

CRYSTAL-RS

~5.1° spot beam. Assembly with holder.



TECHNICAL SPECIFICATIONS:

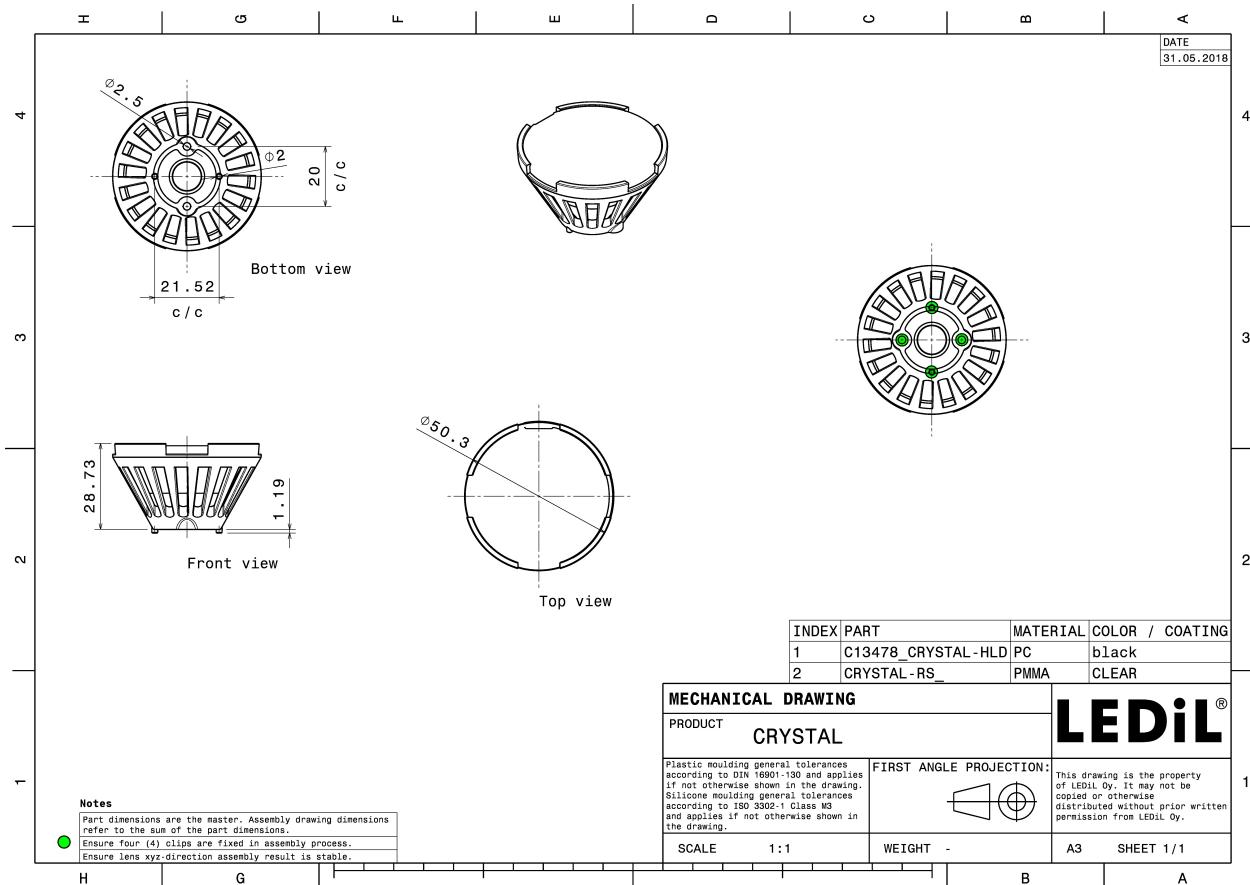
| | |
|----------------|---|
| Dimensions | Ø 49.7 mm |
| Height | 28.7 mm |
| Fastening | pin, screw |
| ROHS compliant | yes  |

MATERIAL SPECIFICATIONS:

| Component | Type | Material | Colour | Finish |
|-------------|-------------|----------|--------|--------|
| CRYSTAL-RS | Single lens | PMMA | clear | |
| CRYSTAL-HLD | Holder | PC | white | |

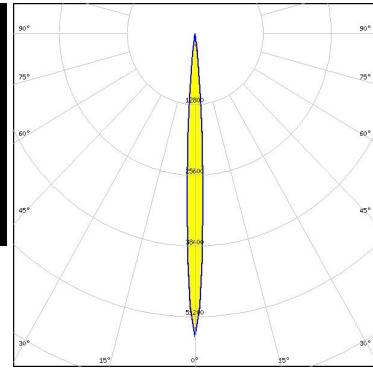
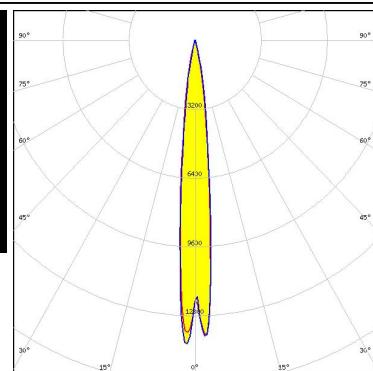
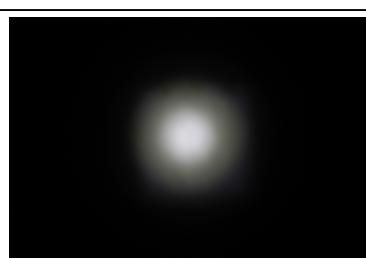
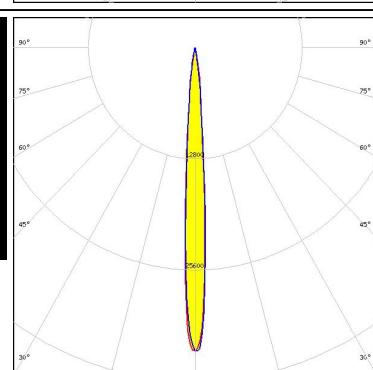
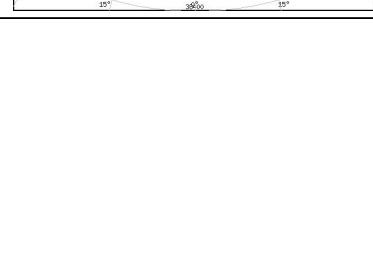
ORDERING INFORMATION:

| Component | Qty in box | MOQ | MPQ | Box weight (kg) |
|---------------------|------------|-----|-----|-----------------|
| FCN13552_CRYSTAL-RS | 288 | 64 | 32 | 0.0 |
| » Box size: | | | | |

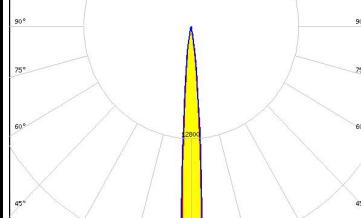
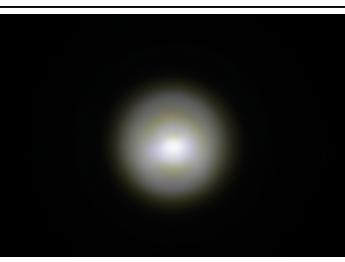
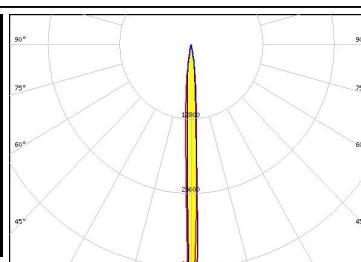
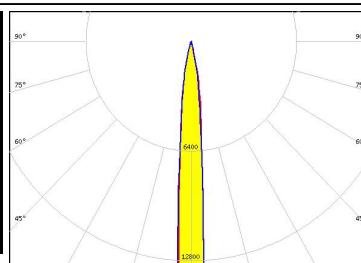


See also our general installation guide: www.ledil.com/installation_guide

PHOTOMETRIC DATA (MEASURED):

| | | | |
|--|-----------------------------|--|---|
|  | LED XHP35 HI |  |  |
| FWHM / FWTM 5.7° / 15.0° | Efficiency 89 % | | |
| Peak intensity 48.3 cd/lm | LEDs/each optic 1 | | |
| Light colour White | Required components: | | |
|  | LED XHP50 |  |  |
| FWHM / FWTM 11.0° / 24.0° | Efficiency 93 % | | |
| Peak intensity 14.1 cd/lm | LEDs/each optic 1 | | |
| Light colour White | Required components: | | |
|  | LED XM-L |  |  |
| FWHM / FWTM 7.0° / 17.0° | Efficiency 94 % | | |
| Peak intensity 34.9 cd/lm | LEDs/each optic 1 | | |
| Light colour White | Required components: | | |
|  | LED XP-G |  |  |
| FWHM / FWTM 4.9° / 11.4° | Efficiency 89 % | | |
| Peak intensity 68.3 cd/lm | LEDs/each optic 1 | | |
| Light colour White | Required components: | | |

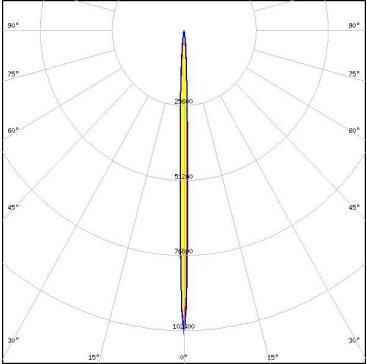
PHOTOMETRIC DATA (MEASURED):

| | | | |
|--|--|--|---|
|  | <p>LED XP-L HD FWHM / FWTM 7.0° / 15.0° Efficiency 88 % Peak intensity 34.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p> |  |  |
|  | <p>LED LUXEON 3030 2D (Round LES) FWHM / FWTM 4.0° / 15.0° Efficiency 94 % Peak intensity 52.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p> |  |  |
|  | <p>LED LUXEON 5050 Round LES FWHM / FWTM 9.0° / 24.0° Efficiency 94 % Peak intensity 17.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p> |  |  |
|  | <p>LED LUXEON A FWHM / FWTM 5.1° / 14.0° Efficiency 89 % Peak intensity 58.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p> |  | |

PHOTOMETRIC DATA (MEASURED):

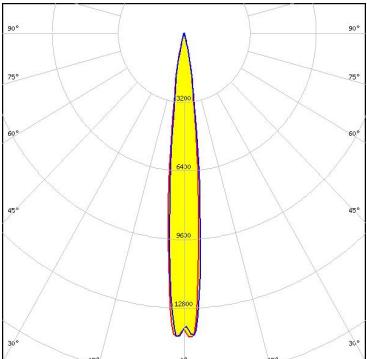
LUMILEDS

LED LUXEON Z ES
 FWHM / FWTM 3.0° / 9.0°
 Efficiency 93 %
 Peak intensity 103.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



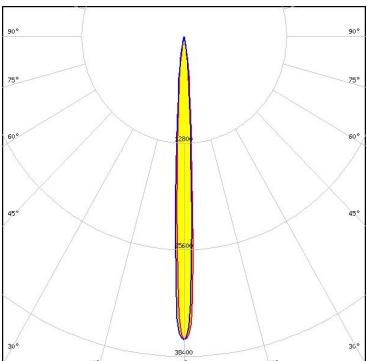
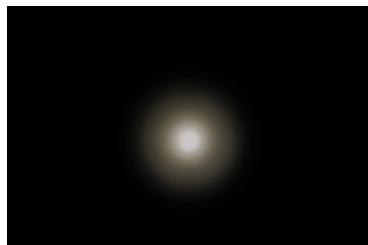
NICHIA

LED NV4x144A
 FWHM / FWTM 12.0° / 25.0°
 Efficiency 92 %
 Peak intensity 14.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



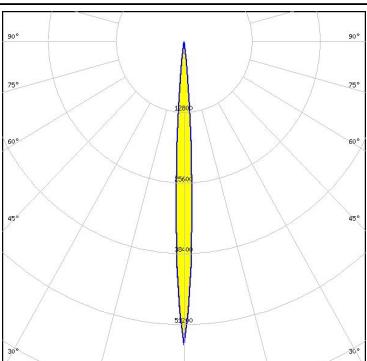
NICHIA

LED NVSW3x9A
 FWHM / FWTM 6.0° / 16.0°
 Efficiency 89 %
 Peak intensity 36.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



NICHIA

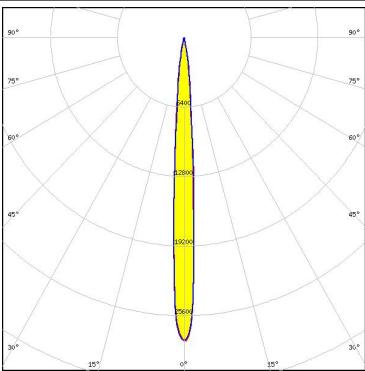
LED NVSxx19B/NVSxx19C
 FWHM / FWTM 5.3° / 17.0°
 Efficiency 89 %
 Peak intensity 42.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



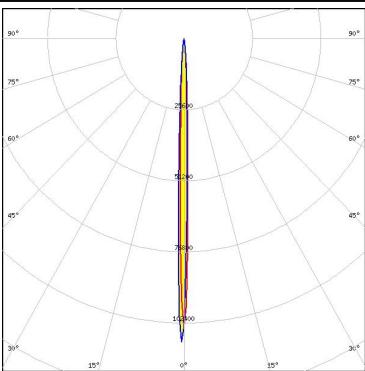
PHOTOMETRIC DATA (MEASURED):



LED NWSx229A
 FWHM / FWTM 8.0° / 18.0°
 Efficiency 92 %
 Peak intensity 27.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED OSLON SSL 150
 FWHM / FWTM 3.0° / 9.0°
 Efficiency 94 %
 Peak intensity 108.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LH351B
 FWHM / FWTM 5.3° / 14.0°
 Efficiency 90 %
 Peak intensity 57 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LH351Z
 FWHM / FWTM 4.4° / 12.0°
 Efficiency 90 %
 Peak intensity 77 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

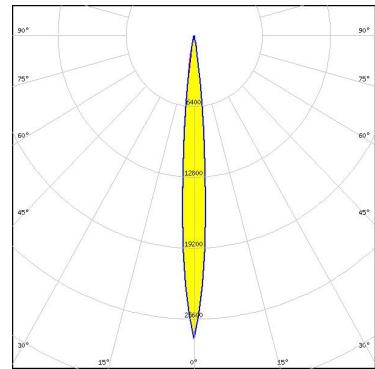


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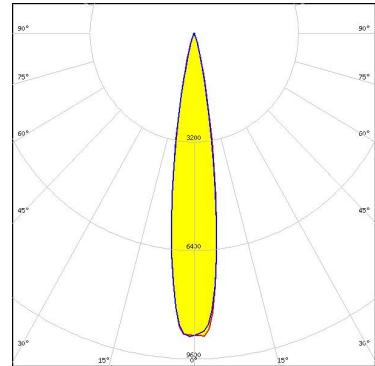
| | |
|-----------------|---------------------|
| LED | XHP50.3 HI |
| FWHM / FWTM | 10.0 + 8.0° / 18.0° |
| Efficiency | 97 % |
| Peak intensity | 27.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



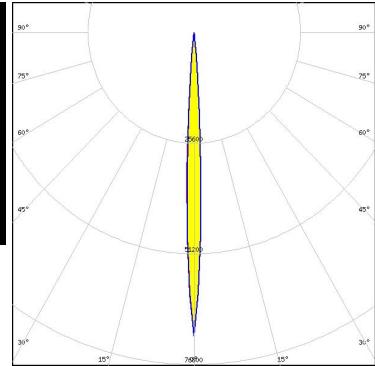
| | |
|-----------------|---------------|
| LED | XHP70.2 |
| FWHM / FWTM | 16.0° / 30.0° |
| Efficiency | 95 % |
| Peak intensity | 9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



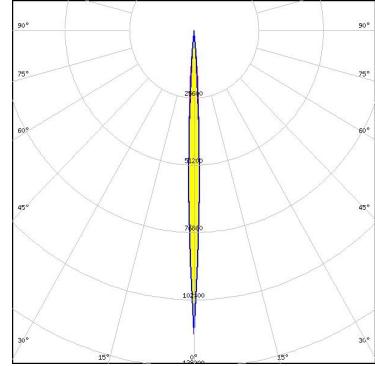
| | |
|-----------------|--------------|
| LED | XP-L HI |
| FWHM / FWTM | 5.6° / 12.0° |
| Efficiency | 94 % |
| Peak intensity | 70.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



| | |
|-----------------|--------------|
| LED | XP-P |
| FWHM / FWTM | 4.0° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 115.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

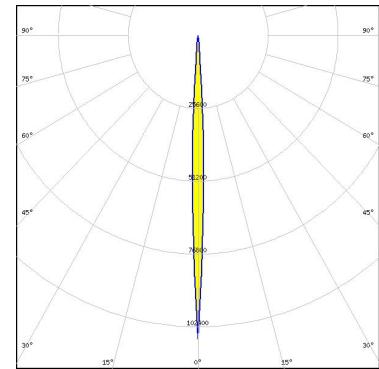


PHOTOMETRIC DATA (SIMULATED):



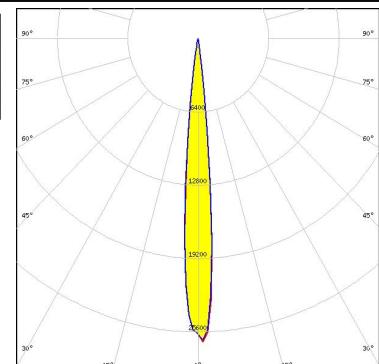
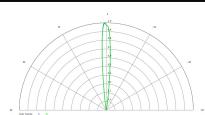
| | |
|-----------------|--------------|
| LED | XQ-E HI |
| FWHM / FWTM | 4.5° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 106.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



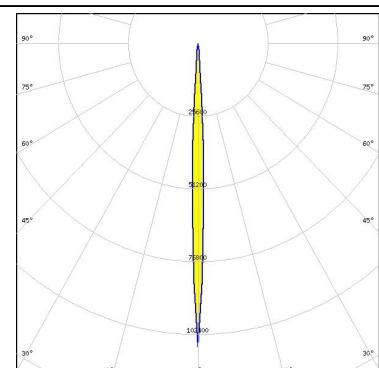
| | |
|-----------------|---------------|
| LED | LUXEON Rubix |
| FWHM / FWTM | 10.0° / 17.0° |
| Efficiency | 97 % |
| Peak intensity | 26.8 cd/lm |
| LEDs/each optic | 4 |
| Light colour | RGBW |

Required components:



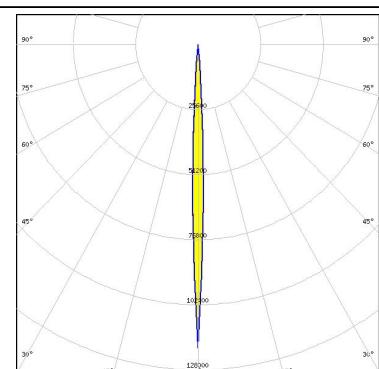
| | |
|-----------------|--------------|
| LED | LUXEON Rubix |
| FWHM / FWTM | 4.0° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 106.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



| | |
|-----------------|--------------|
| LED | LUXEON Rubix |
| FWHM / FWTM | 4.0° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 119.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Red |

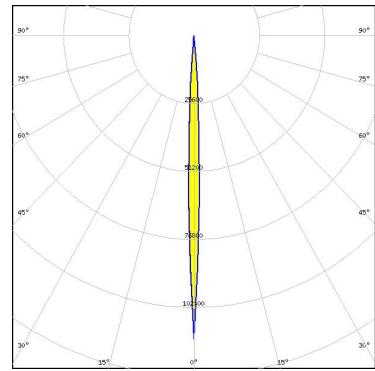
Required components:



PHOTOMETRIC DATA (SIMULATED):

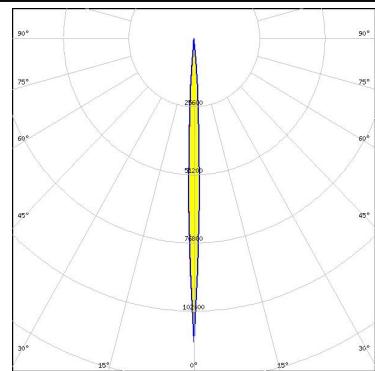
LUMILEDS

LED LUXEON Rubix
 FWHM / FWTM 4.0° / 10.0°
 Efficiency 95 %
 Peak intensity 114.3 cd/lm
 LEDs/each optic 1
 Light colour Green
 Required components:



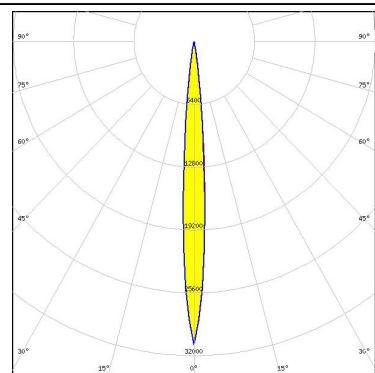
LUMILEDS

LED LUXEON Rubix
 FWHM / FWTM 4.0° / 10.0°
 Efficiency 95 %
 Peak intensity 114 cd/lm
 LEDs/each optic 1
 Light colour Blue
 Required components:



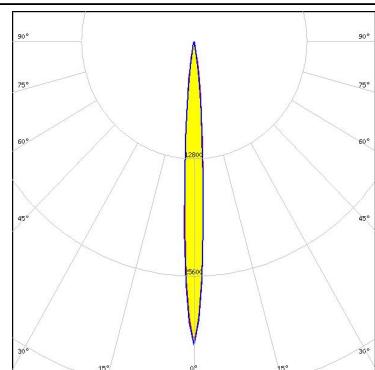
LUMILEDS

LED LUXEON V
 FWHM / FWTM 8.0° / 17.0°
 Efficiency 95 %
 Peak intensity 30.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LUMINUS

LED SBT-90
 FWHM / FWTM 8.0° / 18.0°
 Efficiency 97 %
 Peak intensity 33.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

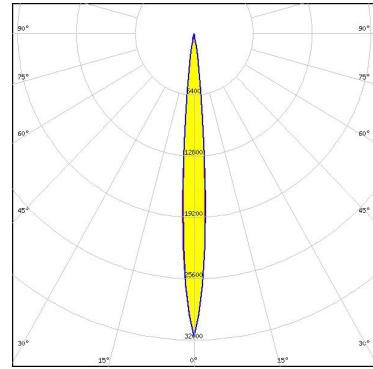


PHOTOMETRIC DATA (SIMULATED):



| | |
|-----------------|--------------|
| LED | SST-40 |
| FWHM / FWTM | 8.0° / 16.0° |
| Efficiency | 97 % |
| Peak intensity | 31.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

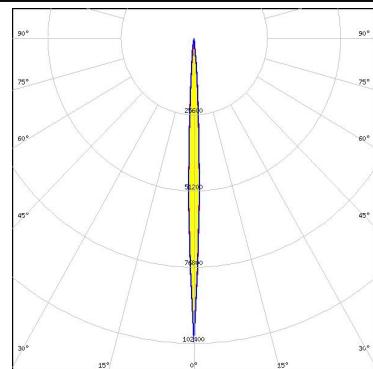


OSRAM

Opto Semiconductors

| | |
|-----------------|------------------------|
| LED | Duris S5 (Single chip) |
| FWHM / FWTM | 4.0° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 101.9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Green |

Required components:

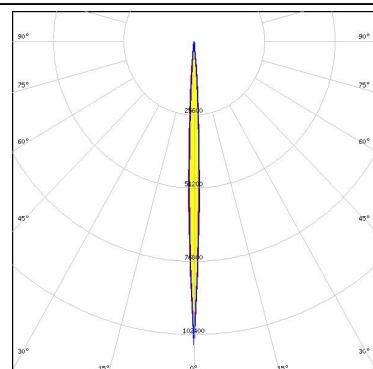


OSRAM

Opto Semiconductors

| | |
|-----------------|------------------------|
| LED | Duris S5 (Single chip) |
| FWHM / FWTM | 4.0° / 10.0° |
| Efficiency | 95 % |
| Peak intensity | 106 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Red |

Required components:

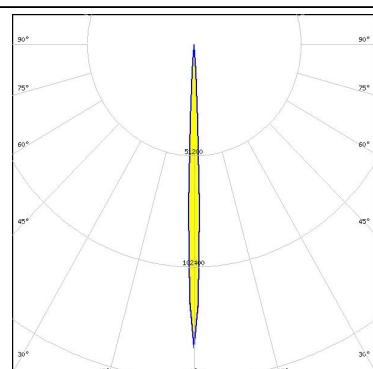


OSRAM

Opto Semiconductors

| | |
|-----------------|---|
| LED | OSTAR Projection Compact (Kx.CSLNM1.xx) |
| FWHM / FWTM | 4.0° / 8.0° |
| Efficiency | 94 % |
| Peak intensity | 139.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:



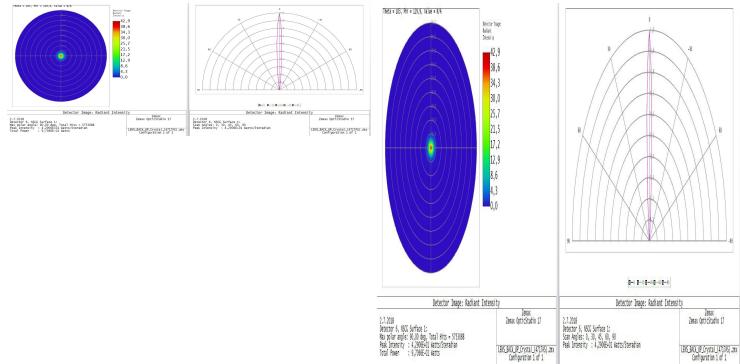
PHOTOMETRIC DATA (SIMULATED):

OSRAM

Opto Semiconductors

| | |
|-----------------|--------------|
| LED | SFH 4717AS |
| FWHM / FWTM | 6.7° / 14.5° |
| Efficiency | 94 % |
| Peak intensity | 46.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

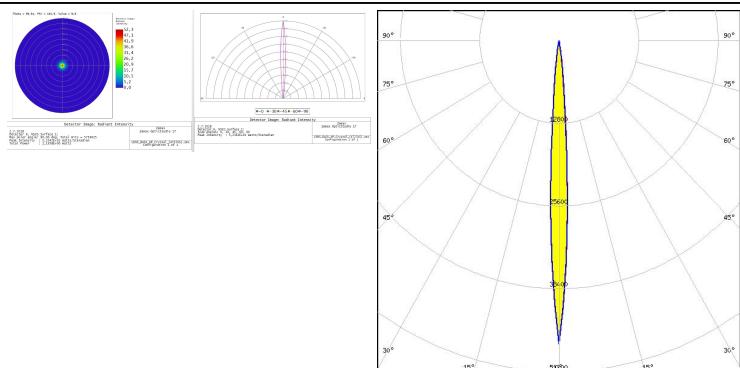


OSRAM

Opto Semiconductors

| | |
|-----------------|--------------|
| LED | SFH 4727AS |
| FWHM / FWTM | 6.7° / 14.5° |
| Efficiency | 94 % |
| Peak intensity | 47 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

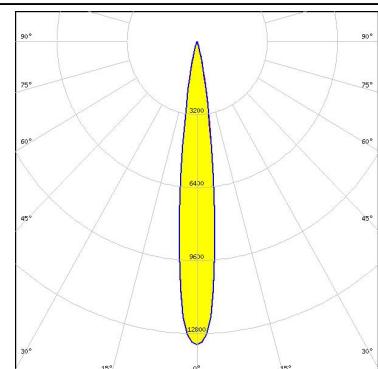


SEoul SEMICONDUCTOR

SEoul SEMICONDUCTOR

| | |
|-----------------|---------------|
| LED | Z8Y50P |
| FWHM / FWTM | 14.0° / 26.0° |
| Efficiency | 97 % |
| Peak intensity | 13.3 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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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