

## HB-2X2-RW

~50° wide beam optimized for CREE XP-L and XM-L



### TECHNICAL SPECIFICATIONS:

Dimensions	50.0 mm
Height	8.5 mm
Fastening	pin, screw
ROHS compliant	yes ⓘ

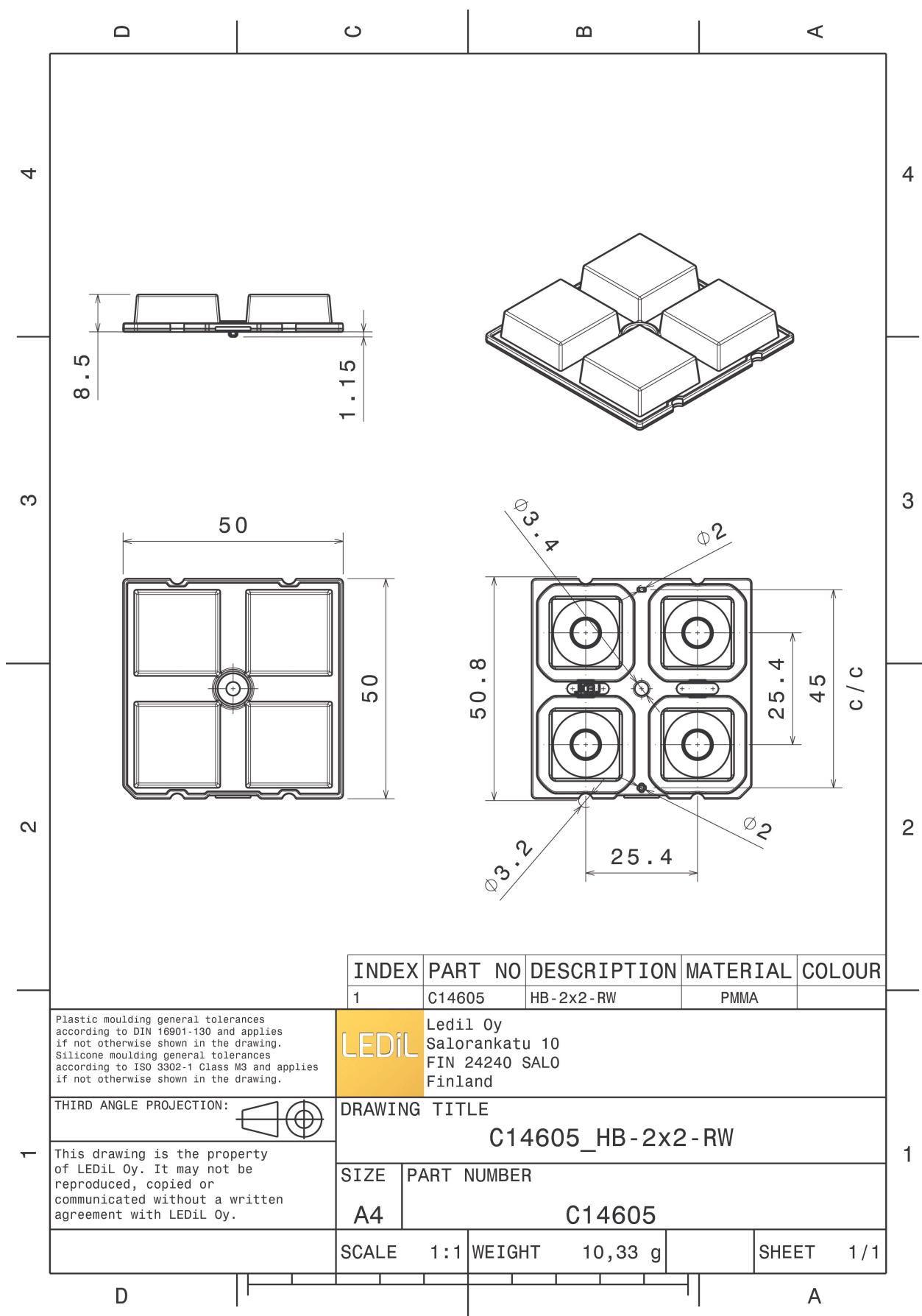
LEDiL®

### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
HB-2X2-RW	Multi-lens	PMMA	clear	

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C14605_HB-2X2-RW » Box size: 476 x 273 x 292 mm	800	160	160	9.1

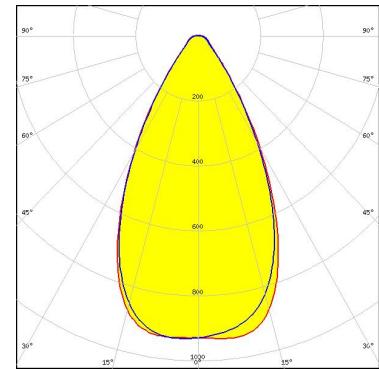
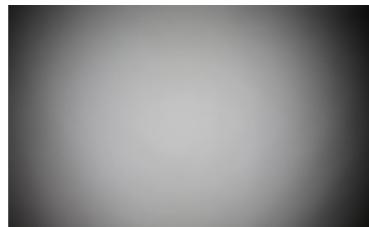


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

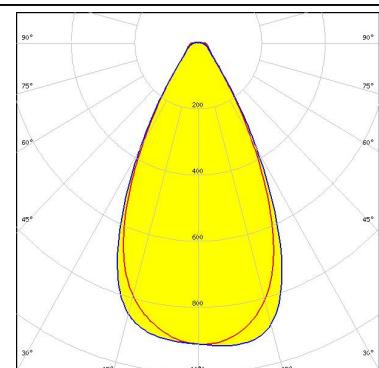
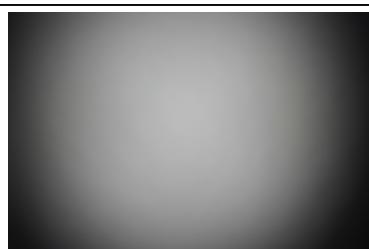
## PHOTOMETRIC DATA (MEASURED):



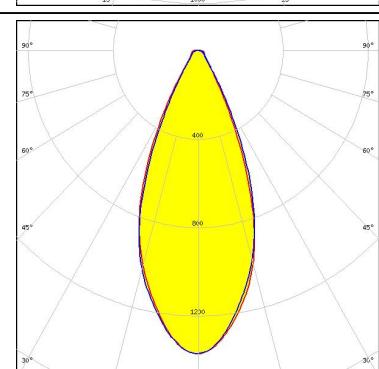
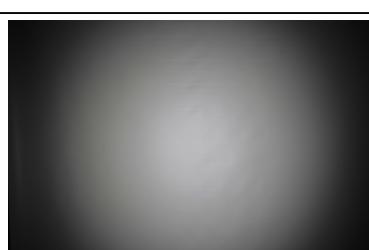
**LED** Bridgelux SMD 5050  
**FWHM** 56.0°  
**Efficiency** 94 %  
**Peak intensity** 0.9 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



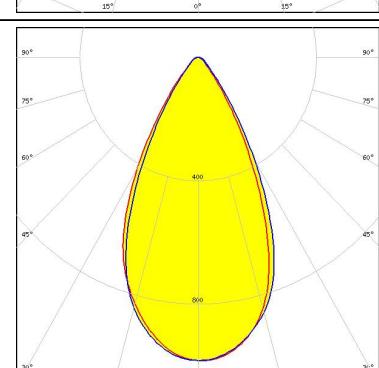
**LED** XD16  
**FWHM** 54.0°  
**Efficiency** 92 %  
**Peak intensity** 0.9 cd/lm  
**LEDs/each optic** 4  
**Light colour** White  
**Required components:**



**LED** XD16  
**FWHM** 44.0°  
**Efficiency** 90 %  
**Peak intensity** 1.4 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



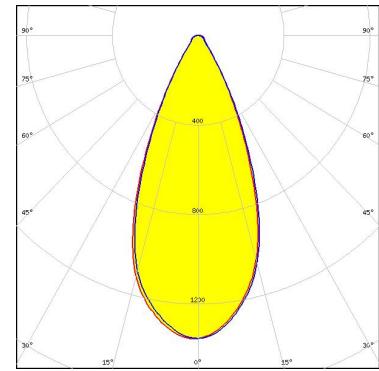
**LED** XHP35 HD  
**FWHM** 53.0°  
**Efficiency** 84 %  
**Peak intensity** 1 cd/lm  
**LEDs/each optic** 1  
**Light colour** White  
**Required components:**



## PHOTOMETRIC DATA (MEASURED):

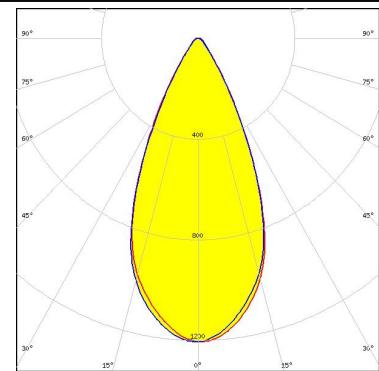
**CREE** 

LED XP-G2  
FWHM 45.0°  
Efficiency 94 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



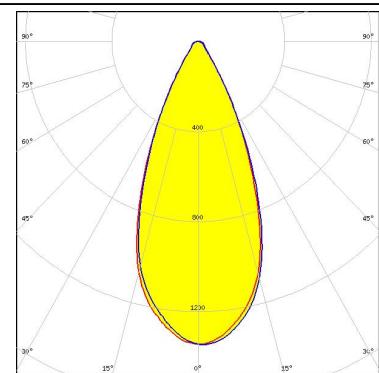
**CREE** 

LED XP-G3  
FWHM 48.0°  
Efficiency 86 %  
Peak intensity 1.2 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



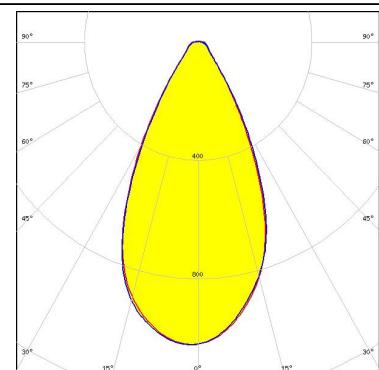
**CREE** 

LED XP-L HI  
FWHM 45.0°  
Efficiency 92 %  
Peak intensity 1.3 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



**CREE** 

LED XP-L2  
FWHM 52.0°  
Efficiency 92 %  
Peak intensity 1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



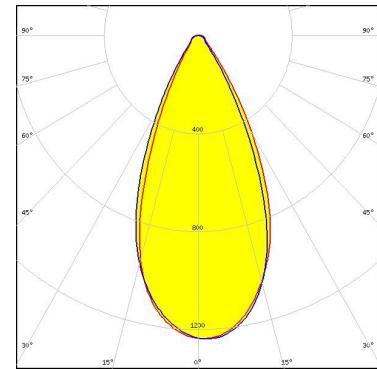
## PHOTOMETRIC DATA (MEASURED):

	<b>LUMILEDS</b>		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 5050 Round LES 55.0° 94 % 1 cd/lm 1 White		
	<b>LUMINUS</b>		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-10-B130 44.0° 96 % 1.5 cd/lm 1 Deep Red		
	<b>NICHIA</b>		
LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSW219F 49.0° 96 % 1.3 cd/lm 1 White		

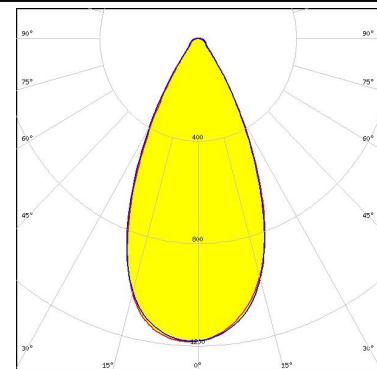
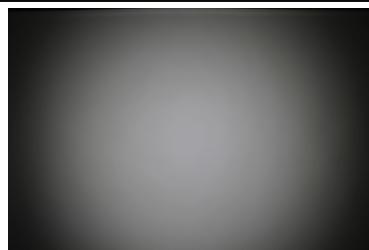
## PHOTOMETRIC DATA (MEASURED):



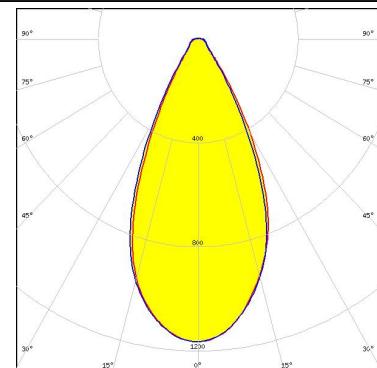
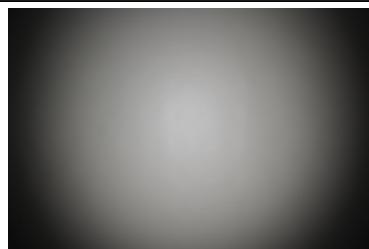
LED NVSW219F  
 FWHM 48.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



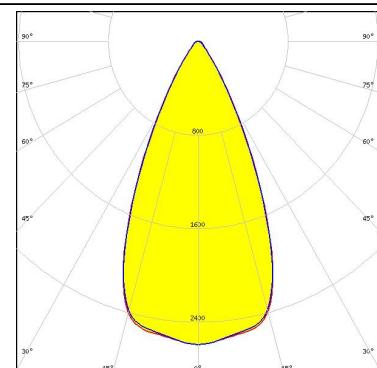
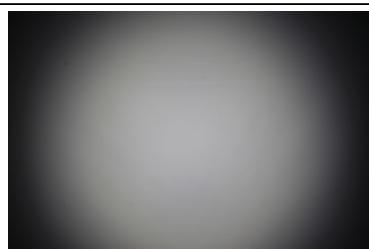
LED NVSW319B  
 FWHM 50.0°  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED NVSW3x9A  
 FWHM 50.0°  
 Efficiency 93 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED PrevalLED Brick HP 2x8  
 FWHM 49.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



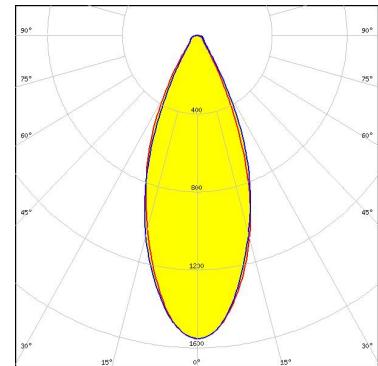
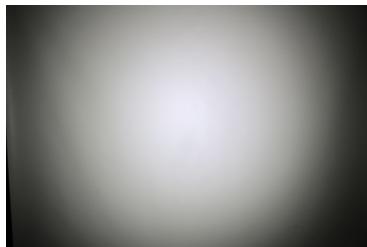
## PHOTOMETRIC DATA (MEASURED):

<b>OSRAM</b> <small>Opto Semiconductors</small>	LED Duris S8 FWHM 56.0° Efficiency 95 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:		
<b>OSRAM</b> <small>Opto Semiconductors</small>	LED OSLON Square CSSRM2/CSSRM3 FWHM 49.0° Efficiency 94 % Peak intensity 1.3 cd/lm LEDs/each optic 1 Light colour White Required components:		
<b>PHILIPS</b>	LED Fortimo FastFlex LED 2x8 DA G4 FWHM 45.0° Efficiency 93 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:		
<b>PHILIPS</b>	LED Fortimo FastFlex LED 2x8 DA G4+ FWHM 48.0° Efficiency 96 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components:		

## PHOTOMETRIC DATA (MEASURED):

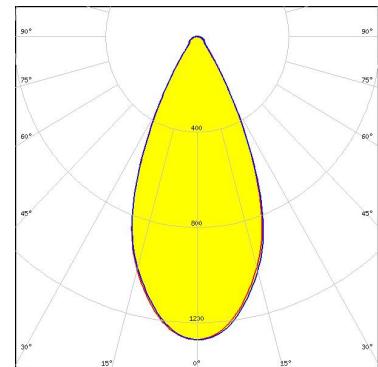
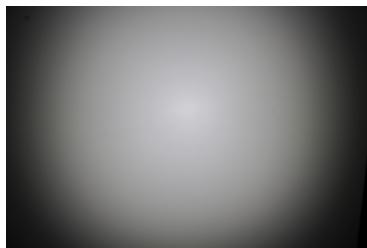
### SAMSUNG

LED HiLOM RC12 Z (LH181B)  
 FWHM 41.0°  
 Efficiency 97 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



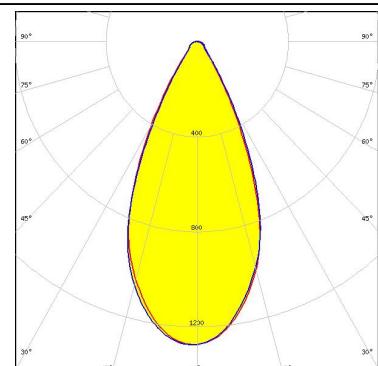
### SAMSUNG

LED HiLOM RH12 Z (LH351C)  
 FWHM 48.0°  
 Efficiency 96 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



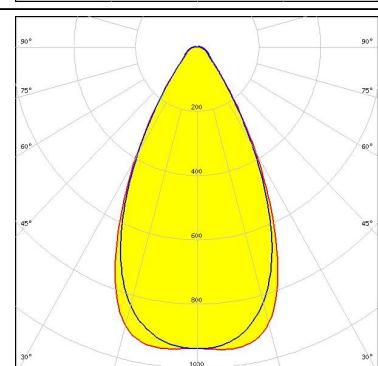
### SAMSUNG

LED HiLOM RH16 (LH351C)  
 FWHM 48.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

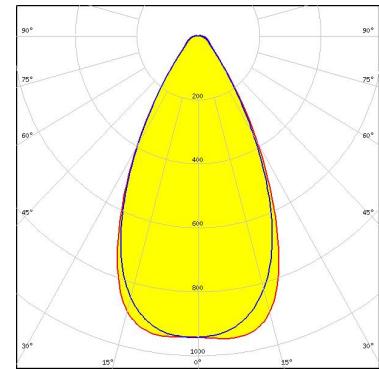
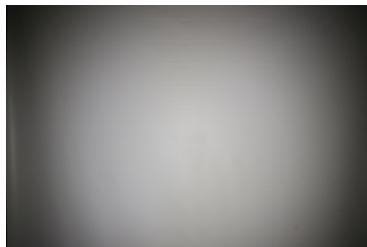
LED HiLOM RM12 Z (LH502C)  
 FWHM 55.0°  
 Efficiency 95 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## PHOTOMETRIC DATA (MEASURED):

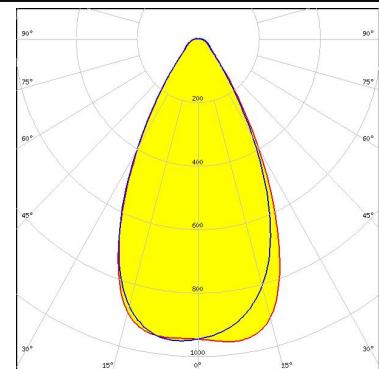
### SAMSUNG

LED HiLOM RM16 Z (LH502C)  
 FWHM 55.0°  
 Efficiency 96 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



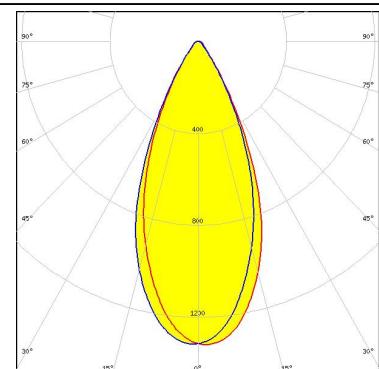
### SAMSUNG

LED HiLOM RM8 Z (LH502C)  
 FWHM 56.0°  
 Efficiency 97 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



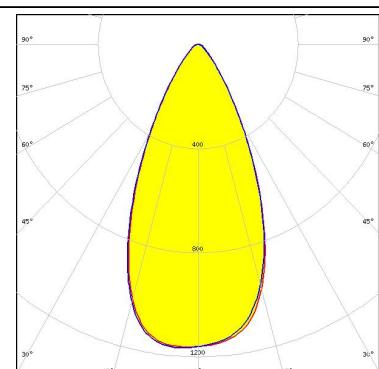
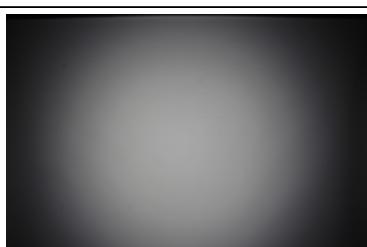
### SAMSUNG

LED LH351B  
 FWHM 45.0°  
 Efficiency 86 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

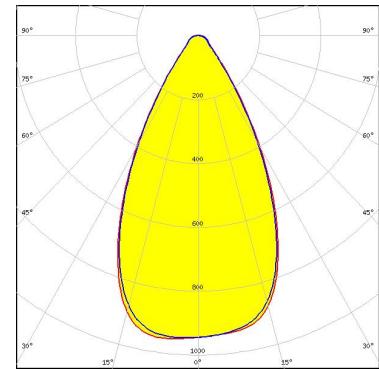
LED LH351D  
 FWHM 49.0°  
 Efficiency 94 %  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## PHOTOMETRIC DATA (MEASURED):

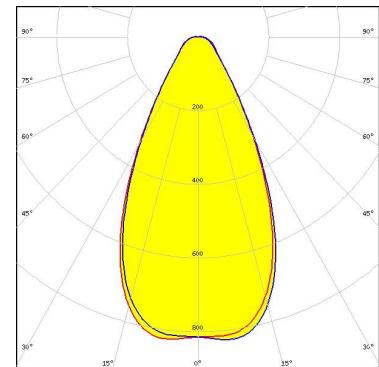
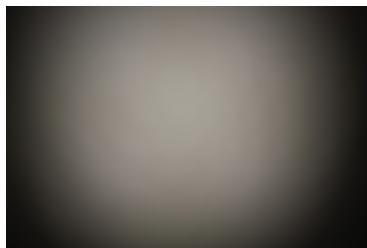
### SAMSUNG

LED LH508A  
 FWHM 56.0°  
 Efficiency 93 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



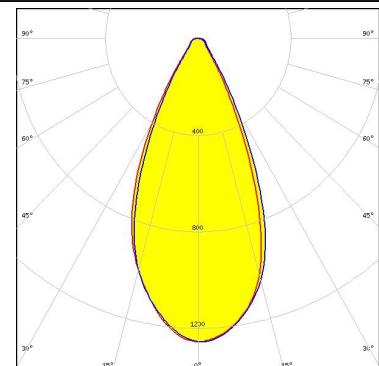
### SEOUL SEMICONDUCTOR

LED 2x2 Y22 module - SMJQ-D48W16AA-XX  
 FWHM 54.0°  
 Efficiency 92 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



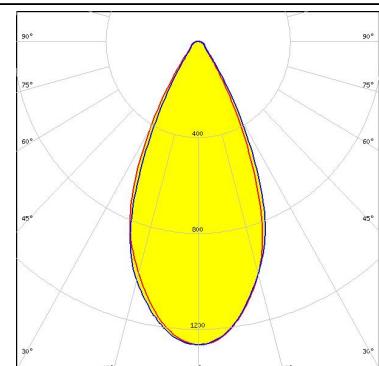
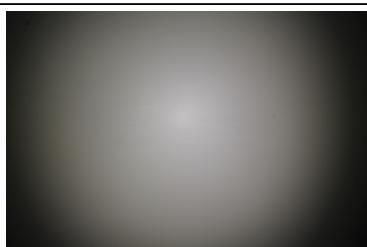
### SEOUL SEMICONDUCTOR

LED Z5M3  
 FWHM 47.0°  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

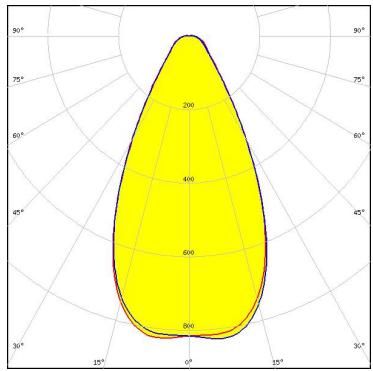
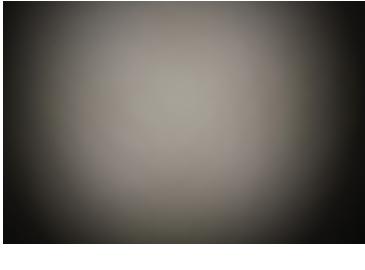
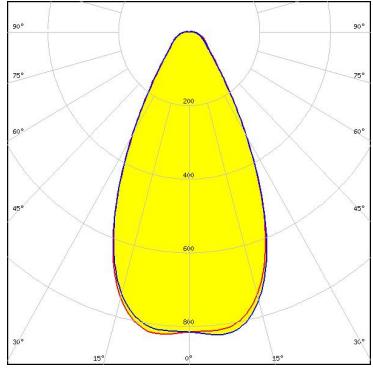
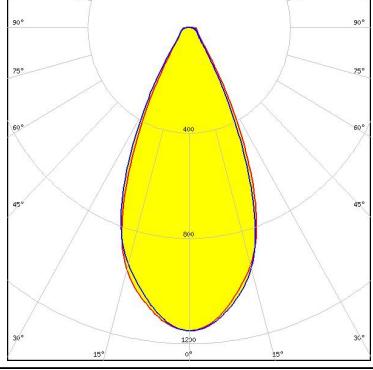


### SEOUL SEMICONDUCTOR

LED Z5M4  
 FWHM 49.0°  
 Efficiency 96 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



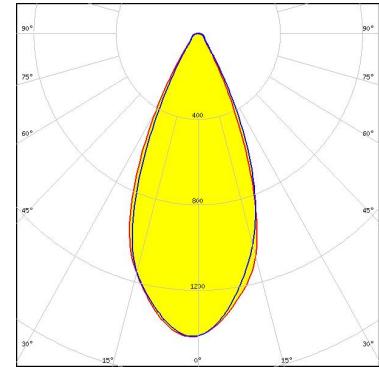
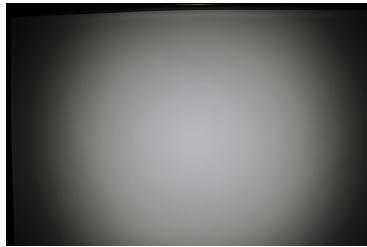
## PHOTOMETRIC DATA (MEASURED):

 <b>SEOUL SEMICONDUCTOR</b> LED Z8Y19 FWHM 54.0° Efficiency 92 % Peak intensity 0.8 cd/lm LEDs/each optic 4 Light colour White Required components:		
 <b>SEOUL SEMICONDUCTOR</b> LED Z8Y19 FWHM 54.0° Efficiency 92 % Peak intensity 0.8 cd/lm LEDs/each optic 4 Light colour White Required components:		
 <b>SEOUL SEMICONDUCTOR</b> LED Z8Y22P FWHM 48.0° Efficiency 92 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components:		
<b>TRIDONIC</b> LED RLE 2x4 2000lm HP EXC2 OTD FWHM 46.0° Efficiency 94 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:		

## PHOTOMETRIC DATA (MEASURED):

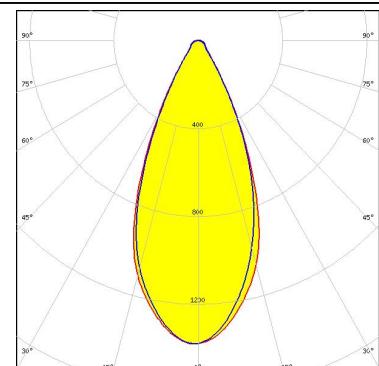
### TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



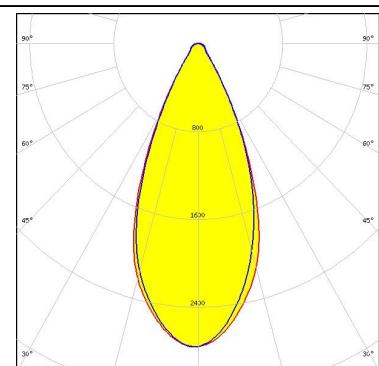
### TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



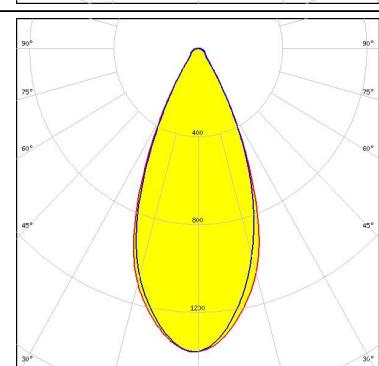
### TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### TRIDONIC

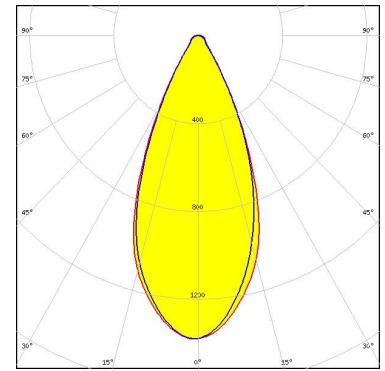
LED RLE G1 49x223mm 4000lm xxx EXC OTD  
 FWHM 46.0°  
 Efficiency 94 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



## PHOTOMETRIC DATA (MEASURED):

### TRIDONIC

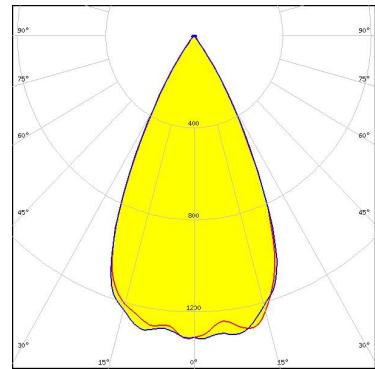
LED RLE G1 49x245mm 4000lm xxx EXC OTD  
FWHM 46.0°  
Efficiency 94 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



## PHOTOMETRIC DATA (SIMULATED):

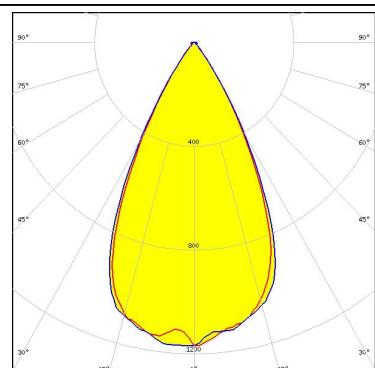
**CREE**

LED	XHP35 HI
FWHM	52.0°
Efficiency	93 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



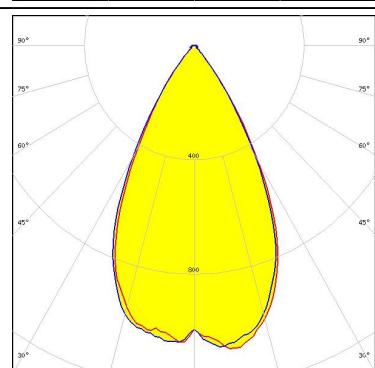
**CREE**

LED	XM-L
FWHM	54.0°
Efficiency	92 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



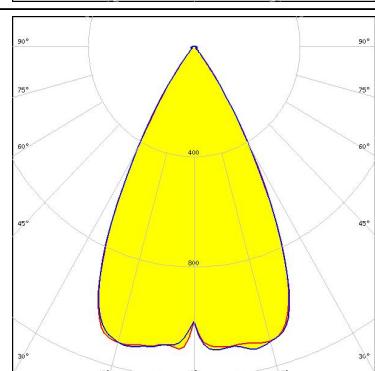
**CREE**

LED	XP-L HD
FWHM	55.0°
Efficiency	93 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



**NICHIA**

LED	NV4WB35AM
FWHM	56.0°
Efficiency	95 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

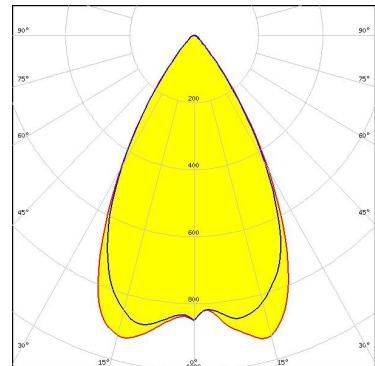


## PHOTOMETRIC DATA (SIMULATED):

**OSRAM**  
Opto Semiconductors

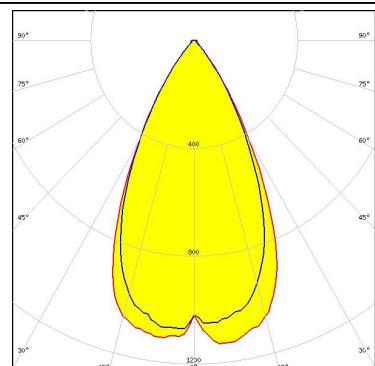
LED	Duris S8
FWHM	57.0°
Efficiency	90 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

Transparent protective cover



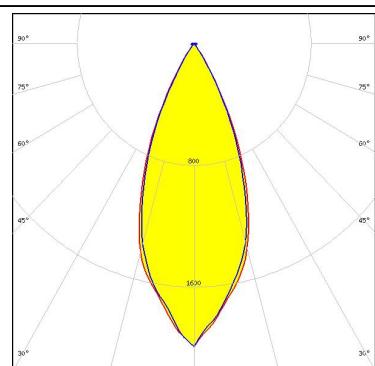
**OSRAM**  
Opto Semiconductors

LED	Duris S8
FWHM	53.0°
Efficiency	91 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



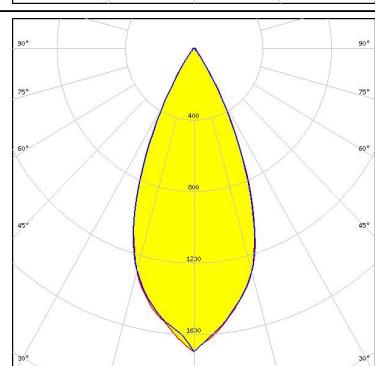
**OSRAM**  
Opto Semiconductors

LED	OSCONIQ P 3030
FWHM	42.0°
Efficiency	96 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



**OSRAM**  
Opto Semiconductors

LED	OSCONIQ P 3737 (2W version)
FWHM	45.0°
Efficiency	96 %
Peak intensity	1.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



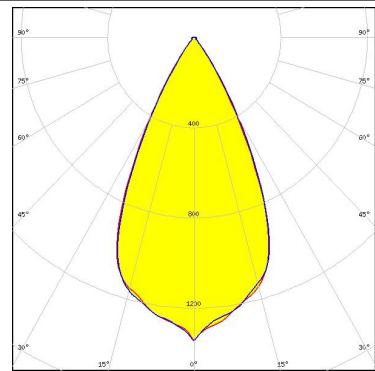
## PHOTOMETRIC DATA (SIMULATED):

**OSRAM**  
Opto Semiconductors

LED OSONIQ P 3737 (3W version)  
FWHM 52.0°

Efficiency 94 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

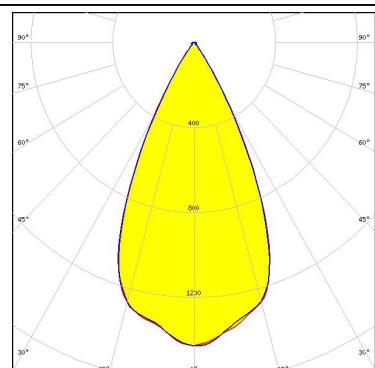


**OSRAM**  
Opto Semiconductors

LED OSONIQ P 3737 Flat

FWHM 50.0°  
Efficiency 96 %  
Peak intensity 1.4 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

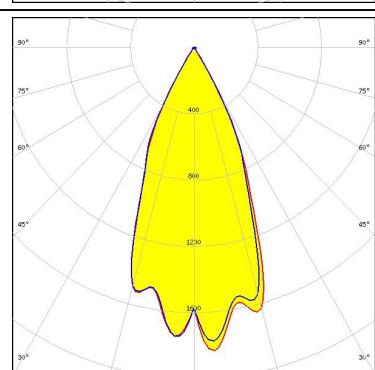


**OSRAM**  
Opto Semiconductors

LED OSLON Square Flat

FWHM 43.0°  
Efficiency 96 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour White

Required components:

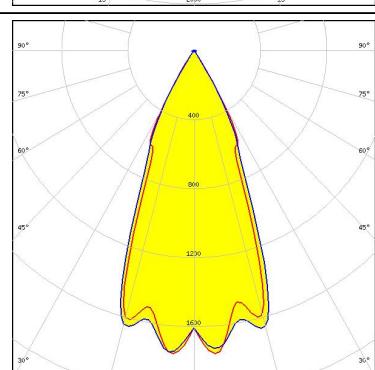


**OSRAM**  
Opto Semiconductors

LED OSTAR Projection Compact (Kx.CSLNM1.xx)

FWHM 42.0°  
Efficiency 96 %  
Peak intensity 1.8 cd/lm  
LEDs/each optic 1  
Light colour White

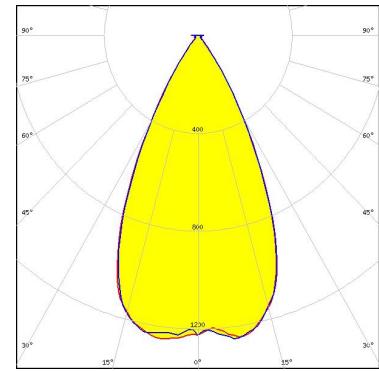
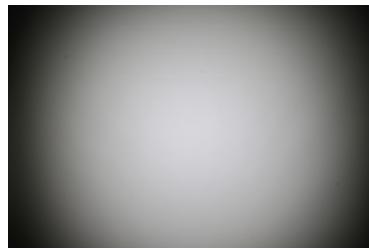
Required components:



## PHOTOMETRIC DATA (SIMULATED):

### PHILIPS

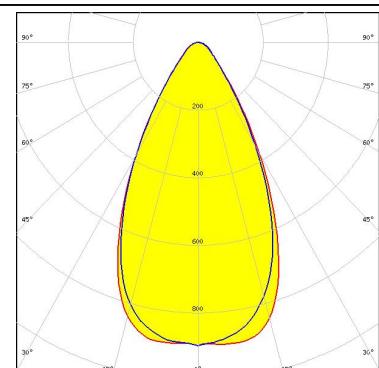
LED	Fortimo FastFlex LED 2x8 DAX G4
FWHM	51.0°
Efficiency	94 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



### SAMSUNG

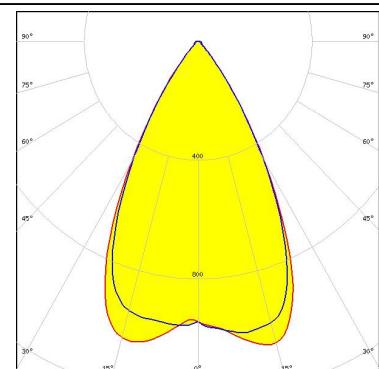
LED	HiLOM RM16 Z (LH502C)
FWHM	56.0°
Efficiency	89 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

Transparent protective cover



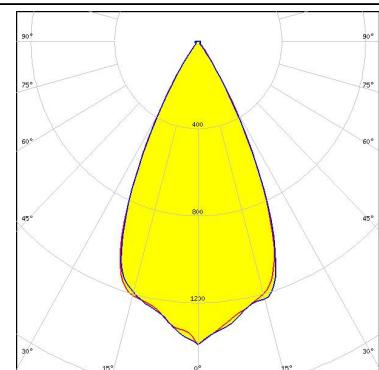
SEOUL SEMICONDUCTOR

LED	SEOUL DC 5050 6V
FWHM	54.0°
Efficiency	94 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



SEOUL SEMICONDUCTOR

LED	Z8Y22T
FWHM	51.0°
Efficiency	94 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



## 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](http://www.ledil.com/where_to_buy)

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

**Distribution Partners**  
[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Ledil:

[C14605\\_HB-2X2-RW](#)