

## HB-2X2-ON

~15° + 50° oval beam

### SPECIFICATION:

|                |                |
|----------------|----------------|
| Dimensions     | 50.0 x 50.0 mm |
| Height         | 10 mm          |
| Fastening      | screw          |
| ROHS compliant | yes ⓘ          |

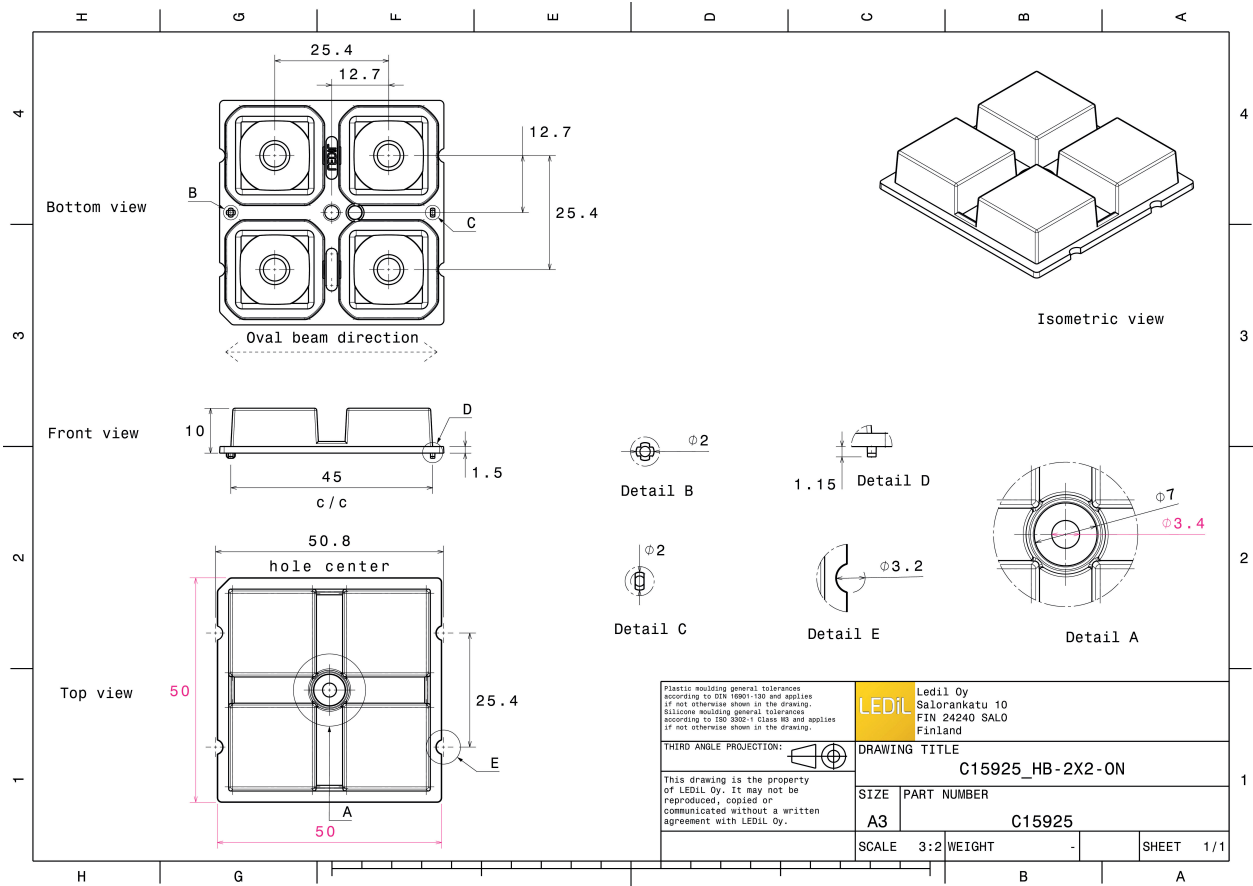
### MATERIALS:

| Component | Type       | Material | Colour | Finish | Length |
|-----------|------------|----------|--------|--------|--------|
| HB-2X2-ON | Multi-lens | PMMA     | clear  |        | 50.0   |

### ORDERING INFORMATION:

| Component                                          | Qty in box | MOQ | MPQ | Box weight (kg) |
|----------------------------------------------------|------------|-----|-----|-----------------|
| C15925_HB-2X2-ON<br>» Box size: 480 x 280 x 300 mm | 800        | 160 | 160 | 9.8             |



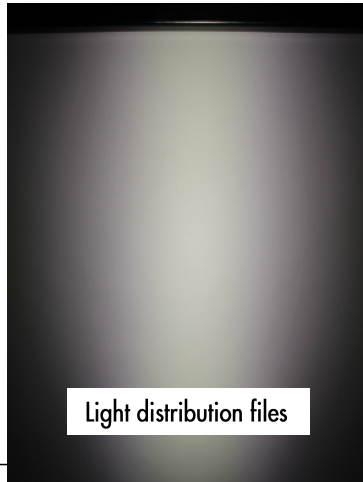


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

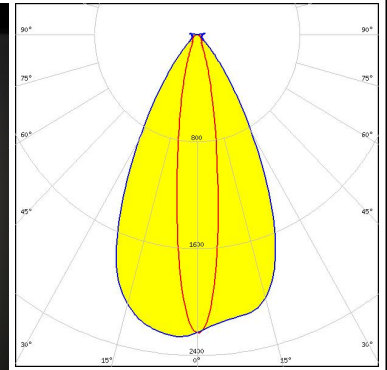
### OPTICAL RESULTS (MEASURED):



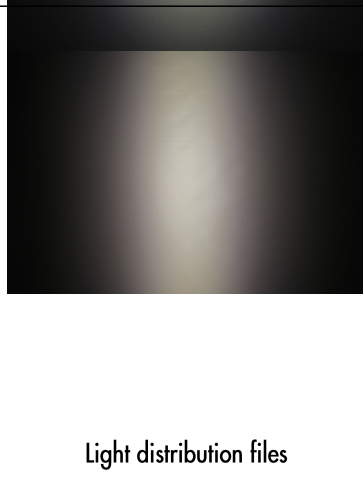
**LED** QUICK FLUX XTP 2x4 xxx LS G5  
**FWHM / FWTM** 16.0 + 55.0° / 40.0 + 83.0°  
**Efficiency** 93 %  
**Peak intensity** 2.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



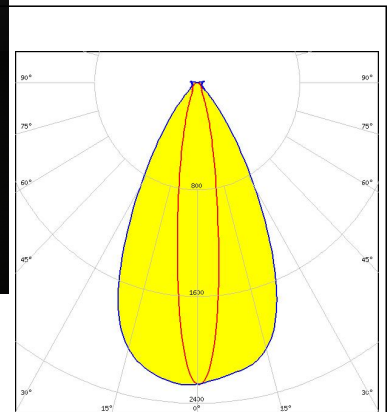
Light distribution files



**LED** QUICK FLUX XTP 2x6 xxx LS G5  
**FWHM / FWTM** 16.0 + 55.0° / 40.0 + 83.0°  
**Efficiency** 93 %  
**Peak intensity** 2.3 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



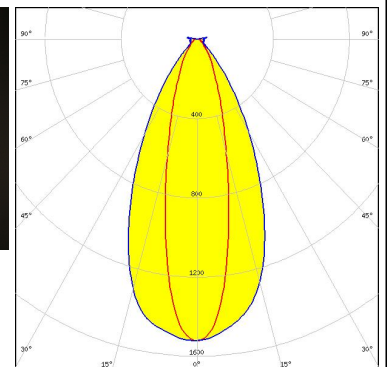
Light distribution files



**LED** J Series 5050C 6V E Class  
**FWHM / FWTM** 25.0 + 51.0° / 64.0 + 87.0°  
**Efficiency** 90 %  
**Peak intensity** 1.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



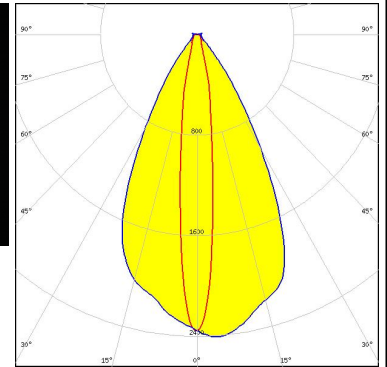
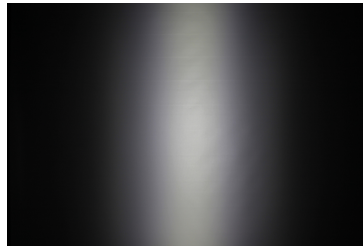
Light distribution files



#### OPTICAL RESULTS (MEASURED):



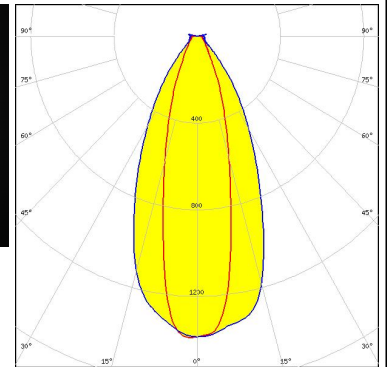
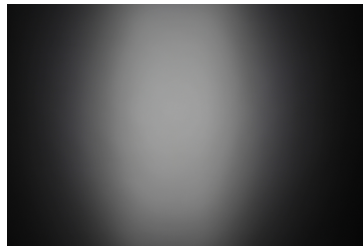
LED XD16  
 FWHM / FWTM 13.0 + 55.0° / 34.0 + 82.0°  
 Efficiency 89 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



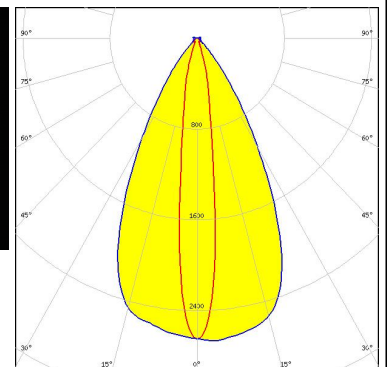
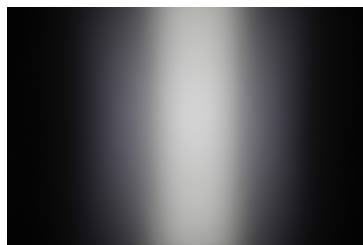
LED XD16  
 FWHM / FWTM 27.0 + 49.0° / 62.0 + 89.0°  
 Efficiency 90 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 4  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-G2  
 FWHM / FWTM 14.0 + 55.0° / 34.0 + 82.0°  
 Efficiency 89 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



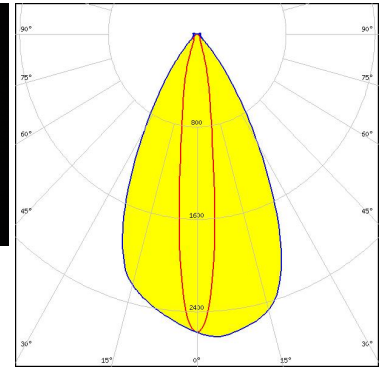
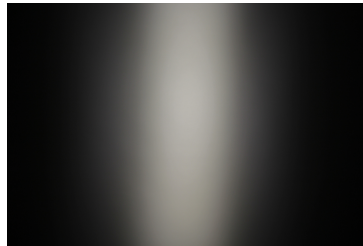
Light distribution files



#### OPTICAL RESULTS (MEASURED):



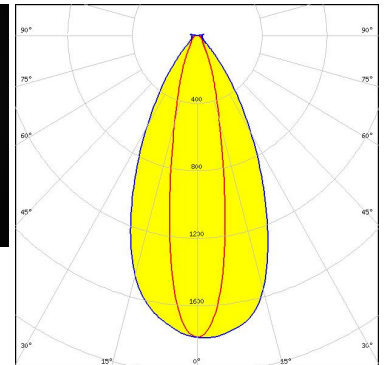
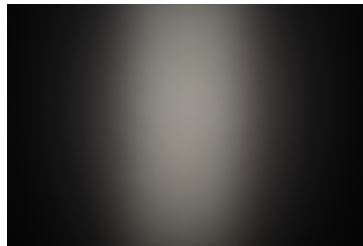
LED XP-L HI  
 FWHM / FWTM 14.0 + 55.0° / 36.0 + 82.0°  
 Efficiency 91 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



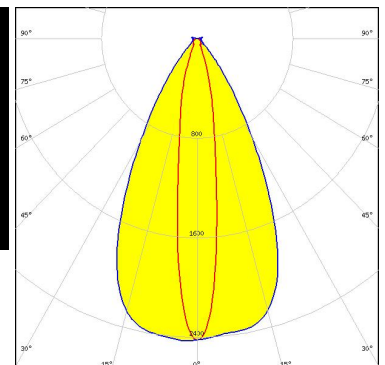
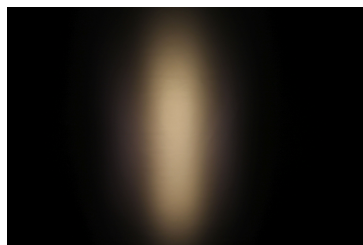
LED LUXEON V  
 FWHM / FWTM 22.0 + 51.0° / 52.0 + 86.0°  
 Efficiency 92 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED RecLED 122x50mm 1900lm 730 2x4 Opt G1  
 FWHM / FWTM 15.0 + 54.0° / 38.5 + 82.5°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

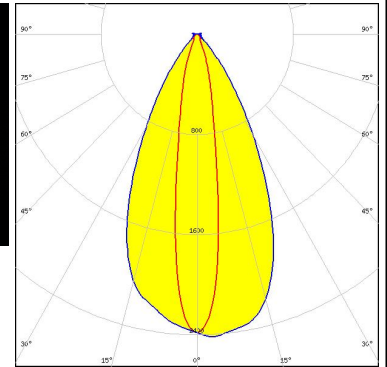


Light distribution files

### OPTICAL RESULTS (MEASURED):



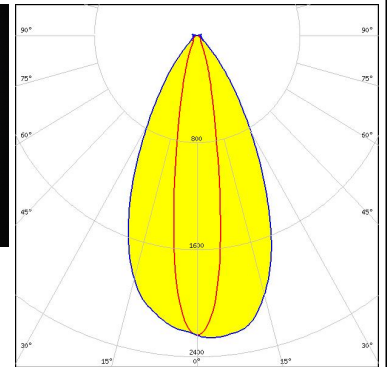
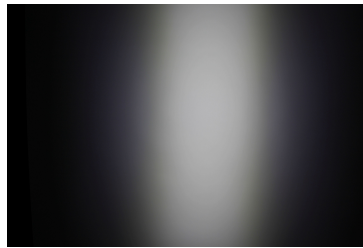
LED NVSW219F  
 FWHM / FWTM 17.0 + 53.0° / 40.0 + 83.0°  
 Efficiency 93 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



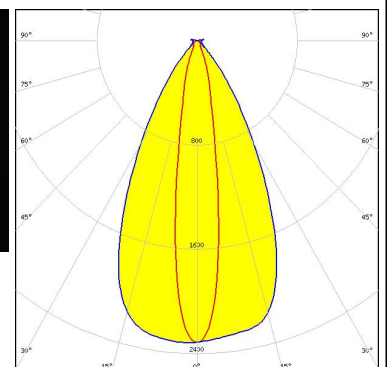
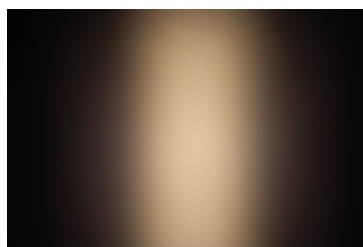
LED NVSW319B  
 FWHM / FWTM 18.0 + 52.0° / 41.0 + 84.0°  
 Efficiency 93 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED PL-BRICK HP 3800 2x8 SSG  
 FWHM / FWTM 17.0 + 54.0° / 41.0 + 84.0°  
 Efficiency 92 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

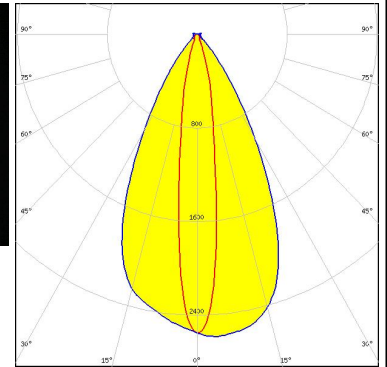
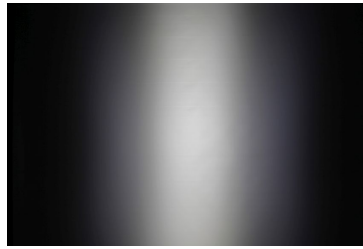


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### OSRAM

LED PrevaLED Brick HP 2x8  
 FWHM / FWTM 15.0 + 54.0° / 36.0 + 82.0°  
 Efficiency 91 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

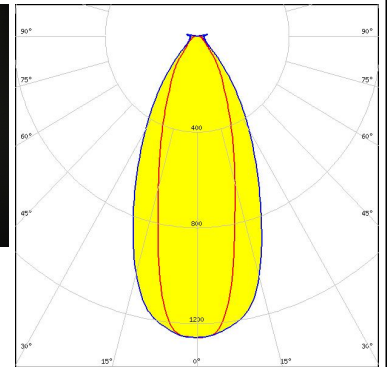
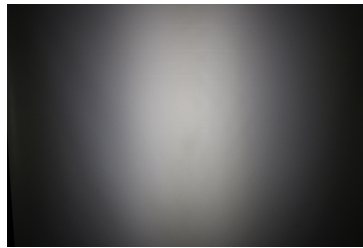


Light distribution files

### OSRAM

Opto Semiconductors

LED Duris S8  
 FWHM / FWTM 31.0 + 49.0° / 78.0 + 91.0°  
 Efficiency 92 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

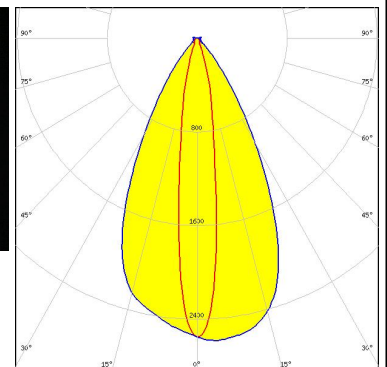
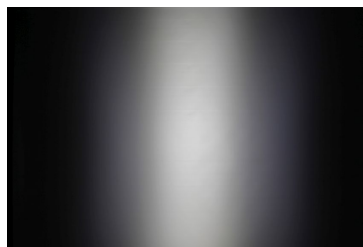


Light distribution files

### OSRAM

Opto Semiconductors

LED OSLOM Square CSSRM2/CSSRM3  
 FWHM / FWTM 15.0 + 54.0° / 36.0 + 82.0°  
 Efficiency 91 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

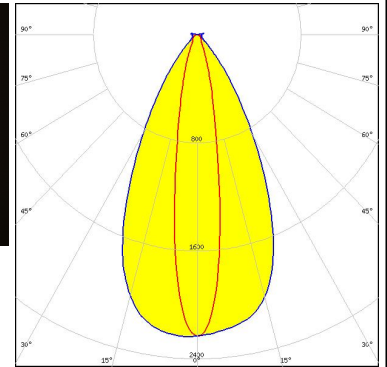
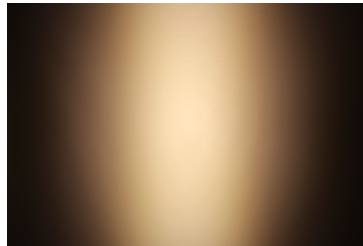


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### PHILIPS

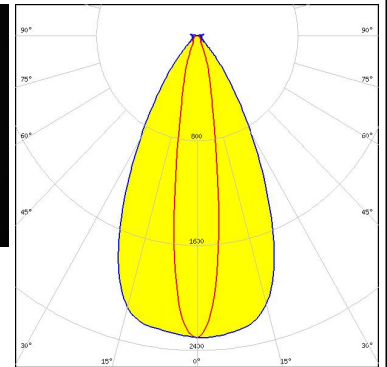
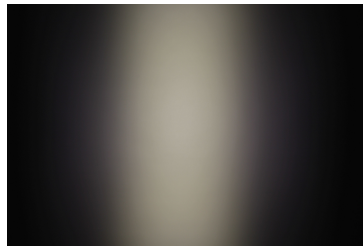
LED Fortimo FastFlex LED 2x8 DA G4+  
 FWHM / FWTM 18.0 + 53.0° / 41.0 + 84.0°  
 Efficiency 94 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

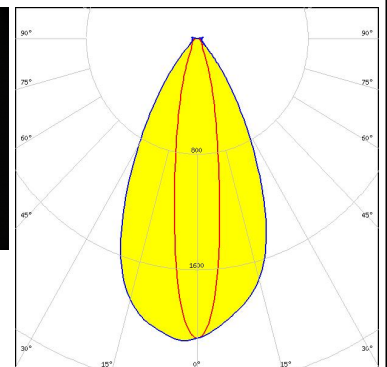
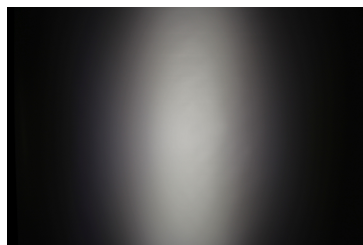
LED HiLOM RH16 (LH351C)  
 FWHM / FWTM 17.0 + 54.0° / 42.0 + 84.0°  
 Efficiency 94 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

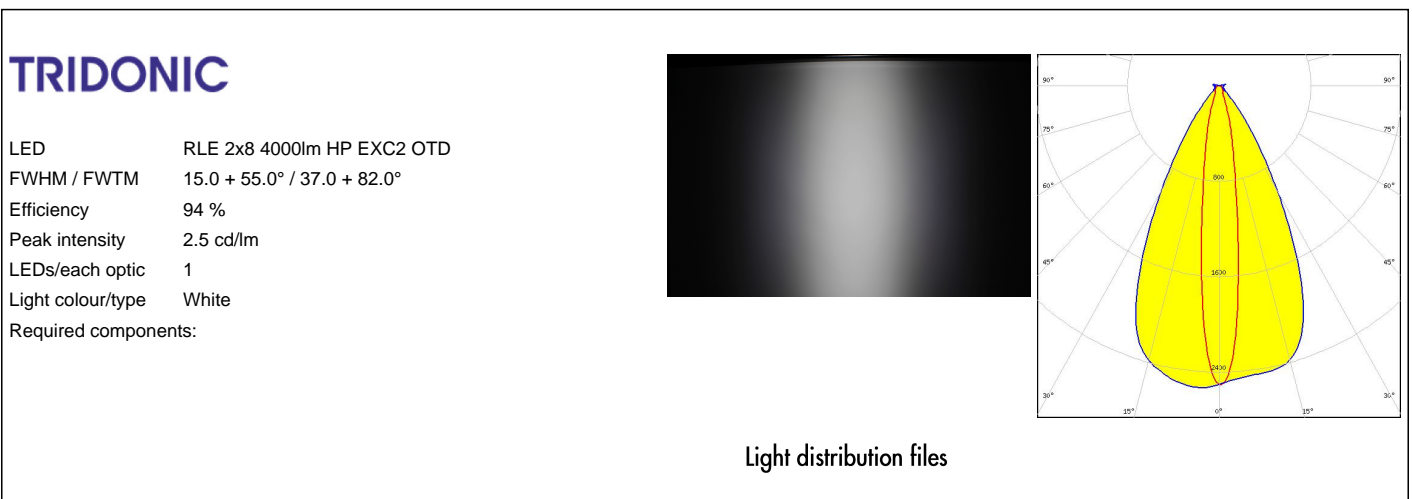
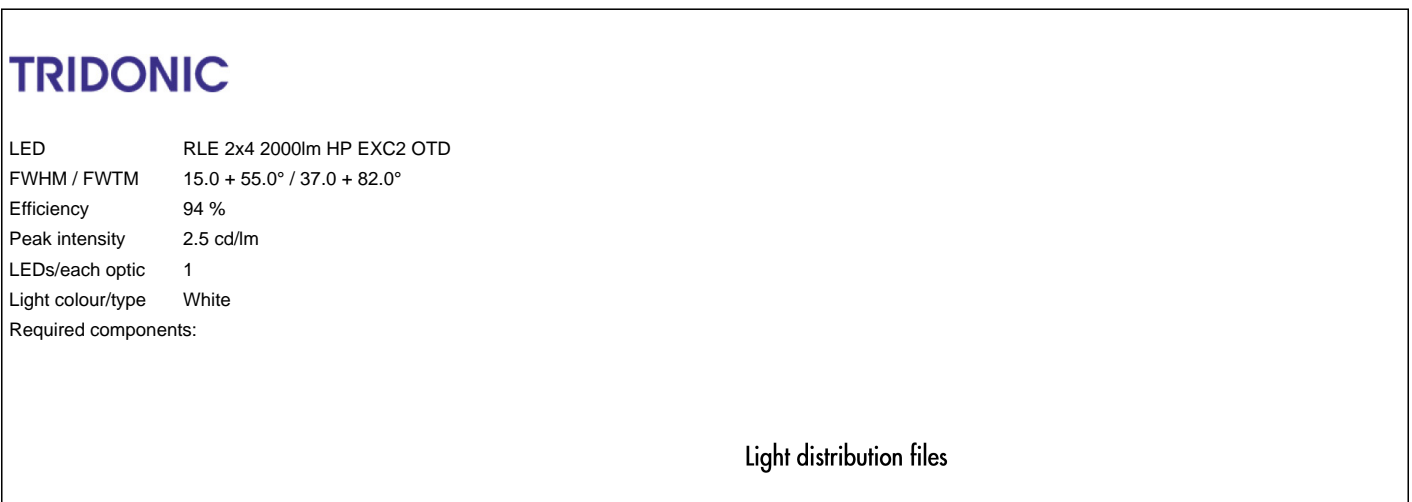
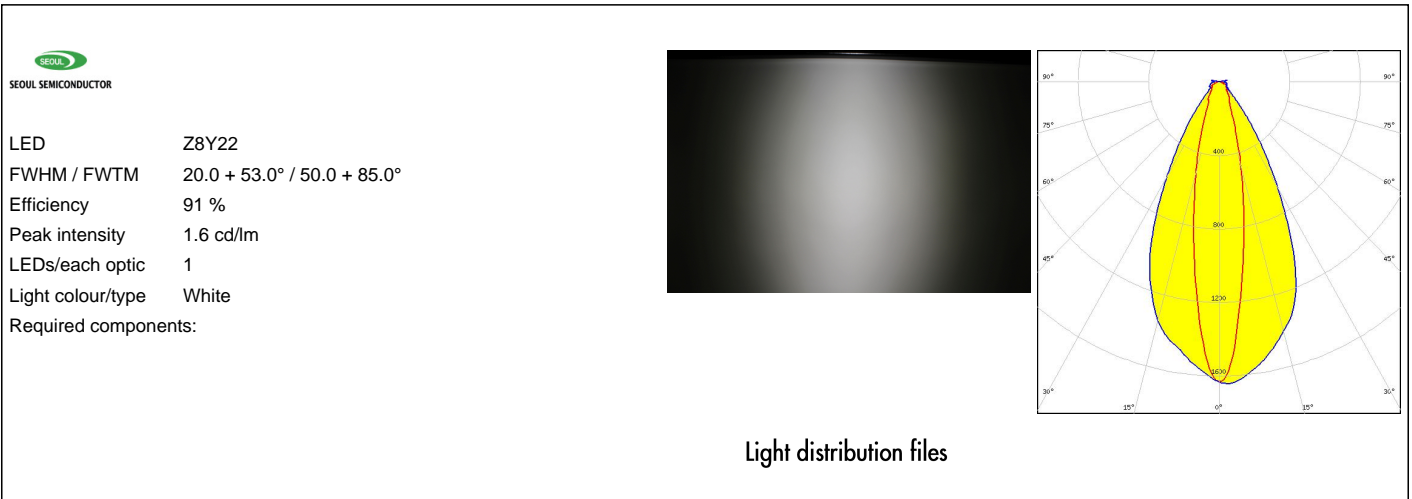


LED Z5M3  
 FWHM / FWTM 18.0 + 53.0° / 44.0 + 84.0°  
 Efficiency 93 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

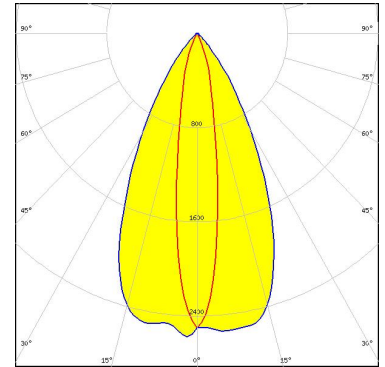
### OPTICAL RESULTS (MEASURED):



### OPTICAL RESULTS (SIMULATED):



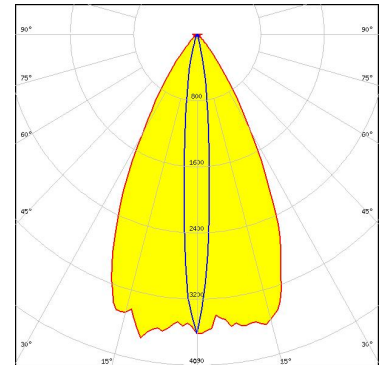
LED XHP35 HI  
 FWHM / FWTM 16.0 + 50.0°  
 Efficiency 90 %  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-E2  
 FWHM / FWTM 54.0 + 10.0° / 78.0 + 27.0°  
 Efficiency 93 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-E2  
 FWHM / FWTM 10.0 + 50.0°  
 Efficiency 90 %  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

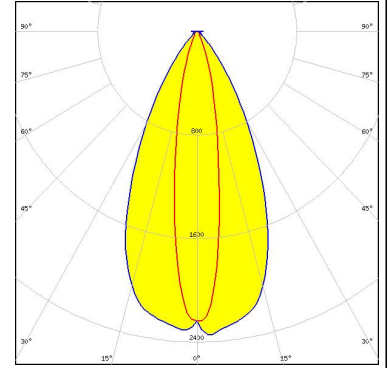
Light distribution files



### OPTICAL RESULTS (SIMULATED):



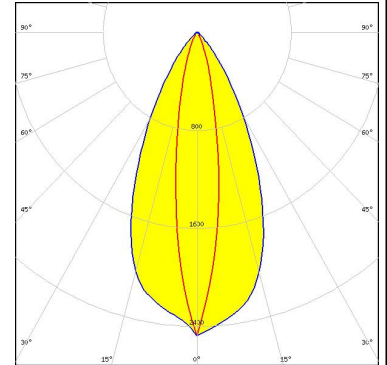
LED XP-G2 HE  
FWHM / FWTM 18.0 + 51.0° / 42.0 + 82.0°  
Efficiency 90 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



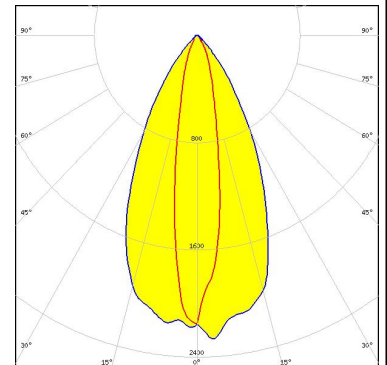
LED XP-G3  
FWHM / FWTM 17.0 + 48.0°  
Efficiency 89 %  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-L HD  
FWHM / FWTM 18.0 + 50.0°  
Efficiency 88 %  
LEDs/each optic 1  
Light colour/type White  
Required components:

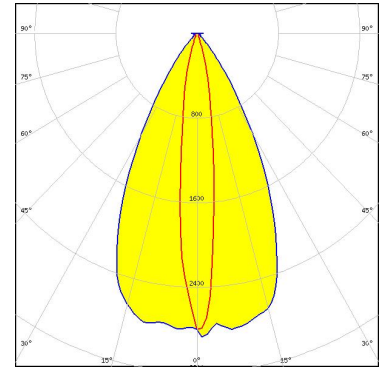


Light distribution files

### OPTICAL RESULTS (SIMULATED):



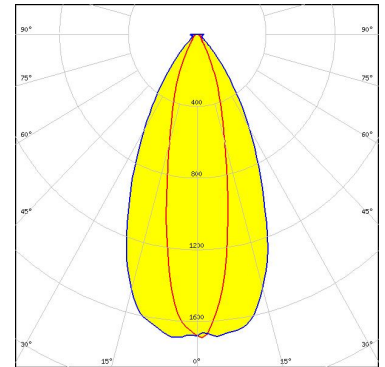
LED XT-E  
FWHM / FWTM 14.0 + 55.0° / 34.0 + 80.0°  
Efficiency 91 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



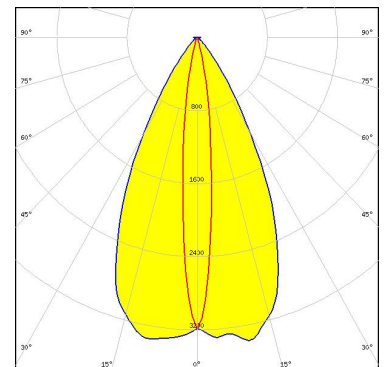
LED LUXEON 5050 Round LES  
FWHM / FWTM 23.0 + 51.0° / 56.0 + 86.0°  
Efficiency 89 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON C  
FWHM / FWTM 12.0 + 54.0° / 27.0 + 79.0°  
Efficiency 91 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

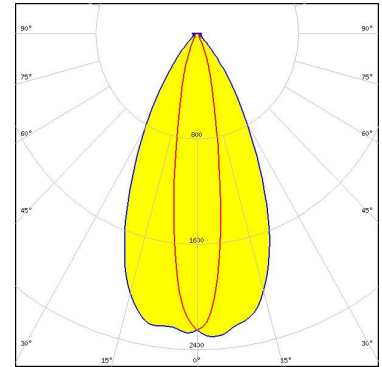


Light distribution files

### OPTICAL RESULTS (SIMULATED):



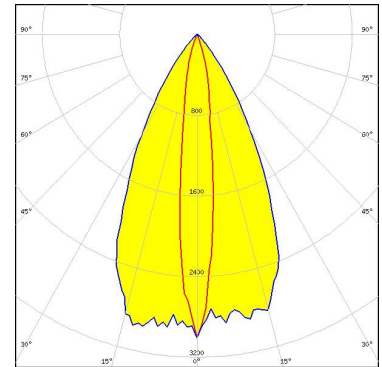
LED LUXEON HL2X  
 FWHM / FWTM 18.0 + 52.0° / 42.0 + 82.0°  
 Efficiency 90 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



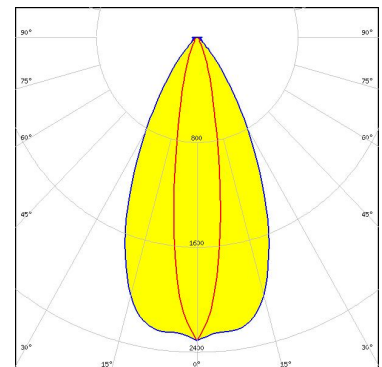
LED LUXEON TX  
 FWHM / FWTM 14.0 + 50.0°  
 Efficiency 90 %  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)  
 FWHM / FWTM 18.0 + 52.0° / 42.0 + 82.0°  
 Efficiency 91 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

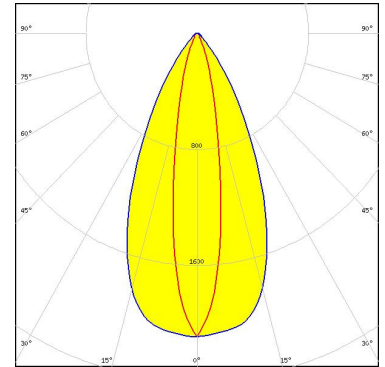
### OPTICAL RESULTS (SIMULATED):



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)  
FWHM / FWTM 18.0 + 50.0° / 42.0 + 80.0°  
Efficiency 82 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

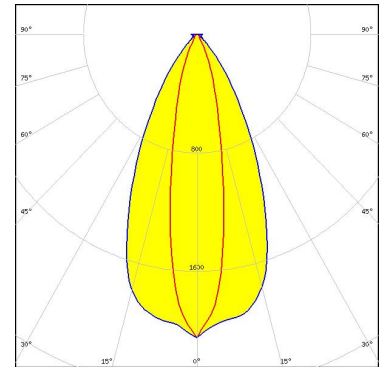
Protective plate, glass

Light distribution files



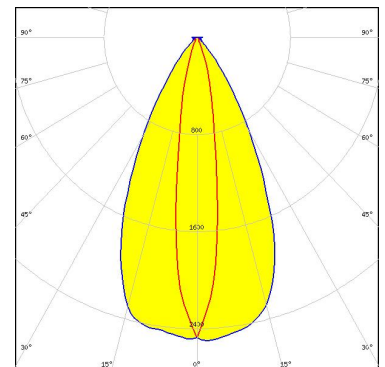
LED NV4WB35AM  
FWHM / FWTM 20.0 + 50.0° / 48.0 + 84.0°  
Efficiency 90 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files



LED NVSxx19B/NVSxx19C  
FWHM / FWTM 16.0 + 53.0° / 38.0 + 81.0°  
Efficiency 90 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

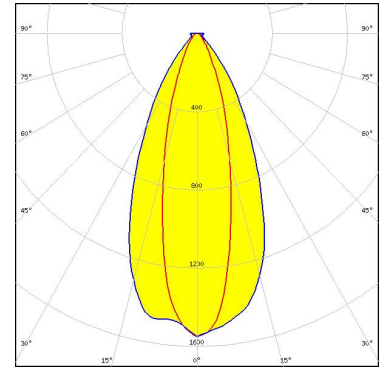
Light distribution files



### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

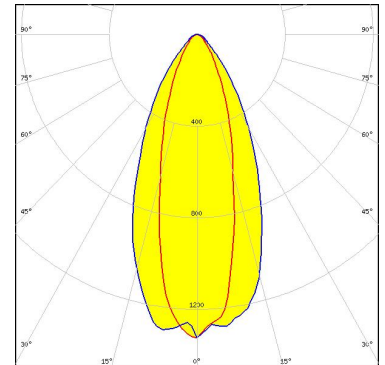
LED Duris S8  
 FWHM / FWTM 26.0 + 49.0° / 59.0 + 86.0°  
 Efficiency 88 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED Duris S8  
 FWHM / FWTM 29.0 + 49.0° / 69.0 + 89.0°  
 Efficiency 84 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

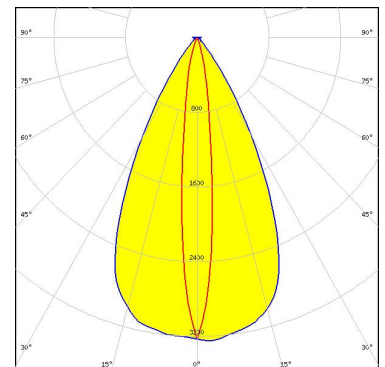


Protective plate, glass

Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ C 2424  
 FWHM / FWTM 12.0 + 54.0° / 30.0 + 78.0°  
 Efficiency 92 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

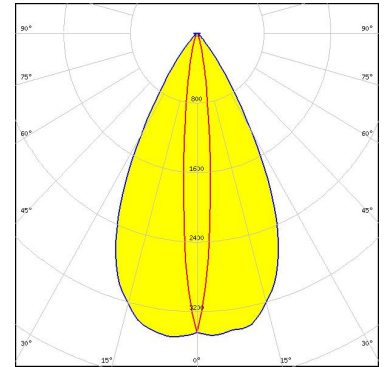


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

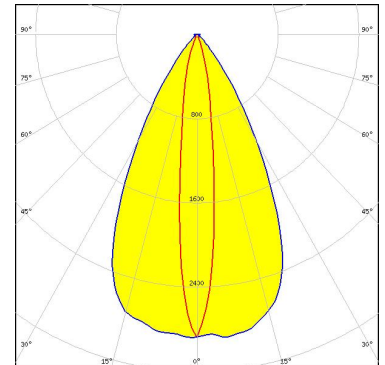
LED OSCONIQ P 3030  
FWHM / FWTM 10.0 + 56.0° / 28.0 + 78.0°  
Efficiency 94 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

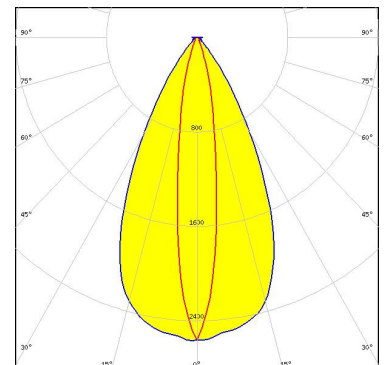
LED OSCONIQ P 3737 (2W version)  
FWHM / FWTM 13.0 + 56.0° / 34.0 + 81.0°  
Efficiency 93 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ P 3737 Flat  
FWHM / FWTM 16.0 + 54.0° / 38.0 + 80.0°  
Efficiency 92 %  
Peak intensity 2.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



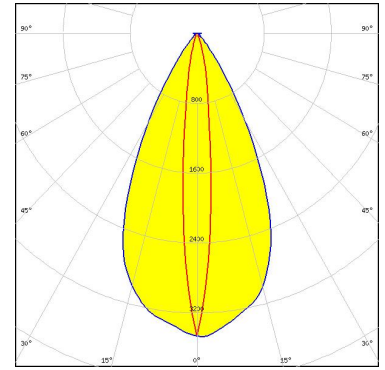
Light distribution files



### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

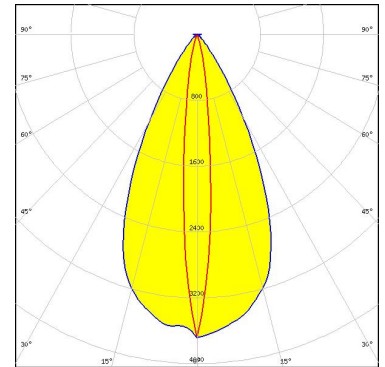
LED OSLON Square Flat  
FWHM / FWTM 12.0 + 52.0° / 29.0 + 76.0°  
Efficiency 93 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

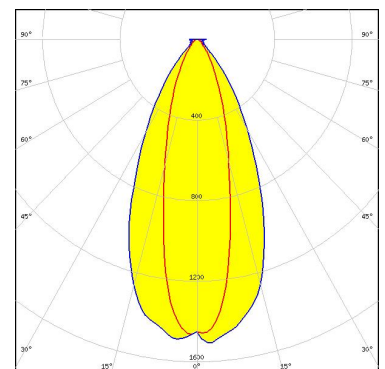
LED OSTAR Projection Compact (KW.CSLNM1.TG)  
FWHM / FWTM 10.0 + 52.0° / 26.0 + 76.0°  
Efficiency 93 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

LED LH502C  
FWHM / FWTM 26.0 + 50.0° / 64.0 + 86.0°  
Efficiency 87 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

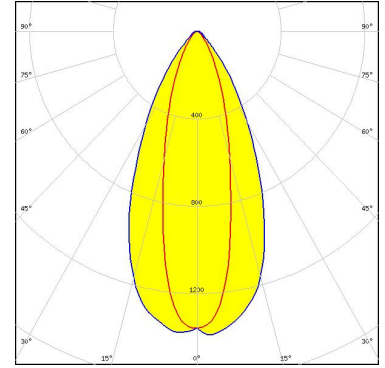
### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

LED LH502C  
FWHM / FWTM 28.0 + 50.0° / 64.0 + 86.0°  
Efficiency 79 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

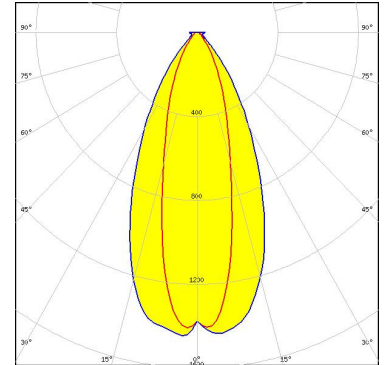
Protective plate, glass

Light distribution files



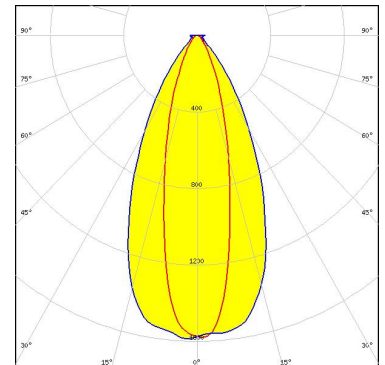
LED MJT 5050  
FWHM / FWTM 28.0 + 50.0° / 67.0 + 88.0°  
Efficiency 87 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

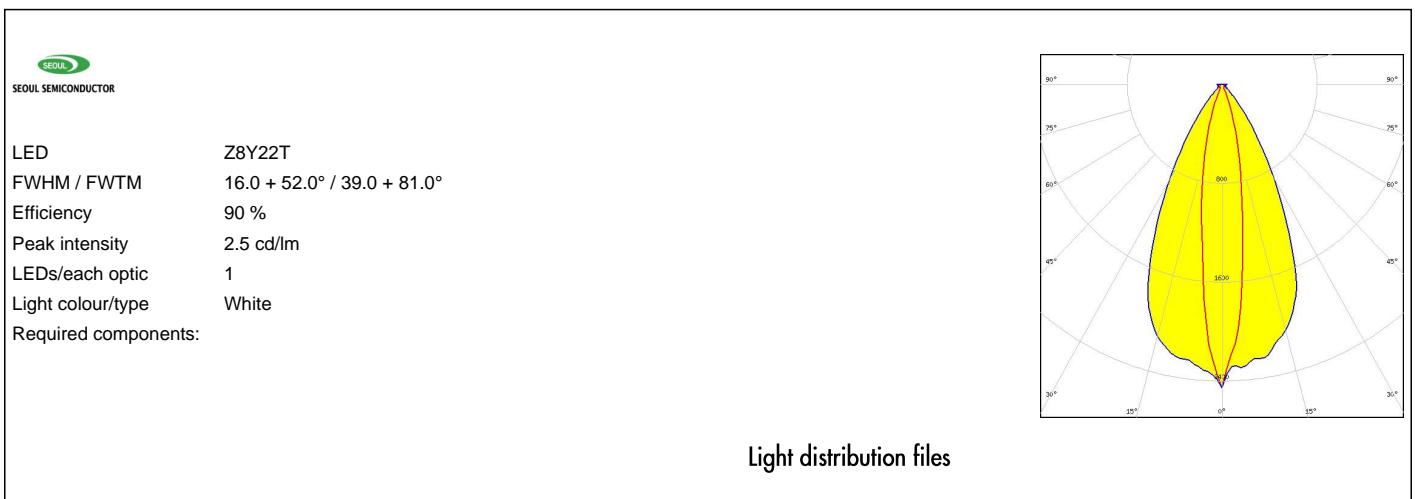
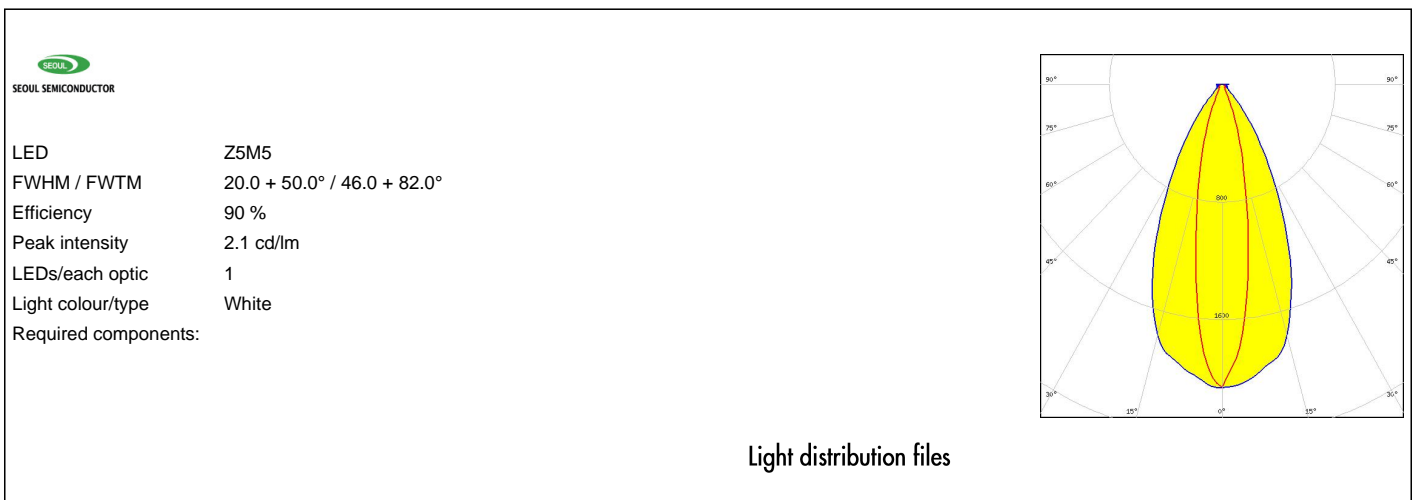
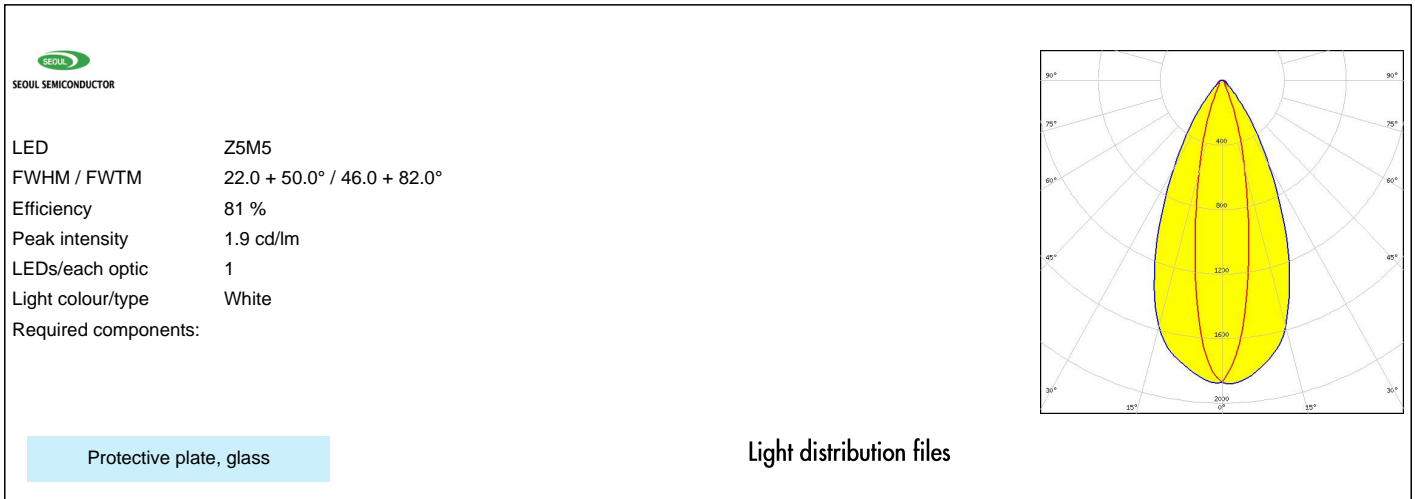


LED SEOUL DC 5050 6V  
FWHM / FWTM 26.0 + 50.0° / 60.0 + 86.0°  
Efficiency 90 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files



### OPTICAL RESULTS (SIMULATED):



### 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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