

## 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 ⓘ           |

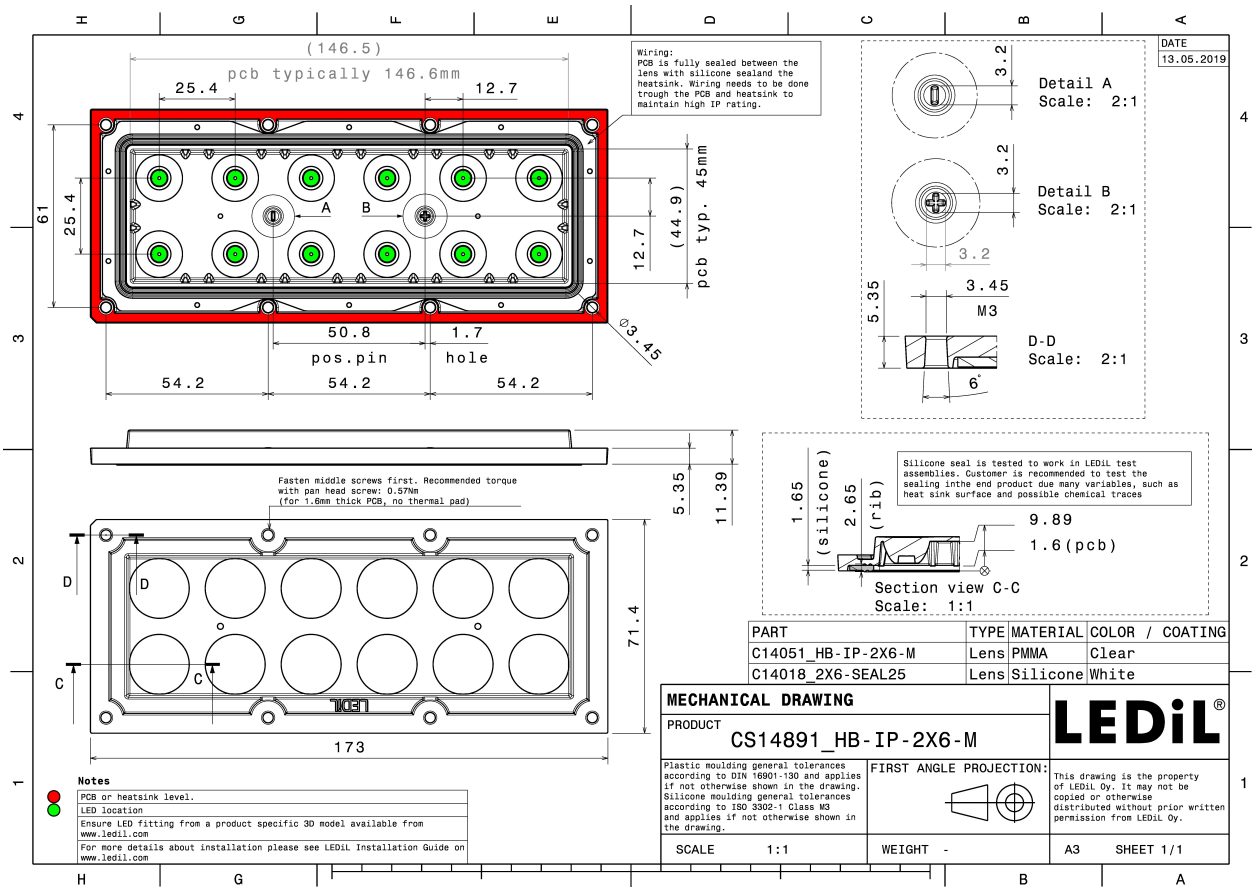
### MATERIAL SPECIFICATIONS:

| 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)

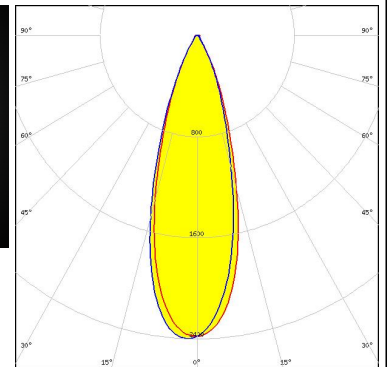
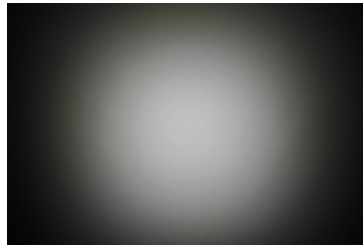
#### PHOTOMETRIC DATA (MEASURED):

|                                                                                                                                                                                                                                                 |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| <p><b>COMET ELECTRONICS</b></p> <p>LED QUICK FLUX 2x6 LED XG xxx G7+</p> <p>FWHM / FWTM 32.0° / 59.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |
| <p><b>COMET ELECTRONICS</b></p> <p>LED QUICK FLUX 2x6 LED XT xxx G5</p> <p>FWHM / FWTM 28.0° / 55.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>  |  |  |
| <p><b>CREE LED</b></p> <p>LED XM-L</p> <p>FWHM / FWTM 27.0° / 50.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                                   |  |  |
| <p><b>CREE LED</b></p> <p>LED XP-G2</p> <p>FWHM / FWTM 30.0° / 57.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                                  |  |  |

#### PHOTOMETRIC DATA (MEASURED):

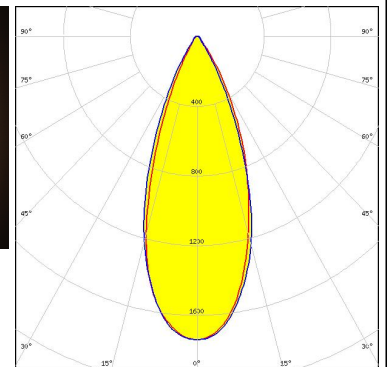
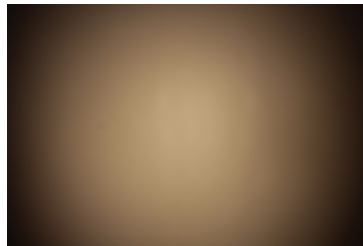
##### CREE LED

LED XP-G3  
FWHM / FWTM 32.0° / 58.0°  
Efficiency 94 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



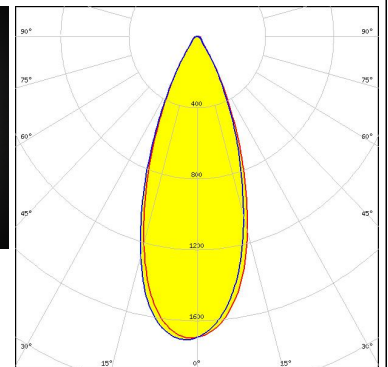
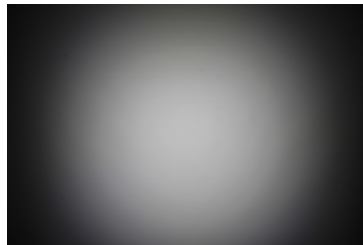
##### CREE LED

LED XP-L HD  
FWHM / FWTM 39.0° / 66.0°  
Efficiency 94 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



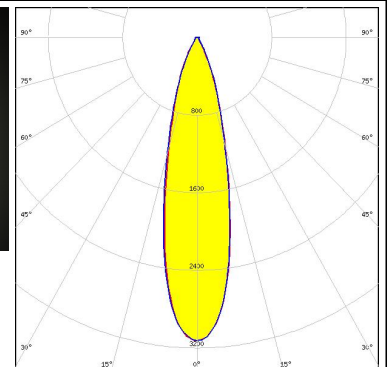
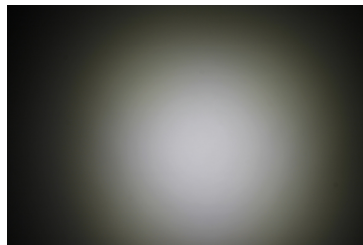
##### CREE LED

LED XP-L2  
FWHM / FWTM 39.0° / 67.0°  
Efficiency 94 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### CREE LED

LED XT-E  
FWHM / FWTM 25.0° / 52.0°  
Efficiency 92 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

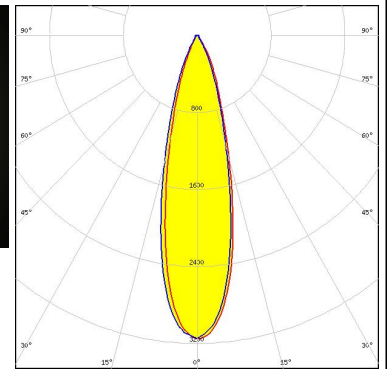




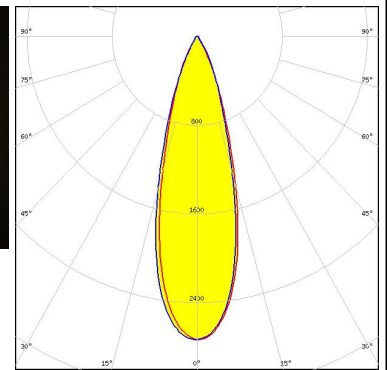
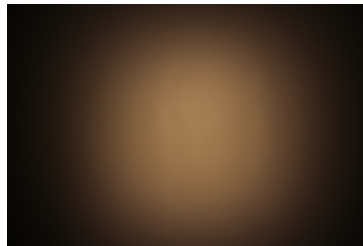
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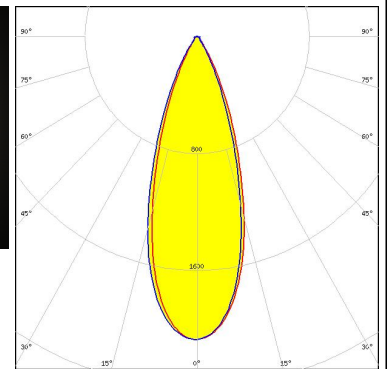
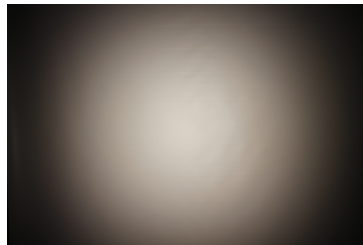
LED XT-E HE  
FWHM / FWTM 26.0° / 53.0°  
Efficiency 94 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



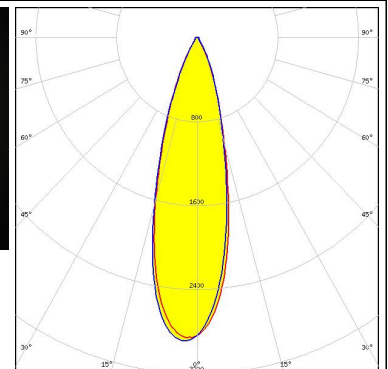
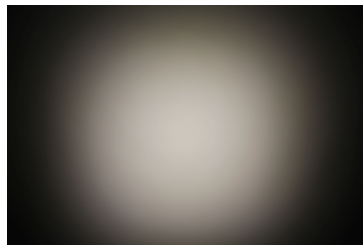
LED LUXEON T  
FWHM / FWTM 29.0° / 55.0°  
Efficiency 94 %  
Peak intensity 2.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED LUXEON V  
FWHM / FWTM 35.0° / 62.0°  
Efficiency 93 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



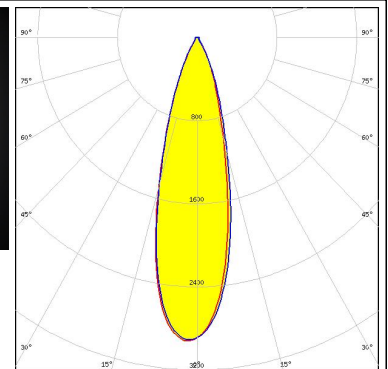
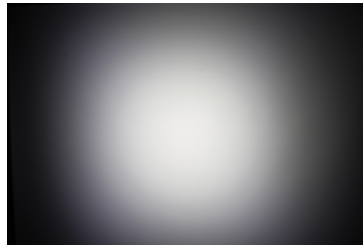
LED LUXEON V2  
FWHM / FWTM 28.0° / 54.0°  
Efficiency 94 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



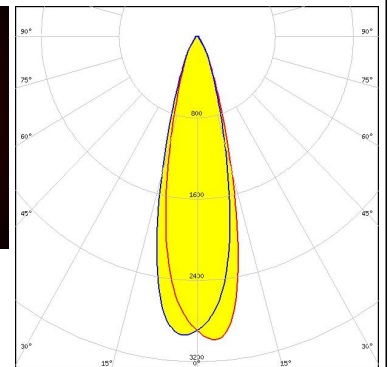
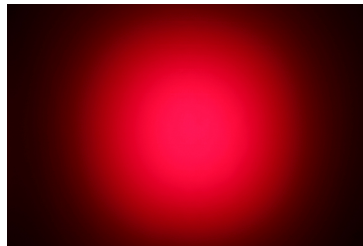
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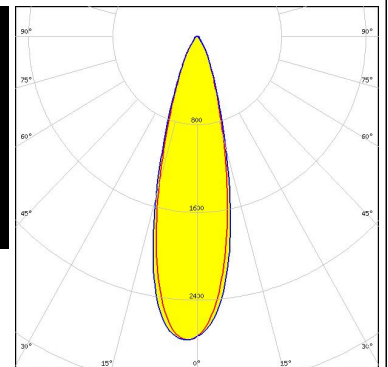
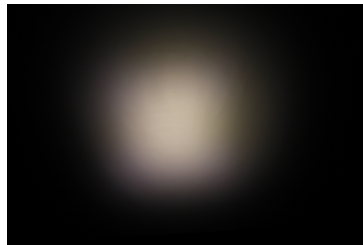
LED LUXEON XR-TX (L2T0-xyy012M)  
 FWHM / FWTM 28.0° / 54.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



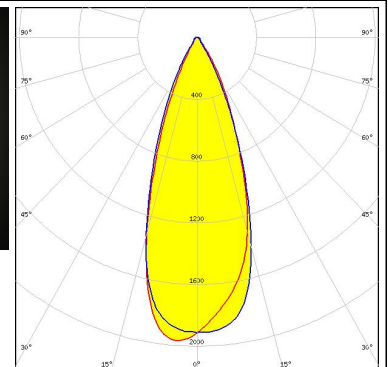
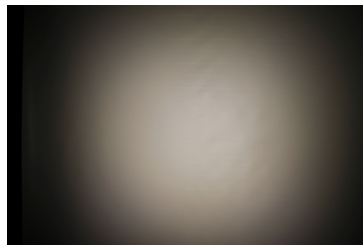
LED SST-10-B130  
 FWHM / FWTM 27.0° / 53.0°  
 Efficiency 95 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour Deep Red  
 Required components:



LED RecLED 146x45mm 2900lm 730 STRADA-IP-2x6 G1  
 FWHM / FWTM 28.0° / 55.0°  
 Efficiency 95 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



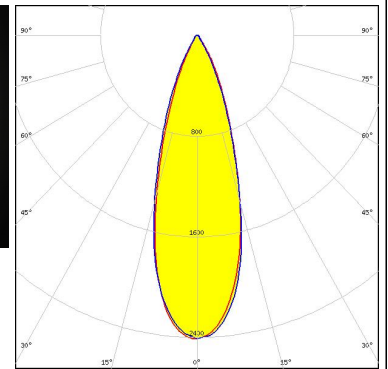
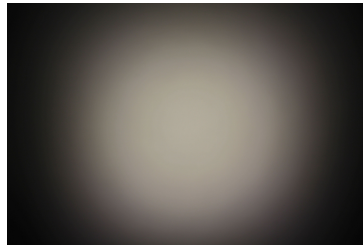
LED NVSW219D  
 FWHM / FWTM 38.0° / 63.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



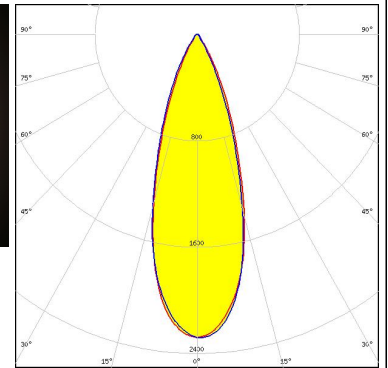
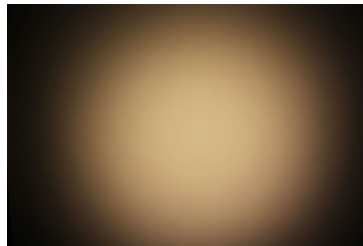
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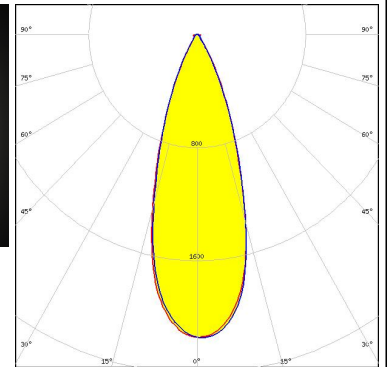
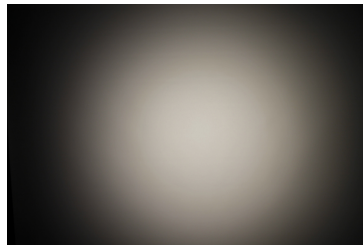
LED NVSW219F  
FWHM / FWTM 33.0° / 59.0°  
Efficiency 94 %  
Peak intensity 2.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



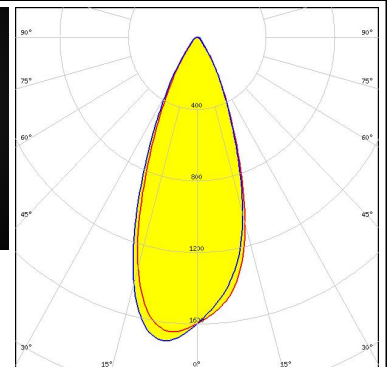
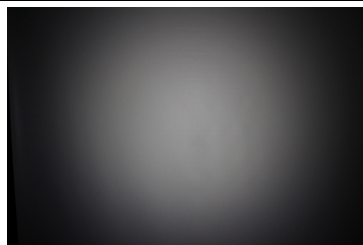
LED NVSW319B  
FWHM / FWTM 34.0° / 61.0°  
Efficiency 94 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED NVSW3x9A  
FWHM / FWTM 34.0° / 60.0°  
Efficiency 94 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



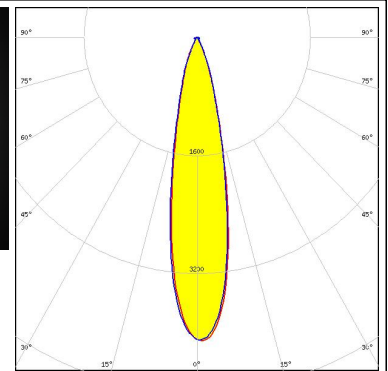
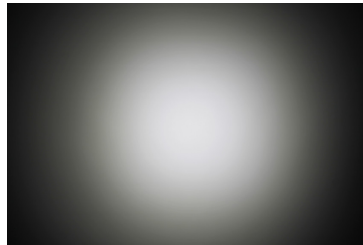
LED NVSW519A  
FWHM / FWTM 40.0° / 70.0°  
Efficiency 95 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



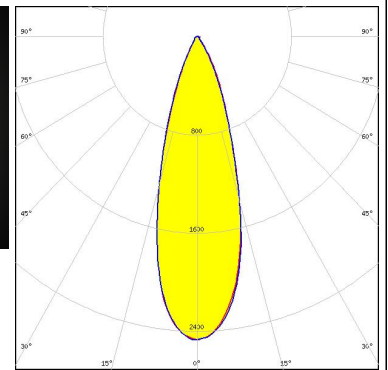
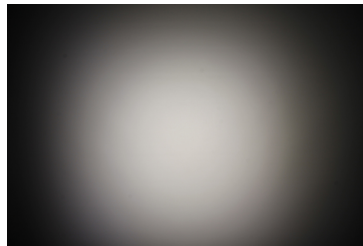
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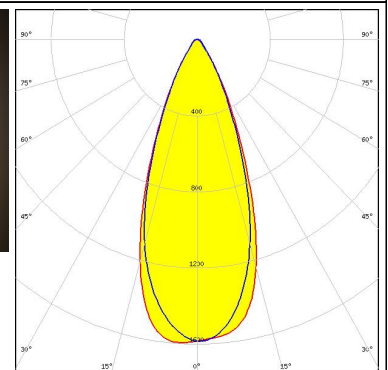
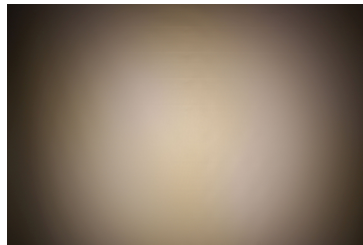
LED NVSxE21A  
FWHM / FWTM 24.0° / 53.0°  
Efficiency 92 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



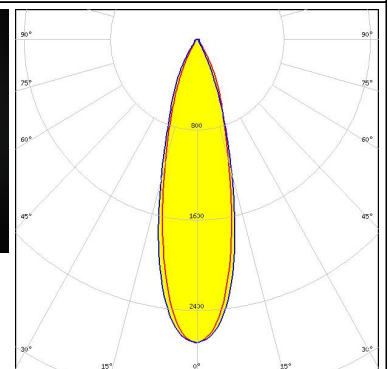
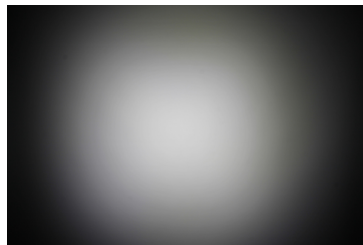
LED NVSxx19B/NVSxx19C  
FWHM / FWTM 31.0° / 58.0°  
Efficiency 93 %  
Peak intensity 2.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED Duris S8  
FWHM / FWTM 41.0° / 70.0°  
Efficiency 94 %  
Peak intensity 1.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED OSLON Square PC  
FWHM / FWTM 29.0° / 57.0°  
Efficiency 93 %  
Peak intensity 2.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

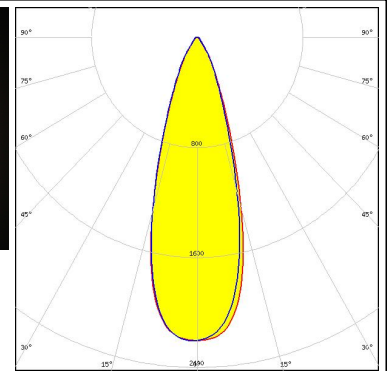
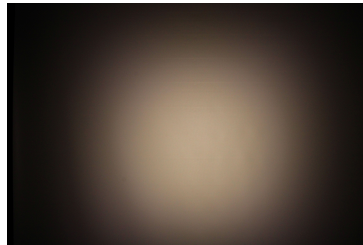




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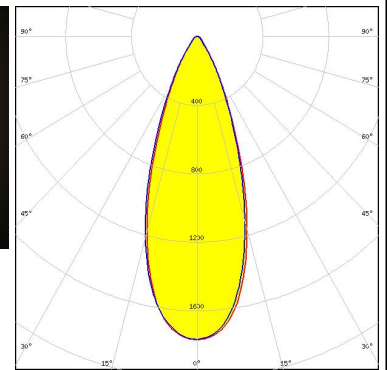
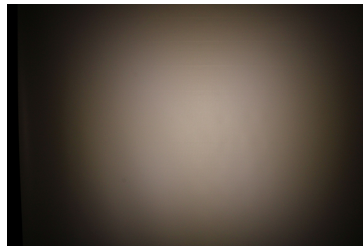
#### PHILIPS

LED Fortimo FastFlex LED 2x6 DP G5  
 FWHM / FWTM 32.0° / 62.0°  
 Efficiency 96 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



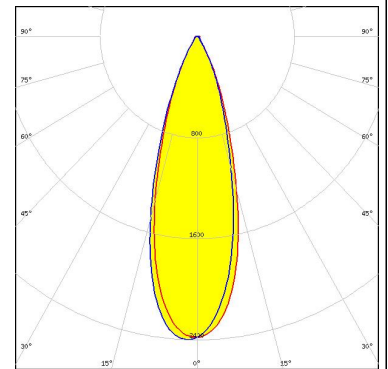
#### PHILIPS

LED Fortimo FastFlex LED 2x6 DP HE  
 FWHM / FWTM 38.0° / 68.0°  
 Efficiency 97 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



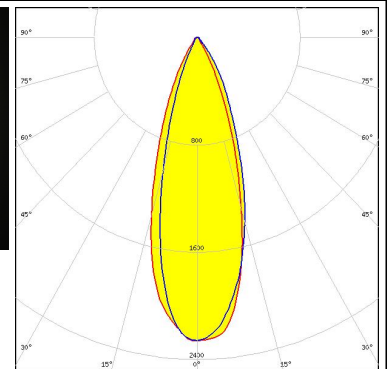
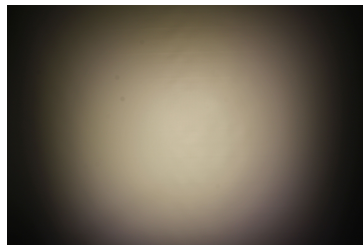
#### PHILIPS

LED Fortimo FastFlex LED 2x6 DPX G4  
 FWHM / FWTM 32.0° / 58.0°  
 Efficiency 94 %  
 Peak intensity 2.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED HiLOM RH12 (LH351C)  
 FWHM / FWTM 33.0° / 61.0°  
 Efficiency 94 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

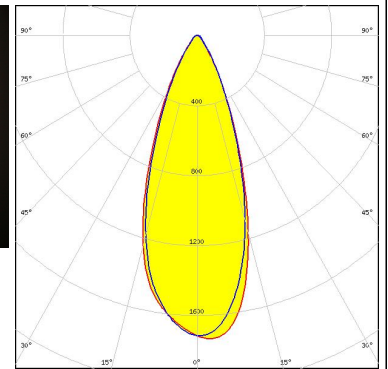
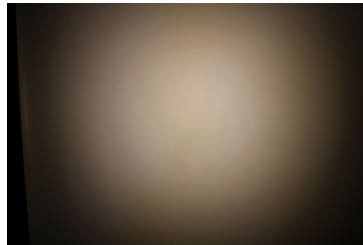




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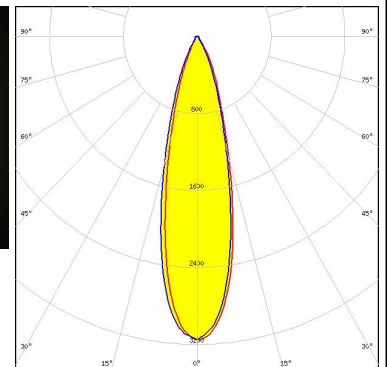
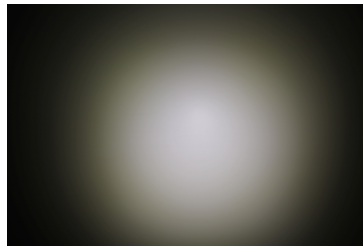
#### SAMSUNG

LED HiLOM RM12 ZP (LH502C)  
 FWHM / FWTM 38.0° / 69.0°  
 Efficiency 96 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



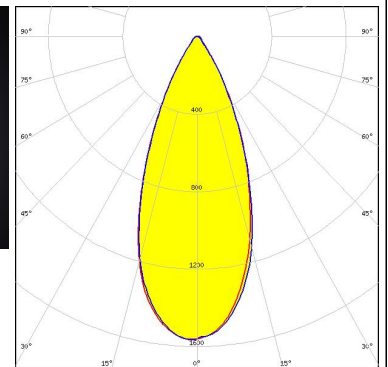
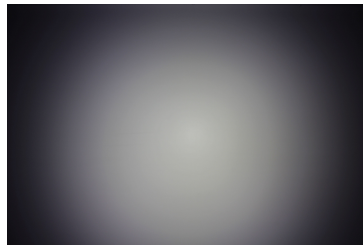
#### SCIOLUX

LED XLE-S22C4XTEHE (XT-E HE)  
 FWHM / FWTM 26.0° / 53.0°  
 Efficiency 94 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



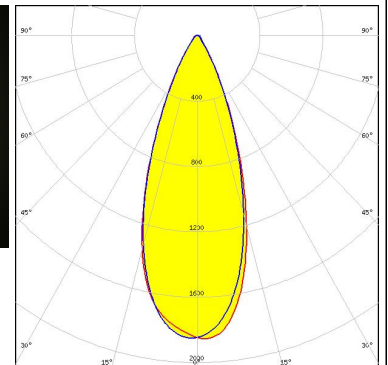
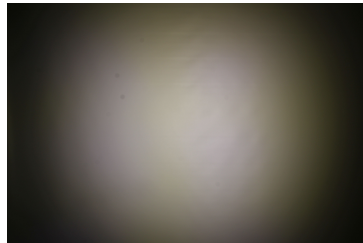
#### SCIOLUX

LED XLE-S26XHP35 (XHP35 HD)  
 FWHM / FWTM 42.0° / 71.0°  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEOUL SEMICONDUCTOR

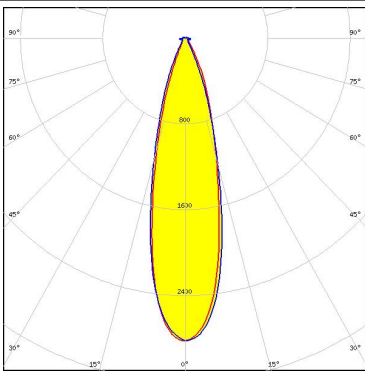
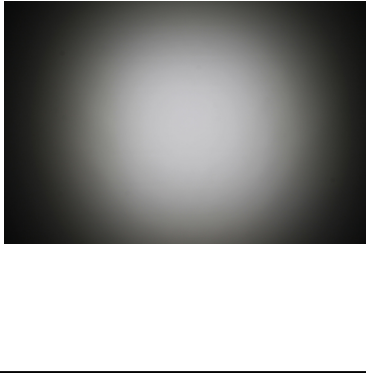
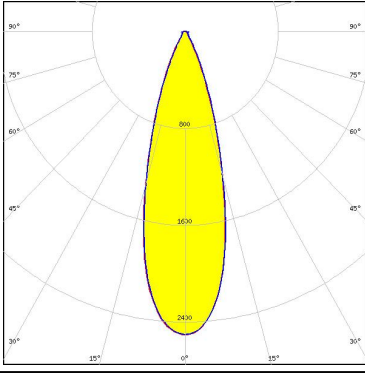
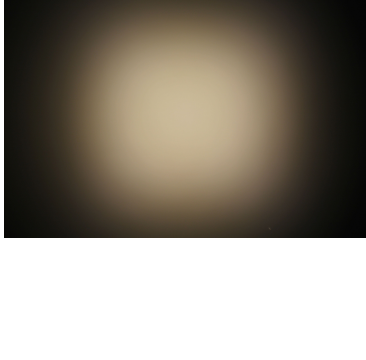
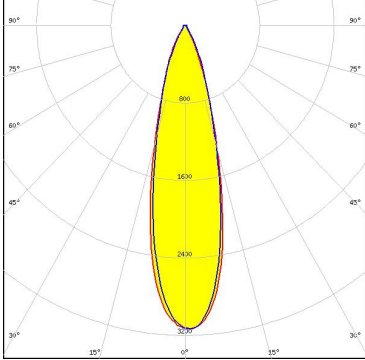
LED 2x6 5050 module - SMJD-3625012F-XX  
 FWHM / FWTM 38.0° / 65.0°  
 Efficiency 94 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

|                                                                                                                                                                                                                                                                                                                  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Mx</p> <p>FWHM / FWTM 26.0° / 52.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px</p> <p>FWHM / FWTM 29.0° / 54.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2</p> <p>FWHM / FWTM 30.0° / 57.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>   |  |  |
| <p><br/>SEOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM 30.0° / 58.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>        |  |  |

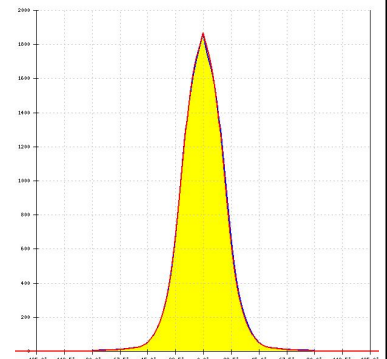
### PHOTOMETRIC DATA (MEASURED):

|                                                                                                                                                                                                                                     |                                                                                      |                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED Z8Y22</p> <p>FWHM / FWTM 26.0° / 52.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/lm</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 / FWTM 30.0° / 55.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.5 cd/lm</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 / FWTM 26.0° / 53.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |

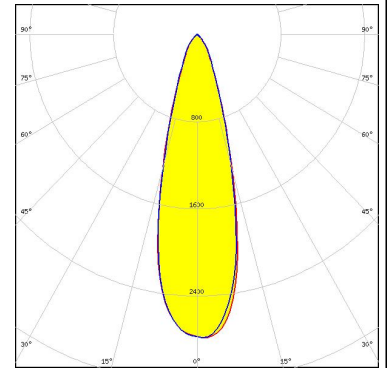
#### PHOTOMETRIC DATA (SIMULATED):



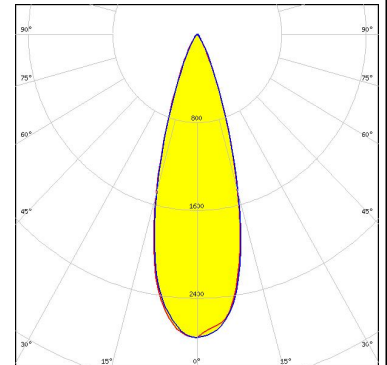
LED Bridgelux SMD 5050  
 FWHM / FWTM 37.0° / 69.0°  
 Efficiency 94 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



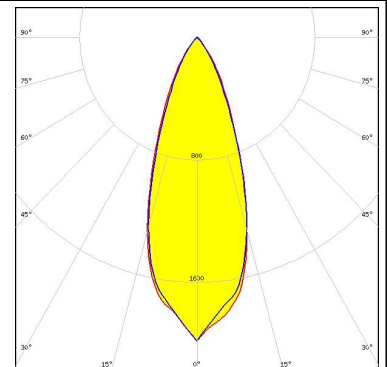
LED XP-E  
 FWHM / FWTM 28.0° / 56.0°  
 Efficiency 94 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-G2 HE  
 FWHM / FWTM 31.0° / 53.0°  
 Efficiency 95 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 5050 Round LES  
 FWHM / FWTM 37.0° / 68.0°  
 Efficiency 93 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



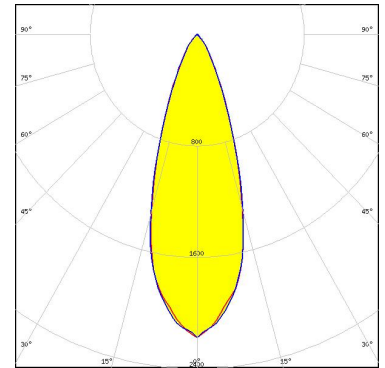
#### PHOTOMETRIC DATA (SIMULATED):



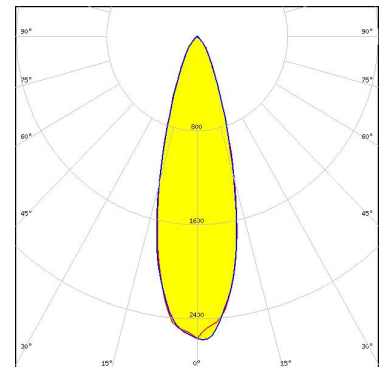
LED LUXEON 5050 Square LES  
 FWHM / FWTM 34.0° / 62.0°  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



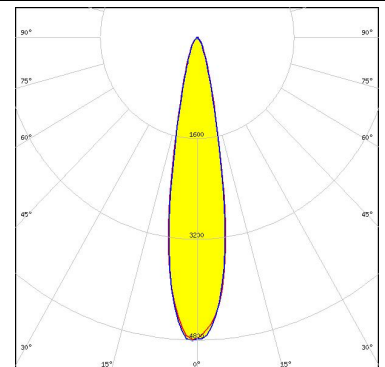
LED NV4WB35AM  
 FWHM / FWTM 34.0° / 62.0°  
 Efficiency 95 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED PrevaLED Brick HP IP 2x6  
 FWHM / FWTM 30.0° / 58.0°  
 Efficiency 95 %  
 Peak intensity 2.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED OSCONIQ P 3030  
 FWHM / FWTM 20.0° / 42.0°  
 Efficiency 96 %  
 Peak intensity 4.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





#### PHOTOMETRIC DATA (SIMULATED):

##### OSRAM

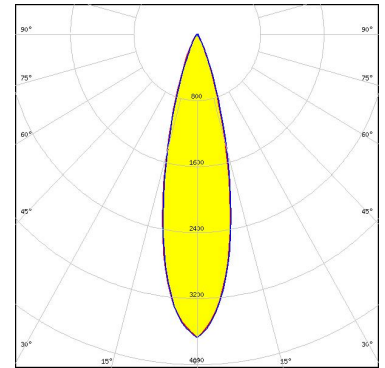
Opto Semiconductors

LED OSCONIQ P 3737 (2W version)  
FWHM / FWTM 26.0° / 52.0°  
Efficiency 96 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

##### OSRAM

Opto Semiconductors

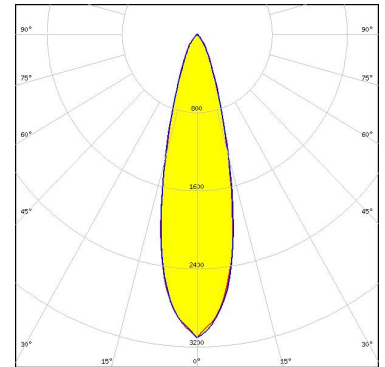
LED OSCONIQ P 3737 (3W version)  
FWHM / FWTM 26.0° / 48.0°  
Efficiency 94 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### OSRAM

Opto Semiconductors

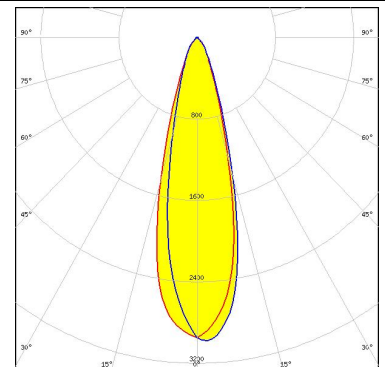
LED OSCONIQ P 3737 Flat  
FWHM / FWTM 27.0° / 54.0°  
Efficiency 96 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### OSRAM

Opto Semiconductors

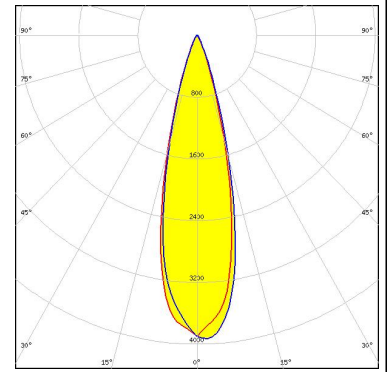
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 27.0° / 53.0°  
Efficiency 94 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### PHOTOMETRIC DATA (SIMULATED):

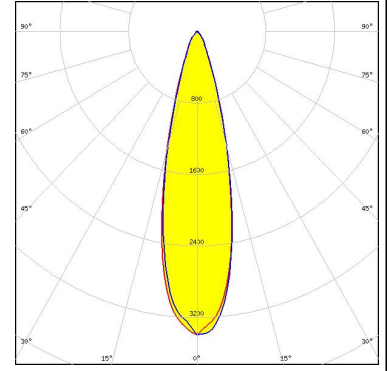
#### PHILIPS

LED Fortimo FastFlex LED 2x6 DP G4  
 FWHM / FWTM 26.0° / 45.0°  
 Efficiency 94 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



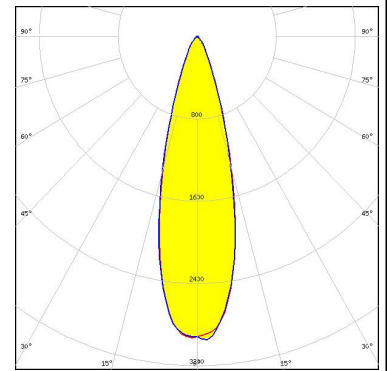
#### SAMSUNG

LED LH181B  
 FWHM / FWTM 27.0° / 50.0°  
 Efficiency 94 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



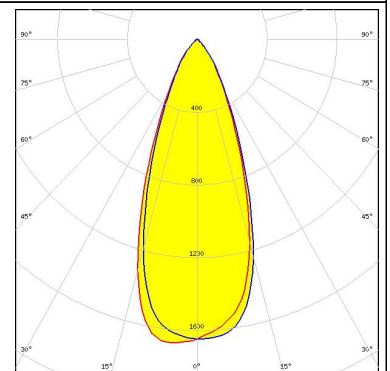
#### SAMSUNG

LED LH231B  
 FWHM / FWTM 28.0° / 52.0°  
 Efficiency 95 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

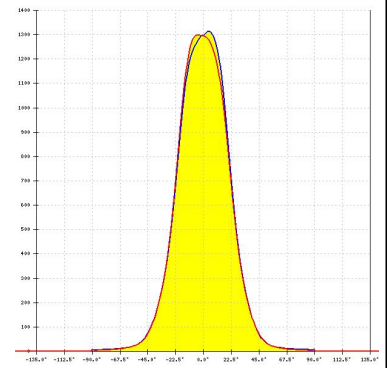
LED LH351C  
 FWHM / FWTM 39.5° / 72.3°  
 Efficiency 94 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (SIMULATED):

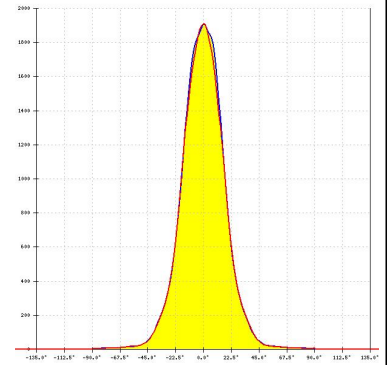
#### SAMSUNG

LED LH351D  
FWHM / FWTM 46.0° / 79.9°  
Efficiency 94 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



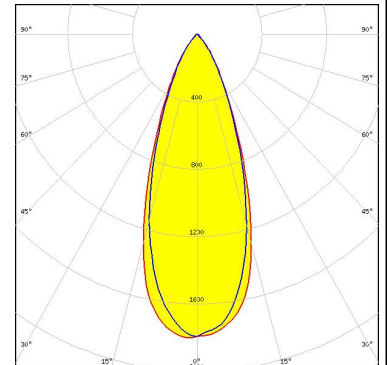
#### SAMSUNG

LED LH508B  
FWHM / FWTM 36.0° / 70.0°  
Efficiency 94 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



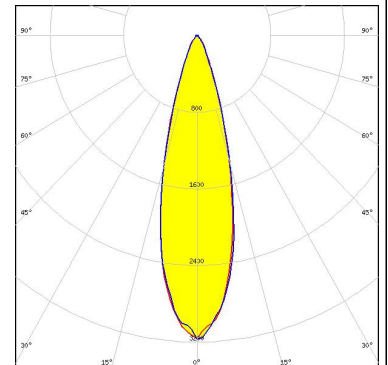
SEOUL SEMICONDUCTOR

LED SEOUL DC 5050 6V  
FWHM / FWTM 39.0° / 72.0°  
Efficiency 94 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

LED Z8Y22T  
FWHM / FWTM 28.0° / 51.0°  
Efficiency 94 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour White  
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:

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