

## TINA2-RS

~14° spot beam optimized for Osram Golden Dragon+. Assembly with holder and installation tape.

## SPECIFICATION:

Dimensions	Ø 16.1 mm
Height	10.1 mm
Fastening	tape
ROHS compliant	yes ⓘ

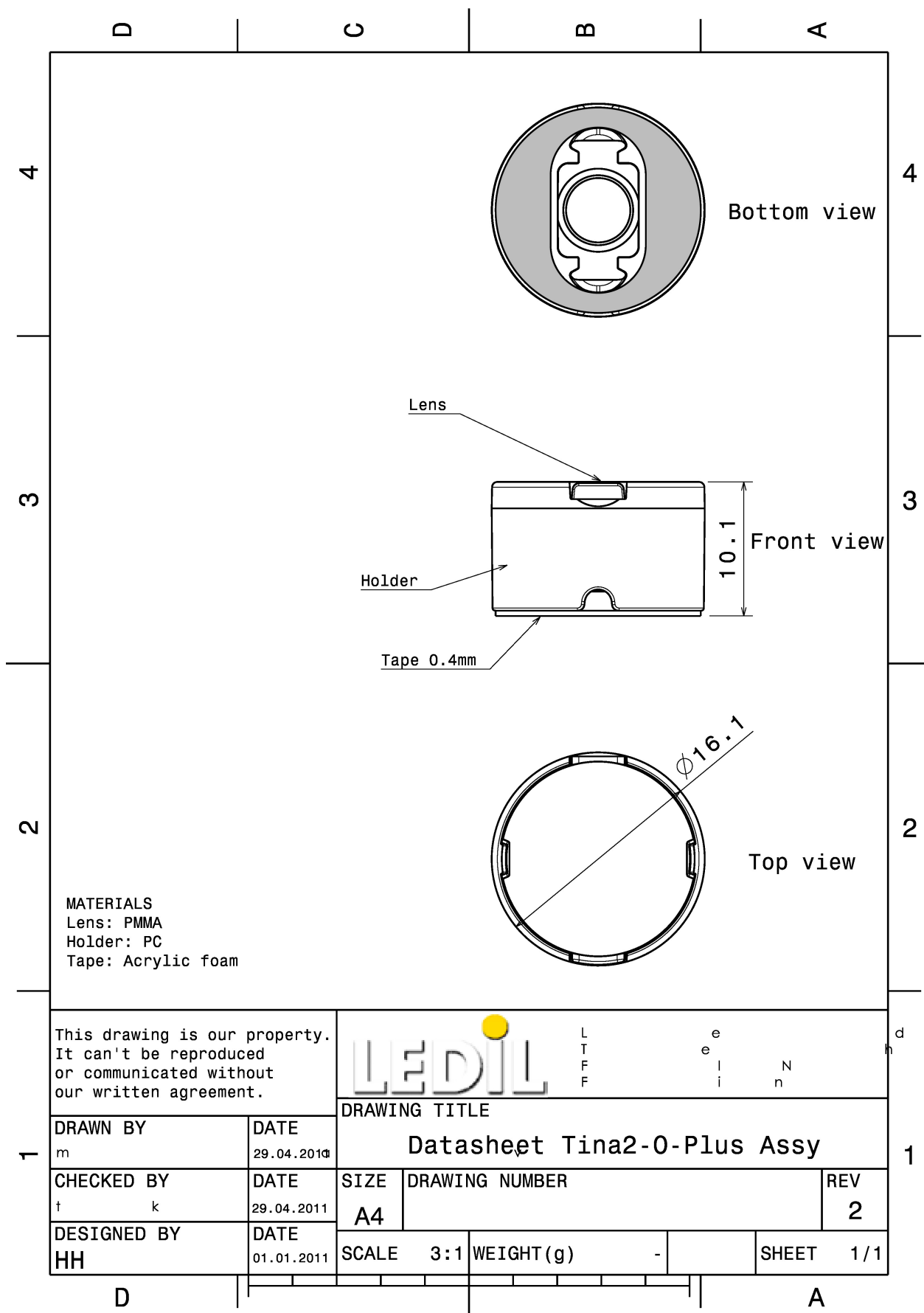


## MATERIALS:

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

## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA11847_TINA2-RS » Box size: 451 x 241 x 298 mm	4140	230	230	0.0



See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

## OPTICAL RESULTS (MEASURED):

**OSRAM**

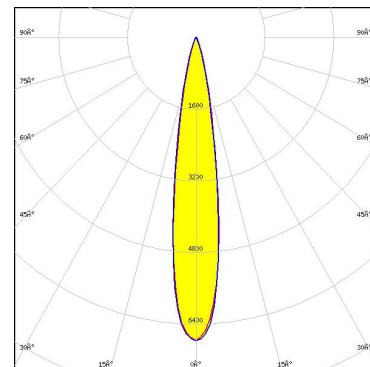
Opto Semiconductors

LED	Golden Dragon+
FWHM / FWTM	10.0° / 20.0°
Efficiency	93 %
Peak intensity	18 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

#### OPTICAL RESULTS (SIMULATED):



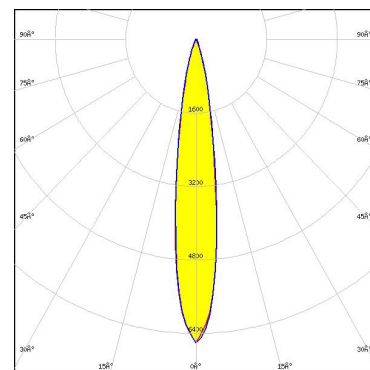
LED XP-G2 HE  
 FWHM / FWTM 17.0° / 34.0°  
 Efficiency 88 %  
 Peak intensity 6.8 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



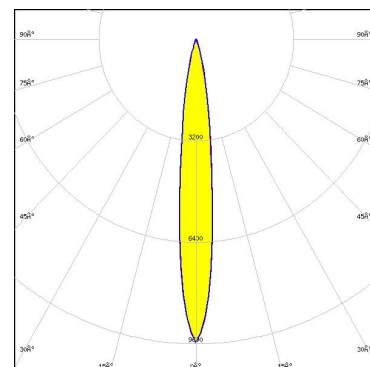
LED XP-G3  
 FWHM / FWTM 16.0° / 34.0°  
 Efficiency 85 %  
 Peak intensity 6.6 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-L HI  
 FWHM / FWTM 12.0° / 30.0°  
 Efficiency 89 %  
 Peak intensity 9.6 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

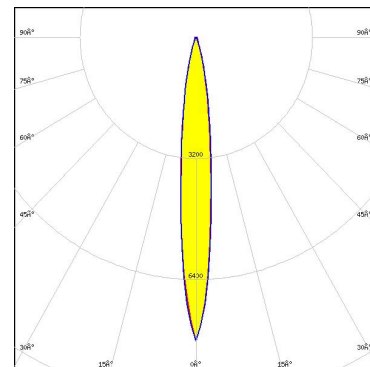


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



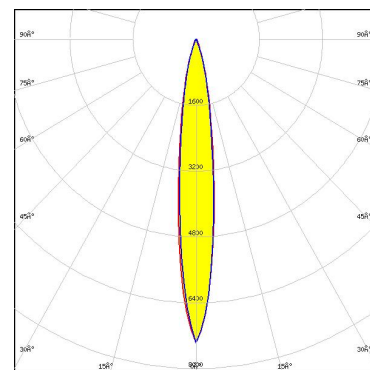
LED	XT-E
FWHM / FWTM	12.0° / 30.0°
Efficiency	82 %
Peak intensity	8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



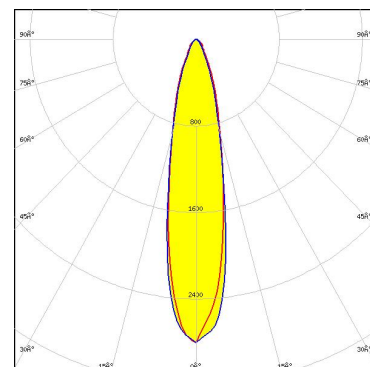
LED	LUXEON 3030 HE Plus
FWHM / FWTM	14.0° / 34.0°
Efficiency	87 %
Peak intensity	7.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



LED	LUXEON 5050 Square LES
FWHM / FWTM	22.0° / 52.0°
Efficiency	85 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

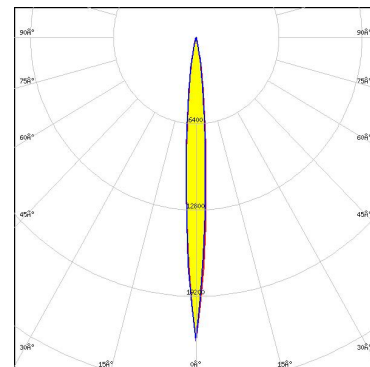


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



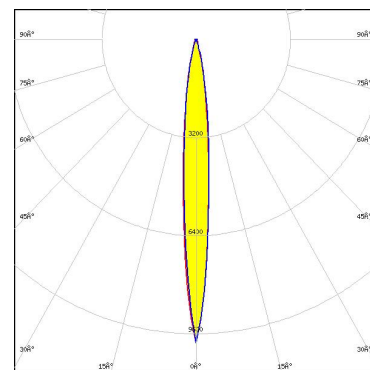
LED LUXEON CZ  
 FWHM / FWTM 8.0° / 20.0°  
 Efficiency 88 %  
 Peak intensity 22.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type Red  
 Required components:



Light distribution files



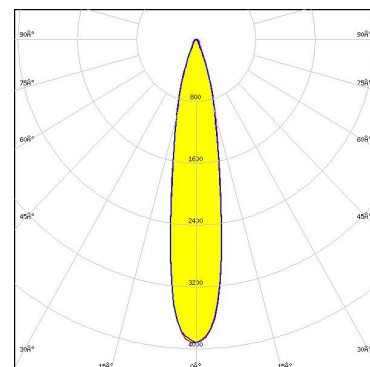
LED LUXEON IR Domed 150 (L110-0xxx150000000)  
 FWHM / FWTM 10.0° / 27.0°  
 Efficiency 81 %  
 LEDs/each optic 1  
 Light colour/type IR  
 Required components:



Light distribution files



LED NV4WB35AM  
 FWHM / FWTM 20.0° / 44.0°  
 Efficiency 86 %  
 Peak intensity 3.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

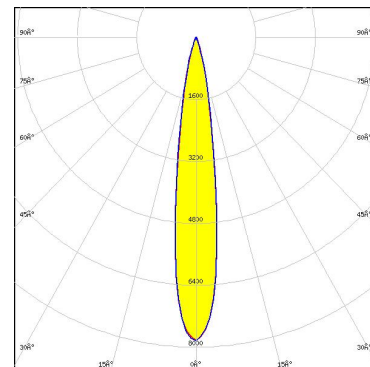


Light distribution files

### OPTICAL RESULTS (SIMULATED):



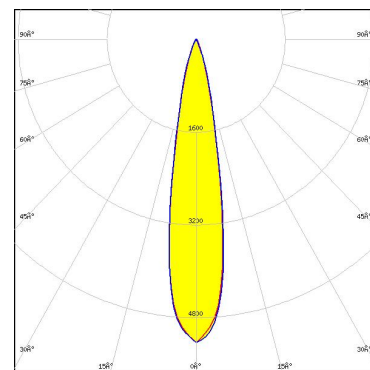
LED NVSW219F  
FWHM / FWTM 16.0° / 32.0°  
Efficiency 89 %  
Peak intensity 7.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



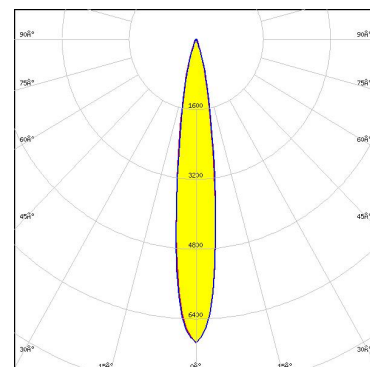
LED NVSW519A  
FWHM / FWTM 20.0° / 38.0°  
Efficiency 85 %  
Peak intensity 5.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NVSxx19B/NVSxx19C  
FWHM / FWTM 16.0° / 33.0°  
Efficiency 84 %  
Peak intensity 6.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

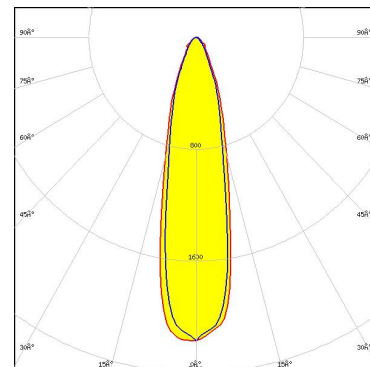


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

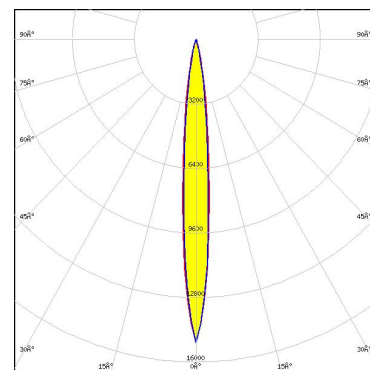
LED Duris S8  
FWHM / FWTM 25.0° / 59.0°  
Efficiency 85 %  
Peak intensity 2.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

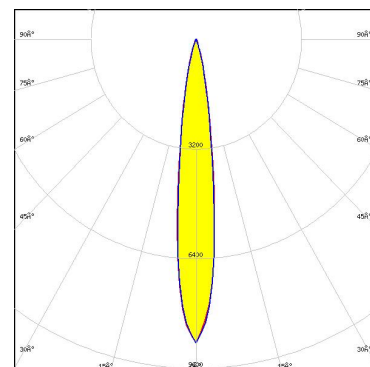
LED OSLO Boost HX (KW CULPM1.TG)  
FWHM / FWTM 10.0° / 24.0°  
Efficiency 89 %  
Peak intensity 15.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLO Square CSSRM2/CSSRM3  
FWHM / FWTM 14.0° / 30.0°  
Efficiency 88 %  
Peak intensity 8.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



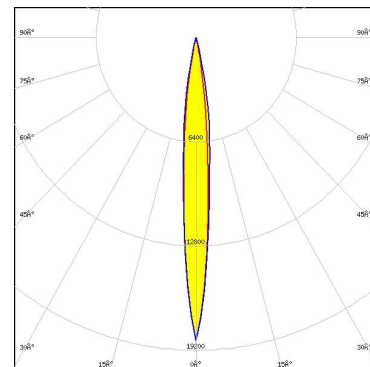
Light distribution files



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

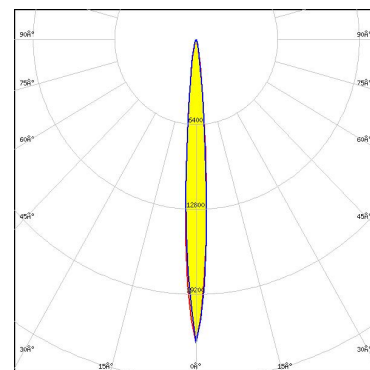
LED PLPVEC2 850A  
FWHM / FWTM 10.0° / 23.0°  
Efficiency 93 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

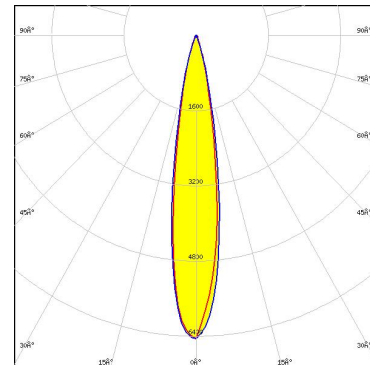
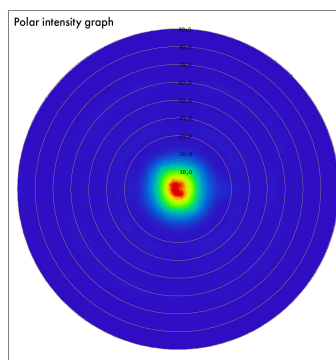
LED SFH 4232A  
FWHM / FWTM 8.0° / 19.0°  
Efficiency 94 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4715AS  
FWHM / FWTM 17.0° / 35.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

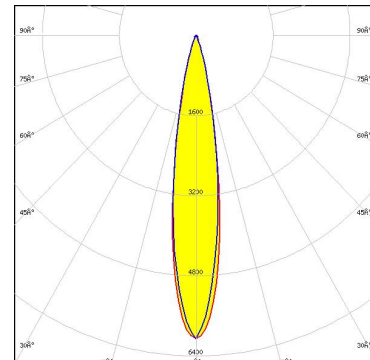
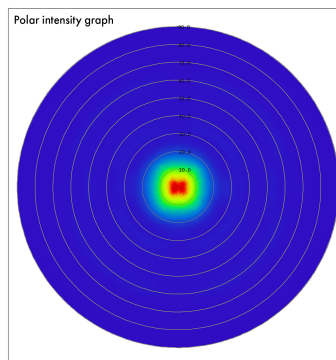


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

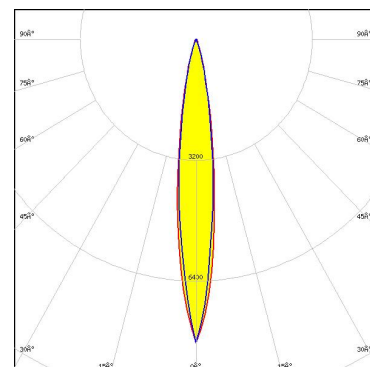
LED SFH 4725AS  
FWHM / FWTM 18.0° / 34.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

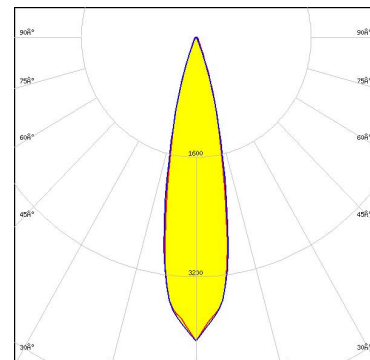
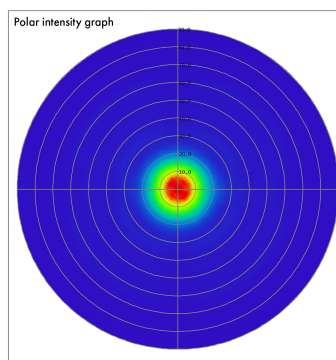
LED SFH 4725S  
FWHM / FWTM 14.0° / 32.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4727AS  
FWHM / FWTM 23.0° / 42.0°  
Efficiency 86 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

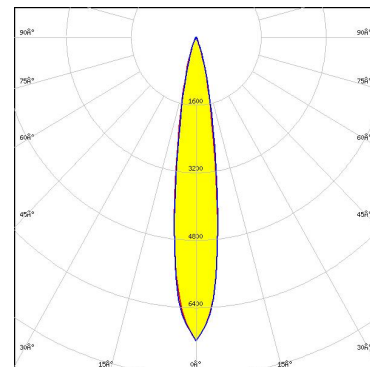


Light distribution files

## OPTICAL RESULTS (SIMULATED):

### SAMSUNG

LED	LH351C
FWHM / FWTM	16.0° / 34.0°
Efficiency	91 %
Peak intensity	7.2 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.

### 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 13  
FI-24240 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](http://www.ledil.com/where_to_buy)

#### Shipping locations

Poznan, Poland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)