

## TINA2-RS

~14° spot beam optimized for Nichia NS6x83.  
Assembly with holder and installation tape.

### SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	11 mm
Fastening	tape
ROHS compliant	yes ⓘ

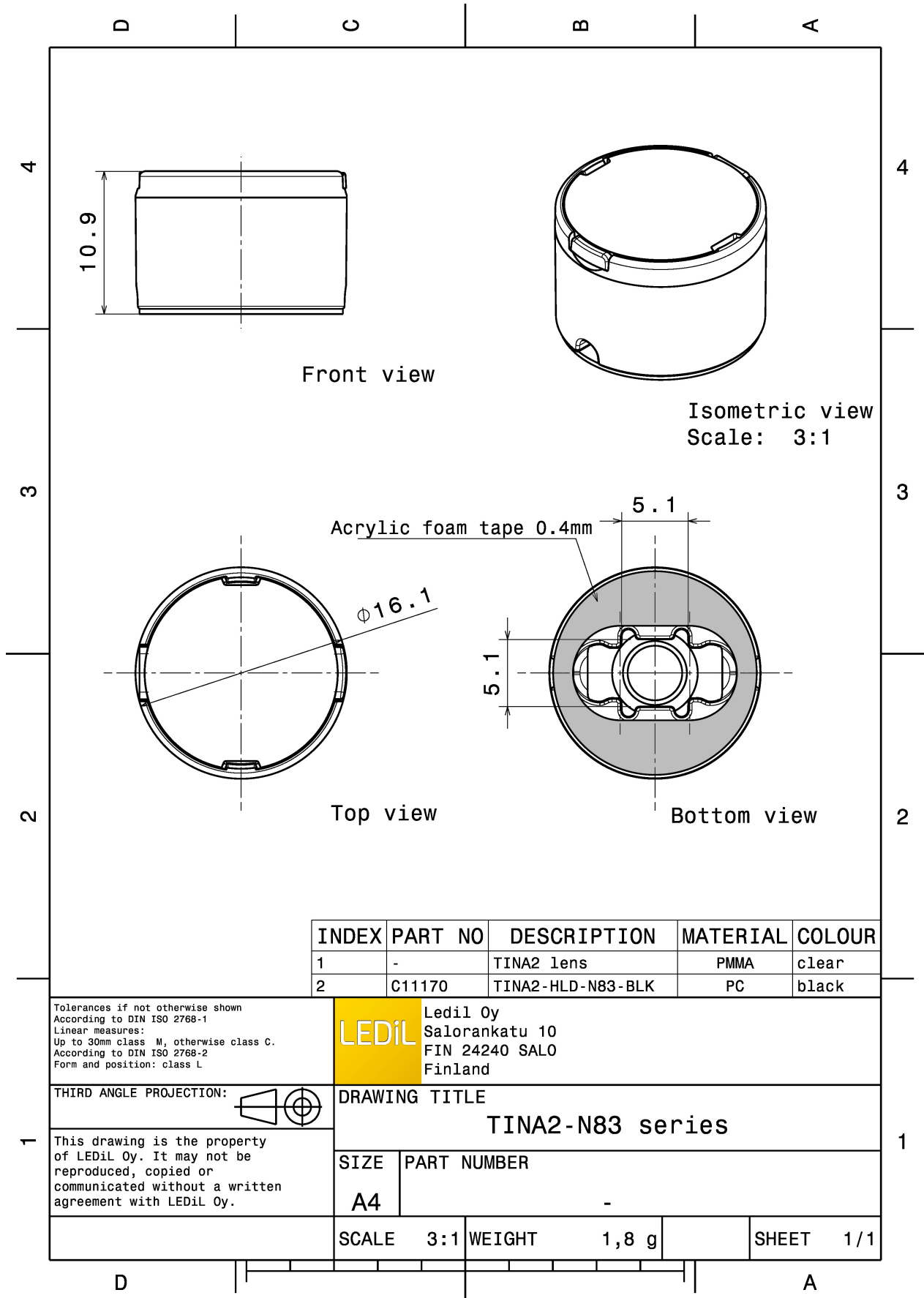


### MATERIALS:

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

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA11171_TINA2-RS » Box size: 451 x 241 x 298 mm	4140	230	230	8.4



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** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**TINA2-N83 series**

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SIZE	PART NUMBER
A4	-

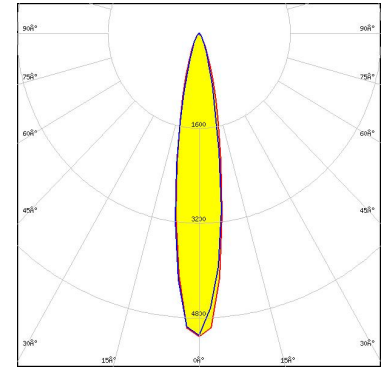
SCALE	3:1	WEIGHT	1,8 g	SHEET	1/1
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See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



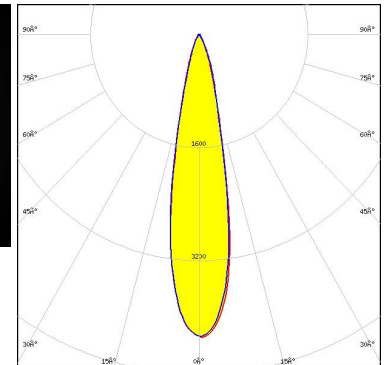
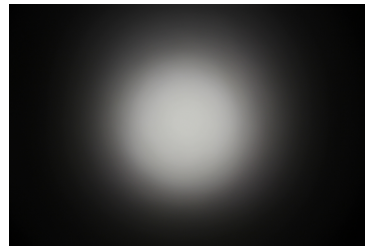
LED MX-6  
FWHM / FWTM 18.0° / 40.0°  
Efficiency 89 %  
Peak intensity 5.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON V  
FWHM / FWTM 21.0° / 41.0°  
Efficiency 82 %  
Peak intensity 4.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



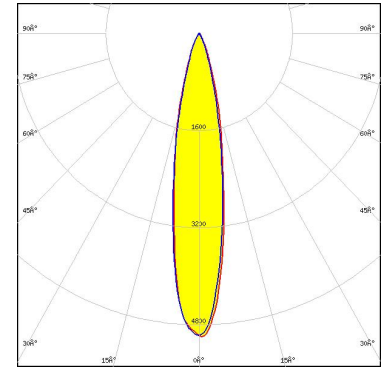
LED NS3x83  
FWHM / FWTM 15.0°  
Efficiency 93 %  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

### OPTICAL RESULTS (MEASURED):



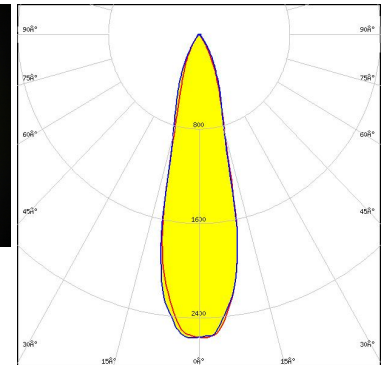
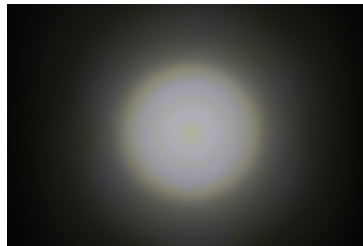
LED NS6x83  
FWHM / FWTM 19.0° / 42.0°  
Efficiency 93 %  
Peak intensity 5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LH508A  
FWHM / FWTM 26.0° / 53.0°  
Efficiency 76 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

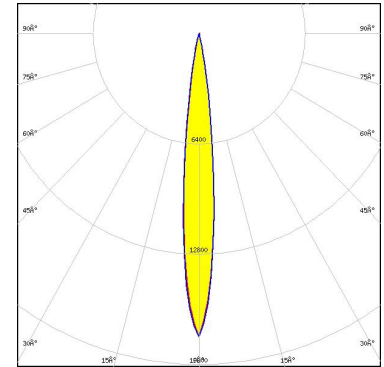


Light distribution files

### OPTICAL RESULTS (SIMULATED):



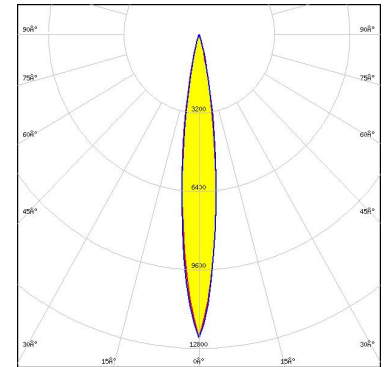
**LED** XP-E2  
**FWHM / FWTM** 12.0° / 22.0°  
**Efficiency** 91 %  
**Peak intensity** 18.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



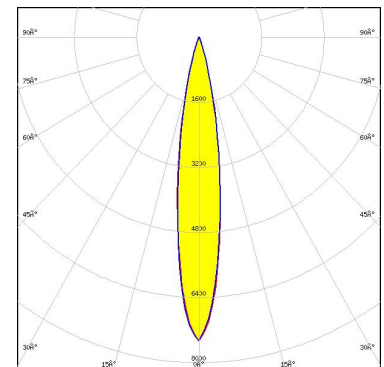
**LED** XP-G2  
**FWHM / FWTM** 14.0° / 27.0°  
**Efficiency** 91 %  
**Peak intensity** 12.4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** XP-G3  
**FWHM / FWTM** 16.0° / 34.0°  
**Efficiency** 87 %  
**Peak intensity** 7.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

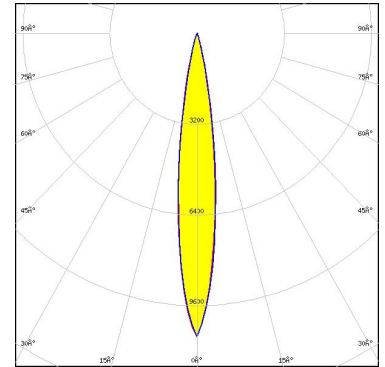


Light distribution files

### OPTICAL RESULTS (SIMULATED):



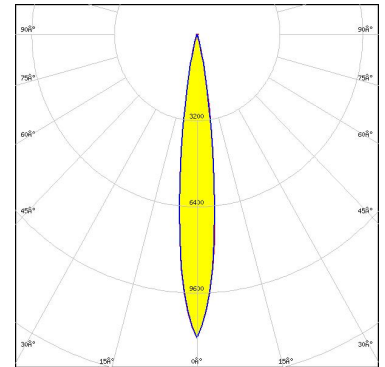
LED XP-L HI  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 92 %  
 Peak intensity 10.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



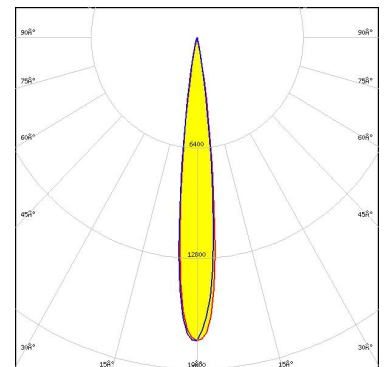
LED XT-E  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 85 %  
 Peak intensity 11.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON CZ  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 92 %  
 Peak intensity 17.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type Red  
 Required components:

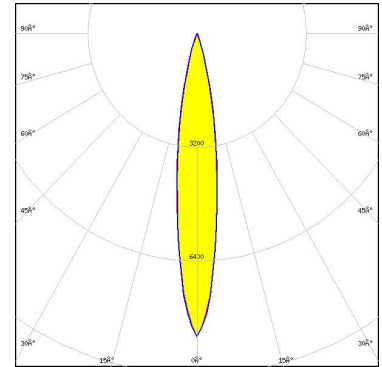


Light distribution files

### OPTICAL RESULTS (SIMULATED):



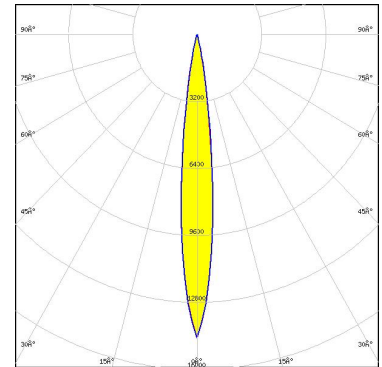
LED LUXEON HL2X  
 FWHM / FWTM 16.0° / 32.0°  
 Efficiency 91 %  
 Peak intensity 8.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



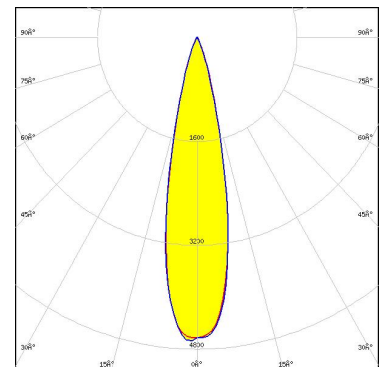
LED SST-20  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 88 %  
 Peak intensity 14.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

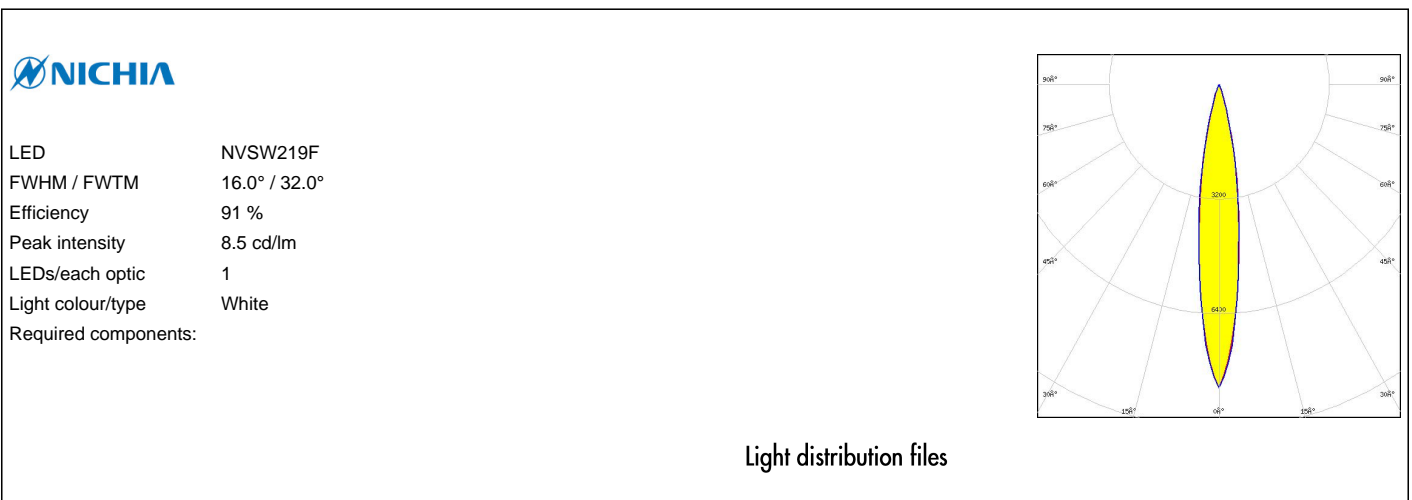
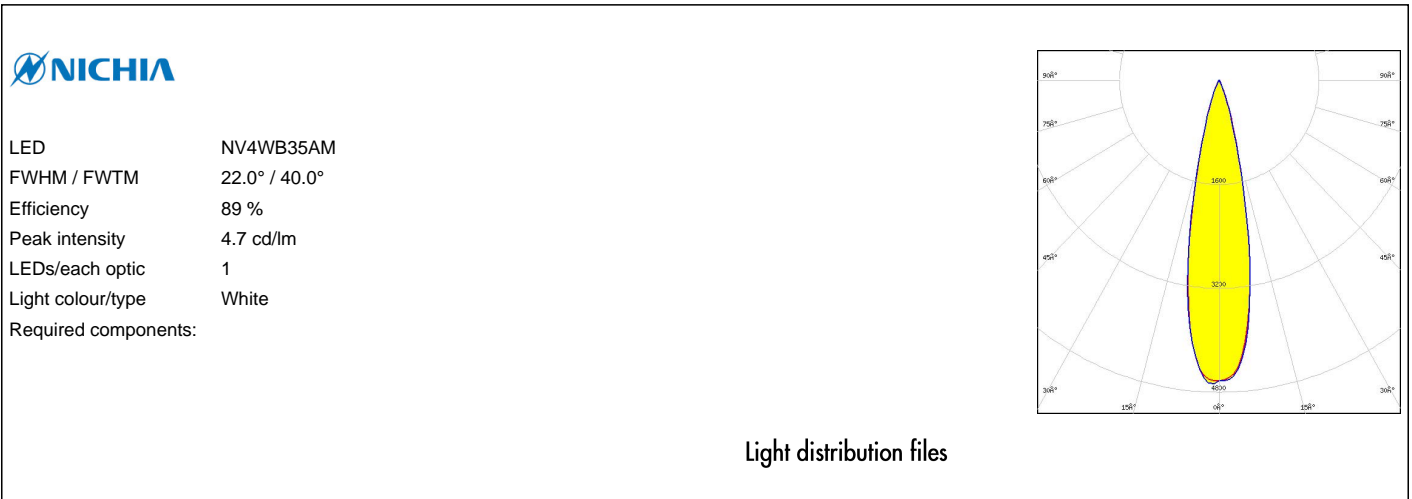


LED NV4WB35AM  
 FWHM / FWTM 22.0° / 40.0°  
 Efficiency 89 %  
 Peak intensity 4.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



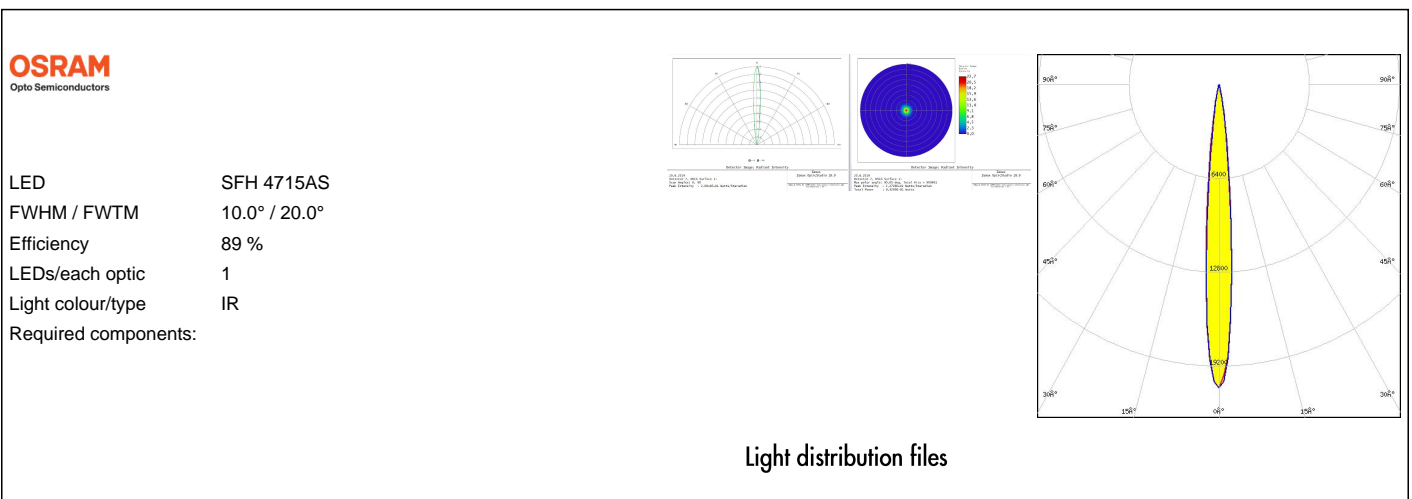
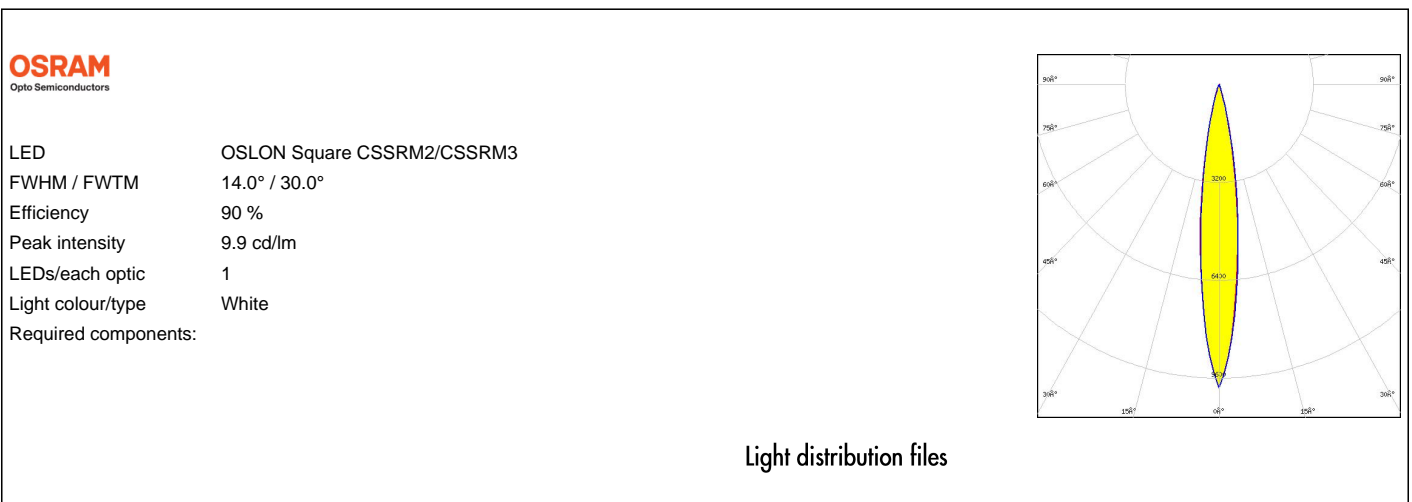
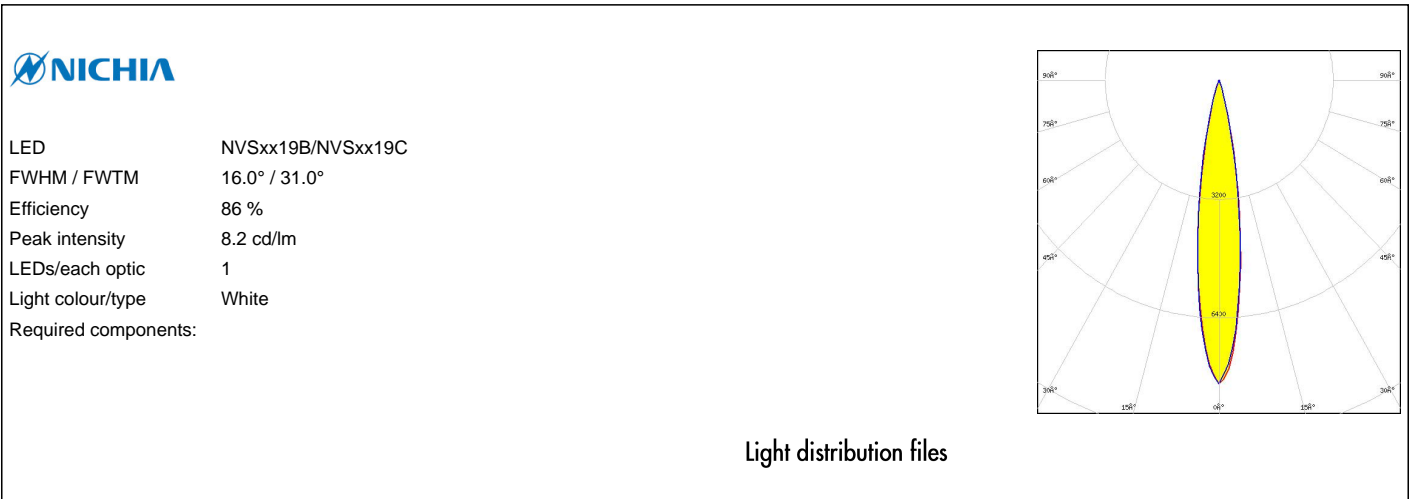
Light distribution files

### OPTICAL RESULTS (SIMULATED):





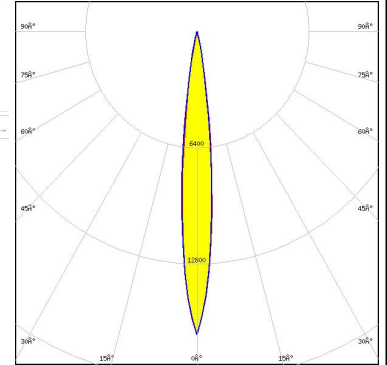
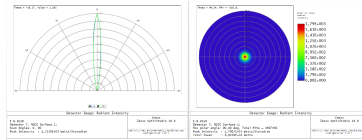
### OPTICAL RESULTS (SIMULATED):



### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

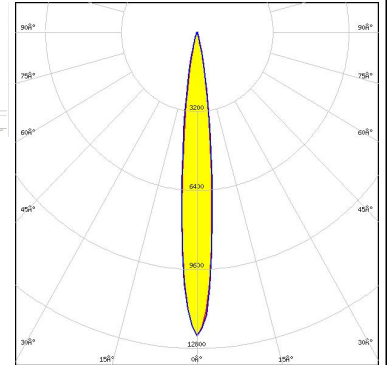
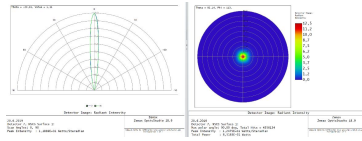
LED SFH 4716AS  
FWHM / FWTM 12.0° / 22.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

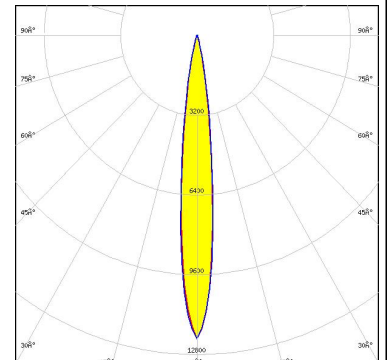
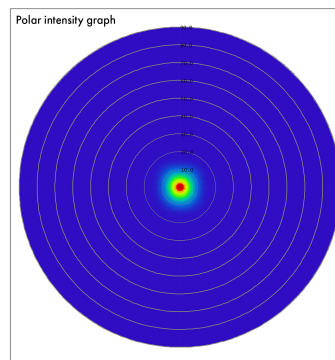
LED SFH 4717AS  
FWHM / FWTM 12.0° / 25.0°  
Efficiency 85 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4725AS  
FWHM / FWTM 10.0° / 20.0°  
Efficiency 89 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

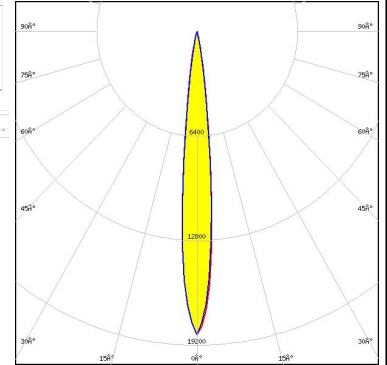
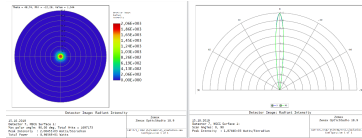


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

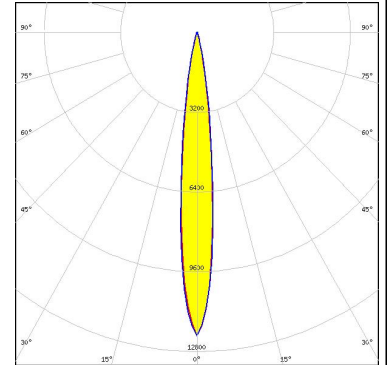
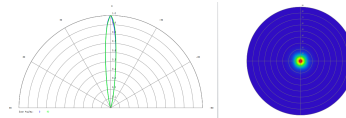
LED SFH 4725S  
FWHM / FWTM 12.0° / 20.0°  
Efficiency 89 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

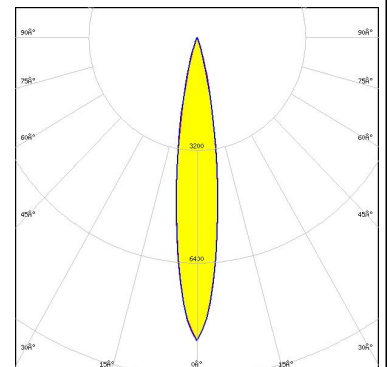
LED SFH 4727AS  
FWHM / FWTM 13.0° / 25.0°  
Efficiency 85 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**SAMSUNG**

LED LH351B  
FWHM / FWTM 16.0° / 32.0°  
Efficiency 90 %  
Peak intensity 8.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

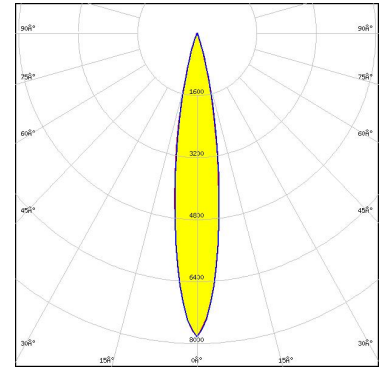


Light distribution files

### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

LED	LH351C
FWHM / FWTM	18.0° / 33.0°
Efficiency	92 %
Peak intensity	7.8 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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[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

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Hong Kong, China

#### Distribution Partners

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