

LISA3-M-PIN

~25° medium beam with location pin installation

SPECIFICATION:

Dimensions	Ø 10.0 mm
Height	7.9 mm
Fastening	glue
ROHS compliant	yes ⓘ

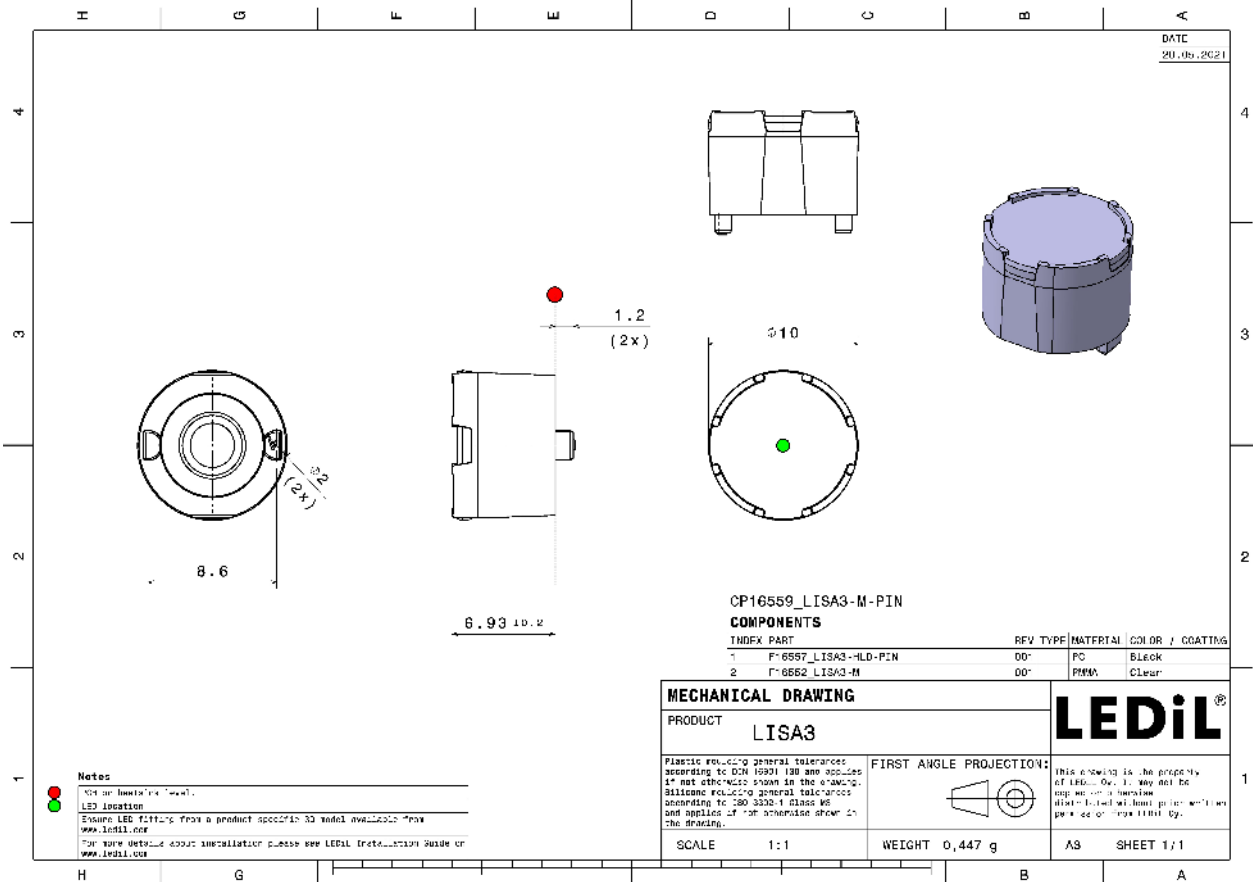
MATERIALS:

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

ORDERING INFORMATION:


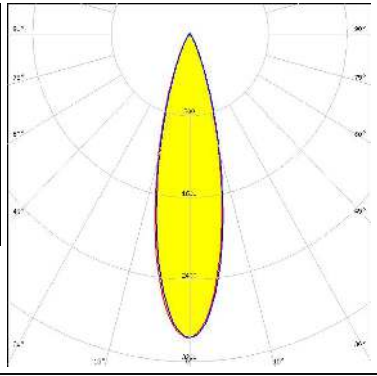

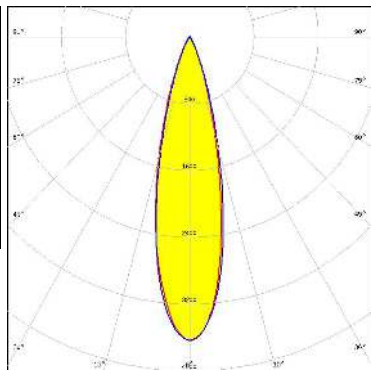

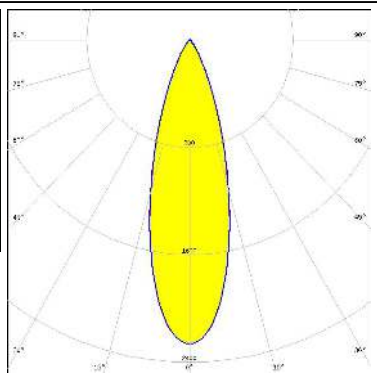
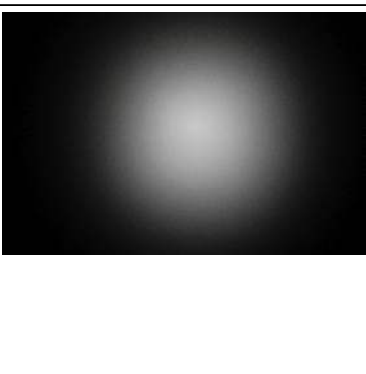
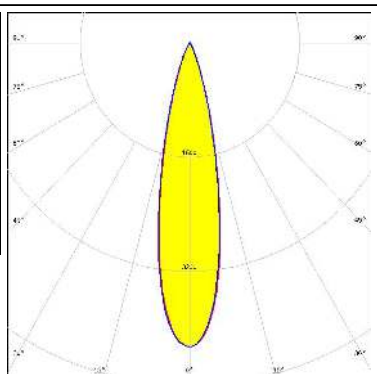
Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16559_LISA3-M-PIN	Single lens	2000	300	100	1.3
» Box size: 310 x 230 x 60 mm					



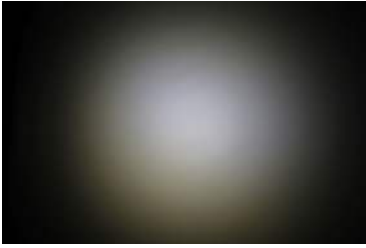
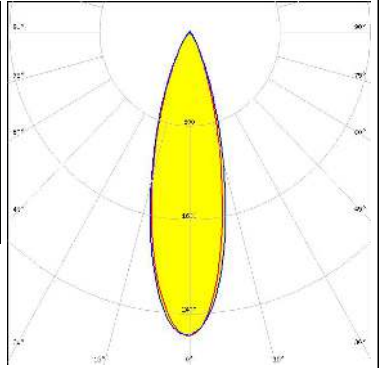

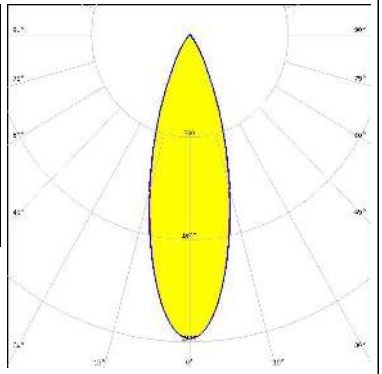

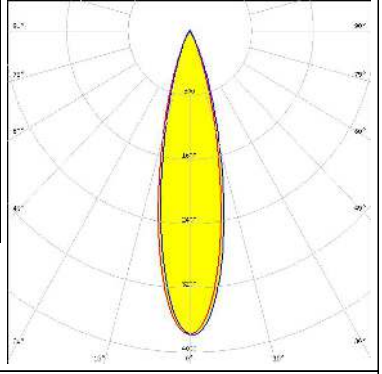

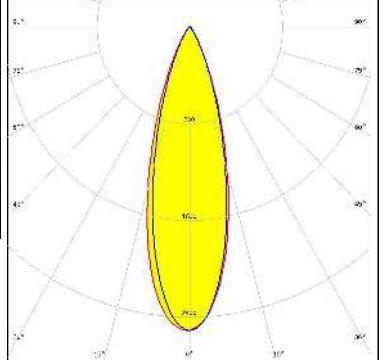


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XD16 FWHM / FWTM 26.0° / 49.0° Efficiency 76 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-E2 FWHM / FWTM 25.0° / 47.0° Efficiency 88 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-G3 FWHM / FWTM 31.0° / 58.0° Efficiency 81 % Peak intensity 2.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON CZ FWHM / FWTM 23.0° / 43.0° Efficiency 87 % Peak intensity 4.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

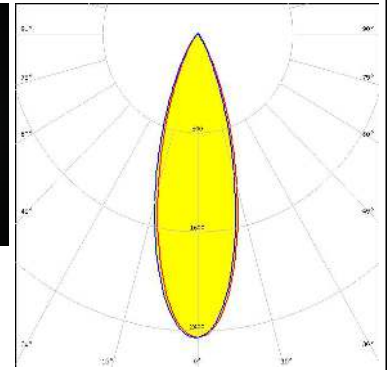
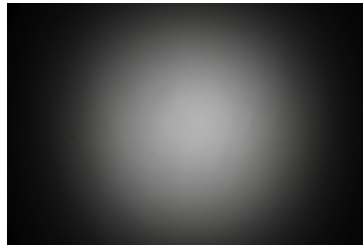
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NF2x757G</p> <p>FWHM / FWTM 28.0° / 54.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 2.6 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 32.0° / 59.0°</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>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ C 2424</p> <p>FWHM / FWTM 24.0° / 46.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.8 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 OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 30.0° / 55.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 2.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

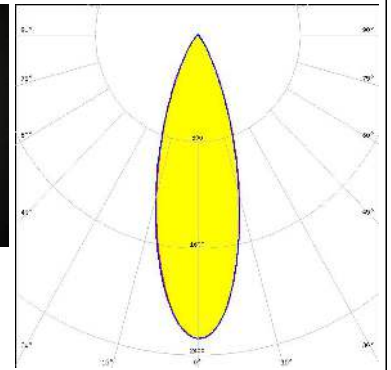
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED LH351C
 FWHM / FWTM 31.0° / 58.0°
 Efficiency 89 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



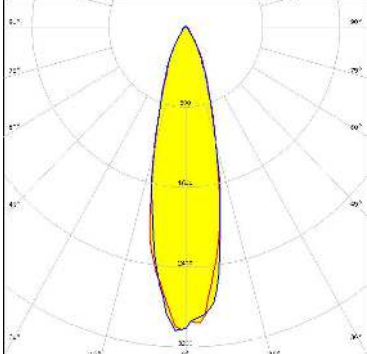
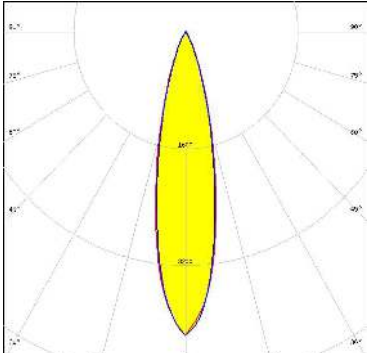
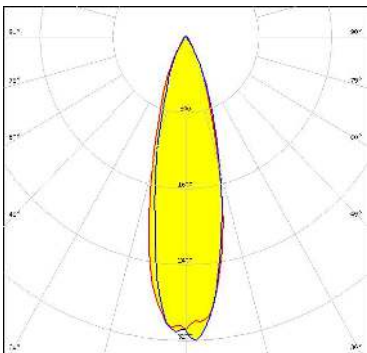
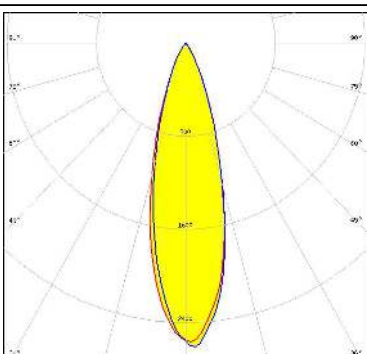
LED Z5M4
 FWHM / FWTM 33.0° / 61.0°
 Efficiency 88 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



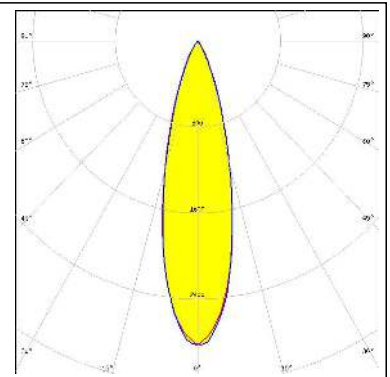
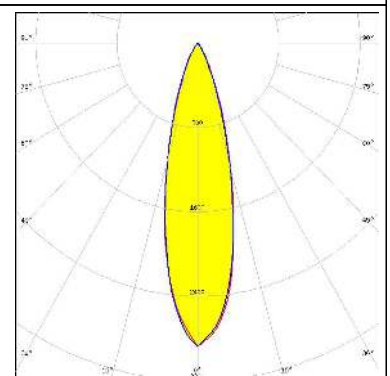
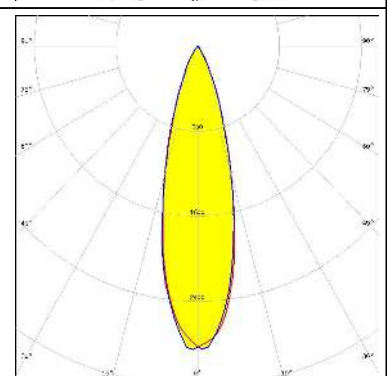
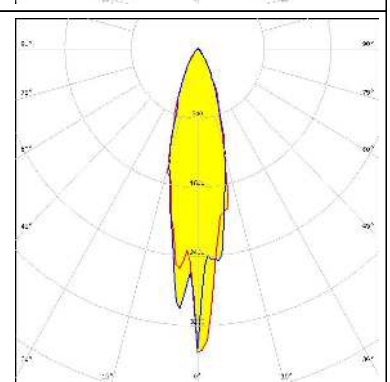
OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED J Series 2835 FWHM / FWTM 25.0° / 50.0° Efficiency 88 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XP-E FWHM / FWTM 28.0° / 45.0° Efficiency 90 % Peak intensity 3.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XP-G FWHM / FWTM 30.0° / 50.0° Efficiency 88 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XP-G2 HE FWHM / FWTM 34.0° / 66.0° Efficiency 86 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

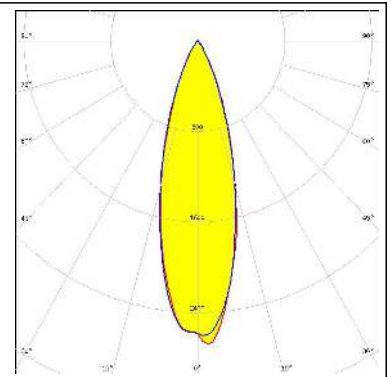
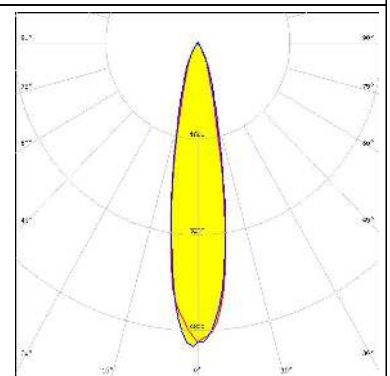
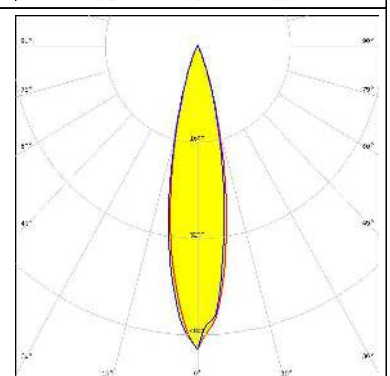
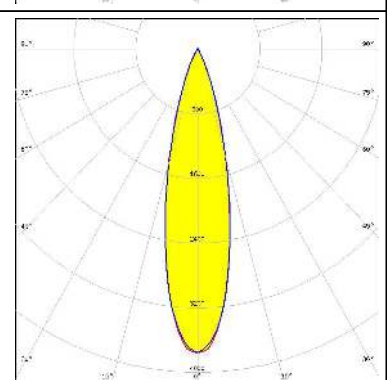
OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED XT-E FWHM / FWTM 24.0° / 46.0° Efficiency 82 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON 2835 Line FWHM / FWTM 23.0° / 46.0° Efficiency 89 % Peak intensity 4.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON 3030 2D (Round LES) FWHM / FWTM 25.0° / 45.0° Efficiency 85 % Peak intensity 4.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON C FWHM / FWTM 28.0° / 54.0° Efficiency 75 % Peak intensity 2.6 cd/lm LEDs/each optic 1 Light colour Deep Red Required components:</p>	

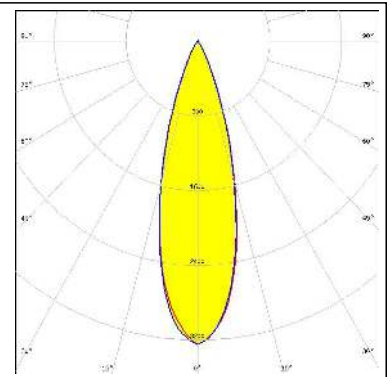
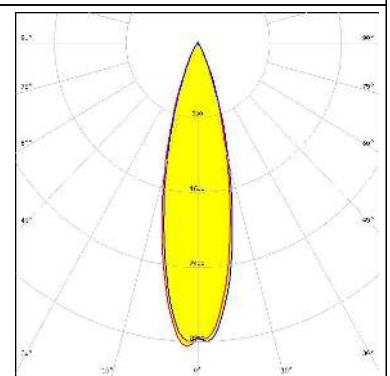
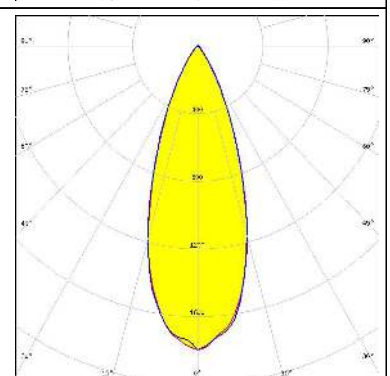
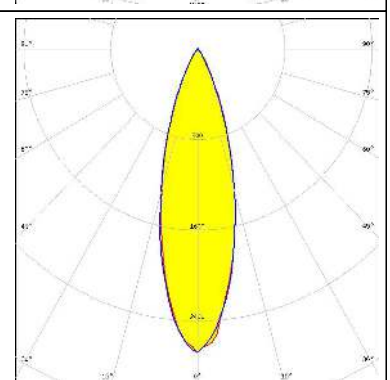
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 26.0° / 52.0° Efficiency: 76 % Peak intensity: 2.8 cd/lm LEDs/each optic: 1 Light colour: Green Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 27.0° / 51.0° Efficiency: 76 % Peak intensity: 2.9 cd/lm LEDs/each optic: 1 Light colour: Royal Blue Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 28.0° / 52.0° Efficiency: 80 % Peak intensity: 2.9 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON TX FWHM / FWTM: 28.0° / 50.0° Efficiency: 87 % Peak intensity: 3.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON V2 FWHM / FWTM: 30.0° / 56.0° Efficiency: 90 % Peak intensity: 2.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON Z FWHM / FWTM: 20.0° / 38.0° Efficiency: 88 % Peak intensity: 6.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON Z ES FWHM / FWTM: 22.0° / 41.0° Efficiency: 89 % Peak intensity: 5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMINUS</p> <p>LED: SST-20 FWHM / FWTM: 26.0° / 46.0° Efficiency: 87 % Peak intensity: 3.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NCSU276C FWHM / FWTM: 30.0° / 52.0° Efficiency: 89 % LEDs/each optic: 1 Light colour: UV-A Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxx19B FWHM / FWTM: 26.0° / 49.0° Efficiency: 83 % Peak intensity: 3.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: 38.0° / 66.0° Efficiency: 85 % Peak intensity: 1.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NVSxx19B/NVSxx19C FWHM / FWTM: 29.0° / 56.0° Efficiency: 86 % Peak intensity: 2.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

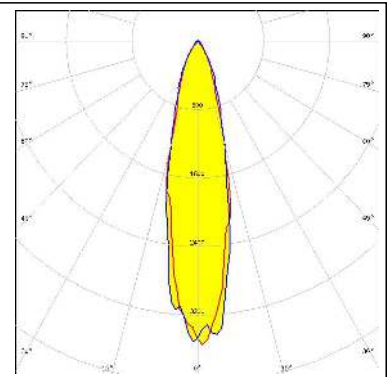
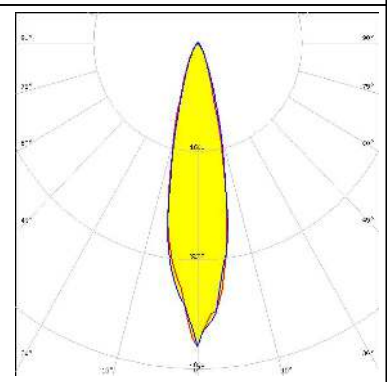
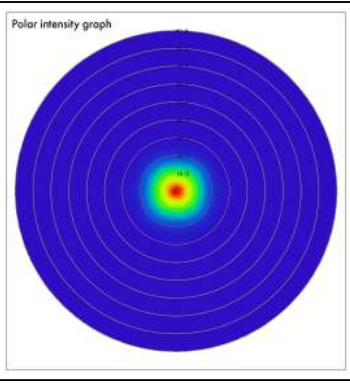
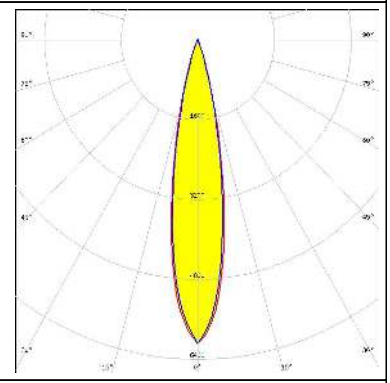
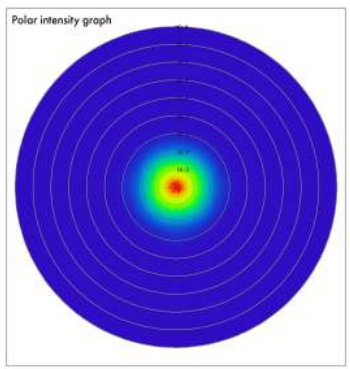
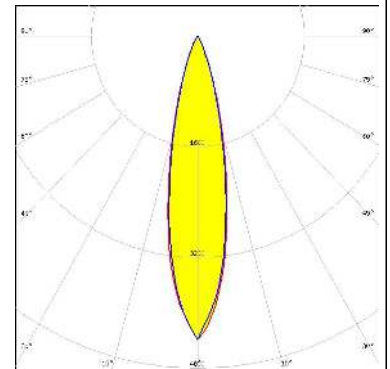
OPTICAL RESULTS (SIMULATED):

OSRAM <small>Opto Semiconductors</small>	<p>LED Duris E 2835</p> <p>FWHM / FWTM 23.0° / 46.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 4.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED Duris S5 (2 chip)</p> <p>FWHM / FWTM 25.0° / 45.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED Duris S5 (Single chip)</p> <p>FWHM / FWTM 25.0° / 45.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 3.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 22.0° / 42.0°</p> <p>Efficiency 85 %</p> <p>Peak intensity 4.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

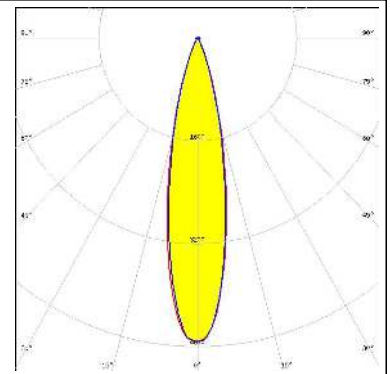
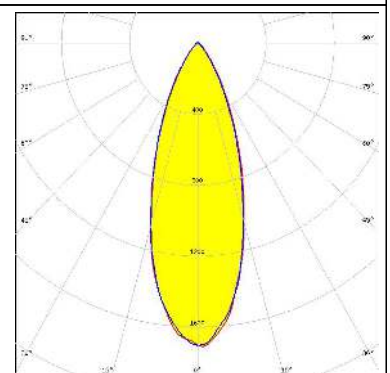
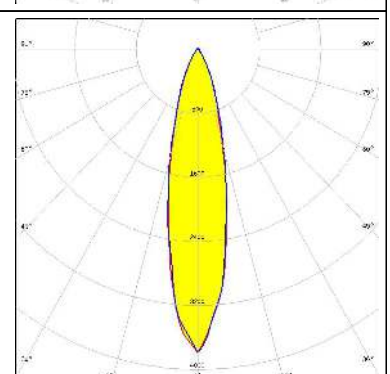
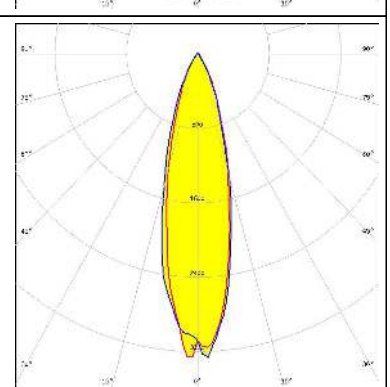
OPTICAL RESULTS (SIMULATED):

OSRAM <small>Opto Semiconductors</small>	<p>LED OSLOⁿ Black</p> <p>FWHM / FWTM 18.0° / 34.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 6.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED OSLOⁿ Square EC</p> <p>FWHM / FWTM 26.0° / 49.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED OSLOⁿ Square Flat</p> <p>FWHM / FWTM 24.0° / 45.0°</p> <p>Efficiency 78 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
OSRAM <small>Opto Semiconductors</small>	<p>LED OSLOⁿ SSL 120</p> <p>FWHM / FWTM 23.0° / 41.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 4.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Hyper Red</p> <p>Required components:</p>	

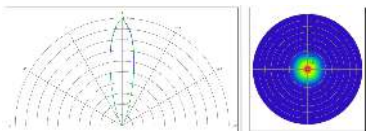
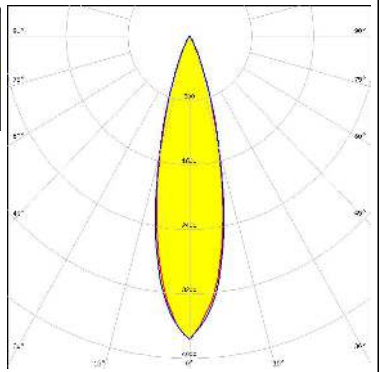
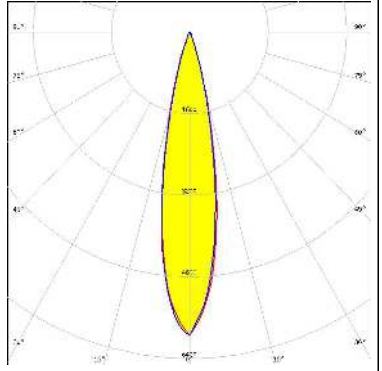
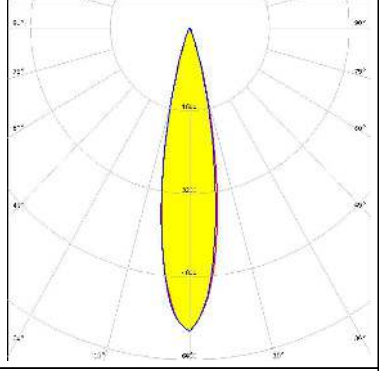
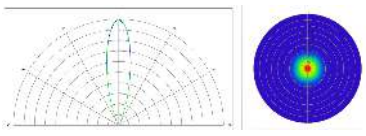
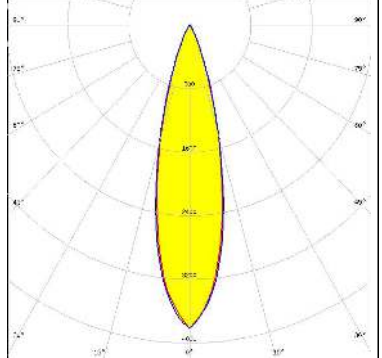
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED: OSLOL SSL 150</p> <p>FWHM / FWTM: 25.0° / 45.0°</p> <p>Efficiency: 89 %</p> <p>Peak intensity: 4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED: OSLOL SSL 80</p> <p>FWHM / FWTM: 21.0° / 40.0°</p> <p>Efficiency: 87 %</p> <p>Peak intensity: 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: SFH 4715S</p> <p>FWHM / FWTM: 20.0° / 35.0°</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> 	
<p>OSRAM Opto Semiconductors</p> <p>LED: SFH 4716S</p> <p>FWHM / FWTM: 22.0° / 44.0°</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> 	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED SYNIOS S2222</p> <p>FWHM / FWTM 23.0° / 44.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 4.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SAMSUNG</p> <p>LED LH351D</p> <p>FWHM / FWTM 36.0° / 70.0°</p> <p>Efficiency 85 %</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>SAMSUNG</p> <p>LED LM301A</p> <p>FWHM / FWTM 22.0° / 41.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SAMSUNG</p> <p>LED LM302A</p> <p>FWHM / FWTM 25.0° / 47.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 3.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>STANLEY</p> <p>LED: FWR1108MS FWHM / FWTM: 25.0° / 46.0° Efficiency: 89 % LEDs/each optic: 1 Light colour: IR Required components:</p>		
<p>STANLEY</p> <p>LED: MFN1108MS FWHM / FWTM: 21.0° / 37.0° Efficiency: 91 % Peak intensity: 6 cd/lm LEDs/each optic: 1 Light colour: IR Required components:</p>		
<p>STANLEY</p> <p>LED: MGN1108MS FWHM / FWTM: 22.0° / 37.0° Efficiency: 91 % Peak intensity: 5.9 cd/lm LEDs/each optic: 1 Light colour: IR Required components:</p>		
<p>STANLEY</p> <p>LED: MJN1108MS FWHM / FWTM: 25.0° / 46.0° Efficiency: 90 % LEDs/each optic: 1 Light colour: IR 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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