

#### HB-2X2-RW

 $\sim \! 50^\circ$  wide beam optimized for CREE XP-L and XM-L

#### SPECIFICATION:

 $\begin{array}{ccc} \text{Dimensions} & & 50.0 \text{ x } 50.0 \\ \text{Height} & & 8.5 \text{ mm} \\ \text{Fastening} & & \text{pin, screw} \\ \text{ROHS compliant} & & \text{yes} \end{array}$ 



#### **MATERIALS:**

ComponentTypeMaterialColourFinishLength (mm)HB-2X2-RWMulti-lensPMMAclear

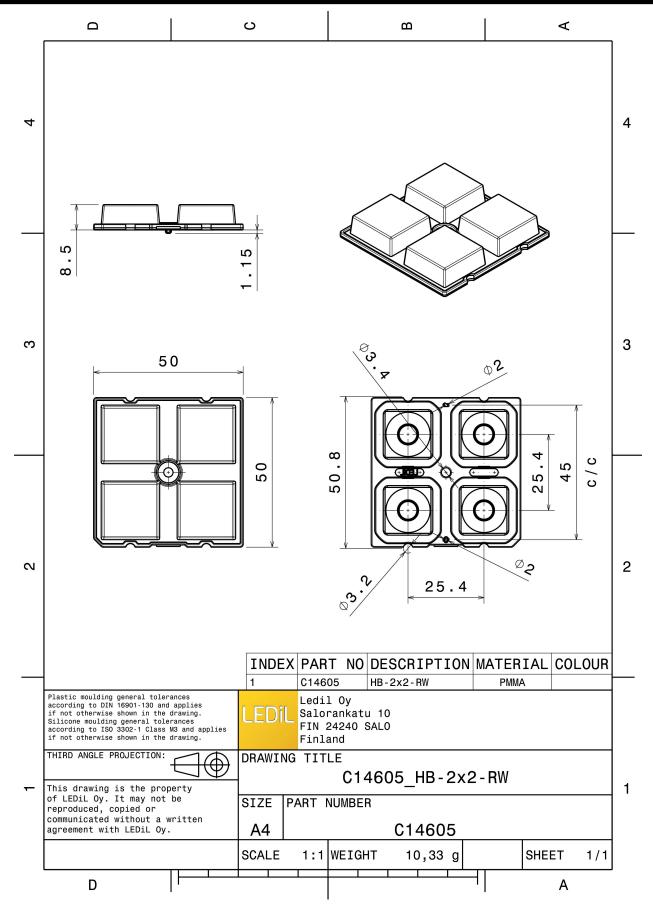
#### **ORDERING INFORMATION:**

 Component
 Qty in box
 MOQ
 MPQ
 Box weight (kg)

 C14605\_HB-2X2-RW
 800
 160
 9.1

» Box size: 476 x 273 x 292 mm





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

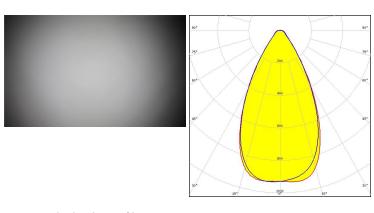




LED Bridgelux SMD 5050

FWHM / FWTM 56.0° / 89.0° Efficiency 94 % Peak intensity 0.9 cd/lm LEDs/each optic 1

Light colour/type White Required components:

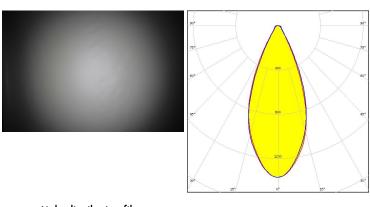


Light distribution files

## CREE \$

LED XD16
FWHM / FWTM 44.0° / 71.0°
Efficiency 90 %
Peak intensity 1.4 cd/lm

LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

## CREE -

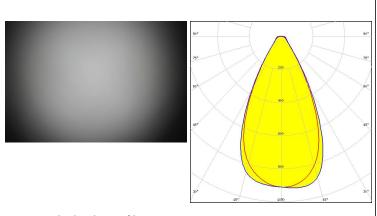
 LED
 XD16

 FWHM / FWTM
 54.0° / 85.0°

 Efficiency
 92 %

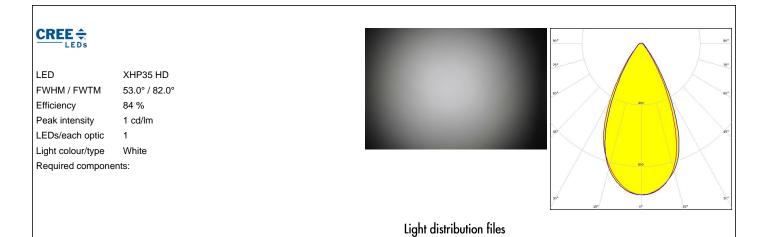
 Peak intensity
 0.9 cd/lm

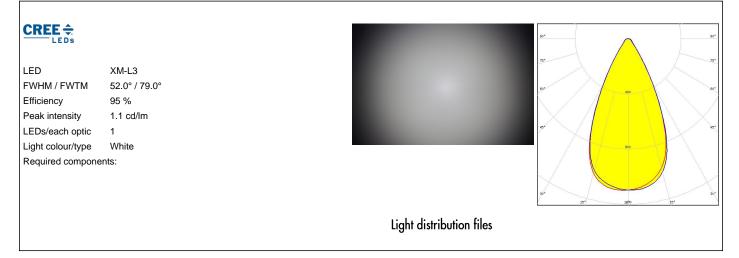
LEDs/each optic 4
Light colour/type White
Required components:

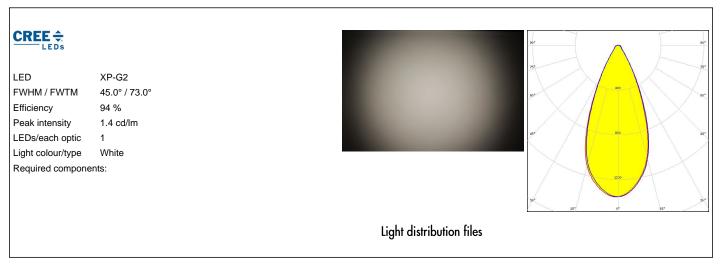


Light distribution files





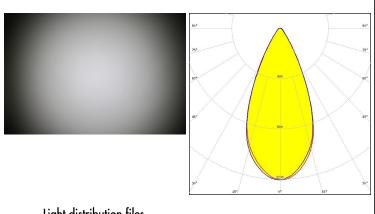






## CREE \$

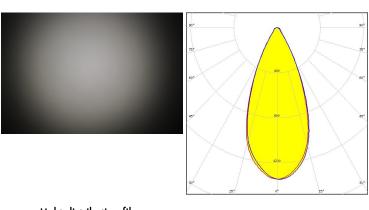
LED XP-G3
FWHM / FWTM 48.0° / 75.0°
Efficiency 86 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

## CREE \$

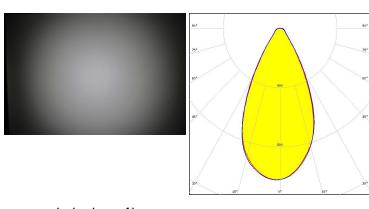
LED XP-L HI
FWHM / FWTM 45.0° / 72.0°
Efficiency 92 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

## CREE &

LED XP-L2
FWHM / FWTM 52.0° / 83.0°
Efficiency 92 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



### inventronics

LED PrevaLED Brick HP 2x8

FWHM / FWTM 49.0° / 72.0°

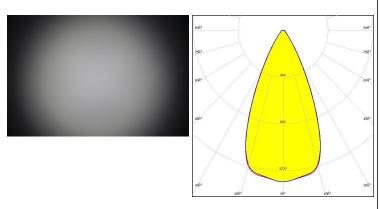
Efficiency 94 %

Peak intensity 1.3 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:

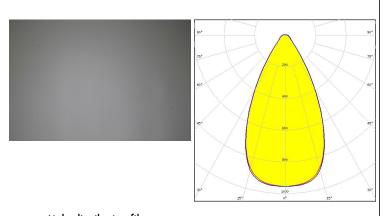


Light distribution files



LED LUXEON 5050 Round LES

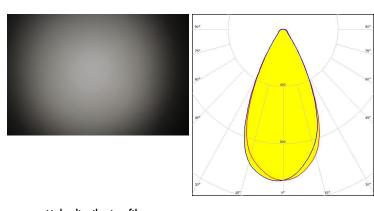
FWHM / FWTM 55.0° / 87.0°
Efficiency 94 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

### **MUMILEDS**

LED LUXEON V
FWHM / FWTM 52.0° / 81.0°
Efficiency 93 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



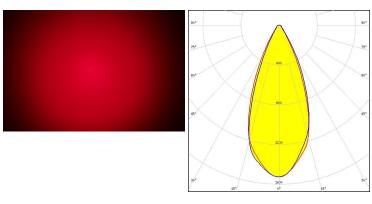
Light distribution files





LED SST-10-B130
FWHM / FWTM 44.0° / 70.0°
Efficiency 96 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour/type Deep Red

Required components:

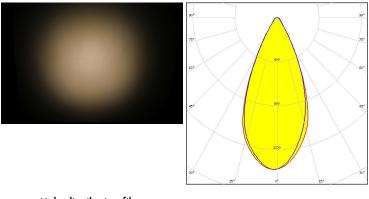


Light distribution files



LED RecLED 122x50mm 1900lm 730 2x4 Opt G1

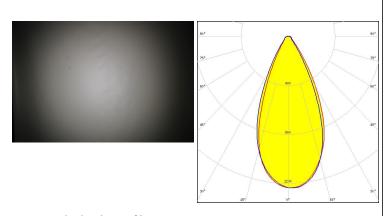
FWHM / FWTM 46.0° / 72.5°
Efficiency 97 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSW219F
FWHM / FWTM 48.0° / 76.0°
Efficiency 94 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

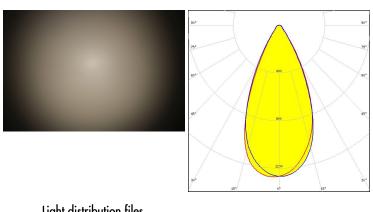


Light distribution files



#### **WNICHIA**

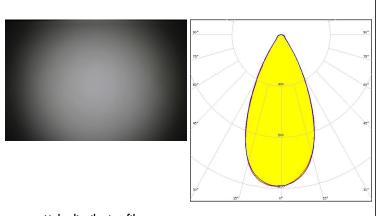
NVSW219F 49.0° / 76.0° FWHM / FWTM Efficiency 96 % Peak intensity 1.3 cd/lm LEDs/each optic White Light colour/type Required components:



Light distribution files

### **WNICHIA**

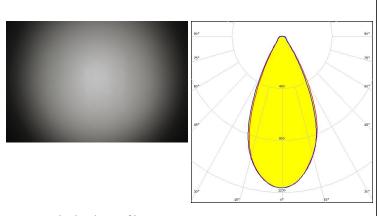
NVSW319B FWHM / FWTM 50.0° / 79.0° Efficiency 94 % Peak intensity 1.2 cd/lm LEDs/each optic Light colour/type White Required components:



Light distribution files

### **WNICHIA**

LED NVSW3x9A 50.0° / 78.0° FWHM / FWTM Efficiency 93 % Peak intensity 1.2 cd/lm LEDs/each optic Light colour/type White Required components:

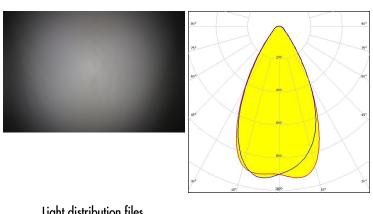


Light distribution files



## OSRAM Opto Semiconductors

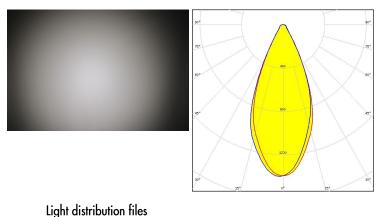
Duris S8 56.0° / 89.0° FWHM / FWTM Efficiency 95 % Peak intensity 0.9 cd/lm LEDs/each optic Light colour/type White Required components:



Light distribution files

## OSRAM Opto Semiconductors

OSCONIQ C 3030 FWHM / FWTM 45.0° / 71.0° Efficiency 94 % Peak intensity 1.4 cd/lm LEDs/each optic Light colour/type White Required components:

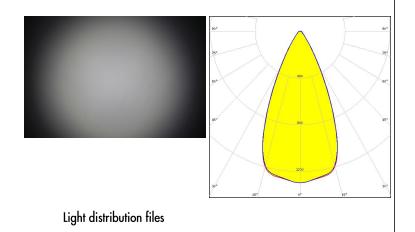


#### OSRAM Opto Semiconductors

LED

OSLON Square CSSRM2/CSSRM3

 $\mathsf{FWHM}\,/\,\mathsf{FWTM}$ 49.0° / 72.0° Efficiency 94 % Peak intensity 1.3 cd/lm LEDs/each optic Light colour/type White Required components:

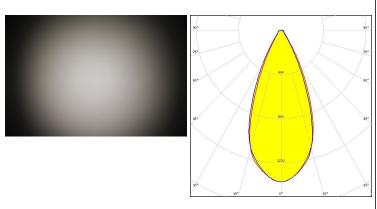




### **PHILIPS**

LED Fortimo FastFlex LED 2x8 DA G4

FWHM / FWTM 45.0° / 71.0°
Efficiency 93 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

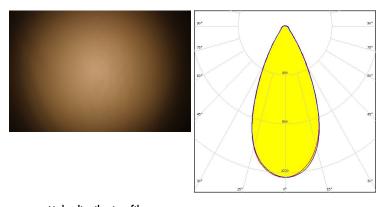


Light distribution files

### **PHILIPS**

LED Fortimo FastFlex LED 2x8 DA G4+

FWHM / FWTM 48.0° / 77.0°
Efficiency 96 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

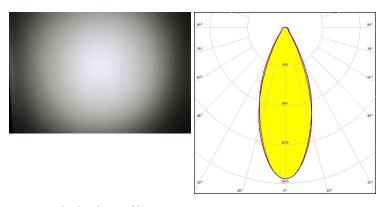


Light distribution files

### **SAMSUNG**

LED HILOM RC12 Z (LH181B)

FWHM / FWTM 41.0° / 71.0°
Efficiency 97 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



### **SAMSUNG**

LED HILOM RH12 Z (LH351C)

FWHM / FWTM 48.0° / 75.0°

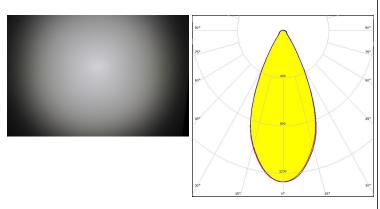
Efficiency 96 %

Peak intensity 1.3 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:



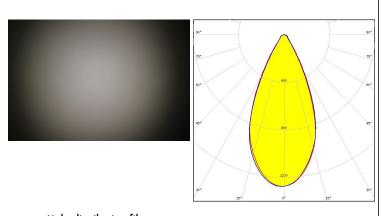
Light distribution files

### **SAMSUNG**

LED HILOM RH16 (LH351C)

FWHM / FWTM 48.0° / 75.0° Efficiency 94 % Peak intensity 1.3 cd/lm LEDs/each optic 1

Light colour/type White Required components:

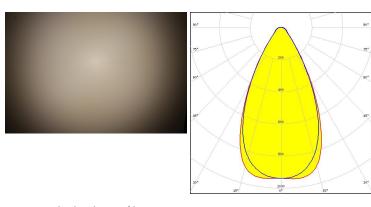


Light distribution files

### **SAMSUNG**

LED HILOM RM12 Z (LH502C)

FWHM / FWTM 55.0° / 88.0°
Efficiency 95 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



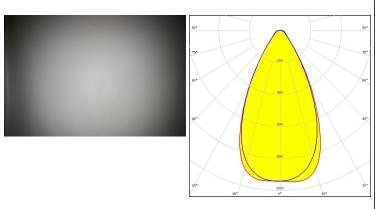
Light distribution files



### **SAMSUNG**

LED HILOM RM16 Z (LH502C)

FWHM / FWTM 55.0° / 89.0°
Efficiency 96 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

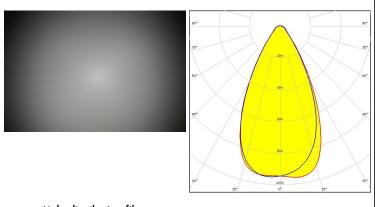


Light distribution files

### **SAMSUNG**

LED HILOM RM8 Z (LH502C)

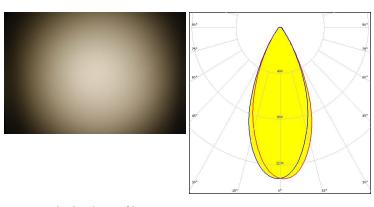
FWHM / FWTM 56.0° / 88.0°
Efficiency 97 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

### **SAMSUNG**

LED LH351B
FWHM / FWTM 45.0° / 74.0°
Efficiency 86 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

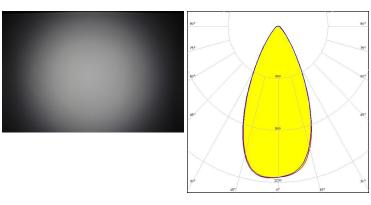


Light distribution files



## **SAMSUNG**

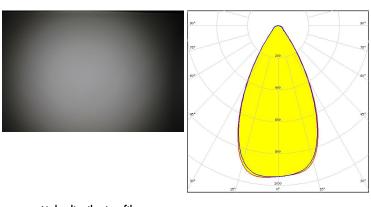
LED LH351D
FWHM / FWTM 49.0° / 82.0°
Efficiency 94 %
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

### **SAMSUNG**

LED LH508A
FWHM / FWTM 56.0° / 87.0°
Efficiency 93 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

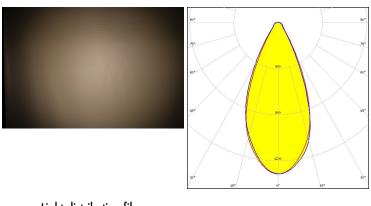


Light distribution files



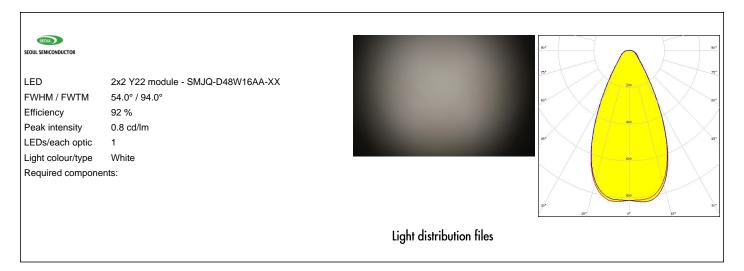
LED LED-Pa-L15c2W11c2-xxx-C050-01

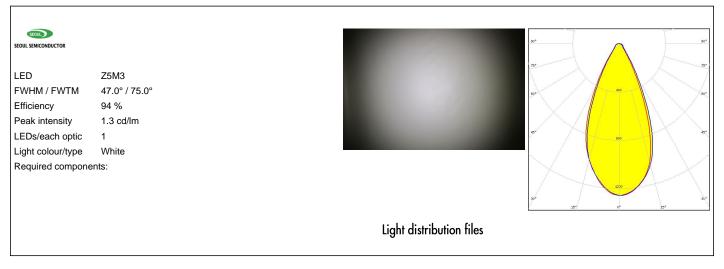
FWHM / FWTM 47.0° / 76.0°
Efficiency 96 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

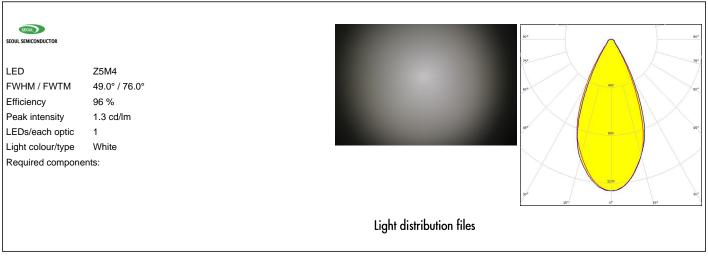


Light distribution files

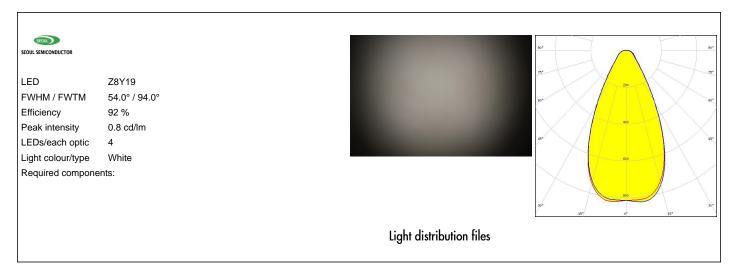




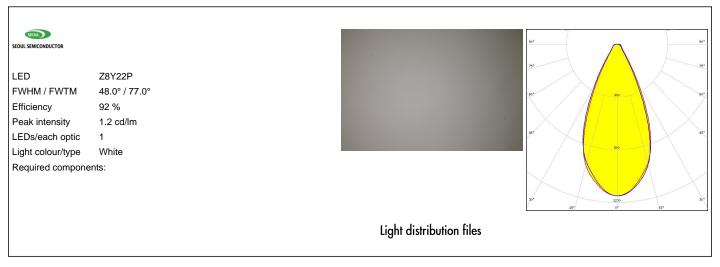














### **TRIDONIC**

LED RLE 2x4 2000lm HP EXC2 OTD

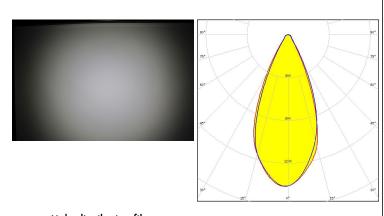
FWHM / FWTM 46.0° / 71.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

### **TRIDONIC**

LED RLE 2x8 4000lm HP EXC2 OTD

FWHM / FWTM 46.0° / 71.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

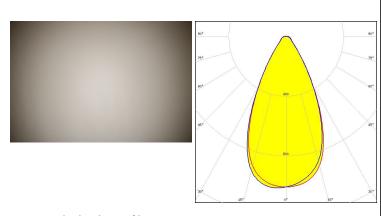


Light distribution files

### **TRIDONIC**

LED RLE 2x8 6000lm HP HE EXC3 OTD

FWHM / FWTM 53.0° / 86.0°
Efficiency 96 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



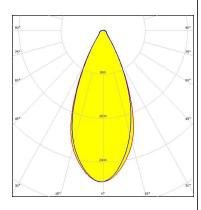
Light distribution files



### **TRIDONIC**

LED RLE G1 49x121mm 2000lm xxx EXC OTD

FWHM / FWTM 46.0° / 73.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

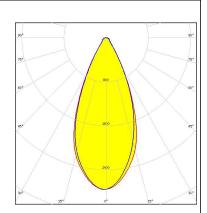


Light distribution files

### **TRIDONIC**

LED RLE G1 49x133mm 2000lm xxx EXC OTD

FWHM / FWTM 46.0° / 73.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

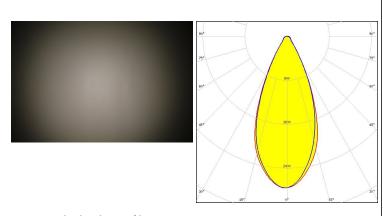


Light distribution files

### **TRIDONIC**

LED RLE G1 49x223mm 4000lm xxx EXC OTD

FWHM / FWTM 46.0° / 73.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



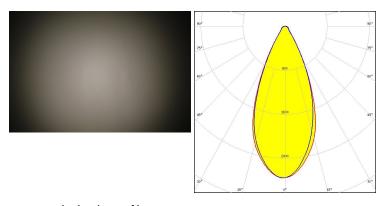
Light distribution files



## **TRIDONIC**

LED RLE G1 49x245mm 4000lm xxx EXC OTD

FWHM / FWTM 46.0° / 73.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

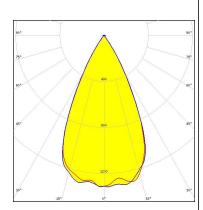


Light distribution files





LED XHP35 HI
FWHM / FWTM 52.0° / 68.0°
Efficiency 93 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

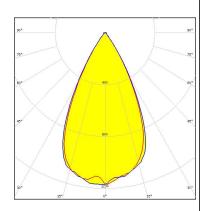


Light distribution files

## CREE -

LED XM-L
FWHM / FWTM 54.0° / 74.0°
Efficiency 92 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

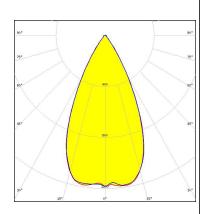


Light distribution files

## CREE -

LED XP-G3
FWHM / FWTM 52.0° / 74.0°
Efficiency 89 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Protective plate, glass



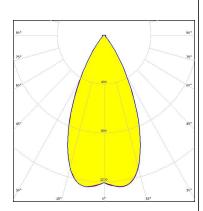
Light distribution files





LED XP-G3
FWHM / FWTM 50.0° / 76.0°
Efficiency 94 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Light distribution files



## CREE -

LED XP-L HD
FWHM / FWTM 56.0° / 78.0°
Efficiency 90 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White

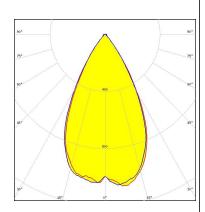
Required components:

Light distribution files

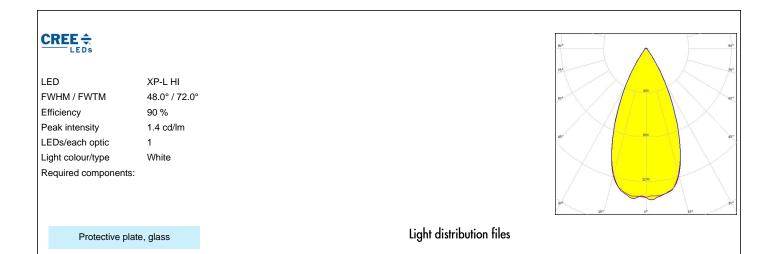
Protective plate, glass

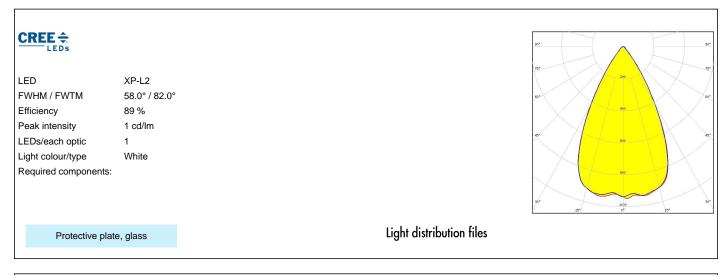
## CREE -

LED XP-L HD
FWHM / FWTM 55.0° / 79.0°
Efficiency 93 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:















Required components:

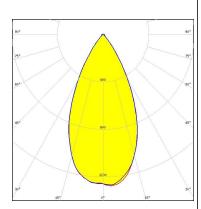
LED LUXEON HL2X
FWHM / FWTM 50.0° / 76.0°

Efficiency 94 %

Peak intensity 1.3 cd/lm

LEDs/each optic 1

Light colour/type White



LED LUXEON HL2X-D
FWHM / FWTM 56.0° / 76.0°
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1

LEDs/each optic 1
Light colour/type White
Required components:

**LUMILEDS** 

Protective plate, glass

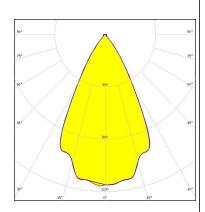
Light distribution files

Light distribution files

### **MILEDS**

LED LUXEON HL2X-D
FWHM / FWTM 56.0° / 76.0°
Efficiency 96 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:







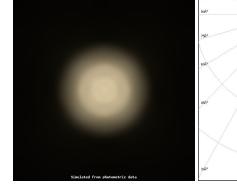
Required components:

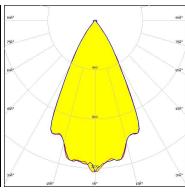
LED LUXEON HL2X-E
FWHM / FWTM 54.0° / 74.0°

Efficiency 96 %
Peak intensity 1.2 cd/lm

LEDs/each optic 1

Light colour/type White





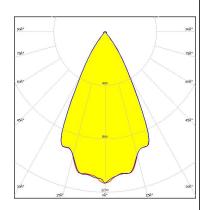
Light distribution files



LED LUXEON HL2X-E
FWHM / FWTM 54.0° / 74.0°
Efficiency 89 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1

Light colour/type White Required components:

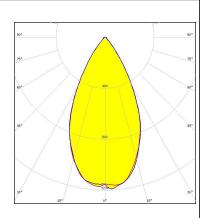
Protective plate, glass



Light distribution files

### **MILEDS**

LED LUXEON HL2X-P
FWHM / FWTM 54.0° / 80.0°
Efficiency 94 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:







Required components:

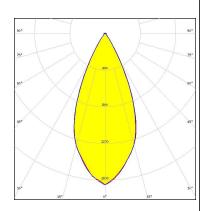
LED LUXEON HL2Z
FWHM / FWTM 46.0° / 66.0°

Efficiency 94 %

Peak intensity 1.7 cd/lm

LEDs/each optic 1

Light colour/type White



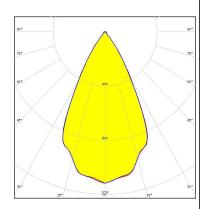
Light distribution files



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)

FWHM / FWTM 54.0° / 76.0°
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Protective plate, glass



Light distribution files



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)

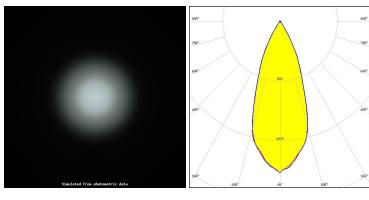
FWHM / FWTM 54.0° / 76.0°
Efficiency 96 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:





LFD SFT-12R-W-A FWHM / FWTM 40.0° / 64.0° Efficiency 96 % Peak intensity 2 cd/lm LEDs/each optic Light colour/type White

Required components:



Light distribution files

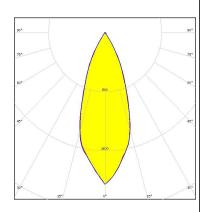


SFT-12R-W-A LFD FWHM / FWTM 38.0° / 64.0° Efficiency 92 % Peak intensity 2.1 cd/lm LEDs/each optic

Light colour/type White

Required components:

Protective plate, glass

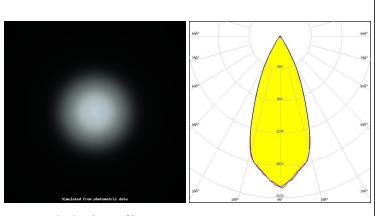


Light distribution files



SFT-25R-W-A FWHM / FWTM 42.0° / 66.0° Efficiency 96 % Peak intensity 1.9 cd/lm LEDs/each optic Light colour/type White

Required components:



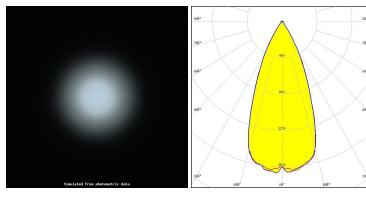
Light distribution files





Required components:

LED SST-12 Gen2
FWHM / FWTM 44.0° / 68.0°
Efficiency 96 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White

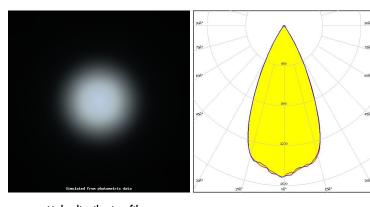


Light distribution files



LED SST-20 Gen2
FWHM / FWTM 48.0° / 68.0°
Efficiency 96 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour/type White

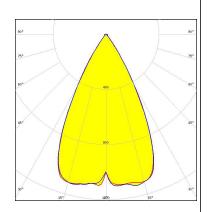
Required components:



Light distribution files



LED NV4WB35AM
FWHM / FWTM 56.0° / 74.0°
Efficiency 95 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



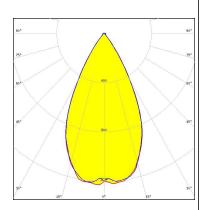
Light distribution files





LFD NVSW219D  $\mathsf{FWHM}\,/\,\mathsf{FWTM}$ 54.0° / 75.0° Efficiency 95 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour/type White

Required components:



Light distribution files

## OSRAM Opto Semiconductore

LED

Duris S8 57.0° / 83.0° FWHM / FWTM Efficiency 90 % 1 cd/lm Peak intensity LEDs/each optic Light colour/type White

Required components:

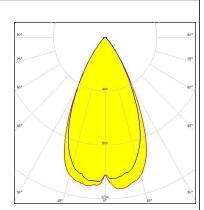
Light distribution files

Protective plate, glass

### OSRAM Opto Semiconductors

Duris S8 FWHM / FWTM 53.0° / 79.0° 91 % Efficiency Peak intensity 1.1 cd/lm LEDs/each optic Light colour/type White

Required components:



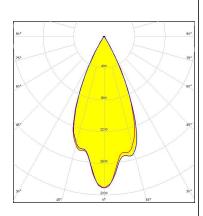
Light distribution files



#### OSRAM Opto Semiconductors

LED OSCONIQ C 2424
FWHM / FWTM 45.0° / 62.0°
Efficiency 96 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

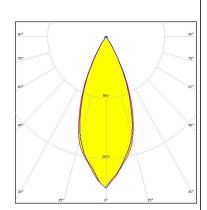


Light distribution files

#### OSRAM Opto Semiconductore

LED OSCONIQ P 3030
FWHM / FWTM 42.0° / 64.0°
Efficiency 96 %
Peak intensity 2 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

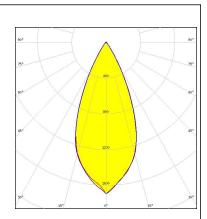


Light distribution files

#### **OSRAM**

LED OSCONIQ P 3737 (2W version)

FWHM / FWTM 45.0° / 68.0°
Efficiency 96 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

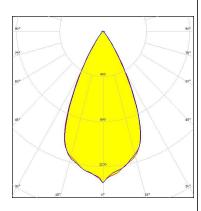


#### OSRAM Opto Semiconductors

LED OSCONIQ P 3737 (3W version)

FWHM / FWTM 52.0° / 72.0°
Efficiency 94 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:



Light distribution files

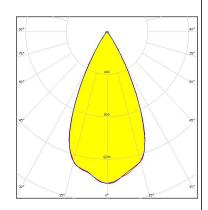
#### OSRAM Opto Semiconductore

Opto Semiconducto

LED OSCONIQ P 3737 Flat

FWHM / FWTM 50.0° / 68.0°
Efficiency 96 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:



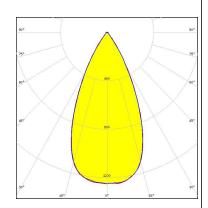
Light distribution files

#### OSRAM Onto Semiconductors

LED OSLON Square CSSRM2/CSSRM3

FWHM / FWTM 50.0° / 72.0°
Efficiency 87 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Protective plate, glass



Light distribution files



# OSRAM Opto Semino

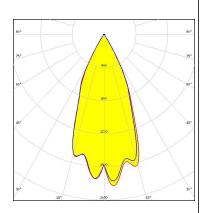
LED OSLON Square Flat

White

FWHM / FWTM 43.0° / 64.0° Efficiency 96 % Peak intensity 1.8 cd/lm LEDs/each optic 1

Required components:

Light colour/type



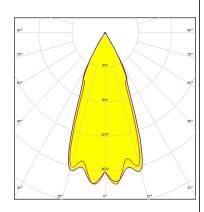
Light distribution files

## OSRAM Opto Semiconductore

OSTAR Projection Compact (KW.CSLNM1.TG) LFD

FWHM / FWTM 42.0° / 64.0° Efficiency 96 % Peak intensity 1.8 cd/lm LEDs/each optic Light colour/type White

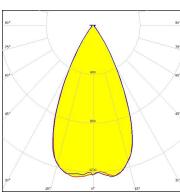
Required components:



Light distribution files

Fortimo FastFlex LED 2x8 DAX G4

FWHM / FWTM 51.0° / 73.0° 94 % Efficiency Peak intensity 1.3 cd/lm LEDs/each optic Light colour/type White Required components:



Light distribution files



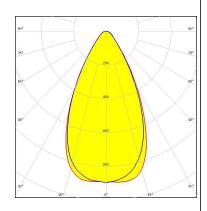
## **SAMSUNG**

LED HiLOM RM16 Z (LH502C)

FWHM / FWTM 56.0° / 90.0°
Efficiency 89 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1

Light colour/type White Required components:

Protective plate, glass



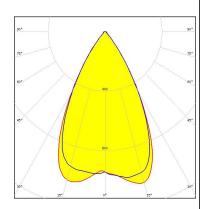
Light distribution files



LED SEOUL DC 5050 6V

FWHM / FWTM 54.0° / 79.0°
Efficiency 94 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White

Required components:

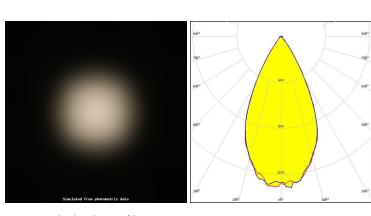


Light distribution files



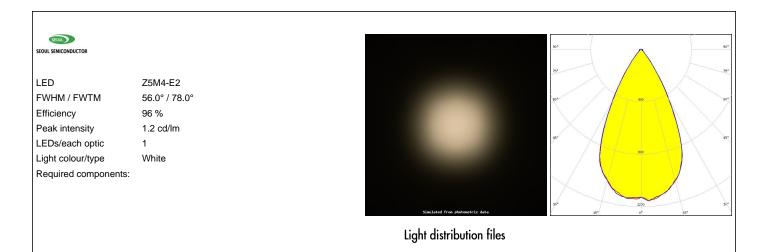
LED Z5M3-E1
FWHM / FWTM 52.0° / 74.0°
Efficiency 96 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1

Light colour/type White Required components:



Light distribution files









## PRODUCT DATASHEET C14605\_HB-2X2-RW

#### **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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#### **LEDIL Oy**

Joensuunkatu 7 FI-24100 SALO Finland

#### **LEDIL Inc.**

228 West Page Street Suite D Sycamore IL 60178 USA

# Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

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