# STRADA-SQ-FS3

**Forward throw beam optimized for European tunnels, resulting in extremely efficient lighting with counter-beam method. Version with location pins. Assembly with installation tape.**




## SPECIFICATION:

| | |
|---|---|
| Dimensions | 25.0 x 25.0 mm |
| Height | 16.2 mm |
| Fastening | tape |
| ROHS compliant | yes |

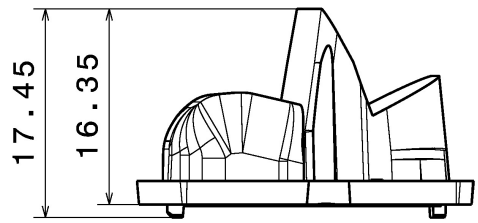
## MATERIALS:

| Component | Type | Material | Colour | Finish |
|---|---|---|---|---|
| STRADA-SQ-FS3 | Single lens | PMMA | clear | |
| ROSE-TAPE | Tape | Acrylic foam | black | |

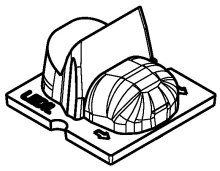
## ORDERING INFORMATION:

| Component | | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|---|---|---|---|---|
| CA15226_STRADA-SQ-FS3 | Single lens | 1470 | 294 | 98 | 7.4 |
| » Box size: 480 x 280 x 300 mm | | | | | |

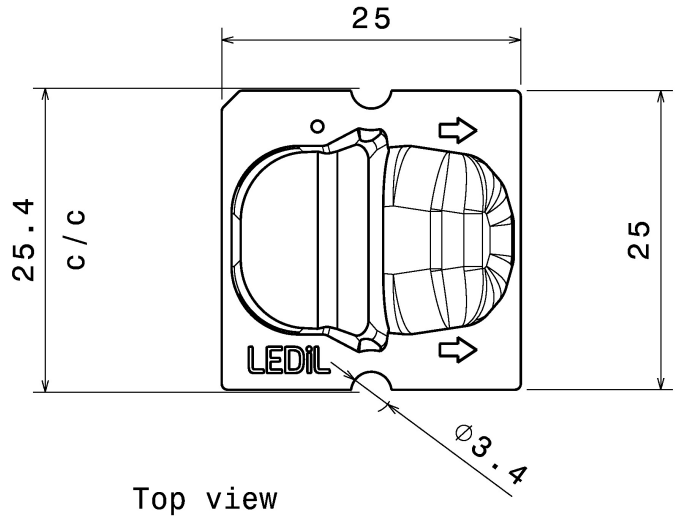

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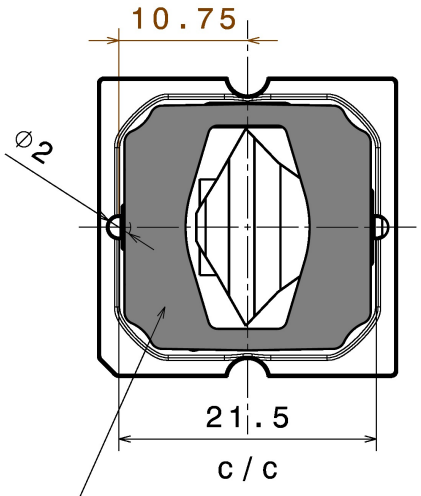

Front view



Isometric view
Scale: 1:1




Top view




Bottom view

| INDEX | PART NO | DESCRIPTION | MATERIAL | COLOUR |
|---|---|---|---|---|
| 1 | C15109 | STRADA-SQ-FS3 | 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 Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
CA15226_STRADA-SQ-FS3

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| SIZE | PART NUMBER |
|---|---|
| A4 | CA15226 |

| SCALE | WEIGHT | SHEET |
|---|---|---|
| 2:1 | 3,51 g | 1/1 |

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

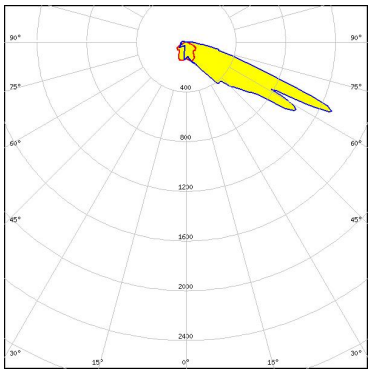

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## OPTICAL RESULTS (MEASURED):

CREE LEDs

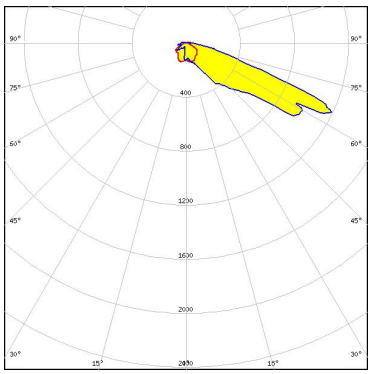
| | |
|---|---|
| LED | MK-R |
| FWHM / FWTM | Asymmetric |
| Efficiency | 88 % |
| Peak intensity | 1.3 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |





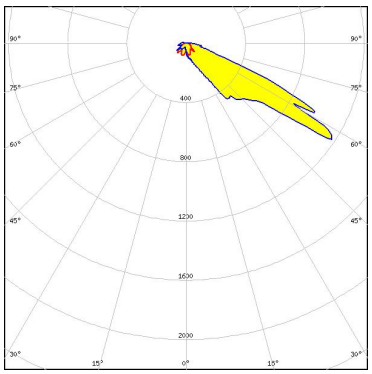
LUMILEDS

| | |
|---|---|
| LED | LUXEON M/MX |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 1.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



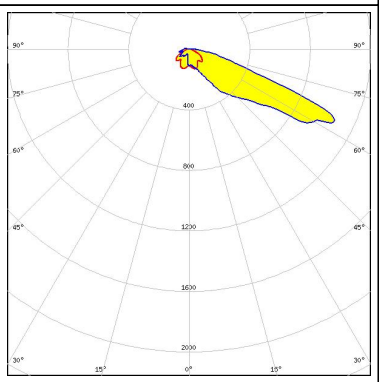
LUMILEDS

| | |
|---|---|
| LED | LUXEON MZ |
| FWHM / FWTM | Asymmetric |
| Efficiency | 91 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



NICHIA

| | |
|---|---|
| LED | NV4x144A |
| FWHM / FWTM | Asymmetric |
| Efficiency | 91 % |
| Peak intensity | 1.3 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |




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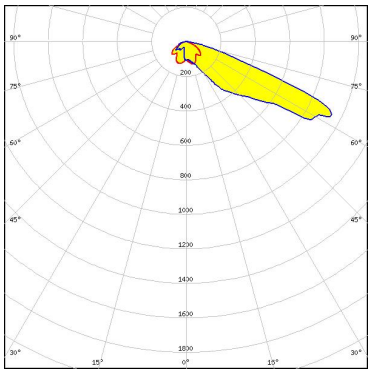
## OPTICAL RESULTS (MEASURED):

NICHIA

| | |
|---|---|
| LED | NV4x144A |
| FWHM / FWTM | Asymmetric |
| Efficiency | 78 % |
| Peak intensity | 1.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

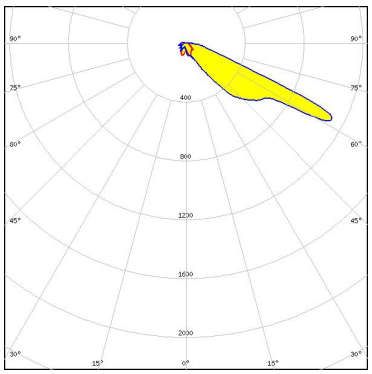
Protective plate, glass



NICHIA

| | |
|---|---|
| LED | NVSW319B |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

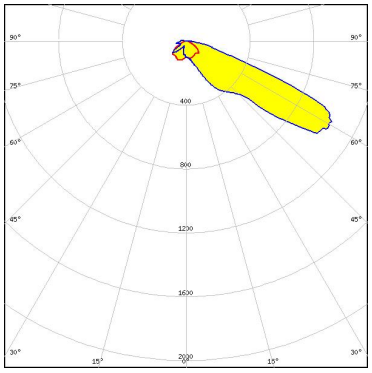
Required components:



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | Duris S10 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 86 % |
| Peak intensity | 1.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

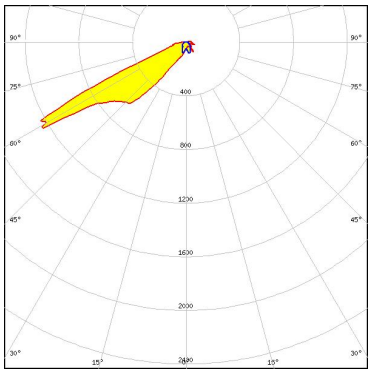
Required components:



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square PC |
| FWHM / FWTM | Asymmetric |
| Efficiency | 91 % |
| Peak intensity | 3.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:




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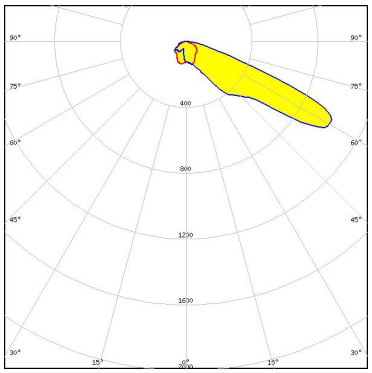
## OPTICAL RESULTS (SIMULATED):

CREE LEDs

| | |
|---|---|
| LED | XHP50.2 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 80 % |
| Peak intensity | 1.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

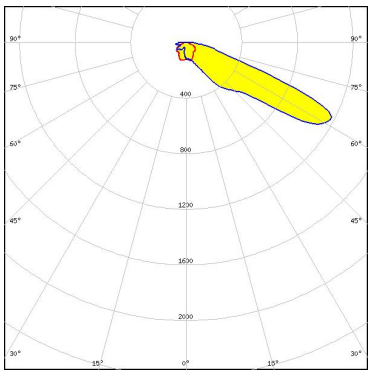
Protective plate, glass



CREE LEDs

| | |
|---|---|
| LED | XHP50.2 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 1.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

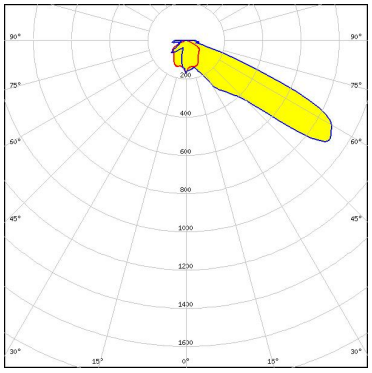


CREE LEDs

| | |
|---|---|
| LED | XHP70 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 77 % |
| Peak intensity | 0.9 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

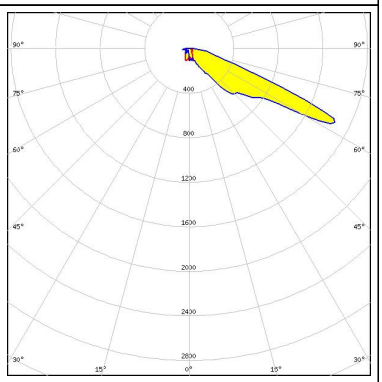
Protective plate, glass



CREE LEDs

| | |
|---|---|
| LED | XM-L2 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 88 % |
| Peak intensity | 2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |

Required components:

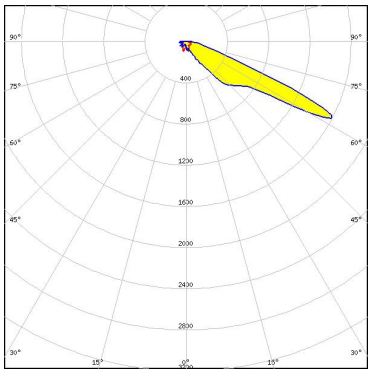



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## OPTICAL RESULTS (SIMULATED):

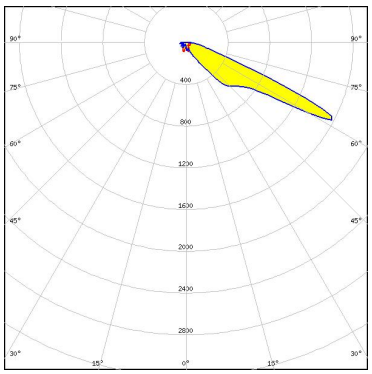
CREE LEDs

| | |
|---|---|
| LED | XP-G3 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 1.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



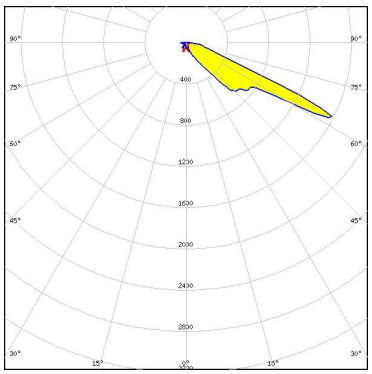
CREE LEDs

| | |
|---|---|
| LED | XP-G3 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 86 % |
| Peak intensity | 1.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour | Red |
| Required components: | |



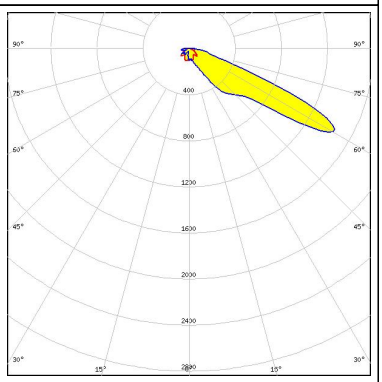
CREE LEDs

| | |
|---|---|
| LED | XT-E |
| FWHM / FWTM | Asymmetric |
| Efficiency | 87 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



LUMILEDS

| | |
|---|---|
| LED | LUXEON 5050 Round LES |
| FWHM / FWTM | Asymmetric |
| Efficiency | 88 % |
| Peak intensity | 1.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

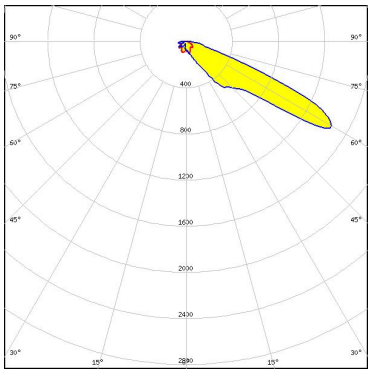



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## OPTICAL RESULTS (SIMULATED):

LUMILEDS

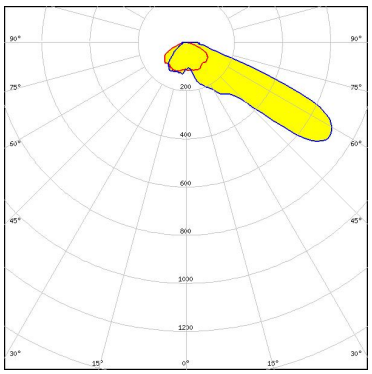
| | |
|---|---|
| LED | LUXEON 5050 Square LES |
| FWHM / FWTM | Asymmetric |
| Efficiency | 86 % |
| Peak intensity | 1.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



LUMILEDS

| | |
|---|---|
| LED | LUXEON 7070 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 76 % |
| Peak intensity | 0.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

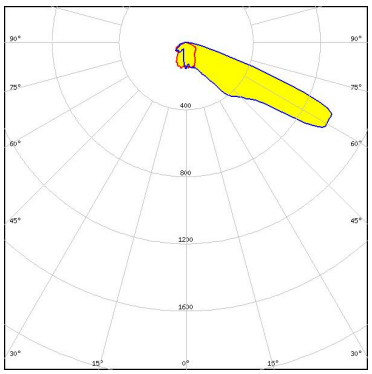
Protective plate, glass



LUMILEDS

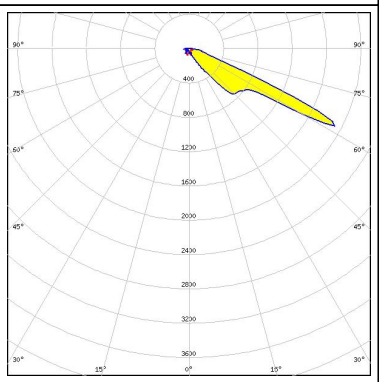
| | |
|---|---|
| LED | LUXEON M/MX |
| FWHM / FWTM | Asymmetric |
| Efficiency | 76 % |
| Peak intensity | 1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

Protective plate, glass



LUMINUS

| | |
|---|---|
| LED | SFT-40-WCS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 89 % |
| Peak intensity | 2.3 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



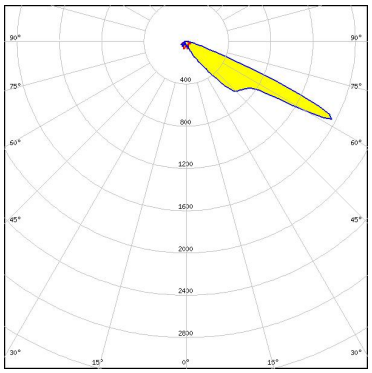

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## OPTICAL RESULTS (SIMULATED):

LUMINUS

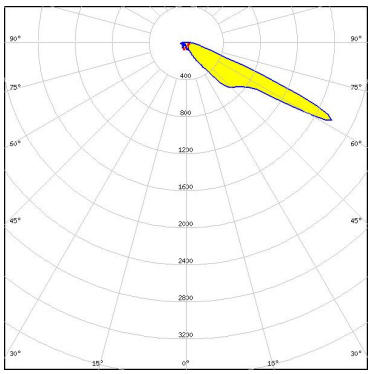
| | |
|---|---|
| LED | SFT-40-WCS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 74 % |
| Peak intensity | 1.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

Protective plate, glass



LUMINUS

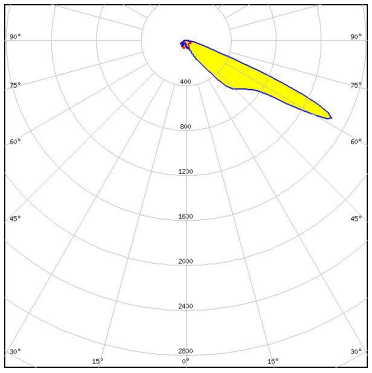
| | |
|---|---|
| LED | SFT-70X-WCS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 89 % |
| Peak intensity | 2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



LUMINUS

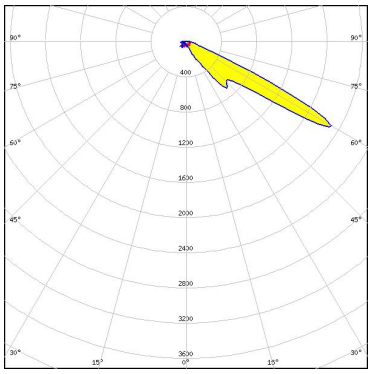
| | |
|---|---|
| LED | SFT-70X-WCS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 74 % |
| Peak intensity | 1.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

Protective plate, glass



NICHIA

| | |
|---|---|
| LED | NVSxE21A |
| FWHM / FWTM | Asymmetric |
| Efficiency | 89 % |
| Peak intensity | 2.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

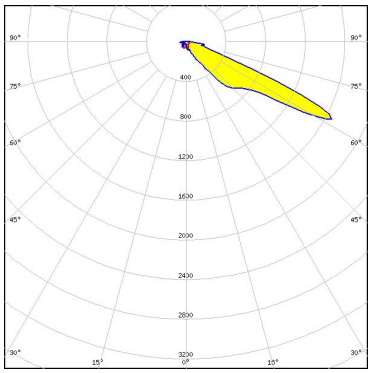



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## OPTICAL RESULTS (SIMULATED):

NICHIA

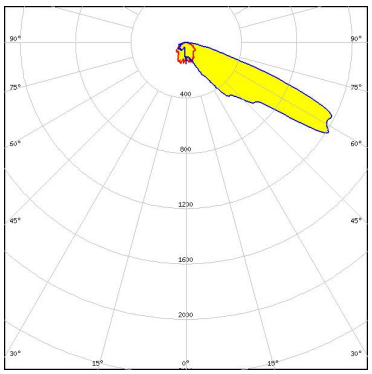
| | |
|---|---|
| LED | NVSxx19B/NVSxx19C |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 2.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



OSRAM
Opto Semiconductors

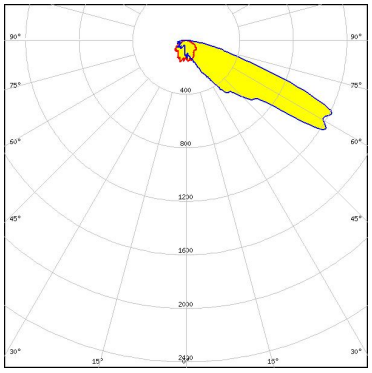
| | |
|---|---|
| LED | OSCONIQ P 7070 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 85 % |
| Peak intensity | 1.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

Protective plate, glass



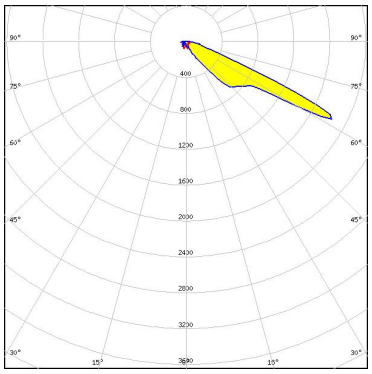
OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSCONIQ P 7070 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 94 % |
| Peak intensity | 1.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square CSSRM2/CSSRM3 |
| FWHM / FWTM | Asymmetric |
| Efficiency | 90 % |
| Peak intensity | 2.2 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |

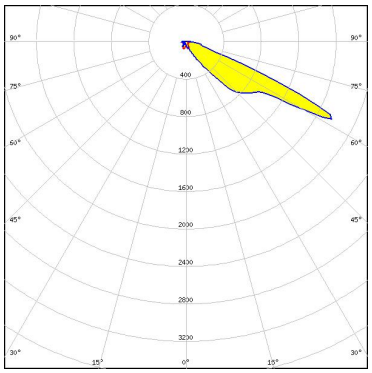



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## OPTICAL RESULTS (SIMULATED):

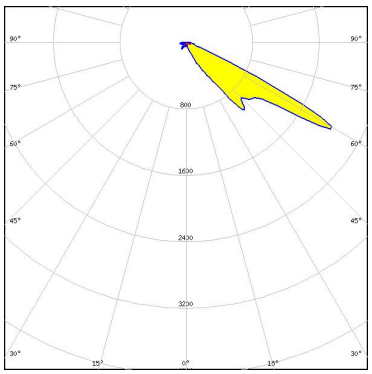
OSRAM Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square EC |
| FWHM / FWTM | Asymmetric |
| Efficiency | 89 % |
| Peak intensity | 2.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |



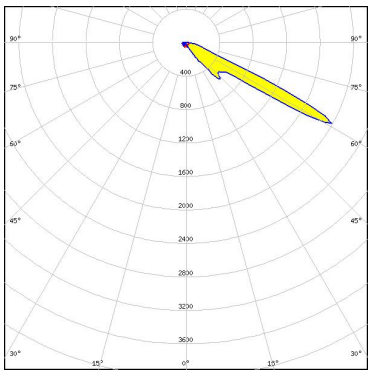
OSRAM Opto Semiconductors

| | |
|---|---|
| LED | SFH 4715AS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 87 % |
| LEDs/each optic | 1 |
| Light colour | IR |
| Required components: | |



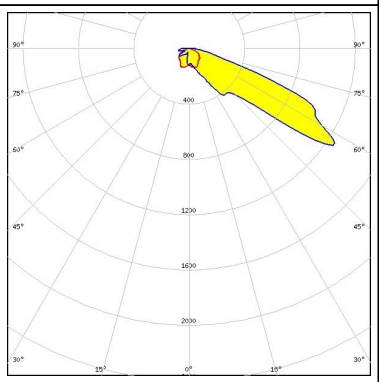
OSRAM Opto Semiconductors

| | |
|---|---|
| LED | SFH 4716AS |
| FWHM / FWTM | Asymmetric |
| Efficiency | 87 % |
| LEDs/each optic | 1 |
| Light colour | IR |
| Required components: | |



SAMSUNG

| | |
|---|---|
| LED | LH181B |
| FWHM / FWTM | Asymmetric |
| Efficiency | 87 % |
| Peak intensity | 1.2 cd/lm |
| LEDs/each optic | 4 |
| Light colour | White |
| Required components: | |

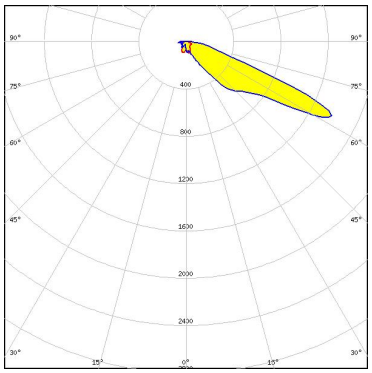



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## OPTICAL RESULTS (SIMULATED):

SAMSUNG

| | |
|---|---|
| LED | LH351D |
| FWHM / FWTM | Asymmetric |
| Efficiency | 87 % |
| Peak intensity | 1.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour | White |
| Required components: | |




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## 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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