

## TINA2-O

~35° 15° oval beam optimized for CREE XP-E.  
Assembly with holder and installation tape.

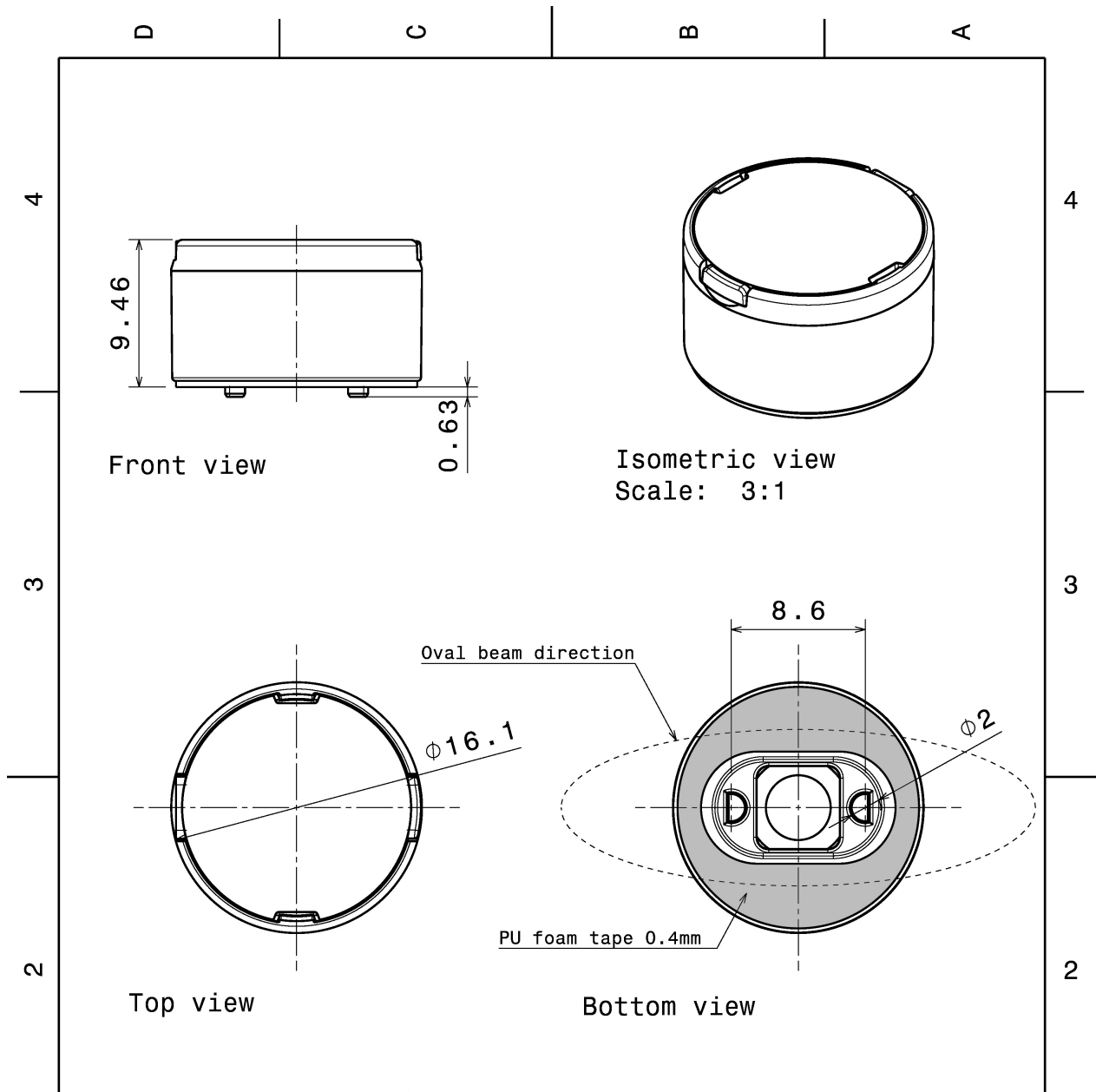
### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16 mm
Height	9.5 mm
Fastening	tape, pin
Colour	black
Box size	451 x 241 x 298 mm
Box weight	8.5 kg
Quantity in Box	4140 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour
TINA2-XP-O	Lens	PMMA	clear
TINA2-HLD-BLK	Holder	PC	black
TINA-TAPE3	Tape	PU tape	black



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2-lens	PMMA	
2	C12373	TINA2-HLD-WHT	PC	white

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L



Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

**DRAWING TITLE**  
TINA2 series datasheet

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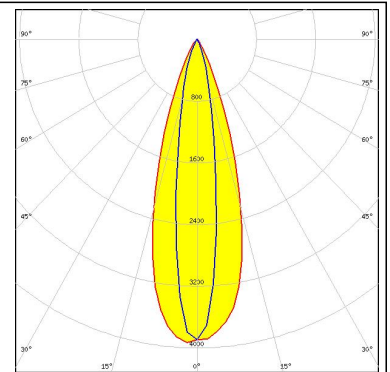
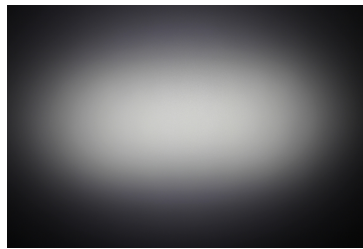
SIZE	PART NUMBER
A4	-

SCALE	3:1	WEIGHT	1,3 g	SHEET	1/1
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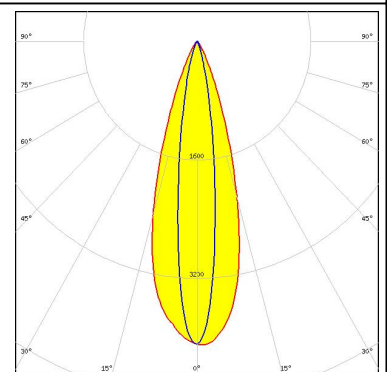
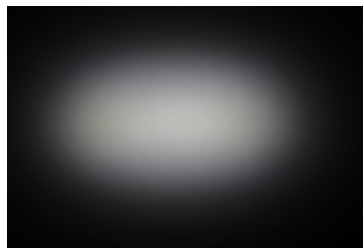
#### PHOTOMETRIC DATA (MEASURED):



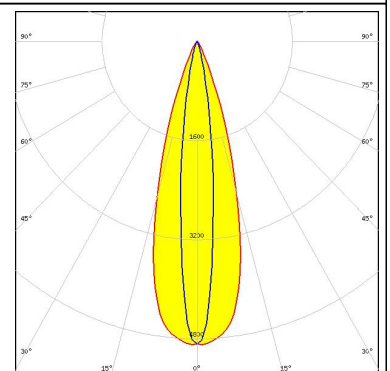
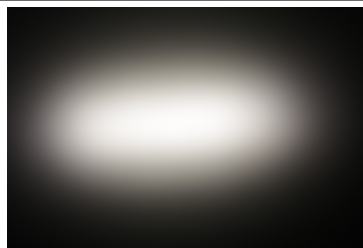
LED XB-H  
 FWHM 34.0 + 17.0°  
 Efficiency 84 %  
 Peak intensity 3.900 cd/lm  
 Required components:



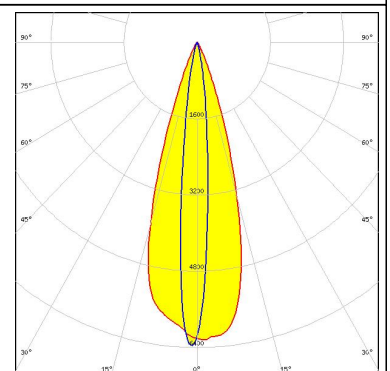
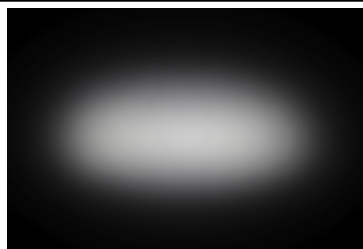
LED XD16  
 FWHM 32.0 + 15.0°  
 Efficiency 80 %  
 Peak intensity 4.100 cd/lm  
 Required components:



LED XQ-E HI  
 FWHM 33.0 + 13.0°  
 Efficiency 80 %  
 Peak intensity 5.000 cd/lm  
 Required components:



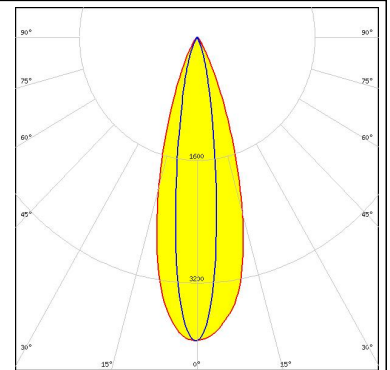
LED LUXEON CZ  
 FWHM 32.0 + 10.0°  
 Efficiency 88 %  
 Peak intensity 6.400 cd/lm  
 Required components:



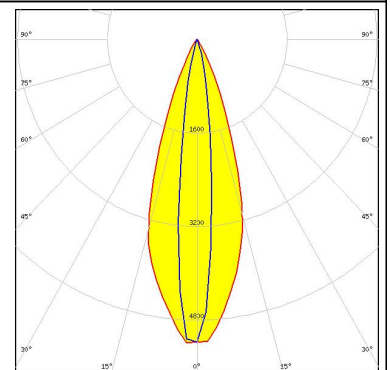
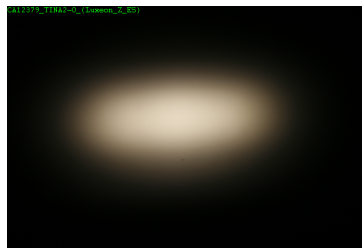
#### PHOTOMETRIC DATA (MEASURED):



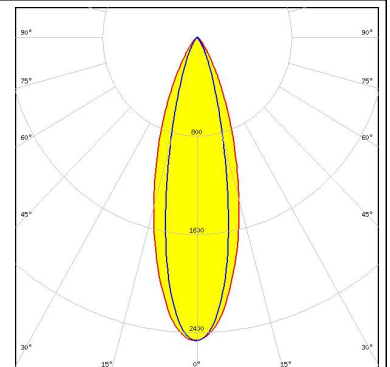
LED LUXEON TX  
 FWHM 32.0 + 16.0°  
 Efficiency 85 %  
 Peak intensity 3.960 cd/lm  
 Required components:



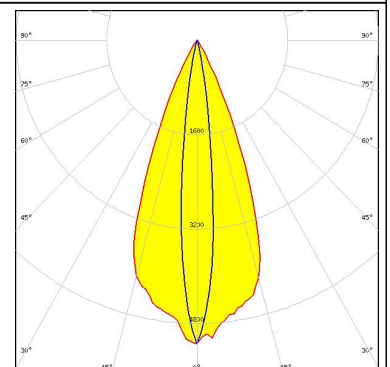
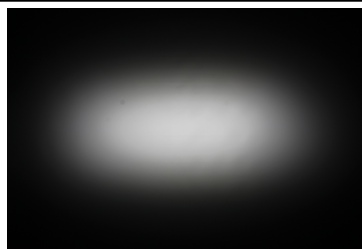
LED LUXEON Z ES  
 FWHM 36.0 + 13.0°  
 Efficiency 85 %  
 Peak intensity 5.300 cd/lm  
 Required components:



LED NWSx229A  
 FWHM 33.0 + 24.0°  
 Efficiency 82 %  
 Peak intensity 2.500 cd/lm  
 Required components:



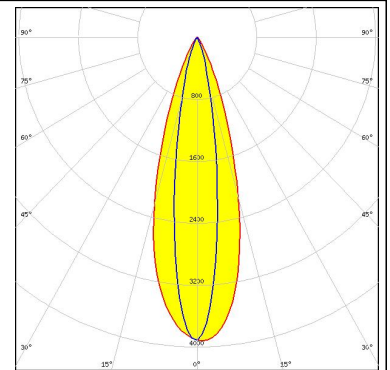
LED Oslon Black Flat  
 FWHM 31.0 + 12.0°  
 Efficiency 87 %  
 Peak intensity 6.000 cd/lm  
 Required components:



**PHOTOMETRIC DATA (MEASURED):**

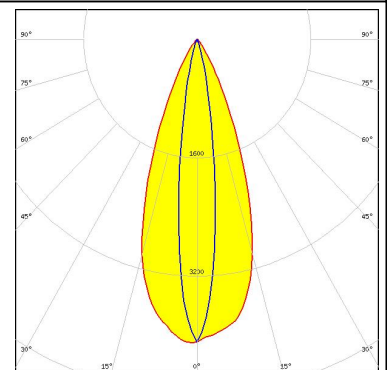
**OSRAM**  
Opto Semiconductors

LED Oslon Square EC  
FWHM 33.0 + 17.0°  
Efficiency 84 %  
Peak intensity 3.920 cd/lm  
Required components:



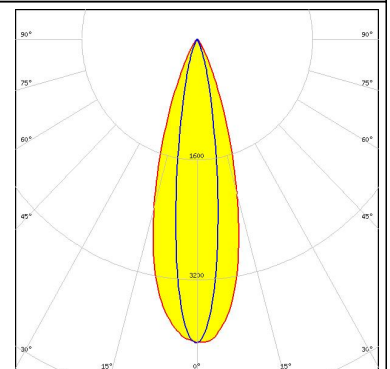
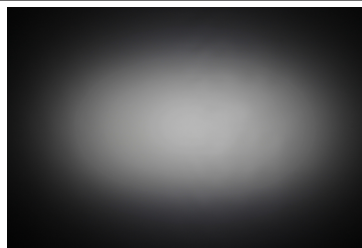
**OSRAM**  
Opto Semiconductors

LED Oslon Square Flat  
FWHM 31.0 + 12.0°  
Efficiency 87 %  
Peak intensity 5.900 cd/lm  
Required components:



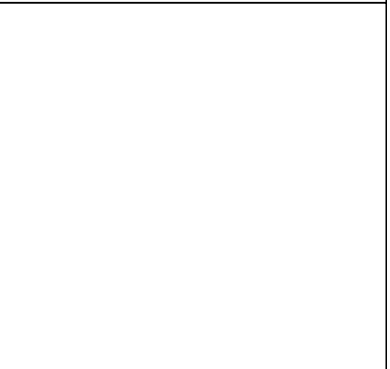
**OSRAM**  
Opto Semiconductors

LED Oslon Square Gen3  
FWHM 32.0 + 16.0°  
Efficiency 87 %  
Peak intensity 4.000 cd/lm  
Required components:



**OSRAM**  
Opto Semiconductors

LED Oslon Square PC  
FWHM 33.0 + 13.0°  
Efficiency 87 %  
Peak intensity 3.750 cd/lm  
Required components:



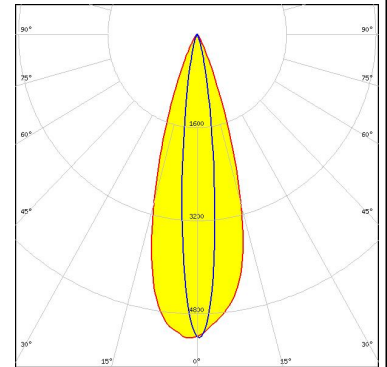
### PHOTOMETRIC DATA (MEASURED):

**OSRAM**  
Opto Semiconductors

LED Oslon SSL 150  
FWHM 38.0 + 13.0°  
Efficiency 87 %  
Peak intensity 3.700 cd/lm  
Required components:

**OSRAM**  
Opto Semiconductors

LED Oslon SSL 150  
FWHM 33.0 + 13.0°  
Efficiency 86 %  
Peak intensity 5.200 cd/lm  
Required components:



**OSRAM**  
Opto Semiconductors

LED Oslon SSL 80  
FWHM 35.0 + 12.0°  
Efficiency 86 %  
Peak intensity 3.800 cd/lm  
Required components:

**OSRAM**  
Opto Semiconductors

LED SFH 4715S  
FWHM 40.0 + 16.0°  
Efficiency %  
Peak intensity cd/lm  
Required components:

## PHOTOMETRIC DATA (MEASURED):

**OSRAM**  
Opto Semiconductors

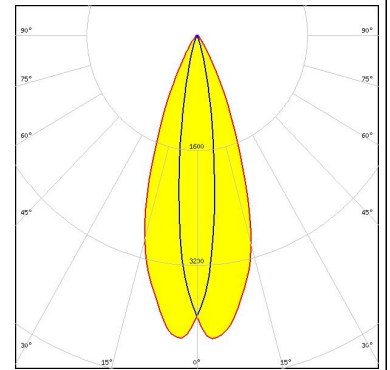
LED	SFH 4725S
FWHM	31.0 + 16.0°
Efficiency	%
Peak intensity	cd/lm
Required components:	



#### PHOTOMETRIC DATA (SIMULATED):

##### LUMILEDS

LED LUXEON C  
 FWHM 14.0 + 37.0°  
 Efficiency 93 %  
 Peak intensity 4.200 cd/lm  
 Required components:

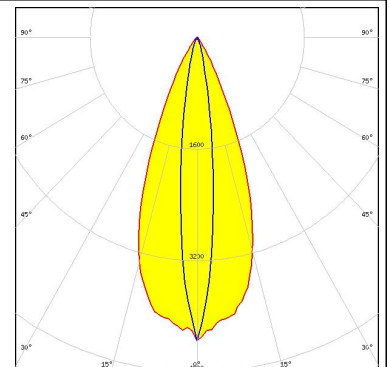


##### LUMILEDS

LED LUXEON IR Compact  
 FWHM 37.0 + 13.0°  
 Efficiency 82 %  
 Peak intensity 0.000 cd/lm  
 Required components:

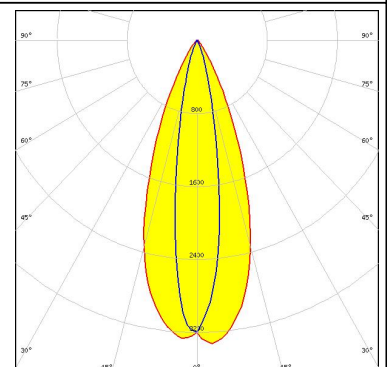
##### NICHIA

LED NFSx757G  
 FWHM 41.0 + 13.0°  
 Efficiency 90 %  
 Peak intensity 4.350 cd/lm  
 Required components:



##### NICHIA

LED NVSxx19B/NVSxx19C  
 FWHM 39.0 + 17.0°  
 Efficiency 86 %  
 Peak intensity 3.300 cd/lm  
 Required components:

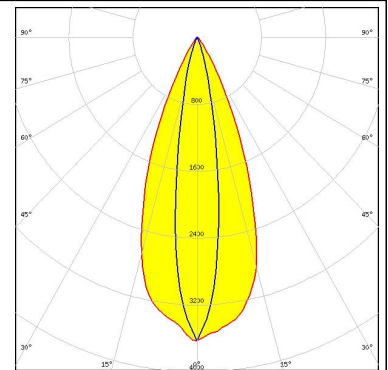
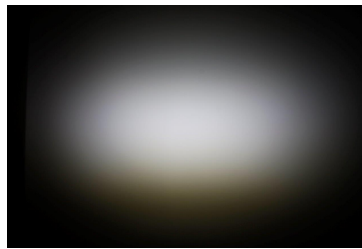




#### PHOTOMETRIC DATA (SIMULATED):

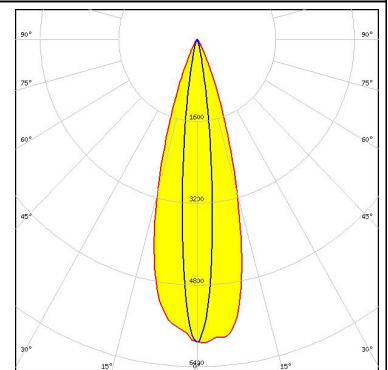
**OSRAM**  
Opto Semiconductors

LED Duris S5 (2 chip)  
 FWHM 41.0 + 17.0°  
 Efficiency 91 %  
 Peak intensity 3.630 cd/lm  
 Required components:



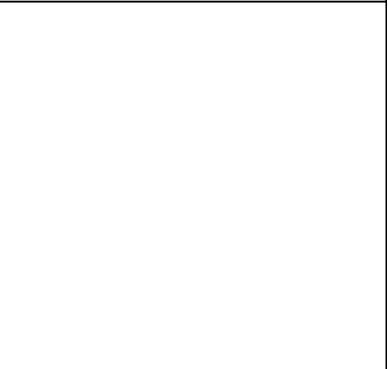
**OSRAM**  
Opto Semiconductors

LED Oslon Black Flat  
 FWHM 31.0 + 12.0°  
 Efficiency 87 %  
 Peak intensity 6.200 cd/lm  
 Required components:



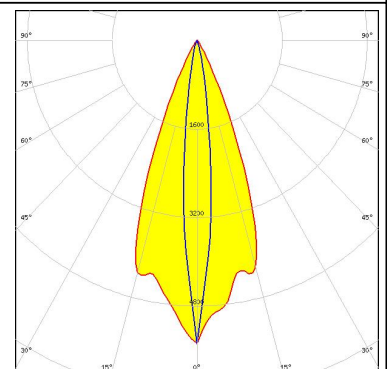
**OSRAM**  
Opto Semiconductors

LED SFH 4770S  
 FWHM 41.0 + 16.0°  
 Efficiency 85 %  
 Peak intensity 3.500 cd/lm  
 Required components:



**OSRAM**  
Opto Semiconductors

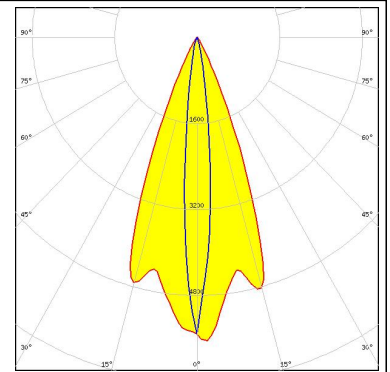
LED Synios P2720 1 mm  
 FWHM 41.0 + 11.0°  
 Efficiency 91 %  
 Peak intensity 5.480 cd/lm  
 Required components:



### PHOTOMETRIC DATA (SIMULATED):

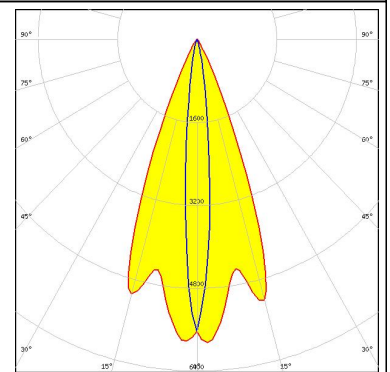
**OSRAM**  
Opto Semiconductors

LED Synios P2720 1/2 mm  
FWHM 41.0 + 10.0°  
Efficiency 91 %  
Peak intensity 5.650 cd/lm  
Required components:



**OSRAM**  
Opto Semiconductors

LED Synios P2720 1/4 mm  
FWHM 41.0 + 9.0°  
Efficiency 91 %  
Peak intensity 5.970 cd/lm  
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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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Local sales and technical support

[www.ledil.com/  
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