

## TINA2-W

~45° wide 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 ⓘ

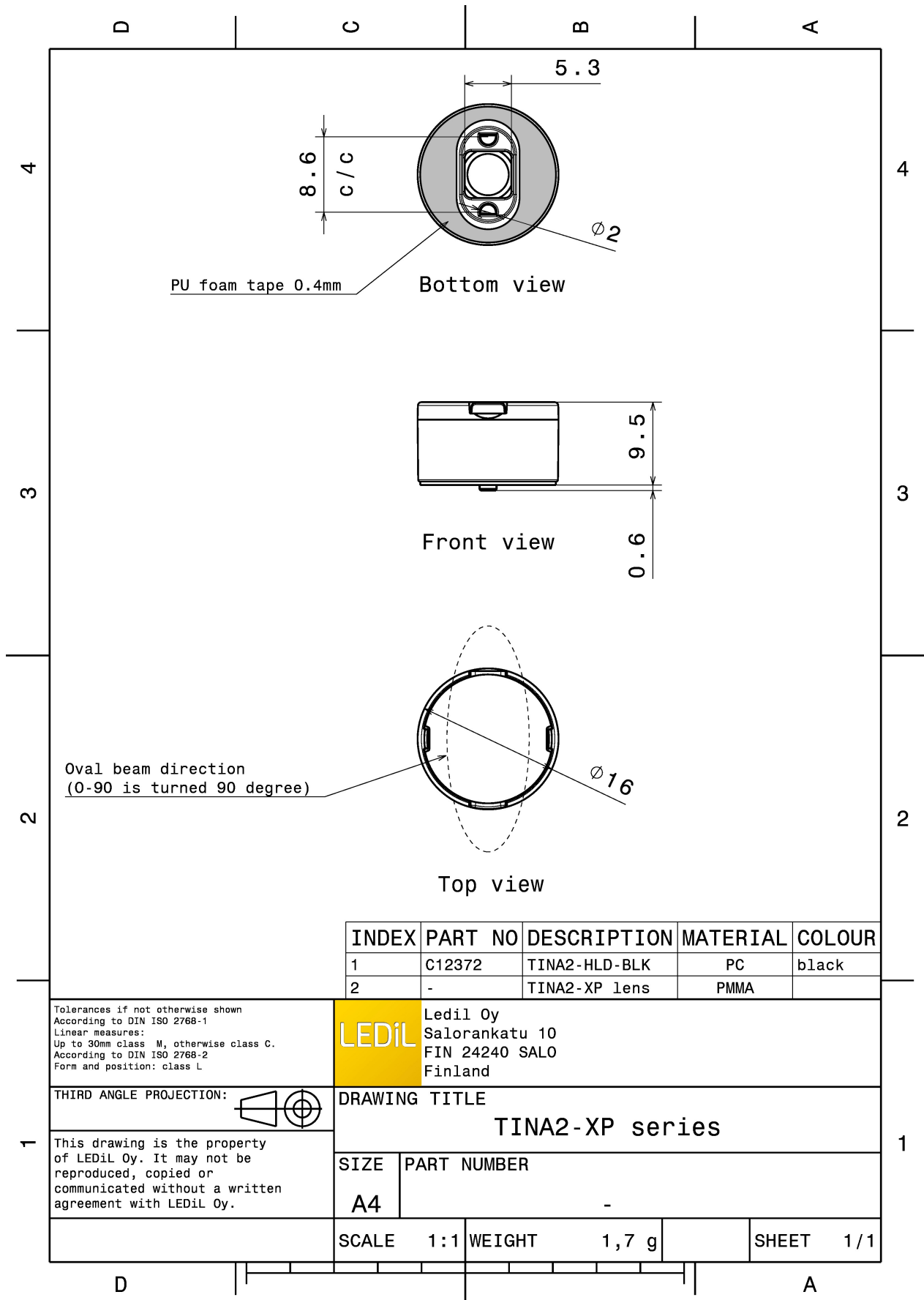


### MATERIALS:

Component	Type	Material	Colour	Finish
TINA2-W-XP	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)
CA12378_TINA2-W	Single lens	4140	230	230	8.3
» Box size:					

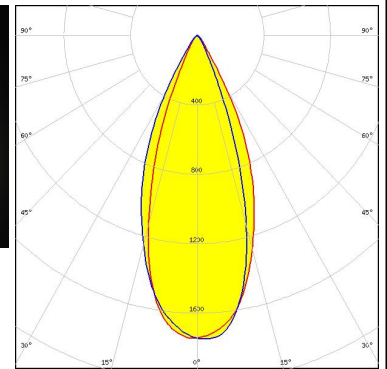
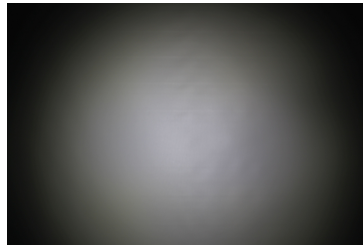


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

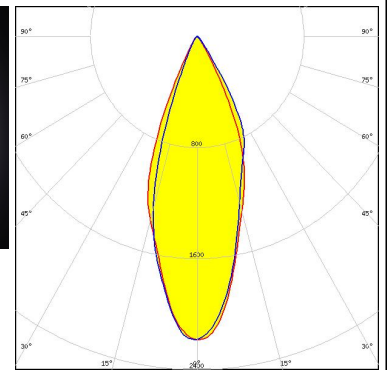
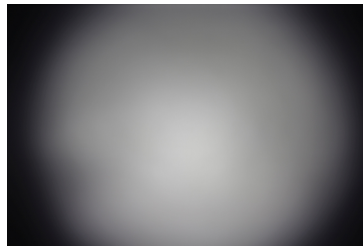
#### OPTICAL RESULTS (MEASURED):



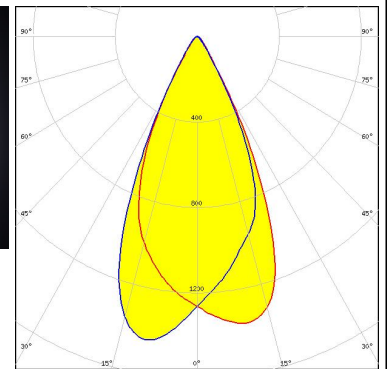
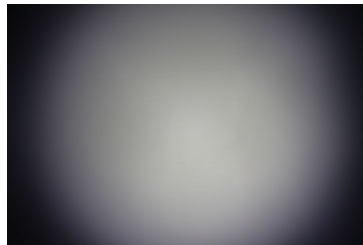
LED XD16  
 FWHM / FWTM 40.0° / 61.0°  
 Efficiency 83 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



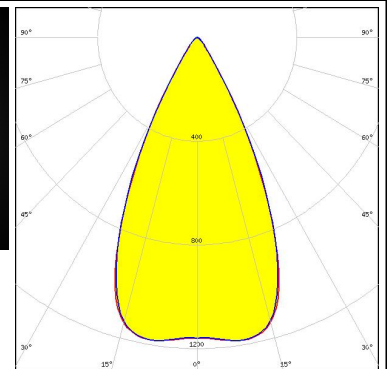
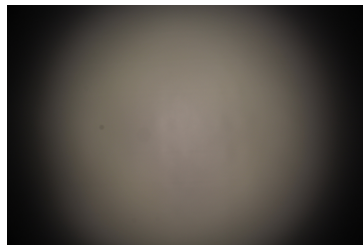
LED LUXEON CZ  
 FWHM / FWTM 39.0° / 61.0°  
 Efficiency 92 %  
 Peak intensity 2.2 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



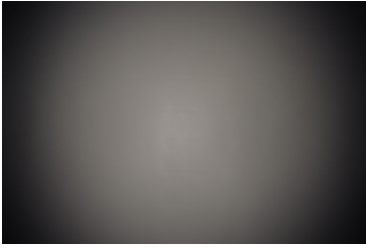
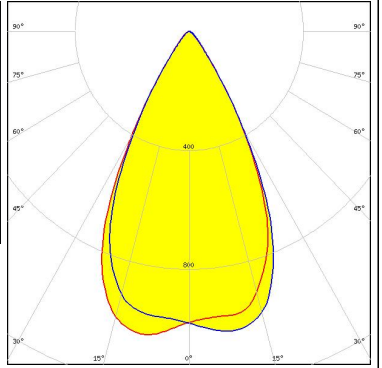
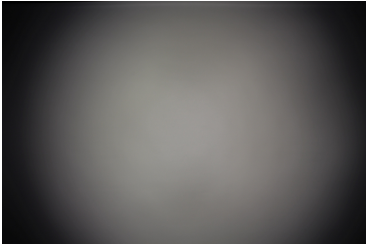
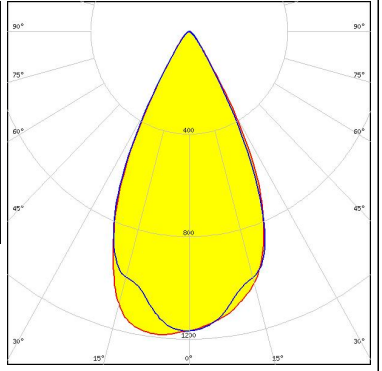
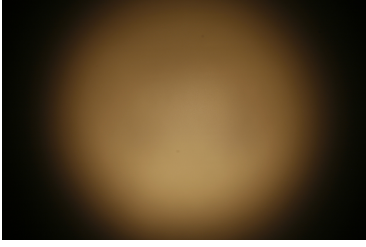
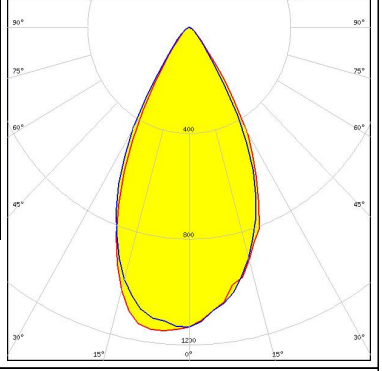
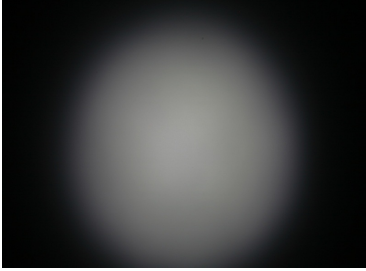
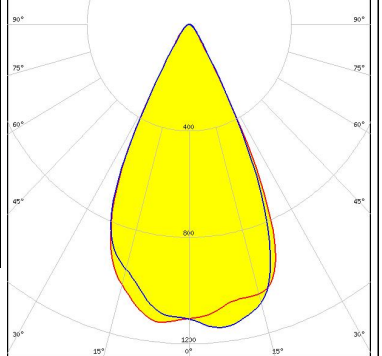
LED LUXEON TX  
 FWHM / FWTM 49.0° / 68.0°  
 Efficiency 88 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 52.0° / 70.0°  
 Efficiency 87 %  
 Peak intensity 1.4 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED NWSx229A            FWHM / FWTM 55.0° / 77.0°            Efficiency 84 %            Peak intensity 1 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM Square EC            FWHM / FWTM 52.0° / 72.0°            Efficiency 85 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM Square EC            FWHM / FWTM 50.0° / 73.0°            Efficiency 84 %            Peak intensity 1.1 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM SSL 150            FWHM / FWTM 53.0° / 70.0°            Efficiency 84 %            Peak intensity 1.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

### OPTICAL RESULTS (MEASURED):

#### OSRAM

Opto Semiconductors

LED SFH 4170S  
FWHM / FWTM 38.0° / 61.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:

#### OSRAM

Opto Semiconductors

LED SFH 4180S  
FWHM / FWTM 34.0° / 60.0°  
Efficiency %  
LEDs/each optic 1  
Light colour IR  
Required components:

#### OSRAM

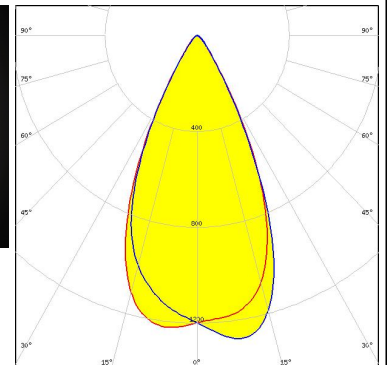
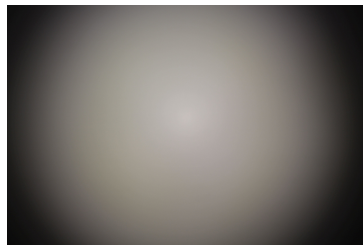
Opto Semiconductors

LED SFH 4715S  
FWHM / FWTM 36.0° / 80.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

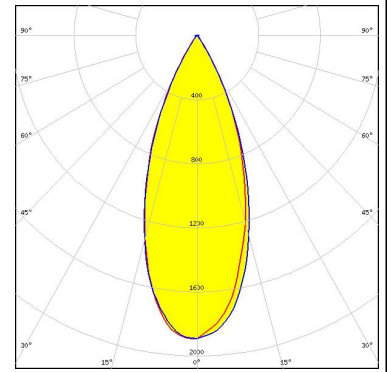
LED Z5M3  
FWHM / FWTM 50.0° / 72.0°  
Efficiency 86 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



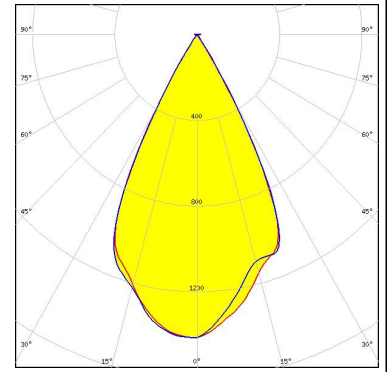
#### OPTICAL RESULTS (SIMULATED):



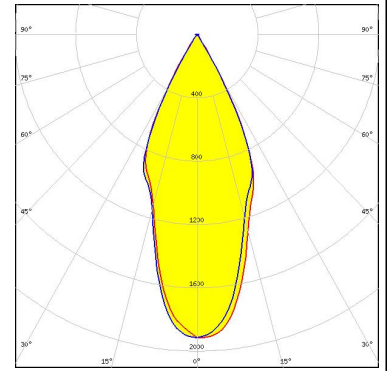
LED XB-D  
 FWHM / FWTM 40.0° / 64.0°  
 Efficiency 89 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



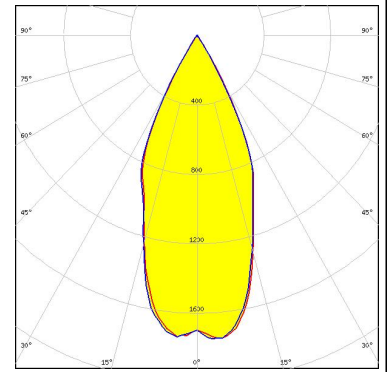
LED XE-G  
 FWHM / FWTM 54.0° / 66.0°  
 Efficiency 92 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XQ-E HI  
 FWHM / FWTM 42.0° / 64.0°  
 Efficiency 92 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON C  
 FWHM / FWTM 44.0° / 65.0°  
 Efficiency 91 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



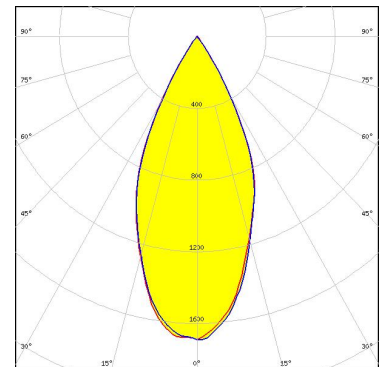
### OPTICAL RESULTS (SIMULATED):

#### LUMILEDS

LED LUXEON IR Compact  
FWHM / FWTM 51.0° / 64.0°  
Efficiency 84 %  
LEDs/each optic 1  
Light colour White  
Required components:

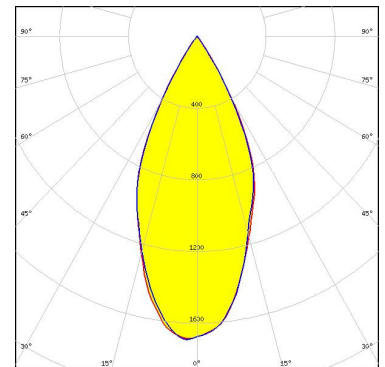
#### LUMILEDS

LED LUXEON Rubix  
FWHM / FWTM 47.0° / 68.0°  
Efficiency 93 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



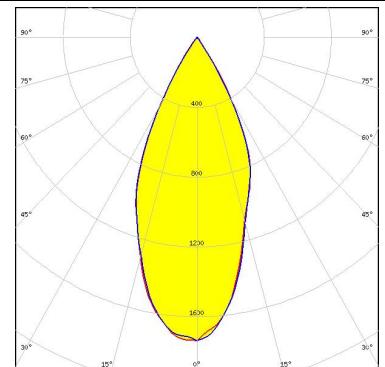
#### LUMILEDS

LED LUXEON Rubix  
FWHM / FWTM 47.0° / 68.0°  
Efficiency 93 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour Blue  
Required components:



#### LUMILEDS

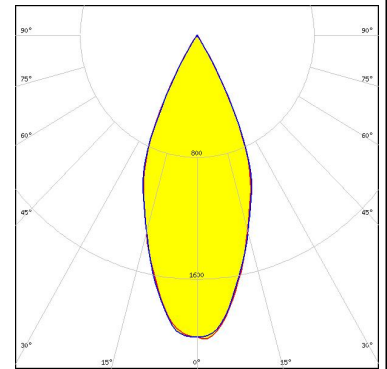
LED LUXEON Rubix  
FWHM / FWTM 45.0° / 68.0°  
Efficiency 93 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour Red  
Required components:



#### OPTICAL RESULTS (SIMULATED):

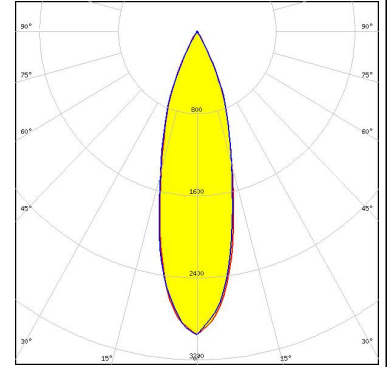
##### LUMILEDS

LED LUXEON Z ES  
 FWHM / FWTM 43.0° / 62.0°  
 Efficiency 93 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### NICHIA

LED NCSxE17A  
 FWHM / FWTM 29.0° / 56.0°  
 Efficiency 90 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### OSRAM

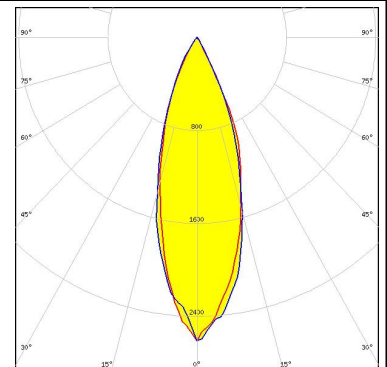
Opto Semiconductors

LED SFH 4770S  
 FWHM / FWTM 32.0° / 61.0°  
 Efficiency 88 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:

##### OSRAM

Opto Semiconductors

LED Synios P2720 1 mm  
 FWHM / FWTM 31.0° / 60.0°  
 Efficiency 92 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



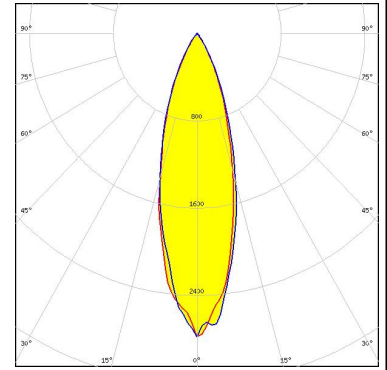


#### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

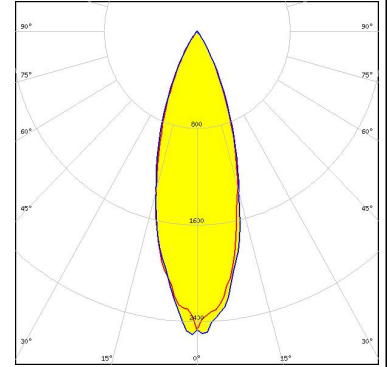
LED Synios P2720 1/2 mm  
 FWHM / FWTM 30.0° / 58.0°  
 Efficiency 92 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

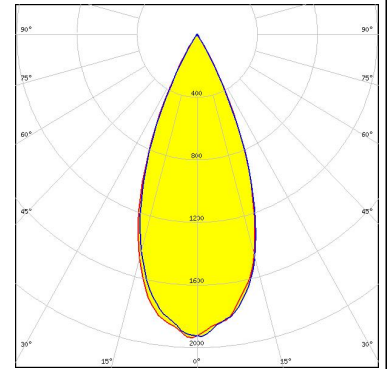
Opto Semiconductors

LED Synios P2720 1/4 mm  
 FWHM / FWTM 31.0° / 60.0°  
 Efficiency 92 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED LH181B  
 FWHM / FWTM 43.0° / 61.0°  
 Efficiency 93 %  
 Peak intensity 2 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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