

SPORT-2X2-FT60

Narrow forward throw beam for high masts

SPECIFICATION:

Dimensions	50.0 x 50.0 mm
Height	15.5 mm
Fastening	screw
ROHS compliant	yes ⓘ

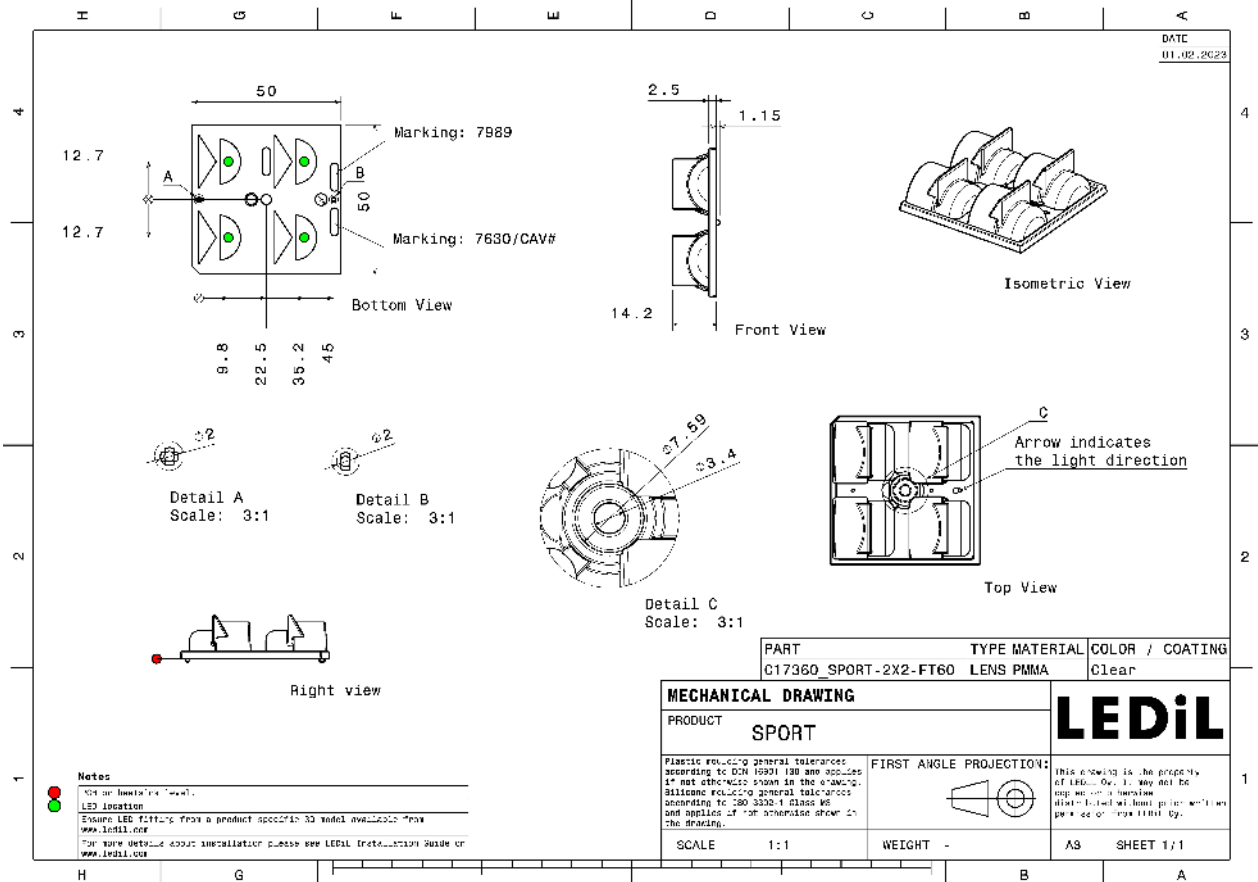
MATERIALS:

Component	Type	Material	Colour	Finish
SPORT-2X2-FT60	Multi-lens	PMMA	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C17360_SPORT-2X2-FT60 » Box size: 480 x 280 x 300 mm	640	128	128	9.5



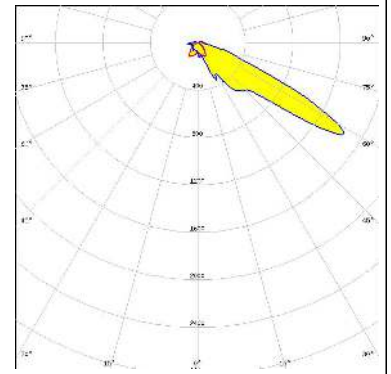


See also our general installation guide: www.ledil.com/installation_guide

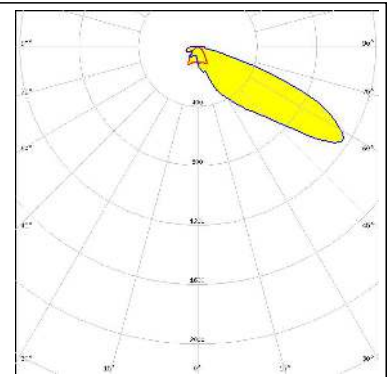
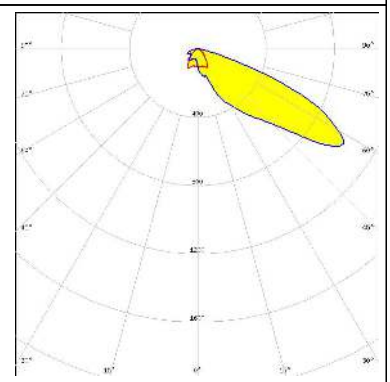
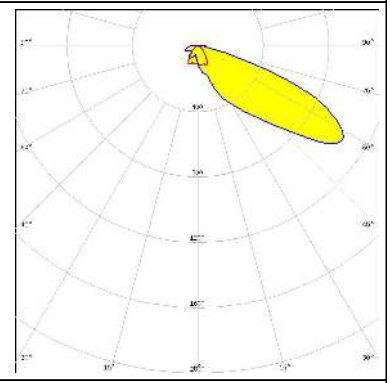
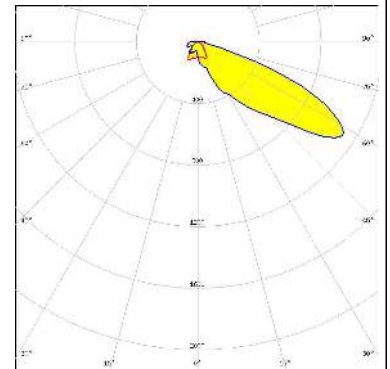
OPTICAL RESULTS (MEASURED):



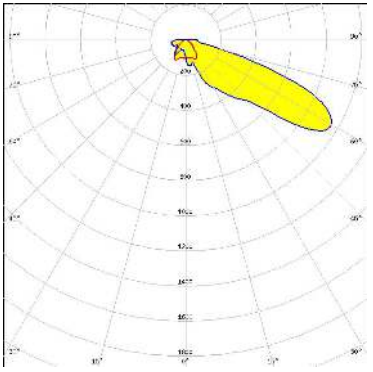
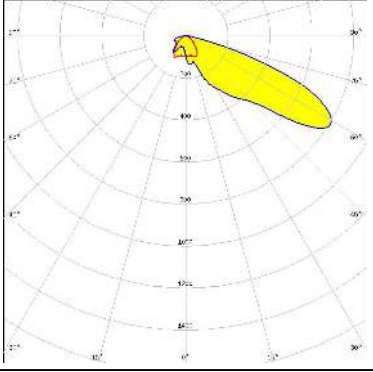
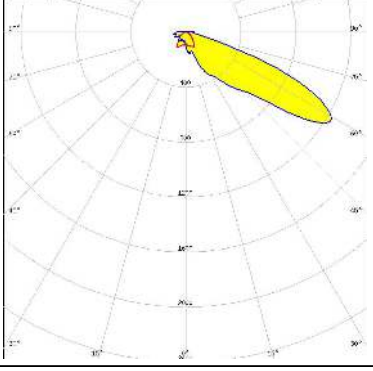
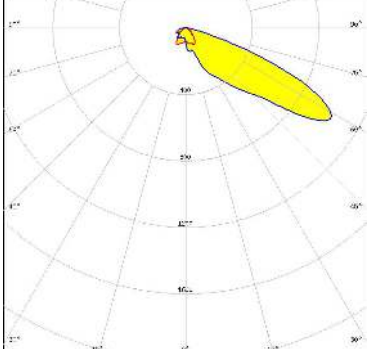
LED PassivePAQ-R-222x50.OS1.9.7K-750-5 V1.0
FWHM / FWTM Asymmetric
Efficiency 94 %
Peak intensity 1.5 cd/m
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (SIMULATED):

<p>CREE → LED</p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>CREE → LED</p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 78 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p style="background-color: #e0f0ff; padding: 2px;">Protective plate, glass</p>	
<p>CREE → LED</p> <p>LED J Series 5050B 6V K Class</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>CREE → LED</p> <p>LED J Series 5050C 6V E Class</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>CREE ⇄ LED</p> <p>LED: XHP35.2 HD FWHM / FWTM: Asymmetric Efficiency: 89 % Peak intensity: 1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XHP35.2 HD FWHM / FWTM: Asymmetric Efficiency: 73 % Peak intensity: 0.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>CREE ⇄ LED</p> <p>LED: XHP35.2 HI FWHM / FWTM: Asymmetric Efficiency: 92 % Peak intensity: 1.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XHP35.2 HI FWHM / FWTM: Asymmetric Efficiency: 77 % Peak intensity: 1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	

OPTICAL RESULTS (SIMULATED):

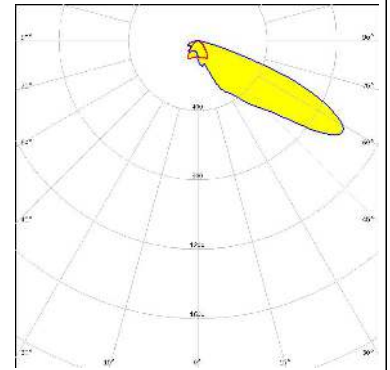
CREE LED

LED XHP50.3 HI
 FWHM / FWTM Asymmetric
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

CREE LED

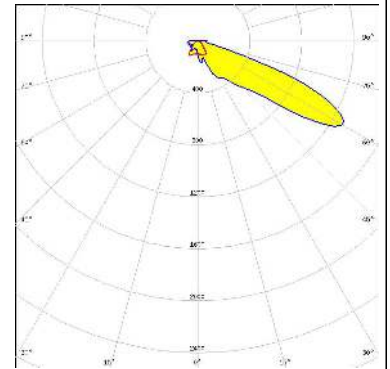
LED XHP50.3 HI
 FWHM / FWTM Asymmetric
 Efficiency 77 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



CREE LED

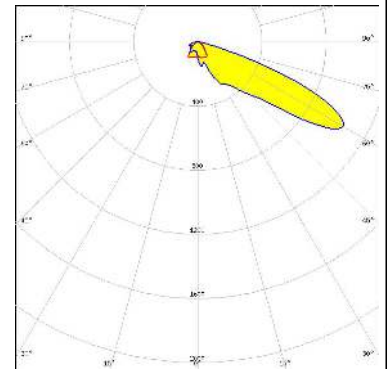
LED XM-L3
 FWHM / FWTM Asymmetric
 Efficiency 90 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



CREE LED

LED XM-L3
 FWHM / FWTM Asymmetric
 Efficiency 74 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


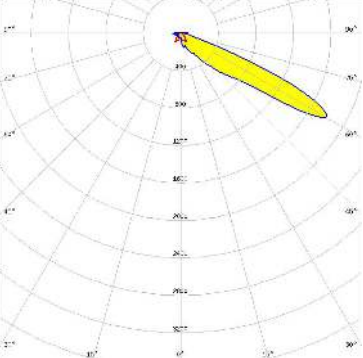

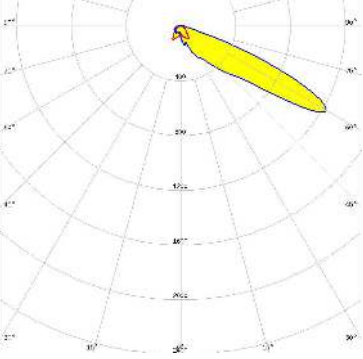
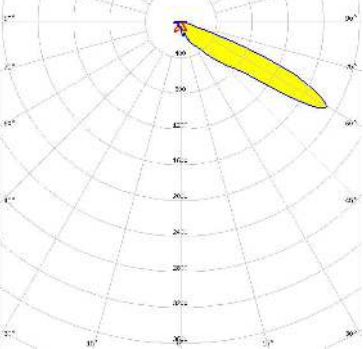
Protective plate, glass



OPTICAL RESULTS (SIMULATED):

<p>CREE ⇄ LED</p> <p>LED: XP-E2 FWHM / FWTM: Asymmetric Efficiency: 88 % Peak intensity: 2 cd/lm LEDs/each optic: 1 Light colour: Green Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-G2 FWHM / FWTM: Asymmetric Efficiency: 90 % Peak intensity: 1.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-G2 FWHM / FWTM: Asymmetric Efficiency: 77 % Peak intensity: 1.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p style="background-color: #e0f2f7; padding: 2px;">Protective plate, glass</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-G2 HE FWHM / FWTM: Asymmetric Efficiency: 73 % Peak intensity: 1.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>C18069_SPORT-2X2-FT-SHD-WHT</p>	

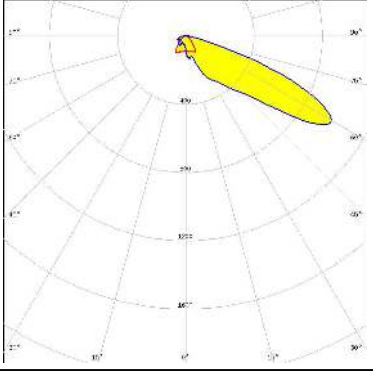
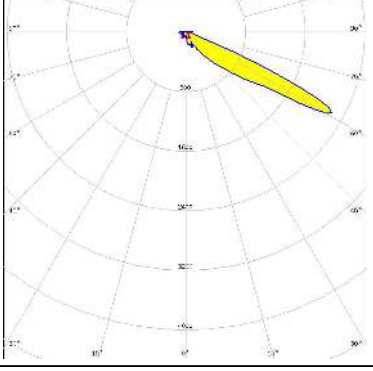
OPTICAL RESULTS (SIMULATED):

<p>CREE  LED</p> <p>LED: XP-G2 HE FWHM / FWTM: Asymmetric Efficiency: 88 % Peak intensity: 1.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE  LED</p> <p>LED: XP-G2 HE FWHM / FWTM: Asymmetric Efficiency: 61 % Peak intensity: 1.6 cd/lm LEDs/each optic: 1 Light colour: White Required components: C17929_SPORT-2X2-FT-SHD-BLK</p>	
<p>CREE  LED</p> <p>LED: XP-G3 FWHM / FWTM: Asymmetric Efficiency: 73 % Peak intensity: 1.2 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>CREE  LED</p> <p>LED: XP-G4 FWHM / FWTM: Asymmetric Efficiency: 90 % Peak intensity: 1.9 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

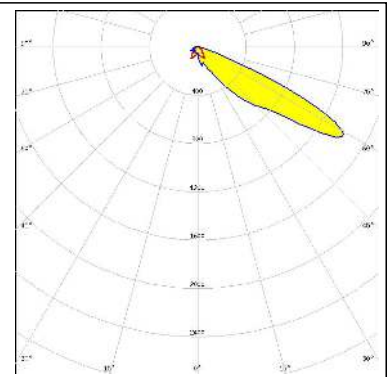
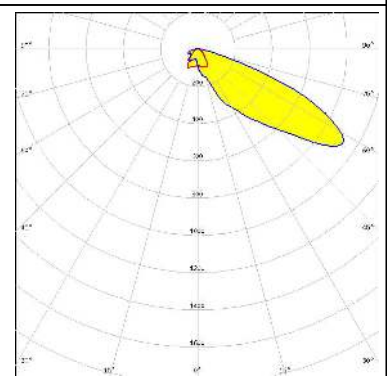
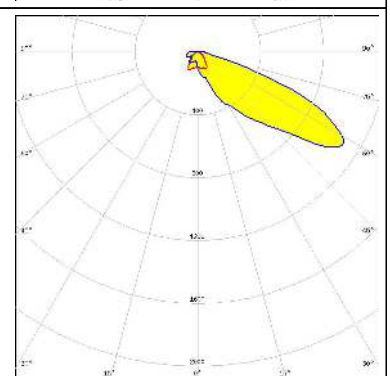
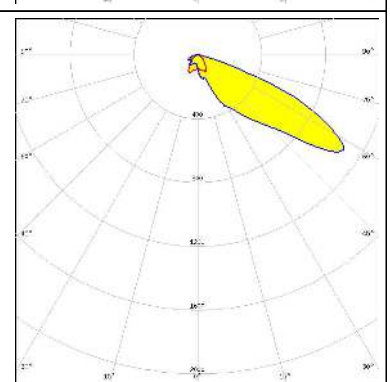
OPTICAL RESULTS (SIMULATED):

<p>CREE → LED</p> <p>LED: XP-L HD FWHM / FWTM: Asymmetric Efficiency: 75 % Peak intensity: 1.1 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>CREE → LED</p> <p>LED: XP-L HD FWHM / FWTM: Asymmetric Efficiency: 91 % Peak intensity: 1.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XP-L HI FWHM / FWTM: Asymmetric Efficiency: 76 % Peak intensity: 1.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>CREE → LED</p> <p>LED: XP-L HI FWHM / FWTM: Asymmetric Efficiency: 92 % Peak intensity: 1.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

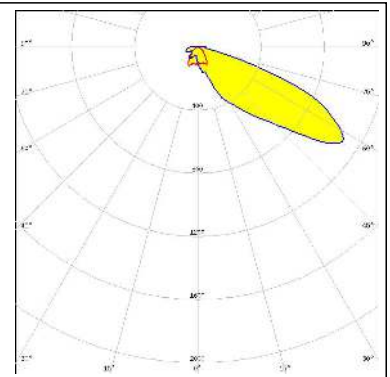
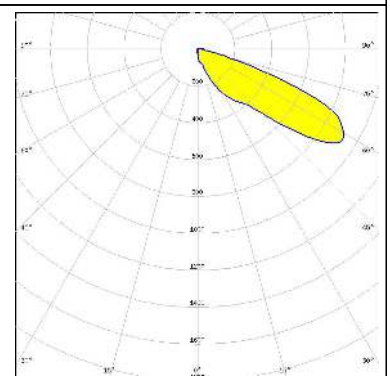
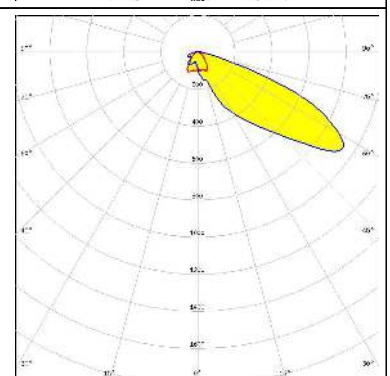
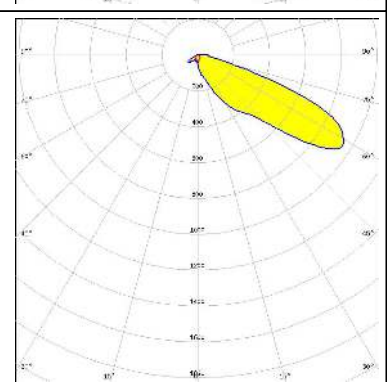
OPTICAL RESULTS (SIMULATED):

<p>CREE ⇄ LED</p> <p>LED: XP-L2 FWHM / FWTM: Asymmetric Efficiency: 87 % Peak intensity: 1.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-L2 FWHM / FWTM: Asymmetric Efficiency: 72 % Peak intensity: 1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-P FWHM / FWTM: Asymmetric Efficiency: 93 % Peak intensity: 2.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED: XP-P FWHM / FWTM: Asymmetric Efficiency: 77 % Peak intensity: 1.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	

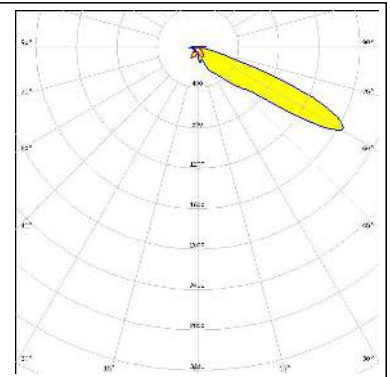
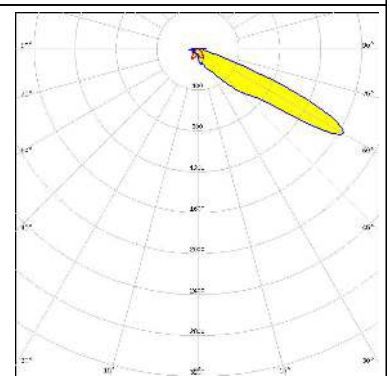
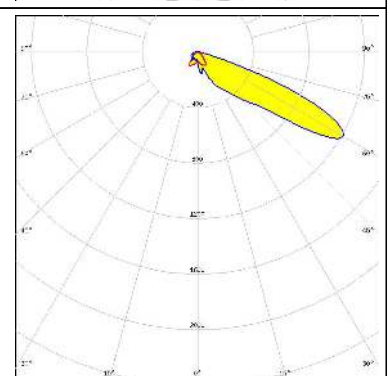
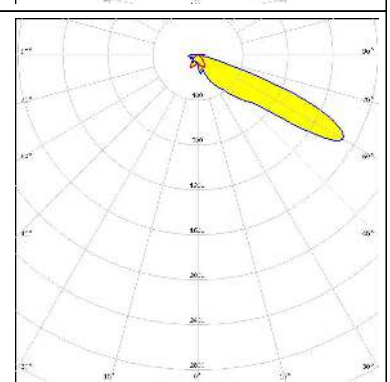
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON 3030 2D (Round LES)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p>LUMILEDS</p> <p>LED LUXEON 5050 HE</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 74 %</p> <p>Peak intensity 0.9 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 5050 HE</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 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 Round LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 78 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	

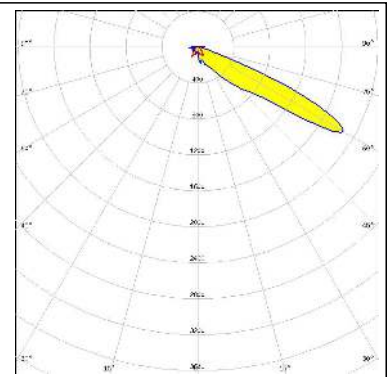
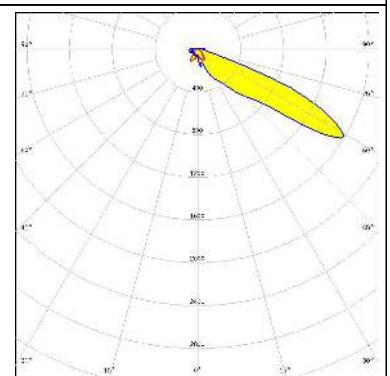
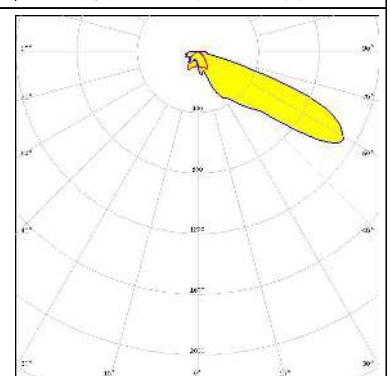
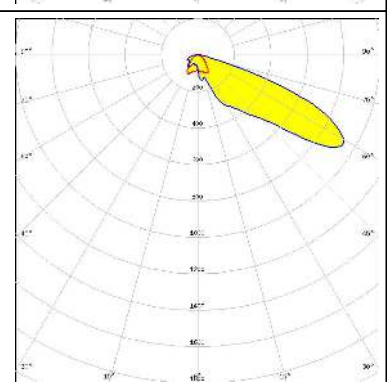
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.1 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 58 %</p> <p>Peak intensity 0.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C17929_SPORT-2X2-FT-SHD-BLK</p>	
<p>LUMILEDS</p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 76 %</p> <p>Peak intensity 0.9 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 5050 Square LES</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 70 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C18069_SPORT-2X2-FT-SHD-WHT</p>	

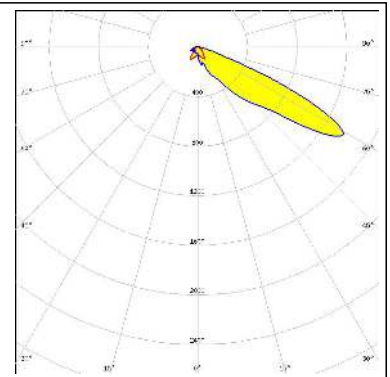
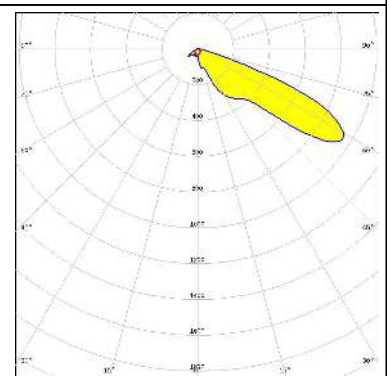
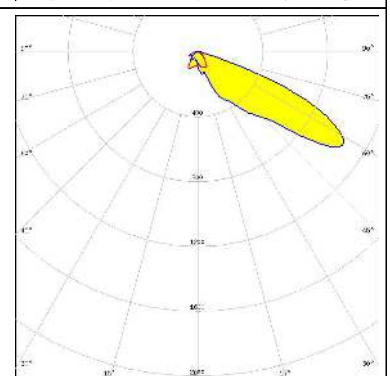
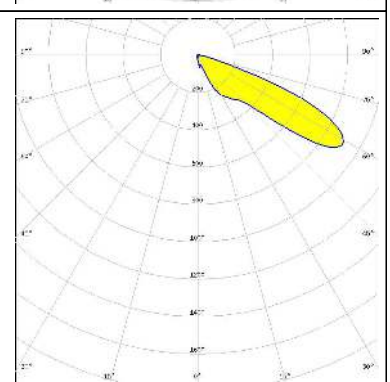
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON HL2X</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 88 %</p> <p>Peak intensity: 1.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON TX</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 88 %</p> <p>Peak intensity: 1.6 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: 76 %</p> <p>Peak intensity: 1.2 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: 92 %</p> <p>Peak intensity: 1.5 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

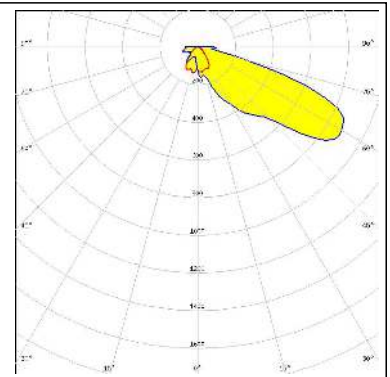
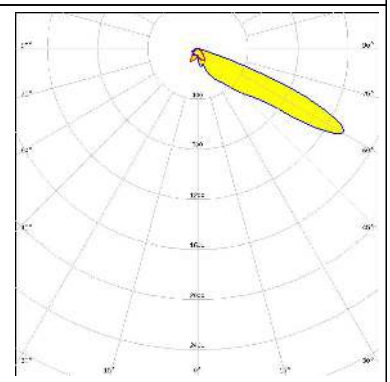
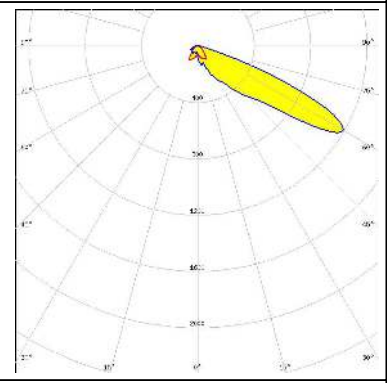
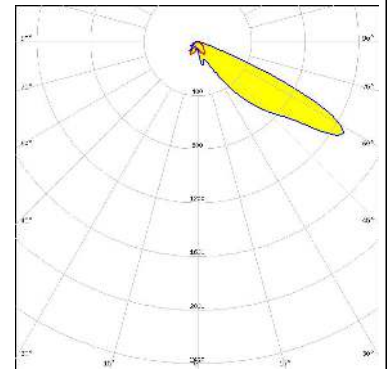
OPTICAL RESULTS (SIMULATED):

<p>LUMINUS</p> <p>LED SFT-40-WCS FWHM / FWTM 90.0 + 15.0° / 142.0 + 61.0° Efficiency 92 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMINUS</p> <p>LED SFT-70X-WCS FWHM / FWTM 87.0 + 18.0° / 141.0 + 65.0° Efficiency 92 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMINUS</p> <p>LED SST-70X-WCS FWHM / FWTM Asymmetric Efficiency 92 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMINUS</p> <p>LED SST-70X-WCS FWHM / FWTM Asymmetric Efficiency 76 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p> <p style="background-color: #ADD8E6; padding: 2px; display: inline-block;">Protective plate, glass</p>	

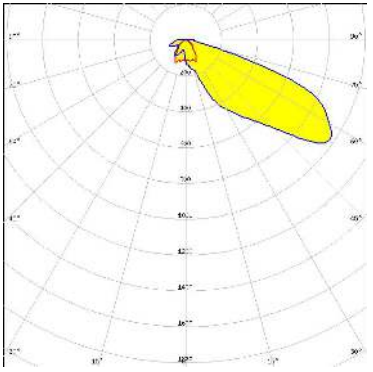
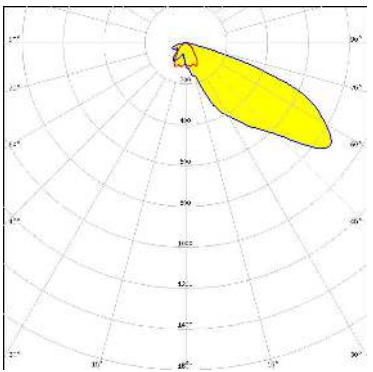
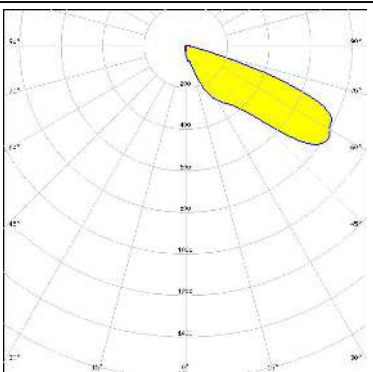
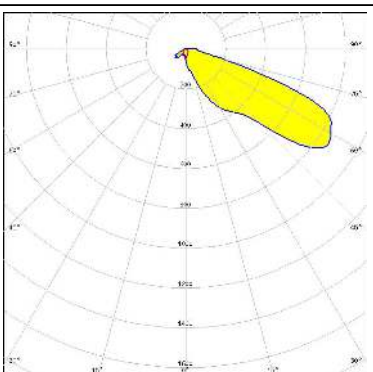
OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NFSx757G FWHM / FWTM: Asymmetric Efficiency: 76 % Peak intensity: 1.4 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: Asymmetric Efficiency: 61 % Peak intensity: 1 cd/lm LEDs/each optic: 1 Light colour: White Required components: C18069_SPORT-2X2-FT-SHD-WHT Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: Asymmetric Efficiency: 75 % Peak intensity: 1.1 cd/lm LEDs/each optic: 1 Light colour: White Required components: Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: Asymmetric Efficiency: 49 % Peak intensity: 0.9 cd/lm LEDs/each optic: 1 Light colour: White Required components: C17929_SPORT-2X2-FT-SHD-BLK Protective plate, glass</p>	

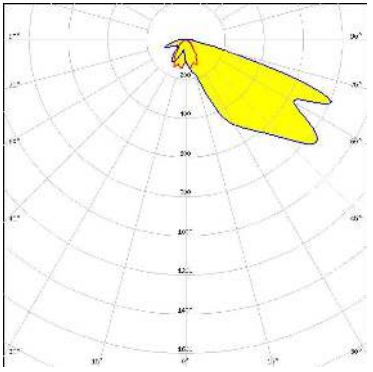
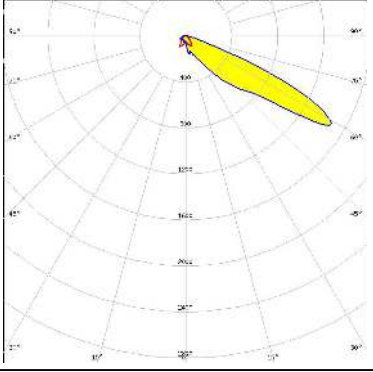
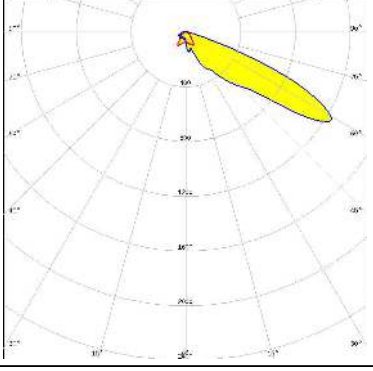
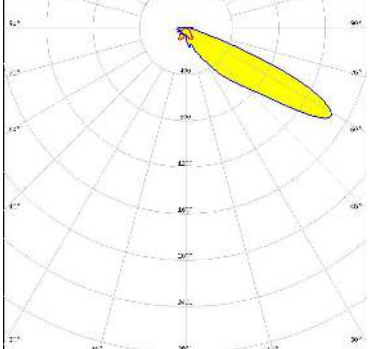
OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NV4x144A FWHM / FWTM: Asymmetric Efficiency: 86 % Peak intensity: 0.9 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NVSW219F FWHM / FWTM: Asymmetric Efficiency: 76 % Peak intensity: 1.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NVSW3x9A FWHM / FWTM: Asymmetric Efficiency: 76 % Peak intensity: 1.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p> <p>Protective plate, glass</p>	
<p>NICHIA</p> <p>LED: NVSxE21A FWHM / FWTM: Asymmetric Efficiency: 77 % Peak intensity: 1.3 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 Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 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 Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 78 %</p> <p>Peak intensity 0.9 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 Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 57 %</p> <p>Peak intensity 0.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C17929_SPORT-2X2-FT-SHD-BLK</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S8</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 70 %</p> <p>Peak intensity 0.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>C18069_SPORT-2X2-FT-SHD-WHT</p>	

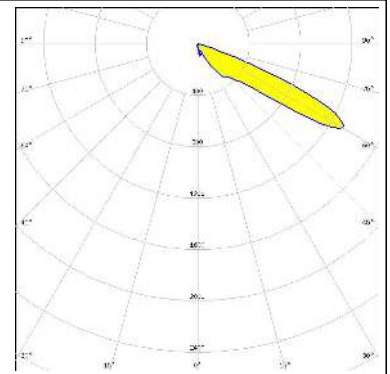
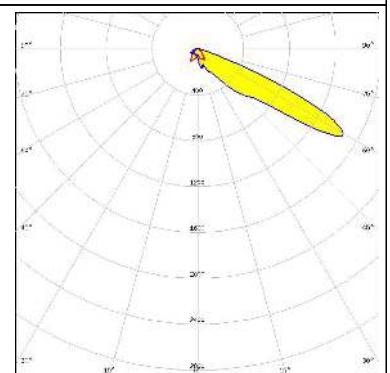
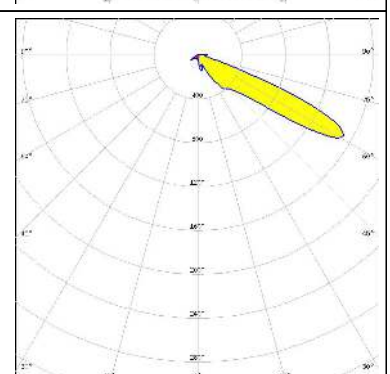
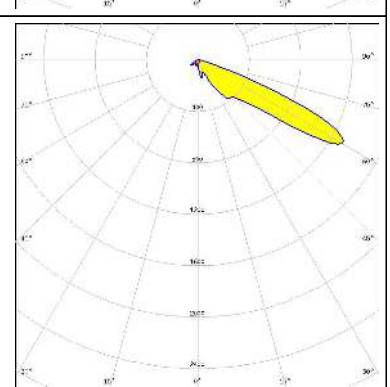
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ C 2424</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 89 %</p> <p>Peak intensity 0.8 cd/lm</p> <p>LEDs/each optic 4</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 76 %</p> <p>Peak intensity 1.5 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 75 %</p> <p>Peak intensity 1.2 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 Flat</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

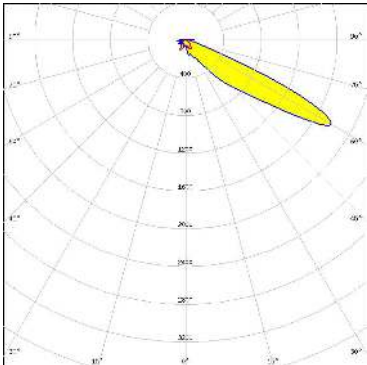
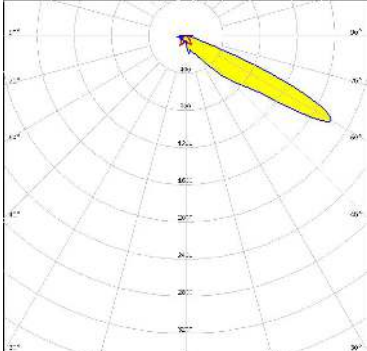
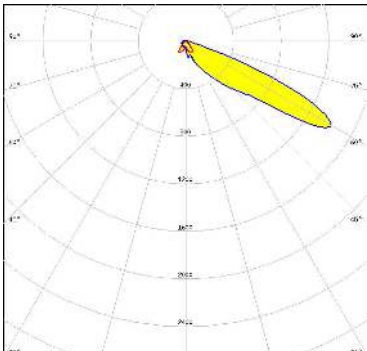
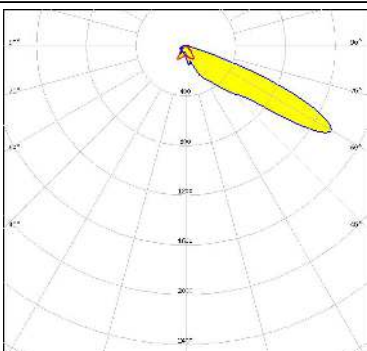
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: OSCONIQ S 5050</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 78 %</p> <p>Peak intensity: 0.9 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: OSCONIQ S 5050</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 93 %</p> <p>Peak intensity: 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: OSOLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 62 %</p> <p>Peak intensity: 1.5 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p> <p>C17929_SPORT-2X2-FT-SHD-BLK</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED: OSOLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 90 %</p> <p>Peak intensity: 1.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 51 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C17929_SPORT-2X2-FT-SHD-BLK</p> <p>Protective plate, glass</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 76 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: Protective plate, glass</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 73 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C18069_SPORT-2X2-FT-SHD-WHT</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 63 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components: C18069_SPORT-2X2-FT-SHD-WHT</p> <p>Protective plate, glass</p>	

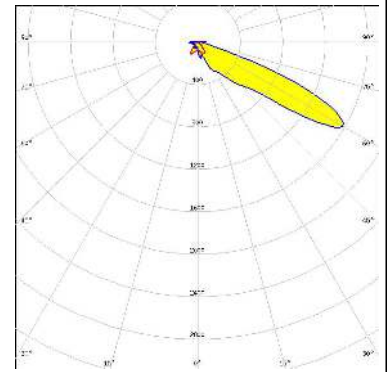
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: OSLOM Square Flat</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 92 %</p> <p>Peak intensity: 1.8 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: OSTAR Projection Compact (KW.CSLNM1.TG)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 92 %</p> <p>Peak intensity: 1.8 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>SAMSUNG</p> <p>LED: LH351B</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 75 %</p> <p>Peak intensity: 1.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p>SAMSUNG</p> <p>LED: LH351C</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 77 %</p> <p>Peak intensity: 1.4 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):

SAMSUNG

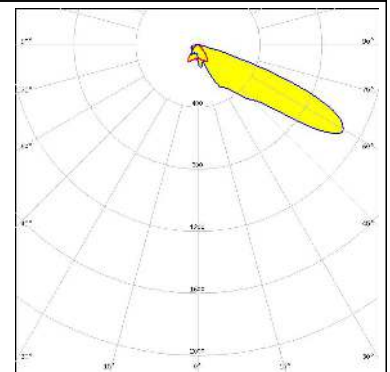
LED LH351C
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

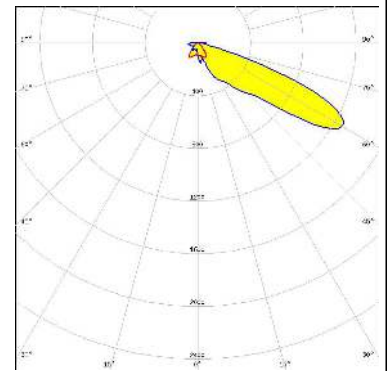
LED LH351D
 FWHM / FWTM Asymmetric
 Efficiency 74 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



SAMSUNG

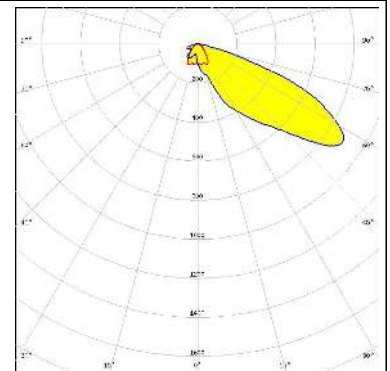
LED LH351D
 FWHM / FWTM Asymmetric
 Efficiency 88 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

LED LH502C
 FWHM / FWTM Asymmetric
 Efficiency 75 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

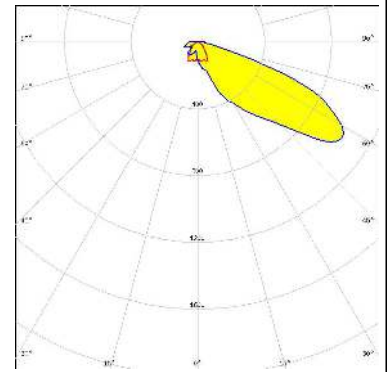
Protective plate, glass



OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED LH502C
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

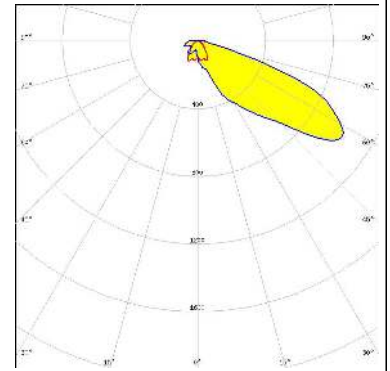


SEOUL SEMICONDUCTOR
 LED MJT 5050
 FWHM / FWTM Asymmetric
 Efficiency 76 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass

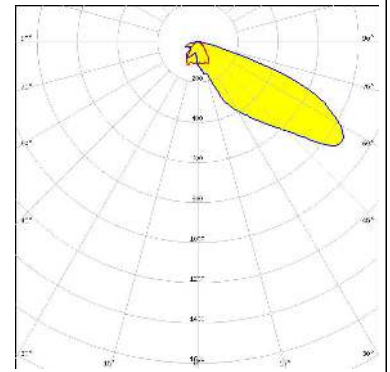


SEOUL SEMICONDUCTOR
 LED SEOUL DC 5050 6V
 FWHM / FWTM Asymmetric
 Efficiency 89 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

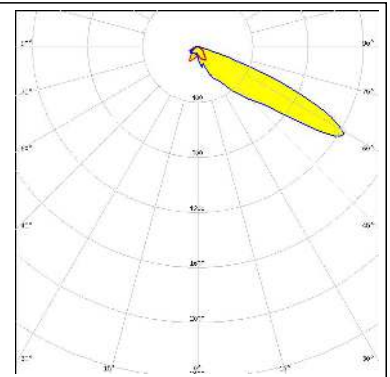
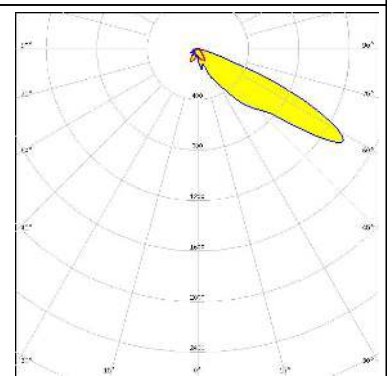
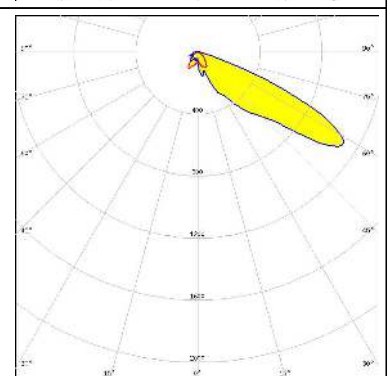
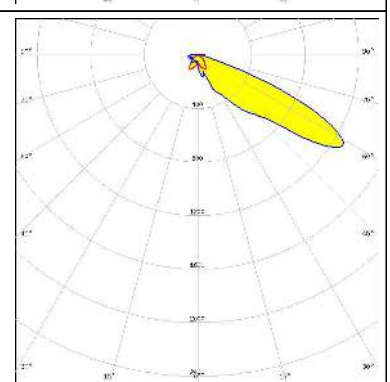


SEOUL SEMICONDUCTOR
 LED SEOUL DC 5050 6V
 FWHM / FWTM Asymmetric
 Efficiency 76 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



OPTICAL RESULTS (SIMULATED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED: Z5M3</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 76 %</p> <p>Peak intensity: 1.2 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: 77 %</p> <p>Peak intensity: 1.4 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: Z5M5</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 76 %</p> <p>Peak intensity: 1.1 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: 88 %</p> <p>Peak intensity: 1.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED: Z8Y22</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 90 %</p> <p>Peak intensity: 1.2 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: Z8Y50P</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 76 %</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 style="background-color: #ADD8E6; padding: 2px;">Protective plate, glass</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:

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)