EMERALD-A

Asymmetric beam

SPECIFICATION:

Dimensions	Ø 21.6
Height	6.9 mm
Fastening	glue, pin
ROHS compliant	yes

MATERIALS:

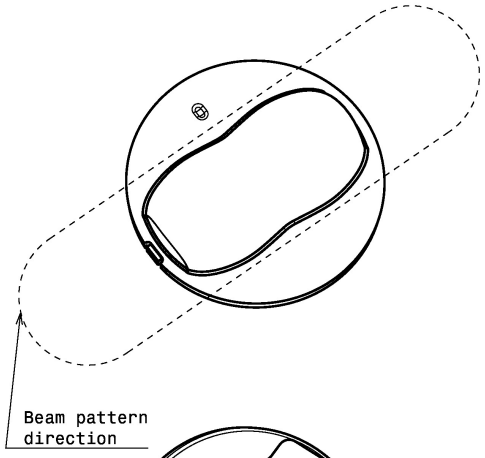
Component	Type	Material	Colour	Finish	Length (mm)
EMERALD-A	Single lens	PMMA	clear		

ORDERING INFORMATION:

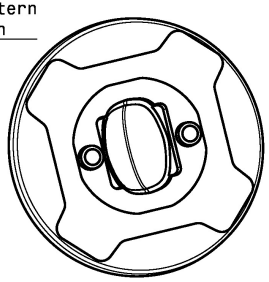
Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13155_EMERALD-A » Box size: 480 x 280 x 300 mm	2128	336	112	4.8

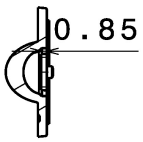
DATE
31.05.2018

Isometric view
Scale: 2:1

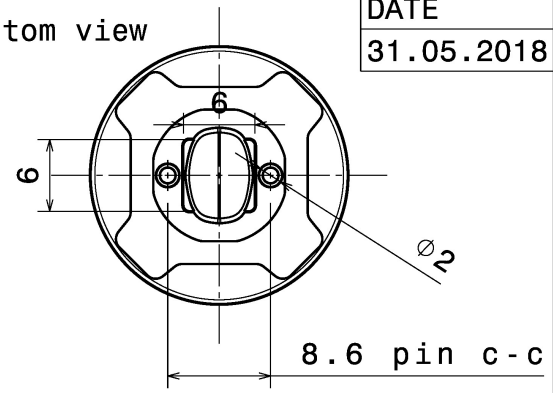


Beam pattern direction

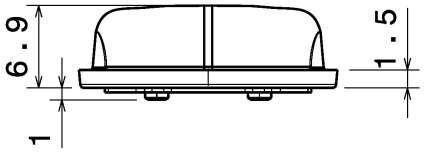




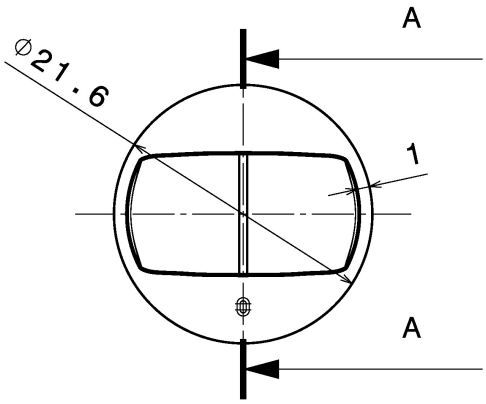
Bottom view



Front view



Top view



PART	MATERIAL	COLOR / COATING
C13155_EMERALD-A	PMMA	CLEAR

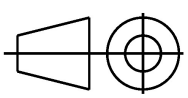
MECHANICAL DRAWING

PRODUCT
EMERALD

LEDiL®

Plastic moulding general tolerances according to DIN 16901-130 and applies if not otherwise shown in the drawing. Silicone moulding general tolerances according to ISO 3302-1 Class M3 and applies if not otherwise shown in the drawing.

FIRST ANGLE PROJECTION:



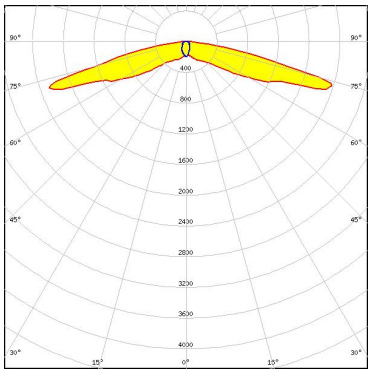
SCALE 1:1 | WEIGHT - | A4 SHEET 1/1

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

OPTICAL RESULTS (MEASURED):

CREE LEDs

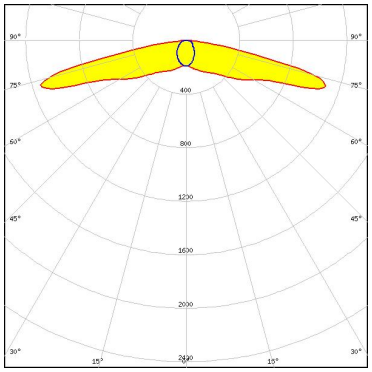
LED	XB-D
FWHM / FWTM	157.0 + 62.0°
Efficiency	90 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

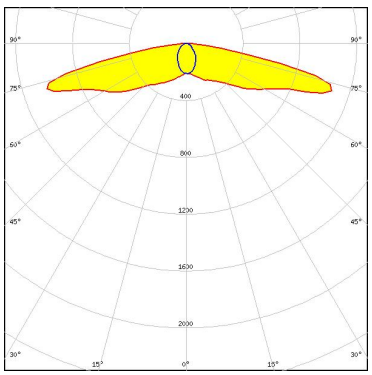
LED	XM-L
FWHM / FWTM	157.0 + 83.0°
Efficiency	94 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XM-L2
FWHM / FWTM	169.0 + 73.0°
Efficiency	94 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

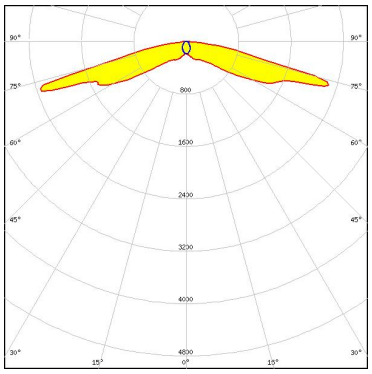


Light distribution files

OPTICAL RESULTS (MEASURED):

CREE LEDs

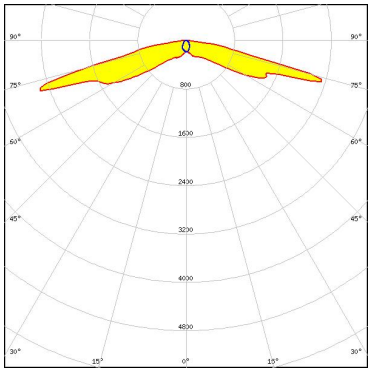
LED	XP-E
FWHM / FWTM	158.0 + 73.0°
Efficiency	93 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

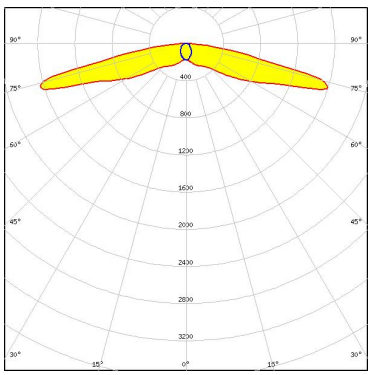
LED	XP-E2
FWHM / FWTM	156.0 + 72.0°
Efficiency	93 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-G
FWHM / FWTM	159.0 + 79.0°
Efficiency	89 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

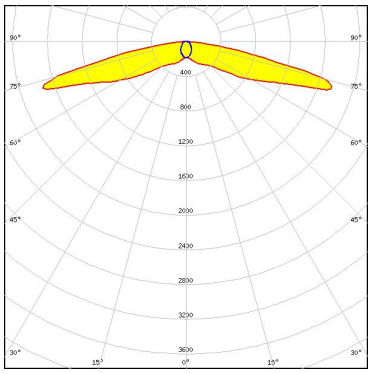


Light distribution files

OPTICAL RESULTS (MEASURED):

CREE LEDs

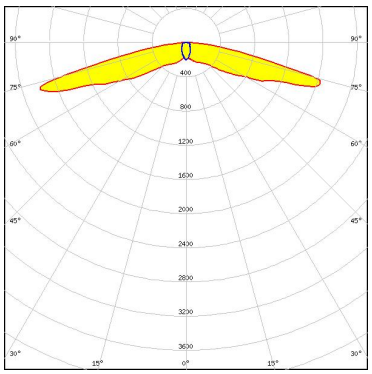
LED	XP-G2
FWHM / FWTM	158.0 + 79.0°
Efficiency	94 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

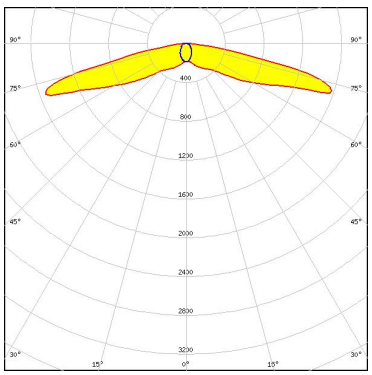
LED	XT-E
FWHM / FWTM	157.0 + 61.0°
Efficiency	89 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON A
FWHM / FWTM	156.0 + 75.0°
Efficiency	92 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

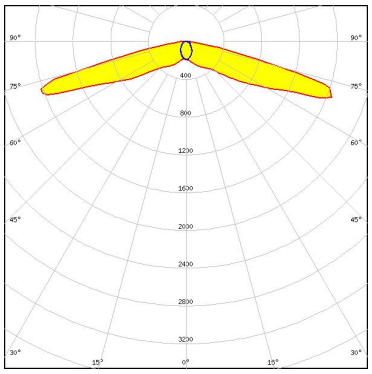


Light distribution files

OPTICAL RESULTS (MEASURED):

LUMILEDS

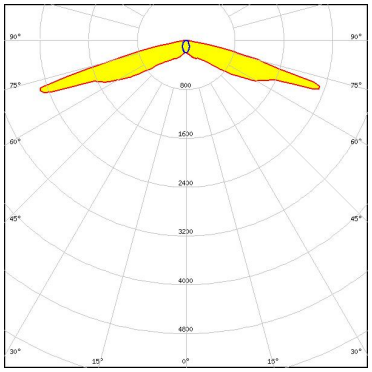
LED	LUXEON R
FWHM / FWTM	153.0 + 73.0°
Efficiency	92 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

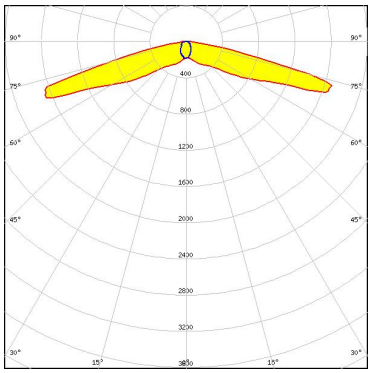
LED	LUXEON Rebel
FWHM / FWTM	152.0 + 67.0°
Efficiency	92 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON Rebel ES
FWHM / FWTM	153.0 + 74.0°
Efficiency	90 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

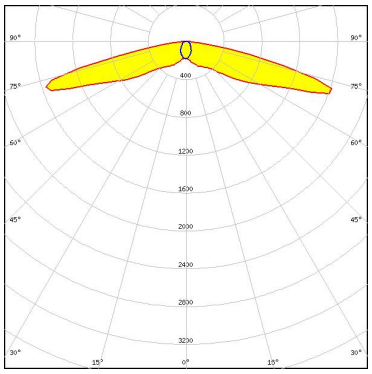


Light distribution files

OPTICAL RESULTS (MEASURED):

LUMILEDS

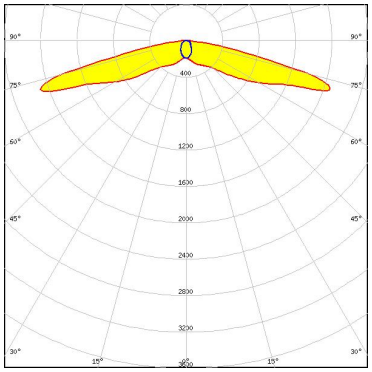
LED	LUXEON T
FWHM / FWTM	155.0 + 76.0°
Efficiency	93 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

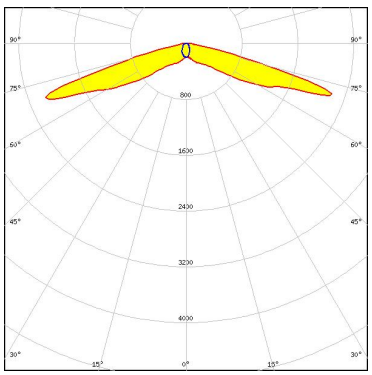
LED	LUXEON TX
FWHM / FWTM	156.0 + 73.0°
Efficiency	94 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NCSxx19A
FWHM / FWTM	151.0 + 65.0°
Efficiency	92 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

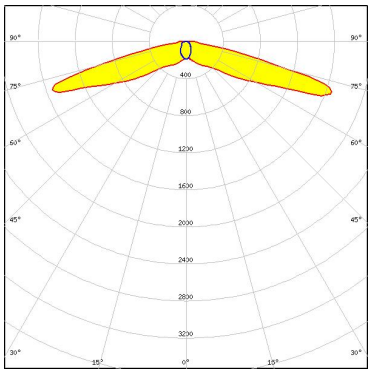


Light distribution files

OPTICAL RESULTS (MEASURED):

NICHIA

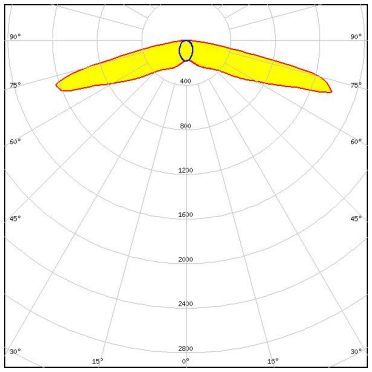
LED	NVSxx19A
FWHM / FWTM	153.0 + 71.0°
Efficiency	91 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

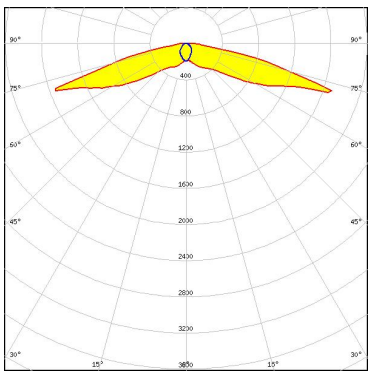
LED	NVSxx19B/NVSxx19C
FWHM / FWTM	155.0 + 80.0° / 168.0 + 158.0°
Efficiency	92 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	156.0 + 80.0°
Efficiency	93 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

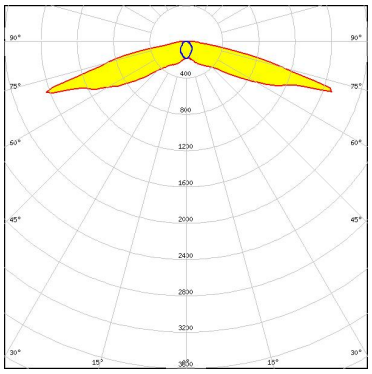


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

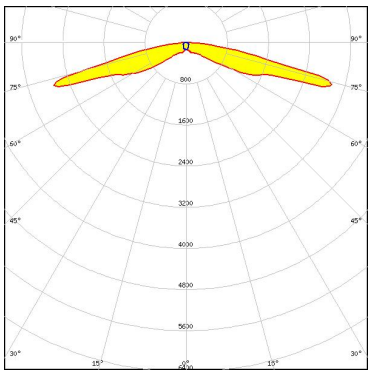
LED	OSLON Square PC
FWHM / FWTM	156.0 + 83.0°
Efficiency	93 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

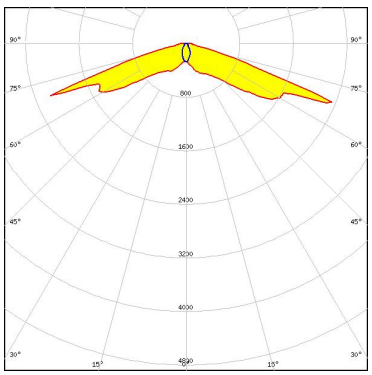
LED	OSLON SSL 150
FWHM / FWTM	157.0 + 86.0°
Efficiency	92 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	147.0 + 52.0°
Efficiency	89 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

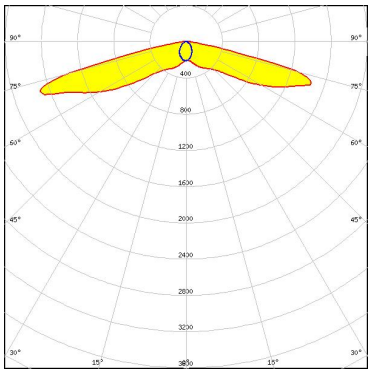


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

LED	LH351Z
FWHM / FWTM	154.0 + 76.0°
Efficiency	94 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

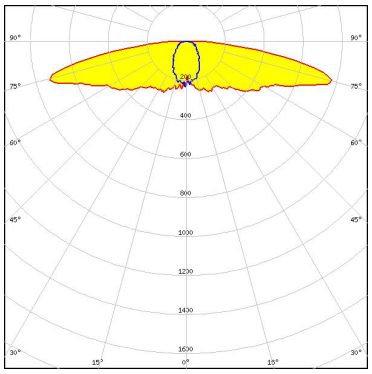


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

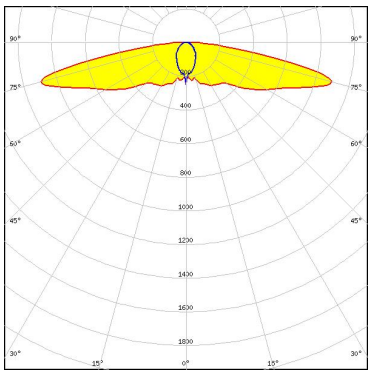
LED	XHP35 HD
FWHM / FWTM	164.0 + 68.0°
Efficiency	91 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

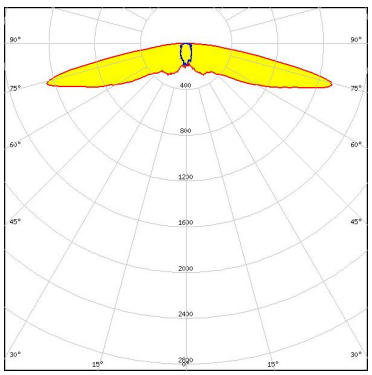
LED	XHP35 HI
FWHM / FWTM	162.0 + 51.0° / 176.0 + 146.0°
Efficiency	90 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-L HI
FWHM / FWTM	159.0°
Efficiency	89 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

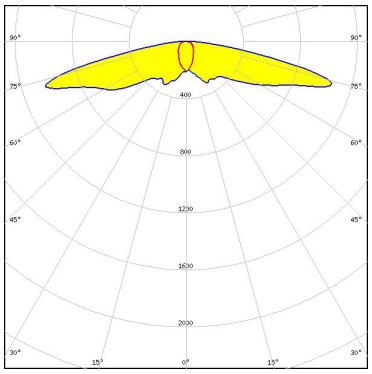


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

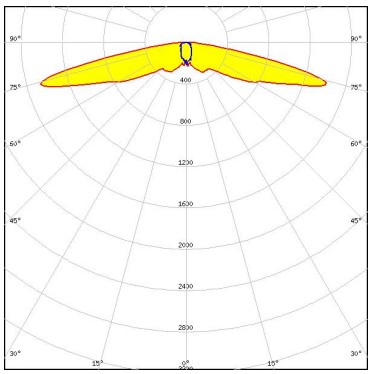
LED	NF2W757G-MT (Tunable White)
FWHM / FWTM	159.0 + 59.0° / 172.0 + 158.0°
Efficiency	94 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	Tunable White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

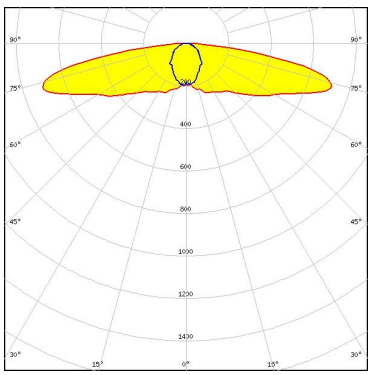
LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	158.0 + 70.0°
Efficiency	93 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

LED	LH351D
FWHM / FWTM	86.0 + 164.0° / 166.0 + 176.0°
Efficiency	91 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

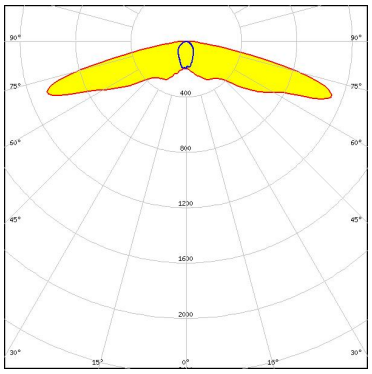


Light distribution files

OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

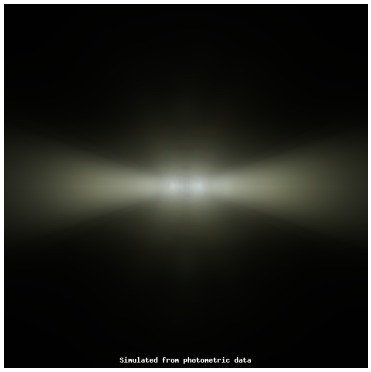
LED	Z5M4
FWHM / FWTM	154.0 + 66.0° / 168.0 + 144.0°
Efficiency	91 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

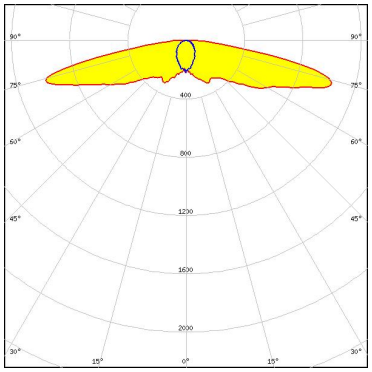


Light distribution files

SEOUL SEMICONDUCTOR

LED	Z5M4-E1
FWHM / FWTM	161.0 + 68.0° / 175.0 + 151.0°
Efficiency	94 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

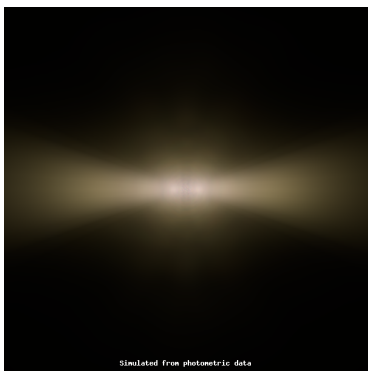


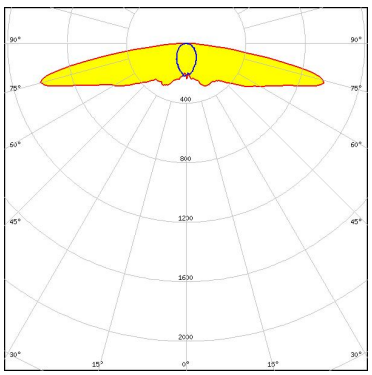


Light distribution files

SEOUL SEMICONDUCTOR

LED	Z5M4-E2
FWHM / FWTM	161.0 + 72.0° / 173.0 + 149.0°
Efficiency	94 %
Peak intensity	1 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.

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