

## HB-IP-2X6-RS

~20° spot beam

### SPECIFICATION:

Dimensions	173.0 x 71.4
Height	11.4 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

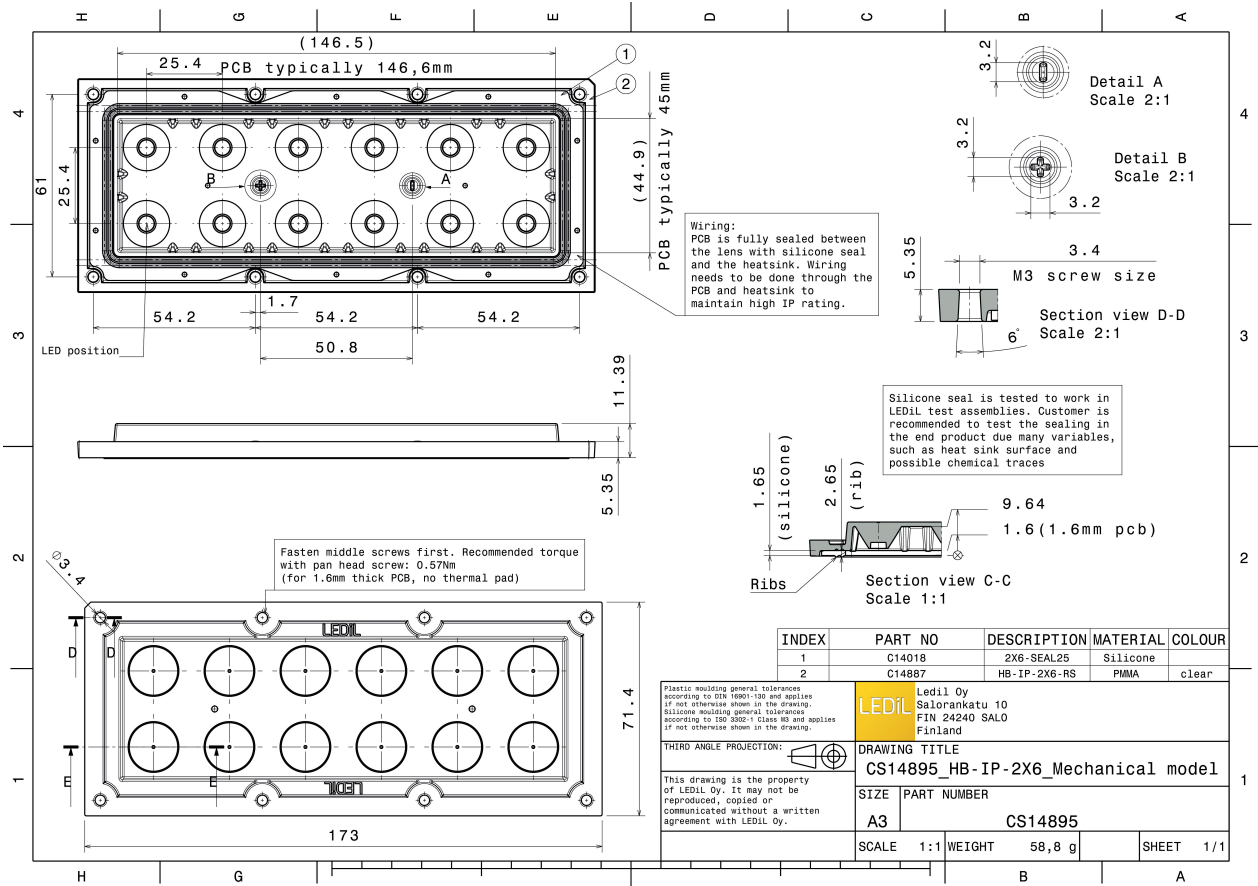
### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-IP-2X6-RS	Multi-lens	PMMA	clear		
2X6-SEAL25	Seal	Silicone	white		



### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14895_HB-IP-2X6-RS	Multi-lens	120	40	40	8.0
» Box size: 476 x 273 x 247 mm					

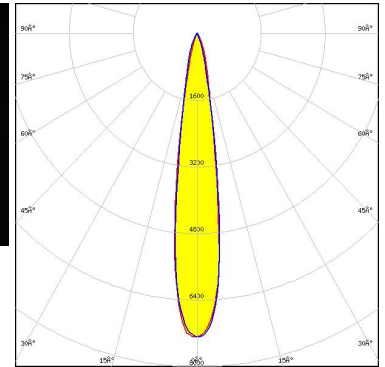


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



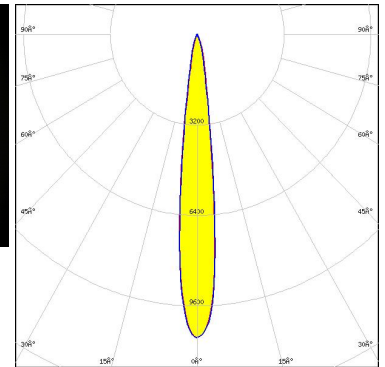
**LED** QUICK FLUX 2x6 LED XG xxx G7+  
**FWHM / FWTM** 16.0° / 33.0°  
**Efficiency** 94 %  
**Peak intensity** 7.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



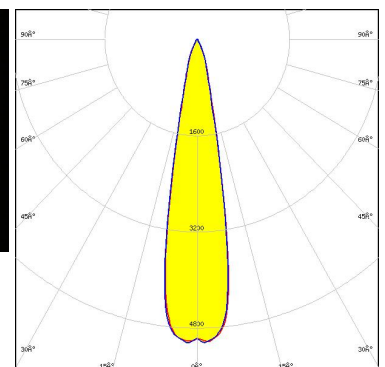
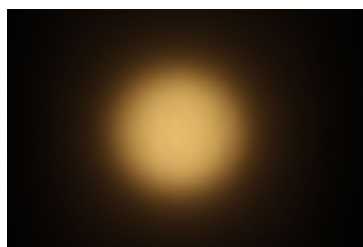
**LED** QUICK FLUX 2x6 LED XT xxx G5  
**FWHM / FWTM** 13.0° / 26.0°  
**Efficiency** 94 %  
**Peak intensity** 10.7 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** XM-L  
**FWHM / FWTM** 21.0° / 38.0°  
**Efficiency** 94 %  
**Peak intensity** 5.1 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

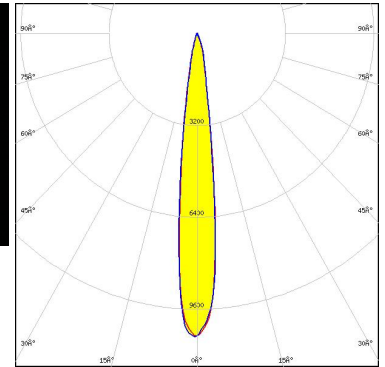


Light distribution files

#### OPTICAL RESULTS (MEASURED):



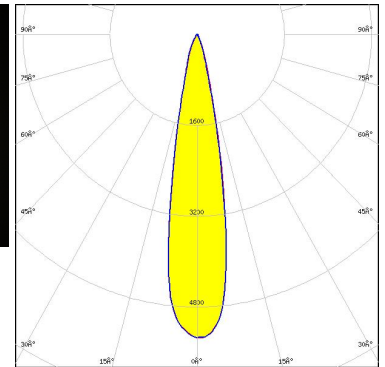
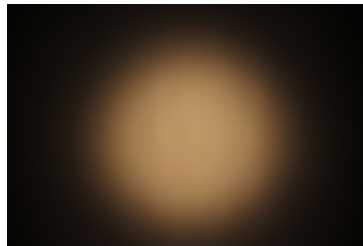
LED XP-G2  
 FWHM / FWTM 13.0° / 27.0°  
 Efficiency 94 %  
 Peak intensity 10.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



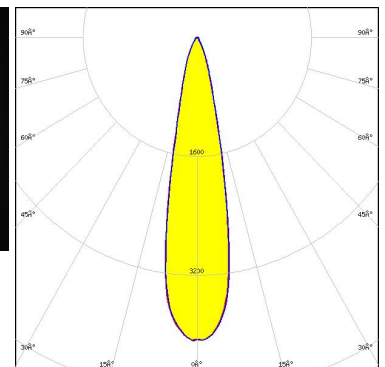
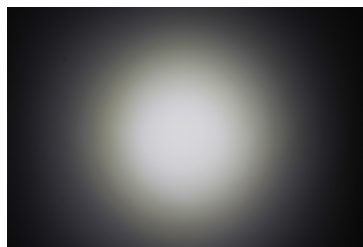
LED XP-L HD  
 FWHM / FWTM 20.0° / 37.0°  
 Efficiency 93 %  
 Peak intensity 5.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-L2  
 FWHM / FWTM 22.0° / 43.0°  
 Efficiency 93 %  
 Peak intensity 4.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

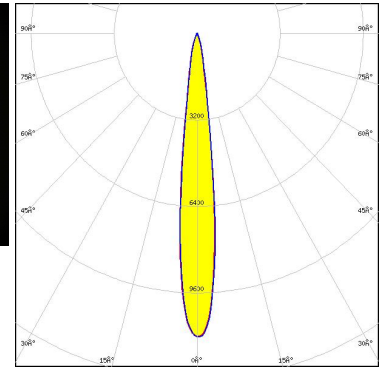


Light distribution files

#### OPTICAL RESULTS (MEASURED):



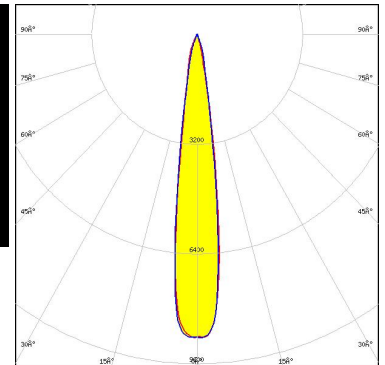
LED XT-E HE  
 FWHM / FWTM 13.0° / 26.0°  
 Efficiency 94 %  
 Peak intensity 11.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



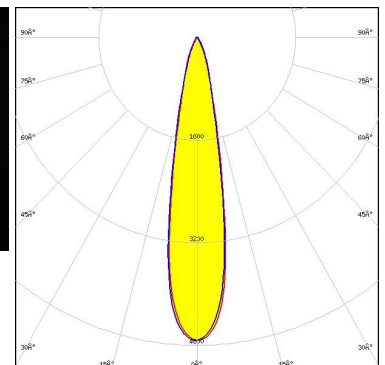
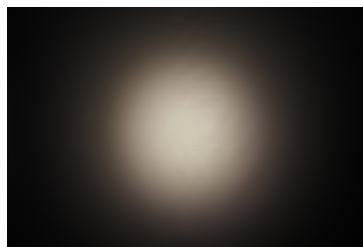
LED LUXEON T  
 FWHM / FWTM 15.0° / 29.0°  
 Efficiency 94 %  
 Peak intensity 8.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON V  
 FWHM / FWTM 20.0° / 41.0°  
 Efficiency 92 %  
 Peak intensity 4.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

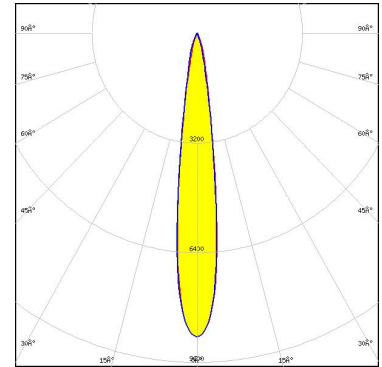


Light distribution files

#### OPTICAL RESULTS (MEASURED):



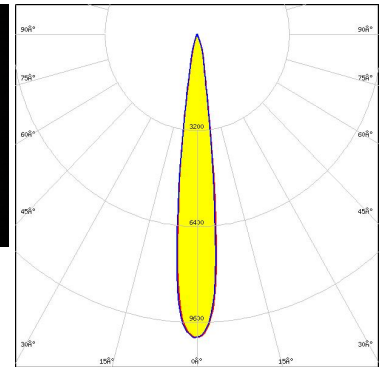
LED LUXEON V2  
 FWHM / FWTM 15.0° / 30.0°  
 Efficiency 94 %  
 Peak intensity 8.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



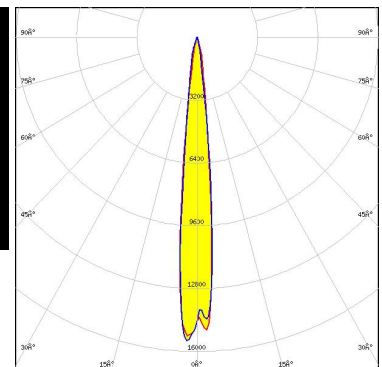
LED LUXEON XR-TX (L2T0-xxxx012M0000)  
 FWHM / FWTM 14.0° / 27.0°  
 Efficiency 92 %  
 Peak intensity 10.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SST-10-B130  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 94 %  
 Peak intensity 15.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type Deep Red  
 Required components:

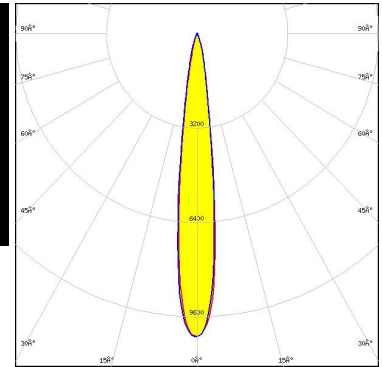
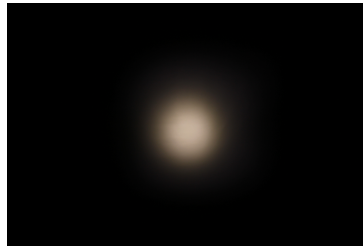


Light distribution files

#### OPTICAL RESULTS (MEASURED):



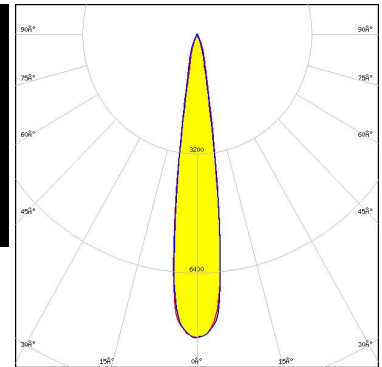
LED RecLED 146x45mm 2900lm 730 2x6 IP G1  
 FWHM / FWTM 14.0° / 27.0°  
 Efficiency 95 %  
 Peak intensity 10.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



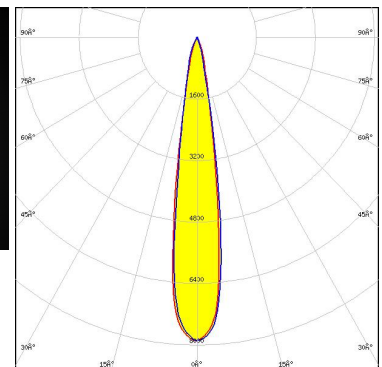
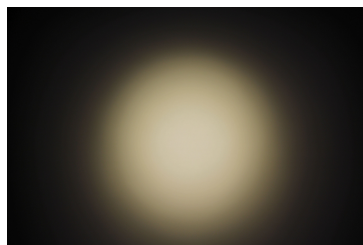
LED NVSW219D  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 94 %  
 Peak intensity 8.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSW219F  
 FWHM / FWTM 16.0° / 31.0°  
 Efficiency 8 %  
 Peak intensity 94 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

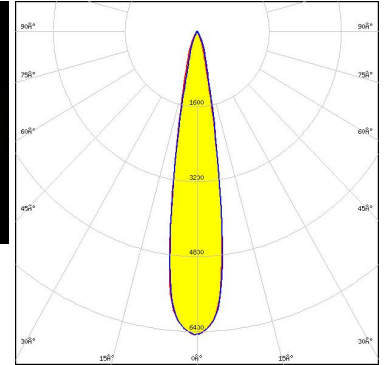


Light distribution files

#### OPTICAL RESULTS (MEASURED):



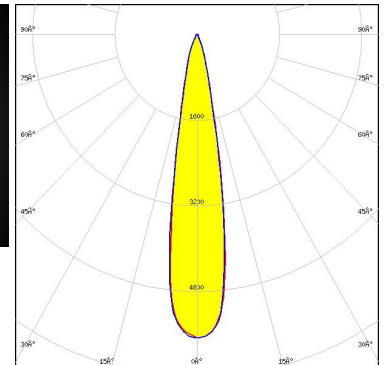
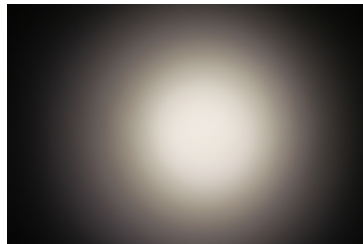
LED NVSW319B  
 FWHM / FWTM 18.0° / 34.0°  
 Efficiency 94 %  
 Peak intensity 6.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



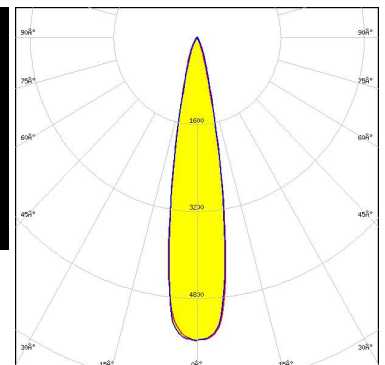
LED NVSW3x9A  
 FWHM / FWTM 19.0° / 36.0°  
 Efficiency 92 %  
 Peak intensity 5.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSW519A  
 FWHM / FWTM 20.0° / 37.0°  
 Efficiency 95 %  
 Peak intensity 5.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



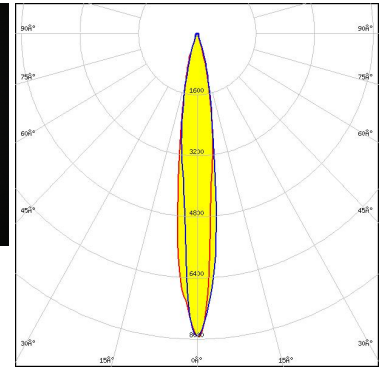
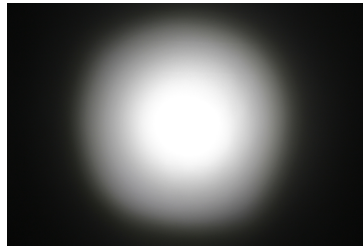
Light distribution files



#### OPTICAL RESULTS (MEASURED):



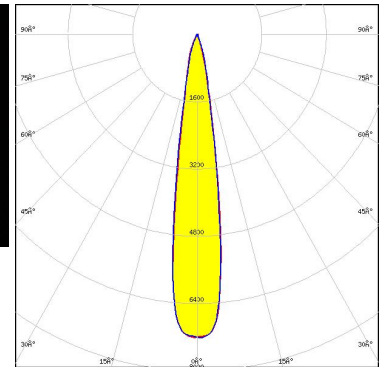
LED NVSxE21A  
 FWHM / FWTM 13.0° / 33.0°  
 Efficiency 94 %  
 Peak intensity 8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



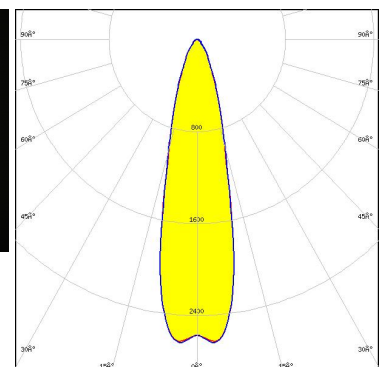
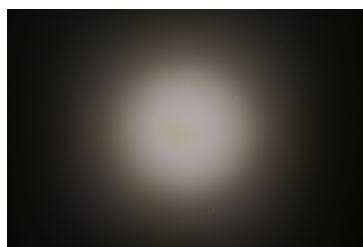
LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 16.0° / 32.0°  
 Efficiency 92 %  
 Peak intensity 7.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSCONIQ S 5050  
 FWHM / FWTM 26.0° / 55.0°  
 Efficiency 96 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

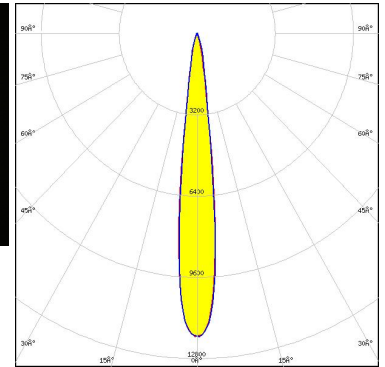


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

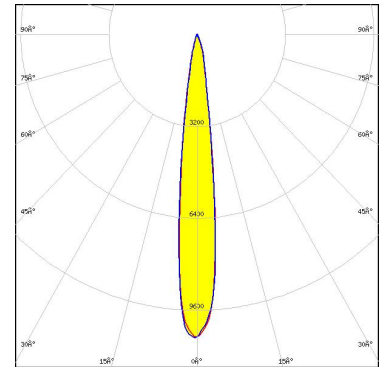
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 13.0° / 24.0°  
Efficiency 94 %  
Peak intensity 12 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

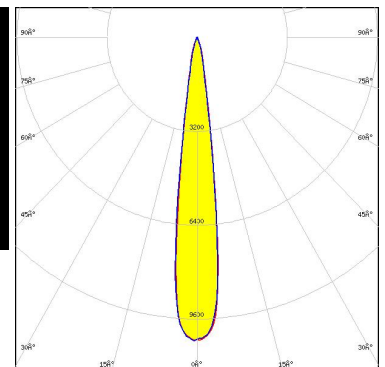
LED Fortimo FastFlex LED 2x6 DP G4  
FWHM / FWTM 13.0° / 27.0°  
Efficiency 94 %  
Peak intensity 10.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

LED Fortimo FastFlex LED 2x6 DP G5  
FWHM / FWTM 14.0° / 26.0°  
Efficiency 96 %  
Peak intensity 10.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

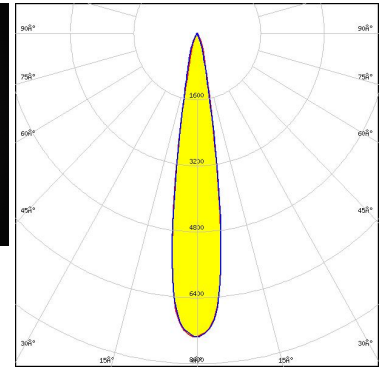


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### SAMSUNG

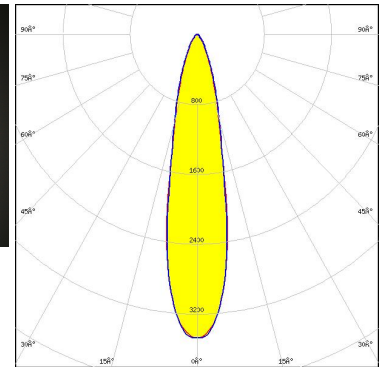
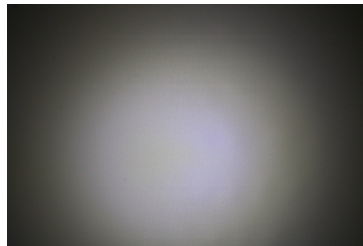
LED HiLOM RH12 (LH351C)  
 FWHM / FWTM 17.0° / 31.0°  
 Efficiency 94 %  
 Peak intensity 7.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### SCIOLUX

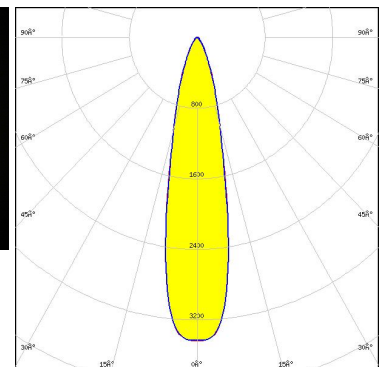
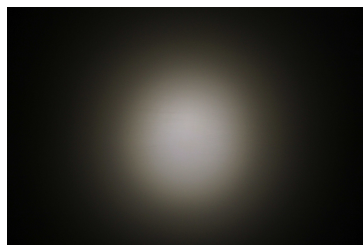
LED BALAM-VP-5250-750-36  
 FWHM / FWTM 22.0° / 50.0°  
 Efficiency 95 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### SCIOLUX

LED BALAMEC-VE-5700-740-36  
 FWHM / FWTM 23.0° / 50.0°  
 Efficiency 96 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

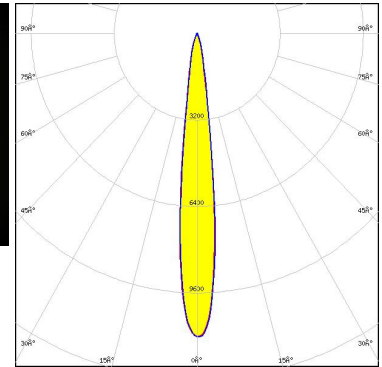


Light distribution files

#### OPTICAL RESULTS (MEASURED):



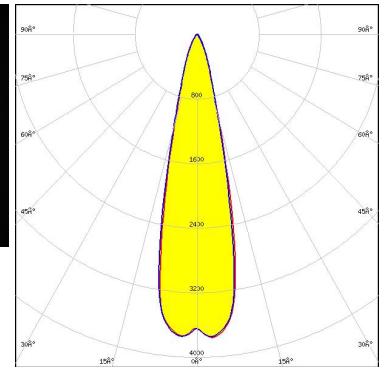
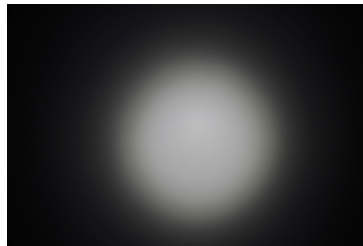
LED XLE-S22C4XTEHE (XT-E HE)  
 FWHM / FWTM 13.0° / 26.0°  
 Efficiency 94 %  
 Peak intensity 11.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



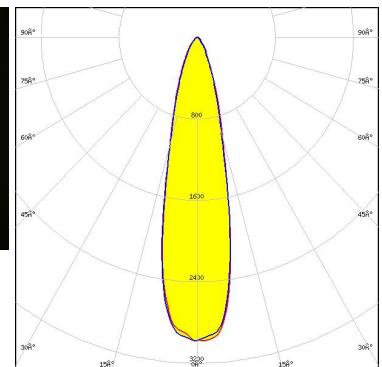
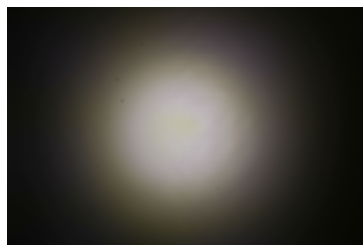
LED XLE-S26XHP35 (XHP35 HD)  
 FWHM / FWTM 24.0° / 45.0°  
 Efficiency 94 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

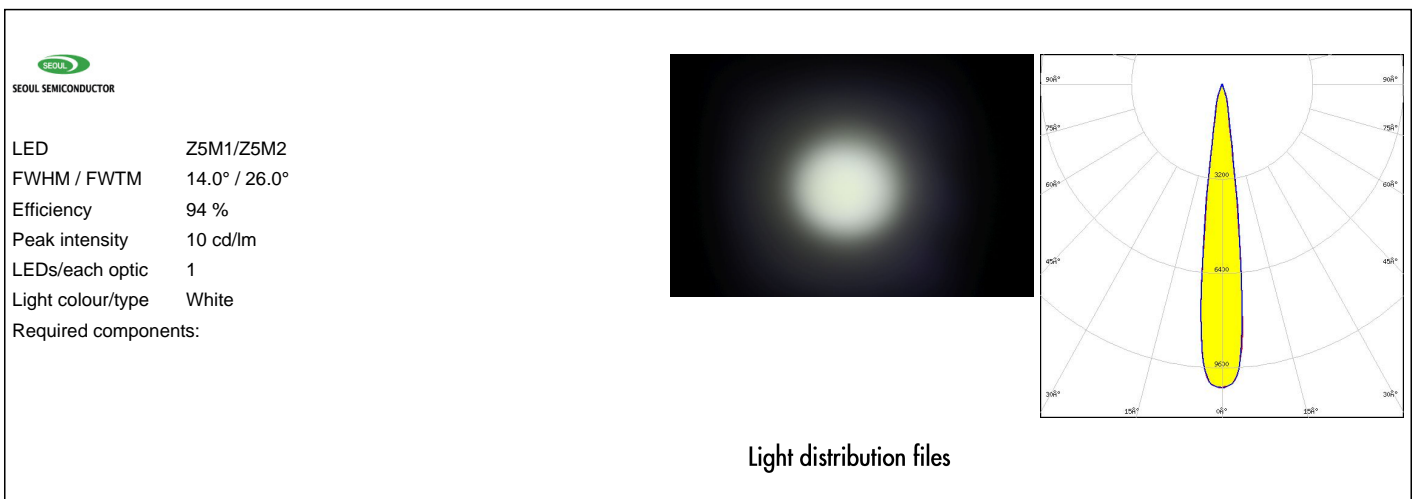
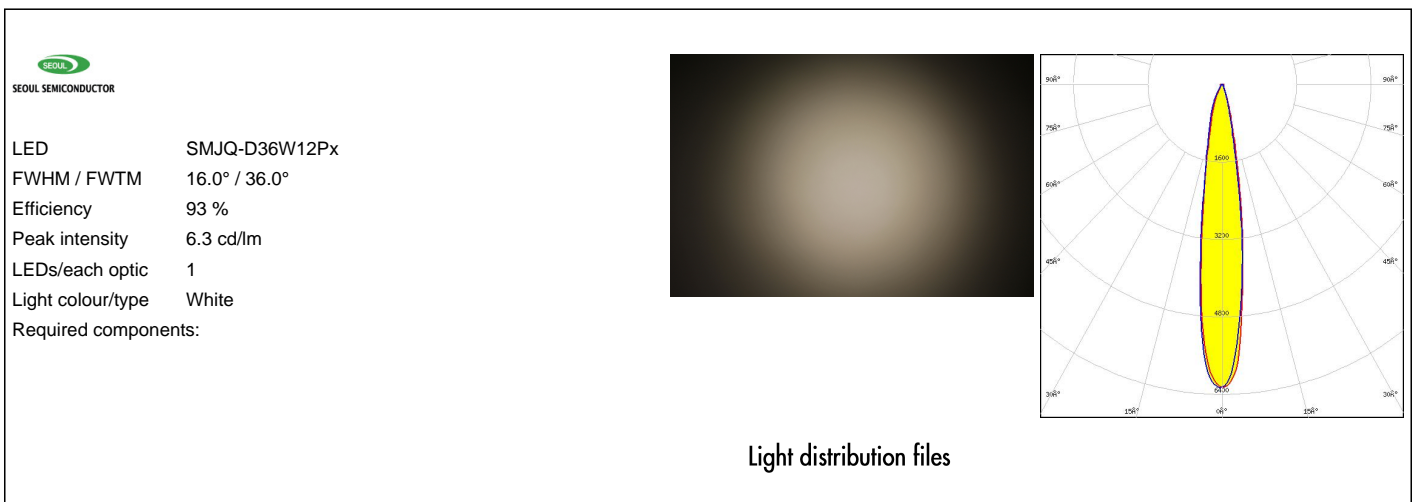
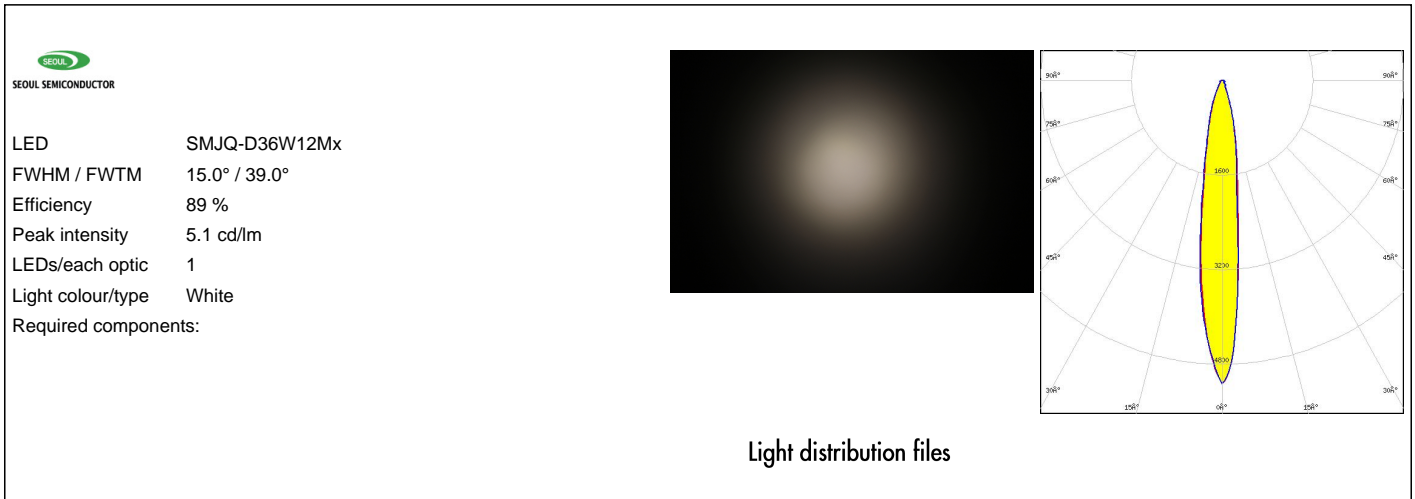


LED 2x6 5050 module - SMJD-3625012F-XX  
 FWHM / FWTM 24.0° / 53.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

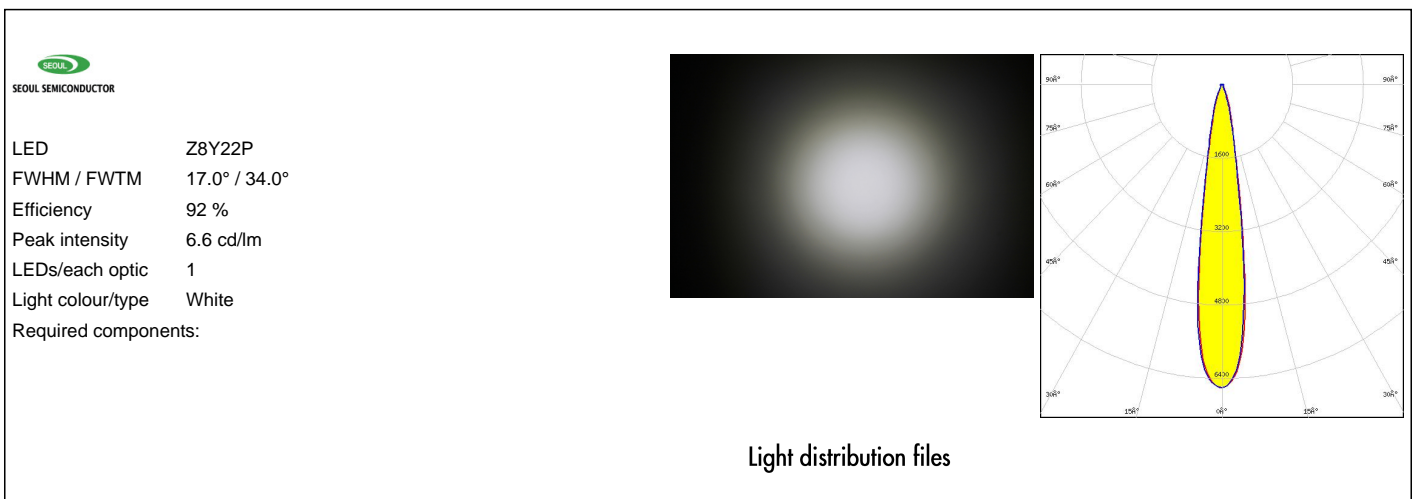
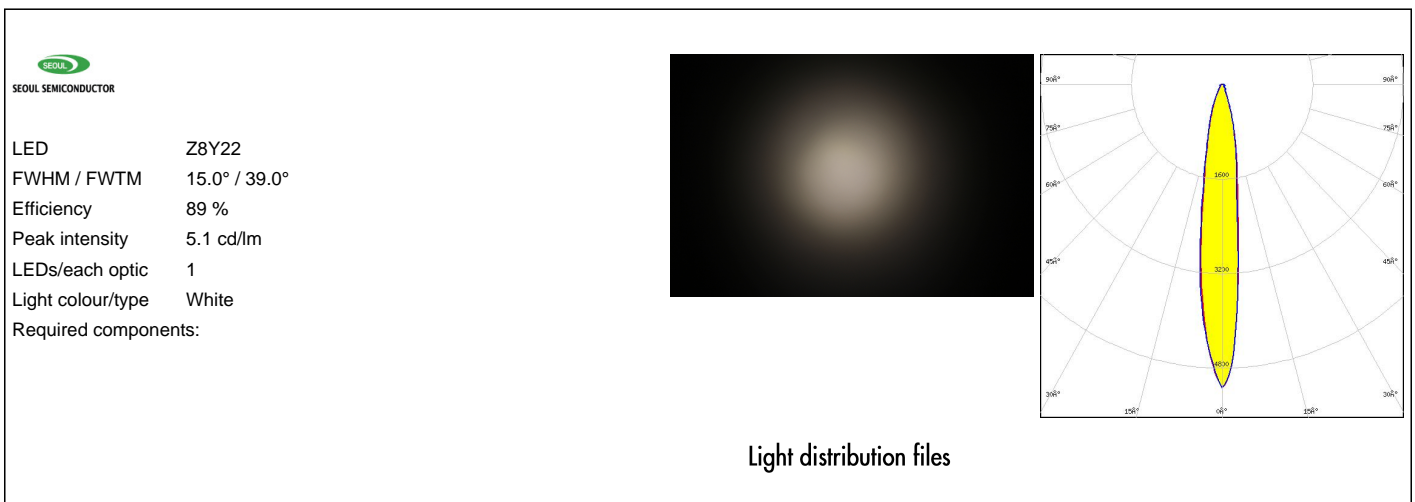
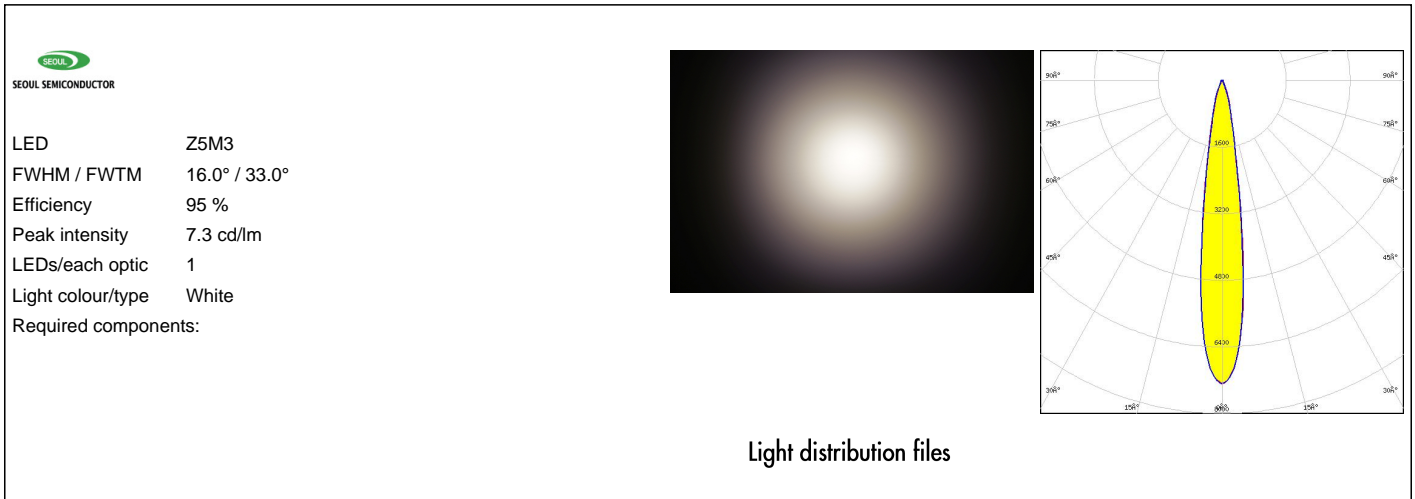


Light distribution files

#### OPTICAL RESULTS (MEASURED):



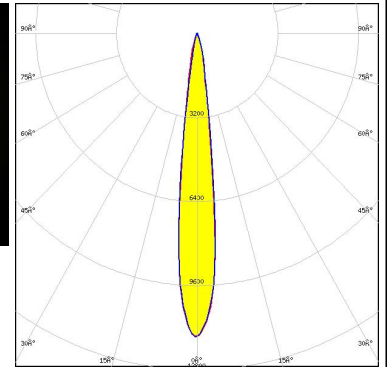
#### OPTICAL RESULTS (MEASURED):



## OPTICAL RESULTS (MEASURED):

### TRIDONIC

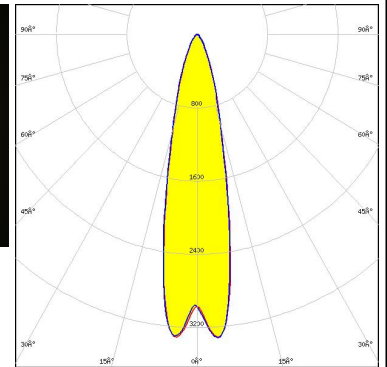
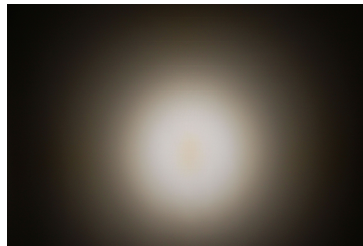
LED RLE 2x6 3000lm HP EXC2 OTD  
 FWHM / FWTM 13.0° / 25.0°  
 Efficiency 94 %  
 Peak intensity 11.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### TRIDONIC

LED RLE 2x6 4500lm HP HE EXC3 OTD Z19  
 FWHM / FWTM 24.0° / 50.0°  
 Efficiency 96 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

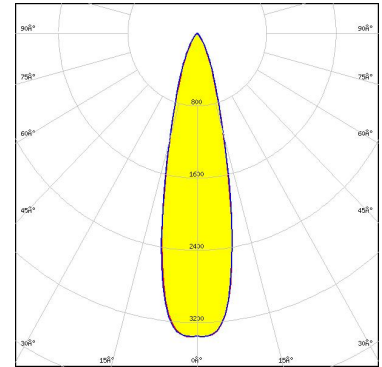


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



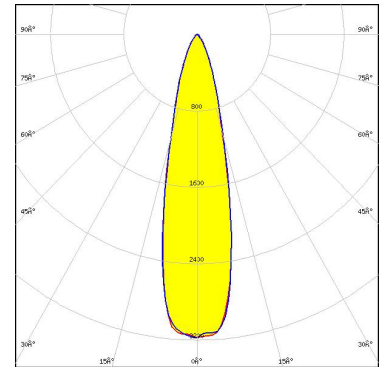
LED J Series 5050 Round LES  
 FWHM / FWTM 25.0° / 51.0°  
 Efficiency 94 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



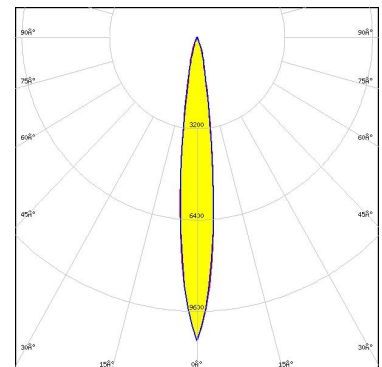
LED J Series 5050B 6V K Class  
 FWHM / FWTM 24.0° / 52.0°  
 Efficiency 94 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XB-H  
 FWHM / FWTM 12.0° / 28.0°  
 Efficiency 92 %  
 Peak intensity 10.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



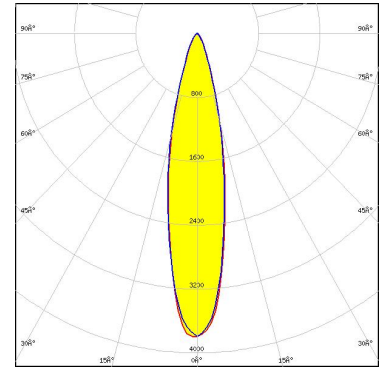
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



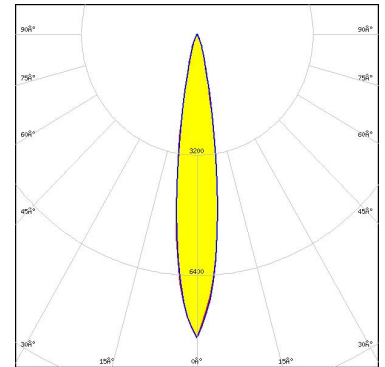
LED XHP35 HD  
FWHM / FWTM 22.0° / 46.0°  
Efficiency 93 %  
Peak intensity 3.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



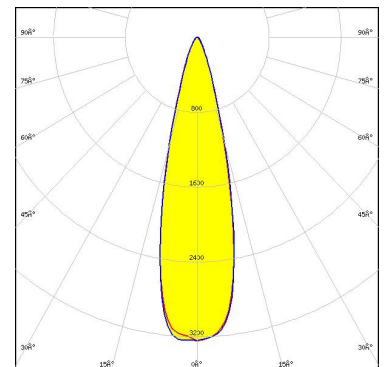
LED XHP35 HI  
FWHM / FWTM 16.0° / 32.0°  
Efficiency 93 %  
Peak intensity 8.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XHP35.2 HD  
FWHM / FWTM 26.0° / 48.0°  
Efficiency 92 %  
Peak intensity 3.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

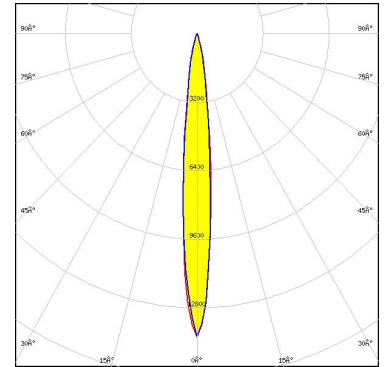


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



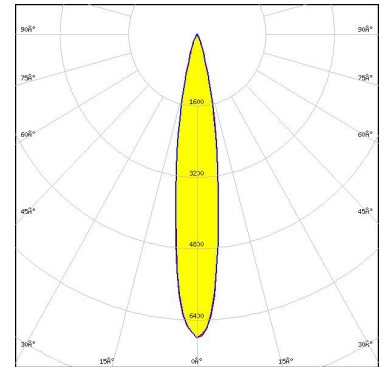
LED XP-E2  
FWHM / FWTM 11.0° / 26.0°  
Efficiency 91 %  
Peak intensity 14.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



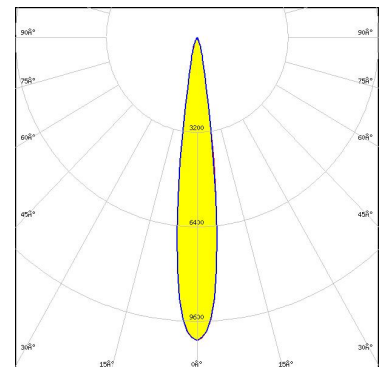
LED XP-G2 HE  
FWHM / FWTM 17.0° / 35.0°  
Efficiency 93 %  
Peak intensity 6.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-G4  
FWHM / FWTM 14.0° / 26.0°  
Efficiency 93 %  
Peak intensity 10.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

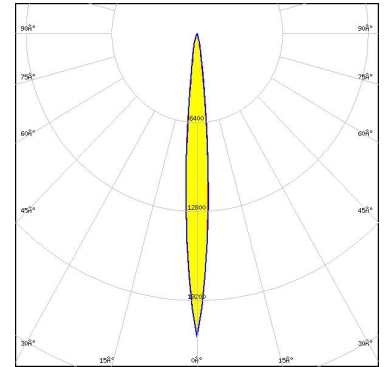


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



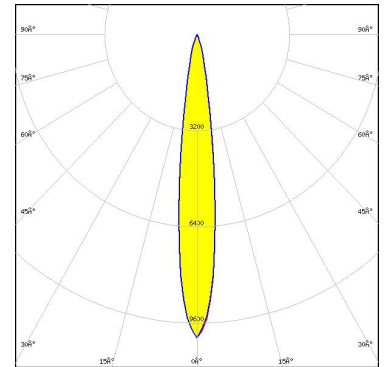
LED XQ-E HD  
FWHM / FWTM 8.0° / 19.0°  
Efficiency 92 %  
Peak intensity 21.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



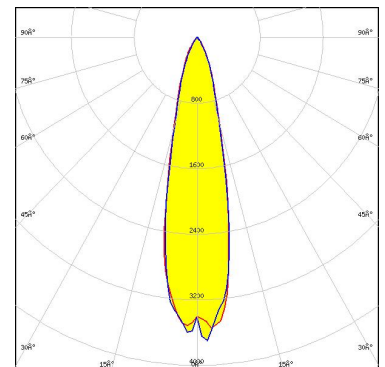
LED PrevaLED Brick HP IP 2x6  
FWHM / FWTM 14.0° / 28.0°  
Efficiency 92 %  
Peak intensity 10.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON 5050 Round LES  
FWHM / FWTM 23.0° / 50.0°  
Efficiency 91 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

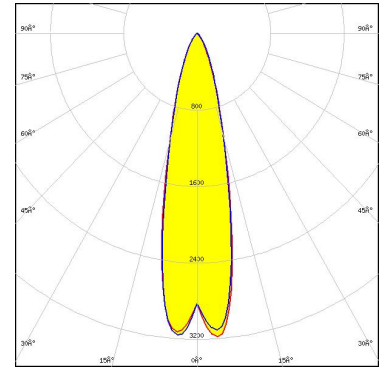


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



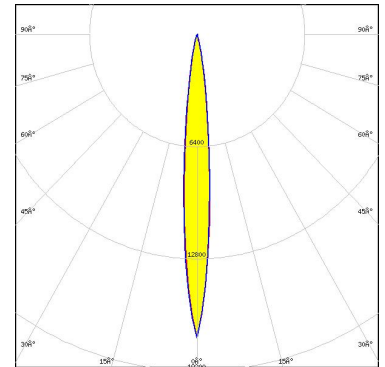
LED LUXEON 5050 Square LES  
FWHM / FWTM 25.0° / 52.0°  
Efficiency 94 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



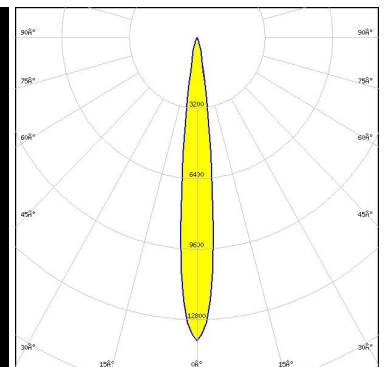
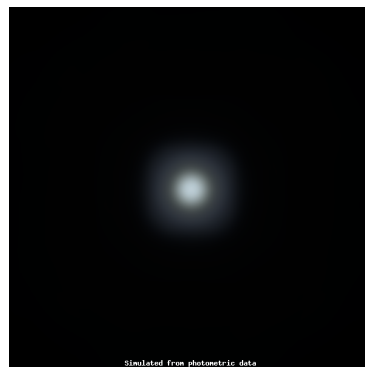
LED LUXEON C  
FWHM / FWTM 10.0° / 23.0°  
Efficiency 91 %  
Peak intensity 17.3 cd/lm  
LEDs/each optic 1  
Light colour/type Cyan  
Required components:



Light distribution files

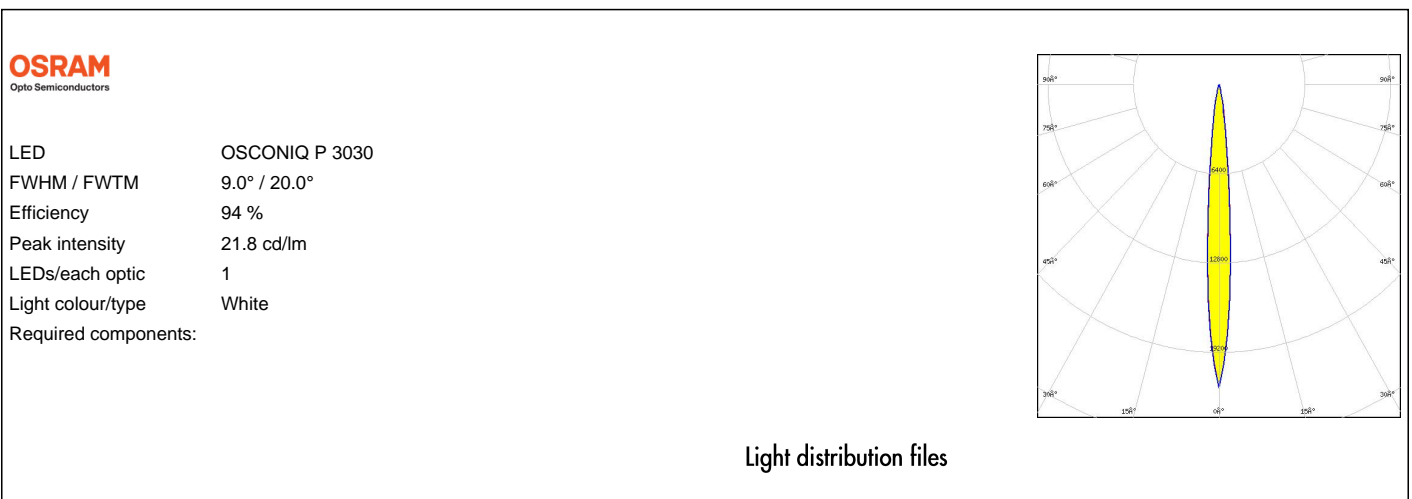
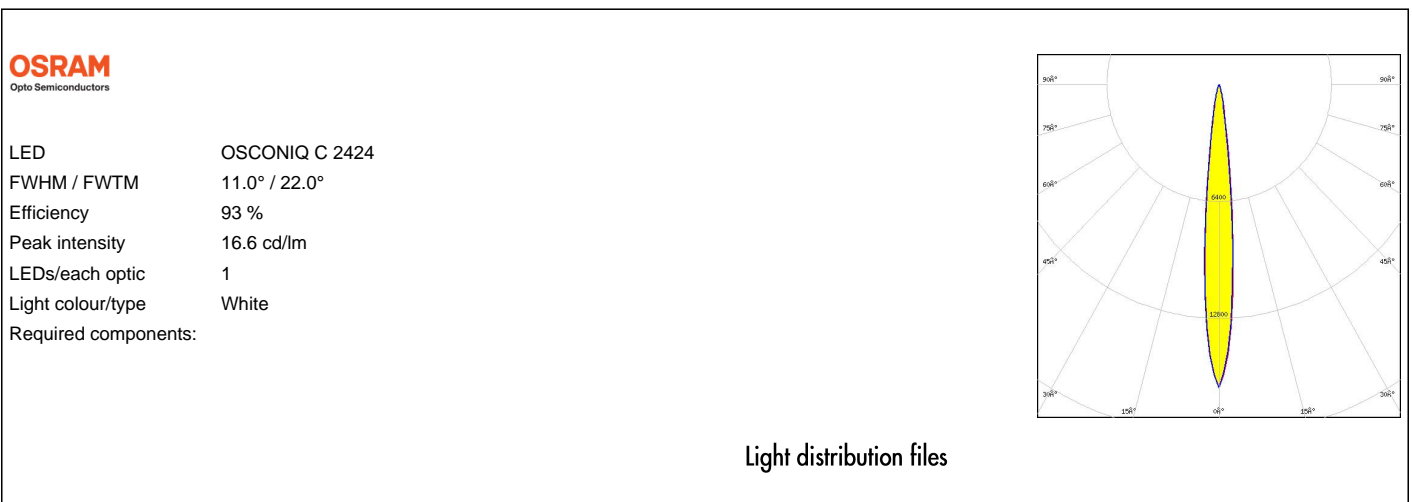
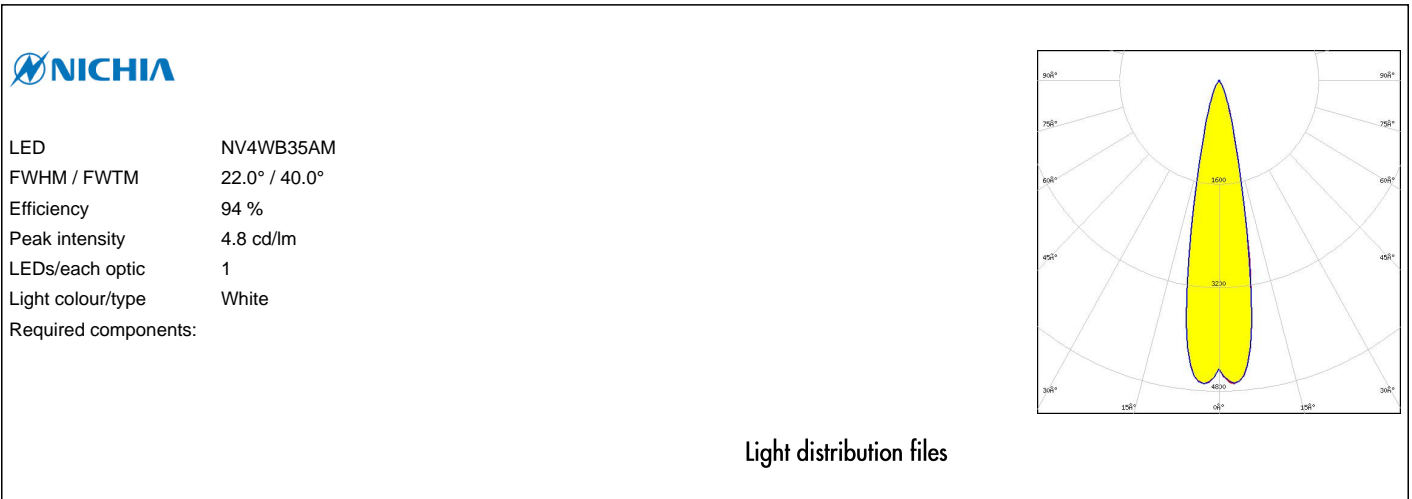


LED SST-20 Gen2  
FWHM / FWTM 12.0° / 24.0°  
Efficiency 93 %  
Peak intensity 13.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

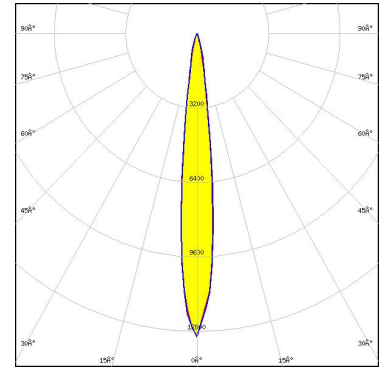
#### OPTICAL RESULTS (SIMULATED):



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

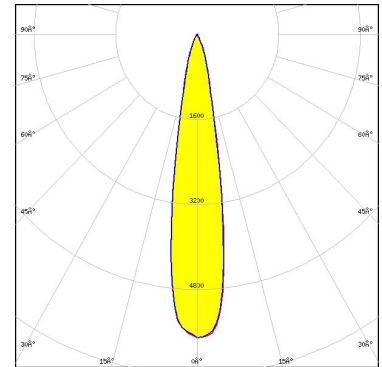
LED OSCONIQ P 3737 (2W version)  
FWHM / FWTM 12.0° / 25.0°  
Efficiency 89 %  
Peak intensity 13 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

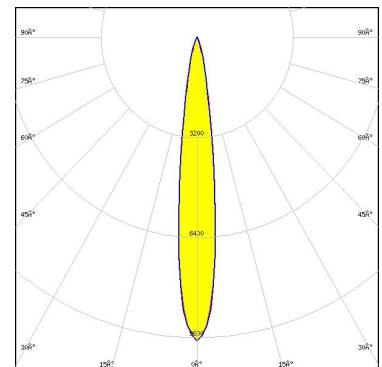
LED OSCONIQ P 3737 (3W version)  
FWHM / FWTM 19.0° / 37.0°  
Efficiency 93 %  
Peak intensity 6.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ P 3737 Flat  
FWHM / FWTM 14.0° / 30.0°  
Efficiency 94 %  
Peak intensity 9.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

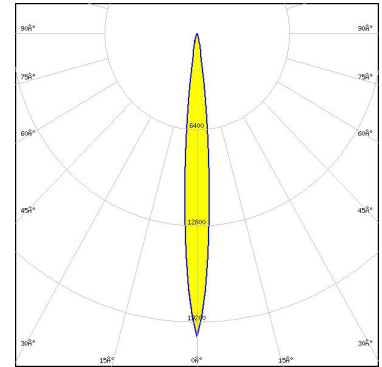


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

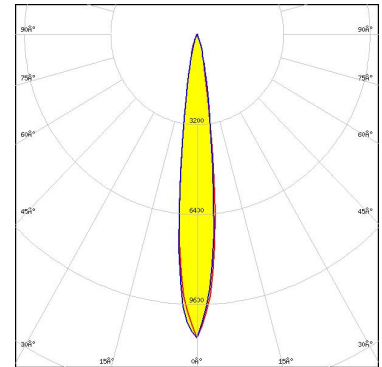
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 10.0° / 20.0°  
Efficiency 92 %  
Peak intensity 20.2 cd/lm  
LEDs/each optic 1  
Light colour/type Far Red  
Required components:



Light distribution files

**SAMSUNG**

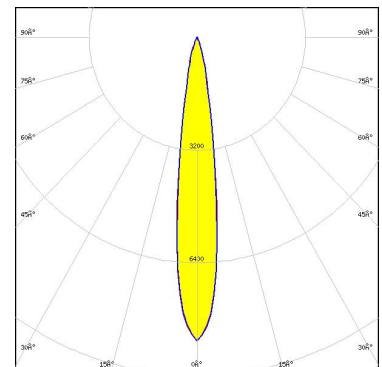
LED LH181B  
FWHM / FWTM 13.0° / 28.0°  
Efficiency 93 %  
Peak intensity 10.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

LED LH231B  
FWHM / FWTM 16.0° / 32.0°  
Efficiency 93 %  
Peak intensity 8.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

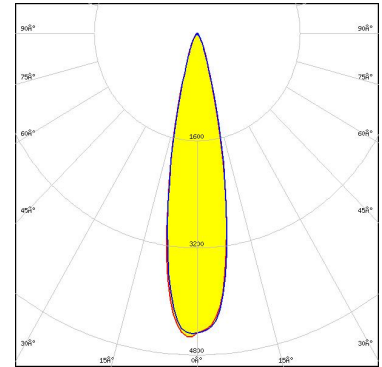


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

### SAMSUNG

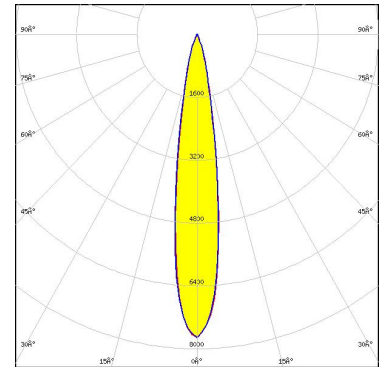
LED LH351D  
FWHM / FWTM 22.0° / 40.0°  
Efficiency 93 %  
Peak intensity 4.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



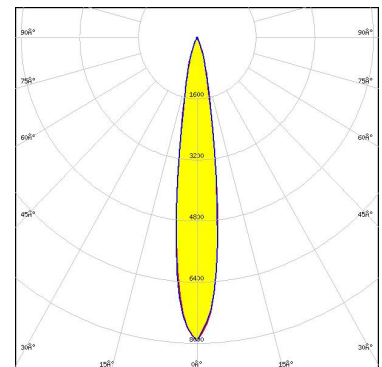
LED Z5M4  
FWHM / FWTM 16.0° / 34.0°  
Efficiency 93 %  
Peak intensity 7.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED Z8Y22T  
FWHM / FWTM 15.0° / 33.0°  
Efficiency 93 %  
Peak intensity 7.9 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 7  
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)