TINA-RS

~13° spot beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

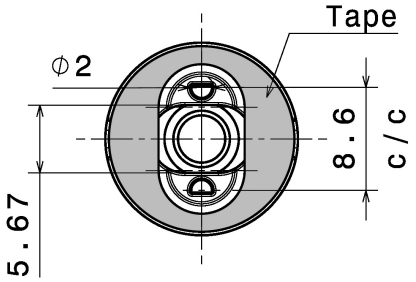
Dimensions	Ø 16.1
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes

MATERIALS:

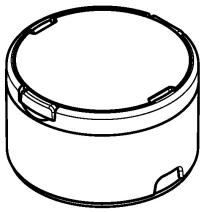
Component	Type	Material	Colour	Finish	Length (mm)
TINA-XP-RS	Single lens	PMMA	clear		
TINA-HLD-PIN-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acryl tape	black		

ORDERING INFORMATION:

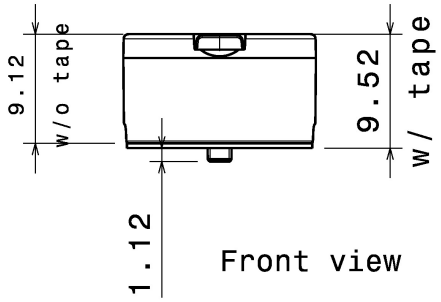
Component	Qty in box	MOQ	MPQ	Box weight (kg)
FA11208_TINA-RS » Box size: 470 x 240 x 105 mm	2016	288	144	4.1



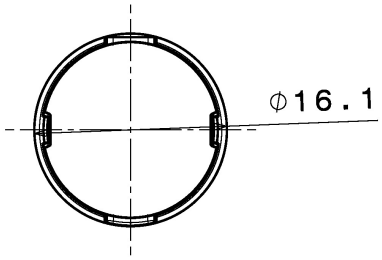
Bottom view



Isometric view



Front view



Top view

Materials
Lens: PMMA
Holder: PC
Tape: PU Foam

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

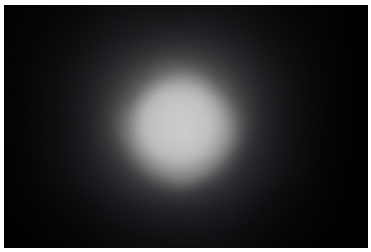
DRAWN BY: as	DATE: 10.9.2012	DRAWING TITLE: Mechanical Drawing	
CHECKED BY: sn	DATE: -	TINA-OSL	
DESIGNED BY: -	DATE: -	SIZE: A4	PART NUMBER: TINA-OSL / REV: 001
		SCALE: 2:1	WEIGHT: 1,47 g / SHEET: 1/1

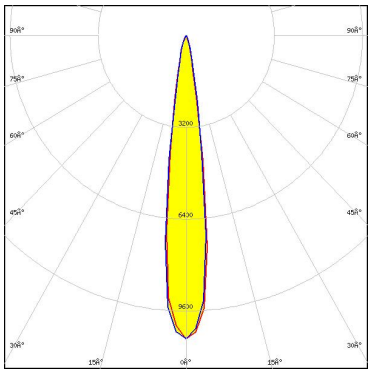
See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XB-H
FWHM / FWTM	15.0° / 27.0°
Efficiency	88 %
Peak intensity	10.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

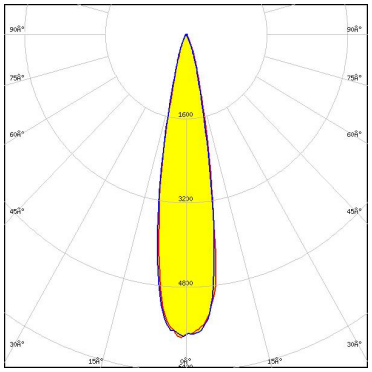




Light distribution files

NICHIA

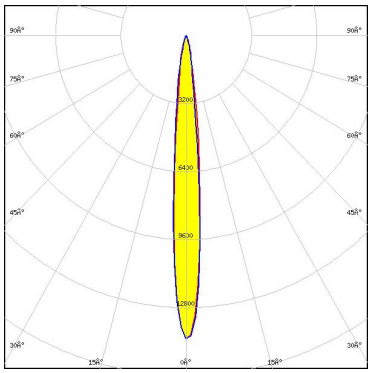
LED	NVSW3x9A
FWHM / FWTM	20.0° / 37.0°
Efficiency	88 %
Peak intensity	5.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	11.0° / 23.0°
Efficiency	90 %
Peak intensity	14.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED	SFH 4715S
FWHM / FWTM	15.0° / 26.0°
Efficiency	%
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4725S
FWHM / FWTM	10.0° / 24.0°
Efficiency	%
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

SAMSUNG

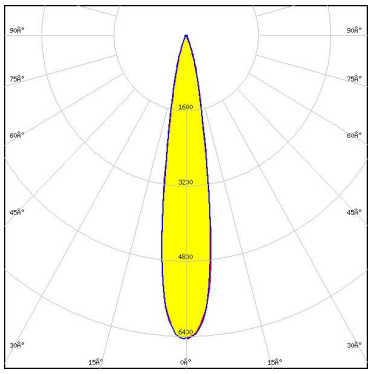
LED	LH351A
FWHM / FWTM	14.0° / 26.0°
Efficiency	93 %
Peak intensity	7.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR

LED	Z8Y22P
FWHM / FWTM	17.0° / 35.0°
Efficiency	85 %
Peak intensity	6.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

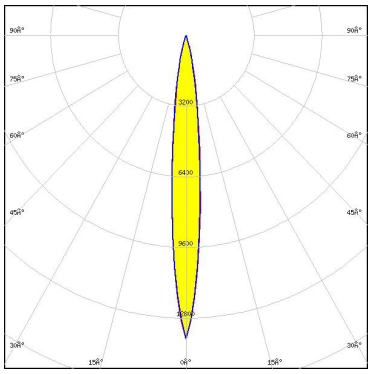


Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMILEDS

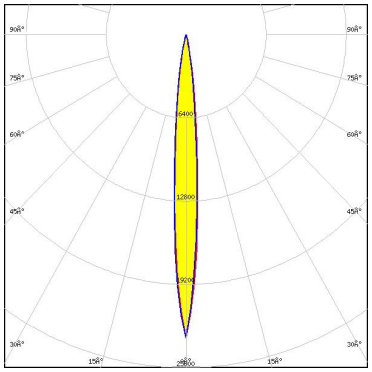
LED	LUXEON C
FWHM / FWTM	12.0° / 27.0°
Efficiency	87 %
Peak intensity	13.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

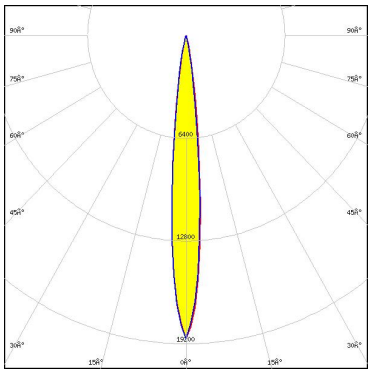
LED	LUXEON CZ
FWHM / FWTM	10.0° / 21.0°
Efficiency	92 %
Peak intensity	23.3 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON Z ES
FWHM / FWTM	11.0° / 22.0°
Efficiency	92 %
Peak intensity	18.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

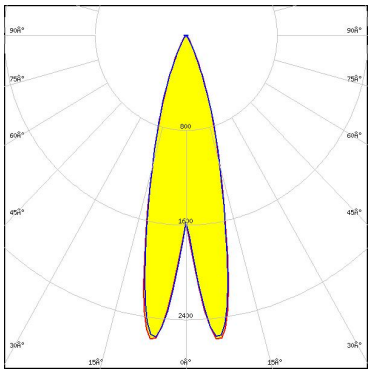


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

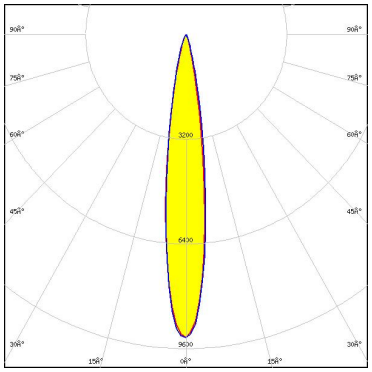
LED	NCSxE17A
FWHM / FWTM	28.0° / 50.0°
Efficiency	85 %
Peak intensity	2.7 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	



Light distribution files

NICHIA

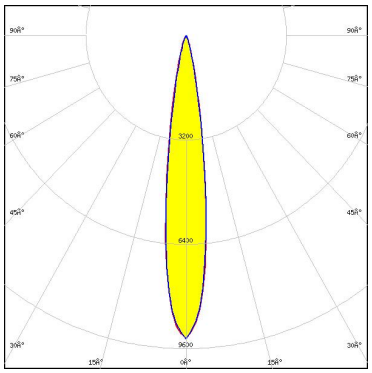
LED	NF2x757G
FWHM / FWTM	16.0° / 30.0°
Efficiency	92 %
Peak intensity	9.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	16.0° / 30.0°
Efficiency	91 %
Peak intensity	9.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

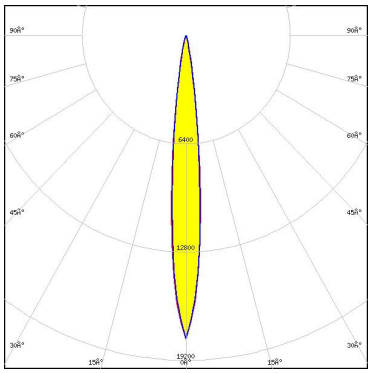


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

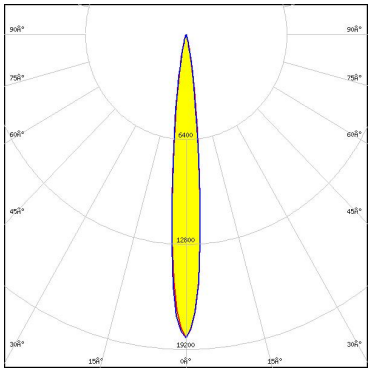
LED	SYNIOS S2222
FWHM / FWTM	12.0 + 11.0° / 22.0°
Efficiency	97 %
Peak intensity	17.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

STANLEY

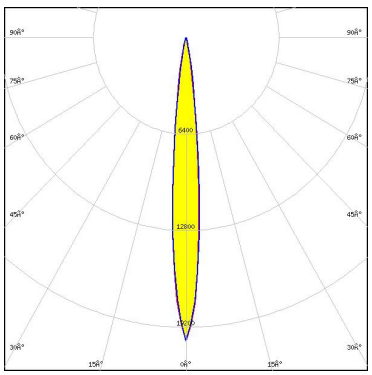
LED	MGN1108MS
FWHM / FWTM	10.0° / 22.0°
Efficiency	91 %
LEDs/each optic	1
Light colour/type	IR
Required components:	



Light distribution files

STANLEY

LED	MJN1108MS
FWHM / FWTM	10.0° / 22.0°
Efficiency	92 %
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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