

HB-2X2MX-8-M

~30° wide beam. New revision.

SPECIFICATION:

Dimensions	90.0 x 90.0
Height	16.4 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

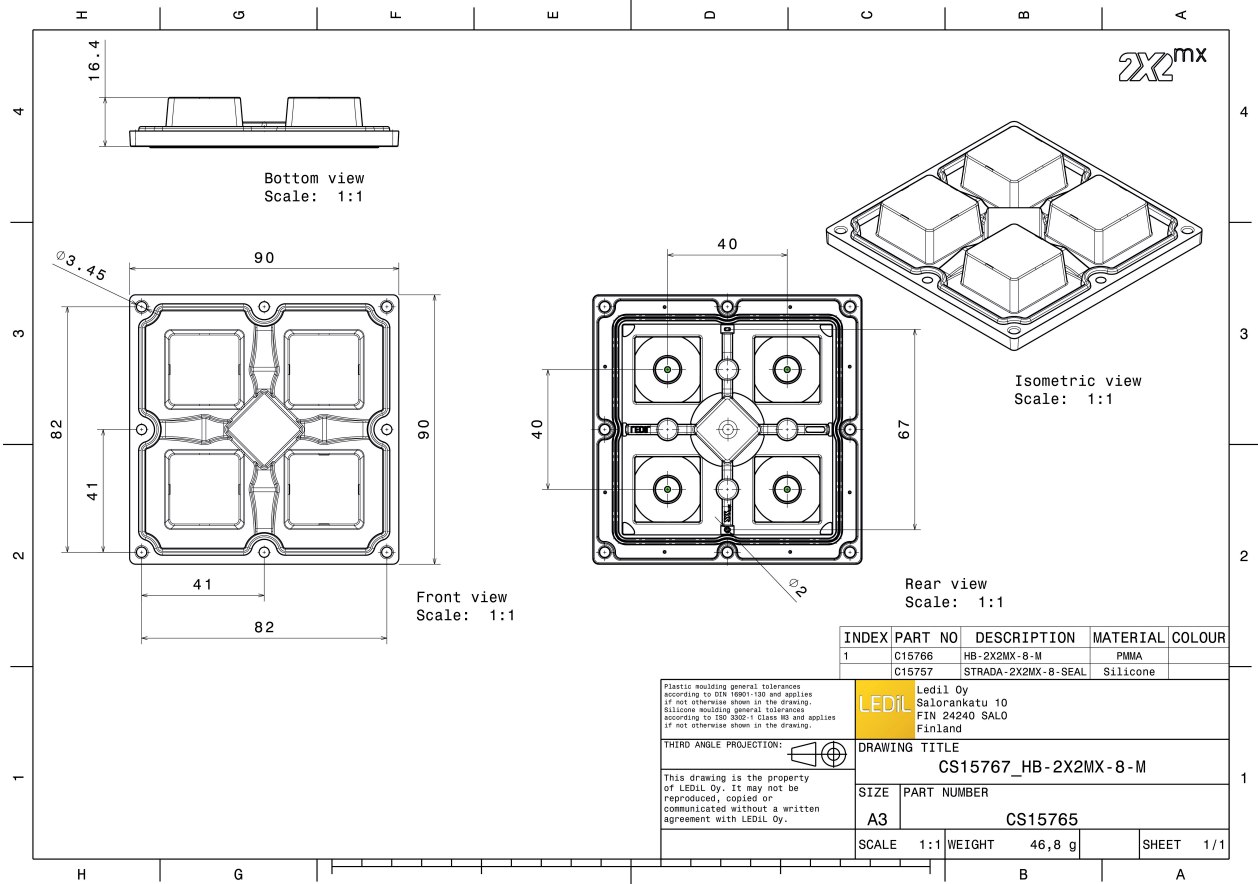
MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-2X2MX-8-M	Multi-lens	PMMA	clear		
STRADA-2X2MX-8-SEAL	Seal	Silicone	clear		



ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS15767_HB-2X2MX-8-M	Multi-lens	156	52	52	8.3
» Box size: 480 x 280 x 300 mm					

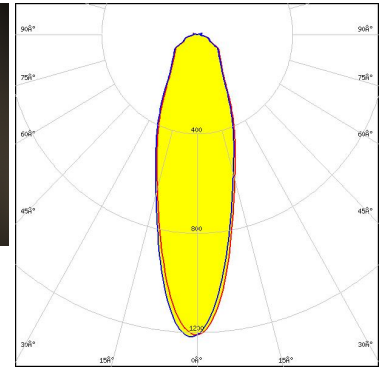
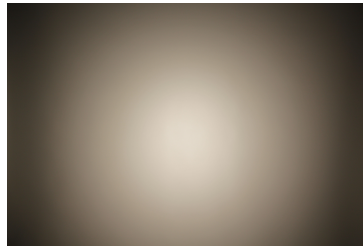


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



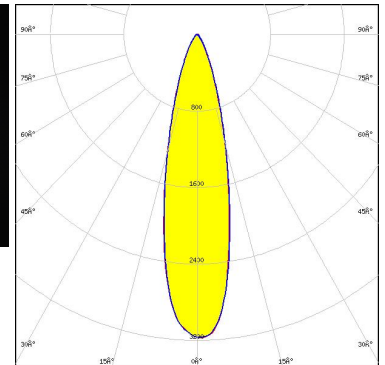
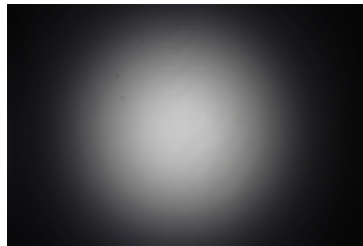
LED CXA/B 15xx
FWHM / FWTM 31.0° / 101.0°
Efficiency 91 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:
Bender Wirth: 441 Typ 2x2MX HV



Light distribution files



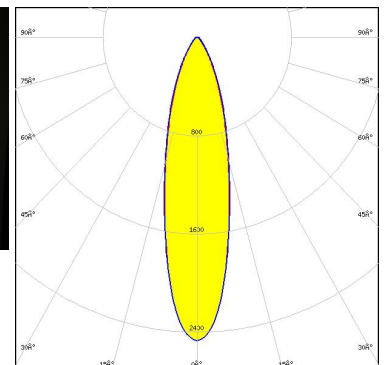
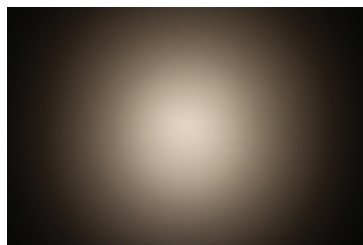
LED LUXEON M/MX
FWHM / FWTM 25.0° / 52.0°
Efficiency 94 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON XR-7070 (L224-xxx004MLU010)
FWHM / FWTM 26.0° / 61.0°
Efficiency 94 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

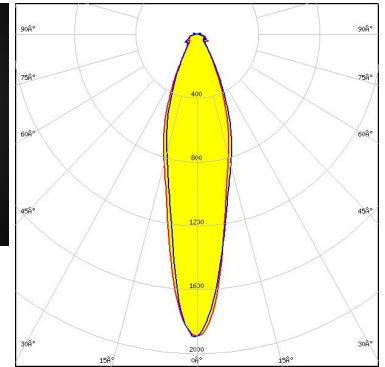
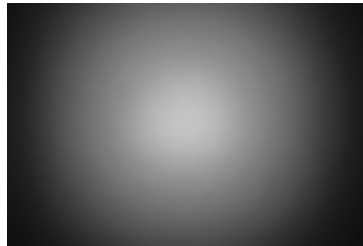


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

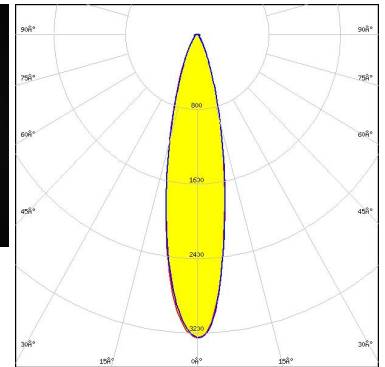
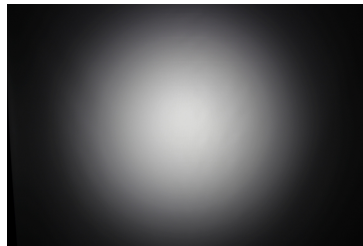
LED HiLOM SC16 (LH181B)
 FWHM / FWTM 25.0° / 64.0°
 Efficiency 93 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SCIOLUX

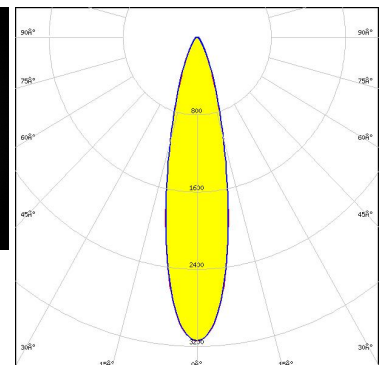
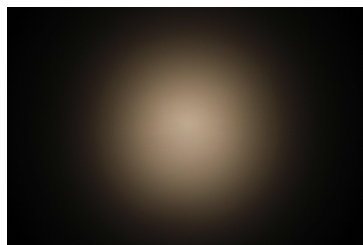
LED XLE-S22C4XD16 (XD16)
 FWHM / FWTM 23.0° / 50.0°
 Efficiency 93 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 4
 Light colour/type White
 Required components:



Light distribution files

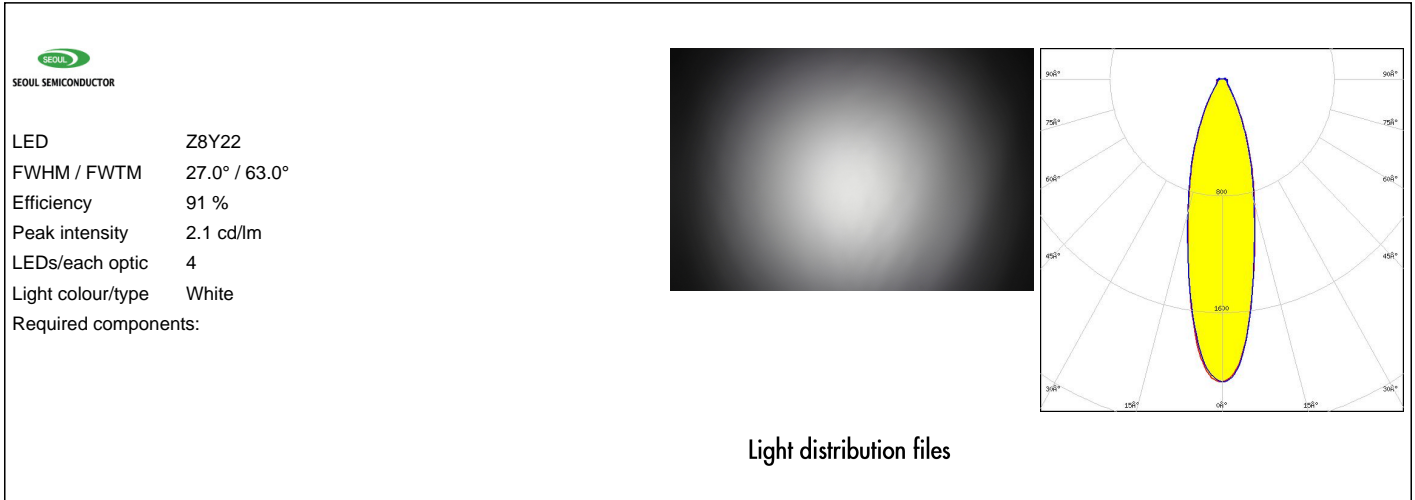
SEMI SEOUL SEMICONDUCTOR

LED WICOP 5050
 FWHM / FWTM 24.0° / 51.0°
 Efficiency 95 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

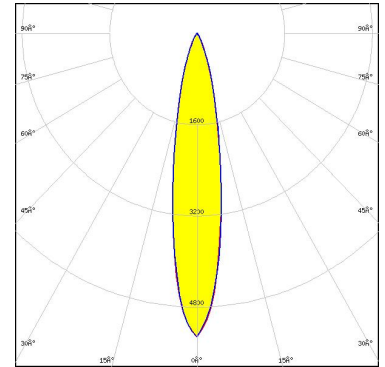
OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (SIMULATED):



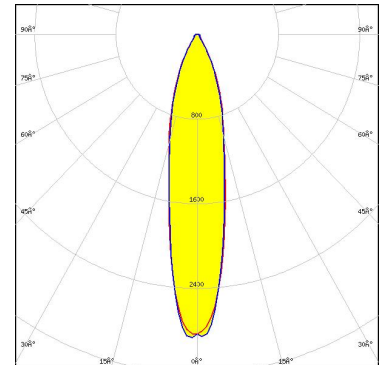
LED Bridgelux SMD 5050
 FWHM / FWTM 19.0° / 43.0°
 Efficiency 94 %
 Peak intensity 5.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

CITIZEN

LED CLU700/701/702/703
 FWHM / FWTM 22.0° / 58.0°
 Efficiency 92 %
 Peak intensity 2.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

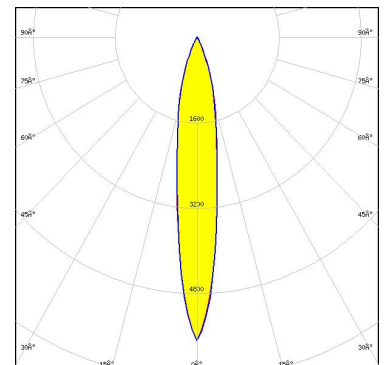


Bender Wirth: 434 Typ 2x2MX HV

Light distribution files



LED CMA1303
 FWHM / FWTM 16.0° / 44.0°
 Efficiency 96 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



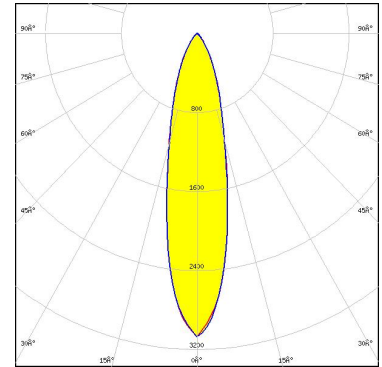
Bender Wirth: 448 Typ 2x2MX HV

Light distribution files

OPTICAL RESULTS (SIMULATED):



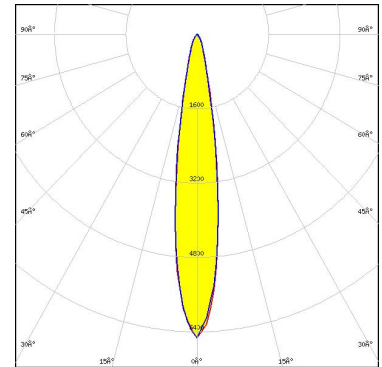
LED J Series 7070B K Class
 FWHM / FWTM 24.0° / 58.0°
 Efficiency 97 %
 Peak intensity 3.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



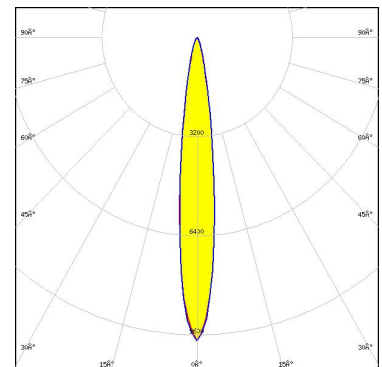
LED XHP35 HD
 FWHM / FWTM 17.0° / 34.0°
 Efficiency 94 %
 Peak intensity 6.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XHP35 HI
 FWHM / FWTM 14.0° / 30.0°
 Efficiency 94 %
 Peak intensity 9.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

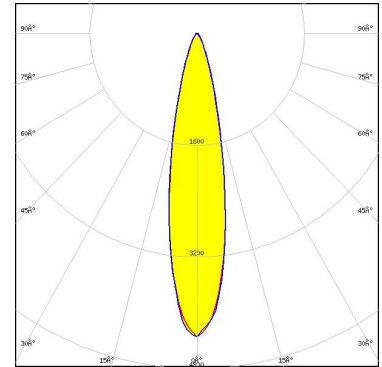


Light distribution files

OPTICAL RESULTS (SIMULATED):



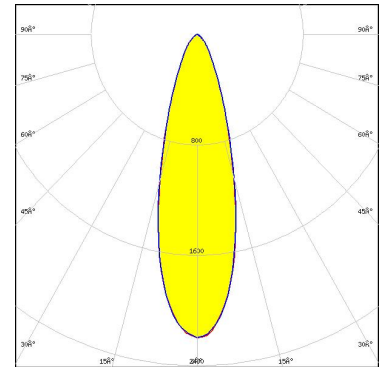
LED XHP50.2
FWHM / FWTM 22.0° / 44.0°
Efficiency 94 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XHP70.2
FWHM / FWTM 30.0° / 62.0°
Efficiency 91 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

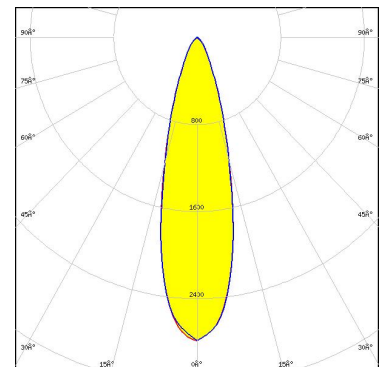


Protective plate, glass

Light distribution files

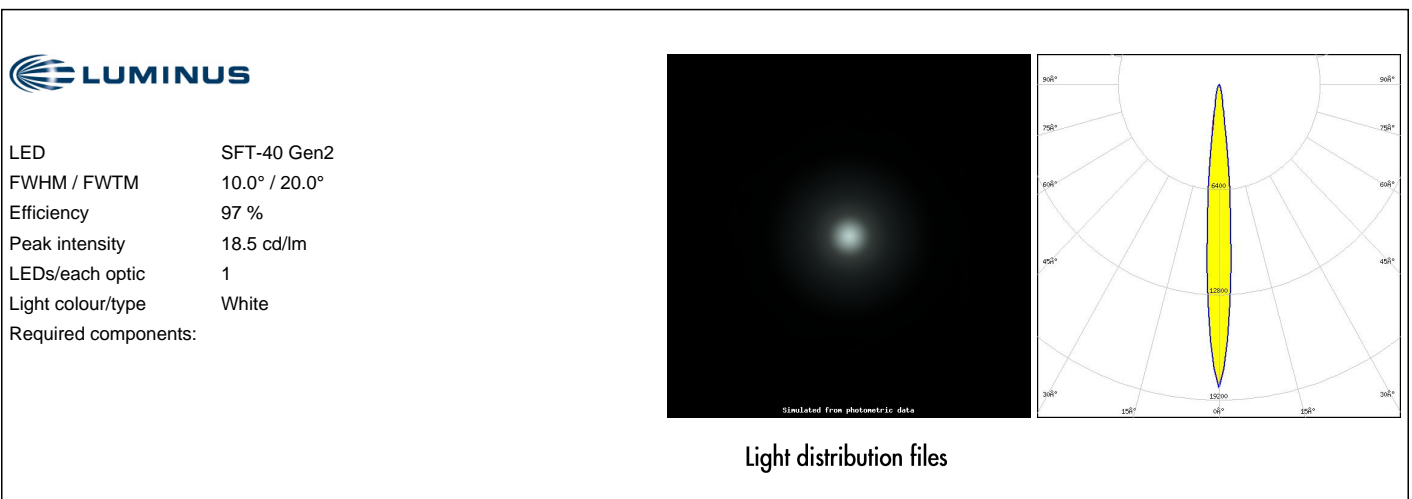
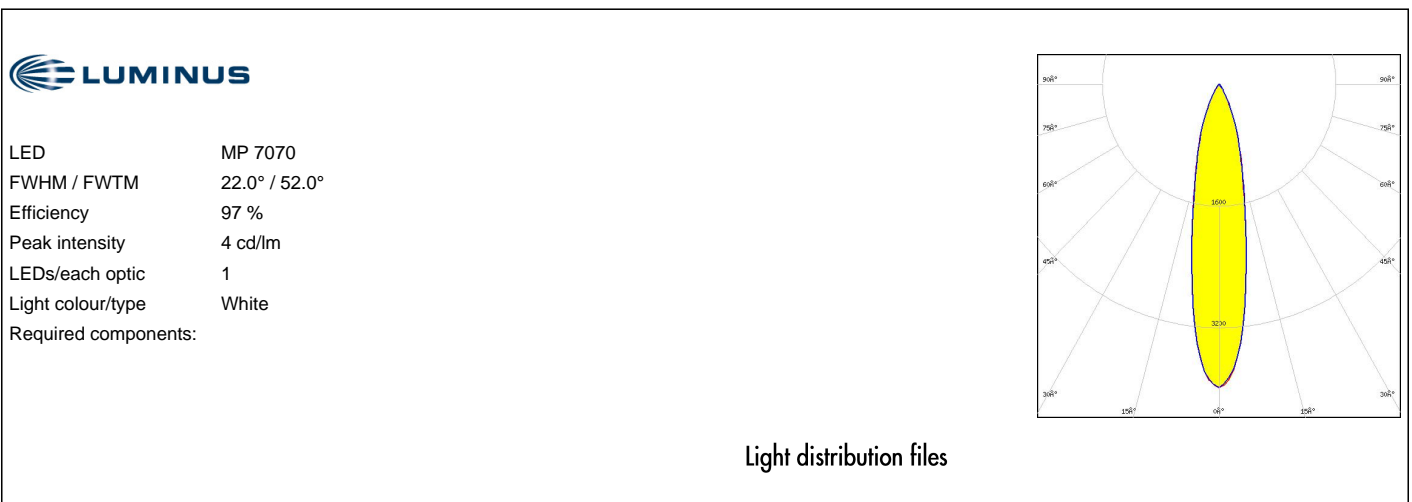
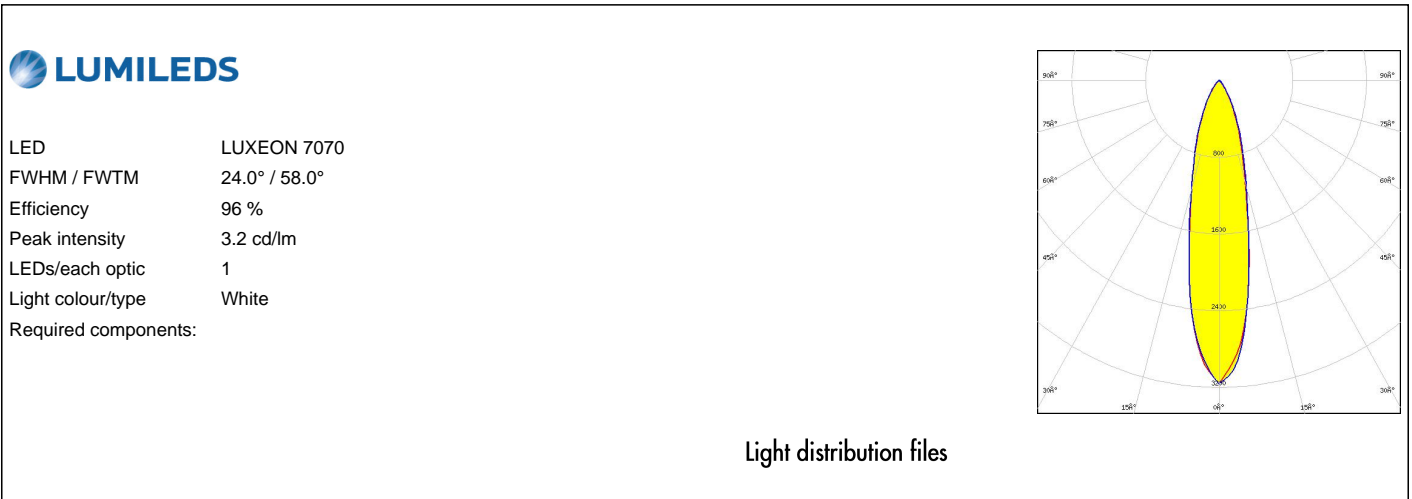


LED XHP70.3 HD
FWHM / FWTM 28.0° / 56.0°
Efficiency 96 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

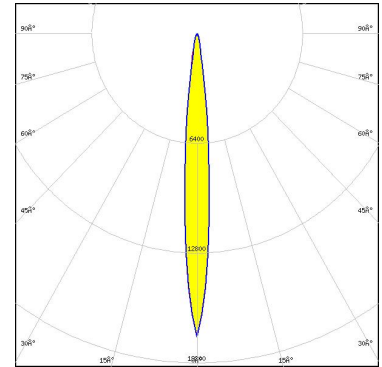
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):



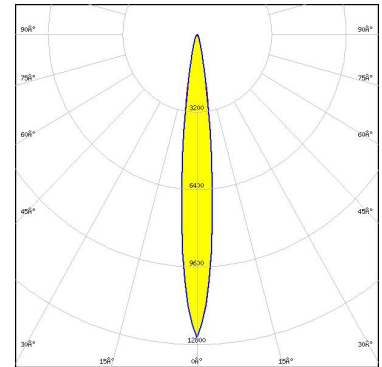
LED SFT-40-WCS
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 97 %
 Peak intensity 17.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



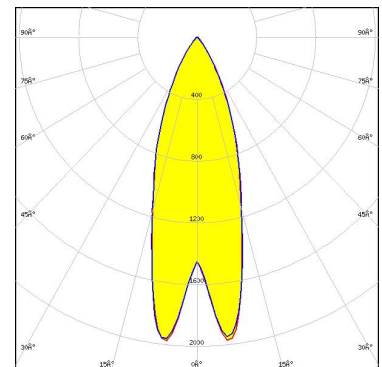
LED SFT-70X-WCS
 FWHM / FWTM 12.0° / 26.0°
 Efficiency 97 %
 Peak intensity 12.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED NF2x757G
 FWHM / FWTM 34.0° / 66.0 + 67.0°
 Efficiency 97 %
 Peak intensity 2 cd/lm
 LEDs/each optic 4
 Light colour/type White
 Required components:

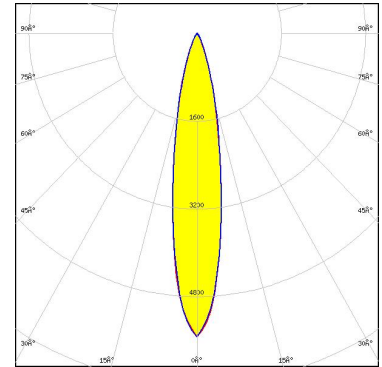


Light distribution files

OPTICAL RESULTS (SIMULATED):



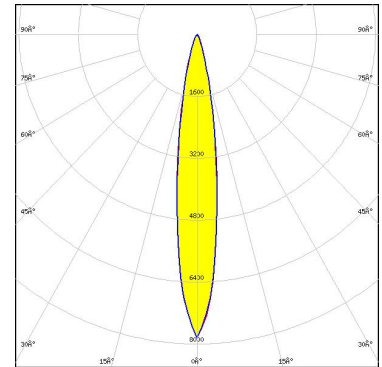
LED NFMW48xA
FWHM / FWTM 19.0° / 42.0°
Efficiency 94 %
Peak intensity 5.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



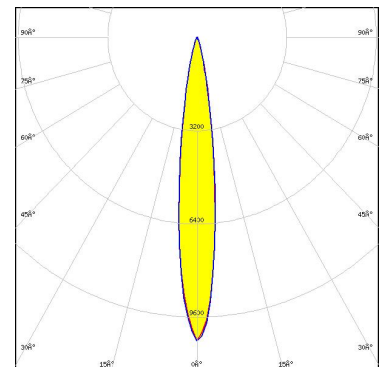
LED NV4WB35AM
FWHM / FWTM 16.0° / 34.0°
Efficiency 97 %
Peak intensity 7.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSxE21A
FWHM / FWTM 14.0° / 28.0°
Efficiency 94 %
Peak intensity 10.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

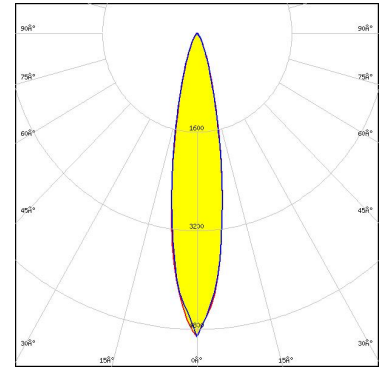


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

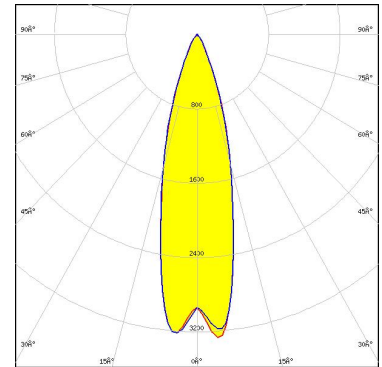
LED Duris S10
FWHM / FWTM 20.0° / 43.0°
Efficiency 94 %
Peak intensity 4.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

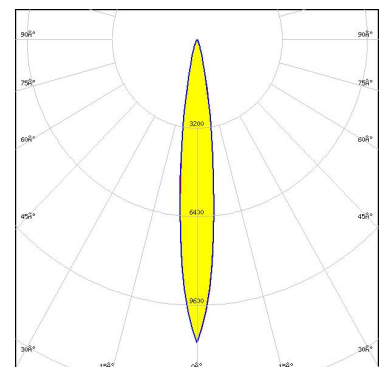
LED OSCONIQ C 2424
FWHM / FWTM 28.0° / 52.0°
Efficiency 97 %
Peak intensity 3.3 cd/lm
LEDs/each optic 4
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LH181B
FWHM / FWTM 14.0° / 28.0°
Efficiency 96 %
Peak intensity 11 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

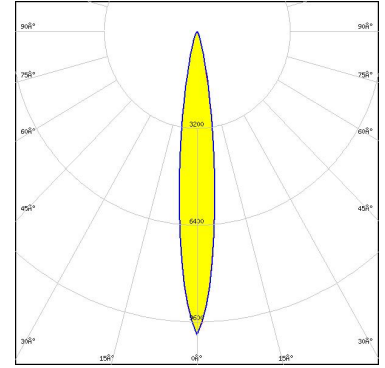


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED	LH231B
FWHM / FWTM	14.0° / 30.0°
Efficiency	96 %
Peak intensity	10 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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

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 7
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](http://www.ledil.com/where_to_buy)

Shipping locations

Poznan, Poland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)