

## MIRELLA-50-S-PIN

~15° spot beam

### SPECIFICATION:

|                |           |
|----------------|-----------|
| Dimensions     | Ø 49.9 mm |
| Height         | 23.9 mm   |
| Fastening      | pin       |
| ROHS compliant | yes ⓘ     |

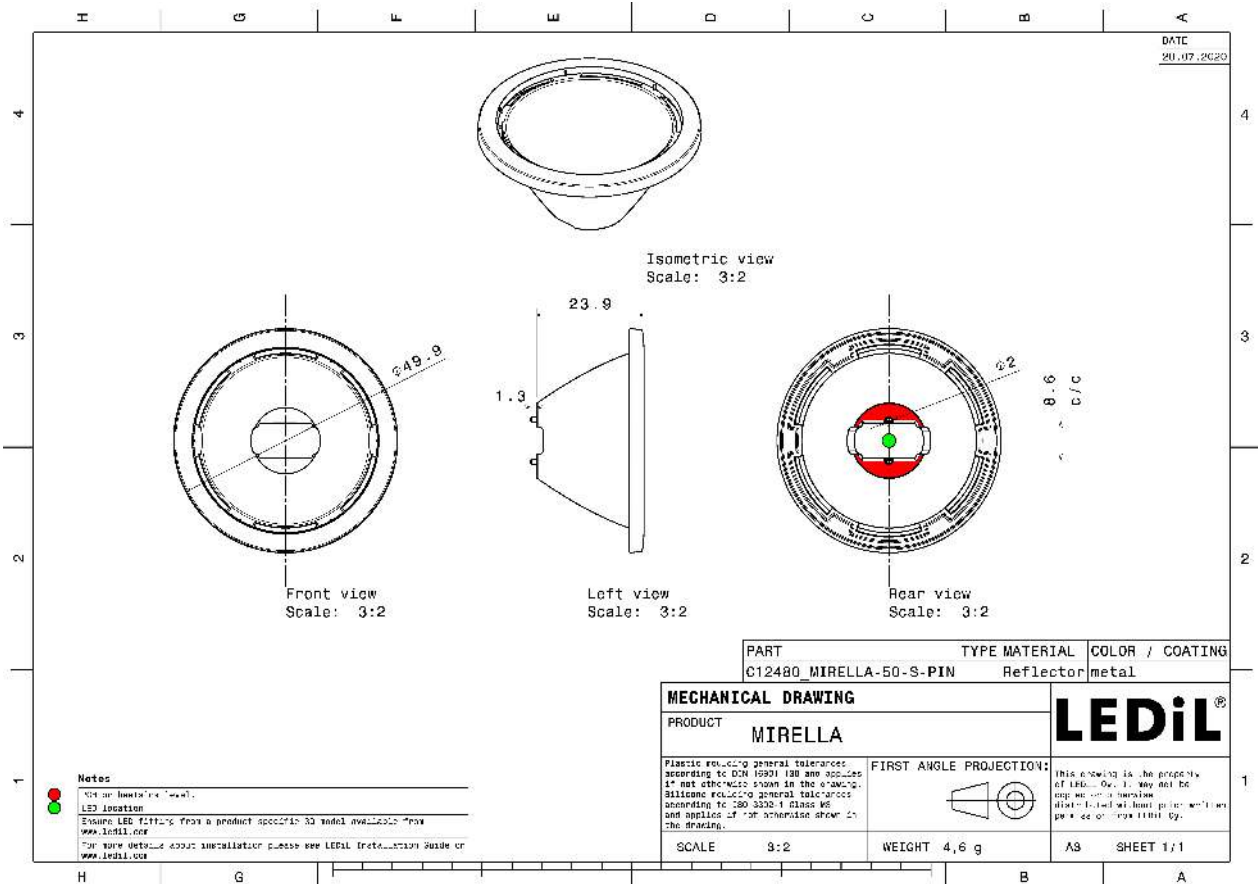
### MATERIALS:

| Component        | Type      | Material | Colour | Finish | Coating |
|------------------|-----------|----------|--------|--------|---------|
| MIRELLA-50-S-PIN | Reflector | PC       | metal  |        | lacquer |







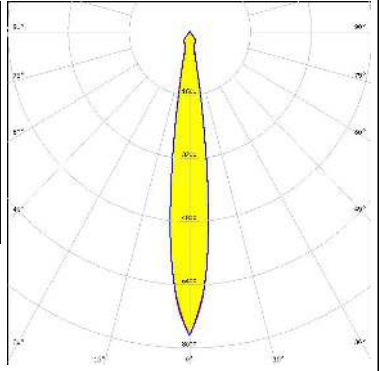




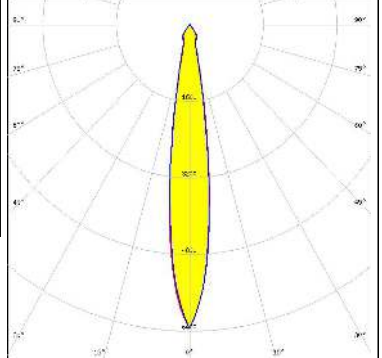
### ORDERING INFORMATION:

| Component   | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|------------|-----|-----|-----------------|
| C12480_MIRELLA-50-S-PIN<br>» Box size: 480 x 280 x 300 mm | 336        | 112 | 28  | 3.0             |


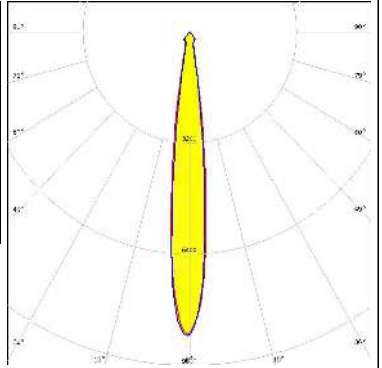

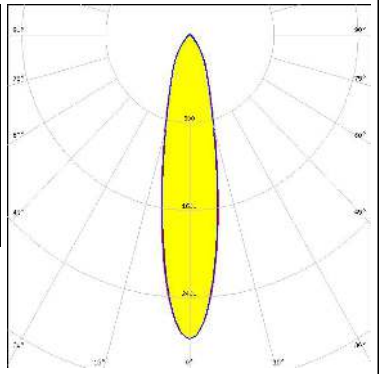

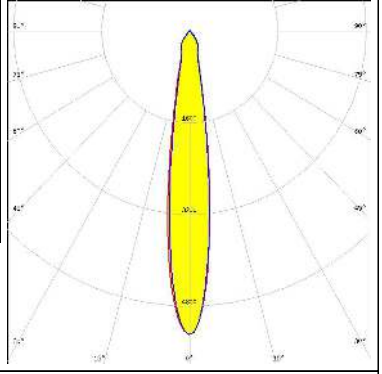

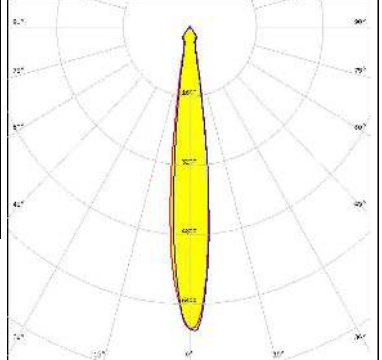


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

|  |  |   |
|--|--|---|
| <p></p> <p>LED SM4<br/>           FWHM / FWTM 15.0° / 32.0°<br/>           Efficiency 81 %<br/>           Peak intensity 6.9 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C12479_MIRELLA-DL</p>       |    |   |
| <p></p> <p>LED MHB-A/B<br/>           FWHM / FWTM 16.0° / 32.0°<br/>           Efficiency 85 %<br/>           Peak intensity 7 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C13333_MIRELLA-CL</p>     |   |   |
| <p></p> <p>LED MHB-A/B<br/>           FWHM / FWTM 14.0° / 28.0°<br/>           Efficiency 90 %<br/>           Peak intensity 9.4 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                                  |  |   |
| <p></p> <p>LED MHB-A/B<br/>           FWHM / FWTM 17.0° / 38.0°<br/>           Efficiency 85 %<br/>           Peak intensity 5.4 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C12479_MIRELLA-DL</p> |  |  |

#### OPTICAL RESULTS (MEASURED):

|   |  |   |
|---|--|---|
| <p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED XHP50<br/>           FWHM / FWTM 13.0° / 24.0°<br/>           Efficiency 93 %<br/>           Peak intensity 8.8 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                                   |    |    |
| <p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED XHP50<br/>           FWHM / FWTM 22.0° / 60.0°<br/>           Efficiency 86 %<br/>           Peak intensity 2.8 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C13723_MIRELLA-RZL</p> |   |   |
| <p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED XHP50<br/>           FWHM / FWTM 16.0° / 35.0°<br/>           Efficiency 89 %<br/>           Peak intensity 5.3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C12479_MIRELLA-DL</p>  |  |  |
| <p><b>CREE</b> ⇄ <b>LED</b></p> <p>LED XHP50<br/>           FWHM / FWTM 14.0° / 27.0°<br/>           Efficiency 88 %<br/>           Peak intensity 7 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C13333_MIRELLA-CL</p>    |  |  |

#### OPTICAL RESULTS (MEASURED):

##### CREE → LED

LED XM-L  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 85 %  
 Peak intensity 11.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13333\_MIRELLA-CL



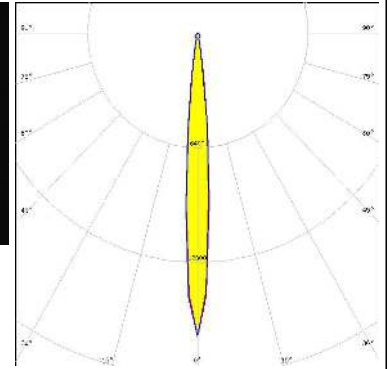
##### CREE → LED

LED XM-L  
 FWHM / FWTM 12.0° / 26.0°  
 Efficiency 86 %  
 Peak intensity 8.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12479\_MIRELLA-DL



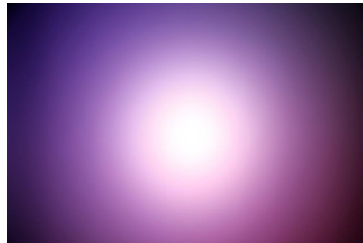
##### CREE → LED

LED XM-L  
 FWHM / FWTM 8.7° / 18.0°  
 Efficiency 90 %  
 Peak intensity 19.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### CREE → LED

LED XM-L RGBW (XMLCTW)  
 FWHM / FWTM 21.0° / 58.0°  
 Efficiency 84 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13723\_MIRELLA-RZL



#### OPTICAL RESULTS (MEASURED):

##### CREE → LED

LED XM-L2  
FWHM / FWTM 8.6° / 18.0°  
Efficiency 91 %  
Peak intensity 18.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### CREE → LED

LED XM-L2  
FWHM / FWTM 12.0° / 26.0°  
Efficiency 86 %  
Peak intensity 8.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12479\_MIRELLA-DL



##### CREE → LED

LED XP-G  
FWHM / FWTM 11.0° / 24.0°  
Efficiency 86 %  
Peak intensity 10.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C12479\_MIRELLA-DL








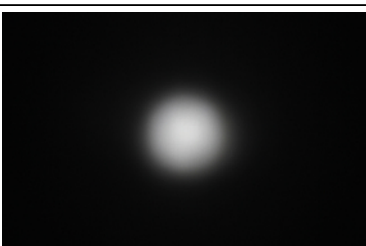
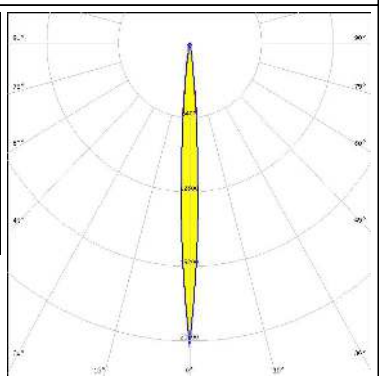


##### CREE → LED

LED XP-G  
FWHM / FWTM 8.1° / 16.0°  
Efficiency 91 %  
Peak intensity 25 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### OPTICAL RESULTS (MEASURED):

|   |  |
|---|--|
| <p><b>CREE</b>  <b>LED</b></p> <p>LED XP-G<br/>           FWHM / FWTM 11.0° / 22.0°<br/>           Efficiency 86 %<br/>           Peak intensity 14.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C13333_MIRELLA-CL</p>    |    |
| <p><b>CREE</b>  <b>LED</b></p> <p>LED XP-G2<br/>           FWHM / FWTM 7.9° / 16.0°<br/>           Efficiency 91 %<br/>           Peak intensity 25.1 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                                     |   |
| <p><b>CREE</b>  <b>LED</b></p> <p>LED XP-G2<br/>           FWHM / FWTM 11.0° / 24.0°<br/>           Efficiency 87 %<br/>           Peak intensity 10.4 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C12479_MIRELLA-DL</p> |    |
| <p><b>CREE</b>  <b>LED</b></p> <p>LED XP-L HI<br/>           FWHM / FWTM 7.7° / 16.0°<br/>           Efficiency 90 %<br/>           Peak intensity 24.9 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                                 |   |

#### OPTICAL RESULTS (MEASURED):

##### CREE LED

LED XT-E  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 84 %  
 Peak intensity 14.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13333\_MIRELLA-CL



##### CREE LED

LED XT-E  
 FWHM / FWTM 11.0° / 24.0°  
 Efficiency 85 %  
 Peak intensity 9.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12479\_MIRELLA-DL



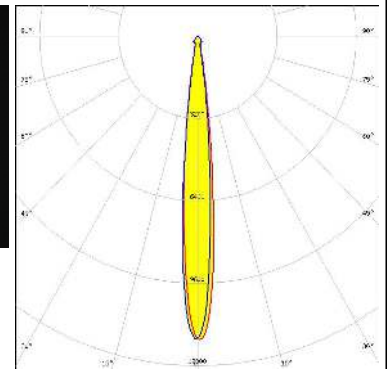
##### CREE LED

LED XT-E  
 FWHM / FWTM 7.6° / 16.0°  
 Efficiency 89 %  
 Peak intensity 24 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:







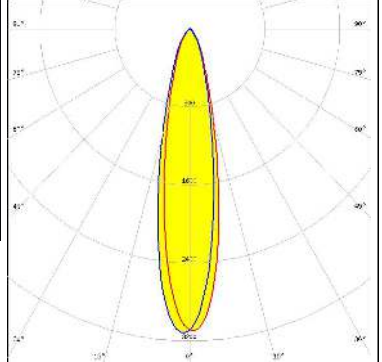
##### LUMILEDS

LED LUXEON 5050 Round LES  
 FWHM / FWTM 11.0° / 21.0°  
 Efficiency 93 %  
 Peak intensity 11.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




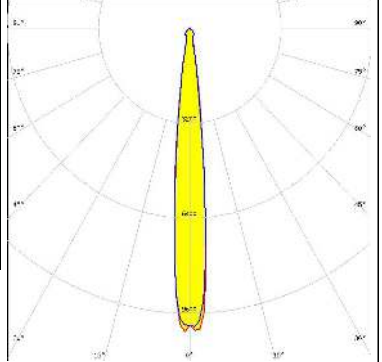





#### OPTICAL RESULTS (MEASURED):

|  |  |
|--|--|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON A</p> <p>FWHM / FWTM 12.0° / 28.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 8.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C12479_MIRELLA-DL</p>  |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON A</p> <p>FWHM / FWTM 10.0° / 22.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 14.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C13333_MIRELLA-CL</p> |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON A</p> <p>FWHM / FWTM 8.9° / 18.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 20.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                        |    |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON C</p> <p>FWHM / FWTM 22.0° / 51.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 3.1 cd/lm</p> <p>LEDs/each optic 4</p> <p>Light colour RGBW</p> <p>Required components:<br/>C13723_MIRELLA-RZL</p>  |   |

#### OPTICAL RESULTS (MEASURED):

|  |  |   |
|--|--|---|
| <p><b>LUMILEDS</b></p> <p>LED LUXEON M/MX</p> <p>FWHM / FWTM 15.0° / 34.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 5.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C12479_MIRELLA-DL</p> |    |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON M/MX</p> <p>FWHM / FWTM 15.0° / 30.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 7.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C13333_MIRELLA-CL</p> |   |   |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON M/MX</p> <p>FWHM / FWTM 12.0° / 26.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 10.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                      |  |  |
| <p><b>LUMILEDS</b></p> <p>LED LUXEON MZ</p> <p>FWHM / FWTM 8.7° / 18.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 19.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                         |  |   |

#### OPTICAL RESULTS (MEASURED):

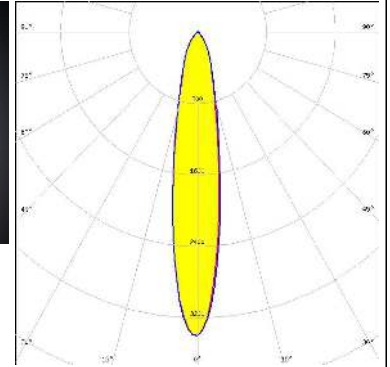
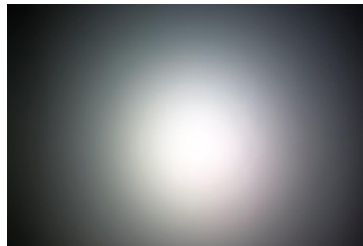
##### LUMILEDS

LED LUXEON MZ  
 FWHM / FWTM 11.0° / 26.0°  
 Efficiency 85 %  
 Peak intensity 9.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12479\_MIRELLA-DL



##### LUMILEDS

LED LUXEON Z  
 FWHM / FWTM 18.0° / 51.0°  
 Efficiency 82 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 4  
 Light colour RGBW  
 Required components:  
 C13723\_MIRELLA-RZL



##### NICHIA

LED NS9x383  
 FWHM / FWTM 9.2° / 15.0°  
 Efficiency 89 %  
 Peak intensity 17.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

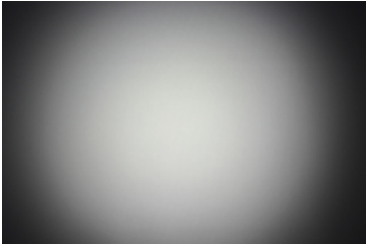
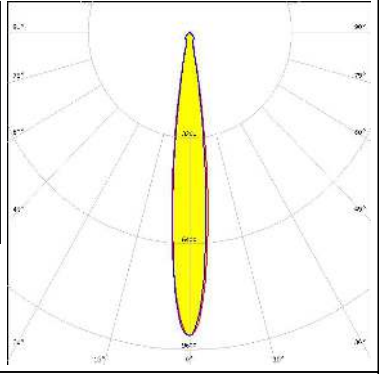





##### NICHIA




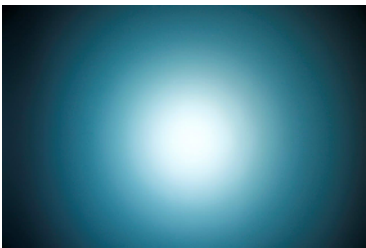
LED NS9x383  
 FWHM / FWTM 12.0° / 28.0°  
 Efficiency 85 %  
 Peak intensity 8.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C12479\_MIRELLA-DL



#### OPTICAL RESULTS (MEASURED):

|  |  |   |
|--|--|---|
| <p><b>NICHIA</b></p> <p>LED NV4x144A<br/>           FWHM / FWTM 13.0° / 24.0°<br/>           Efficiency 92 %<br/>           Peak intensity 9.2 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>  |    |  |
| <p><b>OSRAM</b><br/> <small>Opto Semiconductors</small></p> <p>LED Duris S8<br/>           FWHM / FWTM 12.0° / 28.0°<br/>           Efficiency 86 %<br/>           Peak intensity 8.3 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C12479_MIRELLA-DL</p>  |   |   |
| <p><b>OSRAM</b><br/> <small>Opto Semiconductors</small></p> <p>LED Duris S8<br/>           FWHM / FWTM 11.0° / 22.0°<br/>           Efficiency 86 %<br/>           Peak intensity 11.6 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:<br/>           C13333_MIRELLA-CL</p> |  |   |
| <p><b>OSRAM</b><br/> <small>Opto Semiconductors</small></p> <p>LED Duris S8<br/>           FWHM / FWTM 9.7° / 20.0°<br/>           Efficiency 91 %<br/>           Peak intensity 16 cd/lm<br/>           LEDs/each optic 1<br/>           Light colour White<br/>           Required components:</p>                                     |  |   |

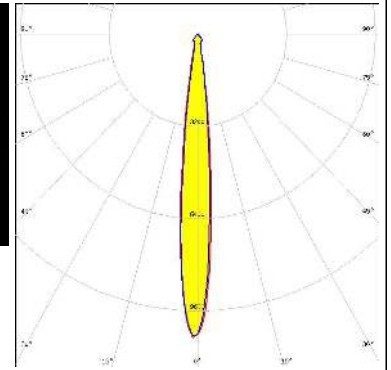
#### OPTICAL RESULTS (MEASURED):

|   |  |
|---|--|
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 8.0° / 16.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 23.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>                       |    |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 9.4° / 20.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 15.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C13333_MIRELLA-CL</p> |   |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 11.0° / 26.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 9.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C12479_MIRELLA-DL</p> |  |
| <p><b>OSRAM</b><br/>Opto Semiconductors</p> <p>LED Ostar-SMT RGB</p> <p>FWHM / FWTM 19.0° / 56.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 3.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:<br/>C13723_MIRELLA-RZL</p>  |  |

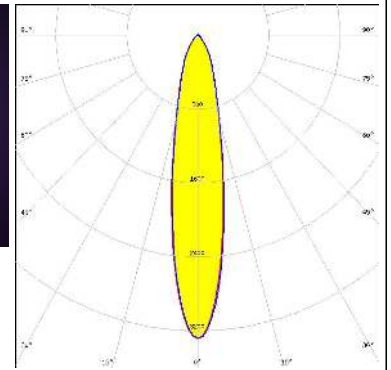
#### OPTICAL RESULTS (MEASURED):

### SAMSUNG

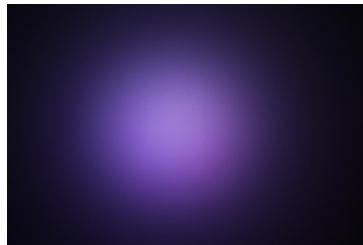
LED LH508A  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 90 %  
 Peak intensity 10.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:




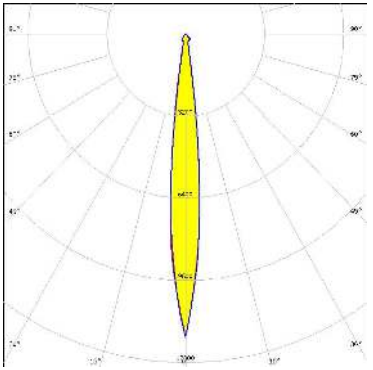

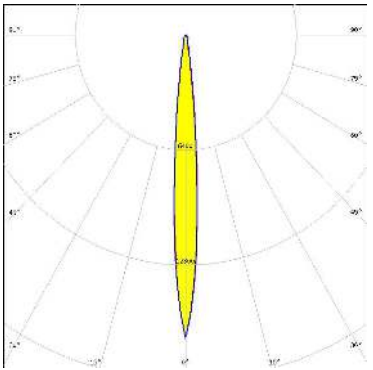

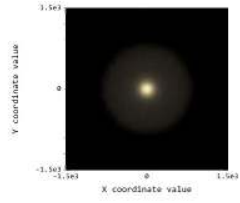
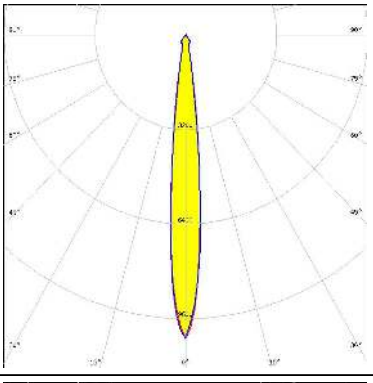

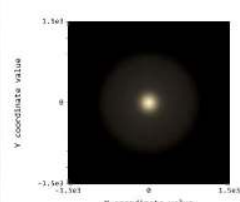
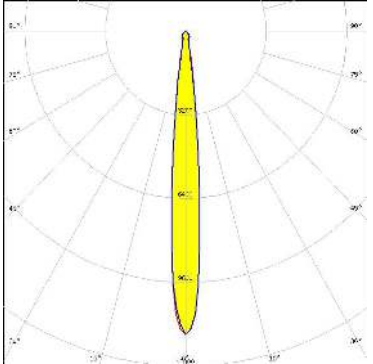
 SEOUL SEMICONDUCTOR  
 LED F50360 (RGB)  
 FWHM / FWTM 21.0° / 55.0°  
 Efficiency 84 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13723\_MIRELLA-RZL



 SEOUL SEMICONDUCTOR  
 LED F50360 (RGB)  
 FWHM / FWTM 19.0° / 56.0°  
 Efficiency 86 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C13723\_MIRELLA-RZL



#### OPTICAL RESULTS (SIMULATED):

|  |  |  |
|--|--|--|
|    | <p>LED: XHP35 HD<br/>           FWHM / FWTM: 11.0° / 20.0°<br/>           Efficiency: 92 %<br/>           Peak intensity: 11.8 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>  |   |
|    | <p>LED: LUXEON 5258<br/>           FWHM / FWTM: 9.0° / 19.0°<br/>           Efficiency: 91 %<br/>           Peak intensity: 17 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>  |    |
|  | <p>LED: OSCONIQ P 7070<br/>           FWHM / FWTM: 11.0° / 22.0°<br/>           Efficiency: 87 %<br/>           Peak intensity: 10.4 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:<br/>           C13333_MIRELLA-CL</p> |   |
|  | <p>LED: OSCONIQ P 7070<br/>           FWHM / FWTM: 10.0° / 21.0°<br/>           Efficiency: 92 %<br/>           Peak intensity: 11.6 cd/lm<br/>           LEDs/each optic: 1<br/>           Light colour: White<br/>           Required components:</p>                                  |   |

#### OPTICAL RESULTS (SIMULATED):





#### 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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