

## LAURA-D-PIN

~15° diffused 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 ⓘ

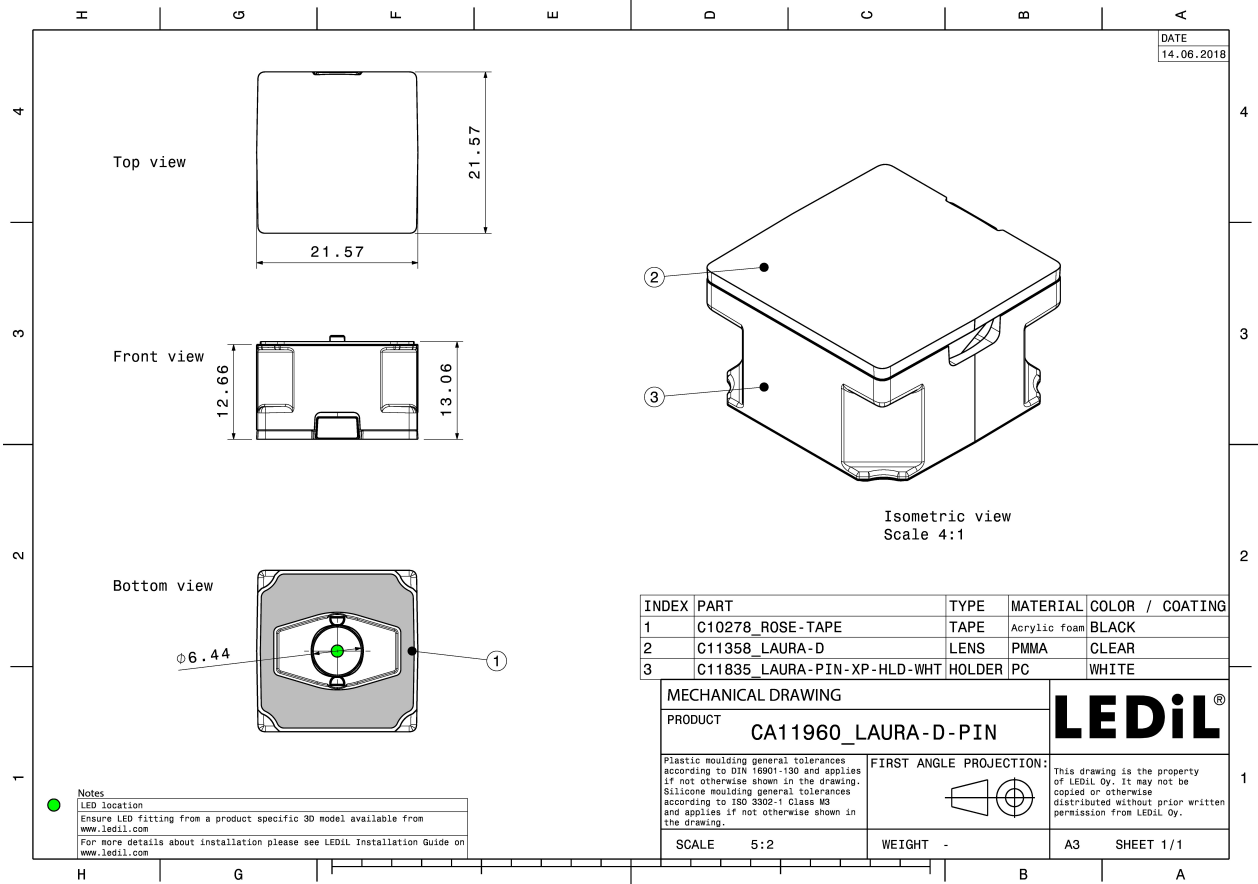


### MATERIALS:

Component	Type	Material	Colour	Finish
LAURA-D	Single lens	PMMA	clear	
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)
CA11960_LAURA-D-PIN	Single lens	1440		180	7.5
» Box size:					



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

#### OPTICAL RESULTS (MEASURED):



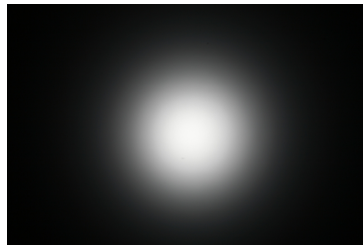
LED XP-E  
FWHM / FWTM 13.0° / 31.0°  
Efficiency 93 %  
Peak intensity 9.3 cd/m  
LEDs/each optic 1  
Light colour White  
Required components:



LED XP-E-HEW  
FWHM / FWTM 15.0° / 33.0°  
Efficiency 86 %  
Peak intensity 6.2 cd/m  
LEDs/each optic 1  
Light colour White  
Required components:



LED XP-E2  
FWHM / FWTM 15.0° / 36.0°  
Efficiency 88 %  
Peak intensity 6.4 cd/m  
LEDs/each optic 1  
Light colour White  
Required components:



LED XP-G  
FWHM / FWTM 16.0°  
Efficiency 94 %  
LEDs/each optic 1  
Light colour White  
Required components:

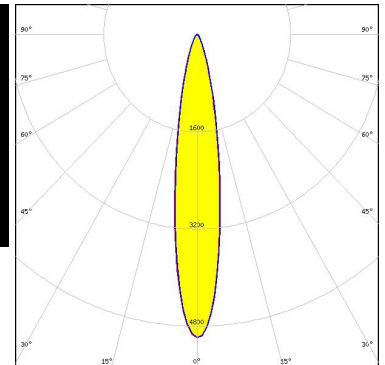
#### OPTICAL RESULTS (MEASURED):

#### LUMILEDS

LED LUXEON Rebel  
 FWHM / FWTM 15.0° / 37.0°  
 Efficiency 90 %  
 Peak intensity 5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

#### LUMILEDS

LED LUXEON T  
 FWHM / FWTM 18.0° / 40.0°  
 Efficiency 89 %  
 Peak intensity 4.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



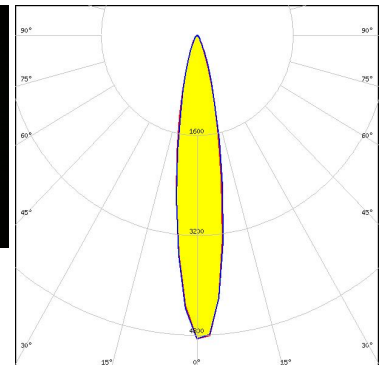
#### LUMILEDS

LED LUXEON Z ES  
 FWHM / FWTM 15.0° / 34.0°  
 Efficiency 90 %  
 Peak intensity 7.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

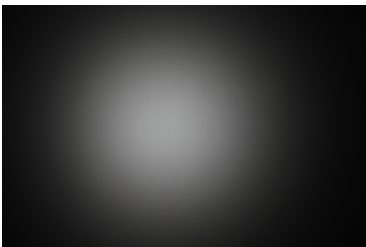
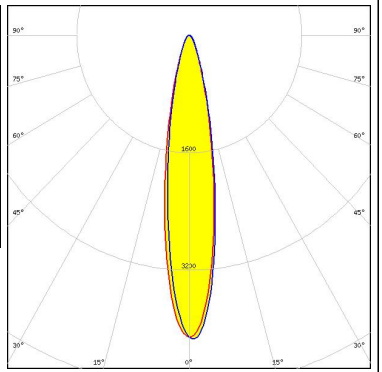
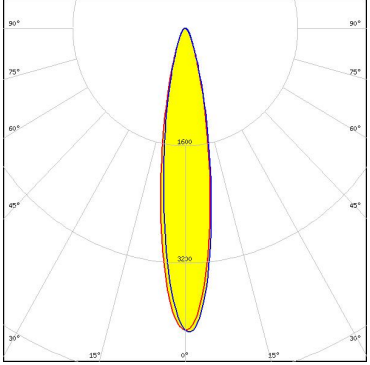





#### NICHIA

LED NCSxx19B  
 FWHM / FWTM 19.0° / 41.0°  
 Efficiency 85 %  
 Peak intensity 5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

			
LED	NF2x757D		
FWHM / FWTM	19.0° / 43.0°		
Efficiency	84 %		
Peak intensity	4.2 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
 <small>Osram Semiconductors</small>			
LED	OSLON Square EC		
FWHM / FWTM	16.0° / 34.0°		
Efficiency	81 %		
Peak intensity	6.7 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
 <small>Osram Semiconductors</small>			
LED	OSLON SSL 150		
FWHM / FWTM	12.0° / 28.0°		
Efficiency	83 %		
Peak intensity	8.9 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			
 <small>Osram Semiconductors</small>			
LED	OSLON SSL 80		
FWHM / FWTM	14.0° / 31.0°		
Efficiency	83 %		
Peak intensity	7.3 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required components:			

## OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED SFH 4725S  
FWHM / FWTM 18.0° / 42.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:



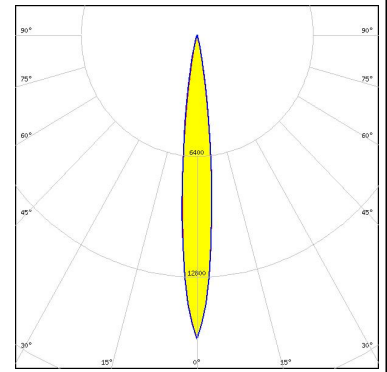
SEOUL SEMICONDUCTOR

LED Z5  
FWHM / FWTM 14.0°  
Efficiency %  
LEDs/each optic 1  
Light colour White  
Required components:

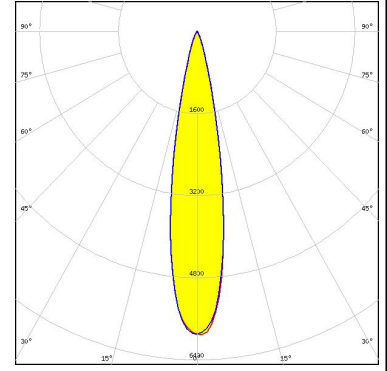
#### OPTICAL RESULTS (SIMULATED):



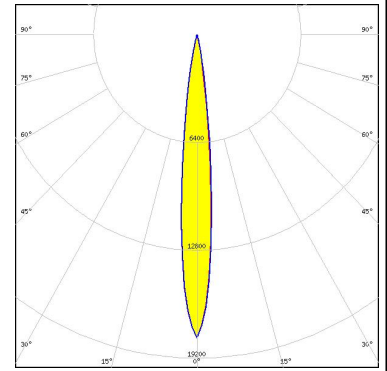
LED XD16  
 FWHM / FWTM 12.0° / 23.0°  
 Efficiency 90 %  
 Peak intensity 16.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



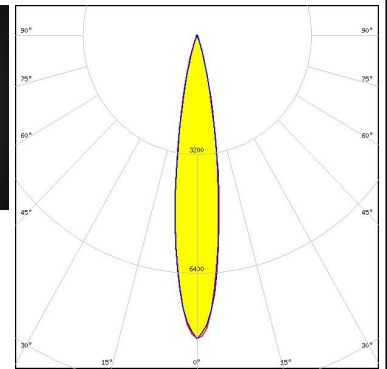
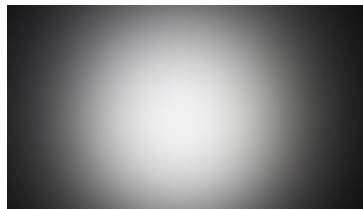
LED XHP35.2 HD  
 FWHM / FWTM 20.0° / 36.0°  
 Efficiency 89 %  
 Peak intensity 5.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-E2  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 94 %  
 Peak intensity 18 cd/lm  
 LEDs/each optic 1  
 Light colour Amber  
 Required components:



LED XP-G3  
 FWHM / FWTM 17.0° / 32.0°  
 Efficiency 93 %  
 Peak intensity 8.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## OPTICAL RESULTS (SIMULATED):

### LUMILEDS

LED LUXEON H50-2  
FWHM / FWTM 13.0° / 28.0°  
Efficiency 90 %  
Peak intensity 9.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

### LUMILEDS

LED LUXEON IR Domed 150 (L110-0xxx150000000)  
FWHM / FWTM 9.0° / 18.0°  
Efficiency 0 %  
LEDs/each optic 1  
Light colour White  
Required components:

### LUMILEDS

LED LUXEON IR Domed 60 (L110-0xxx060000000)  
FWHM / FWTM 12.0° / 25.0°  
Efficiency 94 %  
LEDs/each optic 1  
Light colour White  
Required components:

### LUMILEDS

LED LUXEON IR Domed 90 (L110-0xxx090000000)  
FWHM / FWTM 12.0° / 24.0°  
Efficiency 94 %  
LEDs/each optic 1  
Light colour White  
Required components:



#### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: 16.0° / 32.0°            Efficiency: 96 %            Peak intensity: 8.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSLOM Boost HX (KW CULPM1.TG)            FWHM / FWTM: 10.0° / 20.0°            Efficiency: 96 %            Peak intensity: 21.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSLOM Signal            FWHM / FWTM: 10.0° / 20.0°            Efficiency: 96 %            Peak intensity: 23.8 cd/lm            LEDs/each optic: 1            Light colour: Red            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSLOM Square CSSRM2/CSSRM3            FWHM / FWTM: 12.0° / 24.0°            Efficiency: 96 %            Peak intensity: 15.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

## OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED	SFH 4715S
FWHM / FWTM	13.0°
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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