

## HB-IP-2X6-M

~25° medium beam

### TECHNICAL SPECIFICATIONS:

Dimensions	173.0 x 71.4 mm
Height	11.4 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

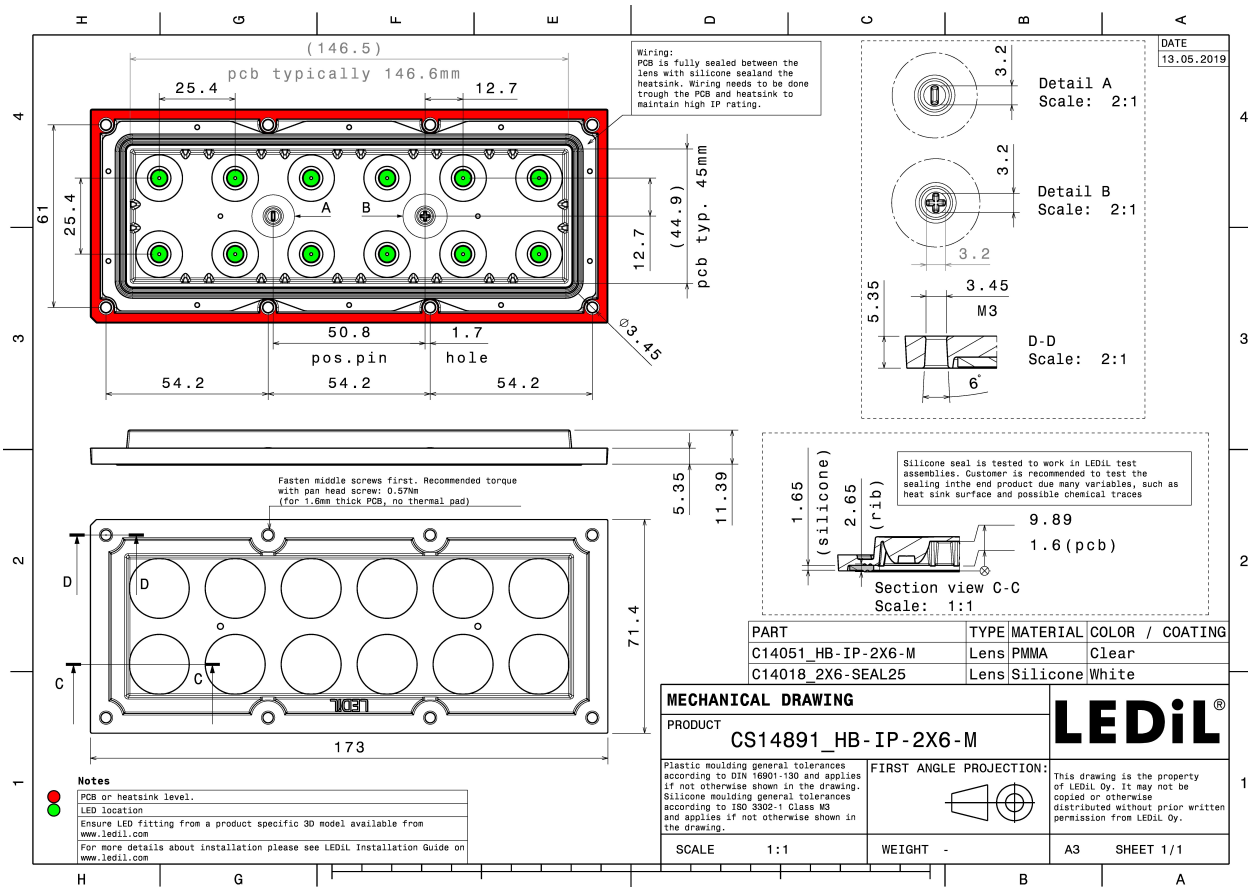


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
HB-IP-2X6-M	Multi-lens	PMMA	clear	
2X6-SEAL25	Seal	Silicone	white	

### ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14891_HB-IP-2X6-M	Multi-lens	120	40	40	8.1
» Box size: 476 x 273 x 247 mm					

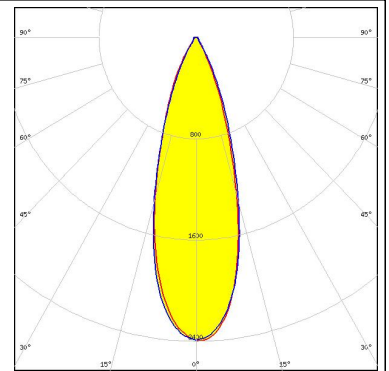
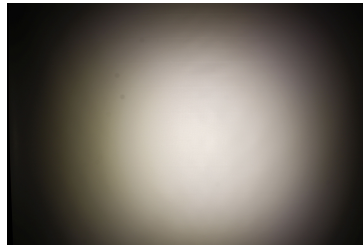


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

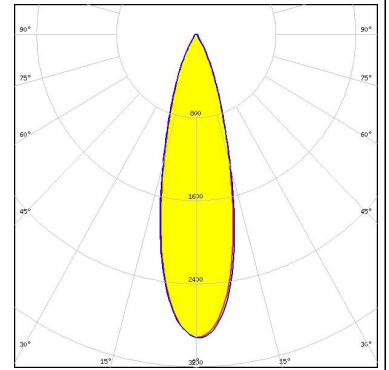
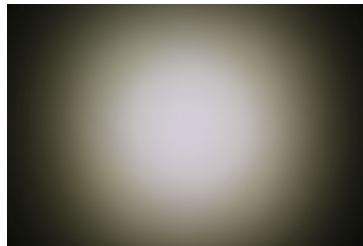
### PHOTOMETRIC DATA (MEASURED):



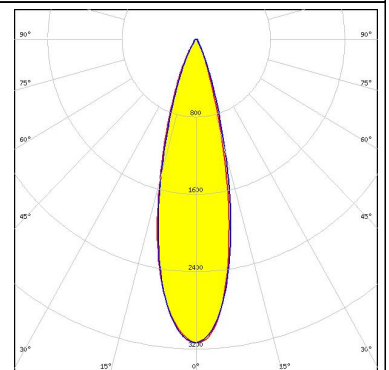
LED QUICK FLUX 2x6 LED XG xxx G7+  
 FWHM 32.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



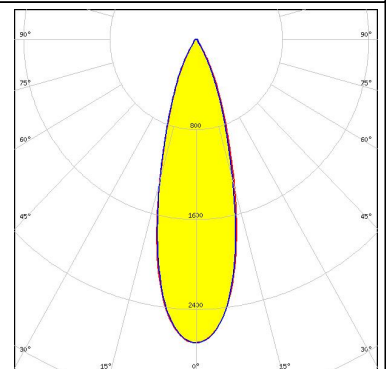
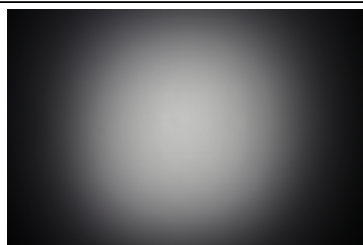
LED QUICK FLUX 2x6 LED XT xxx G5  
 FWHM 28.0°  
 Efficiency 94 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XM-L  
 FWHM 27.0°  
 Efficiency 94 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



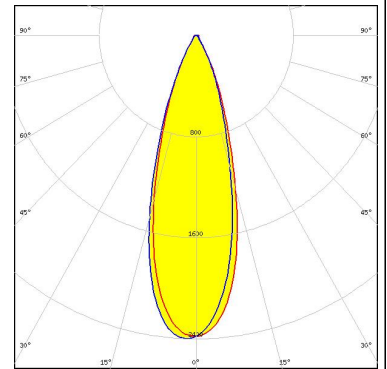
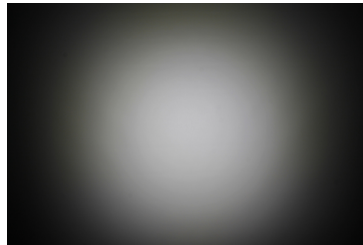
LED XP-G2  
 FWHM 30.0°  
 Efficiency 94 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



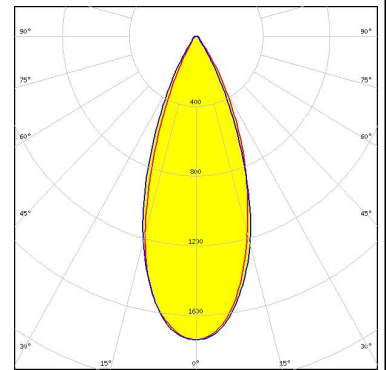
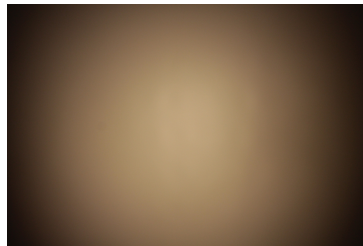
#### PHOTOMETRIC DATA (MEASURED):



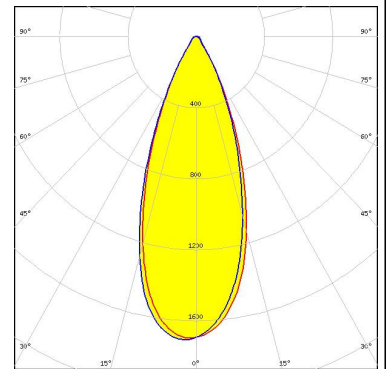
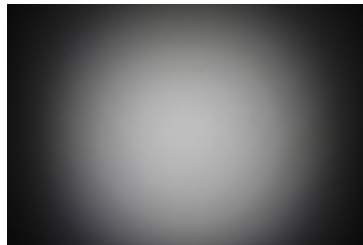
LED XP-G3  
FWHM 32.0°  
Efficiency 94 %  
Peak intensity 2.4 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



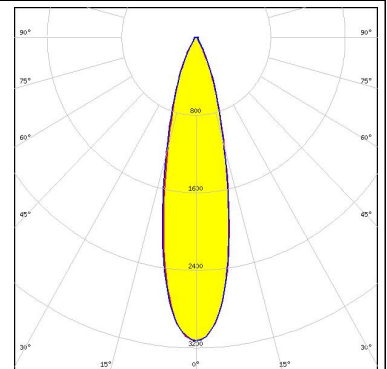
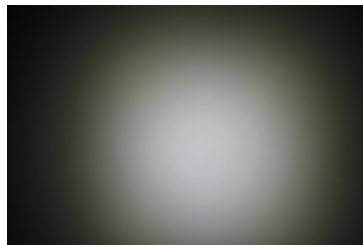
LED XP-L HD  
FWHM 39.0°  
Efficiency 94 %  
Peak intensity 1.7 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



LED XP-L2  
FWHM 39.0°  
Efficiency 94 %  
Peak intensity 1.7 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



LED XT-E  
FWHM 25.0°  
Efficiency 92 %  
Peak intensity 3.1 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:

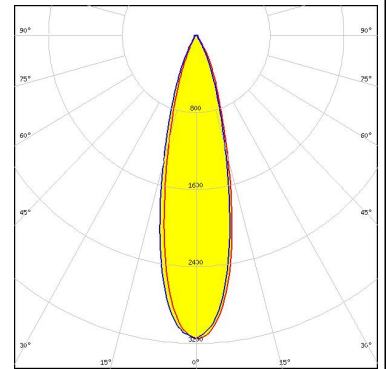
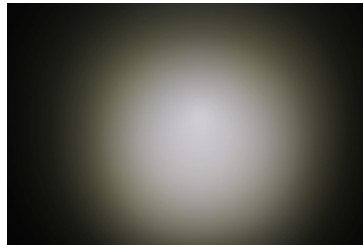




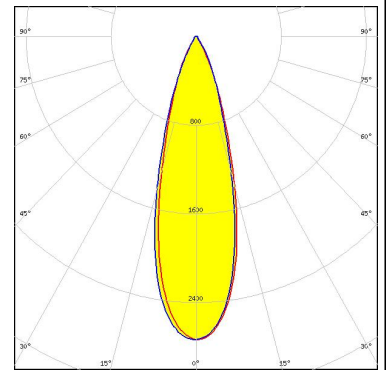
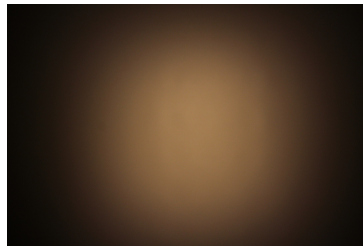
#### PHOTOMETRIC DATA (MEASURED):



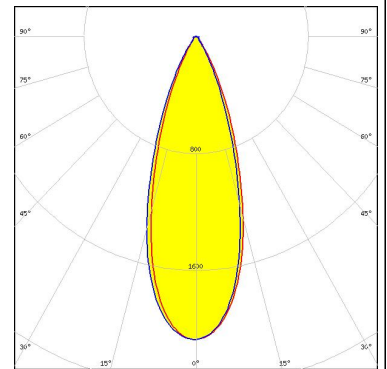
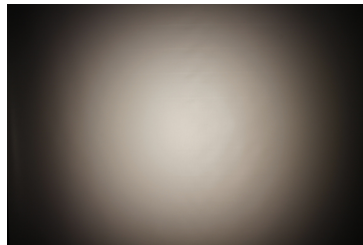
LED XT-E HE  
FWHM 26.0°  
Efficiency 94 %  
Peak intensity 3.2 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



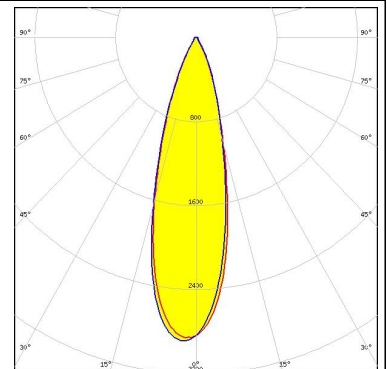
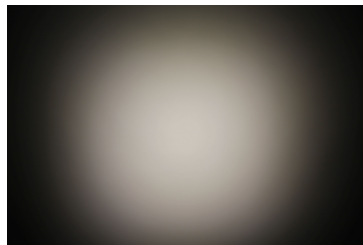
LED LUXEON T  
FWHM 29.0°  
Efficiency 94 %  
Peak intensity 2.7 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



LED LUXEON V  
FWHM 35.0°  
Efficiency 93 %  
Peak intensity 2.1 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



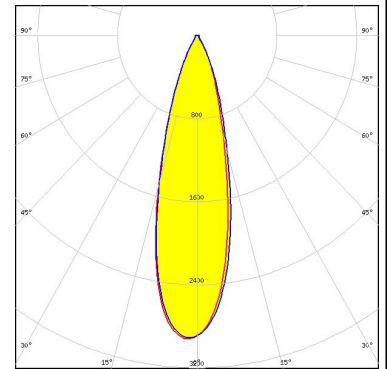
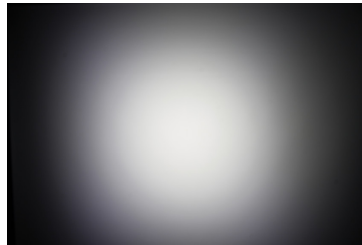
LED LUXEON V2  
FWHM 28.0°  
Efficiency 94 %  
Peak intensity 2.9 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



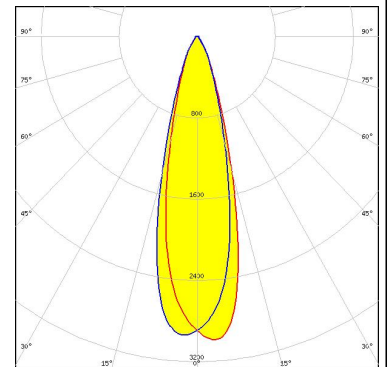
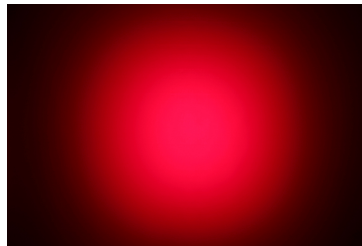
#### PHOTOMETRIC DATA (MEASURED):



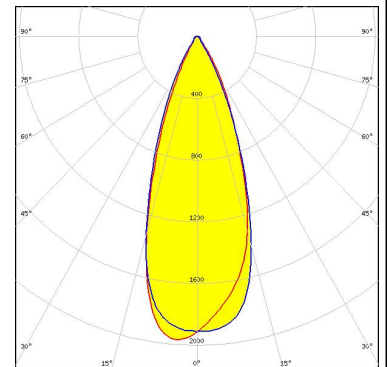
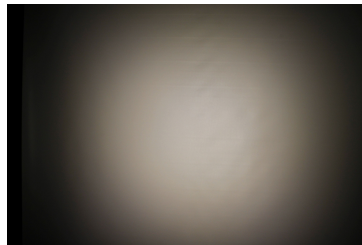
LED LUXEON XR-TX (L2T0-xyy012M)  
 FWHM 28.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



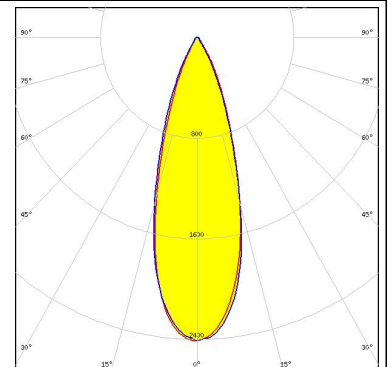
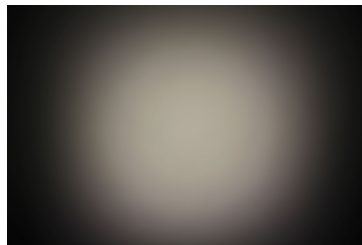
LED SST-10-B130  
 FWHM 27.0°  
 Efficiency 95 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour Deep Red  
 Required components:



LED NVSW219D  
 FWHM 38.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



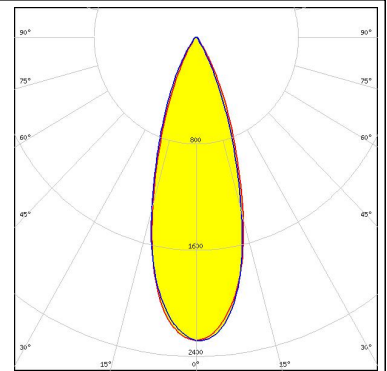
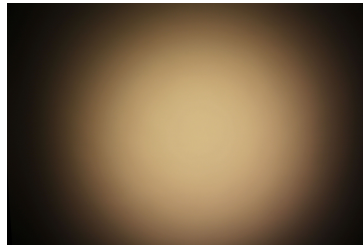
LED NVSW219F  
 FWHM 33.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



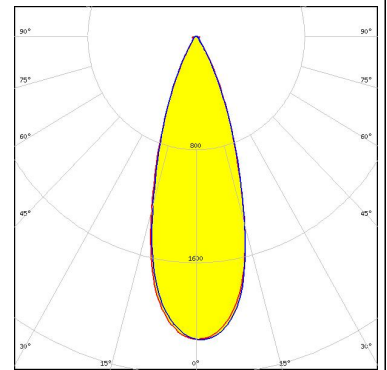
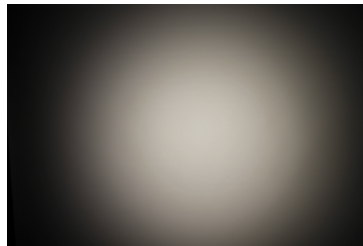
### PHOTOMETRIC DATA (MEASURED):



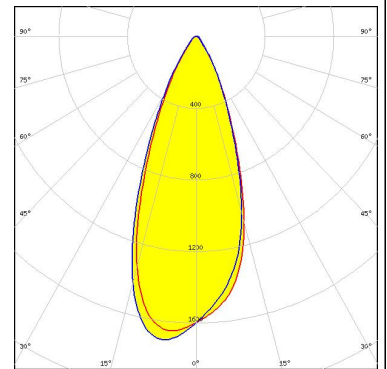
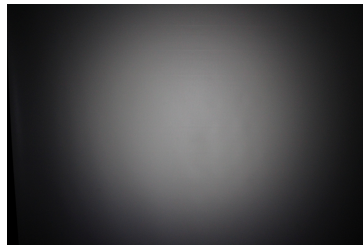
LED NVSW319B  
FWHM 34.0°  
Efficiency 94 %  
Peak intensity 2.3 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



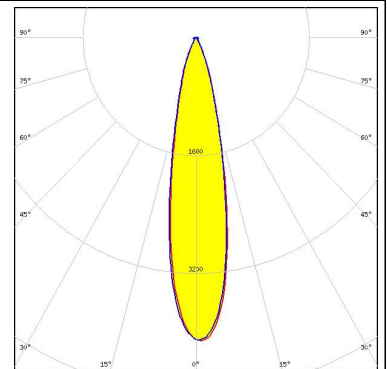
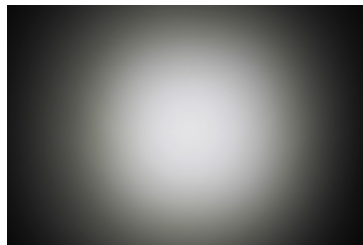
LED NVSW3x9A  
FWHM 34.0°  
Efficiency 94 %  
Peak intensity 2.1 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



LED NVSW519A  
FWHM 40.0°  
Efficiency 95 %  
Peak intensity 1.7 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



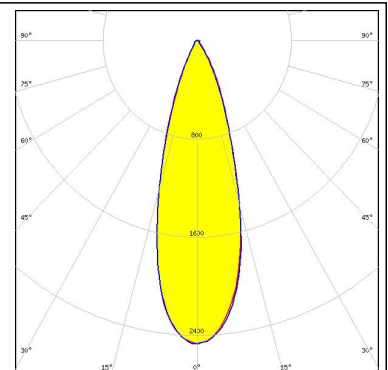
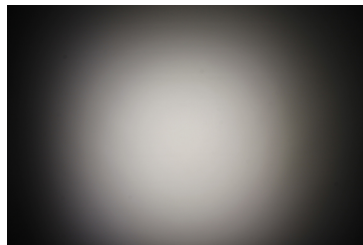
LED NVSxE21A  
FWHM 24.0°  
Efficiency 92 %  
Peak intensity 4.1 cd/Im  
LEDs/each optic 1  
Light colour White  
Required components:



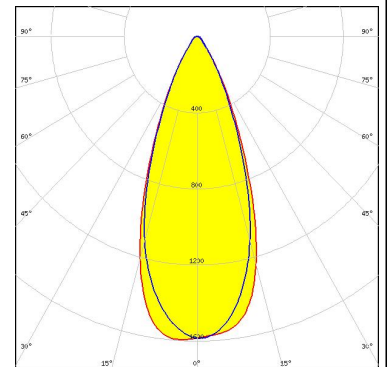
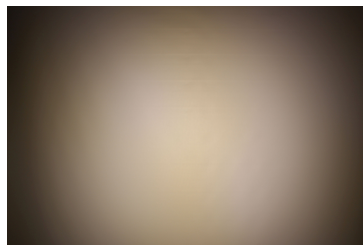
#### PHOTOMETRIC DATA (MEASURED):



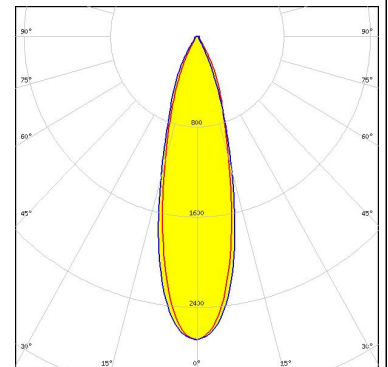
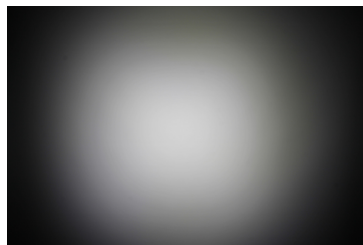
LED NVSxx19B/NVSxx19C  
 FWHM 31.0°  
 Efficiency 93 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



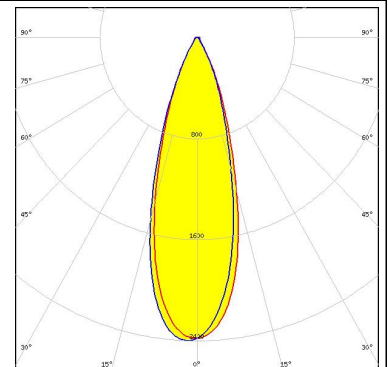
LED Duris S8  
 FWHM 41.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSLOM Square PC  
 FWHM 29.0°  
 Efficiency 93 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED Fortimo FastFlex LED 2x6 DPX G4  
 FWHM 32.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

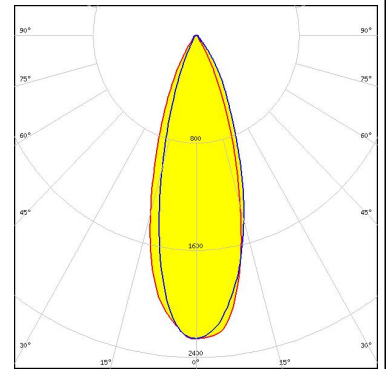




### PHOTOMETRIC DATA (MEASURED):

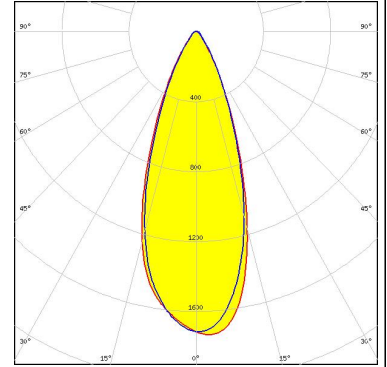
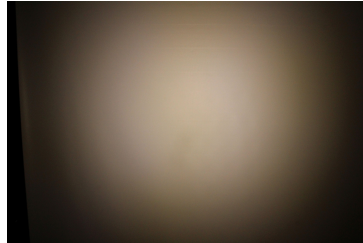
#### SAMSUNG

LED HiLOM RH12 (LH351C)  
 FWHM 33.0°  
 Efficiency 94 %  
 Peak intensity 2.3 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:



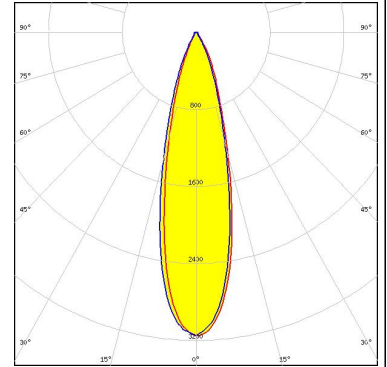
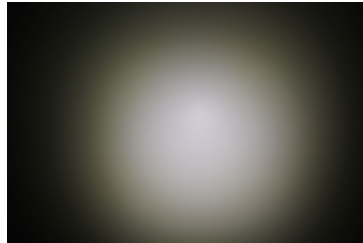
#### SAMSUNG

LED HiLOM RM12 ZP (LH502C)  
 FWHM 38.0°  
 Efficiency 96 %  
 Peak intensity 1.7 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:



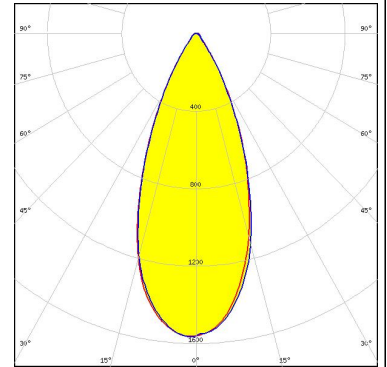
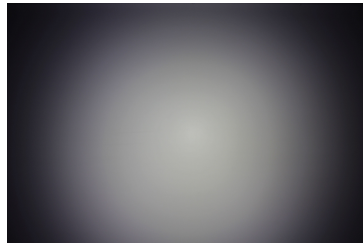
#### SCIOLUX

LED XLE-S22C4XTEHE (XT-E HE)  
 FWHM 26.0°  
 Efficiency 94 %  
 Peak intensity 3.2 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:





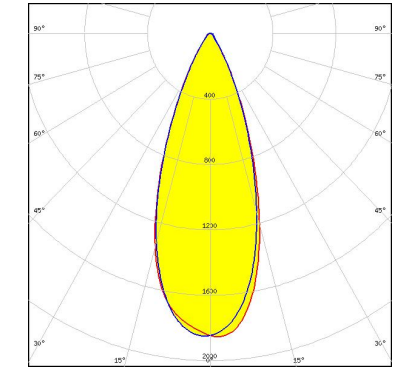


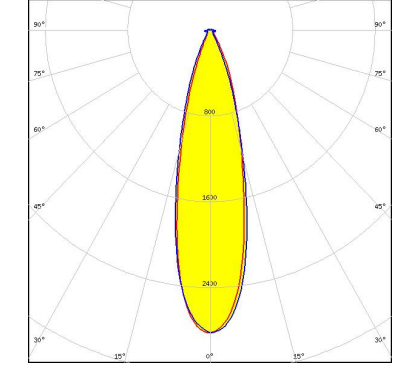

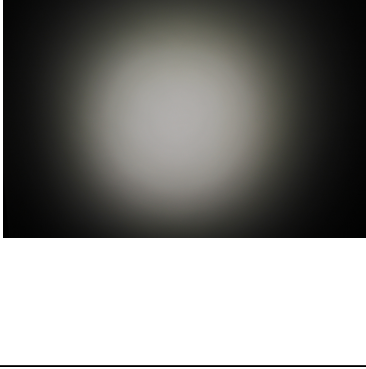
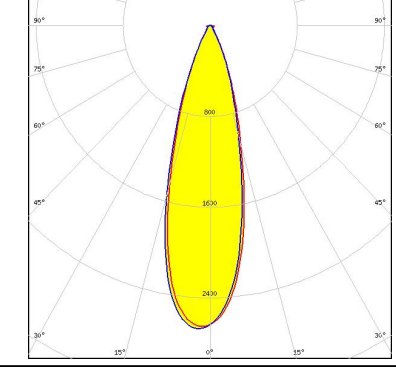


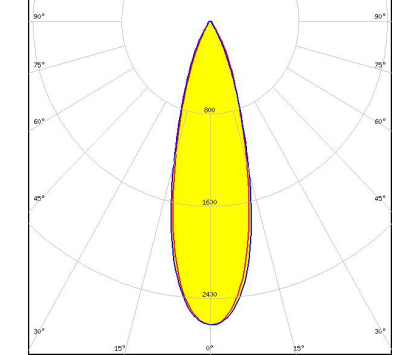
#### SCIOLUX

LED XLE-S26XHP35 (XHP35 HD)  
 FWHM 42.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/Im  
 LEDs/each optic 1  
 Light colour White  
 Required components:


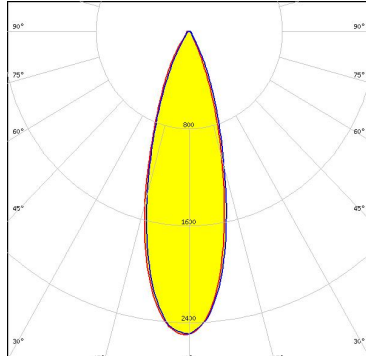
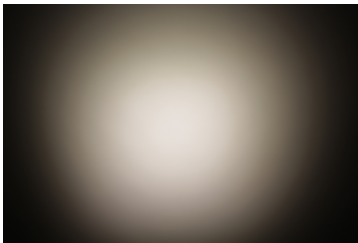
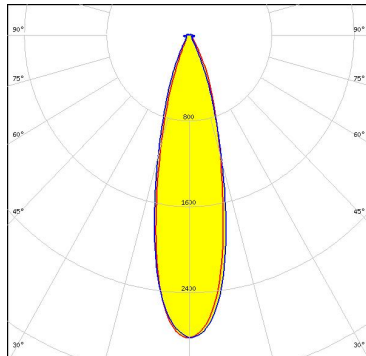
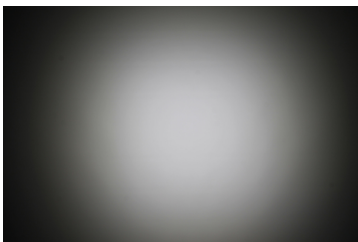
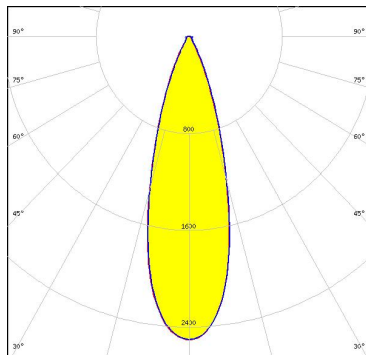
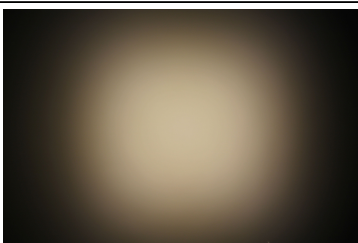
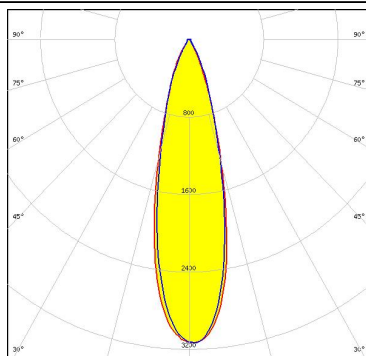




#### PHOTOMETRIC DATA (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED 2x6 5050 module - SMJD-3625012F-XX</p> <p>FWHM 38.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.9 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Mx</p> <p>FWHM 26.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px</p> <p>FWHM 29.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.7 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2</p> <p>FWHM 30.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.6 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

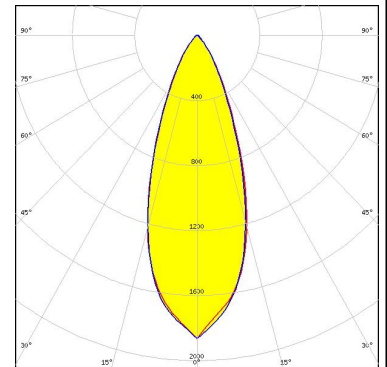
#### PHOTOMETRIC DATA (MEASURED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z5M3</p> <p>FWHM 30.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.5 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z8Y22</p> <p>FWHM 26.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z8Y22P</p> <p>FWHM 30.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.5 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>TRIDONIC</b></p> <p>LED RLE 2x6 3000lm HP EXC2 OTD</p> <p>FWHM 26.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/Im</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

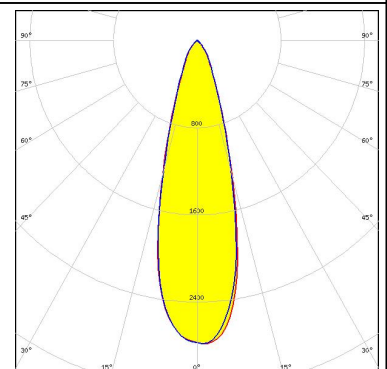
#### PHOTOMETRIC DATA (SIMULATED):



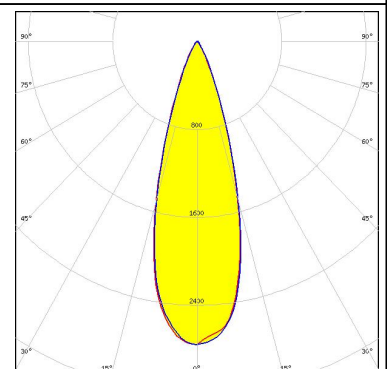
LED Bridgelux SMD 5050  
 FWHM 37.0°  
 Efficiency 94 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



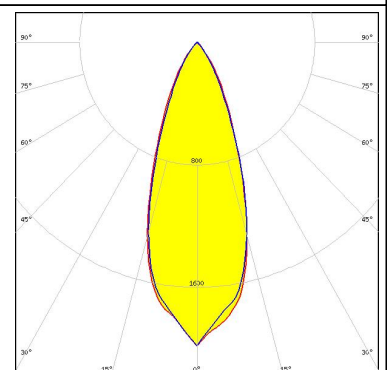
LED XP-E  
 FWHM 28.0°  
 Efficiency 94 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-G2 HE  
 FWHM 31.0°  
 Efficiency 95 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 5050 Round LES  
 FWHM 37.0°  
 Efficiency 93 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



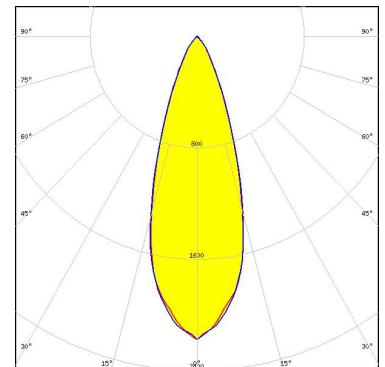
#### PHOTOMETRIC DATA (SIMULATED):



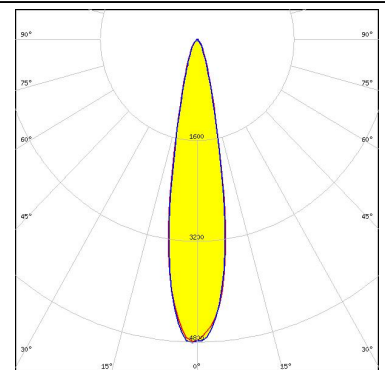
LED LUXEON 5050 Square LES  
 FWHM 34.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



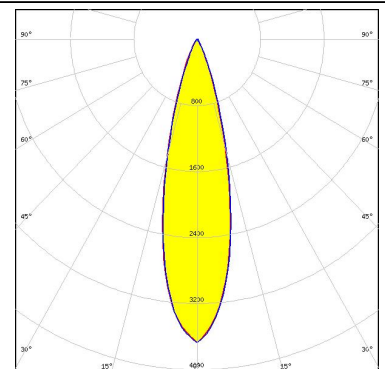
LED NV4WB35AM  
 FWHM 34.0°  
 Efficiency 95 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ P 3030  
 FWHM 20.0°  
 Efficiency 96 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ P 3737 (3W version)  
 FWHM 26.0°  
 Efficiency 94 %  
 Peak intensity 3.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

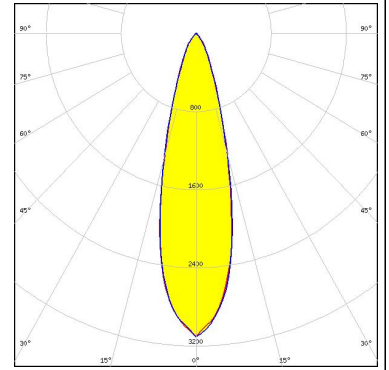


#### PHOTOMETRIC DATA (SIMULATED):

##### OSRAM

Opto Semiconductors

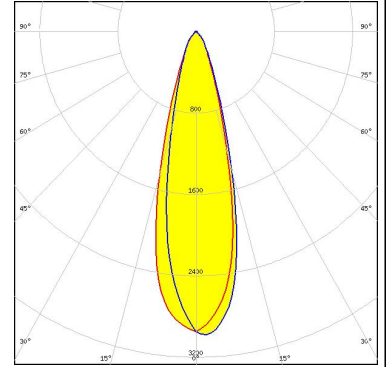
LED OSCONIQ P 3737 Flat  
FWHM 27.0°  
Efficiency 96 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### OSRAM

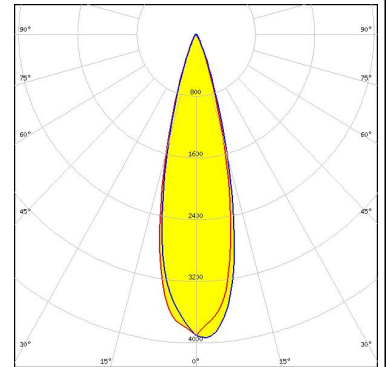
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
FWHM 27.0°  
Efficiency 94 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



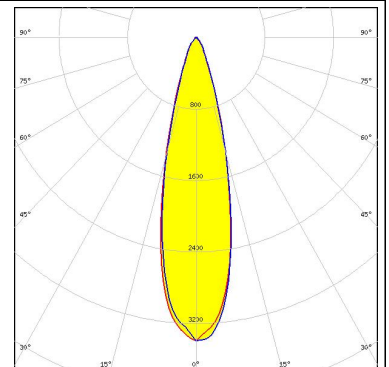
##### PHILIPS

LED Fortimo FastFlex LED 2x6 DP G4  
FWHM 26.0°  
Efficiency 94 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### SAMSUNG

LED LH181B  
FWHM 27.0°  
Efficiency 94 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

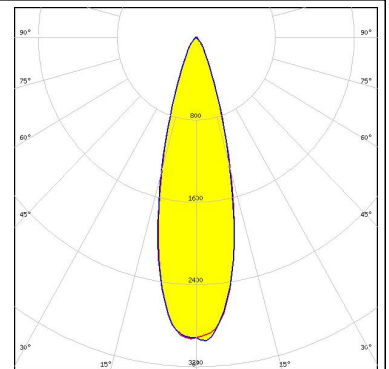




### PHOTOMETRIC DATA (SIMULATED):

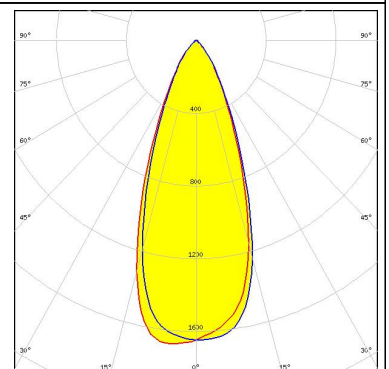
#### SAMSUNG

LED LH231B  
FWHM 28.0°  
Efficiency 95 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



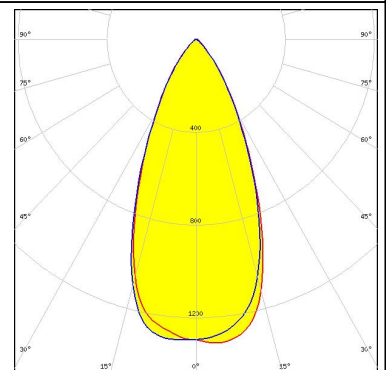
#### SAMSUNG

LED LH351C  
FWHM 39.5°  
Efficiency 94 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



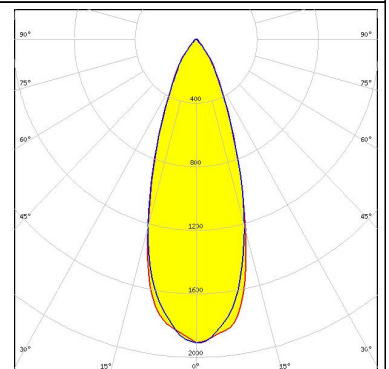
#### SAMSUNG

LED LH351D  
FWHM 46.0°  
Efficiency 94 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:


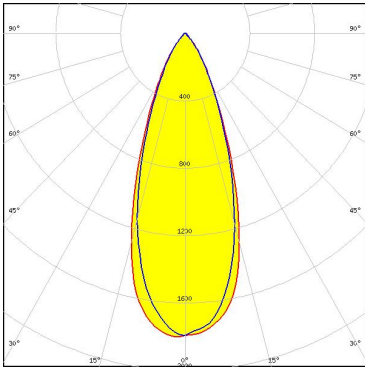

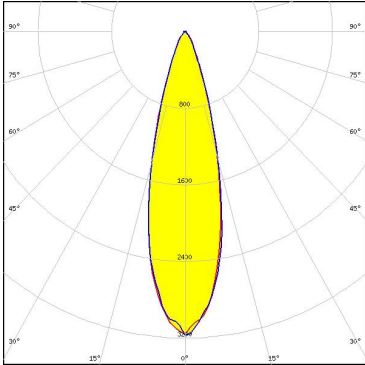


#### SAMSUNG

LED LH508B  
FWHM 36.0°  
Efficiency 94 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### PHOTOMETRIC DATA (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 5050 6V</p> <p>FWHM: 39.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 1.8 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: Z8Y22T</p> <p>FWHM: 28.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 3.2 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

### 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

#### LEDiL Oy

Joensuunkatu 13  
FI-24240 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### 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

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