

EMMA-360

~170° side emitter

SPECIFICATION:

Dimensions	9.9 x 9.9 mm
Height	5.7 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

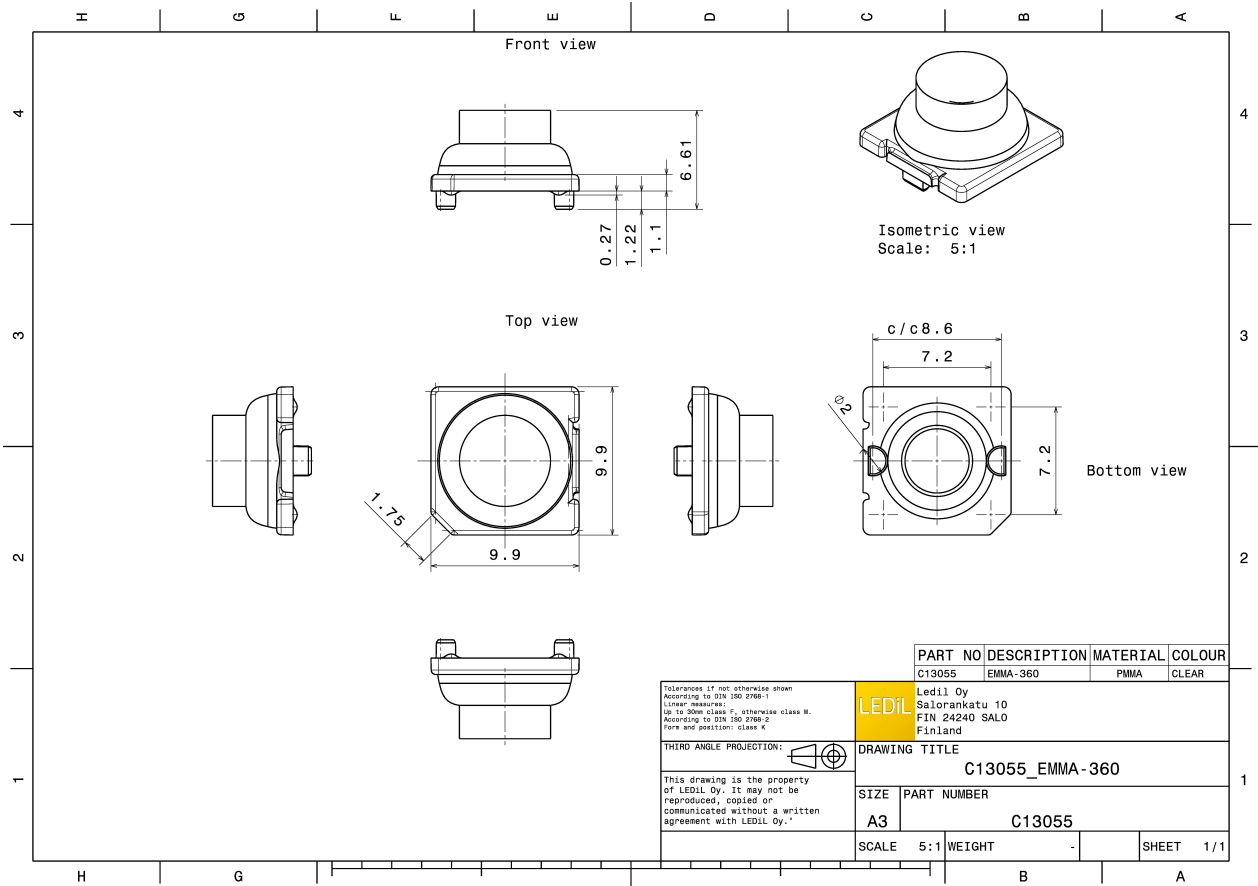
MATERIALS:

Component	Type	Material	Colour	Finish
EMMA-360	Single lens	PMMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13055_EMMA-360	5000	300	100	1.6
» Box size:				



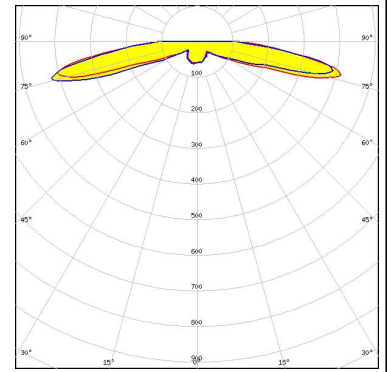


See also our general installation guide: www.ledil.com/installation_guide

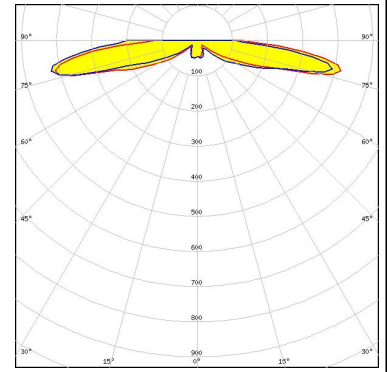
OPTICAL RESULTS (MEASURED):



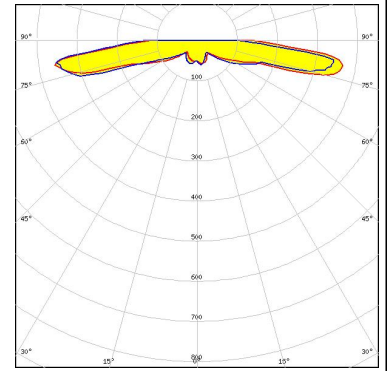
LED XB-D
 FWHM / FWTM 170.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



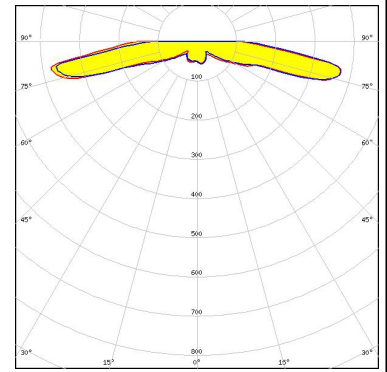
LED XP-E2
 FWHM / FWTM 172.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XP-G
 FWHM / FWTM 173.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



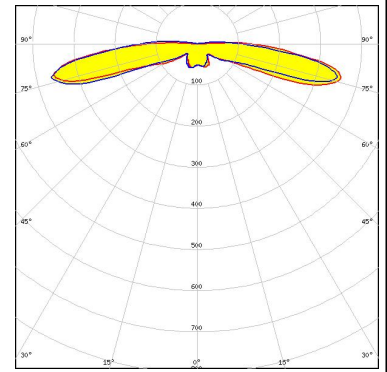
LED XP-G2
 FWHM / FWTM 172.0°
 Efficiency 90 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



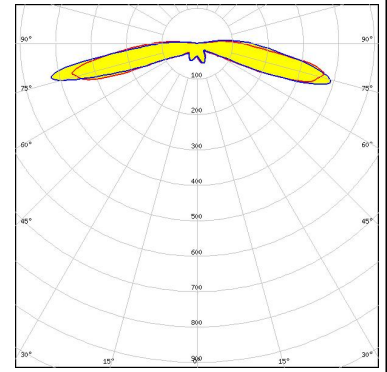
OPTICAL RESULTS (MEASURED):



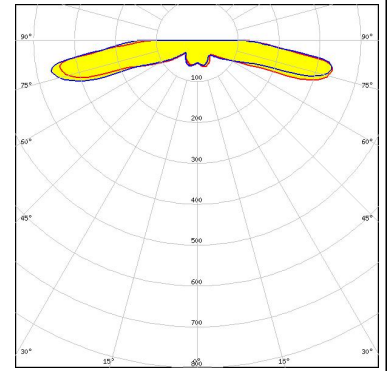
LED XT-E
 FWHM / FWTM 174.0° / 188.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



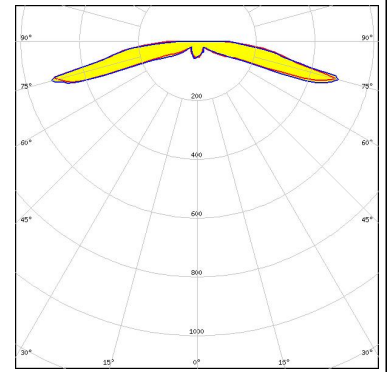
LED LUXEON 3535 2D
 FWHM / FWTM 170.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON A
 FWHM / FWTM 173.0°
 Efficiency 92 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON Rebel
 FWHM / FWTM 165.0°
 Efficiency 93 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



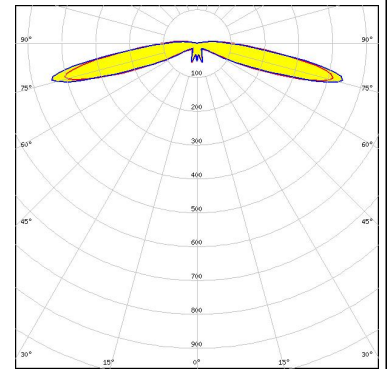
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NCSxx19A FWHM / FWTM 165.0° Efficiency 90 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	 <p>A beam spread diagram for the NICHIA LED. It features a circular grid with radial lines representing beam angles from 0° to 90° and concentric circles representing beam diameters from 100 to 900. A yellow shaded area represents the beam's spread, which is wider at the bottom (0°) and tapers towards the top (90°).</p>
<p>OSRAM Opto Semiconductors</p> <p>LED OSLO[®] Square EC FWHM / FWTM 170.0° Efficiency 92 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	 <p>A beam spread diagram for the OSRAM LED. It features a circular grid with radial lines representing beam angles from 0° to 90° and concentric circles representing beam diameters from 100 to 900. A yellow shaded area represents the beam's spread, which is wider at the bottom (0°) and tapers towards the top (90°).</p>

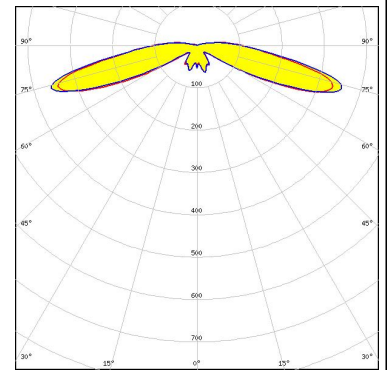
OPTICAL RESULTS (SIMULATED):



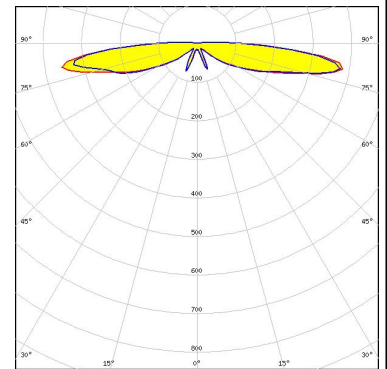
LED J Series 2835
 FWHM / FWTM 167.0° / 194.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



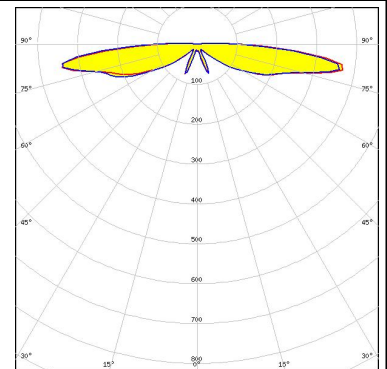
LED J Series 3030
 FWHM / FWTM 167.0° / 198.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



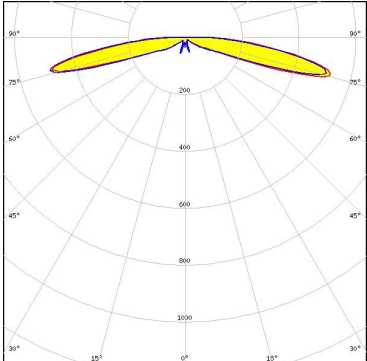
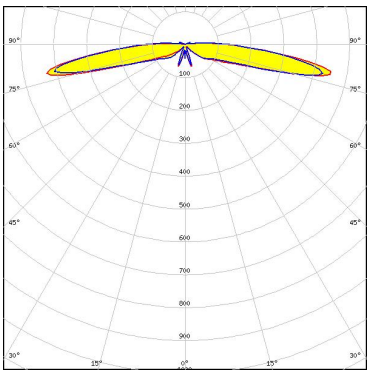
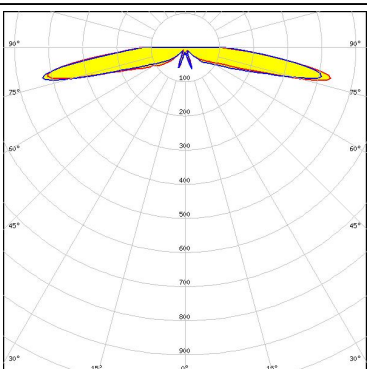
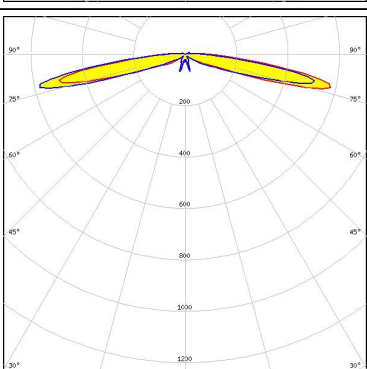
LED XE-G
 FWHM / FWTM 175.0° / 188.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XE-G
 FWHM / FWTM 176.0° / 188.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour Green
 Required components:



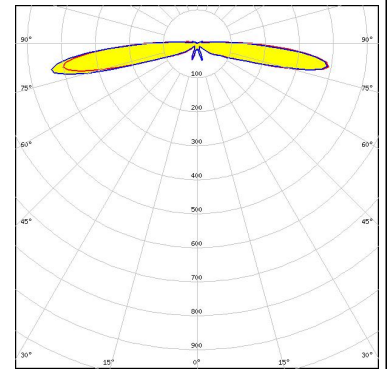
OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED: XQ-E HD FWHM / FWTM: 164.0° / 174.0° Efficiency: 92 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XQ-E HD FWHM / FWTM: 172.0° / 189.0° Efficiency: 97 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	
<p>CREE LEDs</p> <p>LED: XQ-E HD FWHM / FWTM: 170.0° / 182.0° Efficiency: 89 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: PC Amber Required components:</p>	
<p>CREE LEDs</p> <p>LED: XQ-E HI FWHM / FWTM: 166.0° / 181.0° Efficiency: 97 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	

OPTICAL RESULTS (SIMULATED):

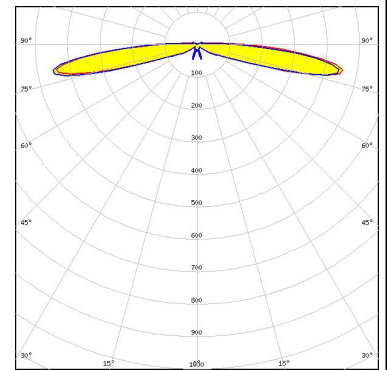
LUMILEDS

LED LUXEON C
 FWHM / FWTM 177.0° / 192.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour Red
 Required components:



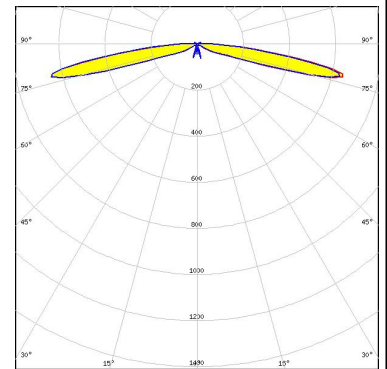
LUMILEDS

LED LUXEON C
 FWHM / FWTM 175.0° / 188.0°
 Efficiency 95 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour Green
 Required components:



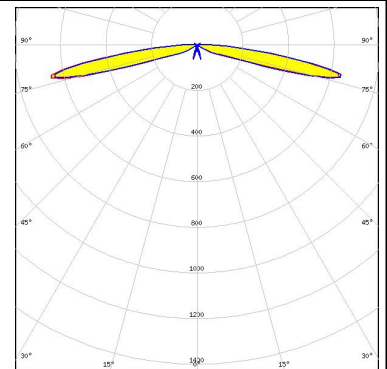
LUMILEDS

LED LUXEON CZ
 FWHM / FWTM 166.0° / 178.0°
 Efficiency 97 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour Royal Blue
 Required components:



LUMILEDS

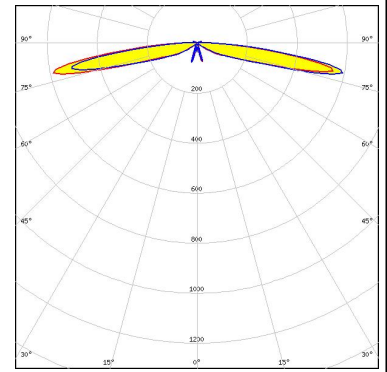
LED LUXEON CZ
 FWHM / FWTM 166.0° / 178.0°
 Efficiency 97 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour Blue
 Required components:



OPTICAL RESULTS (SIMULATED):

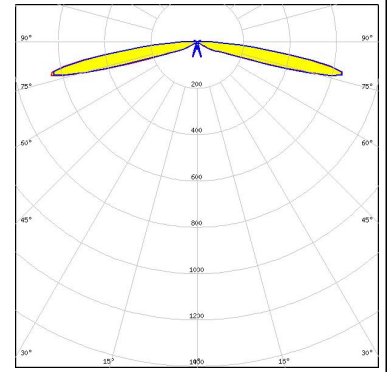
LUMILEDS

LED LUXEON CZ
 FWHM / FWTM 168.0° / 179.0°
 Efficiency 97 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour Amber
 Required components:



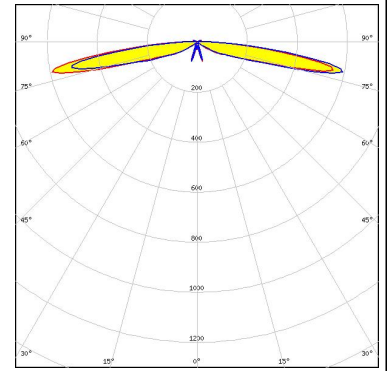
LUMILEDS

LED LUXEON CZ
 FWHM / FWTM 166.0° / 178.0°
 Efficiency 97 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour Green
 Required components:



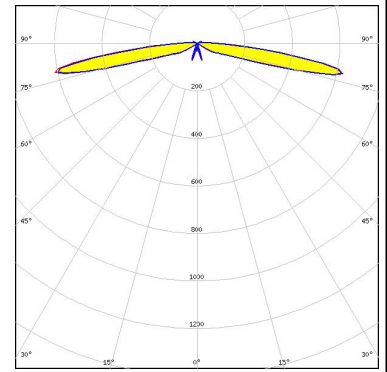
LUMILEDS

LED LUXEON CZ
 FWHM / FWTM 168.0° / 179.0°
 Efficiency 97 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour Red
 Required components:

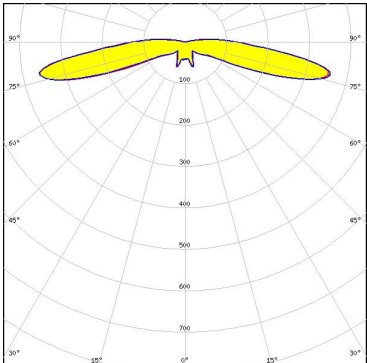
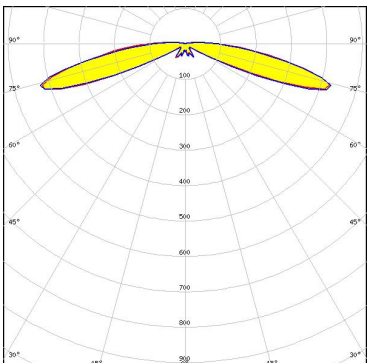
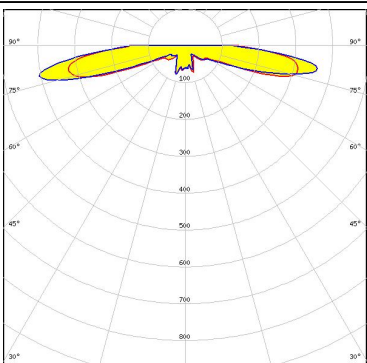
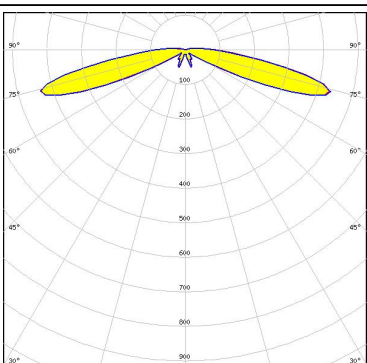


LUMILEDS

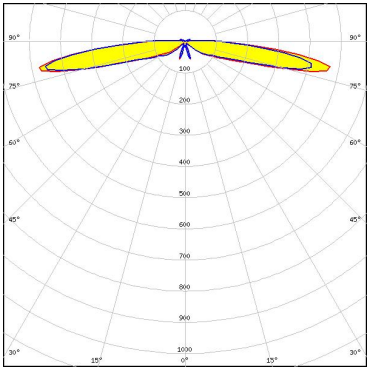
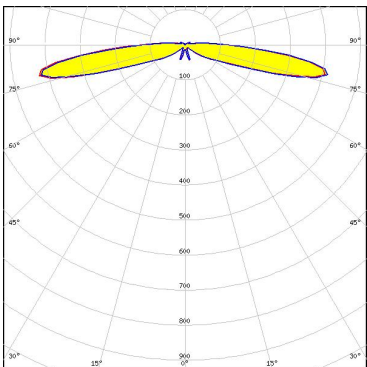
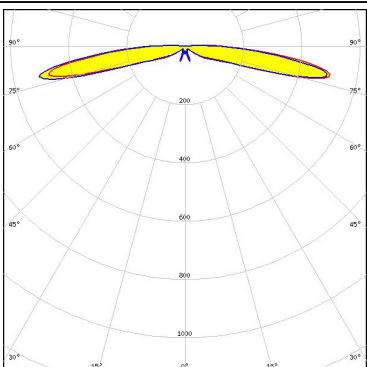
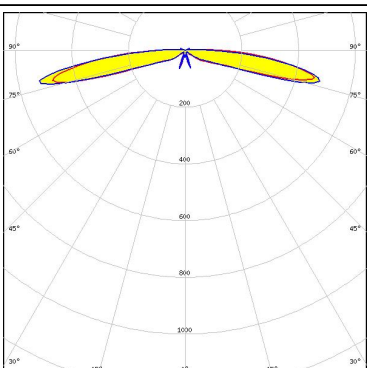
LED LUXEON Rubix
 FWHM / FWTM 168.0° / 178.0°
 Efficiency 97 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour Green
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON V2 FWHM / FWTM: 172.0° / 196.0° Efficiency: 94 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxE17A FWHM / FWTM: 166.0° / 189.0° Efficiency: 94 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: Green Required components:</p>	
<p>NICHIA</p> <p>LED: NF2W757G-MT (Tunable White) FWHM / FWTM: 174.0 + 178.0° / 182.0° Efficiency: 90 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: Tunable White Required components:</p>	
<p>NICHIA</p> <p>LED: NVSxE21A FWHM / FWTM: 164.0° / 188.0° Efficiency: 96 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

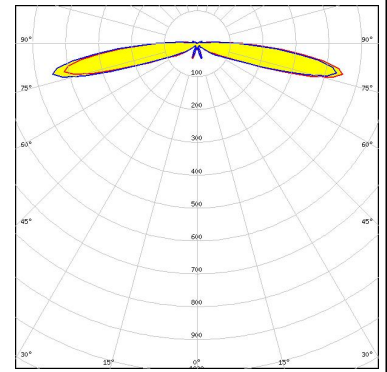
<p>OSRAM Opto Semiconductors</p> <p>LED OSLOM Signal</p> <p>FWHM / FWTM 172.0° / 188.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Red</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLOM Signal</p> <p>FWHM / FWTM 172.0° / 192.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLOM SSL 150</p> <p>FWHM / FWTM 172.0° / 186.0°</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>OSRAM Opto Semiconductors</p> <p>LED OSLOM SSL 150</p> <p>FWHM / FWTM 171.0° / 187.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Red</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

OSRAM

Opto Semiconductors

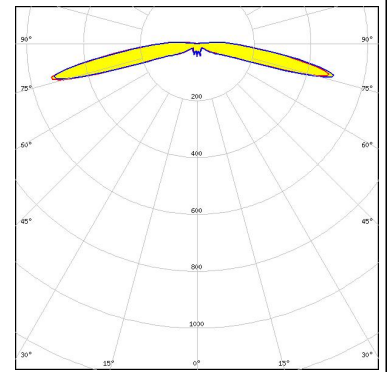
LED OSLOM SSL 150
 FWHM / FWTM 172.0° / 188.0°
 Efficiency 97 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

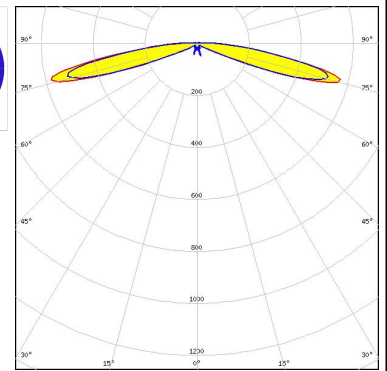
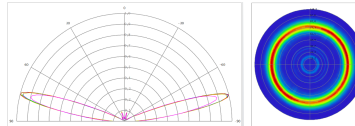
LED OSLOM SSL 80
 FWHM / FWTM 168.0° / 188.0°
 Efficiency 93 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

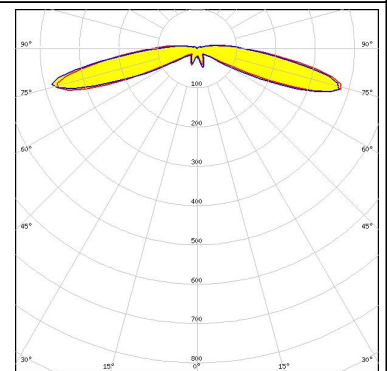
Opto Semiconductors

LED SFH 4716AS
 FWHM / FWTM 164.0° / 180.0°
 Efficiency 96 %
 LEDs/each optic 1
 Light colour IR
 Required components:



SAMSUNG

LED LM28xB Series
 FWHM / FWTM 169.0° / 199.0°
 Efficiency 97 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

 SEOUL SEMICONDUCTOR	LED MJT 3030 FWHM / FWTM 172.0° / 194.0° Efficiency 95 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:	
 SEOUL SEMICONDUCTOR	LED Z8Y22P FWHM / FWTM 152.0° Efficiency 87 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:	