

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:

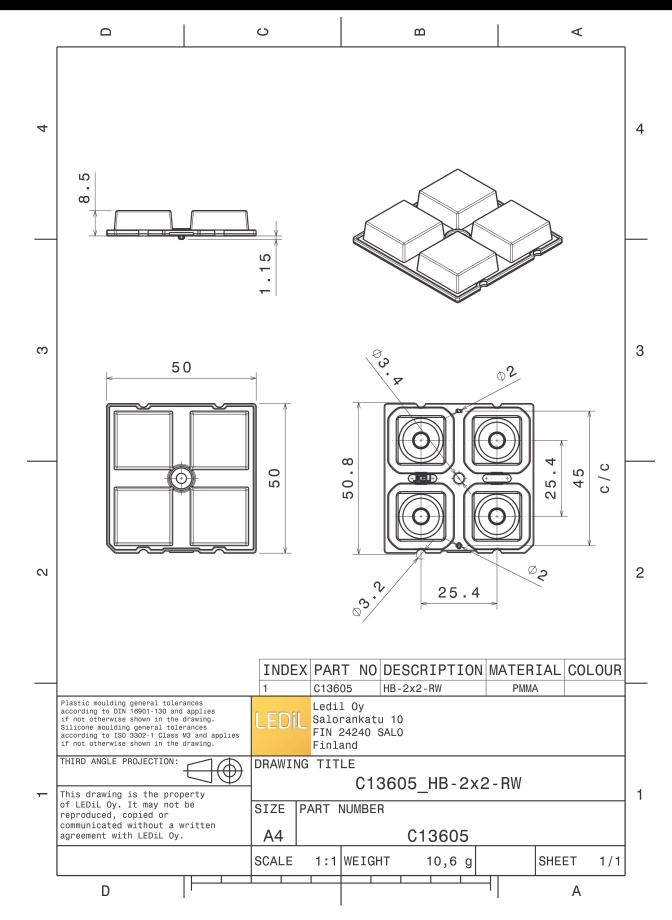
Component C13605_HB-2X2-RW » Box size: 480 x 280 x 300 mm

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

PRODUCT DATASHEET C13605_HB-2X2-RW

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PRODUCT DATASHEET C13605_HB-2X2-RW



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

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| | 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 | | es* |
| Required componer | nts: | | |
| | | | |
| | | | 1230 |
| | | | 30* |
| | | | 15° 0° 15° |
| | 1 | C13605_HE-2X2-RW_(XP-6) | |
| | | (1167g/0-72244 (1946) | 90° |
| LED | XP-G | | 95° |
| LED FWHM / FWTM | XP-G 50.0° / 76.0° | | 90 ⁴ 997 72 800 |
| 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 | | 91 ⁴ 92 ⁴ 91 ⁵ 60 91 ⁵ 60 91 ⁵ 60 91 ⁵ 60 |
| 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 | | 613605 | HE-212-Rf_(NOSteel 94) | 50° 50° |
|---|---|--------|------------------------|---|
| 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 | | | 2, 2, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6 |
| EED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone | NVSxE21A 37.0° / 68.0° 84 % 1.6 cd/lm 1 White | | | 20° 0° 12° 0° 12° 2° |
| EED 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 | | | 20 20 20 20 20 20 20 20 20 20 |



| | - | |
|--|---|---|
| OSRAN | | 90 ⁴ |
| LED | PL-BRICK HP 3800 2x8 SSG | |
| FWHM / FWTM | 47.0° / 75.0° | |
| Efficiency | 95 % | |
| Peak intensity | 1.3 cd/lm | |
| LEDs/each optic | 1 | |
| Light colour | White | er |
| Required compone | ents: | |
| | | |
| | | 1200 |
| | | 344 369 |
| OSRAN | A | 207 0 ⁴ 127 20 ⁴ 2 |
| LED | PrevaLED Brick HP 2x8 | |
| LED FWHM / FWTM | 49.0° / 73.0° | |
| Efficiency | 49.0°/73.0° 89 % | |
| Peak intensity | 89 % 1.3 cd/lm | 69 ¹ |
| LEDs/each optic | 1 | |
| Light colour | ' White | or 200 or |
| Required compone | | |
| Required compone | ans. | |
| | | 1200 |
| | | |
| | | 30 ⁶ 129 ⁷ 0 ⁶ 15 ⁷ |
| OSRAM Opto Semiconductors | | 90 ⁴ |
| LED | OSLON Square CSSRM2/CSSRM3 | |
| | | |
| FWHM / FWTM | 49.0° / 73.0° | |
| FWHM / FWTM Efficiency | 49.0° / 73.0° 89 % | |
| Efficiency | | |
| Efficiency Peak intensity | 89 % | |
| Efficiency | 89 % 1.3 cd/lm | |
| Efficiency Peak intensity LEDs/each optic | 89 % 1.3 cd/lm 1 White | |
| Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White | |
| Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White | er 200 er |
| Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White | |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone | 89 % 1.3 cd/lm 1 White | |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone | 89 % 1.3 cd/lm 1 White ents: | |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC | |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone OSRAM Opto Semiconductors LED FWHM / FWTM | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° | 25 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Opto Semiconductors LED FWHM / FWTM Efficiency | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % | 20 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm | 20 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 | 20 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 White | 20 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 White | 20 |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 White | |
| Efficiency Peak intensity LEDs/each optic Light colour Required compone Optio Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour | 89 % 1.3 cd/lm 1 White ents: OSLON Square PC 50.0° / 73.0° 90 % 1.4 cd/lm 1 White | 25 |



| OSRAM Opto Semiconductors | | 511605_HB=2X2=R#_(1005_00) | 90* 90* |
|------------------------------|---------------|----------------------------|--|
| LED | OSLON SSL 80 | | |
| FWHM / FWTM | 46.0° / 68.0° | | 75* |
| Efficiency | 90 % | _ | |
| Peak intensity | 1.7 cd/lm | | 60** · · · · · · · · · · · · · · · · · · |
| LEDs/each optic | 1 | | |
| Light colour | White | | 93° 43* |
| Required compone | | | 1230 |
| | | | |
| | | | |
| | | | 30* |
| 0 0 0 0 0 0 | | | 123 04 125 |
| SAMSI | JNG | | 90* 90* |
| LED | LH351Z | | |
| FWHM / FWTM | 48.0° / 72.0° | | |
| Efficiency | 90 % | | 400 |
| Peak intensity | 1.4 cd/lm | | $(\times // \wedge \times)$ |
| LEDs/each optic | 1 | | |
| Light colour | White | | 43° dze |
| Required compone | nts: | | |
| | | | |
| | | | |
| | | | 36* 35* 0* 55* 36* |
| SEOUL | | | 50° |
| SEOUL SEMICONDUCTOR | Z5M1/Z5M2 | | |
| FWHM / FWTM | 49.0° / 73.0° | | 75* |
| Efficiency | 90 % | | 400 |
| Peak intensity | 1.4 cd/lm | | 60° |
| LEDs/each optic | 1 | | |
| Light colour | White | | e7* |
| Required compone | nts: | | |
| | | | |
| | | | 1230 |
| | | | 310 364 |
| SEOUL | | | |
| SEOUL SEMICONDUCTOR | | | 90* 90* |
| LED | Z8Y15 | | 75* |
| FWHM / FWTM | 46.0° / 71.0° | | |
| Efficiency | 88 % | | 60° |
| Peak intensity | 1.4 cd/lm | | $ \times // \wedge \times $ |
| LEDs/each optic | 1 | | |
| Light colour | White | | e |
| Required compone | nts: | | |
| | | | |
| | | | |
| | | | 30 |
| 1 | | | 15° 0° 15° |



| 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 |



| TR | DC | DN | IC |
|----|----|----|----|
| | | | |

1

LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:

RLE G1 49x133mm 2000lm xxx EXC OTD 45.0° / 74.0° 94 % 1.4 cd/lm White

TRIDONIC

LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic 1 Light colour Required components:

RLE G1 49x223mm 4000lm xxx EXC OTD 45.0° / 74.0° 94 % 1.4 cd/lm White



289 26-99

2400

2294

2001 1840

16-9-9

140

1299

699 400 29

2899 26-9

2291

2009 1891

16-99

14-00

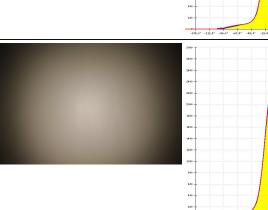
1200

640 631

TRIDONIC LED

FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:

RLE G1 49x245mm 4000lm xxx EXC OTD 45.0° / 74.0° 94 % 1.4 cd/lm 1 White





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.

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Distribution Partners www.ledil.com/ where_to_buy

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