

EMERALD-A

Asymmetric beam

SPECIFICATION:

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

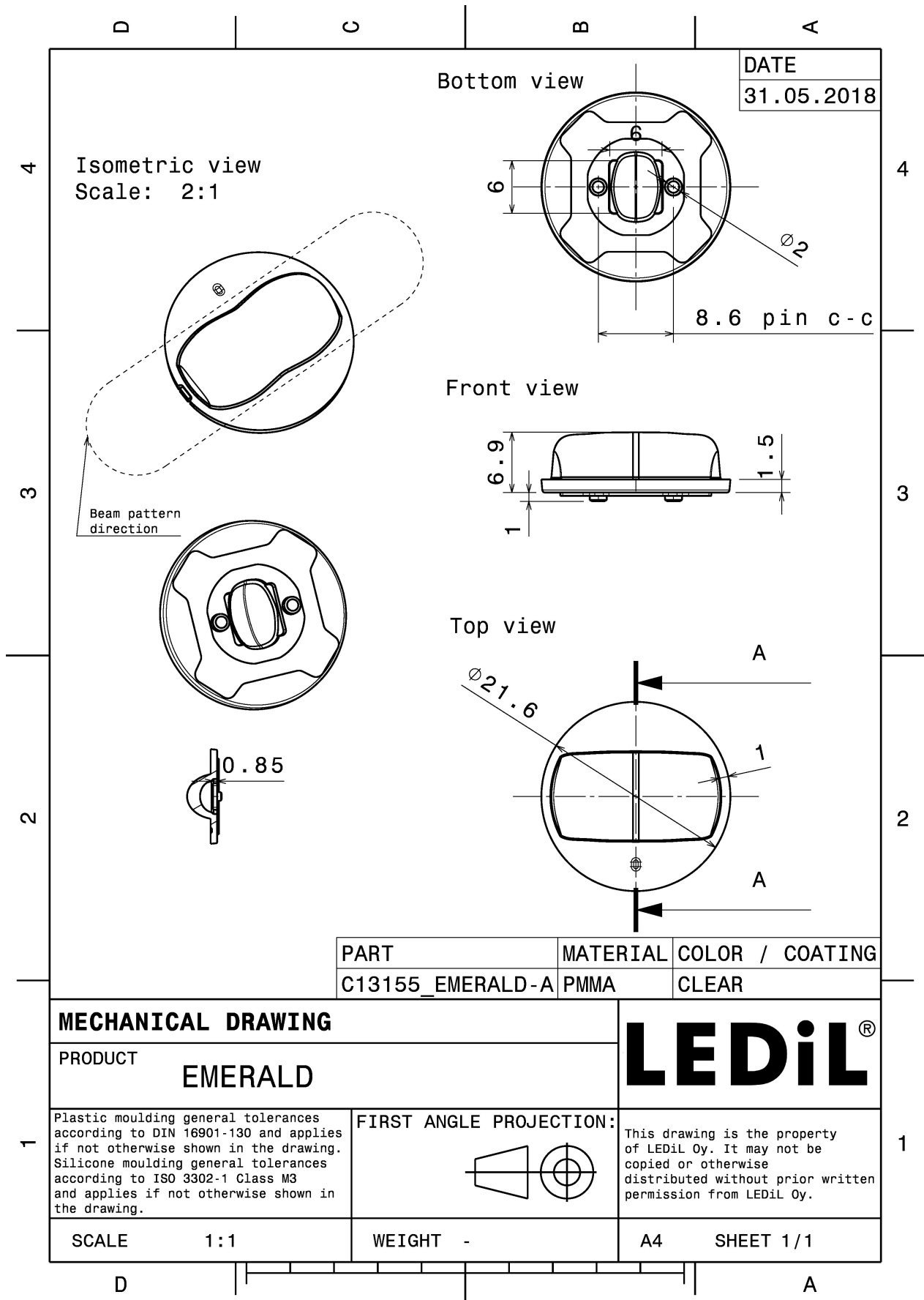
MATERIALS:

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



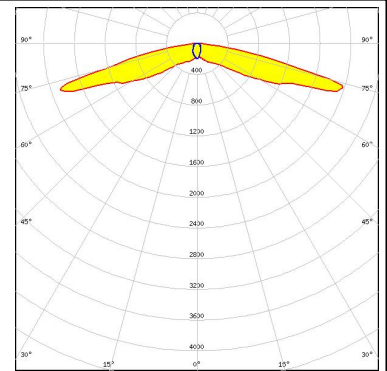


See also our general installation guide: www.ledil.com/installation_guide

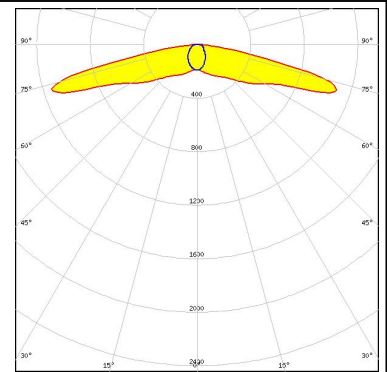
OPTICAL RESULTS (MEASURED):



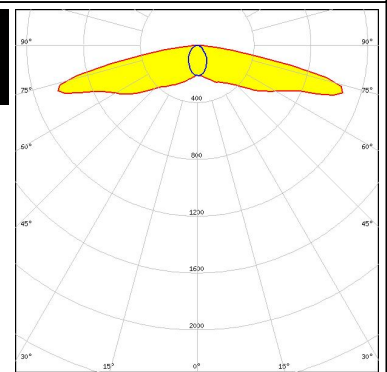
LED XB-D
 FWHM / FWTM 157.0 + 62.0°
 Efficiency 90 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



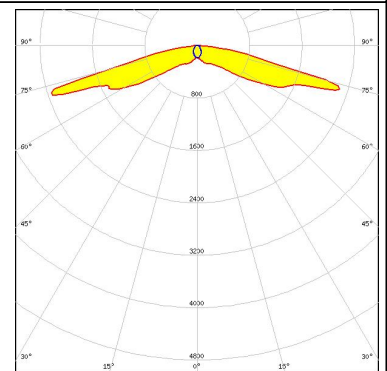
LED XM-L
 FWHM / FWTM 157.0 + 83.0°
 Efficiency 94 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



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:



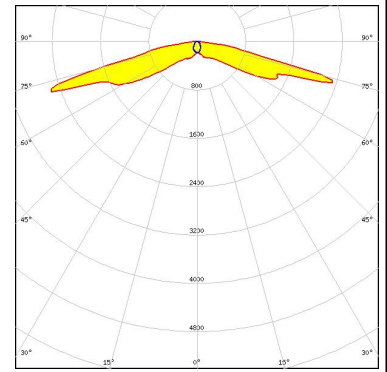
LED XP-E
 FWHM / FWTM 158.0 + 73.0°
 Efficiency 93 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



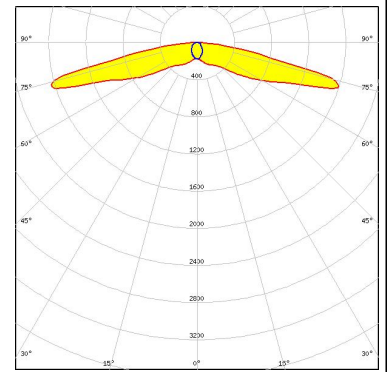
OPTICAL RESULTS (MEASURED):



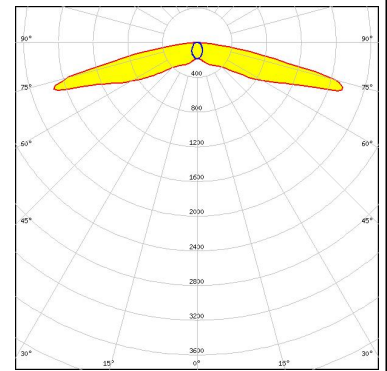
LED XP-E2
 FWHM / FWTM 156.0 + 72.0°
 Efficiency 93 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



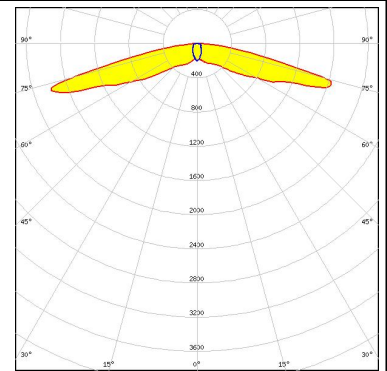
LED XP-G
 FWHM / FWTM 159.0 + 79.0°
 Efficiency 89 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



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:



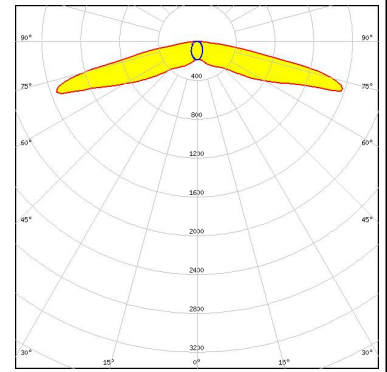
LED XT-E
 FWHM / FWTM 157.0 + 61.0°
 Efficiency 89 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

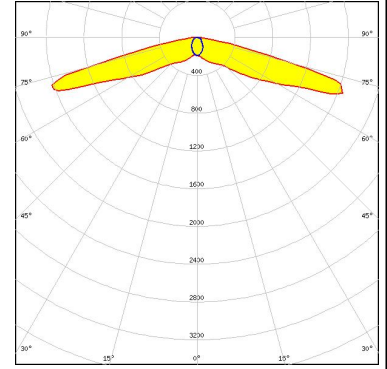
LUMILEDS

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:



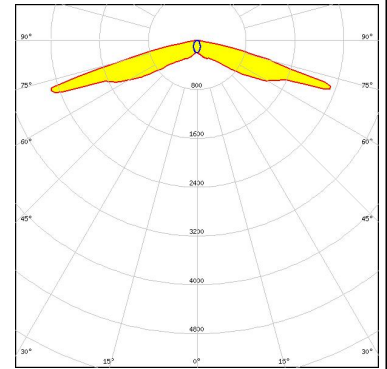
LUMILEDS

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:



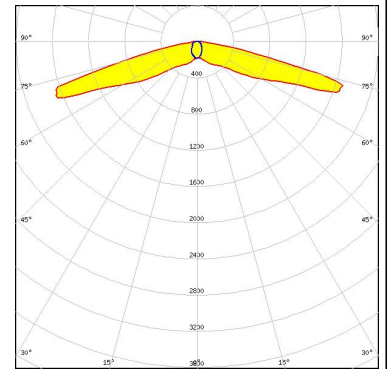
LUMILEDS

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

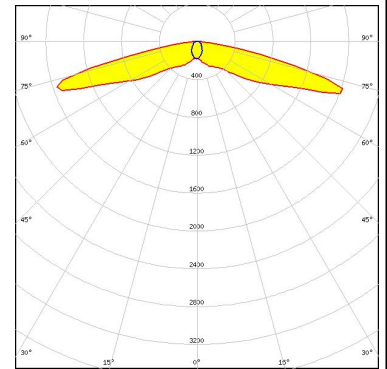
LED LUXEON Rebel ES
 FWHM / FWTM 153.0 + 74.0°
 Efficiency 90 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

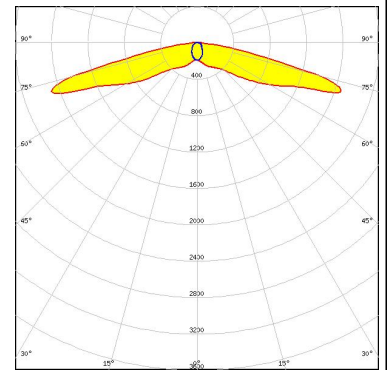
LUMILEDS

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:



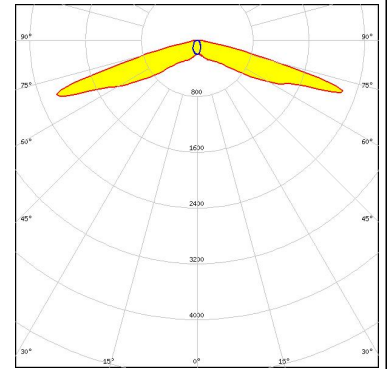
LUMILEDS

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:



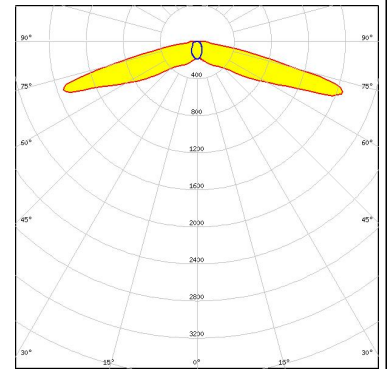
NICHIA

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:

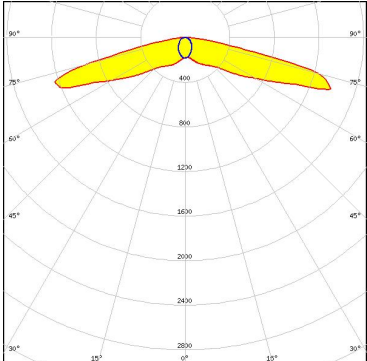
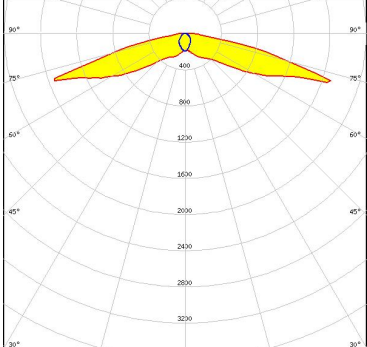
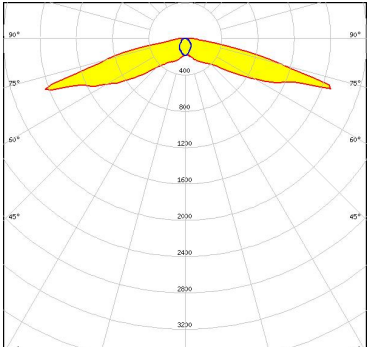
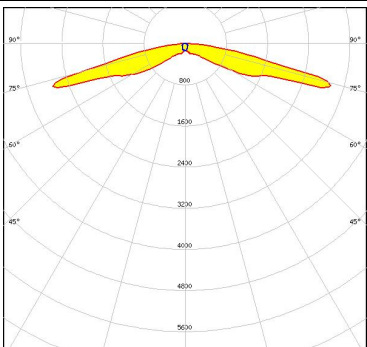


NICHIA

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):

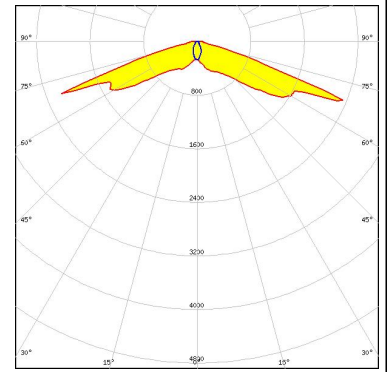
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 155.0 + 80.0° / 168.0 + 158.0° Efficiency 92 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLOM Square EC FWHM / FWTM 156.0 + 80.0° Efficiency 93 % Peak intensity 1.7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

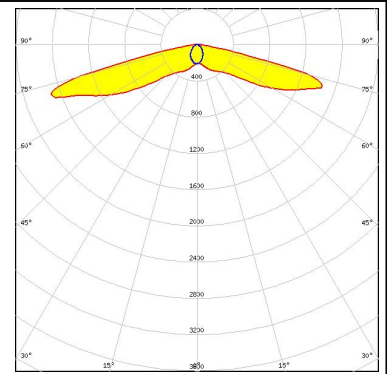
Opto Semiconductors

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:

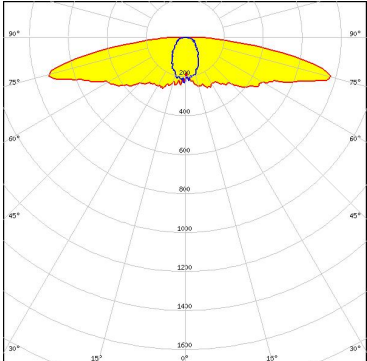
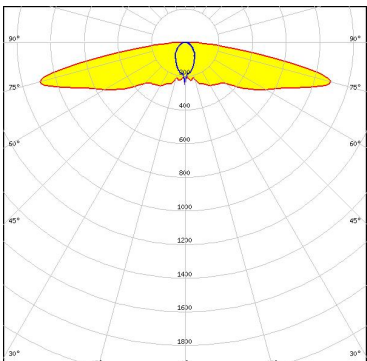
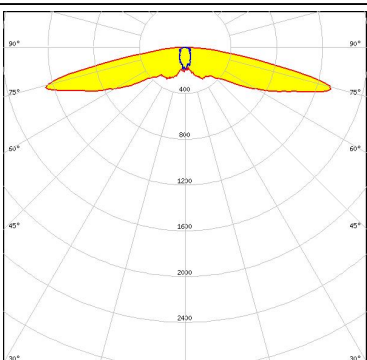
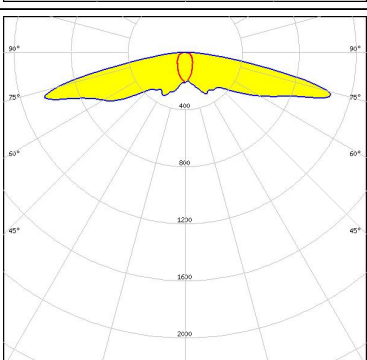


SAMSUNG

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):

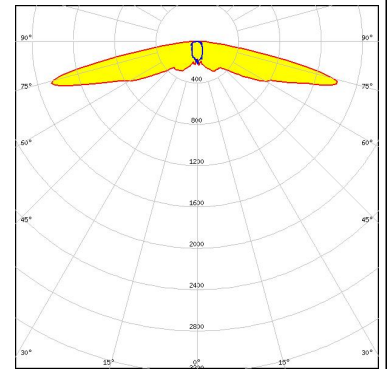
<p>CREE LEDs</p> <p>LED: XHP35 HD FWHM / FWTM: 164.0 + 68.0° Efficiency: 91 % Peak intensity: 0.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XHP35 HI FWHM / FWTM: 162.0 + 51.0° / 176.0 + 146.0° Efficiency: 90 % Peak intensity: 0.9 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>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:</p>	
<p>NICHIA</p> <p>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:</p>	

OPTICAL RESULTS (SIMULATED):

OSRAM

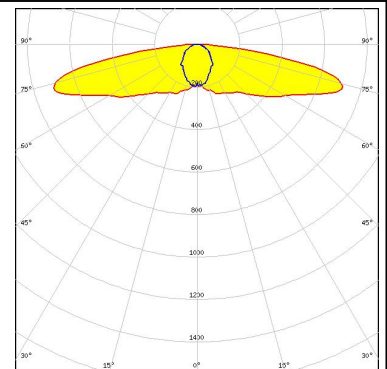
Opto Semiconductors

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:



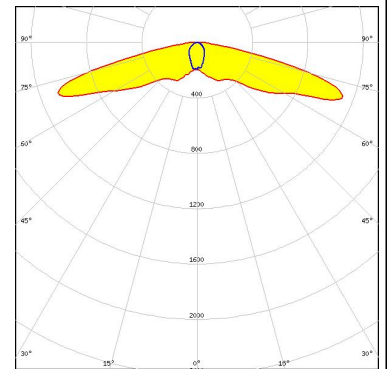
SAMSUNG

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:



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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