

## TINA-WW

~60° wide beam optimized for CREE XP-E.  
Assembly with holder and installation tape.

### SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	9.7 mm
Fastening	tape
ROHS compliant	yes ⓘ

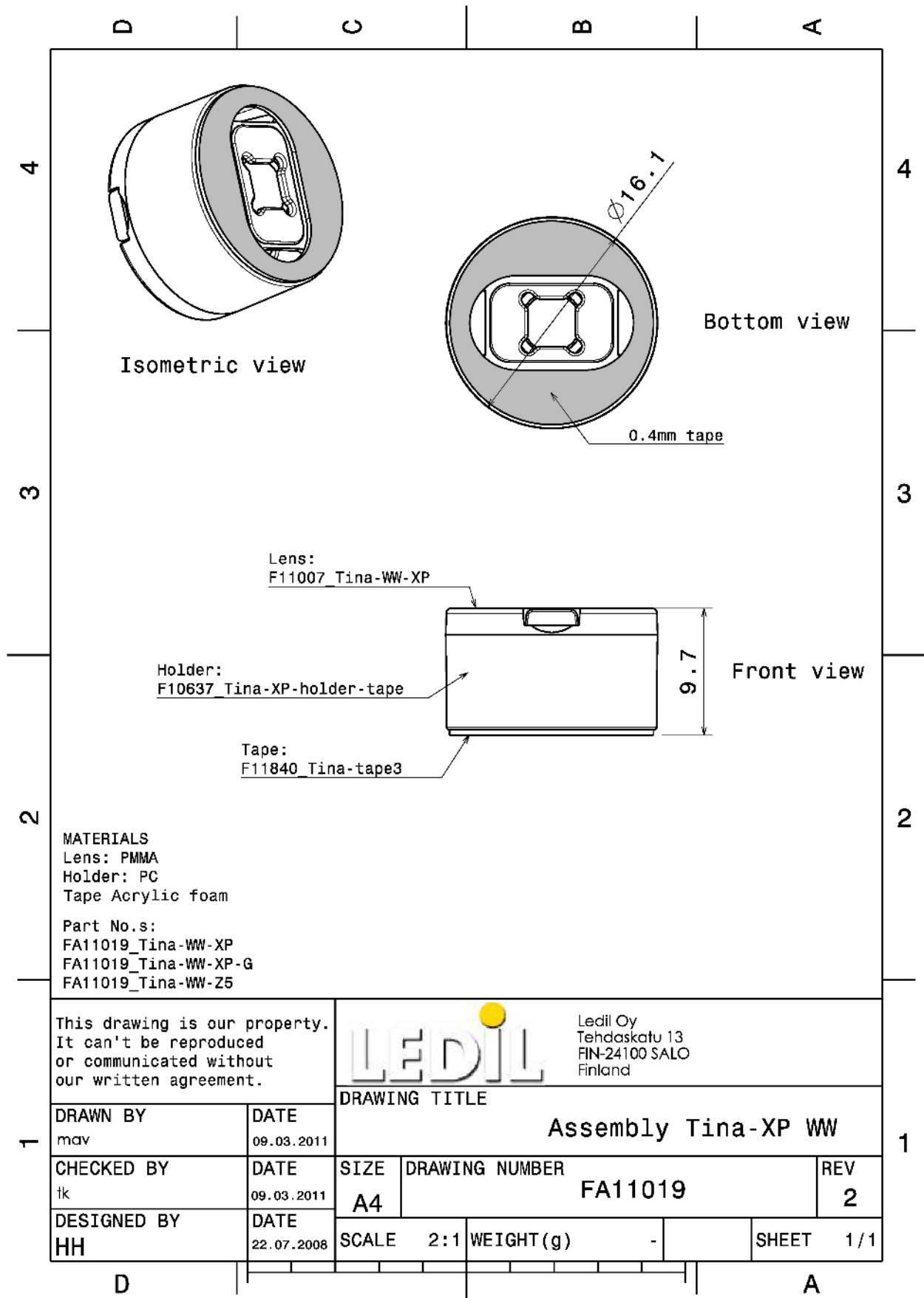


### MATERIALS:

Component	Type	Material	Colour	Finish
TINA-WW-XP	Single lens	PMMA	clear	
TINA-XP-H-TAPE-WHT	Holder	PC	white	
TINA-TAPE3	Tape	Acrylic foam	black	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FA11019_TINA-WW	Single lens	2016	288	144	4.1
» Box size:					



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

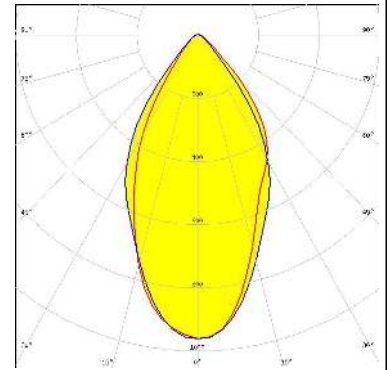
#### OPTICAL RESULTS (MEASURED):

##### CREE → LED

LED XP-E  
 FWHM / FWTM 58.0° / 94.0°  
 Efficiency 93 %  
 Peak intensity 0.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:

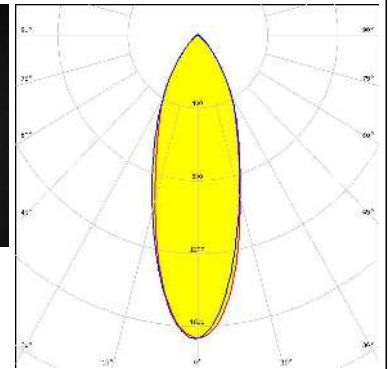
##### CREE → LED

LED XP-G  
 FWHM / FWTM 62.0° / 106.0°  
 Efficiency 91 %  
 Peak intensity 0.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



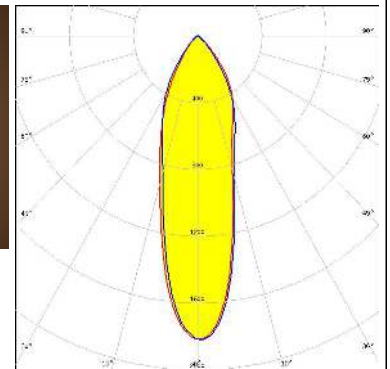
##### LUMILEDS

LED LUXEON 2835 Line  
 FWHM / FWTM 35.0° / 79.0°  
 Efficiency 92 %  
 Peak intensity 1.7 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:


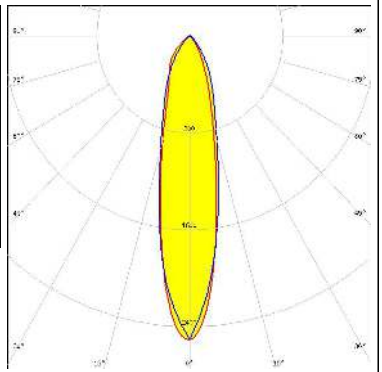
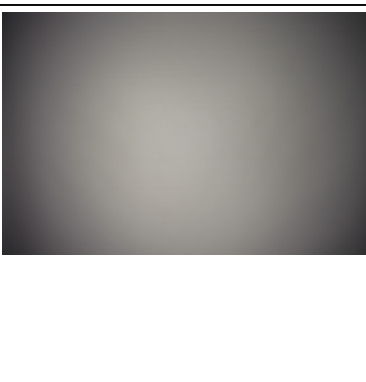
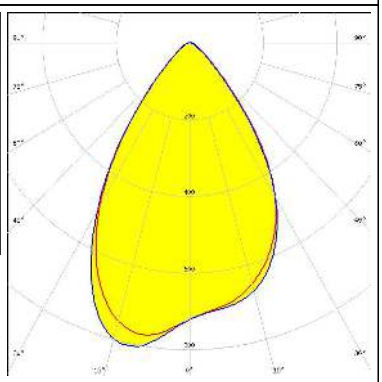


##### LUMILEDS

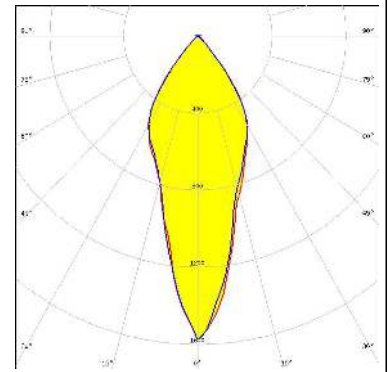
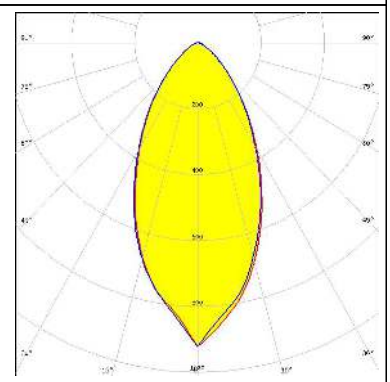
LED LUXEON Z ES  
 FWHM / FWTM 29.0° / 78.0°  
 Efficiency 91 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**OPTICAL RESULTS (MEASURED):**

<p><b>NICHIA</b></p> <p>LED                    NCSxE17A            FWHM / FWTM    23.0° / 66.0°            Efficiency            86 %            Peak intensity     2.5 cd/lm            LEDs/each optic   1            Light colour        White            Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED                    LH351B            FWHM / FWTM    67.0° / 98.0°            Efficiency            94 %            Peak intensity     0.8 cd/lm            LEDs/each optic   1            Light colour        White            Required components:</p>		

### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → LED</p> <p>LED: XQ-E HI            FWHM / FWTM: 32.0° / 82.0°            Efficiency: 96 %            Peak intensity: 1.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → LED</p> <p>LED: XT-E            FWHM / FWTM: 52.0° / 102.0°            Efficiency: %            Peak intensity: 0.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SEMI</b> SEMI-SEMICONDUCTOR</p> <p>LED: Z5            FWHM / FWTM: 33.0°            Efficiency: %            LEDs/each optic: 1            Light colour: White            Required components:</p>	

### 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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