# HB-2X2-5050-S

**~25° spot beam for industrial applications**


## SPECIFICATION:

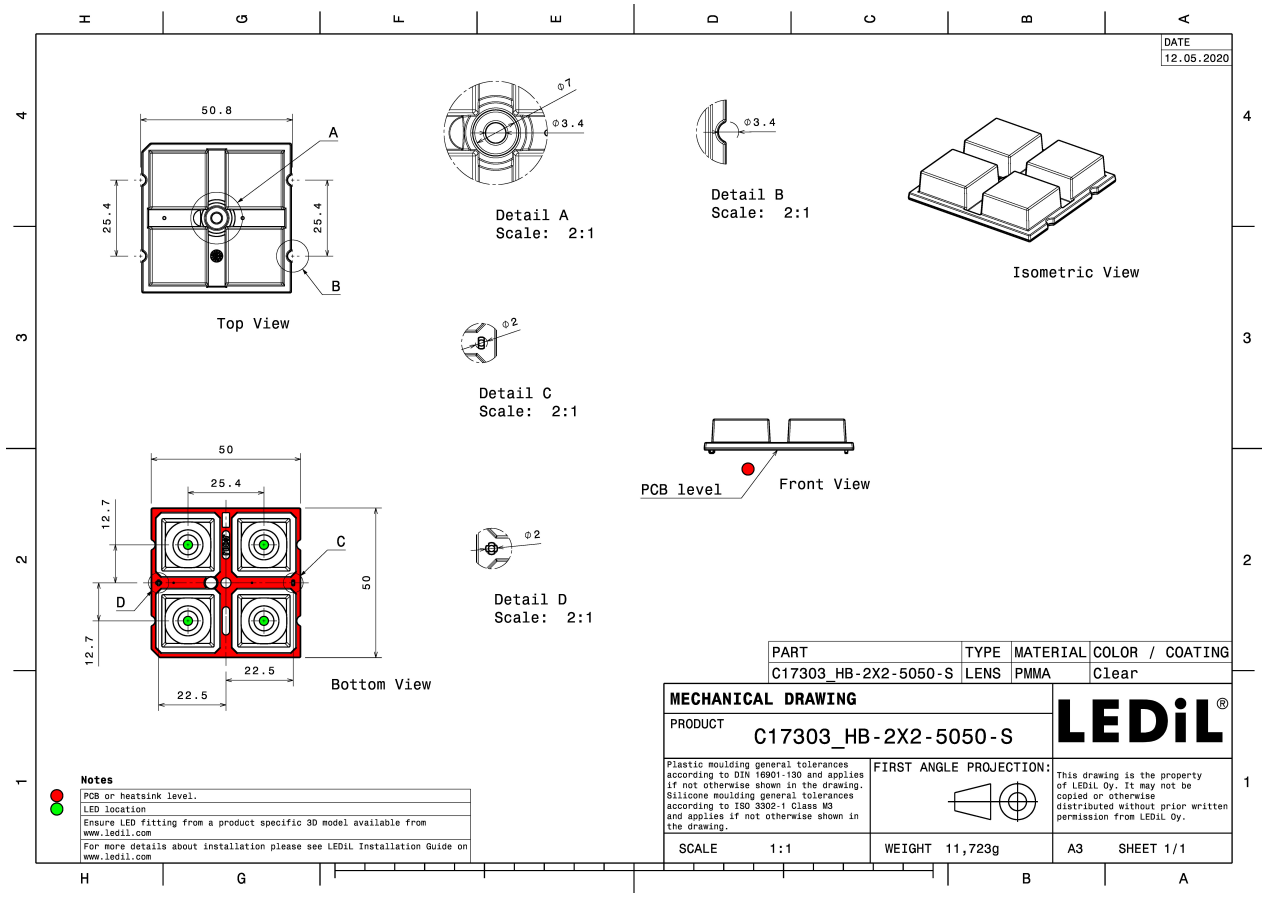
| | |
|---|---|
| Dimensions | 50.0 x 50.0 mm |
| Height | 10.4 mm |
| Fastening | screw |
| ROHS compliant | yes |

## MATERIALS:

| Component | Type | Material | Colour | Finish | Length |
|---|---|---|---|---|---|
| HB-2X2-5050-S | Multi-lens | PMMA | clear | | 50.0 |

## ORDERING INFORMATION:

| Component | Qty in box | MOQ | MPQ | Box weight (kg) |
|---|---|---|---|---|
| C17303_HB-2X2-5050-S<br>» Box size: 480 x 280 x 300 mm | 800 | 160 | 160 | 10.2 |

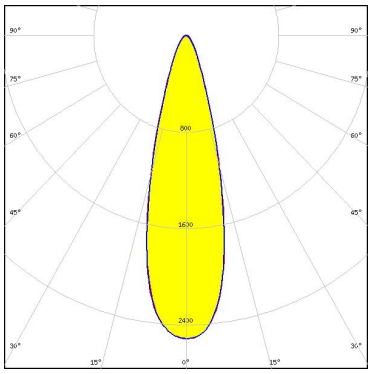



See also our general installation guide: www.ledil.com/installation_guide

## OPTICAL RESULTS (MEASURED):

LUMILEDS

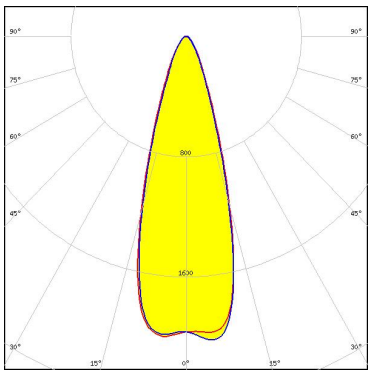
| | |
|---|---|
| LED | LUXEON XR-5050 SQR (L213-xxxx016MRH001) |
| FWHM / FWTM | 28.0° / 55.0° |
| Efficiency | 94 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

MST Your solutions

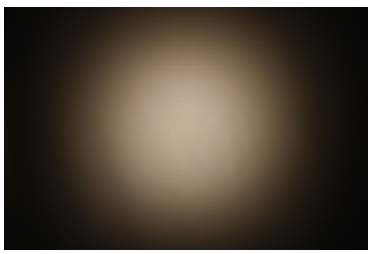
| | |
|---|---|
| LED | RecLED 173x50mm 2900lm 740 2x6 5050 Opt G1 |
| FWHM / FWTM | 33.0° / 60.0° |
| Efficiency | 94 % |
| Peak intensity | 2 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

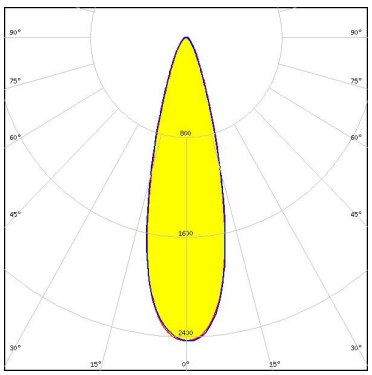


Light distribution files

PHILIPS

| | |
|---|---|
| LED | Fortimo FastFlex LED 2x8 DA HE |
| FWHM / FWTM | 29.0° / 56.0° |
| Efficiency | 95 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



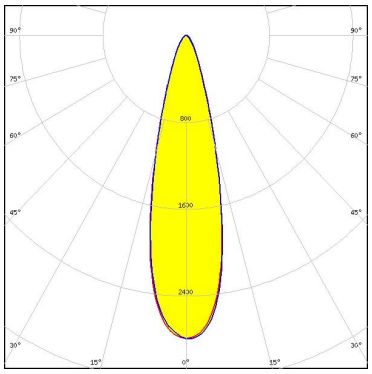


Light distribution files

## OPTICAL RESULTS (MEASURED):

TRIDONIC

| | |
|---|---|
| LED | RLE 2x8 6000lm HP HE EXC3 OTD |
| FWHM / FWTM | 27.0° / 52.0° |
| Efficiency | 94 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

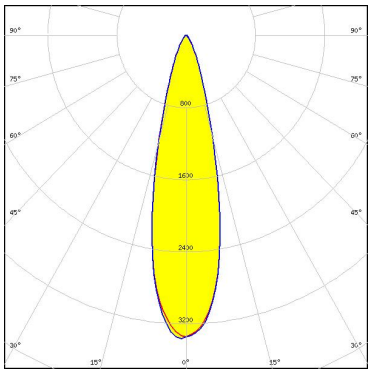


Light distribution files

## OPTICAL RESULTS (SIMULATED):

CREE LEDs

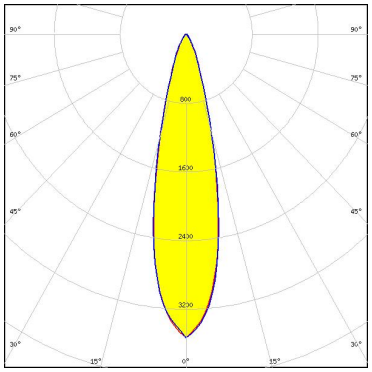
| | |
|---|---|
| LED | J Series 5050 Round LES |
| FWHM / FWTM | 26.0° / 50.0° |
| Efficiency | 93 % |
| Peak intensity | 3.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

CREE LEDs

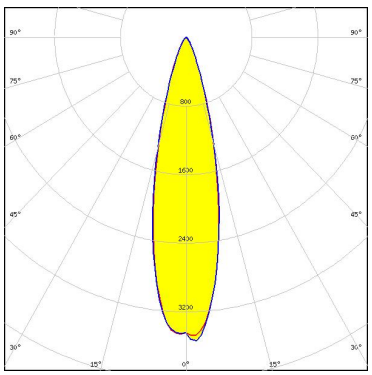
| | |
|---|---|
| LED | J Series 5050B 6V K Class |
| FWHM / FWTM | 24.0° / 48.0° |
| Efficiency | 92 % |
| Peak intensity | 3.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

CREE LEDs

| | |
|---|---|
| LED | XM-L RGBW (XMLDCL HI) |
| FWHM / FWTM | 26.0° / 48.0° |
| Efficiency | 94 % |
| Peak intensity | 3.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | RGBW |
| Required components: | |

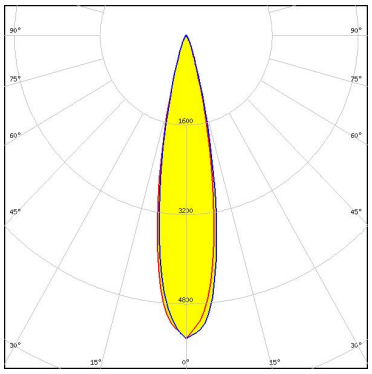


Light distribution files

## OPTICAL RESULTS (SIMULATED):

CREE LEDs

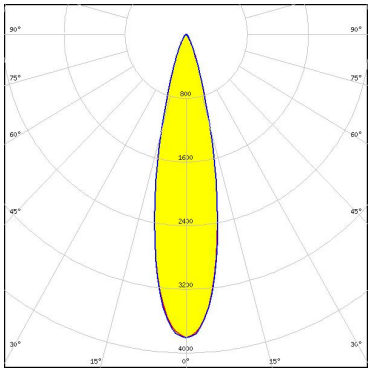
| | |
|---|---|
| LED | XP-G2 |
| FWHM / FWTM | 21.0° / 38.0° |
| Efficiency | 96 % |
| Peak intensity | 5.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

CREE LEDs

| | |
|---|---|
| LED | XP-G3 |
| FWHM / FWTM | 24.0° / 44.0° |
| Efficiency | 89 % |
| Peak intensity | 3.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

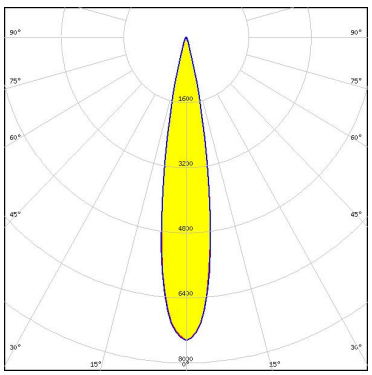


Protective plate, glass

Light distribution files

CREE LEDs

| | |
|---|---|
| LED | XP-P |
| FWHM / FWTM | 18.0° / 30.0° |
| Efficiency | 91 % |
| Peak intensity | 7.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



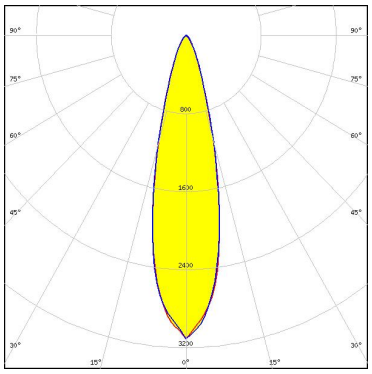
Protective plate, glass

Light distribution files

## OPTICAL RESULTS (SIMULATED):

LUMILEDS

| | |
|---|---|
| LED | LUXEON 5050 HE |
| FWHM / FWTM | 26.0° / 50.0° |
| Efficiency | 87 % |
| Peak intensity | 3.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

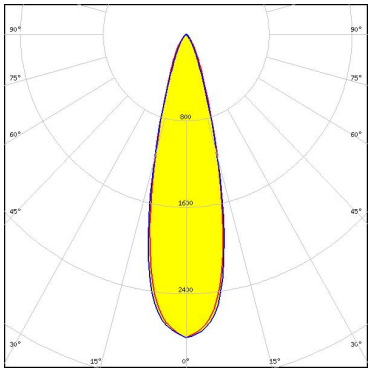


Protective plate, glass

Light distribution files

LUMILEDS

| | |
|---|---|
| LED | LUXEON 5050 Round LES |
| FWHM / FWTM | 28.0° / 52.0° |
| Efficiency | 83 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

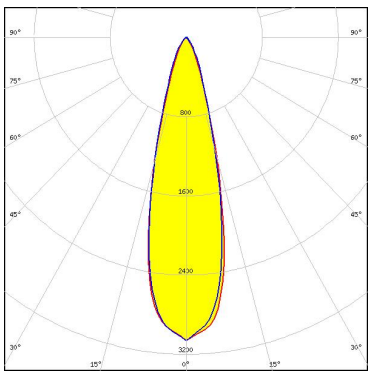


Protective plate, glass

Light distribution files

LUMILEDS

| | |
|---|---|
| LED | LUXEON 5050 Round LES |
| FWHM / FWTM | 27.0° / 51.0° |
| Efficiency | 90 % |
| Peak intensity | 3.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



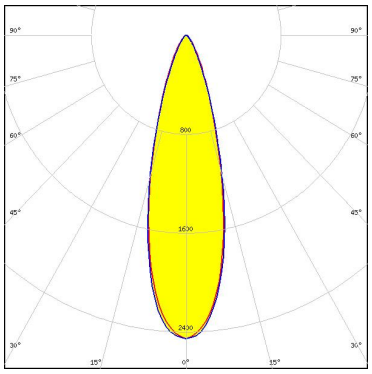
Light distribution files

## OPTICAL RESULTS (SIMULATED):

LUMILEDS

| | |
|---|---|
| LED | LUXEON 5050 Square LES |
| FWHM / FWTM | 28.0° / 57.0° |
| Efficiency | 87 % |
| Peak intensity | 2.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

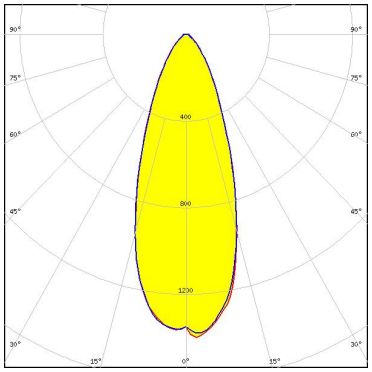
Protective plate, glass



Light distribution files

LUMILEDS

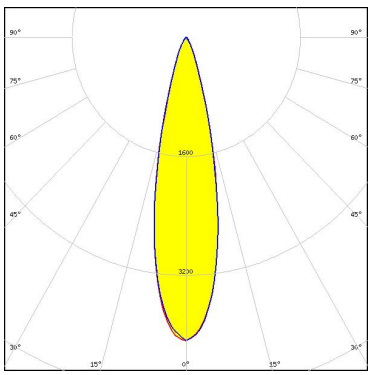
| | |
|---|---|
| LED | LUXEON 7070 |
| FWHM / FWTM | 38.0° / 79.0° |
| Efficiency | 89 % |
| Peak intensity | 1.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

LUMILEDS

| | |
|---|---|
| LED | LUXEON HL2X |
| FWHM / FWTM | 24.0° / 44.0° |
| Efficiency | 95 % |
| Peak intensity | 4.1 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



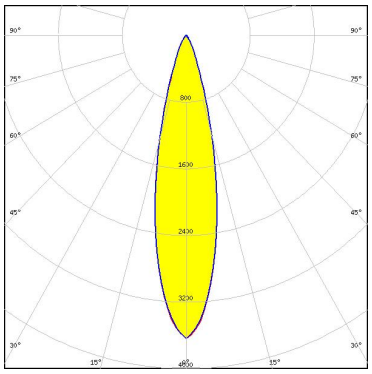
Light distribution files

## OPTICAL RESULTS (SIMULATED):

LUMILEDS

| | |
|---|---|
| LED | LUXEON HL2X-D |
| FWHM / FWTM | 24.0° / 46.0° |
| Efficiency | 88 % |
| Peak intensity | 3.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

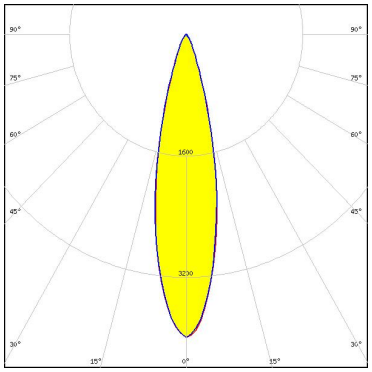
Protective plate, glass



Light distribution files

LUMILEDS

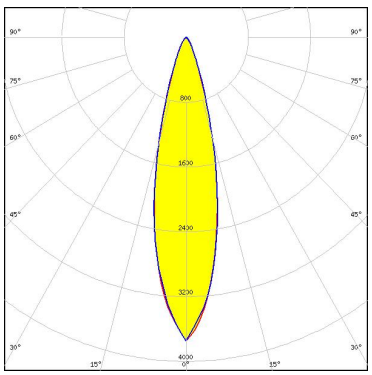
| | |
|---|---|
| LED | LUXEON HL2X-D |
| FWHM / FWTM | 24.0° / 46.0° |
| Efficiency | 96 % |
| Peak intensity | 4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

LUMILEDS

| | |
|---|---|
| LED | LUXEON HL2X-P |
| FWHM / FWTM | 24.0° / 47.0° |
| Efficiency | 95 % |
| Peak intensity | 3.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

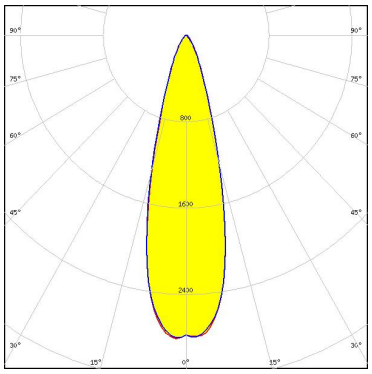


Light distribution files

## OPTICAL RESULTS (SIMULATED):

NICHIA

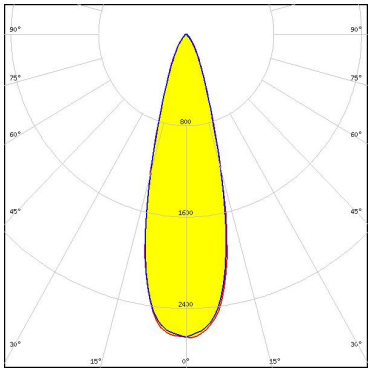
| | |
|---|---|
| LED | NFMW48xA |
| FWHM / FWTM | 28.0° / 54.0° |
| Efficiency | 93 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

NICHIA

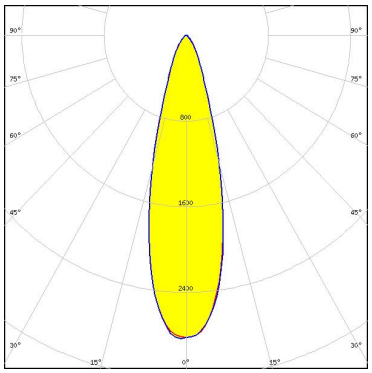
| | |
|---|---|
| LED | NFMW48xA |
| FWHM / FWTM | 29.0° / 55.0° |
| Efficiency | 90 % |
| Peak intensity | 2.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | DURIS E 5050 (GW J9LHS1.4M) |
| FWHM / FWTM | 28.0° / 56.0° |
| Efficiency | 93 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | RGBW |
| Required components: | |



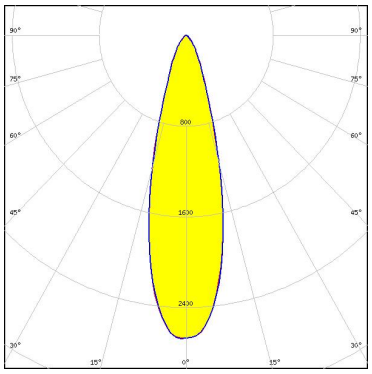
Light distribution files

## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | DURIS E 5050 (GW J9LHS1.4M) |
| FWHM / FWTM | 28.0° / 56.0° |
| Efficiency | 88 % |
| Peak intensity | 2.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | RGBW |
| Required components: | |

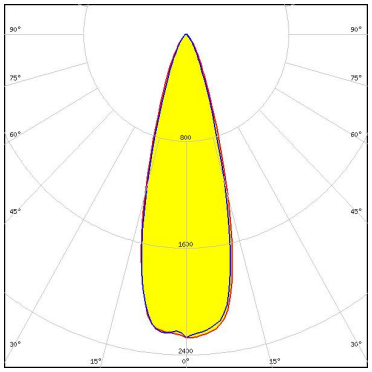
Protective plate, glass



Light distribution files

OSRAM
Opto Semiconductors

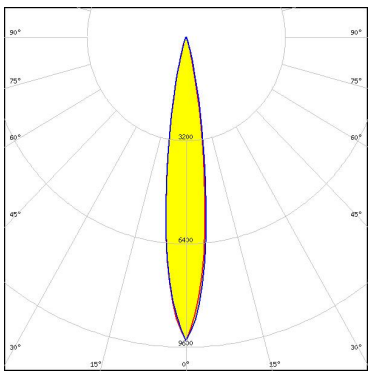
| | |
|---|---|
| LED | Duris S8 |
| FWHM / FWTM | 31.0° / 56.0° |
| Efficiency | 87 % |
| Peak intensity | 2.3 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSCONIQ C 2424 |
| FWHM / FWTM | 16.0° / 30.0° |
| Efficiency | 96 % |
| Peak intensity | 9.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

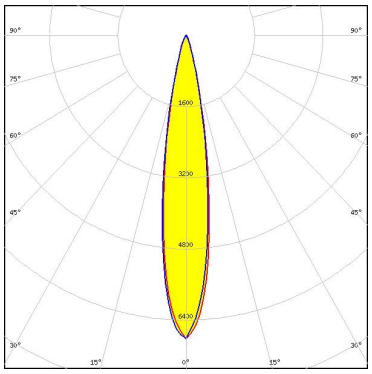


Light distribution files

## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

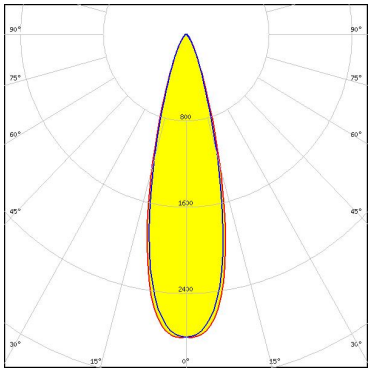
| | |
|---|---|
| LED | OSCONIQ P 3737 Flat |
| FWHM / FWTM | 18.0° / 34.0° |
| Efficiency | 95 % |
| Peak intensity | 6.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

OSRAM
Opto Semiconductors

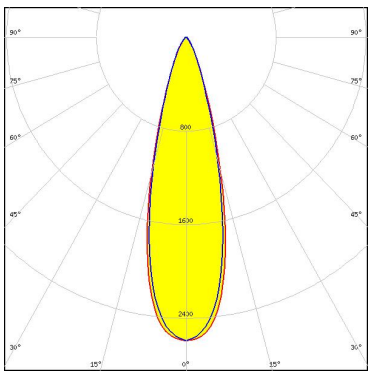
| | |
|---|---|
| LED | OSCONIQ S 5050 |
| FWHM / FWTM | 28.0° / 52.0° |
| Efficiency | 94 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSCONIQ S 5050 |
| FWHM / FWTM | 28.0° / 52.0° |
| Efficiency | 85 % |
| Peak intensity | 2.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



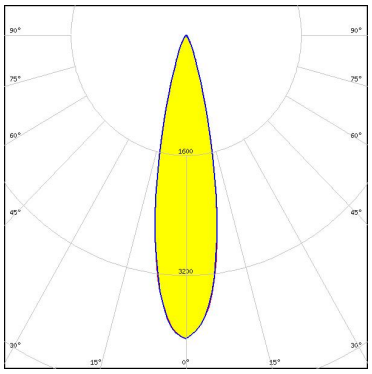
Protective plate, glass

Light distribution files

## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square CSSRM2/CSSRM3 |
| FWHM / FWTM | 24.0° / 42.0° |
| Efficiency | 87 % |
| Peak intensity | 4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

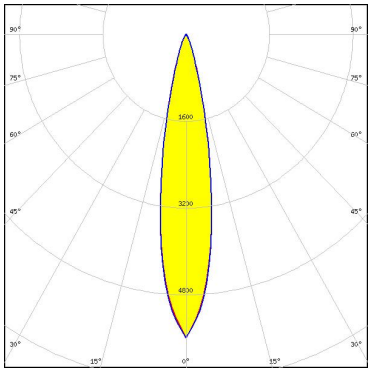


Protective plate, glass

Light distribution files

OSRAM
Opto Semiconductors

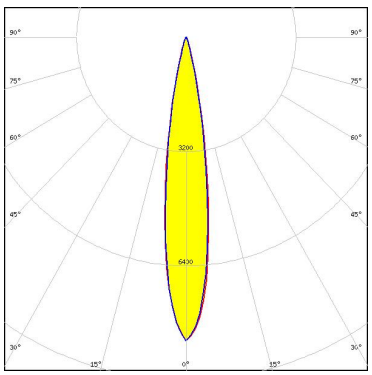
| | |
|---|---|
| LED | OSLON Square CSSRM2/CSSRM3 |
| FWHM / FWTM | 20.0° / 38.0° |
| Efficiency | 95 % |
| Peak intensity | 5.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSLON Square Flat |
| FWHM / FWTM | 17.0° / 30.0° |
| Efficiency | 96 % |
| Peak intensity | 8.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

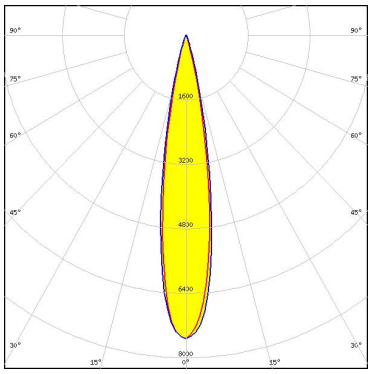


Light distribution files

## OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSTAR Projection Compact (KW.CSLNM1.TG) |
| FWHM / FWTM | 19.0° / 32.0° |
| Efficiency | 96 % |
| Peak intensity | 7.5 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

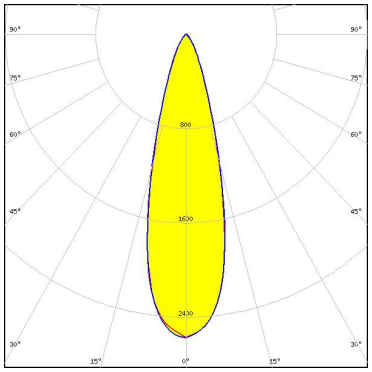


Light distribution files

SAMSUNG

| | |
|---|---|
| LED | LH502C |
| FWHM / FWTM | 28.0° / 54.0° |
| Efficiency | 85 % |
| Peak intensity | 2.6 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

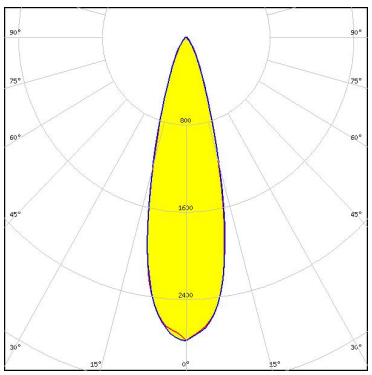
Protective plate, glass



Light distribution files

SAMSUNG

| | |
|---|---|
| LED | LH502C |
| FWHM / FWTM | 28.0° / 54.0° |
| Efficiency | 92 % |
| Peak intensity | 2.8 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |

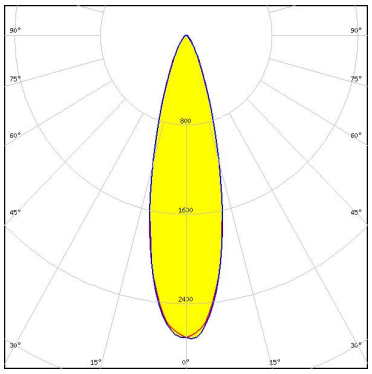


Light distribution files

## OPTICAL RESULTS (SIMULATED):

SAMSUNG

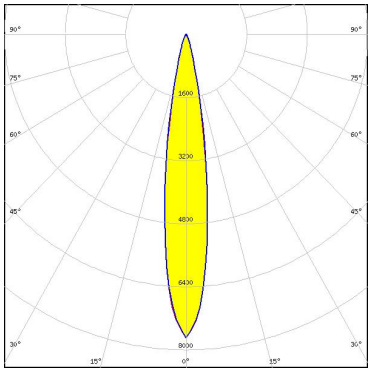
| | |
|---|---|
| LED | LH508B |
| FWHM / FWTM | 28.0° / 56.0° |
| Efficiency | 92 % |
| Peak intensity | 2.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

SAMSUNG

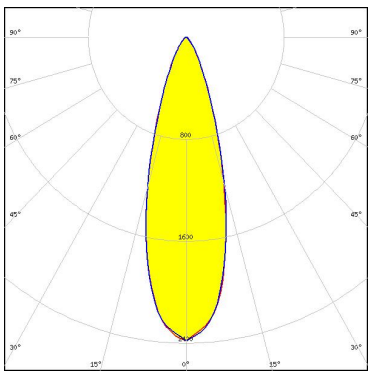
| | |
|---|---|
| LED | LM301B |
| FWHM / FWTM | 16.0° / 32.0° |
| Efficiency | 94 % |
| Peak intensity | 7.7 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | MJT 5050 |
| FWHM / FWTM | 30.0° / 60.0° |
| Efficiency | 92 % |
| Peak intensity | 2.4 cd/lm |
| LEDs/each optic | 1 |
| Light colour/type | White |
| Required components: | |



Light distribution files

## 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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