STRADELLA-IP-28-HB-S

~30° spot beam. Variant made from PMMA.

SPECIFICATION:

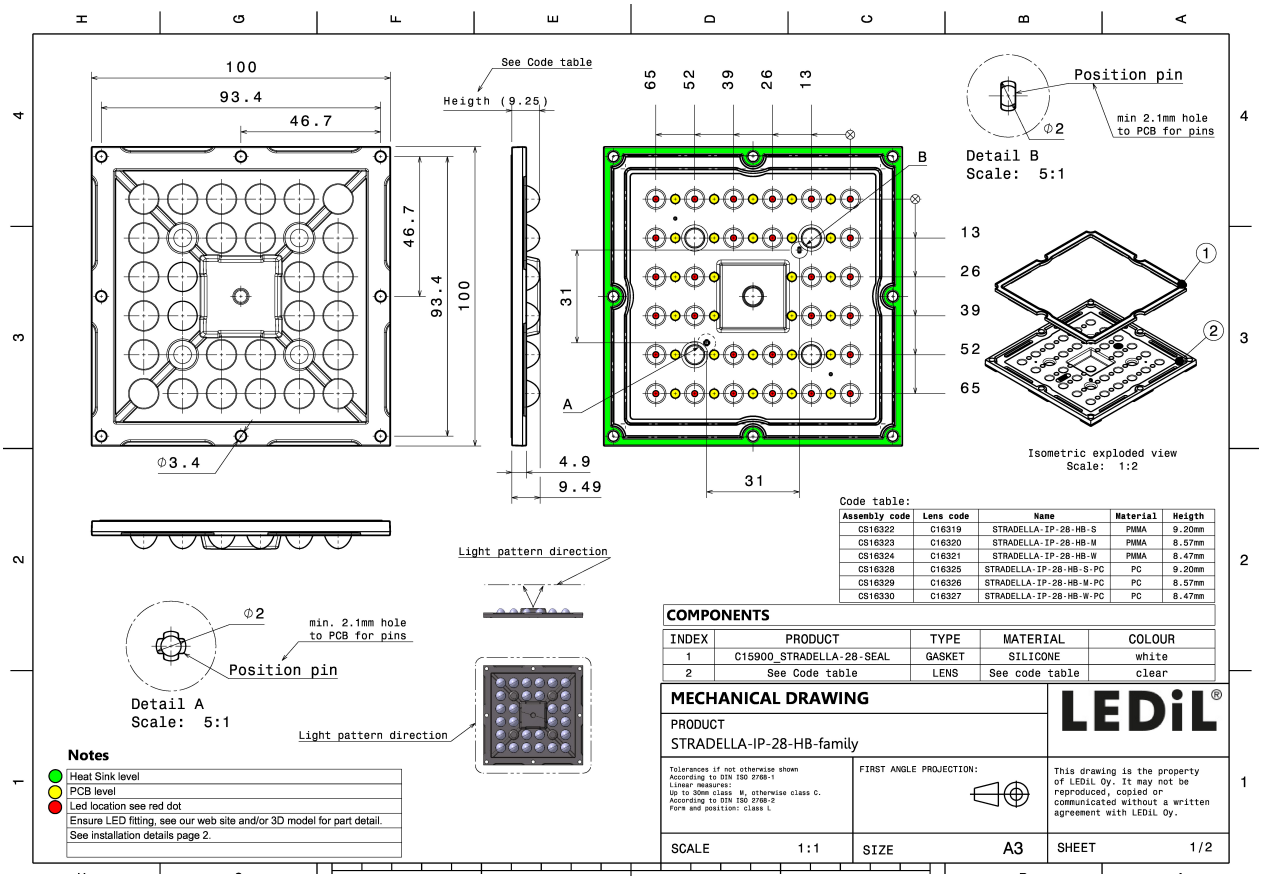
Dimensions	100.0 x 100.0 mm
Height	9.5 mm
Fastening	pin, screw
Ingress protection classes	IP66, IP67
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
STRADELLA-IP-28-HB-S	Multi-lens	PMMA	clear		
STRADELLA-28-SEAL	Seal	Silicone	white		

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS16322_STRADELLA-IP-28-HB-S » Box size: 476 x 273 x 247 mm	Multi-lens	156	78	78	5.9



Code table:

Assembly code	Lens code	Name	Material	Heigth
CS16322	C16319	STRADELLA-IP-28-HB-S	PMMA	9.20mm
CS16323	C16320	STRADELLA-IP-28-HB-M	PMMA	8.57mm
CS16324	C16321	STRADELLA-IP-28-HB-W	PMMA	8.47mm
CS16328	C16325	STRADELLA-IP-28-HB-S-PC	PC	9.20mm
CS16329	C16326	STRADELLA-IP-28-HB-M-PC	PC	8.57mm
CS16330	C16327	STRADELLA-IP-28-HB-W-PC	PC	8.47mm

COMPONENTS

INDEX	PRODUCT	TYPE	MATERIAL	COLOUR
1	C15900_STRADELLA-28-SEAL	GASKET	SILICONE	white
2	See Code table	LENS	See code table	clear

Notes

Heat Sink level
PCB level
Led location see red dot
Ensure LED fitting, see our web site and/or 3D model for part detail.
See installation details page 2.

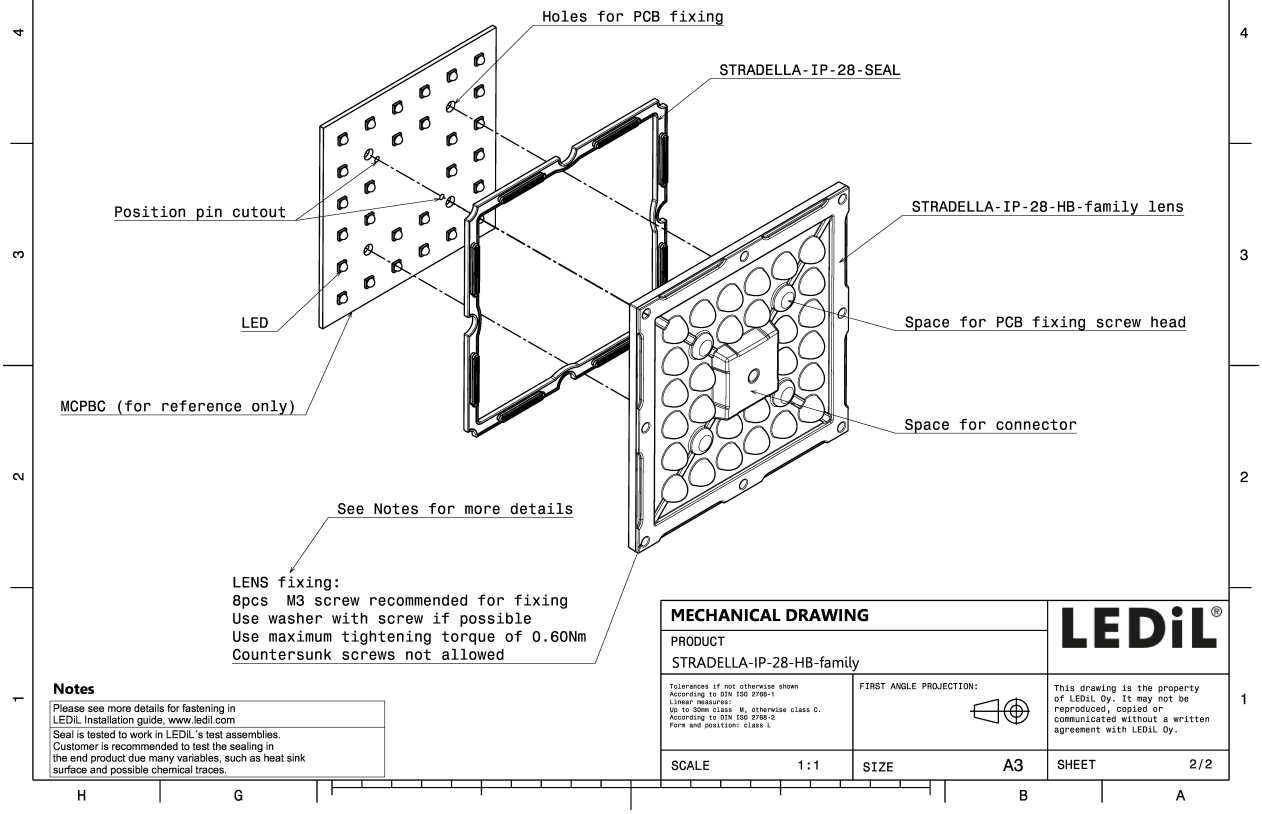
MECHANICAL DRAWING

PRODUCT
STRADELLA-IP-28-HB-family

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

FIRST ANGLE PROJECTION:

SCALE 1:1 | SIZE A3 | SHEET 1/2



Notes

Please see more details for fastening in LEDiL Installation guide, www.ledil.com
Seal is tested to work in LEDiL´s test assemblies. Customer is recommended to test the sealing in the end product due many variables, such as heat sink surface and possible chemical traces.

MECHANICAL DRAWING

PRODUCT
STRADELLA-IP-28-HB-family

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

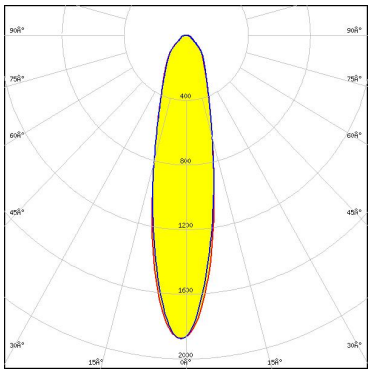
FIRST ANGLE PROJECTION:

SCALE 1:1 | SIZE A3 | SHEET 2/2

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

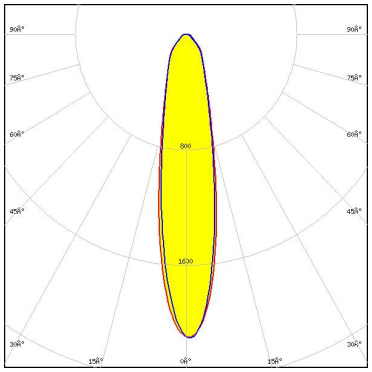
OPTICAL RESULTS (MEASURED):

LED	HiQLED STR28 CR JE2835 4x7 xxx
FWHM / FWTM	24.0° / 75.0°
Efficiency	91 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



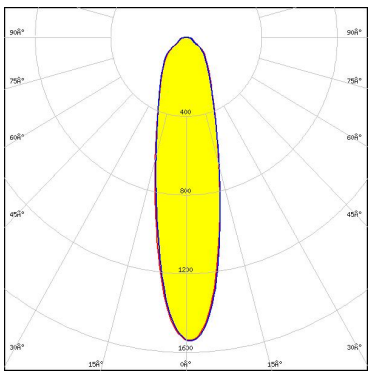
Light distribution files

LED	HiQLED STR28 CR JK3030 4x7 xxx
FWHM / FWTM	22.0° / 69.0°
Efficiency	90 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

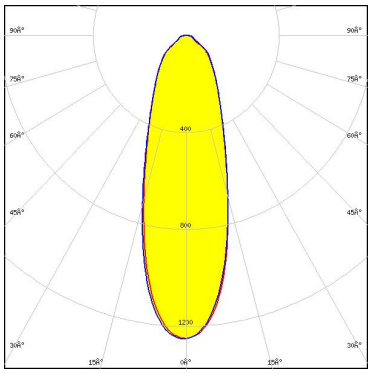
LED	QUICK FLUX STR28 XD2x14 xxx G8
FWHM / FWTM	26.0° / 88.0°
Efficiency	91 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

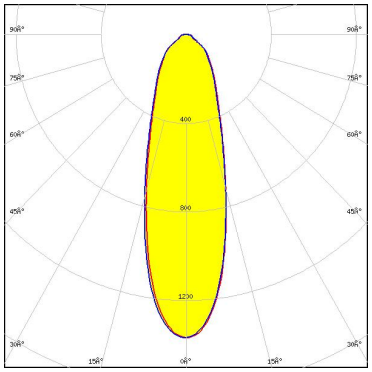
OPTICAL RESULTS (MEASURED):

LED	QUICK FLUX STR28 XP2x14 xxx G7
FWHM / FWTM	33.0° / 99.0°
Efficiency	92 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



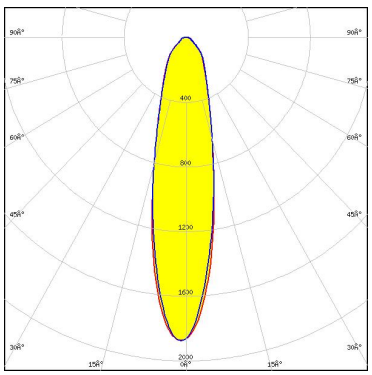
Light distribution files

LED	QUICK FLUX STR28 XT2x14 xxx G5
FWHM / FWTM	32.0° / 95.0°
Efficiency	93 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LED	J Series 2835
FWHM / FWTM	24.0° / 75.0°
Efficiency	91 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

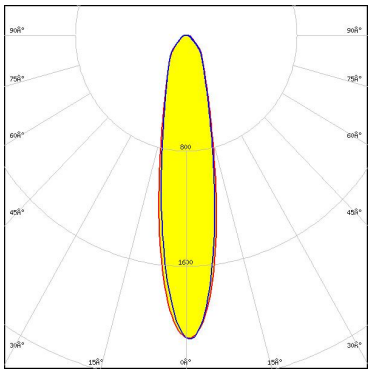


Light distribution files

OPTICAL RESULTS (MEASURED):

CREE LEDs

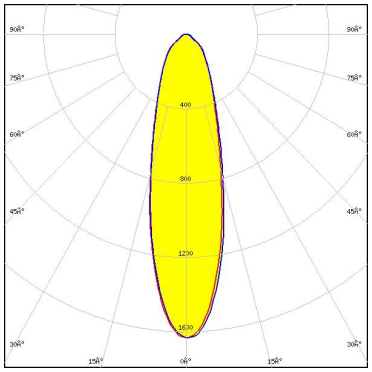
LED	J Series 3030
FWHM / FWTM	22.0° / 69.0°
Efficiency	90 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

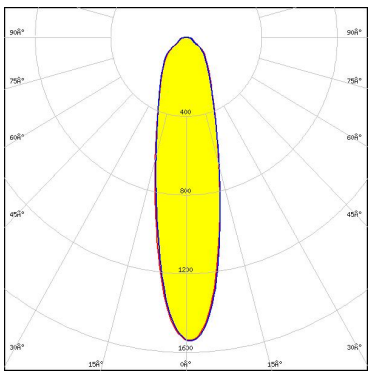
LED	J Series 3030
FWHM / FWTM	28.0° / 83.0°
Efficiency	93 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XD16
FWHM / FWTM	26.0° / 88.0°
Efficiency	91 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

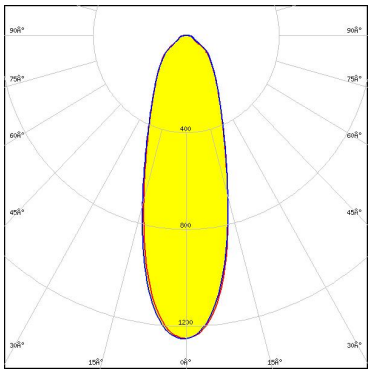


Light distribution files

OPTICAL RESULTS (MEASURED):

CREE LEDs

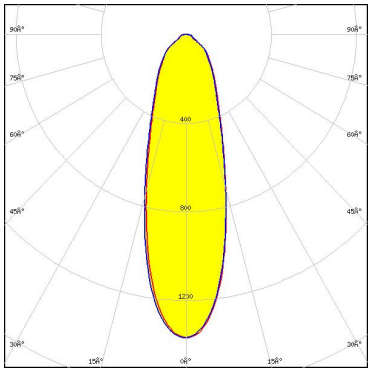
LED	XP-G3
FWHM / FWTM	33.0° / 99.0°
Efficiency	92 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

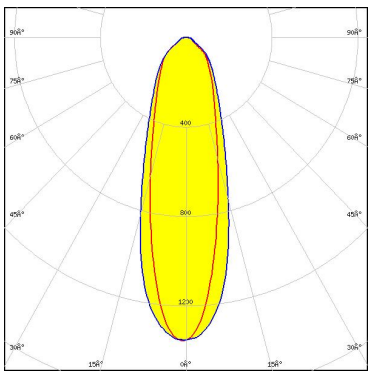
LED	XT-E
FWHM / FWTM	32.0° / 95.0°
Efficiency	93 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NF2W585AR
FWHM / FWTM	31.0° / 96.0°
Efficiency	91 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

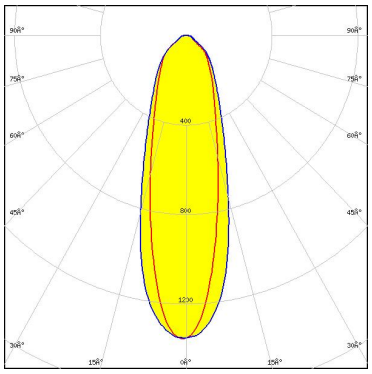


Light distribution files

OPTICAL RESULTS (MEASURED):

NICHIA

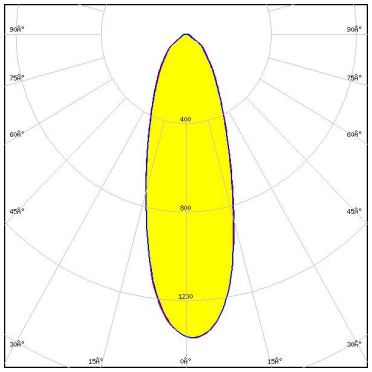
LED	NF2W585AR
FWHM / FWTM	31.0° / 97.0°
Efficiency	91 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

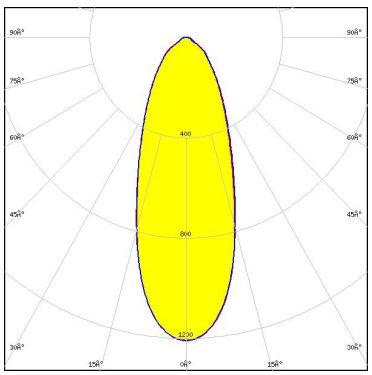
LED	NVSW219F
FWHM / FWTM	34.0° / 90.0°
Efficiency	94 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSW319B
FWHM / FWTM	39.0° / 97.0°
Efficiency	94 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

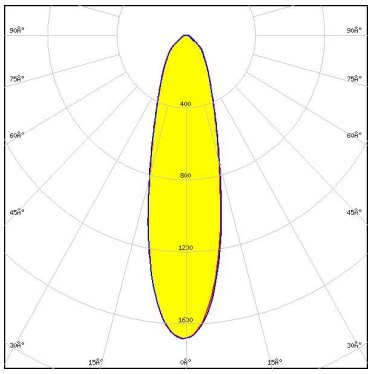


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

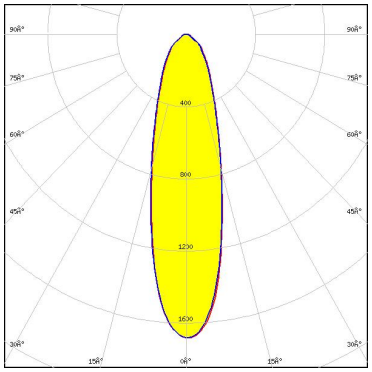
LED	OSCONIQ S 3030 (QSLR31)
FWHM / FWTM	28.0° / 81.0°
Efficiency	93 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

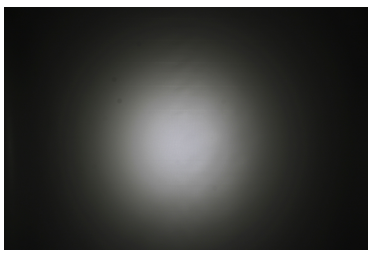
LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	28.0° / 80.0°
Efficiency	93 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

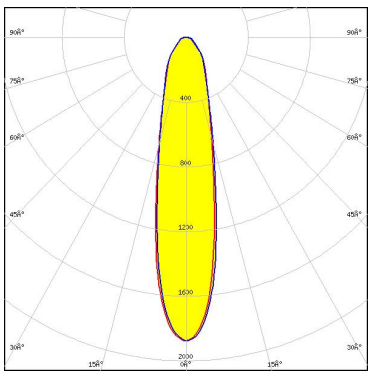


Light distribution files

SAMSUNG

LED	HiLOM SC28 (LH181B)
FWHM / FWTM	23.0° / 74.0°
Efficiency	89 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



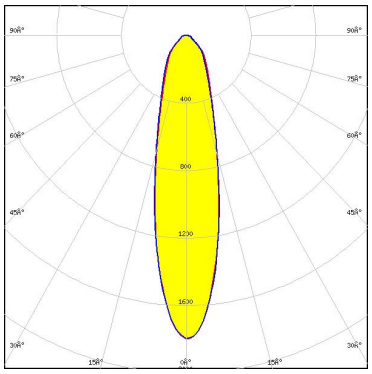


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

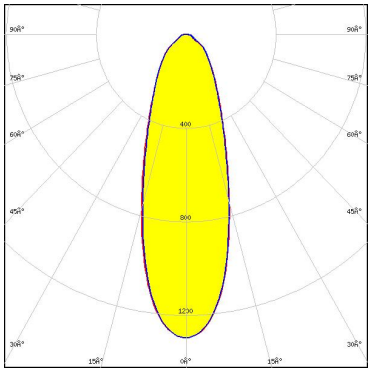
LED	HiLOM SM28 (LM301B)
FWHM / FWTM	25.0° / 78.0°
Efficiency	91 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	Z5M3
FWHM / FWTM	34.0° / 94.0°
Efficiency	93 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

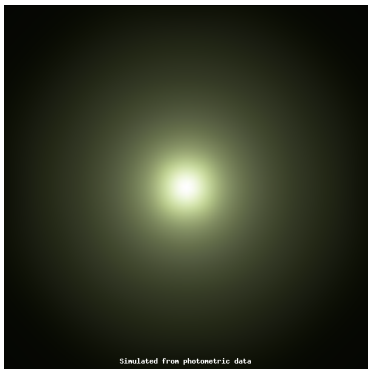


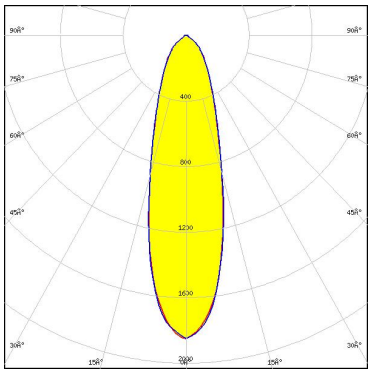
Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

LED	J Series 3030C
FWHM / FWTM	28.0° / 78.0°
Efficiency	94 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

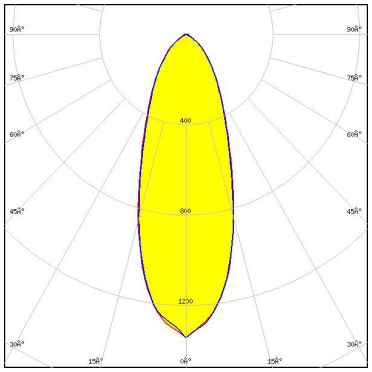




Light distribution files

CREE LEDs

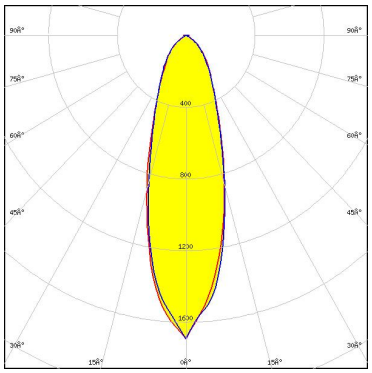
LED	XP-G2 HE
FWHM / FWTM	37.0° / 90.0°
Efficiency	92 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-L HI
FWHM / FWTM	30.0° / 82.0°
Efficiency	90 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

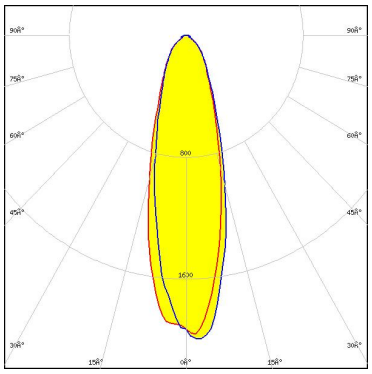


Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMILEDS

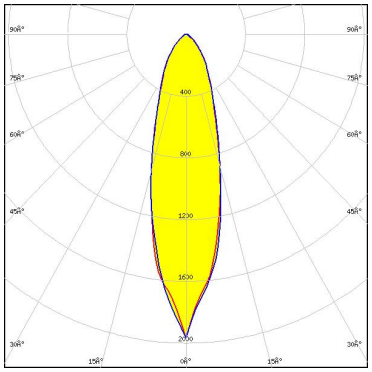
LED	LUXEON 3030 2D (Round LES)
FWHM / FWTM	27.0° / 74.0°
Efficiency	92 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

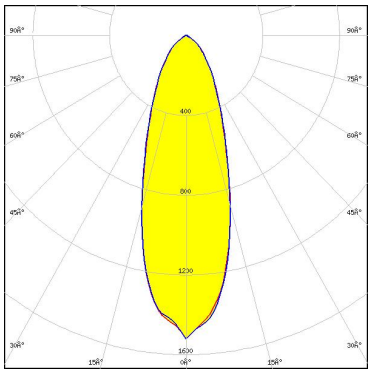
LED	NF2x757G
FWHM / FWTM	28.0° / 76.0°
Efficiency	93 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSW219F
FWHM / FWTM	34.0° / 84.0°
Efficiency	93 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

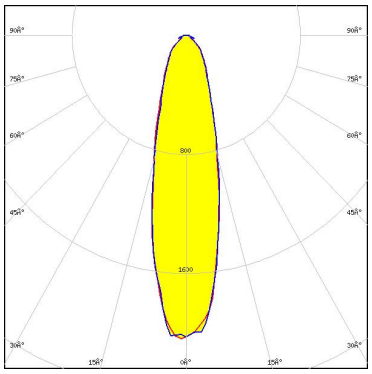


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

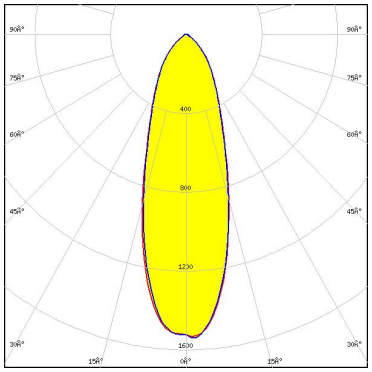
LED	NVSxE21A
FWHM / FWTM	25.0° / 73.0°
Efficiency	92 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

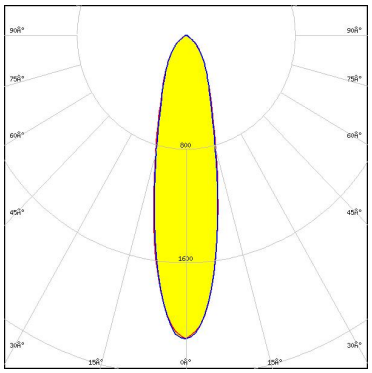
LED	NVSxx19B/NVSxx19C
FWHM / FWTM	34.0° / 86.0°
Efficiency	93 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSCONIQ C 2424
FWHM / FWTM	25.0° / 73.0°
Efficiency	93 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

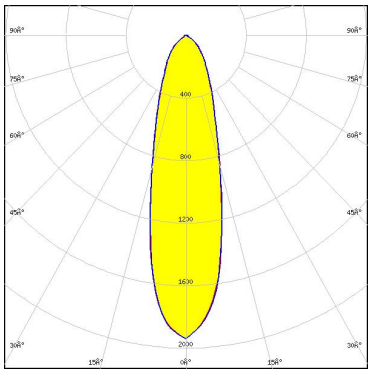


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

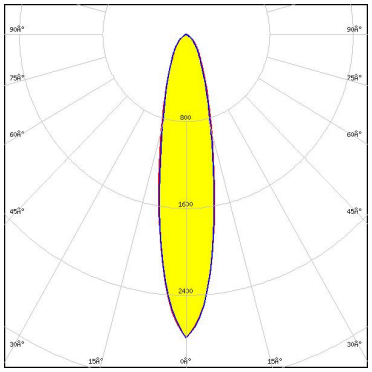
LED	OSCONIQ C 3030
FWHM / FWTM	28.0° / 76.0°
Efficiency	94 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

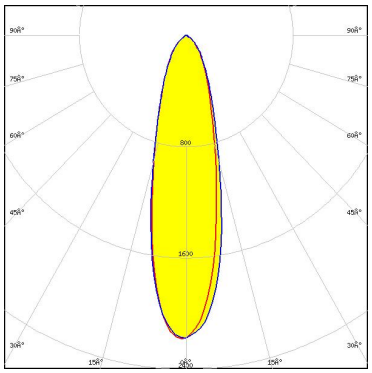
LED	OSCONIQ P 3030
FWHM / FWTM	22.0° / 60.0°
Efficiency	94 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSCONIQ P 3737 (2W version)
FWHM / FWTM	27.0° / 69.0°
Efficiency	93 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

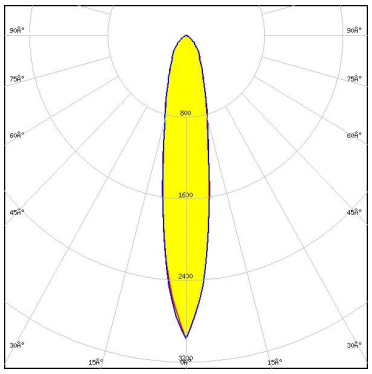


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

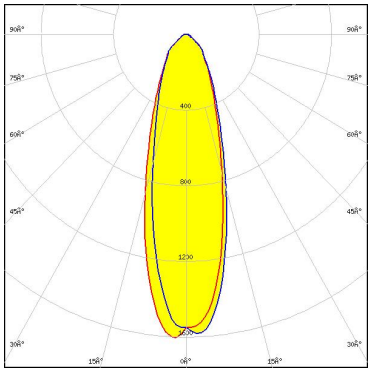
LED	OSLON Pure 1414
FWHM / FWTM	18.0° / 58.0°
Efficiency	95 %
Peak intensity	3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

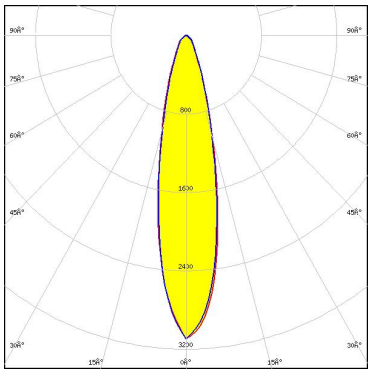
LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	30.0° / 80.0°
Efficiency	91 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	23.0° / 51.0°
Efficiency	93 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

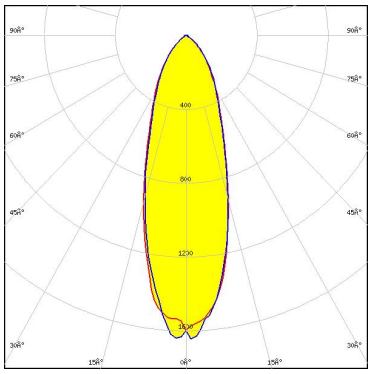


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

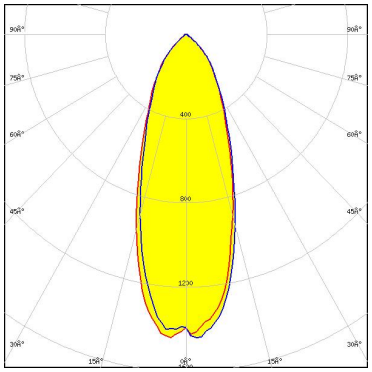
LED	LH351B
FWHM / FWTM	33.0° / 82.0°
Efficiency	94 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

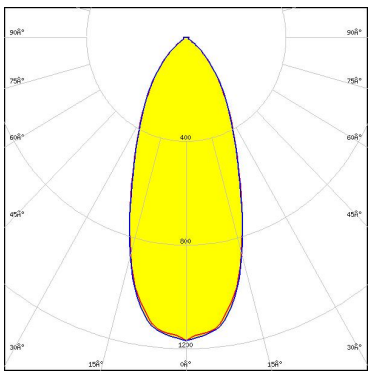
LED	LH351C
FWHM / FWTM	37.0° / 87.0°
Efficiency	94 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

LED	LH351D
FWHM / FWTM	44.0° / 92.0°
Efficiency	91 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

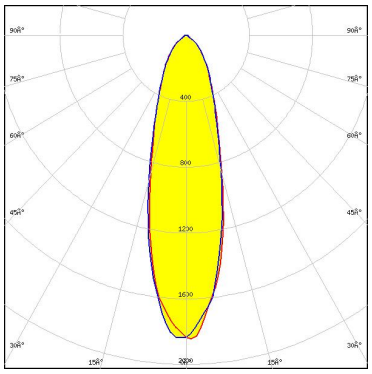


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

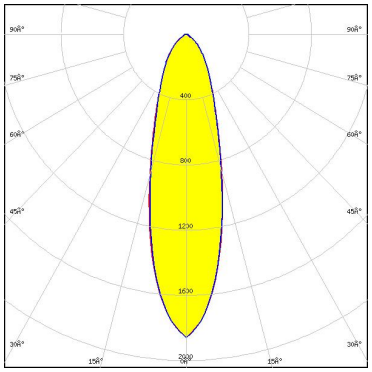
LED	LM301B
FWHM / FWTM	29.0° / 78.0°
Efficiency	93 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

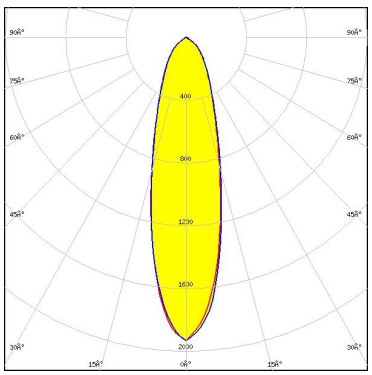
LED	SEOUL 3030
FWHM / FWTM	28.0° / 78.0°
Efficiency	93 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	SEOUL DC 3030C
FWHM / FWTM	28.0° / 77.0°
Efficiency	93 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

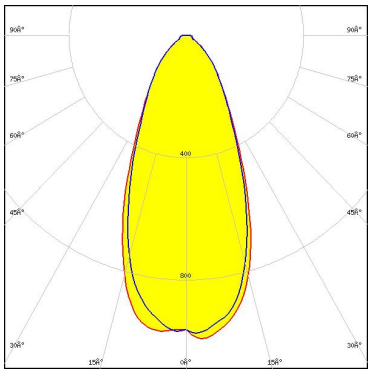


Light distribution files

OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

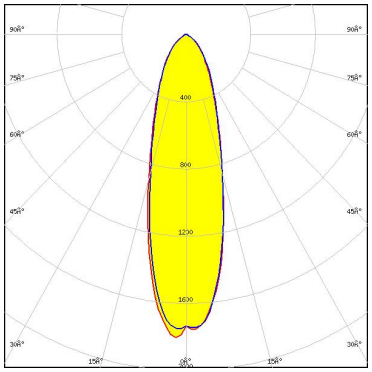
LED	SEOUL DC 5050 6V
FWHM / FWTM	46.0° / 98.0°
Efficiency	89 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

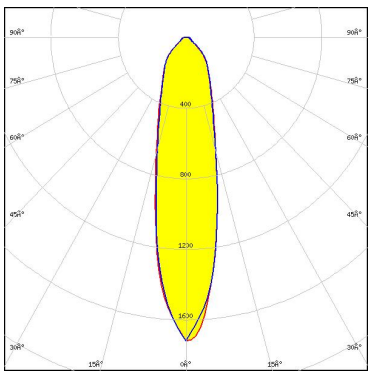
LED	Z5M1/Z5M2
FWHM / FWTM	30.0° / 79.0°
Efficiency	94 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	Z8Y19
FWHM / FWTM	24.0° / 84.0°
Efficiency	89 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

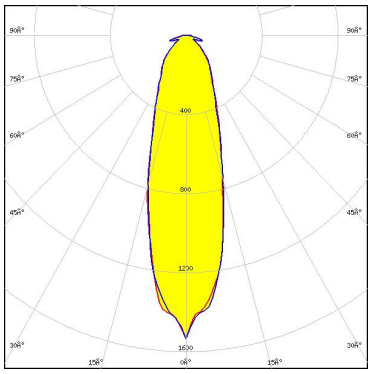


Light distribution files

OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

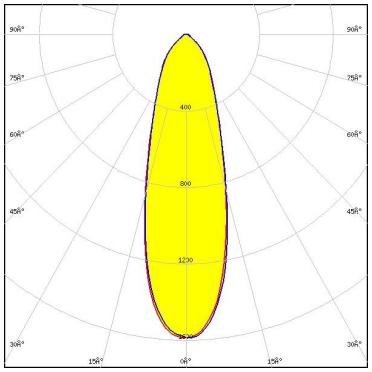
LED	Z8Y22
FWHM / FWTM	29.0° / 88.0°
Efficiency	92 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	Z8Y22T
FWHM / FWTM	32.0° / 83.0°
Efficiency	92 %
Peak intensity	1.6 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 13
FI-24240 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

Shipping locations
Poznan, Poland
Hong Kong, China

Distribution Partners
www.ledil.com/
where_to_buy