TINA2-M

~30° medium beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

SPECIFICATION:

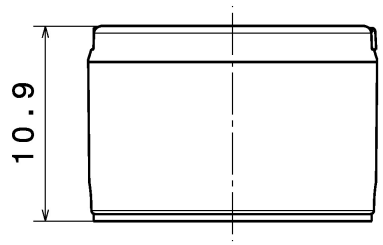
Dimensions	Ø 16.1
Height	11 mm
Fastening	tape
ROHS compliant	yes

MATERIALS:

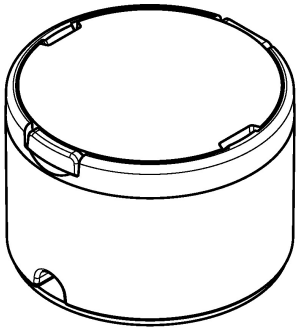
Component	Type	Material	Colour	Finish	Length (mm)
TINA2-M	Single lens	PMMA	clear		
TINA2-HLD-N83-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acryl tape	black		

ORDERING INFORMATION:

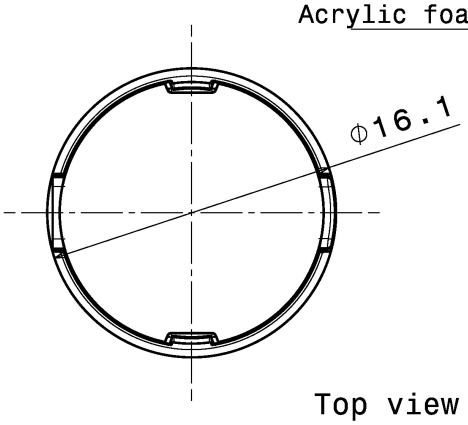
Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA11174_TINA2-M » Box size: 451 x 241 x 298 mm	4140	230	230	8.4



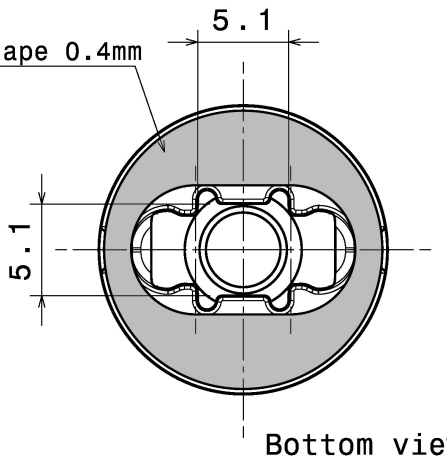
Front view



Isometric view
Scale: 3:1



Top view



Bottom view

INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2 lens	PMMA	clear
2	C11170	TINA2-HLD-N83-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

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
TINA2-N83 series

SIZE A4

PART NUMBER -

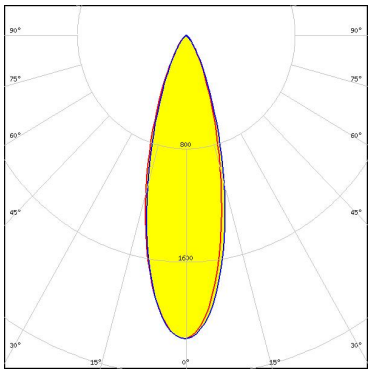
SCALE 3:1 WEIGHT 1,8 g SHEET 1/1

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

OPTICAL RESULTS (MEASURED):

CREE LEDs

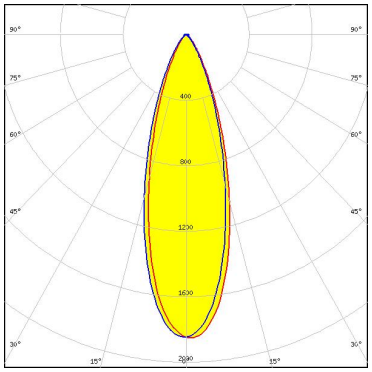
LED	MX-6
FWHM / FWTM	30.0° / 60.0°
Efficiency	83 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON V
FWHM / FWTM	32.0° / 63.0°
Efficiency	75 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

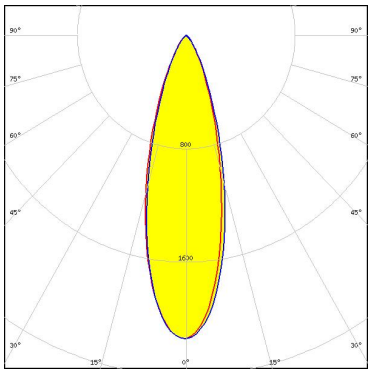
LED	NS3x83
FWHM / FWTM	32.0° / 60.0°
Efficiency	%
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

OPTICAL RESULTS (MEASURED):

NICHIA

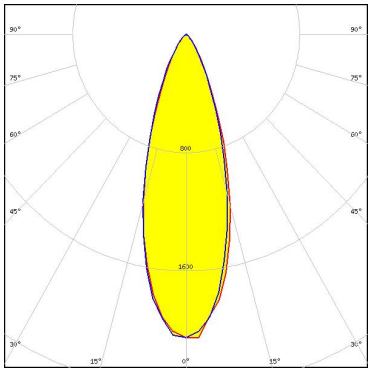
LED	NS6x83
FWHM / FWTM	30.0° / 60.0°
Efficiency	85 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OPTOGAN

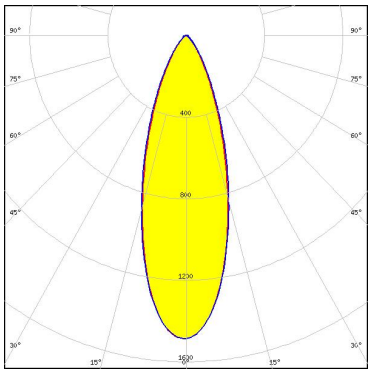
LED	OLP-x5050F6L
FWHM / FWTM	34.0° / 64.0°
Efficiency	86 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

LED	LH508A
FWHM / FWTM	33.0° / 68.0°
Efficiency	71 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

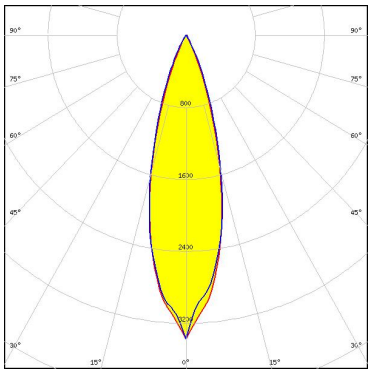


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

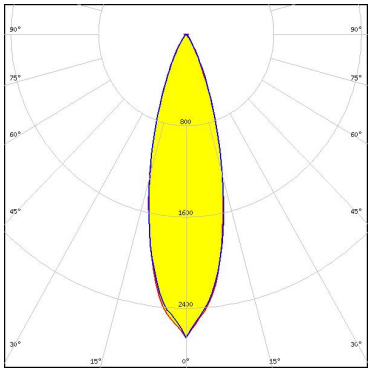
LED	XP-E2
FWHM / FWTM	28.0° / 51.0°
Efficiency	90 %
Peak intensity	3.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

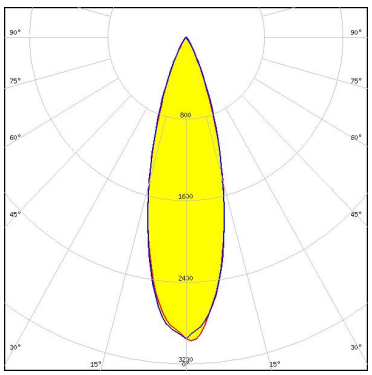
LED	XP-G3
FWHM / FWTM	30.0° / 56.0°
Efficiency	84 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-G4
FWHM / FWTM	30.0° / 53.0°
Efficiency	90 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

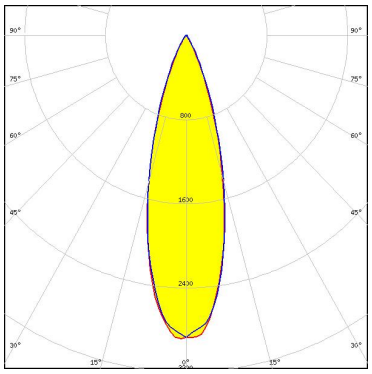


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

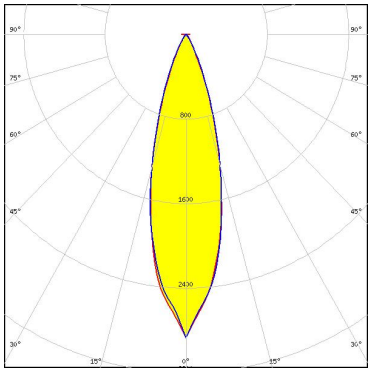
LED	XP-L HI
FWHM / FWTM	30.0° / 54.0°
Efficiency	89 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

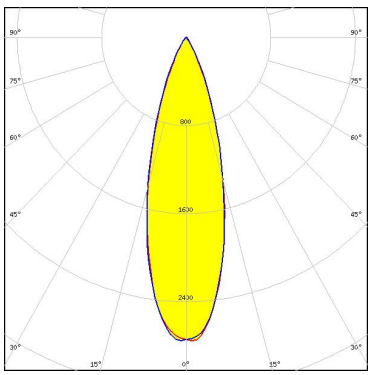
LED	XT-E
FWHM / FWTM	28.0° / 52.0°
Efficiency	81 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSW219F
FWHM / FWTM	30.0° / 55.0°
Efficiency	88 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

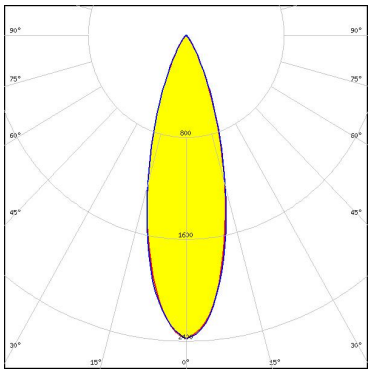


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

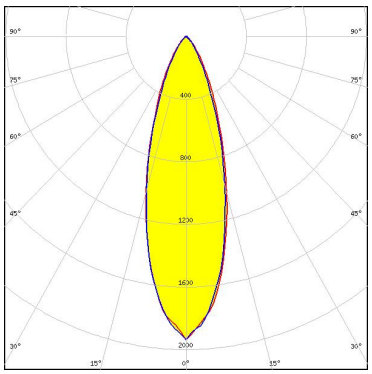
LED	NVSW519A
FWHM / FWTM	30.0° / 58.0°
Efficiency	83 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

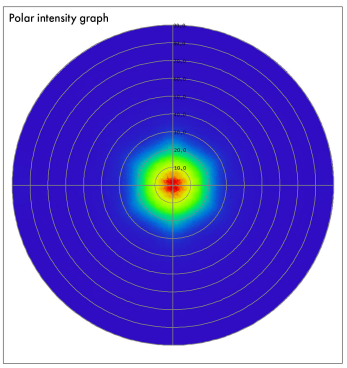
LED	Duris S8
FWHM / FWTM	31.0° / 65.0°
Efficiency	78 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

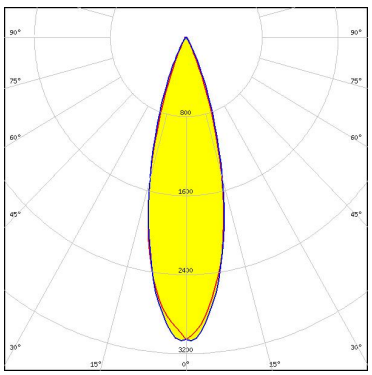


Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4715AS
FWHM / FWTM	29.0° / 50.0°
Efficiency	87 %
LEDs/each optic	1
Light colour/type	IR
Required components:	



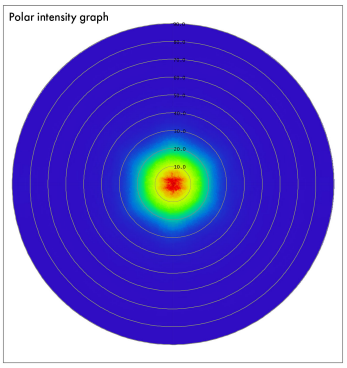


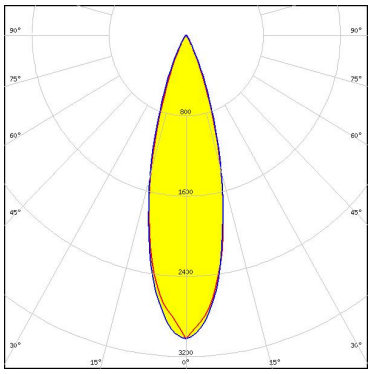
Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	SFH 4725AS
FWHM / FWTM	28.0° / 51.0°
Efficiency	86 %
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:

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.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy
Joensuunkatu 7
FI-24100 SALO
Finland

LEDiL Inc.
228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.
405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

Local sales and technical support
www.ledil.com/
where_to_buy

Shipping locations
Poznan, Poland
Hong Kong, China

Distribution Partners
www.ledil.com/
where_to_buy