

# PRODUCT DATASHEET FP15898\_HB-2X2MXS-WW

## HB-2X2MXS-WW

~55° wide beam

## **TECHNICAL SPECIFICATIONS:**

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



# LEDIL®

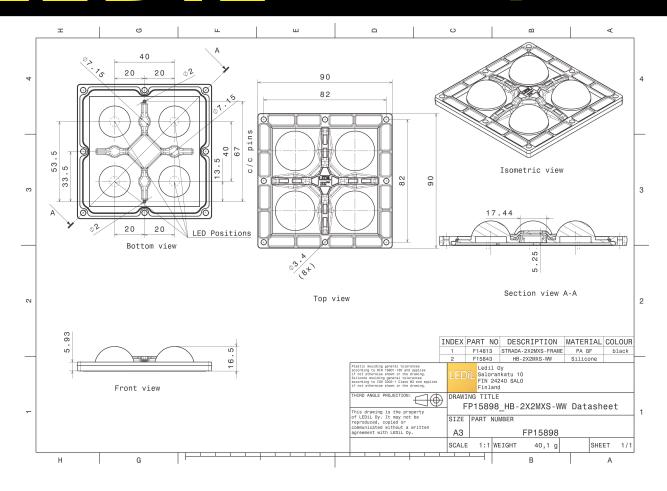
## **MATERIAL SPECIFICATIONS:**

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

#### **ORDERING INFORMATION:**

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

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



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

		25	90*
LED	XHP70		
FWHM / FWTM	64.0° / 80.0°		
Efficiency	91 %		
Peak intensity	0.9 cd/lm		<u>~</u> 7
LEDs/each optic	1		
Light colour	White		65*
Required compone	nts:		
		342 257 04	36.0
			90°
LED	XHP70.2		
FWHM / FWTM	61.0° / 80.0°	20	×
Efficiency	91 %		
Peak intensity	1 cd/lm		
LEDs/each optic	1		$\backslash$
Light colour	White		
Required compone	nts:		
			H
			// X
		30% 100	100 300
		15° 0°	
	EDS	20 <sup>5</sup> 0 <sup>4</sup>	90*
			90*
	EDS LUXEON M/MX 54.0° / 73.0°		90°
LED	LUXEON M/MX		90 <sup>4</sup>
LED FWHM / FWTM	LUXEON M/MX 54.0° / 73.0°		50°
LED FWHM / FWTM Efficiency	LUXEON M/MX 54.0° / 73.0° 94 %		55* 95* 88*
LED FWHM / FWTM Efficiency Peak intensity	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm		57 99 <sup>4</sup> 99 <sup>4</sup> 80 <sup>4</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White		67 67 89 89
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White		5° 50° 50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts:		902 902 902 902 902 902 902 902
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts:		90 <sup>2</sup> 90 <sup>2</sup> 90 <sup>2</sup> 90 <sup>2</sup> 90 <sup>2</sup> 90 <sup>2</sup>
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts:		22 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts:		100 100 100 100 100 100 100 100 100 100
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0°		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 %		60 60 60 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Model and the set of t	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 % 1.2 cd/lm		90 90 90 90 90 90 90 90 90 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Mediate Compone Equired compone Mediate Compone Efficiency Peak intensity LEDs/each optic	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 % 1.2 cd/lm 1 White		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Compone Equired compone Compone Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 % 1.2 cd/lm 1 White		50°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Compone Equired compone Compone Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 % 1.2 cd/lm 1 White		82 82 82 82 82 82 82 82 82 82
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone Component Required component Component Efficiency Peak intensity LEDs/each optic Light colour	LUXEON M/MX 54.0° / 73.0° 94 % 1.2 cd/lm 1 White nts: EDS LUXEON XR-7070 52.0° / 70.0° 91 % 1.2 cd/lm 1 White		20



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

<b>ØNICHI</b>		50° 50°
LED	NV4x144A	77
FWHM / FWTM	54.0° / 73.0°	
Efficiency	90 %	60 <sup>1</sup>
Peak intensity	1.1 cd/lm	
LEDs/each optic	1	
Light colour	White	¢*
Required compone		200 20 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup> 25 <sup>4</sup>
SΛMSL	JNG	90° 90°
LED	HiLOM SC16 (LH181B)	77
FWHM / FWTM	48.0° / 62.0°	
Efficiency	93 %	60 <sup>4</sup>
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	φ <sup>2</sup> δ <sup>2</sup>
Required compone	nts:	200 20 <sup>4</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup> 20 <sup>5</sup>



## PHOTOMETRIC DATA (SIMULATED):

bridgelux.		90° 90°
LED	Bridgelux SMD 5050	
FWHM / FWTM	57.0° / 73.0°	75'
Efficiency	92 %	
Peak intensity	1.1 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	gr
Required components:		
		316
		150 1200 150
CITIZEN		90° 90°
LED	CLU700/701/702	
FWHM / FWTM	52.0° / 68.0°	
Efficiency	89 %	e0* 400 60*
Peak intensity	1.2 cd/im	$\land$ $\land$ $\land$ $\land$ $\land$ $\land$
LEDs/each optic	1	
Light colour	White	gr
Required components:		
Bender Wirth: 434 Ty	p 2x2MX HV	
		30" 30"
		30° 15° 0° 15°
		90 <sup>2</sup> 15 <sup>2</sup> 0 <sup>3</sup> 15 <sup>2</sup>
	XHP70.3	30,         30,         30,           30,         30,         30,           30,         30,         30,
	XHP70.3 66.0° / 78.0°	
LED FWHM / FWTM Efficiency		
LED FWHM / FWTM Efficiency Peak intensity	66.0° / 78.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	66.0° / 78.0° 91 % 0.8 cd/lm 1	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	66.0° / 78.0° 91 % 0.8 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	66.0° / 78.0° 91 % 0.8 cd/lm 1	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	66.0° / 78.0° 91 % 0.8 cd/lm 1	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	66.0° / 78.0° 91 % 0.8 cd/lm 1	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	66.0° / 78.0° 91 % 0.8 cd/lm 1	79° 200
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White	77 60 60 60 60 60 60 60
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White S LUXEON 7070 50.0° / 66.0°	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm 1	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>WIM / COMPARENT</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm 1	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm 1	29 20 20 
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	66.0° / 78.0° 91 % 0.8 cd/lm 1 White V S LUXEON 7070 50.0° / 66.0° 86 % 1.3 cd/lm 1	20 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -



## PHOTOMETRIC DATA (SIMULATED):

<b>Μ</b> ΝΙCΗΙΛ		50°*
LED	NFMW48xA	
FWHM / FWTM	48.0° / 66.0°	78
Efficiency	92 %	60° 60°
Peak intensity	1.3 cd/lm	$f \propto //   \rangle > 1$
LEDs/each optic	1	
Light colour	White	43° 43°
Required components:		30 <sup>4</sup> 12 <sup>5</sup> 0 <sup>4</sup> 12 <sup>5</sup> 36 <sup>4</sup>
MICHIΛ		90*
LED	NV4WB35AM	25*
FWHM / FWTM	58.0° / 76.0°	
Efficiency	91 %	60°
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required components:		34



#### **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:

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