TINA2-O

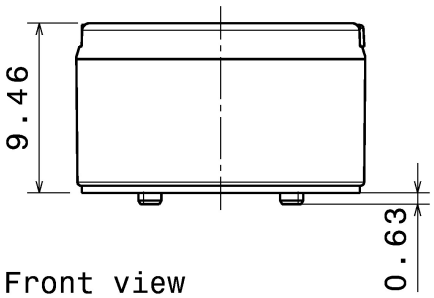
~35° + 15° oval beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

TECHNICAL SPECIFICATIONS:

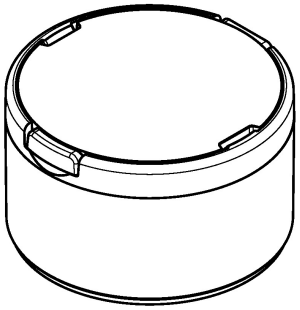
Dimensions	Ø 16.0 mm
Height	9.5 mm
Fastening	tape, pin
Colour	black
Box size	451 x 241 x 298 mm
Box weight	8.5 kg
Quantity in Box	4140 pcs
ROHS compliant	yes

MATERIAL SPECIFICATIONS:

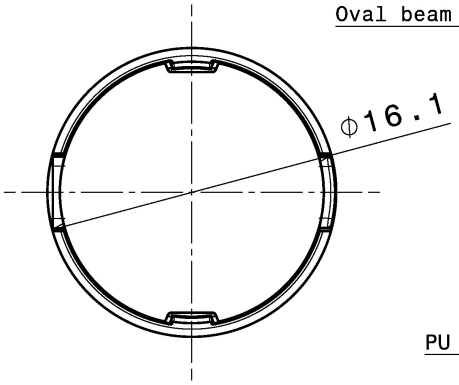
Component	Type	Material	Colour
TINA2-XP-O	Single lens	PMMA	clear
TINA2-HLD-BLK	Holder	PC	black
TINA-TAPE3	Tape	PU tape	black



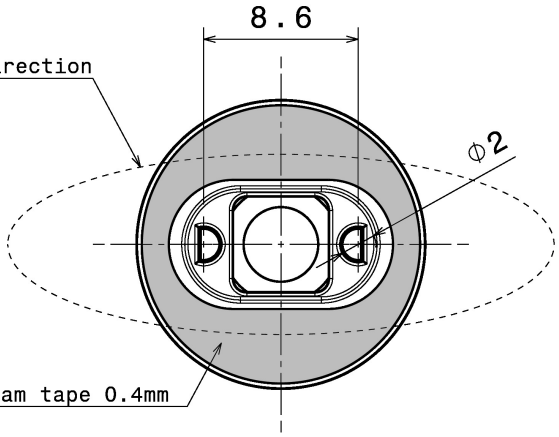
Front view



Isometric view
Scale: 3:1



Top view



Bottom view

INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2-lens	PMMA	
2	C12373	TINA2-HLD-WHT	PC	white

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

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
TINA2 series datasheet

SIZE A4

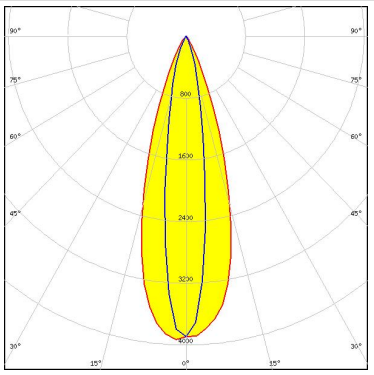
PART NUMBER -

SCALE 3:1 | WEIGHT 1,3 g | SHEET 1/1

PHOTOMETRIC DATA (MEASURED):

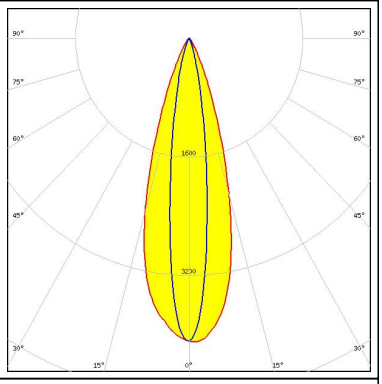
CREE

LED	XB-H
FWHM	34.0 + 17.0°
Efficiency	84 %
Peak intensity	3.900 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



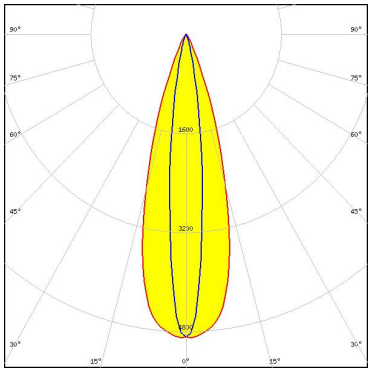
CREE

LED	XD16
FWHM	32.0 + 15.0°
Efficiency	80 %
Peak intensity	4.100 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



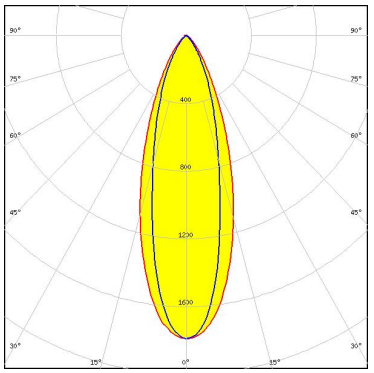
CREE

LED	XQ-E HI
FWHM	33.0 + 13.0°
Efficiency	80 %
Peak intensity	5.000 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



LUMILEDS

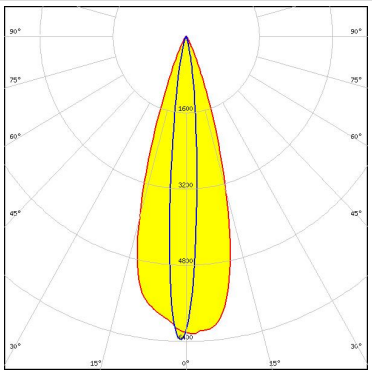
LED	LUXEON 5050
FWHM	36.0 + 28.0°
Efficiency	80 %
Peak intensity	1.800 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



PHOTOMETRIC DATA (MEASURED):

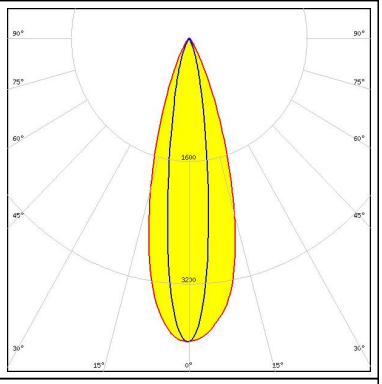
LUMILEDS

LED	LUXEON CZ
FWHM	32.0 + 10.0°
Efficiency	88 %
Peak intensity	6.400 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



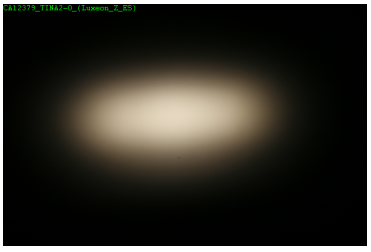
LUMILEDS

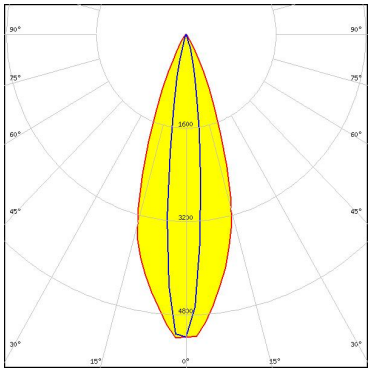
LED	LUXEON TX
FWHM	32.0 + 16.0°
Efficiency	85 %
Peak intensity	3.960 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



LUMILEDS

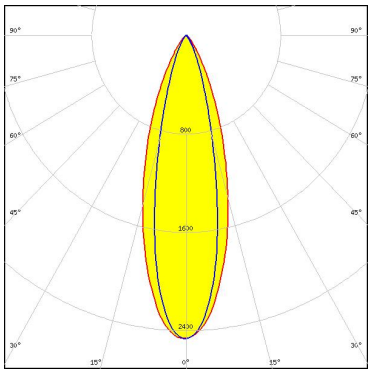
LED	LUXEON Z ES
FWHM	36.0 + 13.0°
Efficiency	85 %
Peak intensity	5.300 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	





NICHIA

LED	NWSx229A
FWHM	33.0 + 24.0°
Efficiency	82 %
Peak intensity	2.500 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

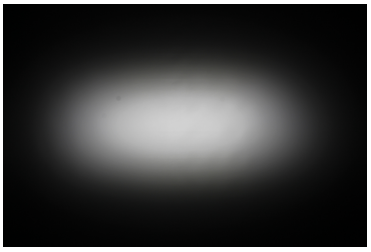


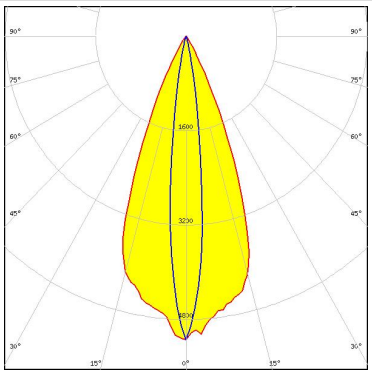
PHOTOMETRIC DATA (MEASURED):

OSRAM
Opto Semiconductors

LED	Oslon Black Flat
FWHM	31.0 + 12.0°
Efficiency	87 %
Peak intensity	6.000 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

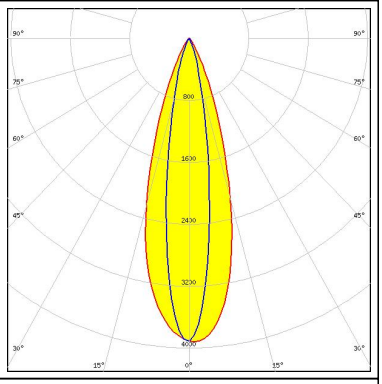




OSRAM
Opto Semiconductors

LED	Oslon Square EC
FWHM	33.0 + 17.0°
Efficiency	84 %
Peak intensity	3.920 cd/lm
LEDs/each optic	1
Light colour	White

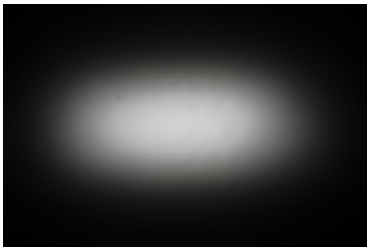
Required components:

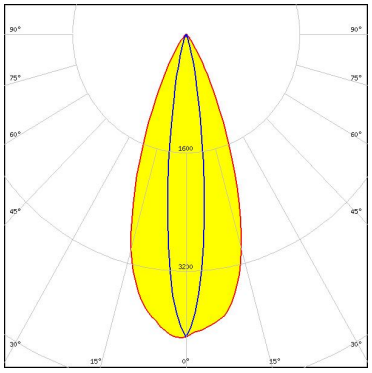


OSRAM
Opto Semiconductors

LED	Oslon Square Flat
FWHM	31.0 + 12.0°
Efficiency	87 %
Peak intensity	5.900 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

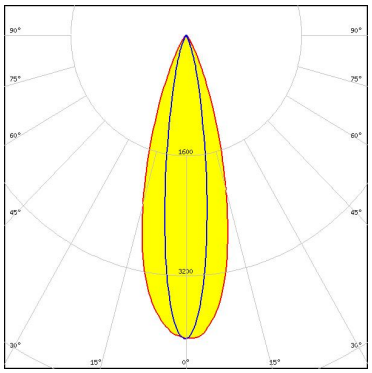




OSRAM
Opto Semiconductors

LED	Oslon Square Gen3
FWHM	32.0 + 16.0°
Efficiency	87 %
Peak intensity	4.000 cd/lm
LEDs/each optic	1
Light colour	White

Required components:



PHOTOMETRIC DATA (MEASURED):

OSRAM
Opto Semiconductors

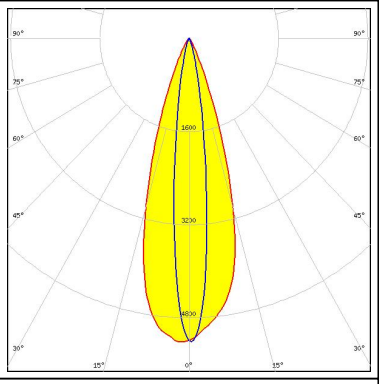
LED	Oslon Square PC
FWHM	33.0 + 13.0°
Efficiency	87 %
Peak intensity	3.750 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

OSRAM
Opto Semiconductors

LED	Oslon SSL 150
FWHM	33.0 + 13.0°
Efficiency	86 %
Peak intensity	5.200 cd/lm
LEDs/each optic	1
Light colour	White

Required components:



OSRAM
Opto Semiconductors

LED	Oslon SSL 150
FWHM	38.0 + 13.0°
Efficiency	87 %
Peak intensity	3.700 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

OSRAM
Opto Semiconductors

LED	Oslon SSL 80
FWHM	35.0 + 12.0°
Efficiency	86 %
Peak intensity	3.800 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

PHOTOMETRIC DATA (MEASURED):

OSRAM
Opto Semiconductors

LED	SFH 4715S
FWHM	40.0 + 16.0°
Efficiency	%
Peak intensity	cd/lm
LEDs/each optic	1
Light colour	White

Required components:

OSRAM
Opto Semiconductors

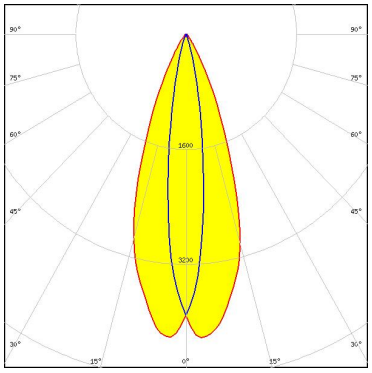
LED	SFH 4725S
FWHM	31.0 + 16.0°
Efficiency	%
Peak intensity	cd/lm
LEDs/each optic	1
Light colour	White

Required components:

PHOTOMETRIC DATA (SIMULATED):

LUMILEDS

LED	LUXEON C
FWHM	14.0 + 37.0°
Efficiency	93 %
Peak intensity	4.200 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

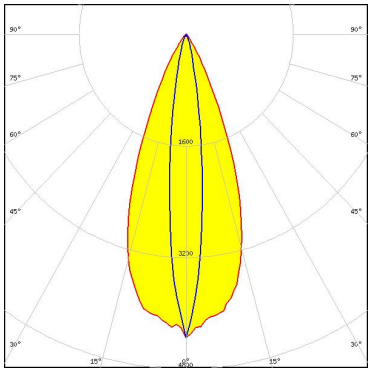


LUMILEDS

LED	LUXEON IR Compact
FWHM	37.0 + 13.0°
Efficiency	82 %
Peak intensity	0.000 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

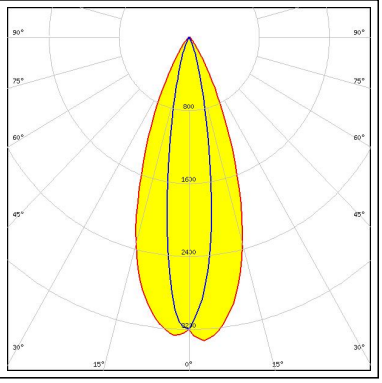
NICHIA

LED	NFSx757G
FWHM	41.0 + 13.0°
Efficiency	90 %
Peak intensity	4.350 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



NICHIA

LED	NVSxx19B/NVSxx19C
FWHM	39.0 + 17.0°
Efficiency	86 %
Peak intensity	3.300 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

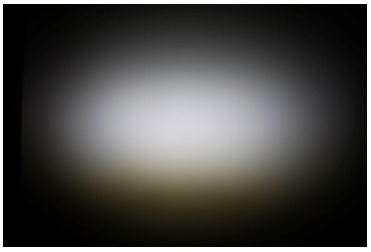


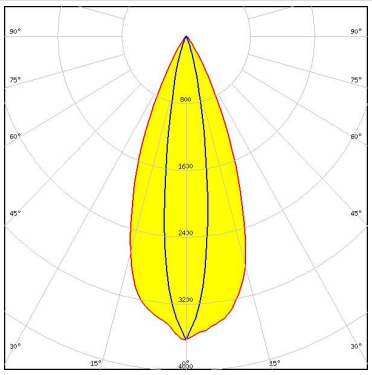
PHOTOMETRIC DATA (SIMULATED):

OSRAM
Opto Semiconductors

LED	Duris S5 (2 chip)
FWHM	41.0 + 17.0°
Efficiency	91 %
Peak intensity	3.630 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

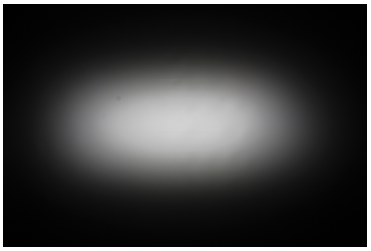


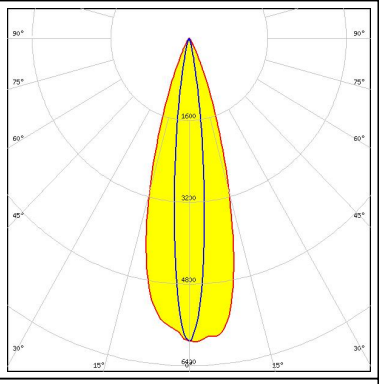


OSRAM
Opto Semiconductors

LED	Oslon Black Flat
FWHM	31.0 + 12.0°
Efficiency	87 %
Peak intensity	6.200 cd/lm
LEDs/each optic	1
Light colour	White

Required components:





OSRAM
Opto Semiconductors

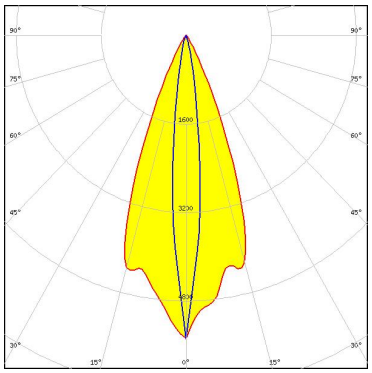
LED	SFH 4770S
FWHM	41.0 + 16.0°
Efficiency	85 %
Peak intensity	3.500 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

OSRAM
Opto Semiconductors

LED	Synios P2720 1 mm
FWHM	41.0 + 11.0°
Efficiency	91 %
Peak intensity	5.480 cd/lm
LEDs/each optic	1
Light colour	White

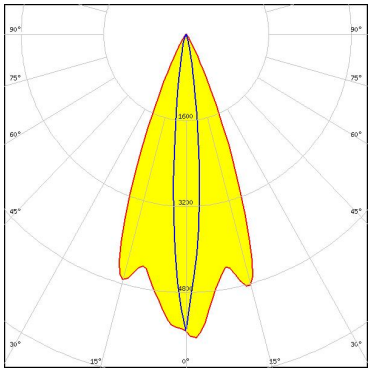
Required components:



PHOTOMETRIC DATA (SIMULATED):

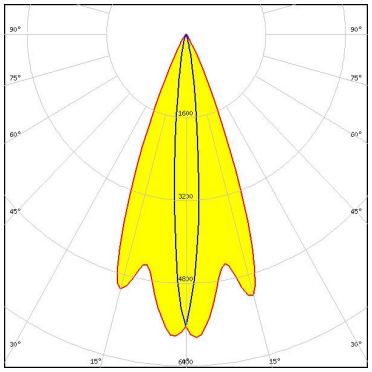
OSRAM
Opto Semiconductors

LED	Synios P2720 1/2 mm
FWHM	41.0 + 10.0°
Efficiency	91 %
Peak intensity	5.650 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM
Opto Semiconductors

LED	Synios P2720 1/4 mm
FWHM	41.0 + 9.0°
Efficiency	91 %
Peak intensity	5.970 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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

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