

HB-2X2-O

~20° + 115° oval beam for aisle lighting

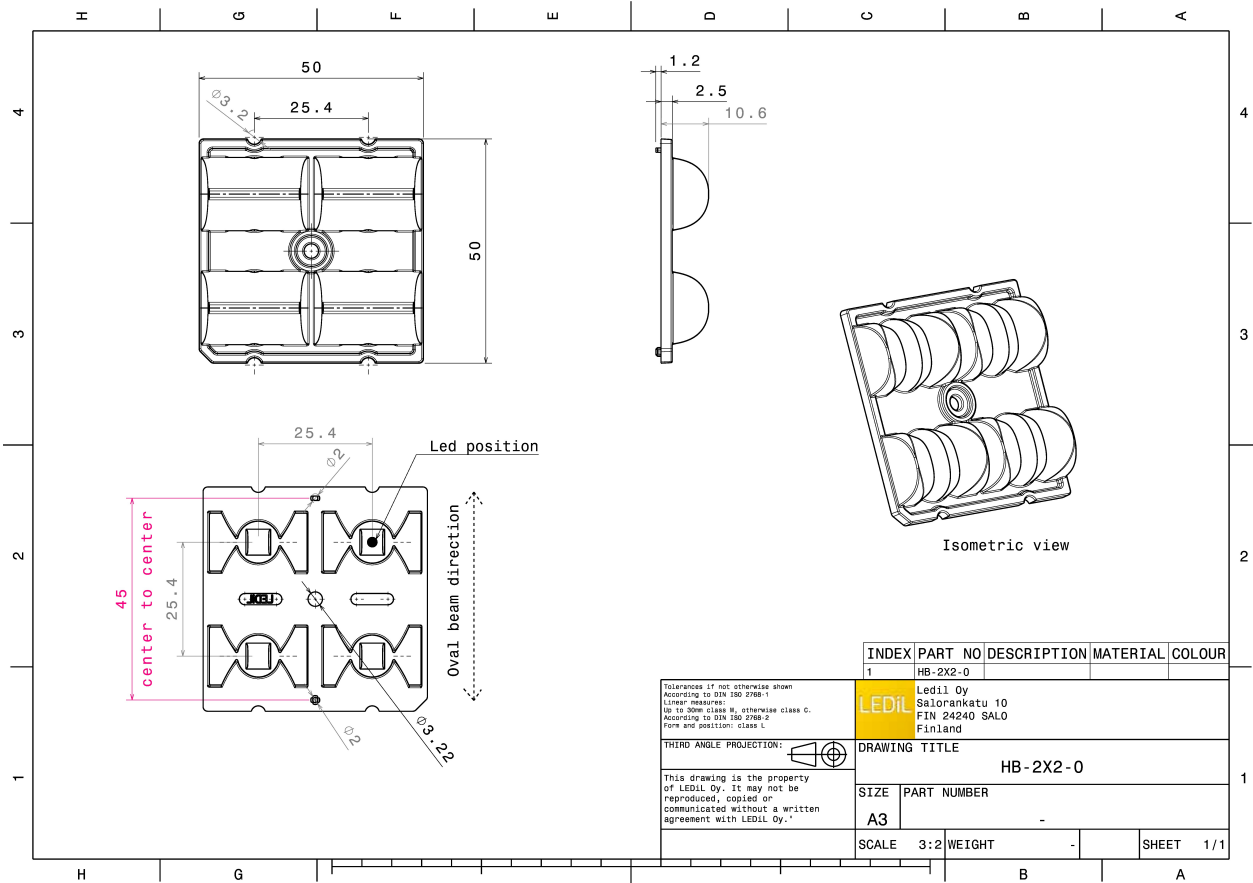
TECHNICAL SPECIFICATIONS:

Dimensions	50.0 mm
Height	10.6 mm
Fastening	glue, screw, pin
Colour	clear
Box size	480 x 280 x 300 mm
Box weight	10.4 kg
Quantity in Box	800 pcs
ROHS compliant	yes ⓘ



MATERIAL SPECIFICATIONS:

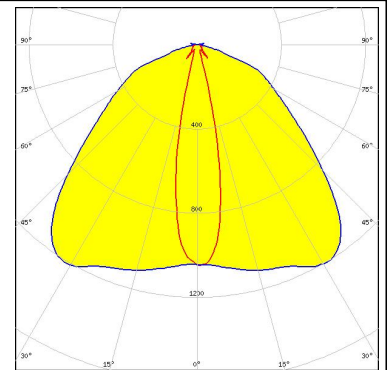
Component	Type	Material	Colour
HB-2X2-O	Lens	PMMA	clear



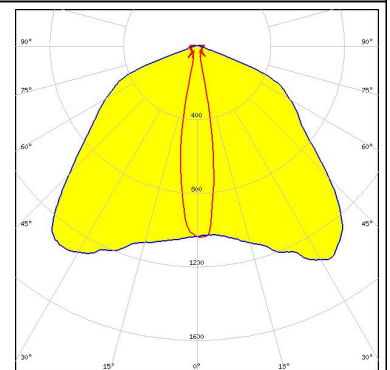
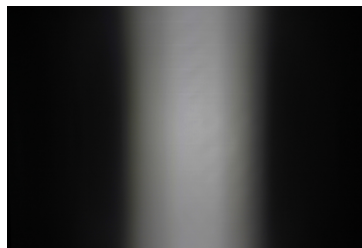
PHOTOMETRIC DATA (MEASURED):



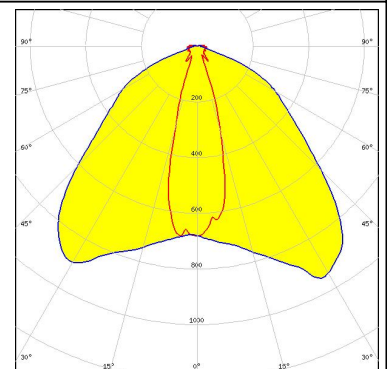
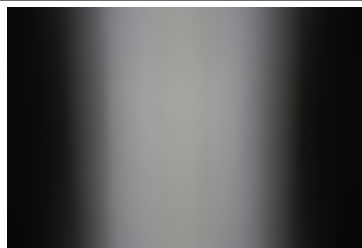
LED QUICK FLUX XTP 2x6 xxx LS G5
 FWHM 22.0 + 111.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



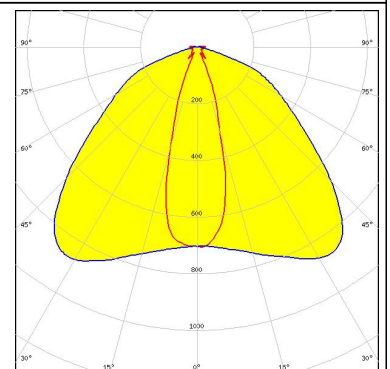
LED XD16
 FWHM 19.0 + 127.0°
 Efficiency 93 %
 Peak intensity 1.400 cd/lm
 Required components:



LED XD16 2x2 cluster
 FWHM 29.0 + 116.0°
 Efficiency 94 %
 Peak intensity 0.950 cd/lm
 Required components:



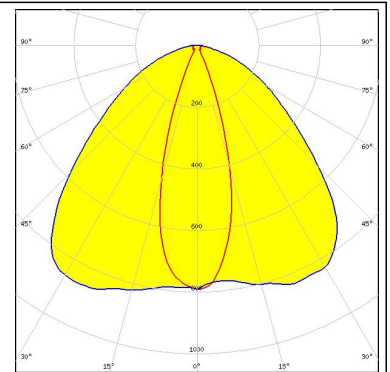
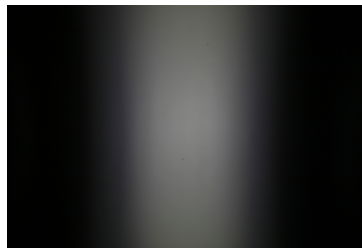
LED XHP35 HD
 FWHM 29.0 + 117.0°
 Efficiency 94 %
 Peak intensity 0.870 cd/lm
 Required components:



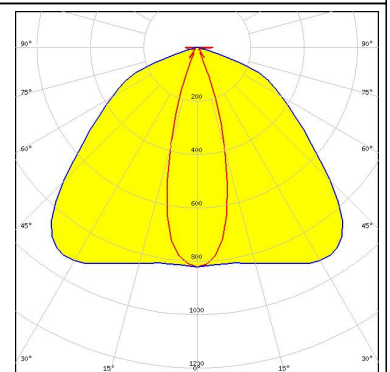
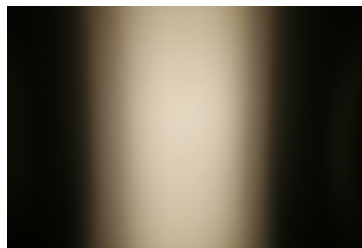
PHOTOMETRIC DATA (MEASURED):



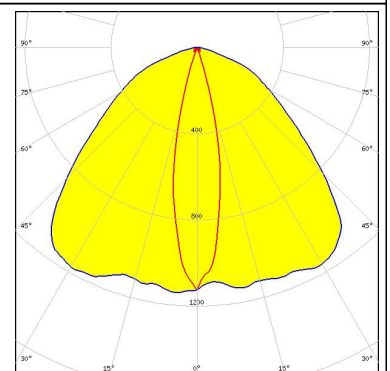
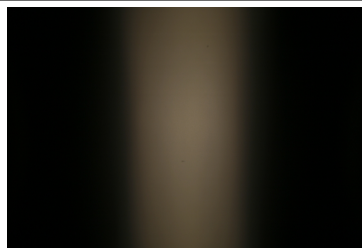
LED XM-L
 FWHM 29.0 + 109.0°
 Efficiency 94 %
 Peak intensity 0.980 cd/lm
 Required components:



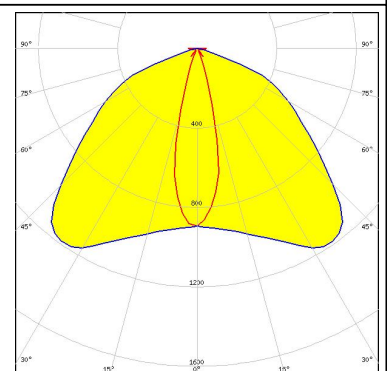
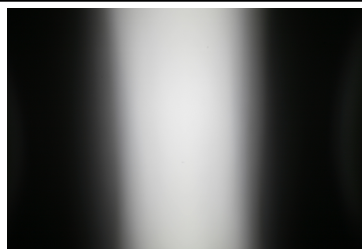
LED XM-L2
 FWHM 30.0 + 106.0°
 Efficiency 94 %
 Peak intensity 1.000 cd/lm
 Required components:



LED XP-G
 FWHM 26.0 + 115.0°
 Efficiency 94 %
 Peak intensity 1.130 cd/lm
 Required components:



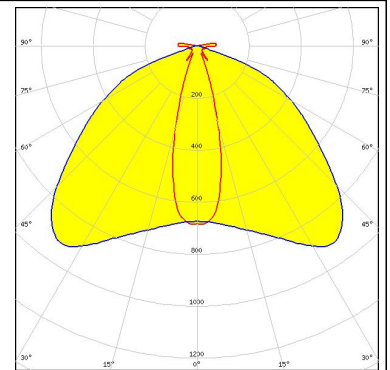
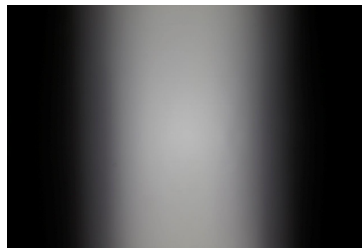
LED XP-G2
 FWHM 27.0 + 112.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



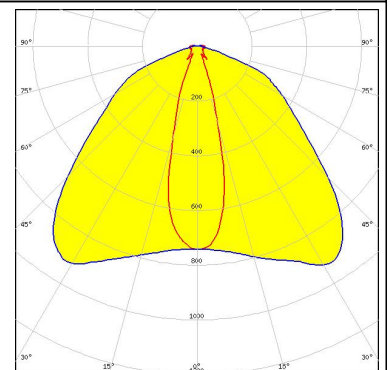
PHOTOMETRIC DATA (MEASURED):



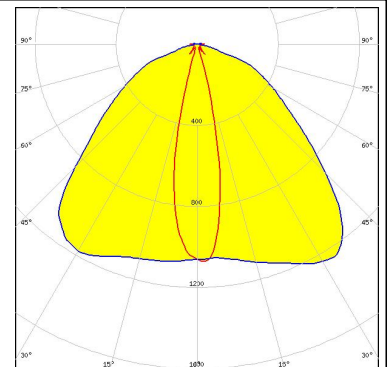
LED XP-L
FWHM 29.0 + 117.0°
Efficiency 94 %
Peak intensity 0.890 cd/lm
Required components:



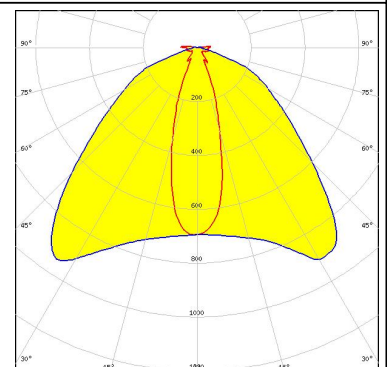
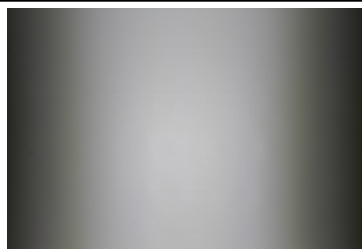
LED XP-L2
FWHM 28.0 + 117.0°
Efficiency 94 %
Peak intensity 0.930 cd/lm
Required components:



LED H35C1 (LEMWA33)
FWHM 23.0 + 110.0°
Efficiency 94 %
Peak intensity 1.200 cd/lm
Required components:



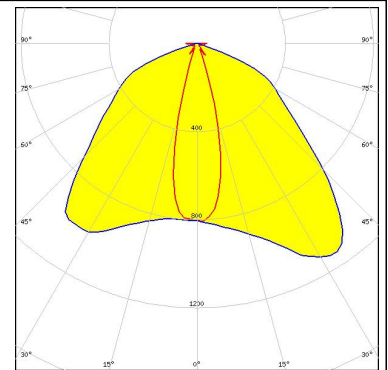
LED LUXEON 5050
FWHM 29.0 + 114.0°
Efficiency 94 %
Peak intensity 0.940 cd/lm
Required components:



PHOTOMETRIC DATA (MEASURED):

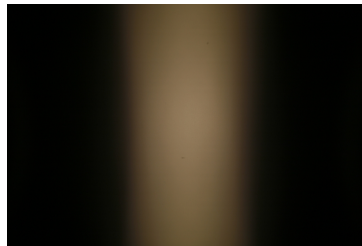
LUMILEDS

LED LUXEON MZ
 FWHM 28.0 + 103.0°
 Efficiency 94 %
 Peak intensity 1.100 cd/lm
 Required components:



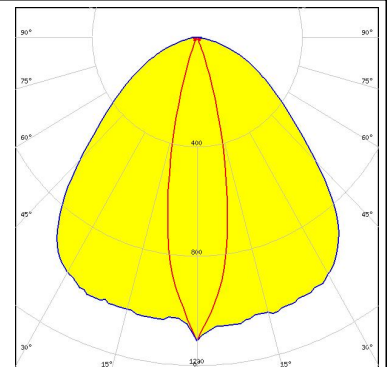
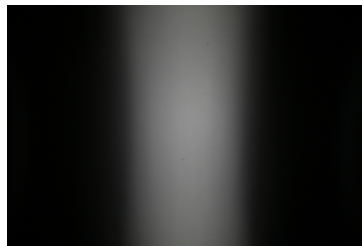
LUMILEDS

LED LUXEON R
 FWHM 25.0 + 105.0°
 Efficiency 94 %
 Peak intensity 1.240 cd/lm
 Required components:



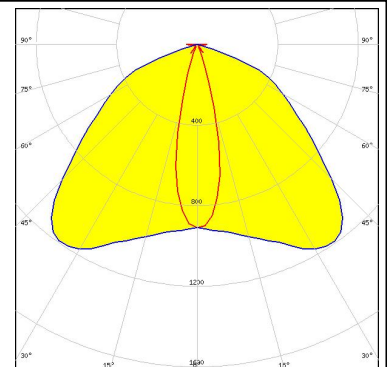
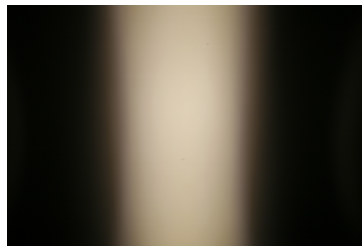
LUMILEDS

LED LUXEON Rebel ES
 FWHM 25.0 + 106.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



LUMILEDS

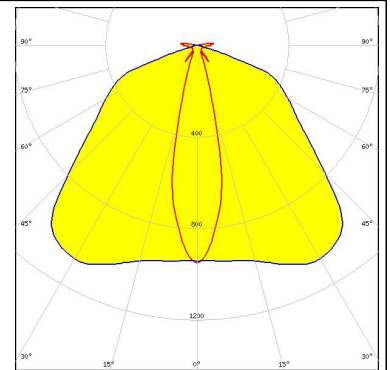
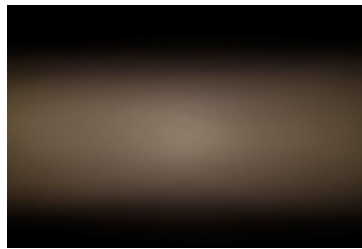
LED LUXEON T
 FWHM 26.0 + 110.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



PHOTOMETRIC DATA (MEASURED):

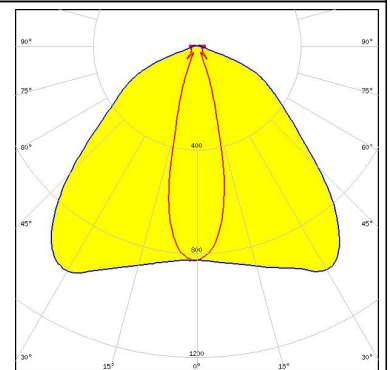
LUMILEDS

LED LUXEON TX
 FWHM 24.0 + 118.0°
 Efficiency 94 %
 Peak intensity 1.080 cd/lm
 Required components:



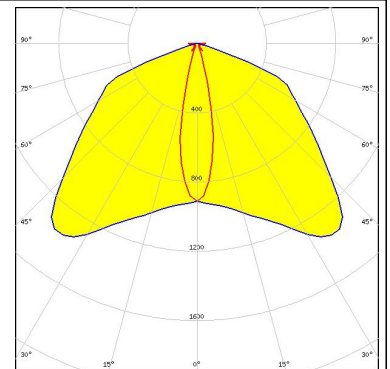
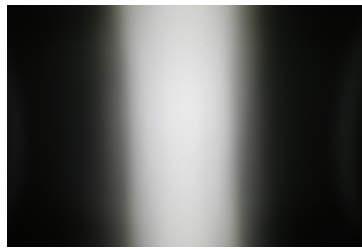
LUMILEDS

LED LUXEON V
 FWHM 26.0 + 108.0°
 Efficiency 94 %
 Peak intensity 1.000 cd/lm
 Required components:



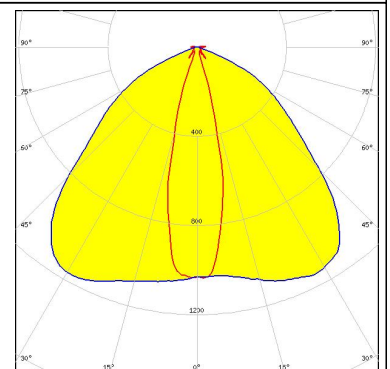
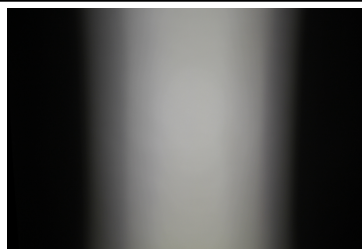
NICHIA

LED NCSxx19B
 FWHM 23.0 + 113.0°
 Efficiency 94 %
 Peak intensity 1.400 cd/lm
 Required components:



NICHIA

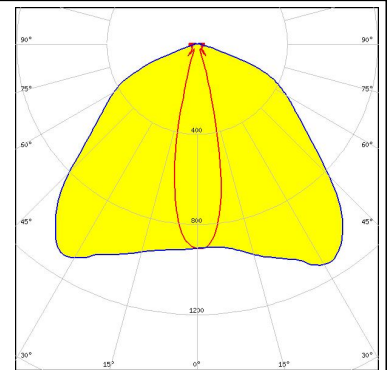
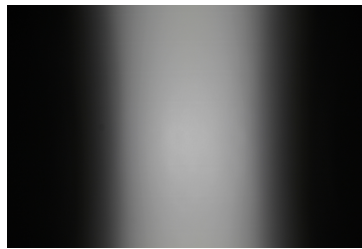
LED NVSW219D
 FWHM 25.0 + 107.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



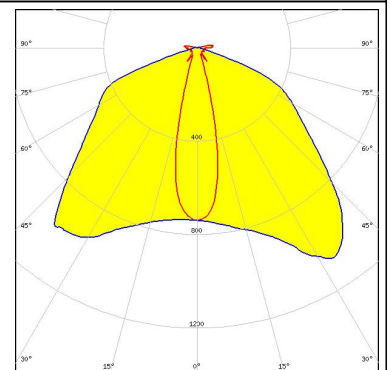
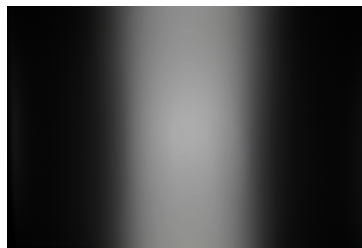
PHOTOMETRIC DATA (MEASURED):



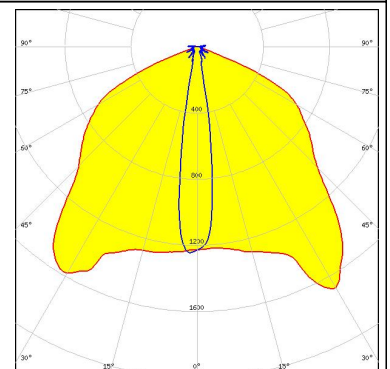
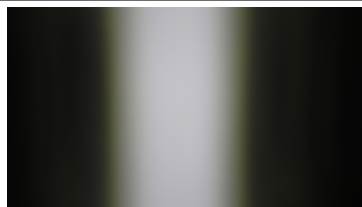
LED NVSW3x9A
 FWHM 24.0 + 119.0°
 Efficiency 94 %
 Peak intensity 1.100 cd/lm
 Required components:



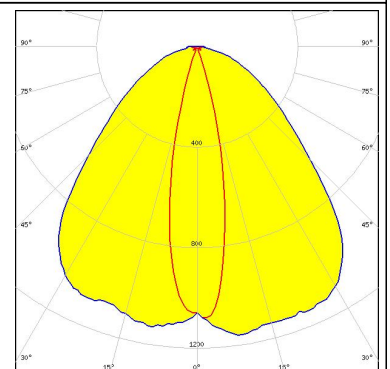
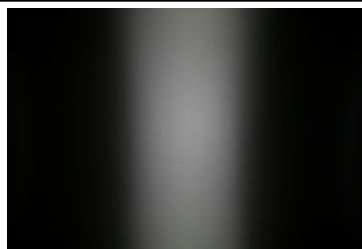
LED NVSW3x9A
 FWHM 25.0 + 134.0°
 Efficiency 93 %
 Peak intensity 0.400 cd/lm
 Required components:



LED NVSxE21A
 FWHM 17.0 + 125.0°
 Efficiency 94 %
 Peak intensity 1.680 cd/lm
 Required components:



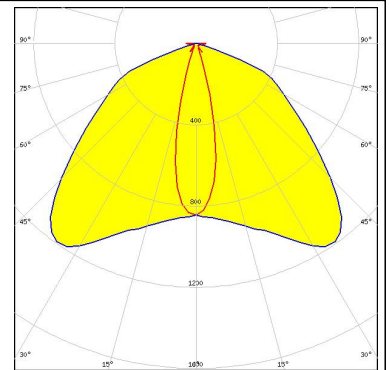
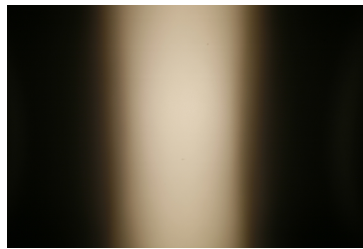
LED NVSxx19A
 FWHM 24.0 + 105.0°
 Efficiency 94 %
 Peak intensity 1.220 cd/lm
 Required components:



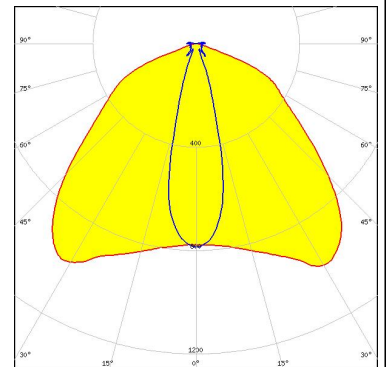
PHOTOMETRIC DATA (MEASURED):



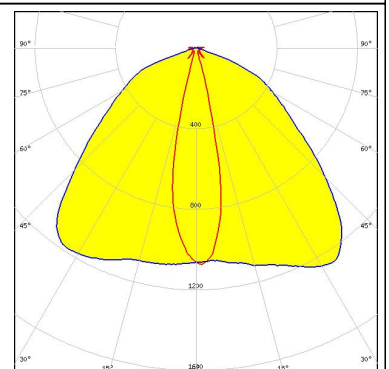
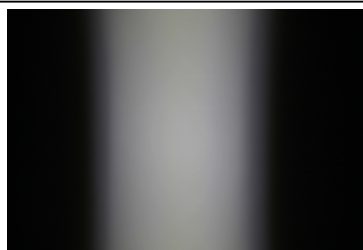
LED NVSxx19B/NVSxx19C
 FWHM 26.0 + 108.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



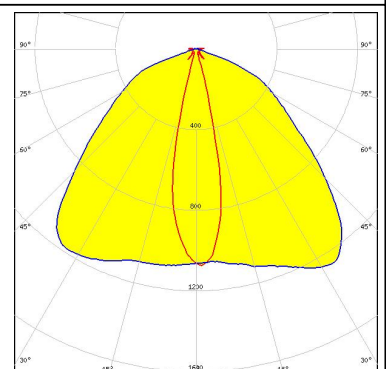
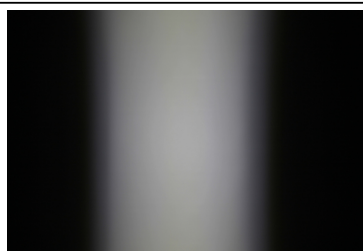
LED NWSx229A
 FWHM 27.0 + 118.0°
 Efficiency 94 %
 Peak intensity 1.000 cd/lm
 Required components:



LED PrevaLED Brick DC 2x8
 FWHM 23.0 + 111.0°
 Efficiency 94 %
 Peak intensity 1.300 cd/lm
 Required components:



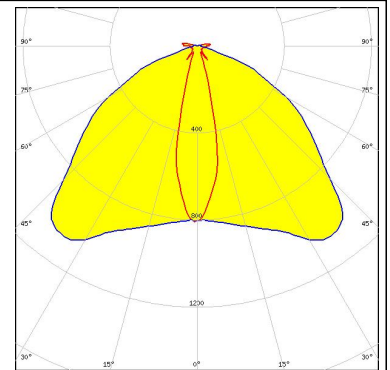
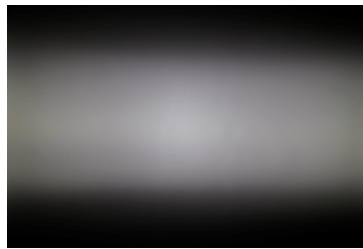
LED Oslon Square Gen3
 FWHM 23.0 + 111.0°
 Efficiency 94 %
 Peak intensity 1.300 cd/lm
 Required components:



PHOTOMETRIC DATA (MEASURED):

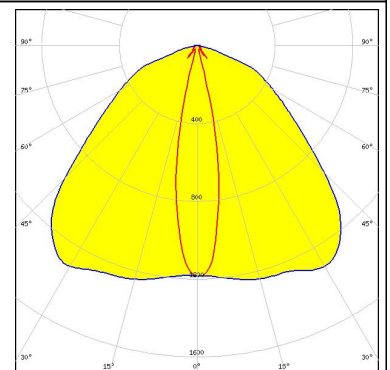
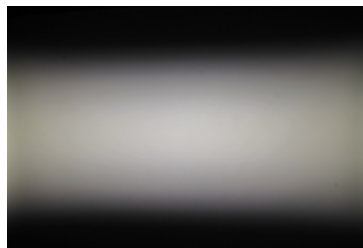
OSRAM
Opto Semiconductors

LED Oslon Square PC
FWHM 25.0 + 124.0°
Efficiency 91 %
Peak intensity 1.070 cd/lm
Required components:



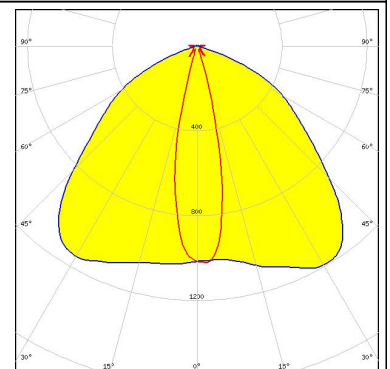
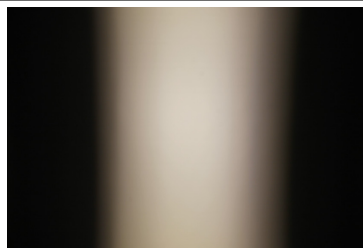
PHILIPS

LED Fortimo FastFlex LED board 2x8 DA G4
FWHM 21.0 + 108.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



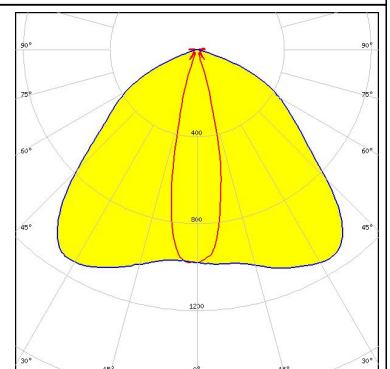
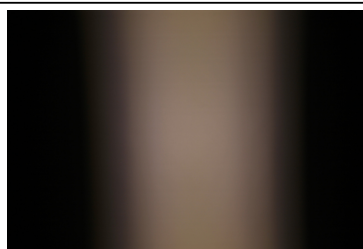
SAMSUNG

LED LH351B
FWHM 23.0 + 113.0°
Efficiency 94 %
Peak intensity 1.210 cd/lm
Required components:



SAMSUNG

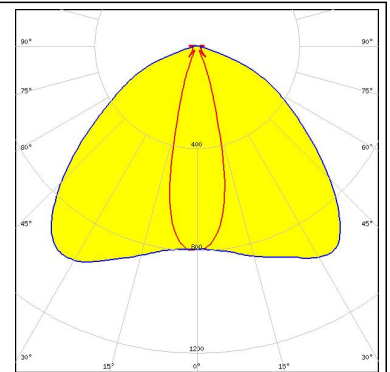
LED LH351C
FWHM 24.0 + 111.0°
Efficiency 94 %
Peak intensity 1.100 cd/lm
Required components:



PHOTOMETRIC DATA (MEASURED):

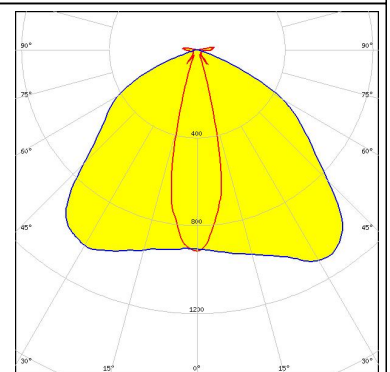
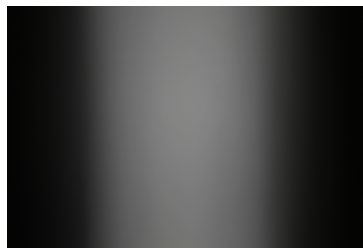
SAMSUNG

LED LH351D
FWHM 27.0 + 116.0°
Efficiency 94 %
Peak intensity 0.970 cd/lm
Required components:



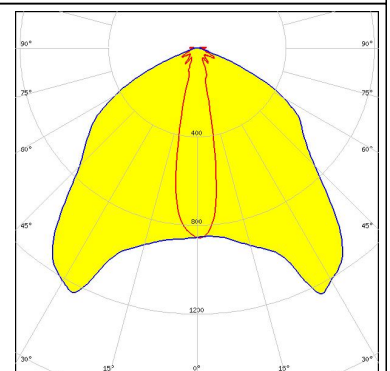
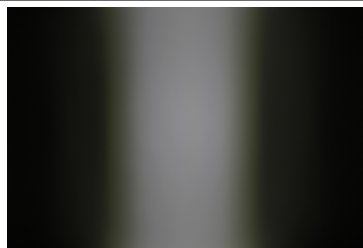
SAMSUNG

LED LH351Z
FWHM 26.0 + 117.0°
Efficiency 94 %
Peak intensity 1.100 cd/lm
Required components:



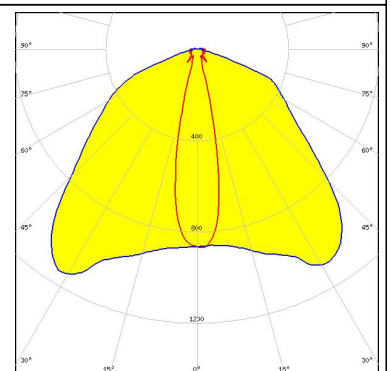
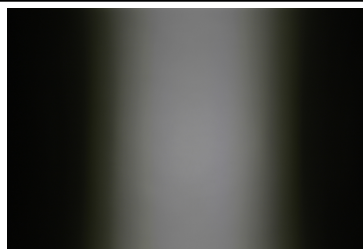
SEOUL SEMICONDUCTOR

LED Z8Y22
FWHM 21.0 + 121.0°
Efficiency 94 %
Peak intensity 1.200 cd/lm
Required components:



SEOUL SEMICONDUCTOR

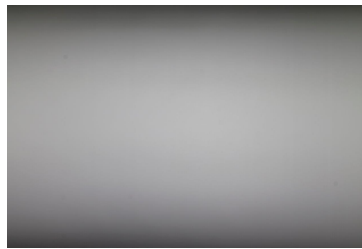
LED Z8Y22P
FWHM 23.0 + 121.0°
Efficiency 94 %
Peak intensity 1.100 cd/lm
Required components:



PHOTOMETRIC DATA (MEASURED):

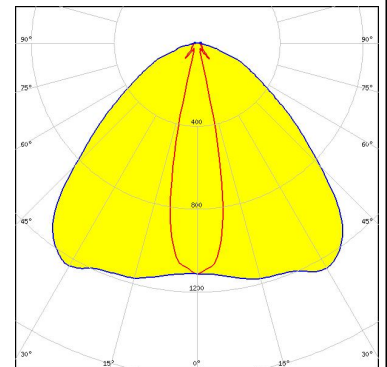
TOSHIBA
Leading Innovation >>>

LED TL1L4
FWHM 24.0 + 119.0°
Efficiency 89 %
Peak intensity 1.100 cd/lm
Required components:



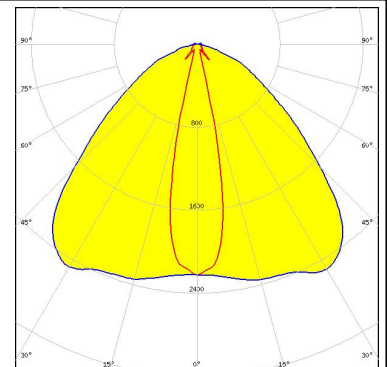
TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD
FWHM 23.0 + 104.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



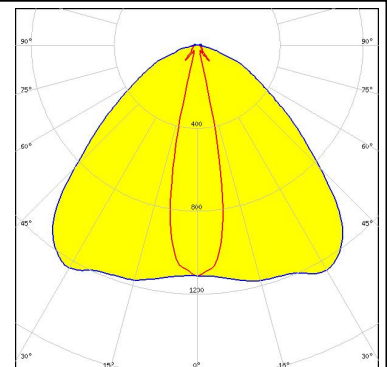
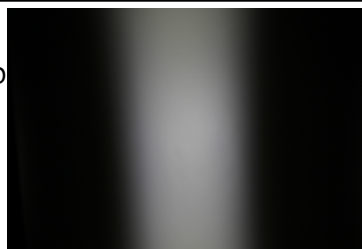
TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD
FWHM 23.0 + 104.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



TRIDONIC

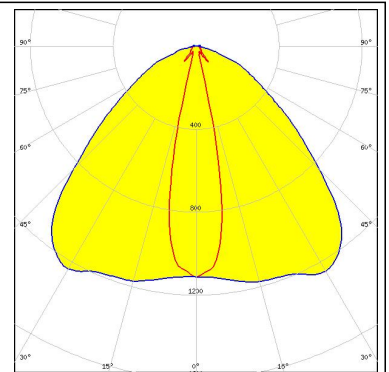
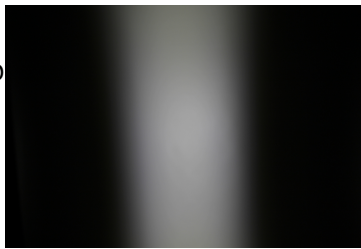
LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM 23.0 + 104.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



PHOTOMETRIC DATA (MEASURED):

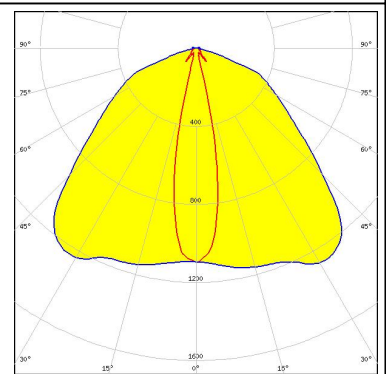
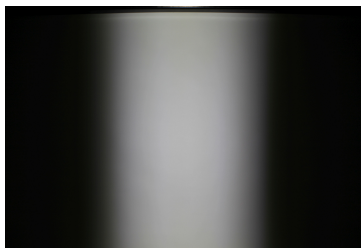
TRIDONIC

LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM 23.0 + 104.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



TRIDONIC

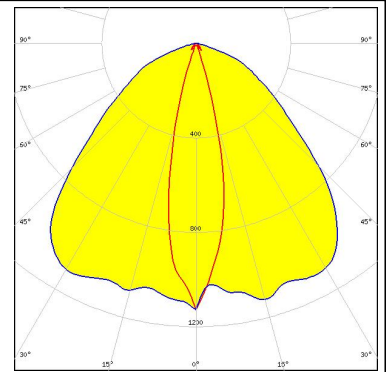
LED RLE G2 HP 2x8 4000lm
FWHM 22.0 + 113.0°
Efficiency 94 %
Peak intensity 1.300 cd/lm
Required components:



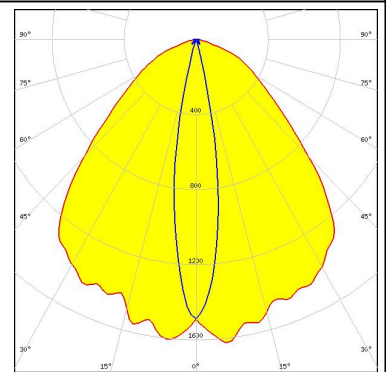
PHOTOMETRIC DATA (SIMULATED):



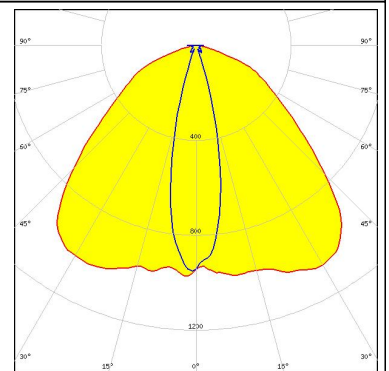
LED XHP35 HI
 FWHM 101.0 + 27.0°
 Efficiency 94 %
 Peak intensity 1.200 cd/lm
 Required components:



LED XP-E2
 FWHM 93.0 + 18.0°
 Efficiency 94 %
 Peak intensity 1.630 cd/lm
 Required components:



LED XP-G3
 FWHM 103.0 + 29.0°
 Efficiency 94 %
 Peak intensity 1.100 cd/lm
 Required components:

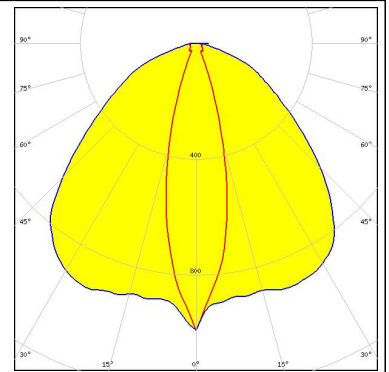


LED XQ-E HI
 FWHM 96.0 + 14.0°
 Efficiency %
 Peak intensity cd/lm
 Required components:

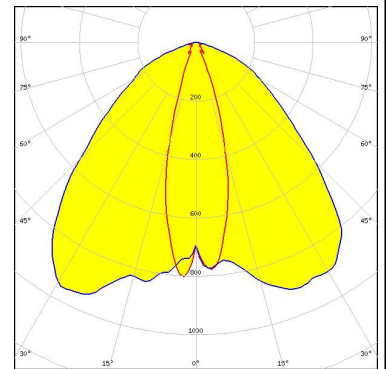
PHOTOMETRIC DATA (SIMULATED):



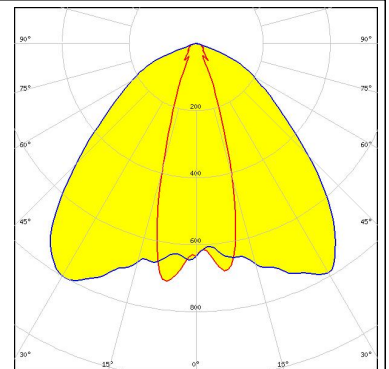
LED XT-E HE
 FWHM 100.0 + 24.0°
 Efficiency 94 %
 Peak intensity cd/lm
 Required components:



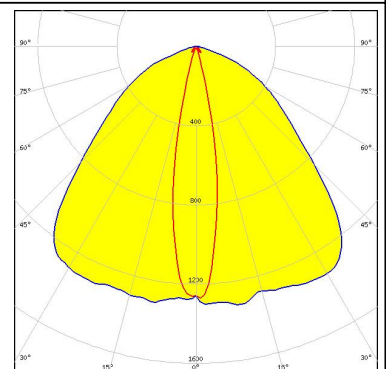
LED Duris S8
 FWHM 95.0 + 25.0°
 Efficiency 93 %
 Peak intensity 0.950 cd/lm
 Required components:



LED Duris S8
 FWHM 31.0 + 96.0°
 Efficiency 87 %
 Peak intensity 0.805 cd/lm
 Required components:
 Undefined Manufacturer: Protective Plate, Glass



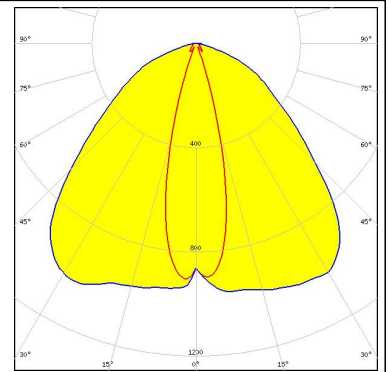
LED OSCONIQ P 3737 (2W version)
 FWHM 99.0 + 19.0°
 Efficiency 94 %
 Peak intensity 1.300 cd/lm
 Required components:



PHOTOMETRIC DATA (SIMULATED):

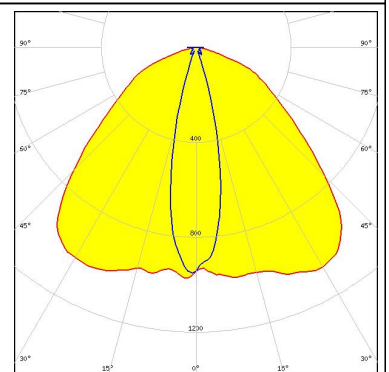
OSRAM
Opto Semiconductors

LED OSCONIQ P 3737 (3W version)
FWHM 100.0 + 30.0°
Efficiency 94 %
Peak intensity 1.030 cd/lm
Required components:



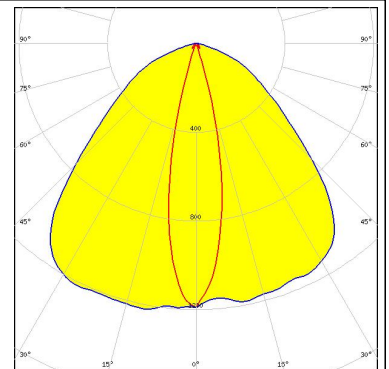
PHILIPS

LED Fortimo FastFlex LED board 2x8 DAX G4
FWHM 103.0 + 29.0°
Efficiency 94 %
Peak intensity 1.100 cd/lm
Required components:



SEOL
SEOUL SEMICONDUCTOR

LED Z5M1/Z5M2
FWHM 22.0 + 97.0°
Efficiency 94 %
Peak intensity 1.200 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:

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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Local sales and technical support

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Shipping locations

Salo, Finland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)