

## VERONICA-O

~55° + 10° oval beam

### SPECIFICATION:

|                |           |
|----------------|-----------|
| Dimensions     | Ø 26.0 mm |
| Height         | 12.2 mm   |
| Fastening      | glue, pin |
| ROHS compliant | yes ⓘ     |

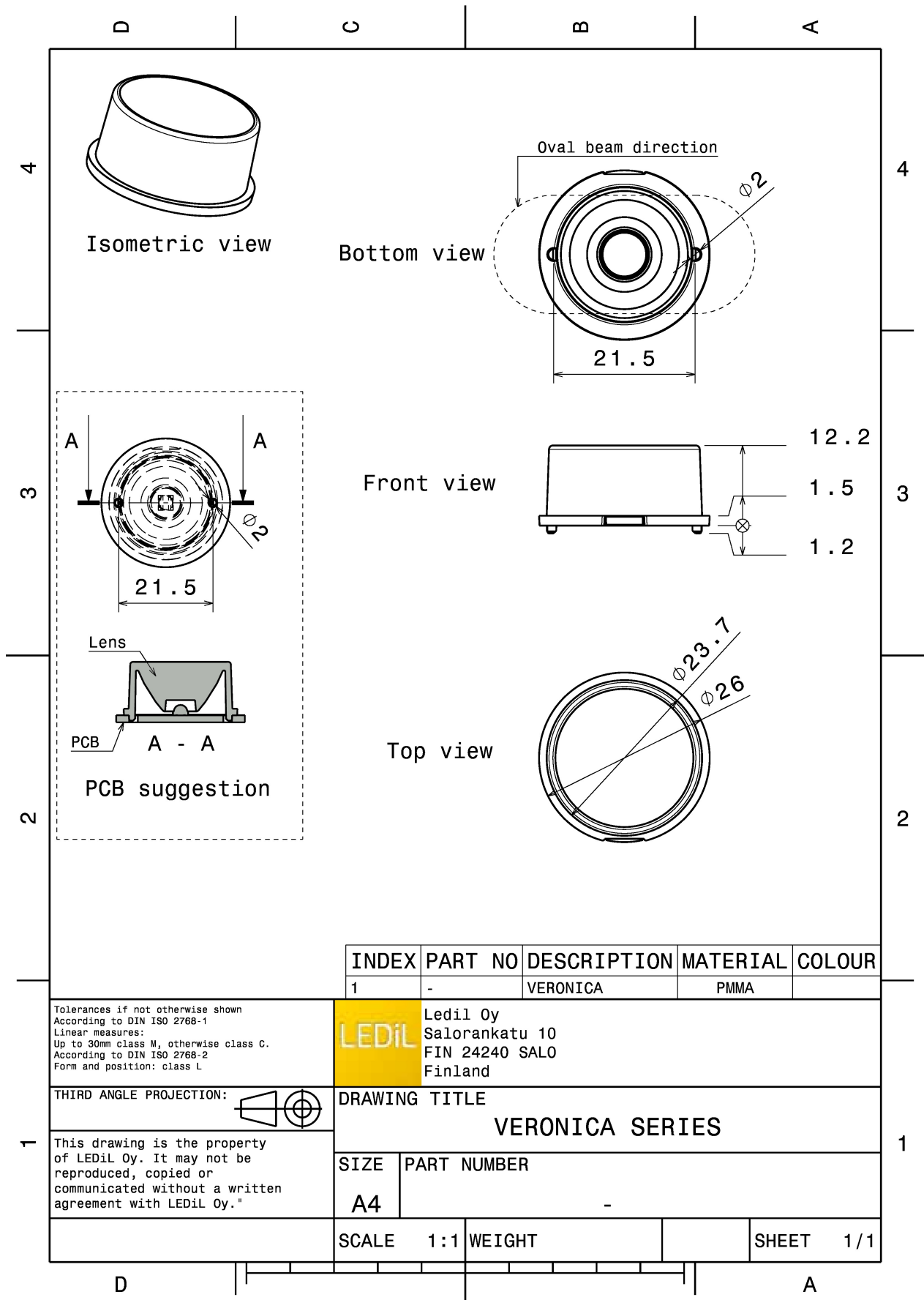
### MATERIALS:

| Component  | Type        | Material | Colour | Finish |
|------------|-------------|----------|--------|--------|
| VERONICA-O | Single lens | PMMA     | clear  |        |



### ORDERING INFORMATION:

| Component   | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|------------|-----|-----|-----------------|
| C13529_VERONICA-O<br>» Box size: 480 x 280 x 300 mm | 2240       | 336 | 112 | 11.1            |



| INDEX | PART NO | DESCRIPTION | MATERIAL | COLOUR |
|-------|---------|-------------|----------|--------|
| 1     | -       | VERONICA    | PMMA     |        |

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
Up to 30mm class M, otherwise class C.  
According to DIN ISO 2768-2  
Form and position: class L

**LEDiL** LediL Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**VERONICA SERIES**

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| SIZE | PART NUMBER |
|------|-------------|
| A4   | -           |

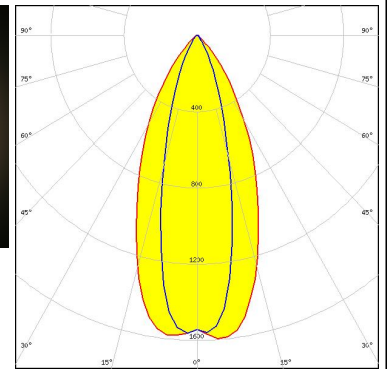
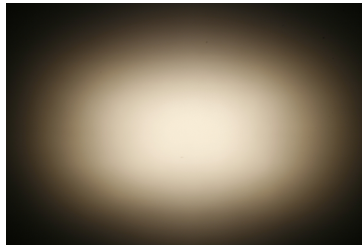
| SCALE | 1:1 | WEIGHT | SHEET | 1/1 |
|-------|-----|--------|-------|-----|
|-------|-----|--------|-------|-----|

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

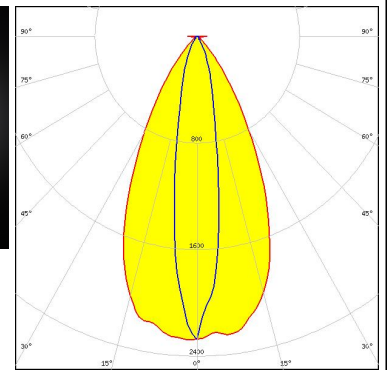
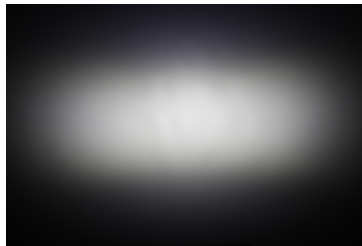
### OPTICAL RESULTS (MEASURED):



LED MK-R  
 FWHM / FWTM 48.0 + 28.0° / 85.0 + 58.0°  
 Efficiency 80 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



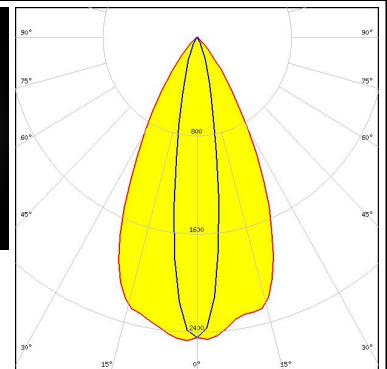
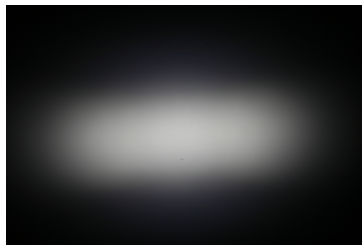
LED XHP35 HD  
 FWHM / FWTM 52.0 + 19.0° / 84.0 + 44.0°  
 Efficiency 80 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




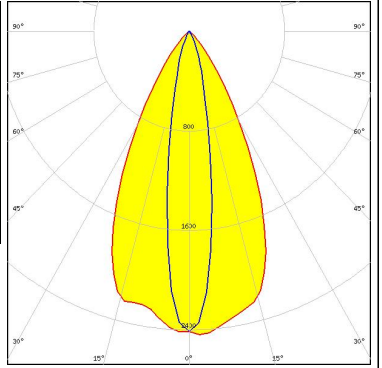

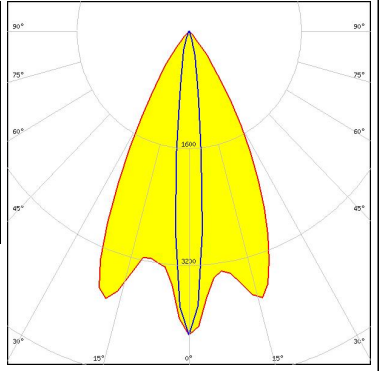

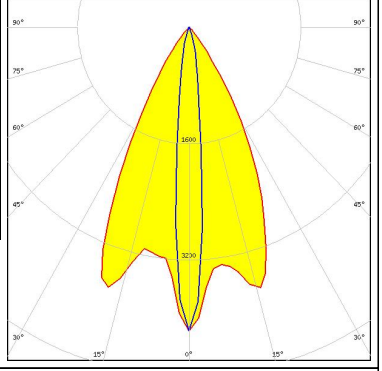

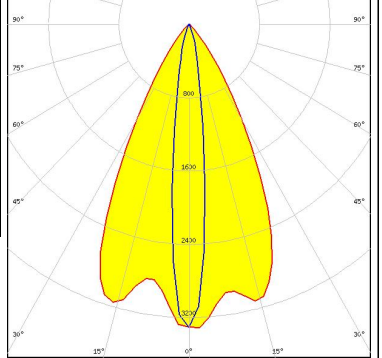
LED XHP35 HI  
 FWHM / FWTM 53.0 + 16.0° / 82.0 + 38.0°  
 Efficiency 82 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XM-L  
 FWHM / FWTM 54.0 + 18.0° / 81.0 + 40.0°  
 Efficiency 83 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



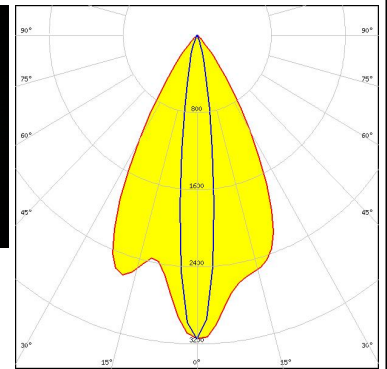
### OPTICAL RESULTS (MEASURED):

|   |  |   |
|---|--|---|
| <p><b>CREE</b><br/>LEDs</p> <p>LED XM-L2<br/>           FWHM / FWTM 54.0 + 18.0° / 81.0 + 41.0°<br/>           Efficiency 82 %<br/>           Peak intensity 2.4 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p> |    |    |
| <p><b>CREE</b><br/>LEDs</p> <p>LED XP-E<br/>           FWHM / FWTM 54.0 + 11.0° / 76.0 + 26.0°<br/>           Efficiency 83 %<br/>           Peak intensity 4.2 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>  |   |   |
| <p><b>CREE</b><br/>LEDs</p> <p>LED XP-E2<br/>           FWHM / FWTM 54.0 + 11.0° / 76.0 + 27.0°<br/>           Efficiency 84 %<br/>           Peak intensity 4.2 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p> |  |  |
| <p><b>CREE</b><br/>LEDs</p> <p>LED XP-G<br/>           FWHM / FWTM 55.0 + 13.0° / 79.0 + 30.0°<br/>           Efficiency 83 %<br/>           Peak intensity 3.3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>  |  |  |

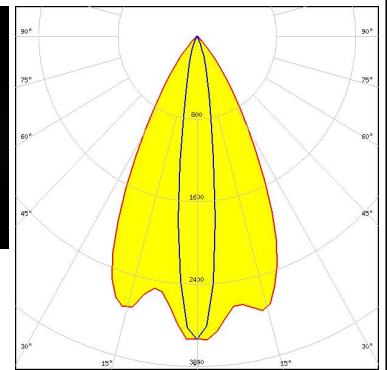
#### OPTICAL RESULTS (MEASURED):



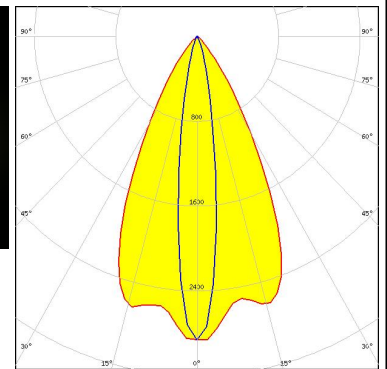
LED XP-G2  
 FWHM / FWTM 55.0 + 13.0° / 78.0 + 30.0°  
 Efficiency 84 %  
 Peak intensity 3.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



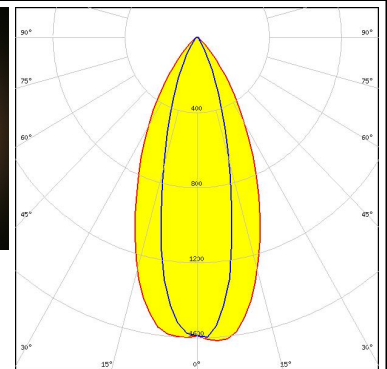
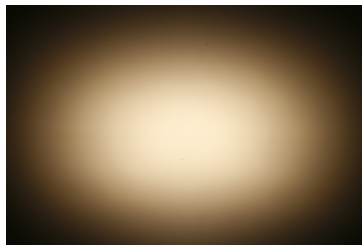
LED XT-E  
 FWHM / FWTM 54.0 + 15.0° / 79.0 + 33.0°  
 Efficiency 81 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




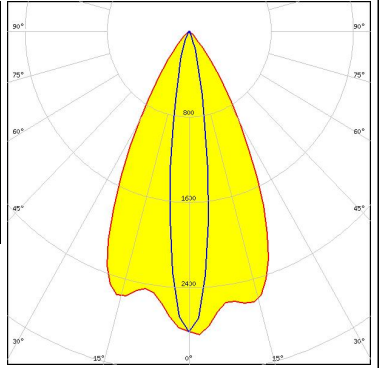

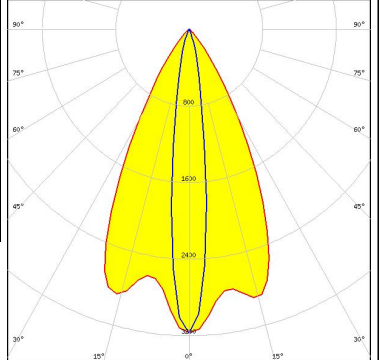
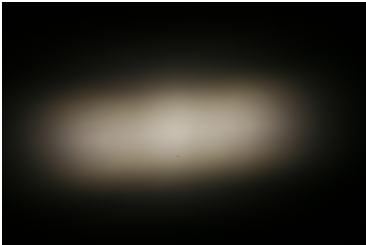
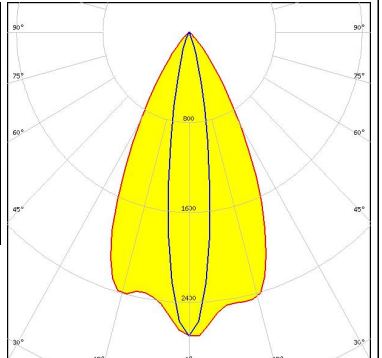
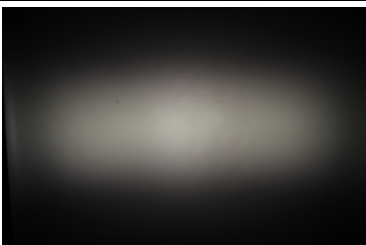
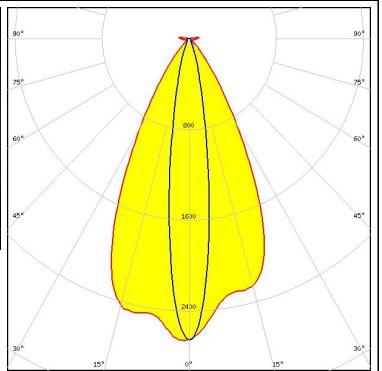
LED LUXEON A  
 FWHM / FWTM 54.0 + 15.0° / 79.0 + 33.0°  
 Efficiency 82 %  
 Peak intensity 2.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON M/MX  
 FWHM / FWTM 49.0 + 28.0° / 84.0 + 57.0°  
 Efficiency 79 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



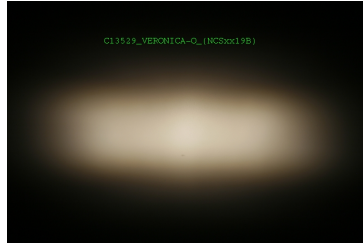
### OPTICAL RESULTS (MEASURED):

|   |  |   |
|---|--|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON R</p> <p>FWHM / FWTM 54.0 + 16.0° / 79.0 + 34.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 2.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>        |    |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON Rebel</p> <p>FWHM / FWTM 54.0 + 14.0° / 78.0 + 31.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 3.2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>    |   |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON Rebel ES</p> <p>FWHM / FWTM 54.0 + 17.0° / 80.0 + 34.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 2.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON V2</p> <p>FWHM / FWTM 52.0 + 16.0° / 78.0 + 36.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>       |  |  |

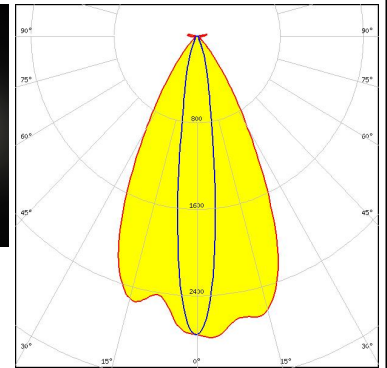
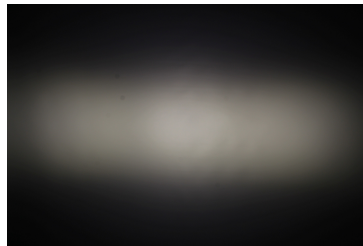
### OPTICAL RESULTS (MEASURED):



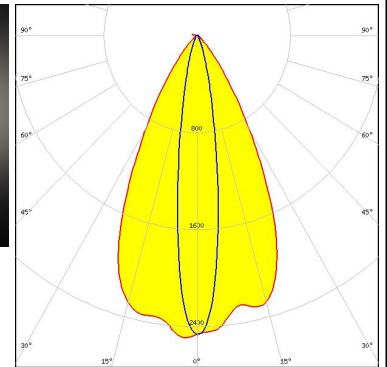
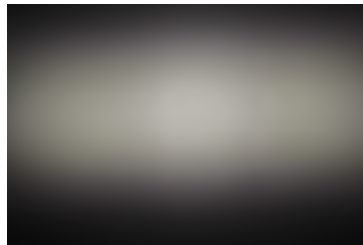
LED NCSxx19B  
 FWHM / FWTM 52.0 + 15.0° / 80.0 + 32.0°  
 Efficiency 80 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



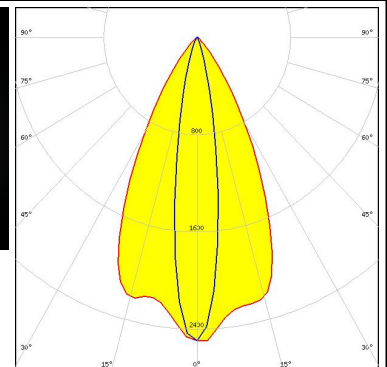
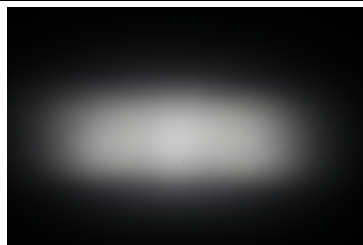
LED NVSW219F  
 FWHM / FWTM 53.0 + 15.0° / 79.0 + 36.0°  
 Efficiency 91 %  
 Peak intensity 2.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




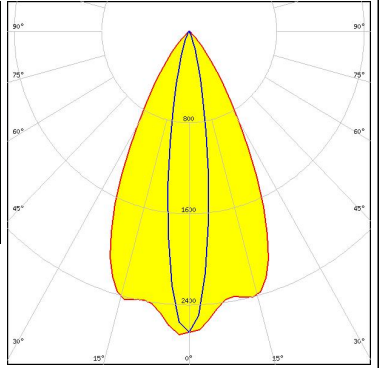

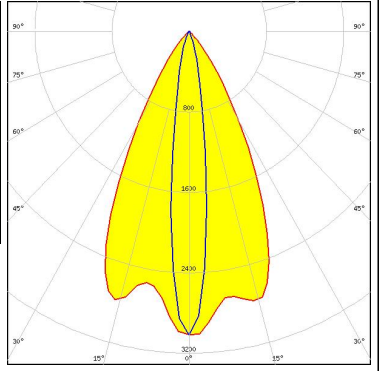

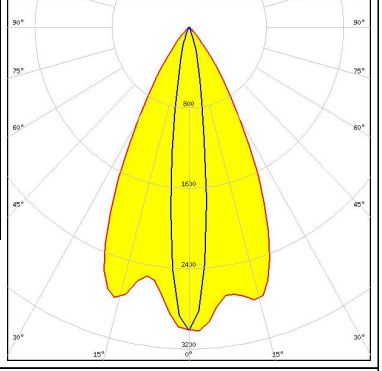

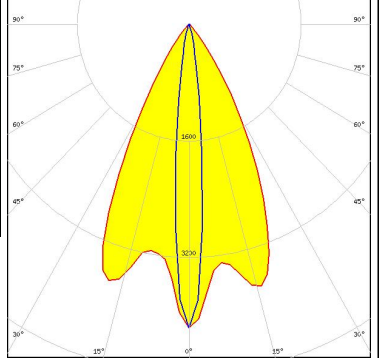
LED NVSW3x9A  
 FWHM / FWTM 53.0 + 16.0° / 80.0 + 35.0°  
 Efficiency 80 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NVSxx19A  
 FWHM / FWTM 53.0 + 18.0° / 80.0 + 36.0°  
 Efficiency 79 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (MEASURED):

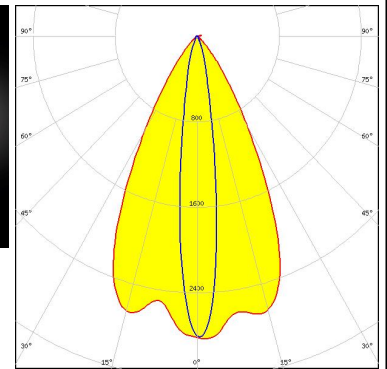
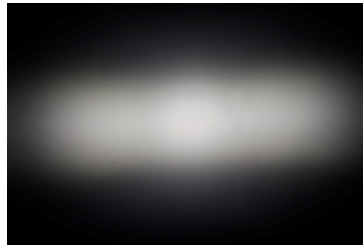
|   |  |   |
|---|--|---|
| <p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C<br/>           FWHM / FWTM 54.0 + 17.0° / 79.0 + 35.0°<br/>           Efficiency 79 %<br/>           Peak intensity 2.7 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                    |    |    |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLOM Square EC<br/>           FWHM / FWTM 54.0 + 14.0° / 79.0 + 32.0°<br/>           Efficiency 81 %<br/>           Peak intensity 3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p> |   |   |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLOM Square PC<br/>           FWHM / FWTM 54.0 + 15.0° / 79.0 + 32.0°<br/>           Efficiency 81 %<br/>           Peak intensity 3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p> |  |  |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLOM SSL 150<br/>           FWHM / FWTM 54.0 + 11.0° / 76.0 + 24.0°<br/>           Efficiency 83 %<br/>           Peak intensity 4.2 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p> |  |  |



### OPTICAL RESULTS (MEASURED):

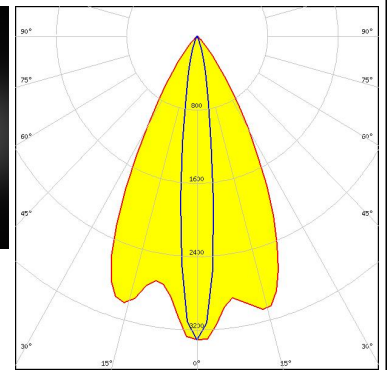
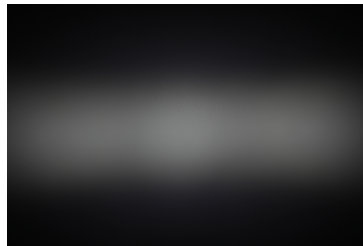
#### SAMSUNG

LED LH351B  
 FWHM / FWTM 54.0 + 14.0° / 79.0 + 33.0°  
 Efficiency 84 %  
 Peak intensity 2.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



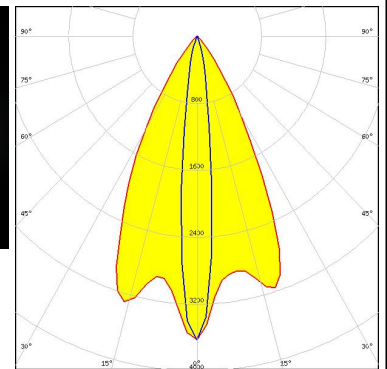
#### SAMSUNG

LED LH351Z  
 FWHM / FWTM 54.0 + 13.0° / 78.0 + 31.0°  
 Efficiency 83 %  
 Peak intensity 3.3 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



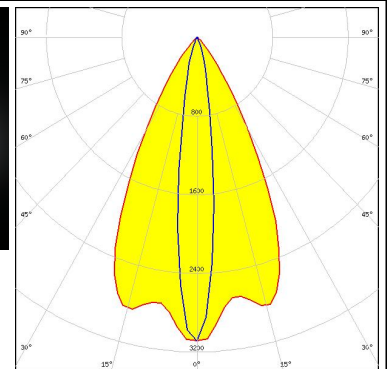
SEOUL SEMICONDUCTOR

LED Z5  
 FWHM / FWTM 54.0 + 13.0° / 77.0 + 28.0°  
 Efficiency 83 %  
 Peak intensity 3.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



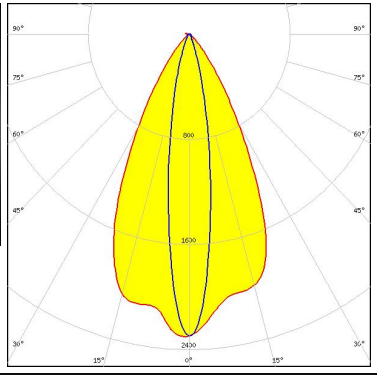


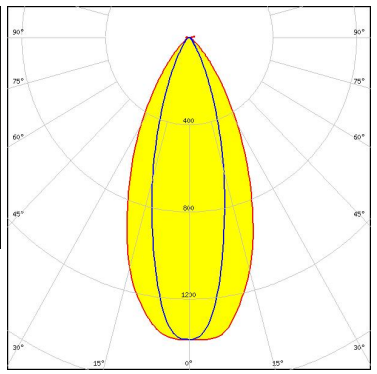


SEOUL SEMICONDUCTOR

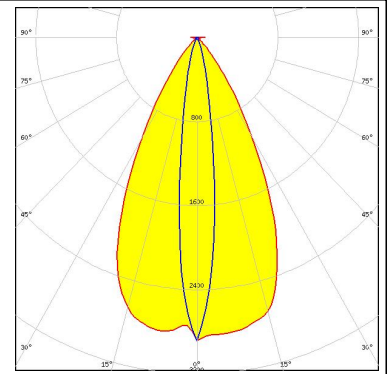
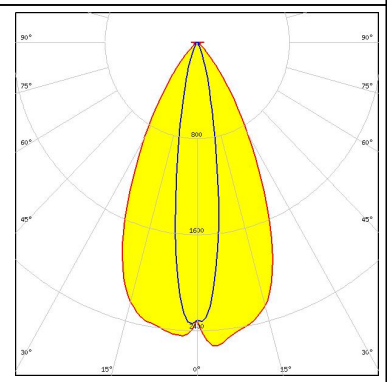
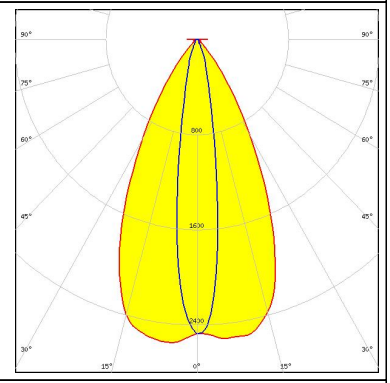
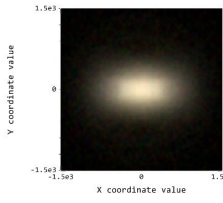
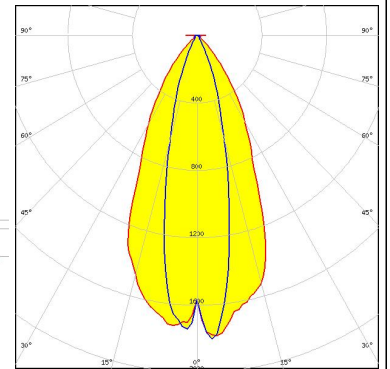
LED Z5M1/Z5M2  
 FWHM / FWTM 54.0 + 15.0° / 79.0 + 33.0°  
 Efficiency 83 %  
 Peak intensity 3.1 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



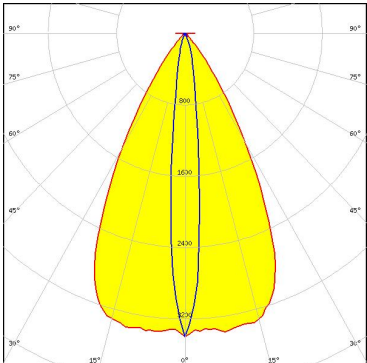
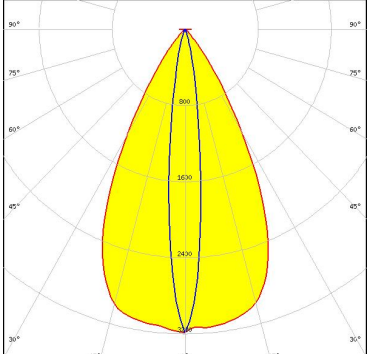
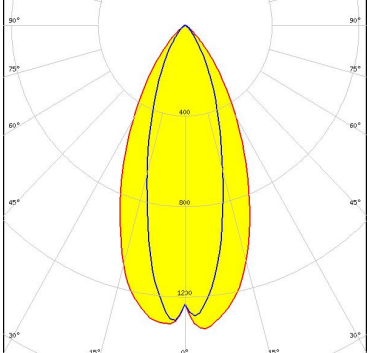
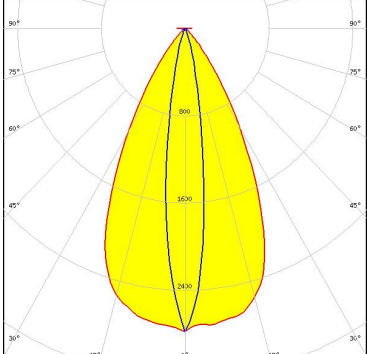
### OPTICAL RESULTS (MEASURED):

|   |   |  |
|---|---|--|
| <p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM 52.0 + 17.0° / 79.0 + 37.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 2.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |   |   |
| <p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y50P</p> <p>FWHM / FWTM 48.0 + 29.0° / 84.0 + 58.0°</p> <p>Efficiency 73 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> |  |  |

### OPTICAL RESULTS (SIMULATED):

|  |  |   |
|--|--|---|
| <p><b>CREE</b><br/>LEDs</p> <p>LED: XP-G2 HE<br/>           FWHM / FWTM: 54.0 + 14.0° / 80.0 + 32.0°<br/>           Efficiency: 90 %<br/>           Peak intensity: 2.9 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>                       |  |    |
| <p><b>NICHIA</b></p> <p>LED: NV4WB35AM<br/>           FWHM / FWTM: 52.0 + 18.0° / 82.0 + 38.0°<br/>           Efficiency: 91 %<br/>           Peak intensity: 2.5 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>                             |  |   |
| <p><b>NICHIA</b></p> <p>LED: NVSW519A<br/>           FWHM / FWTM: 54.0 + 16.0° / 82.0 + 37.0°<br/>           Efficiency: 91 %<br/>           Peak intensity: 2.6 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>                              |  |  |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED: OSCONIQ P 7070<br/>           FWHM / FWTM: 48.0 + 25.0° / 85.0 + 50.0°<br/>           Efficiency: 85 %<br/>           Peak intensity: 1.9 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p> |  <p>detector size: 0.000000<br/>           Total Power: 0.000000 Lumens</p> |  |

### OPTICAL RESULTS (SIMULATED):

|  |   |
|--|---|
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 57.0 + 11.0° / 80.0 + 26.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 3.4 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 MJT 3030</p> <p>FWHM / FWTM 56.0 + 12.0° / 78.0 + 28.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 3.2 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 MJT 5050</p> <p>FWHM / FWTM 50.0 + 30.0° / 87.0 + 68.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 1.4 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 Z5M4</p> <p>FWHM / FWTM 54.0 + 14.0° / 80.0 + 32.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.8 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:

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