

HB-IP-2X6-M

~25° medium beam

SPECIFICATION:

Dimensions	173.0 x 71.4 mm
Height	11.4 mm
Fastening	pin, screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

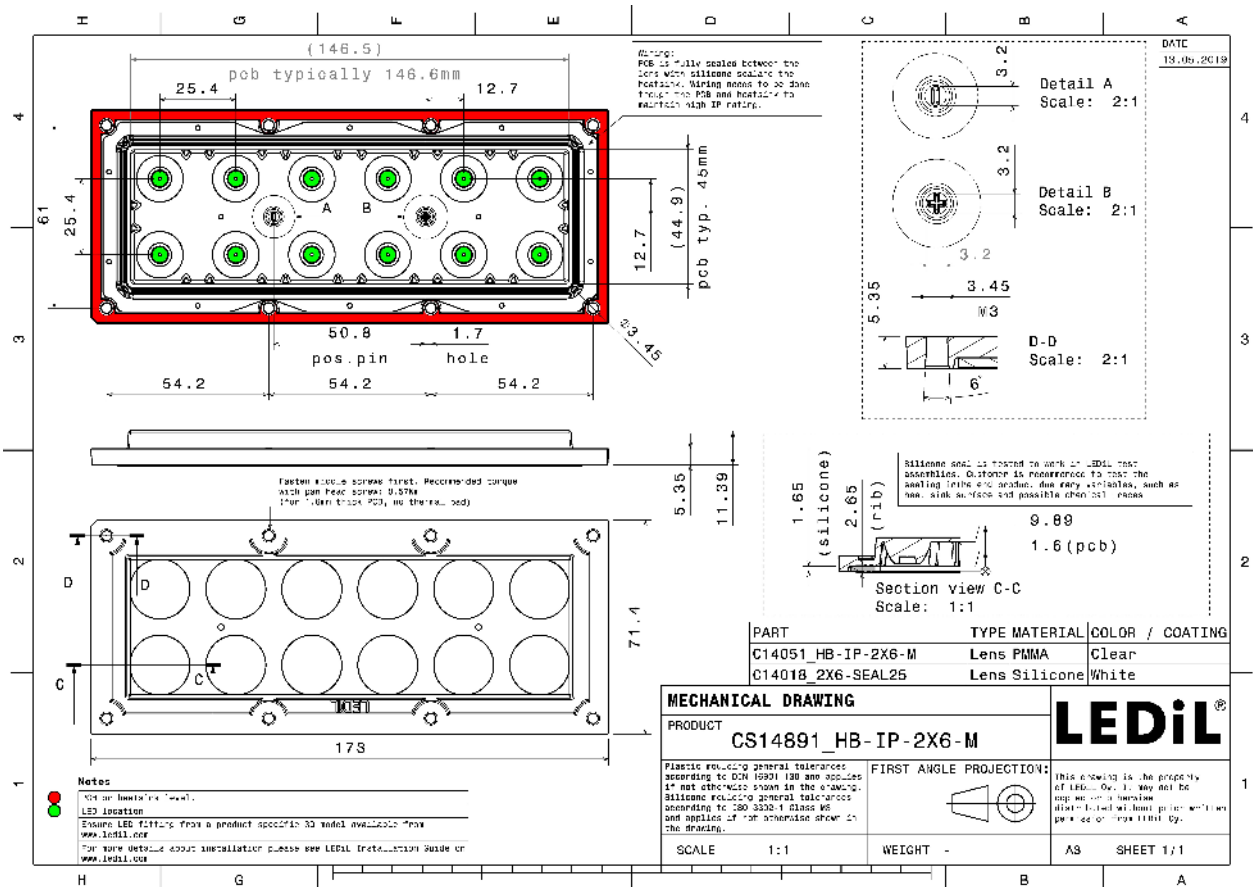
MATERIALS:

Component	Type	Material	Colour	Finish
HB-IP-2X6-M	Multi-lens	PMMA	clear	
2X6-SEAL25	Seal	Silicone	white	





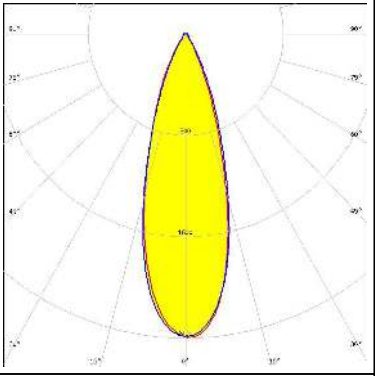


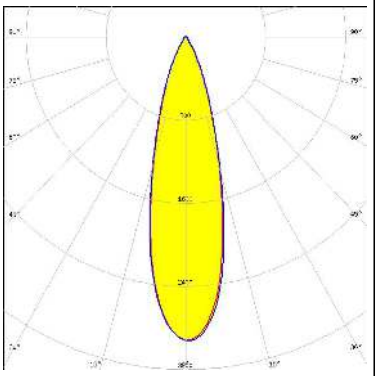


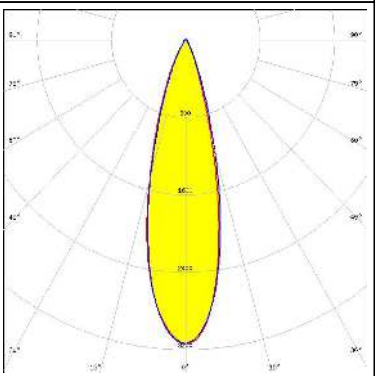


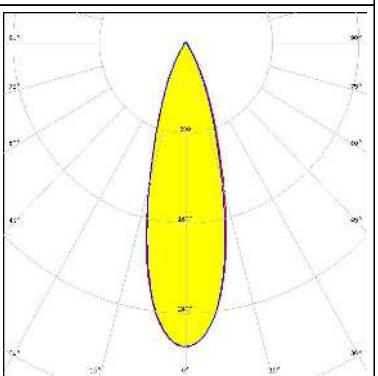
ORDERING INFORMATION:

Component	Type	Qty in box	MOQ	MPQ	Box weight (kg)
CS14891_HB-IP-2X6-M » Box size: 476 x 273 x 247 mm	Multi-lens	120	40	40	8.1

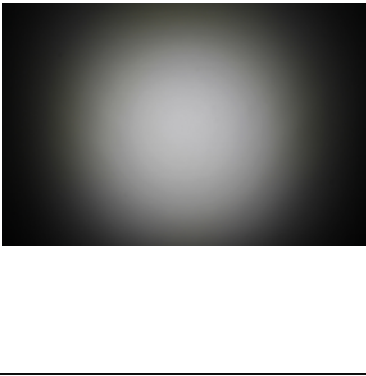
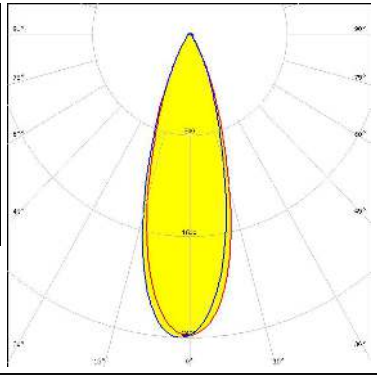

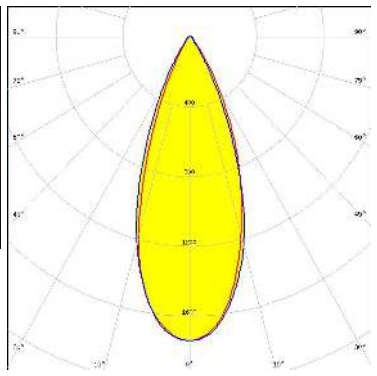

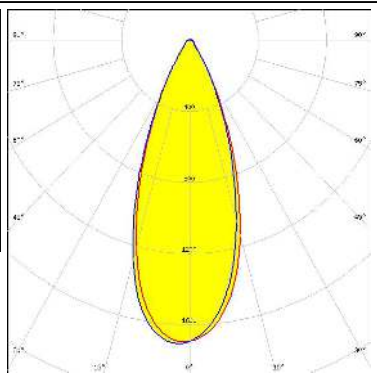

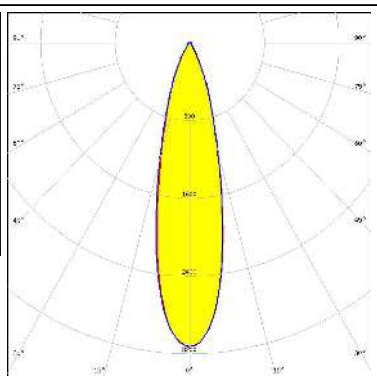


See also our general installation guide: www.ledil.com/installation_guide


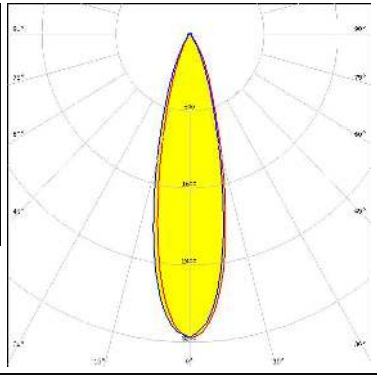
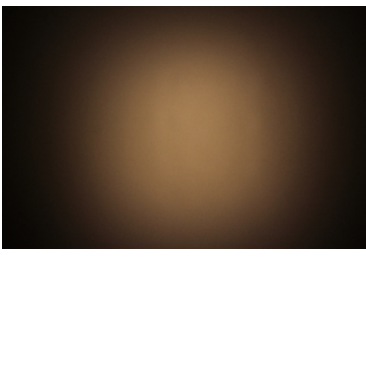
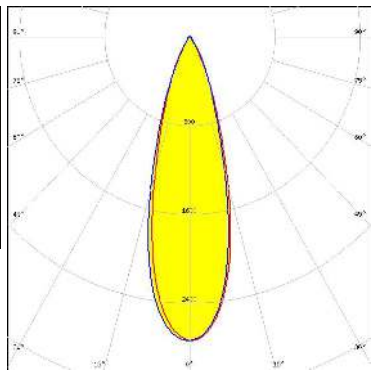

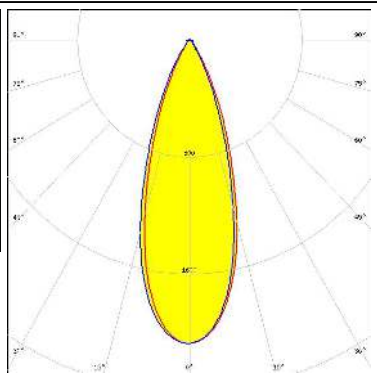
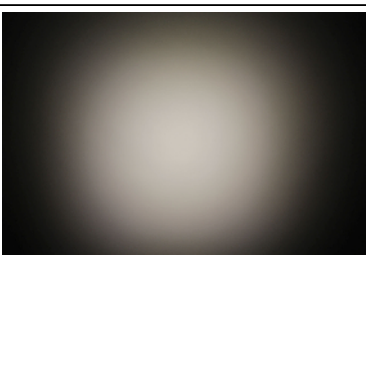
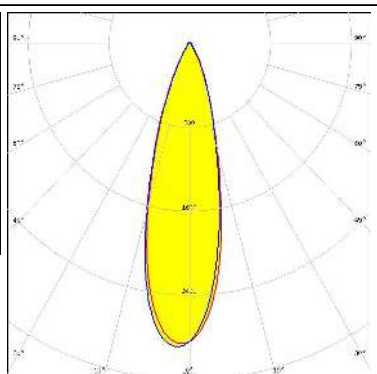
OPTICAL RESULTS (MEASURED):

<p></p> <p>LED QUICK FLUX 2x6 LED XG xxx G7+</p> <p>FWHM / FWTM 32.0° / 59.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p></p> <p>LED QUICK FLUX 2x6 LED XT xxx G5</p> <p>FWHM / FWTM 28.0° / 55.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p></p> <p>LED XM-L</p> <p>FWHM / FWTM 27.0° / 50.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/m</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 30.0° / 57.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

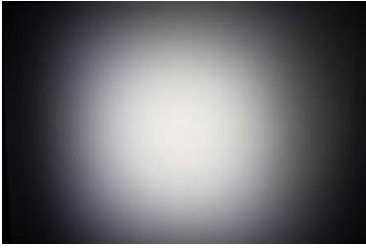
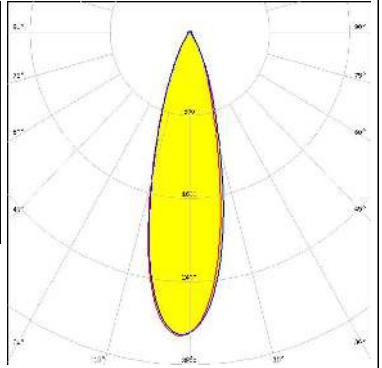

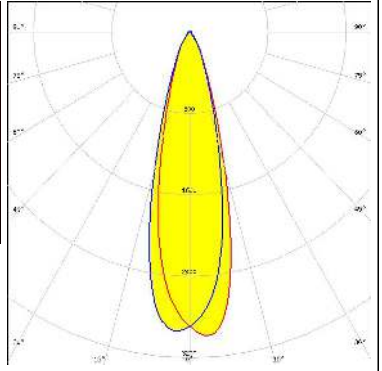
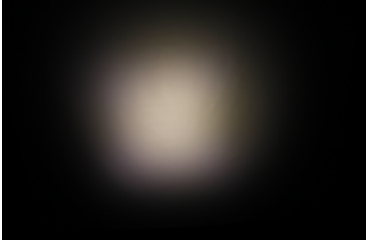
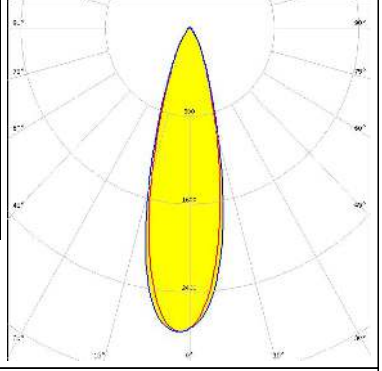

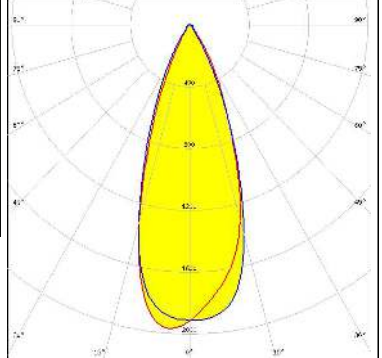
OPTICAL RESULTS (MEASURED):

<p>CREE → LED</p> <p>LED XP-G3 FWHM / FWTM 32.0° / 58.0° Efficiency 94 % Peak intensity 2.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE → LED</p> <p>LED XP-L HD FWHM / FWTM 39.0° / 66.0° Efficiency 94 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE → LED</p> <p>LED XP-L2 FWHM / FWTM 39.0° / 67.0° Efficiency 94 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE → LED</p> <p>LED XT-E FWHM / FWTM 25.0° / 52.0° Efficiency 92 % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

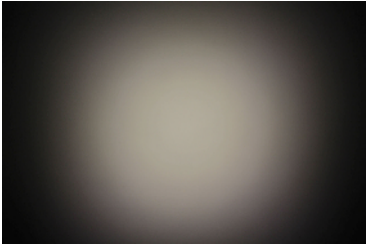
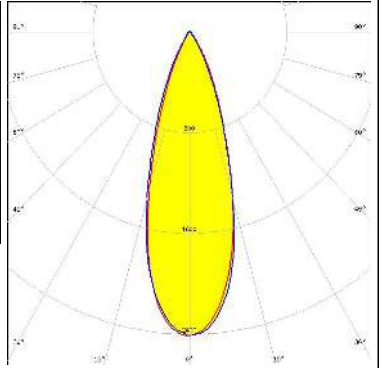
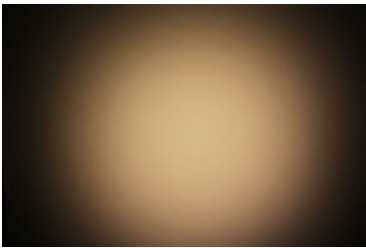
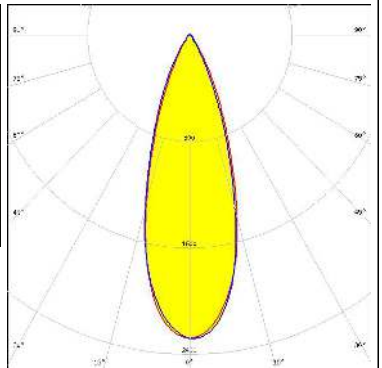
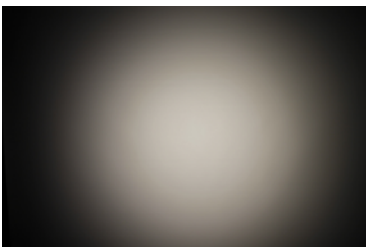
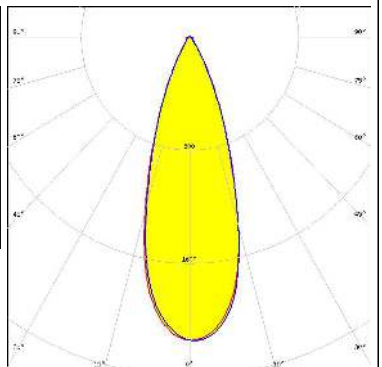
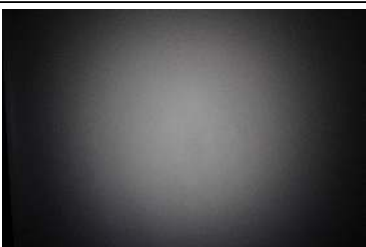
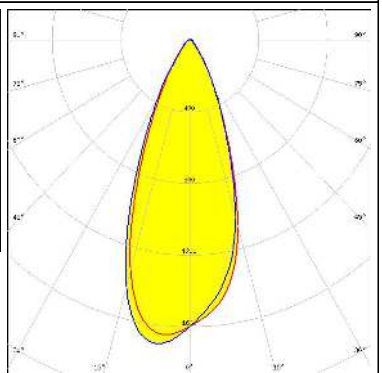
OPTICAL RESULTS (MEASURED):

<p>CREE LED</p> <p>LED XT-E HE FWHM / FWTM 26.0° / 53.0° Efficiency 94 % Peak intensity 3.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON T FWHM / FWTM 29.0° / 55.0° Efficiency 94 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON V FWHM / FWTM 35.0° / 62.0° Efficiency 93 % Peak intensity 2.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON V2 FWHM / FWTM 28.0° / 54.0° Efficiency 94 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

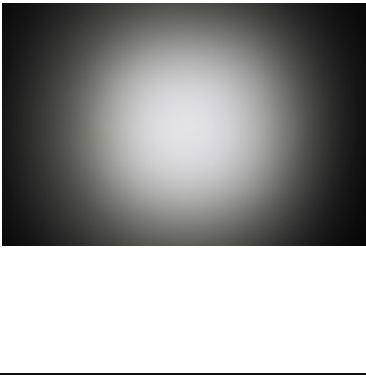
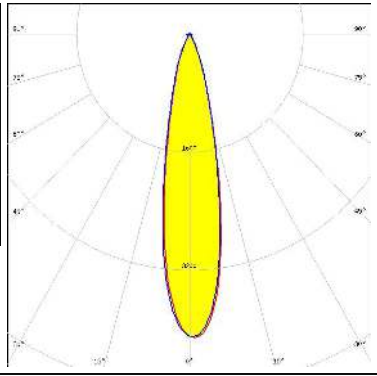

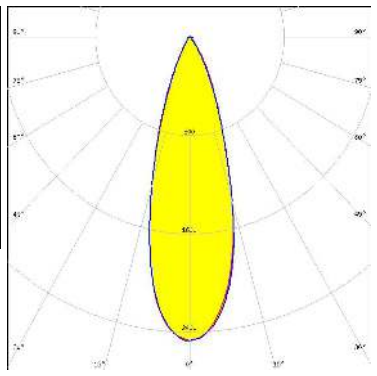
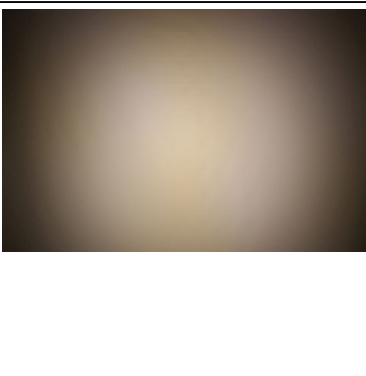
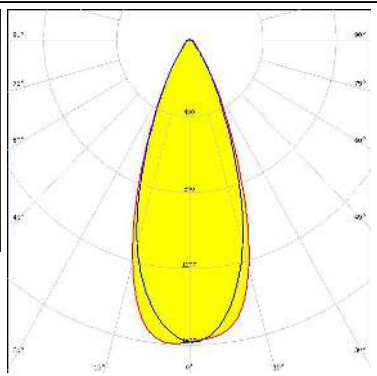
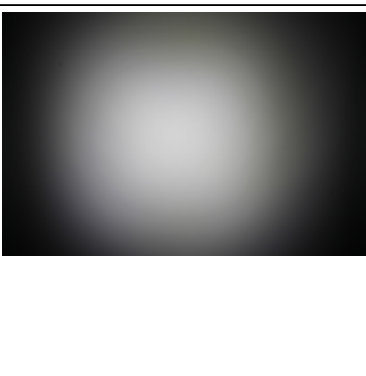
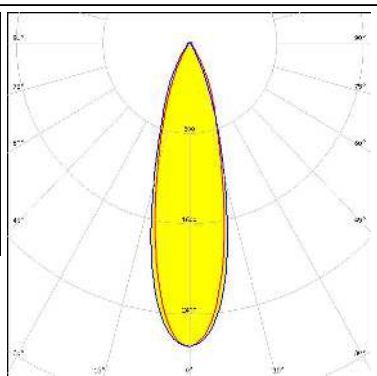
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON XR-TX (L2T0-xxxx012M0000)</p> <p>FWHM / FWTM 28.0° / 54.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMINUS</p> <p>LED SST-10-B130</p> <p>FWHM / FWTM 27.0° / 53.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Deep Red</p> <p>Required components:</p>		
<p>MST <i>Your solutions</i></p> <p>LED RecLED 146x45mm 2900lm 730 2x6 IP G1</p> <p>FWHM / FWTM 28.0° / 55.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 2.8 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 38.0° / 63.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2 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 NVSW219F FWHM / FWTM 33.0° / 59.0° Efficiency 94 % Peak intensity 2.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW319B FWHM / FWTM 34.0° / 61.0° Efficiency 94 % Peak intensity 2.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW3x9A FWHM / FWTM 34.0° / 60.0° Efficiency 94 % Peak intensity 2.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW519A FWHM / FWTM 40.0° / 70.0° Efficiency 95 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

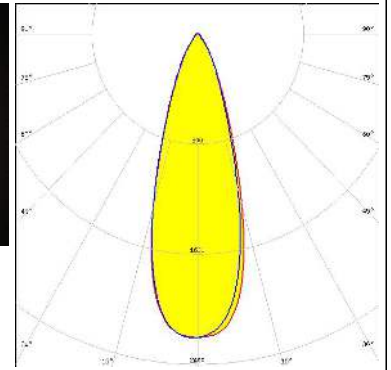
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NVSxE21A FWHM / FWTM 24.0° / 53.0° Efficiency 92 % Peak intensity 4.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 31.0° / 58.0° Efficiency 93 % Peak intensity 2.5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED Duris S8 FWHM / FWTM 41.0° / 70.0° Efficiency 94 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLON Square PC FWHM / FWTM 29.0° / 57.0° Efficiency 93 % Peak intensity 2.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

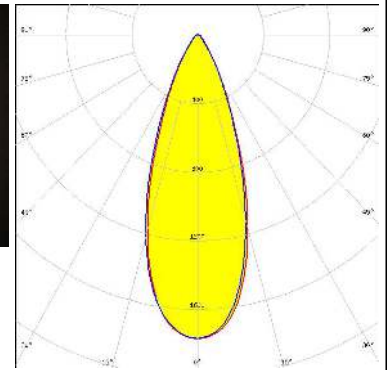
PHILIPS

LED Fortimo FastFlex LED 2x6 DP G5
 FWHM / FWTM 32.0° / 62.0°
 Efficiency 96 %
 Peak intensity 2.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



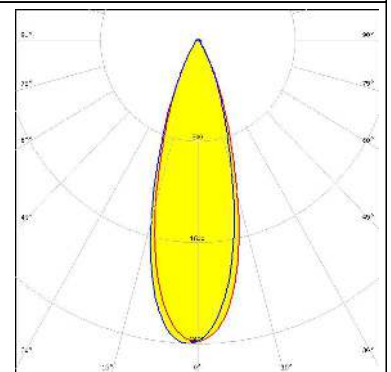
PHILIPS

LED Fortimo FastFlex LED 2x6 DP HE
 FWHM / FWTM 38.0° / 68.0°
 Efficiency 97 %
 Peak intensity 1.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



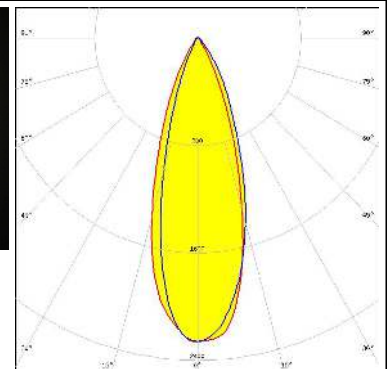
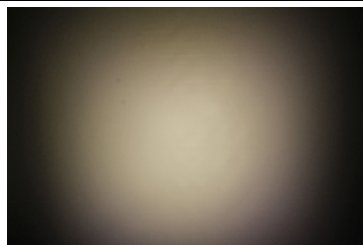
PHILIPS

LED Fortimo FastFlex LED 2x6 DPX G4
 FWHM / FWTM 32.0° / 58.0°
 Efficiency 94 %
 Peak intensity 2.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

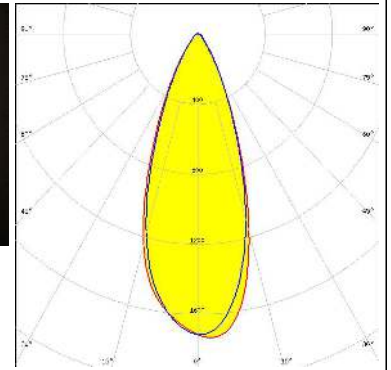
LED HiLOM RH12 (LH351C)
 FWHM / FWTM 33.0° / 61.0°
 Efficiency 94 %
 Peak intensity 2.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

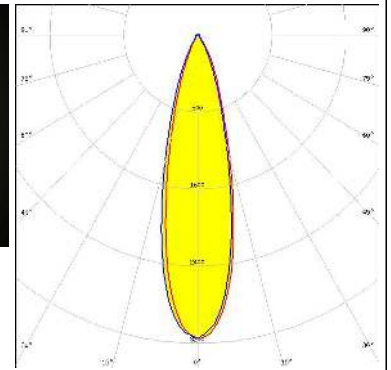
SAMSUNG

LED HiLOM RM12 ZP (LH502C)
 FWHM / FWTM 38.0° / 69.0°
 Efficiency 96 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



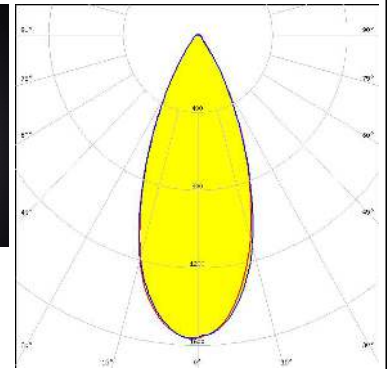
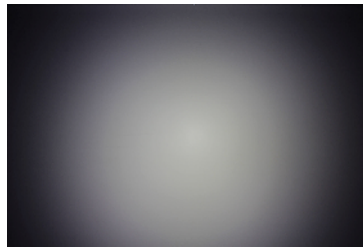
SCIOLUX

LED XLE-S22C4XTEHE (XT-E HE)
 FWHM / FWTM 26.0° / 53.0°
 Efficiency 94 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

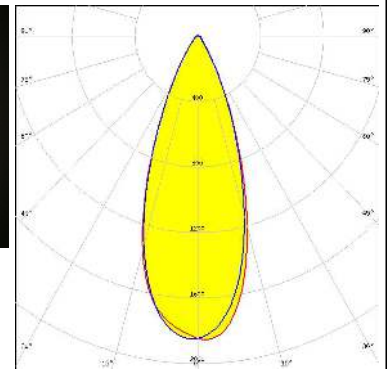
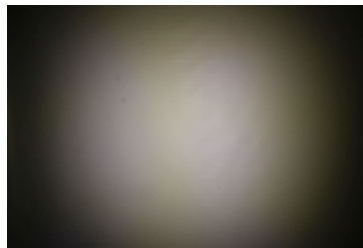


SCIOLUX



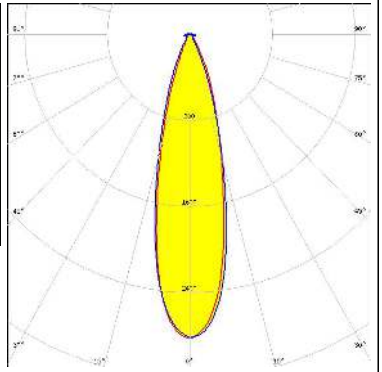


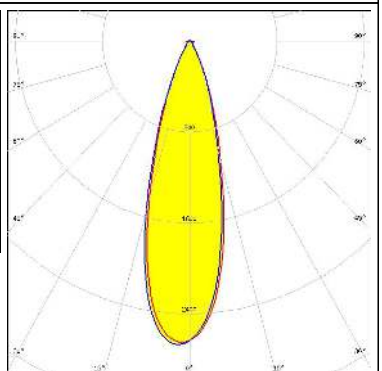

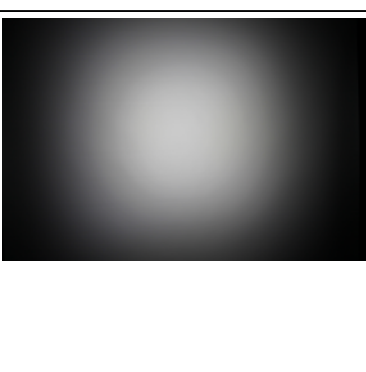
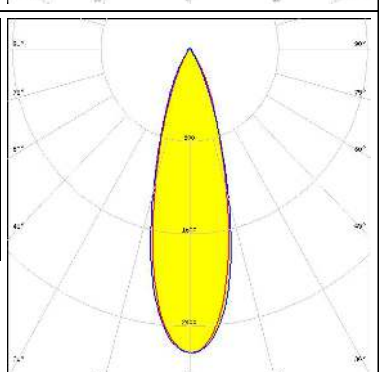


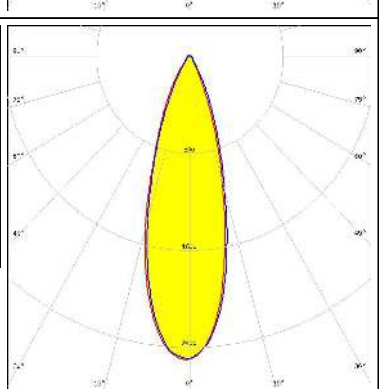
LED XLE-S26XHP35 (XHP35 HD)
 FWHM / FWTM 42.0° / 71.0°
 Efficiency 94 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




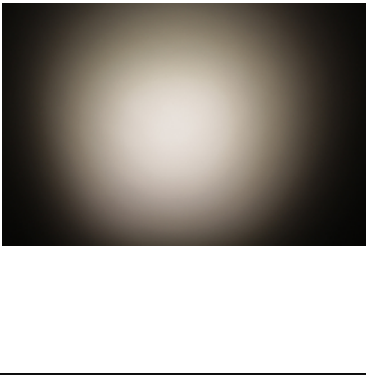
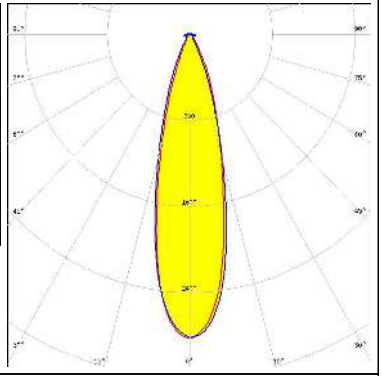


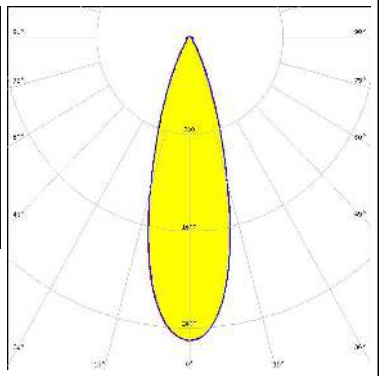

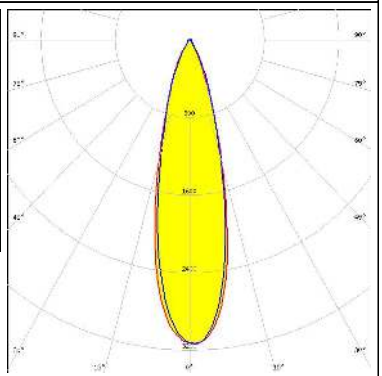
LED 2x6 5050 module - SMJD-3625012F-XX
 FWHM / FWTM 38.0° / 65.0°
 Efficiency 94 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



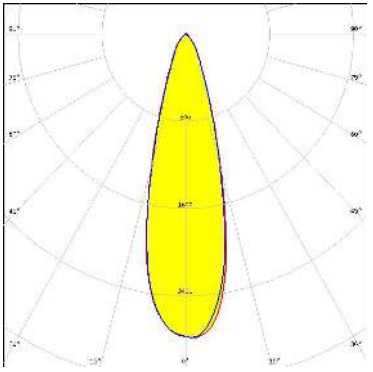
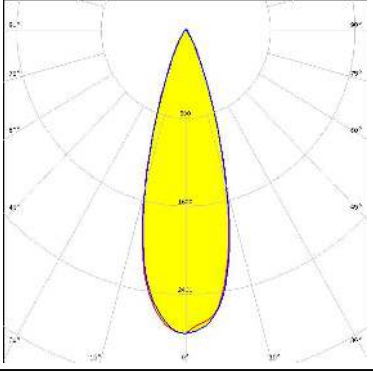
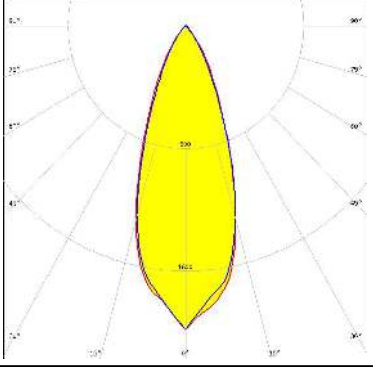
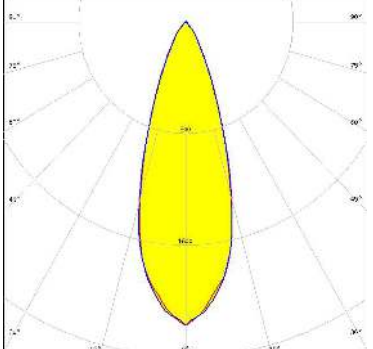
OPTICAL RESULTS (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Mx</p> <p>FWHM / FWTM 26.0° / 52.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Px</p> <p>FWHM / FWTM 29.0° / 54.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M1/Z5M2</p> <p>FWHM / FWTM 30.0° / 57.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM 30.0° / 58.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

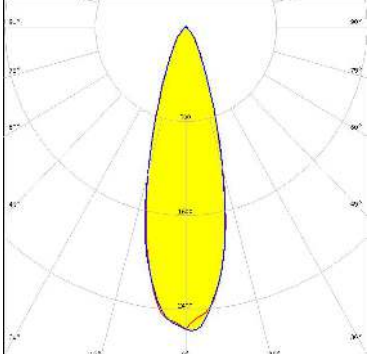
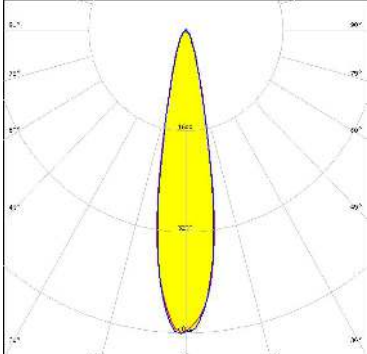
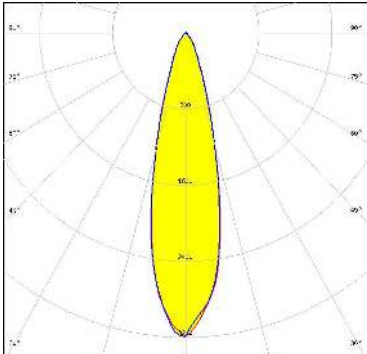
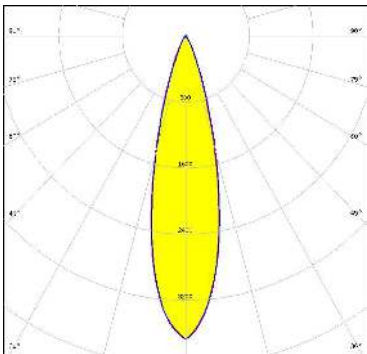
OPTICAL RESULTS (MEASURED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22</p> <p>FWHM / FWTM 26.0° / 52.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.8 cd/m</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 30.0° / 55.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 2.5 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>TRIDONIC</p> <p>LED RLE 2x6 3000lm HP EXC2 OTD</p> <p>FWHM / FWTM 26.0° / 53.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

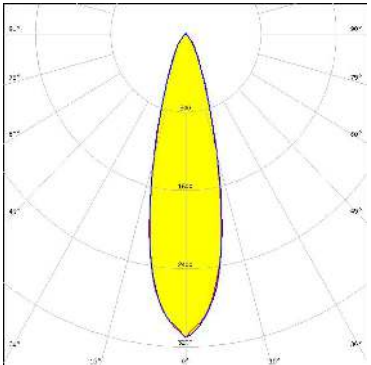
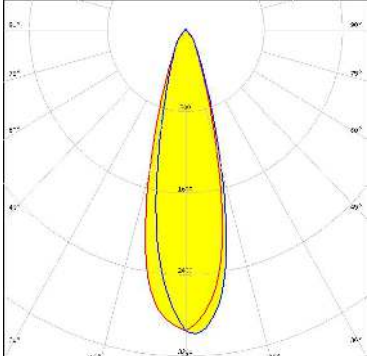
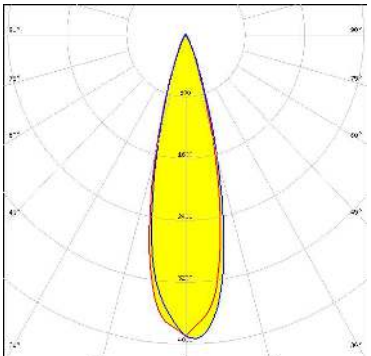
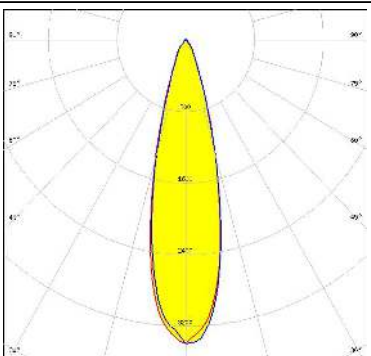
OPTICAL RESULTS (SIMULATED):

<p>CREE → LED</p> <p>LED: XP-E FWHM / FWTM: 28.0° / 56.0° Efficiency: 94 % Peak intensity: 2.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE → LED</p> <p>LED: XP-G2 HE FWHM / FWTM: 31.0° / 53.0° Efficiency: 95 % Peak intensity: 2.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON 5050 Round LES FWHM / FWTM: 37.0° / 68.0° Efficiency: 93 % Peak intensity: 2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: 34.0° / 62.0° Efficiency: 95 % Peak intensity: 2.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM</p> <p>LED: PrevaLED Brick HP IP 2x6</p> <p>FWHM / FWTM: 30.0° / 58.0°</p> <p>Efficiency: 95 %</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>OSRAM <small>Opto Semiconductors</small></p> <p>LED: OSCONIQ P 3030</p> <p>FWHM / FWTM: 20.0° / 42.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 4.8 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED: OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM: 26.0° / 52.0°</p> <p>Efficiency: 96 %</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>OSRAM <small>Opto Semiconductors</small></p> <p>LED: OSCONIQ P 3737 (3W version)</p> <p>FWHM / FWTM: 26.0° / 48.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 3.7 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

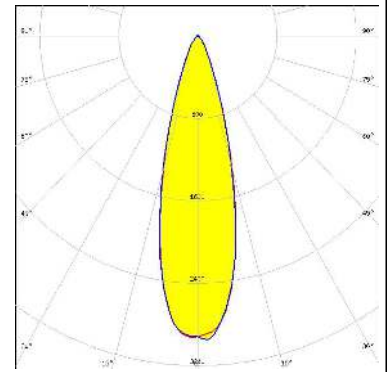
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3737 Flat</p> <p>FWHM / FWTM 27.0° / 54.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 3.1 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 OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 27.0° / 53.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>PHILIPS</p> <p>LED Fortimo FastFlex LED 2x6 DP G4</p> <p>FWHM / FWTM 26.0° / 45.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SAMSUNG</p> <p>LED LH181B</p> <p>FWHM / FWTM 27.0° / 50.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

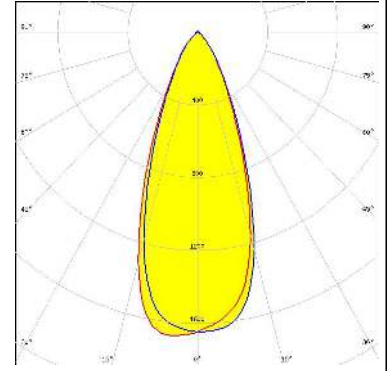
SAMSUNG

LED LH231B
 FWHM / FWTM 28.0° / 52.0°
 Efficiency 95 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



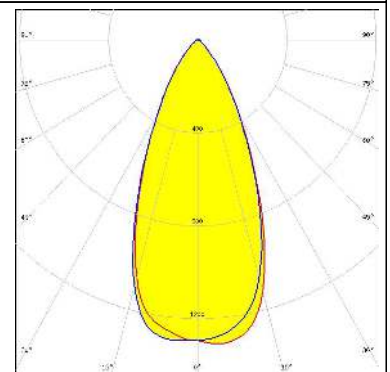
SAMSUNG

LED LH351C
 FWHM / FWTM 39.5° / 72.3°
 Efficiency 94 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



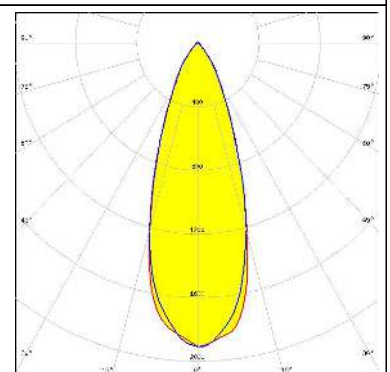
SAMSUNG

LED LH351D
 FWHM / FWTM 46.0° / 79.9°
 Efficiency 94 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


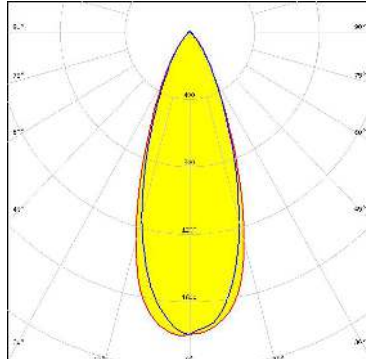

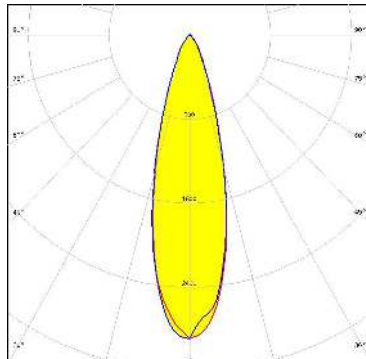

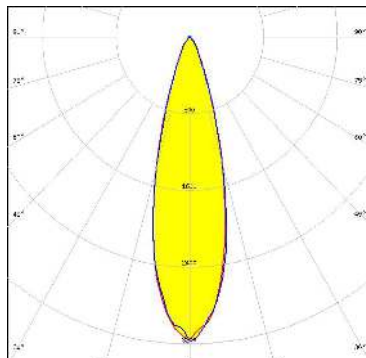


SAMSUNG

LED LH508B
 FWHM / FWTM 36.0° / 70.0°
 Efficiency 94 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 5050 6V</p> <p>FWHM / FWTM: 39.0° / 72.0°</p> <p>Efficiency: 94 %</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> SEOUL SEMICONDUCTOR</p> <p>LED: Z5M4</p> <p>FWHM / FWTM: 28.0° / 55.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 2.9 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: Z8Y22T</p> <p>FWHM / FWTM: 28.0° / 51.0°</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 3.2 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

GENERAL INFORMATION:

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

MATERIALS:

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