

## HB-2X2-WWW

~100° wide beam

## SPECIFICATION:

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

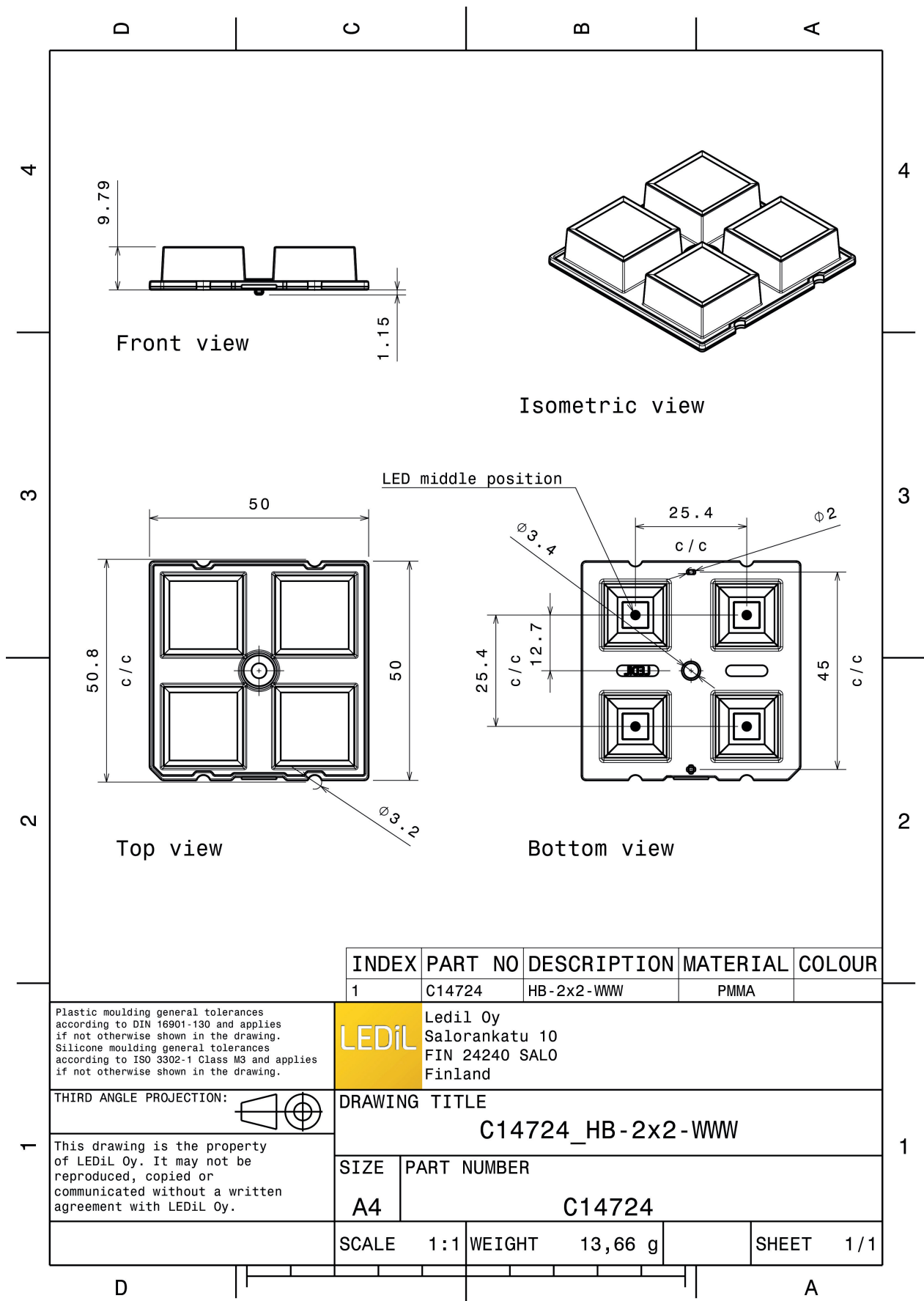
## MATERIALS:

| Component  | Type       | Material | Colour | Finish | Length (mm) |
|------------|------------|----------|--------|--------|-------------|
| HB-2X2-WWW | Multi-lens | PMMA     | clear  |        |             |



## ORDERING INFORMATION:

| Component                                           | Qty in box | MOQ | MPQ | Box weight (kg) |
|-----------------------------------------------------|------------|-----|-----|-----------------|
| C14724_HB-2X2-WWW<br>» Box size: 480 x 280 x 300 mm | 800        | 160 | 160 | 11.7            |



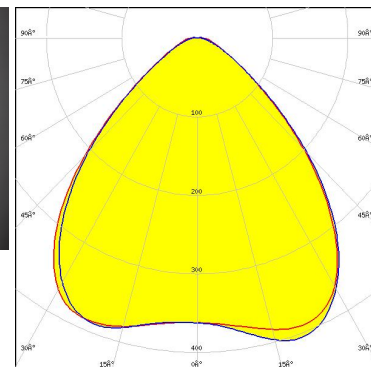
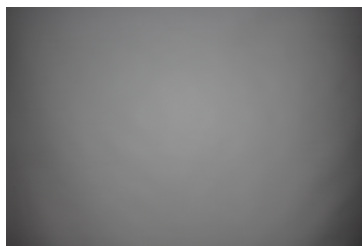
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



#### OPTICAL RESULTS (MEASURED):



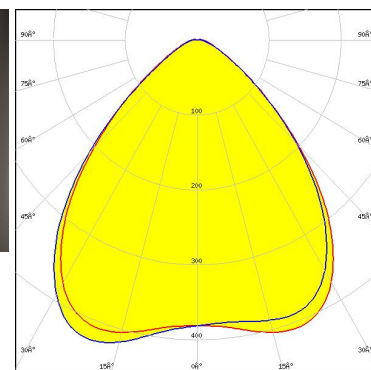
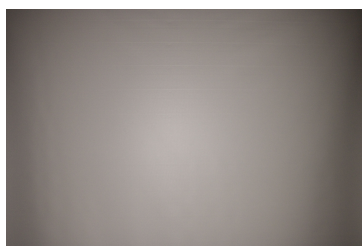
LED Bridgelux SMD 5050  
 FWHM / FWTM 94.0° / 133.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



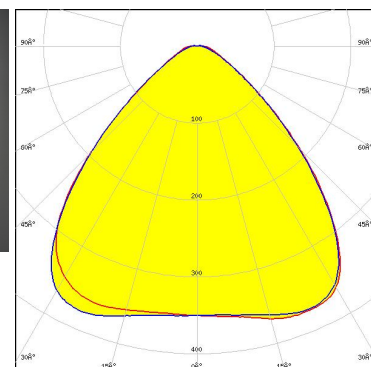
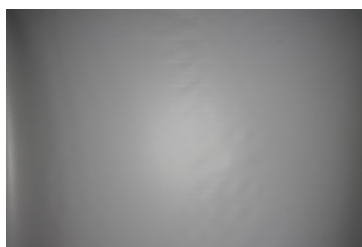
LED J Series 5050C 6V E Class  
 FWHM / FWTM 89.0° / 127.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XD16  
 FWHM / FWTM 93.0° / 132.0°  
 Efficiency 91 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

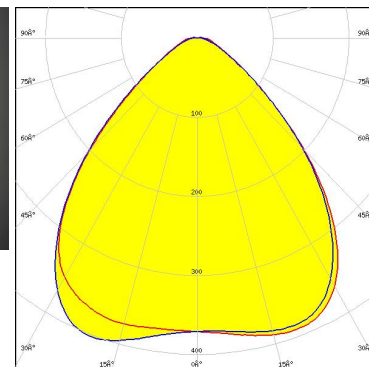
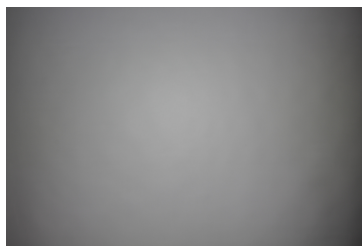


Light distribution files

#### OPTICAL RESULTS (MEASURED):



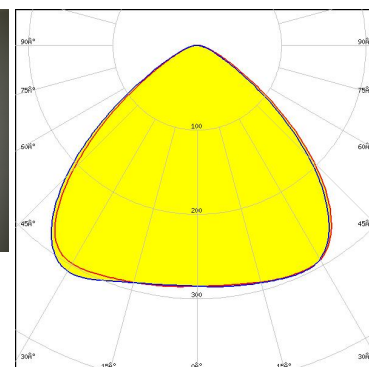
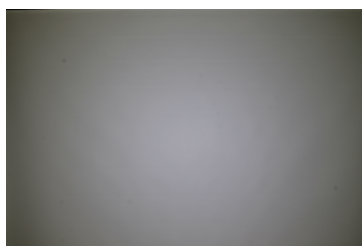
LED XD16  
 FWHM / FWTM 92.0° / 131.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 4  
 Light colour/type White  
 Required components:



Light distribution files



LED XHP35 HD  
 FWHM / FWTM 101.0° / 132.0°  
 Efficiency 79 %  
 Peak intensity 0.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



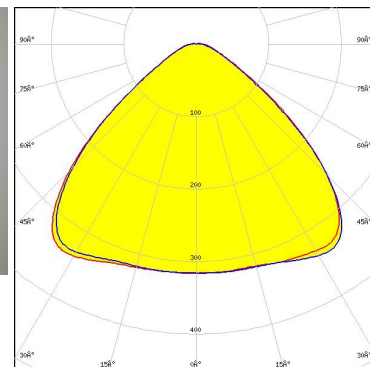
LED XM-L3  
 FWHM / FWTM 97.0° / 140.0°  
 Efficiency 91 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

Light distribution files

#### OPTICAL RESULTS (MEASURED):



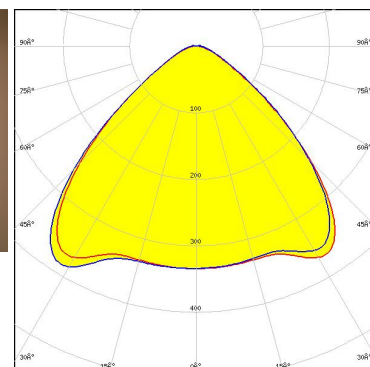
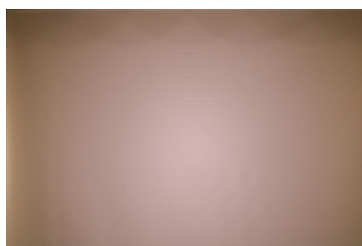
LED XP-G2  
 FWHM / FWTM 106.0° / 144.0°  
 Efficiency 92 %  
 Peak intensity 0.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



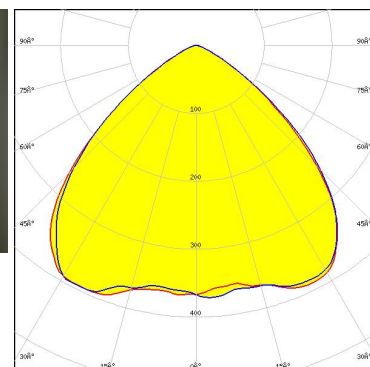
LED PL-BRICK HP 3800 2x8 SSG  
 FWHM / FWTM 98.0° / 131.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED PrevaLED Brick HP 2x8  
 FWHM / FWTM 104.0° / 132.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

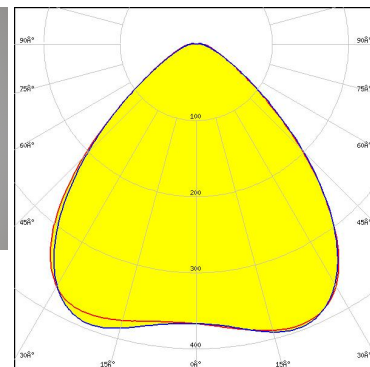


Light distribution files

#### OPTICAL RESULTS (MEASURED):



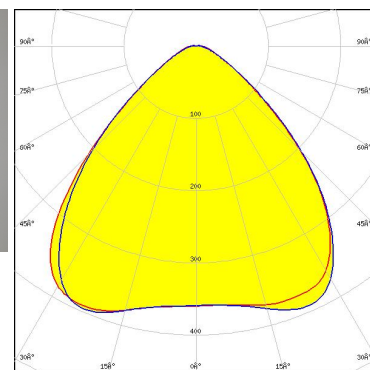
LED LUXEON 5050 Round LES  
 FWHM / FWTM 93.0° / 133.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



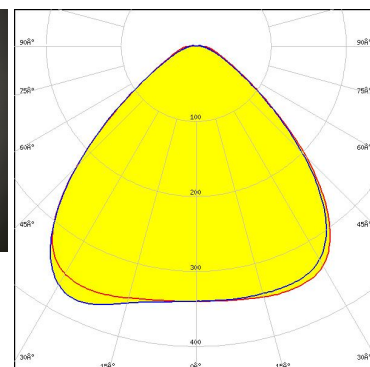
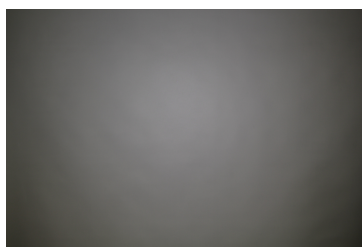
LED LUXEON MZ  
 FWHM / FWTM 94.0° / 131.0°  
 Efficiency 92 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON V  
 FWHM / FWTM 96.0° / 137.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

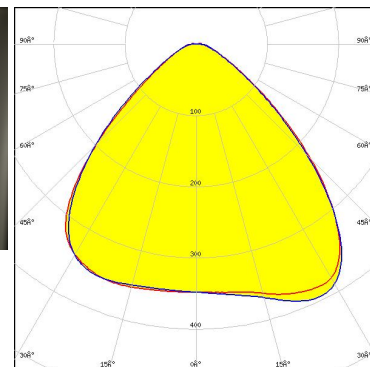
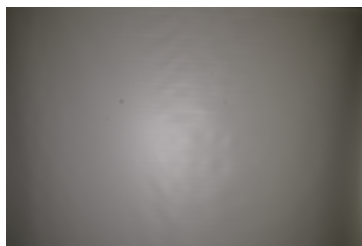


Light distribution files

#### OPTICAL RESULTS (MEASURED):



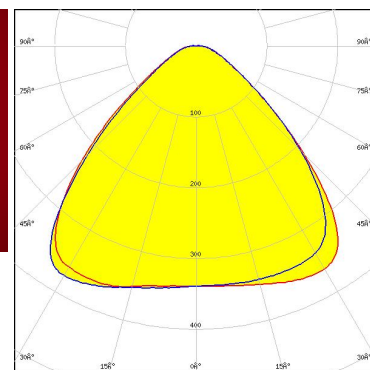
LED LUXEON V2  
FWHM / FWTM 95.0° / 134.0°  
Efficiency 93 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



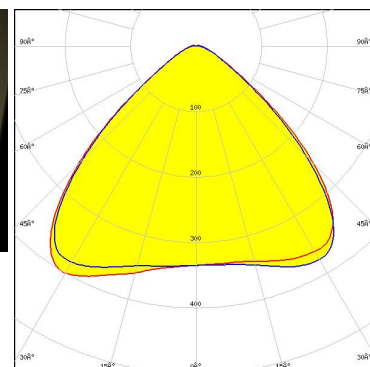
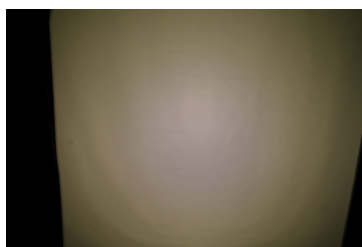
LED SST-10-B130  
FWHM / FWTM 96.0° / 138.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type Deep Red  
Required components:



Light distribution files



LED RecLED 122x50mm 1900lm 730 2x4 Opt G1  
FWHM / FWTM 96.0° / 126.0°  
Efficiency 95 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



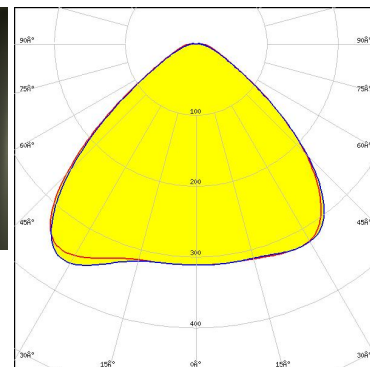
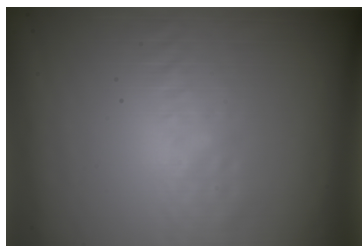
Light distribution files



#### OPTICAL RESULTS (MEASURED):



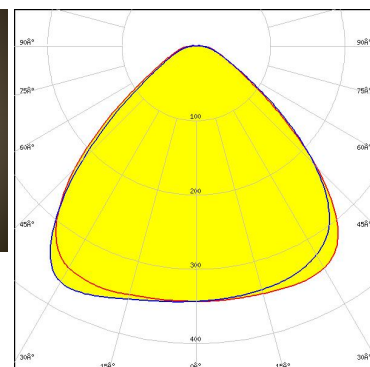
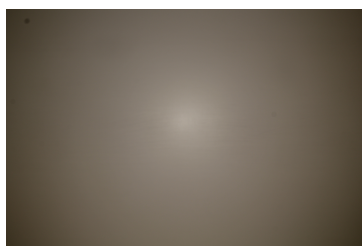
LED NVSW219F-V2  
 FWHM / FWTM 102.0° / 140.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



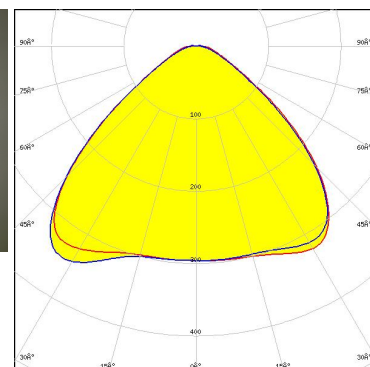
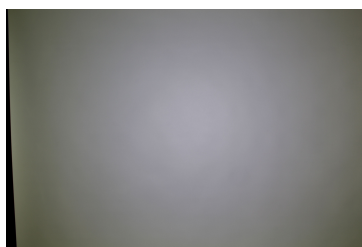
LED NVSW219F-V2  
 FWHM / FWTM 97.0° / 139.0°  
 Efficiency 92 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSW319B  
 FWHM / FWTM 104.0° / 144.0°  
 Efficiency 92 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



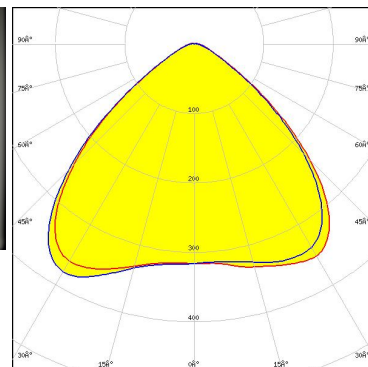
Light distribution files



#### OPTICAL RESULTS (MEASURED):



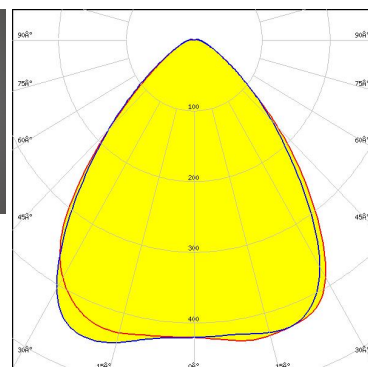
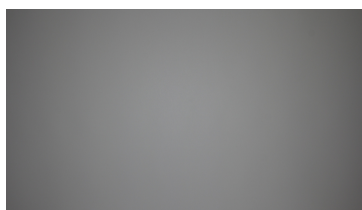
LED NVSW3x9A  
 FWHM / FWTM 101.0° / 130.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



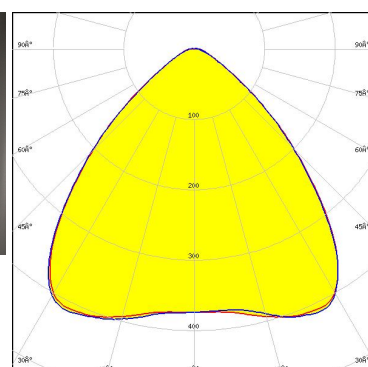
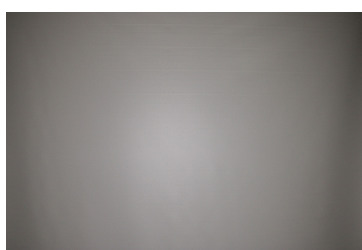
LED NVSxE21A  
 FWHM / FWTM 85.0° / 124.0°  
 Efficiency 92 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSCONIQ C 3030  
 FWHM / FWTM 89.0° / 123.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

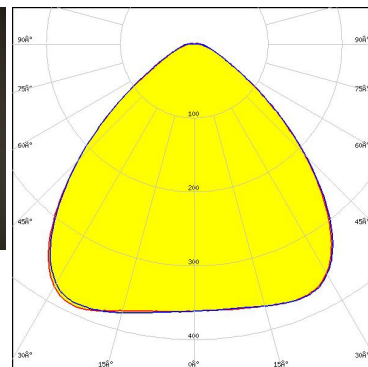
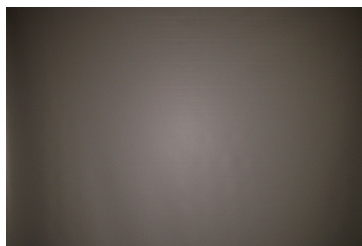


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

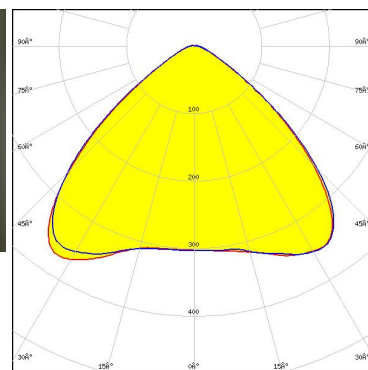
LED OSCONIQ P 3737 (3W) PUSTA1  
FWHM / FWTM 94.0° / 132.0°  
Efficiency 93 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

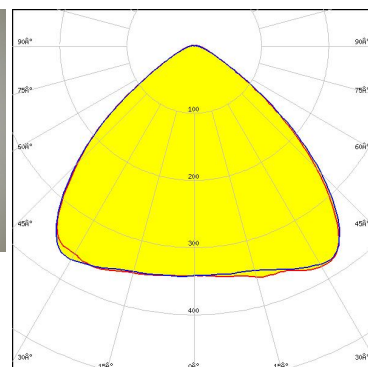
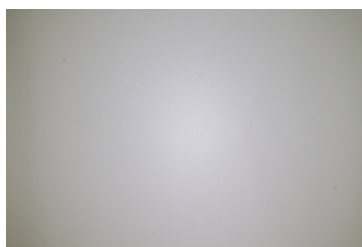
LED OSLOM Square CSSRM2/CSSRM3  
FWHM / FWTM 104.0° / 132.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLOM Square PC  
FWHM / FWTM 105.0° / 136.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

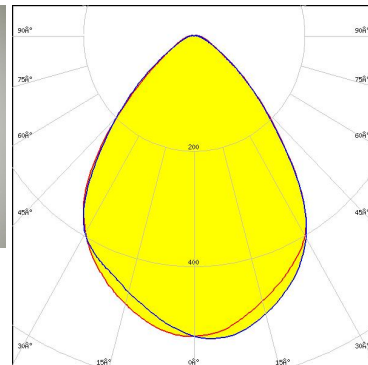


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

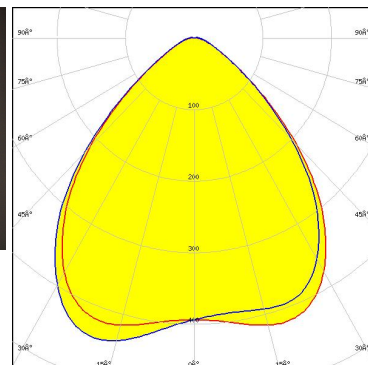
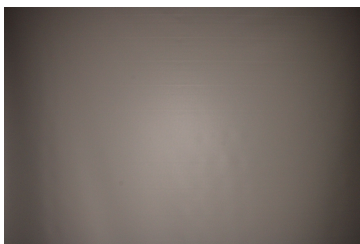
LED OSLON SSL 80  
FWHM / FWTM 82.0° / 124.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

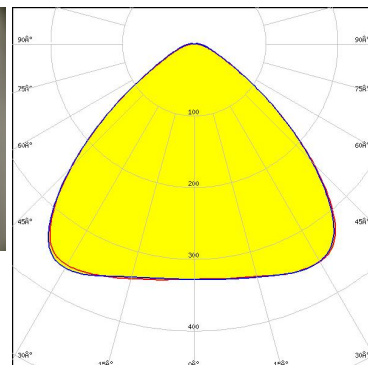
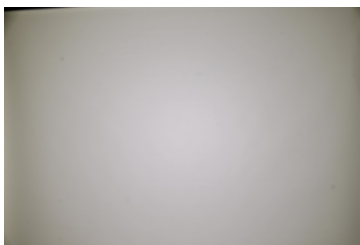
LED Fortimo FastFlex LED 2x8 DA (U)HE  
FWHM / FWTM 89.0° / 126.0°  
Efficiency 96 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

LED Fortimo FastFlex LED 2x8 DA G4  
FWHM / FWTM 104.0° / 140.0°  
Efficiency 92 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

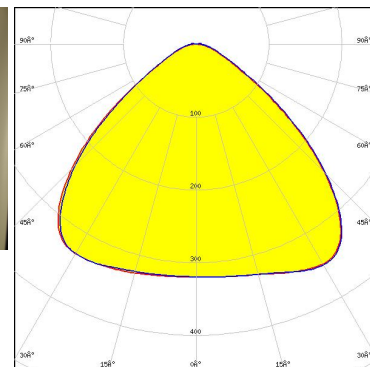
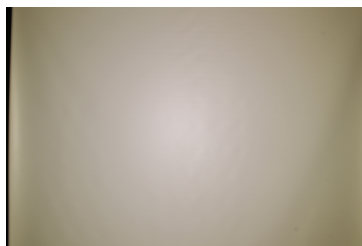


Light distribution files

#### OPTICAL RESULTS (MEASURED):

#### PHILIPS

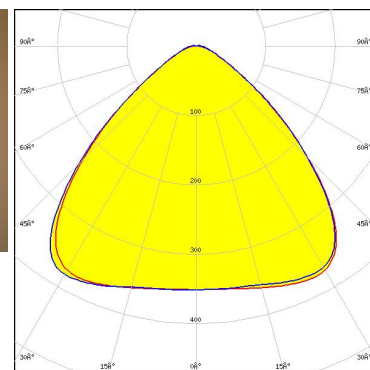
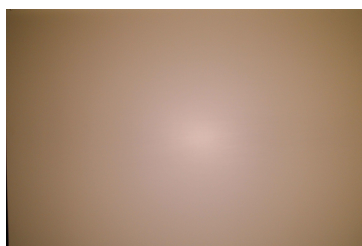
|                      |                                 |
|----------------------|---------------------------------|
| LED                  | Fortimo FastFlex LED 2x8 DA G4+ |
| FWHM / FWTM          | 101.0° / 136.0°                 |
| Efficiency           | 94 %                            |
| Peak intensity       | 0.4 cd/lm                       |
| LEDs/each optic      | 1                               |
| Light colour/type    | White                           |
| Required components: |                                 |



Light distribution files

#### PHILIPS

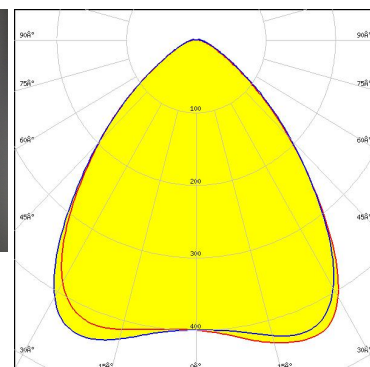
|                      |                                |
|----------------------|--------------------------------|
| LED                  | Fortimo FastFlex LED 2x8 DA G5 |
| FWHM / FWTM          | 95.0° / 129.0°                 |
| Efficiency           | 94 %                           |
| Peak intensity       | 0.4 cd/lm                      |
| LEDs/each optic      | 1                              |
| Light colour/type    | White                          |
| Required components: |                                |



Light distribution files

#### SAMSUNG

|                      |                       |
|----------------------|-----------------------|
| LED                  | HiLOM RC12 Z (LH181B) |
| FWHM / FWTM          | 86.0° / 124.0°        |
| Efficiency           | 96 %                  |
| Peak intensity       | 0.5 cd/lm             |
| LEDs/each optic      | 1                     |
| Light colour/type    | White                 |
| Required components: |                       |

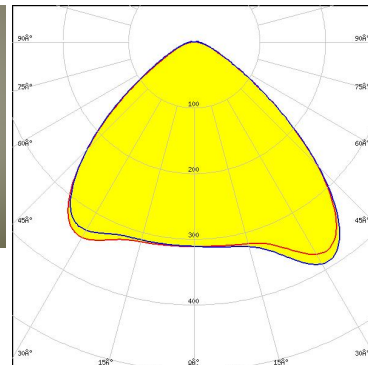


Light distribution files

#### OPTICAL RESULTS (MEASURED):

### SAMSUNG

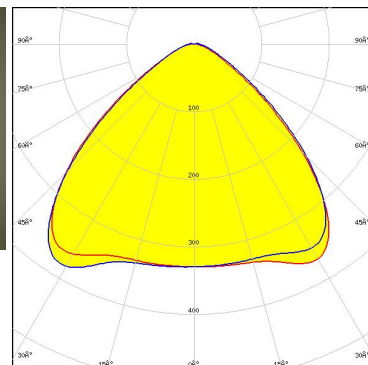
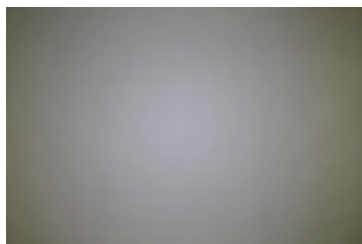
LED HiLOM RH12 Z (LH351C)  
 FWHM / FWTM 98.0° / 133.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### SAMSUNG

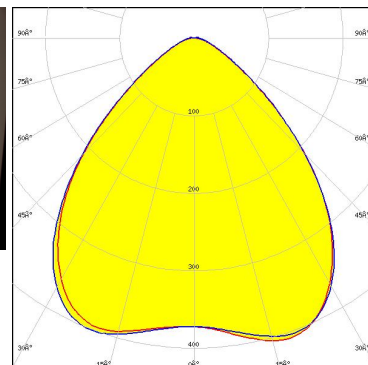
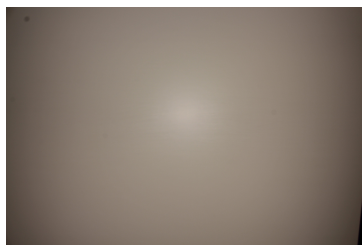
LED HiLOM RH16 (LH351C)  
 FWHM / FWTM 102.0° / 136.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### SAMSUNG

LED HiLOM RM12 Z (LH502C)  
 FWHM / FWTM 91.0° / 129.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



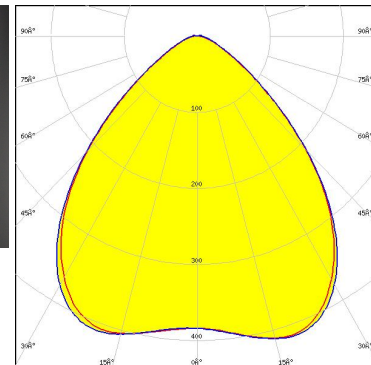
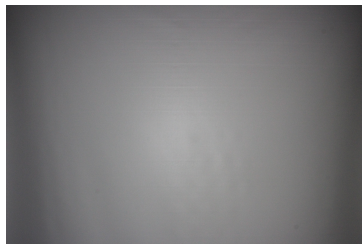
Light distribution files



#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

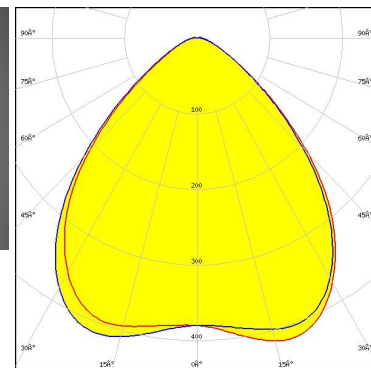
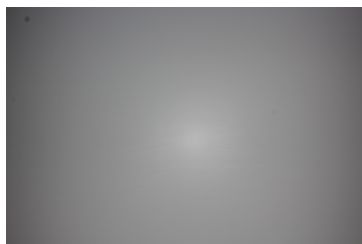
LED HiLOM RM16 Z (LH502C)  
 FWHM / FWTM 91.0° / 129.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

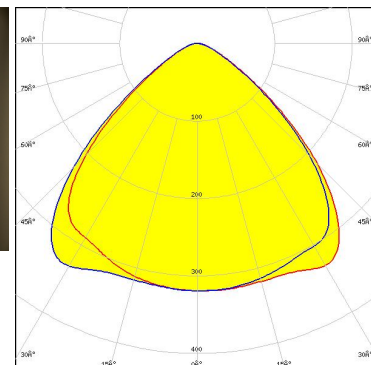
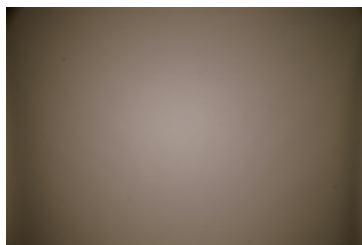
LED HiLOM RM8 Z (LH502C)  
 FWHM / FWTM 91.0° / 129.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

LED LH351B  
 FWHM / FWTM 102.0° / 135.0°  
 Efficiency 81 %  
 Peak intensity 0.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



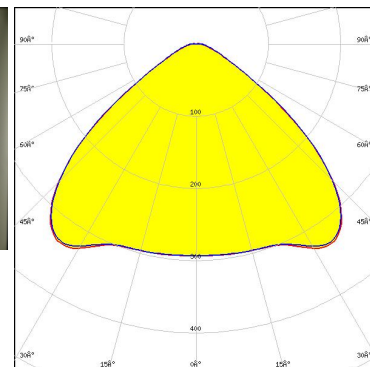
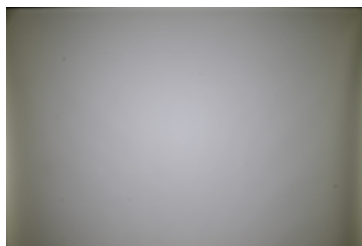
Light distribution files



#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

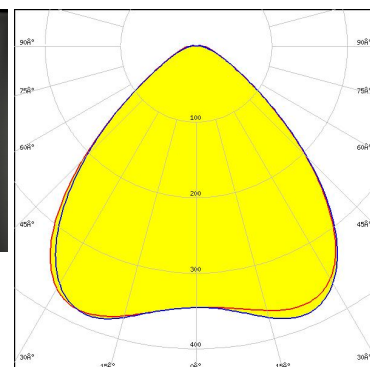
LED LH351D  
 FWHM / FWTM 107.0° / 139.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

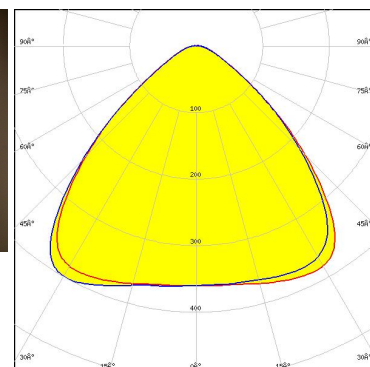
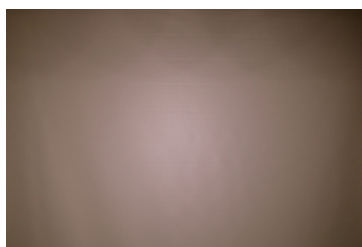
LED LH508A  
 FWHM / FWTM 95.0° / 136.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LED-Pa-L15c2W11c2-xxx-C050-01  
 FWHM / FWTM 94.0° / 129.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

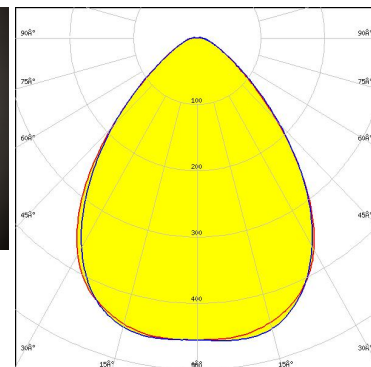
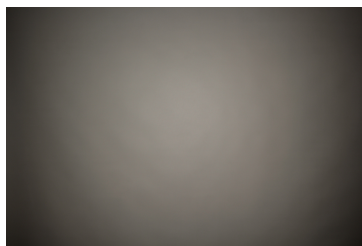


Light distribution files

#### OPTICAL RESULTS (MEASURED):



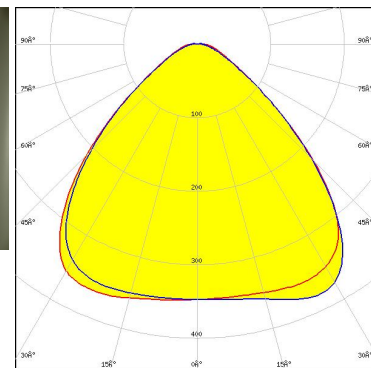
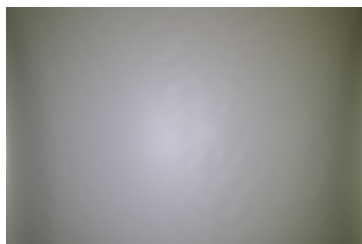
LED 2x2 Y22 module - SMJQ-D48W16AA-XX  
 FWHM / FWTM 83.0° / 126.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



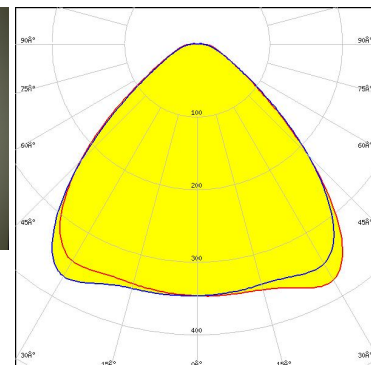
LED Z5M3  
 FWHM / FWTM 96.0° / 137.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED Z5M4  
 FWHM / FWTM 95.0° / 138.0°  
 Efficiency 92 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

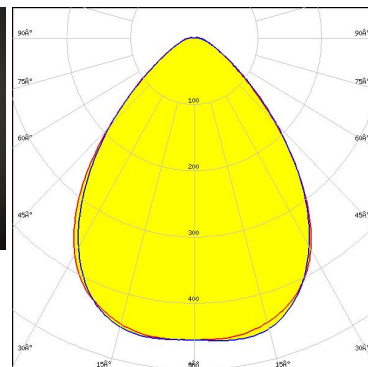
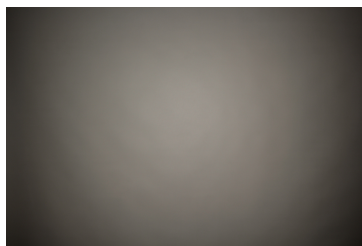


Light distribution files

#### OPTICAL RESULTS (MEASURED):



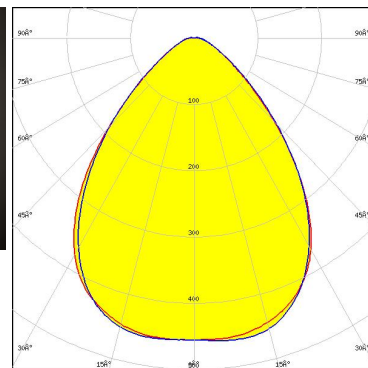
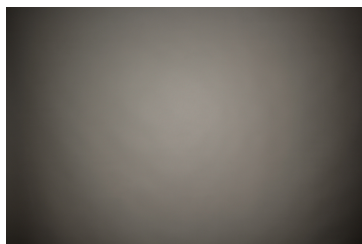
LED Z8Y19  
 FWHM / FWTM 83.0° / 126.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 4  
 Light colour/type White  
 Required components:



Light distribution files



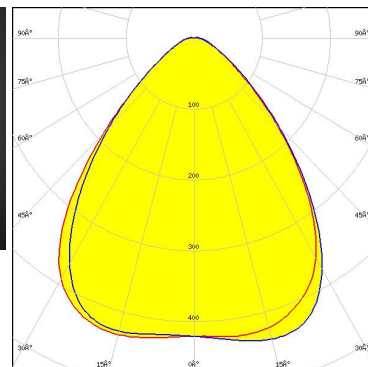
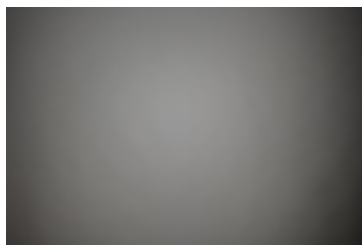
LED Z8Y19  
 FWHM / FWTM 83.0° / 126.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 4  
 Light colour/type White  
 Required components:



Light distribution files



LED Z8Y22  
 FWHM / FWTM 85.0° / 126.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

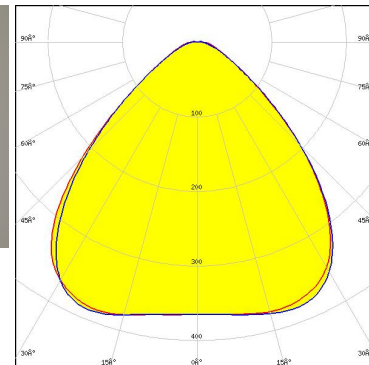


Light distribution files

#### OPTICAL RESULTS (MEASURED):



LED Z8Y22P  
 FWHM / FWTM 93.0° / 134.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



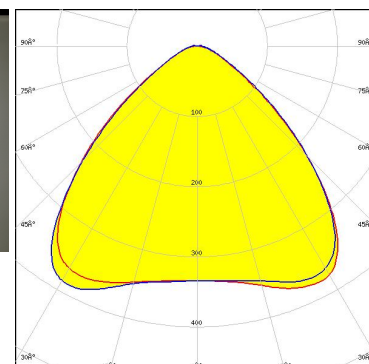
Light distribution files

#### TRIDONIC

LED RLE 2x4 2000lm HP EXC2 OTD  
 FWHM / FWTM 99.0° / 134.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

#### TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD  
 FWHM / FWTM 99.0° / 134.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

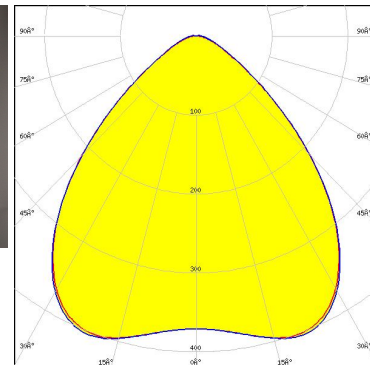
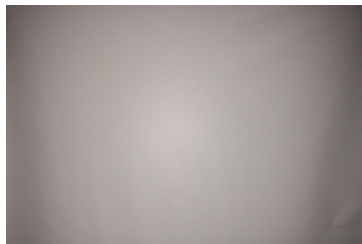


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

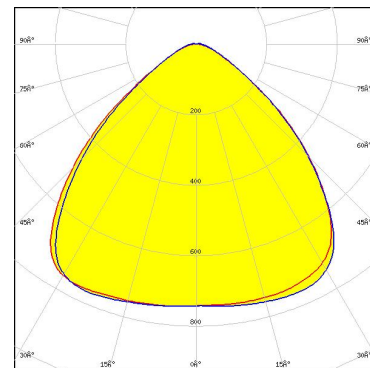
LED RLE 2x8 6000lm HP HE EXC3 OTD  
 FWHM / FWTM 91.0° / 129.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### TRIDONIC

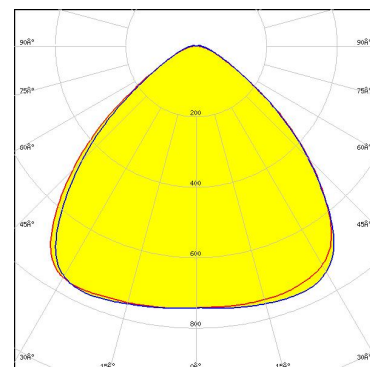
LED RLE G1 49x121mm 2000lm xxx EXC OTD  
 FWHM / FWTM 98.0° / 132.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD  
 FWHM / FWTM 98.0° / 132.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



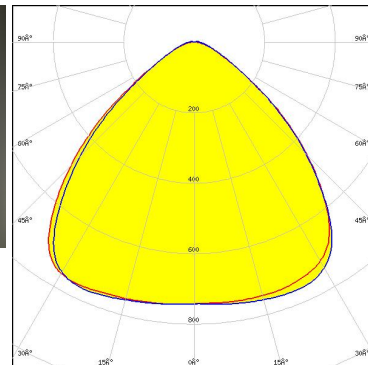
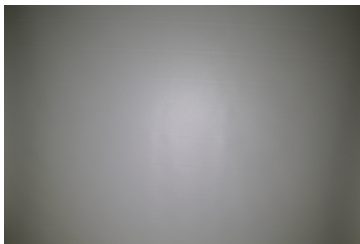
Light distribution files



## OPTICAL RESULTS (MEASURED):

### TRIDONIC

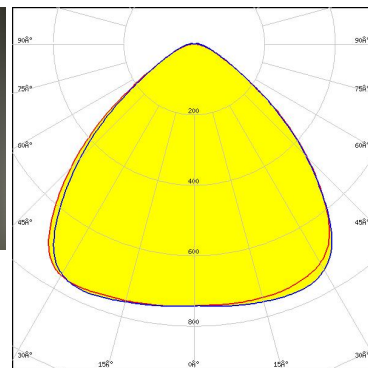
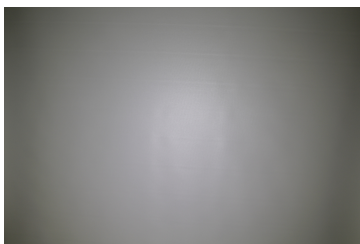
LED RLE G1 49x223mm 4000lm xxx EXC OTD  
 FWHM / FWTM 98.0° / 132.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

### TRIDONIC

LED RLE G1 49x245mm 4000lm xxx EXC OTD  
 FWHM / FWTM 98.0° / 132.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

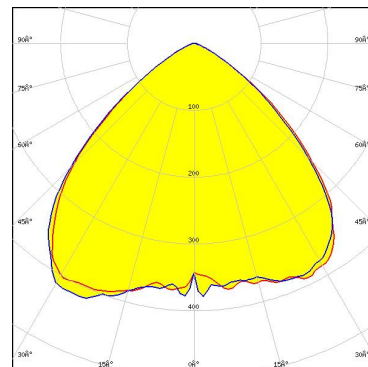


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



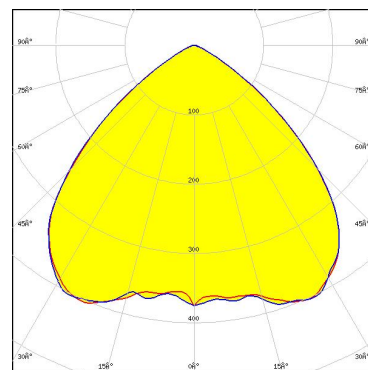
LED J Series 5050 6V P Class  
 FWHM / FWTM 98.0° / 131.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



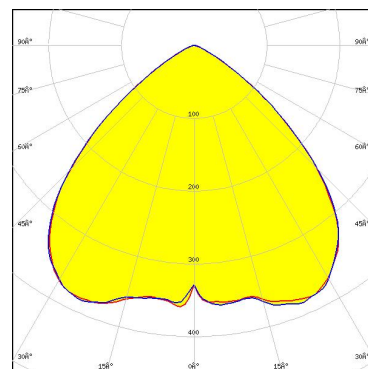
LED J Series 5050B 6V K Class  
 FWHM / FWTM 96.0° / 122.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED J Series 5050B 6V K Class  
 FWHM / FWTM 96.0° / 122.0°  
 Efficiency 89 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



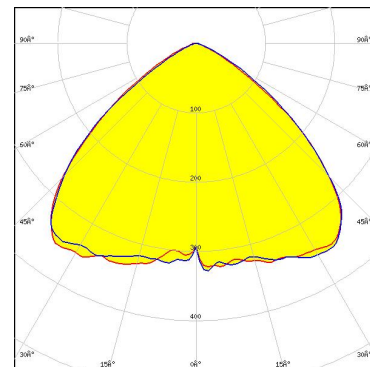
Protective plate, glass

Light distribution files

#### OPTICAL RESULTS (SIMULATED):



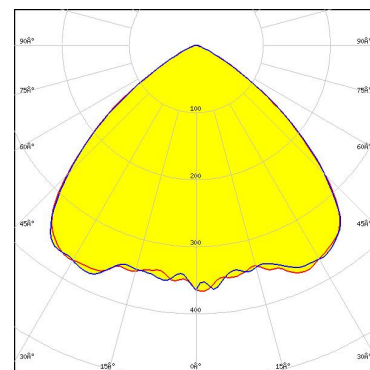
LED XHP35 HI  
 FWHM / FWTM 99.0° / 133.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



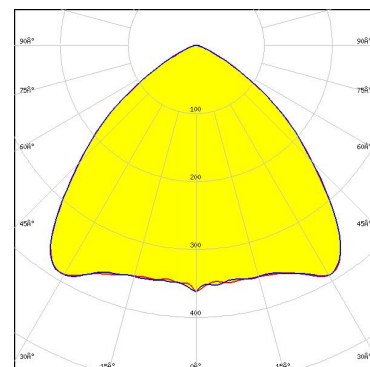
LED XM-L RGBW (XMLDCL HI)  
 FWHM / FWTM 102.0° / 126.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



LED XP-E2  
 FWHM / FWTM 98.0° / 128.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

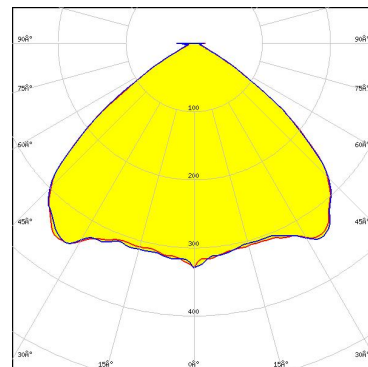


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



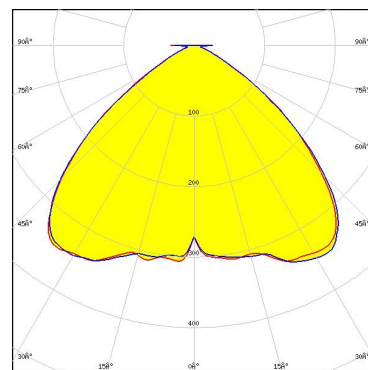
LED XP-G2 HE  
 FWHM / FWTM 106.0° / 126.0°  
 Efficiency 93 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



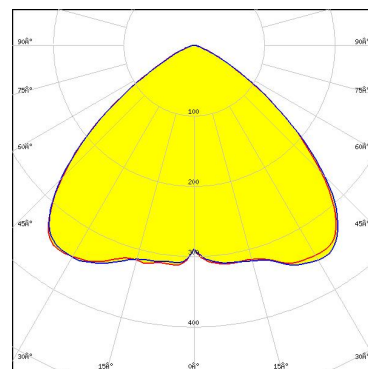
LED XP-G3  
 FWHM / FWTM 98.0° / 132.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-G3  
 FWHM / FWTM 96.0° / 130.0°  
 Efficiency 91 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Protective plate, glass

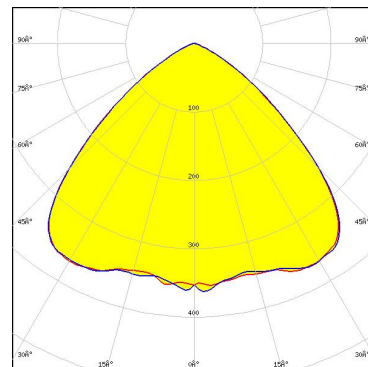
Light distribution files

#### OPTICAL RESULTS (SIMULATED):



LED XP-G4  
 FWHM / FWTM 99.0° / 126.0°  
 Efficiency 90 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

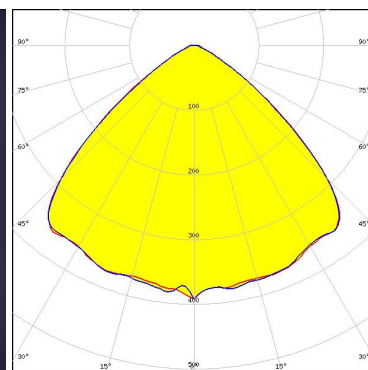
Protective plate, glass



Light distribution files



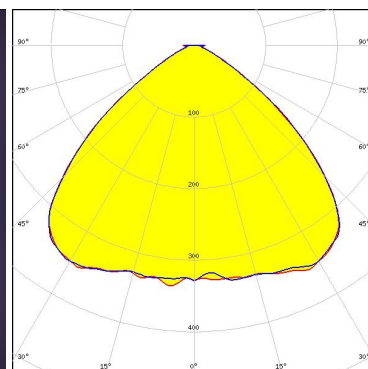
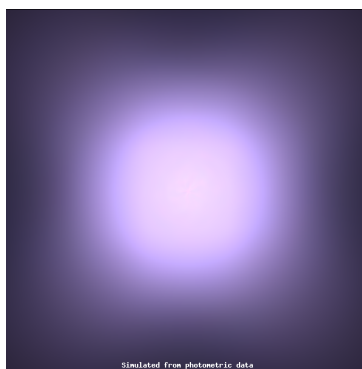
LED XP-L RGBW HD  
 FWHM / FWTM 100.0° / 126.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



LED XP-L RGBW HI Blend  
 FWHM / FWTM 102.0° / 131.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



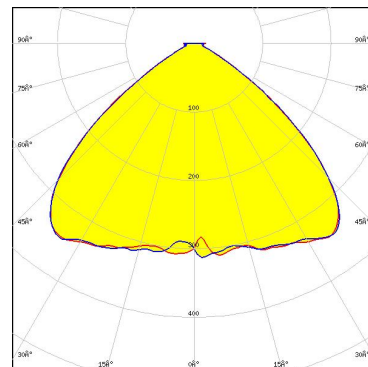
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



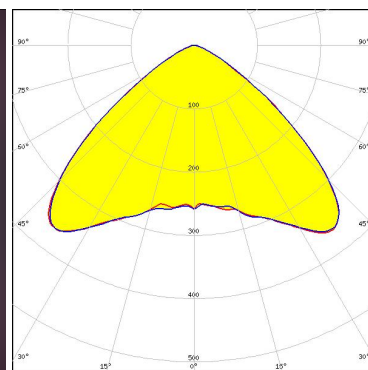
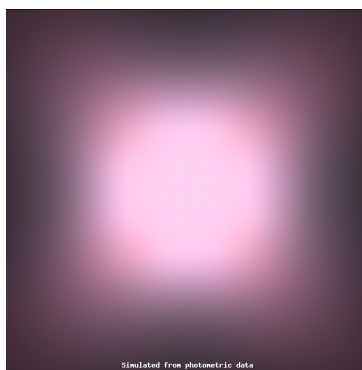
LED XP-L2  
 FWHM / FWTM 104.0° / 129.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



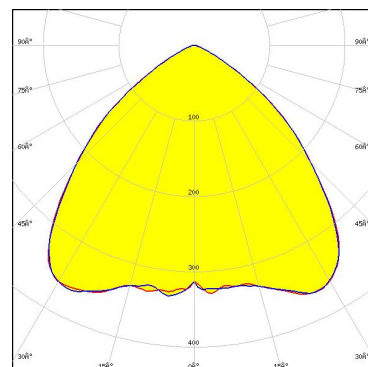
LED XQ-E HD  
 FWHM / FWTM 104.0° / 130.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 4  
 Light colour/type RGBW  
 Required components:



Light distribution files



LED XT-E  
 FWHM / FWTM 96.0° / 126.0°  
 Efficiency 89 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



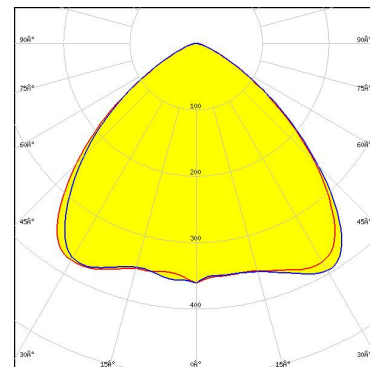
Protective plate, glass

Light distribution files

#### OPTICAL RESULTS (SIMULATED):



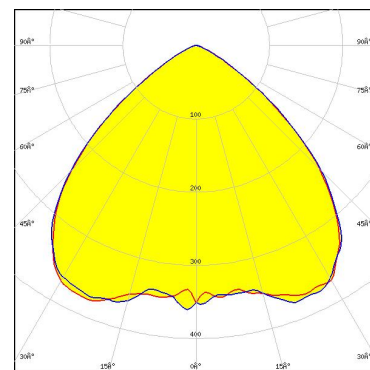
LED LUXEON 3535L  
 FWHM / FWTM 92.0° / 128.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON 5050 HE  
 FWHM / FWTM 98.0° / 124.0°  
 Efficiency 90 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

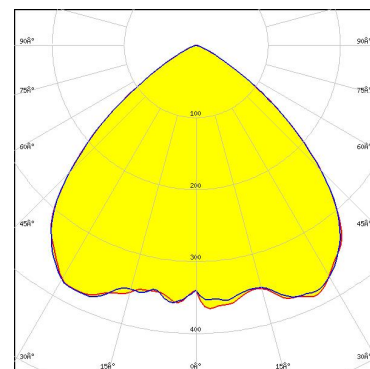


Protective plate, glass

Light distribution files



LED LUXEON 5050 Square LES  
 FWHM / FWTM 98.0° / 123.0°  
 Efficiency 90 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



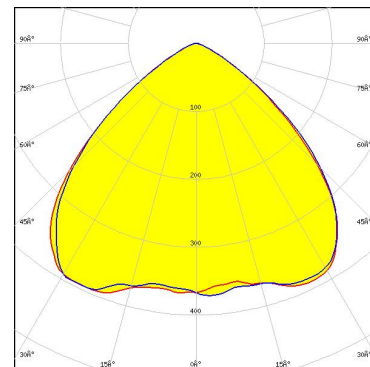
Protective plate, glass

Light distribution files

#### OPTICAL RESULTS (SIMULATED):



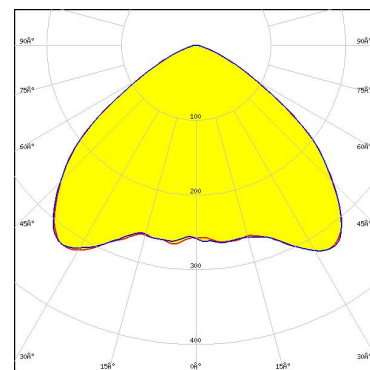
LED LUXEON 5050 Square LES  
 FWHM / FWTM 98.0° / 126.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



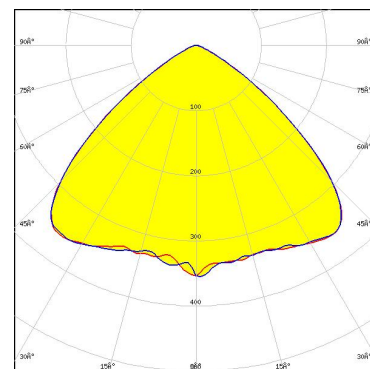
LED LUXEON C  
 FWHM / FWTM 108.0° / 140.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON HL2X  
 FWHM / FWTM 104.0° / 126.0°  
 Efficiency 94 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

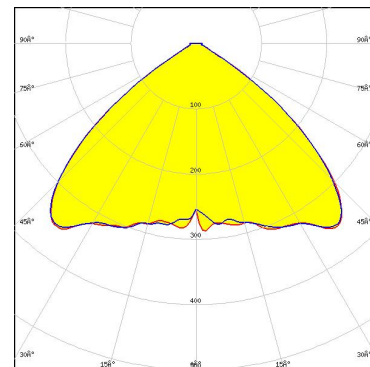


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



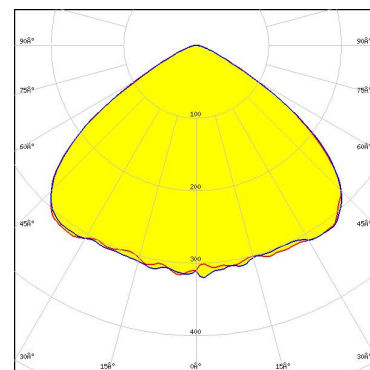
LED LUXEON HL4X  
 FWHM / FWTM 104.0° / 122.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



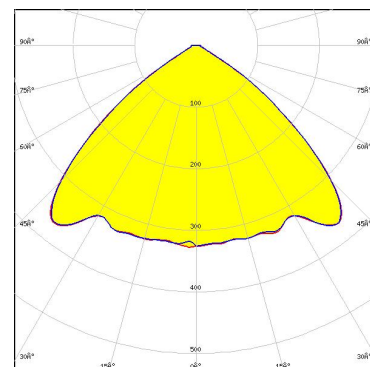
LED LUXEON T  
 FWHM / FWTM 112.0° / 135.0°  
 Efficiency 92 %  
 Peak intensity 0.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)  
 FWHM / FWTM 104.0° / 122.0°  
 Efficiency 95 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



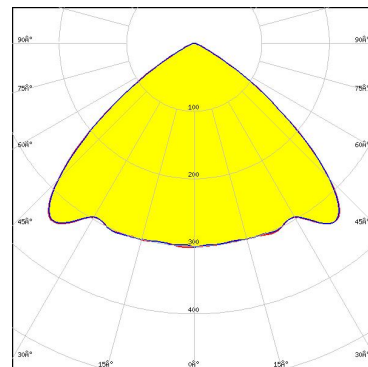
Light distribution files

#### OPTICAL RESULTS (SIMULATED):



|                      |                                     |
|----------------------|-------------------------------------|
| LED                  | LUXEON XR-HL2X (L2H2-xxxxxxxMLU010) |
| FWHM / FWTM          | 104.0° / 124.0°                     |
| Efficiency           | 85 %                                |
| Peak intensity       | 0.3 cd/lm                           |
| LEDs/each optic      | 1                                   |
| Light colour/type    | White                               |
| Required components: |                                     |

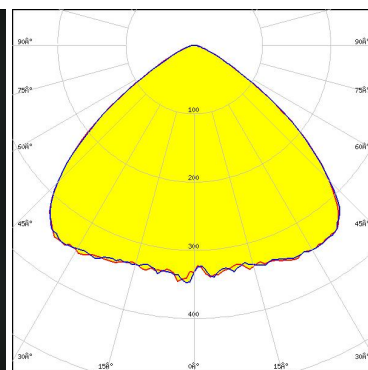
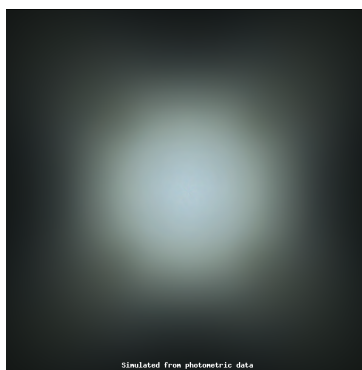
Protective plate, glass



Light distribution files



|                      |                                 |
|----------------------|---------------------------------|
| LED                  | SFT-40 Gen2                     |
| FWHM / FWTM          | 106.0 + 105.0° / 132.0 + 130.0° |
| Efficiency           | 96 %                            |
| Peak intensity       | 0.4 cd/lm                       |
| LEDs/each optic      | 1                               |
| Light colour/type    | White                           |
| Required components: |                                 |

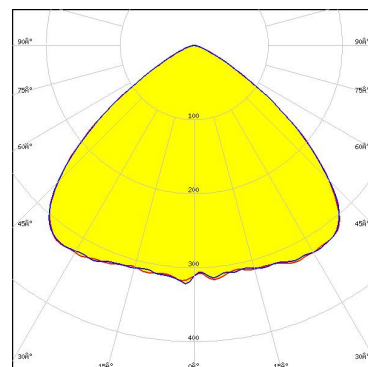


Light distribution files



|                      |                 |
|----------------------|-----------------|
| LED                  | SFT-40 Gen2     |
| FWHM / FWTM          | 104.0° / 130.0° |
| Efficiency           | 86 %            |
| Peak intensity       | 0.3 cd/lm       |
| LEDs/each optic      | 1               |
| Light colour/type    | White           |
| Required components: |                 |

Protective plate, glass

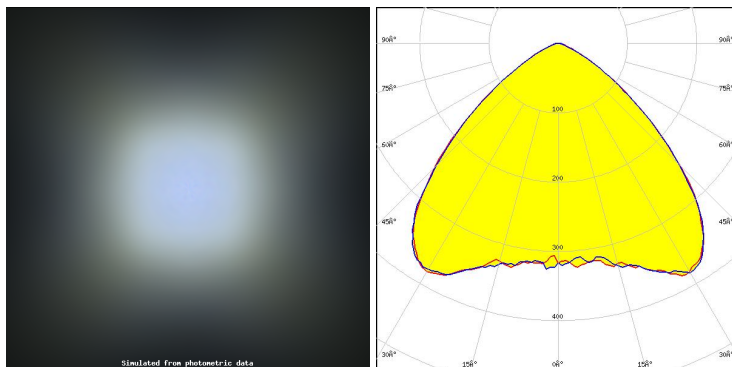


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



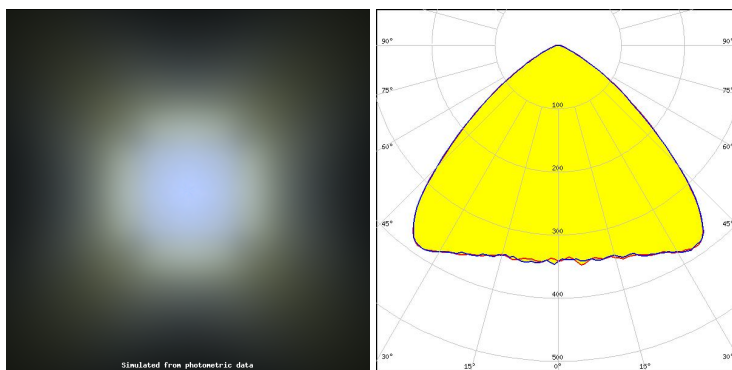
LED SST-20 Gen2  
 FWHM / FWTM 98.0° / 128.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



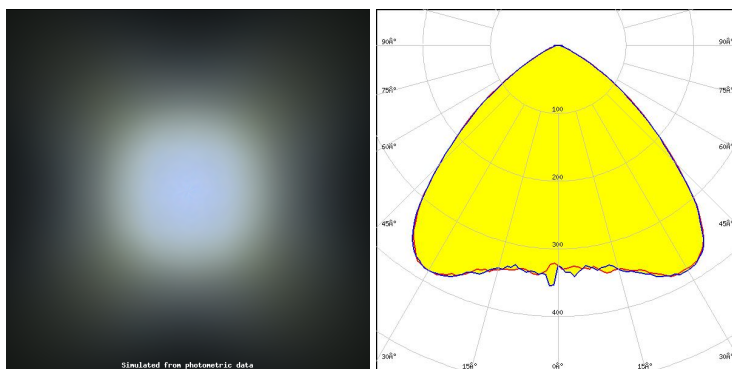
LED SST-20F-W  
 FWHM / FWTM 98.0° / 126.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SST-25-W  
 FWHM / FWTM 98.0° / 126.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



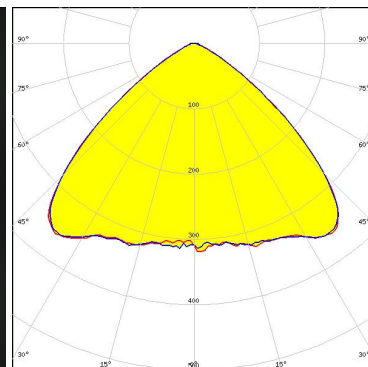
Light distribution files



### OPTICAL RESULTS (SIMULATED):



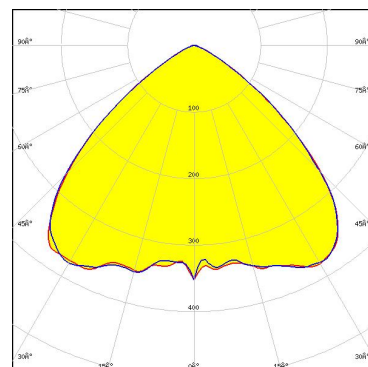
LED SST-36F-W  
FWHM / FWTM 102.0° / 126.0°  
Efficiency 95 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



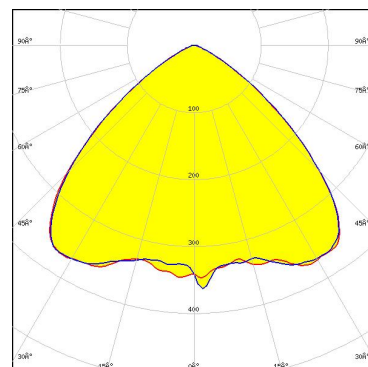
LED NV4WB35AM  
FWHM / FWTM 100.0° / 124.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NVSxx19B/NVSxx19C  
FWHM / FWTM 100.0° / 127.0°  
Efficiency 95 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

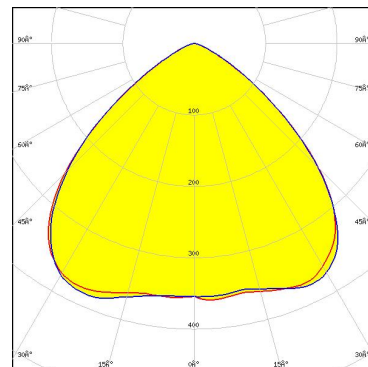
#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED Duris S8  
FWHM / FWTM 100.0° / 125.0°  
Efficiency 91 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Protective plate, glass

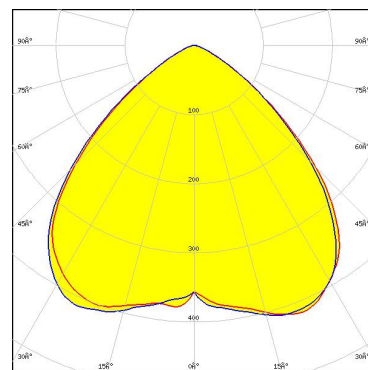
Light distribution files



**OSRAM**  
Opto Semiconductors

LED Duris S8  
FWHM / FWTM 92.0° / 126.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

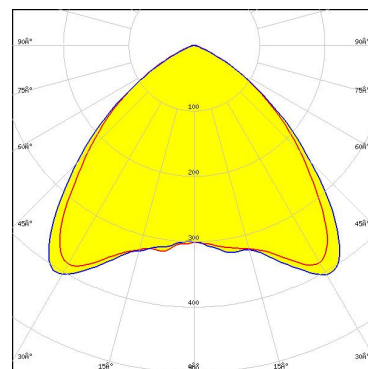
Light distribution files



**OSRAM**  
Opto Semiconductors

LED OSCONIQ P 3030  
FWHM / FWTM 96.0° / 130.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

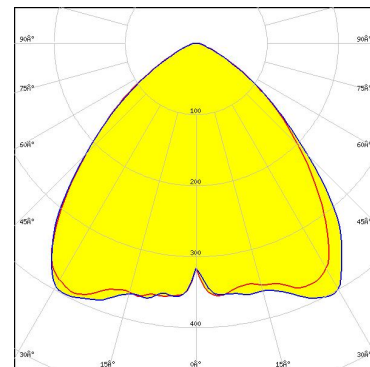
Light distribution files



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

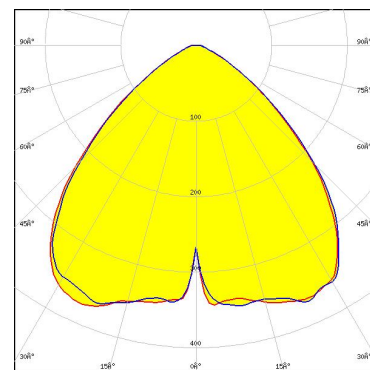
LED OSCONIQ P 3737 (2W) PUSRA1  
FWHM / FWTM 90.0° / 130.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

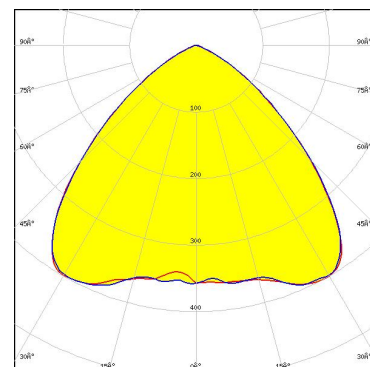
LED OSCONIQ P 3737 (3W) PUSTA1  
FWHM / FWTM 93.0° / 130.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ P 3737 Flat  
FWHM / FWTM 96.0° / 126.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

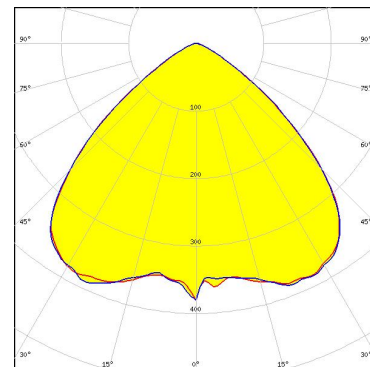


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

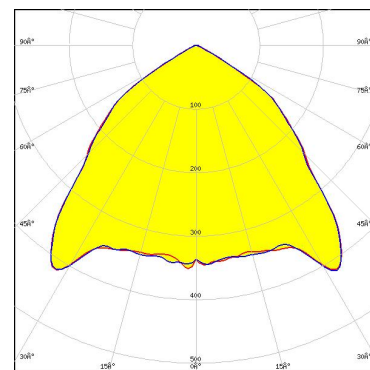
LED OSCONIQ S 5050 (Q9LR35)  
FWHM / FWTM 99.0° / 124.0°  
Efficiency 96 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

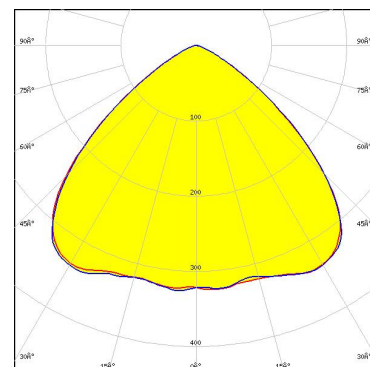
LED OSLO Pure 1414  
FWHM / FWTM 97.0° + 96.0° / 122.0°  
Efficiency 97 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLO Square CSSRM2/CSSRM3  
FWHM / FWTM 100.0° / 128.0°  
Efficiency 85 %  
Peak intensity 0.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



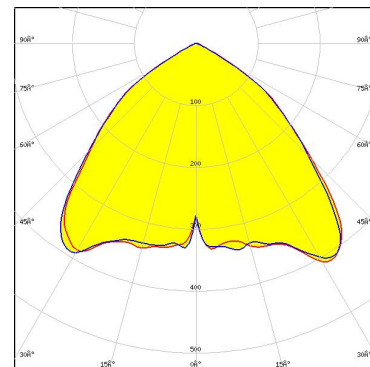
Protective plate, glass

Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

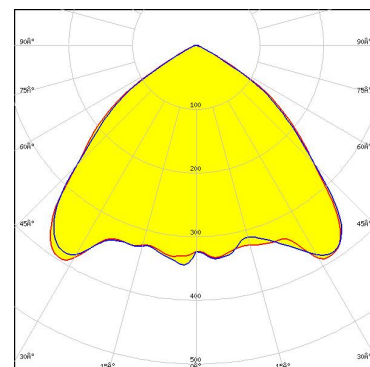
LED OSLON Square Flat  
FWHM / FWTM 97.0° / 123.0°  
Efficiency 97 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

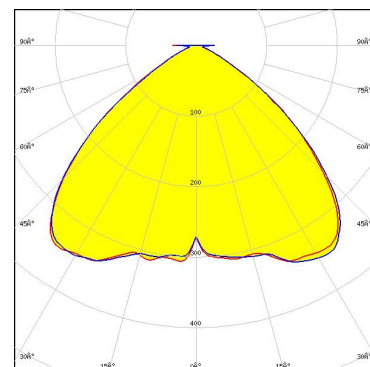
LED OSTAR Projection Compact (KW.CSLNM1.TG)  
FWHM / FWTM 100.0° / 124.0°  
Efficiency 97 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

LED Fortimo FastFlex LED 2x8 DAX G4  
FWHM / FWTM 98.0° / 132.0°  
Efficiency 94 %  
Peak intensity 0.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

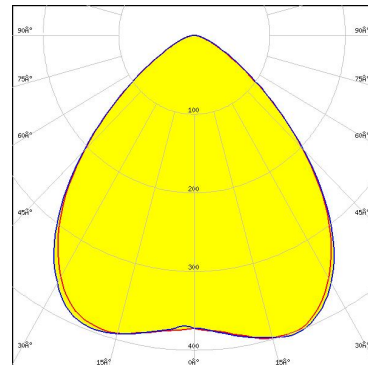
#### OPTICAL RESULTS (SIMULATED):

### SAMSUNG

|                      |                       |
|----------------------|-----------------------|
| LED                  | HiLOM RM16 Z (LH502C) |
| FWHM / FWTM          | 90.0° / 127.0°        |
| Efficiency           | 88 %                  |
| Peak intensity       | 0.4 cd/lm             |
| LEDs/each optic      | 1                     |
| Light colour/type    | White                 |
| Required components: |                       |

Protective plate, glass

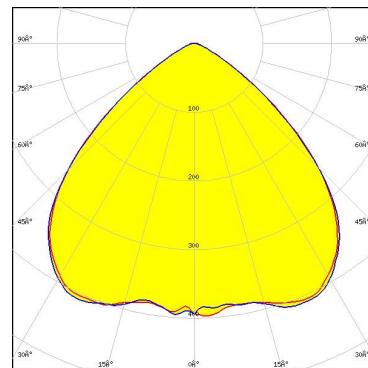
Light distribution files



### SAMSUNG

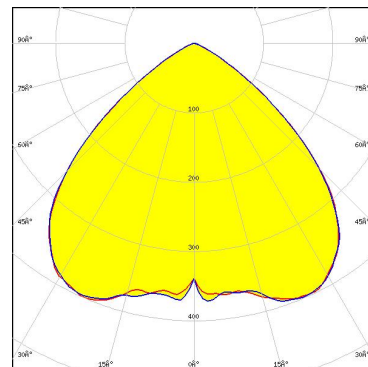
|                      |                |
|----------------------|----------------|
| LED                  | LH502D         |
| FWHM / FWTM          | 97.0° / 124.0° |
| Efficiency           | 98 %           |
| Peak intensity       | 0.4 cd/lm      |
| LEDs/each optic      | 1              |
| Light colour/type    | White          |
| Required components: |                |

Light distribution files



|                      |                |
|----------------------|----------------|
| LED                  | MJT 5050       |
| FWHM / FWTM          | 98.0° / 122.0° |
| Efficiency           | 95 %           |
| Peak intensity       | 0.4 cd/lm      |
| LEDs/each optic      | 1              |
| Light colour/type    | White          |
| Required components: |                |

Light distribution files

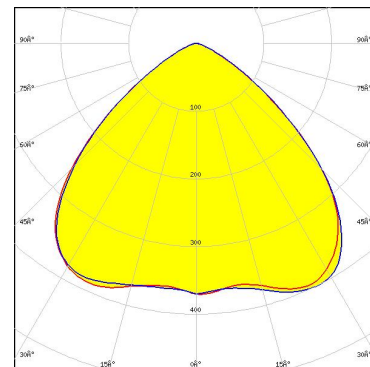




#### OPTICAL RESULTS (SIMULATED):



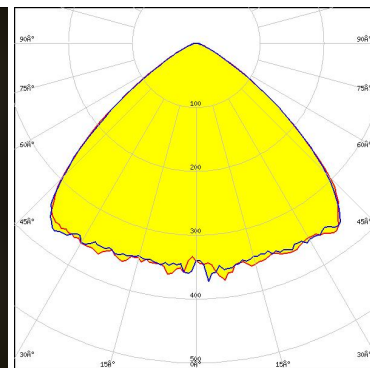
LED: SEOUL DC 5050 6V  
 FWHM / FWTM: 94.0° / 126.0°  
 Efficiency: 94 %  
 Peak intensity: 0.4 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:



Light distribution files



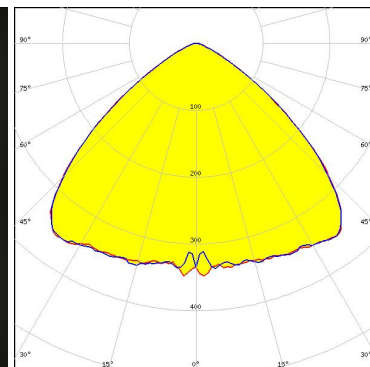
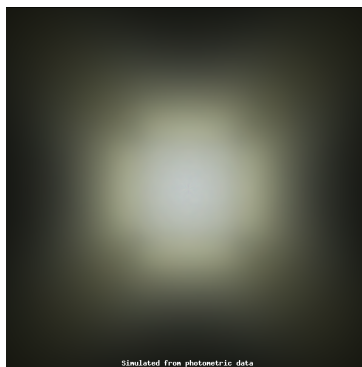
LED: Z5M3-E1  
 FWHM / FWTM: 102.0° / 128.0 + 127.0°  
 Efficiency: 96 %  
 Peak intensity: 0.4 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:



Light distribution files



LED: Z5M4-E1  
 FWHM / FWTM: 104.0 + 103.0° / 130.0°  
 Efficiency: 96 %  
 Peak intensity: 0.4 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:

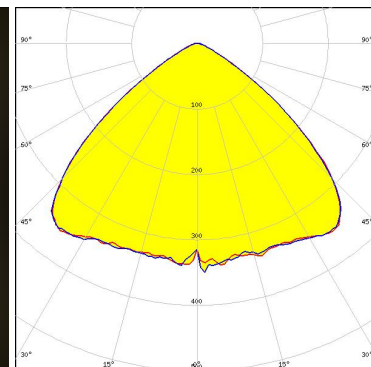
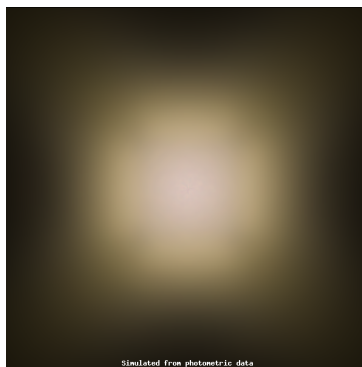


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



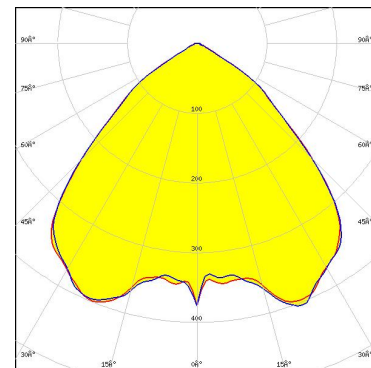
LED Z5M4-E2  
 FWHM / FWTM 104.0° / 128.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



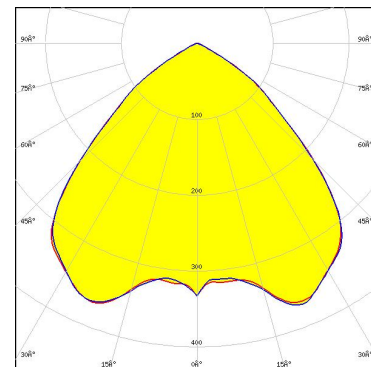
LED Z5M5  
 FWHM / FWTM 94.0° / 120.0°  
 Efficiency 96 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED Z5M5  
 FWHM / FWTM 94.0° / 122.0°  
 Efficiency 87 %  
 Peak intensity 0.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



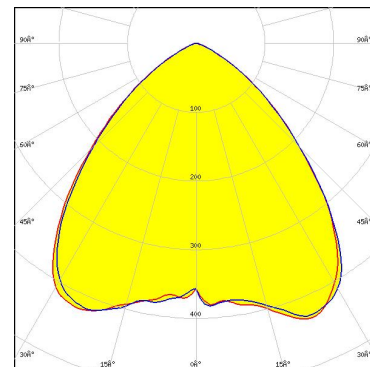
Protective plate, glass

Light distribution files

## OPTICAL RESULTS (SIMULATED):



LED Z8Y22T  
 FWHM / FWTM 94.0° / 131.0°  
 Efficiency 94 %  
 Peak intensity 0.5 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:

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