

HB-2X2-5050-S

~25° spot beam for industrial applications

SPECIFICATION:

Dimensions	50.0 x 50.0
Height	10.4 mm
Fastening	screw
ROHS compliant	yes ⓘ

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-2X2-5050-S	Multi-lens	PMMA	clear		



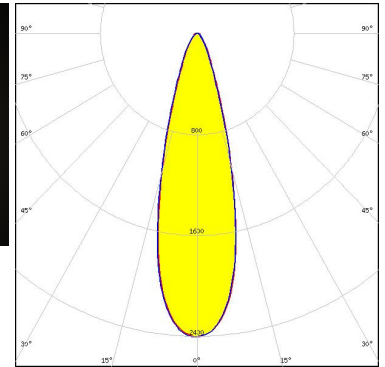
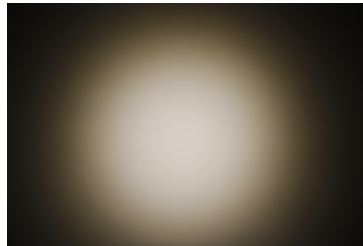
ORDERING INFORMATION:

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

OPTICAL RESULTS (MEASURED):



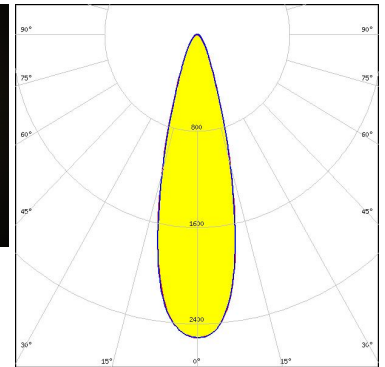
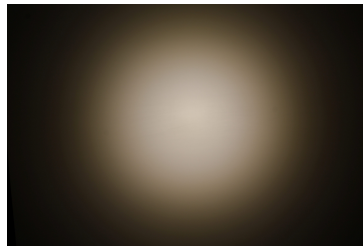
LED LUXEON 5050 HE Plus
 FWHM / FWTM 29.0° / 56.0°
 Efficiency 92 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



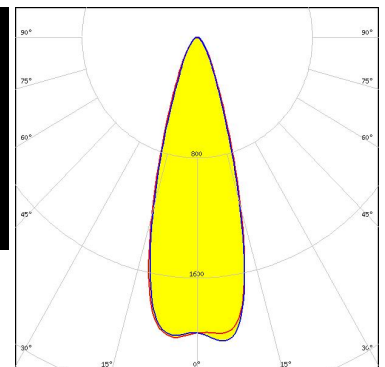
LED LUXEON XR-5050 SQR (L213-xxxx016MRH001)
 FWHM / FWTM 28.0° / 55.0°
 Efficiency 94 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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

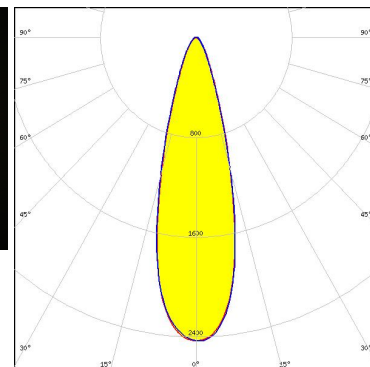
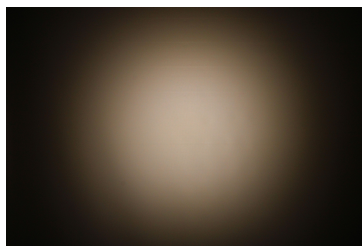


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

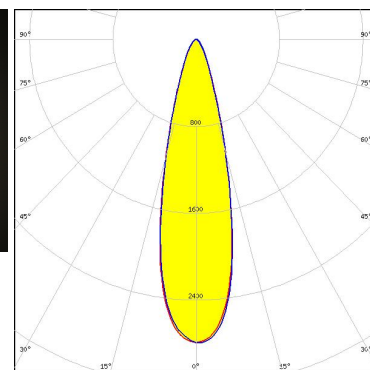
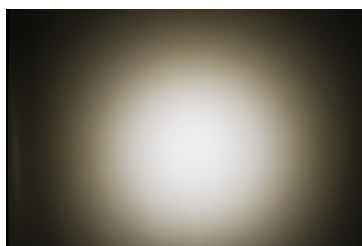
LED	Fortimo FastFlex LED 2x8 DA (U)HE
FWHM / FWTM	29.0° / 56.0°
Efficiency	95 %
Peak intensity	2.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

TRIDONIC

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

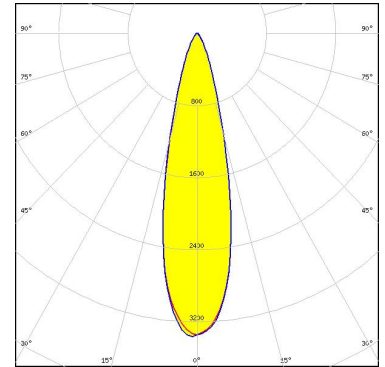


Light distribution files

OPTICAL RESULTS (SIMULATED):



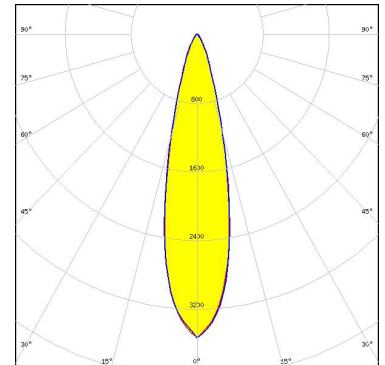
LED J Series 5050 Round LES
 FWHM / FWTM 26.0° / 50.0°
 Efficiency 93 %
 Peak intensity 3.4 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



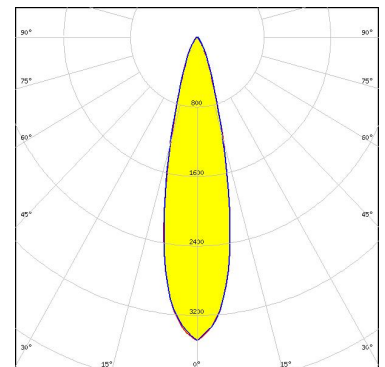
LED J Series 5050B 6V K Class
 FWHM / FWTM 24.0° / 48.0°
 Efficiency 92 %
 Peak intensity 3.5 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED J Series 5050C 6V E Class
 FWHM / FWTM 24.0° / 48.0°
 Efficiency 92 %
 Peak intensity 3.5 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:

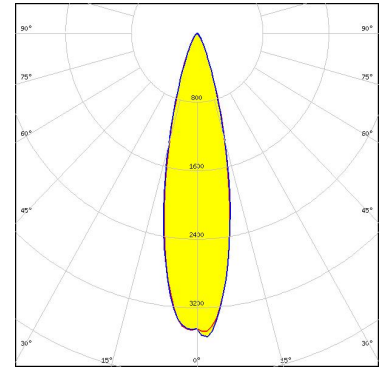


Light distribution files

OPTICAL RESULTS (SIMULATED):



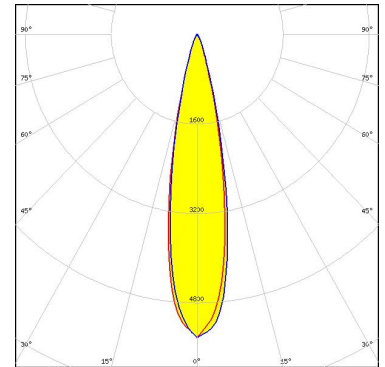
LED XM-L RGBW (XMLDCL HI)
 FWHM / FWTM 26.0° / 48.0°
 Efficiency 94 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type RGBW
 Required components:



Light distribution files



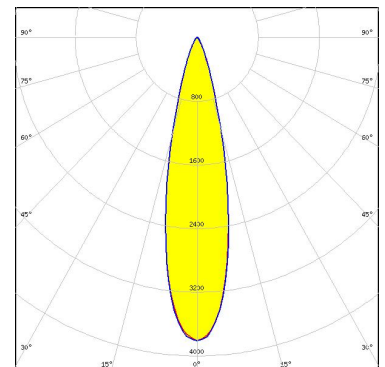
LED XP-G2
 FWHM / FWTM 21.0° / 38.0°
 Efficiency 96 %
 Peak intensity 5.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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



Protective plate, glass

Light distribution files

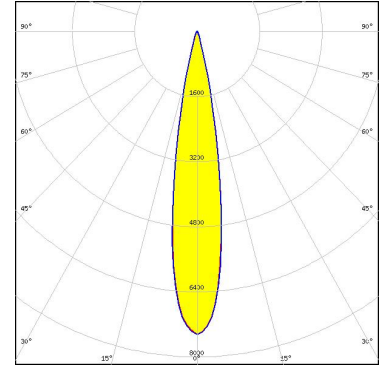
OPTICAL RESULTS (SIMULATED):



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

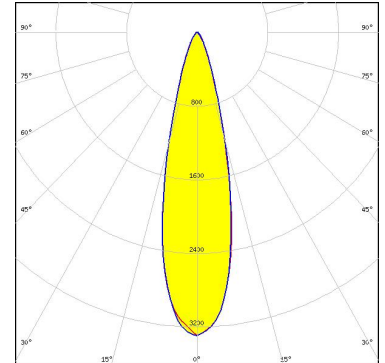
Protective plate, glass

Light distribution files



LED LUXEON 5050 HE
FWHM / FWTM 26.0° / 48.0°
Efficiency 94 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

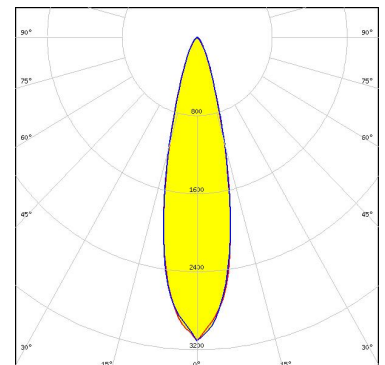
Light distribution files



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

Protective plate, glass

Light distribution files



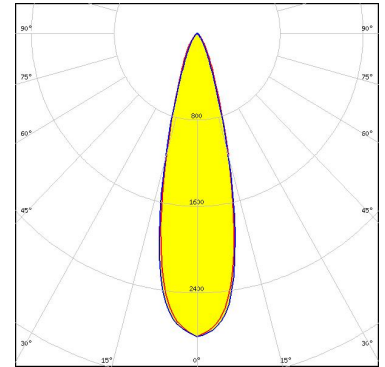
OPTICAL RESULTS (SIMULATED):



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

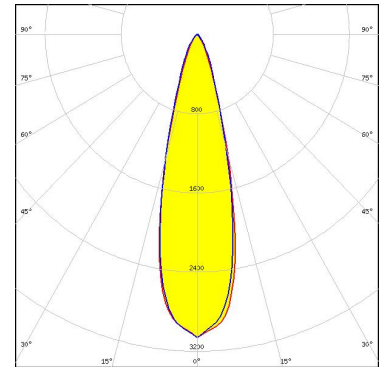
Protective plate, glass

Light distribution files



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

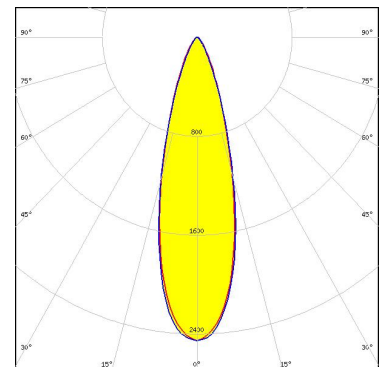
Light distribution files



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

Protective plate, glass

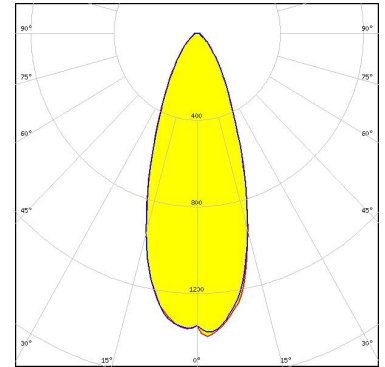
Light distribution files



OPTICAL RESULTS (SIMULATED):



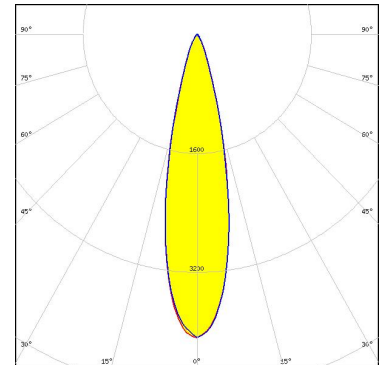
LED LUXEON 7070
 FWHM / FWTM 38.0° / 79.0°
 Efficiency 89 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



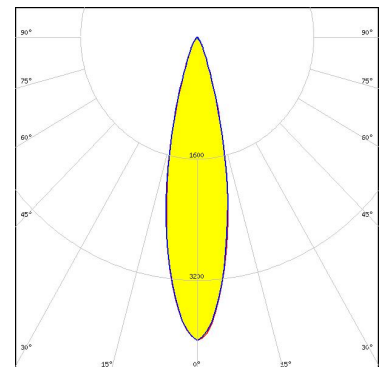
LED LUXEON HL2X
 FWHM / FWTM 24.0° / 44.0°
 Efficiency 95 %
 Peak intensity 4.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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



Light distribution files

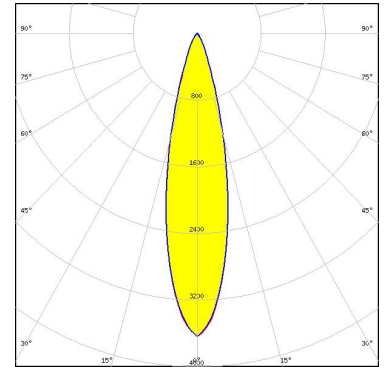
OPTICAL RESULTS (SIMULATED):



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

Protective plate, glass

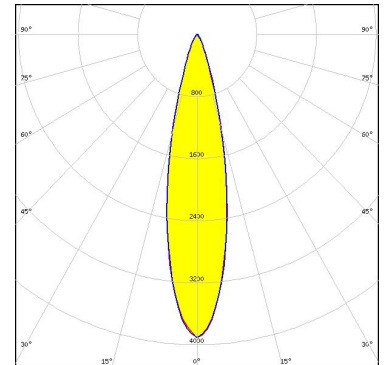
Light distribution files



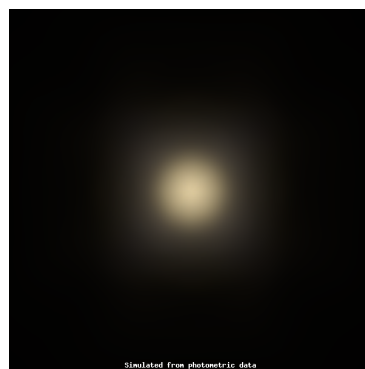
LED LUXEON HL2X-E
 FWHM / FWTM 24.0° / 44.0°
 Efficiency 89 %
 Peak intensity 3.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

Protective plate, glass

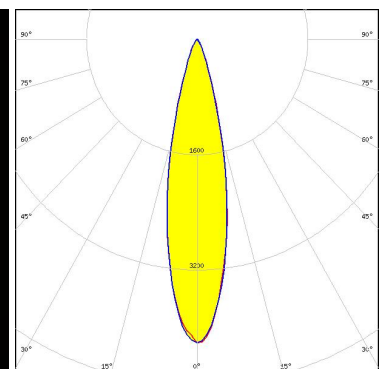
Light distribution files



LED LUXEON HL2X-E
 FWHM / FWTM 24.0° / 44.0°
 Efficiency 96 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



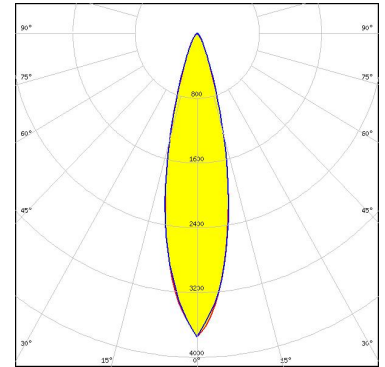
Light distribution files



OPTICAL RESULTS (SIMULATED):



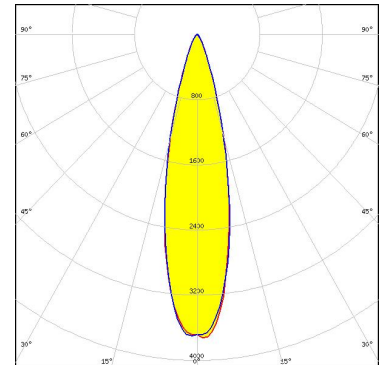
LED LUXEON HL2X-P
 FWHM / FWTM 24.0° / 47.0°
 Efficiency 95 %
 Peak intensity 3.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



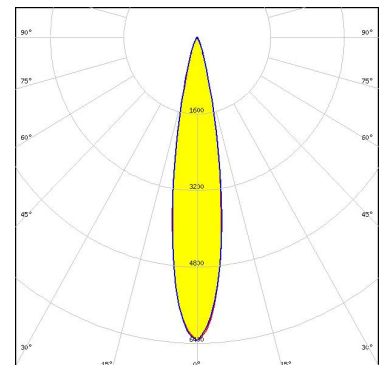
LED LUXEON HL4X
 FWHM / FWTM 24.0° / 46.0°
 Efficiency 94 %
 Peak intensity 3.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

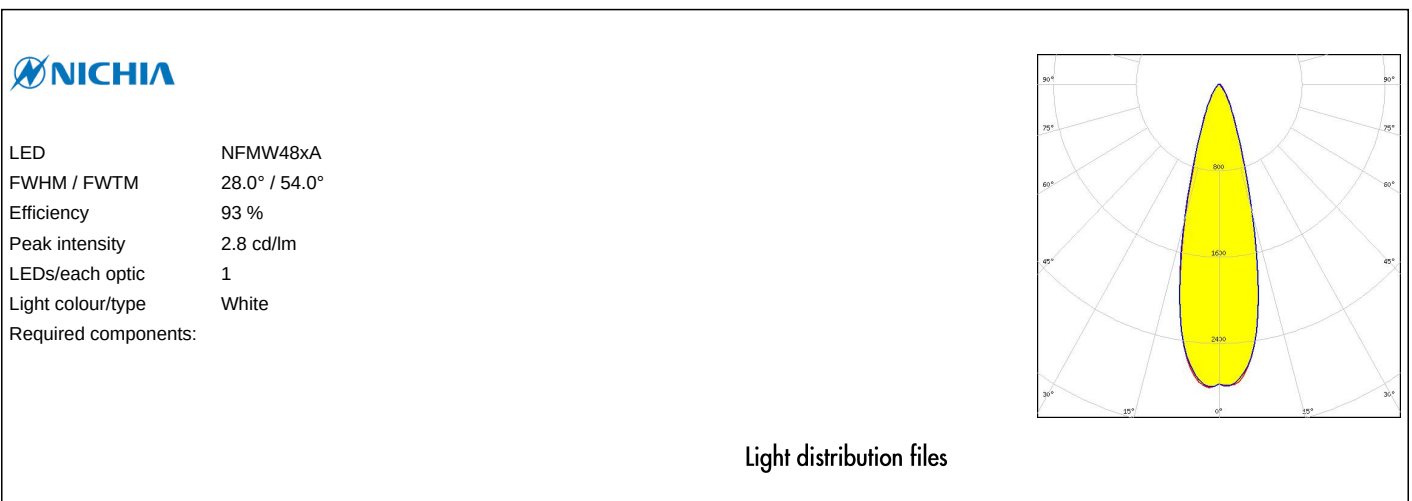
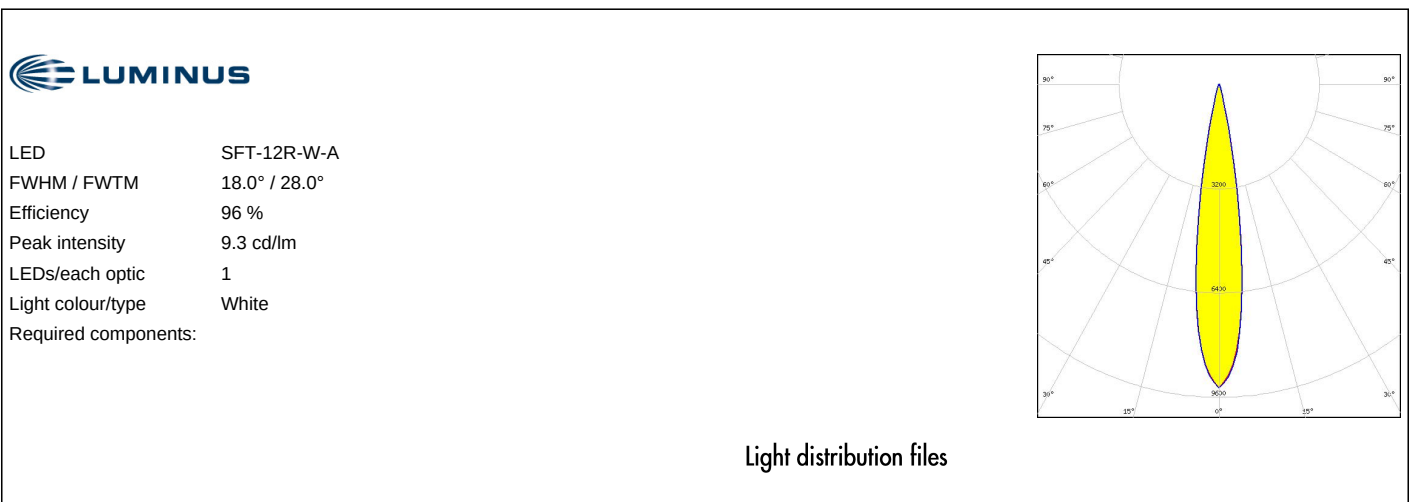
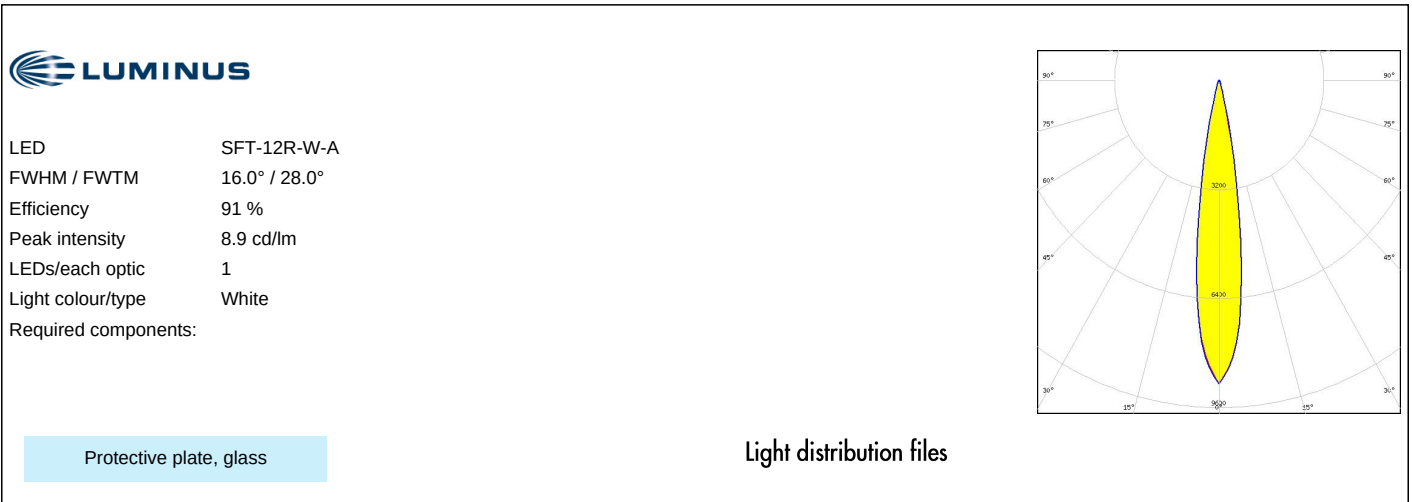


LED LUXEON HL4Z
 FWHM / FWTM 18.0° / 36.0°
 Efficiency 95 %
 Peak intensity 6.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

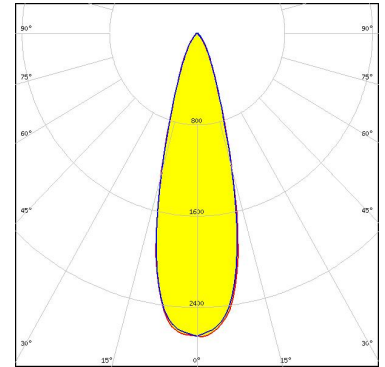
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):



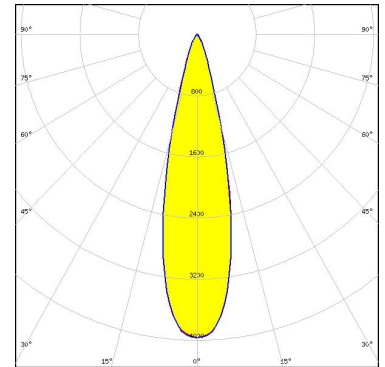
LED NFMW48xA
 FWHM / FWTM 29.0° / 55.0°
 Efficiency 90 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



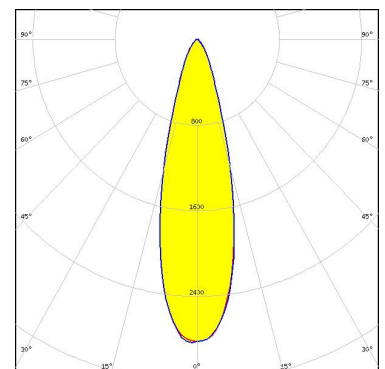
LED NVSW219F
 FWHM / FWTM 24.0° / 44.0°
 Efficiency 95 %
 Peak intensity 4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



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



Light distribution files

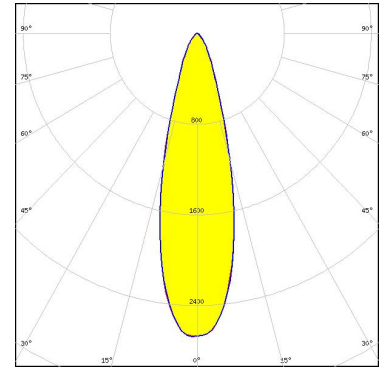
OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

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

Protective plate, glass

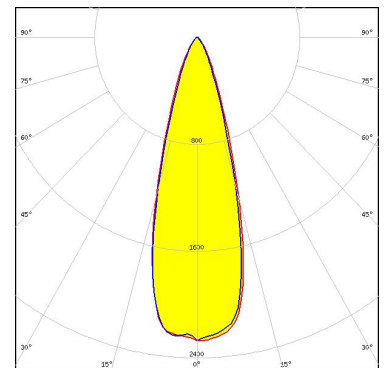
Light distribution files



OSRAM
Opto Semiconductors

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

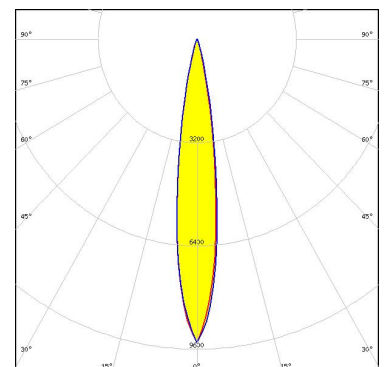
Light distribution files



OSRAM
Opto Semiconductors

LED OSCONIQ C 2424 Gen1
FWHM / FWTM 16.0° / 30.0°
Efficiency 96 %
Peak intensity 9.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

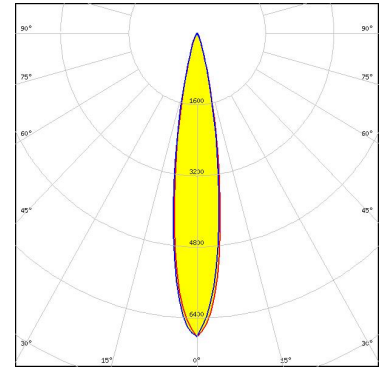
Light distribution files



OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

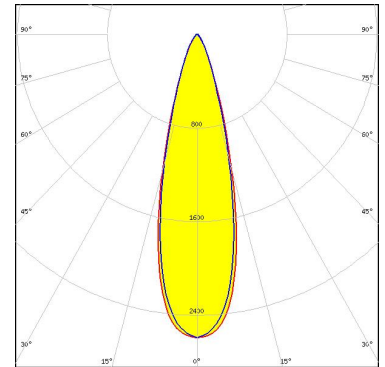
LED OSCONIQ P 3737 Flat
FWHM / FWTM 18.0° / 34.0°
Efficiency 95 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSCONIQ S 5050 (Q9LR32)
FWHM / FWTM 28.0° / 52.0°
Efficiency 85 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

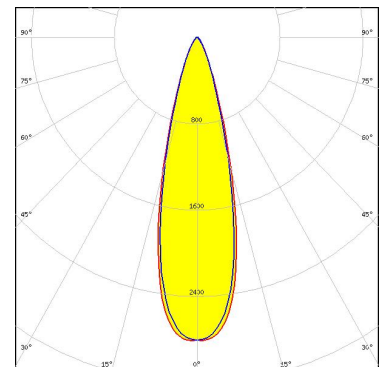


Light distribution files

Protective plate, glass

OSRAM
Opto Semiconductors

LED OSCONIQ S 5050 (Q9LR32)
FWHM / FWTM 28.0° / 52.0°
Efficiency 94 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

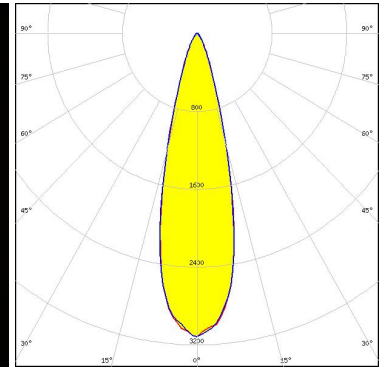
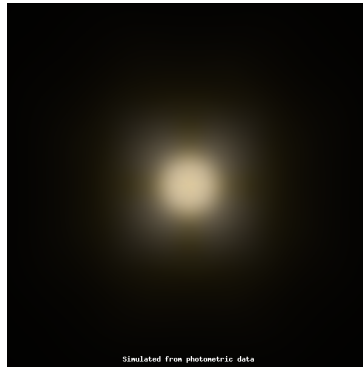


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

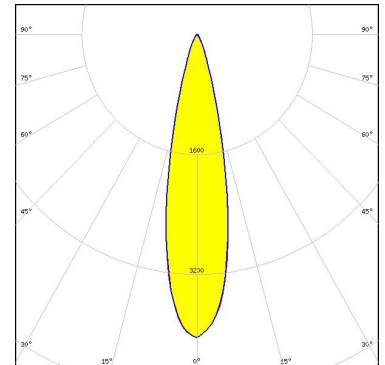
LED OSCONIQ S 5050 SFC
FWHM / FWTM 26.0° / 48.0 + 49.0°
Efficiency 94 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

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

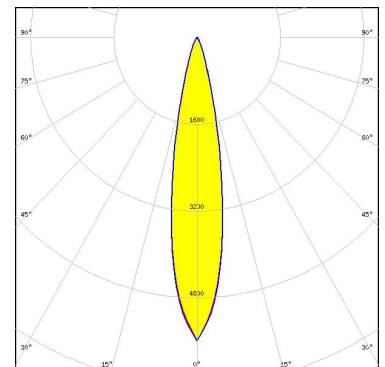


Protective plate, glass

Light distribution files

OSRAM
Opto Semiconductors

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

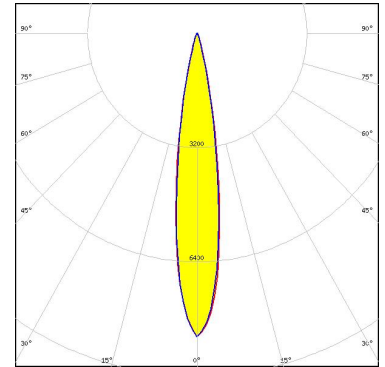


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

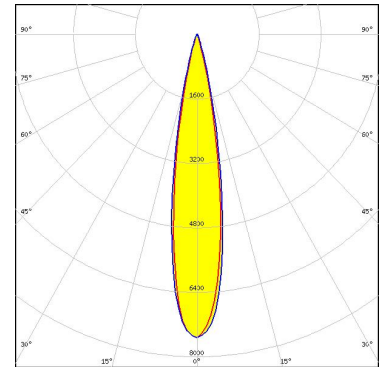
LED OSLON Square Flat
FWHM / FWTM 17.0° / 30.0°
Efficiency 96 %
Peak intensity 8.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

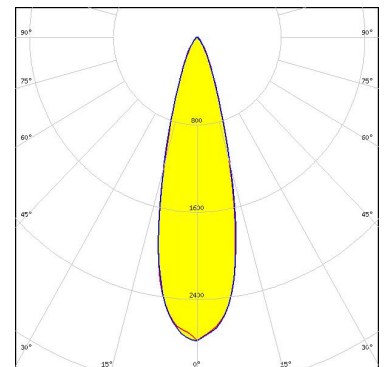
LED OSTAR Projection Compact (KW.CSLNM1.TG)
FWHM / FWTM 19.0° / 32.0°
Efficiency 96 %
Peak intensity 7.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

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



Light distribution files

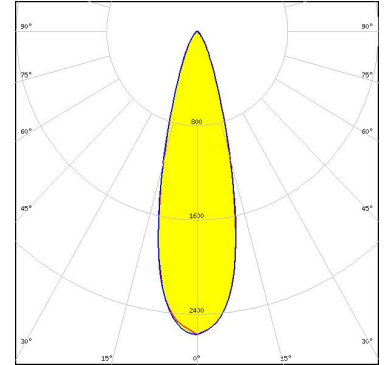
OPTICAL RESULTS (SIMULATED):

SAMSUNG

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

Protective plate, glass

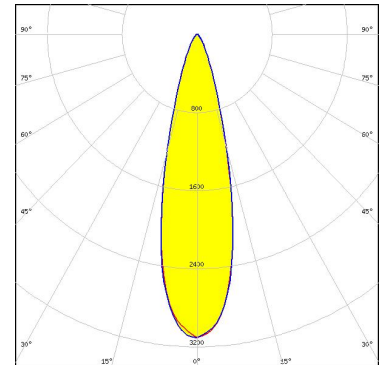
Light distribution files



SAMSUNG

LED LH502D
 FWHM / FWTM 26.0° / 50.0°
 Efficiency 93 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

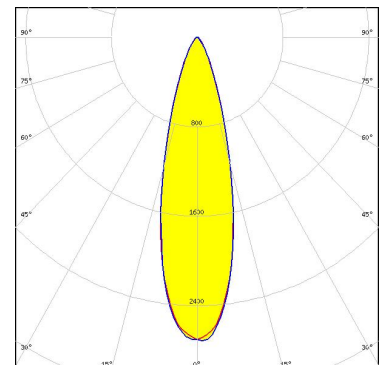
Light distribution files



SAMSUNG

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

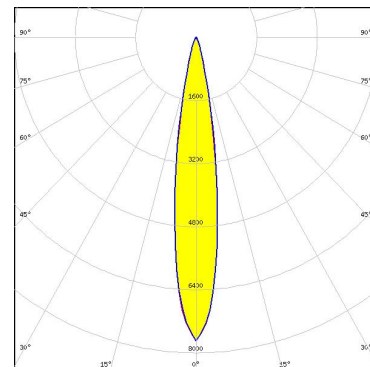
Light distribution files



OPTICAL RESULTS (SIMULATED):

SAMSUNG

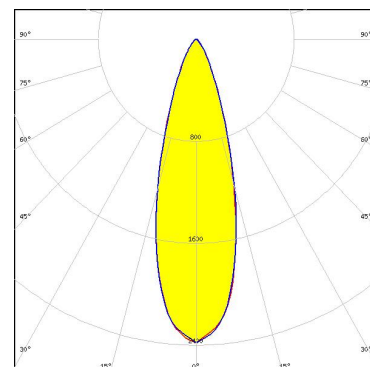
LED LM301B
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 94 %
 Peak intensity 7.7 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



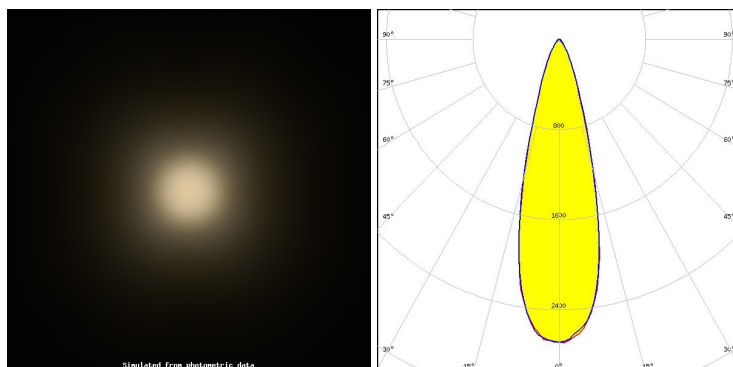
LED MJT 5050
 FWHM / FWTM 30.0° / 60.0°
 Efficiency 92 %
 Peak intensity 2.4 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Seoul 5050 G-Series
 FWHM / FWTM 28.0° / 54.0°
 Efficiency 94 %
 Peak intensity 2.7 cd/Im
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OPTICAL RESULTS (SIMULATED):



GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

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