

# PRODUCT DATASHEET CS15767\_HB-2X2MX-8-M

# HB-2X2MX-8-M

~30° wide beam. New revision.

### **TECHNICAL SPECIFICATIONS:**

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



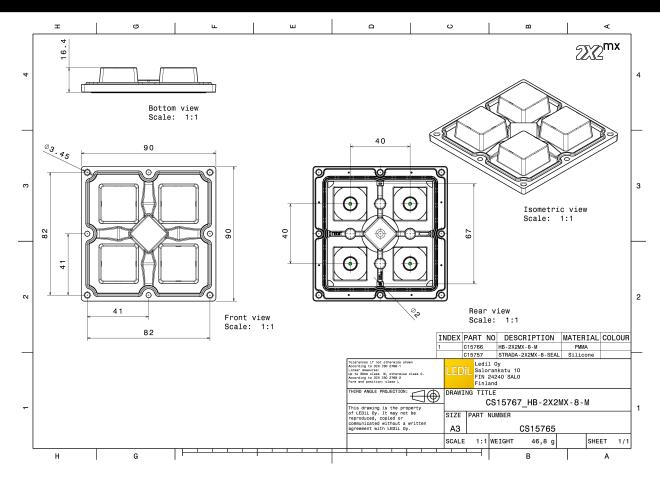
## MATERIAL SPECIFICATIONS:

Component	Туре	Material	Colour	Finish
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					





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



## **PHOTOMETRIC DATA (MEASURED):**

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		90* 90*
LED	CXA/B 15xx	
FWHM / FWTM	31.0° / 101.0°	73*
Efficiency	91 %	
Peak intensity	1.2 cd/lm	60 <sup>+</sup> / / <sup>400</sup> / <sup>60</sup>
LEDs/each optic	1	
Light colour	White	45*
Required compone		
	11 Typ 2x2MX HV	
		30° 30° 30° 30°
UMIL	EDS	90*
LED	LUXEON M/MX	
FWHM / FWTM	25.0° / 52.0°	73
Efficiency	94 %	60° 60'
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	1600
Light colour	White	gré de la companya de
Required compone	nts:	2450
		30* 34
		15° 0° 15°
ςληςι	JNG	90* 90*
	HiLOM SC16 (LH181B) 25.0° / 64.0°	
LED	HiLOM SC16 (LH181B)	
LED FWHM / FWTM Efficiency	HiLOM SC16 (LH181B) 25.0° / 64.0°	
LED FWHM / FWTM Efficiency Peak intensity	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White	9° 120 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White	9° 120 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	g 120 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	1200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts: LUX	9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup> 9 <sup>1</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts: LUX XLE-S22C4XD16 (XD16)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts: LUX	9 <sup>3</sup> 9 <sup>3</sup> 10 <sup>3</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/m 1 White nts: LUX XLE-S22C4XD16 (XD16) 23.0° / 50.0° 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts: LUX XLE-S22C4XD16 (XD16) 23.0° / 50.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	
FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White nts:	



### **PHOTOMETRIC DATA (MEASURED):**

SEOUL		50×
LED	Z8Y22	
FWHM / FWTM	27.0° / 63.0°	
Efficiency	91 %	
Peak intensity	2.1 cd/lm	
LEDs/each optic	4	
Light colour	White	gr / / 63
Required compone	nts:	30° 10° 0° 10° 5°



bridgelux. LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Bridgelux SMD 5050 19.0° / 43.0° 94 % 5.3 cd/lm 1 White	30. 30. 60. 60. 700 700 700 60. 60. 60. 60. 60. 60. 60. 6
CITTIZEN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Bender Wirth: 434 Ty	CLU700/701/702 22.0° / 58.0° 92 % 2.9 cd/lm 1 White p 2x2MX HV	97 75 60 60 60 60 60 60 60 60 60 60
CREE LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP35 HD 17.0° / 34.0° 94 % 6.6 cd/lm 1 White	y, y, g, g, g, g, g, g, g, g, g, g, g, g, g,
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP35 HI 14.0° / 30.0° 94 % 9.8 cd/lm 1 White	



		50°
LED	XHP50.2	
FWHM / FWTM	22.0° / 44.0°	73.
Efficiency	94 %	
Peak intensity	4.4 cd/lm	50° 50°
LEDs/each optic	1	
Light colour	White	97
Required components:		
		3220
		36*
		15%
		90* 50*
LED	XHP70.2	27
FWHM / FWTM	30.0° / 62.0°	
Efficiency	91 %	50 <sup>2</sup> 50 <sup>2</sup>
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	95× 65°
Required components:		1692
Protective plate		
Protective plate	, glass	
		30°
		15° 2030 15°
		10 <sup>4</sup> 2000 10 <sup>4</sup>
	VUD70.2	25 <sup>°</sup> 20 <sup>0</sup> 15 <sup>°</sup>
LED	XHP70.3	32. 30. 30. 30. 30. 30. 30. 30. 30
LED FWHM / FWTM	28.0° / 56.0°	25 235 15°
LED FWHM / FWTM Efficiency	28.0° / 56.0° 96 %	39 75 75
LED FWHM / FWTM Efficiency Peak intensity	28.0° / 56.0° 96 % 2.8 cd/lm	39 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 56.0° 96 % 2.8 cd/lm 1	99 75 75
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm	60 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	28.0° / 56.0° 96 % 2.8 cd/lm 1	60 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1	60 00 00 00 00 00 00 00 00 00 00 00 00 0
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1	a. 100 100 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1	a. 100 100 100 100 100 100 100 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	a. 100 100 00 00 00 00 00 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 40.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 30. 40.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White V LUXEON 7070 24.0° / 58.0° 96 % 3.2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	28.0° / 56.0° 96 % 2.8 cd/lm 1 White V S LUXEON 7070 24.0° / 58.0° 96 % 3.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: UED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1 White V S LUXEON 7070 24.0° / 58.0° 96 % 3.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: UED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1 White V S LUXEON 7070 24.0° / 58.0° 96 % 3.2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: UED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	28.0° / 56.0° 96 % 2.8 cd/lm 1 White V S LUXEON 7070 24.0° / 58.0° 96 % 3.2 cd/lm 1	



ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NFMW48xA 19.0° / 42.0° 94 % 5.5 cd/lm 1 White	90 90 60 90 90 90 90 90 90 90 90 90 9
<b>Ø</b> ΝΙCΗΙΛ		90° 90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 16.0° / 34.0° 97 % 7.8 cd/lm 1 White	30. 120 0. 120 30. 100 40. 100 40. 100 100 100 100 100 100 100 100
<b>Μ</b> ΝΙCΗΙΛ		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxE21A 14.0° / 28.0° 94 % 10.4 cd/lm 1 White	200 200 200 200 200 200 200 200
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Duris \$10 20.0° / 43.0° 94 % 4.9 cd/lm 1 White	20. 20. 22.0 22.0 22.0 22.0 20. 25.0 25.0



PHILIPS		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH181B 14.0° / 28.0° 96 % 11 cd/lm 1 White	34
SAMSUN LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LH231B 14.0° / 30.0° 96 % 10 cd/lm 1 White	



#### **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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