TINA-RS

~13° spot beam optimized for Nichia NS6x83. Assembly with holder and installation tape.

SPECIFICATION:

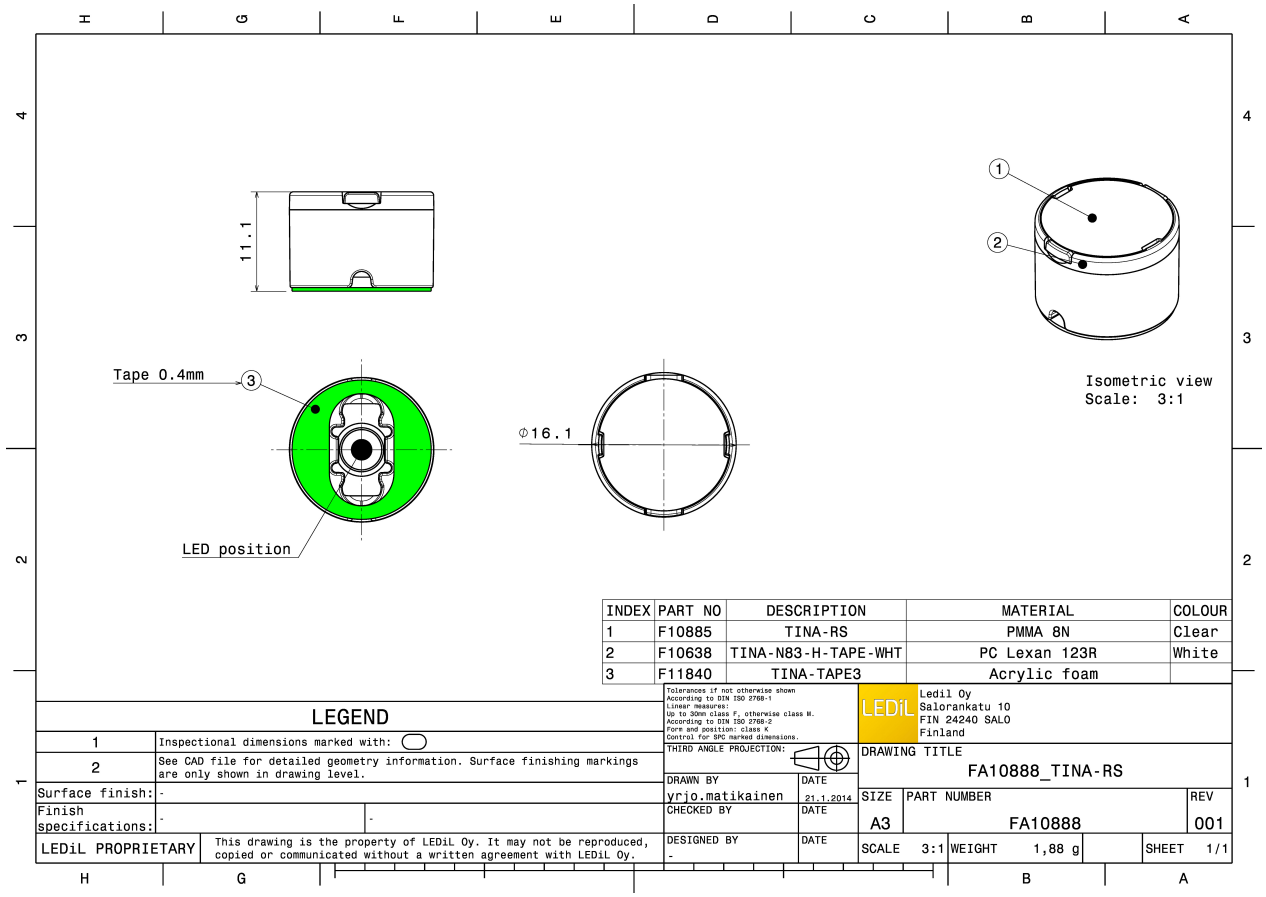
Dimensions	Ø 16.1 mm
Height	11.1 mm
Fastening	tape
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA-RS	Single lens	PMMA	clear		
TINA-N83-H-TAPE-WHT	Holder	PC	white		
TINA-TAPE3	Tape	Acrylic foam	black		

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
FA10888_TINA-RS » Box size: 470 x 240 x 105 mm	2016	288	144	4.1



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	F10885	TINA-RS	PMMA 8N	Clear
2	F10638	TINA-N83-H-TAPE-WHT	PC Lexan 123R	White
3	F11840	TINA-TAPE3	Acrylic foam	

LEGEND	
1	Inspectional dimensions marked with: ⬭
2	See CAD file for detailed geometry information. Surface finishing markings are only shown in drawing level.
Surface finish:	-
Finish specifications:	- -
LEDiL PROPRIETARY	This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy.

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
Control for SPC marked dimensions.

THIRD ANGLE PROJECTION:

DRAWN BY	yrjo.matikainen	DATE 21.1.2014
CHECKED BY		DATE
DESIGNED BY	-	DATE

LEDiL
Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

DRAWING TITLE
FA10888_TINA-RS

SIZE	PART NUMBER	REV
A3	FA10888	001

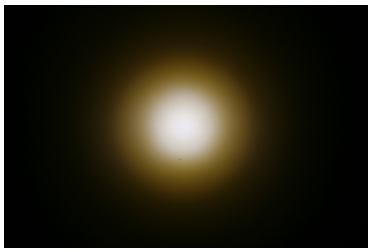
SCALE 3:1 | WEIGHT 1,88 g | SHEET 1/1

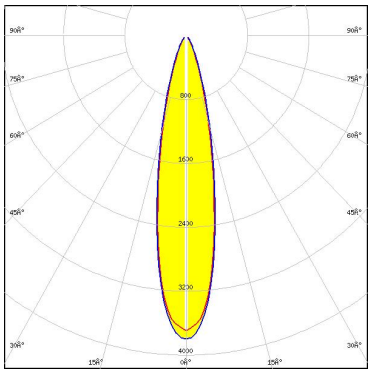
See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	MX-6
FWHM / FWTM	14.0° / 36.0°
Efficiency	93 %
Peak intensity	7.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

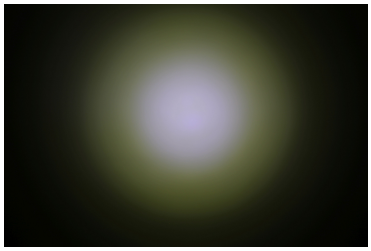


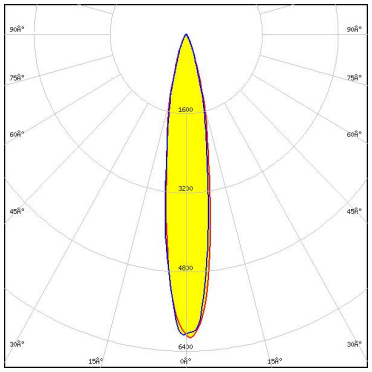


Light distribution files

NICHIA

LED	NS6x83
FWHM / FWTM	17.0° / 39.0°
Efficiency	94 %
Peak intensity	6.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

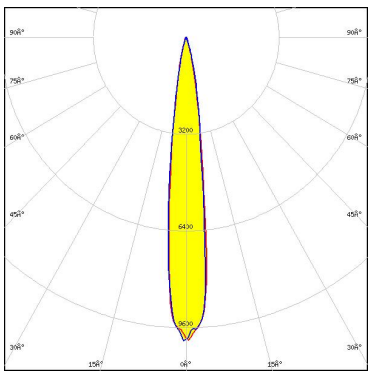




Light distribution files

TOSHIBA
Leading Innovation

LED	TL1L4
FWHM / FWTM	13.0° / 28.0°
Efficiency	90 %
Peak intensity	10 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

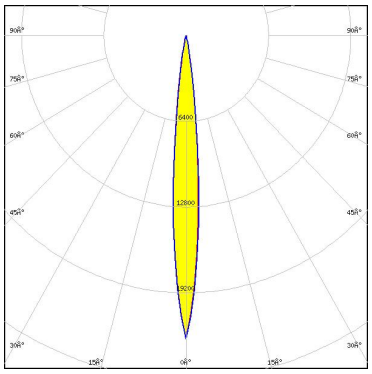


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

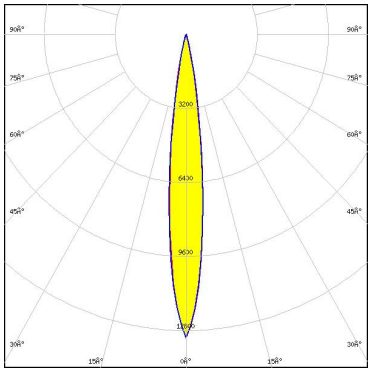
LED	XP-E2
FWHM / FWTM	10.0° / 20.0°
Efficiency	92 %
Peak intensity	22.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

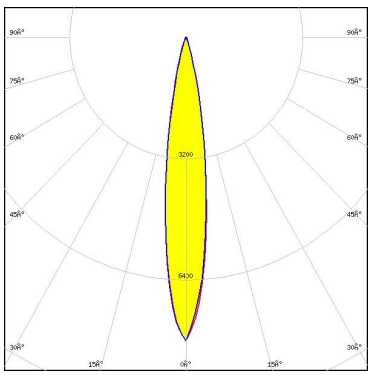
LED	XP-G2
FWHM / FWTM	14.0° / 25.0°
Efficiency	92 %
Peak intensity	13.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-G3
FWHM / FWTM	16.0° / 32.0°
Efficiency	89 %
Peak intensity	8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

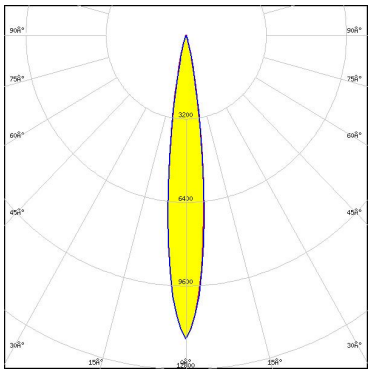


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

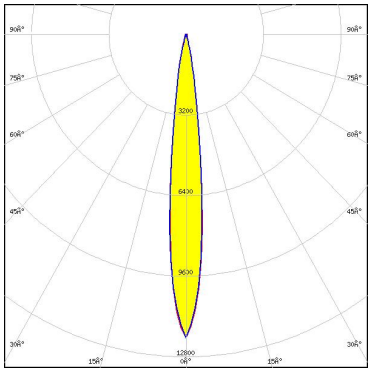
LED	XP-L HI
FWHM / FWTM	14.0° / 26.0°
Efficiency	93 %
Peak intensity	11.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

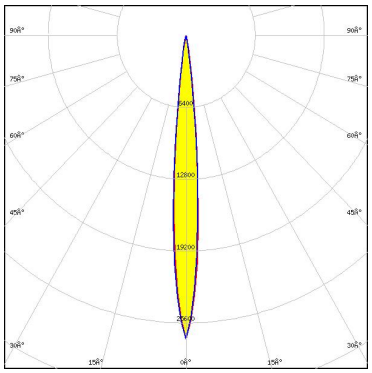
LED	XT-E
FWHM / FWTM	12.0° / 24.0°
Efficiency	86 %
Peak intensity	12.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON CZ
FWHM / FWTM	10.0° / 18.0°
Efficiency	92 %
Peak intensity	27 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	

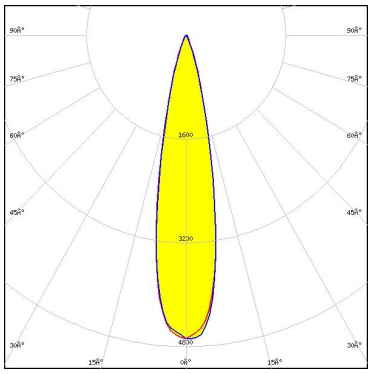


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

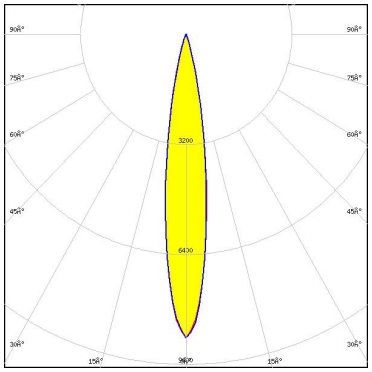
LED	NV4WB35AM
FWHM / FWTM	22.0° / 40.0°
Efficiency	90 %
Peak intensity	4.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

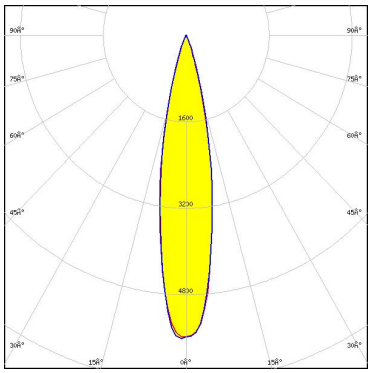
LED	NVSW219F
FWHM / FWTM	16.0° / 30.0°
Efficiency	92 %
Peak intensity	8.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSW519A
FWHM / FWTM	20.0° / 37.0°
Efficiency	88 %
Peak intensity	5.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

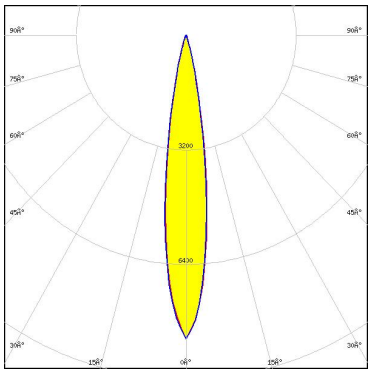


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

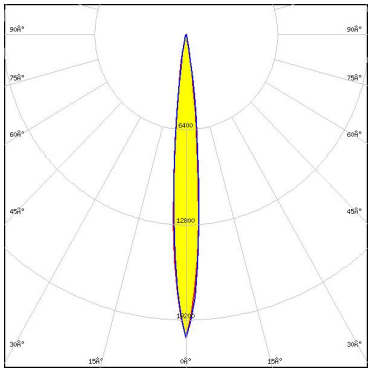
LED	NVSxx19B/NVSxx19C
FWHM / FWTM	16.0° / 30.0°
Efficiency	88 %
Peak intensity	8.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

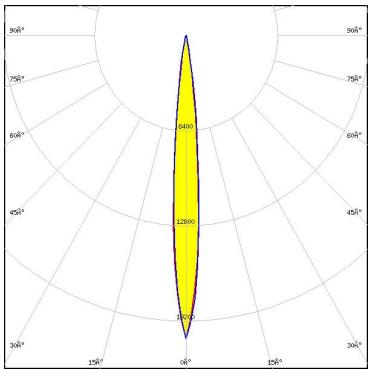
LED	OSLON Black
FWHM / FWTM	10.0° / 20.0°
Efficiency	89 %
Peak intensity	20.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4716AS
FWHM / FWTM	11.0° / 21.0°
Efficiency	90 %
Peak intensity	17.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

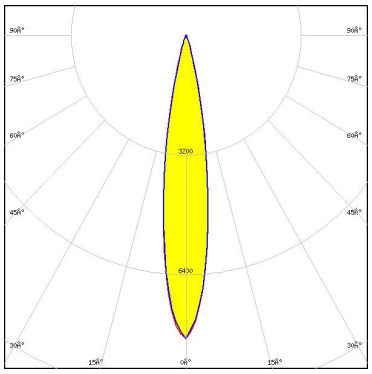


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED	LH351C
FWHM / FWTM	18.0° / 32.0°
Efficiency	94 %
Peak intensity	8.1 cd/lm
LEDs/each optic	1
Light colour/type	White
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.

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