TINA2-SS

~20° smooth spot beam. Assembly with holder, installation tape and location pins.



SPECIFICATION:

Dimensions	Ø 16.0 mm
Height	9.3 mm
Fastening	tape, pin
ROHS compliant	yes

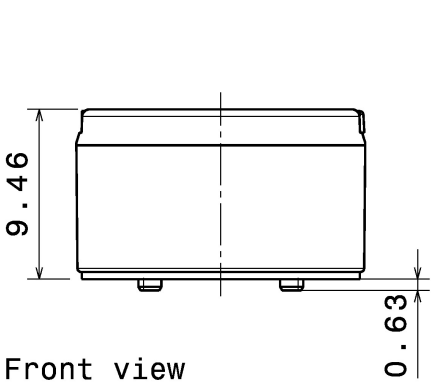
MATERIALS:

Component	Type	Material	Colour	Finish	Length
TINA2-SS	Single lens	PMMA	clear		14.8
TINA2-HLD-BLK	Holder	PC	black		16.1
TINA-TAPE3	Tape	Acrylic foam	black		16.0

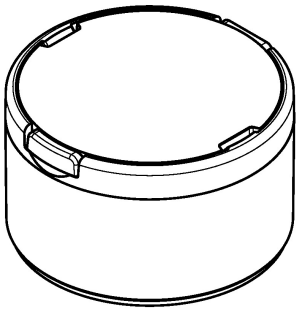
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA12376_TINA2-SS » Box size: 451 x 254 x 197 mm	4140	230	230	8.1

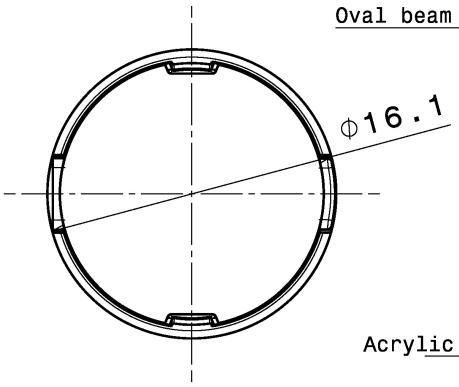
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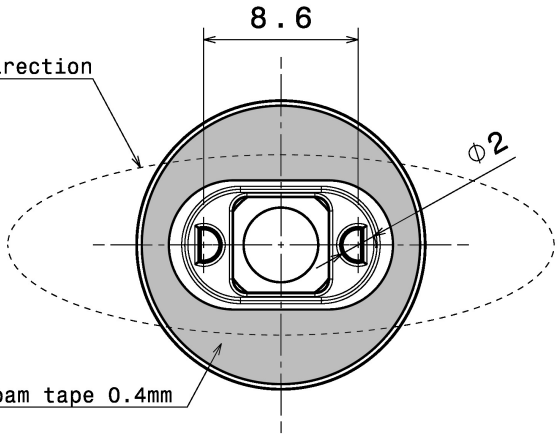
Front view



Isometric view
Scale: 3:1



Top view



Bottom view

INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2-lens	PMMA	
2	C12372	TINA2-HLD-BLK	PC	black

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

THIRD ANGLE PROJECTION:

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Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

DRAWING TITLE
TINA2 series datasheet

SIZE A4 | PART NUMBER -

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

See also our general installation guide: www.ledil.com/installation_guide

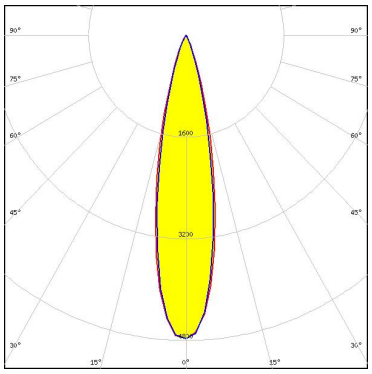
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OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XB-H
FWHM / FWTM	22.0° / 41.0°
Efficiency	87 %
Peak intensity	4.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

CREE LEDs

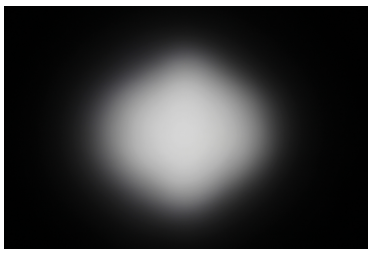
LED	XQ-E HD
FWHM / FWTM	22.0° / 39.0°
Efficiency	85 %
Peak intensity	6.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

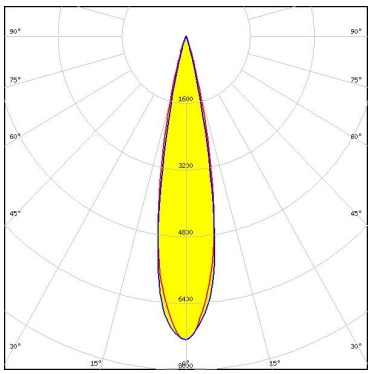


Light distribution files

LUMILEDS

LED	LUXEON CZ
FWHM / FWTM	20.0° / 33.0°
Efficiency	91 %
Peak intensity	7.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

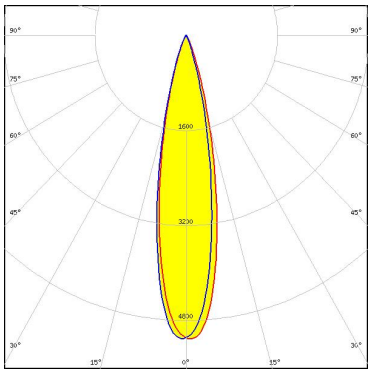
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OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON TX
FWHM / FWTM	22.0° / 40.0°
Efficiency	89 %
Peak intensity	5.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

LUMILEDS

LED	LUXEON Z ES
FWHM / FWTM	21.0° / 37.0°
Efficiency	88 %
Peak intensity	6.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

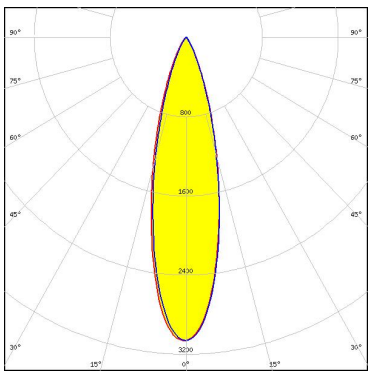


Light distribution files

NICHIA

LED	NWSx229A
FWHM / FWTM	26.0° / 52.0°
Efficiency	86 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





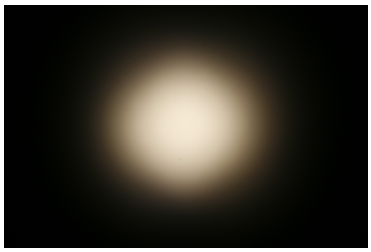
Light distribution files

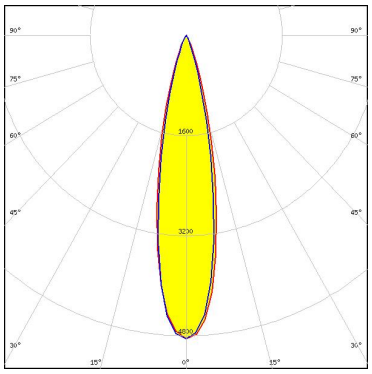
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OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	23.0° / 40.0°
Efficiency	85 %
Peak intensity	4.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

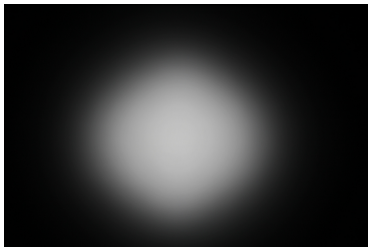


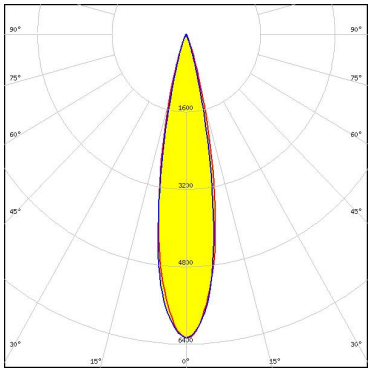


Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	22.0° / 37.0°
Efficiency	89 %
Peak intensity	6.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4725S
FWHM / FWTM	20.0° / 39.0°
Efficiency	%
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

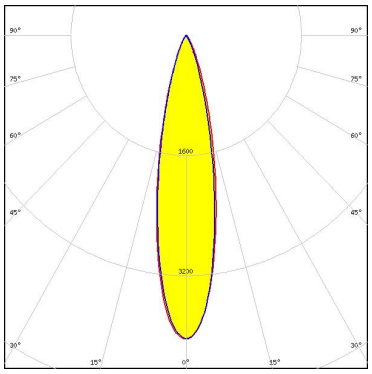
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OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR

LED	Z5M3
FWHM / FWTM	23.0° / 45.0°
Efficiency	87 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





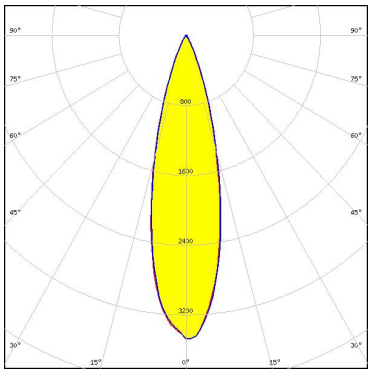
Light distribution files

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OPTICAL RESULTS (SIMULATED):

CREE LEDs

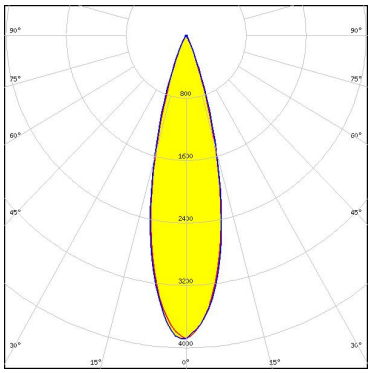
LED	XB-D
FWHM / FWTM	26.0° / 49.0°
Efficiency	88 %
Peak intensity	3.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

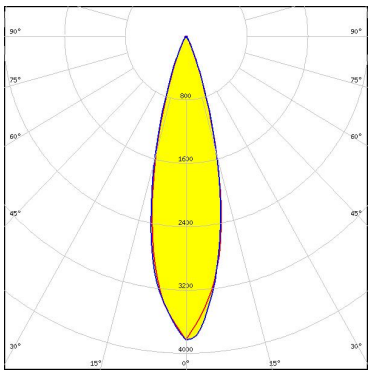
CREE LEDs

LED	XE-G
FWHM / FWTM	27.0° / 46.0°
Efficiency	91 %
Peak intensity	3.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



LUMILEDS

LED	LUXEON C
FWHM / FWTM	26.0° / 45.0°
Efficiency	93 %
Peak intensity	3.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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OPTICAL RESULTS (SIMULATED):

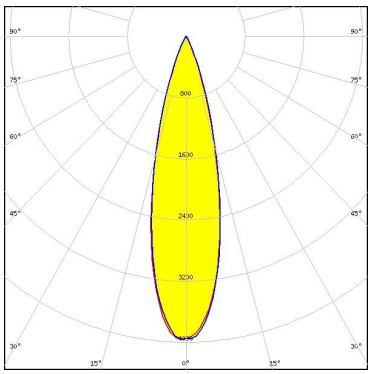
LUMILEDS

LED	LUXEON IR Compact
FWHM / FWTM	26.0° / 44.0°
Efficiency	84 %
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

LUMILEDS

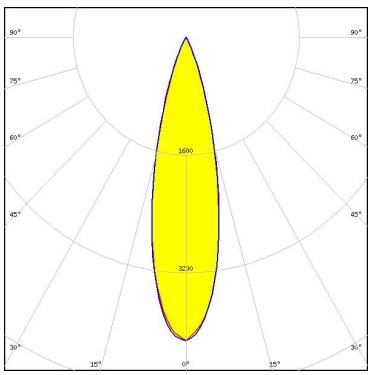
LED	LUXEON Rubix
FWHM / FWTM	26.0° / 46.0°
Efficiency	92 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON Rubix
FWHM / FWTM	26.0° / 45.0°
Efficiency	92 %
Peak intensity	4.1 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	



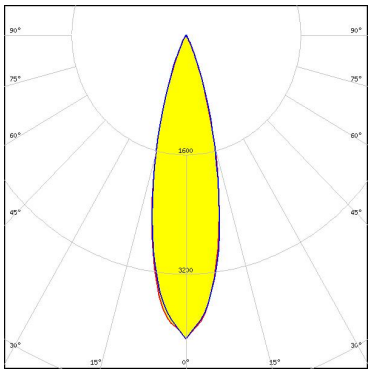
Light distribution files

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OPTICAL RESULTS (SIMULATED):

LUMILEDS

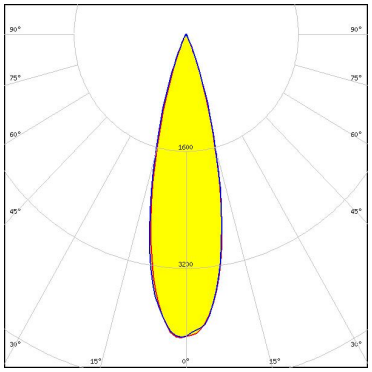
LED	LUXEON Rubix
FWHM / FWTM	26.0° / 46.0°
Efficiency	92 %
Peak intensity	4.1 cd/lm
LEDs/each optic	1
Light colour/type	Blue
Required components:	



Light distribution files

LUMILEDS

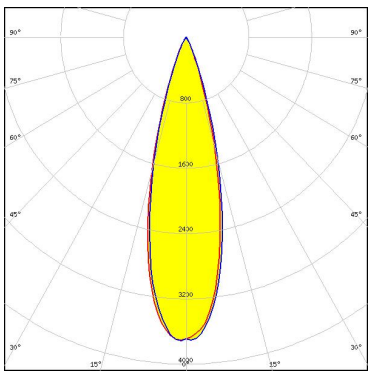
LED	LUXEON Z ES
FWHM / FWTM	26.0° / 44.0°
Efficiency	92 %
Peak intensity	4.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NFSx757G
FWHM / FWTM	27.0° / 47.0°
Efficiency	92 %
Peak intensity	3.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

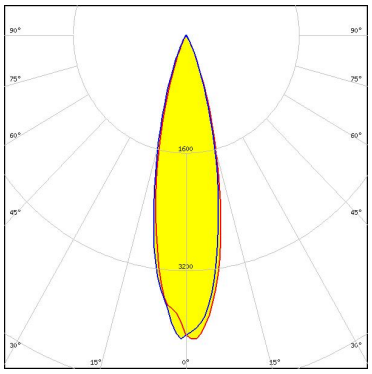
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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	Duris S5 (2 chip)
FWHM / FWTM	25.0° / 46.0°
Efficiency	92 %
Peak intensity	4.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

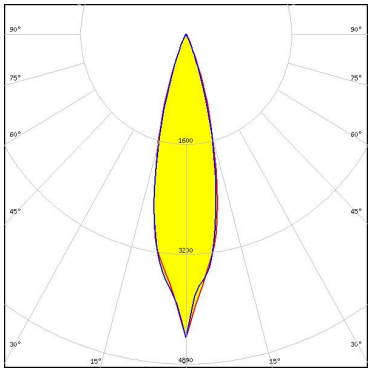




Light distribution files

OSRAM
Opto Semiconductors

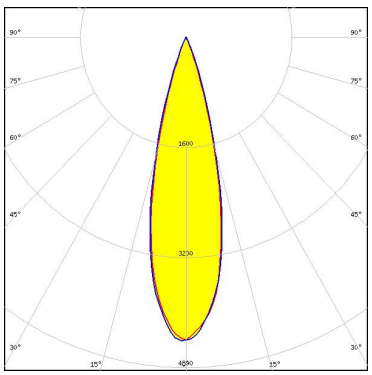
LED	OSCONIQ P 3030
FWHM / FWTM	24.0° / 45.0°
Efficiency	91 %
Peak intensity	4.4 cd/lm
LEDs/each optic	1
Light colour/type	Blue
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Pure 1414
FWHM / FWTM	26.0° / 42.0 + 44.0°
Efficiency	92 %
Peak intensity	4.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



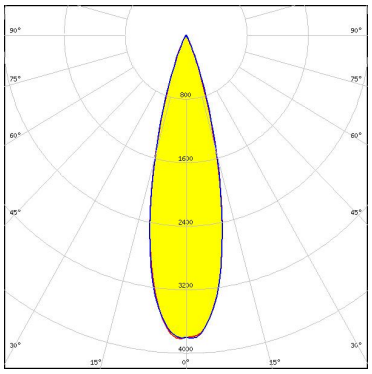
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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	OSLON Square Flat
FWHM / FWTM	27.0° / 45.0°
Efficiency	90 %
Peak intensity	3.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

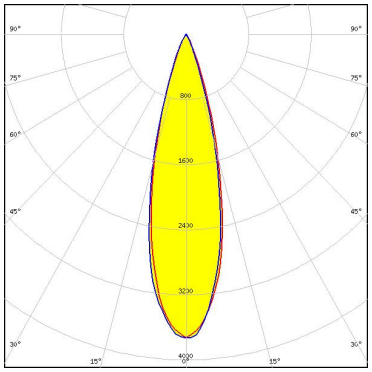




Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	27.0° / 46.0°
Efficiency	90 %
Peak intensity	3.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4770S
FWHM / FWTM	24.0° / 44.0°
Efficiency	86 %
Peak intensity	4.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

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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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