

## EMERALD-A

Asymmetric beam

### TECHNICAL SPECIFICATIONS:

Dimensions	Ø 21.6 mm
Height	6.9 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

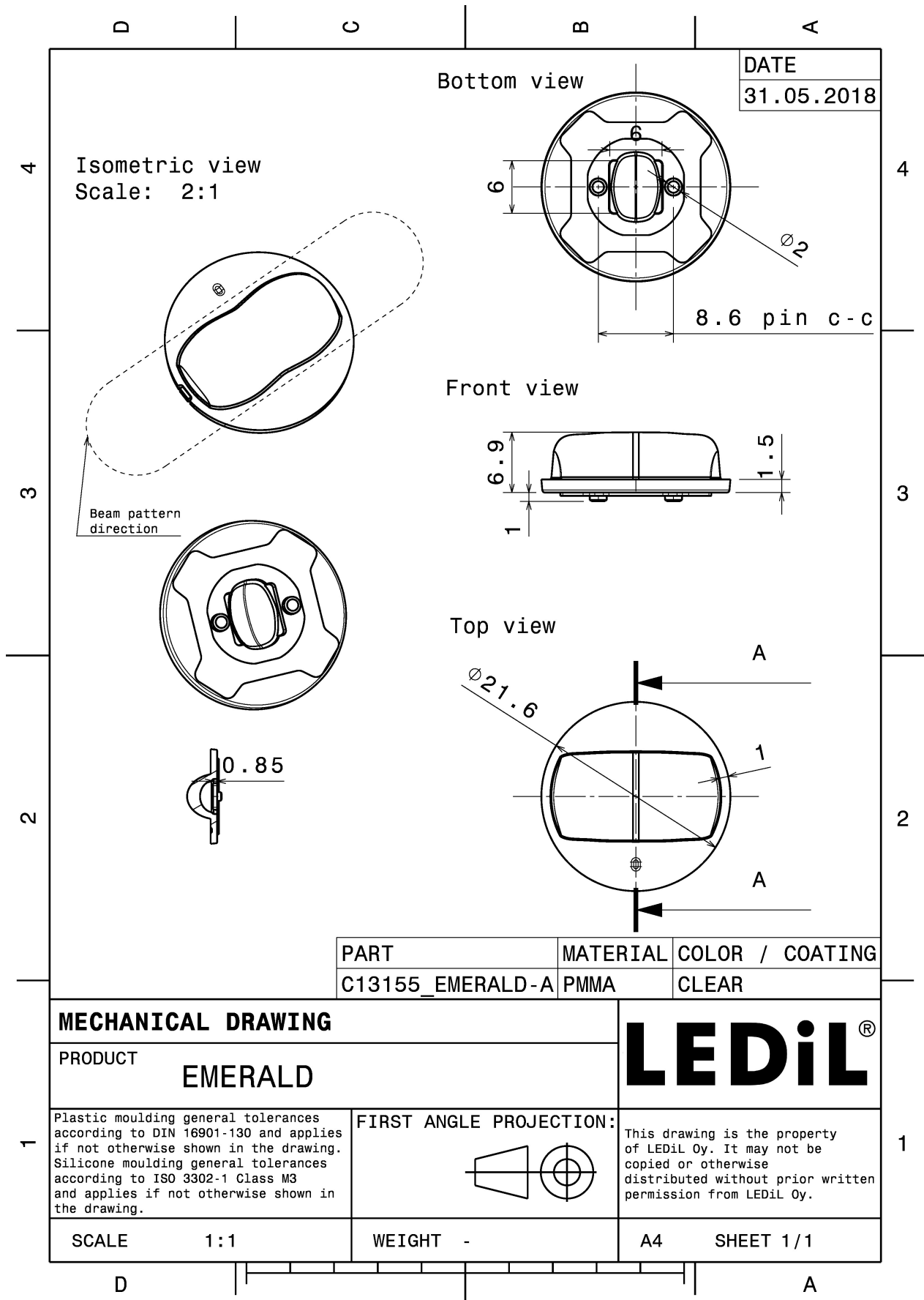
### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
EMERALD-A	Single lens	PMMA	clear	

### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13155_EMERALD-A » Box size: 480 x 280 x 300 mm	2128	336	112	4.8



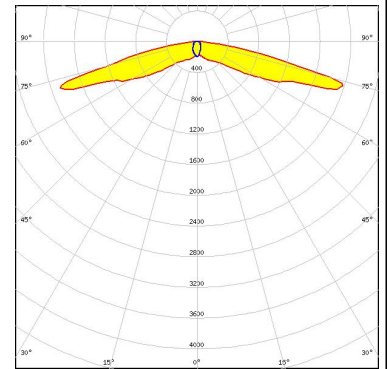


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### PHOTOMETRIC DATA (MEASURED):

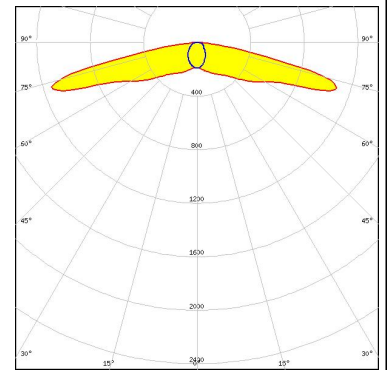
#### CREE LED

LED XB-D  
 FWHM / FWTM 157.0 + 62.0°  
 Efficiency 90 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



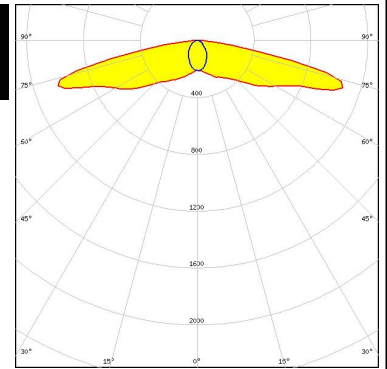
#### CREE LED

LED XM-L  
 FWHM / FWTM 157.0 + 83.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



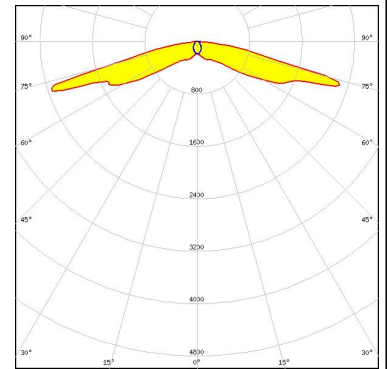
#### CREE LED

LED XM-L2  
 FWHM / FWTM 169.0 + 73.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### CREE LED

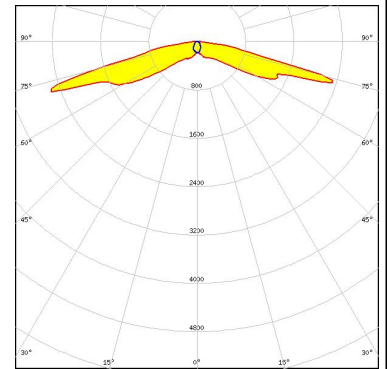
LED XP-E  
 FWHM / FWTM 158.0 + 73.0°  
 Efficiency 93 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

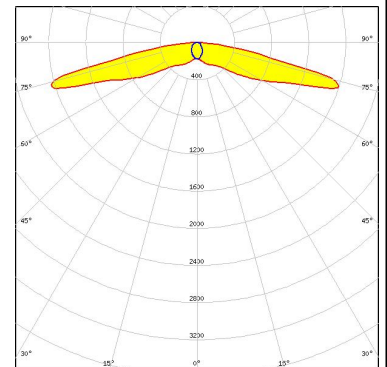
#### CREE LED

LED XP-E2  
 FWHM / FWTM 156.0 + 72.0°  
 Efficiency 93 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



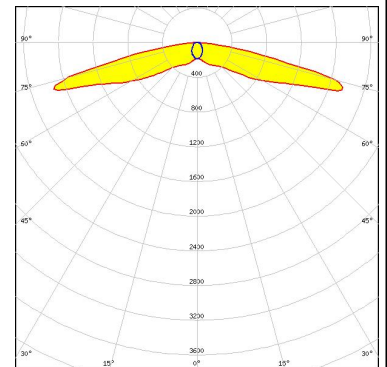
#### CREE LED

LED XP-G  
 FWHM / FWTM 159.0 + 79.0°  
 Efficiency 89 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



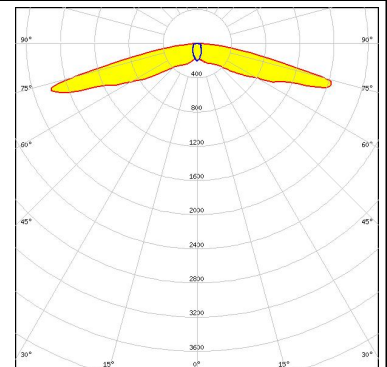
#### CREE LED

LED XP-G2  
 FWHM / FWTM 158.0 + 79.0°  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### CREE LED

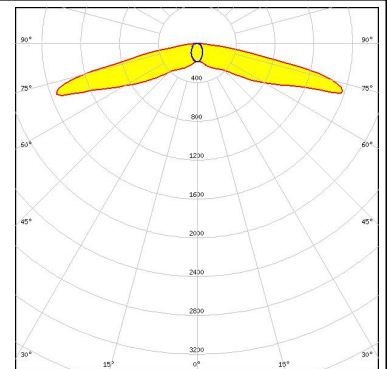
LED XT-E  
 FWHM / FWTM 157.0 + 61.0°  
 Efficiency 89 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

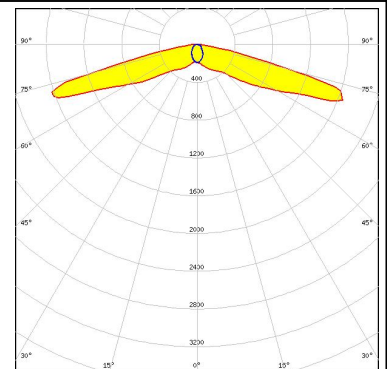
#### LUMILEDS

LED LUXEON A  
 FWHM / FWTM 156.0 + 75.0°  
 Efficiency 92 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



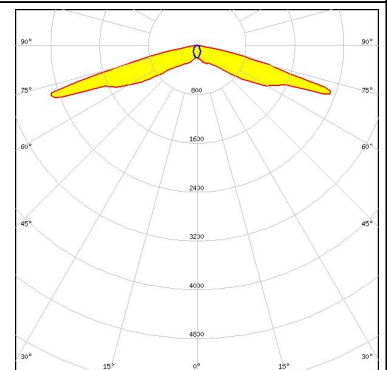
#### LUMILEDS

LED LUXEON R  
 FWHM / FWTM 153.0 + 73.0°  
 Efficiency 92 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



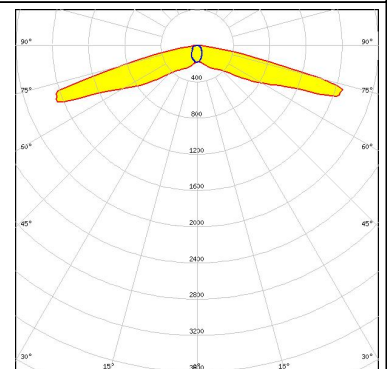
#### LUMILEDS

LED LUXEON Rebel  
 FWHM / FWTM 152.0 + 67.0°  
 Efficiency 92 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### LUMILEDS

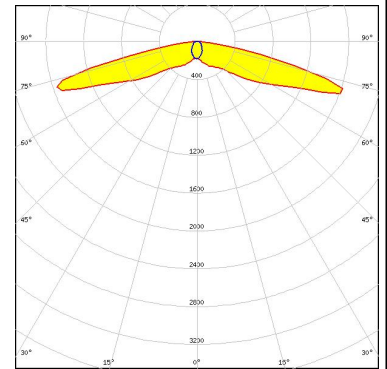
LED LUXEON Rebel ES  
 FWHM / FWTM 153.0 + 74.0°  
 Efficiency 90 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

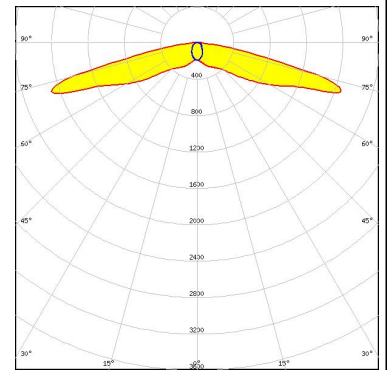
#### LUMILEDS

LED LUXEON T  
 FWHM / FWTM 155.0 + 76.0°  
 Efficiency 93 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



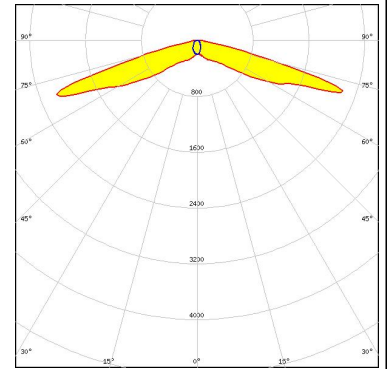
#### LUMILEDS

LED LUXEON TX  
 FWHM / FWTM 156.0 + 73.0°  
 Efficiency 94 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



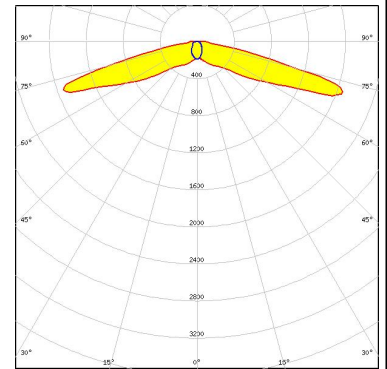
#### NICHIA

LED NCSxx19A  
 FWHM / FWTM 151.0 + 65.0°  
 Efficiency 92 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### NICHIA

LED NVSxx19A  
 FWHM / FWTM 153.0 + 71.0°  
 Efficiency 91 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHOTOMETRIC DATA (MEASURED):

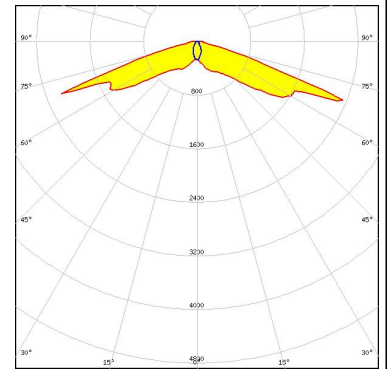
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM / FWTM 155.0 + 80.0° / 168.0 + 158.0°            Efficiency 92 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM Square EC            FWHM / FWTM 156.0 + 80.0°            Efficiency 93 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM Square PC            FWHM / FWTM 156.0 + 83.0°            Efficiency 93 %            Peak intensity 1.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLOM SSL 150            FWHM / FWTM 157.0 + 86.0°            Efficiency 92 %            Peak intensity 2.9 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	

### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

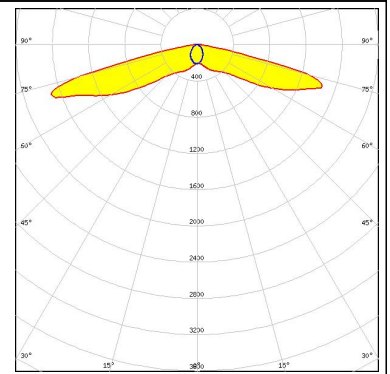
Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 147.0 + 52.0°  
Efficiency 89 %  
Peak intensity 1.9 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### SAMSUNG

LED LH351Z  
FWHM / FWTM 154.0 + 76.0°  
Efficiency 94 %  
Peak intensity 1.7 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:

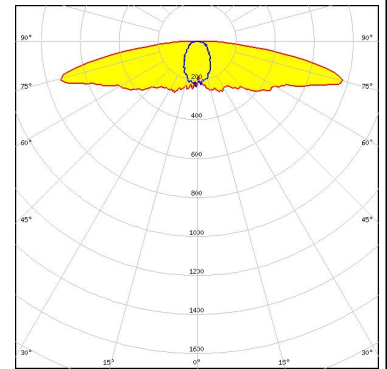




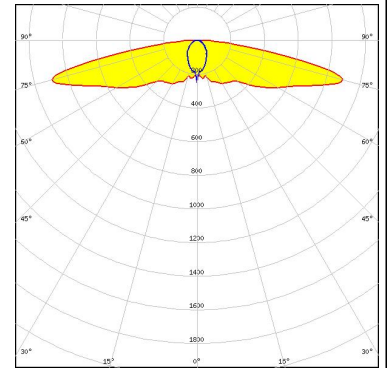
### PHOTOMETRIC DATA (SIMULATED):



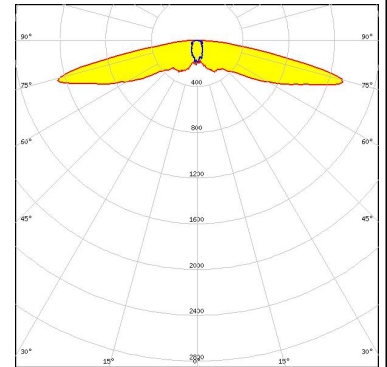
LED XHP35 HD  
 FWHM / FWTM 164.0 + 68.0°  
 Efficiency 91 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XHP35 HI  
 FWHM / FWTM 162.0 + 51.0° / 176.0 + 146.0°  
 Efficiency 90 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED XP-L HI  
 FWHM / FWTM 159.0°  
 Efficiency 89 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



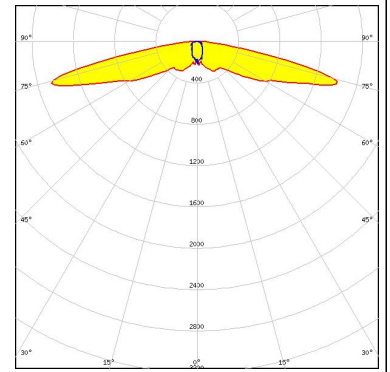
LED NF2W757G-MT (Tunable White)  
 FWHM / FWTM 159.0 + 59.0° / 172.0 + 158.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour Tunable White  
 Required components:

### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

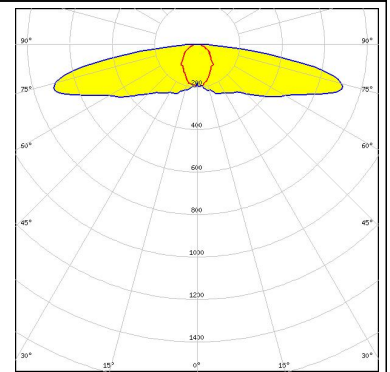
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 158.0 + 70.0°  
Efficiency 93 %  
Peak intensity 1.5 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### SAMSUNG

LED LH351D  
FWHM / FWTM 86.0 + 164.0° / 166.0 + 176.0°  
Efficiency 91 %  
Peak intensity 0.7 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:

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