

## HB-IP-24-M

~30° wide beam.

## SPECIFICATION:

Dimensions	173.0 x 71.4
Height	10 mm
Fastening	pin, screw
Ingress protection classes	IP66, IP67
ROHS compliant	yes ⓘ

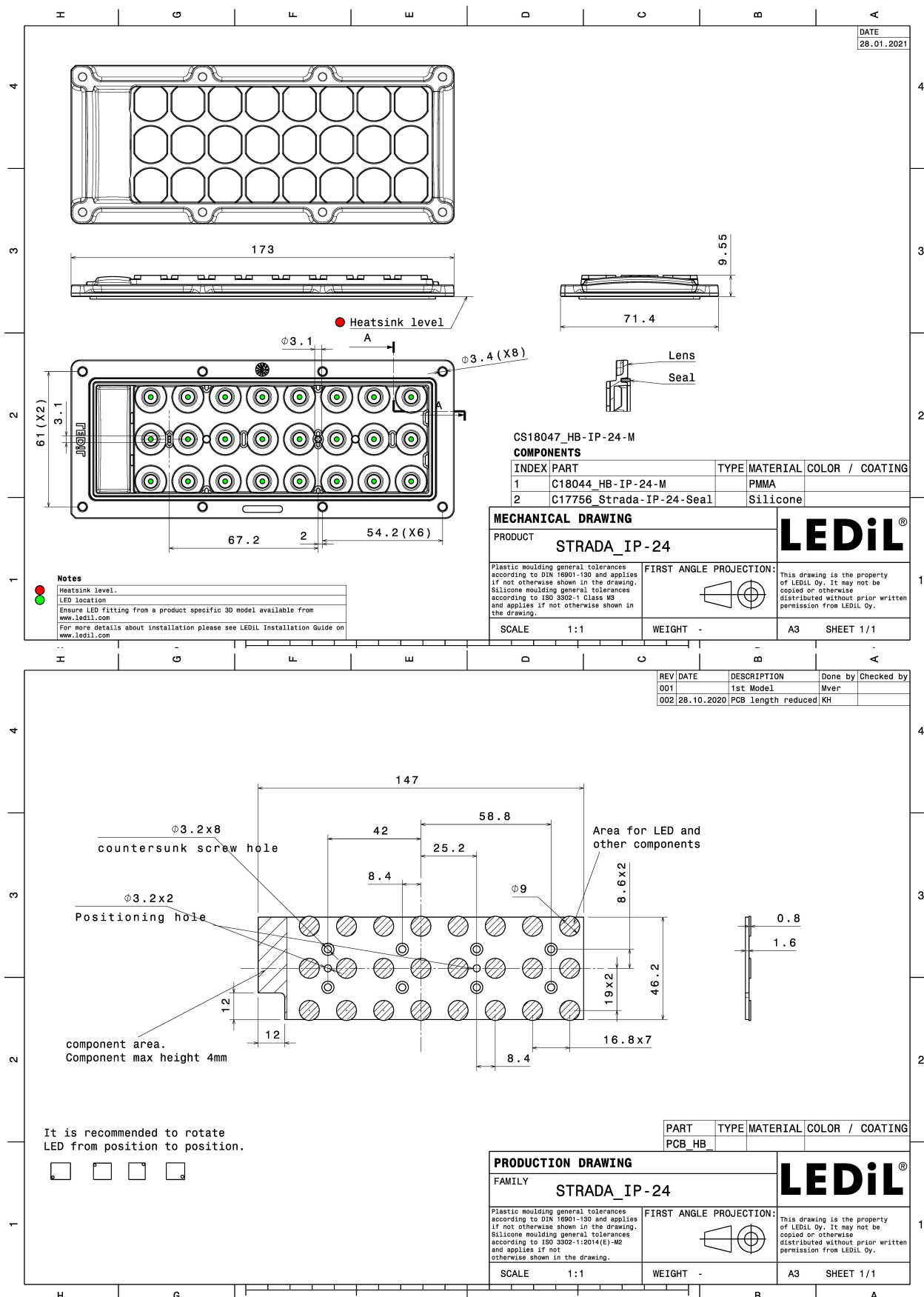
## MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-IP-24-M	Multi-lens	PMMA	clear		
STRADA-IP-24-SEAL	Seal	Silicone	white		



## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CS18047_HB-IP-24-M	120	120	40	7.0
» Box size: 476 x 273 x 247 mm				



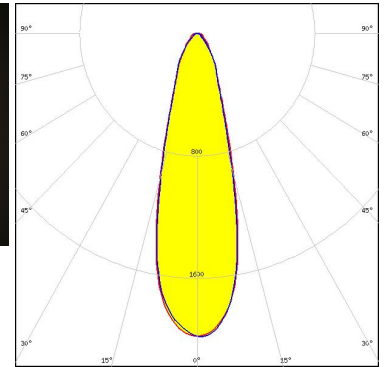
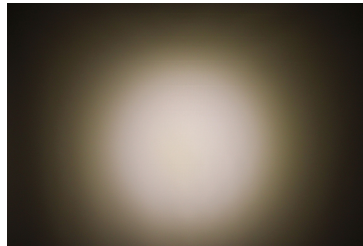
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



### OPTICAL RESULTS (MEASURED):



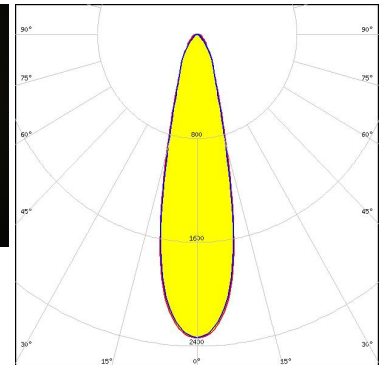
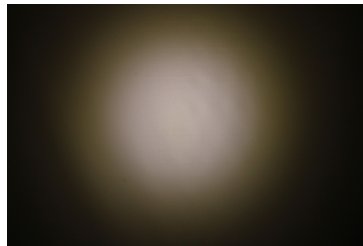
LED LIGHT ENGINE STRADA-IP 24 LEDs 147.4 x 46.2 x 1.5  
 FWHM / FWTM 29.0° / 68.0°  
 Efficiency 96 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



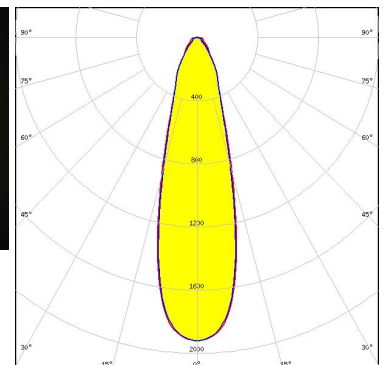
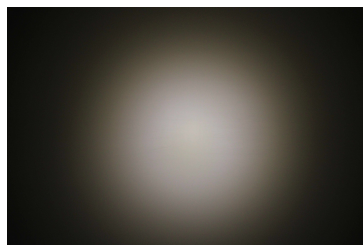
LED LUXEON 5050 HE  
 FWHM / FWTM 26.0° / 62.0°  
 Efficiency 96 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON 5050 Square LES  
 FWHM / FWTM 29.0° / 68.0°  
 Efficiency 95 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

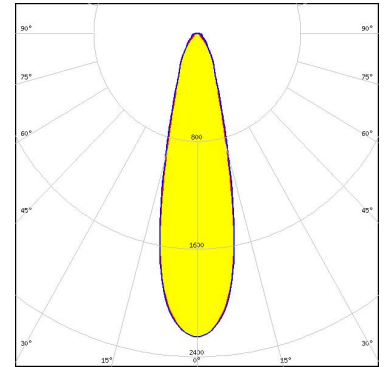


Light distribution files

#### OPTICAL RESULTS (MEASURED):



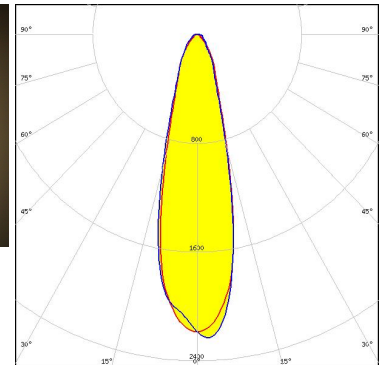
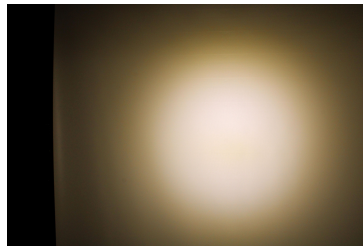
LED LUXEON XR-5050 HE (L225-xxxx024MLU010)  
 FWHM / FWTM 27.0° / 64.0°  
 Efficiency 97 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



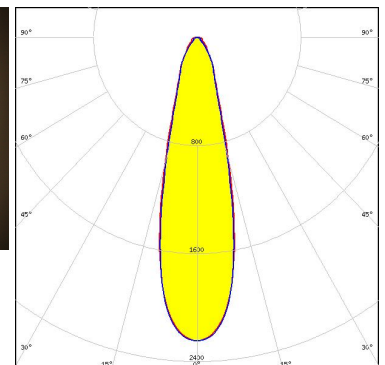
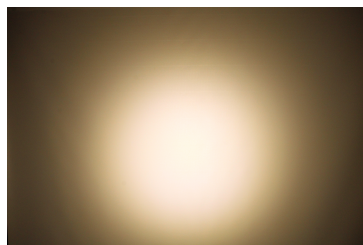
LED HiLOM RM24 ZP (LH502D)  
 FWHM / FWTM 27.0° / 65.0°  
 Efficiency 97 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED CHI-VP-10K5-740-36  
 FWHM / FWTM 27.0° / 63.0°  
 Efficiency 95 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

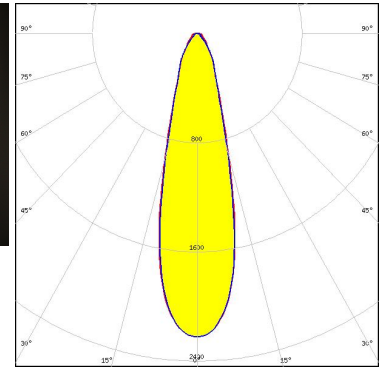
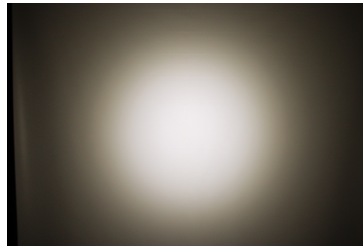


Light distribution files

#### OPTICAL RESULTS (MEASURED):



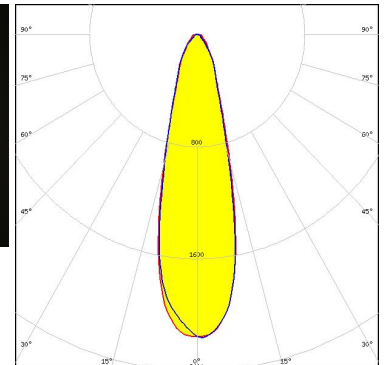
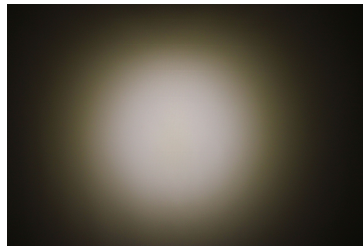
LED CHIEC-VE-11K4-740-48  
 FWHM / FWTM 28.0° / 65.0°  
 Efficiency 97 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED RLE 3x8 6000lm HP HE EXC3 OTD  
 FWHM / FWTM 28.0° / 65.0°  
 Efficiency 97 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

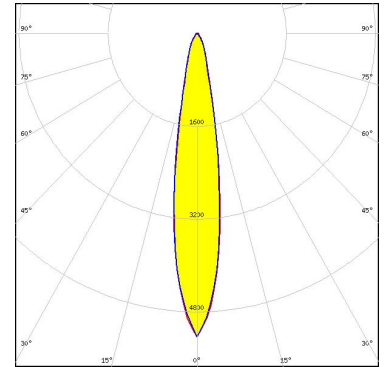


Light distribution files

### OPTICAL RESULTS (SIMULATED):



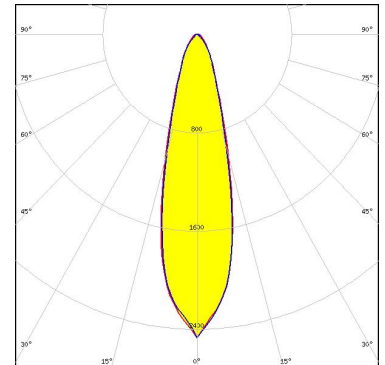
LED J Series 3030  
FWHM / FWTM 18.0° / 38.0°  
Efficiency 95 %  
Peak intensity 5.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



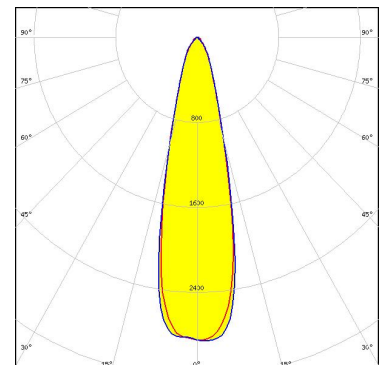
LED J Series 5050C 6V E Class  
FWHM / FWTM 27.0° / 60.0°  
Efficiency 96 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-G3  
FWHM / FWTM 26.0° / 54.0°  
Efficiency 95 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

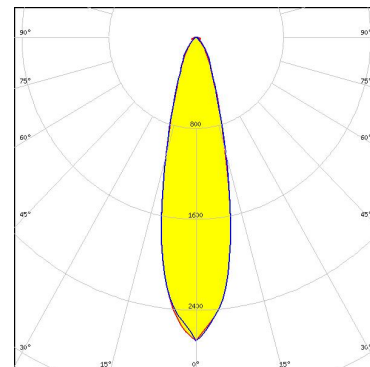


Light distribution files

### OPTICAL RESULTS (SIMULATED):



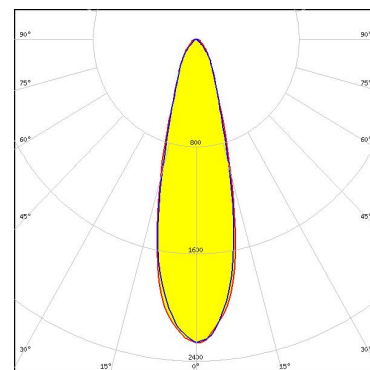
LED LUXEON 5050 HE  
FWHM / FWTM 26.0° / 57.0°  
Efficiency 95 %  
Peak intensity 2.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



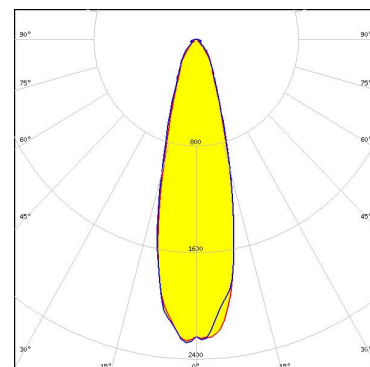
LED LUXEON 5050 Round LES  
FWHM / FWTM 28.0° / 64.0°  
Efficiency 96 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON 5050 Square LES  
FWHM / FWTM 28.0° / 64.0°  
Efficiency 96 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

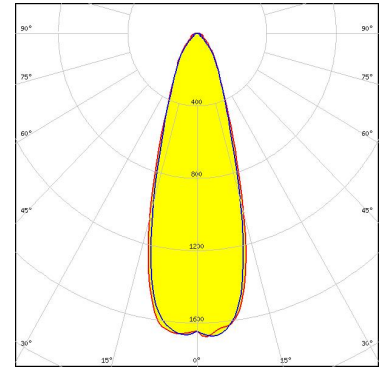


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



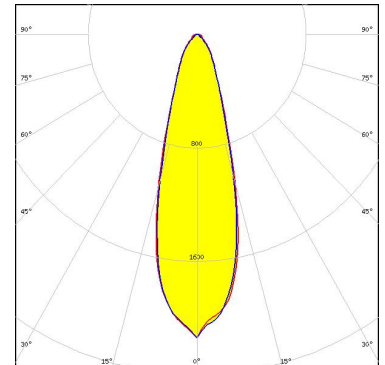
LED RecLED 147x47mm 5800lm 7x0 5050 STRADA-IP-24 G2  
 FWHM / FWTM 33.0° / 74.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



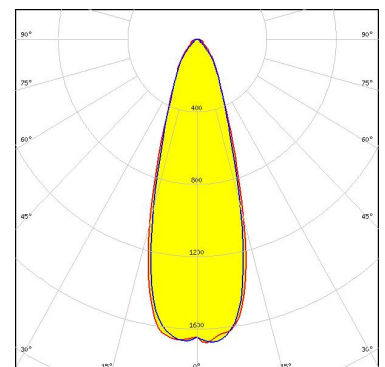
LED NFMW48xA  
 FWHM / FWTM 30.0° / 66.0°  
 Efficiency 96 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED Duris S8  
 FWHM / FWTM 33.0° / 74.0°  
 Efficiency 93 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



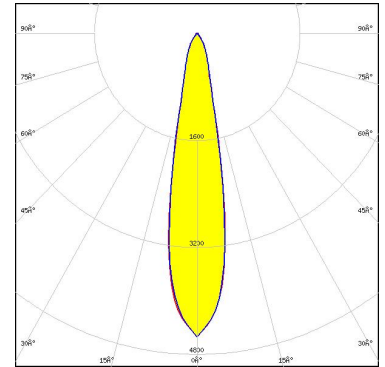
Light distribution files



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

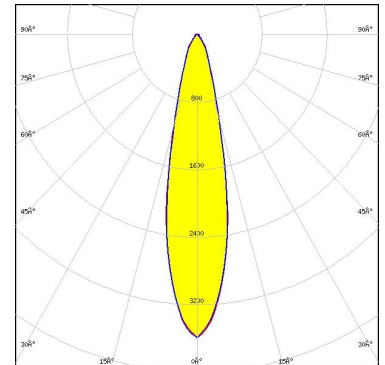
LED OSCONIQ P 3737 (2W version)  
FWHM / FWTM 20.0° / 44.0°  
Efficiency 96 %  
Peak intensity 4.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

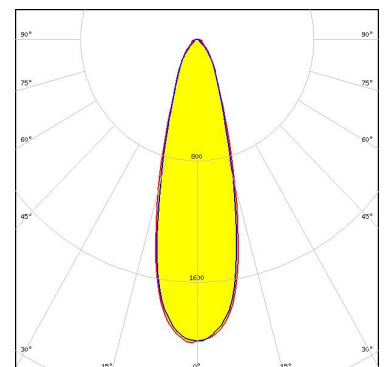
LED OSCONIQ P 3737 (3W version)  
FWHM / FWTM 24.0° / 48.0°  
Efficiency 96 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

LED HiLOM RM24 ZP (LH502C)  
FWHM / FWTM 30.0° / 68.0°  
Efficiency 95 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

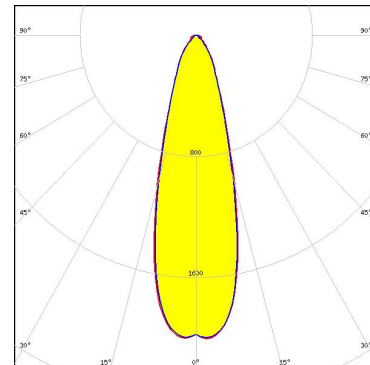


Light distribution files

### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

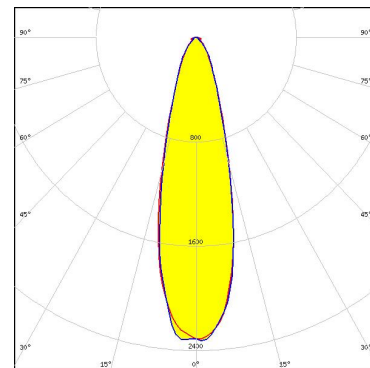
LED LH502C  
FWHM / FWTM 30.0° / 68.0°  
Efficiency 95 %  
Peak intensity 2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SAMSUNG

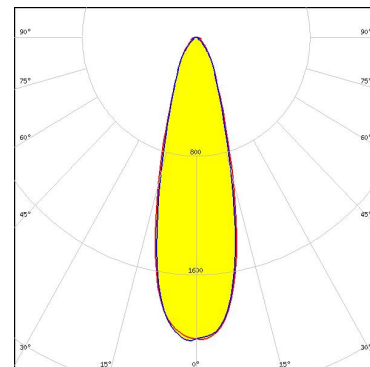
LED LH502D  
FWHM / FWTM 28.0° / 62.0°  
Efficiency 96 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SAMSUNG

LED LH508C  
FWHM / FWTM 29.0° / 67.0°  
Efficiency 95 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

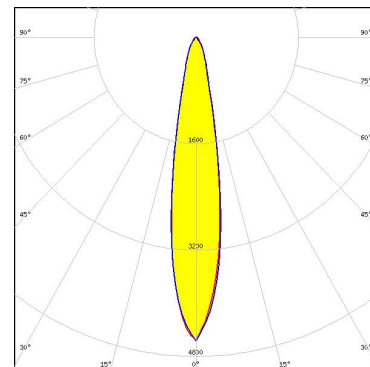


Light distribution files

### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

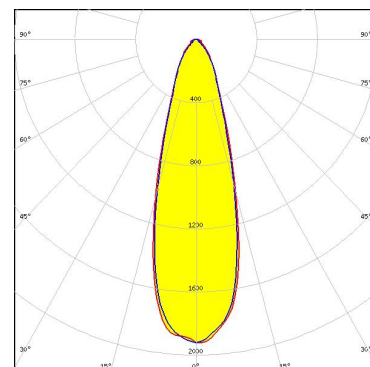
LED LM301D  
FWHM / FWTM 18.0° / 42.0°  
Efficiency 95 %  
Peak intensity 4.6 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED SEOUL DC 5050 6V  
FWHM / FWTM 31.0° / 70.0°  
Efficiency 95 %  
Peak intensity 1.9 cd/Im  
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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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.

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#### 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

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