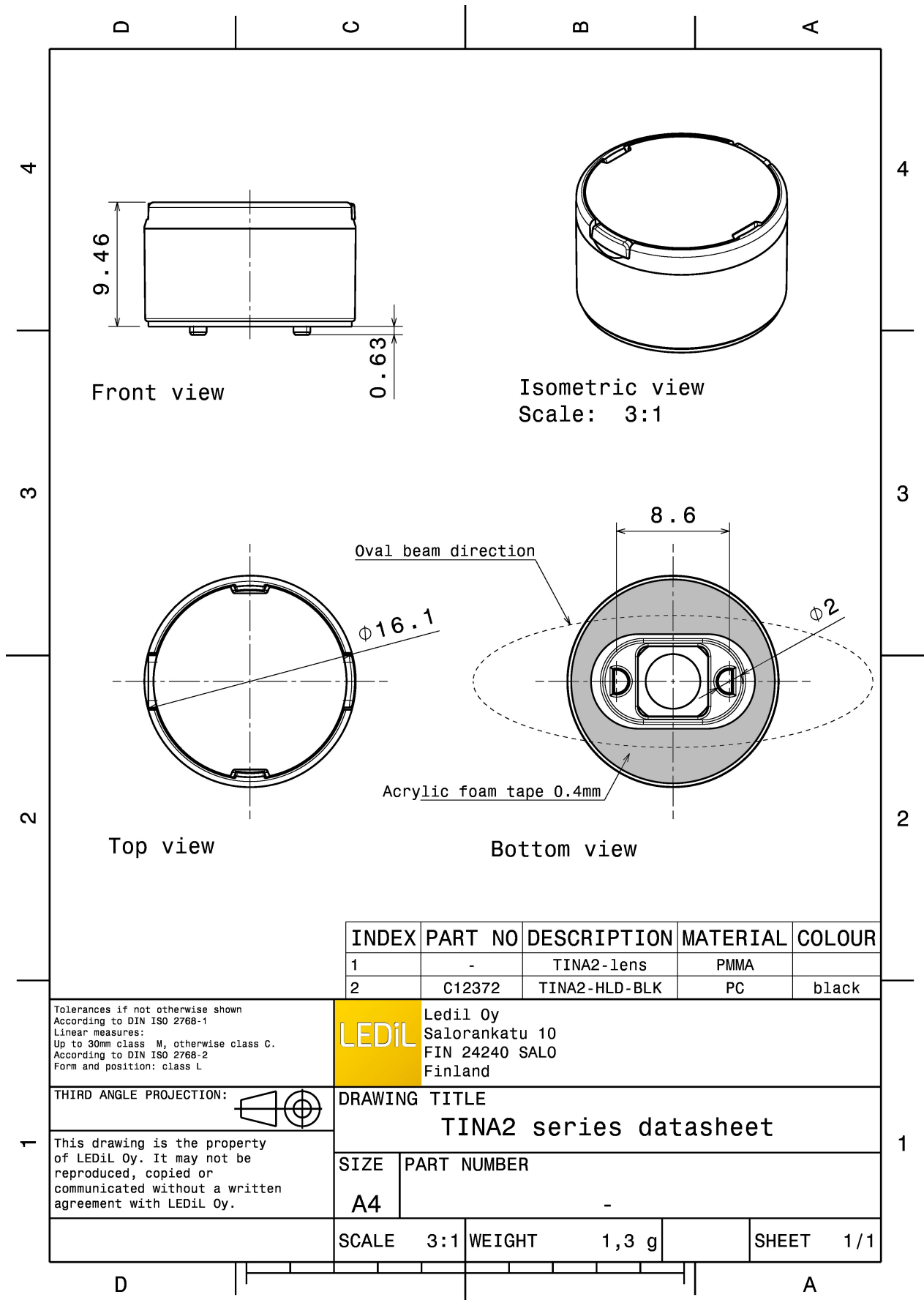


### MATERIALS:

Component	Type	Material	Colour	Finish
TINA2-XP-M	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)
CA12377_TINA2-M	Single lens	4140	230	230	8.3
» Box size: 451 x 241 x 298 mm					

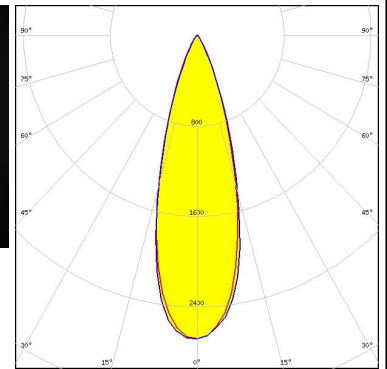
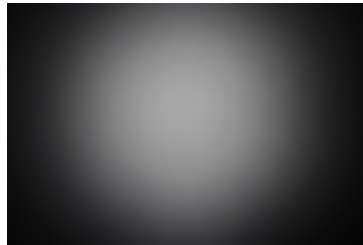


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

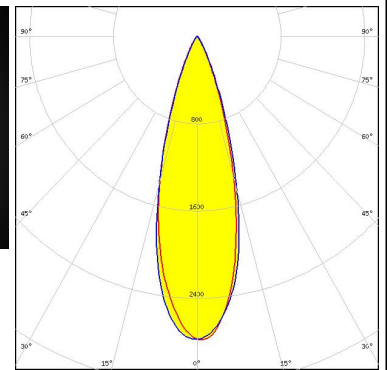
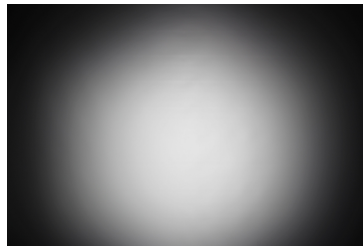
### OPTICAL RESULTS (MEASURED):



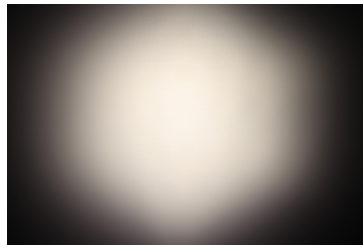
LED XB-H  
 FWHM / FWTM 31.0° / 54.0°  
 Efficiency 85 %  
 Peak intensity 2.7 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



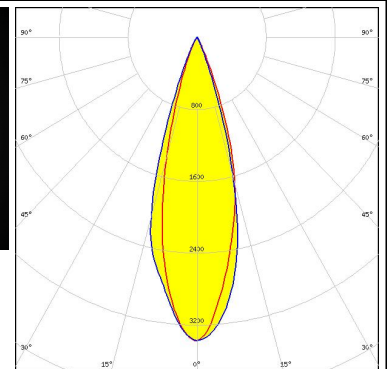
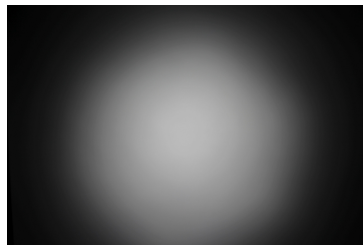
LED XD16  
 FWHM / FWTM 30.0° / 52.0°  
 Efficiency 83 %  
 Peak intensity 2.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XQ-E HD  
 FWHM / FWTM 29.0° / 51.0°  
 Efficiency 84 %  
 Peak intensity 3.2 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



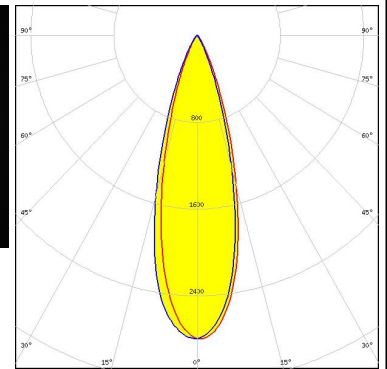
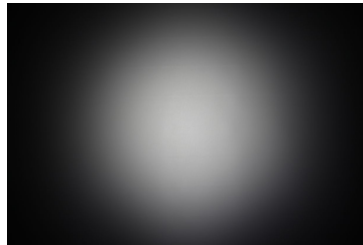
LED LUXEON CZ  
 FWHM / FWTM 28.0° / 47.0°  
 Efficiency 89 %  
 Peak intensity 3.4 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

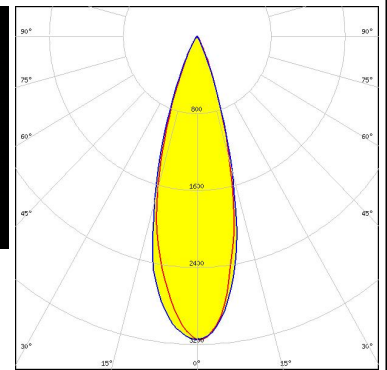
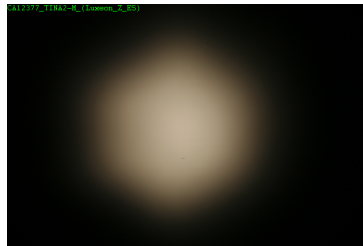
#### LUMILEDS

LED LUXEON TX  
 FWHM / FWTM 30.0° / 53.0°  
 Efficiency 86 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### LUMILEDS

LED LUXEON Z ES  
 FWHM / FWTM 31.0° / 50.0°  
 Efficiency 88 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



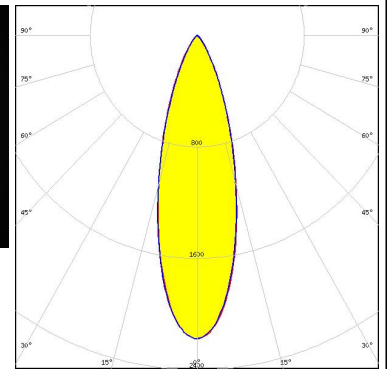
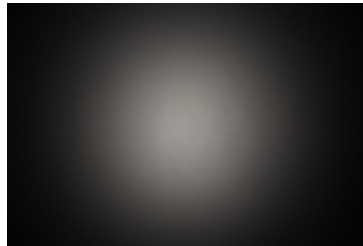
#### NICHIA

LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 29.0° / 55.0°  
 Efficiency 85 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### NICHIA

LED NWSx229A  
 FWHM / FWTM 26.0° / 52.0°  
 Efficiency 86 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



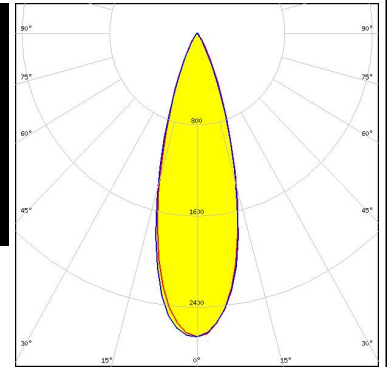


#### OPTICAL RESULTS (MEASURED):

##### OSRAM

Opto Semiconductors

LED OSLON Square EC  
 FWHM / FWTM 30.0° / 54.0°  
 Efficiency 85 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

Opto Semiconductors

LED OSLON Square PC  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 86 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### OSRAM

Opto Semiconductors

LED SFH 4170S  
 FWHM / FWTM 28.0° / 50.0°  
 Efficiency %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:

##### OSRAM

Opto Semiconductors

LED SFH 4180S  
 FWHM / FWTM 29.0° / 49.0°  
 Efficiency %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:

### OPTICAL RESULTS (MEASURED):

#### OSRAM Opto Semiconductors

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

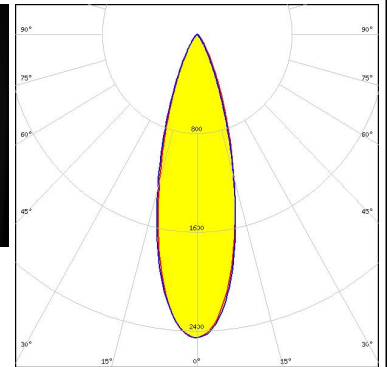
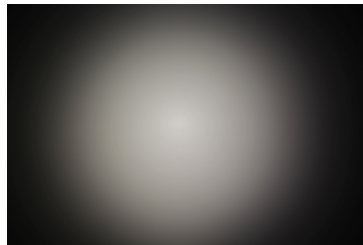
#### OSRAM Opto Semiconductors

LED SFH 4725S  
FWHM / FWTM 27.0° / 54.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:



#### SEOUL SEMICONDUCTOR

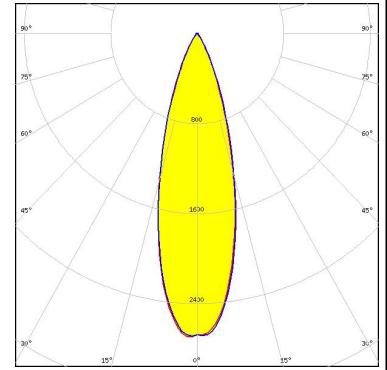
LED Z5M3  
FWHM / FWTM 30.0° / 57.0°  
Efficiency 83 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



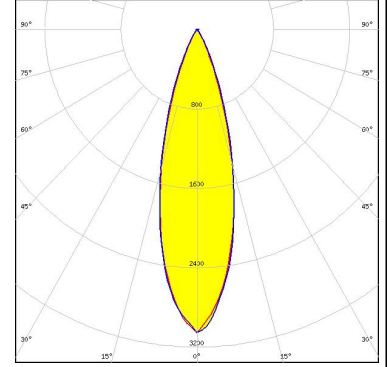
### OPTICAL RESULTS (SIMULATED):



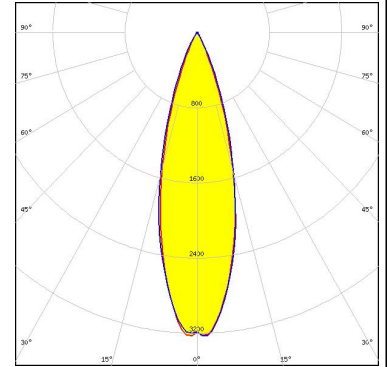
LED XB-D  
 FWHM / FWTM 30.0° / 55.0°  
 Efficiency 86 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



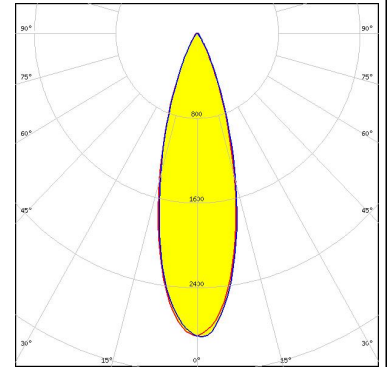
LED XE-G  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 89 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XQ-E HI  
 FWHM / FWTM 29.0° / 51.0°  
 Efficiency 90 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



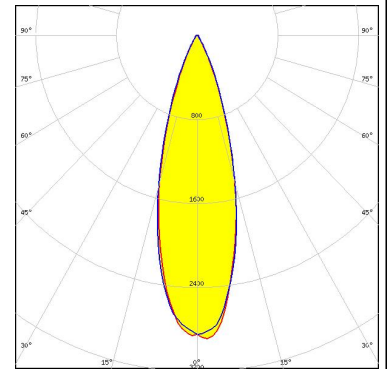
LED LUXEON 2835 Line  
 FWHM / FWTM 30.0° / 55.0°  
 Efficiency 96 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (SIMULATED):

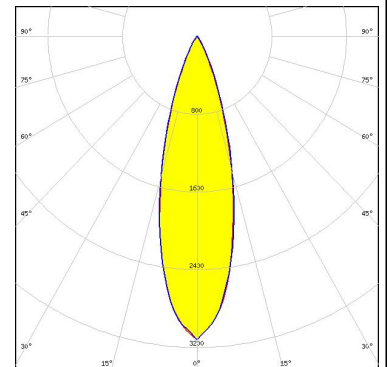
#### LUMILEDS

LED LUXEON C  
 FWHM / FWTM 30.0° / 52.0°  
 Efficiency 93 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



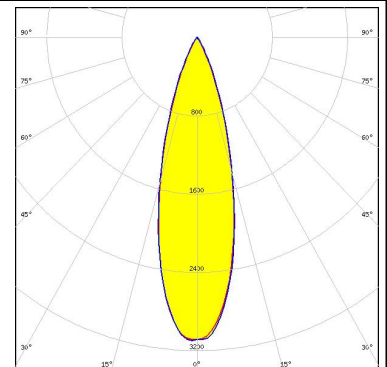
#### LUMILEDS

LED LUXEON IR Compact  
 FWHM / FWTM 29.0° / 51.0°  
 Efficiency 83 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:



#### LUMILEDS

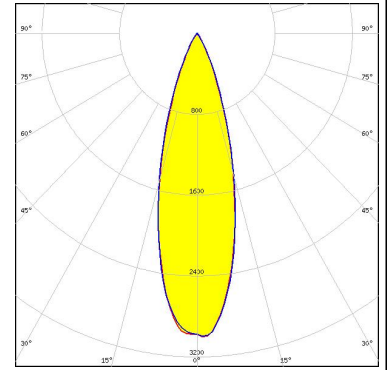
LED LUXEON Rubix  
 FWHM / FWTM 29.0° / 52.0°  
 Efficiency 91 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour Red  
 Required components:



### OPTICAL RESULTS (SIMULATED):

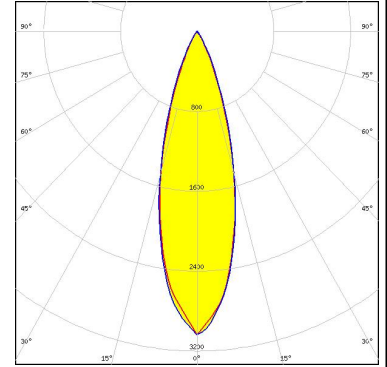
#### LUMILEDS

LED LUXEON Rubix  
 FWHM / FWTM 30.0° / 53.0°  
 Efficiency 91 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour Blue  
 Required components:



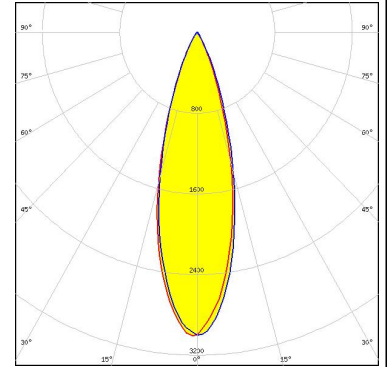
#### LUMILEDS

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 White  
 Required components:



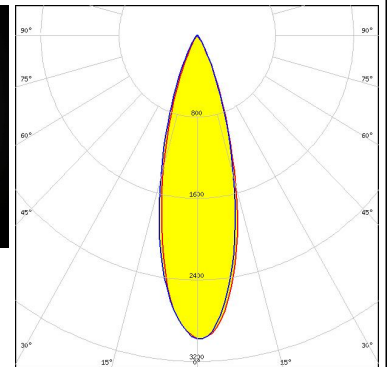
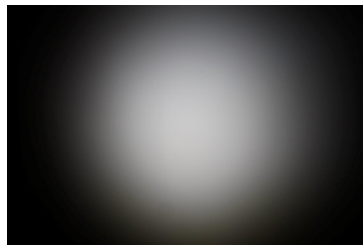
#### NICHIA

LED NFSx757G  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 90 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

Opto Semiconductors  
 LED Duris S5 (2 chip)  
 FWHM / FWTM 29.0° / 54.0°  
 Efficiency 92 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


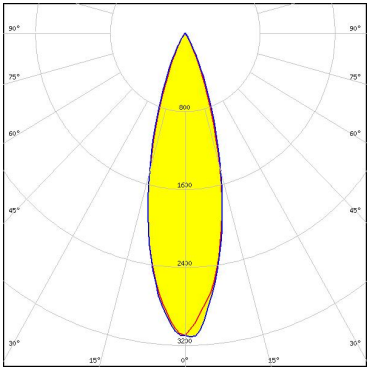

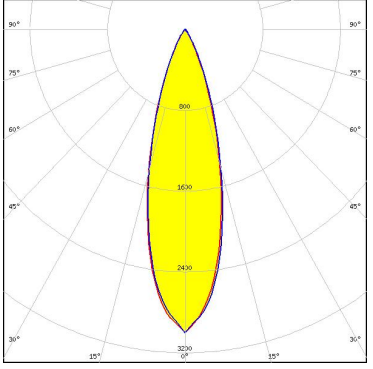

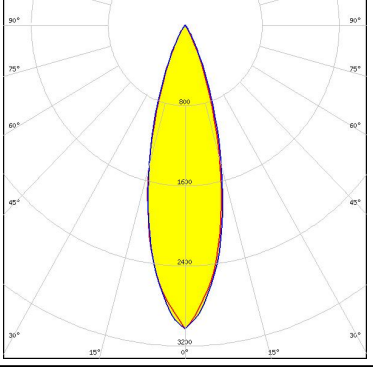

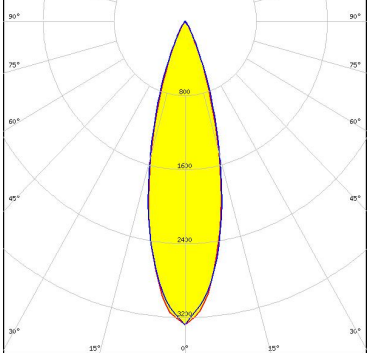


### OPTICAL RESULTS (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 26.0° / 50.0 + 52.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Blue</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Black Flat (LUW HWQP)</p> <p>FWHM / FWTM 28.0° / 49.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3.5 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 OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 30.0° / 56.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.8 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 OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 29.0° / 54.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	



### OPTICAL RESULTS (SIMULATED):

<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON Square Flat</p> <p>FWHM / FWTM 29.0° / 52.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON SSL 150</p> <p>FWHM / FWTM 29.0° / 54.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLON SSL 80</p> <p>FWHM / FWTM 29.0° / 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>		
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4715S</p> <p>FWHM / FWTM 28.0° / 51.0°</p> <p>Efficiency 90 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>		

#### OPTICAL RESULTS (SIMULATED):

##### OSRAM

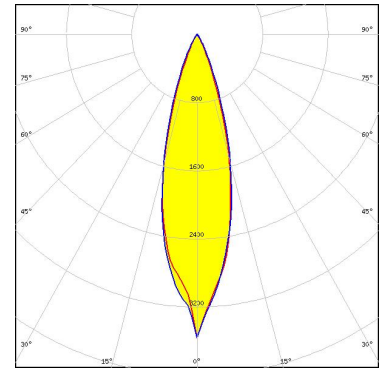
Opto Semiconductors

LED SFH 4770S  
 FWHM / FWTM 27.0° / 51.0°  
 Efficiency 85 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:

##### OSRAM

Opto Semiconductors

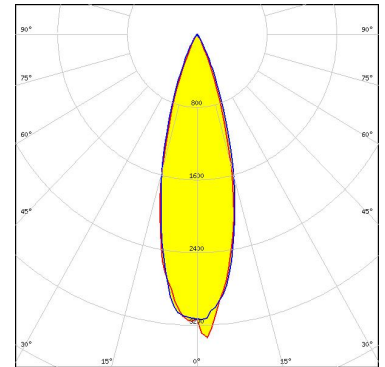
LED Synios P2720 1 mm  
 FWHM / FWTM 27.0° / 50.0°  
 Efficiency 91 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

Opto Semiconductors

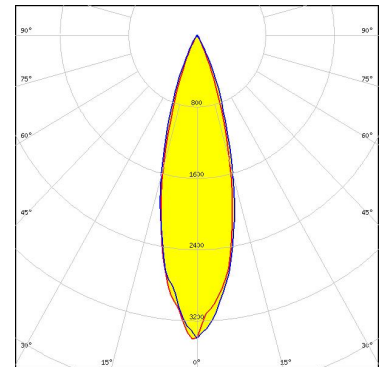
LED Synios P2720 1/2 mm  
 FWHM / FWTM 29.0° / 51.0°  
 Efficiency 93 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

Opto Semiconductors

LED Synios P2720 1/4 mm  
 FWHM / FWTM 28.0° / 50.0°  
 Efficiency 91 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## OPTICAL RESULTS (SIMULATED):

### SAMSUNG

LED	LH181B
FWHM / FWTM	29.0° / 53.5°
Efficiency	90 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

