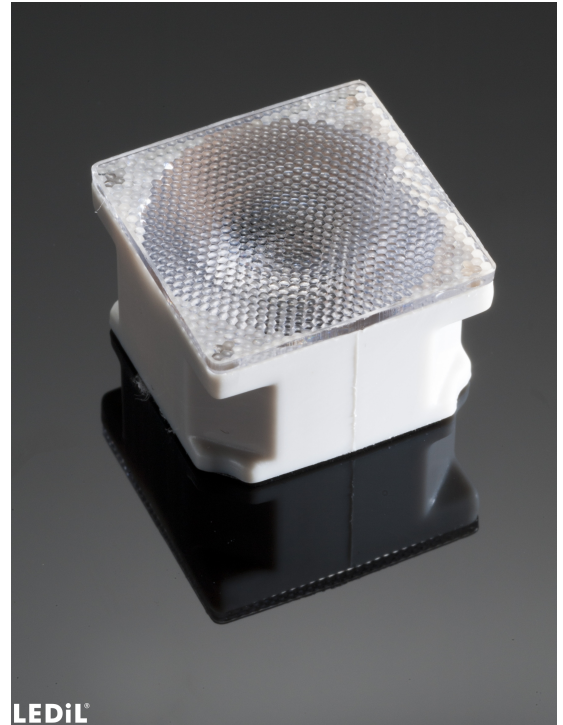


## LAURA-SS-PIN

~11° smooth spot beam optimized for CREE XP-E. Assembly with white holder, installation tape and location pins.

### SPECIFICATION:

Dimensions	21.6 x 21.6 mm
Height	13.1 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

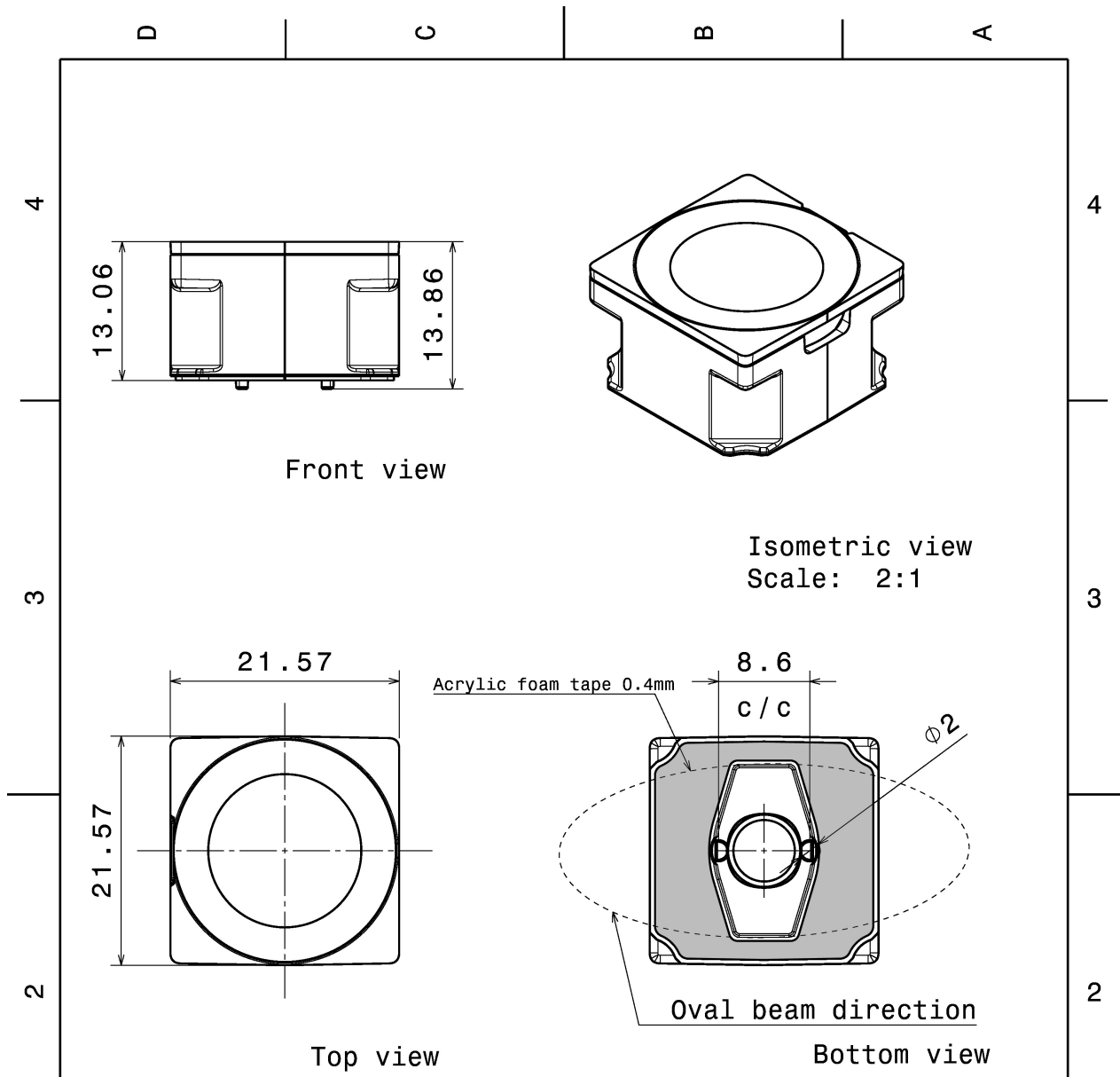


### MATERIALS:

Component	Type	Material	Colour	Finish
LAURA-SS	Single lens	PMMA		
LAURA-PIN-XP-HLD-WHT	Holder	PC	white	
ROSE-TAPE	Tape	Acrylic foam	black	

### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CA12011_LAURA-SS-PIN	Single lens	1440		180	7.5
» Box size:					



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	Laura-mech	PMMA	
3	C11835	LAURA-PIN-XP-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** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**LAURA-XP-PIN-WHT assembly**

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SIZE	PART NUMBER
A4	-

SCALE	2:1	WEIGHT	9 g	SHEET	1/1
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See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



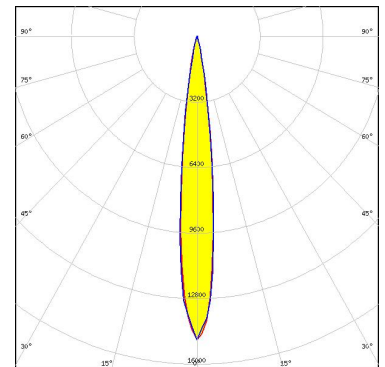
LED XB-D  
 FWHM / FWTM 11.0°  
 Efficiency 93 %  
 Peak intensity 14.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-E  
 FWHM / FWTM 11.0° / 19.0°  
 Efficiency 93 %  
 Peak intensity 16.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-E-HEW  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 92 %  
 Peak intensity 11.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

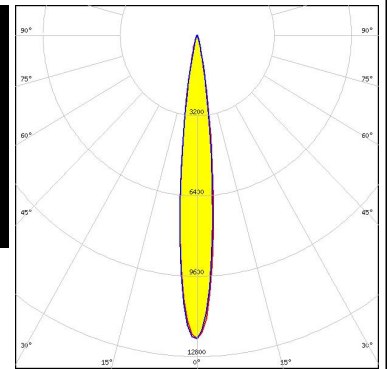


LED XP-G  
 FWHM / FWTM 12.0°  
 Efficiency 94 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:

#### OPTICAL RESULTS (MEASURED):

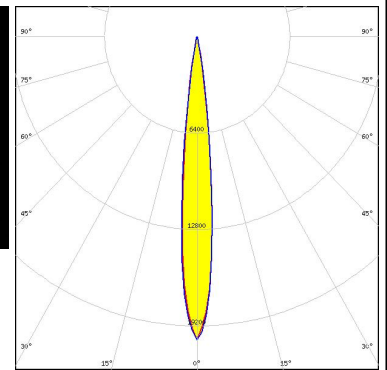
##### LUMILEDS

LED LUXEON T  
 FWHM / FWTM 13.0° / 24.0°  
 Efficiency 92 %  
 Peak intensity 12.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



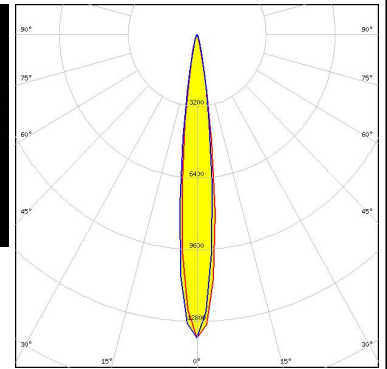
##### LUMILEDS

LED LUXEON Z ES  
 FWHM / FWTM 12.0° / 21.0°  
 Efficiency 92 %  
 Peak intensity 17.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



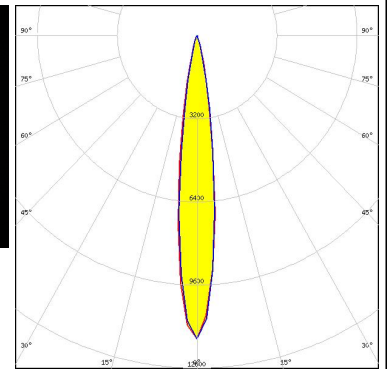
##### NICHIA

LED NCSxx19B  
 FWHM / FWTM 13.0° / 25.0°  
 Efficiency 91 %  
 Peak intensity 13.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### NICHIA

LED NF2x757D  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 91 %  
 Peak intensity 11.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (MEASURED):

#### OSRAM

Opto Semiconductors

LED OSLON Square EC  
FWHM / FWTM 13.0° / 26.0°  
Efficiency 88 %  
Peak intensity 9.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### OSRAM

Opto Semiconductors

LED OSLON SSL 150  
FWHM / FWTM 11.0° / 22.0°  
Efficiency 91 %  
Peak intensity 12.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### OSRAM

Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 11.0° / 21.0°  
Efficiency 91 %  
Peak intensity 13.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

#### OSRAM

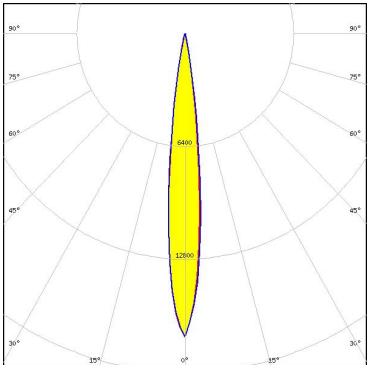
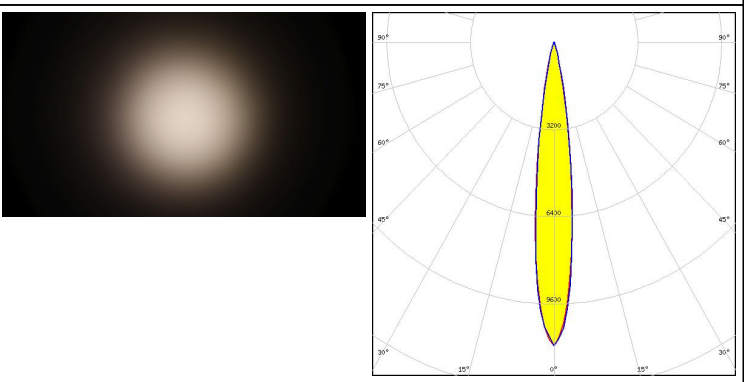
Opto Semiconductors

LED SFH 4725S  
FWHM / FWTM 14.0° / 28.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:



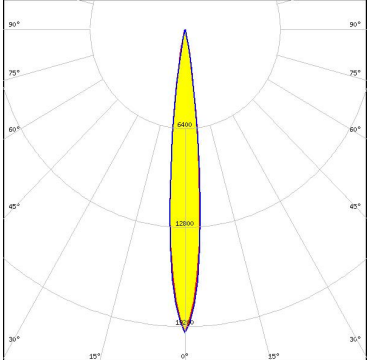

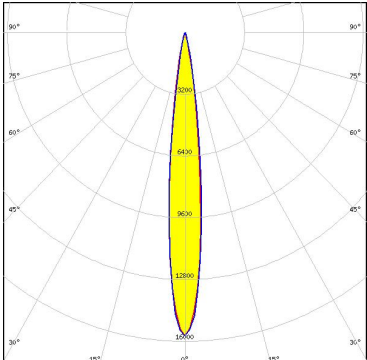

## OPTICAL RESULTS (MEASURED):

	
SEOUL SEMICONDUCTOR	
LED	Z5
FWHM / FWTM	10.0°
Efficiency	%
LEDs/each optic	1
Light colour	White
Required components:	

#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> LEDs</p> <p>LED: XP-E2            FWHM / FWTM: 12.0° / 23.0°            Efficiency: 94 %            Peak intensity: 17.2 cd/lm            LEDs/each optic: 1            Light colour: Amber            Required components:</p>	
<p><b>CREE</b> LEDs</p> <p>LED: XP-G3            FWHM / FWTM: Asymmetric            Efficiency: 93 %            Peak intensity: 11.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON IR Domed 150 (L110-0xxx150000000)            FWHM / FWTM: 14.0° / 24.0°            Efficiency: 0 %            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON IR Domed 60 (L110-0xxx060000000)            FWHM / FWTM: 12.0° / 25.0°            Efficiency: 94 %            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

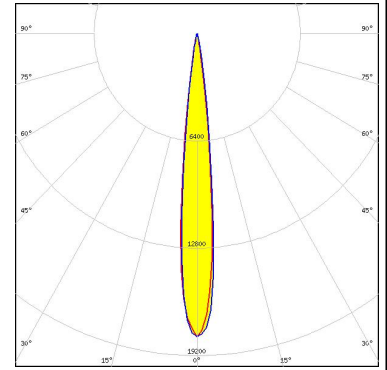
		
LED	LUXEON IR Domed 90 (L110-0xxx090000000)	
FWHM / FWTM	12.0° / 24.0°	
Efficiency	94 %	
LEDs/each optic	1	
Light colour	White	
Required components:		
		
LED	OSLON Boost HX (KW CULPM1.TG)	
FWHM / FWTM	12.0° / 21.0°	
Efficiency	96 %	
Peak intensity	19.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
		
LED	OSLON Square CSSRM2/CSSRM3	
FWHM / FWTM	12.0° / 23.0°	
Efficiency	96 %	
Peak intensity	15.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
		
LED	OSLON Square PC	
FWHM / FWTM	12.0°	
Efficiency	%	
LEDs/each optic	1	
Light colour	White	
Required components:		



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED SFH 4170S  
FWHM / FWTM 12.0° / 19.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour IR  
Required components:



**OSRAM**  
Opto Semiconductors

LED SFH 4715S  
FWHM / FWTM 12.0°  
Efficiency %  
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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#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

[www.ledil.com/  
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