

## LINNEA-60

~60° + 90° beam optimized for 1.0 mm metal sheet or profile. Variant made from PC.

## SPECIFICATION:

|                |                 |
|----------------|-----------------|
| Dimensions     | 285.0 x 40.0 mm |
| Height         | 9.5 mm          |
| Fastening      | clips           |
| ROHS compliant | yes ⓘ           |

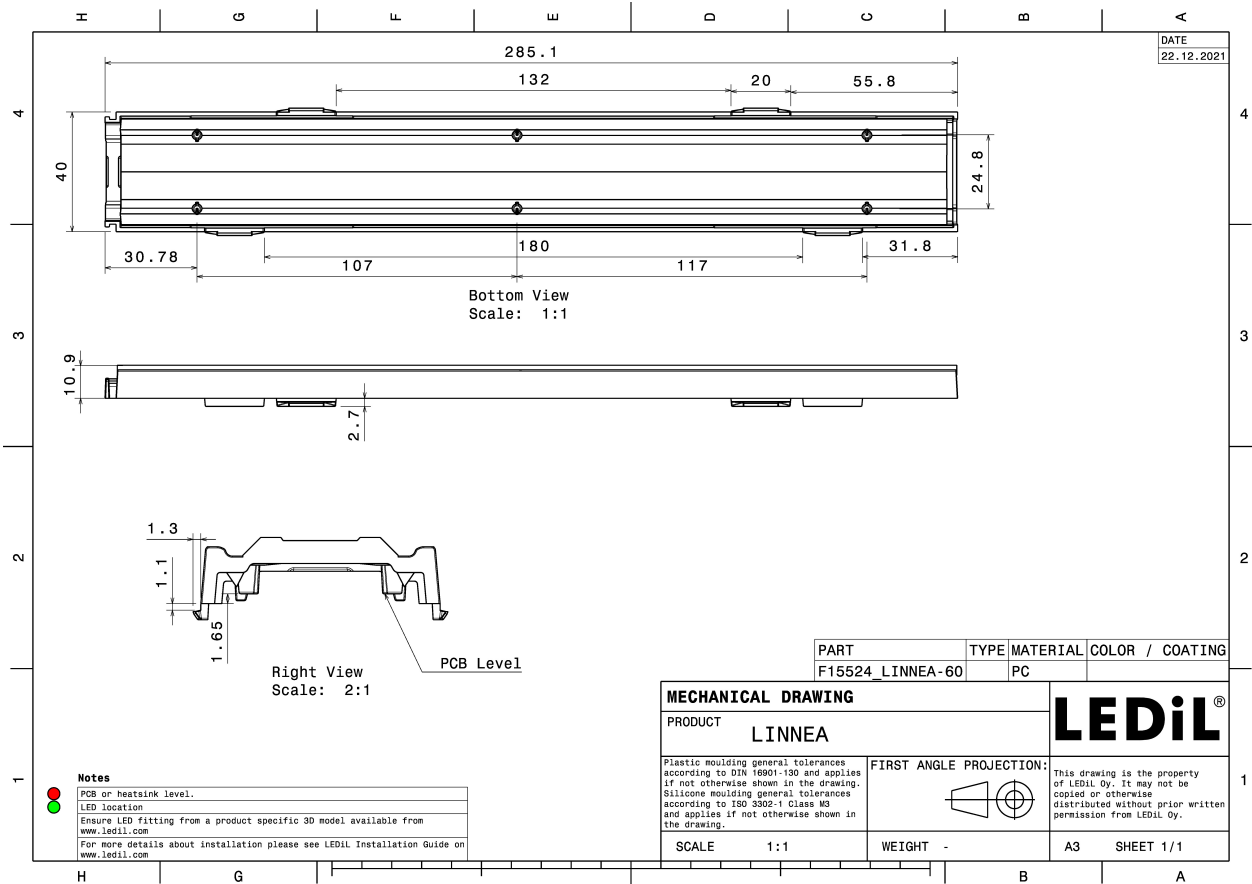


## MATERIALS:

| Component | Type        | Material | Colour | Finish | Length |
|-----------|-------------|----------|--------|--------|--------|
| LINNEA-60 | Linear lens | PC       | clear  |        | 285.0  |

## ORDERING INFORMATION:

| Component                                          | Qty in box | MOQ | MPQ | Box weight (kg) |
|----------------------------------------------------|------------|-----|-----|-----------------|
| F15524_LINNEA-60<br>» Box size: 398 x 298 x 265 mm | 153        | 36  | 9   | 8.3             |

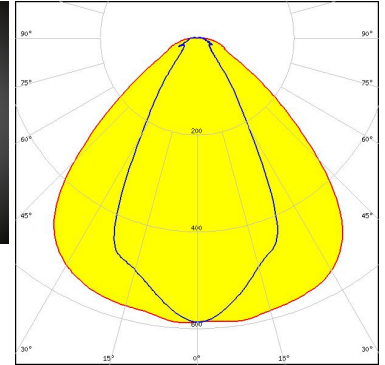


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



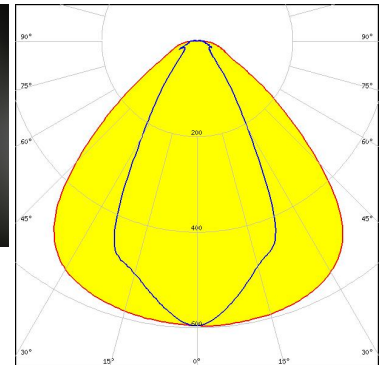
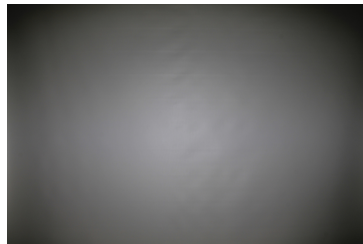
LED CALOSNU405-M7W1  
FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°  
Efficiency 84 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



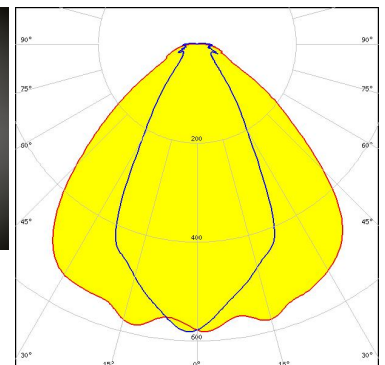
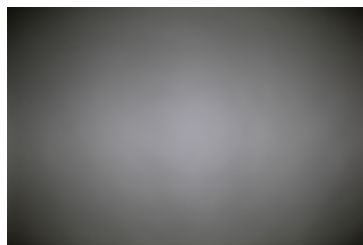
LED CALOSNU410-M7W1  
FWHM / FWTM 95.0 + 55.0° / 139.0 + 86.0°  
Efficiency 84 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-E  
FWHM / FWTM 96.0 + 54.0° / 139.0 + 86.0°  
Efficiency 83 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

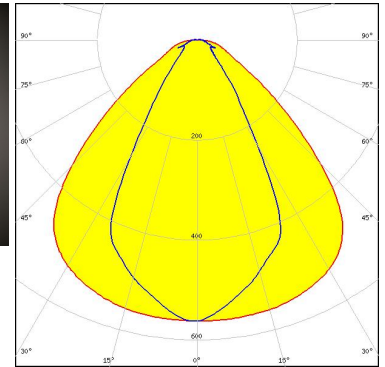
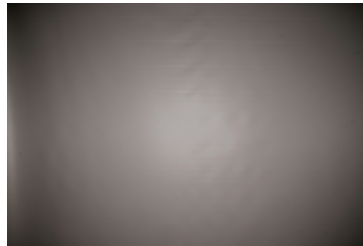


Light distribution files

#### OPTICAL RESULTS (MEASURED):

##### Helvar

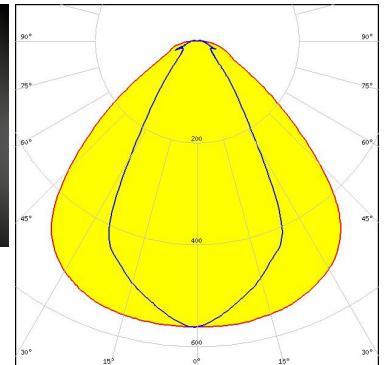
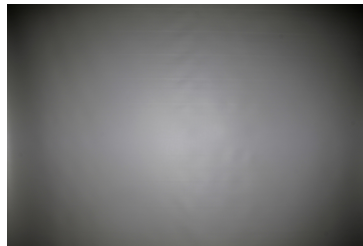
LED L-iC-282-827-865-011A  
 FWHM / FWTM 97.0 + 58.0° / 142.0 + 91.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

##### Helvar

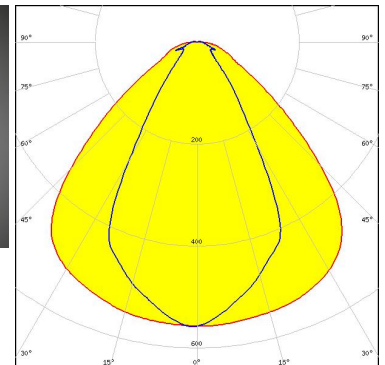
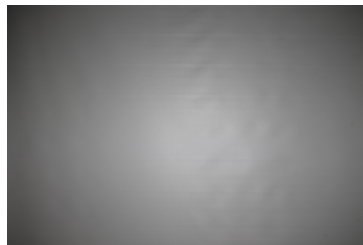
LED LP-282-840-009A 60/300  
 FWHM / FWTM 97.0 + 58.0° / 142.0 + 91.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

##### Helvar

LED LS-282-840-011A  
 FWHM / FWTM 97.0 + 58.0° / 145.0 + 91.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



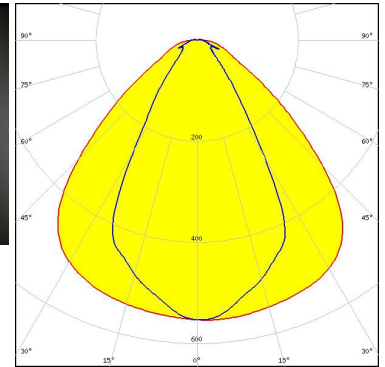
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### Helvar

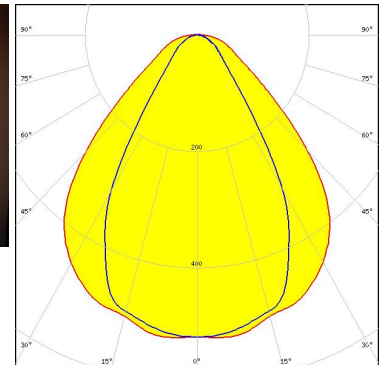
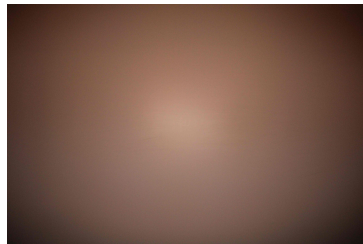
LED LX-282-840-023A  
FWHM / FWTM 96.0 + 59.0° / 144.0 + 92.0°  
Efficiency 85 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### LUMITRONIX® High-Performance LED-Technologies & Solutions

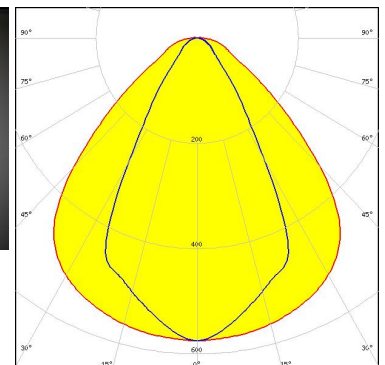
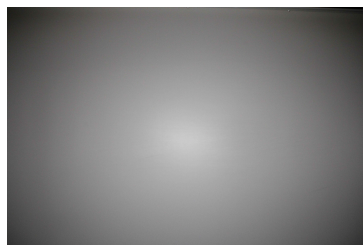
LED LinearZ 280-112 Circadian TW  
FWHM / FWTM 92.0 + 64.0° / 147.0 + 104.0°  
Efficiency 85 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type Tunable White  
Required components:



Light distribution files

#### LUMITRONIX® High-Performance LED-Technologies & Solutions

LED LinearZ 280-26  
FWHM / FWTM 96.0 + 59.0° / 145.0 + 92.0°  
Efficiency 85 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

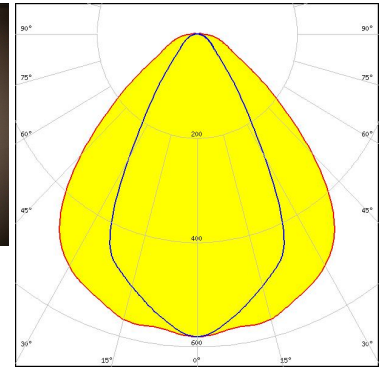


Light distribution files

#### OPTICAL RESULTS (MEASURED):



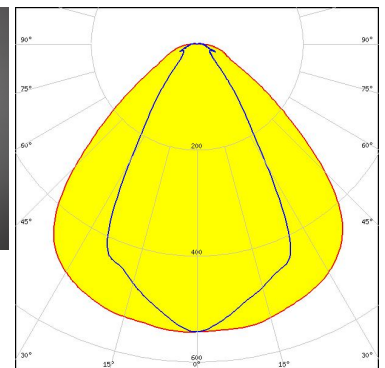
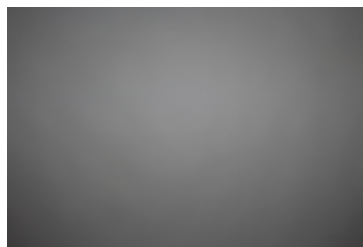
LED LinearZ 280-40 TW  
 FWHM / FWTM 94.0 + 59.0° / 142.0 + 92.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type Tunable White  
 Required components:



Light distribution files



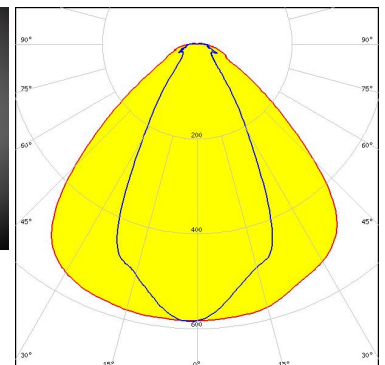
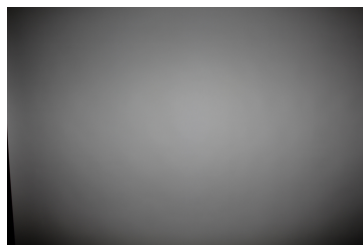
LED LinLED 280x24mm 1100lm 830 2C 30V LINNEA-GC G1  
 FWHM / FWTM 96.0 + 59.0° / 143.0 + 89.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NF2x757G  
 FWHM / FWTM 96.0 + 54.0° / 141.0 + 87.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

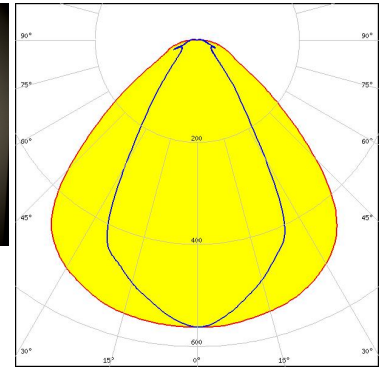


Light distribution files

#### OPTICAL RESULTS (MEASURED):



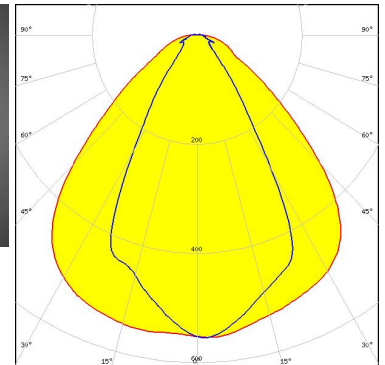
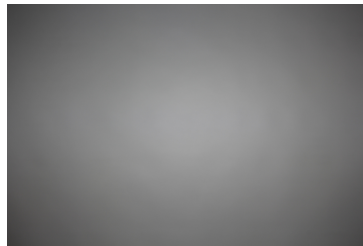
LED NFSW757H  
 FWHM / FWTM 96.0 + 60.0° / 145.0 + 93.0°  
 Efficiency 86 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



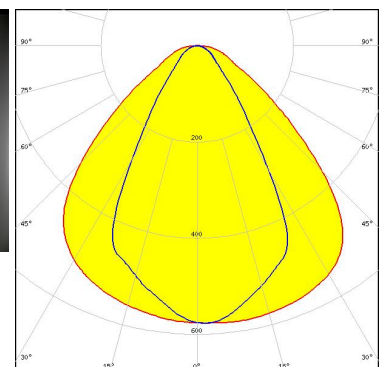
LED NFSx757G  
 FWHM / FWTM 96.0 + 59.0° / 145.0 + 88.0°  
 Efficiency 83 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED PL-LIN-IND-Z1 2800 560x24  
 FWHM / FWTM 96.0 + 60.0° / 144.0 + 96.0°  
 Efficiency 88 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

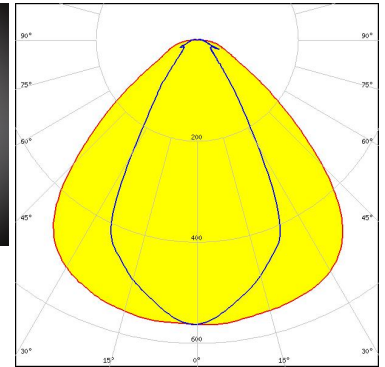
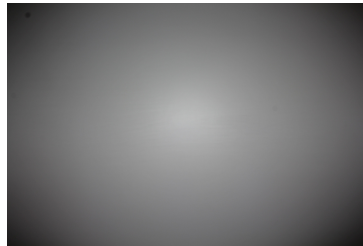


Light distribution files

#### OPTICAL RESULTS (MEASURED):

#### OSRAM

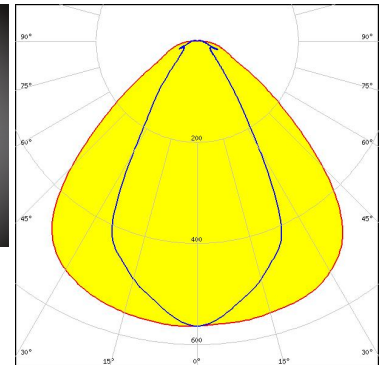
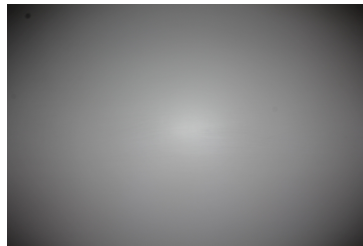
LED PL-LIN-Z5 1100 280x20  
 FWHM / FWTM 97.0 + 58.0° / 143.0 + 91.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### OSRAM

LED PL-LIN-Z5 2000 280x20  
 FWHM / FWTM 97.0 + 58.0° / 143.0 + 91.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

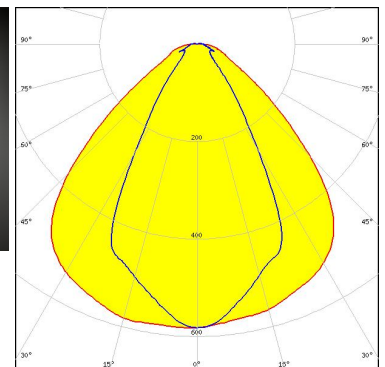
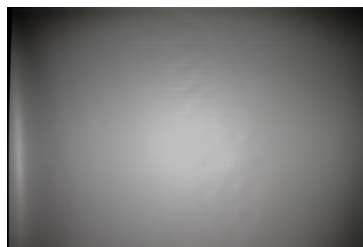


Light distribution files

#### OSRAM

Opto Semiconductors

LED Duris S5 (2 chip)  
 FWHM / FWTM 95.0 + 57.0° / 140.0 + 88.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

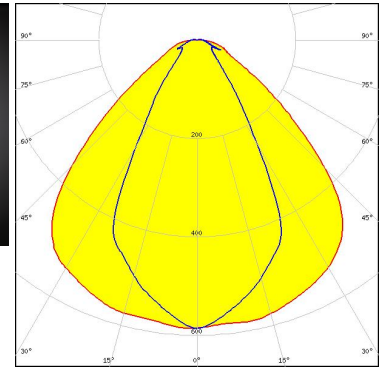
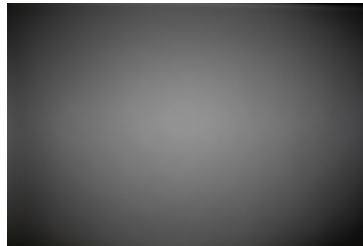


Light distribution files

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

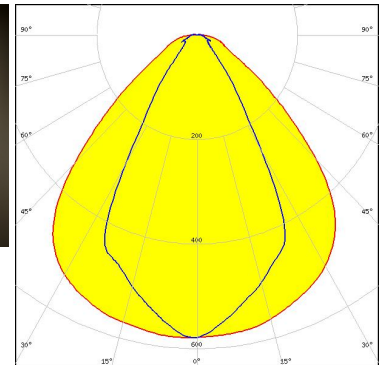
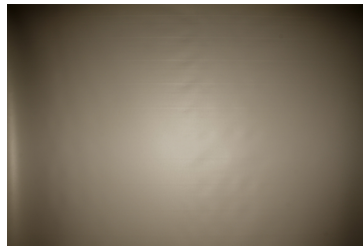
LED Duris S5 (Single chip)  
FWHM / FWTM 96.0 + 57.0° / 143.0 + 91.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

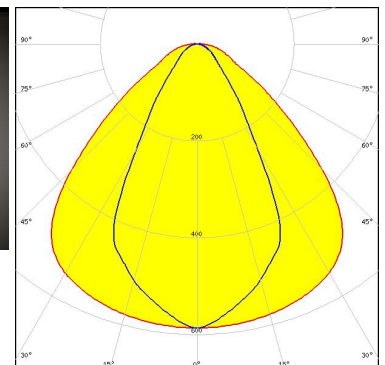
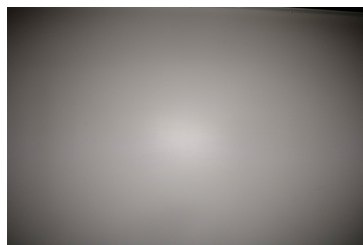
LED Fortimo LED Strip 1ft 1100lm FC HV4 & LV4  
FWHM / FWTM 95.0 + 59.0° / 141.0 + 88.0°  
Efficiency 85 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**PHILIPS**

LED Fortimo LED Strip 1ft 1100lm FC HV5 & LV5  
FWHM / FWTM 97.0 + 58.0° / 145.0 + 95.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



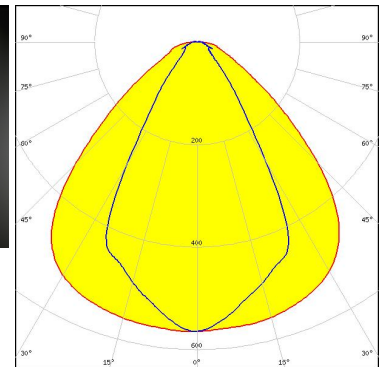
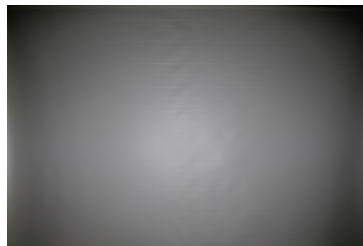
Light distribution files



#### OPTICAL RESULTS (MEASURED):

### PHILIPS

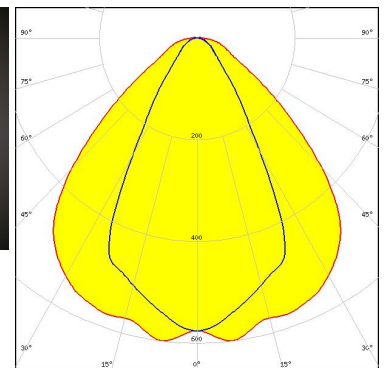
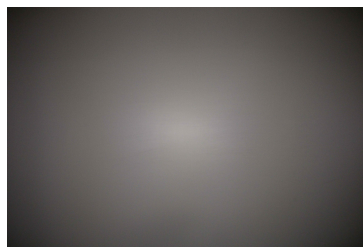
|                      |                                          |
|----------------------|------------------------------------------|
| LED                  | Fortimo LED Strip 1ft 650lm FC HV4 & LV4 |
| FWHM / FWTM          | 95.0 + 59.0° / 139.0 + 89.0°             |
| Efficiency           | 84 %                                     |
| Peak intensity       | 0.6 cd/lm                                |
| LEDs/each optic      | 1                                        |
| Light colour/type    | White                                    |
| Required components: |                                          |



Light distribution files

### PHILIPS

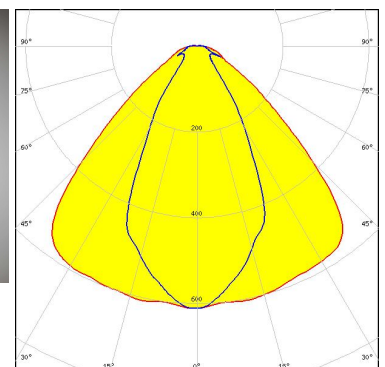
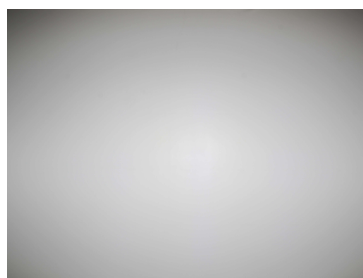
|                      |                                          |
|----------------------|------------------------------------------|
| LED                  | Fortimo LED Strip 1ft 650lm FC HV5 & LV5 |
| FWHM / FWTM          | 96.0 + 58.0° / 143.0 + 94.0°             |
| Efficiency           | 87 %                                     |
| Peak intensity       | 0.6 cd/lm                                |
| LEDs/each optic      | 1                                        |
| Light colour/type    | White                                    |
| Required components: |                                          |



Light distribution files

### SAMSUNG

|                      |                               |
|----------------------|-------------------------------|
| LED                  | LM28xB Series                 |
| FWHM / FWTM          | 95.0 + 53.0° / 136.0 + 106.0° |
| Efficiency           | 84 %                          |
| Peak intensity       | 0.4 cd/lm                     |
| LEDs/each optic      | 1                             |
| Light colour/type    | White                         |
| Required components: |                               |



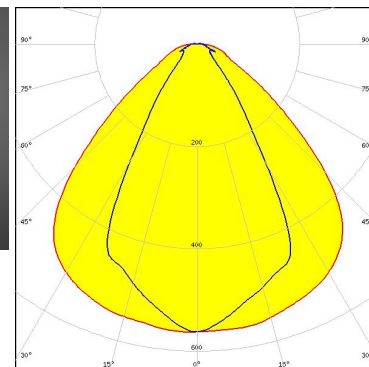
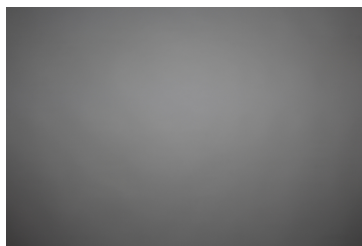
Light distribution files



#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

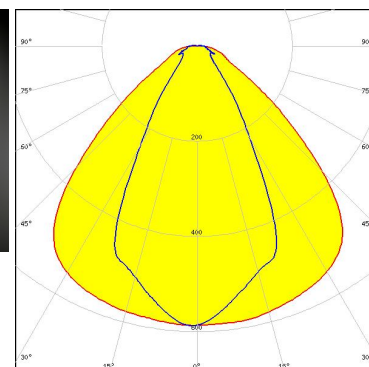
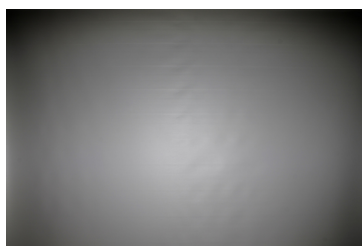
LED LM561B Plus  
 FWHM / FWTM 96.0 + 59.0° / 143.0 + 89.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

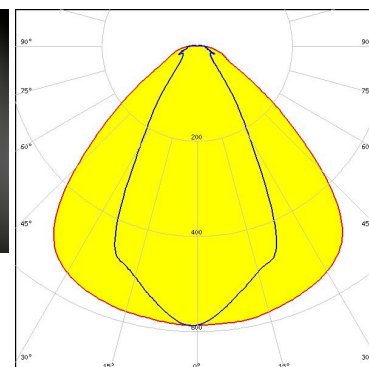
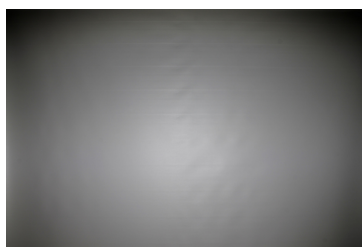
LED LT-H282C  
 FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

LED LT-H562C  
 FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

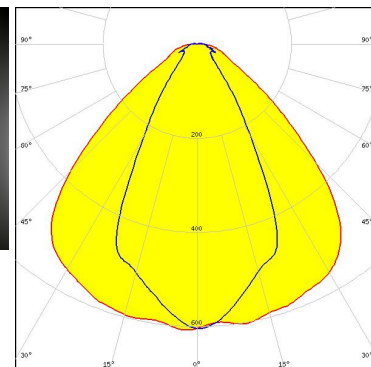
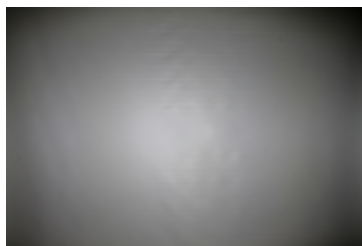


Light distribution files

#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

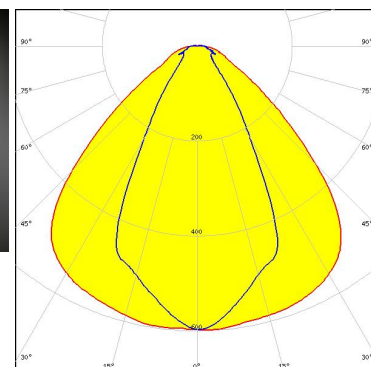
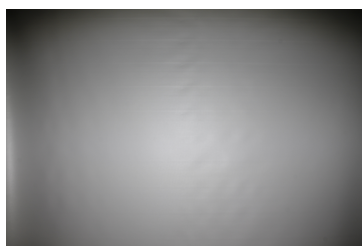
LED LT-Q282B  
 FWHM / FWTM 95.0 + 54.0° / 138.0 + 86.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

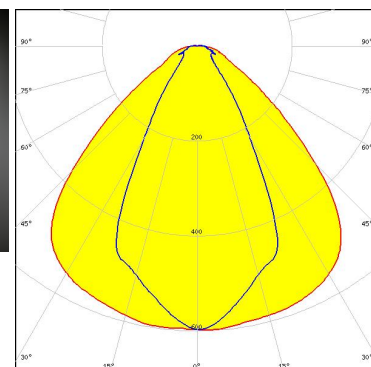
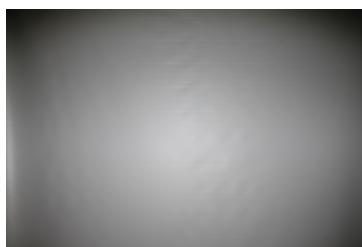
LED LT-S282H  
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### SAMSUNG

LED LT-S562H  
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°  
 Efficiency 85 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

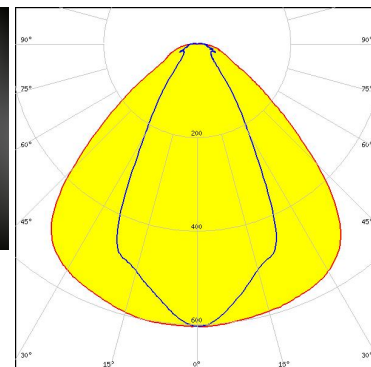
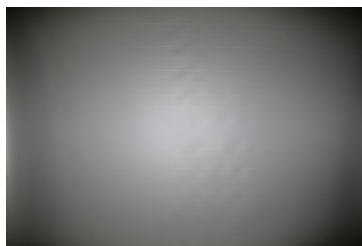


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

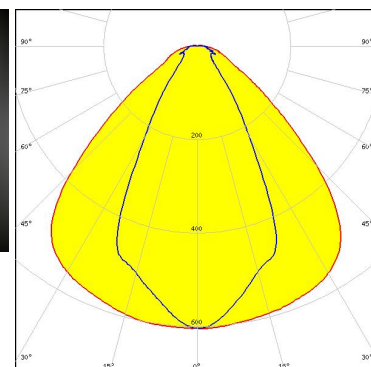
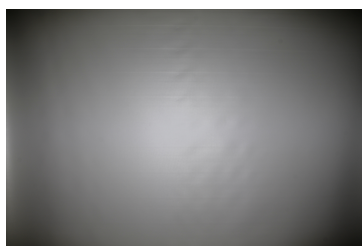
LED LT-V282E  
FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SAMSUNG

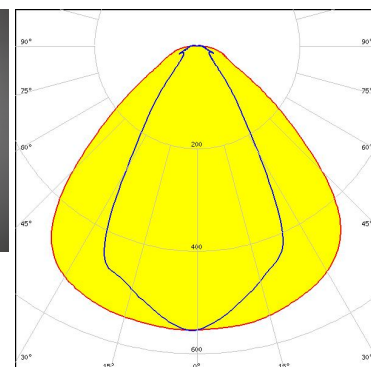
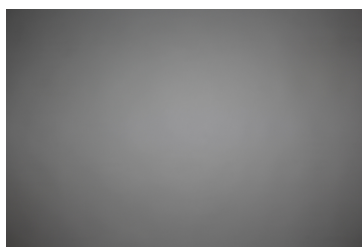
LED LT-V562E  
FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED SEOUL 5630D  
FWHM / FWTM 73.0° / 112.0°  
Efficiency 84 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

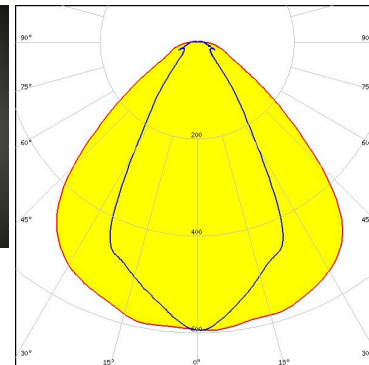
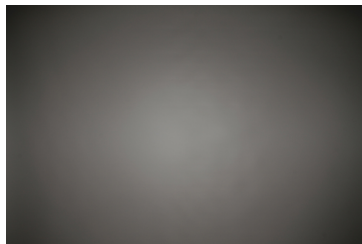


Light distribution files

### OPTICAL RESULTS (MEASURED):



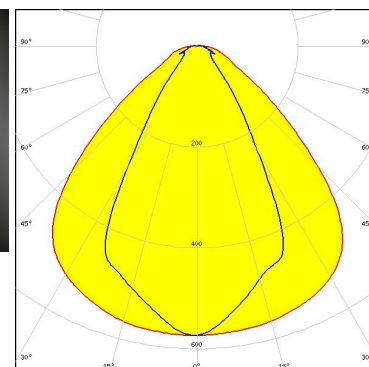
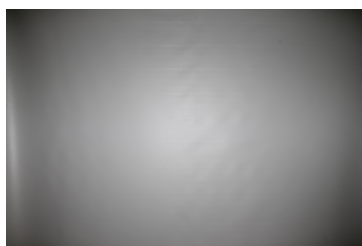
LED SEOUL DC 3030  
FWHM / FWTM 96.0 + 57.0° / 139.0 + 88.0°  
Efficiency 86 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### TRIDONIC

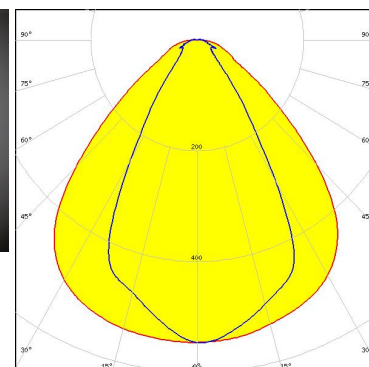
LED LLE G4 24x280mm 1250lm  
FWHM / FWTM 96.0 + 58.0° / 141.0 + 88.0°  
Efficiency 85 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### TRIDONIC

LED LLE G4 24x280mm 2000lm ADV  
FWHM / FWTM 95.0 + 60.0° / 143.0 + 91.0°  
Efficiency 85 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

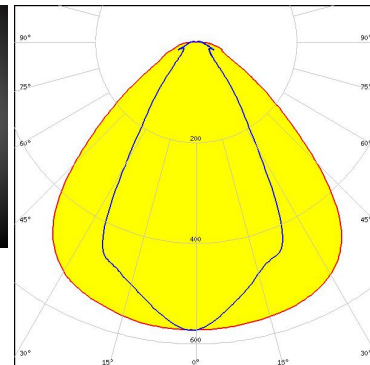
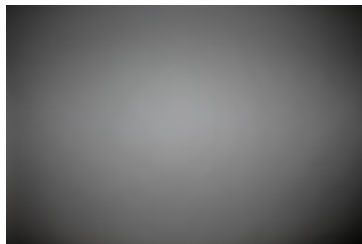


Light distribution files

## OPTICAL RESULTS (MEASURED):

### TRIDONIC

|                      |                              |
|----------------------|------------------------------|
| LED                  | LLE G4 24x280mm 650lm        |
| FWHM / FWTM          | 95.0 + 59.0° / 140.0 + 89.0° |
| Efficiency           | 85 %                         |
| Peak intensity       | 0.6 cd/lm                    |
| LEDs/each optic      | 1                            |
| Light colour/type    | White                        |
| Required components: |                              |



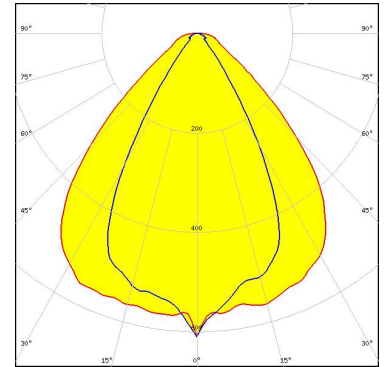
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



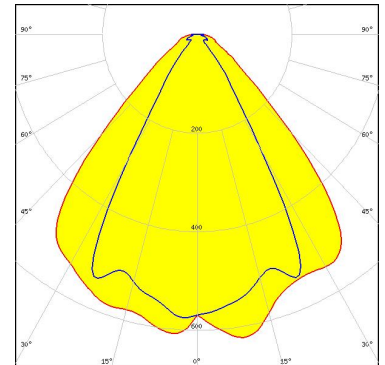
LED Bridgelux SMD 2835  
 FWHM / FWTM 90.0 + 58.0° / 127.0 + 82.0°  
 Efficiency 81 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



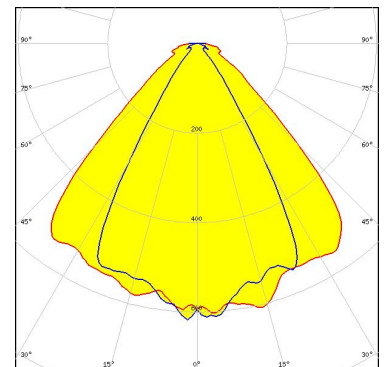
LED LUXEON 3030 2D (Round LES)  
 FWHM / FWTM 89.0 + 60.0° / 125.0 + 80.0°  
 Efficiency 84 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SEOUL DC 3030C  
 FWHM / FWTM 92.0 + 60.0° / 134.0 + 80.0°  
 Efficiency 85 %  
 Peak intensity 0.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

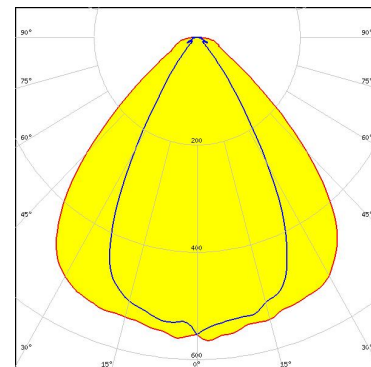


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



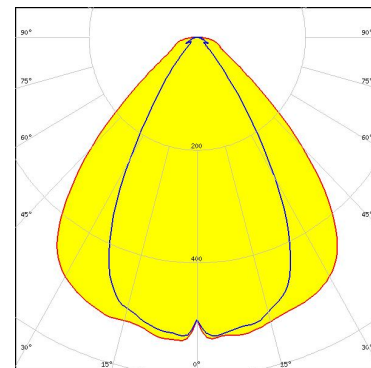
LED: SEOUL DC 3528  
 FWHM / FWTM: 92.0 + 59.0° / 128.0 + 82.0°  
 Efficiency: 78 %  
 Peak intensity: 0.6 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:



Light distribution files



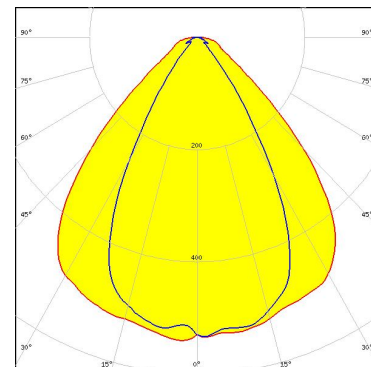
LED: SEOUL DC 3528  
 FWHM / FWTM: 90.0 + 60.0° / 128.0 + 85.0°  
 Efficiency: 77 %  
 Peak intensity: 0.5 cd/lm  
 LEDs/each optic: 2  
 Light colour/type: White  
 Required components:



Light distribution files



LED: SEOUL DC 3528  
 FWHM / FWTM: 90.0 + 60.0° / 128.0 + 85.0°  
 Efficiency: 77 %  
 Peak intensity: 0.5 cd/lm  
 LEDs/each optic: 2  
 Light colour/type: White  
 Required components:

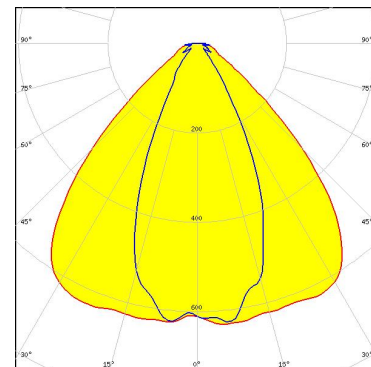


Light distribution files

### OPTICAL RESULTS (SIMULATED):



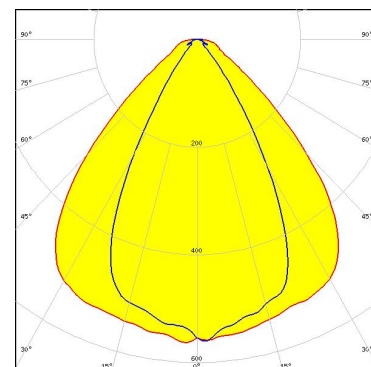
LED: SEOUL DC 3528  
 FWHM / FWTM: 91.0 + 48.0° / 122.0 + 77.0°  
 Efficiency: 76 %  
 Peak intensity: 0.6 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:



Light distribution files



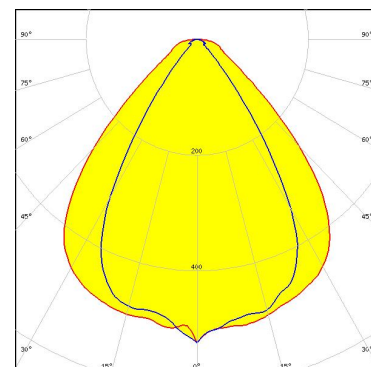
LED: SEOUL DC 3528  
 FWHM / FWTM: 92.0 + 59.0° / 127.0 + 82.0°  
 Efficiency: 77 %  
 Peak intensity: 0.6 cd/lm  
 LEDs/each optic: 1  
 Light colour/type: White  
 Required components:



Light distribution files

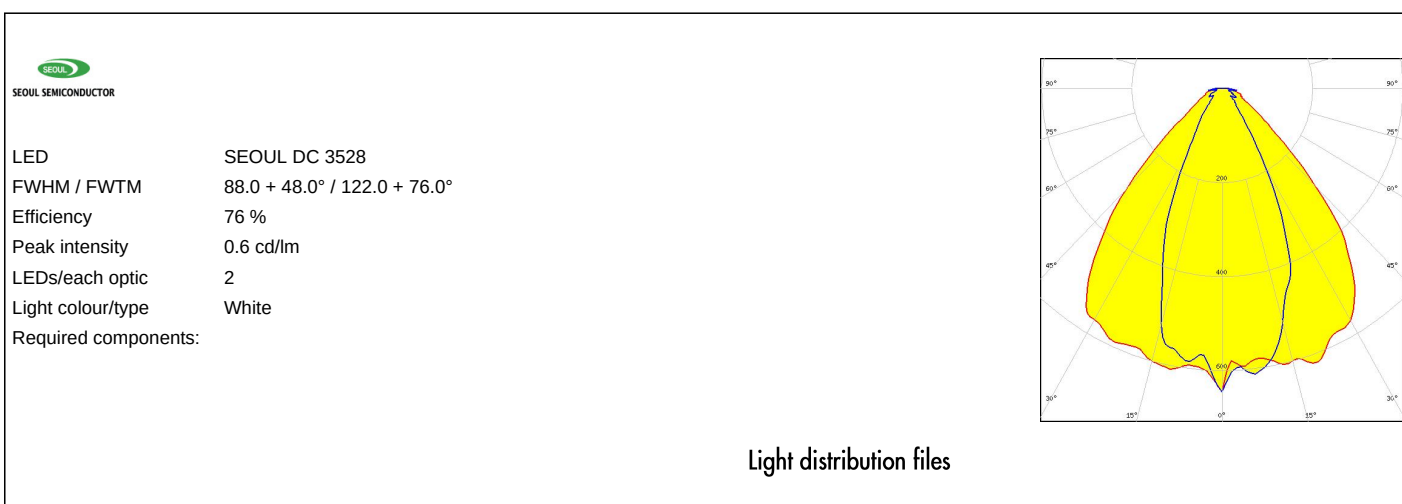
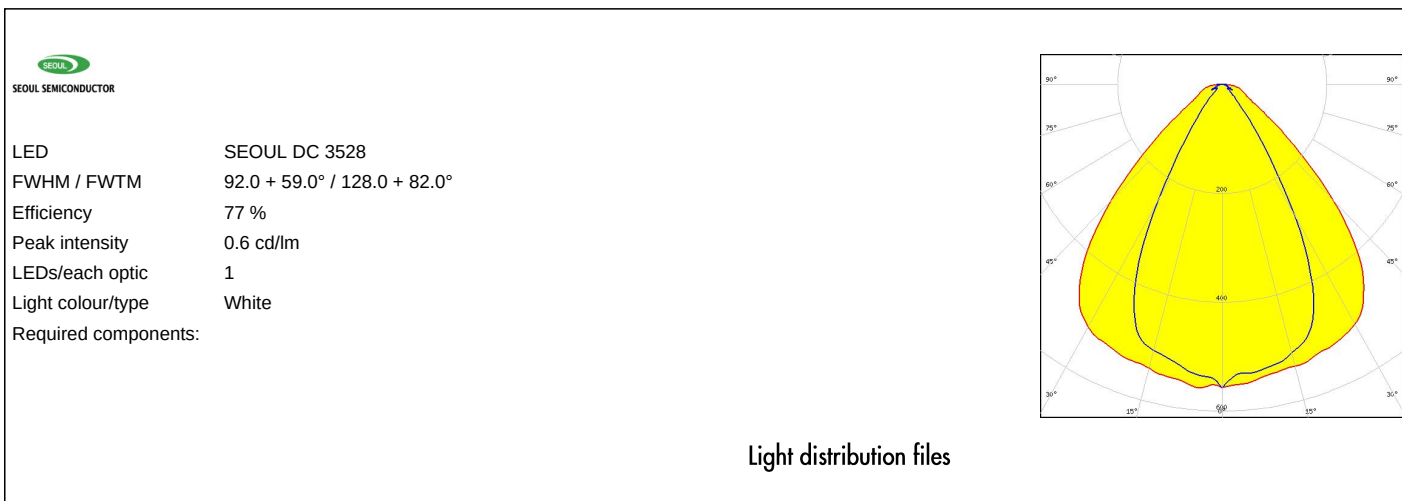


LED: SEOUL DC 3528  
 FWHM / FWTM: 90.0 + 65.0° / 131.0 + 87.0°  
 Efficiency: 78 %  
 Peak intensity: 0.5 cd/lm  
 LEDs/each optic: 2  
 Light colour/type: White  
 Required components:



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.

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