

HB-IP-2X6-M

~25° medium beam

SPECIFICATION:

Dimensions	173.0 x 71.4
Height	11.4 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

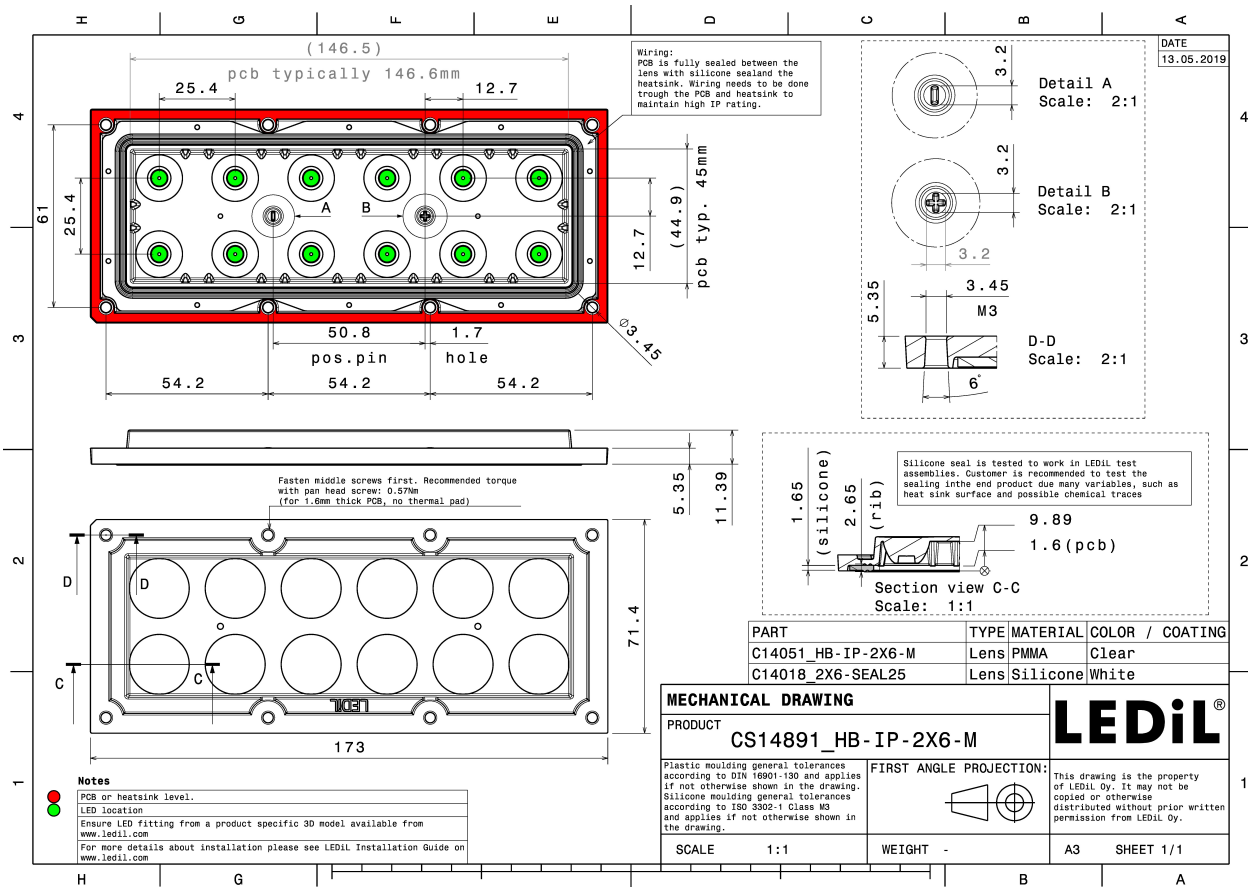
MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-IP-2X6-M	Multi-lens	PMMA	clear		
2X6-SEAL25	Seal	Silicone	white		



ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14891_HB-IP-2X6-M	Multi-lens	120	40	40	8.1
» Box size: 476 x 273 x 247 mm					

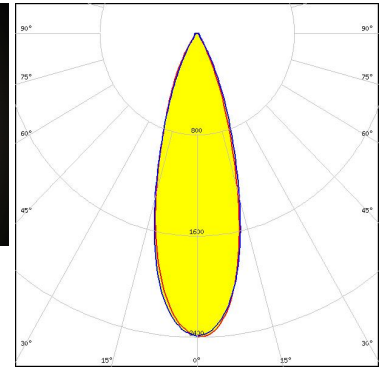
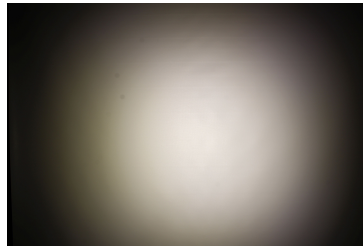


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



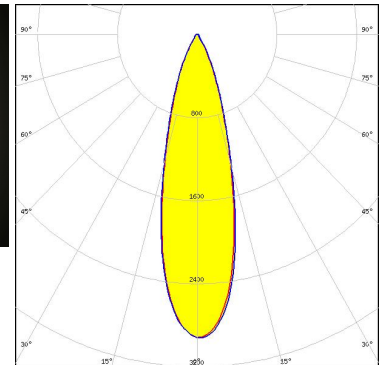
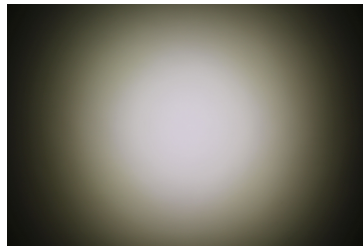
LED QUICK FLUX 2x6 LED XG xxx G7+
 FWHM / FWTM 32.0° / 59.0°
 Efficiency 94 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



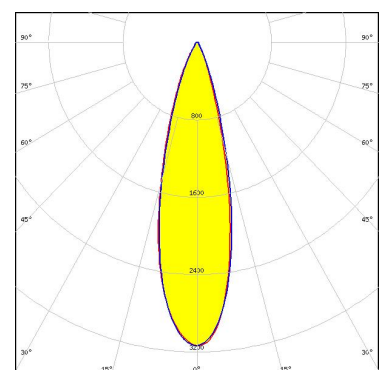
LED QUICK FLUX 2x6 LED XT xxx G5
 FWHM / FWTM 28.0° / 55.0°
 Efficiency 94 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XM-L
 FWHM / FWTM 27.0° / 50.0°
 Efficiency 94 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

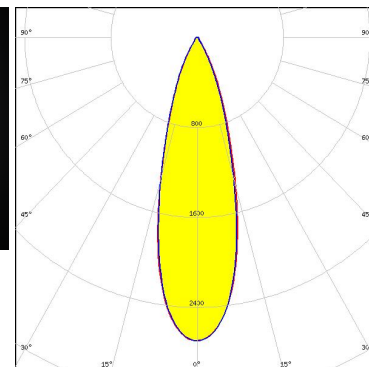
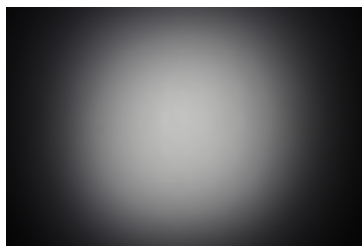


Light distribution files

OPTICAL RESULTS (MEASURED):



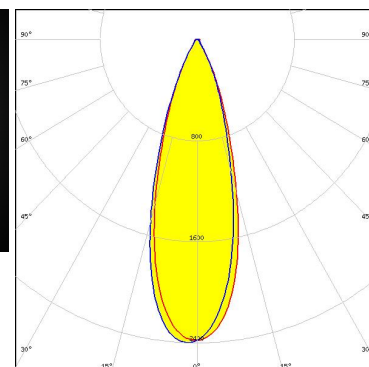
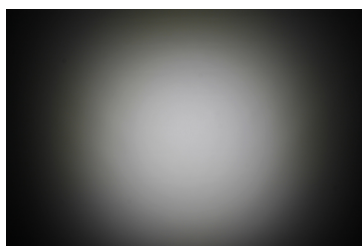
LED XP-G2
 FWHM / FWTM 30.0° / 57.0°
 Efficiency 94 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



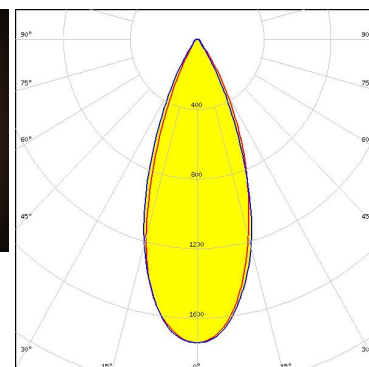
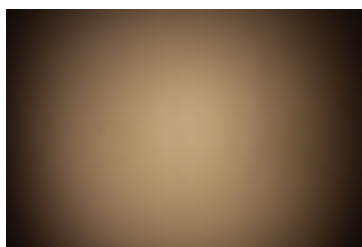
LED XP-G3
 FWHM / FWTM 32.0° / 58.0°
 Efficiency 94 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-L HD
 FWHM / FWTM 39.0° / 66.0°
 Efficiency 94 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

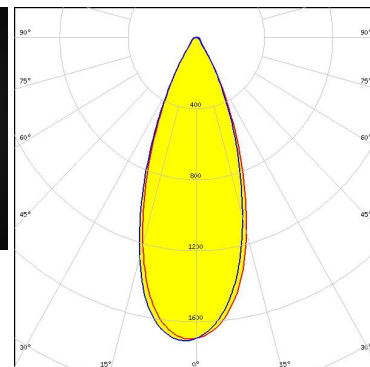
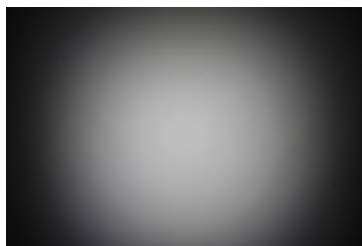


Light distribution files

OPTICAL RESULTS (MEASURED):



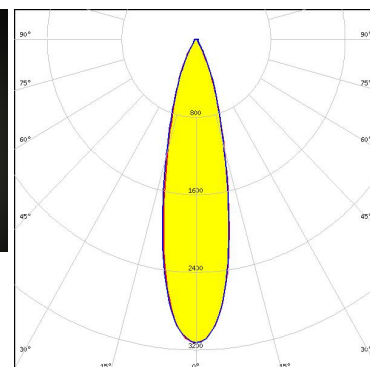
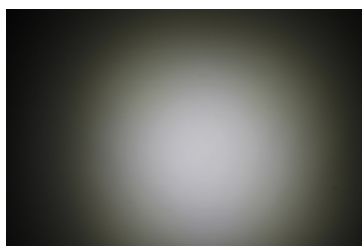
LED XP-L2
 FWHM / FWTM 39.0° / 67.0°
 Efficiency 94 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



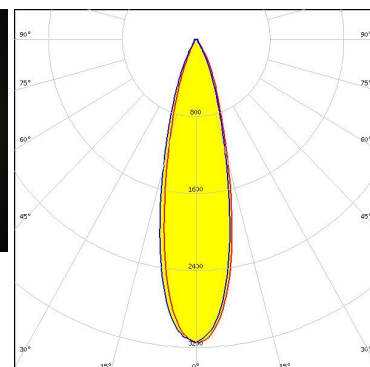
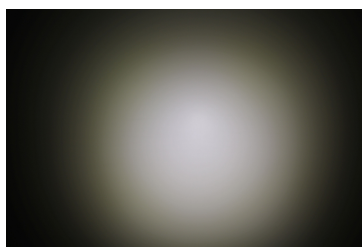
LED XT-E
 FWHM / FWTM 25.0° / 52.0°
 Efficiency 92 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XT-E HE
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 94 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

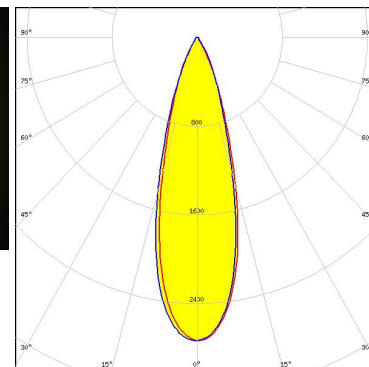
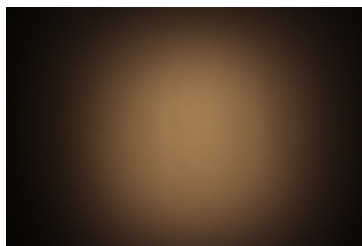


Light distribution files

OPTICAL RESULTS (MEASURED):



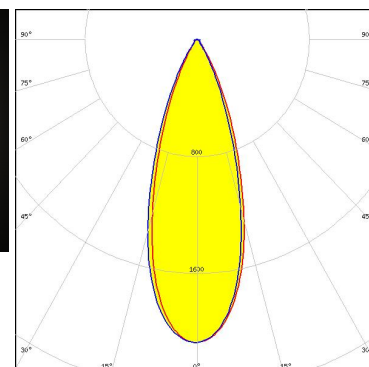
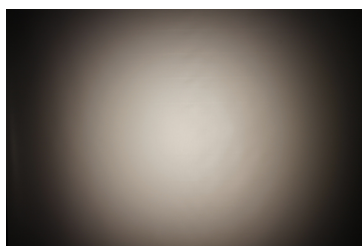
LED LUXEON T
FWHM / FWTM 29.0° / 55.0°
Efficiency 94 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



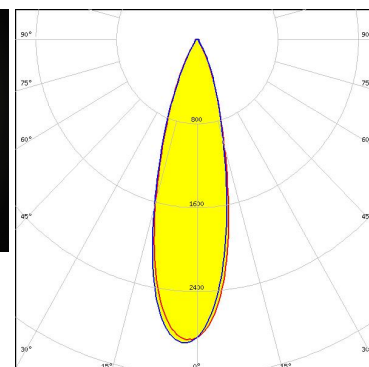
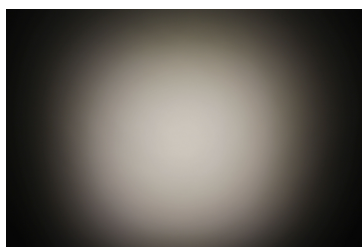
LED LUXEON V
FWHM / FWTM 35.0° / 62.0°
Efficiency 93 %
Peak intensity 2.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON V2
FWHM / FWTM 28.0° / 54.0°
Efficiency 94 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

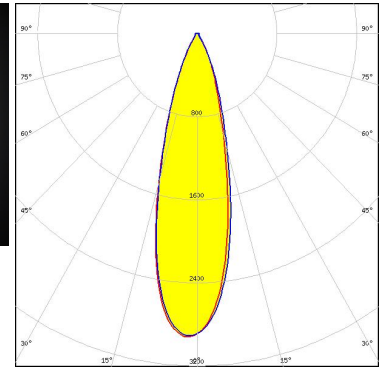
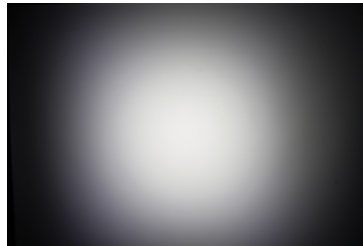


Light distribution files

OPTICAL RESULTS (MEASURED):



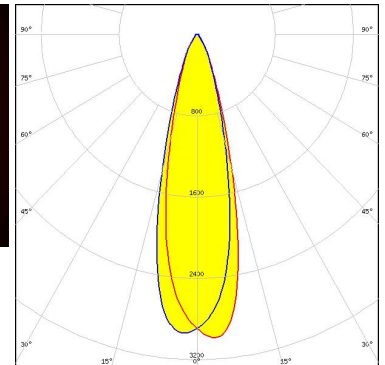
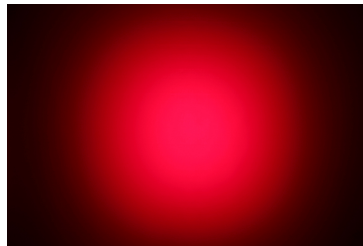
LED LUXEON XR-TX (L2T0-xxxx012M0000)
 FWHM / FWTM 28.0° / 54.0°
 Efficiency 94 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



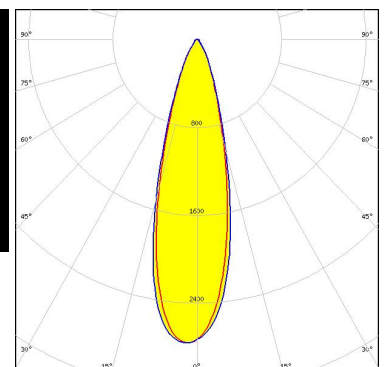
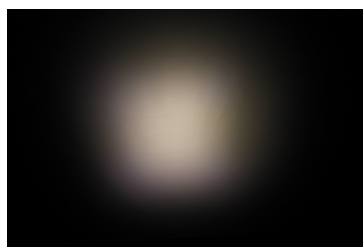
LED SST-10-B130
 FWHM / FWTM 27.0° / 53.0°
 Efficiency 95 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type Deep Red
 Required components:



Light distribution files



LED RecLED 146x45mm 2900lm 730 2x6 IP G1
 FWHM / FWTM 28.0° / 55.0°
 Efficiency 95 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

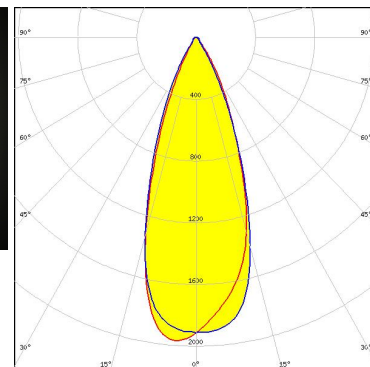
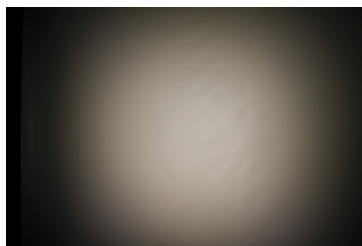


Light distribution files

OPTICAL RESULTS (MEASURED):



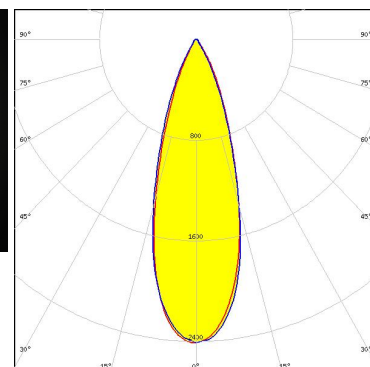
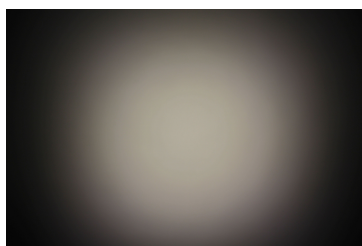
LED NVSW219D
 FWHM / FWTM 38.0° / 63.0°
 Efficiency 94 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



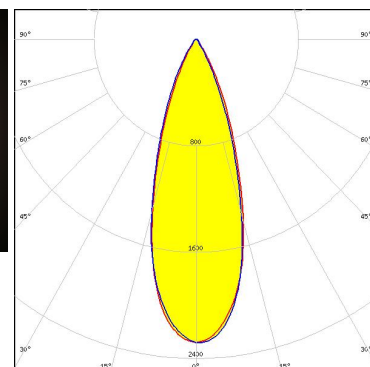
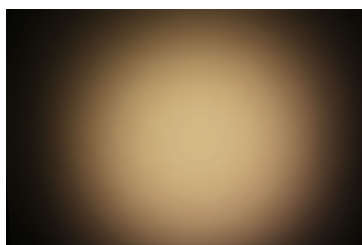
LED NVSW219F-V2
 FWHM / FWTM 33.0° / 59.0°
 Efficiency 94 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED NVSW319B
 FWHM / FWTM 34.0° / 61.0°
 Efficiency 94 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

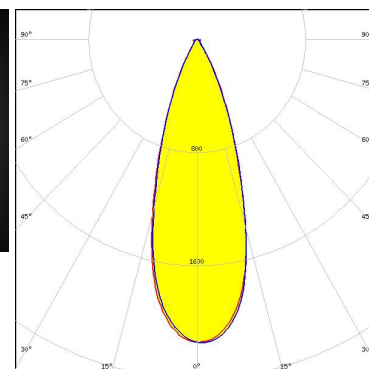
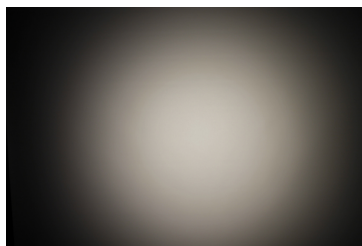


Light distribution files

OPTICAL RESULTS (MEASURED):



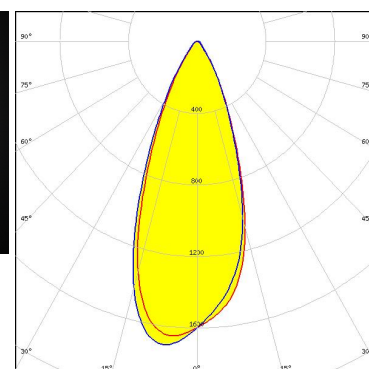
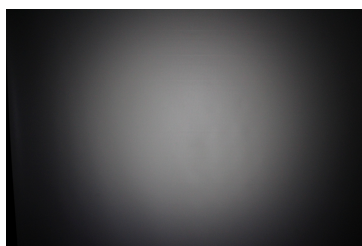
LED NVSW3x9A
 FWHM / FWTM 34.0° / 60.0°
 Efficiency 94 %
 Peak intensity 2.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



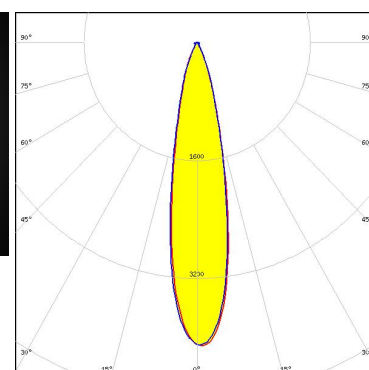
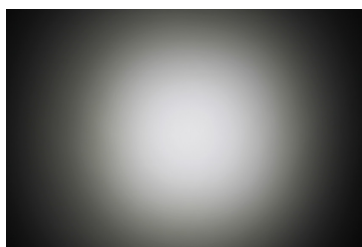
LED NVSW519A
 FWHM / FWTM 40.0° / 70.0°
 Efficiency 95 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED NVSxE21A
 FWHM / FWTM 24.0° / 53.0°
 Efficiency 92 %
 Peak intensity 4.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

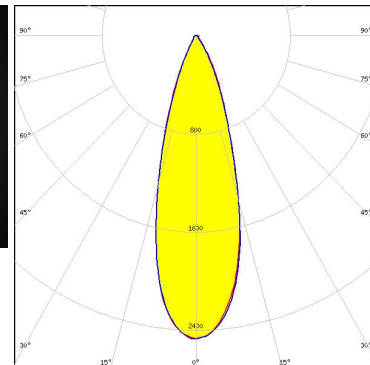
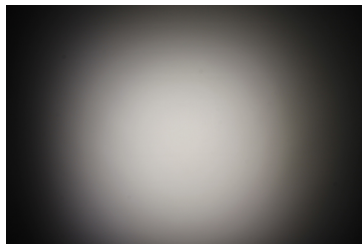


Light distribution files

OPTICAL RESULTS (MEASURED):



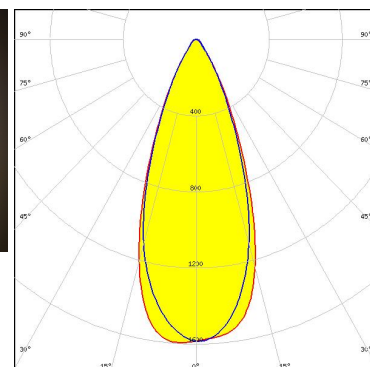
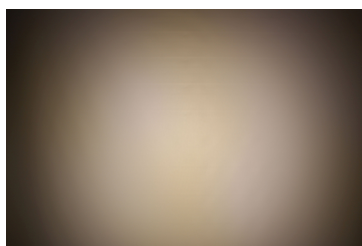
LED NVSxx19B/NVSxx19C
 FWHM / FWTM 31.0° / 58.0°
 Efficiency 93 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



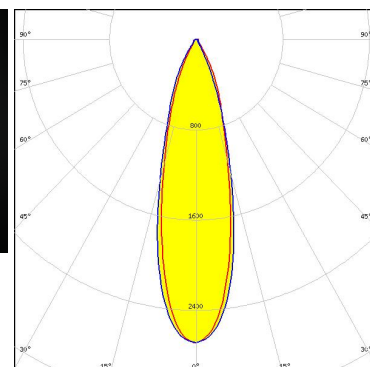
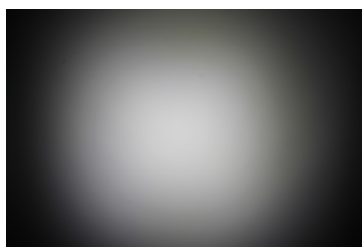
LED Duris S8
 FWHM / FWTM 41.0° / 70.0°
 Efficiency 94 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED OSLON Square PC
 FWHM / FWTM 29.0° / 57.0°
 Efficiency 93 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

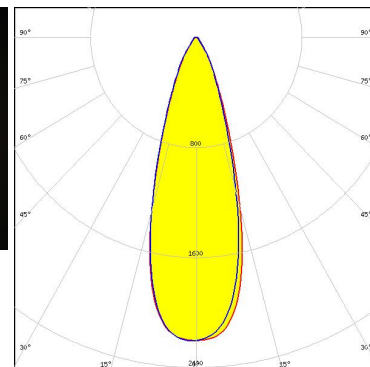
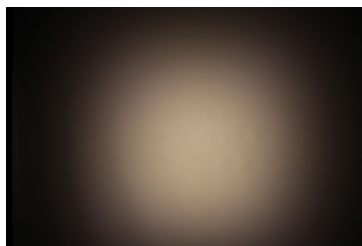


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

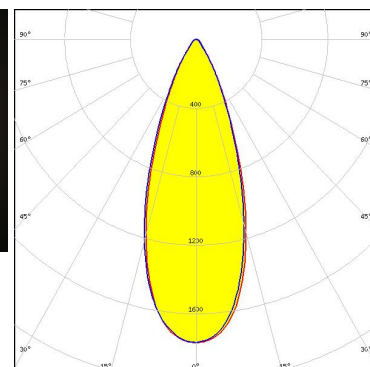
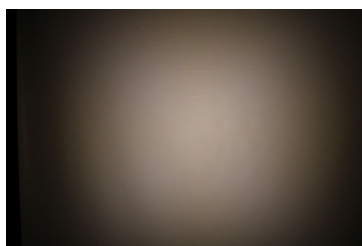
LED	Fortimo FastFlex LED 2x6 DP G5
FWHM / FWTM	32.0° / 62.0°
Efficiency	96 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

PHILIPS

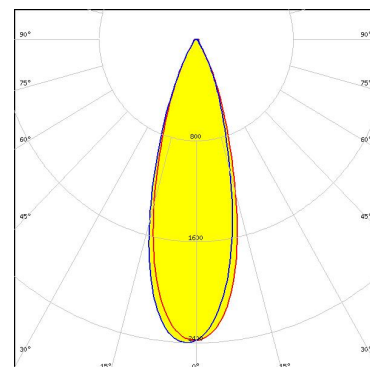
LED	Fortimo FastFlex LED 2x6 DP HE
FWHM / FWTM	38.0° / 68.0°
Efficiency	97 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

PHILIPS

LED	Fortimo FastFlex LED 2x6 DPX G4
FWHM / FWTM	32.0° / 58.0°
Efficiency	94 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

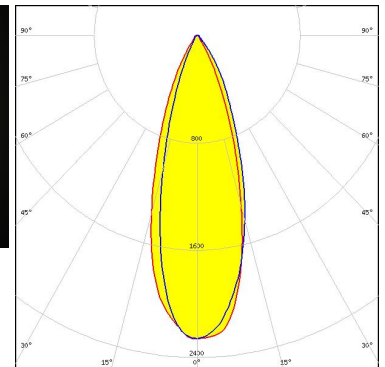
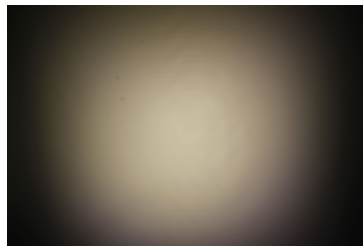


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

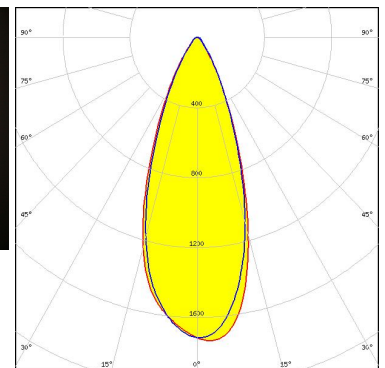
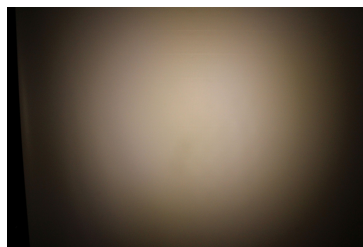
LED HiLOM RH12 (LH351C)
 FWHM / FWTM 33.0° / 61.0°
 Efficiency 94 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

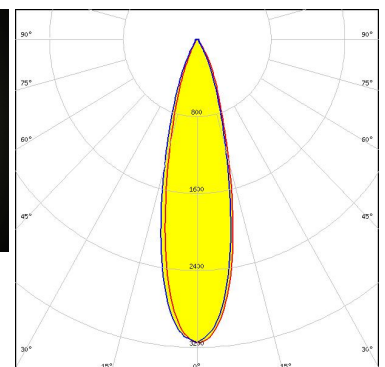
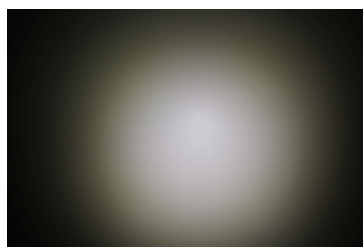
LED HiLOM RM12 ZP (LH502C)
 FWHM / FWTM 38.0° / 69.0°
 Efficiency 96 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SCIOLUX

LED XLE-S22C4XTEHE (XT-E HE)
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 94 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

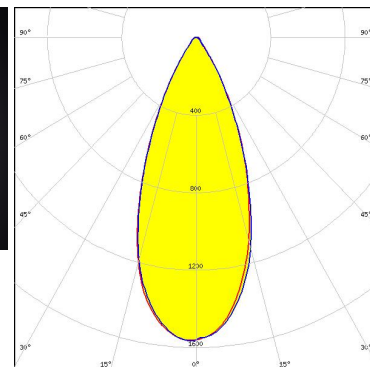
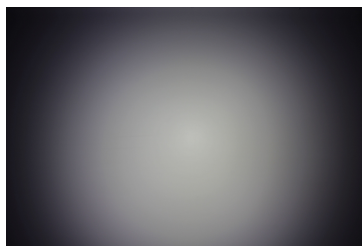


Light distribution files

OPTICAL RESULTS (MEASURED):



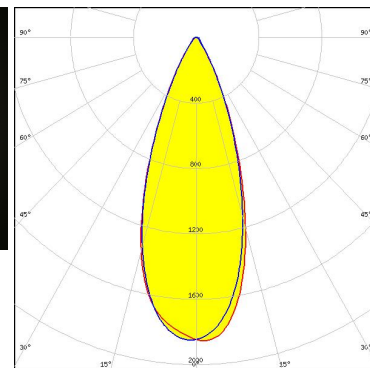
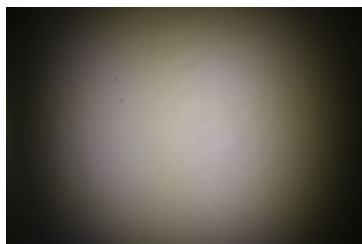
LED XLE-S26XHP35 (XHP35 HD)
 FWHM / FWTM 42.0° / 71.0°
 Efficiency 94 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



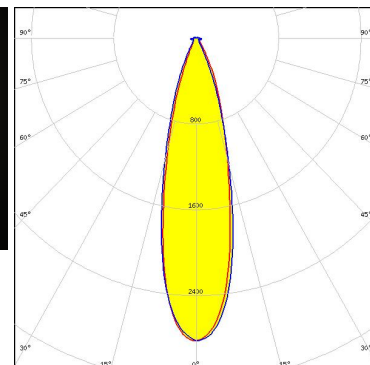
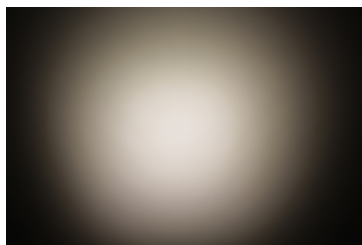
LED 2x6 5050 module - SMJD-3625012F-XX
 FWHM / FWTM 38.0° / 65.0°
 Efficiency 94 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED SMJQ-D36W12Mx
 FWHM / FWTM 26.0° / 52.0°
 Efficiency 91 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

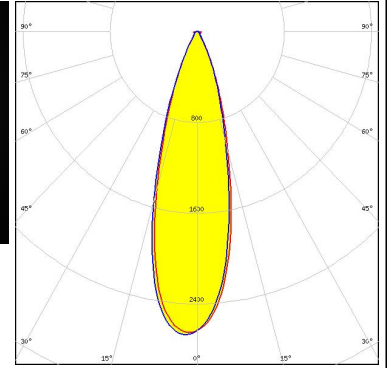


Light distribution files

OPTICAL RESULTS (MEASURED):



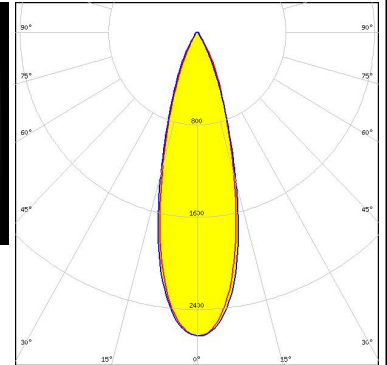
LED SMJQ-D36W12Px
 FWHM / FWTM 29.0° / 54.0°
 Efficiency 94 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



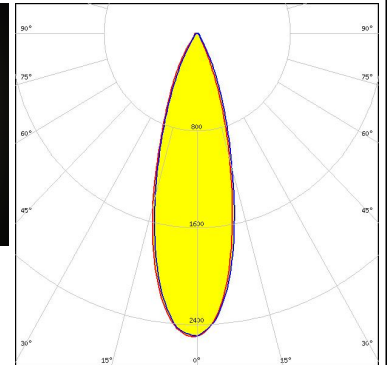
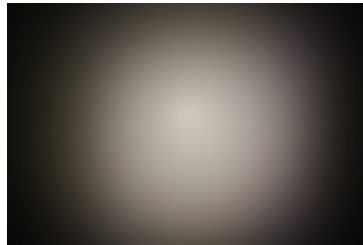
LED Z5M1/Z5M2
 FWHM / FWTM 30.0° / 57.0°
 Efficiency 93 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Z5M3
 FWHM / FWTM 30.0° / 58.0°
 Efficiency 94 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

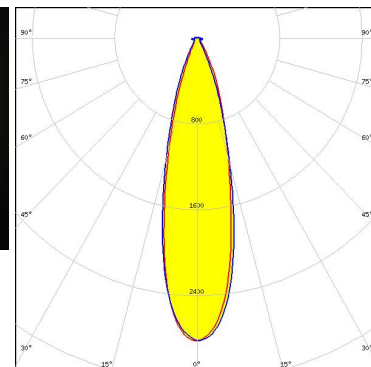
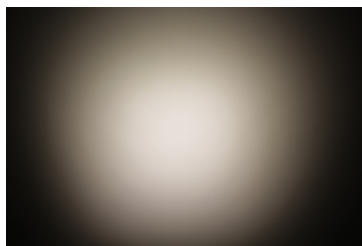


Light distribution files

OPTICAL RESULTS (MEASURED):



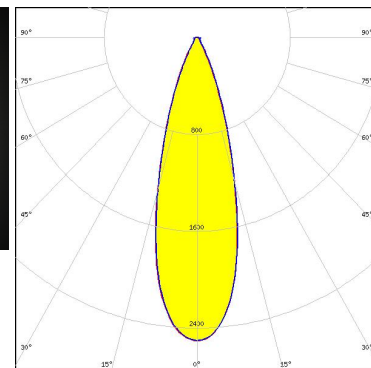
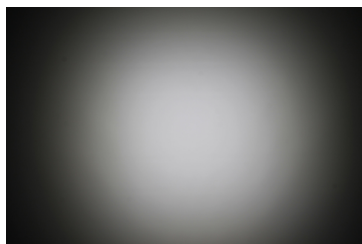
LED Z8Y22
FWHM / FWTM 26.0° / 52.0°
Efficiency 91 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



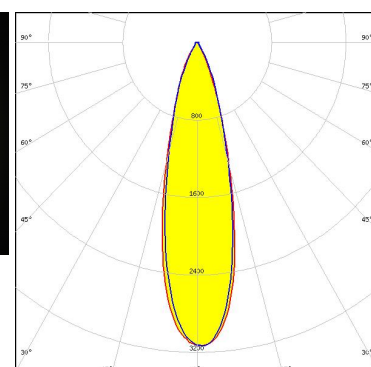
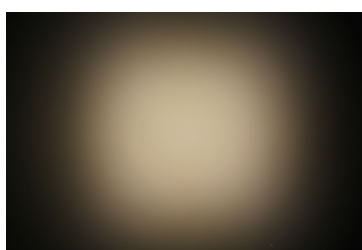
LED Z8Y22P
FWHM / FWTM 30.0° / 55.0°
Efficiency 93 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

TRIDONIC

LED RLE 2x6 3000lm HP EXC2 OTD
FWHM / FWTM 26.0° / 53.0°
Efficiency 94 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

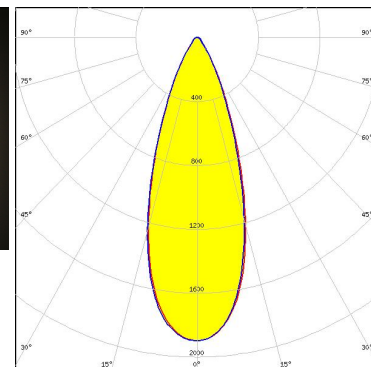
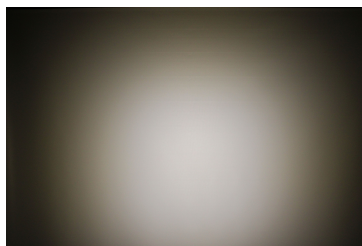


Light distribution files

OPTICAL RESULTS (MEASURED):

TRIDONIC

LED	RLE 2x6 4500lm HP HE EXC3 OTD Z19
FWHM / FWTM	36.0° / 67.0°
Efficiency	96 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

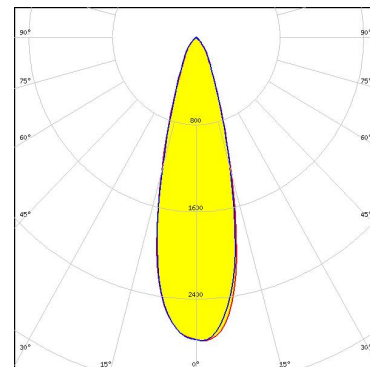


Light distribution files

OPTICAL RESULTS (SIMULATED):



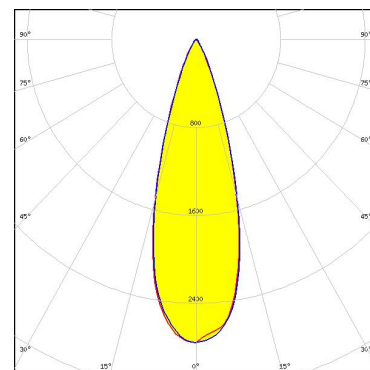
LED XP-E
 FWHM / FWTM 28.0° / 56.0°
 Efficiency 94 %
 Peak intensity 2.8 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



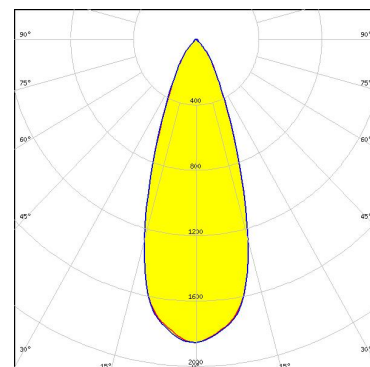
LED XP-G2 HE
 FWHM / FWTM 31.0° / 53.0°
 Efficiency 95 %
 Peak intensity 2.8 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-G4
 FWHM / FWTM 38.0° / 70.0°
 Efficiency 96 %
 Peak intensity 1.9 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:

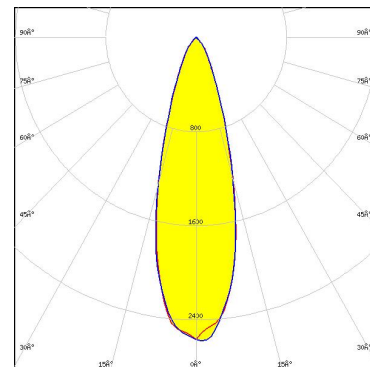


Light distribution files

OPTICAL RESULTS (SIMULATED):

inventronics

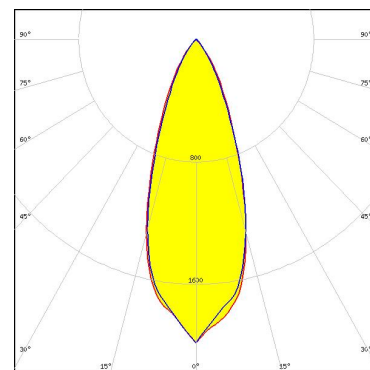
LED	PrevaLED Brick HP IP 2x6
FWHM / FWTM	30.0° / 58.0°
Efficiency	95 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

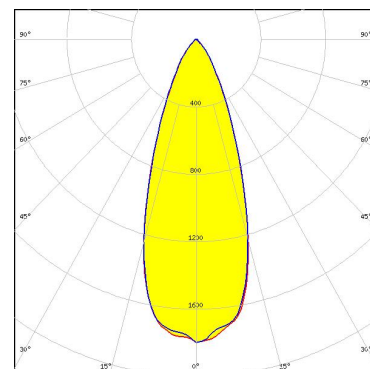
LED	LUXEON 5050 Round LES
FWHM / FWTM	37.0° / 68.0°
Efficiency	93 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON HL2X
FWHM / FWTM	38.0° / 70.0°
Efficiency	95 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

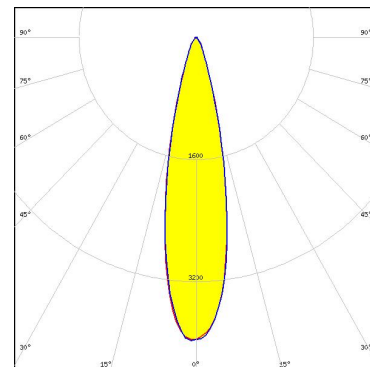


Light distribution files

OPTICAL RESULTS (SIMULATED):



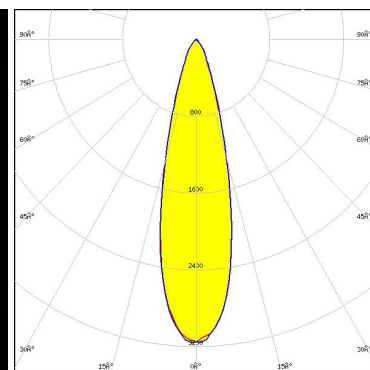
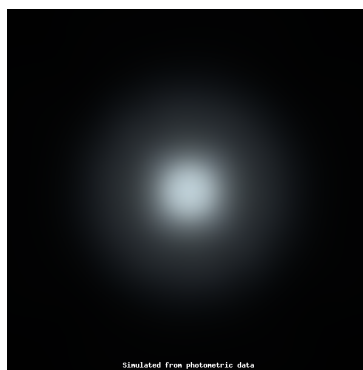
LED	LUXEON HL2Z
FWHM / FWTM	24.0° / 44.0°
Efficiency	95 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



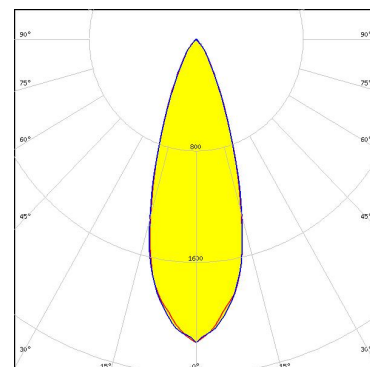
LED	SST-20 Gen2
FWHM / FWTM	26.0° / 52.0°
Efficiency	96 %
Peak intensity	3.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



LED	NV4WB35AM
FWHM / FWTM	34.0° / 62.0°
Efficiency	95 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

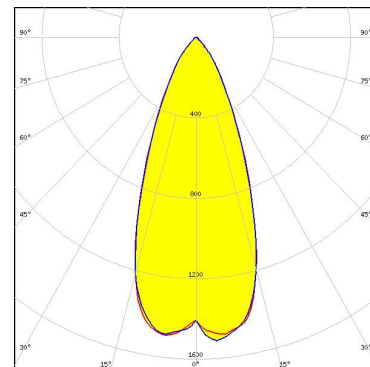


Light distribution files

OPTICAL RESULTS (SIMULATED):



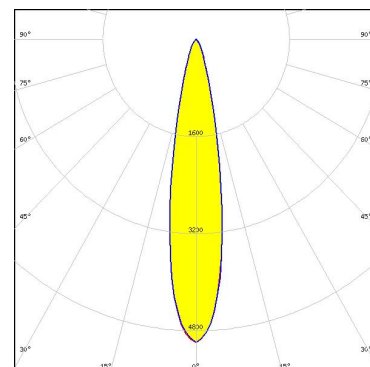
LED NVSW219D
 FWHM / FWTM 42.0° / 76.0°
 Efficiency 95 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



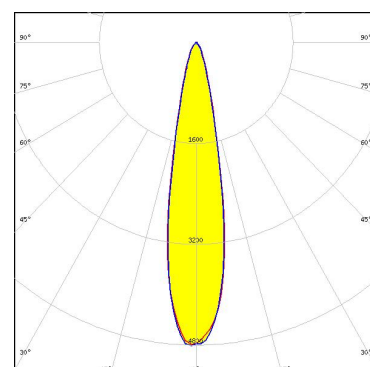
LED OSCONIQ P 3030
 FWHM / FWTM 20.0° / 40.0°
 Efficiency 95 %
 Peak intensity 5 cd/lm
 LEDs/each optic 1
 Light colour/type True Green
 Required components:



Light distribution files



LED OSCONIQ P 3030
 FWHM / FWTM 20.0° / 42.0°
 Efficiency 96 %
 Peak intensity 4.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

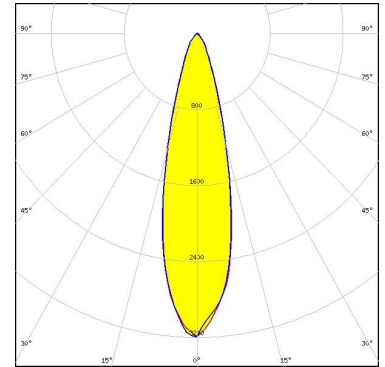


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

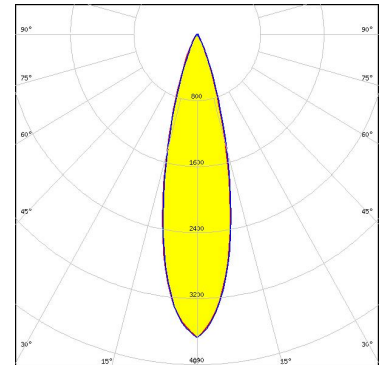
LED OSCONIQ P 3737 (2W) PUSRA1
FWHM / FWTM 26.0° / 52.0°
Efficiency 96 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

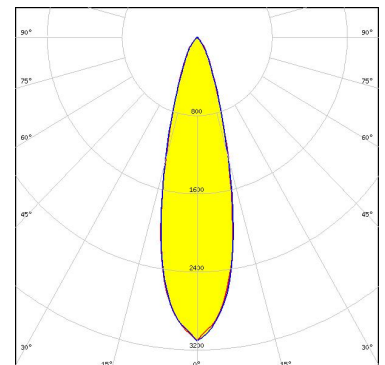
LED OSCONIQ P 3737 (3W) PUSTA1
FWHM / FWTM 26.0° / 48.0°
Efficiency 94 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSCONIQ P 3737 Flat
FWHM / FWTM 27.0° / 54.0°
Efficiency 96 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

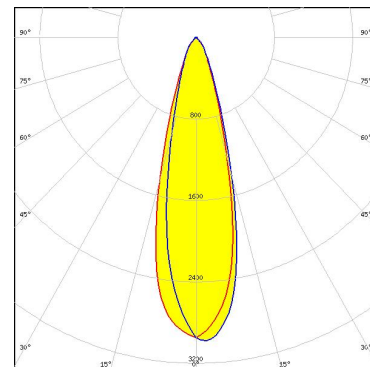


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

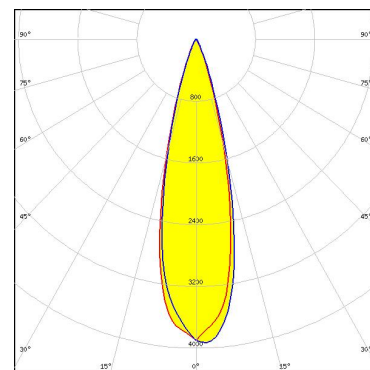
LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 27.0° / 53.0°
Efficiency 94 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

PHILIPS

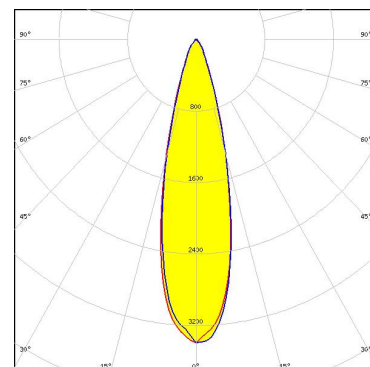
LED Fortimo FastFlex LED 2x6 DP G4
FWHM / FWTM 26.0° / 45.0°
Efficiency 94 %
Peak intensity 4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LH181B
FWHM / FWTM 27.0° / 50.0°
Efficiency 94 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

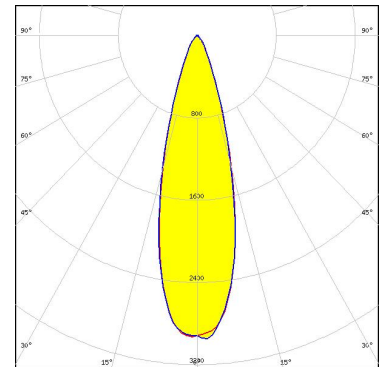


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

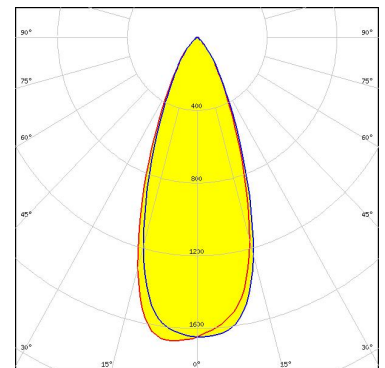
LED LH231B
 FWHM / FWTM 28.0° / 52.0°
 Efficiency 95 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

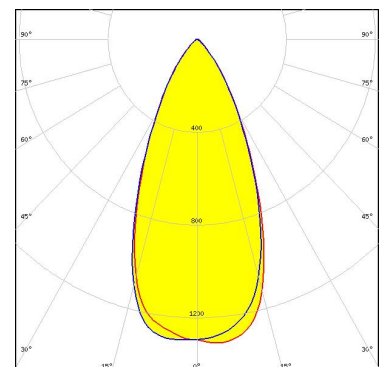
LED LH351C
 FWHM / FWTM 39.5° / 72.3°
 Efficiency 94 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

LED LH351D
 FWHM / FWTM 46.0° / 79.9°
 Efficiency 94 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

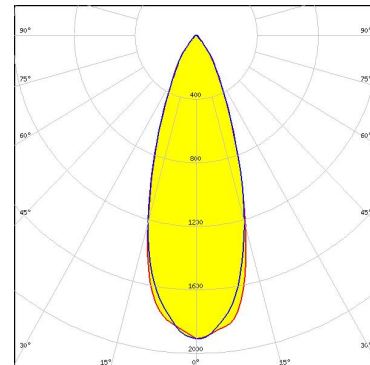


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

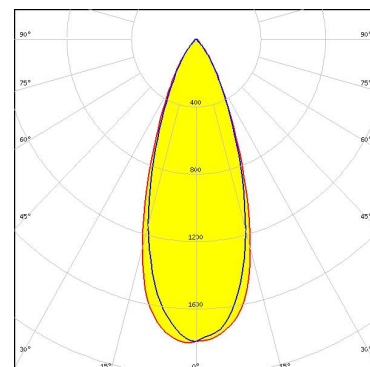
LED LH508B
 FWHM / FWTM 36.0° / 70.0°
 Efficiency 94 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



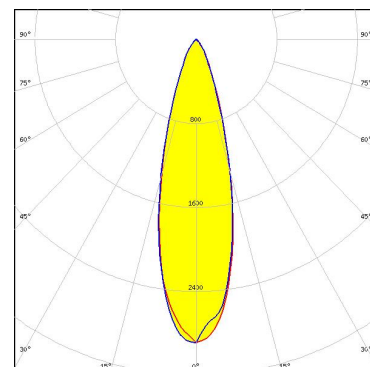
LED SEOUL DC 5050 6V
 FWHM / FWTM 39.0° / 72.0°
 Efficiency 94 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Z5M4
 FWHM / FWTM 28.0° / 55.0°
 Efficiency 95 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

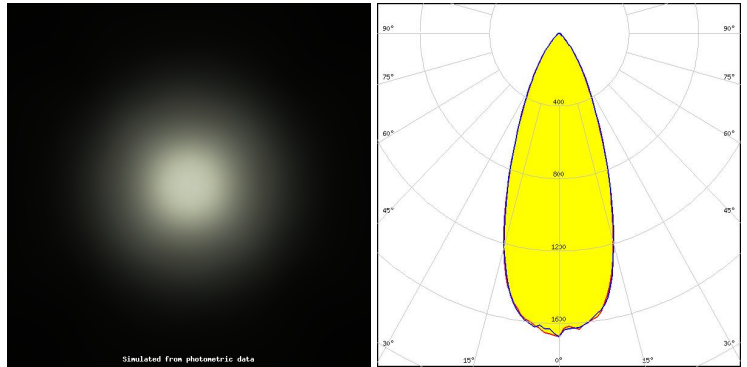


Light distribution files

OPTICAL RESULTS (SIMULATED):



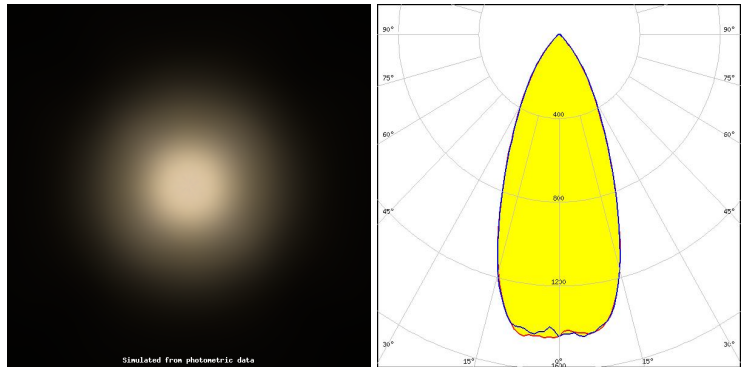
LED Z5M4-E1
 FWHM / FWTM 40.0° / 74.0°
 Efficiency 96 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



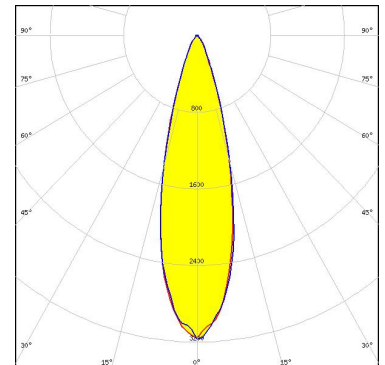
LED Z5M4-E2
 FWHM / FWTM 44.0° / 78.0°
 Efficiency 96 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Z8Y22T
 FWHM / FWTM 28.0° / 51.0°
 Efficiency 94 %
 Peak intensity 3.2 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:

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 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

Local sales and technical support

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

Shipping locations

Poznan, Poland
Hong Kong, China

Distribution Partners

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