

EMMA-360

~170° side emitter

SPECIFICATION:

Dimensions	9.9 x 9.9 mm
Height	5.7 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

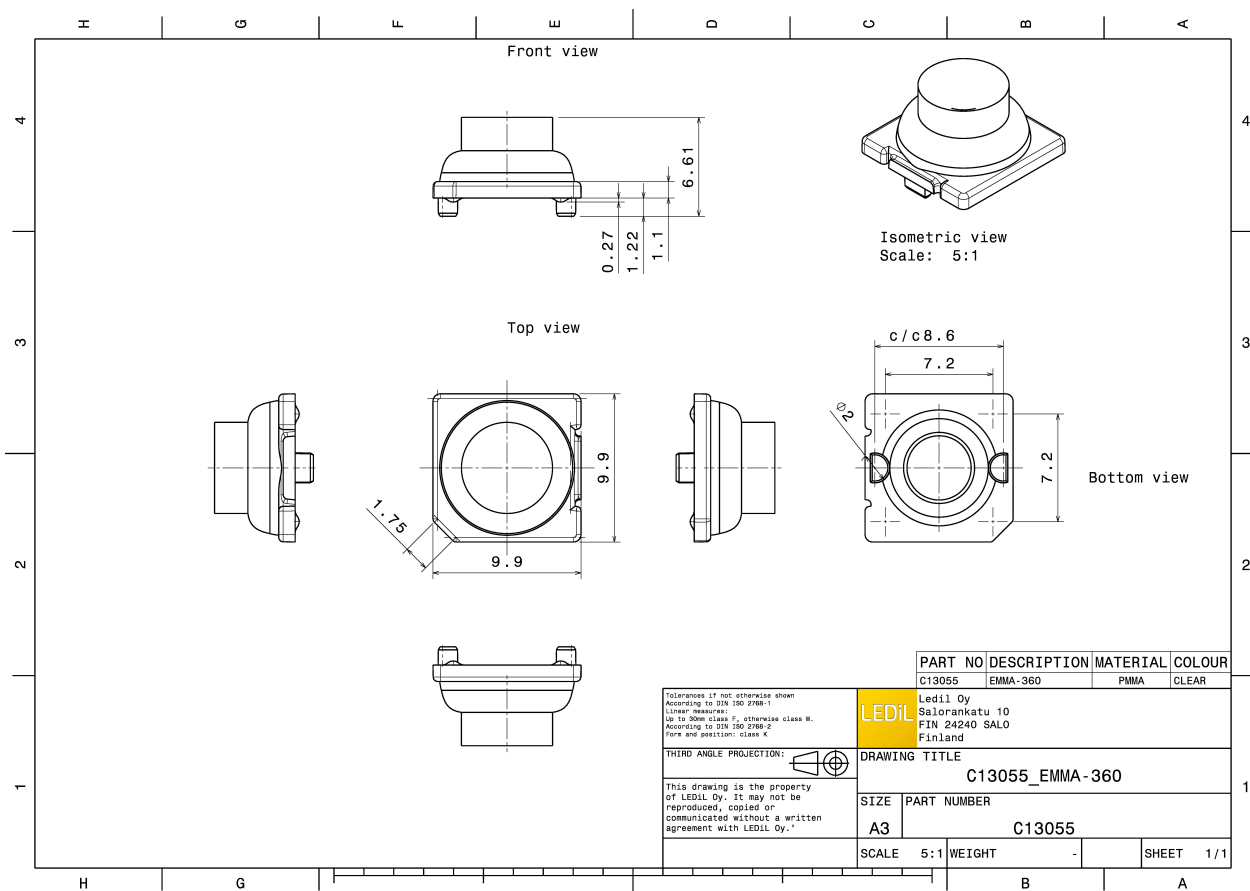
MATERIALS:

Component	Type	Material	Colour	Finish
EMMA-360	Single lens	PMMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13055_EMMA-360	5000	300	100	1.6
» Box size:				



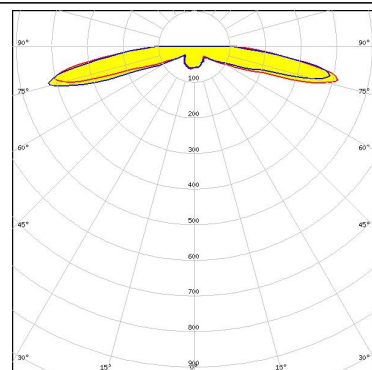


See also our general installation guide: www.ledil.com/installation_guide

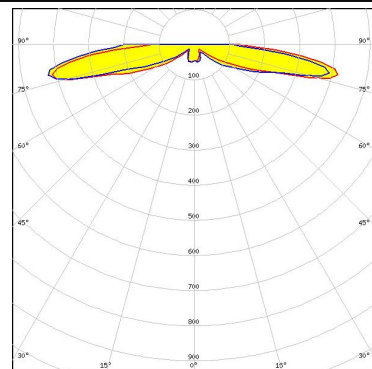
OPTICAL RESULTS (MEASURED):



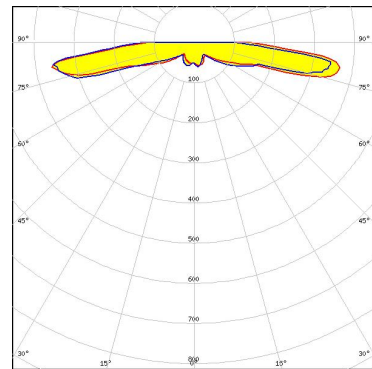
LED XB-D
FWHM / FWTM 170.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



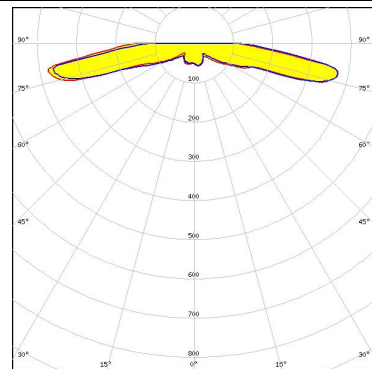
LED XP-E2
FWHM / FWTM 172.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED XP-G
FWHM / FWTM 173.0°
Efficiency 88 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



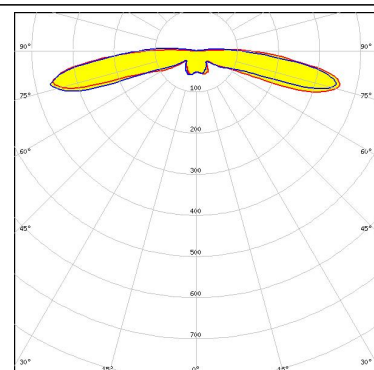
LED XP-G2
FWHM / FWTM 172.0°
Efficiency 90 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



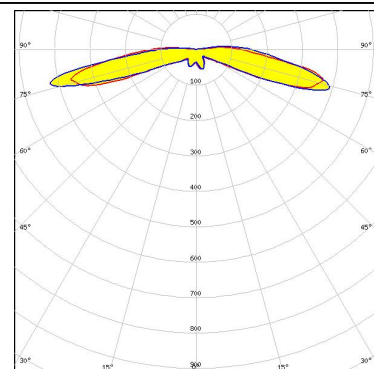
OPTICAL RESULTS (MEASURED):



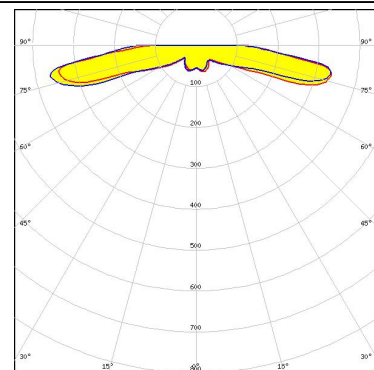
LED XT-E
FWHM / FWTM 174.0° / 188.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



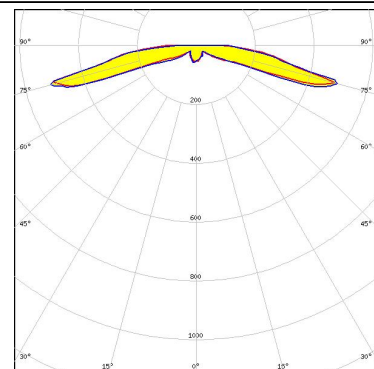
LED LUXEON 3535 2D
FWHM / FWTM 170.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED LUXEON A
FWHM / FWTM 173.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



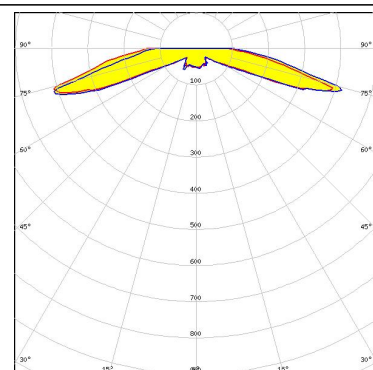
LED LUXEON Rebel
FWHM / FWTM 165.0°
Efficiency 93 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



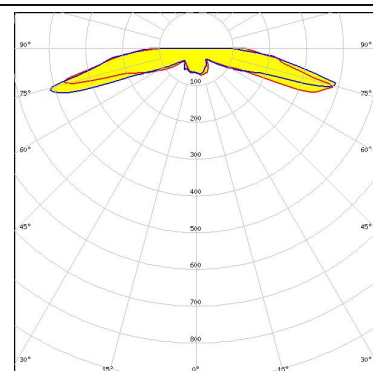
OPTICAL RESULTS (MEASURED):



LED NCSxx19A
FWHM / FWTM 165.0°
Efficiency 90 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



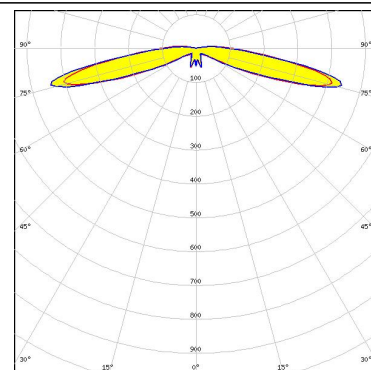
LED OSLOM Square EC
FWHM / FWTM 170.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



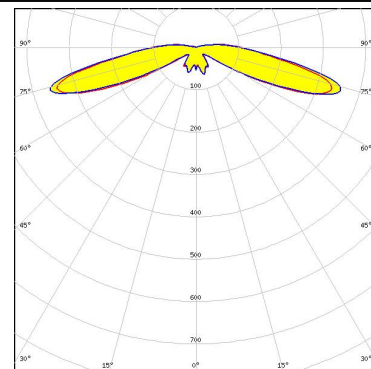
OPTICAL RESULTS (SIMULATED):



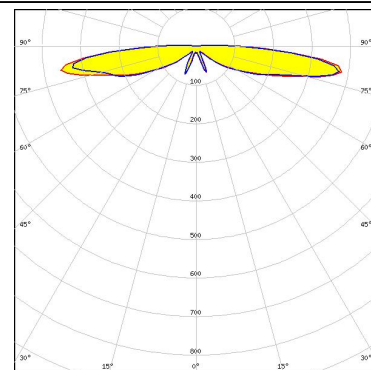
LED J Series 2835
FWHM / FWTM 167.0° / 194.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



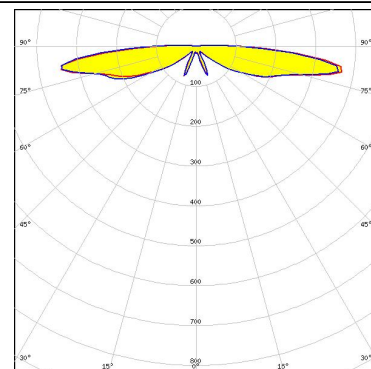
LED J Series 3030
FWHM / FWTM 167.0° / 198.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED XE-G
FWHM / FWTM 175.0° / 188.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



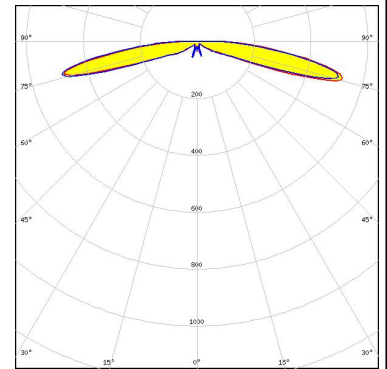
LED XE-G
FWHM / FWTM 176.0° / 188.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour Green
Required components:



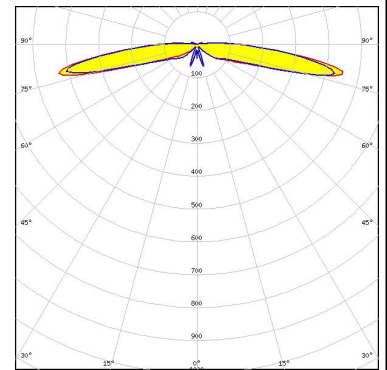
OPTICAL RESULTS (SIMULATED):



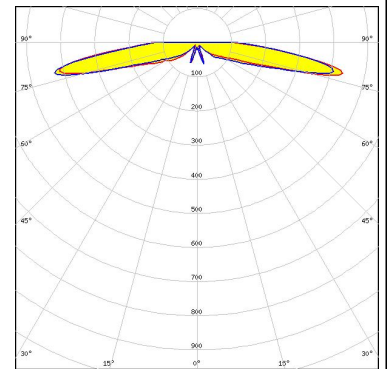
LED XQ-E HD
FWHM / FWTM 164.0° / 174.0°
Efficiency 92 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



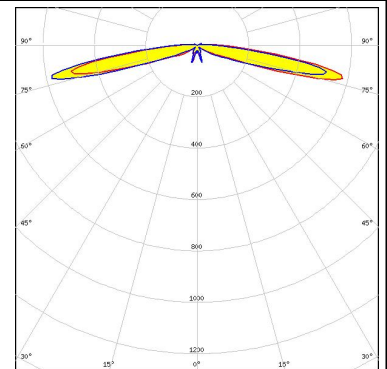
LED XQ-E HD
FWHM / FWTM 172.0° / 189.0°
Efficiency 97 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour Red
Required components:



LED XQ-E HD
FWHM / FWTM 170.0° / 182.0°
Efficiency 89 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour PC Amber
Required components:



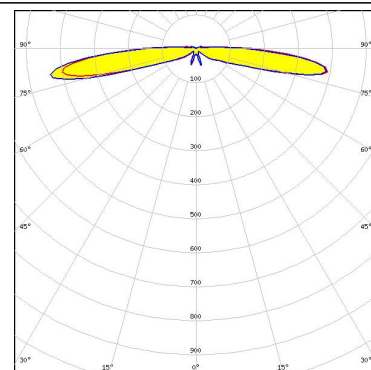
LED XQ-E HI
FWHM / FWTM 166.0° / 181.0°
Efficiency 97 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour Red
Required components:



OPTICAL RESULTS (SIMULATED):

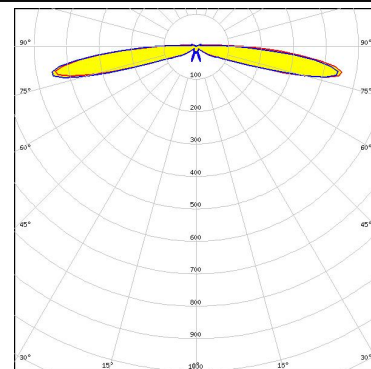
LUMILEDS

LED LUXEON C
FWHM / FWTM 177.0° / 192.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour Red
Required components:



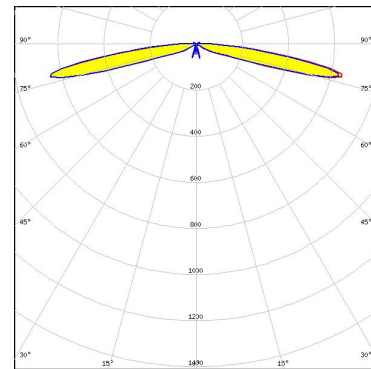
LUMILEDS

LED LUXEON C
FWHM / FWTM 175.0° / 188.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour Green
Required components:



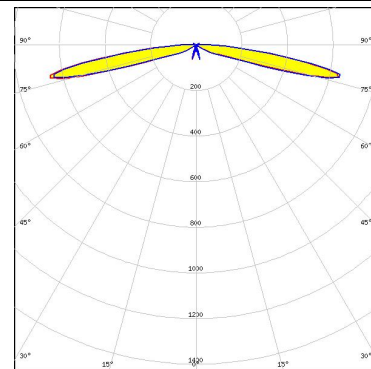
LUMILEDS

LED LUXEON CZ
FWHM / FWTM 166.0° / 178.0°
Efficiency 97 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour Royal Blue
Required components:



LUMILEDS

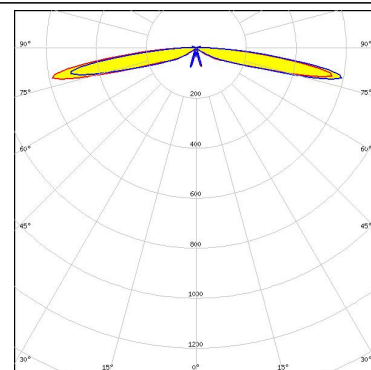
LED LUXEON CZ
FWHM / FWTM 166.0° / 178.0°
Efficiency 97 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour Blue
Required components:



OPTICAL RESULTS (SIMULATED):

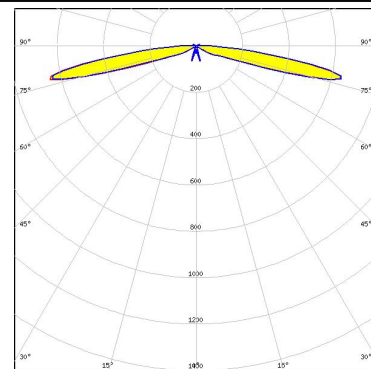
LUMILEDS

LED LUXEON CZ
FWHM / FWTM 168.0° / 179.0°
Efficiency 97 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour Amber
Required components:



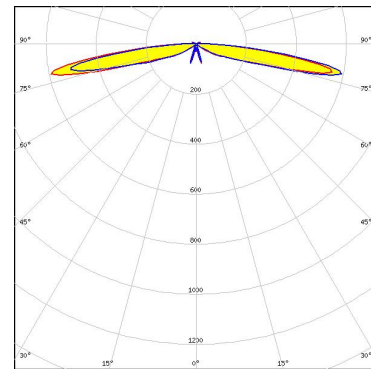
LUMILEDS

LED LUXEON CZ
FWHM / FWTM 166.0° / 178.0°
Efficiency 97 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour Green
Required components:



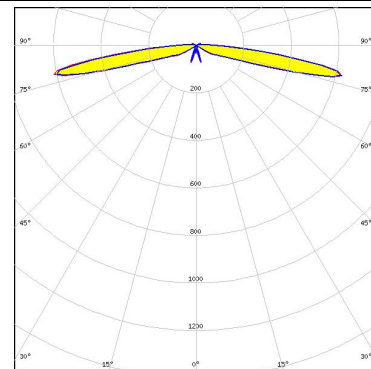
LUMILEDS

LED LUXEON CZ
FWHM / FWTM 168.0° / 179.0°
Efficiency 97 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour Red
Required components:



LUMILEDS

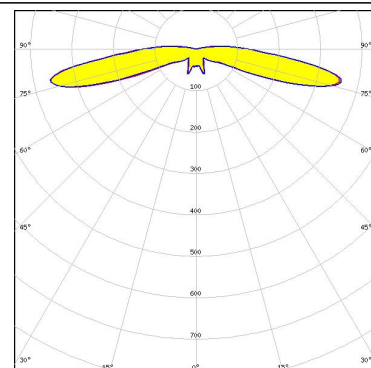
LED LUXEON Rubix
FWHM / FWTM 168.0° / 178.0°
Efficiency 97 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour Green
Required components:



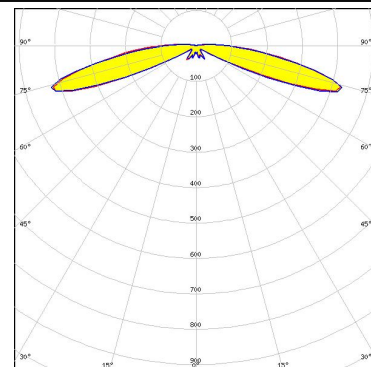
OPTICAL RESULTS (SIMULATED):



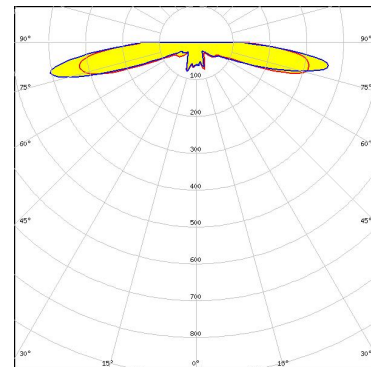
LED LUXEON V2
FWHM / FWTM 172.0° / 196.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



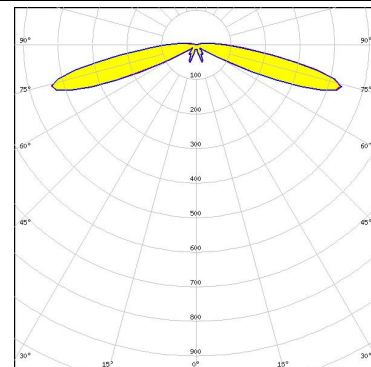
LED NCSxE17A
FWHM / FWTM 166.0° / 189.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour Green
Required components:



LED NF2W757G-MT (Tunable White)
FWHM / FWTM 174.0 + 178.0° / 182.0°
Efficiency 90 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:



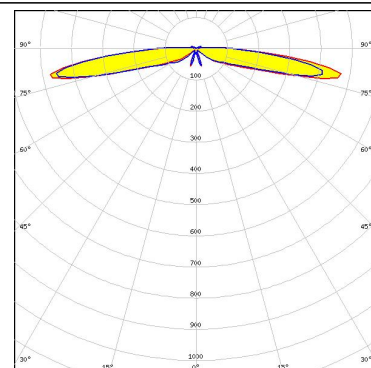
LED NVSxE21A
FWHM / FWTM 164.0° / 188.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (SIMULATED):

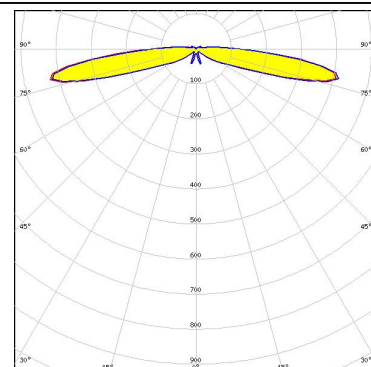
OSRAM Opto Semiconductors

LED OSLON Signal
FWHM / FWTM 172.0° / 188.0°
Efficiency 97 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour Red
Required components:



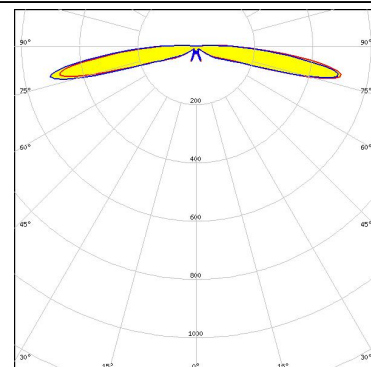
OSRAM Opto Semiconductors

LED OSLON Signal
FWHM / FWTM 172.0° / 192.0°
Efficiency 97 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



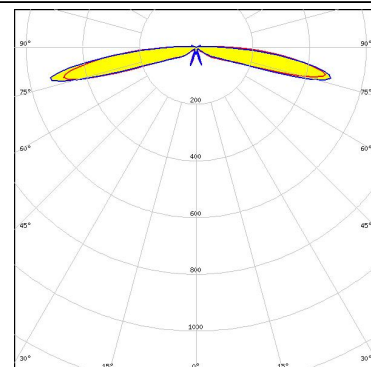
OSRAM Opto Semiconductors

LED OSLON SSL 150
FWHM / FWTM 172.0° / 186.0°
Efficiency 95 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM Opto Semiconductors

LED OSLON SSL 150
FWHM / FWTM 171.0° / 187.0°
Efficiency 97 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour Red
Required components:

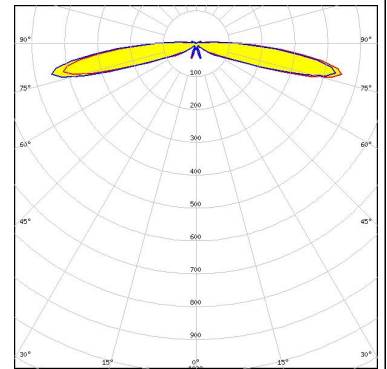


OPTICAL RESULTS (SIMULATED):

OSRAM

Opto Semiconductors

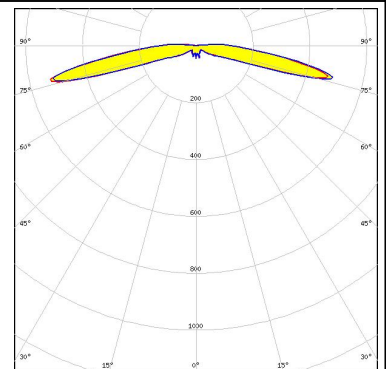
LED OSLOM SSL 150
FWHM / FWTM 172.0° / 188.0°
Efficiency 97 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

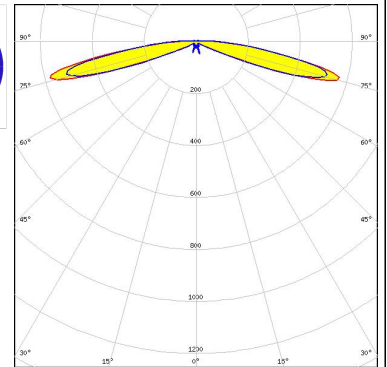
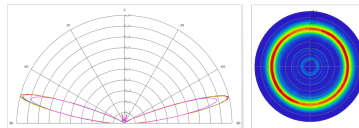
LED OSLOM SSL 80
FWHM / FWTM 168.0° / 188.0°
Efficiency 93 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

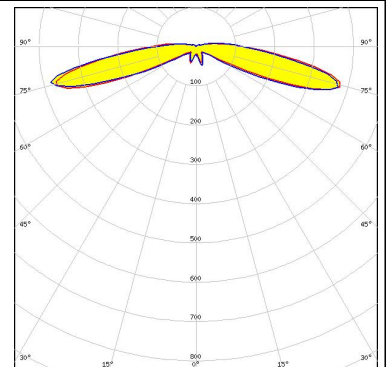
Opto Semiconductors

LED SFH 4716AS
FWHM / FWTM 164.0° / 180.0°
Efficiency 96 %
LEDs/each optic 1
Light colour IR
Required components:

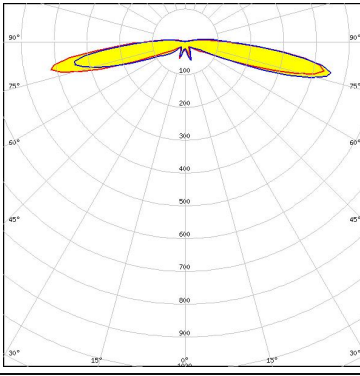
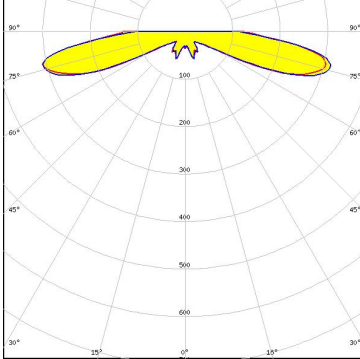


SAMSUNG

LED LM28xB Series
FWHM / FWTM 169.0° / 199.0°
Efficiency 97 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (SIMULATED):

 SEOUL SEMICONDUCTOR LED MJT 3030 FWHM / FWTM 172.0° / 194.0° Efficiency 95 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:	
 SEOUL SEMICONDUCTOR LED Z8Y22P FWHM / FWTM 152.0° Efficiency 87 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White 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.

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Hong Kong, China

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