

## LISA3-W-PIN

~35° wide beam with location pin installation

### SPECIFICATION:

Dimensions	Ø 9.9 mm
Height	7 mm
Fastening	pin
ROHS compliant	yes ⓘ

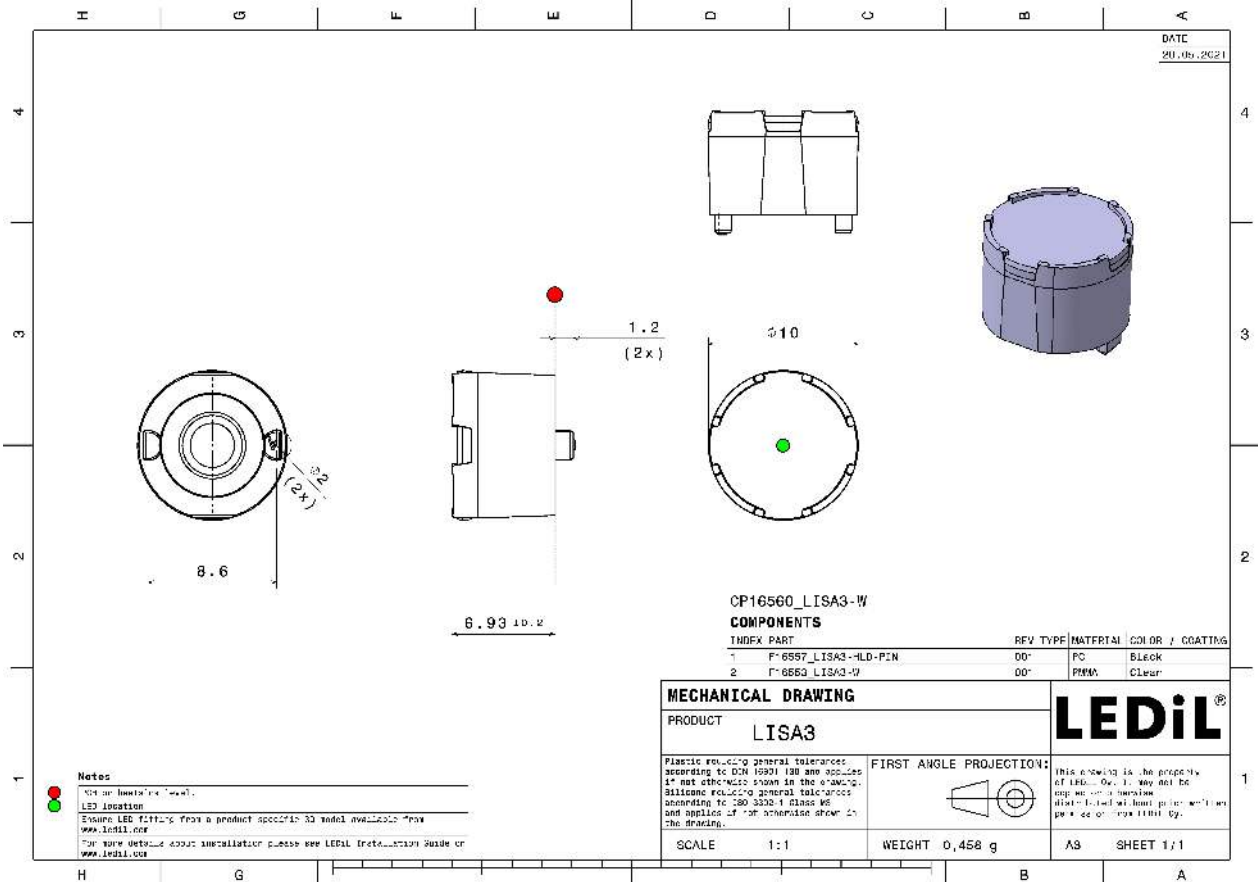
### MATERIALS:

Component	Type	Material	Colour	Finish
LISA3-W	Single lens	PMMA	clear	
LISA3-HLD-PIN	Holder	PC	black	




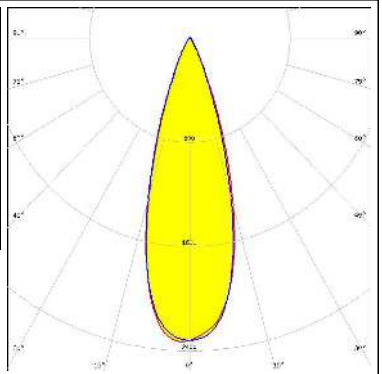

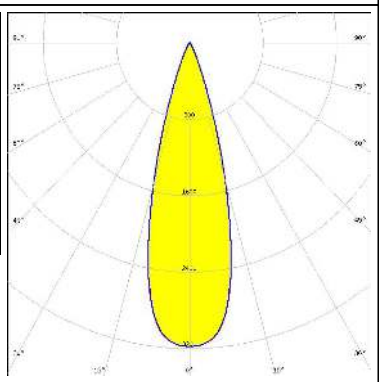

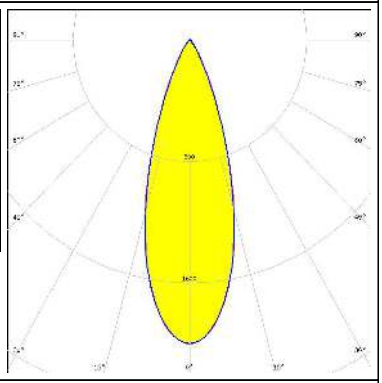
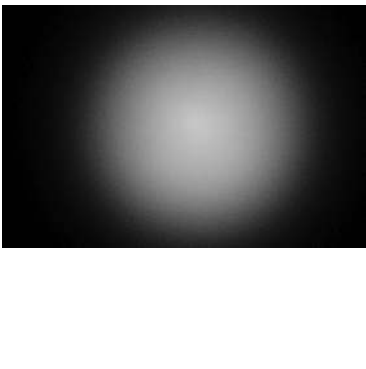
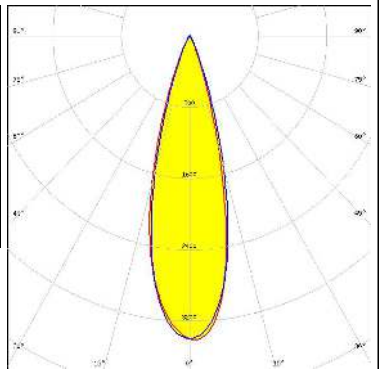
### ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
FP16560_LISA3-W-PIN » Box size: 310 x 230 x 60 mm	Single lens	2000	300	100	1.3


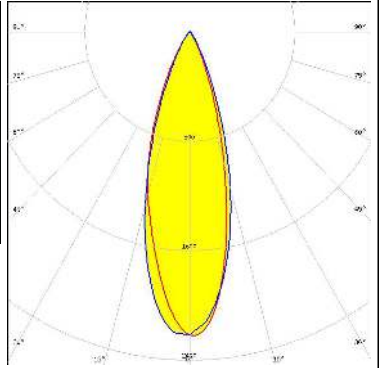

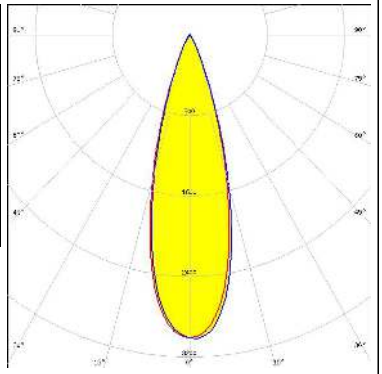
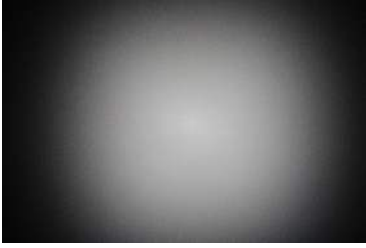
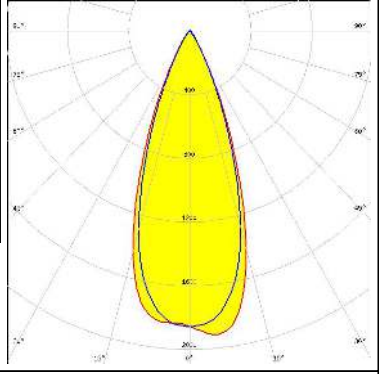
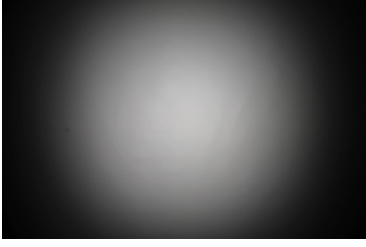
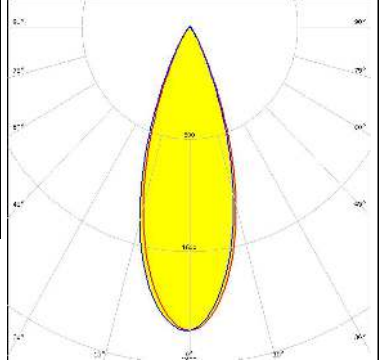


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

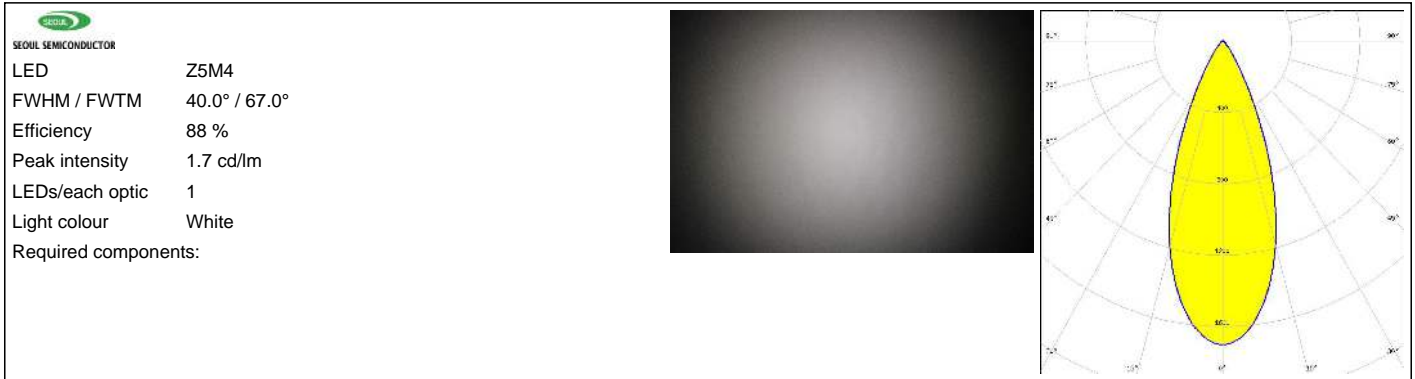
#### OPTICAL RESULTS (MEASURED):

<p><b>CREE</b> LED</p> <p>LED: XD16            FWHM / FWTM: 32.0° / 52.0°            Efficiency: 77 %            Peak intensity: 2.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p><b>CREE</b> LED</p> <p>LED: XP-E2            FWHM / FWTM: 29.0° / 46.0°            Efficiency: 86 %            Peak intensity: 3.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p><b>CREE</b> LED</p> <p>LED: XP-G3            FWHM / FWTM: 34.0° / 58.0°            Efficiency: 78 %            Peak intensity: 2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED: LUXEON CZ            FWHM / FWTM: 29.0° / 47.0°            Efficiency: 88 %            Peak intensity: 3.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		


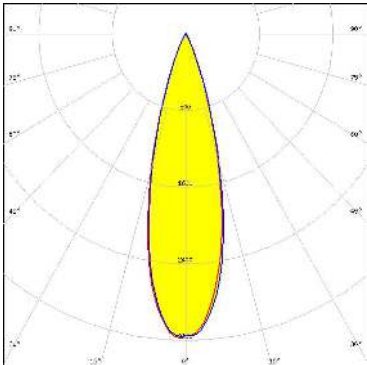

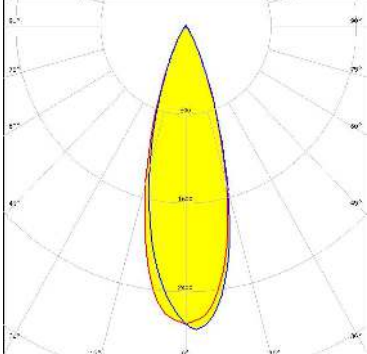

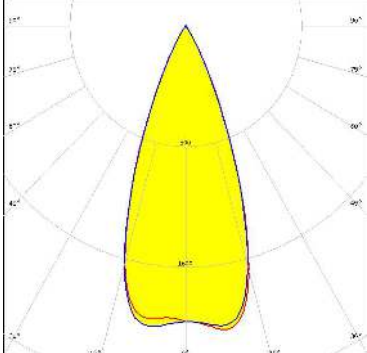

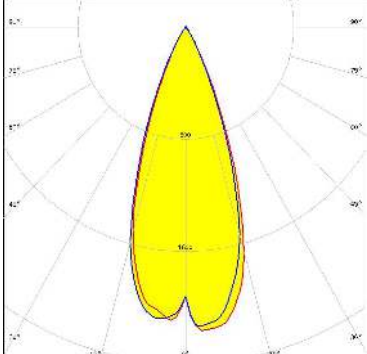
#### OPTICAL RESULTS (MEASURED):

<p><b>NICHIA</b></p> <p>LED NF2x757G</p> <p>FWHM / FWTM 32.0° / 57.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ C 2424</p> <p>FWHM / FWTM 30.0° / 50.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSOLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 39.0° / 60.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>SAMSUNG</b></p> <p>LED LH351C</p> <p>FWHM / FWTM 35.0° / 58.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

### OPTICAL RESULTS (MEASURED):




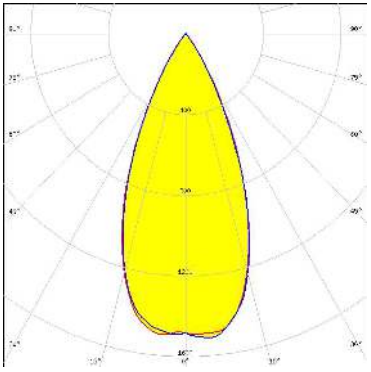

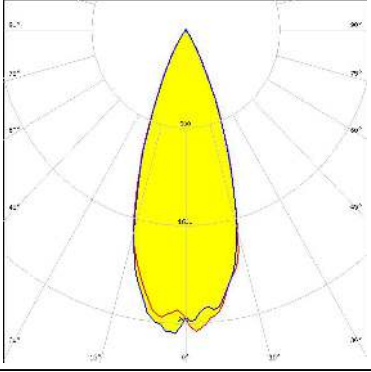

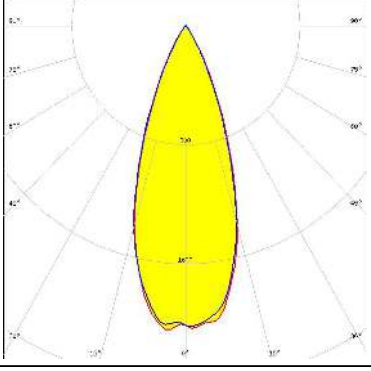

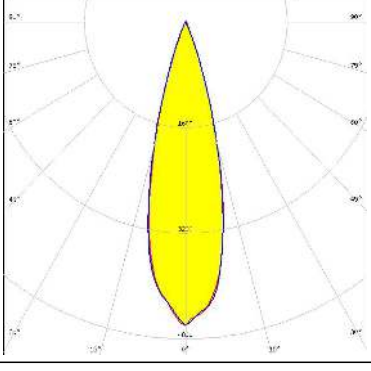
#### OPTICAL RESULTS (SIMULATED):

<p></p> <p>LED CSP 2323 (BXCP)</p> <p>FWHM / FWTM 28.0° / 47.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 3.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p></p> <p>LED J Series 2835</p> <p>FWHM / FWTM 31.0° / 54.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p></p> <p>LED XP-E</p> <p>FWHM / FWTM 41.0° / 59.0°</p> <p>Efficiency 92 %</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></p> <p>LED XP-G2</p> <p>FWHM / FWTM 39.0° / 58.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):


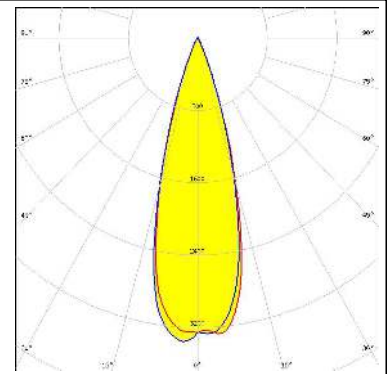

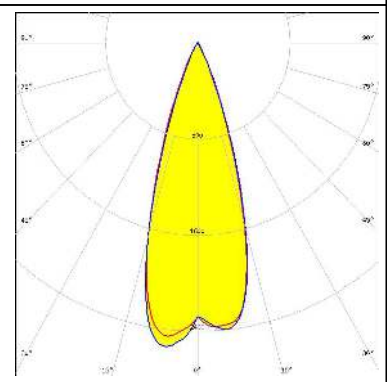

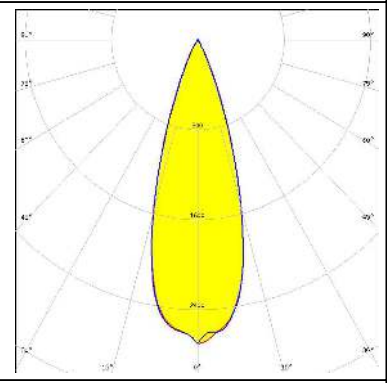

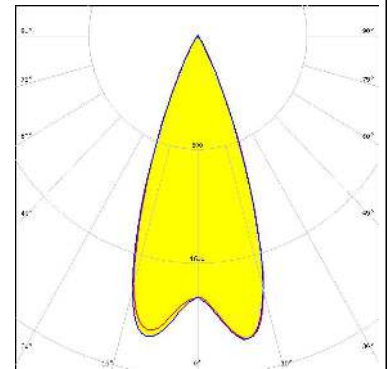
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-G2 HE            FWHM / FWTM: 48.0° / 72.0°            Efficiency: 87 %            Peak intensity: 1.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XT-E            FWHM / FWTM: 30.0° / 49.0°            Efficiency: 82 %            Peak intensity: 2.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 2835 Line            FWHM / FWTM: 30.0° / 52.0°            Efficiency: 89 %            Peak intensity: 3.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 3030 2D (Round LES)            FWHM / FWTM: 30.0° / 50.0°            Efficiency: 85 %            Peak intensity: 3.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

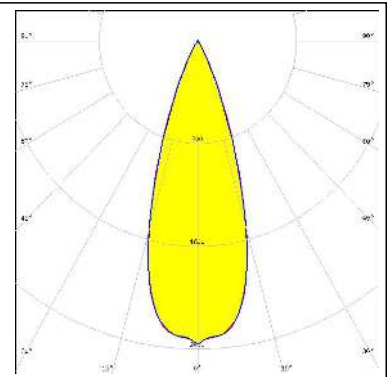
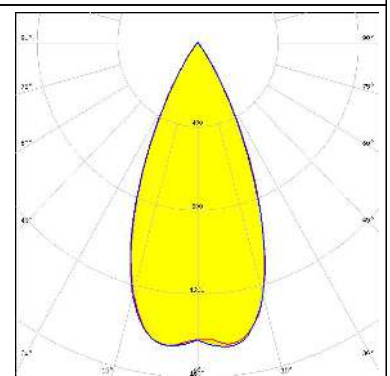
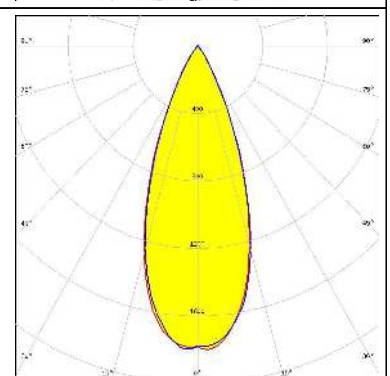
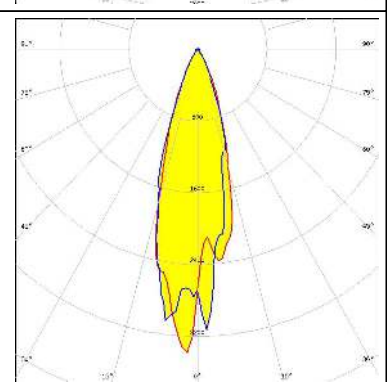
	<p>LED LUXEON HL2X</p> <p>FWHM / FWTM 46.0° / 68.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
	<p>LED LUXEON TX</p> <p>FWHM / FWTM 36.0° / 55.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
	<p>LED LUXEON V2</p> <p>FWHM / FWTM 36.0° / 61.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
	<p>LED LUXEON Z</p> <p>FWHM / FWTM 27.5° / 42.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 4.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	



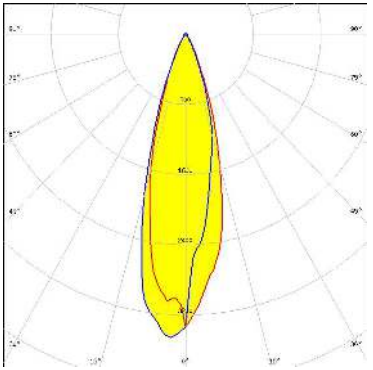
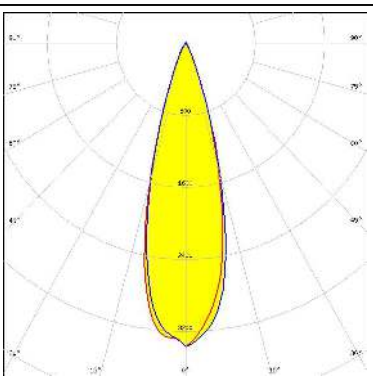
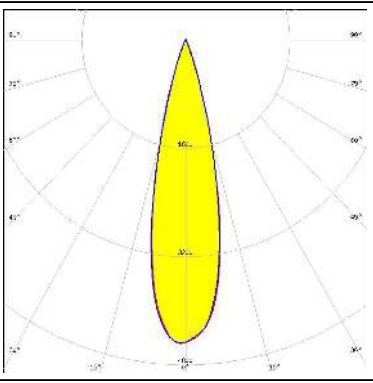
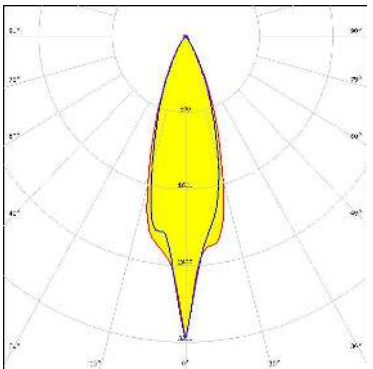
#### OPTICAL RESULTS (SIMULATED):

	<p>LED LUXEON Z ES</p> <p>FWHM / FWTM 30.0° / 46.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
	<p>LED SST-10-IR-B90</p> <p>FWHM / FWTM 34.0° / 51.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
	<p>LED SST-20</p> <p>FWHM / FWTM 32.0° / 52.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
	<p>LED NCSU276C</p> <p>FWHM / FWTM 41.0° / 57.0°</p> <p>Efficiency 91 %</p> <p>LEDs/each optic 1</p> <p>Light colour UV-A</p> <p>Required components:</p>	

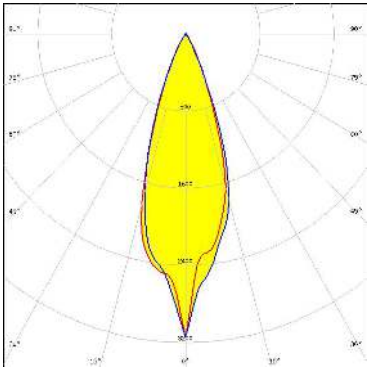
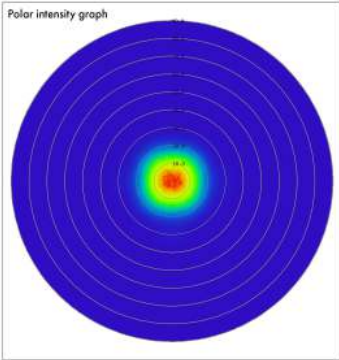
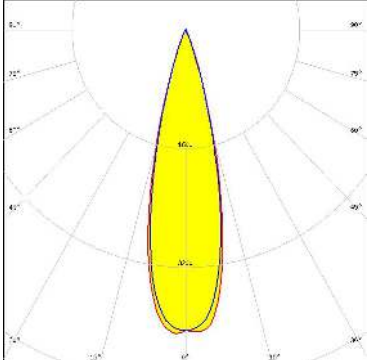
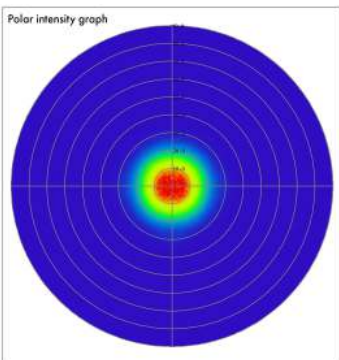
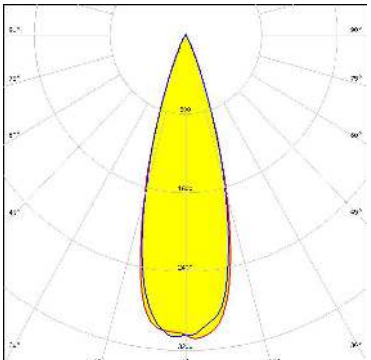
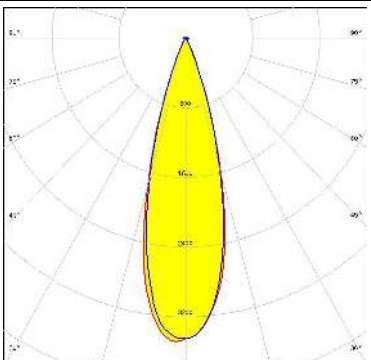
#### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NCSxx19B            FWHM / FWTM: 34.0° / 54.0°            Efficiency: 84 %            Peak intensity: 2.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSW219F            FWHM / FWTM: 46.0° / 68.0°            Efficiency: 88 %            Peak intensity: 1.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSxx19B/NVSxx19C            FWHM / FWTM: 38.9° / 62.5°            Efficiency: 83 %            Peak intensity: 1.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED: Duris S5 (2 chip)            FWHM / FWTM: 30.0° / 52.0°            Efficiency: 87 %            Peak intensity: 2.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S5 (Single chip)</p> <p>FWHM / FWTM 30.0° / 50.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 29.0° / 46.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Black</p> <p>FWHM / FWTM 25.0° / 40.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 4.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 35.0° / 55.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

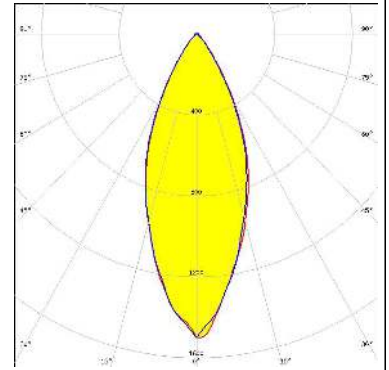
#### OPTICAL RESULTS (SIMULATED):

<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED OSLOM SSL 150</p> <p>FWHM / FWTM 35.0° / 52.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4715S</p> <p>FWHM / FWTM 26.0° / 40.0°</p> <p>Efficiency 87 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SFH 4716S</p> <p>FWHM / FWTM 31.0° / 47.0°</p> <p>Efficiency 86 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	<p>Polar intensity graph</p> 	
<b>OSRAM</b> <small>Opto Semiconductors</small>	<p>LED SYNIOS S2222</p> <p>FWHM / FWTM 30.0° / 48.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 3.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (SIMULATED):

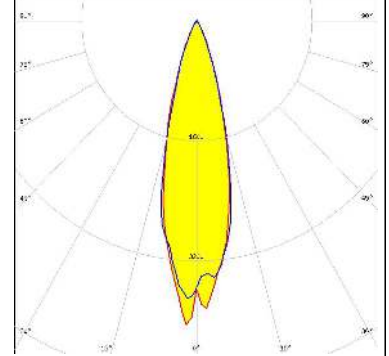
### SAMSUNG

LED LH351D  
 FWHM / FWTM 41.0° / 73.0°  
 Efficiency 85 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



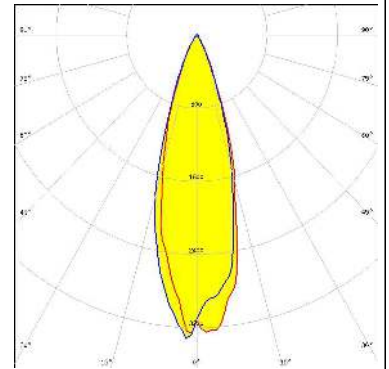
### SAMSUNG

LED LM301A  
 FWHM / FWTM 29.0° / 48.0°  
 Efficiency 87 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



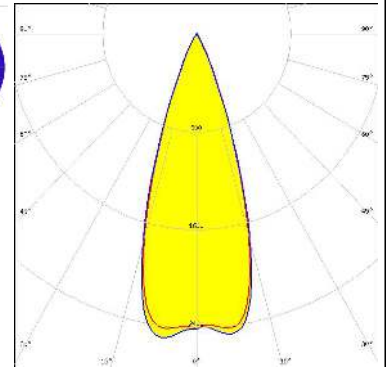
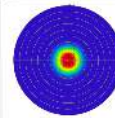
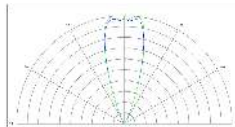
### SAMSUNG

LED LM302A  
 FWHM / FWTM 30.0° / 51.0°  
 Efficiency 87 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

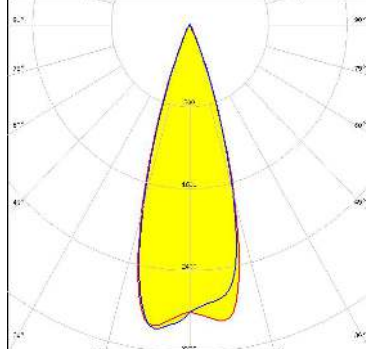
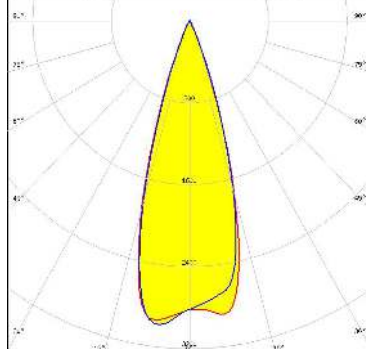
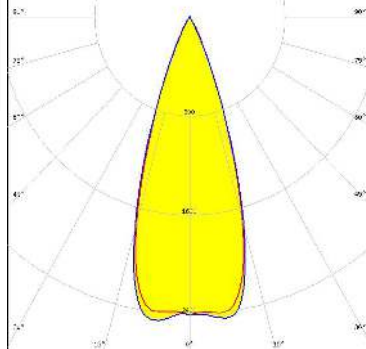


### STANLEY

LED FWR1108MS  
 FWHM / FWTM 35.0° / 51.0°  
 Efficiency 90 %  
 LEDs/each optic 1  
 Light colour IR  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

<p><b>STANLEY</b></p> <p>LED MFN1108MS</p> <p>FWHM / FWTM 33.0° / 47.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
<p><b>STANLEY</b></p> <p>LED MGN1108MS</p> <p>FWHM / FWTM 33.0° / 47.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	
<p><b>STANLEY</b></p> <p>LED MJN1108MS</p> <p>FWHM / FWTM 36.0° / 52.0°</p> <p>Efficiency 91 %</p> <p>LEDs/each optic 1</p> <p>Light colour IR</p> <p>Required components:</p>	

### GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

### MATERIALS:

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