# HB-IP-2X6-W

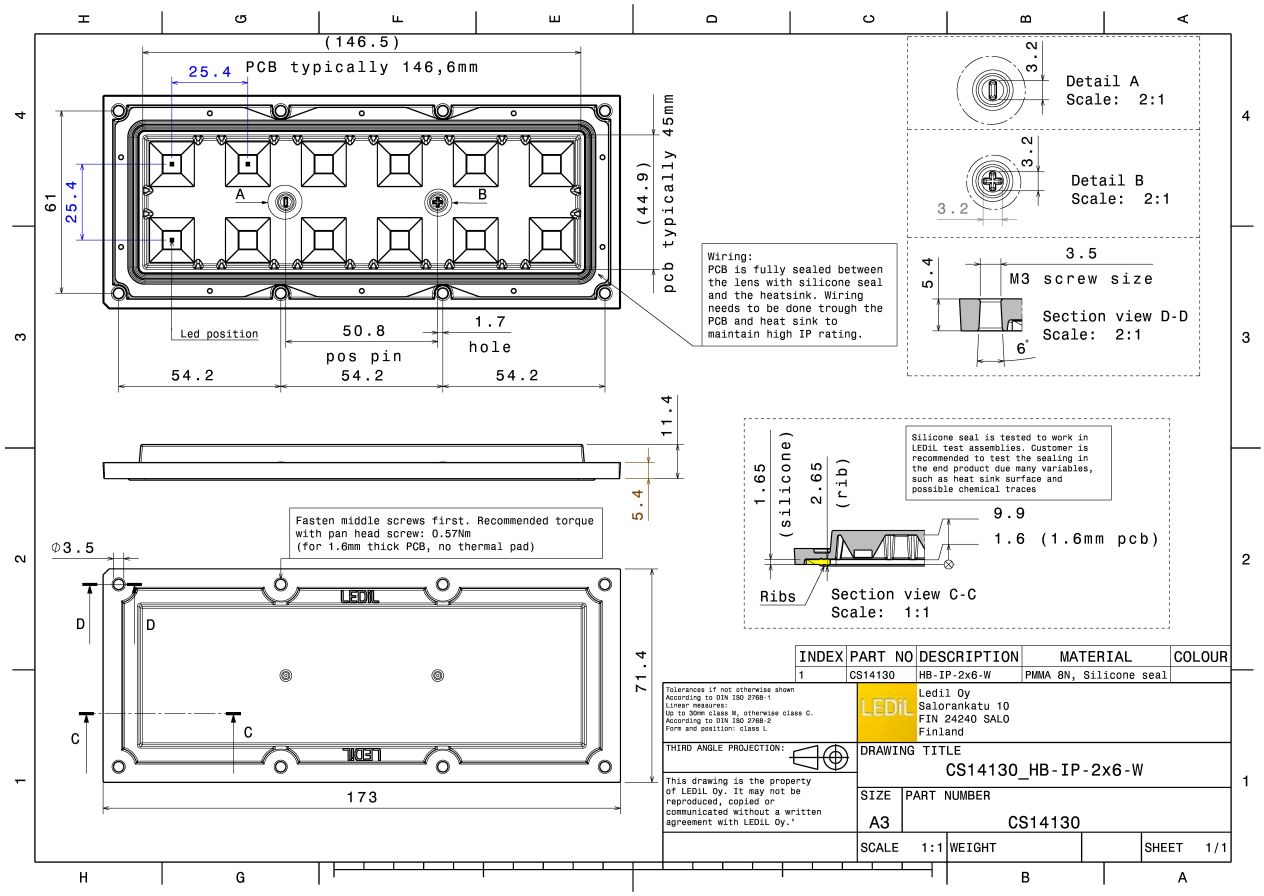
**~60° wide beam**

## TECHNICAL SPECIFICATIONS:

| | |
|---|---|
| Dimensions | 173 + 71.4 mm |
| Height | 11.4 mm |
| Fastening | pin, screw |
| Colour | clear |
| Box size | 476 x 273 x 247 mm |
| Box weight | 8.4 kg |
| Quantity in Box | 120 pcs |
| ROHS compliant | yes |

## MATERIAL SPECIFICATIONS:

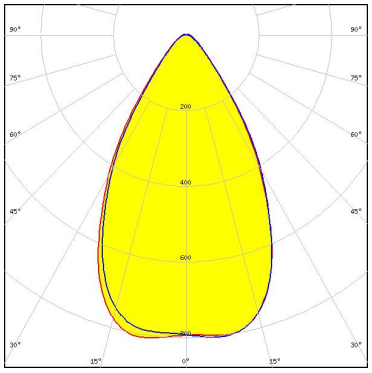
| Component | Type | Material | Colour |
|---|---|---|---|
| HB-IP-2X6-W | Lens | PMMA | clear |
| 2X6-SEAL25 | Seal | Silicone | white |



## PHOTOMETRIC DATA (MEASURED):

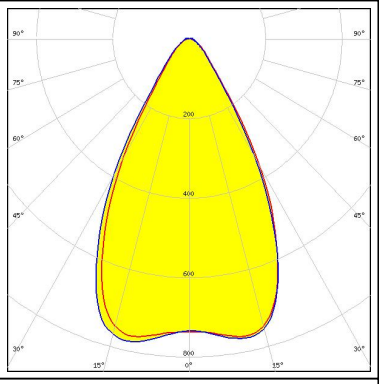
CREE

| | |
|---|---|
| LED | XM-L2 |
| FWHM | 61.0° |
| Efficiency | 94 % |
| Peak intensity | 0.800 cd/lm |
| Required components: | |



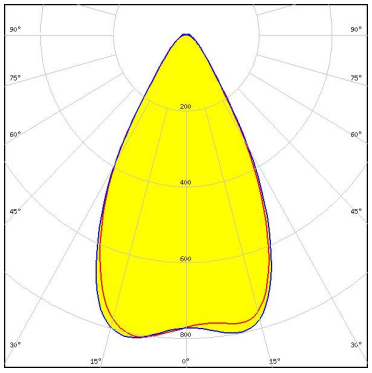
CREE

| | |
|---|---|
| LED | XP-G |
| FWHM | 60.0° |
| Efficiency | 94 % |
| Peak intensity | 0.840 cd/lm |
| Required components: | |



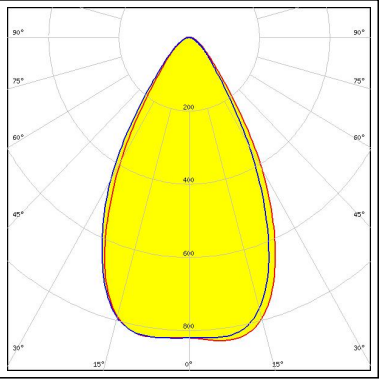
CREE

| | |
|---|---|
| LED | XP-G2 |
| FWHM | 58.0° |
| Efficiency | 93 % |
| Peak intensity | 0.870 cd/lm |
| Required components: | |



CREE

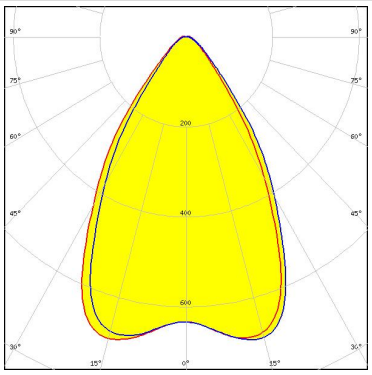
| | |
|---|---|
| LED | XP-G3 |
| FWHM | 59.0° |
| Efficiency | 94 % |
| Peak intensity | 0.840 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

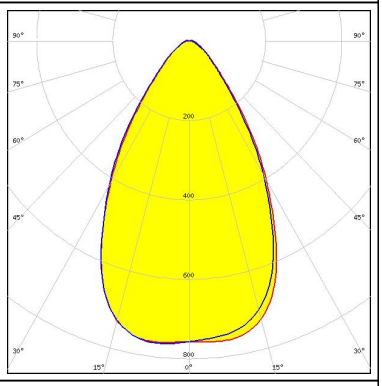
CREE

| | |
|---|---|
| LED | XP-L |
| FWHM | 67.0° |
| Efficiency | 94 % |
| Peak intensity | 0.750 cd/lm |
| Required components: | |



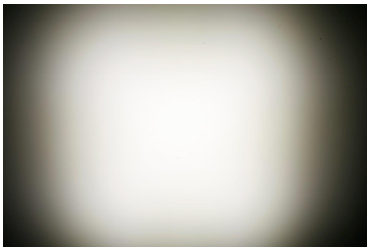
CREE

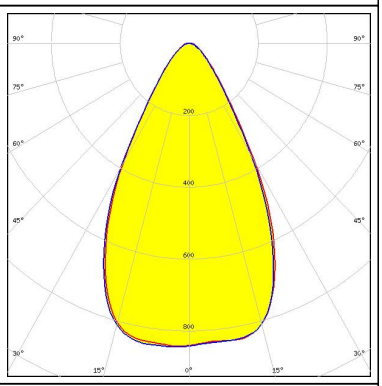
| | |
|---|---|
| LED | XP-L2 |
| FWHM | 62.0° |
| Efficiency | 94 % |
| Peak intensity | 0.770 cd/lm |
| Required components: | |



CREE

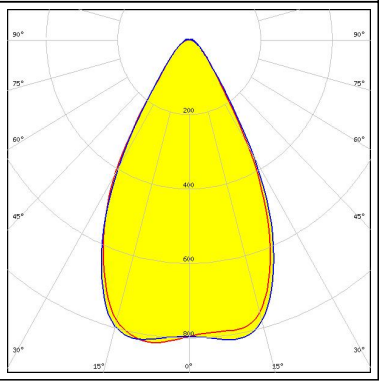
| | |
|---|---|
| LED | XT-E |
| FWHM | 58.0° |
| Efficiency | 94 % |
| Peak intensity | 0.870 cd/lm |
| Required components: | |





LUMILEDS

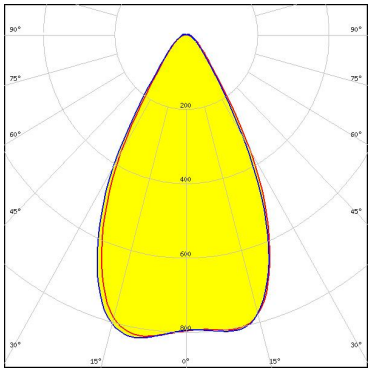
| | |
|---|---|
| LED | LUXEON R |
| FWHM | 58.0° |
| Efficiency | 94 % |
| Peak intensity | 0.900 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

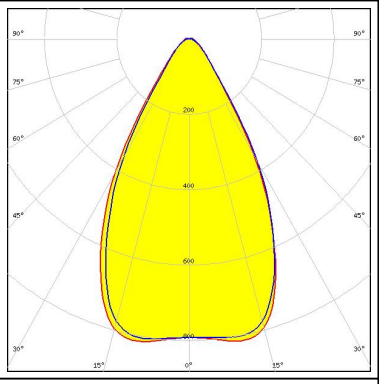
LUMILEDS

| | |
|---|---|
| LED | LUXEON Rebel ES |
| FWHM | 57.0° |
| Efficiency | 94 % |
| Peak intensity | 0.860 cd/lm |
| Required components: | |



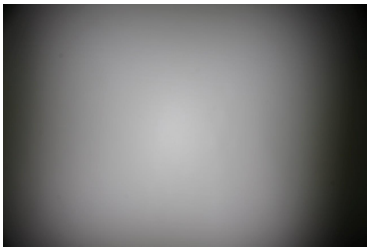
LUMILEDS

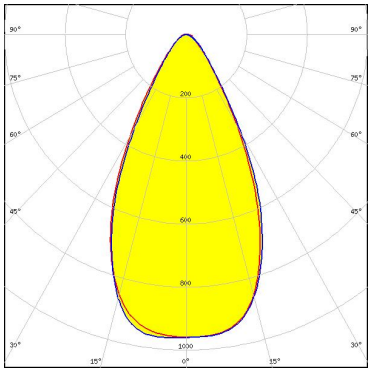
| | |
|---|---|
| LED | LUXEON T |
| FWHM | 60.0° |
| Efficiency | 94 % |
| Peak intensity | 0.860 cd/lm |
| Required components: | |



LUMILEDS

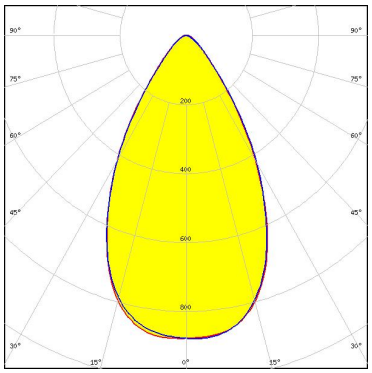
| | |
|---|---|
| LED | LUXEON TX |
| FWHM | 54.0° |
| Efficiency | 94 % |
| Peak intensity | 0.960 cd/lm |
| Required components: | |





LUMILEDS

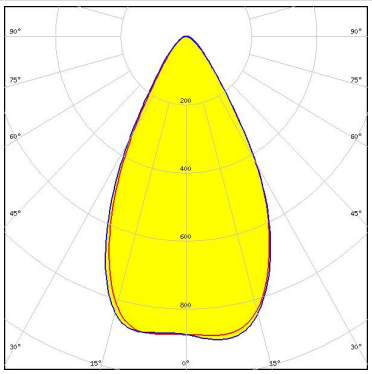
| | |
|---|---|
| LED | LUXEON V |
| FWHM | 59.0° |
| Efficiency | 93 % |
| Peak intensity | 0.900 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

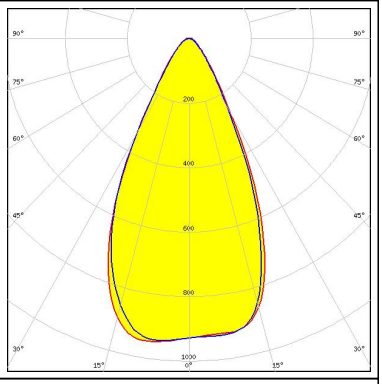
LUMILEDS

| | |
|---|---|
| LED | LUXEON XR-TX (L2T0-xxyy012M) |
| FWHM | 60.0° |
| Efficiency | 94 % |
| Peak intensity | 0.900 cd/lm |
| Required components: | |



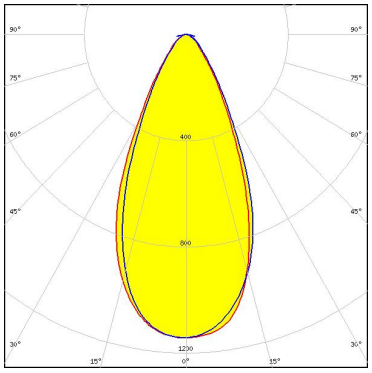
LUMILEDS

| | |
|---|---|
| LED | LUXEON Z ES |
| FWHM | 52.0° |
| Efficiency | 94 % |
| Peak intensity | 1.000 cd/lm |
| Required components: | |



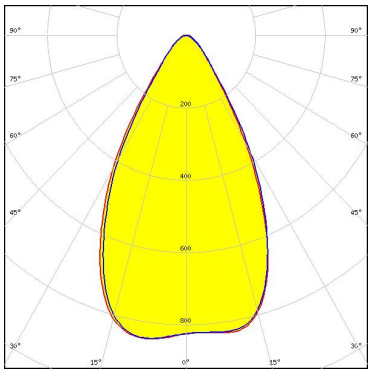
NICHIA

| | |
|---|---|
| LED | NVSxE21A |
| FWHM | 51.0° |
| Efficiency | 94 % |
| Peak intensity | 1.140 cd/lm |
| Required components: | |



NICHIA

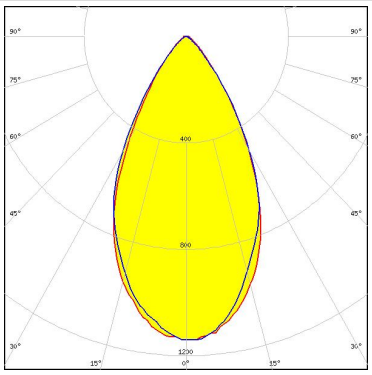
| | |
|---|---|
| LED | NVSxx19B/NVSxx19C |
| FWHM | 58.0° |
| Efficiency | 94 % |
| Peak intensity | 0.870 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

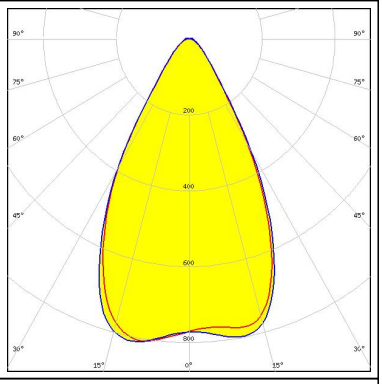
OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | Duris S8 |
| FWHM | 54.0° |
| Efficiency | 94 % |
| Peak intensity | 1.000 cd/lm |
| Required components: | |



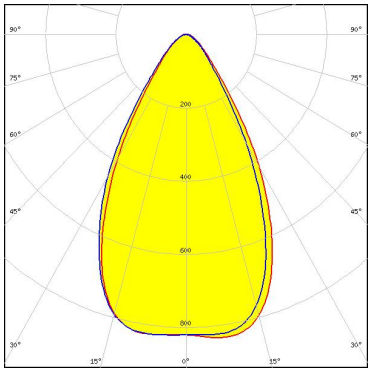
PHILIPS

| | |
|---|---|
| LED | Fortimo FastFlex LED board 2x6 DP G4 |
| FWHM | 58.0° |
| Efficiency | 93 % |
| Peak intensity | 0.870 cd/lm |
| Required components: | |



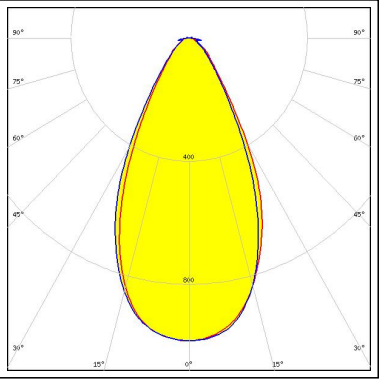
PHILIPS

| | |
|---|---|
| LED | Fortimo FastFlex LED board 2x6 DPX G4 |
| FWHM | 59.0° |
| Efficiency | 94 % |
| Peak intensity | 0.840 cd/lm |
| Required components: | |



SEOUL SEMICONDUCTOR

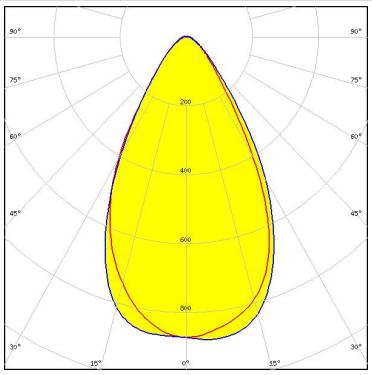
| | |
|---|---|
| LED | SMJQ-D36W12Mx |
| FWHM | 53.0° |
| Efficiency | 93 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

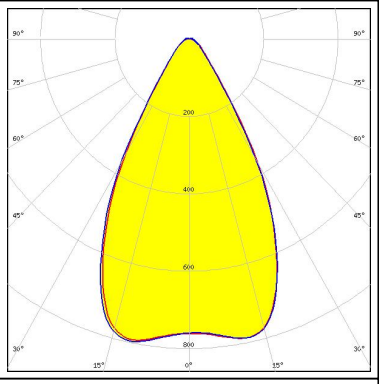
SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | SMJQ-D36W12Px |
| FWHM | 58.0° |
| Efficiency | 94 % |
| Peak intensity | 0.880 cd/lm |
| Required components: | |



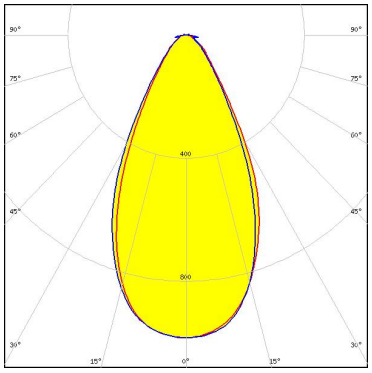
SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | Z5M1/Z5M2 |
| FWHM | 59.0° |
| Efficiency | 94 % |
| Peak intensity | 0.870 cd/lm |
| Required components: | |



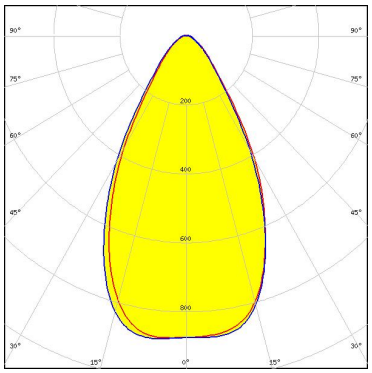
SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | Z8Y22 |
| FWHM | 53.0° |
| Efficiency | 93 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



SEOUL SEMICONDUCTOR

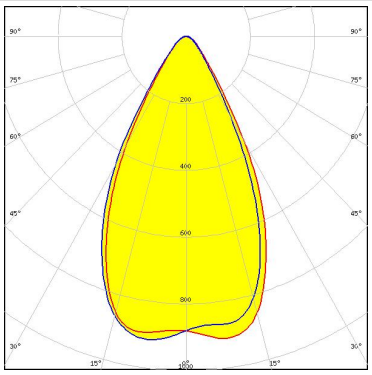
| | |
|---|---|
| LED | Z8Y22P |
| FWHM | 57.0° |
| Efficiency | 94 % |
| Peak intensity | 0.880 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (MEASURED):

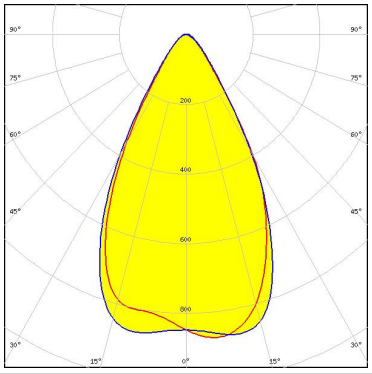
TOSHIBA
Leading Innovation

| | |
|---|---|
| LED | TL1L4 |
| FWHM | 56.0° |
| Efficiency | 94 % |
| Peak intensity | 0.950 cd/lm |
| Required components: | |



TRIDONIC

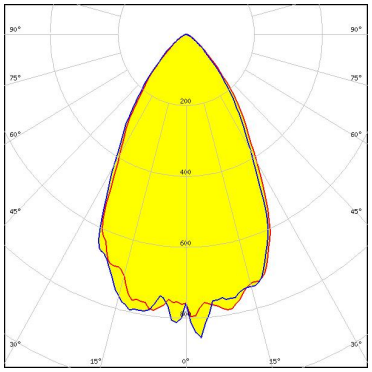
| | |
|---|---|
| LED | RLE G2 HP 2x6 3000lm |
| FWHM | 57.0° |
| Efficiency | 94 % |
| Peak intensity | 0.910 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (SIMULATED):

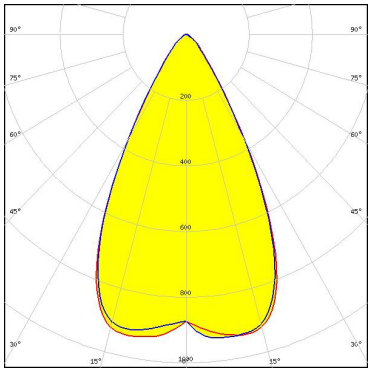
CREE

| | |
|---|---|
| LED | MHB-A/B |
| FWHM | 60.0° |
| Efficiency | 91 % |
| Peak intensity | 0.860 cd/lm |
| Required components: | |



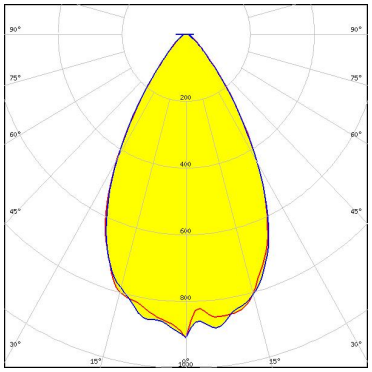
CREE

| | |
|---|---|
| LED | XB-D |
| FWHM | 52.0° |
| Efficiency | 90 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



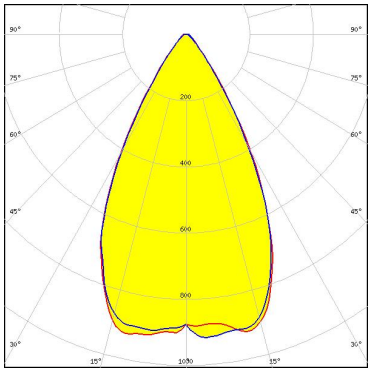
CREE

| | |
|---|---|
| LED | XHP35 HD |
| FWHM | 60.0° |
| Efficiency | 94 % |
| Peak intensity | 0.930 cd/lm |
| Required components: | |



CREE

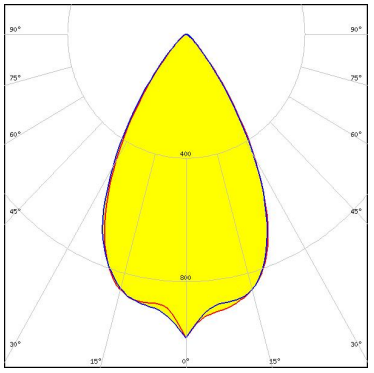
| | |
|---|---|
| LED | XHP35 HI |
| FWHM | 57.0° |
| Efficiency | 94 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (SIMULATED):

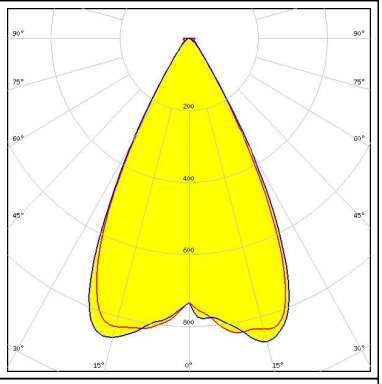
CREE

| | |
|---|---|
| LED | XM-L |
| FWHM | 57.0° |
| Efficiency | 93 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



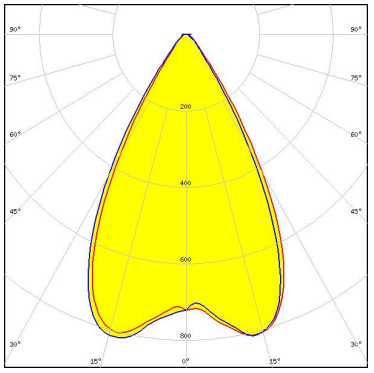
CREE

| | |
|---|---|
| LED | XP-E2 |
| FWHM | 56.0° |
| Efficiency | 94 % |
| Peak intensity | cd/lm |
| Required components: | |



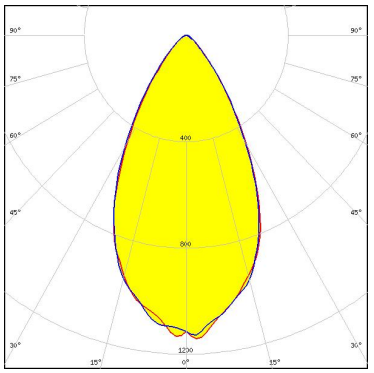
LG Innotek

| | |
|---|---|
| LED | H35C1 (LEMWA33) |
| FWHM | 59.0° |
| Efficiency | 94 % |
| Peak intensity | 0.960 cd/lm |
| Required components: | |



LUMILEDS

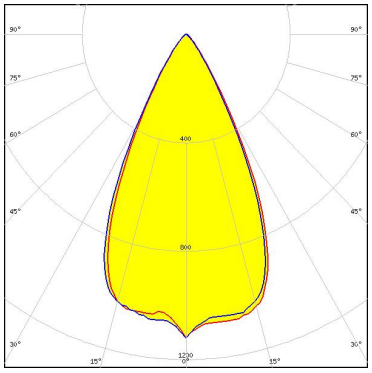
| | |
|---|---|
| LED | LUXEON 5050 |
| FWHM | 54.0° |
| Efficiency | 95 % |
| Peak intensity | 1.100 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (SIMULATED):

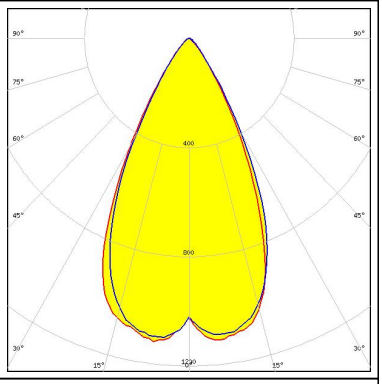
LUMILEDS

| | |
|---|---|
| LED | LUXEON Rebel |
| FWHM | 50.0° |
| Efficiency | 93 % |
| Peak intensity | 1.120 cd/lm |
| Required components: | |



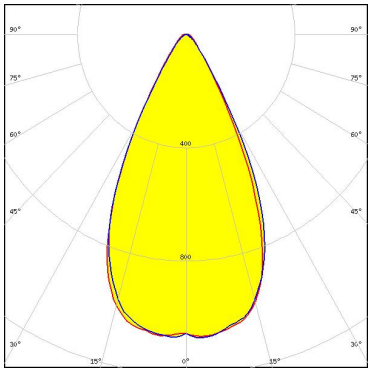
NICHIA

| | |
|---|---|
| LED | NF2x757A |
| FWHM | 50.0° |
| Efficiency | 93 % |
| Peak intensity | 1.120 cd/lm |
| Required components: | |



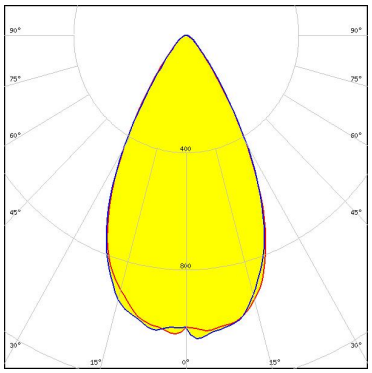
OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSCONIQ P 3737 (2W version) |
| FWHM | 57.0° |
| Efficiency | 94 % |
| Peak intensity | 1.100 cd/lm |
| Required components: | |



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | OSCONIQ P 3737 (3W version) |
| FWHM | 56.0° |
| Efficiency | 94 % |
| Peak intensity | 1.060 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (SIMULATED):

OSRAM
Opto Semiconductors

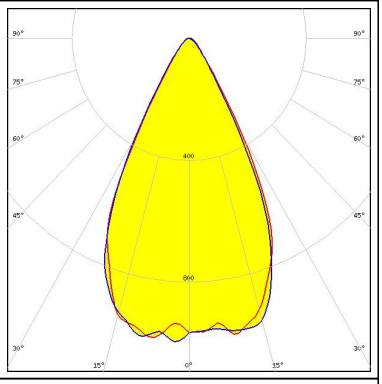
| | |
|---|---|
| LED | Oslon Square EC |
| FWHM | 56.0° |
| Efficiency | 93 % |
| Peak intensity | cd/lm |

Required components:

OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | Oslon Square Gen3 |
| FWHM | 56.0° |
| Efficiency | 94 % |
| Peak intensity | cd/lm |

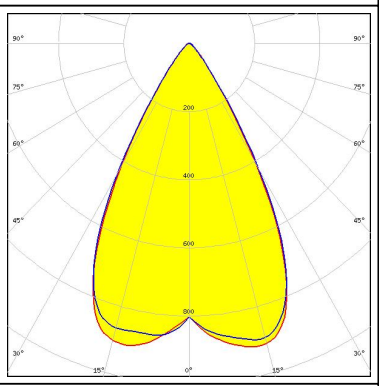
Required components:



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | Oslon Square PC |
| FWHM | 56.0° |
| Efficiency | 93 % |
| Peak intensity | 0.980 cd/lm |

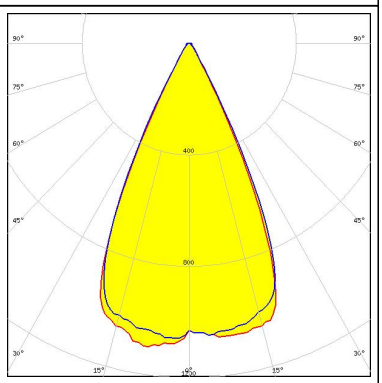
Required components:



OSRAM
Opto Semiconductors

| | |
|---|---|
| LED | Oslon SSL 80 |
| FWHM | 52.0° |
| Efficiency | 94 % |
| Peak intensity | 1.200 cd/lm |

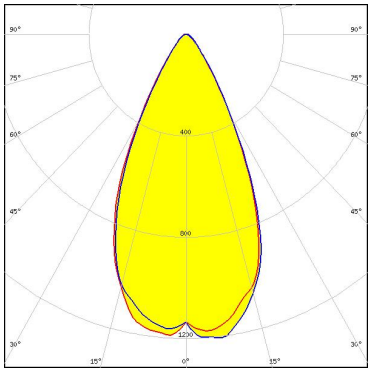
Required components:



## PHOTOMETRIC DATA (SIMULATED):

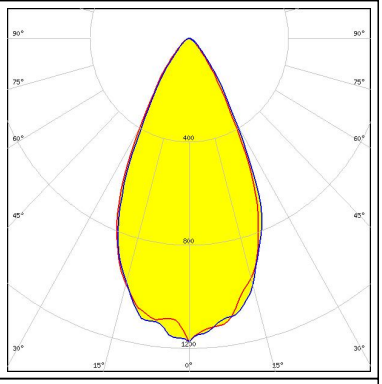
SAMSUNG

| | |
|---|---|
| LED | LH181B |
| FWHM | 54.0° |
| Efficiency | 94 % |
| Peak intensity | 1.200 cd/lm |
| Required components: | |



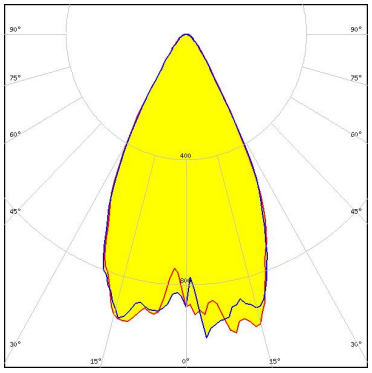
SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | Acrich MJT 4040 |
| FWHM | 52.0° |
| Efficiency | 93 % |
| Peak intensity | 1.200 cd/lm |
| Required components: | |



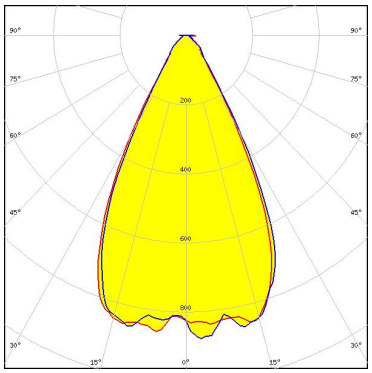
SEOUL SEMICONDUCTOR

| | |
|---|---|
| LED | Z5M |
| FWHM | 50.0° |
| Efficiency | 94 % |
| Peak intensity | 1.000 cd/lm |
| Required components: | |



TOSHIBA
Leading Innovation

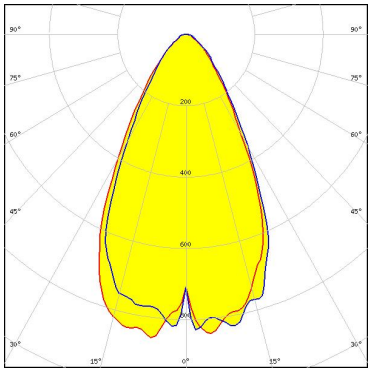
| | |
|---|---|
| LED | TL1L2 |
| FWHM | 55.0° |
| Efficiency | 94 % |
| Peak intensity | 0.980 cd/lm |
| Required components: | |



## PHOTOMETRIC DATA (SIMULATED):

TOSHIBA
Leading Innovation

| | |
|---|---|
| LED | TL1L3 |
| FWHM | 54.0° |
| Efficiency | 89 % |
| Peak intensity | cd/lm |
| 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:

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