

TINA3-WWW

~70° wide beam optimized for CREE XP-E.
Assembly with holder, installation tape and location pins.

SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	7 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

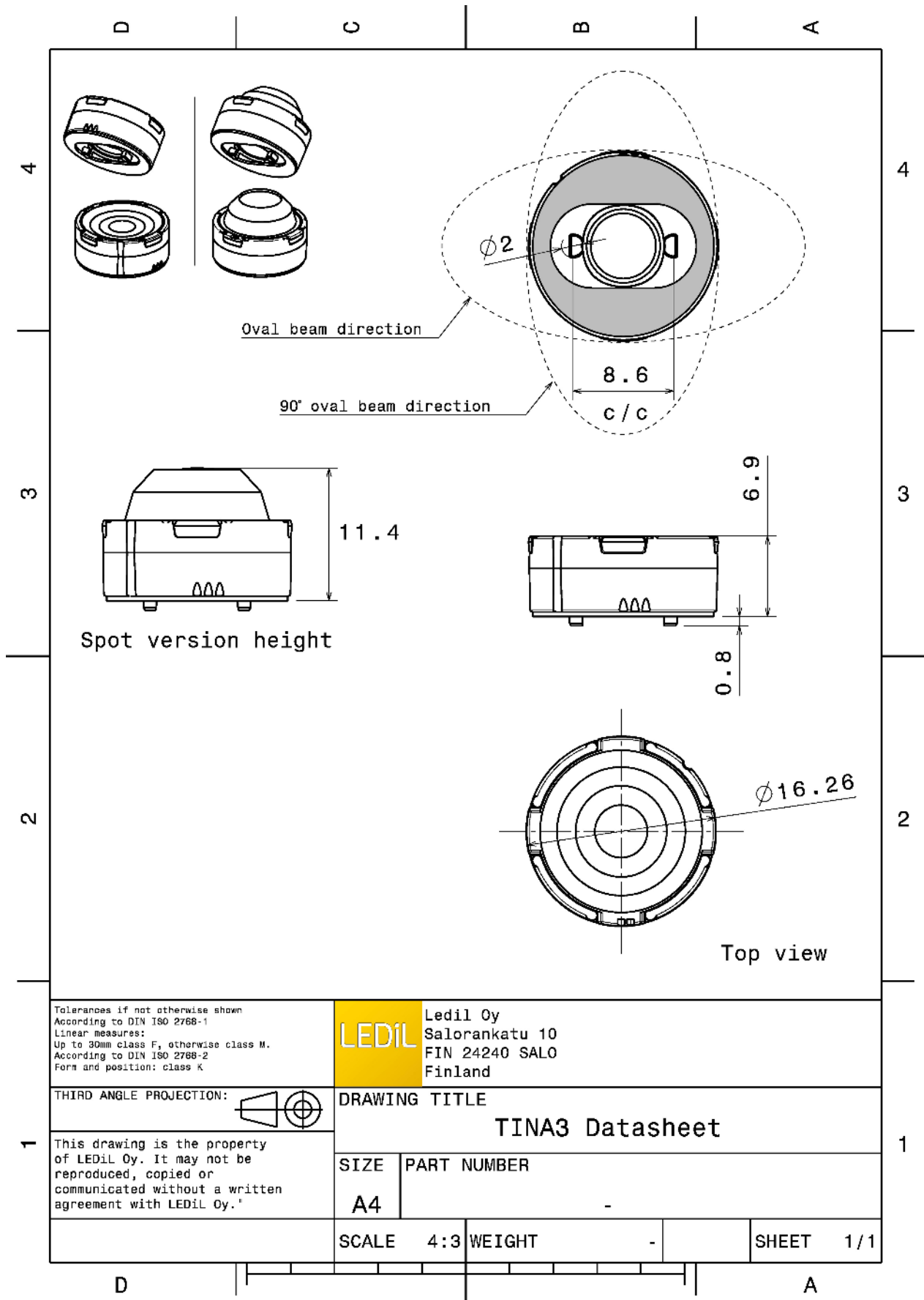


MATERIALS:

Component	Type	Material	Colour	Finish
TINA3-WWW	Single lens	PMMA	clear	
TINA3-HLD-PIN-TAPE-XP	Holder	PC	white	
TINA-TAPE3	Tape	Acrylic foam	black	

ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
FA11904_TINA3-WWW	Single lens	2016	288	288	3.0
» Box size:					



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



Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
TINA3 Datasheet

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SIZE	PART NUMBER
A4	-

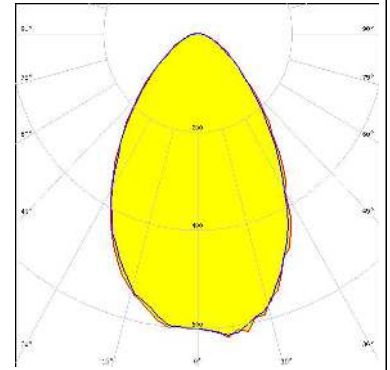
SCALE	4:3	WEIGHT	-	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

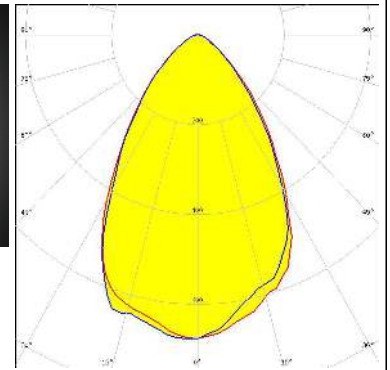
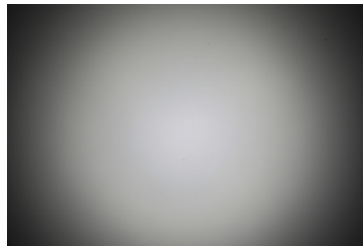
CREE LED

LED XM-L
 FWHM / FWTM 70.0° / 122.0°
 Efficiency 89 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



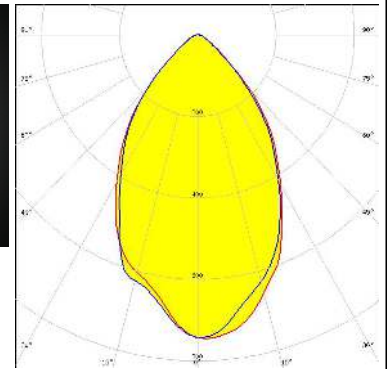
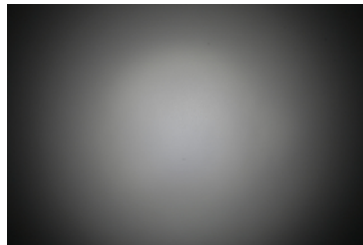
CREE LED

LED XM-L2
 FWHM / FWTM 71.0° / 110.0°
 Efficiency 88 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



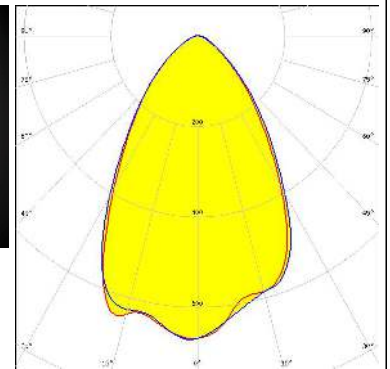
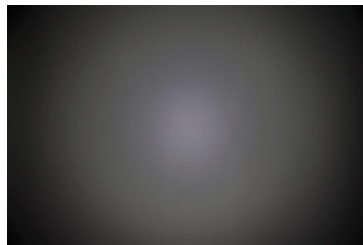
CREE LED

LED XP-G2
 FWHM / FWTM 67.0° / 107.0°
 Efficiency 90 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:

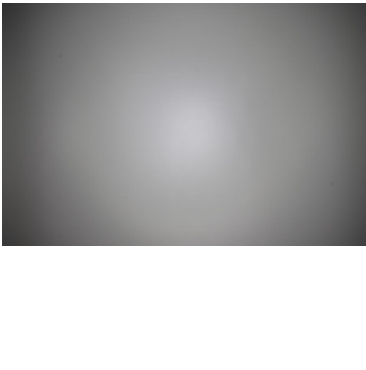
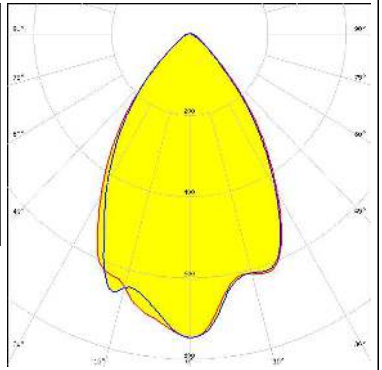

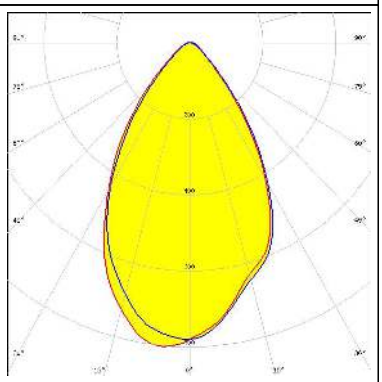
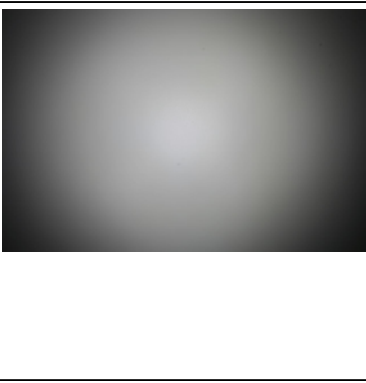
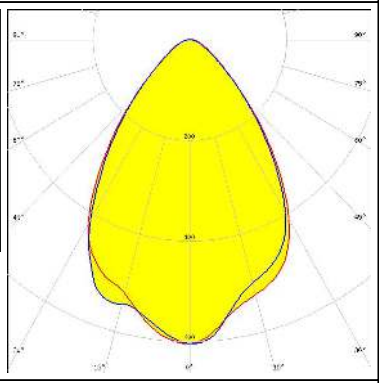

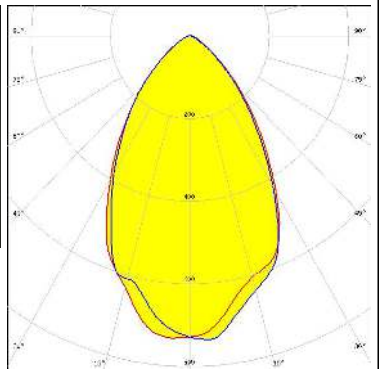


CREE LED

LED XP-L HD
 FWHM / FWTM 65.0° / 112.0°
 Efficiency 89 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



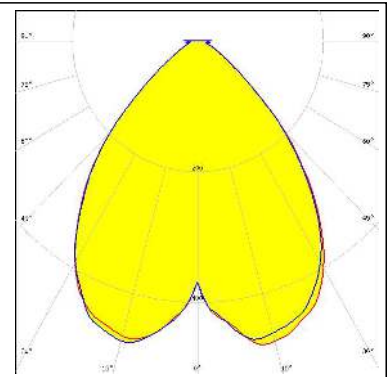
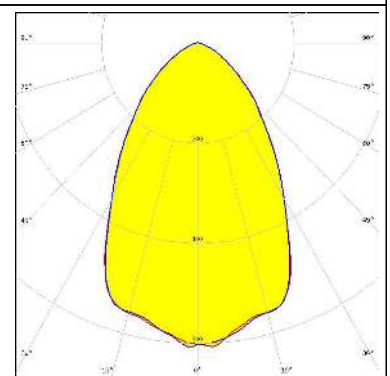
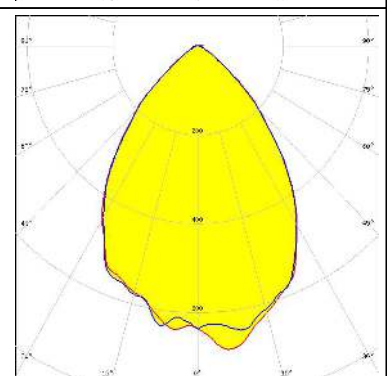
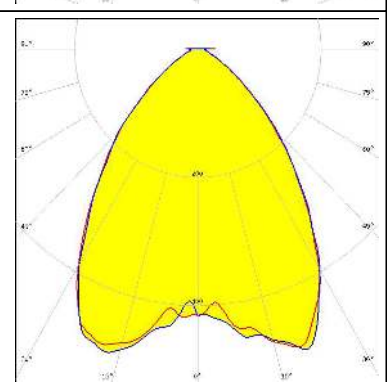
OPTICAL RESULTS (MEASURED):

<p>CREE → LED</p> <p>LED: XP-L HI FWHM / FWTM: 67.0° / 101.0° Efficiency: 90 % Peak intensity: 0.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		
<p>CREE → LED</p> <p>LED: XT-E FWHM / FWTM: 60.0° / 110.0° Efficiency: 88 % Peak intensity: 0.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		
<p>NICHIA</p> <p>LED: NS9x383 FWHM / FWTM: 72.0° / 114.0° Efficiency: 87 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		
<p>NICHIA</p> <p>LED: NVSW219F FWHM / FWTM: 64.0° / 107.0° Efficiency: 90 % Peak intensity: 0.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		

OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (SIMULATED):

<p>CREE → LED</p> <p>LED: XD16 FWHM / FWTM: 77.0° / 116.0° Efficiency: 87 % Peak intensity: 0.5 cd/lm LEDs/each optic: 4 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XHP35 HD FWHM / FWTM: 67.0° / 120.0° Efficiency: 84 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XHP35 HI FWHM / FWTM: 75.0° / 109.0° Efficiency: 94 % Peak intensity: 0.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XHP35.2 HD FWHM / FWTM: 79.0° / 120.0° Efficiency: 86 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

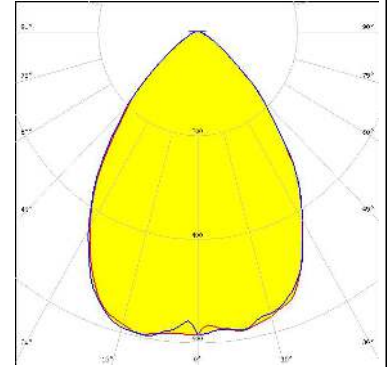
OPTICAL RESULTS (SIMULATED):



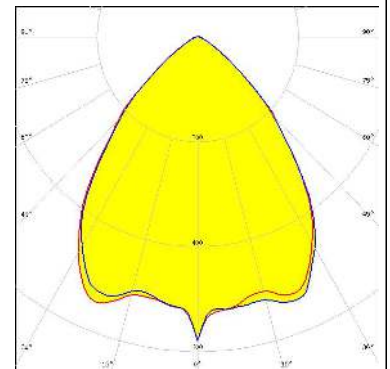
LED XM-L HVW
 FWHM / FWTM 80.0°
 Efficiency %
 LEDs/each optic 1
 Light colour White
 Required components:



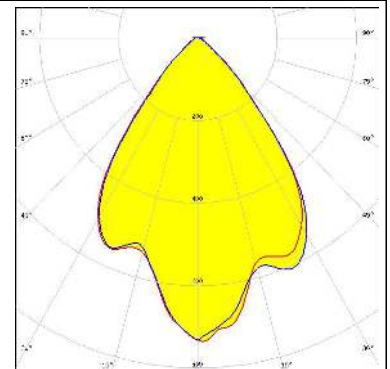
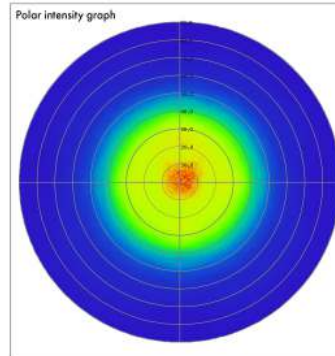
LED XP-G3
 FWHM / FWTM 76.0° / 113.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON HL2X
 FWHM / FWTM 81.0° / 113.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



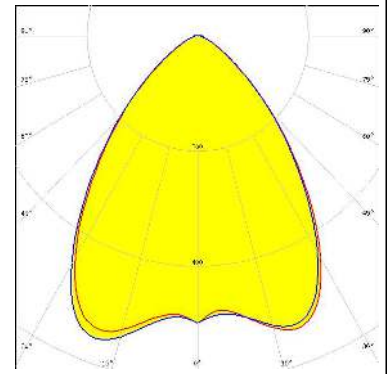
LED SST-10-IR-B90
 FWHM / FWTM 72.0° / 99.0°
 Efficiency 92 %
 LEDs/each optic 1
 Light colour IR
 Required components:



OPTICAL RESULTS (SIMULATED):



LED	NVSW3x9A
FWHM / FWTM	79.0° / 117.0°
Efficiency	92 %
Peak intensity	0.6 cd/lm
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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