

## HB-IP-24-WWW

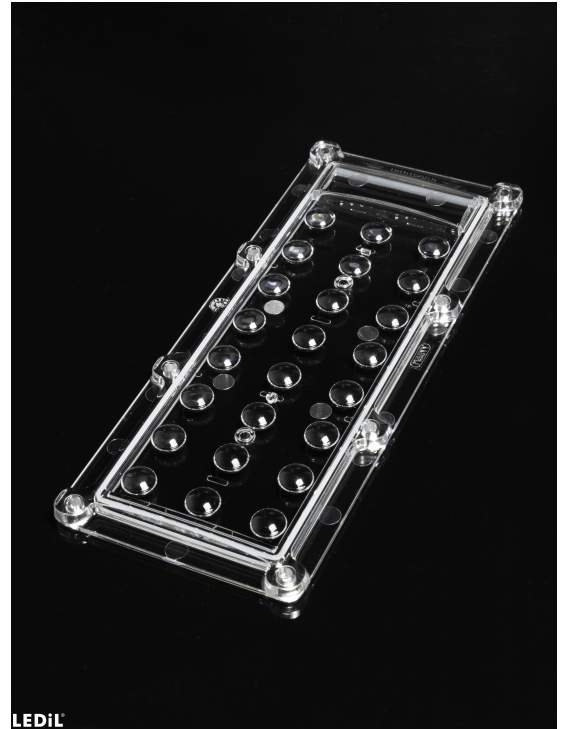
~90° wide beam

### SPECIFICATION:

Dimensions	173.0 x 71.4 mm
Height	10 mm
Fastening	pin, screw
Ingress protection classes	IP66, IP67
ROHS compliant	yes ⓘ

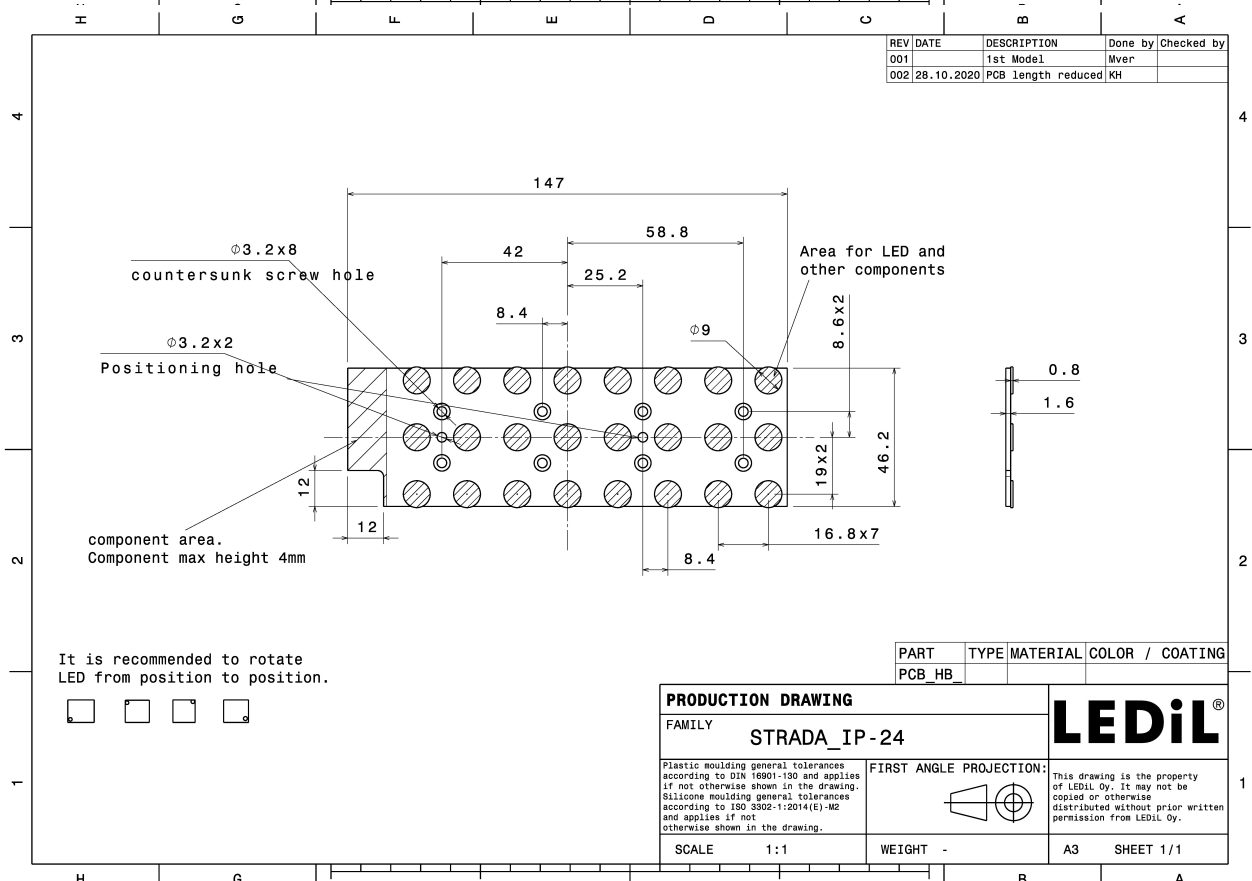
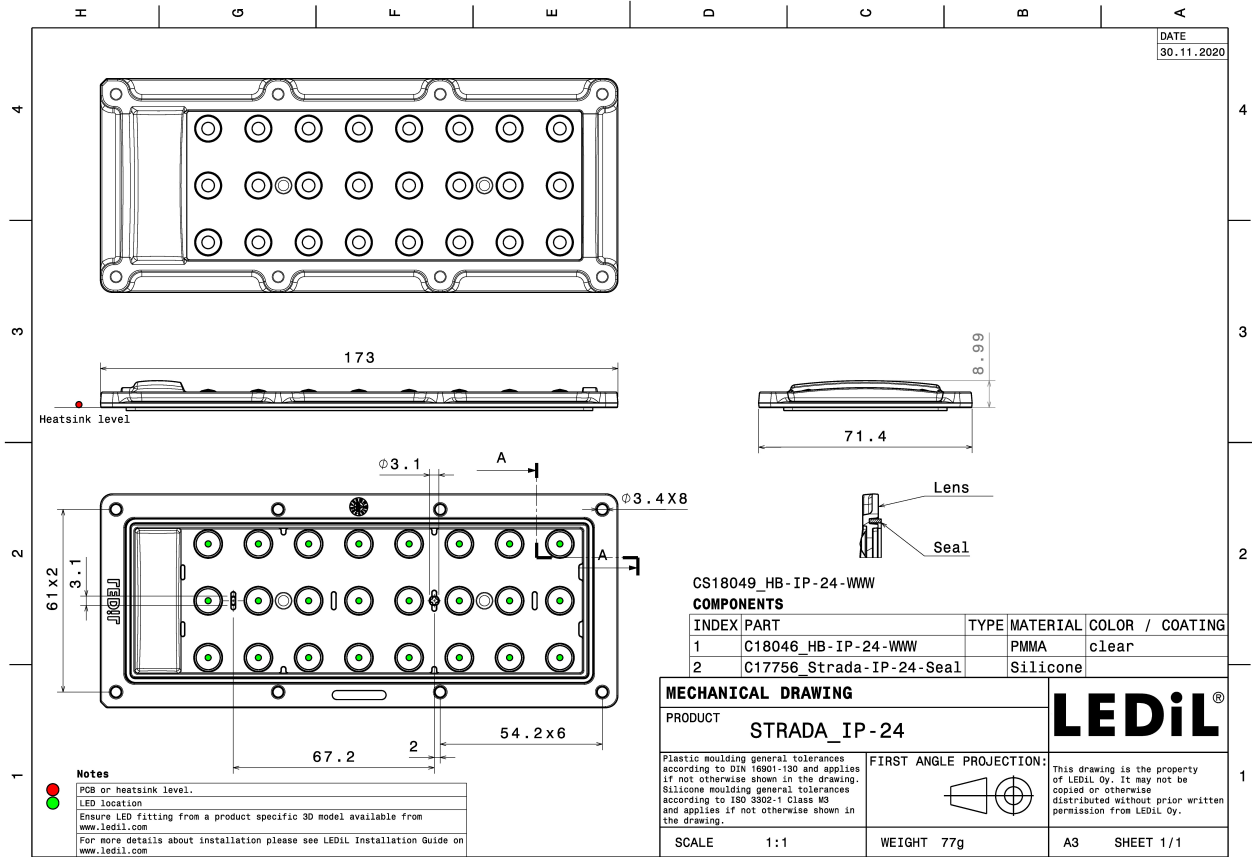
### MATERIALS:

Component	Type	Material	Colour	Finish
HB-IP-24-WWW	Multi-lens	PMMA	clear	
STRADA-IP-24-SEAL	Seal	Silicone	white	




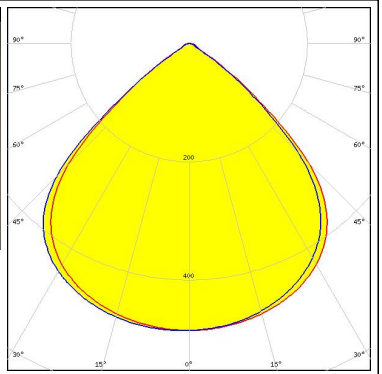
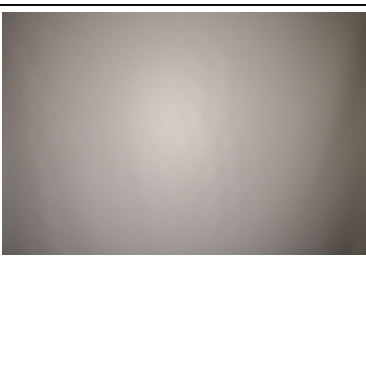
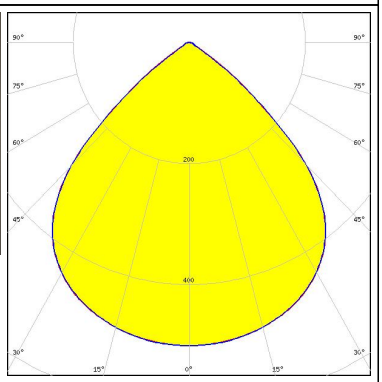

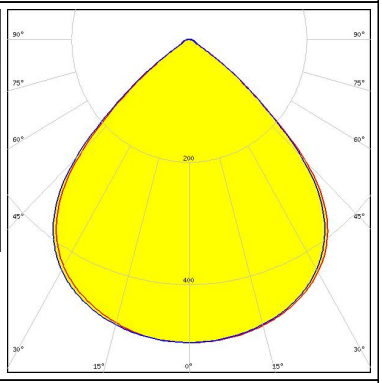

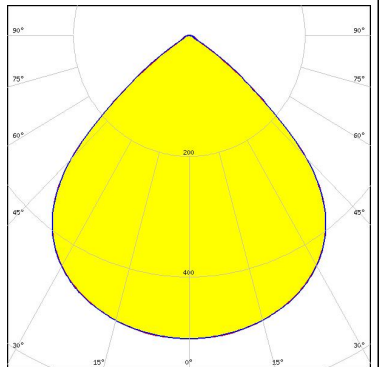
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CS18049_HB-IP-24-WWW » Box size: 476 x 273 x 247 mm	120	120	40	5.2

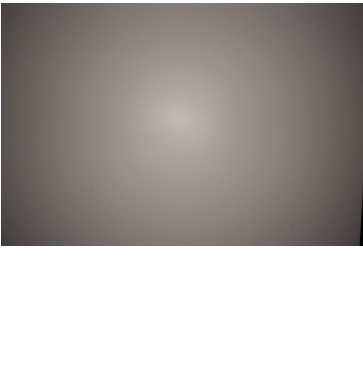
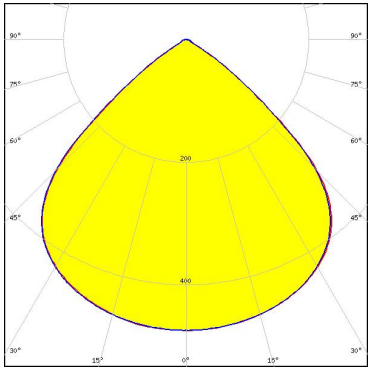

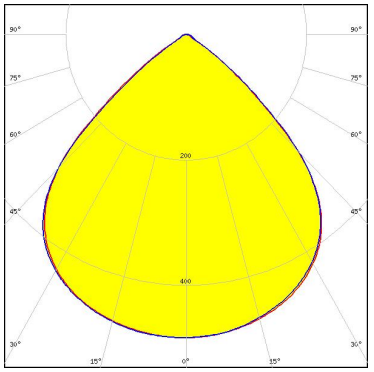
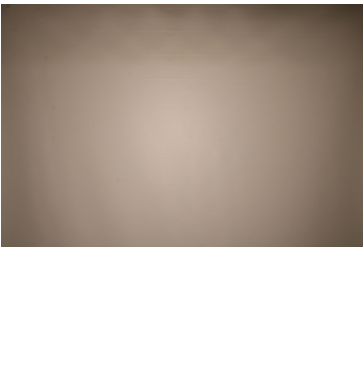
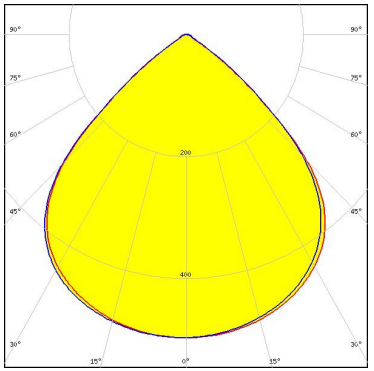
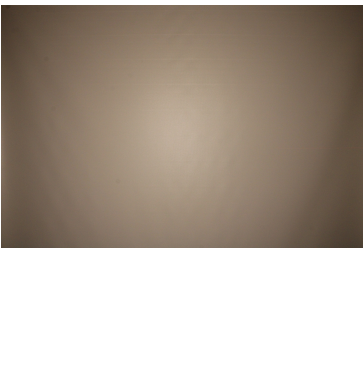
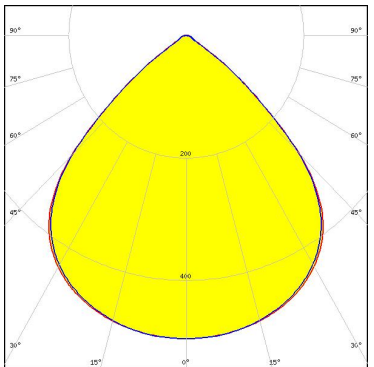


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

<p><b>AUDAX ELECTRONICS</b></p> <p>LED LIGHT ENGINE STRADA-IP 24 LEDs 147.4 x 46.2 x 1.5</p> <p>FWHM / FWTM 94.0° / 114.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 HE</p> <p>FWHM / FWTM 93.0° / 113.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM 92.0° / 112.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON XR-5050 HE (L225-xxxx024MLU010)</p> <p>FWHM / FWTM 93.0° / 113.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):

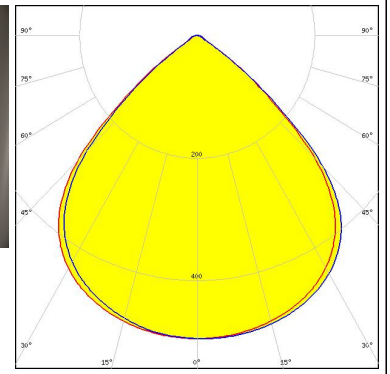
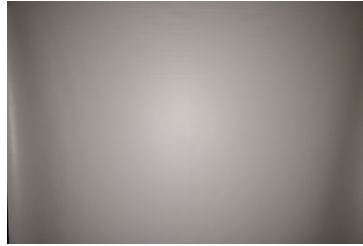
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S8</p> <p>FWHM / FWTM 96.0° / 114.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ S 5050</p> <p>FWHM / FWTM 94.0° / 113.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED HiLOM RM24 ZP (LH502D)</p> <p>FWHM / FWTM 94.0° / 114.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SCIOLUX</b></p> <p>LED CHI-VP-10K5-740-36</p> <p>FWHM / FWTM 92.0° / 112.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		



### OPTICAL RESULTS (MEASURED):

**SCIOLUX**

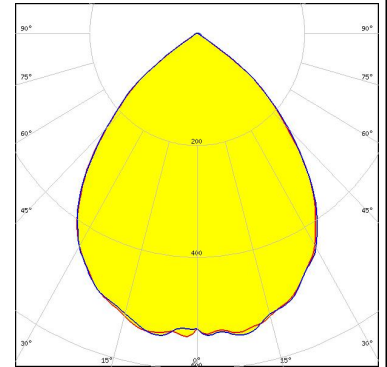
LED CHIEC-VE-11K4-740-48  
FWHM / FWTM 94.0 + 93.0° / 114.0 + 113.0°  
Efficiency 96 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



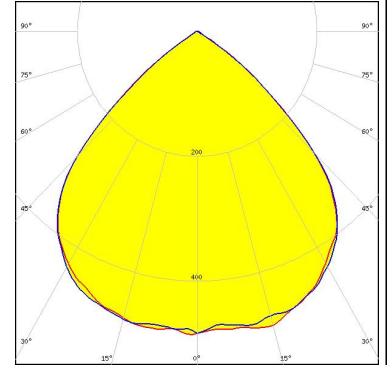
### OPTICAL RESULTS (SIMULATED):



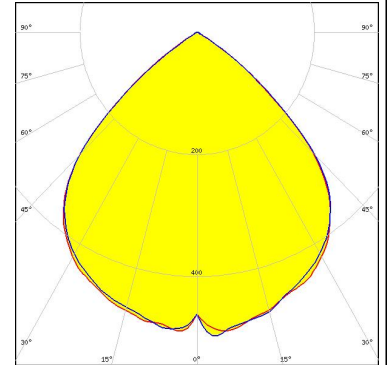
LED J Series 3030  
 FWHM / FWTM 86.0° / 112.0°  
 Efficiency 93 %  
 Peak intensity 0.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



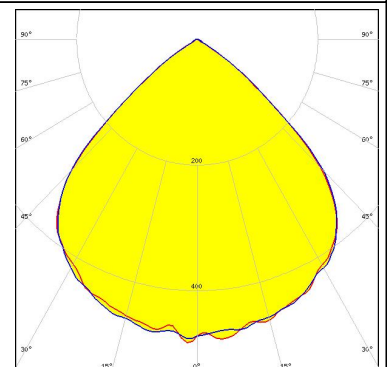
LED J Series 5050 Round LES  
 FWHM / FWTM 94.0° / 114.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



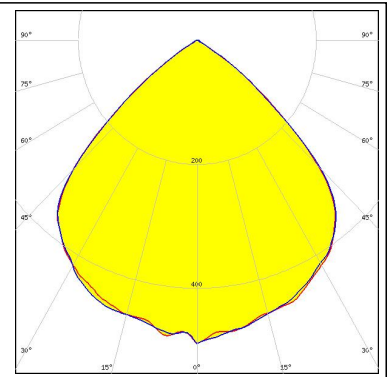
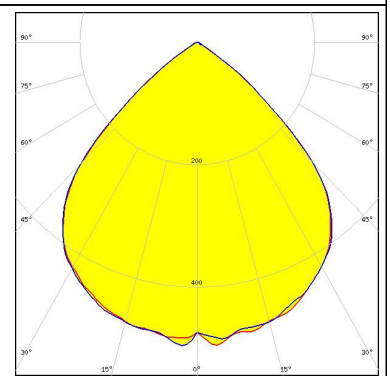
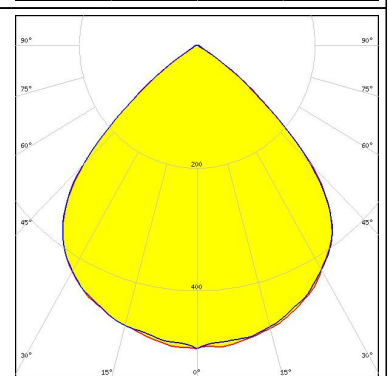
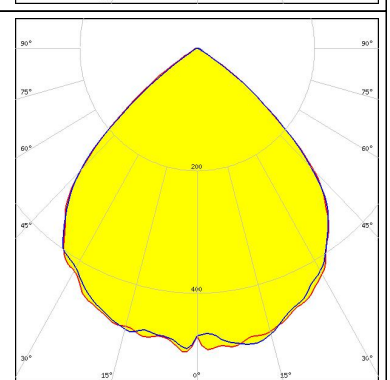
LED J Series 5050C 6V E Class  
 FWHM / FWTM 94.0° / 114.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED ReLED 147x47mm 5800lm 7x0 5050 STRADA-IP-24 G2  
 FWHM / FWTM 95.0° / 114.0°  
 Efficiency 93 %  
 Peak intensity 0.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



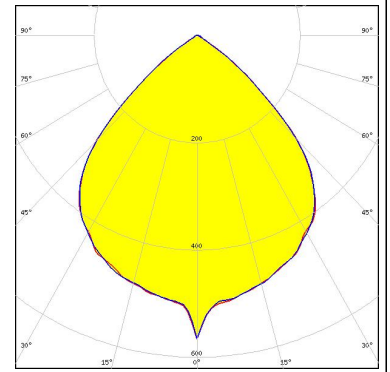
### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NFMW48xA            FWHM / FWTM: 94.0° / 114.0°            Efficiency: 93 %            Peak intensity: 0.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SAMSUNG</b></p> <p>LED: HiLOM RM24 ZP (LH502C)            FWHM / FWTM: 93.0° / 114.0°            Efficiency: 93 %            Peak intensity: 0.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SAMSUNG</b></p> <p>LED: LH502C            FWHM / FWTM: 92.0° / 113.0°            Efficiency: 93 %            Peak intensity: 0.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>SAMSUNG</b></p> <p>LED: LH502D            FWHM / FWTM: 93.0 + 94.0° / 114.0 + 113.0°            Efficiency: 93 %            Peak intensity: 0.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

### OPTICAL RESULTS (SIMULATED):

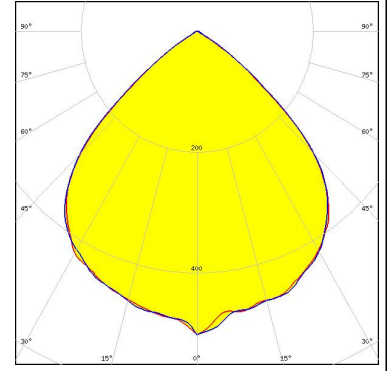
#### SAMSUNG

LED LH508C  
FWHM / FWTM 89.0° / 112.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

LED SEOUL DC 5050 6V  
FWHM / FWTM 94.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 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)