

HB-2X2-RW

~50° wide beam

TECHNICAL SPECIFICATIONS:

Dimensions	50.0 x 50.0 mm
Height	8.5 mm
Fastening	glue, pin, screw
ROHS compliant	yes 🛈



MATERIAL SPECIFICATIONS:

Component HB-2X2-RW **Type** Multi-lens

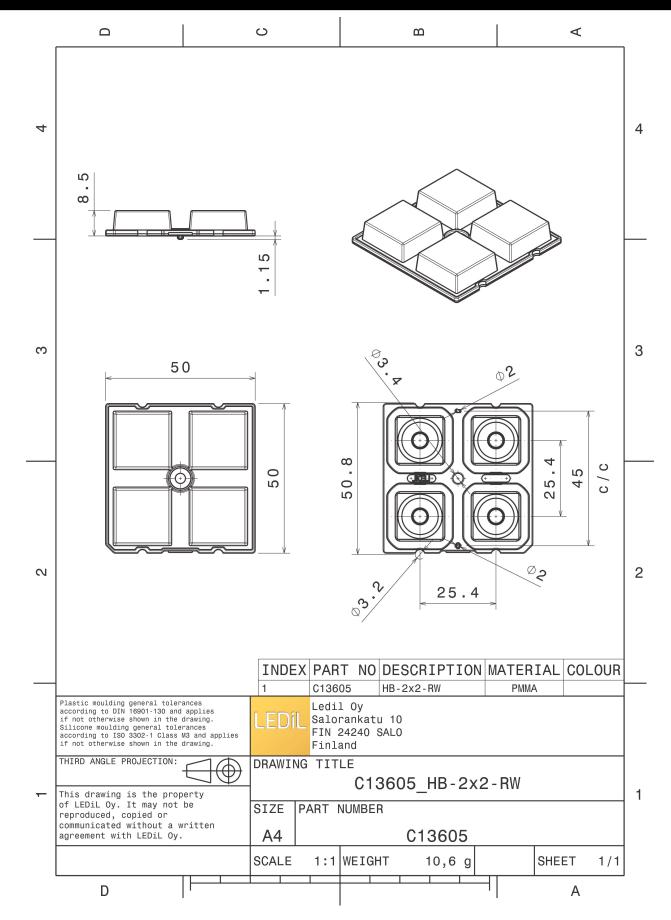
Material	Colour	Finish
PMMA	clear	

ORDERING INFORMATION:

Component C13605_HB-2X2-RW » Box size: 480 x 280 x 300 mm

Qty in box	MOQ	MPQ	Box weight (kg)
800	160	160	9.3

PRODUCT DATASHEET C13605_HB-2X2-RW



R

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



	3	C13605_HE=2X2=R#_(1XH=5)	90* 90*
LED	XB-D White		
FWHM / FWTM	46.0° / 68.0°	_	23.
Efficiency	88 %		60° - 60° - 60°
Peak intensity	1.6 cd/lm		
LEDs/each optic	1		
Light colour	White		gr at
Required componer	nts:		
			30"
	1		90 ⁰
LED	– XP-E		
FWHM / FWTM	51.0° / 72.0°		77
Efficiency	89 %		400
Peak intensity	1.4 cd/lm		
LEDs/each optic	1		
Light colour	White		ase
Required componer	nts:		
			1230
			30*
			15° 0° 15°
	1	C13605_HE-2X2-RW_(XP-6)	
		(1167g/0-1224) (1946)	90°
LED	XP-G		95°
LED FWHM / FWTM	XP-G 50.0° / 76.0°		90 ⁴ 997
LED FWHM / FWTM Efficiency	XP-G 50.0° / 76.0° 89 %		99*99 92 93*90 90*90
LED FWHM / FWTM Efficiency Peak intensity	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm		90° 907 31° 90 91° 60°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1		94 94 95 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White		9/* 9/* 9/* 9/* 9/* 9/* 9/* 9/* 9/* 9/*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White		90 ⁴ 99 ⁴ 92 ⁴ 400 60 ⁴
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White		9° - 99 9° - 400 9° - 6° 9° - 6° 129
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White		94 94 94 94 94 94 94 94 96 96 96 96 96 96 96 96 96 96 96 96 96
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White nts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts:		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0°		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 %		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm 1		9/2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer Required componer ELED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm 1 White		91 ² 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm 1 White		91 ² 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm 1 White		91 ² 00 00
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componer CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G 50.0° / 76.0° 89 % 1.3 cd/lm 1 White hts: XT-E 44.0° / 68.0° 91 % 1.6 cd/lm 1 White		



ØNICHI/		21162_0212=0216-0216-0216-0216-0216-0216-0216-0216-
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19A 49.0° / 71.0° 90 % 1.5 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxE21A 37.0° / 68.0° 84 % 1.6 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19A 52.0° / 76.0° 88 % 1.3 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19B/NVSxx19C 51.0° / 76.0° 90 % 1.3 cd/lm 1 White	



00044		
OSRAN		90* 90
LED	PL-BRICK HP 3800 2x8 SSG	73*
FWHM / FWTM	47.0° / 75.0°	
Efficiency	95 %	60. 60.
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	45" 45
Required compone	ints:	20 ⁴ 10 ⁴ 10 ⁴ 20 ⁴
OSRAN		90*
LED	PrevaLED Brick HP 2x8	
FWHM / FWTM	49.0° / 73.0°	
Efficiency	89 %	400
Peak intensity	1.3 cd/lm	$\Gamma \times / / $
LEDs/each optic	1	
Light colour	White	9 ⁹⁴ 63
Required compone	ints:	
OSRAM		20° 12° 0° 13°
OSRAM Opto Semiconductors		00e +00e
LED	OSLON Square CSSRM2/CSSRM3	75
FWHM / FWTM	49.0° / 73.0°	
Efficiency	89 %	600 600
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour		
	White	65× 65
Required compone		9° 500 97 3° 123 3° 22° 0° 12° 30
OSRAM		9° 90 90 30° 100 30° 200 90° 100 100 100 100 100 100 100 100 100 100
OSRAM Opto Semiconductors	ints:	
OSRAM Opto Semiconductors LED	OSLON Square PC	9° 500 97 1139 3° 25° 6° 500 1139 3° 30° 3° 3° 3° 3° 30° 3
OSRAM Opto Semiconductors LED FWHM / FWTM	OSLON Square PC 50.0° / 73.0°	75
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	OSLON Square PC 50.0° / 73.0° 90 %	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	OSLON Square PC 50.0° / 73.0°	75
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1	75
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 White	75



OCDAM		13605_88-232-RV (SSL 88)	
OSRAM Opto Semiconductors			90* 90*
LED	OSLON SSL 80		
FWHM / FWTM	46.0° / 68.0°		400
Efficiency	90 %		60* 60*
Peak intensity	1.7 cd/lm		
LEDs/each optic	1		
Light colour	White		63° 63°
Required compone	ints:		1230
			1500
			300 300
CANACI			1 15°, 0°, 35°,
SAMSI			90*
LED	LH351Z		75
FWHM / FWTM	48.0° / 72.0°		
Efficiency	90 %		50° 50°
Peak intensity	1.4 cd/lm		
LEDs/each optic	1		
Light colour	White		45°
Required compone	nts:		
			1200
			30° 15° 0° 15° 36°
SEOUL			90 ⁴
SEOUL SEMICONDUCTOR	Z5M1/Z5M2		
FWHM / FWTM	49.0° / 73.0°		235
Efficiency	90 %		400
Peak intensity	1.4 cd/lm		601 ⁻
LEDs/each optic	1		
Light colour	White		45
Required compone	nts:		
			1239
			30* 30*
SEQUL			125 0 ⁴ 125
SEOUL SEMICONDUCTOR			90* 90*
LED	Z8Y15		25
FWHM / FWTM	46.0° / 71.0°		
Efficiency	88 %		400
Peak intensity	1.4 cd/lm		$[\times // \square] \times]$
LEDs/each optic	1		
Light colour	White		a7 ³ 000 a7°
Required compone	ints:		
			1200
			900



seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z8Y19 47.0° / 74.0° 87 % 1.3 cd/lm 1 White nts:	21° 0° 22° 21° 0° 22° 21° 0° 0° 0° 21° 0° 0° 0° 21° 0° 0° 0° 0° 21° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°
stout SEMCONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	Z8Y22 45.0° / 78.0° 93 % 1.2 cd/lm 1 White nts:	22 0, 22 24 25 26 28 28 28 28 28 28 28 28 28 28
TOSHIBA Leading Innovation >>> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	TL1L4 47.0° / 70.0° 83 % 1.3 cd/lm 1 White nts:	9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹
TRIDON LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	RLE G1 49x121mm 2000lm xxx EXC OTD 45.0° / 74.0° 94 % 1.4 cd/lm 1 White	200 200 200 200 200 200 200 200 200 200



TRIDON	NIC .	99*
LED	RLE G1 49x133mm 2000lm xxx EXC OTD	
FWHM / FWTM	45.0° / 74.0°	
Efficiency	94 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	gt6
Required compone	ents:	
TRIDON	NIC	
LED	RLE G1 49x223mm 4000lm xxx EXC OTD	
FWHM / FWTM	45.0° / 74.0°	
Efficiency	94 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	gr600
Required compone	ents:	307 307 307 07 307
TRIDOM	NIC	90 ⁴
LED	RLE G1 49x245mm 4000lm xxx EXC OTD	
FWHM / FWTM	45.0° / 74.0°	
Efficiency	94 %	
Peak intensity	1.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	



PHOTOMETRIC DATA (SIMULATED):

SEOUL SEOUL SEMICONDUCTOR		30*
LED	Z8Y22T	27
FWHM / FWTM	54.0° / 71.0°	
Efficiency	94 %	60 ⁴
Peak intensity	1.3 cd/lm	
LEDs/each optic	1	
Light colour	White	a ^y 800
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.

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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/ where_to_buy

Last update: 18/11/2021 Subject to change without prior notice LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.