

# HB-IP-2X6-M

~25° medium beam

#### **TECHNICAL SPECIFICATIONS:**

Dimensions	173.0 x 71.4 mm
Height	11.4 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes 🛈

# PRODUCT DATASHEET CS14891\_HB-IP-2X6-M



### MATERIAL SPECIFICATIONS:

Component HB-IP-2X6-M 2X6-SEAL25 **Type** Multi-lens Seal

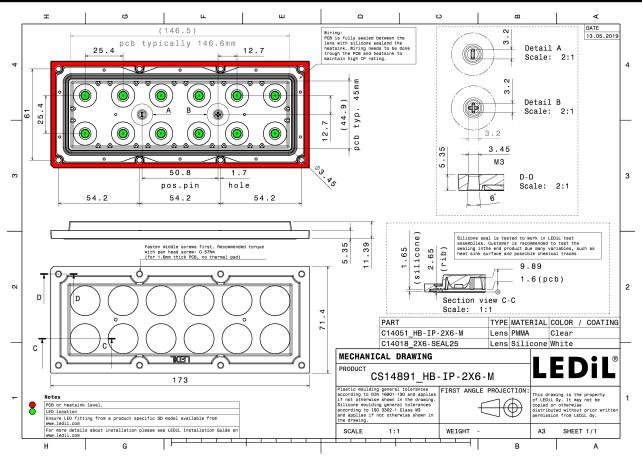
Material	Colour	Finish
PMMA	clear	
Silicone	white	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14891_HB-IP-2X6-M	Multi-lens	120	40	40	8.1
» Box size: 476 x 273 x 247 mm					



# PRODUCT DATASHEET CS14891\_HB-IP-2X6-M



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



LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	50° 50° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6° 6°
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XM-L 27.0° 94 % 3.1 cd/lm 1 White	
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XP-G2 30.0° 94 % 2.7 cd/lm 1 White	



CREE ¢ LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XP-G3 32.0° 94 % 2.4 cd/Im 1 White	3 <sup>1</sup> ,
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XP-L HD       39.0°         94 %       1.7 cd/lm         1       White	20 20 20 20 20 20 20 20 20 20
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XP-L2 39.0° 94 % 1.7 cd/lm 1 White	200 200 200 200 200 200 200 200 200 200
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XT-E 25.0° 92 % 3.1 cd/Im 1 White	



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XT-E HE 26.0° 94 % 3.2 cd/lm 1 White	31° C C C C C C C C C C C C C C C C C C C
WHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	LUXEON T 29.0° 94 % 2.7 cd/lm 1 White	27 0° 15° 91° 91° 91° 91° 91° 91° 91° 91
ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	LUXEON V 35.0° 93 % 2.1 cd/lm 1 White	30 90 90 90 90 90 90 90 90 90 9
White the second	LUXEON V2 28.0° 94 % 2.9 cd/lm 1 White	



C LUMIL	EDS	90° 90°
LED	LUXEON XR-TX (L2T0-xxyy012M)	
FWHM	28.0°	78*
Efficiency	94 %	
Peak intensity	3 cd/lm	
LEDs/each optic		
Light colour	White	er
Required compor	nents:	
		2490
		300 310
		10° 28% 25°
		90*
LED	SST-10-B130	75
FWHM	27.0°	
Efficiency	95 %	60 <sup>1</sup> 60 <sup>1</sup>
Peak intensity	3 cd/lm	
LEDs/each optic		
Light colour	Deep Red	Ø
Required compor	ients:	
		30° 15° 30° 35°
MST Your solution	ons	90 <sup>4</sup> 99 <sup>5</sup>
LED		
	Rect ED 1/6x/5mm 2000lm 7x0 2x6 IP Opt C2	
	RecLED 146x45mm 2900lm 7x0 2x6 IP Opt G2	75
FWHM	28.0°	77
FWHM Efficiency	28.0° 95 %	911 000 331 (32
FWHM Efficiency Peak intensity	28.0° 95 % 2.8 cd/lm	93- 93- 95- 90- 90- 90- 90- 90- 90- 90- 90- 90- 90
FWHM Efficiency Peak intensity LEDs/each optic	28.0° 95 % 2.8 cd/lm 1	gr. 600 92 93 93 95 95 95 95 95 95
FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 95 % 2.8 cd/lm 1 White	91
FWHM Efficiency Peak intensity LEDs/each optic	28.0° 95 % 2.8 cd/lm 1 White	27 000 91 000 92 000 92 000 92 000
FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 95 % 2.8 cd/lm 1 White	27 92 92 95 95 95 95 95 95 95 95 95 95 95 95 95
FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 95 % 2.8 cd/lm 1 White	200 200 200 200 200 200 200 200 200 200
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents:	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents:	200 200 200 200 200 200 200 200
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0°	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 %	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm 1	91- 60 60
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm 1 White	
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm 1 White	55 400 754 91 <sup>4</sup> 000 92
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm 1 White	91- 60 60
FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	28.0° 95 % 2.8 cd/lm 1 White nents: NVSW219D 38.0° 94 % 2 cd/lm 1 White	91- 60 60



Mauria		7
ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	NVSW219F 33.0° 94 % 2.4 cd/lm 1 White	5°, 500
<b>NICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	NVSW319B 34.0° 94 % 2.3 cd/lm 1 White	94 95 95 95 95 95 95 95 95 95 95 95 95 95
<b>NICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	NVSW3x9A 34.0° 94 % 2.1 cd/lm 1 White	34
ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	



XICHIA LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	NVSxE21A 24.0° 92 % 4.1 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
<b>NICHIA</b> LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	NVSxx19B/NVSxx19C 31.0° 93 % 2.5 cd/lm 1 White	30, 00, 12, 34, 34, 34, 34, 34, 34, 34, 34, 34, 34
Osram Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	54 54 54 54 54 54 54 54 54 54
OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	



PHILIP	S	30*
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	Fortimo FastFlex LED 2x6 DPX G4 32.0° 94 % 2.4 cd/lm 1 White	21 <sup>1</sup> 00 0 0
SAMSU LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	HiLOM RH12 (LH351C) 33.0° 94 % 2.3 cd/lm 1 White	21 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
SAMSU LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	HiLOM RM12 ZP (LH502C) 38.0° 96 % 1.7 cd/lm 1 White	94 9 75 00 7 64 00 0 70 00 0 70 00 0 100 0 100 0 100 0 100 0
SCIO LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	XLE-S22C4XTEHE (XT-E HE) 26.0° 94 % 3.2 cd/lm 1 White	25 <sup>°</sup> 4 <sup>°</sup> 15 <sup>°</sup> 54 <sup>°</sup> 75 <sup>°</sup> 65 <sup>°</sup> 6 <sup>°</sup> 500 <sup>°</sup> 5



SCIO LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XLE-S26XHP35 (XHP35 HD) 42.0° 94 % 1.6 cd/lm 1 White	91 <sup>*</sup> 92 <sup>*</sup> 60 <sup>*</sup> 60 <sup>*</sup> 60 <sup>*</sup> 1200 1200 1200 1200 1200 1200 1200 120
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	91 <sup>4</sup> 91 <sup>5</sup> 91 <sup>4</sup> 91 <sup>5</sup> 91 <sup>6</sup> 60 <sup>5</sup> 60 <sup>6</sup> 1520 15
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	90° p° 72° 72° 60° 60° 60° 60° 1000 60° 2100 60°
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	White	94 97 97 90 90 90 90 90 90 90 90 90 90 90 90 90



SEOUL SEMICONDUCTOR LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	30. 30. 21. 21. 21. 21. 21. 21. 21. 21
stout semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	34. 36. 37. 38. 39. 39. 500 60. 60. 60. 60. 60. 60. 60. 6
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	

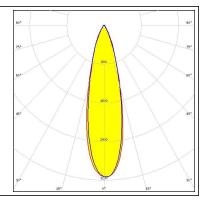


## **TRIDONIC**

LED FWHM Efficiency Peak intensity LEDs/each optic 1 Light colour

RLE 2x6 3000lm HP EXC2 OTD 26.0° 94 % 3.1 cd/lm White Required components:







bridgelux. LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Bridgelux SMD 5050 37.0° 94 % 1.9 cd/lm 1 White hts:	RA.         RA. <thra.< th=""> <thra.< th=""> <thra.< th=""></thra.<></thra.<></thra.<>
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-E 28.0° 94 % 2.8 cd/lm 1 White	50 50 50 50 50 50 50 50 50 50 50 50 50 5
CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G2 HE 31.0° 95 % 2.8 cd/lm 1 White offs:	
CUMILE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	LUXEON 5050 Round LES 37.0° 93 % 2 cd/lm 1 White	30°         30°         30°           60°         30°         60°           30°         30°         60°



### 

LED	LUXEON 5050 Square LES
FWHM	34.0°
Efficiency	94 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White
Required components	5:

<b>Μ</b> ΝΙCΗΙΛ		90 <sup>4</sup> 90 <sup>6</sup>
LED	NV4WB35AM	
FWHM	34.0°	23.
Efficiency	95 %	60° 60°
Peak intensity	2.2 cd/lm	
LEDs/each optic	1	
Light colour	White	g., 63,
Required component	nts:	250
OSRAM Opto Semiconductors		90* 90*
LED	OSCONIQ P 3030	
FWHM	20.0°	75 75
Efficiency	96 %	
Peak intensity	4.8 cd/lm	
LEDs/each optic	1	$\times$ / / $\wedge$ $\times$
Light colour	White	a <sup>+</sup> a <sup>+</sup>
Required componer	nts:	30° 12° 0° 12° 30°
OSRAM Opto Semiconductors		90 <sup>4</sup> 90 <sup>4</sup>
LED	OSCONIQ P 3737 (3W version)	75"
FWHM	26.0°	
Efficiency	94 %	60 <sup>4</sup> 60 <sup>4</sup>
Peak intensity	3.7 cd/lm	
LEDs/each optic	1	
Light colour	White	5° - 2400 - 5°
Required component	nts:	34 <sup>2</sup> 22.92



OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	OSCONIQ P 3737 Flat 27.0° 96 % 3.1 cd/lm 1 White its:	34. 250 200 200 200 200 200 200 200
OSRAM		15° 0° 15°
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	OSLON Square CSSRM2/CSSRM3 27.0° 94 % 3 cd/lm 1 White	5° 50 50 50 50 50 50 50 50 50 50 50 50 50
DIULIDO		
PHILIPS LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	Fortimo FastFlex LED 2x6 DP G4 26.0° 94 % 4 cd/lm 1 White Its:	22. 0, 12, 2, 2. 0, 20 2. 0, 0, 100 100 100 100 100 100 100 1
SAMSU LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componer	LH181B 27.0° 94 % 3.4 cd/lm 1 White	200 200 200 200 200 200 200 200



0.0.0.0.0.0		
SAMSU	NG	90° 90°
LED	LH231B	
FWHM	28.0°	78. 73.
Efficiency	95 %	60° 60°
Peak intensity	3 cd/lm	$f \times / H \wedge X \cap$
LEDs/each optic	1	1600
Light colour	White	
Required componen	ts:	
		2000
		30* 32* 32* 30*
SAMSU	NG	20 20 20 20 20 20 20 20 20 20 20 20 20 2
		2V 30 <sup>4</sup>
LED	LH351C	75"
FWHM	39.5°	400
Efficiency	94 % 1.7 cd/lm	60° 60°
Peak intensity		
LEDs/each optic	1	are
Light colour Required componen	White	
Required componen	15.	
		1600
		30° 30° 30°
SAMSU	NG	90°
		95°
LED	LH351D	97
LED FWHM	LH351D 46.0°	27
LED FWHM Efficiency	LH351D 46.0° 94 %	60
LED FWHM Efficiency Peak intensity	LH351D 46.0° 94 % 1.3 cd/lm	90 <sup>4</sup> 90 <sup>4</sup> 90 90 90 90 90 90 90 90 90 90 90 90 90
LED FWHM Efficiency Peak intensity LEDs/each optic	LH351D 46.0° 94 % 1.3 cd/lm 1	67 90 62 69 95 95 95 95 95
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White	97 00 07 97 97 00 00 07
LED FWHM Efficiency Peak intensity LEDs/each optic	LH351D 46.0° 94 % 1.3 cd/lm 1 White	97 00 97 97 00 67
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White	92 <sup>5</sup> 97 97 97 90 60 60 67 60 60 67 67 60 60 67
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White	2 <sup>10</sup> 2 <sup></sup>
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts:	27 27 27 27 27 27 27 20 20 20 20 20 20 20 20 20 20
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts:	By         By         By
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts:	93*         93           93         93           93         93           93         93           93         93           93         93
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts:	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUT LED FWHM	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0°	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen <b>SAMSUT</b> LED FWHM Efficiency	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 %	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUI LED FWHM Efficiency Peak intensity	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 % 1.9 cd/lm	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUT LED FWHM Efficiency Peak intensity LEDs/each optic	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 % 1.9 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUI LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 % 1.9 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUI LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 % 1.9 cd/lm 1 White	
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required componen SAMSUS LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	LH351D 46.0° 94 % 1.3 cd/lm 1 White ts: <b>VG</b> LH508B 36.0° 94 % 1.9 cd/lm 1 White	



SEOUL SEOUL SEMICONDUCTOR		50° 50°
LED	SEOUL DC 5050 6V	77
FWHM	39.0°	
Efficiency	94 %	and the second se
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	₫ <sup>*</sup> 6 <sup>*</sup>
Required component	nts:	30 <sup>4</sup> 15 <sup>4</sup> 15 <sup>4</sup> 30 <sup>4</sup>
SEOUL SEMICONDUCTOR		59* 59*
	Z8Y22T	
SEOUL SEMICONDUCTOR	Z8Y22T 28.0°	27
seoul semiconductor		
seour semiconductor LED FWHM Efficiency Peak intensity	28.0°	37 000
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic	28.0° 94 %	37 57
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 94 % 3.2 cd/lm 1 White	
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic	28.0° 94 % 3.2 cd/lm 1 White	
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 94 % 3.2 cd/lm 1 White	75 66 77 77 77 77 77 77 77 77 77 77
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 94 % 3.2 cd/lm 1 White	37 64 50 7 50 7 67
seoul semiconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour	28.0° 94 % 3.2 cd/lm 1 White	75 66 77 77 77 77 77 77 77 77 77 77



#### **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.

#### 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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Shipping locations Salo, Finland Hong Kong, China

#### Distribution Partners www.ledil.com/ where\_to\_buy

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