

## HB-2X2-WWW

~100° wide beam

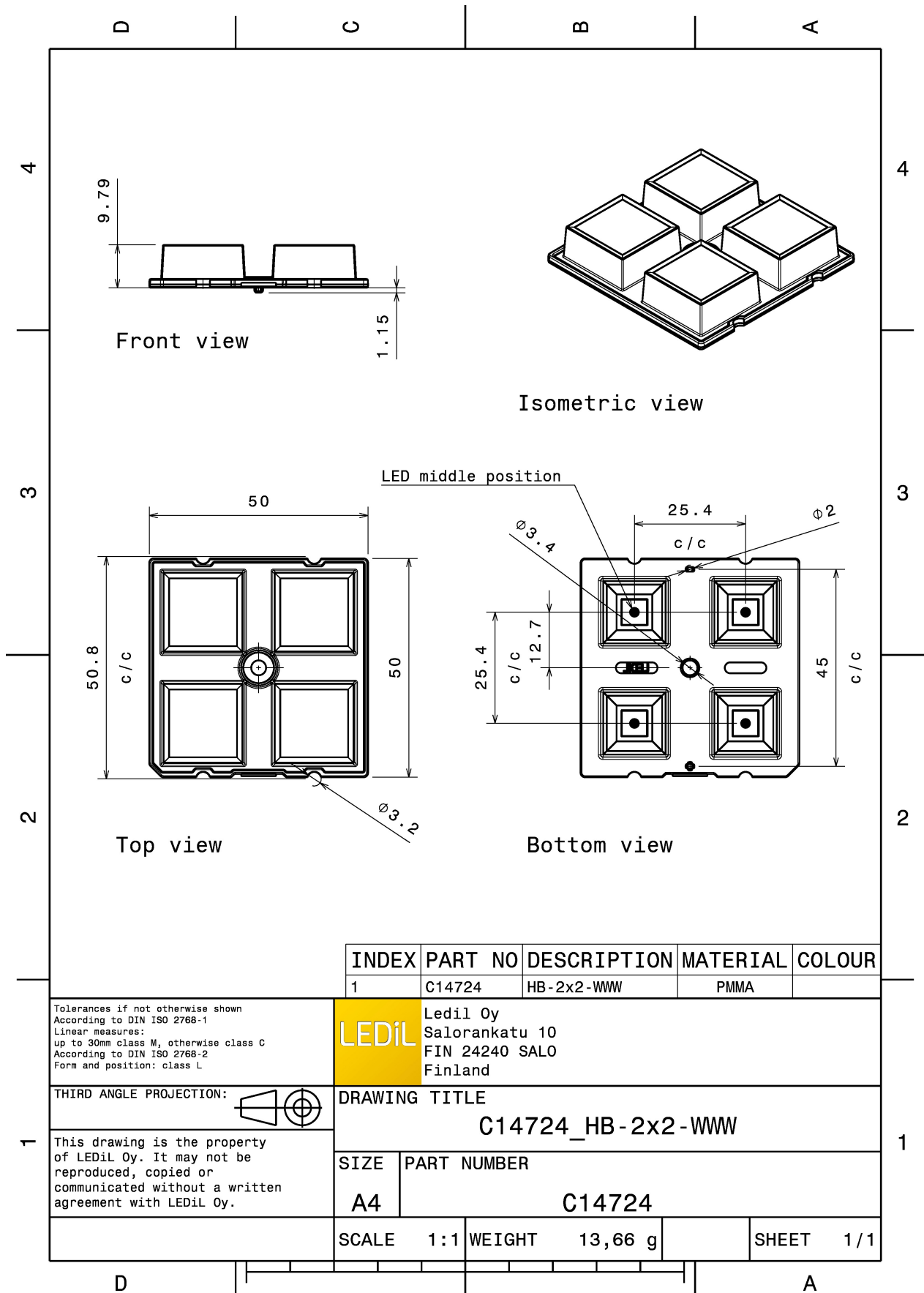
### TECHNICAL SPECIFICATIONS:

Dimensions	50.0 mm
Height	10 mm
Fastening	tape, screw
Colour	clear
Box size	480 x 280 x 300 mm
Box weight	11.7 kg
Quantity in Box	800 pcs
ROHS compliant	yes ⓘ



### MATERIAL SPECIFICATIONS:

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



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C14724	HB-2x2-WWW	PMMA	

Tolerances if not otherwise shown  
According to DIN ISO 2768-1  
Linear measures:  
up to 30mm class M, otherwise class C  
According to DIN ISO 2768-2  
Form and position: class L

**LEDiL**

Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE

C14724\_HB-2x2-WWW

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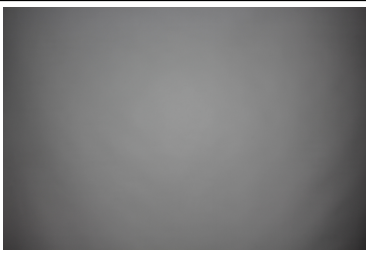
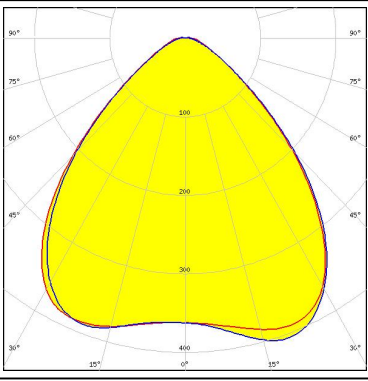

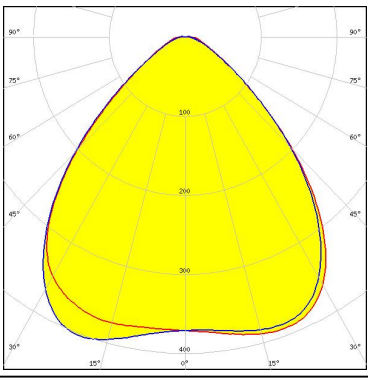

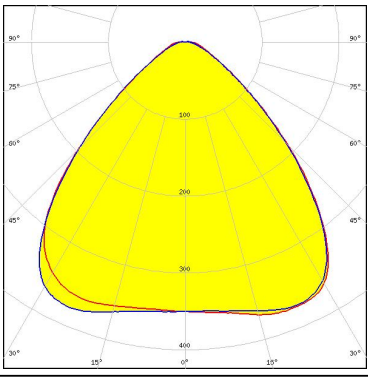

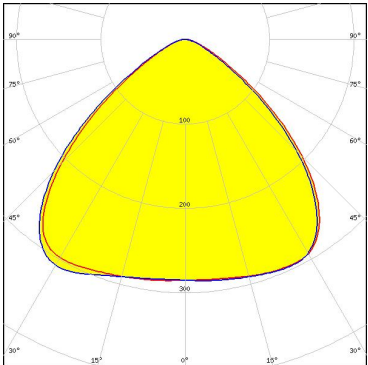
SIZE PART NUMBER

A4

C14724

SCALE 1:1 WEIGHT 13,66 g SHEET 1/1

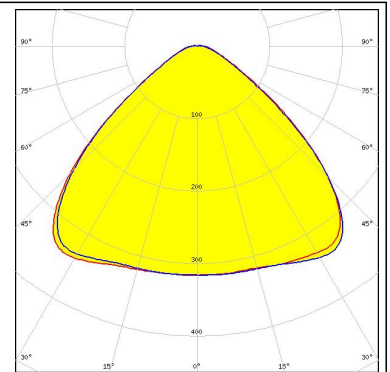
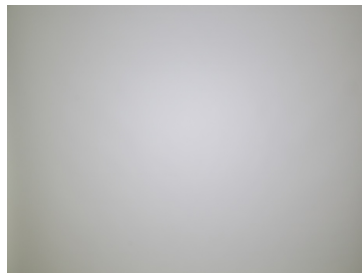
**PHOTOMETRIC DATA (MEASURED):**

<p>bridgelux</p> <p>LED Bridgelux SMD 5050 FWHM 94.0° Efficiency 94 % Peak intensity 0.420 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>CREE</b> ⇄</p> <p>LED XD16 FWHM 92.0° Efficiency 94 % Peak intensity 0.410 cd/lm LEDs/each optic 4 Light colour White Required components:</p>		
<p><b>CREE</b> ⇄</p> <p>LED XD16 FWHM 93.0° Efficiency 91 % Peak intensity 0.390 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>CREE</b> ⇄</p> <p>LED XHP35 HD FWHM 101.0° Efficiency 79 % Peak intensity 0.310 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

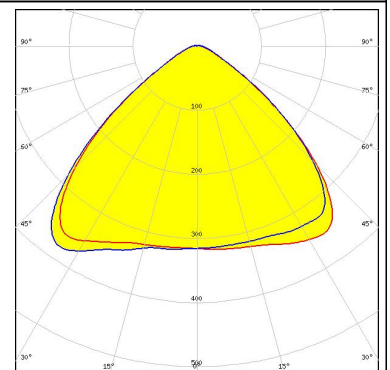
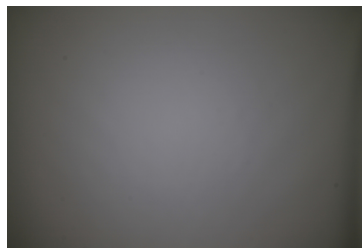
**PHOTOMETRIC DATA (MEASURED):**



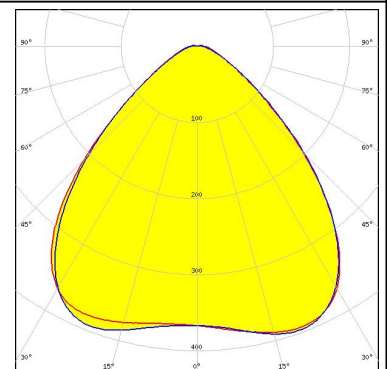
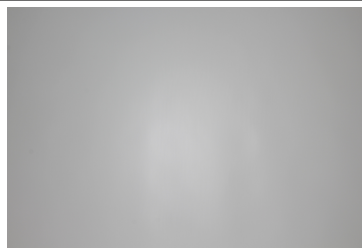
LED XP-G2  
FWHM 106.0°  
Efficiency 92 %  
Peak intensity 0.340 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



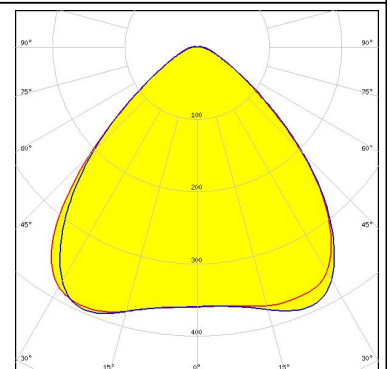
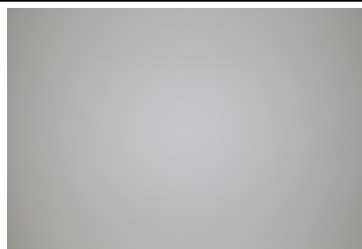
LED H35C1 (LEMWA33)  
FWHM 104.0°  
Efficiency 94 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED LUXEON 5050  
FWHM 93.0°  
Efficiency 93 %  
Peak intensity 0.410 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



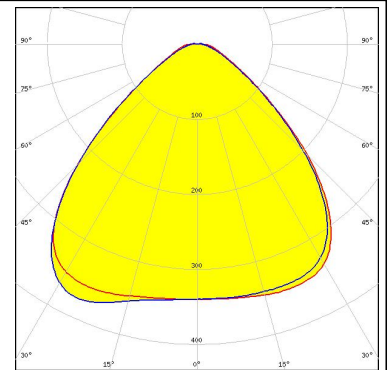
LED LUXEON MZ  
FWHM 94.0°  
Efficiency 92 %  
Peak intensity 0.400 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



### PHOTOMETRIC DATA (MEASURED):

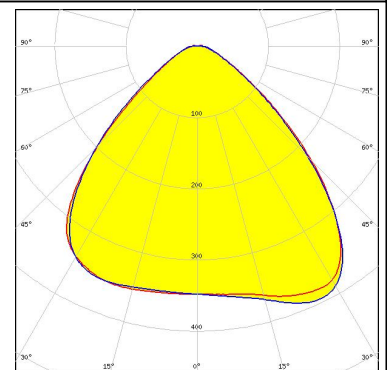
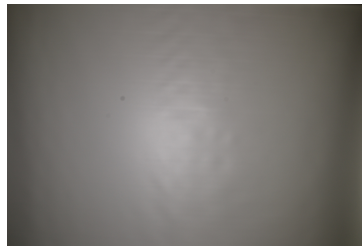
#### LUMILEDS

LED LUXEON V  
 FWHM 96.0°  
 Efficiency 93 %  
 Peak intensity 0.370 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



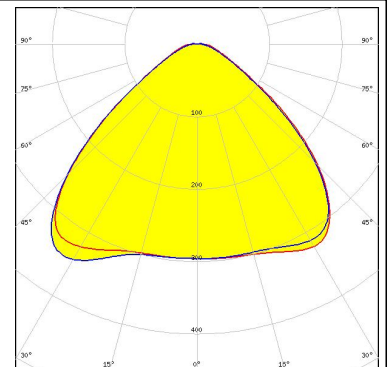
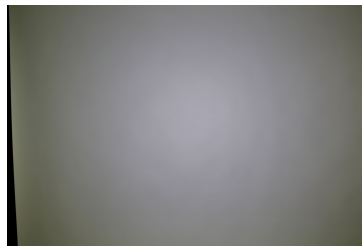
#### LUMILEDS

LED LUXEON V2  
 FWHM 95.0°  
 Efficiency 93 %  
 Peak intensity 0.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



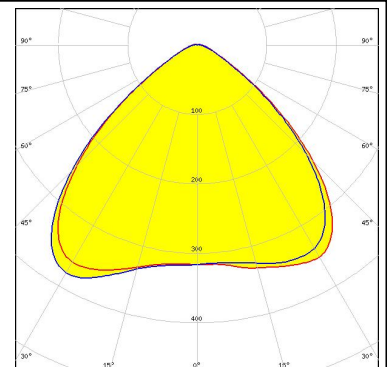
#### NICHIA

LED NVSW319B  
 FWHM 104.0°  
 Efficiency 92 %  
 Peak intensity 0.350 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### NICHIA

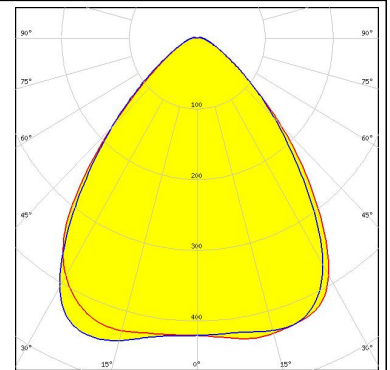
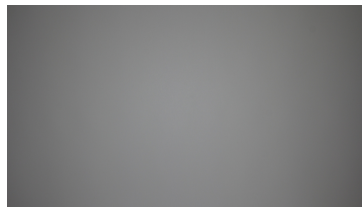
LED NVSW3x9A  
 FWHM 101.0°  
 Efficiency 93 %  
 Peak intensity 0.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



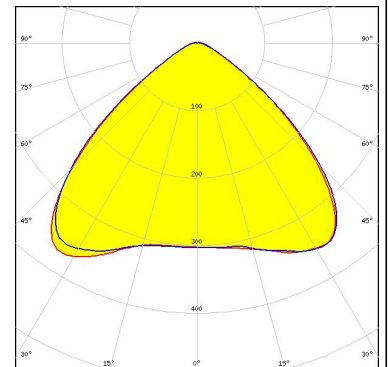
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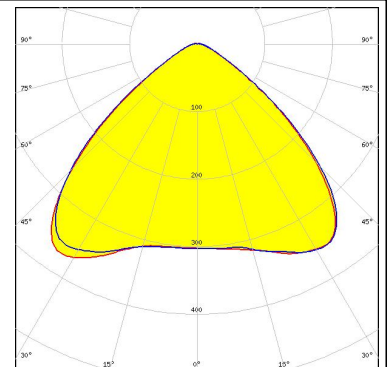
LED NVSxE21A  
FWHM 85.0°  
Efficiency 92 %  
Peak intensity 0.460 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



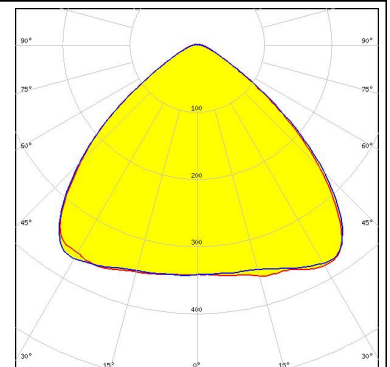
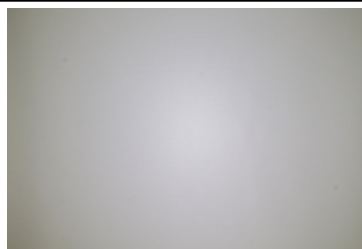
LED PrevaLED Brick HP 2x8  
FWHM 104.0°  
Efficiency 94 %  
Peak intensity 0.370 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



LED OSLOM Square CSSRM2/CSSRM3  
FWHM 104.0°  
Efficiency 94 %  
Peak intensity 0.370 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



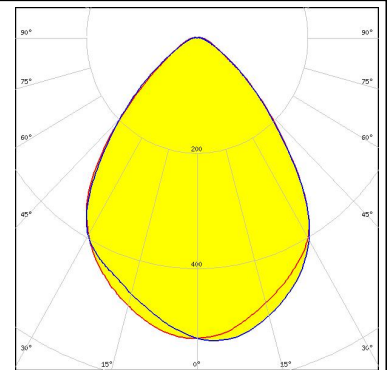
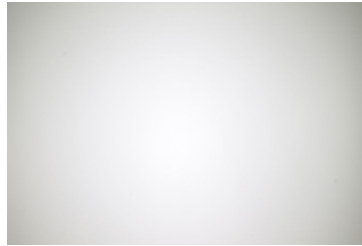
LED OSLOM Square PC  
FWHM 105.0°  
Efficiency 94 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



**PHOTOMETRIC DATA (MEASURED):**

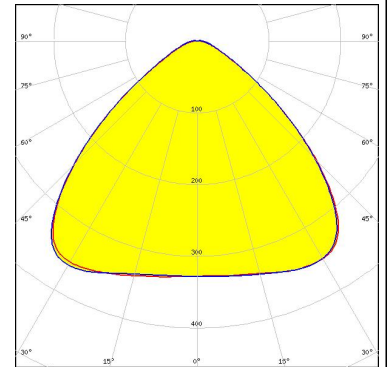
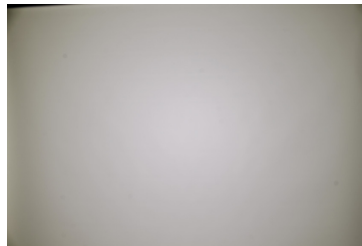
**OSRAM**  
Opto Semiconductors

LED OSOLON SSL 80  
FWHM 82.0°  
Efficiency 93 %  
Peak intensity 0.530 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



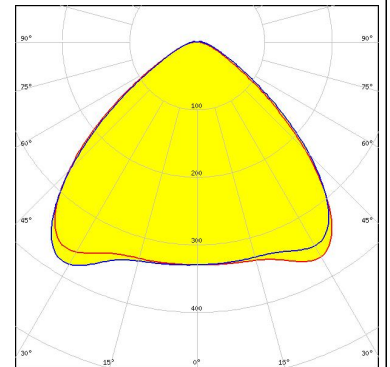
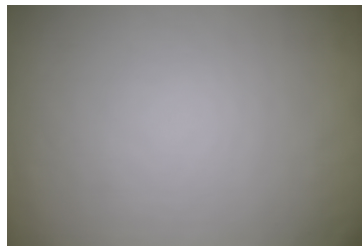
**PHILIPS**

LED Fortimo FastFlex LED 2x8 DA G4  
FWHM 104.0°  
Efficiency 92 %  
Peak intensity 0.360 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



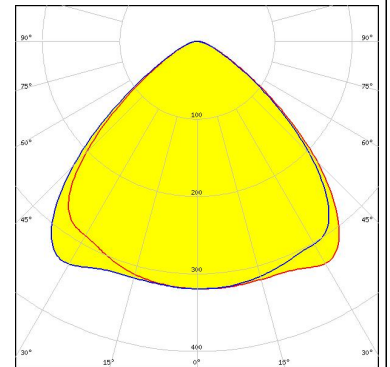
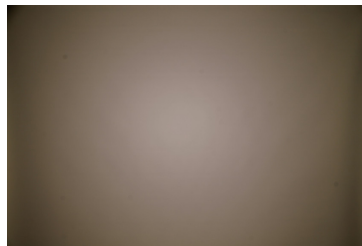
**SAMSUNG**

LED HiLOM RH16 (LH351C)  
FWHM 102.0°  
Efficiency 94 %  
Peak intensity 0.400 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



**SAMSUNG**

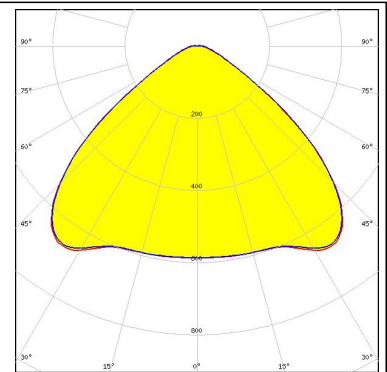
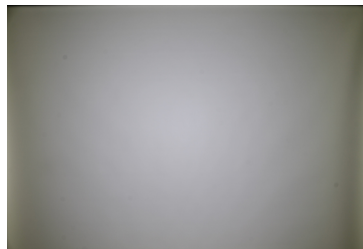
LED LH351B  
FWHM 102.0°  
Efficiency 81 %  
Peak intensity 0.330 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



**PHOTOMETRIC DATA (MEASURED):**

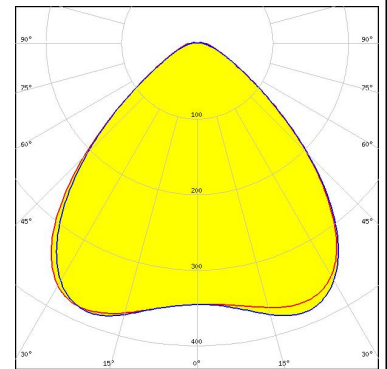
**SAMSUNG**

LED LH351D  
FWHM 107.0°  
Efficiency 94 %  
Peak intensity 0.350 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



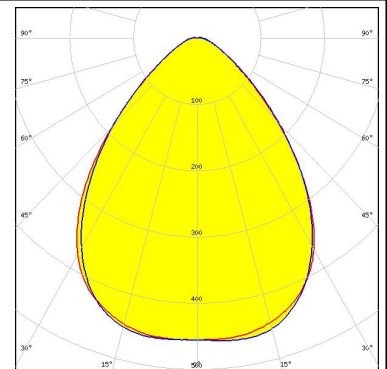
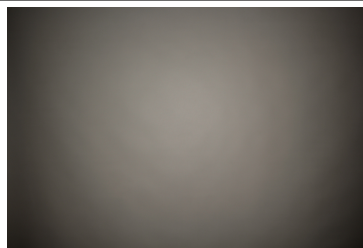
**SAMSUNG**

LED LH508A  
FWHM 95.0°  
Efficiency 93 %  
Peak intensity 0.400 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



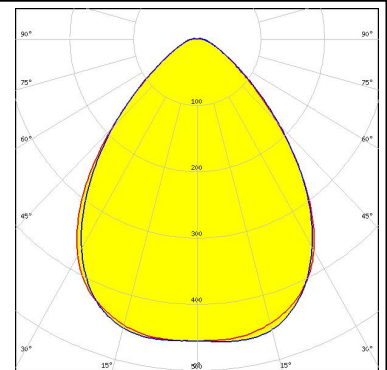
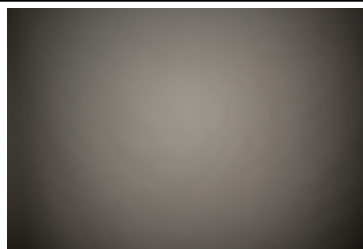
SEOUL SEMICONDUCTOR

LED 2x2 Y22 module - SMJQ-D48W16AA-XX  
FWHM 83.0°  
Efficiency 93 %  
Peak intensity 0.460 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:




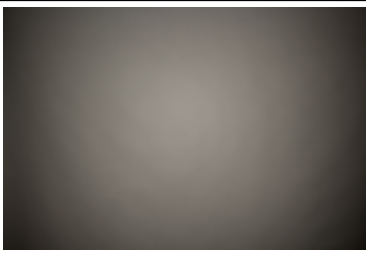
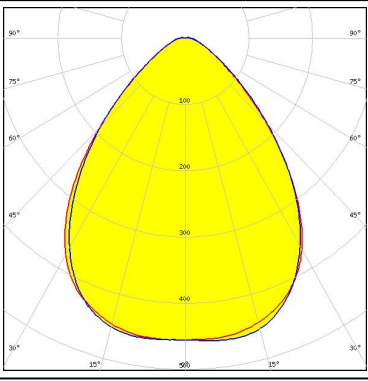


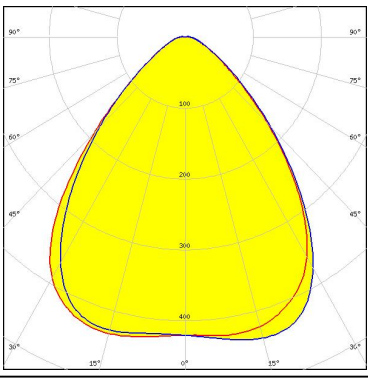


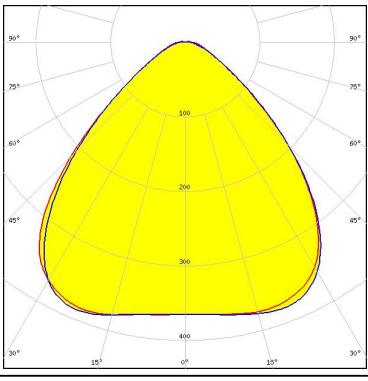
SEOUL SEMICONDUCTOR

LED Z8Y19  
FWHM 83.0°  
Efficiency 93 %  
Peak intensity 0.460 cd/lm  
LEDs/each optic 4  
Light colour White  
Required components:





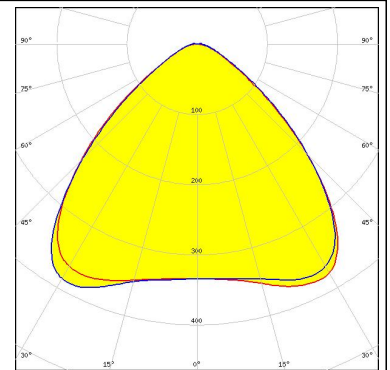
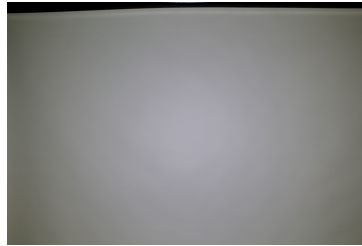
**PHOTOMETRIC DATA (MEASURED):**

<p> SEOUL SEMICONDUCTOR</p> <p>LED            Z8Y19 FWHM        83.0° Efficiency    93 % Peak intensity 0.460 cd/lm LEDs/each optic 4 Light colour    White Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED            Z8Y22 FWHM        85.0° Efficiency    94 % Peak intensity 0.440 cd/lm LEDs/each optic 1 Light colour    White Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED            Z8Y22P FWHM        93.0° Efficiency    94 % Peak intensity 0.390 cd/lm LEDs/each optic 1 Light colour    White Required components:</p>		
<p><b>TRIDONIC</b></p> <p>LED            RLE 2x4 2000lm HP EXC2 OTD FWHM        99.0° Efficiency    94 % Peak intensity 0.400 cd/lm LEDs/each optic 1 Light colour    White Required components:</p>		

### PHOTOMETRIC DATA (MEASURED):

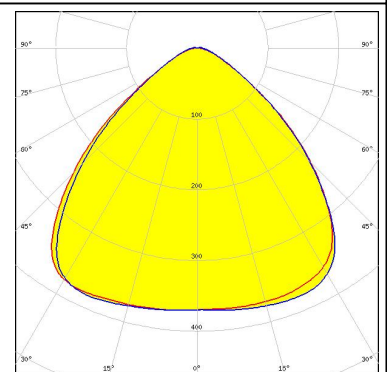
#### TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD  
FWHM 99.0°  
Efficiency 94 %  
Peak intensity 0.400 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



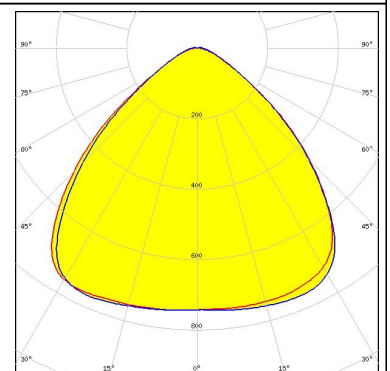
#### TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD  
FWHM 98.0°  
Efficiency 93 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



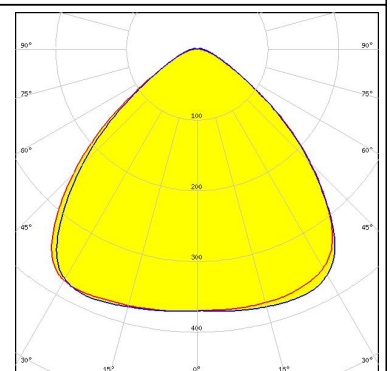
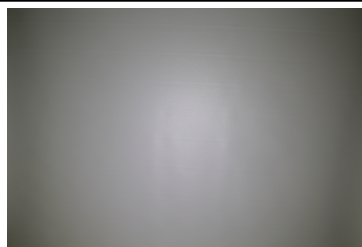
#### TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD  
FWHM 98.0°  
Efficiency 94 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### TRIDONIC

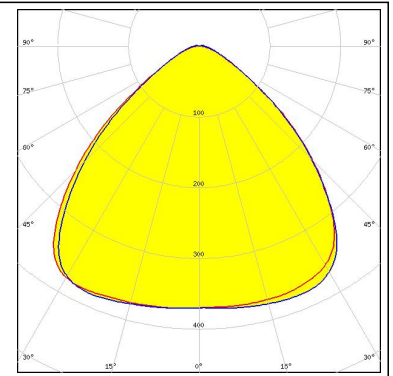
LED RLE G1 49x223mm 4000lm xxx EXC OTD  
FWHM 98.0°  
Efficiency 93 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



## PHOTOMETRIC DATA (MEASURED):

### TRIDONIC

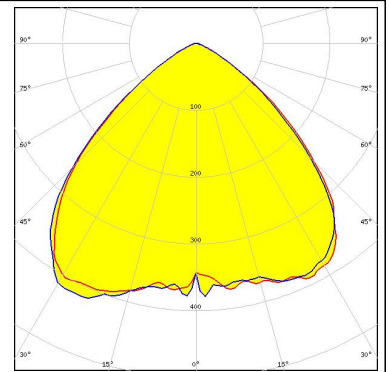
LED RLE G1 49x245mm 4000lm xxx EXC OTD  
FWHM 98.0°  
Efficiency 93 %  
Peak intensity 0.380 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



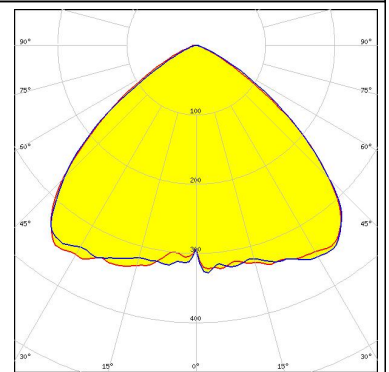
### PHOTOMETRIC DATA (SIMULATED):



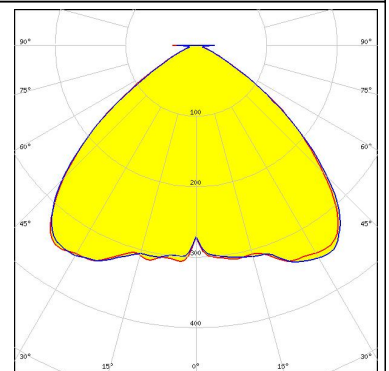
LED J Series 5050  
 FWHM 98.0°  
 Efficiency 94 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



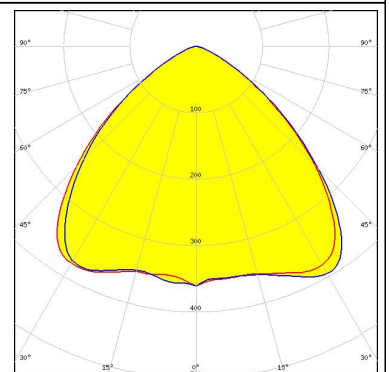
LED XHP35 HI  
 FWHM 99.0°  
 Efficiency 93 %  
 Peak intensity 0.360 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-G3  
 FWHM 98.0°  
 Efficiency 94 %  
 Peak intensity 0.360 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LUXEON 3535L  
 FWHM 92.0°  
 Efficiency 94 %  
 Peak intensity 0.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



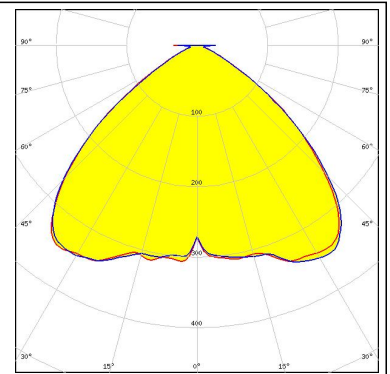
#### PHOTOMETRIC DATA (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON C            FWHM 108.0°            Efficiency 94 %            Peak intensity 0.360 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED Duris S8            FWHM 92.0°            Efficiency 94 %            Peak intensity 0.420 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSCONIQ P 3737 (2W version)            FWHM 90.0°            Efficiency 94 %            Peak intensity 0.410 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED OSCONIQ P 3737 (3W version)            FWHM 93.0°            Efficiency 94 %            Peak intensity 0.390 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

### PHOTOMETRIC DATA (SIMULATED):

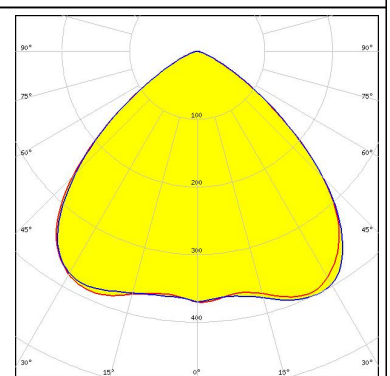
#### PHILIPS

LED Fortimo FastFlex LED 2x8 DAX G4  
FWHM 98.0°  
Efficiency 94 %  
Peak intensity 0.360 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

LED SEOUL DC 5050 6V  
FWHM 94.0°  
Efficiency 94 %  
Peak intensity 0.400 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.

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