EMERALD-A

Asymmetric beam. Assembly with installation tape.

SPECIFICATION:

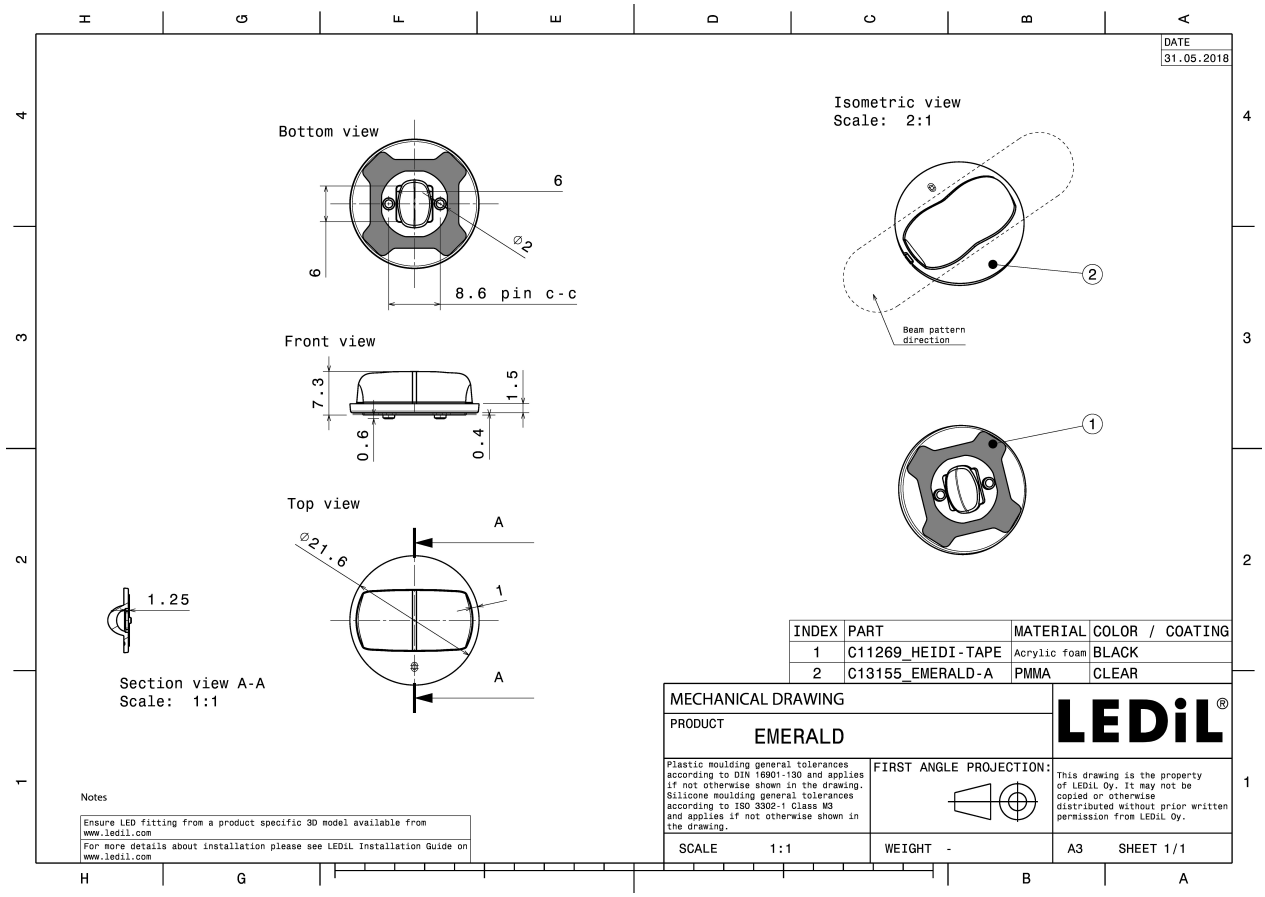
Dimensions	Ø 21.6 mm
Height	7.3 mm
Fastening	tape, pin
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish
EMERALD-A	Single lens	PMMA	clear	
HEIDI-TAPE	Tape	Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA13156_EMERALD-A » Box size: 480 x 280 x 300 mm	Single lens	2128	336	112	4.9



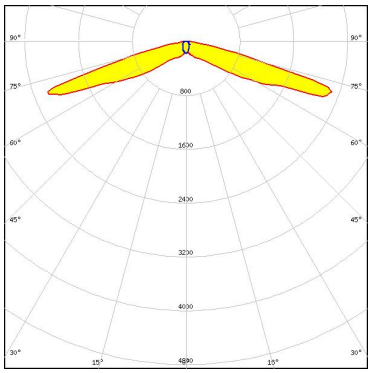
See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XB-D
FWHM / FWTM	150.0 + 63.0°
Efficiency	88 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour	White

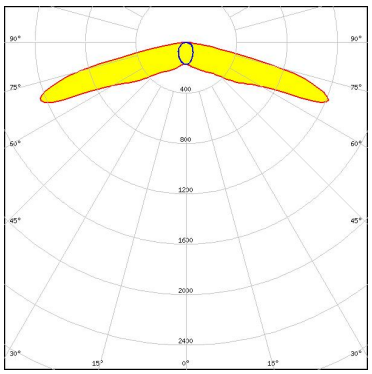
Required components:



CREE LEDs

LED	XM-L
FWHM / FWTM	152.0 + 81.0°
Efficiency	91 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White

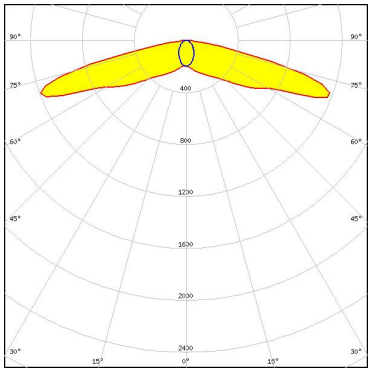
Required components:



CREE LEDs

LED	XM-L2
FWHM / FWTM	167.0 + 71.0°
Efficiency	92 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White

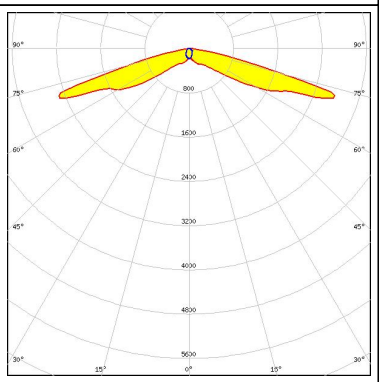
Required components:



CREE LEDs

LED	XP-E
FWHM / FWTM	152.0 + 71.0°
Efficiency	93 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

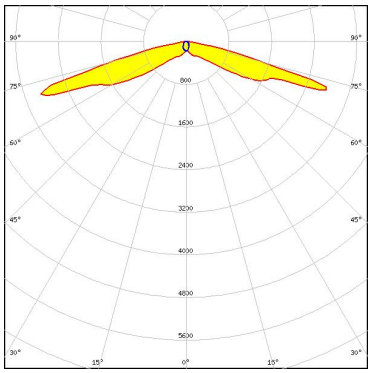


OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XP-E2
FWHM / FWTM	153.0 + 70.0°
Efficiency	93 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour	White

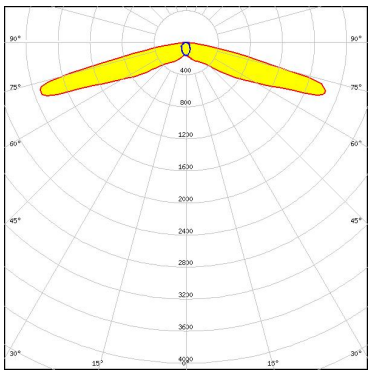
Required components:



CREE LEDs

LED	XP-G
FWHM / FWTM	153.0 + 92.0°
Efficiency	88 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White

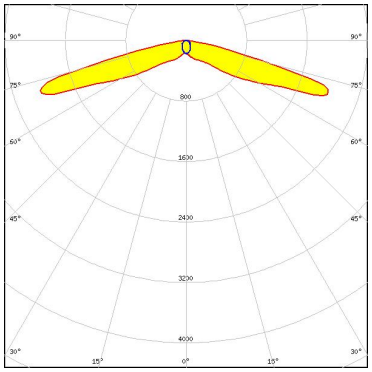
Required components:



CREE LEDs

LED	XP-G2
FWHM / FWTM	151.0 + 75.0°
Efficiency	91 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White

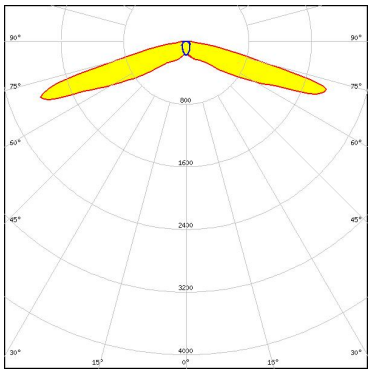
Required components:



CREE LEDs

LED	XT-E
FWHM / FWTM	150.0 + 64.0°
Efficiency	88 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

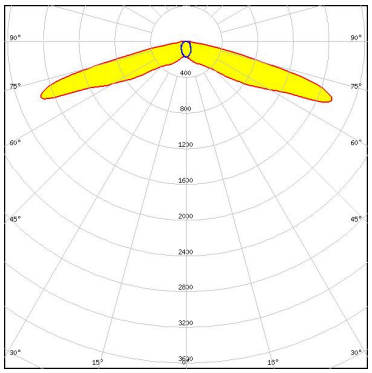


OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON A
FWHM / FWTM	151.0 + 73.0°
Efficiency	89 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour	White

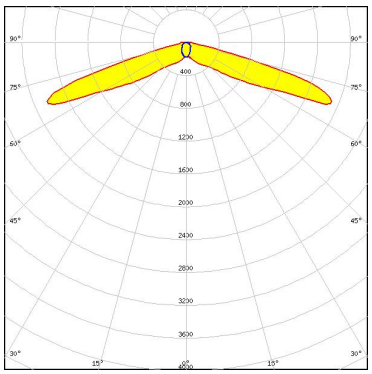
Required components:



LUMILEDS

LED	LUXEON R
FWHM / FWTM	147.0 + 71.0°
Efficiency	88 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White

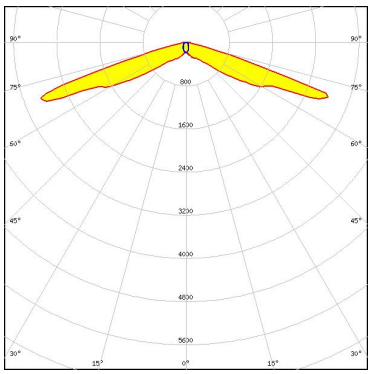
Required components:



LUMILEDS

LED	LUXEON Rebel
FWHM / FWTM	146.0 + 64.0°
Efficiency	88 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour	White

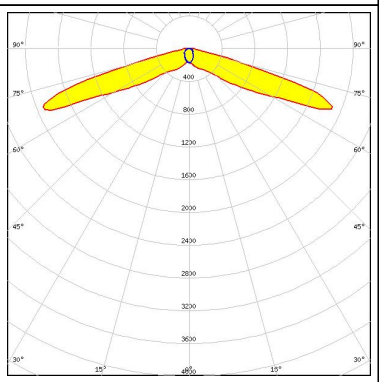
Required components:



LUMILEDS

LED	LUXEON Rebel ES
FWHM / FWTM	147.0 + 73.0°
Efficiency	88 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White

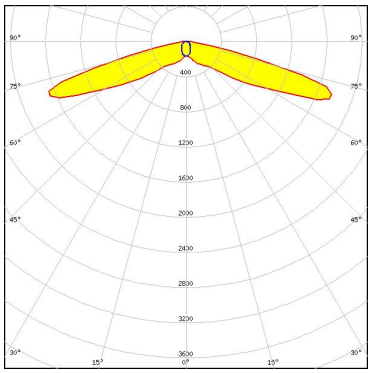
Required components:



OPTICAL RESULTS (MEASURED):

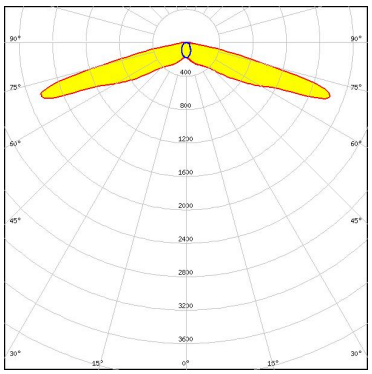
LUMILEDS

LED	LUXEON T
FWHM / FWTM	151.0 + 75.0°
Efficiency	93 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



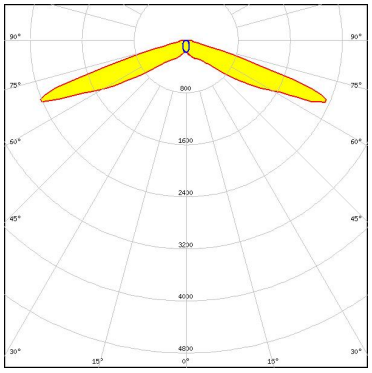
LUMILEDS

LED	LUXEON TX
FWHM / FWTM	151.0 + 71.0°
Efficiency	92 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



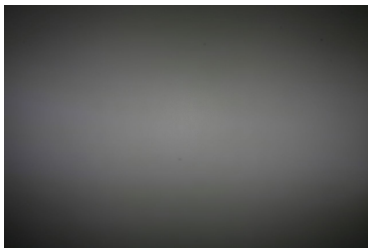
NICHIA

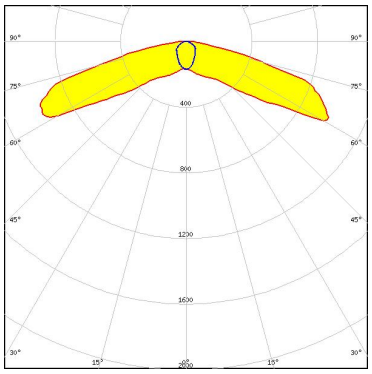
LED	NCSxx19A
FWHM / FWTM	145.0 + 64.0°
Efficiency	88 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



NICHIA

LED	NS9x383
FWHM / FWTM	150.0 + 82.0°
Efficiency	89 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

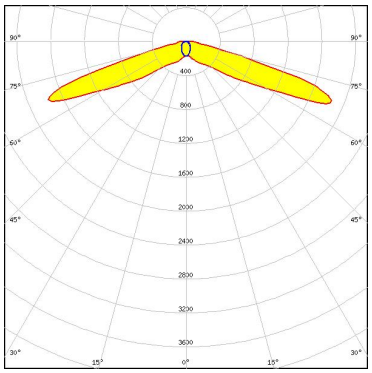




OPTICAL RESULTS (MEASURED):

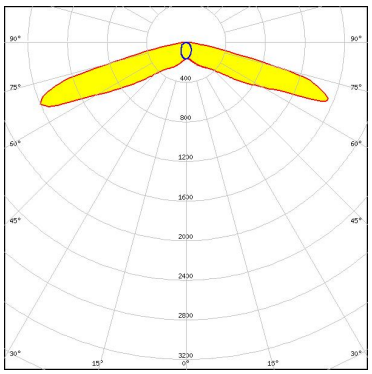
NICHIA

LED	NVSxx19A
FWHM / FWTM	147.0 + 70.0°
Efficiency	87 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



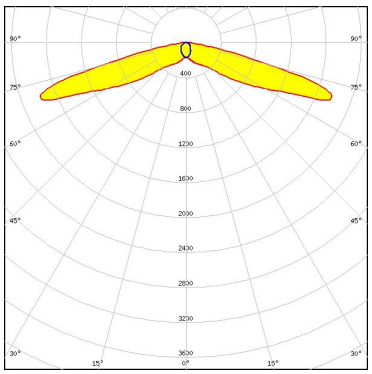
NICHIA

LED	NVSxx19B/NVSxx19C
FWHM / FWTM	151.0 + 77.0° / 163.0 + 152.0°
Efficiency	87 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



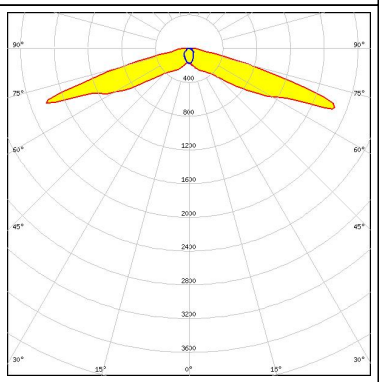
OSRAM
Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	152.0 + 76.0° / 163.0 + 158.0°
Efficiency	90 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM
Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	150.0 + 76.0°
Efficiency	89 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

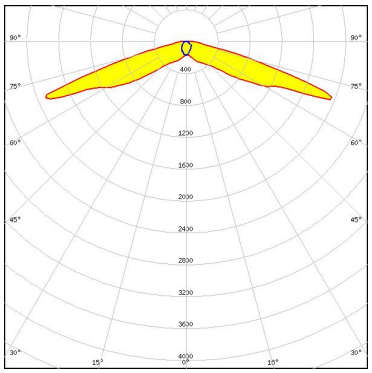


OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED	OSLON Square PC
FWHM / FWTM	150.0 + 86.0°
Efficiency	89 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White

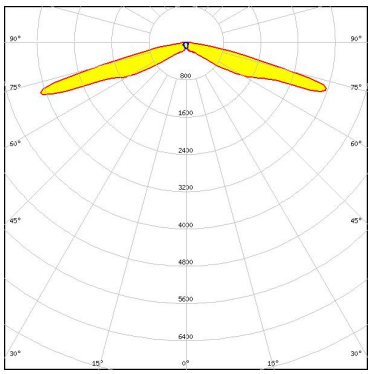
Required components:



OSRAM
Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	152.0 + 99.0°
Efficiency	92 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour	White

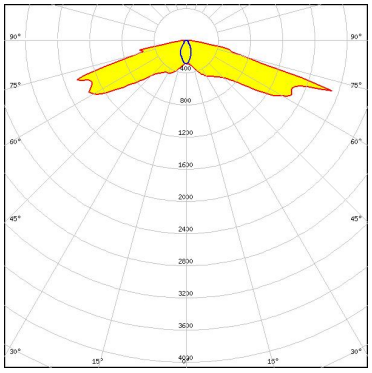
Required components:



OSRAM
Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	148.0 + 53.0°
Efficiency	89 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour	White

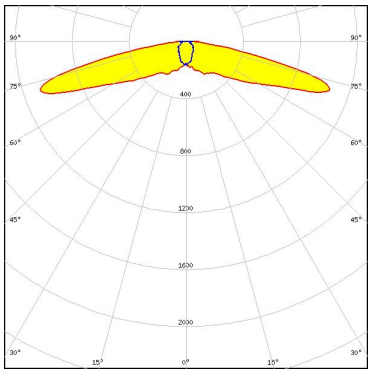
Required components:



OPTICAL RESULTS (SIMULATED):

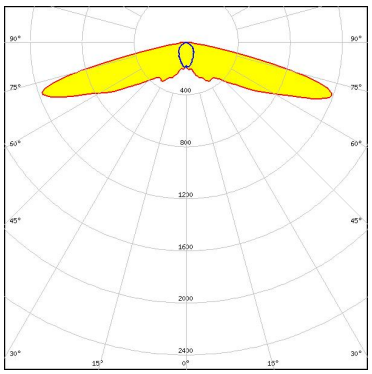
CREE LEDs

LED	XP-G3
FWHM / FWTM	157.0 + 79.0° / 171.0 + 182.0°
Efficiency	88 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



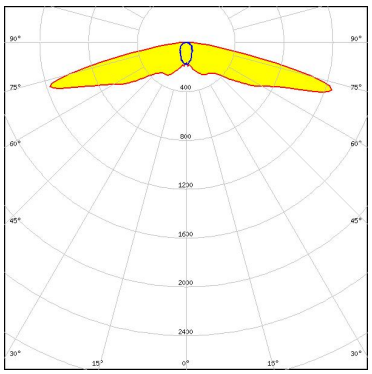
CREE LEDs

LED	XP-G4
FWHM / FWTM	153.0 + 73.0° / 162.0 + 131.0°
Efficiency	90 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



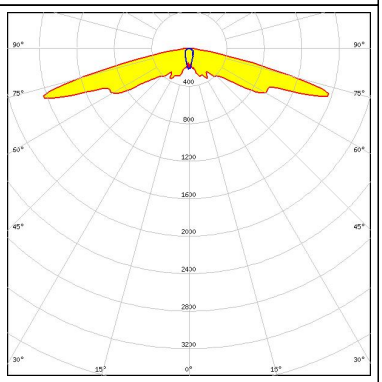
CREE LEDs

LED	XP-L HI
FWHM / FWTM	156.0 + 64.0° / 168.0 + 166.0°
Efficiency	90 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



CREE LEDs

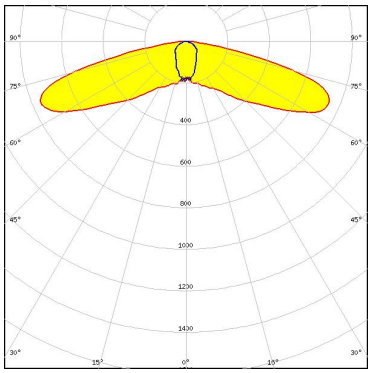
LED	XP-P
FWHM / FWTM	153.0 + 39.0° / 165.0 + 148.0°
Efficiency	91 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OPTICAL RESULTS (SIMULATED):

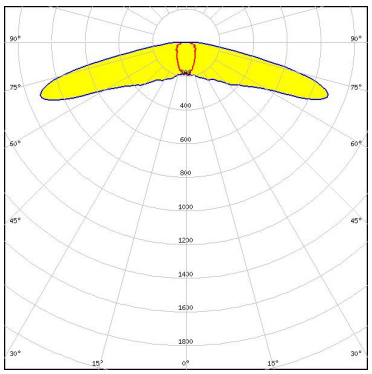
LUMILEDS

LED	LUXEON 5050 Round LES
FWHM / FWTM	Asymmetric
Efficiency	87 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



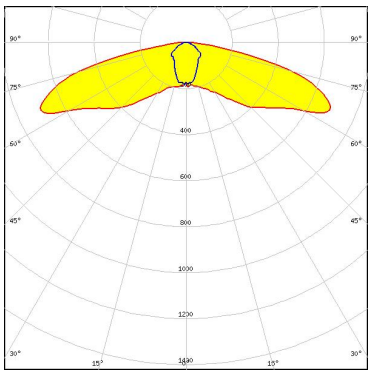
LUMILEDS

LED	LUXEON V
FWHM / FWTM	64.0 + 156.0° / 176.0 + 175.0°
Efficiency	90 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



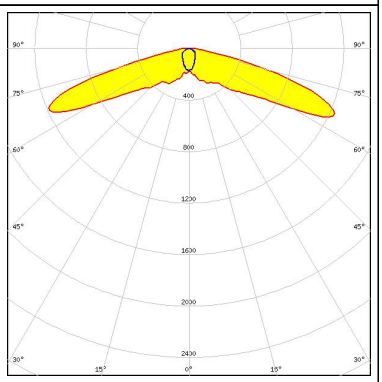
OSRAM
Opto Semiconductors

LED	OSCONIQ S 5050
FWHM / FWTM	154.0 + 72.0° / 168.0 + 154.0°
Efficiency	87 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



SEOUL SEMICONDUCTOR

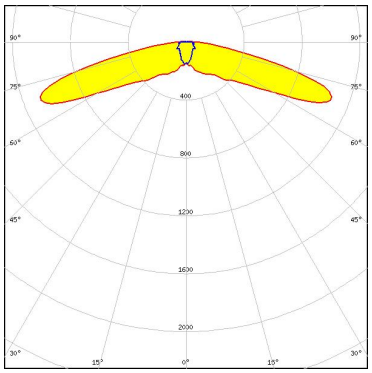
LED	Z5M4
FWHM / FWTM	149.0 + 67.0° / 164.0 + 140.0°
Efficiency	89 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

LED	Z8Y22P
FWHM / FWTM	154.6 + 110.7° / 172.0 + 180.0°
Efficiency	93 %
Peak intensity	1.1 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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