

### 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 ⓘ

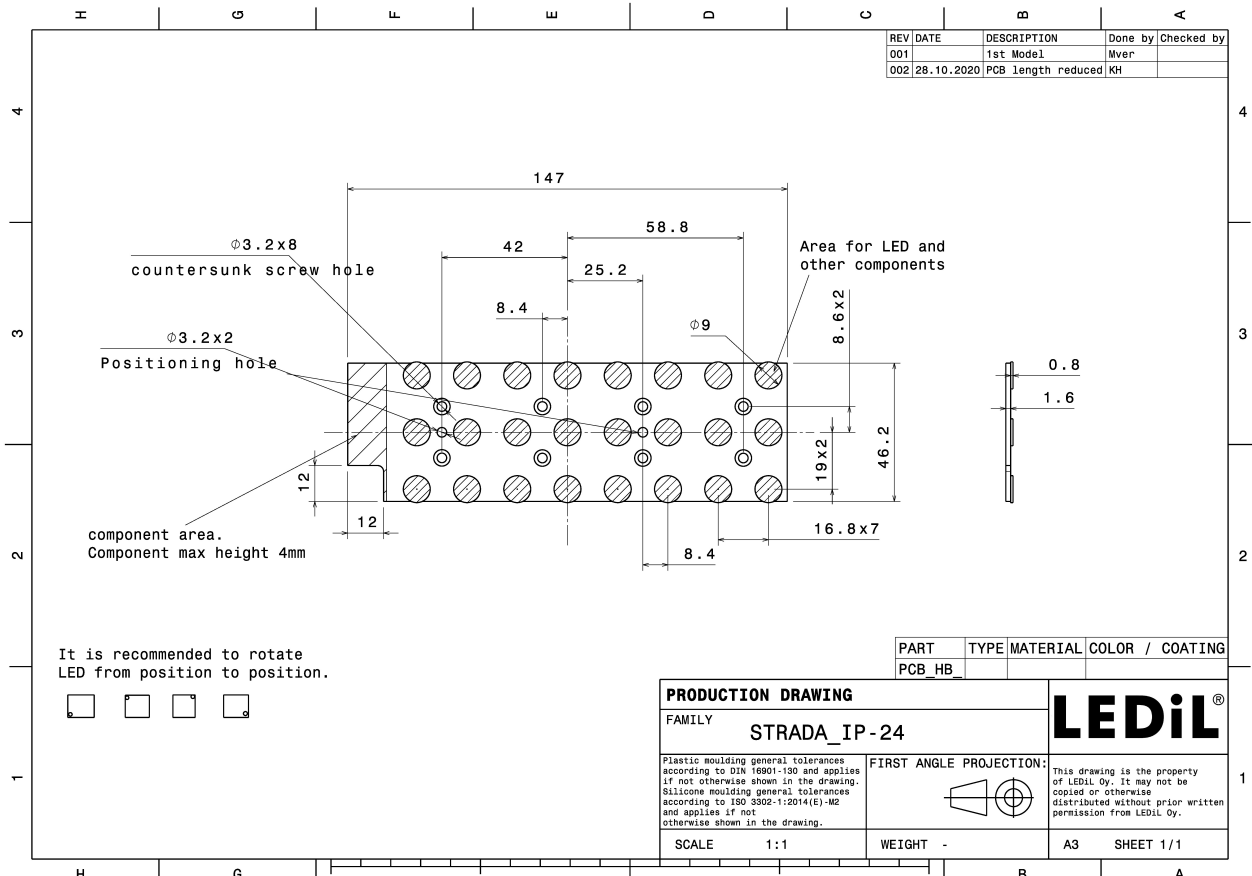
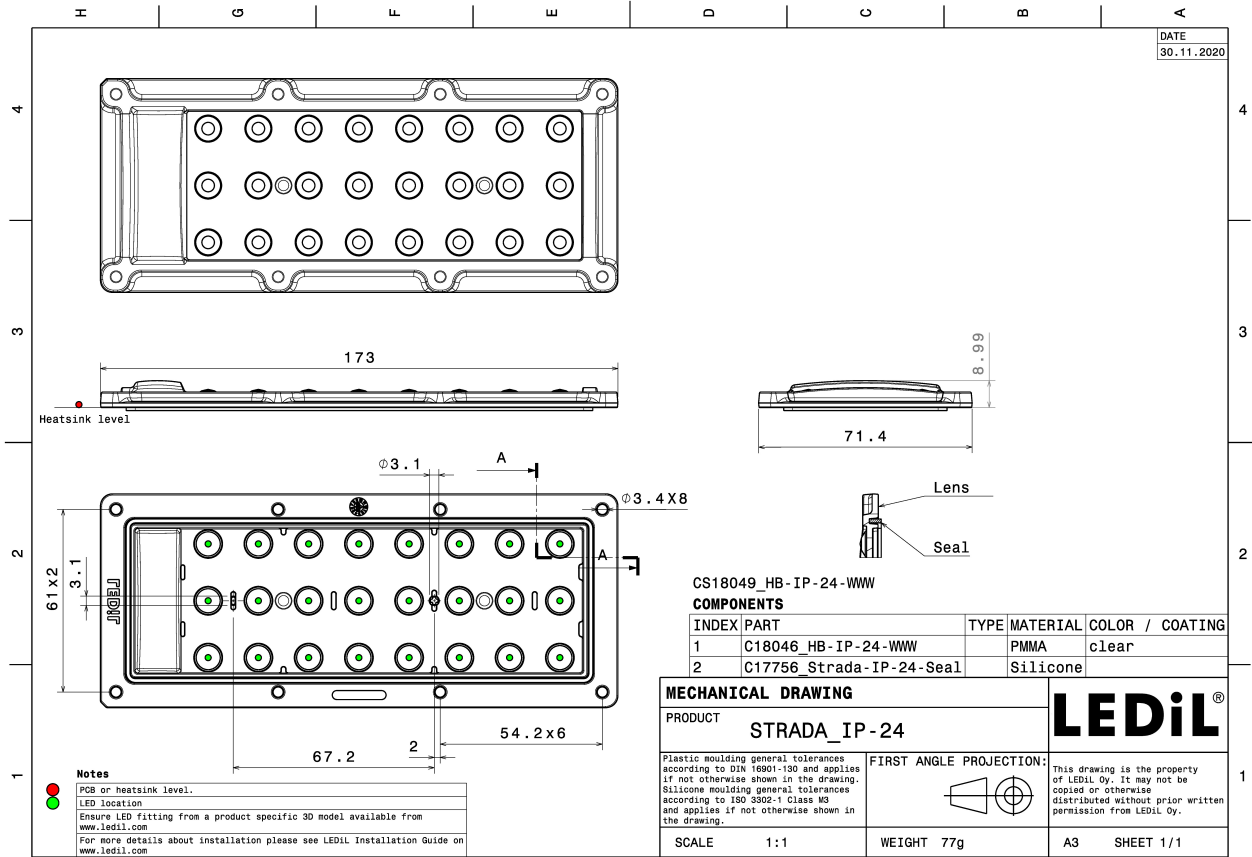
#### MATERIALS:

Component	Type	Material	Colour	Finish	Length
HB-IP-24-WWW	Multi-lens	PMMA	clear		173.0
STRADA-IP-24-SEAL	Seal	Silicone	white		165.0



#### 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



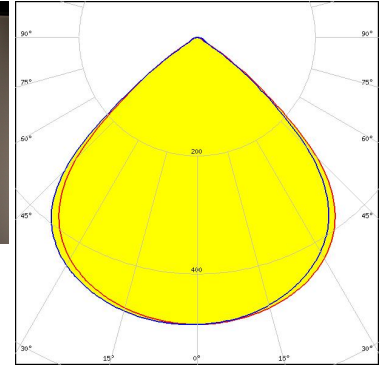
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



### OPTICAL RESULTS (MEASURED):



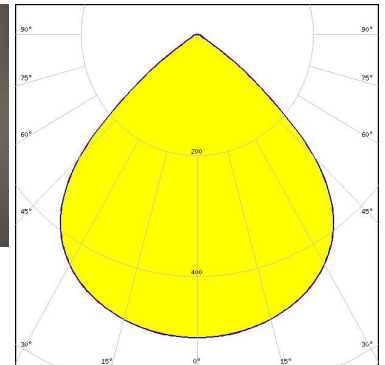
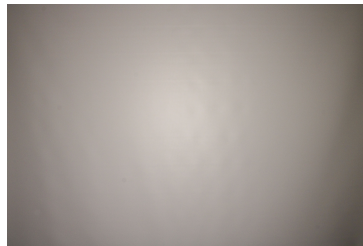
LED LIGHT ENGINE STRADA-IP 24 LEDs 147.4 x 46.2 x 1.5  
FWHM / FWTM 94.0° / 114.0°  
Efficiency 96 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



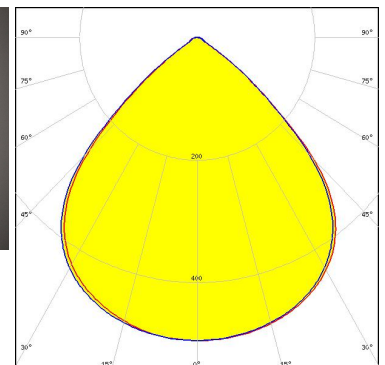
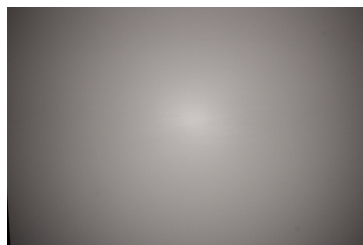
LED LUXEON 5050 HE  
FWHM / FWTM 93.0° / 113.0°  
Efficiency 96 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON 5050 Square LES  
FWHM / FWTM 92.0° / 112.0°  
Efficiency 95 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### OPTICAL RESULTS (MEASURED):

**LUMILEDS**

LED LUXEON XR-5050 HE (L225-xxxx024MLU010)

FWHM / FWTM 93.0° / 113.0°

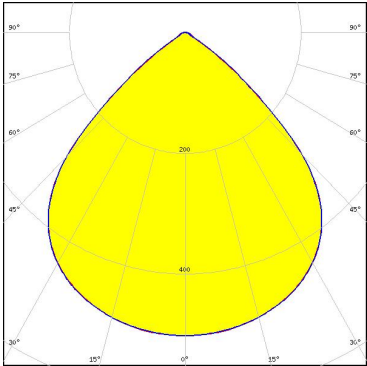
Efficiency 97 %

Peak intensity 0.5 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED Duris S8

FWHM / FWTM 96.0° / 114.0°

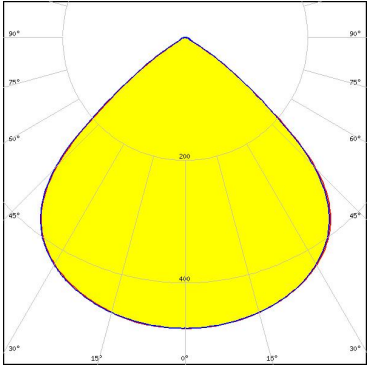
Efficiency 96 %

Peak intensity 0.5 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ S 5050

FWHM / FWTM 94.0° / 113.0°

Efficiency 94 %

Peak intensity 0.5 cd/lm

LEDs/each optic 1

Light colour/type White

Required components:

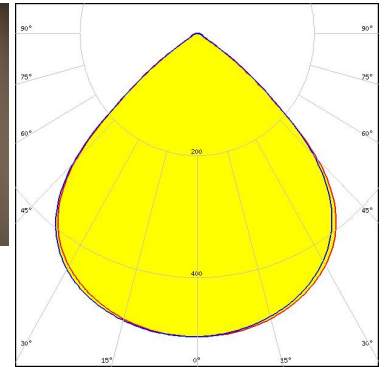
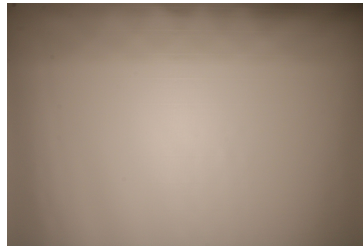


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

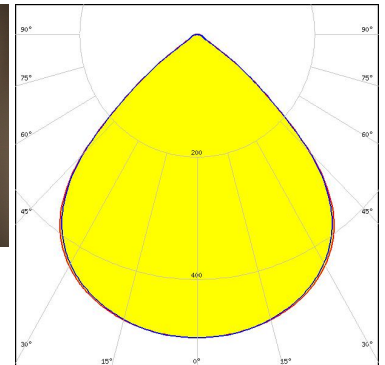
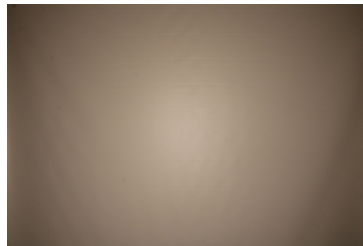
LED HiLOM RM24 ZP (LH502D)  
FWHM / FWTM 94.0° / 114.0°  
Efficiency 97 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SCIOLUX

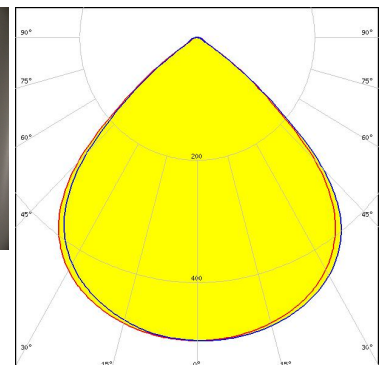
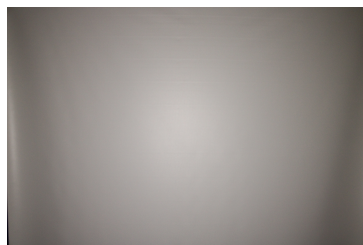
LED CHI-VP-10K5-740-36  
FWHM / FWTM 92.0° / 112.0°  
Efficiency 94 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SCIOLUX

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

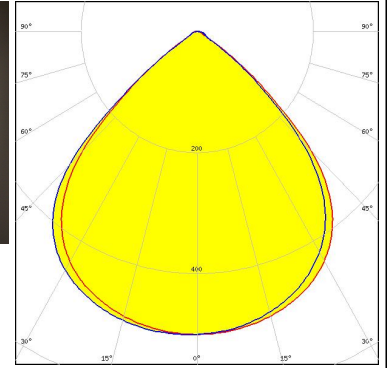
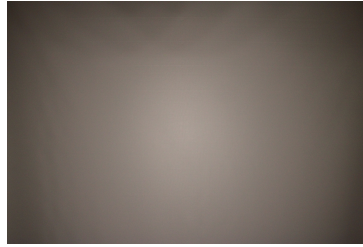


Light distribution files

### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

LED RLE 3x8 6000lm HP HE EXC3 OTD  
FWHM / FWTM 93.0° / 113.0°  
Efficiency 96 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

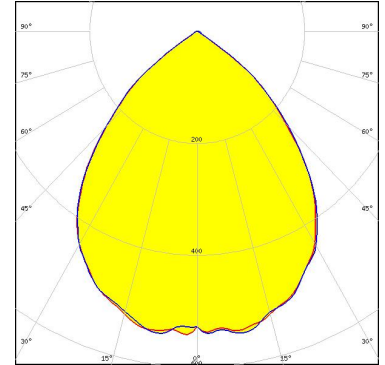


Light distribution files

### OPTICAL RESULTS (SIMULATED):



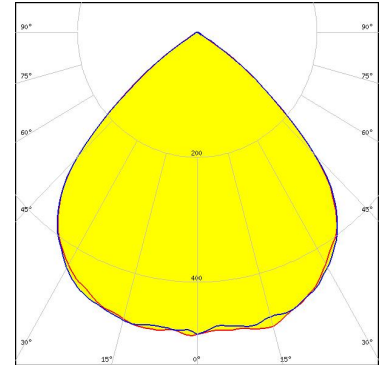
LED J Series 3030  
FWHM / FWTM 86.0° / 112.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



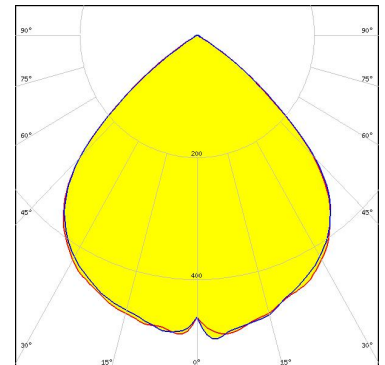
LED J Series 5050 Round LES  
FWHM / FWTM 94.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



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/type White  
Required components:

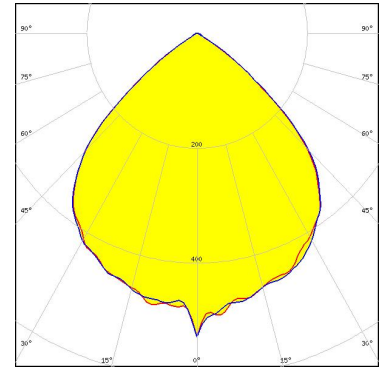


Light distribution files

### OPTICAL RESULTS (SIMULATED):



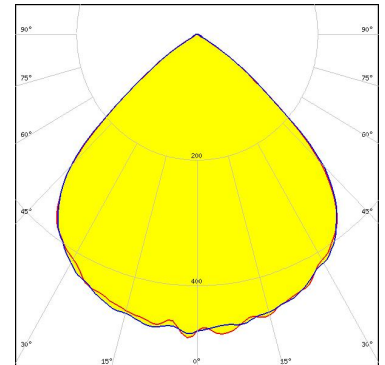
LED LUXEON 5050 HE  
FWHM / FWTM 92.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



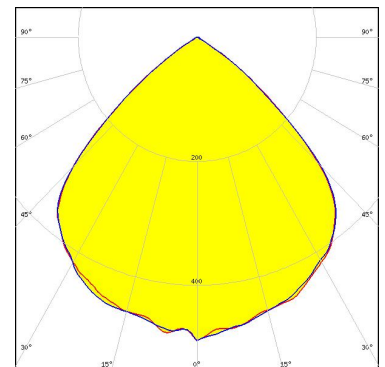
LED RecLED 147x47mm 5800lm 7x0 5050 STRADA-IP-24 G2  
FWHM / FWTM 95.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NFMW48xA  
FWHM / FWTM 94.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

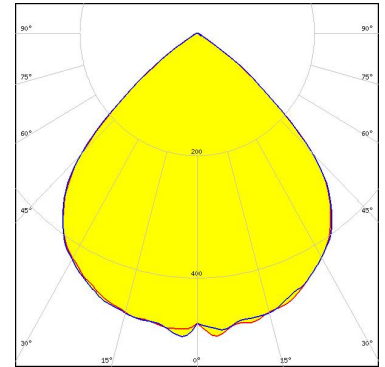


Light distribution files

### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

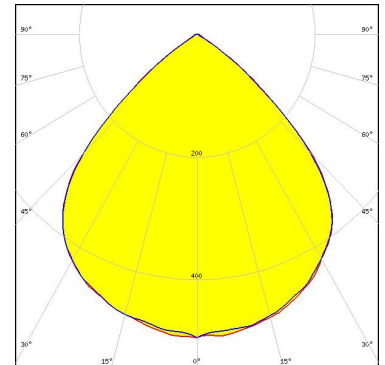
LED HiLOM RM24 ZP (LH502C)  
FWHM / FWTM 93.0° / 114.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SAMSUNG

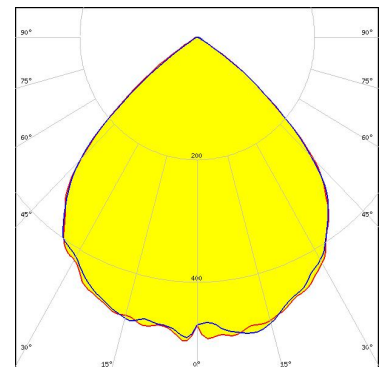
LED LH502C  
FWHM / FWTM 92.0° / 113.0°  
Efficiency 93 %  
Peak intensity 0.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### SAMSUNG

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/type White  
Required components:



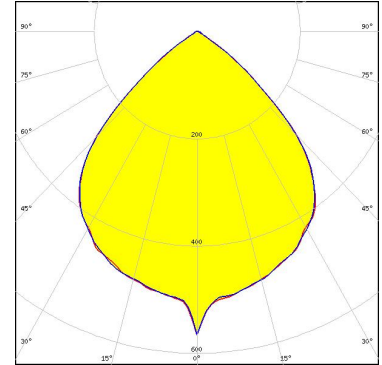
Light distribution files



### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

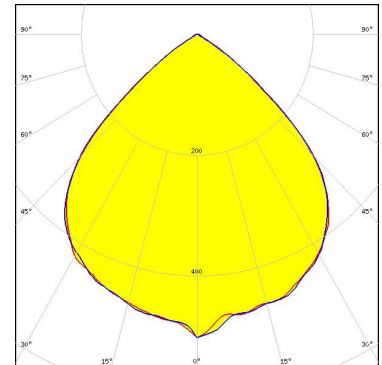
LED LH508C  
FWHM / FWTM 89.0° / 112.0°  
Efficiency 93 %  
Peak intensity 0.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



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/type White  
Required components:



Light distribution files

### 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:

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