

# 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 🛈



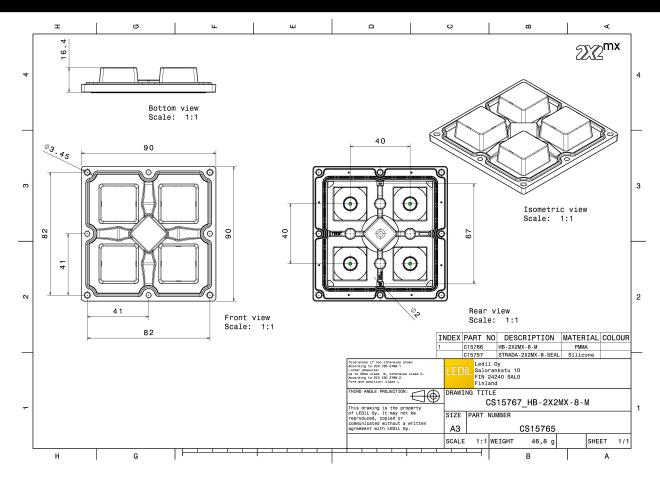
## MATERIAL SPECIFICATIONS:

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):**

CREE <del>\$</del>		90° 90°
LED	™ CXA/B 15xx	
FWHM / FWTM	31.0° / 101.0°	75'
Efficiency	91 %	
Peak intensity	1.2 cd/m	60 <sup>+</sup> 60 <sup>+</sup>
LEDs/each optic	1	
Light colour	White	45°
Required componer		
Bender Wirth: 44		
		30 30 15 <sup>9</sup> 0 <sup>9</sup> 15 <sup>9</sup>
UMIL	EDS	90° 90°
LED	LUXEON M/MX	75*
FWHM / FWTM	25.0° / 52.0°	
Efficiency	94 %	60° 60'
Peak intensity	3.2 cd/lm	
LEDs/each optic	1	- 1630 -
Light colour	White	95 <sup>4</sup> (95
Required componer	nts:	2450
		300 30
		(15°) 0° 15°
СЛЛЛСІ		
SVWS		90° 90'
LED	HiLOM SC16 (LH181B)	90 <sup>-</sup>
LED FWHM / FWTM	HiLOM SC16 (LH181B) 25.0° / 64.0°	90 <sup>10</sup> 72 <sup>1</sup> 700
LED FWHM / FWTM Efficiency	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 %	
LED FWHM / FWTM Efficiency Peak intensity	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/m	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HiLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/m 1	
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	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	
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	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HILOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HILOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts: LUX	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HILOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts: LUX XLE-S22C4XD16 (XD16)	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HILOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts: LUX XLE-S22C4XD16 (XD16) 23.0° / 50.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HILOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts: LUX XLE-S22C4XD16 (XD16) 23.0° / 50.0° 93 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer SCIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White hts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer SCIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer SCIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer SCIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White tts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer SCIO LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	HLOM SC16 (LH181B) 25.0° / 64.0° 93 % 1.9 cd/lm 1 White tts:	



### **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 - 12 - 0 - 13 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
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	200 200 200 200 200 200 200 200 200 200
CREE 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	
CREE C 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	20° 0° 13°



CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP50.2 22.0° / 44.0° 94 % 4.4 cd/lm 1 White	200 200 200 200 200 200 200 200 200 200
CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XHP70.2 30.0° / 62.0° 91 % 2.2 cd/lm 1 White	50 50 50 50 50 50 50 50 50 50 50 50 50 5
Protective plate	e, glass	34
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	20 20 20 20 20 20 20 20 20 20
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 16.0° / 34.0° 97 % 7.8 cd/lm 1 White	20- 0- 0- 0- 0- 0- 0- 20- 0-0- 20-



<b>ΜΝΙCΗΙΛ</b>		90* 90*
LED	NVSxE21A	71 A A 71
FWHM / FWTM	14.0° / 28.0°	
Efficiency	94 %	50 <sup>4</sup> 50 <sup>4</sup>
Peak intensity	10.4 cd/lm	$( \times / / ( ) \times )$
LEDs/each optic	1	
Light colour	White	65° 6130 61
Required components:		
		X   X
		30" 30" 30"
OSRAM Opto Semiconductors		90° 99°
LED	Duris S10	
FWHM / FWTM	20.0° / 43.0°	25-
Efficiency	94 %	60°
Peak intensity	4.9 cd/lm	
LEDs/each optic	1	
Light colour	White	5° 520
Required components:		
		30° 30° 30°
PHILIPS		90° 90°
PHILIPS	Fortimo FastFlex LED 2x2 70x70 DC G4	
		9° 9° 7° 9°
LED	Fortimo FastFlex LED 2x2 70x70 DC G4	77
LED FWHM / FWTM	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0°	
LED FWHM / FWTM Efficiency	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 %	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm	77
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1	737 - 757 664 - 2000 - 664
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1	57 64 77 67 77 67 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1	57 64 77 67 77 67 67
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1	57 64 77 67 77 67 67
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	55 66 75 75 75 75 75 75 75 75 75 75 75 75 75
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	55 66 75 75 75 75 75 75 75 75 75 75 75 75 75
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	39°
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	22 24 25 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	31 32   32 32   33 32   34 32   35 32   36 32   37 32   38 32   39 32
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency	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
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	22 24 25 20 20 20 20 20 20 20 20 20 20
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SANNSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	Fortimo FastFlex LED 2x2 70x70 DC G4 21.0° / 44.0° 94 % 4.5 cd/lm 1 White	



SAMSU	NG	90*
LED	LH231B	
FWHM / FWTM	14.0° / 30.0°	
Efficiency	96 %	60° (300)
Peak intensity	10 cd/lm	
LEDs/each optic	1	
Light colour	White	5° (600
Required component	S:	



#### **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.

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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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