

## HB-IP-2X6-O

~30° 115° oval beam

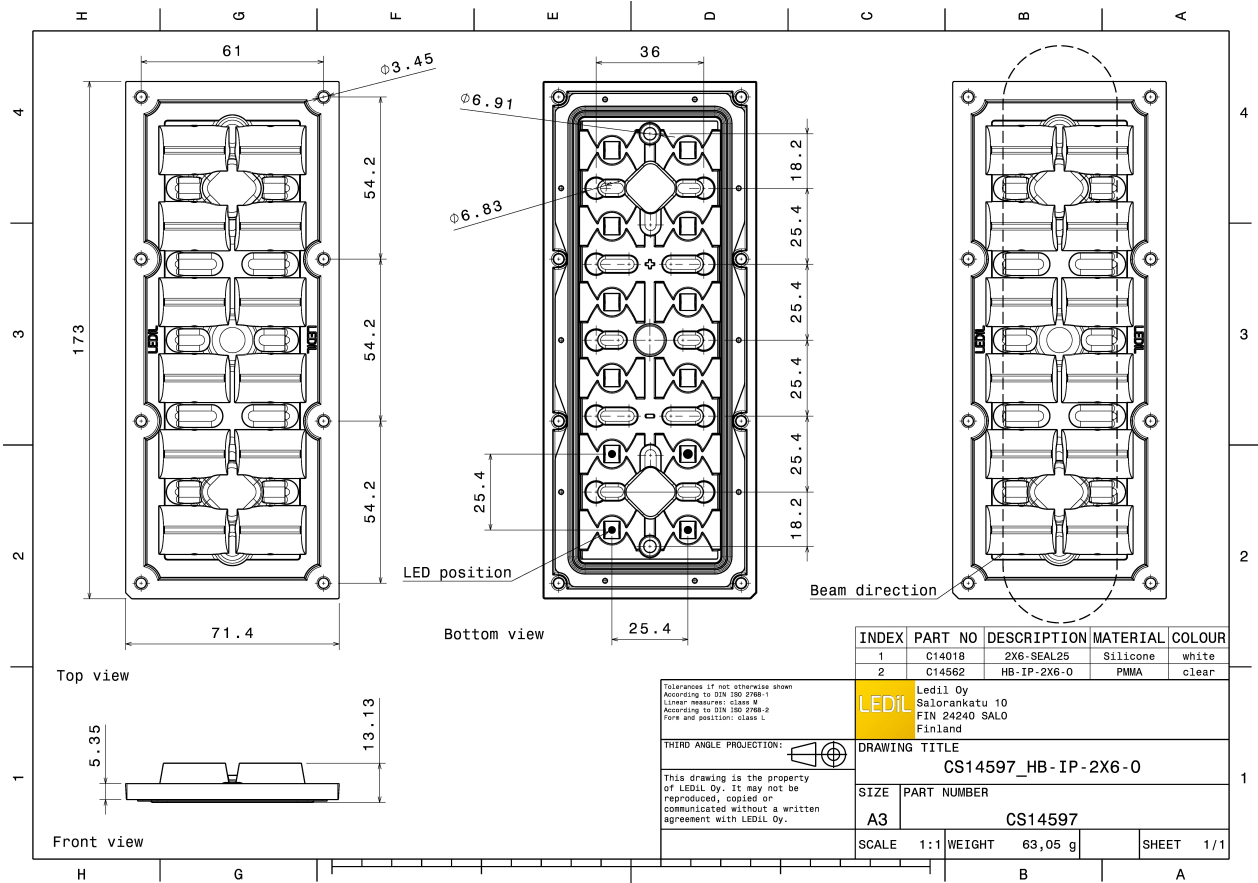
### TECHNICAL SPECIFICATIONS:

Dimensions	173x71.4 mm
Height	13.1 mm
Fastening	screw
Colour	clear
Box size	476 x 273 x 247 mm
Box weight	8 kg
Quantity in Box	108 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

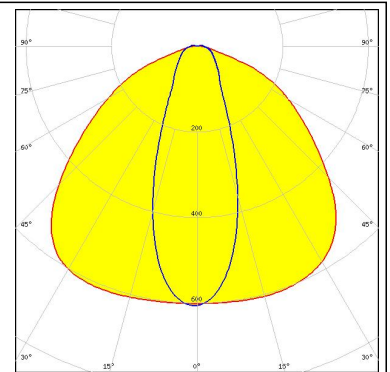
Component	Type	Material	Colour
HB-IP-2X6-O	Lens array	PMMA	clear
2X6-SEAL25	Seal	Silicone	white



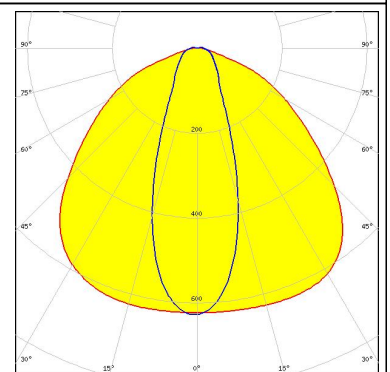
#### PHOTOMETRIC DATA (MEASURED):



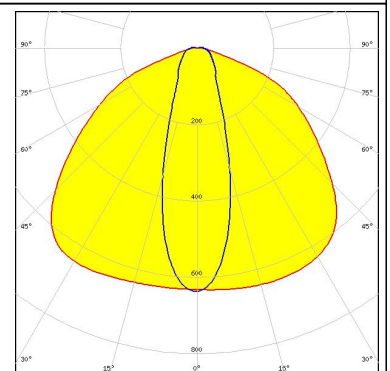
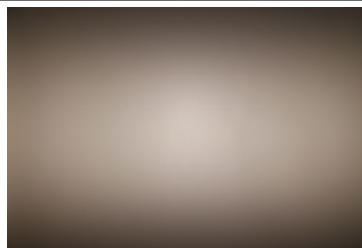
LED XM-L  
 FWHM 36.0 + 110.0°  
 Efficiency 91 %  
 Peak intensity 0.610 cd/lm  
 Required components:



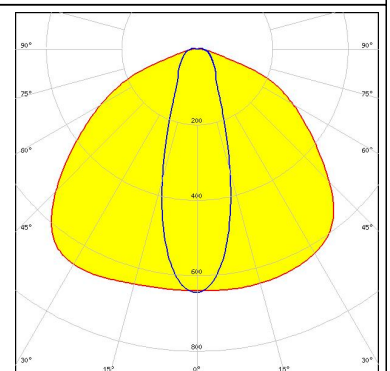
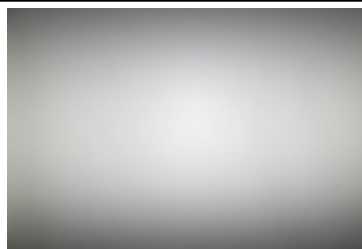
LED XM-L2  
 FWHM 36.0 + 108.0°  
 Efficiency 91 %  
 Peak intensity 0.630 cd/lm  
 Required components:



LED XP-G  
 FWHM 31.0 + 117.0°  
 Efficiency 91 %  
 Peak intensity 0.650 cd/lm  
 Required components:



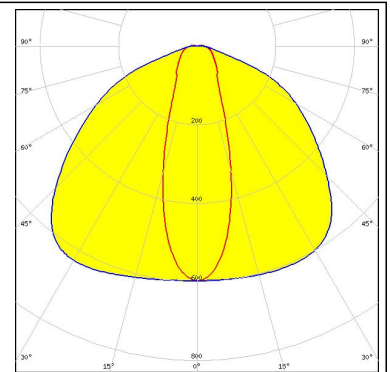
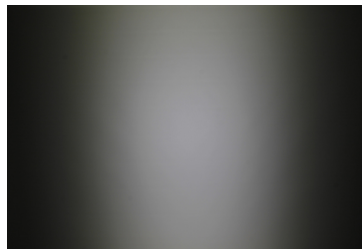
LED XP-G2  
 FWHM 32.0 + 116.0°  
 Efficiency 92 %  
 Peak intensity 0.660 cd/lm  
 Required components:



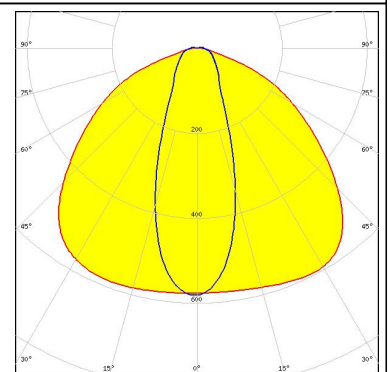
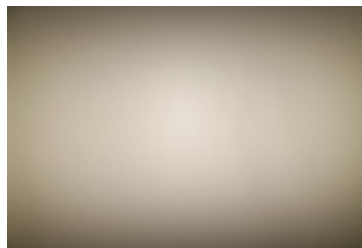
#### PHOTOMETRIC DATA (MEASURED):



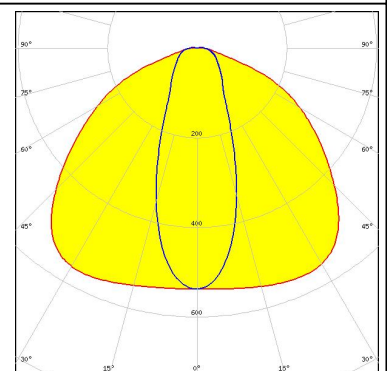
LED XP-G3  
 FWHM 33.0 + 119.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 Required components:



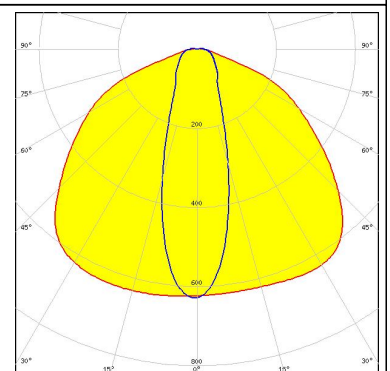
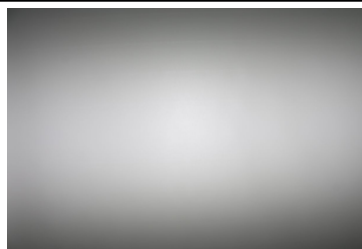
LED XP-L  
 FWHM 36.0 + 115.0°  
 Efficiency 91 %  
 Peak intensity 0.600 cd/lm  
 Required components:



LED XP-L2  
 FWHM 118.0 + 38.0°  
 Efficiency 92 %  
 Peak intensity 0.560 cd/lm  
 Required components:



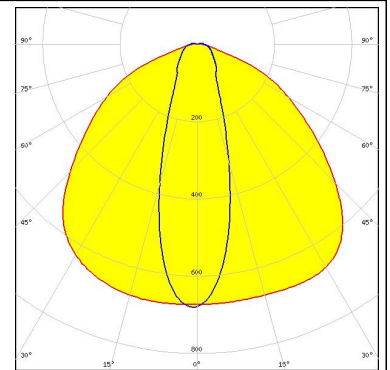
LED XT-E  
 FWHM 31.0 + 119.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

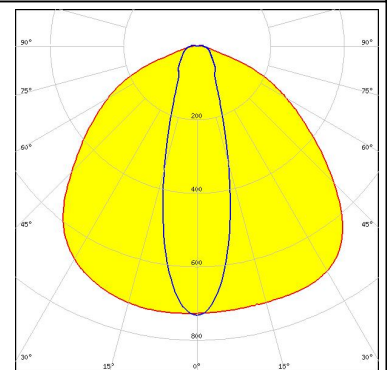
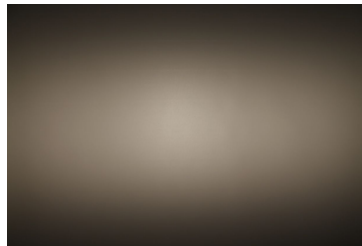
#### LUMILEDS

LED LUXEON R  
FWHM 30.0 + 109.0°  
Efficiency 91 %  
Peak intensity 0.680 cd/lm  
Required components:



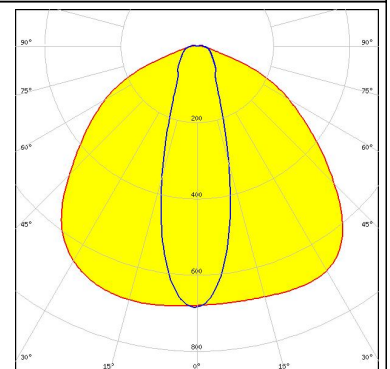
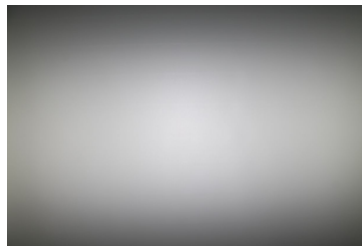
#### LUMILEDS

LED LUXEON Rebel  
FWHM 28.0 + 107.0°  
Efficiency 91 %  
Peak intensity 0.730 cd/lm  
Required components:



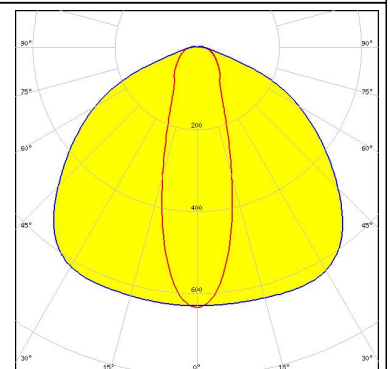
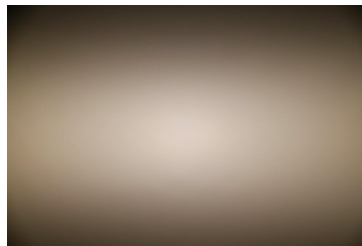
#### LUMILEDS

LED LUXEON Rebel ES  
FWHM 30.0 + 110.0°  
Efficiency 91 %  
Peak intensity 0.690 cd/lm  
Required components:



#### LUMILEDS

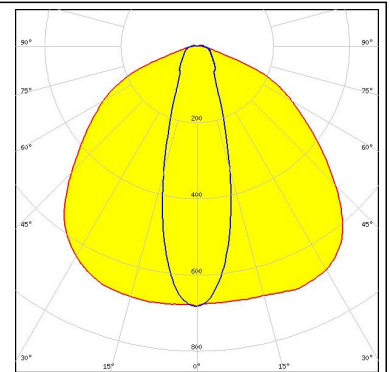
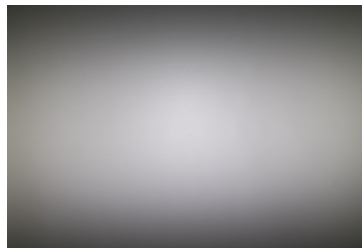
LED LUXEON T  
FWHM 32.0 + 115.0°  
Efficiency 91 %  
Peak intensity 0.630 cd/lm  
Required components:



#### PHOTOMETRIC DATA (MEASURED):

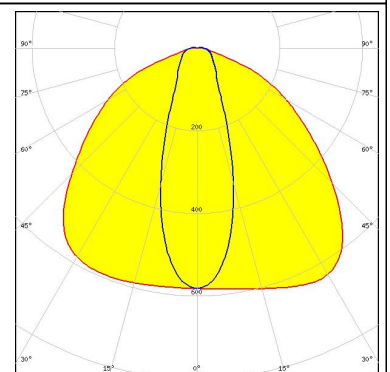
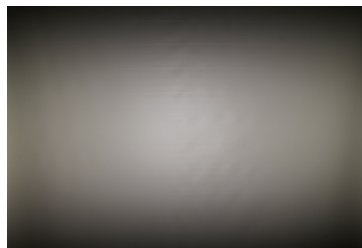
##### LUMILEDS

LED LUXEON TX  
 FWHM 30.0 + 111.0°  
 Efficiency 90 %  
 Peak intensity 0.690 cd/lm  
 Required components:



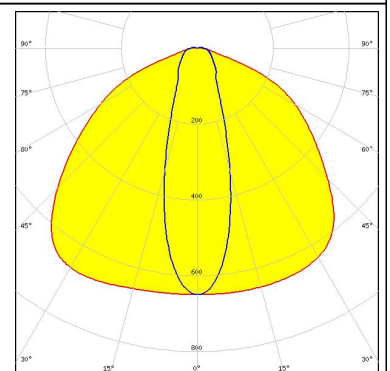
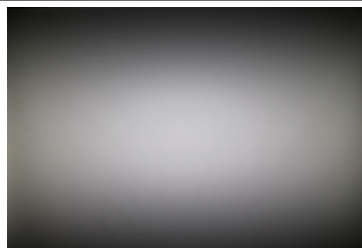
##### LUMILEDS

LED LUXEON V  
 FWHM 112.0 + 34.0°  
 Efficiency 87 %  
 Peak intensity 0.600 cd/lm  
 Required components:



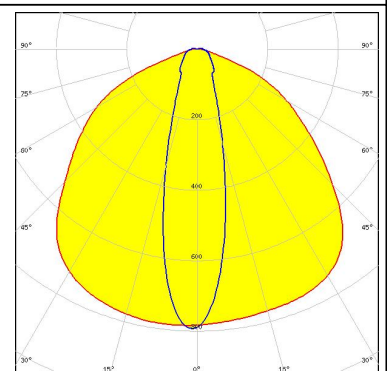
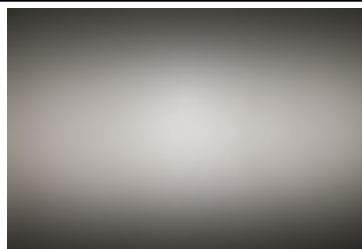
##### LUMILEDS

LED LUXEON XR-TX (L2T0-xxyy012M)  
 FWHM 30.0 + 115.0°  
 Efficiency 91 %  
 Peak intensity 0.670 cd/lm  
 Required components:

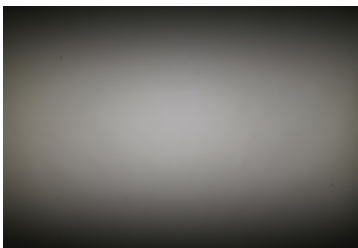


##### LUMILEDS

LED LUXEON Z ES  
 FWHM 25.0 + 108.0°  
 Efficiency 90 %  
 Peak intensity 0.790 cd/lm  
 Required components:



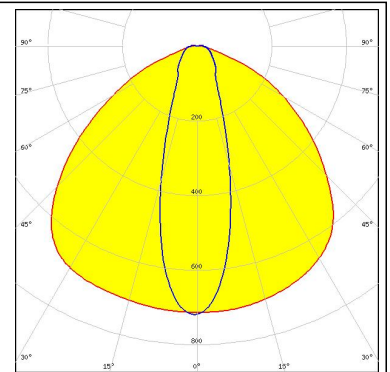
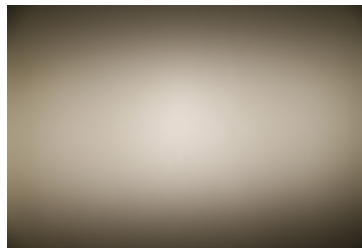
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NVSxE21A            FWHM 26.0 + 116.0°            Efficiency 91 %            Peak intensity 0.700 cd/lm            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM 114.0 + 32.0°            Efficiency 91 %            Peak intensity 0.670 cd/lm            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM 31.0 + 116.0°            Efficiency 90 %            Peak intensity 0.630 cd/lm            Required components:</p>		
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris S8            FWHM 111.0 + 38.0°            Efficiency 92 %            Peak intensity 0.920 cd/lm            Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

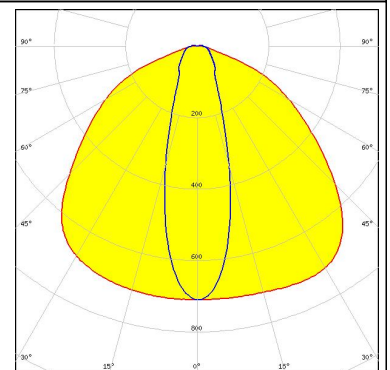
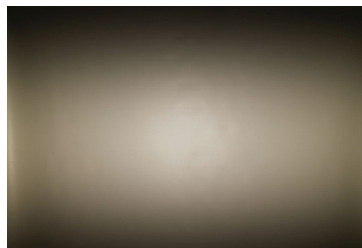
**OSRAM**  
Opto Semiconductors

LED Oslon Square EC  
FWHM 30.0 + 108.0°  
Efficiency 91 %  
Peak intensity 0.720 cd/lm  
Required components:



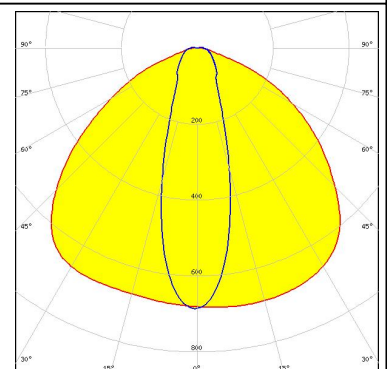
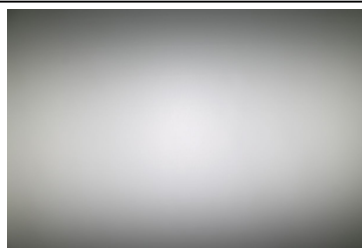
**OSRAM**  
Opto Semiconductors

LED Oslon Square Gen3  
FWHM 110.0 + 29.0°  
Efficiency 92 %  
Peak intensity 0.720 cd/lm  
Required components:



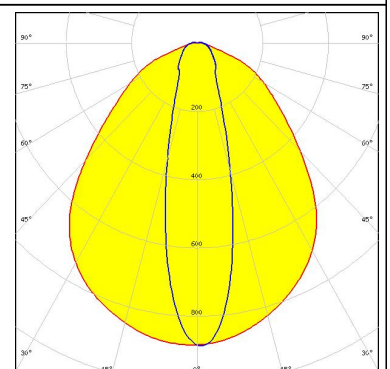
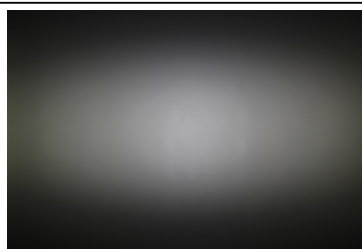
**OSRAM**  
Opto Semiconductors

LED Oslon Square PC  
FWHM 30.0 + 111.0°  
Efficiency 92 %  
Peak intensity 0.690 cd/lm  
Required components:



**OSRAM**  
Opto Semiconductors

LED Oslon SSL 80  
FWHM 26.0 + 92.0°  
Efficiency 93 %  
Peak intensity 0.890 cd/lm  
Required components:

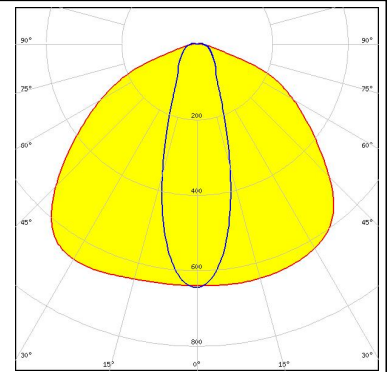




#### PHOTOMETRIC DATA (MEASURED):

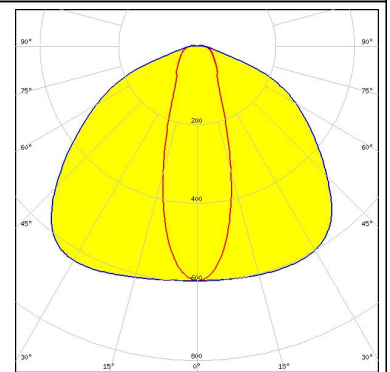
#### PHILIPS

LED Fortimo FastFlex LED board 2x6 DP G4  
 FWHM 32.0 + 116.0°  
 Efficiency 92 %  
 Peak intensity 0.660 cd/lm  
 Required components:



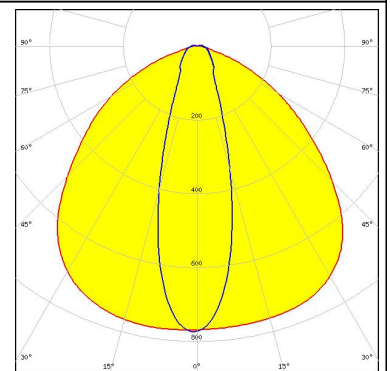
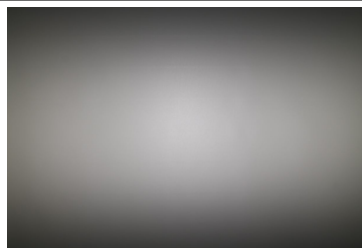
#### PHILIPS

LED Fortimo FastFlex LED board 2x6 DPX G4  
 FWHM 33.0 + 119.0°  
 Efficiency 92 %  
 Peak intensity 0.630 cd/lm  
 Required components:

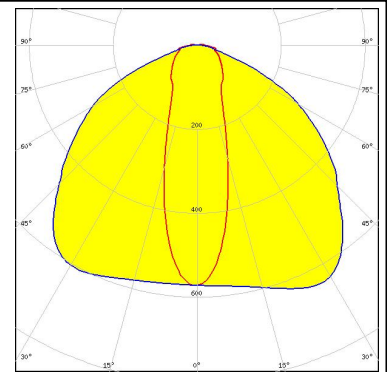
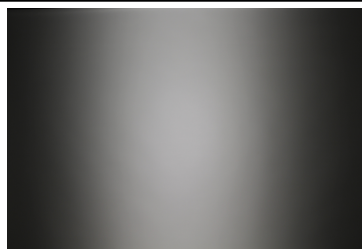


#### SAMSUNG

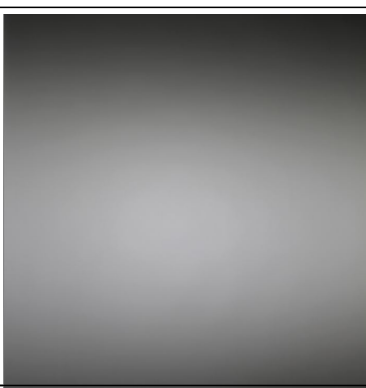
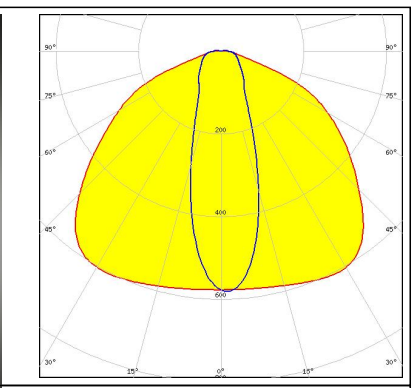
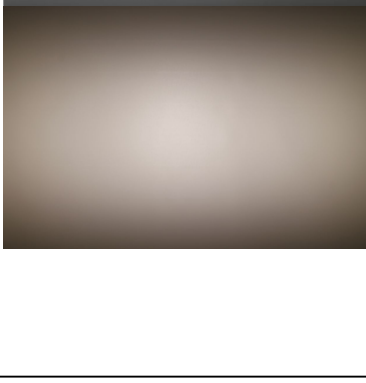
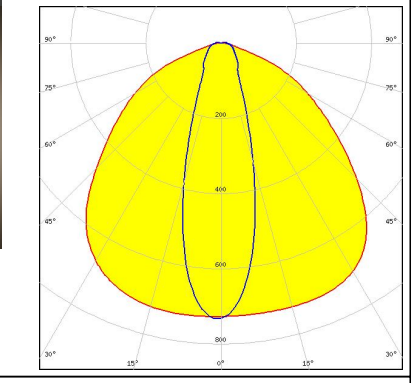
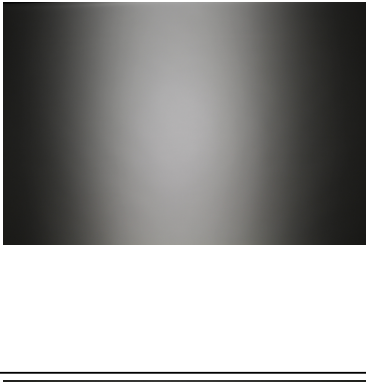
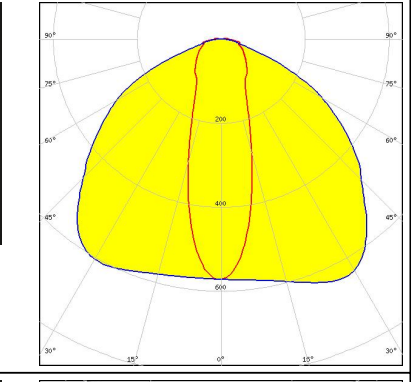

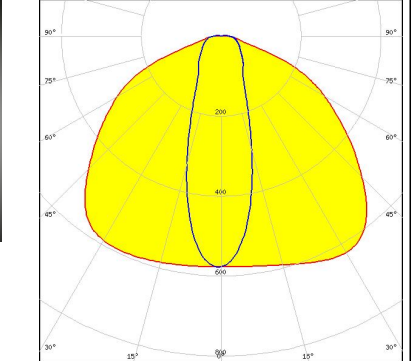
LED LH351Z  
 FWHM 29.0 + 104.0°  
 Efficiency 91 %  
 Peak intensity 0.770 cd/lm  
 Required components:



LED SMJQ-D36W12Mx  
 FWHM 30.0 + 119.0°  
 Efficiency 91 %  
 Peak intensity 0.640 cd/lm  
 Required components:



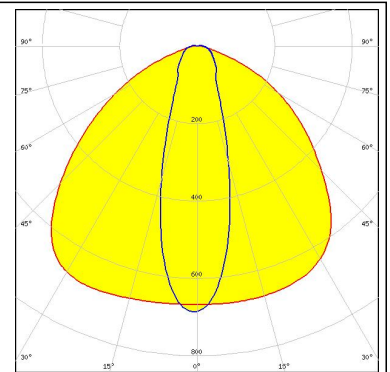
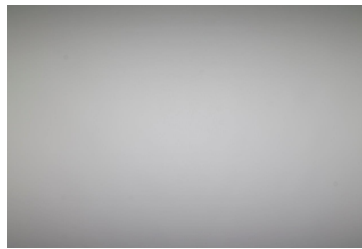
#### PHOTOMETRIC DATA (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px FWHM 121.0 + 32.0° Efficiency 92 % Peak intensity 0.610 cd/lm Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2 FWHM 29.0 + 105.0° Efficiency 90 % Peak intensity 0.730 cd/lm Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22 FWHM 30.0 + 119.0° Efficiency 91 % Peak intensity 0.640 cd/lm Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM 122.0 + 32.0° Efficiency 92 % Peak intensity 0.630 cd/lm Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

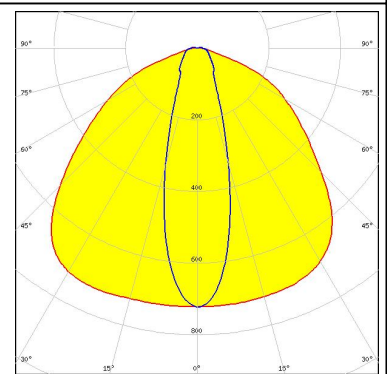
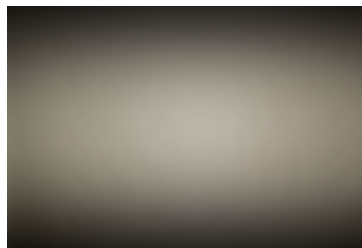
##### **TOSHIBA** Leading Innovation >>>

LED TL1L4  
FWHM 29.0 + 107.0°  
Efficiency 87 %  
Peak intensity 0.690 cd/lm  
Required components:



##### **TRIDONIC**

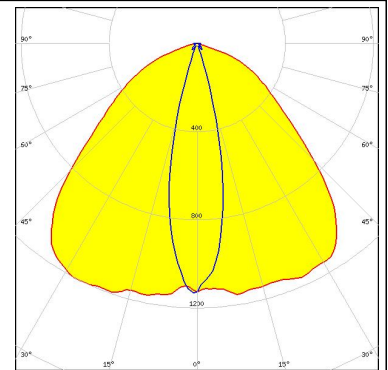
LED RLE G2 HP 2x6 3000lm  
FWHM 108.0 + 29.0°  
Efficiency 92 %  
Peak intensity 0.730 cd/lm  
Required components:



#### PHOTOMETRIC DATA (SIMULATED):

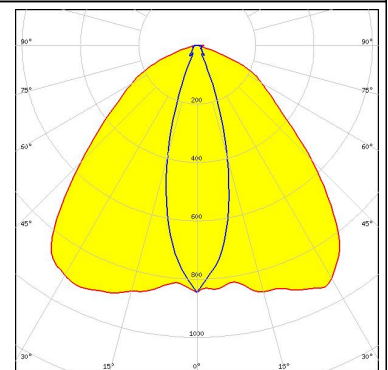
##### LG Innotek

LED H35C1 (LEMWA33)  
FWHM 24.0 + 99.0°  
Efficiency 94 %  
Peak intensity 1.200 cd/lm  
Required components:



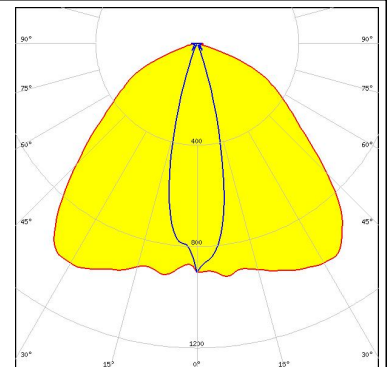
##### LUMILEDS

LED LUXEON 5050  
FWHM 34.0 + 96.0°  
Efficiency 93 %  
Peak intensity 0.940 cd/lm  
Required components:



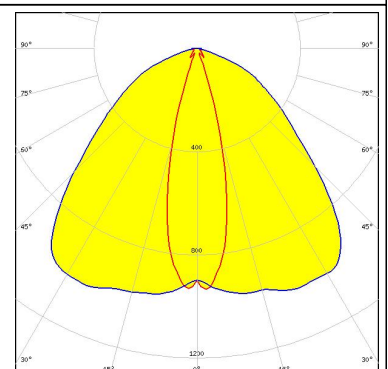
##### NICHIA

LED NVSW3x9A  
FWHM 103.0 + 25.0°  
Efficiency 91 %  
Peak intensity 1.000 cd/lm  
Required components:



##### OSRAM Opto Semiconductors

LED OSCONIQ P 3737 (3W version)  
FWHM 27.0 + 100.0°  
Efficiency 94 %  
Peak intensity 1.020 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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#### LEDiL Oy

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#### Local sales and technical support

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Salo, Finland  
Hong Kong, China

#### Distribution Partners

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