

STRADA-2X2-DWC

Universal road lighting beam with excellent mixed illuminance and luminance uniformity. Typically IESNA Type III (medium).

SPECIFICATION:

Dimensions	50.0 x 50.0 mm
Height	6 mm
Fastening	glue, pin, screw
ROHS compliant	yes ⓘ

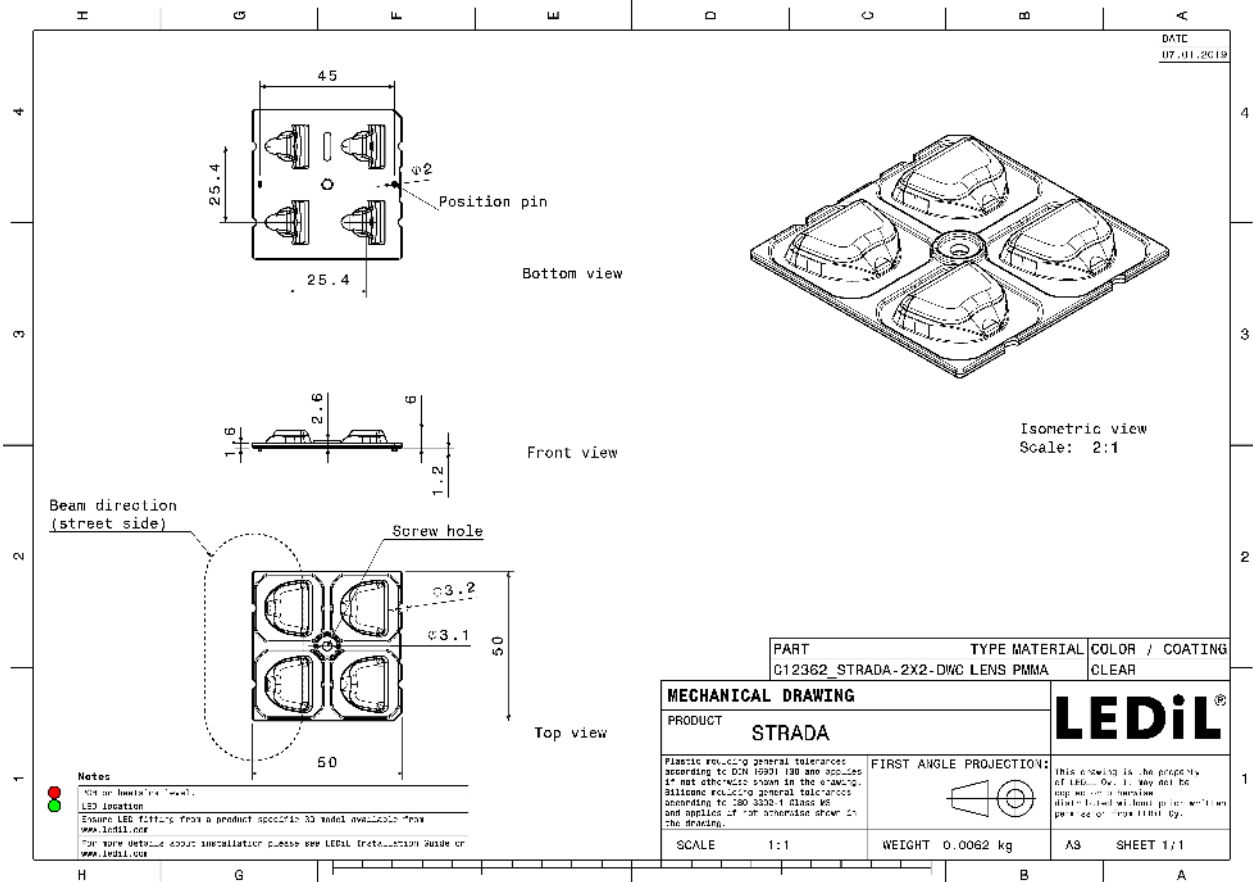


MATERIALS:

Component	Type	Material	Colour	Finish
STRADA-2X2-DWC	Multi-lens	PMMA	clear	


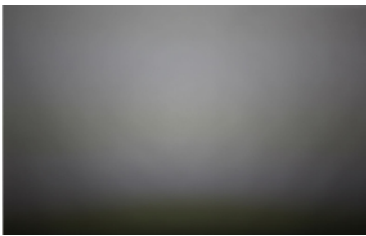
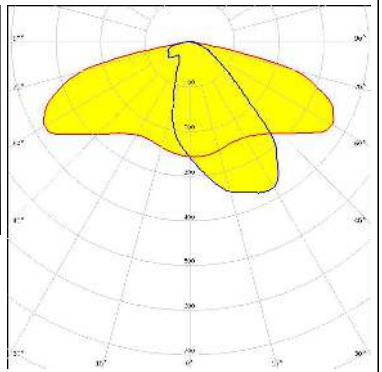

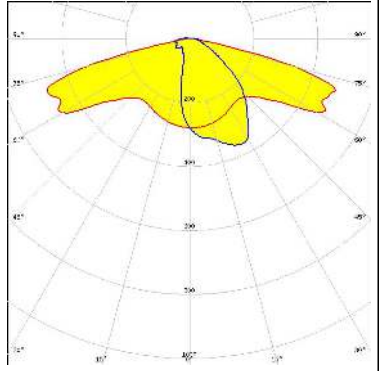

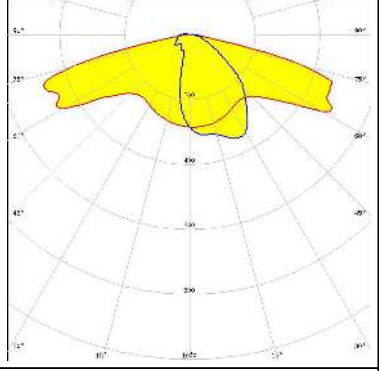

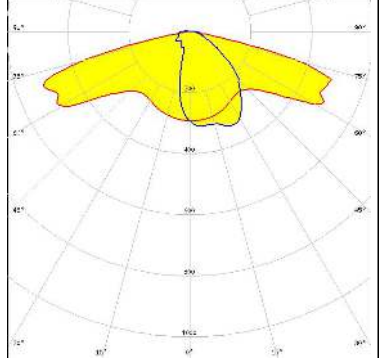
ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C12362_STRADA-2X2-DWC » Box size: 480 x 280 x 300 mm	800	160	160	5.8

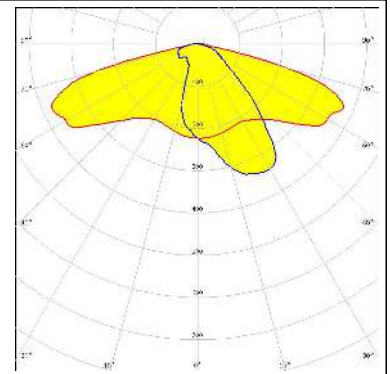
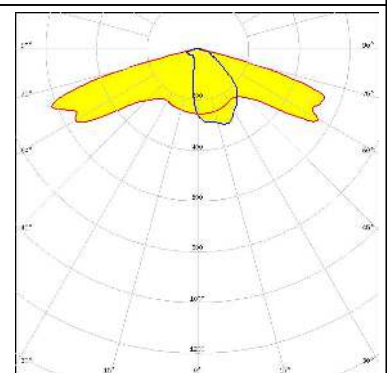
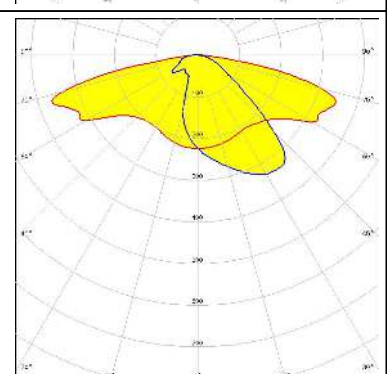


See also our general installation guide: www.ledil.com/installation_guide


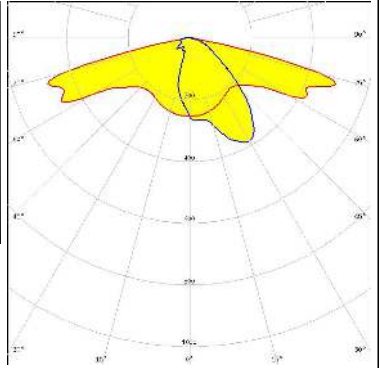
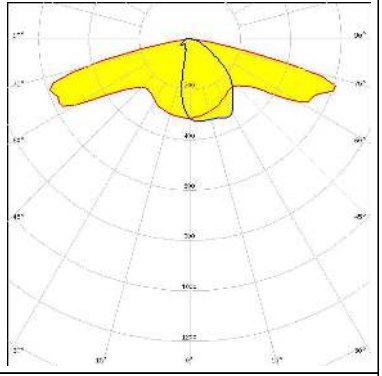
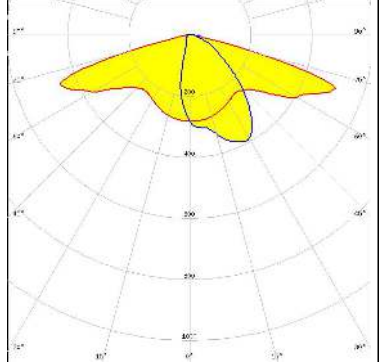
OPTICAL RESULTS (MEASURED):

<p> LED Bridgelux SMD 5050</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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> LED QUICK FLUX XTP 2x4 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> LED QUICK FLUX XTP 2x6 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> LED QUICK FLUX XTP 2x8 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

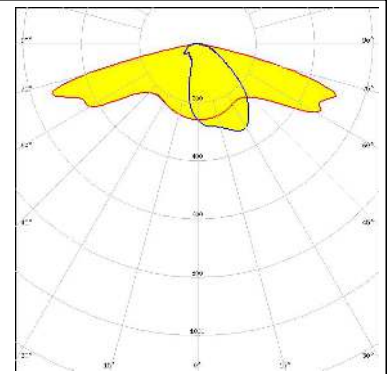
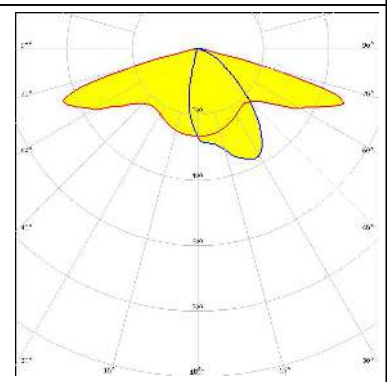
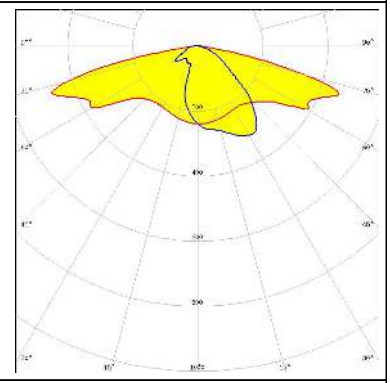
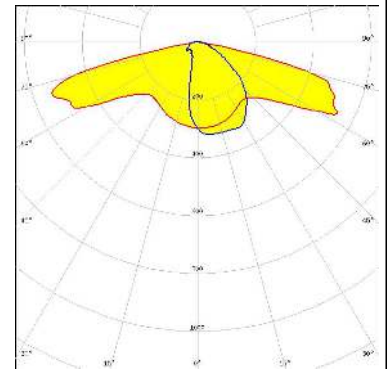
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XD16 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XD16 FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 0.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XHP35 HD FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XM-L FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

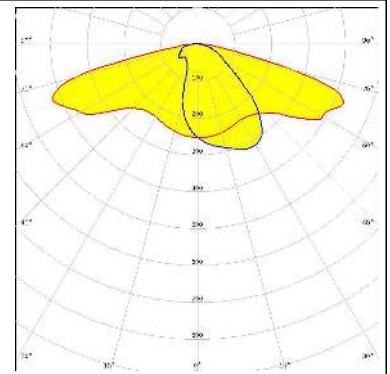
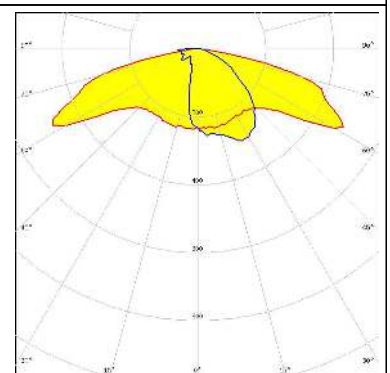
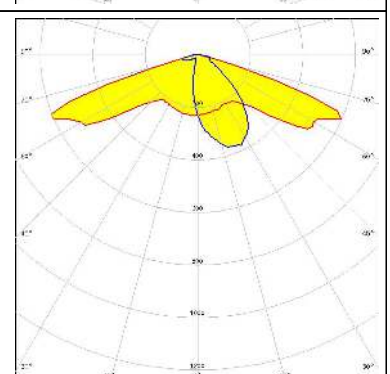
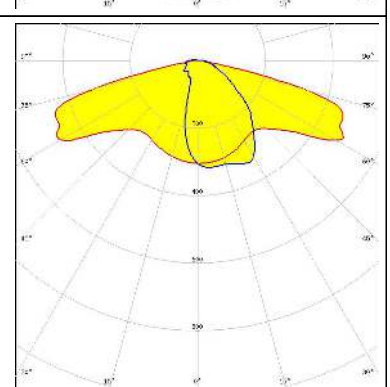
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XM-L3 FWHM / FWTM Asymmetric Efficiency 96 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-G FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-G2 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-G3 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C17580_STRADA-2X2-SHD-WHT</p>		


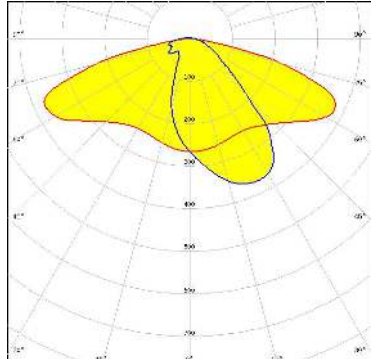

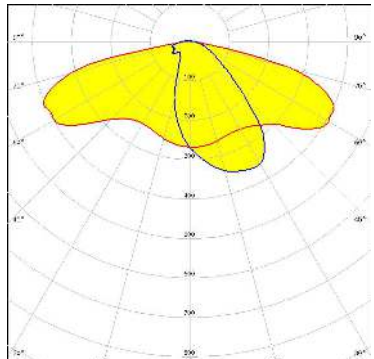

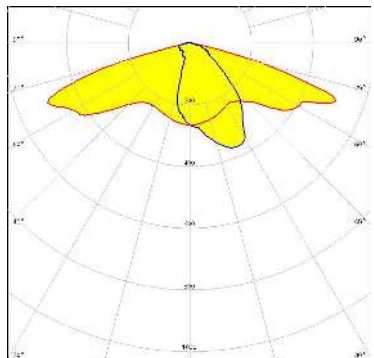

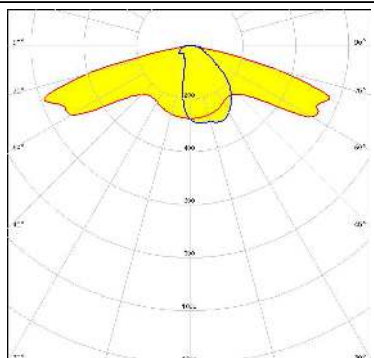
OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XP-G3 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XP-G3 FWHM / FWTM Asymmetric Efficiency 82 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components: C17677_STRADA-2X2-SHD-BLK</p>	
<p>CREE LEDs</p> <p>LED XP-L HD FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XP-L HI FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XP-L2 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XT-E FWHM / FWTM Asymmetric Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XT-E HVW FWHM / FWTM Asymmetric Efficiency % LEDs/each optic 1 Light colour White Required components:</p>	
<p>ELECTRIO LEDs & SOLUTIONS COMPANY</p> <p>LED EHP-2x8-3535 FWHM / FWTM Asymmetric Efficiency 97 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

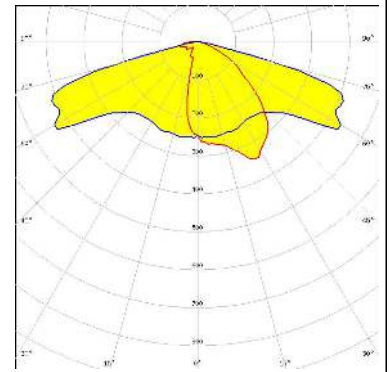
OPTICAL RESULTS (MEASURED):

<p> ELECTRIO SOLUTIONS & INNOVATION CENTER</p> <p>LED: EHP-2x8-5050 FWHM / FWTM: Asymmetric Efficiency: 97 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> LUMILEDS</p> <p>LED: LUXEON 5050 Round LES FWHM / FWTM: Asymmetric Efficiency: 94 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> LUMILEDS</p> <p>LED: LUXEON MZ FWHM / FWTM: Asymmetric Efficiency: 94 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> LUMILEDS</p> <p>LED: LUXEON Q FWHM / FWTM: Asymmetric Efficiency: 94 % Peak intensity: 0.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (MEASURED):

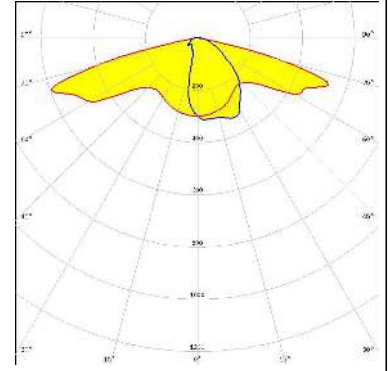
LUMILEDS

LED LUXEON Rebel ES
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



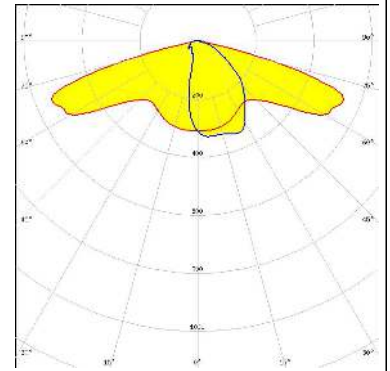
LUMILEDS

LED LUXEON T
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



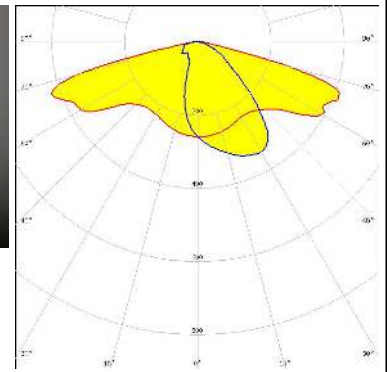
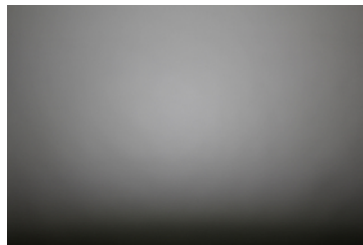
LUMILEDS

LED LUXEON TX
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

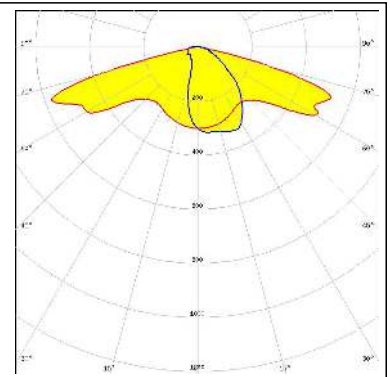
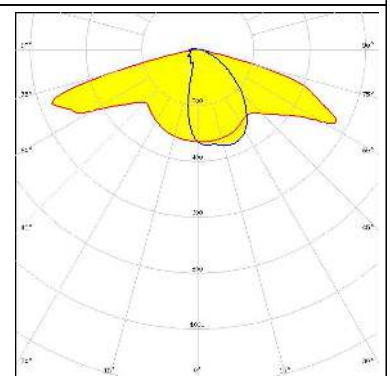
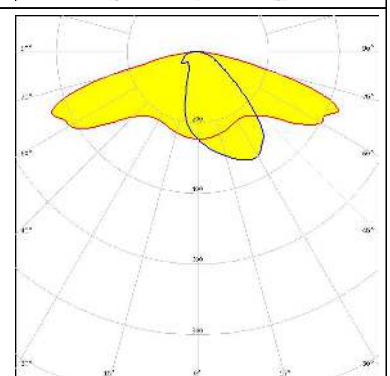
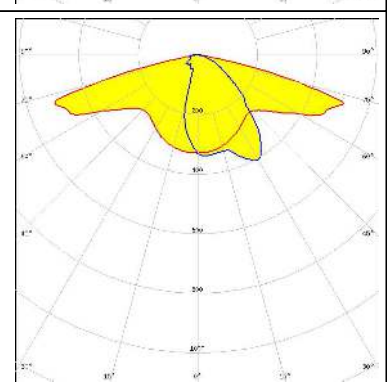


LUMILEDS

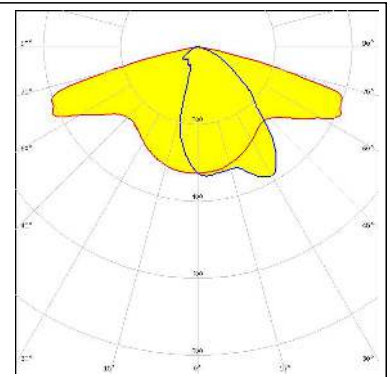
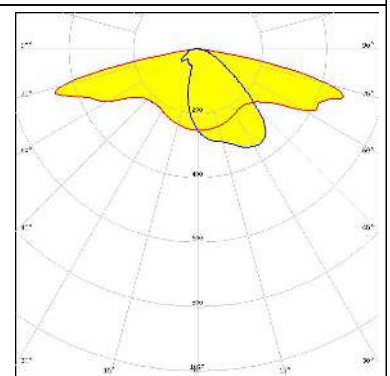
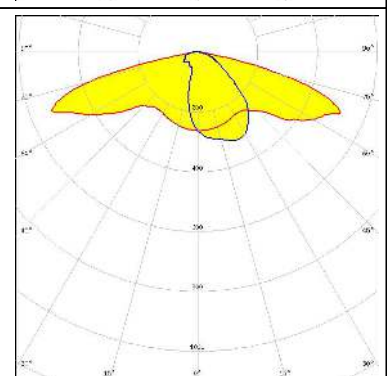
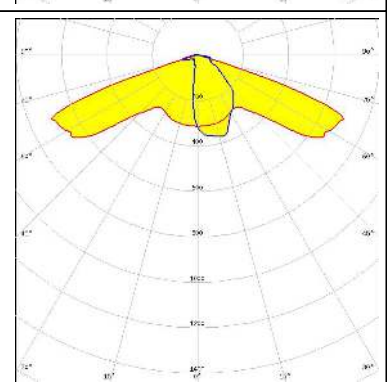
LED LUXEON V
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



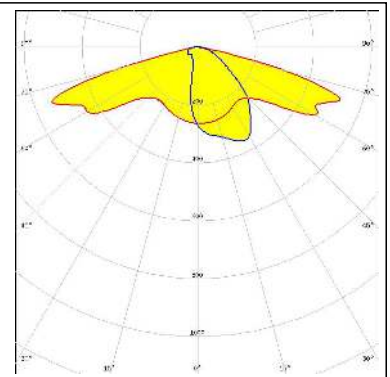
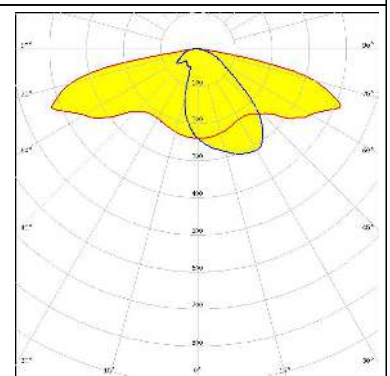
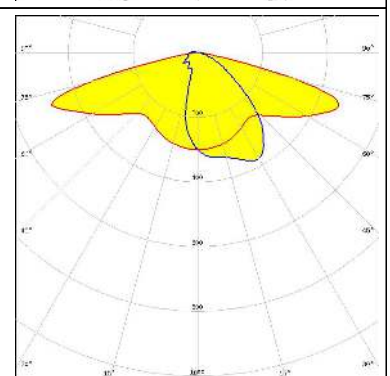
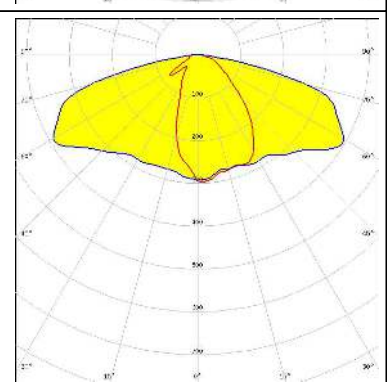
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON V2</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>MST <i>Your solutions</i></p> <p>LED RecLED 122x50mm 1900lm 730 2x4 Opt G1</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>NICHIA</p> <p>LED NS9x383</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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>NICHIA</p> <p>LED NVSW219D</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

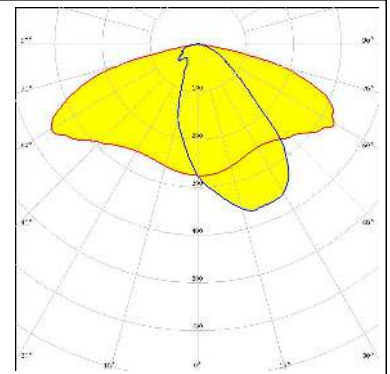
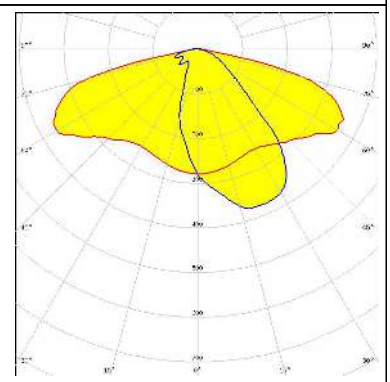
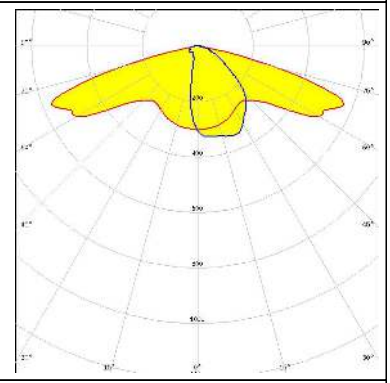
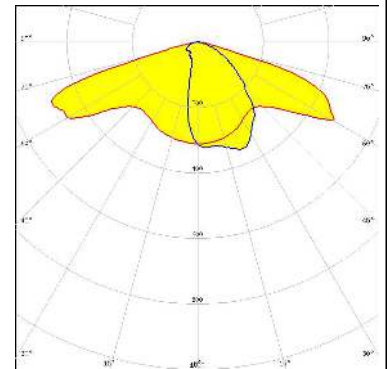
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NVSW219D FWHM / FWTM Asymmetric Efficiency 86 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NVSW319B FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NVSW3x9A FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NVSxE21A FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NWSx229A FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM</p> <p>LED PL-BRICK HP 3800 2x8 SSG FWHM / FWTM Asymmetric Efficiency 95 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM</p> <p>LED PrevaLED Brick HP 2x8 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 0.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

OPTICAL RESULTS (MEASURED):

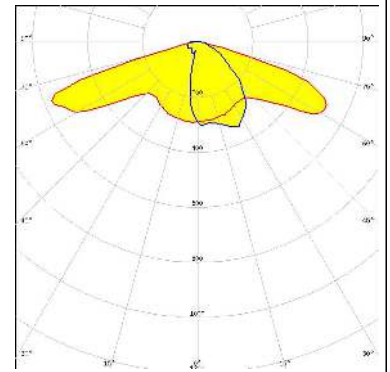
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 97 %</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 Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 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 Square PC</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 85 %</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>Protective plate, glass</p>	

OPTICAL RESULTS (MEASURED):

OSRAM

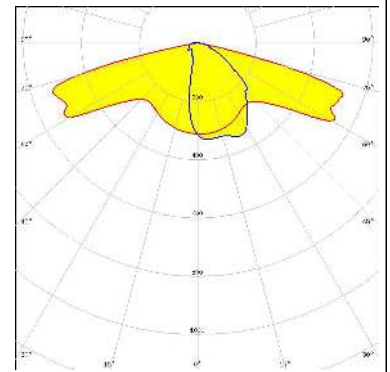
Opto Semiconductors

LED OSLOM Square PC
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



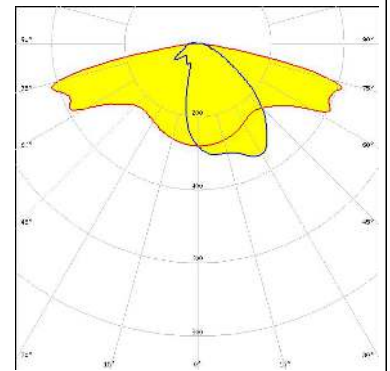
PHILIPS

LED Fortimo FastFlex LED 2x8 DA G4
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



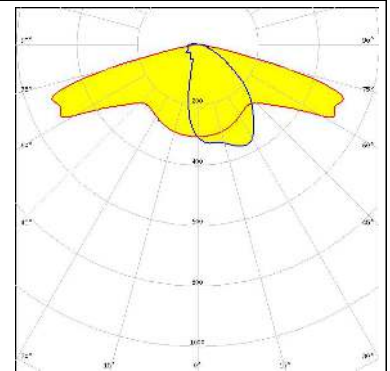
PHILIPS

LED Fortimo FastFlex LED 2x8 DA G4+
 FWHM / FWTM Asymmetric
 Efficiency 97 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHILIPS

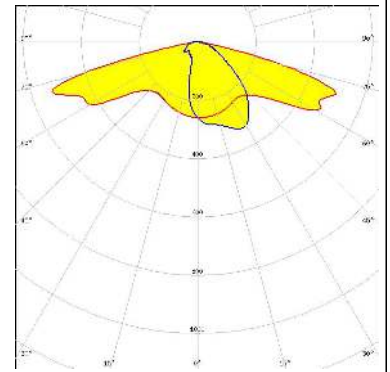
LED Fortimo FastFlex LED 2x8 DA G5
 FWHM / FWTM Asymmetric
 Efficiency 96 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

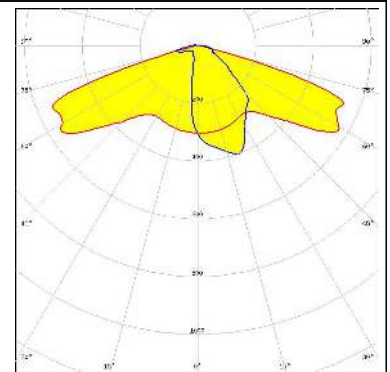
PHILIPS

LED Fortimo FastFlex LED 2x8 DAX G4
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 LEDs/each optic 1
 Light colour White
 Required components:



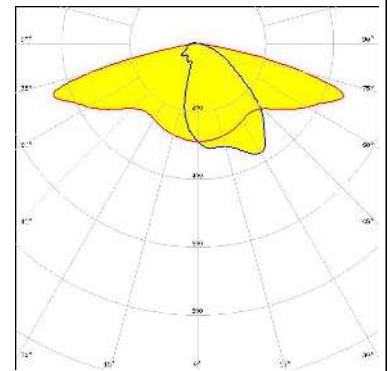
SAMSUNG

LED HiLOM RC12 Z (LH181B)
 FWHM / FWTM Asymmetric
 Efficiency 99 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



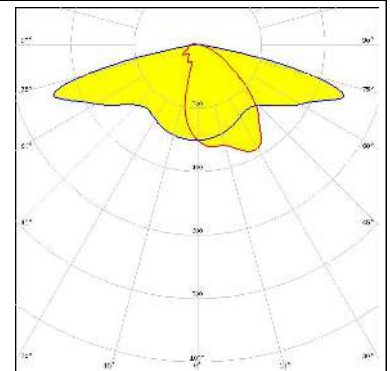
SAMSUNG

LED HiLOM RH12 Z (LH351C)
 FWHM / FWTM Asymmetric
 Efficiency 96 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

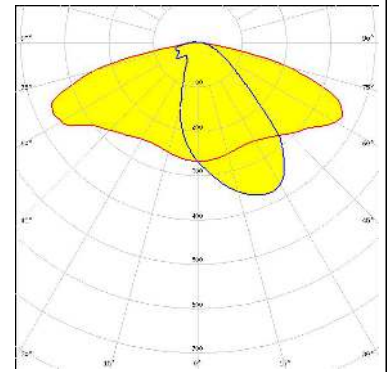
LED HiLOM RH16 (LH351C)
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.6 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

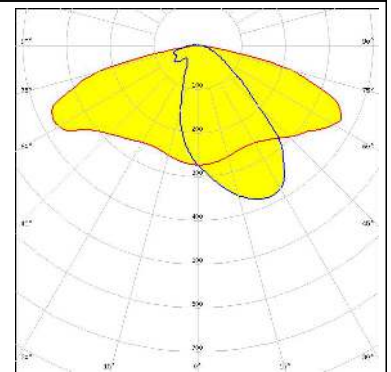
SAMSUNG

LED HiLOM RM12 Z (LH502C)
FWHM / FWTM Asymmetric
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



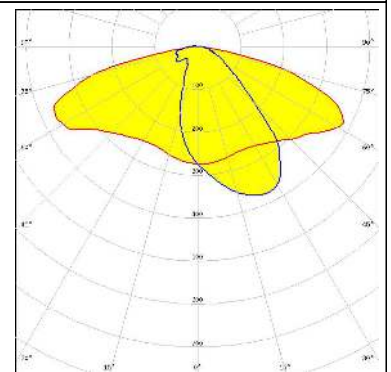
SAMSUNG

LED HiLOM RM16 Z (LH502C)
FWHM / FWTM Asymmetric
Efficiency 98 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



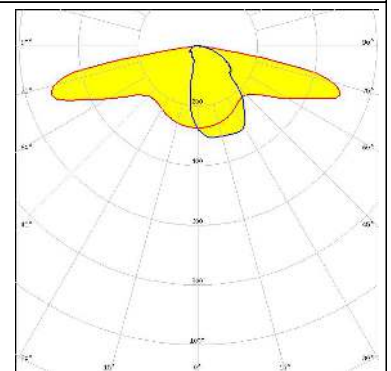
SAMSUNG

LED HiLOM RM8 Z (LH502C)
FWHM / FWTM Asymmetric
Efficiency 97 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



SAMSUNG

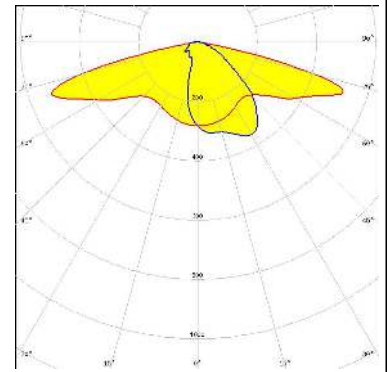
LED LH351B
FWHM / FWTM Asymmetric
Efficiency 89 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (MEASURED):

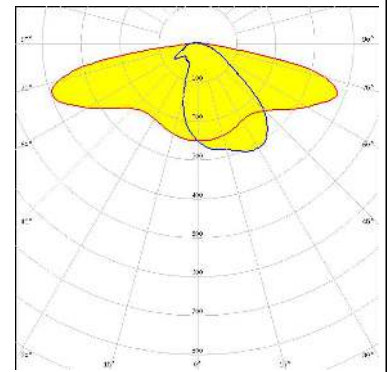
SAMSUNG

LED LH351C
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



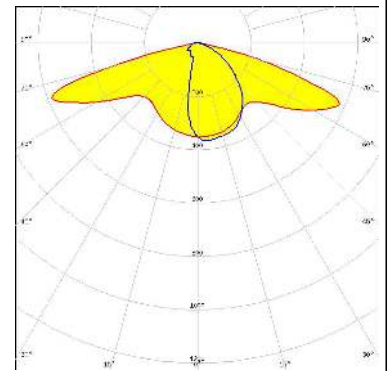
SAMSUNG

LED LH351D
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



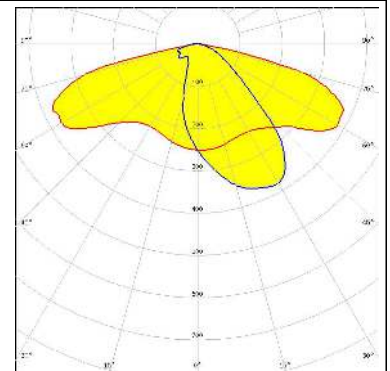
SAMSUNG

LED LH351Z
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

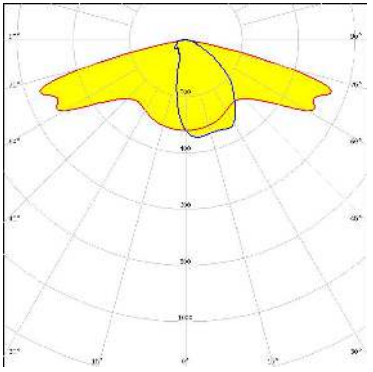
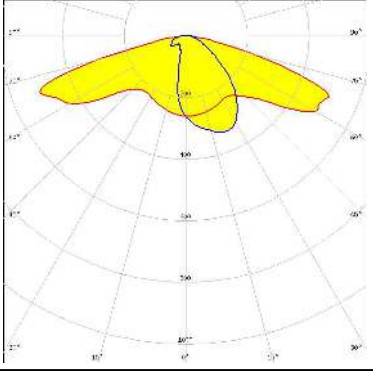

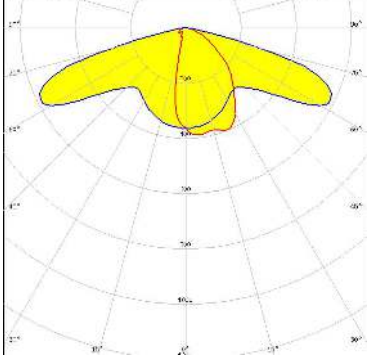


SAMSUNG


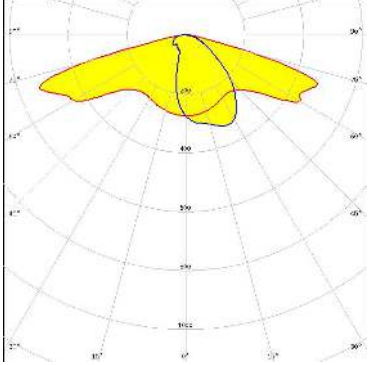

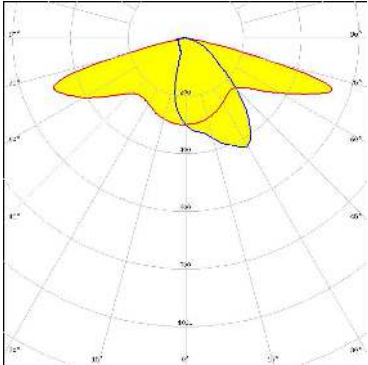

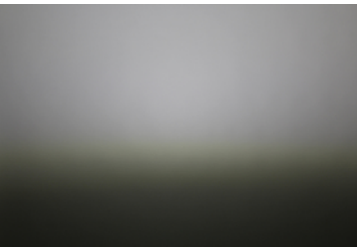
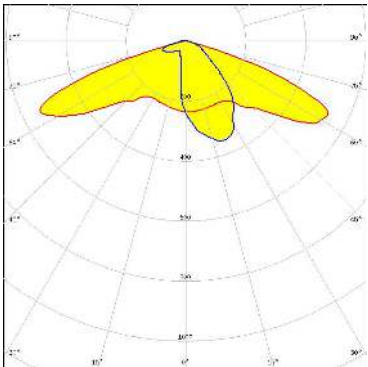

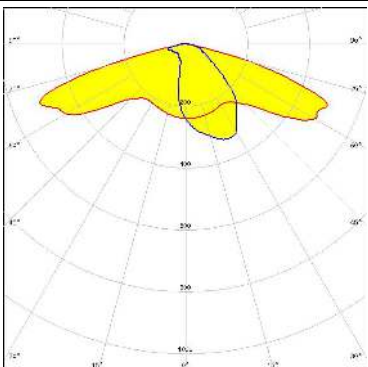
LED LH508A
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

<p>SEITEC Elektronik GmbH</p> <p>LED LED-Pa-L15c2W11c2-xxx-C050-01</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 97 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Acrich MJT 4040</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (MEASURED):

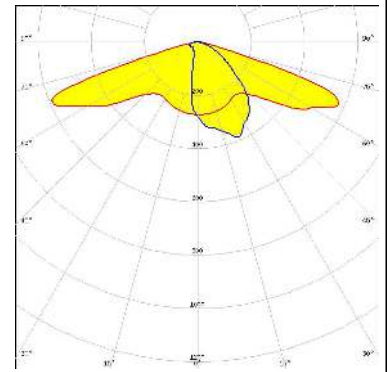
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M4</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 96 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

TOSHIBA

Leading Innovation >>>

LED TL1L4
 FWHM / FWTM Asymmetric
 Efficiency 93 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

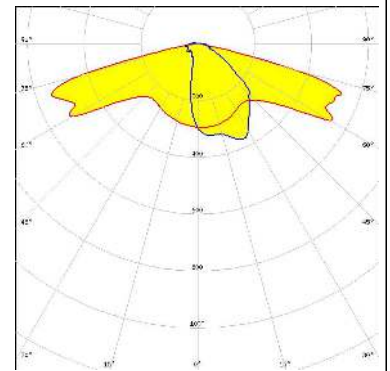


TRIDONIC

LED RLE 2x4 2000lm HP EXC2 OTD
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

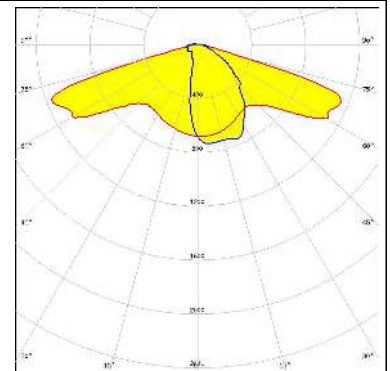
TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



TRIDONIC

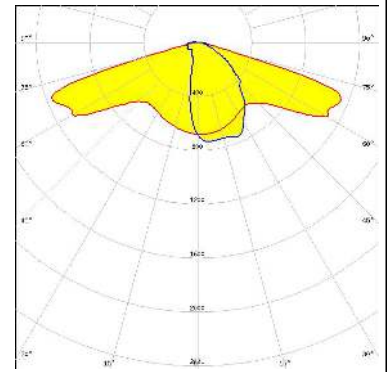
LED RLE G1 49x121mm 2000lm xxx EXC OTD
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

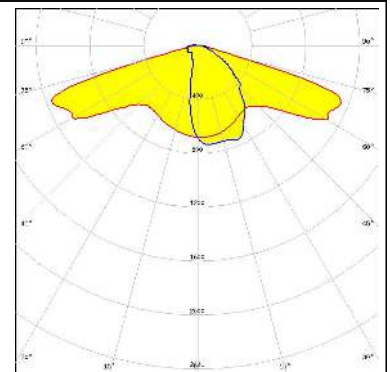
TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD
FWHM / FWTM Asymmetric
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



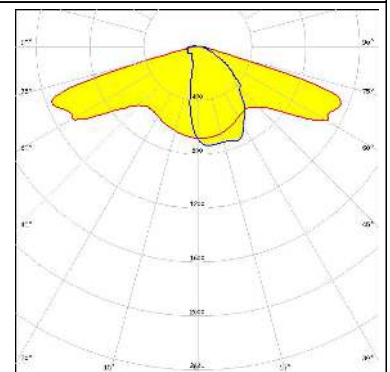
TRIDONIC

LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM / FWTM Asymmetric
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:

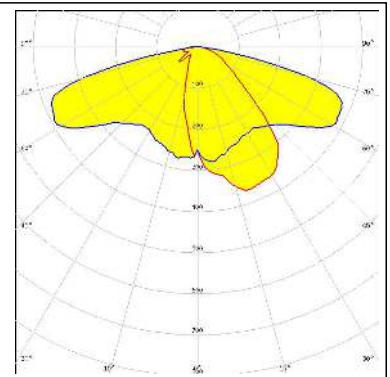
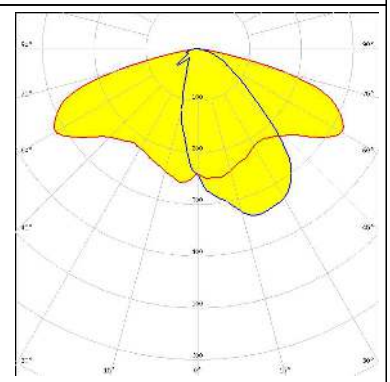
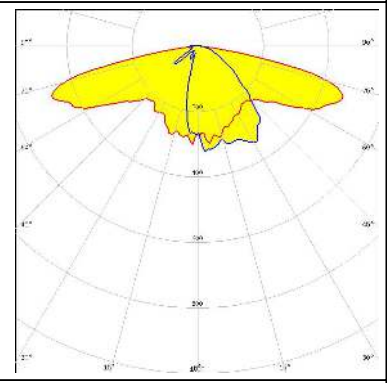
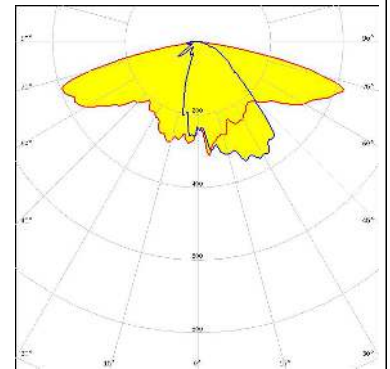


TRIDONIC

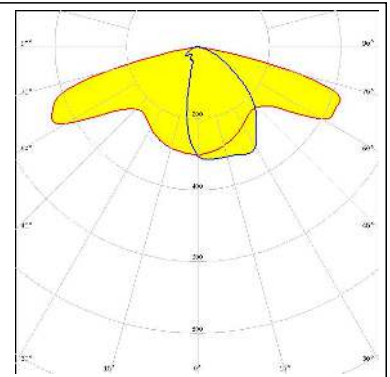
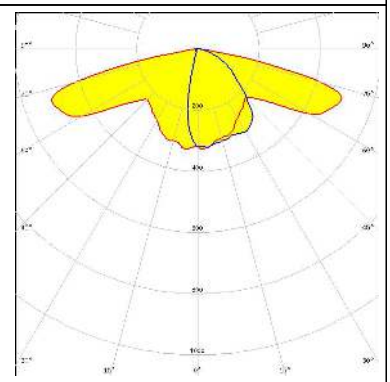
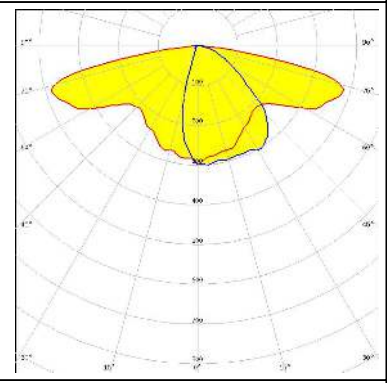
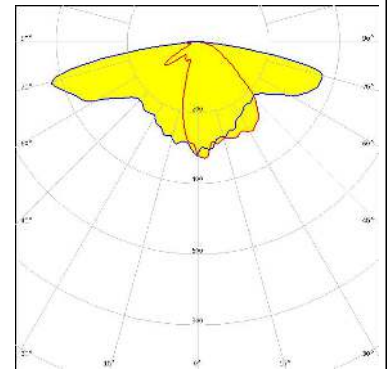
LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM / FWTM Asymmetric
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



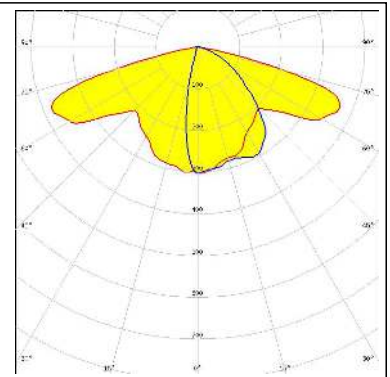
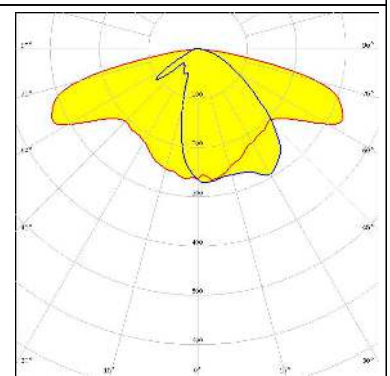
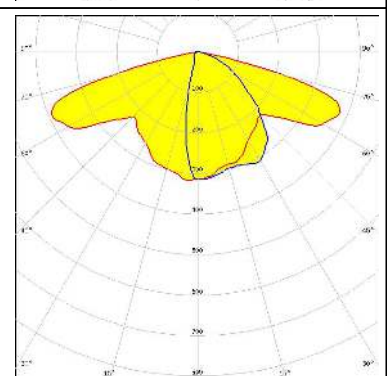
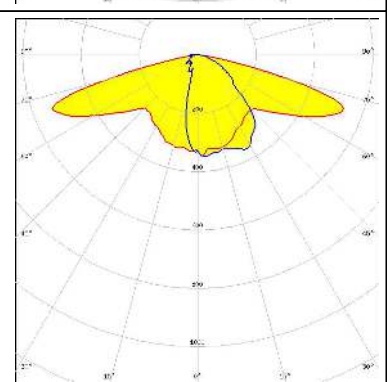
OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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>CREE LEDs</p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 80 %</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 style="background-color: #ADD8E6; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p>CREE LEDs</p> <p>LED XHP35 HI</p> <p>FWHM / FWTM Asymmetric</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>	
<p>CREE LEDs</p> <p>LED XM-L2</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency %</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED: XP-G2 FWHM / FWTM: Asymmetric Efficiency: 84 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>CREE LEDs</p> <p>LED: XP-G2 FWHM / FWTM: Asymmetric Efficiency: 86 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components: C17580_STRADA-2X2-SHD-WHT</p>	
<p>CREE LEDs</p> <p>LED: XP-G2 HE FWHM / FWTM: Asymmetric Efficiency: 82 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: C17580_STRADA-2X2-SHD-WHT</p>	
<p>CREE LEDs</p> <p>LED: XP-G2 HE FWHM / FWTM: Asymmetric Efficiency: 92 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

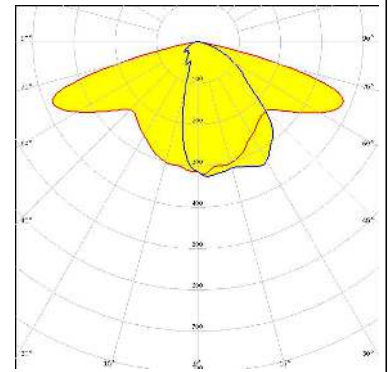
<p>CREE LEDs</p> <p>LED: XP-G3 FWHM / FWTM: Asymmetric Efficiency: 71 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White</p> <p>Required components: C17677_STRADA-2X2-SHD-BLK</p> <p>Protective plate, glass</p>	
<p>CREE LEDs</p> <p>LED: XP-G3 FWHM / FWTM: Asymmetric Efficiency: 79 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White</p> <p>Required components: C17677_STRADA-2X2-SHD-BLK</p> <p>Protective plate, glass</p>	
<p>CREE LEDs</p> <p>LED: XP-G3 FWHM / FWTM: Asymmetric Efficiency: 76 % Peak intensity: 0.5 cd/lm LEDs/each optic: 1 Light colour: White</p> <p>Required components: C17580_STRADA-2X2-SHD-WHT</p> <p>Protective plate, glass</p>	
<p>CREE LEDs</p> <p>LED: XP-G4 FWHM / FWTM: Asymmetric Efficiency: 94 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):



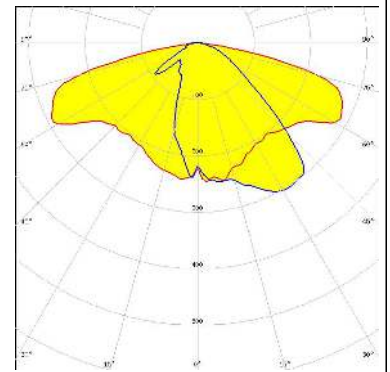
LED XP-G4
 FWHM / FWTM Asymmetric
 Efficiency 81 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass

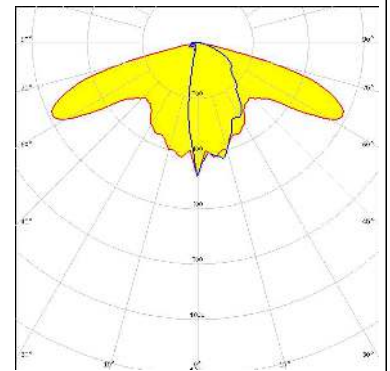


LED XP-L2
 FWHM / FWTM Asymmetric
 Efficiency 79 %
 Peak intensity 0.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass

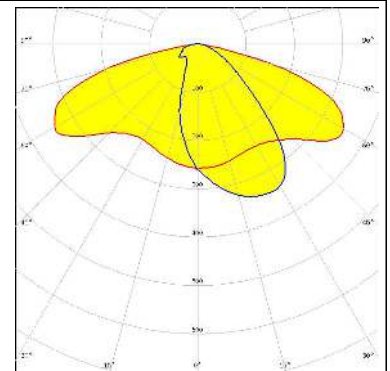


LED XQ-E HD
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 LEDs/each optic 1
 Light colour White
 Required components:

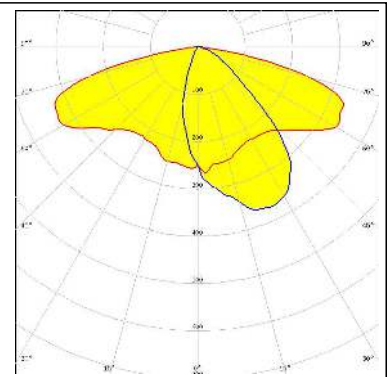
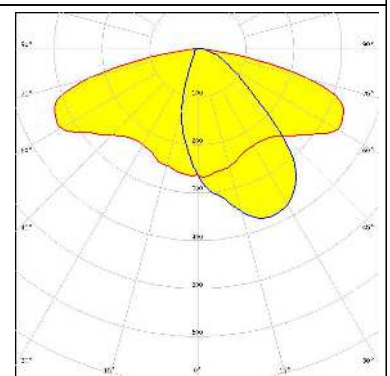
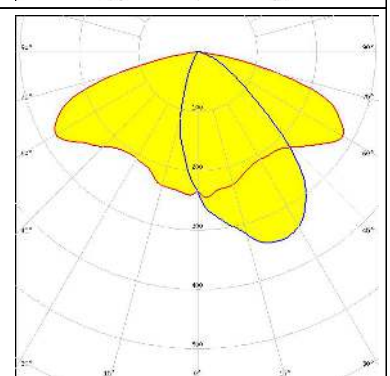
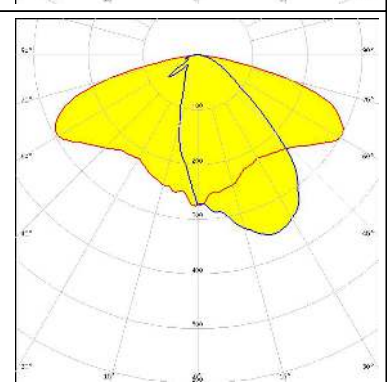


LED LUXEON 5050 Round LES
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

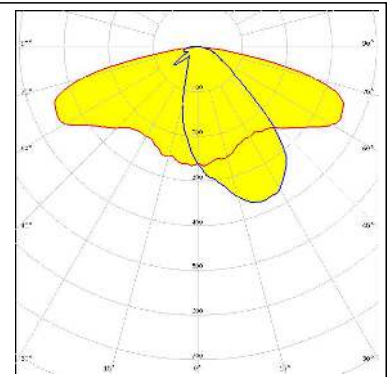
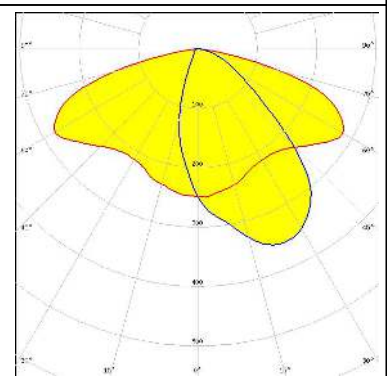
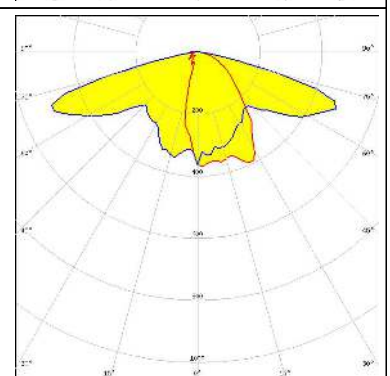
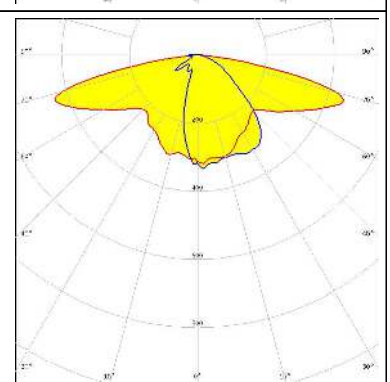
Protective plate, glass



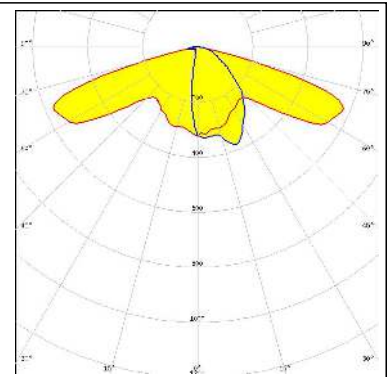
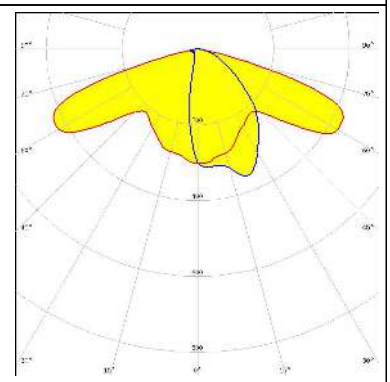
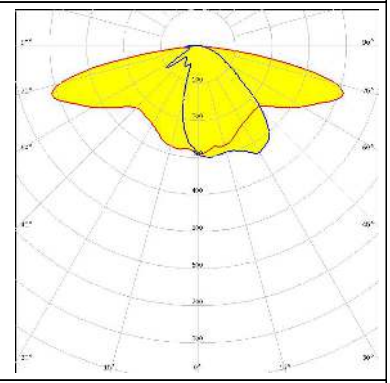
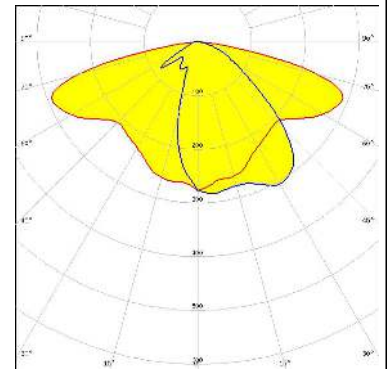
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17677_STRADA-2X2-SHD-BLK</p>	
<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17580_STRADA-2X2-SHD-WHT</p>	
<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 72 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17677_STRADA-2X2-SHD-BLK</p> <p>Protective plate, glass</p>	
<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 80 %</p> <p>Peak intensity 0.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Protective plate, glass</p>	

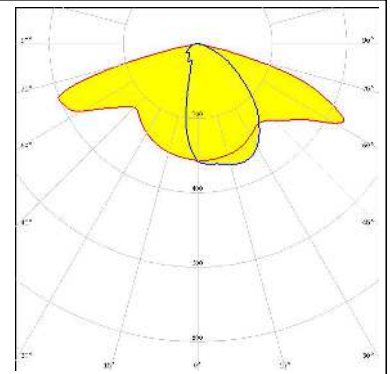
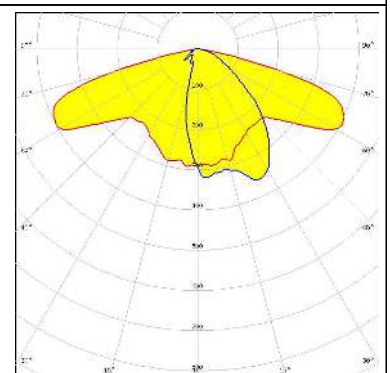
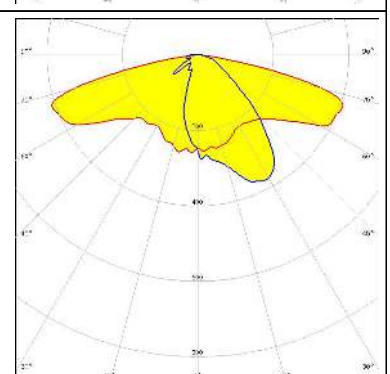
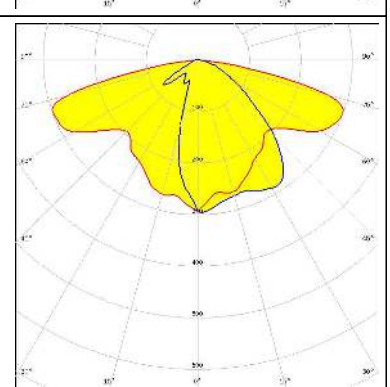
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</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>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 76 %</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>C17580_STRADA-2X2-SHD-WHT</p> <p>Protective plate, glass</p>	
<p>LUMILEDS</p> <p>LED LUXEON H50-2</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency %</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON HL2X</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

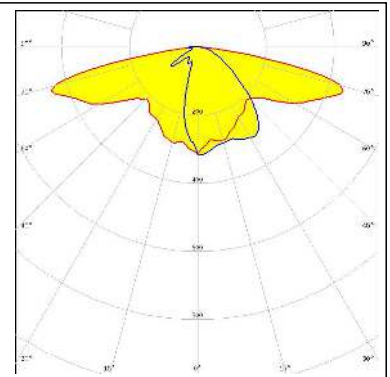
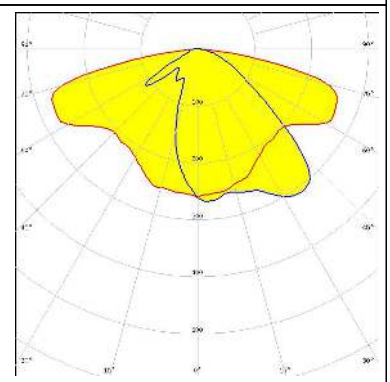
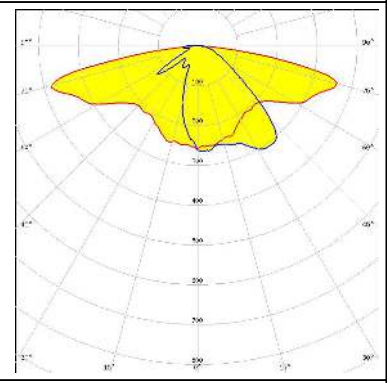
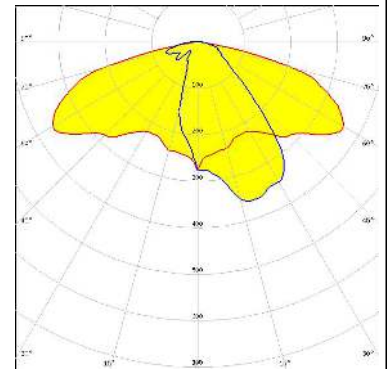
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON HL2Z</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 92 %</p> <p>Peak intensity: 0.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON HL2Z</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 79 %</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>Protective plate, glass</p>	
<p>LUMILEDS</p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 93 %</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>LUMILEDS</p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 78 %</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>Protective plate, glass</p>	

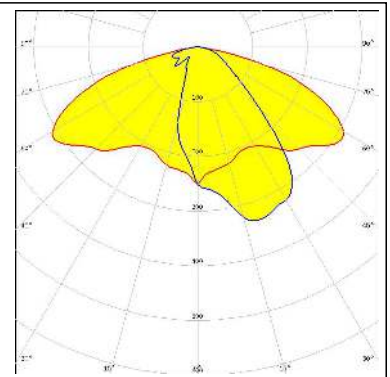
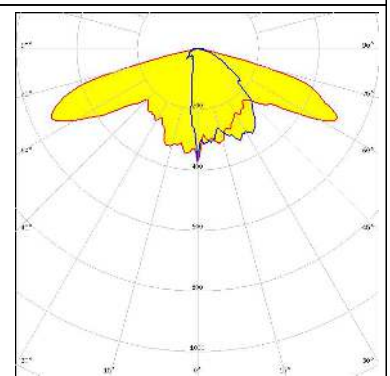
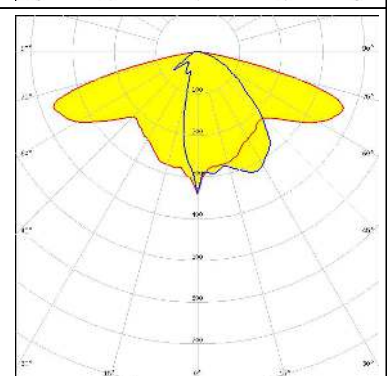
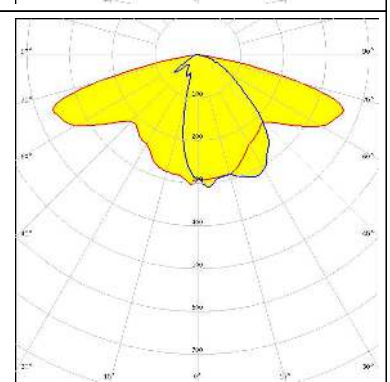
OPTICAL RESULTS (SIMULATED):

<p>MST <i>Your solutions</i></p> <p>LED RecLED 122x50mm 1900lm 730 2x4 Opt G1</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 83 %</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>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED NF2x757G</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 81 %</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>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED NV4WB35AM</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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>NICHIA</p> <p>LED NVSW219F</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 75 %</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>Protective plate, glass</p>	

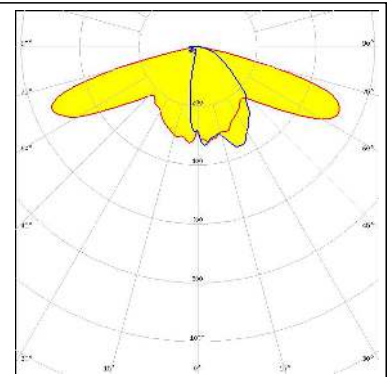
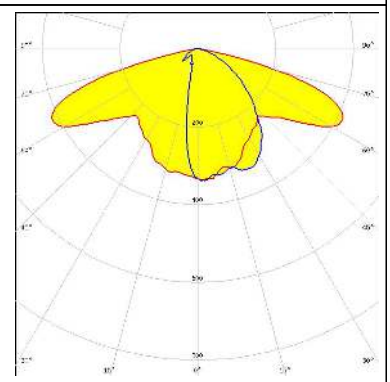
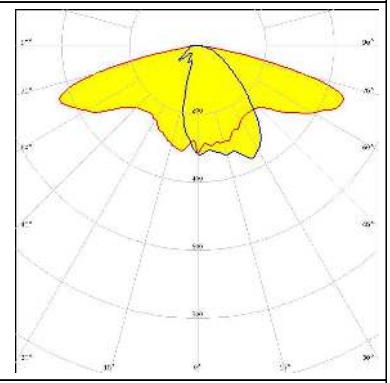
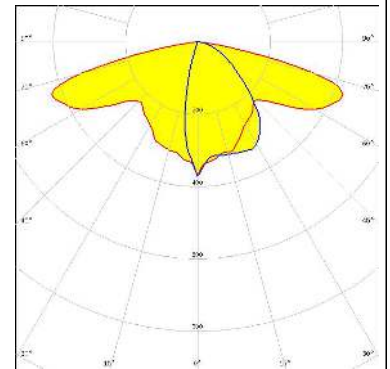
OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED NVSW219F FWHM / FWTM Asymmetric Efficiency 90 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NVSW519A FWHM / FWTM Asymmetric Efficiency 82 % Peak intensity 0.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p> <p style="background-color: #ADD8E6; padding: 2px;">Protective plate, glass</p>	
<p>NICHIA</p> <p>LED NVSW519A FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NVSxE21A FWHM / FWTM Asymmetric Efficiency 95 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NVSxE21A FWHM / FWTM: Asymmetric Efficiency: 81 % Peak intensity: 0.4 cd/lm LEDs/each optic: 4 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NVSxx19A FWHM / FWTM: Asymmetric Efficiency: 85 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NVSxx19B/NVSxx19C FWHM / FWTM: Asymmetric Efficiency: 80 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NVSxx19B/NVSxx19C FWHM / FWTM: Asymmetric Efficiency: 78 % Peak intensity: 0.4 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.6 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 OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 80 %</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 style="background-color: #ADD8E6; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (3W version)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.1 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 Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 82 %</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>C17677_STRADA-2X2-SHD-BLK</p>	

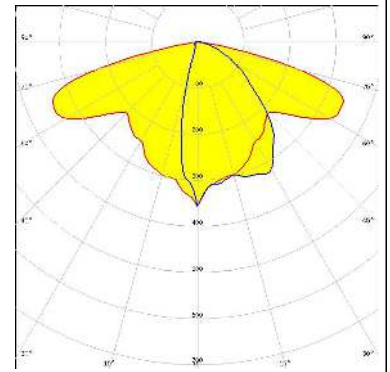
OPTICAL RESULTS (SIMULATED):

OSRAM

Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM Asymmetric
 Efficiency 74 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C17580_STRADA-2X2-SHD-WHT

Protective plate, glass

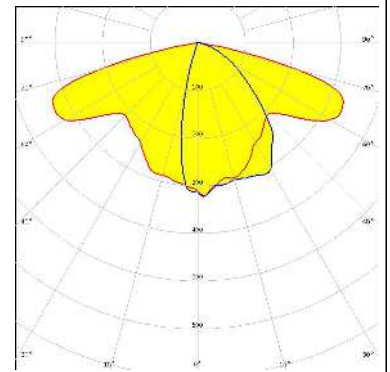


OSRAM

Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM Asymmetric
 Efficiency 71 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C17677_STRADA-2X2-SHD-BLK

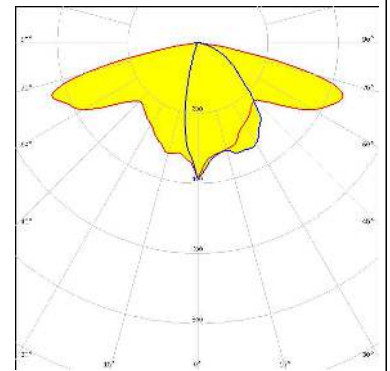
Protective plate, glass



OSRAM

Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM Asymmetric
 Efficiency 85 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C17580_STRADA-2X2-SHD-WHT

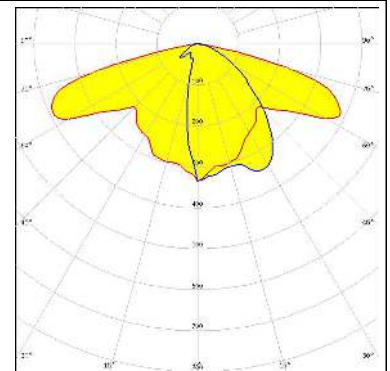


OSRAM

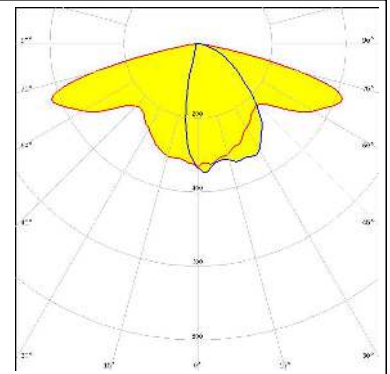
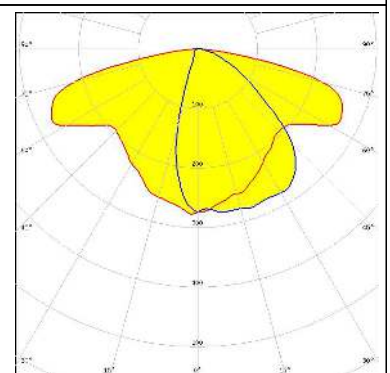
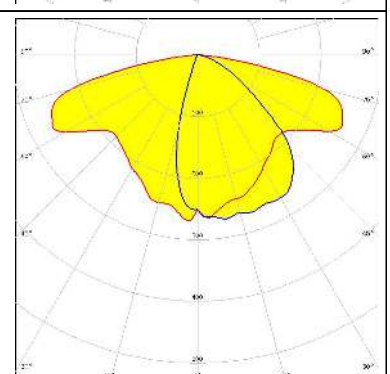
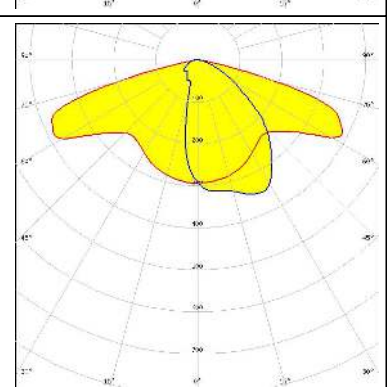
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM Asymmetric
 Efficiency 81 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:
 C17580_STRADA-2X2-SHD-WHT

Protective plate, glass



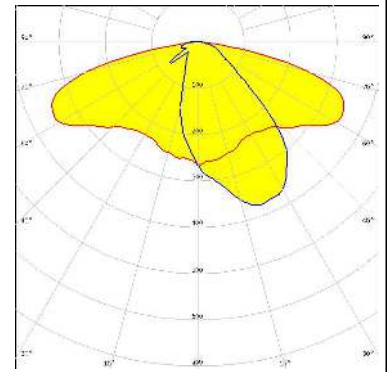
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17580_STRADA-2X2-SHD-WHT</p>	
<p>PHILIPS</p> <p>LED Fortimo FastFlex LED 2x8 DA G4+</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 69 %</p> <p>Peak intensity 0.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17580_STRADA-2X2-SHD-WHT</p>	
<p>PHILIPS</p> <p>LED Fortimo FastFlex LED 2x8 DA G4+</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 65 %</p> <p>Peak intensity 0.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17677_STRADA-2X2-SHD-BLK</p>	
<p>PHILIPS</p> <p>LED Fortimo FastFlex LED 2x8 DA G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 83 %</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 style="background-color: #ADD8E6; padding: 2px;">Protective plate, glass</p>	

OPTICAL RESULTS (SIMULATED):

PHILIPS

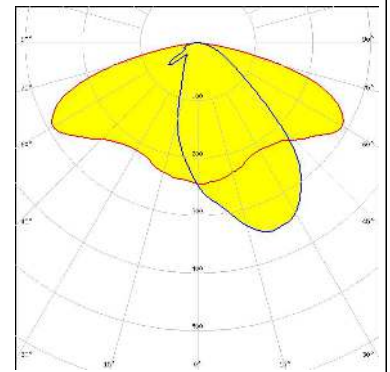
LED Fortimo FastFlex LED 2x8 DA HE
 FWHM / FWTM Asymmetric
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHILIPS

LED Fortimo FastFlex LED 2x8 DA HE
 FWHM / FWTM Asymmetric
 Efficiency 81 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

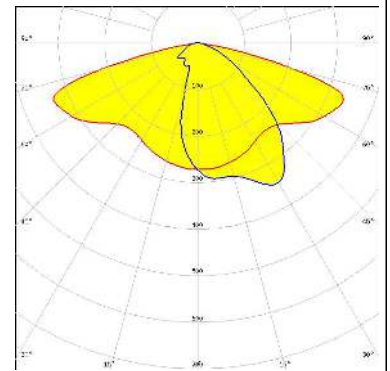
Protective plate, glass



SAMSUNG

LED HiLOM RH12 Z (LH351C)
 FWHM / FWTM Asymmetric
 Efficiency 82 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

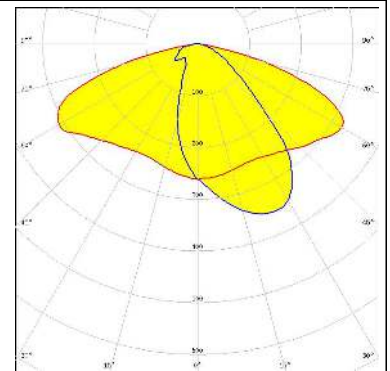
Protective plate, glass



SAMSUNG

LED HiLOM RM8 Z (LH502C)
 FWHM / FWTM Asymmetric
 Efficiency 84 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

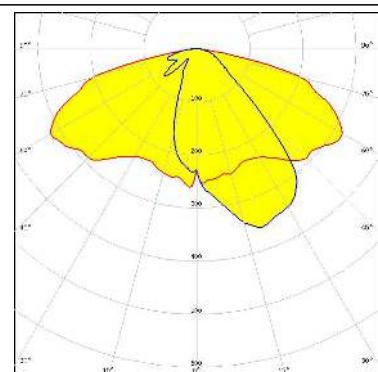
Protective plate, glass



OPTICAL RESULTS (SIMULATED):

SAMSUNG

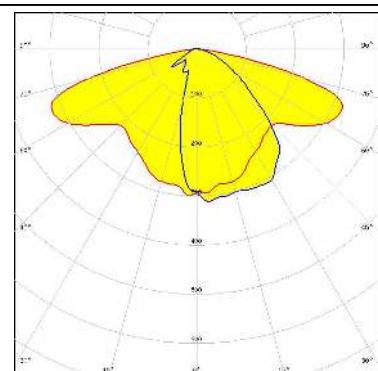
LED LH181B
FWHM / FWTM Asymmetric
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 4
Light colour White
Required components:



SAMSUNG

LED LH351B
FWHM / FWTM Asymmetric
Efficiency 77 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

Protective plate, glass

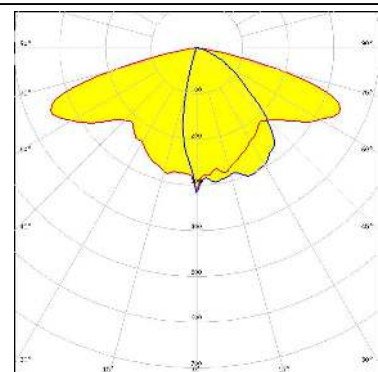


SAMSUNG

LED LH351B
FWHM / FWTM Asymmetric
Efficiency 69 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

C17677_STRADA-2X2-SHD-BLK

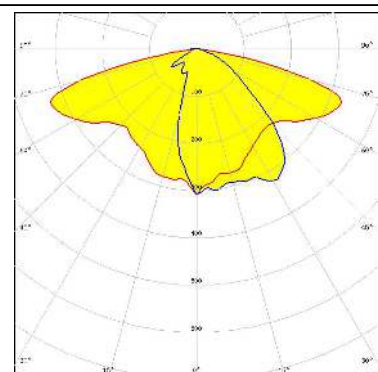
Protective plate, glass



SAMSUNG

LED LH351C
FWHM / FWTM Asymmetric
Efficiency 79 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

Protective plate, glass

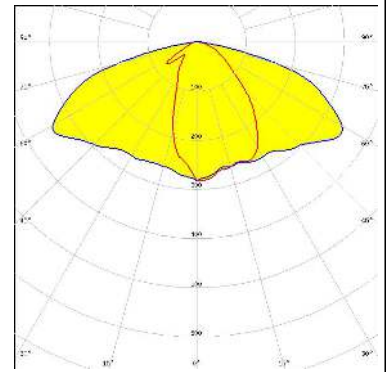


OPTICAL RESULTS (SIMULATED):

SAMSUNG

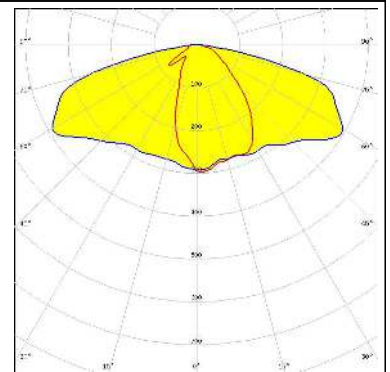
LED LM301B
 FWHM / FWTM Asymmetric
 Efficiency 80 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 4
 Light colour White
 Required components:

Protective plate, glass

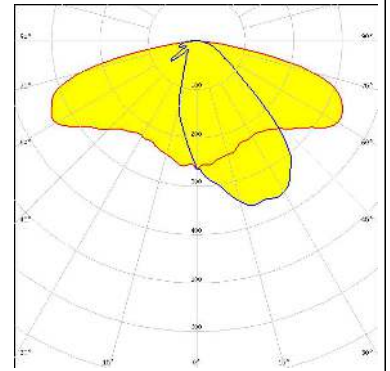


SAMSUNG

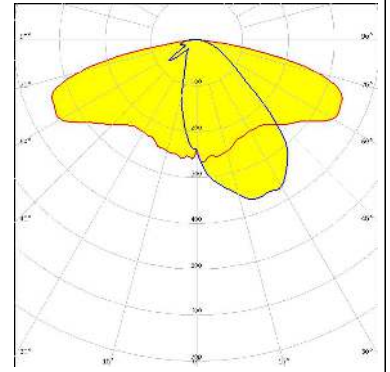
LED LM301B
 FWHM / FWTM Asymmetric
 Efficiency 91 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 4
 Light colour White
 Required components:



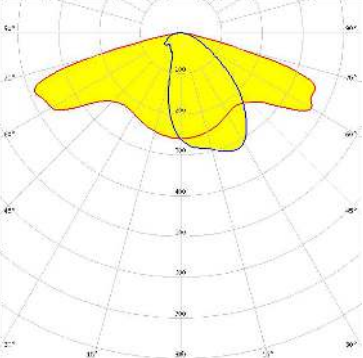
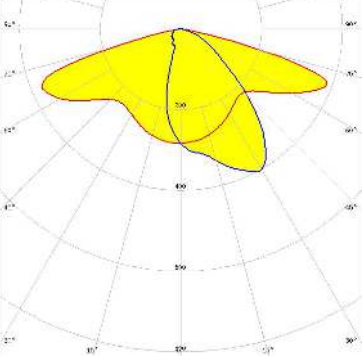
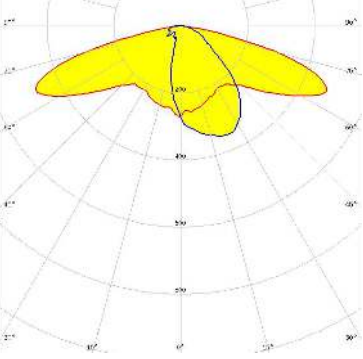
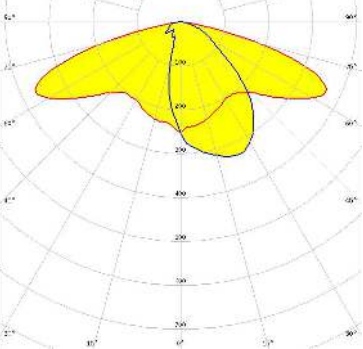
SEOUL SEMICONDUCTOR
 LED MJT 5050
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




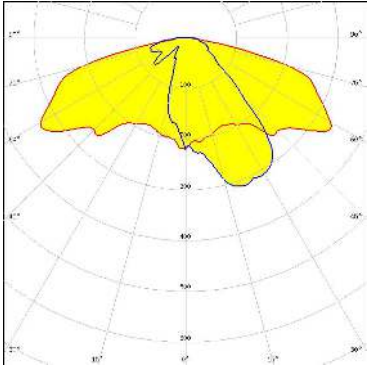
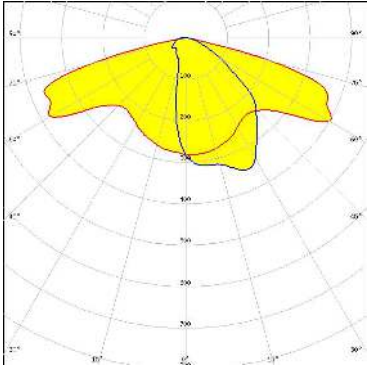
SEOUL SEMICONDUCTOR
 LED SEOUL DC 5050 6V
 FWHM / FWTM Asymmetric
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED: Z5M3</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 81 %</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>Protective plate, glass</p>	
<p>SEOUL SEMICONDUCTOR</p> <p>LED: Z5M4</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 83 %</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>Protective plate, glass</p>	
<p>SEOUL SEMICONDUCTOR</p> <p>LED: Z5M5</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>SEOUL SEMICONDUCTOR</p> <p>LED: Z5M5</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 80 %</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>Protective plate, glass</p>	

OPTICAL RESULTS (SIMULATED):

 SECOIL SEMICONDUCTOR		
LED	Z8Y19	
FWHM / FWTM	Asymmetric	
Efficiency	93 %	
Peak intensity	0.5 cd/lm	
LEDs/each optic	4	
Light colour	White	
Required components:		
TRIDONIC		
LED	RLE 2x8 4000lm HP EXC2 OTD	
FWHM / FWTM	Asymmetric	
Efficiency	83 %	
Peak intensity	0.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
	Protective plate, glass	

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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

405 , Block B
Casic Motor Building
Shenzhen 518057
P.R.CHINA

Local sales and technical support

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Shipping locations

Salo, Finland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)