

HB-2X2MXS-M

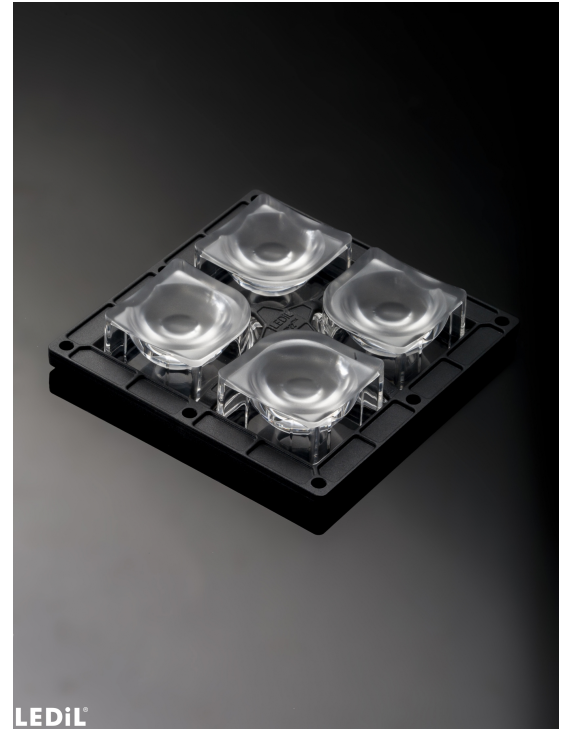
~30° wide beam

SPECIFICATION:

Dimensions	90.0 x 90.0 mm
Height	18 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

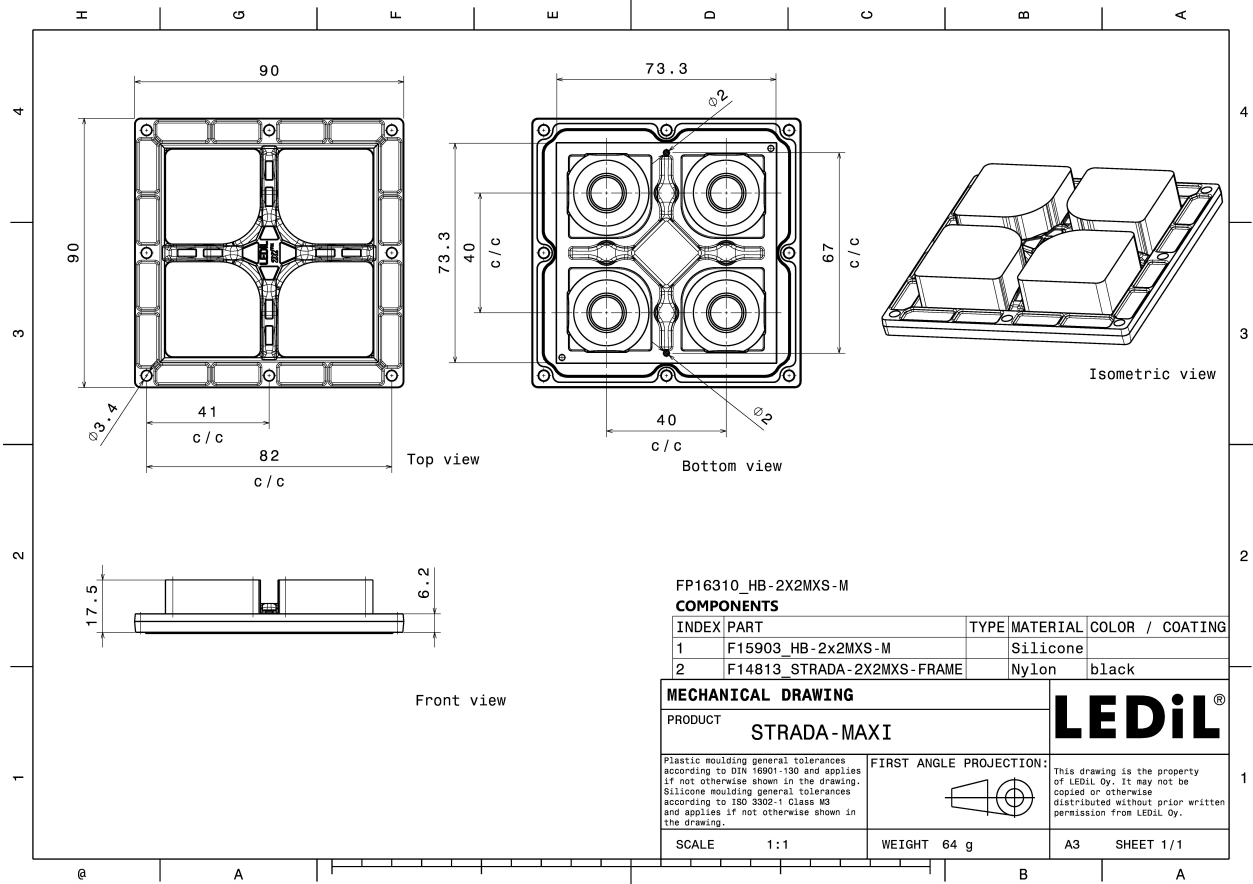
MATERIALS:

Component	Type	Material	Colour	Finish
HB-2X2MXS-M	Multi-lens	Silicone	clear	
STRADA-2X2MXS-FRAME	Holder	PA66	black	



ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16310_HB-2X2MXS-M	Multi-lens	156	24	12	10.5
» Box size: 398 x 298 x 265 mm					

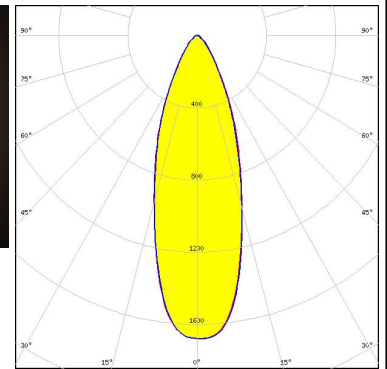
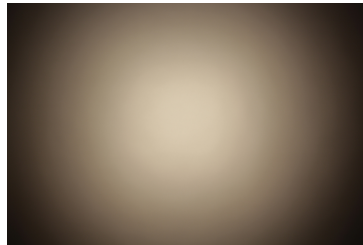


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

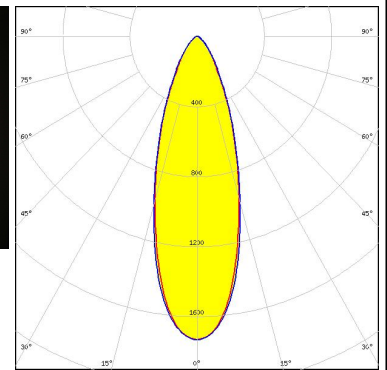
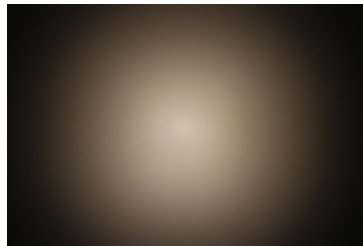
LUMILEDS

LED LUXEON M/MX
 FWHM / FWTM 34.0° / 72.0°
 Efficiency 91 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



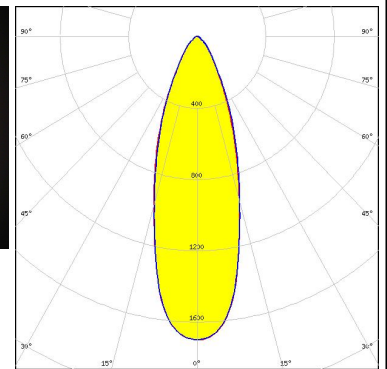
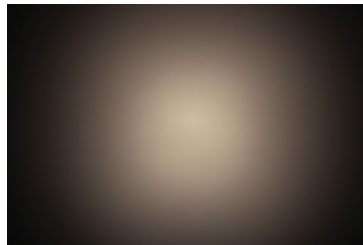
LUMILEDS

LED LUXEON XR-7070 (L224-xxx004MLU010)
 FWHM / FWTM 33.0° / 72.0°
 Efficiency 90 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



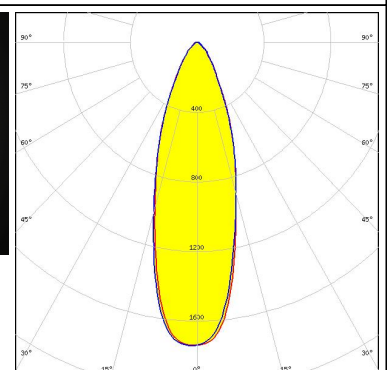
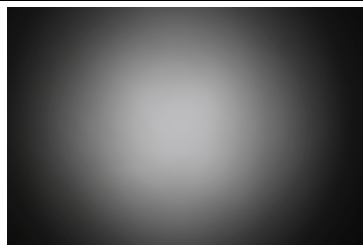
NICHIA

LED NV4x144A
 FWHM / FWTM 34.0° / 71.0°
 Efficiency 90 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

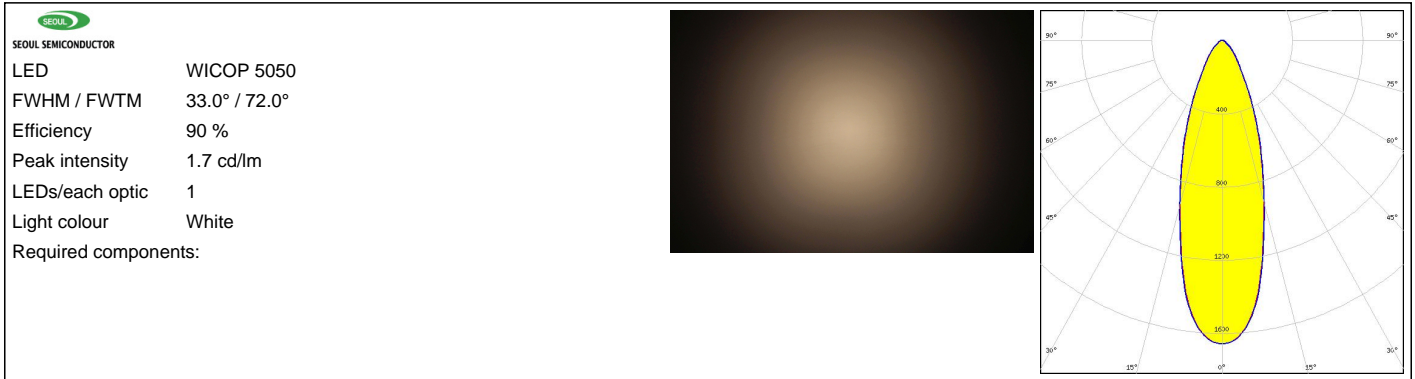


SAMSUNG

LED HiLOM SC16 (LH181B)
 FWHM / FWTM 32.0° / 72.0°
 Efficiency 89 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



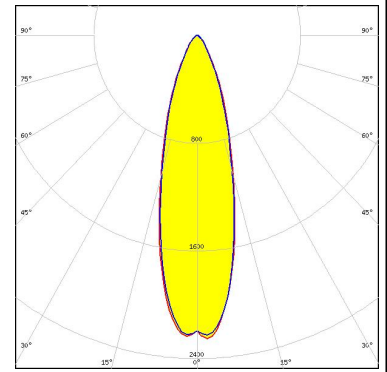
OPTICAL RESULTS (MEASURED):



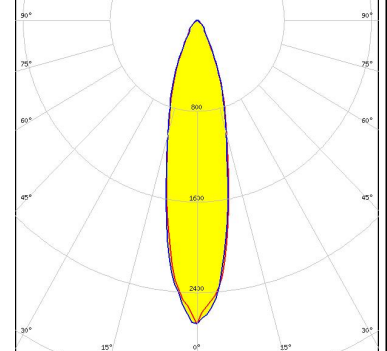
OPTICAL RESULTS (SIMULATED):

CITIZEN

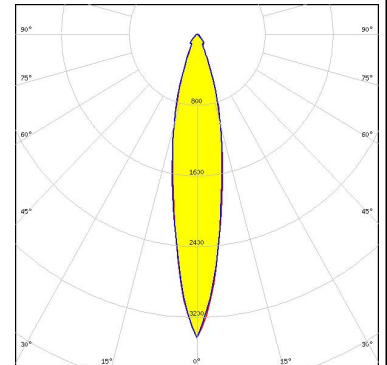
LED CLU700/701/702/703
 FWHM / FWTM 29.0° / 61.0°
 Efficiency 88 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 Bender Wirth: 434 Typ 2x2MX HV



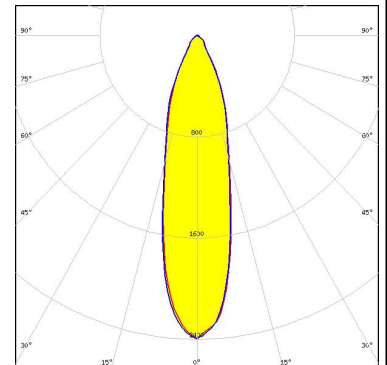
LED MHB-A/B
 FWHM / FWTM 24.0° / 57.0°
 Efficiency 90 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XHP35 HI
 FWHM / FWTM 20.0° / 46.0°
 Efficiency 86 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



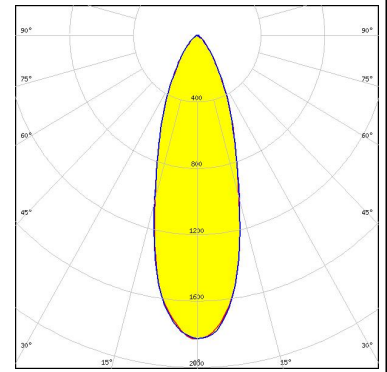
LED XHP50
 FWHM / FWTM 26.4° / 61.7°
 Efficiency 92 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



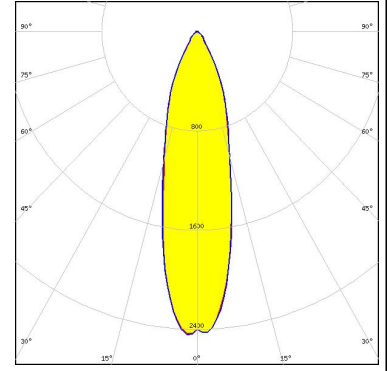
OPTICAL RESULTS (SIMULATED):



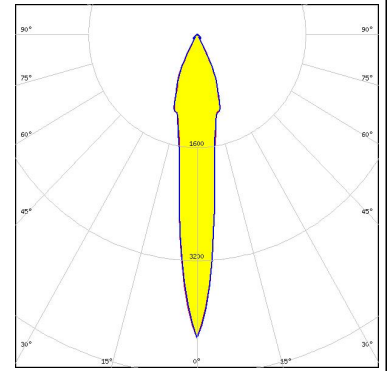
LED XHP70.3 HD
 FWHM / FWTM 32.0° / 72.0°
 Efficiency 93 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



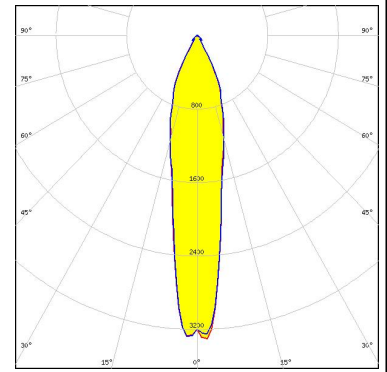
LED XHP70.3 HI
 FWHM / FWTM 27.0° / 62.0°
 Efficiency 93 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



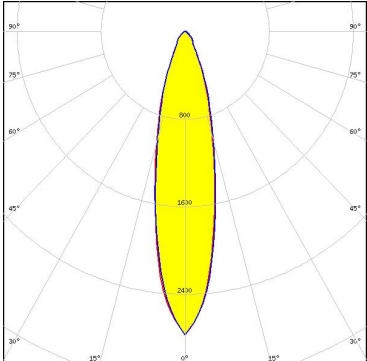
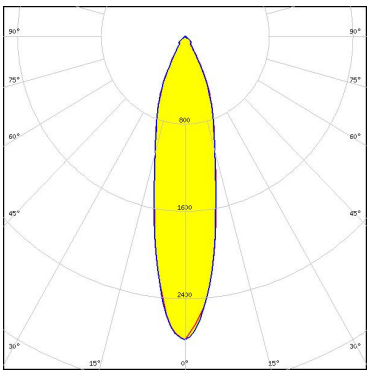
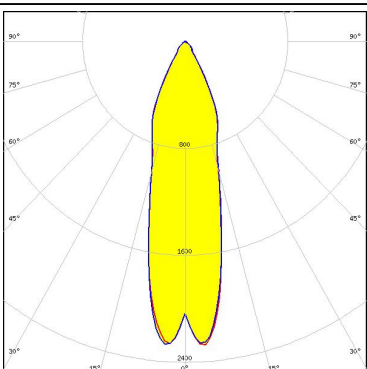
LED SFT-40-WCS
 FWHM / FWTM 14.0° / 54.0°
 Efficiency 95 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED SFT-70X-WCS
 FWHM / FWTM 20.0° / 56.0°
 Efficiency 95 %
 Peak intensity 3.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NFMW48xA FWHM / FWTM: 24.0° / 54.0° Efficiency: 90 % Peak intensity: 2.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: 24.0° / 60.0° Efficiency: 95 % Peak intensity: 2.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED: OSCONIQ C 2424 FWHM / FWTM: 28.0° / 64.0° Efficiency: 94 % Peak intensity: 2.4 cd/lm LEDs/each optic: 4 Light colour: White Required components:</p>	

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.

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