

VERONICA-SQ-SE

~190° side emitter beam

TECHNICAL SPECIFICATIONS:

Dimensions	22.5 x 22.5 mm
Height	11.4 mm
Fastening	tape
ROHS compliant	yes ⓘ

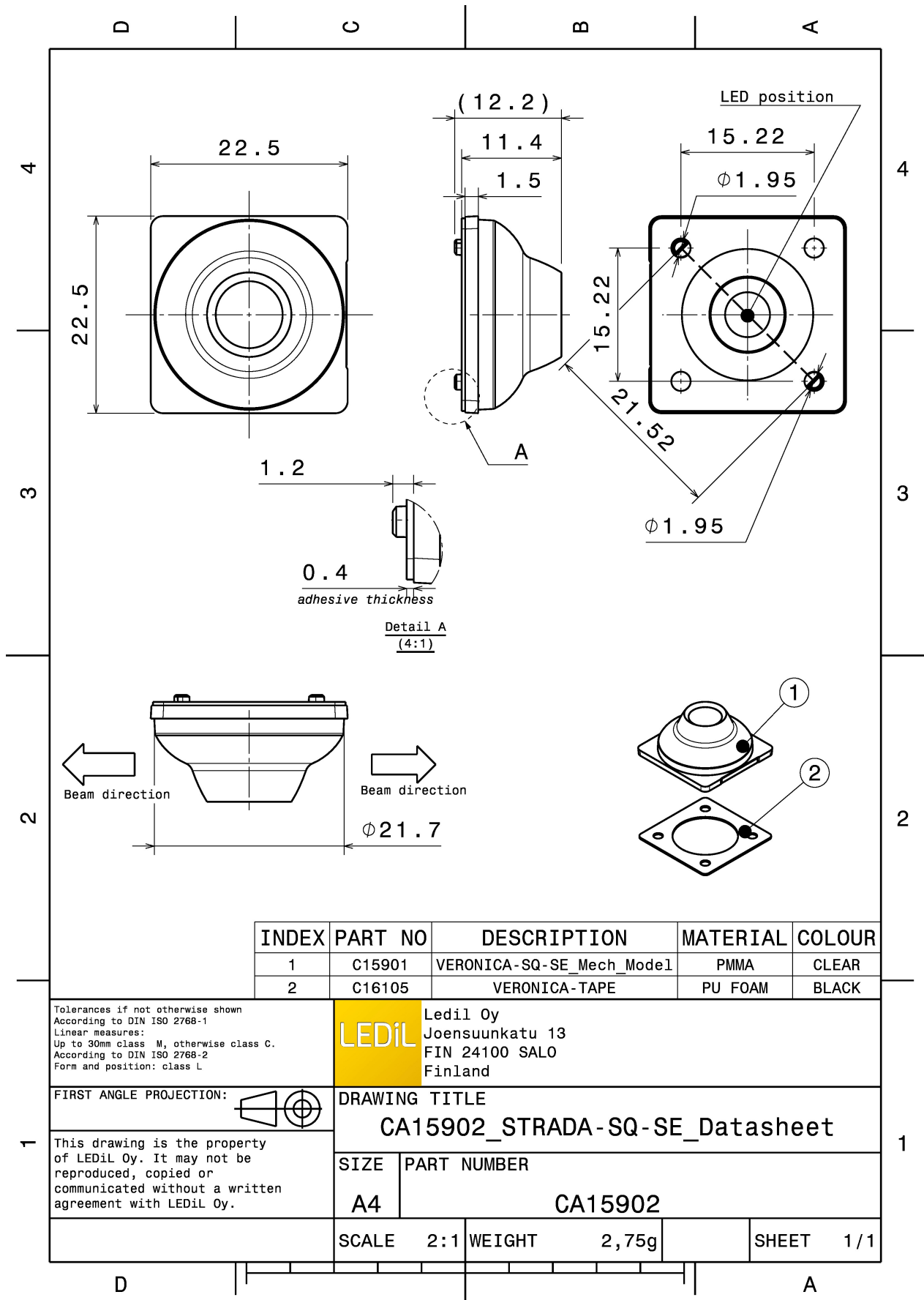
MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
VERONICA-SQ-SE	Single lens	PMMA	clear	
VERONICA-TAPE	Tape	Acrylic foam	clear	



ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CA15902_VERONICA-SQ-SE » Box size: 480 x 280 x 300 mm	Single lens	3060	360	180	9.6



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C15901	VERONICA-SQ-SE_Mech_Model1	PMMA	CLEAR
2	C16105	VERONICA-TAPE	PU FOAM	BLACK

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

LEDiL Ledil Oy
Joensuunkatu 13
FIN 24100 SALO
Finland

FIRST ANGLE PROJECTION:

DRAWING TITLE
CA15902_STRADA-SQ-SE_Datasheet

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SIZE	PART NUMBER
A4	CA15902

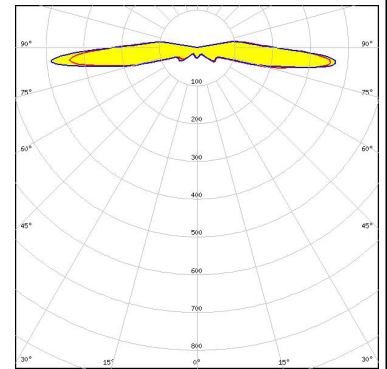
SCALE	2:1	WEIGHT	2,75g	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

PHOTOMETRIC DATA (MEASURED):

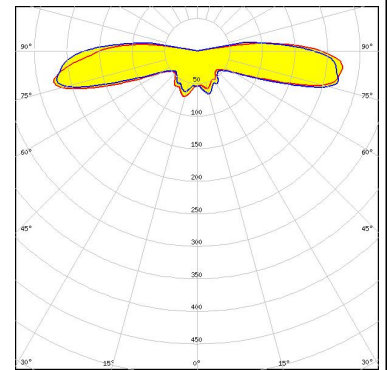
CREE LED

LED XHP35 HI
 FWHM / FWTM 183.0° / 201.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



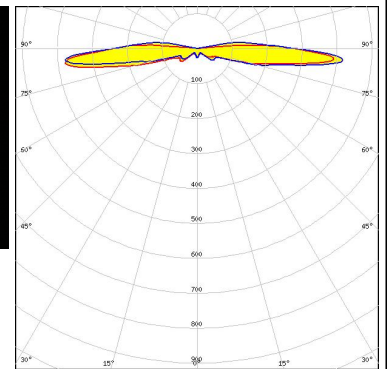
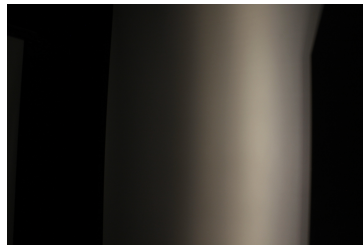
CREE LED

LED XHP70.2
 FWHM / FWTM 194.0° / 220.0°
 Efficiency 84 %
 Peak intensity 0.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



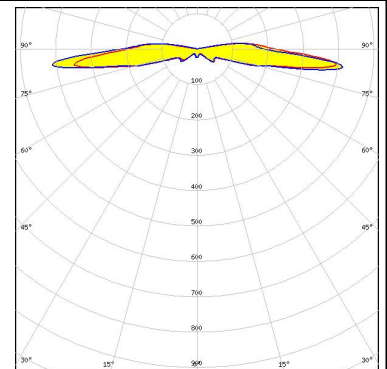
CREE LED

LED XP-G2
 FWHM / FWTM 184.0° / 196.0°
 Efficiency 87 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



CREE LED

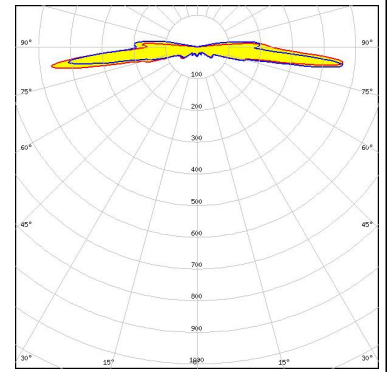
LED XP-L HI
 FWHM / FWTM 184.0° / 210.0°
 Efficiency 87 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



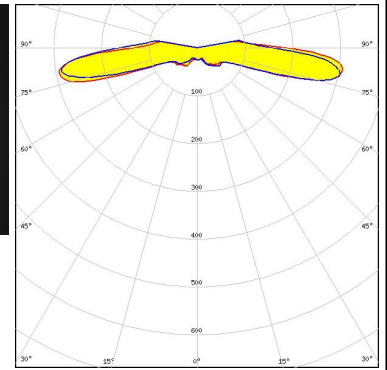
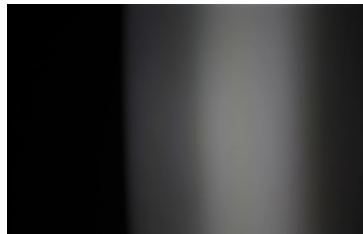
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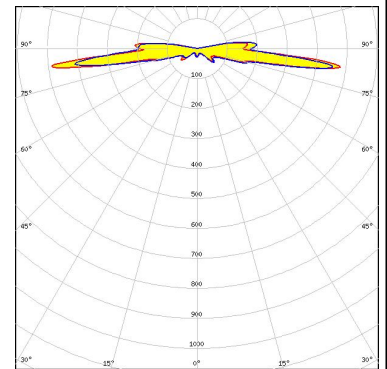
LED XQ-E HI
 FWHM / FWTM 176.0° / 195.0°
 Efficiency 87 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



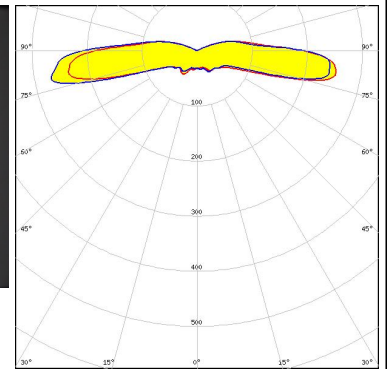
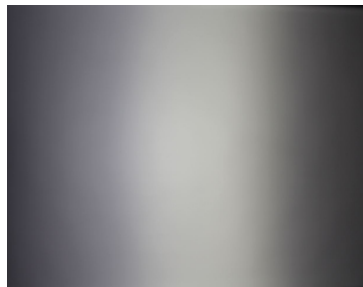
LED LUXEON 5050 Round LES
 FWHM / FWTM 180.0° / 200.0°
 Efficiency 87 %
 Peak intensity 0.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




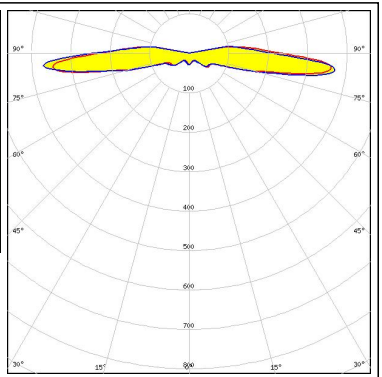

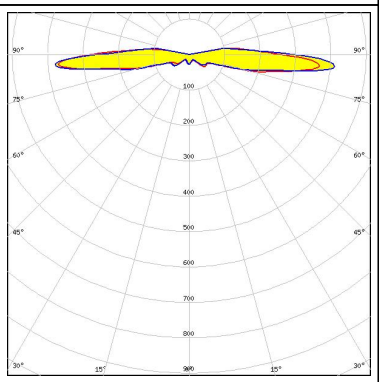
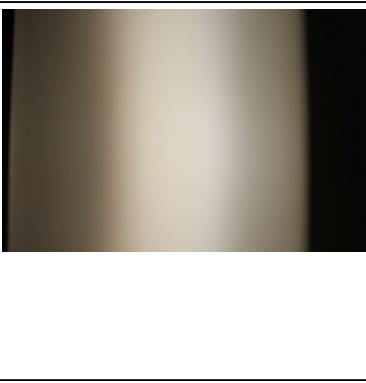
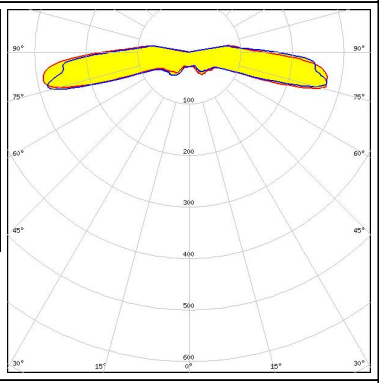

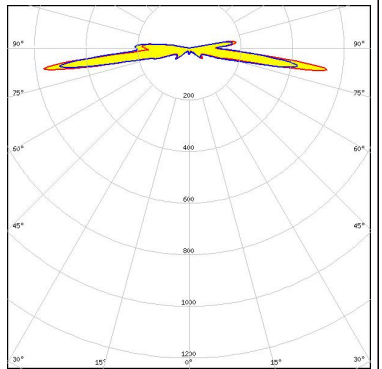
LED LUXEON CZ
 FWHM / FWTM 173.0° / 200.0°
 Efficiency 90 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



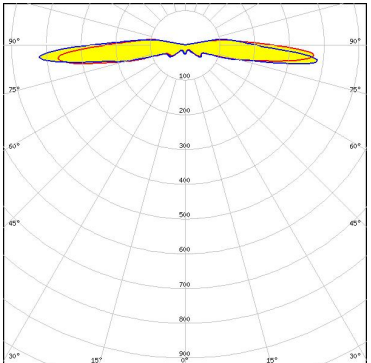
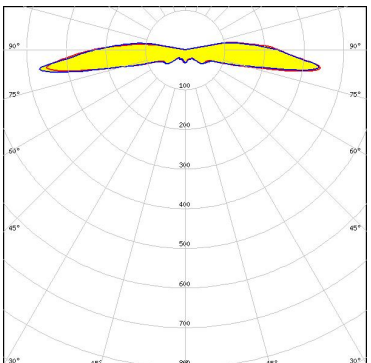
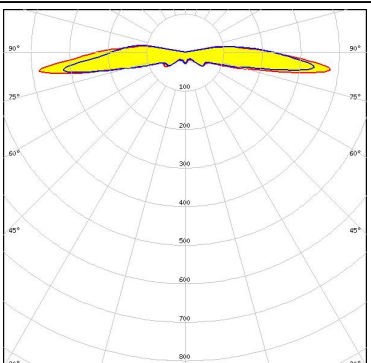
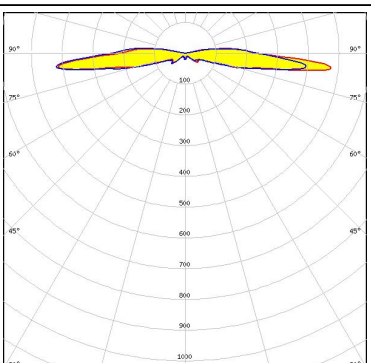
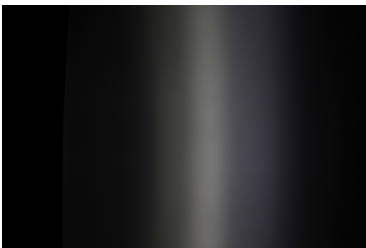
LED LUXEON M/MX
 FWHM / FWTM 189.0° / 225.0°
 Efficiency 91 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON TX FWHM / FWTM 185.0° / 201.0° Efficiency 88 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW219F FWHM / FWTM 185.0° / 201.0° Efficiency 89 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED Duris S8 FWHM / FWTM 182.0° / 201.0° Efficiency 87 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLOM Black Flat FWHM / FWTM 170.0° / 210.0° Efficiency 89 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

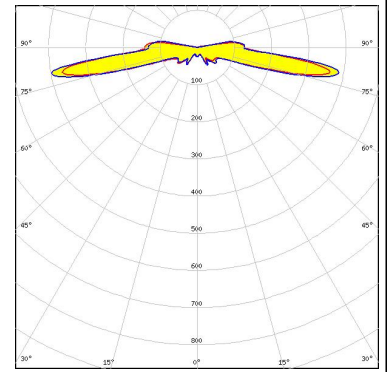
PHOTOMETRIC DATA (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 186.0° / 220.0°</p> <p>Efficiency 88 %</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 OSLON Square EC</p> <p>FWHM / FWTM 189.0° / 201.0°</p> <p>Efficiency 88 %</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 OSLON Square PC</p> <p>FWHM / FWTM 187.0° / 200.0°</p> <p>Efficiency 88 %</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 OSLON SSL 150</p> <p>FWHM / FWTM 182.0° / 200.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	 

PHOTOMETRIC DATA (MEASURED):

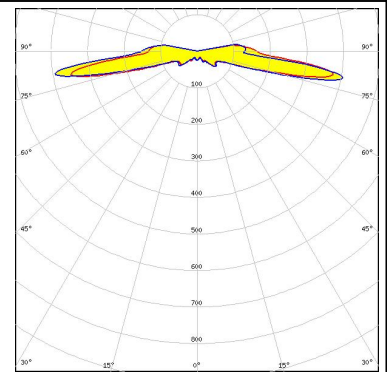
SAMSUNG

LED LH181A
 FWHM / FWTM 170.0° / 210.0°
 Efficiency 91 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



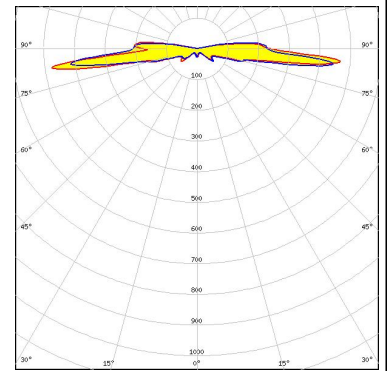
SAMSUNG

LED LH181B
 FWHM / FWTM 171.0° / 201.0°
 Efficiency 88 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



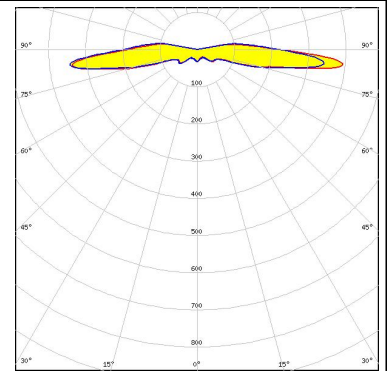
SEOUL SEMICONDUCTOR

LED nPola
 FWHM / FWTM 181.0° / 200.0°
 Efficiency 89 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

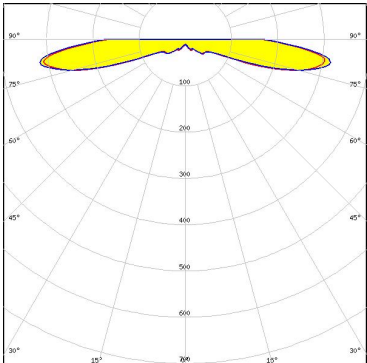
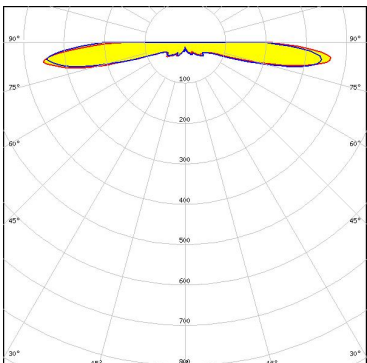
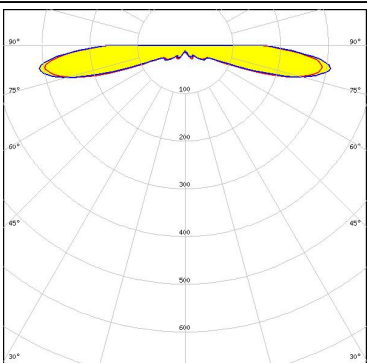
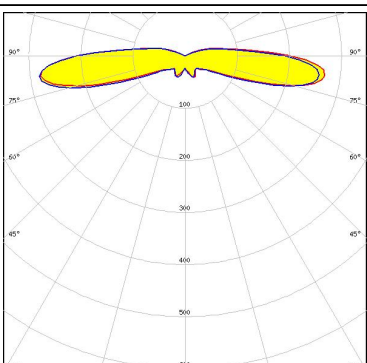


SEOUL SEMICONDUCTOR

LED Z5M3
 FWHM / FWTM 184.0° / 201.0°
 Efficiency 89 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



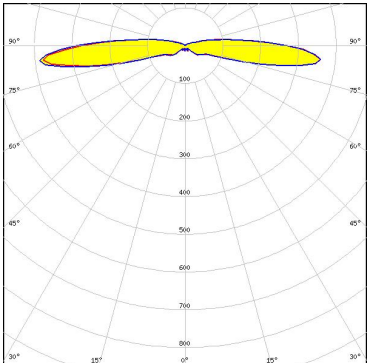
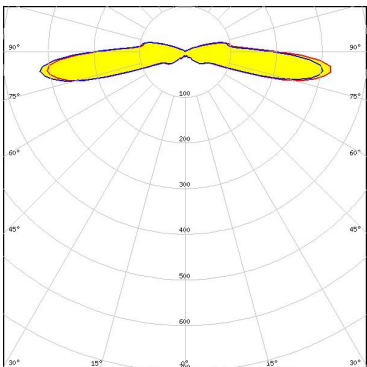
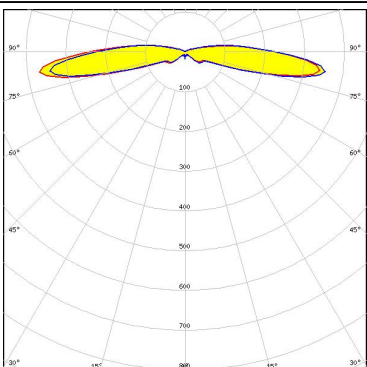
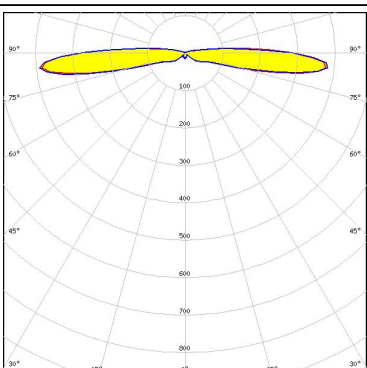
PHOTOMETRIC DATA (SIMULATED):

<p>CREE → LED</p> <p>LED J Series 5050 Round LES FWHM / FWTM 180.0° / 182.0° Efficiency 75 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE → LED</p> <p>LED J Series 5050 Square LES 30V FWHM / FWTM 180.0° / 182.0° Efficiency 75 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE → LED</p> <p>LED J Series 5050 Square LES 6V FWHM / FWTM 180.0° / 182.0° Efficiency 75 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE → LED</p> <p>LED XD16 FWHM / FWTM 188.0° / 223.0° Efficiency 94 % Peak intensity 0.3 cd/lm LEDs/each optic 7 Light colour White Required components:</p>	


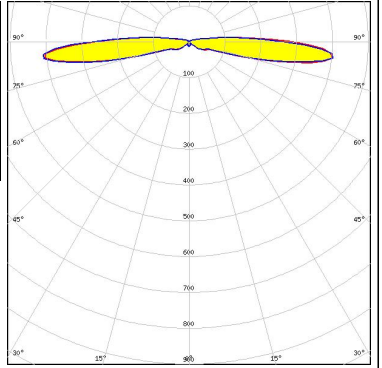
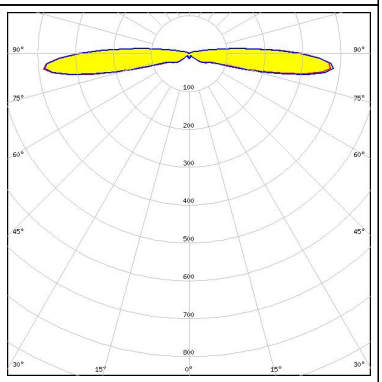
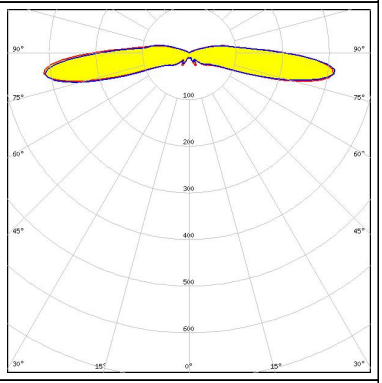
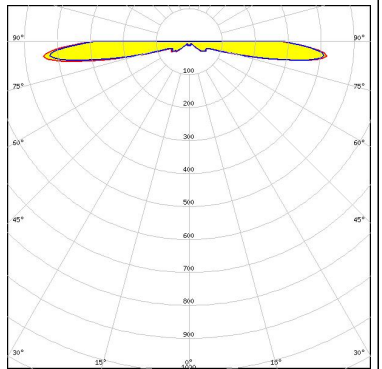
PHOTOMETRIC DATA (SIMULATED):

<p>CREE → LED</p> <p>LED: XHP35 HD FWHM / FWTM: 194.0° / 216.0° Efficiency: 94 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XHP70 FWHM / FWTM: 190.0° / 232.0° Efficiency: 94 % Peak intensity: 0.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XP-E2 FWHM / FWTM: 188.0° / 206.0° Efficiency: 95 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	
<p>CREE → LED</p> <p>LED: XP-G2 HE FWHM / FWTM: 191.0° / 212.0° Efficiency: 95 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

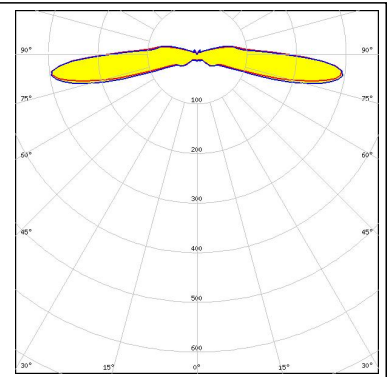
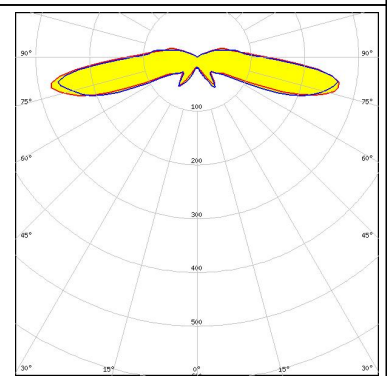
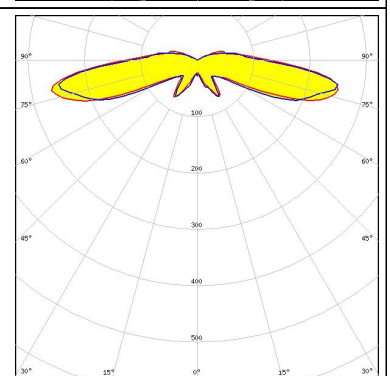
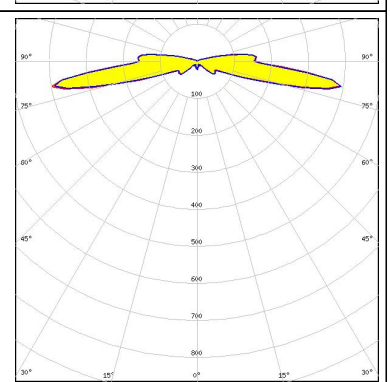
PHOTOMETRIC DATA (SIMULATED):

<p>CREE LED</p> <p>LED: XP-G3 FWHM / FWTM: 186.0° / 211.0° Efficiency: 94 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LED</p> <p>LED: XQ-E HI FWHM / FWTM: 183.0° / 221.0° Efficiency: 94 % Peak intensity: 0.3 cd/lm LEDs/each optic: 4 Light colour: White Required components:</p>	
<p>CREE LED</p> <p>LED: XT-E FWHM / FWTM: 184.0° / 212.0° Efficiency: 95 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 184.0° / 204.0° Efficiency: 91 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 183.0° / 201.0° Efficiency: 92 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: Green Required components:</p>		
<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 188.0° / 204.0° Efficiency: 93 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		
<p>LUMILEDS</p> <p>LED: LUXEON IR Compact FWHM / FWTM: 183.4° / 217.0° Efficiency: 94 % Peak intensity: 0.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>		
<p>LUMILEDS</p> <p>LED: LUXEON Rebel FWHM / FWTM: 180.0° / 182.0° Efficiency: 75 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>		

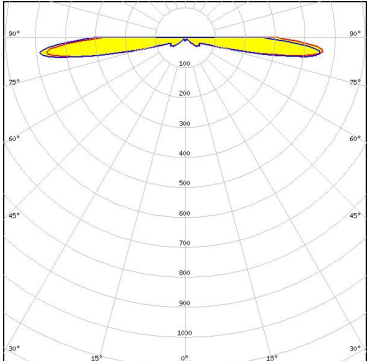
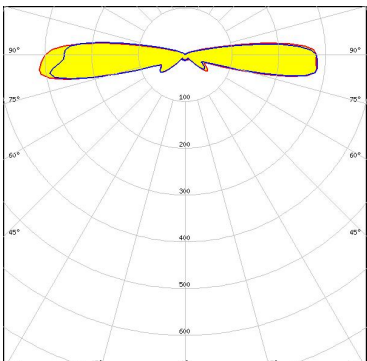
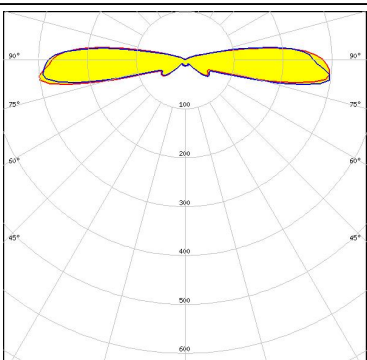
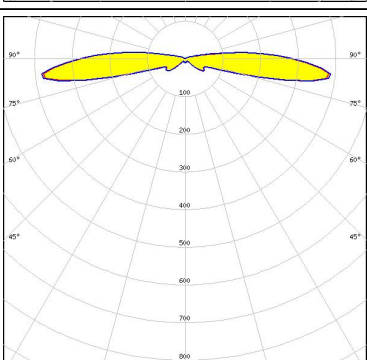
PHOTOMETRIC DATA (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON Z FWHM / FWTM: 183.4° / 218.0° Efficiency: 89 % Peak intensity: 0.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxE17A FWHM / FWTM: 179.0° / 228.0° Efficiency: 96 % Peak intensity: 0.3 cd/lm LEDs/each optic: 7 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxE17A FWHM / FWTM: 180.0° / 226.0° Efficiency: 96 % Peak intensity: 0.3 cd/lm LEDs/each optic: 7 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxE17A FWHM / FWTM: 173.0° / 208.0° Efficiency: 96 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: 184.0° / 220.0° Efficiency: 95 % Peak intensity: 0.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSCONIQ P 3030 FWHM / FWTM: 181.0° / 208.0° Efficiency: 95 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSCONIQ P 7070 FWHM / FWTM: 192.0° / 226.0° Efficiency: 95 % LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSLOM Signal FWHM / FWTM: 186.0° / 203.0° Efficiency: 95 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: OSLON SSL 150</p> <p>FWHM / FWTM: 180.0° / 182.0°</p> <p>Efficiency: 78 %</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: OSLON SSL 80</p> <p>FWHM / FWTM: 197.0° / 215.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 0.3 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: OSLON SSL 80</p> <p>FWHM / FWTM: 198.0° / 216.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: Blue</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSTAR Projection Compact (Kx.CSLNM1.xx)</p> <p>FWHM / FWTM: 188.0° / 208.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 0.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: Red</p> <p>Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

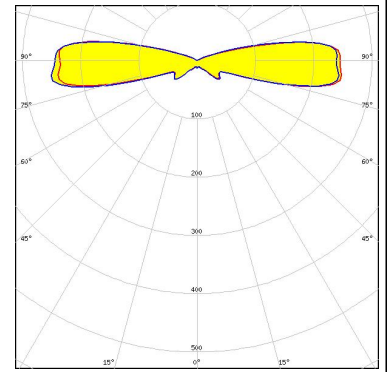
<p>OSRAM Opto Semiconductors</p> <p>LED SFH 4170S</p> <p>FWHM / FWTM 188.0° / 208.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED SFH 4715AS</p> <p>FWHM / FWTM 202.0° / 221.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED SFH 4715S</p> <p>FWHM / FWTM 196.0° / 216.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED SFH 4716AS</p> <p>FWHM / FWTM 184.0° / 207.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	

PHOTOMETRIC DATA (SIMULATED):

OSRAM

Opto Semiconductors

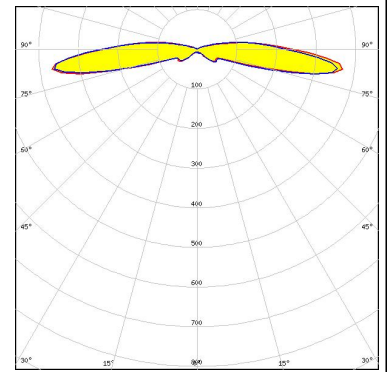
LED SFH 4717AS
 FWHM / FWTM 207.0° / 224.0°
 Efficiency 95 %
 Peak intensity 0.3 cd/lm
 LEDs/each optic 1
 Light colour IR
 Required components:



OSRAM

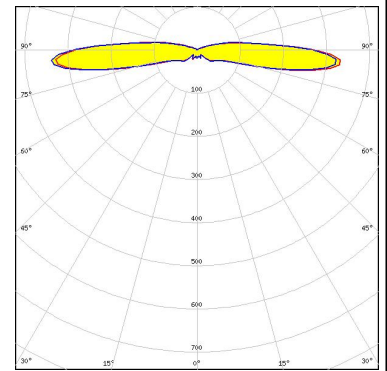
Opto Semiconductors

LED SFH 4770S
 FWHM / FWTM 185.0° / 212.0°
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour IR
 Required components:



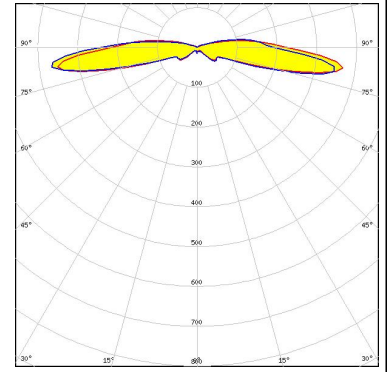
SAMSUNG

LED LH351D
 FWHM / FWTM 190.0° / 216.0°
 Efficiency 94 %
 Peak intensity 0.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SEOUL SEMICONDUCTOR

LED MJT 3030
 FWHM / FWTM 184.0° / 212.0°
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (SIMULATED):

<p> SEUL SEMICONDUCTOR</p> <p>LED: Z5M4</p> <p>FWHM / FWTM: 184.0° / 216.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 0.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEUL SEMICONDUCTOR</p> <p>LED: Z8Y22P</p> <p>FWHM / FWTM: 181.4° / 210.6°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

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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