

## TINA-M

~30° medium beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

### SPECIFICATION:

Dimensions	Ø 16.1
Height	10.1 mm
Fastening	tape
ROHS compliant	yes ⓘ

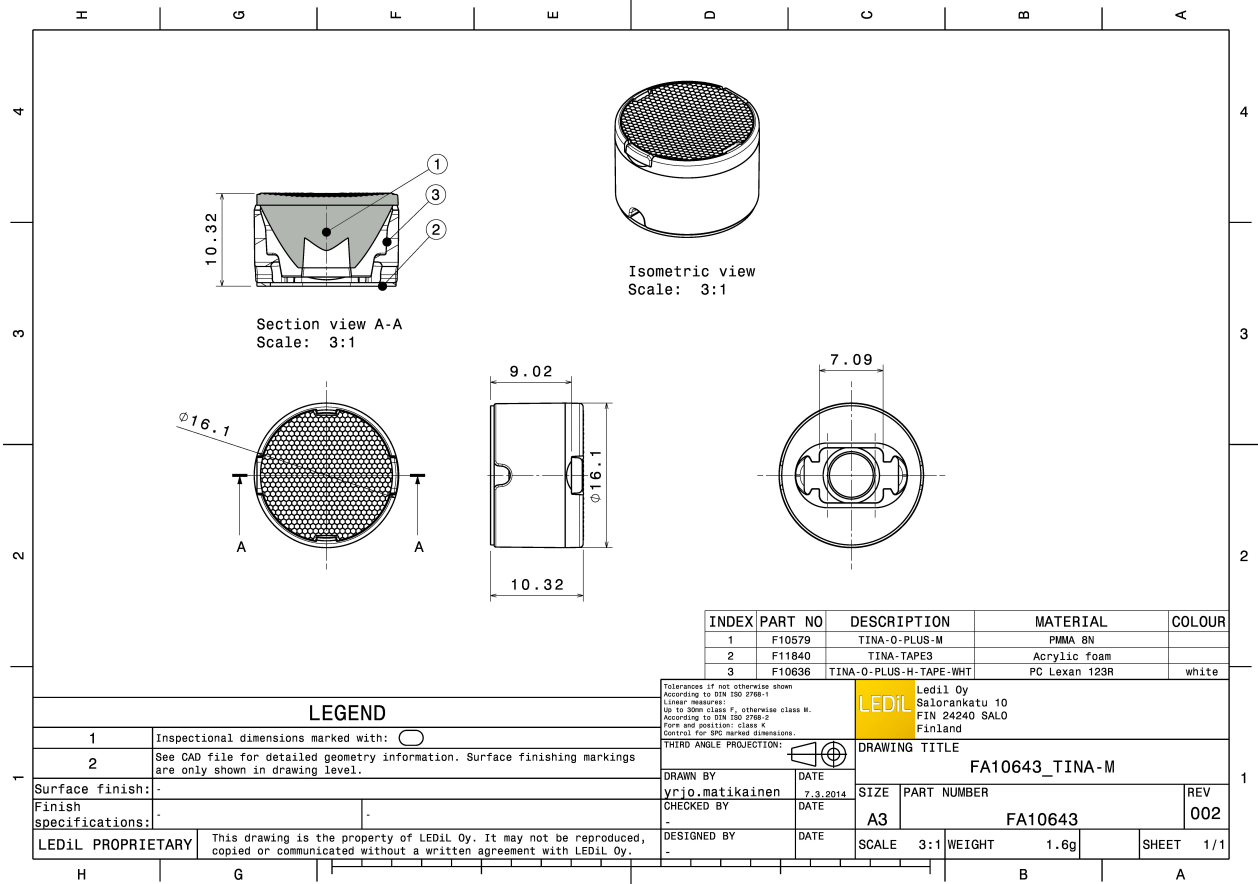


### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA-O-PLUS-H-TAPE-WHT	Holder	PC	white		
TINA-O-PLUS-M	Single lens	PMMA	clear		
TINA-TAPE3	Tape	Acryl tape	black		

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
FA10643_TINA-M » Box size:	2016	288	144	4.0



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

## OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

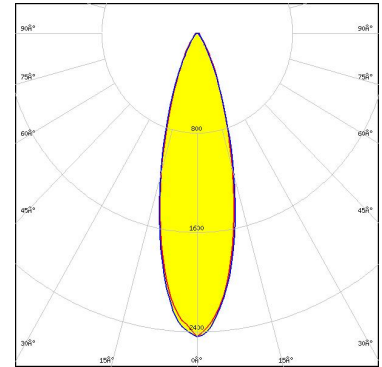
LED	Golden Dragon+
FWHM / FWTM	30.0° / 58.0°
Efficiency	92 %
Peak intensity	3.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

### OPTICAL RESULTS (SIMULATED):



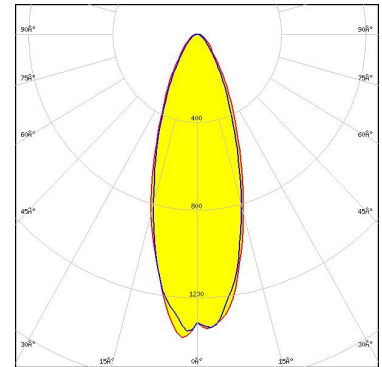
**LED** XP-L HI  
**FWHM / FWTM** 29.0° / 58.0°  
**Efficiency** 88 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



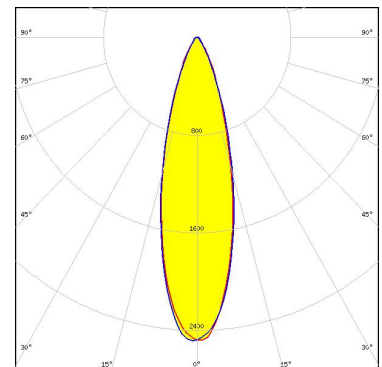
**LED** LUXEON 5050 Square LES  
**FWHM / FWTM** 35.0° / 76.0°  
**Efficiency** 82 %  
**Peak intensity** 1.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** NVSW219C-V2  
**FWHM / FWTM** 28.0° / 58.0°  
**Efficiency** 86 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

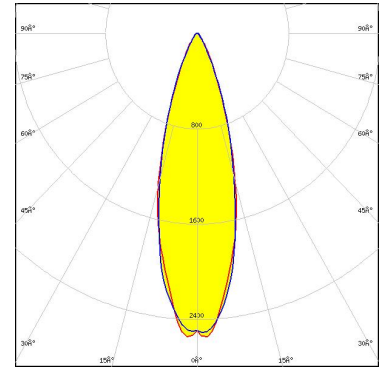


Light distribution files

### OPTICAL RESULTS (SIMULATED):



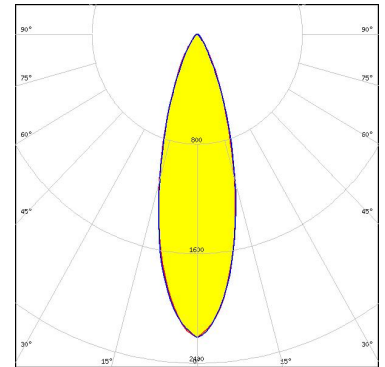
LED NVSW219F-V2  
FWHM / FWTM 30.0° / 56.0°  
Efficiency 89 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



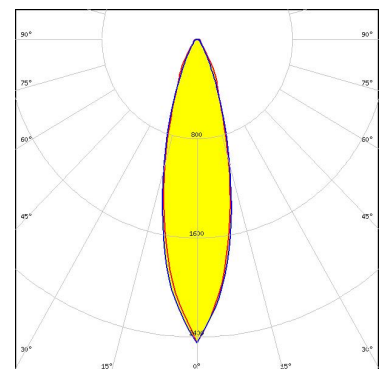
LED NVSW519A  
FWHM / FWTM 30.0° / 60.0°  
Efficiency 84 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED OSLOM Black Flat S (KW HHL533.TK)  
FWHM / FWTM 27.0° / 58.0°  
Efficiency 84 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

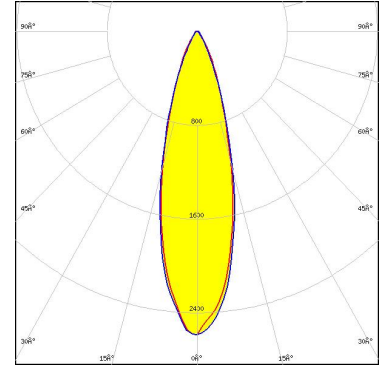


Light distribution files

## OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

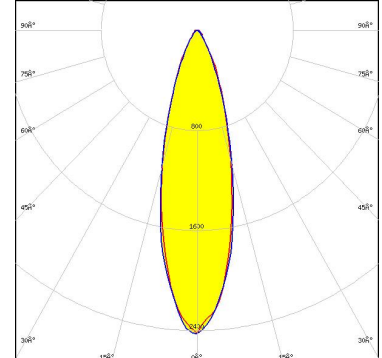
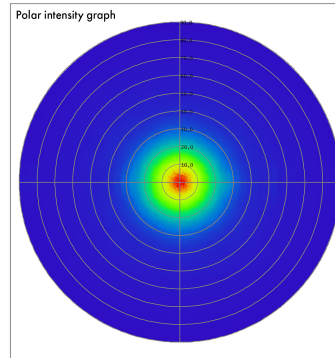
LED OSLON Boost HX (KW CULPM1.TG)  
 FWHM / FWTM 28.0° / 57.0°  
 Efficiency 87 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4715AS  
 FWHM / FWTM 28.0° / 58.0°  
 Efficiency 87 %  
 LEDs/each optic 1  
 Light colour/type IR  
 Required components:



Light distribution files

### 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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