

## HB-IP-2X6-W

~60° wide beam

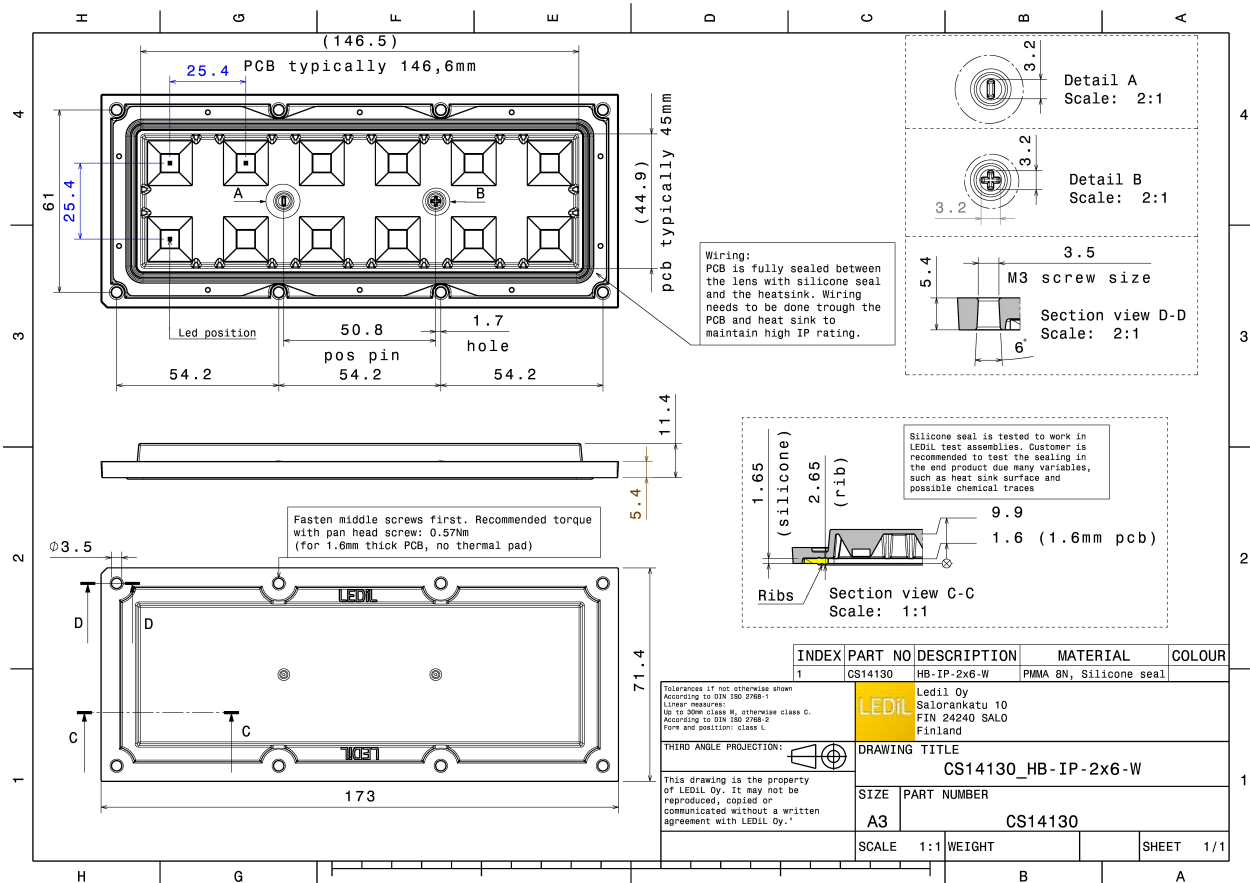
### TECHNICAL SPECIFICATIONS:

|                 |                    |
|-----------------|--------------------|
| Dimensions      | 173 + 71.4 mm      |
| Height          | 11.4 mm            |
| Fastening       | pin, screw         |
| Colour          | clear              |
| Box size        | 476 x 273 x 247 mm |
| Box weight      | 8.4 kg             |
| Quantity in Box | 120 pcs            |
| ROHS compliant  | yes ⓘ              |



### MATERIAL SPECIFICATIONS:

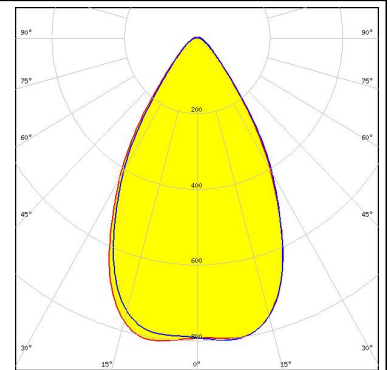
| Component   | Type | Material | Colour |
|-------------|------|----------|--------|
| HB-IP-2X6-W | Lens | PMMA     | clear  |
| 2X6-SEAL25  | Seal | Silicone | white  |



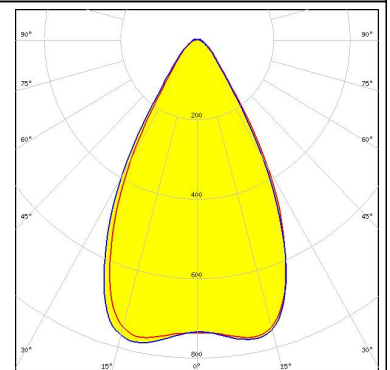
#### PHOTOMETRIC DATA (MEASURED):



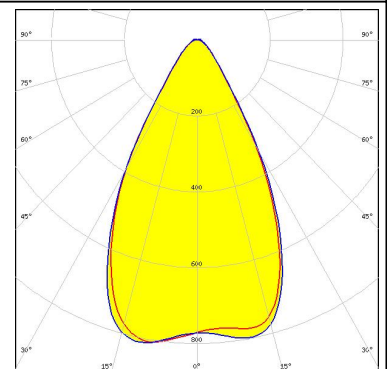
LED XM-L2  
 FWHM 61.0°  
 Efficiency 94 %  
 Peak intensity 0.800 cd/lm  
 Required components:



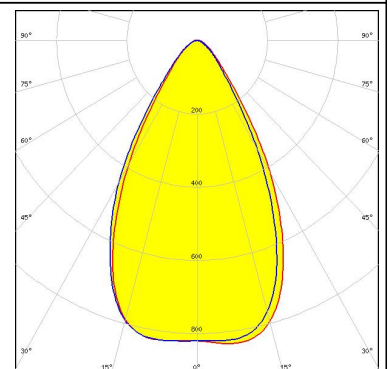
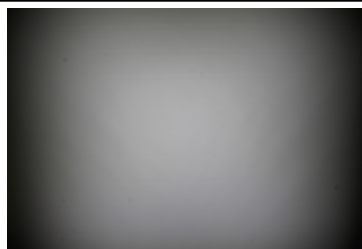
LED XP-G  
 FWHM 60.0°  
 Efficiency 94 %  
 Peak intensity 0.840 cd/lm  
 Required components:



LED XP-G2  
 FWHM 58.0°  
 Efficiency 93 %  
 Peak intensity 0.870 cd/lm  
 Required components:



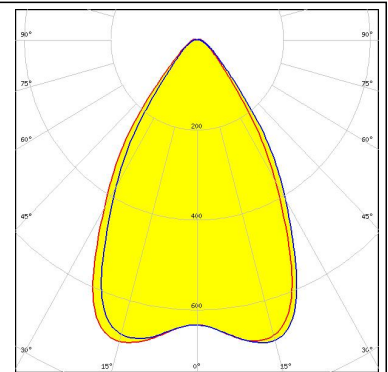
LED XP-G3  
 FWHM 59.0°  
 Efficiency 94 %  
 Peak intensity 0.840 cd/lm  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

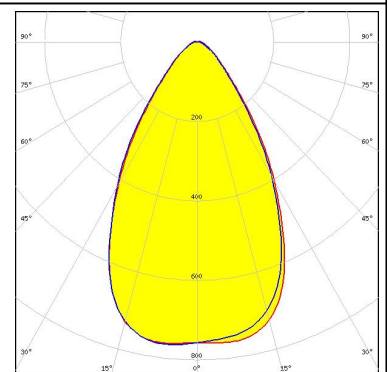
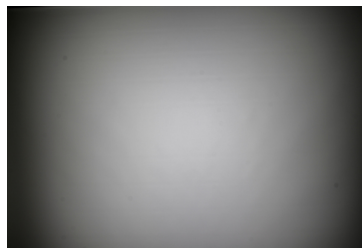
**CREE** 

LED XP-L  
FWHM 67.0°  
Efficiency 94 %  
Peak intensity 0.750 cd/lm  
Required components:



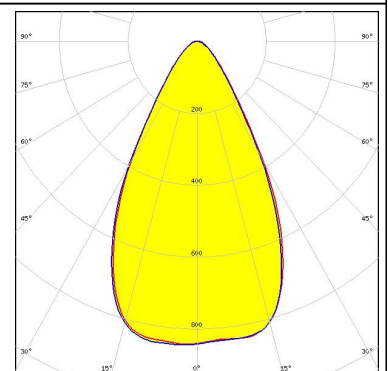
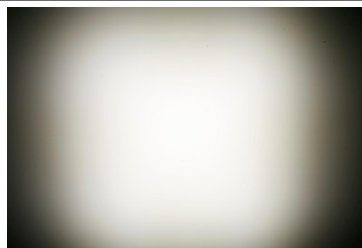
**CREE** 

LED XP-L2  
FWHM 62.0°  
Efficiency 94 %  
Peak intensity 0.770 cd/lm  
Required components:



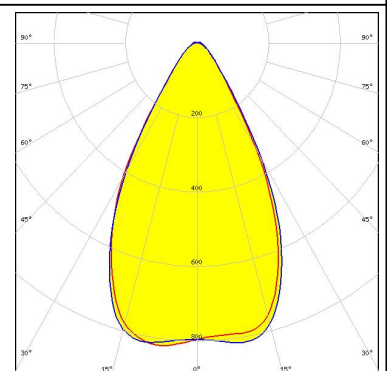
**CREE** 

LED XT-E  
FWHM 58.0°  
Efficiency 94 %  
Peak intensity 0.870 cd/lm  
Required components:



 **LUMILEDS**

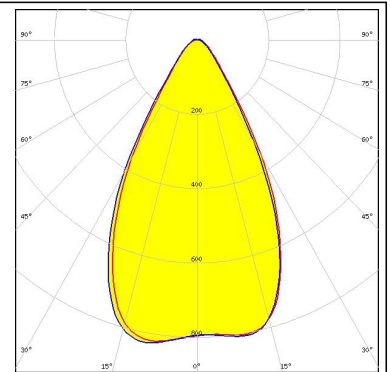
LED LUXEON R  
FWHM 58.0°  
Efficiency 94 %  
Peak intensity 0.900 cd/lm  
Required components:



#### PHOTOMETRIC DATA (MEASURED):

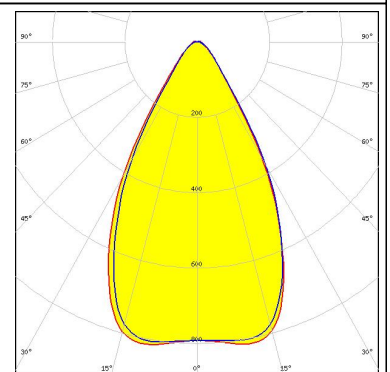
##### LUMILEDS

LED LUXEON Rebel ES  
 FWHM 57.0°  
 Efficiency 94 %  
 Peak intensity 0.860 cd/lm  
 Required components:



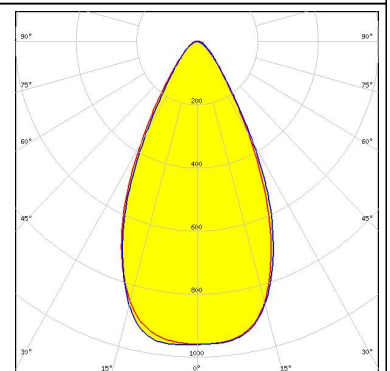
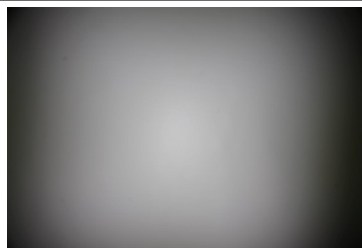
##### LUMILEDS

LED LUXEON T  
 FWHM 60.0°  
 Efficiency 94 %  
 Peak intensity 0.860 cd/lm  
 Required components:



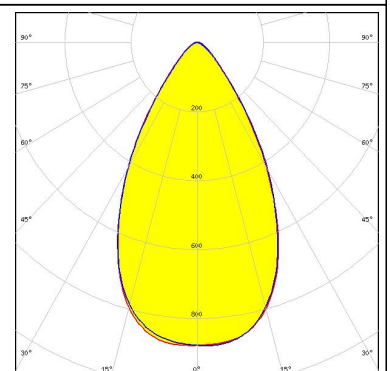
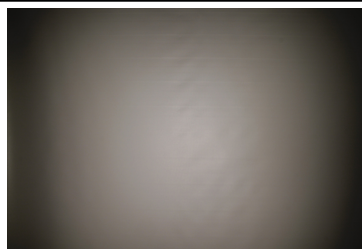
##### LUMILEDS

LED LUXEON TX  
 FWHM 54.0°  
 Efficiency 94 %  
 Peak intensity 0.960 cd/lm  
 Required components:



##### LUMILEDS

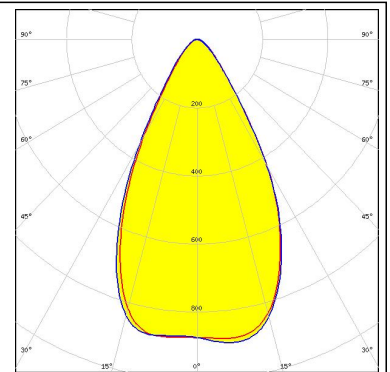
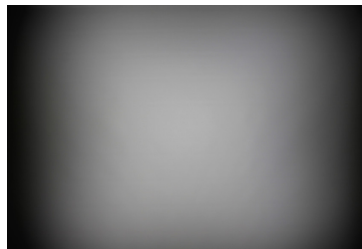
LED LUXEON V  
 FWHM 59.0°  
 Efficiency 93 %  
 Peak intensity 0.900 cd/lm  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

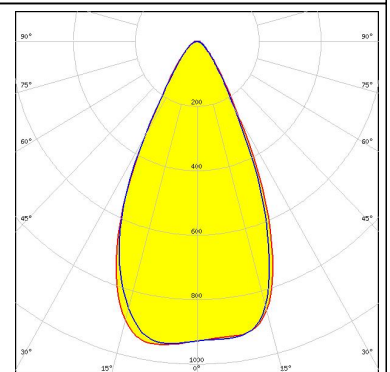
##### LUMILEDS

LED LUXEON XR-TX (L2T0-xyy012M)  
 FWHM 60.0°  
 Efficiency 94 %  
 Peak intensity 0.900 cd/lm  
 Required components:



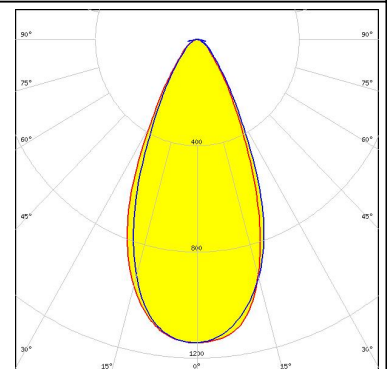
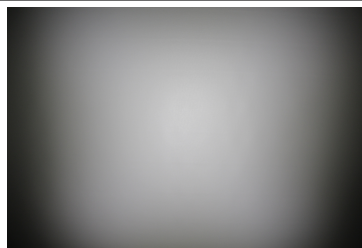
##### LUMILEDS

LED LUXEON Z ES  
 FWHM 52.0°  
 Efficiency 94 %  
 Peak intensity 1.000 cd/lm  
 Required components:



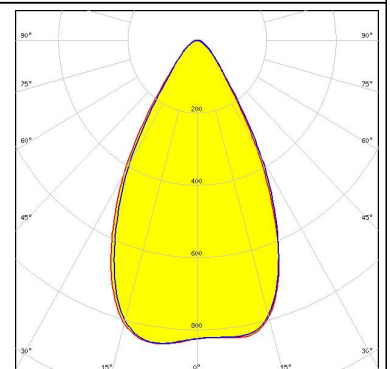
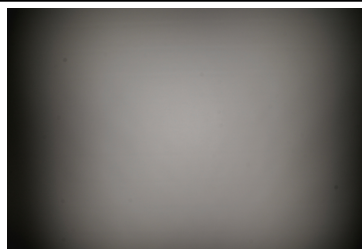
##### NICHIA

LED NVSxE21A  
 FWHM 51.0°  
 Efficiency 94 %  
 Peak intensity 1.140 cd/lm  
 Required components:



##### NICHIA

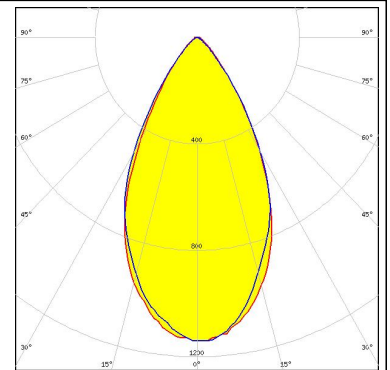
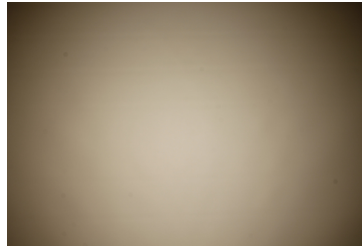
LED NVSxx19B/NVSxx19C  
 FWHM 58.0°  
 Efficiency 94 %  
 Peak intensity 0.870 cd/lm  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

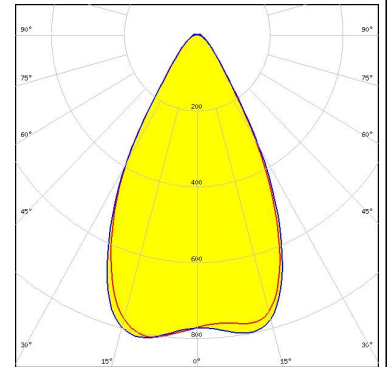
**OSRAM**  
Opto Semiconductors

LED Duris S8  
FWHM 54.0°  
Efficiency 94 %  
Peak intensity 1.000 cd/lm  
Required components:



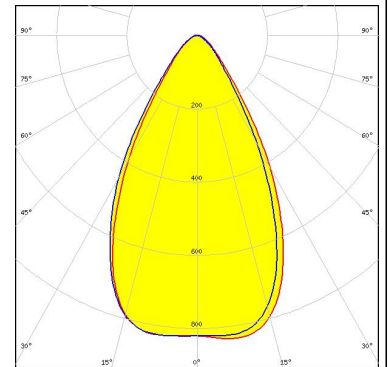
**PHILIPS**

LED Fortimo FastFlex LED board 2x6 DP G4  
FWHM 58.0°  
Efficiency 93 %  
Peak intensity 0.870 cd/lm  
Required components:



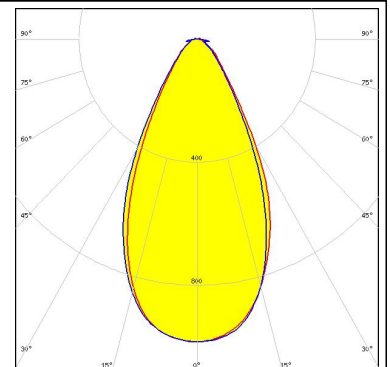
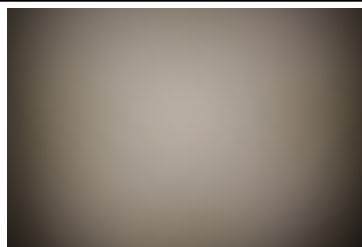
**PHILIPS**

LED Fortimo FastFlex LED board 2x6 DPX G4  
FWHM 59.0°  
Efficiency 94 %  
Peak intensity 0.840 cd/lm  
Required components:


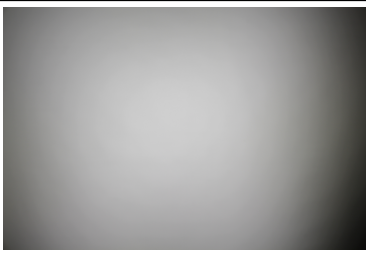
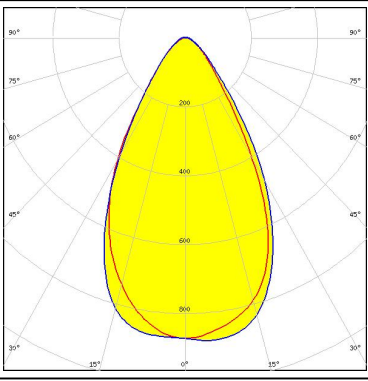

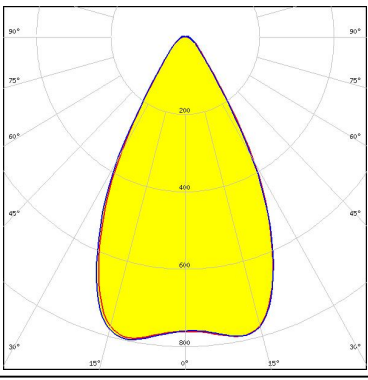


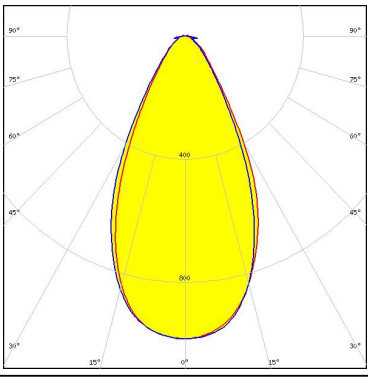


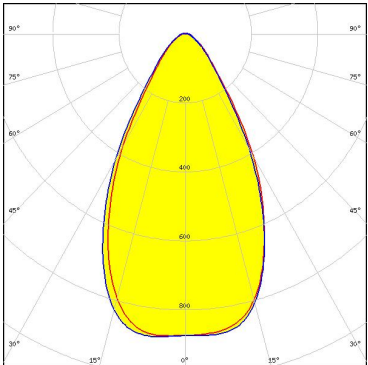


SEOUL SEMICONDUCTOR

LED SMJQ-D36W12Mx  
FWHM 53.0°  
Efficiency 93 %  
Peak intensity 0.980 cd/lm  
Required components:



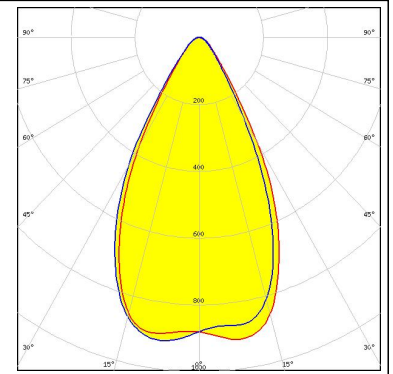
#### PHOTOMETRIC DATA (MEASURED):

|  |  |   |
|--|--|---|
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px<br/>FWHM 58.0°<br/>Efficiency 94 %<br/>Peak intensity 0.880 cd/lm<br/>Required components:</p> |    |    |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2<br/>FWHM 59.0°<br/>Efficiency 94 %<br/>Peak intensity 0.870 cd/lm<br/>Required components:</p>     |  |   |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22<br/>FWHM 53.0°<br/>Efficiency 93 %<br/>Peak intensity 0.980 cd/lm<br/>Required components:</p>       |  |  |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P<br/>FWHM 57.0°<br/>Efficiency 94 %<br/>Peak intensity 0.880 cd/lm<br/>Required components:</p>      |  |  |

#### PHOTOMETRIC DATA (MEASURED):

**TOSHIBA**  
Leading Innovation >>>

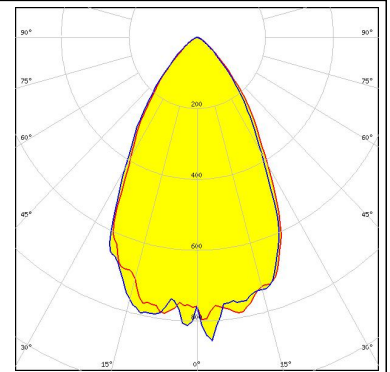
LED TL1L4  
FWHM 56.0°  
Efficiency 94 %  
Peak intensity 0.950 cd/lm  
Required components:



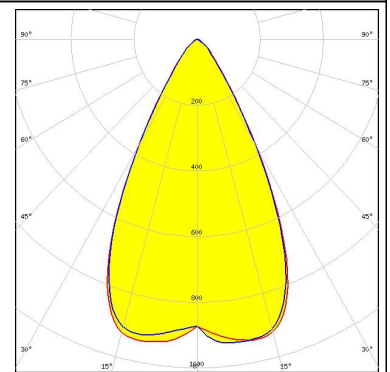
#### PHOTOMETRIC DATA (SIMULATED):



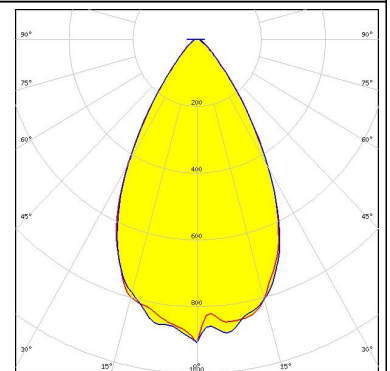
LED MHB-A/B  
FWHM 60.0°  
Efficiency 91 %  
Peak intensity 0.860 cd/lm  
Required components:



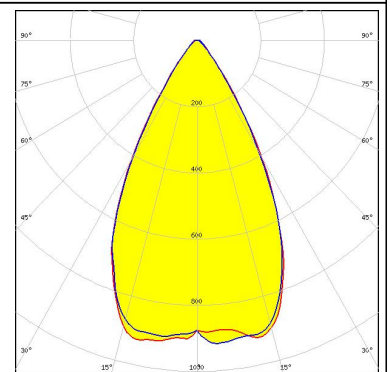
LED XB-D  
FWHM 52.0°  
Efficiency 90 %  
Peak intensity cd/lm  
Required components:



LED XHP35 HD  
FWHM 60.0°  
Efficiency 94 %  
Peak intensity 0.930 cd/lm  
Required components:



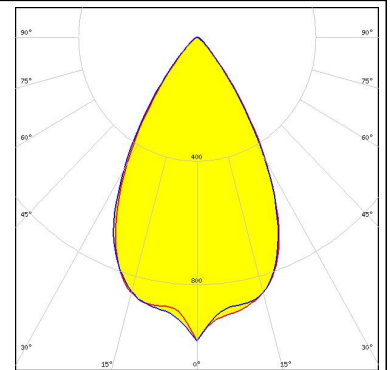
LED XHP35 HI  
FWHM 57.0°  
Efficiency 94 %  
Peak intensity 0.980 cd/lm  
Required components:



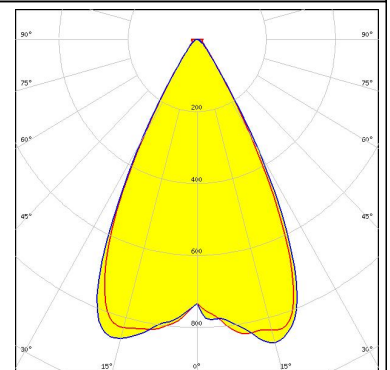
#### PHOTOMETRIC DATA (SIMULATED):



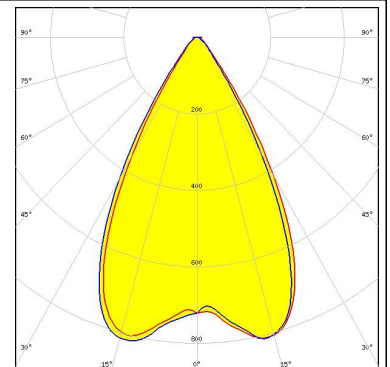
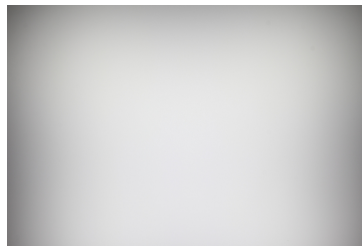
LED XM-L  
 FWHM 57.0°  
 Efficiency 93 %  
 Peak intensity cd/lm  
 Required components:



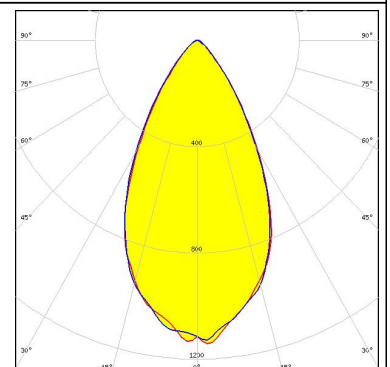
LED XP-E2  
 FWHM 56.0°  
 Efficiency 94 %  
 Peak intensity cd/lm  
 Required components:



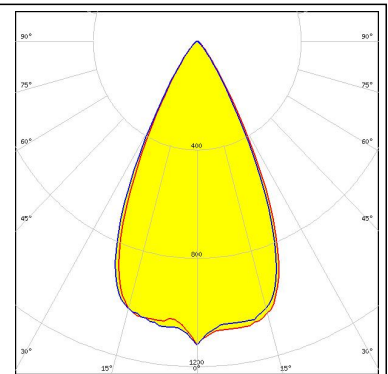
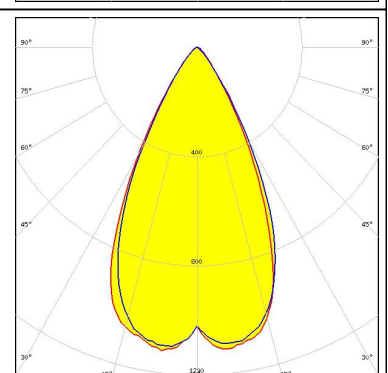
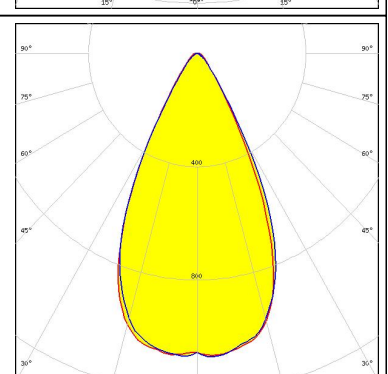
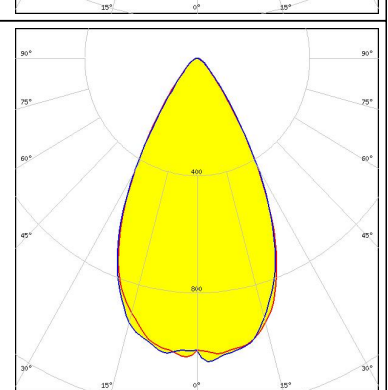
LED H35C1 (LEMWA33)  
 FWHM 59.0°  
 Efficiency 94 %  
 Peak intensity 0.960 cd/lm  
 Required components:



LED LUXEON 5050  
 FWHM 54.0°  
 Efficiency 95 %  
 Peak intensity 1.100 cd/lm  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

|   |   |
|---|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON Rebel</p> <p>FWHM 50.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity cd/lm</p> <p>Required components:</p>   |    |
| <p><b>NICHIA</b></p> <p>LED NF2x757A</p> <p>FWHM 50.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity cd/lm</p> <p>Required components:</p>   |   |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (2W version)</p> <p>FWHM 57.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.100 cd/lm</p> <p>Required components:</p> |  |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (3W version)</p> <p>FWHM 56.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.060 cd/lm</p> <p>Required components:</p> |  |

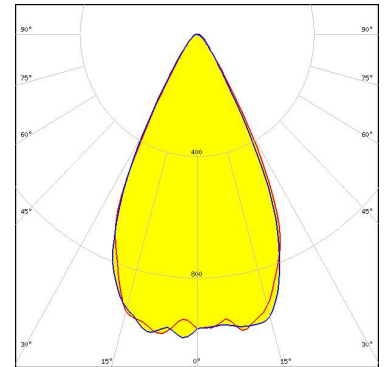
#### PHOTOMETRIC DATA (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED Oslon Square EC  
FWHM 56.0°  
Efficiency 93 %  
Peak intensity cd/lm  
Required components:

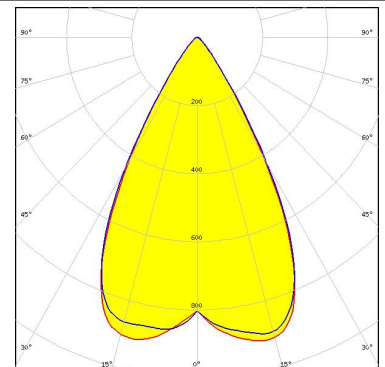
**OSRAM**  
Opto Semiconductors

LED Oslon Square Gen3  
FWHM 56.0°  
Efficiency 94 %  
Peak intensity cd/lm  
Required components:



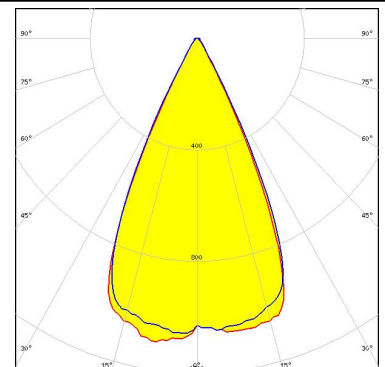
**OSRAM**  
Opto Semiconductors

LED Oslon Square PC  
FWHM 56.0°  
Efficiency 93 %  
Peak intensity cd/lm  
Required components:



**OSRAM**  
Opto Semiconductors

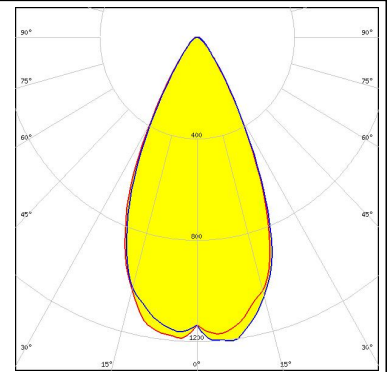
LED Oslon SSL 80  
FWHM 52.0°  
Efficiency 94 %  
Peak intensity 1.200 cd/lm  
Required components:



**PHOTOMETRIC DATA (SIMULATED):**

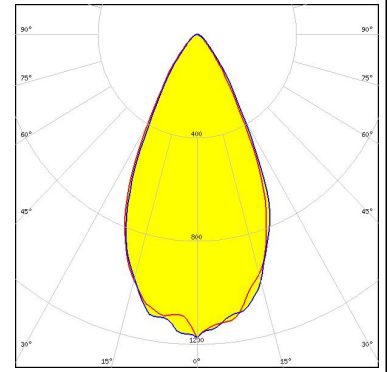
## SAMSUNG

LED LH181B  
FWHM 54.0°  
Efficiency 94 %  
Peak intensity 1.200 cd/lm  
Required components:



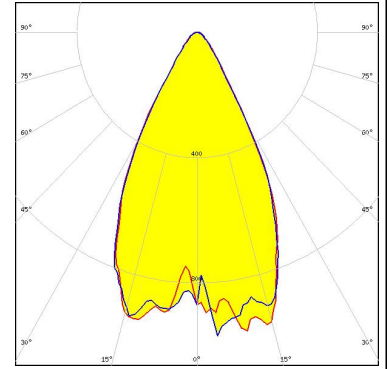
SEOUL SEMICONDUCTOR

LED Acrich MJT 4040  
FWHM 52.0°  
Efficiency 93 %  
Peak intensity 1.200 cd/lm  
Required components:



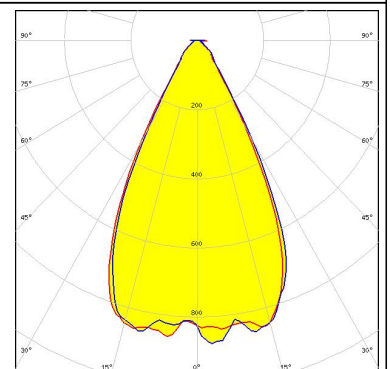
SEOUL SEMICONDUCTOR

LED Z5M  
FWHM 50.0°  
Efficiency 94 %  
Peak intensity 1.000 cd/lm  
Required components:



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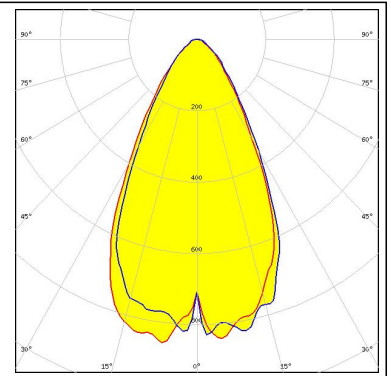
LED TL1L2  
FWHM 55.0°  
Efficiency 94 %  
Peak intensity 0.980 cd/lm  
Required components:



## PHOTOMETRIC DATA (SIMULATED):

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LED TL1L3  
FWHM 54.0°  
Efficiency 89 %  
Peak intensity cd/lm  
Required components:



### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

### PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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