

## EMERALD-A

Asymmetric beam

### SPECIFICATION:

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

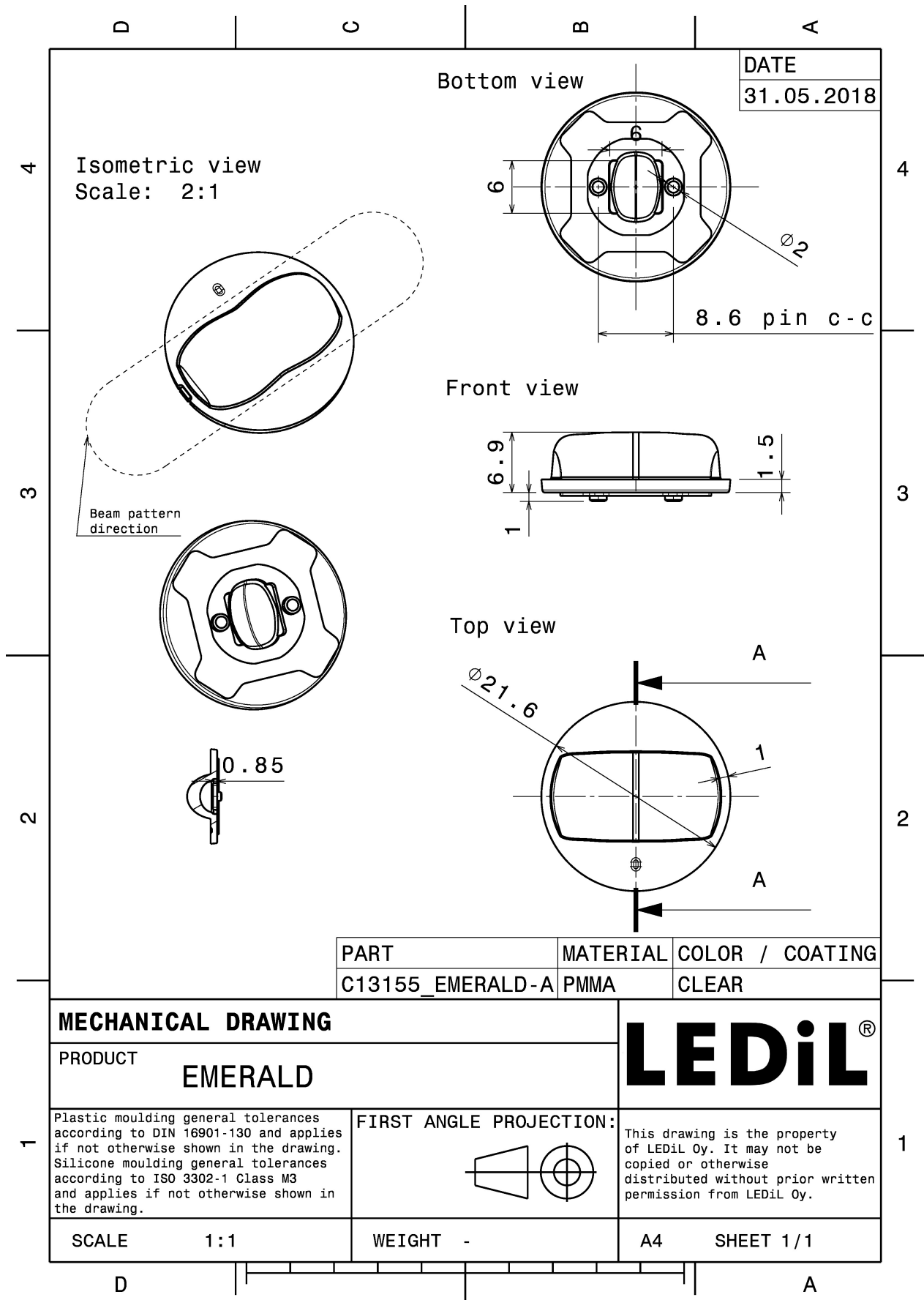
### MATERIALS:

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



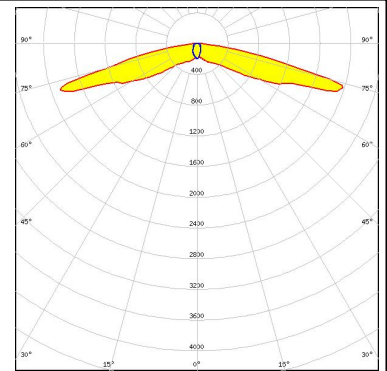


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

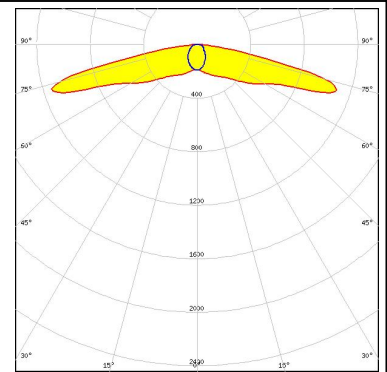
### OPTICAL RESULTS (MEASURED):



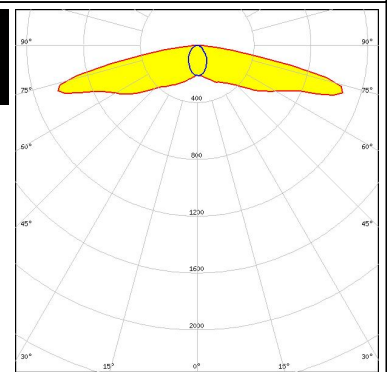
LED XB-D  
 FWHM / FWTM 157.0 + 62.0°  
 Efficiency 90 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



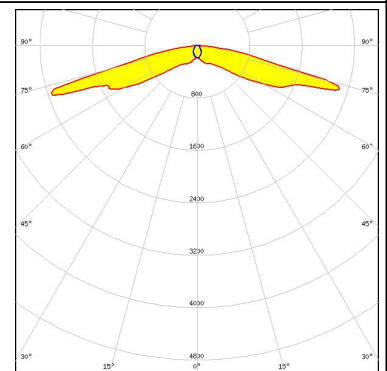
LED XM-L  
 FWHM / FWTM 157.0 + 83.0°  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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:



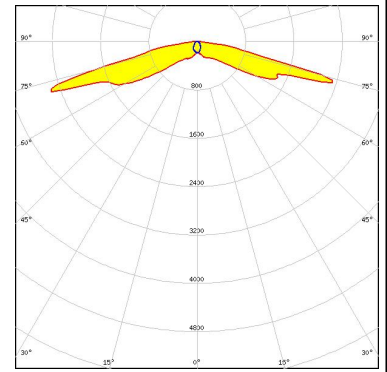
LED XP-E  
 FWHM / FWTM 158.0 + 73.0°  
 Efficiency 93 %  
 Peak intensity 2.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



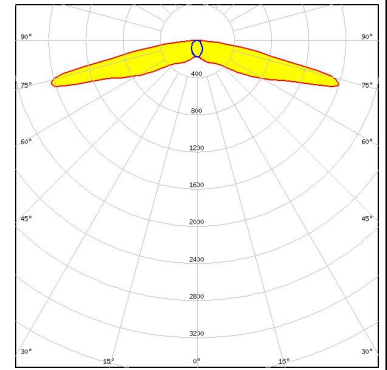
### OPTICAL RESULTS (MEASURED):



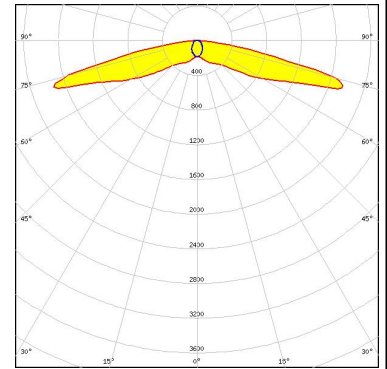
LED XP-E2  
 FWHM / FWTM 156.0 + 72.0°  
 Efficiency 93 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



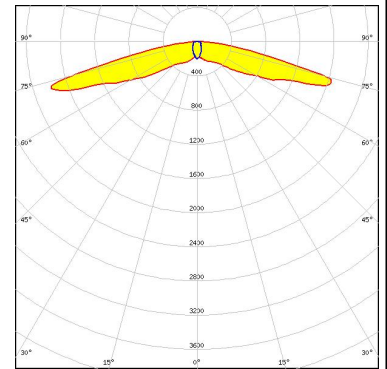
LED XP-G  
 FWHM / FWTM 159.0 + 79.0°  
 Efficiency 89 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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:



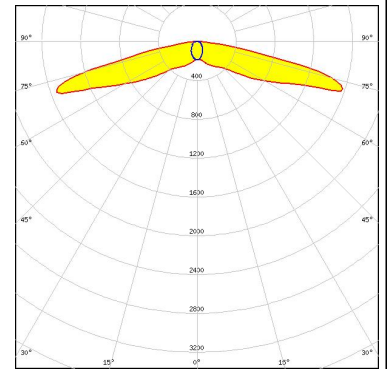
LED XT-E  
 FWHM / FWTM 157.0 + 61.0°  
 Efficiency 89 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (MEASURED):

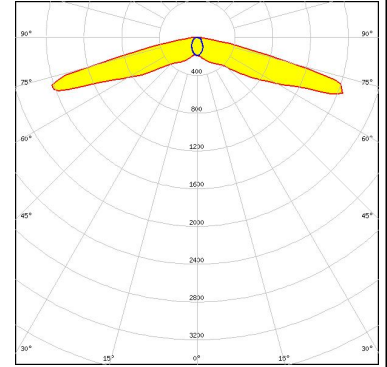
#### LUMILEDS

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:



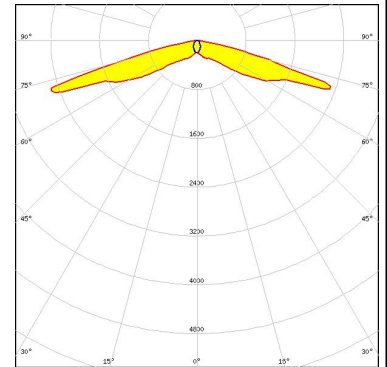
#### LUMILEDS

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:



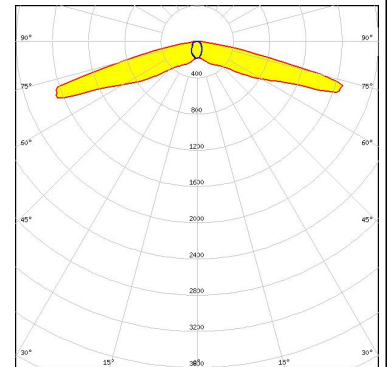
#### LUMILEDS

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

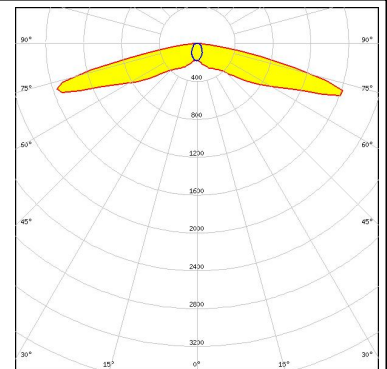
LED LUXEON Rebel ES  
 FWHM / FWTM 153.0 + 74.0°  
 Efficiency 90 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (MEASURED):

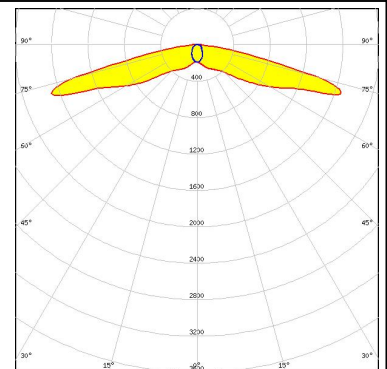
#### LUMILEDS

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:



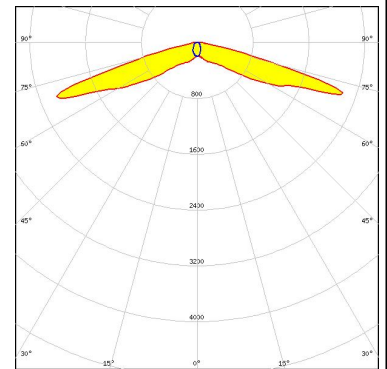
#### LUMILEDS

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:



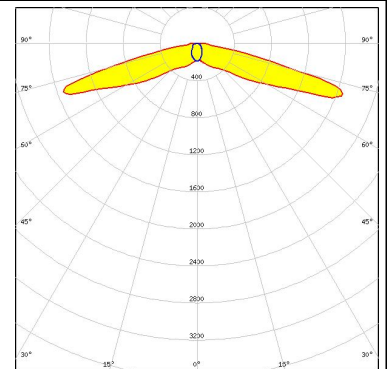
#### NICHIA

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:

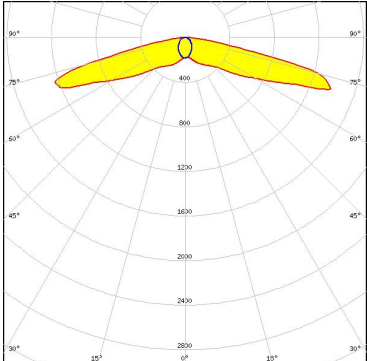
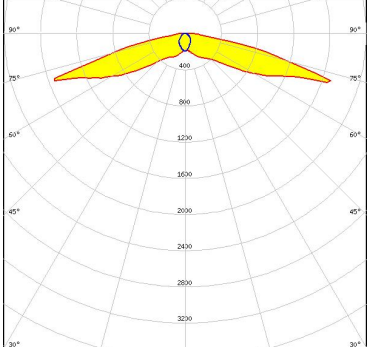
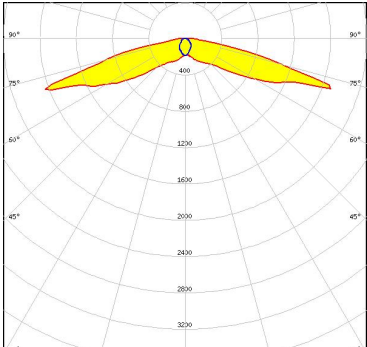
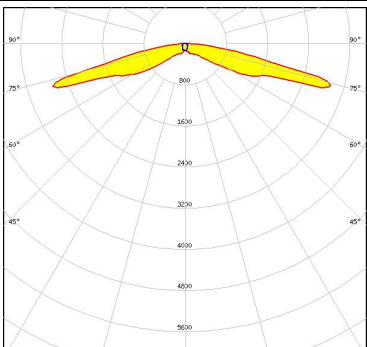


#### NICHIA

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:



### OPTICAL RESULTS (MEASURED):

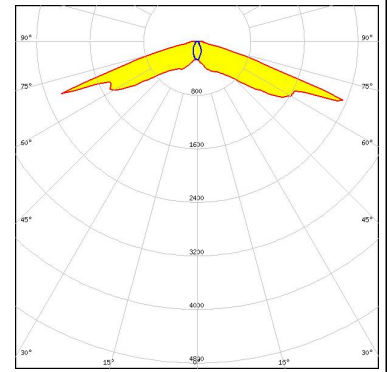
<p><b>NICHIA</b></p> <p>LED NVSxx19B/NVSxx19C            FWHM / FWTM 155.0 + 80.0° / 168.0 + 158.0°            Efficiency 92 %            Peak intensity 1.4 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED 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>	

### OPTICAL RESULTS (MEASURED):

#### OSRAM

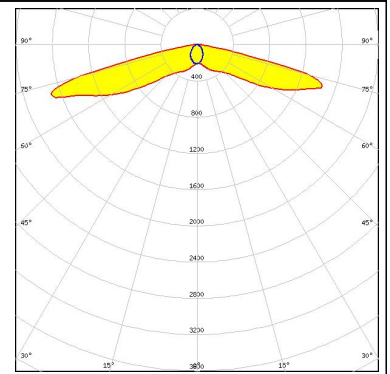
Opto Semiconductors

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:

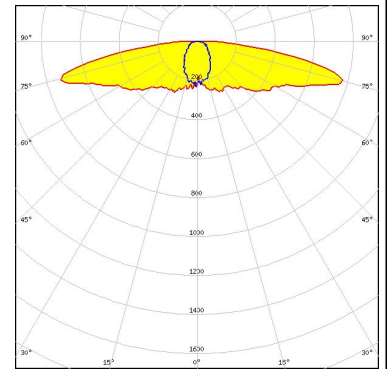




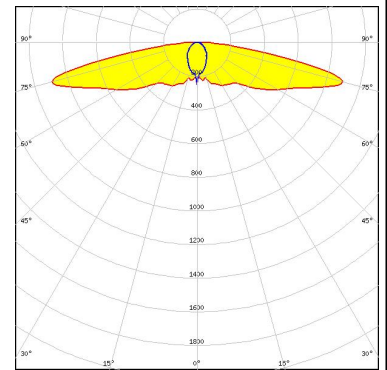
### OPTICAL RESULTS (SIMULATED):



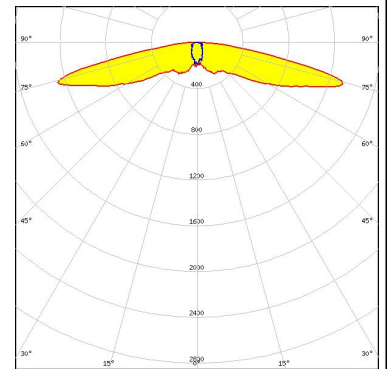
LED XHP35 HD  
 FWHM / FWTM 164.0 + 68.0°  
 Efficiency 91 %  
 Peak intensity 0.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



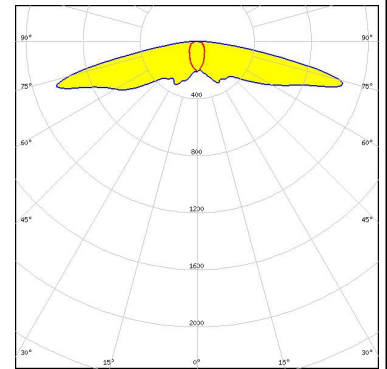
LED XHP35 HI  
 FWHM / FWTM 162.0 + 51.0° / 176.0 + 146.0°  
 Efficiency 90 %  
 Peak intensity 0.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



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:

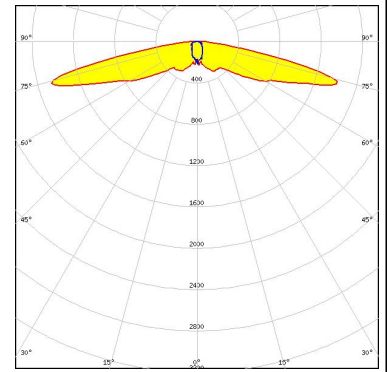


### OPTICAL RESULTS (SIMULATED):

#### OSRAM

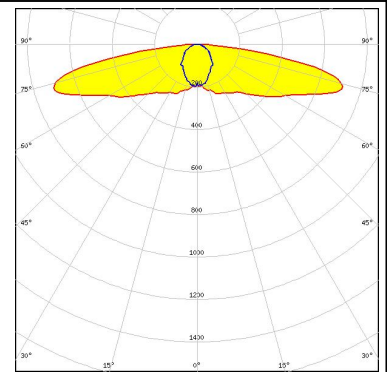
Opto Semiconductors

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:



SEOUL SEMICONDUCTOR

LED Z5M4  
 FWHM / FWTM 154.0 + 66.0° / 168.0 + 144.0°  
 Efficiency 91 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

