

## HB-2X2MXS-WW

~55° wide beam

### SPECIFICATION:

Dimensions	90.0 x 90.0 mm
Height	16.5 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

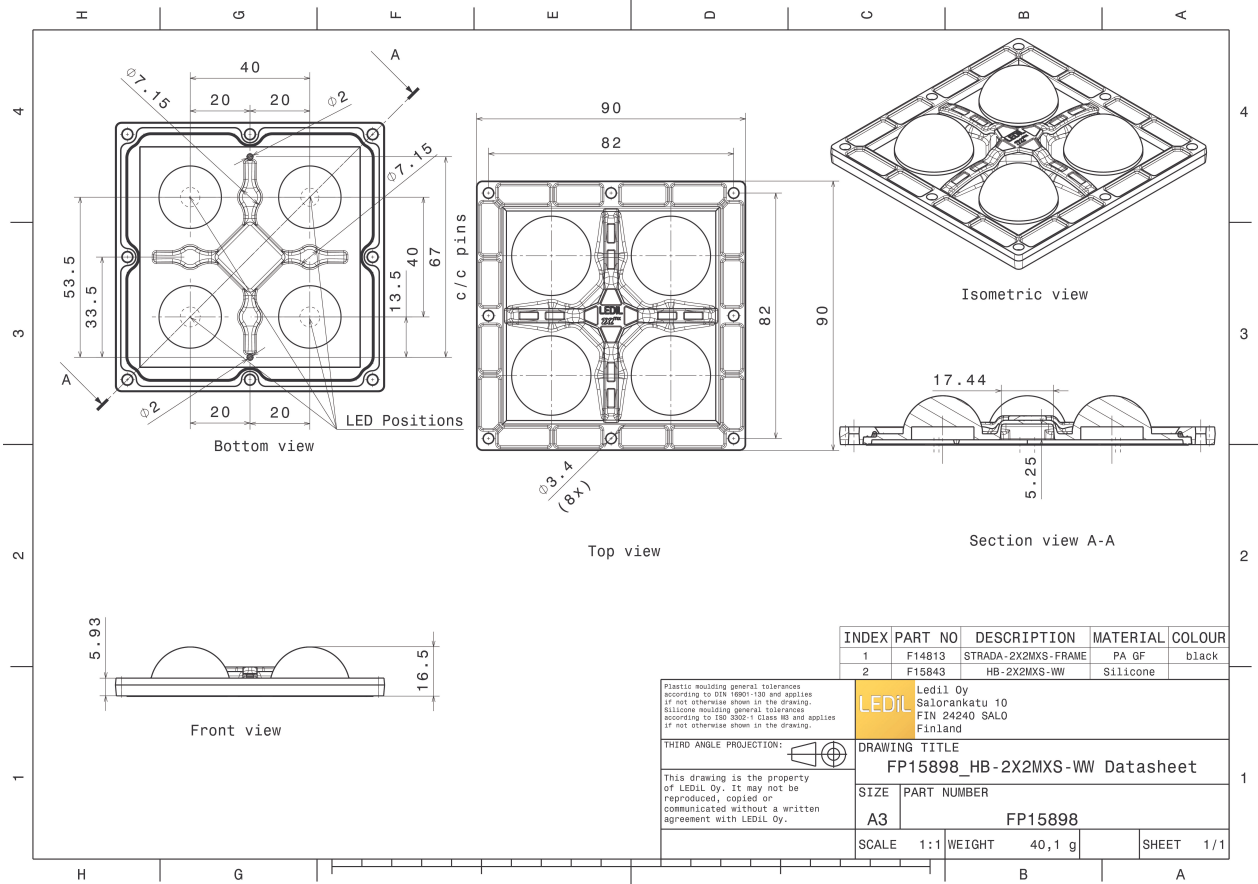
### MATERIALS:

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



### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
FP15898_HB-2X2MXS-WW » Box size: 398 x 298 x 265 mm	Multi-lens	168	24	12	8.6

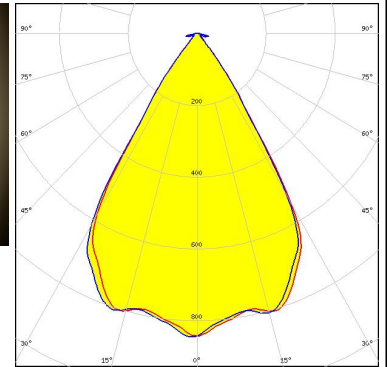


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

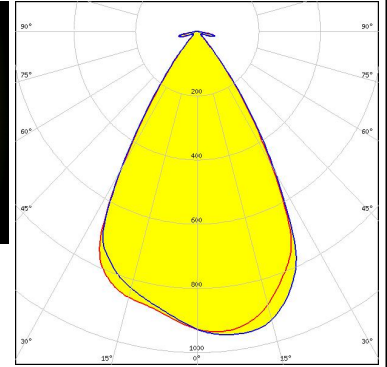
##### CREE LED

LED XHP70  
 FWHM / FWTM 64.0° / 80.0°  
 Efficiency 91 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



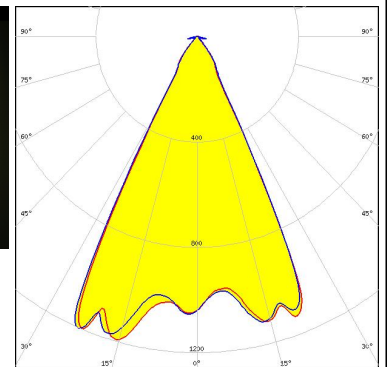
##### CREE LED

LED XHP70.2  
 FWHM / FWTM 61.0° / 80.0°  
 Efficiency 91 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



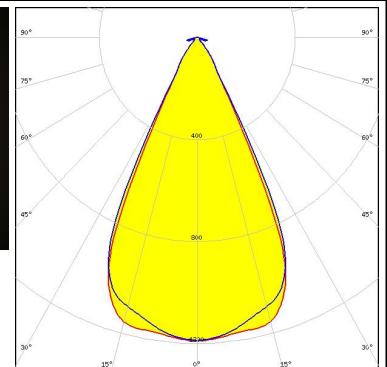
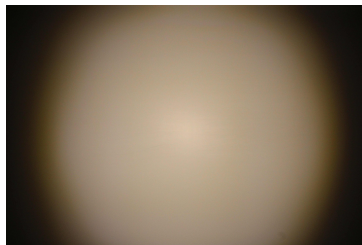
##### LUMILEDS

LED LUXEON M/MX  
 FWHM / FWTM 54.0° / 73.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### LUMILEDS

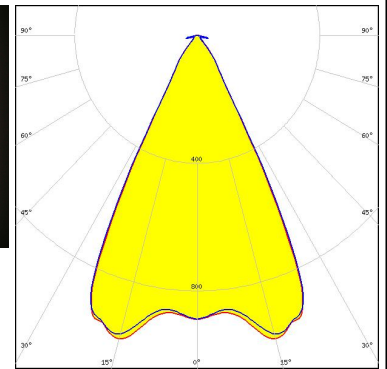
LED LUXEON XR-7070 (L224-xxxx004MLU010)  
 FWHM / FWTM 52.0° / 70.0°  
 Efficiency 91 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



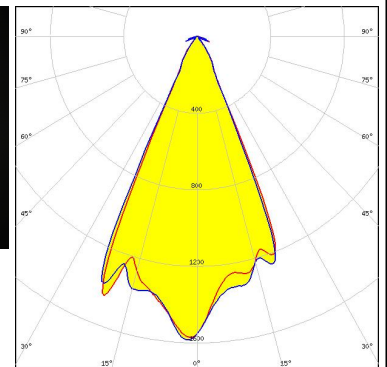
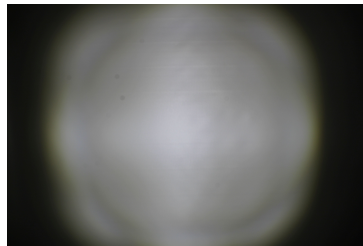
#### OPTICAL RESULTS (MEASURED):



**LED** NV4x144A  
**FWHM / FWTM** 54.0° / 73.0°  
**Efficiency** 90 %  
**Peak intensity** 1.1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**

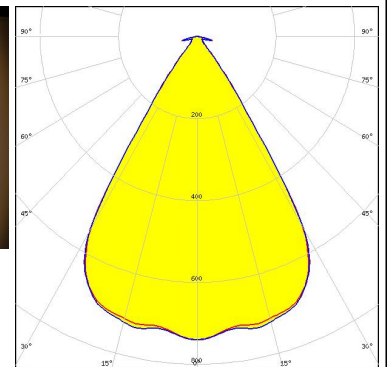


**LED** HiLOM SC16 (LH181B)  
**FWHM / FWTM** 48.0° / 62.0°  
**Efficiency** 93 %  
**Peak intensity** 1.6 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**


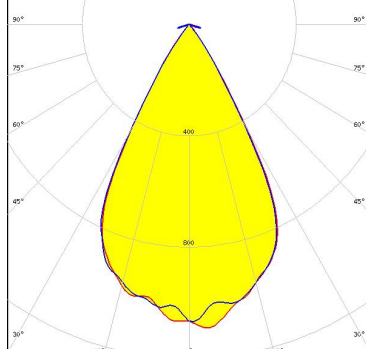
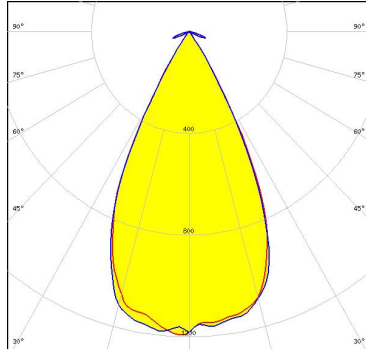

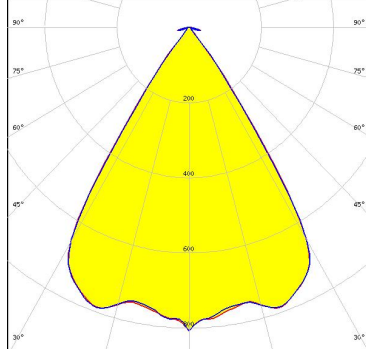

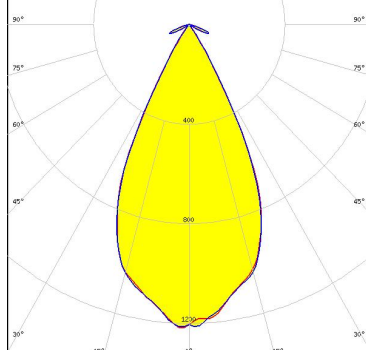


SEOUL SEMICONDUCTOR

**LED** WICOP 5050  
**FWHM / FWTM** 65.0° / 80.0°  
**Efficiency** 89 %  
**Peak intensity** 0.8 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



#### OPTICAL RESULTS (SIMULATED):

<p> <b>bridgelux</b></p> <p>LED: Bridgelux SMD 5050            FWHM / FWTM: 57.0° / 73.0°            Efficiency: 92 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CITIZEN</b></p> <p>LED: CLU700/701/702/703            FWHM / FWTM: 52.0° / 68.0°            Efficiency: 89 %            Peak intensity: 1.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:            Bender Wirth: 434 Typ 2x2MX HV</p>	
<p> <b>CREE LED</b></p> <p>LED: XHP70.3 HD            FWHM / FWTM: 66.0° / 78.0°            Efficiency: 91 %            Peak intensity: 0.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p> <b>LUMILEDS</b></p> <p>LED: LUXEON 7070            FWHM / FWTM: 50.0° / 66.0°            Efficiency: 86 %            Peak intensity: 1.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

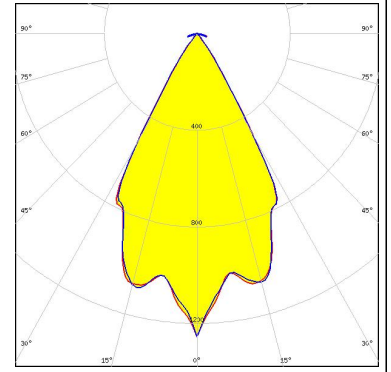
#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMINUS</b></p> <p>LED: SFT-40-WCS            FWHM / FWTM: 58.0° / 76.0°            Efficiency: 92 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMINUS</b></p> <p>LED: SFT-70X-WCS            FWHM / FWTM: 58.0° / 76.0°            Efficiency: 93 %            Peak intensity: 1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NFMW48xA            FWHM / FWTM: 48.0° / 66.0°            Efficiency: 92 %            Peak intensity: 1.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: 58.0° / 76.0°            Efficiency: 91 %            Peak intensity: 1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED	OSCONIQ C 2424
FWHM / FWTM	58.0° / 72.0°
Efficiency	92 %
Peak intensity	1.3 cd/lm
LEDs/each optic	4
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.

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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