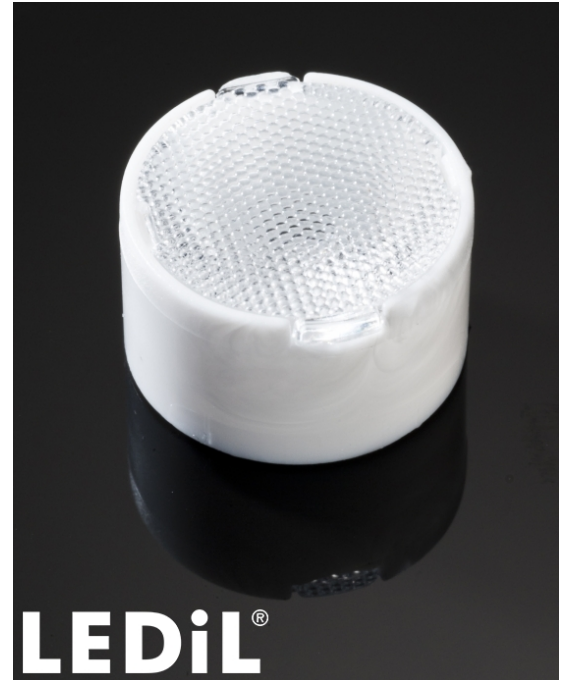


## TINA-M

~30° medium beam optimized for CREE XP-E.  
Assembly with holder and installation tape.

### TECHNICAL SPECIFICATIONS:

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

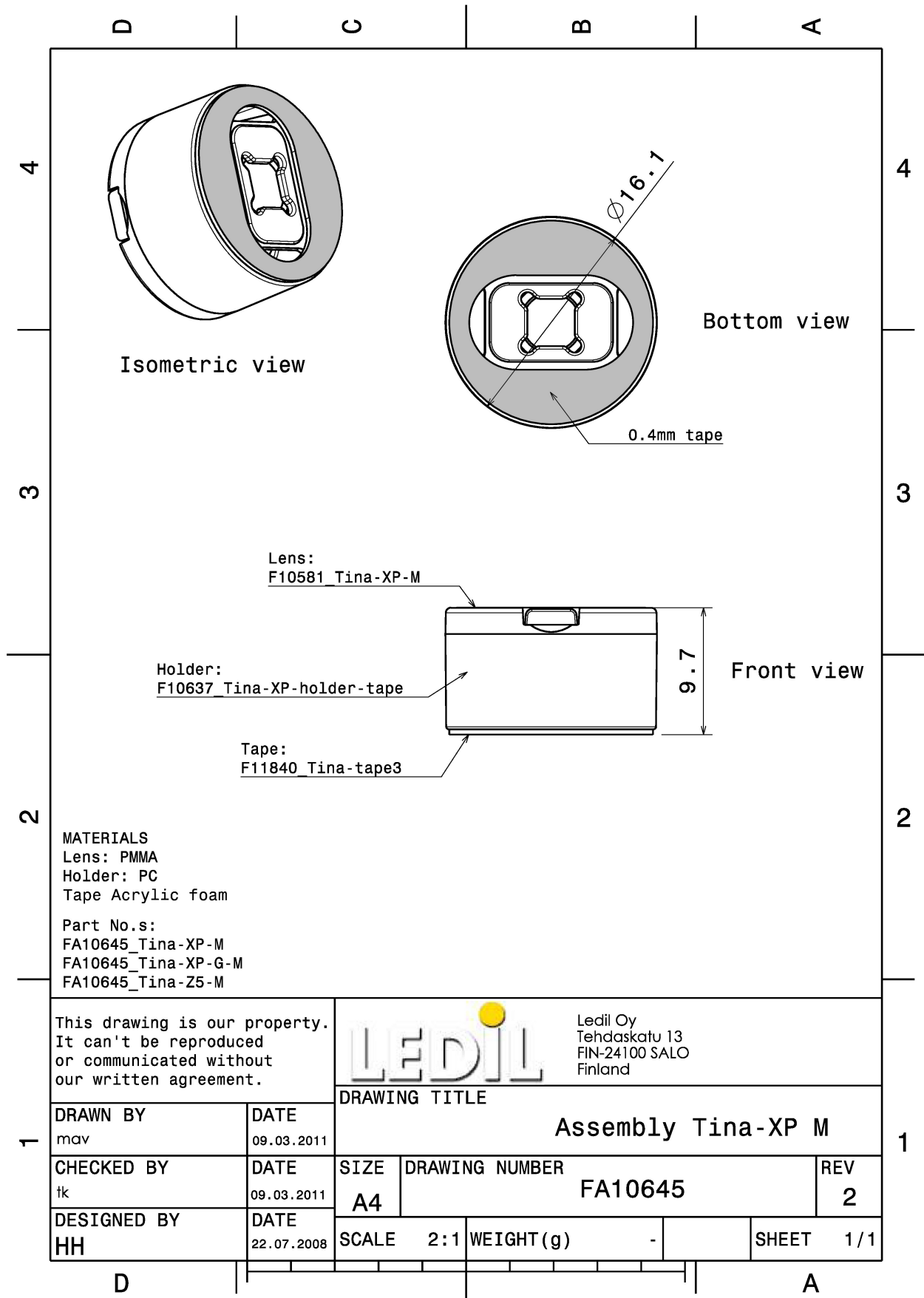


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
TINA-M	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)
FA10645_TINA-M	Single lens	2016	288	144	4.1
» Box size: 470 x 240 x 105 mm					

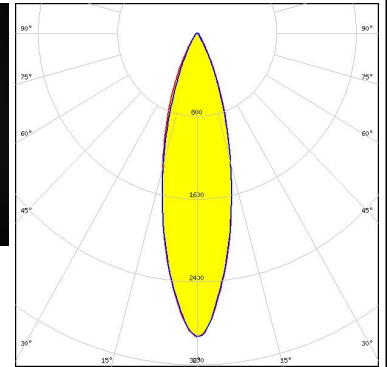
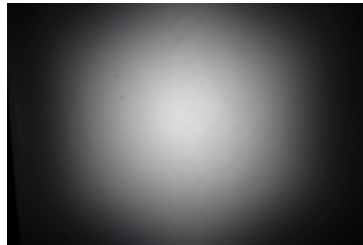


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### PHOTOMETRIC DATA (MEASURED):

##### CREE LED

LED XP-E  
 FWHM / FWTM 27.0° / 56.0°  
 Efficiency 94 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



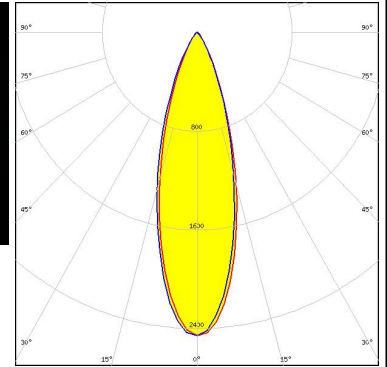
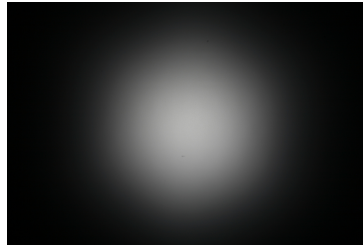
##### CREE LED

LED XP-G  
 FWHM / FWTM 30.0° / 59.0°  
 Efficiency 90 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



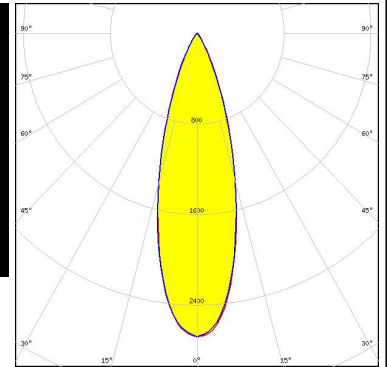
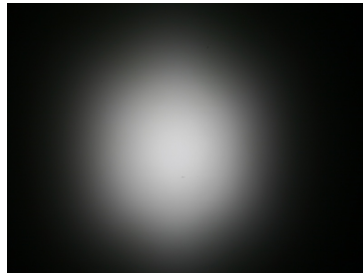
##### CREE LED

LED XP-G2  
 FWHM / FWTM 31.0° / 60.0°  
 Efficiency 87 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



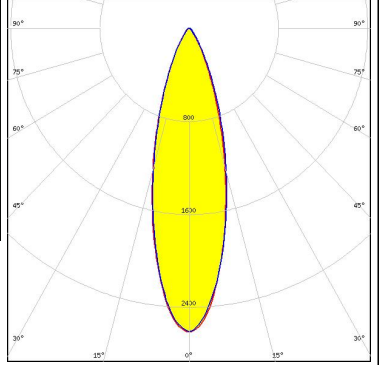



##### CREE LED

LED XT-E  
 FWHM / FWTM 31.0° / 60.0°  
 Efficiency 88 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

<p> <b>LUMILEDS</b></p> <p>LED LUXEON 2835 Line FWHM / FWTM 29.0° / 59.0° Efficiency 95 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p> <b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z5 FWHM / FWTM 31.0° Efficiency % LEDs/each optic 1 Light colour White Required components:</p>		

### PHOTOMETRIC DATA (SIMULATED):

<p><b>CREE</b> LED</p> <p>LED: XP-G3            FWHM / FWTM: 30.0° / 58.0°            Efficiency: 85 %            Peak intensity: 2.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSLOM Square CSSRM2/CSSRM3            FWHM / FWTM: 30.0° / 55.0°            Efficiency: 94 %            Peak intensity: 2.9 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: 29.0° / 54.0°            Efficiency: 94 %            Peak intensity: 3 cd/lm            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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