

HB-IP-2X6-RS

~20° spot beam

SPECIFICATION:

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

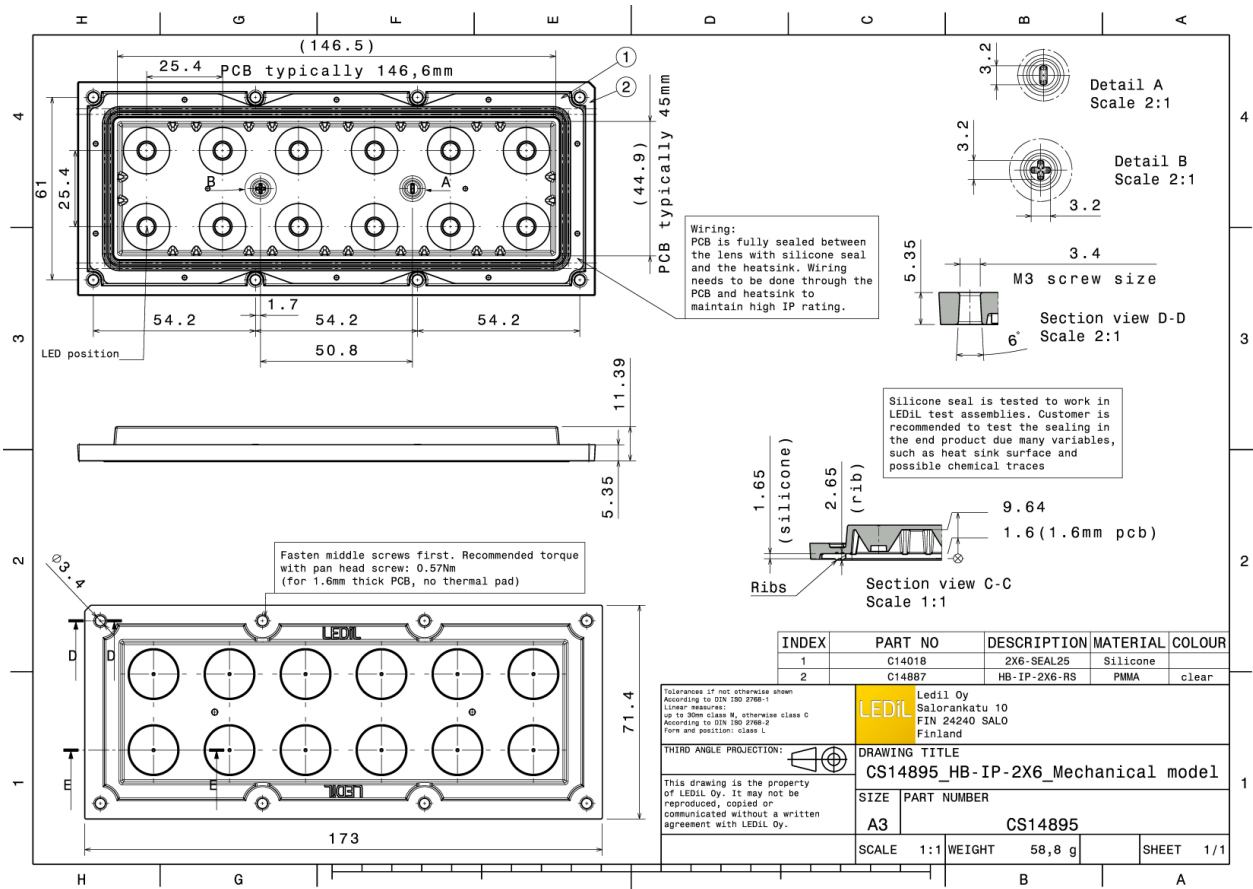
MATERIALS:

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




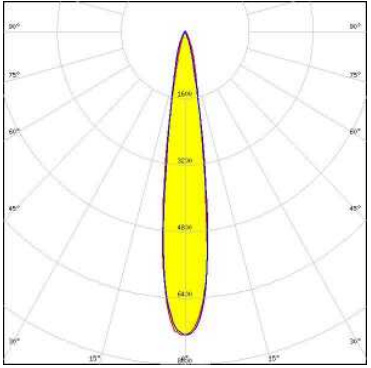

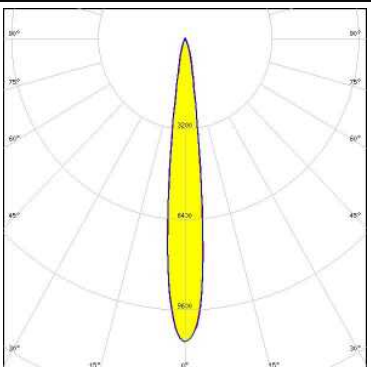

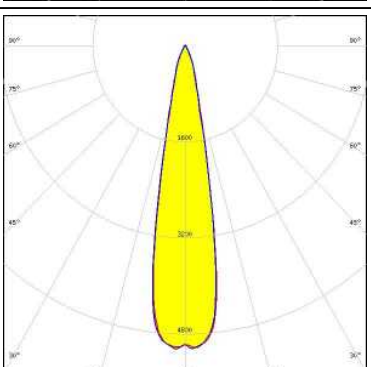

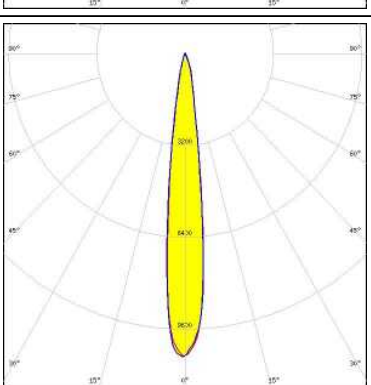
ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14895_HB-IP-2X6-RS	Multi-lens	120	40	40	8.0
» Box size: 476 x 273 x 247 mm					


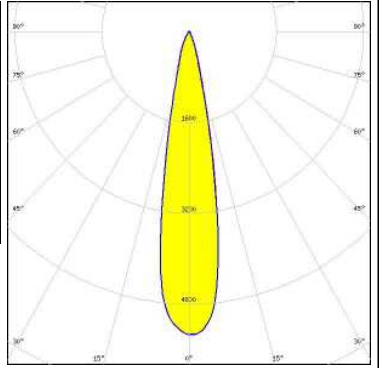

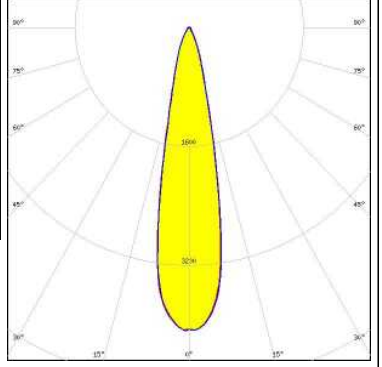

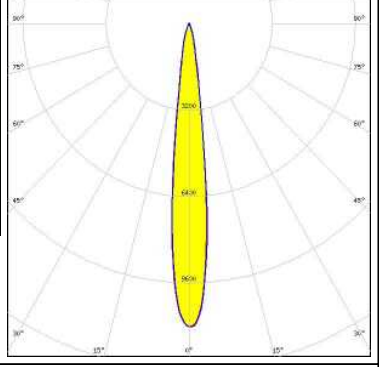

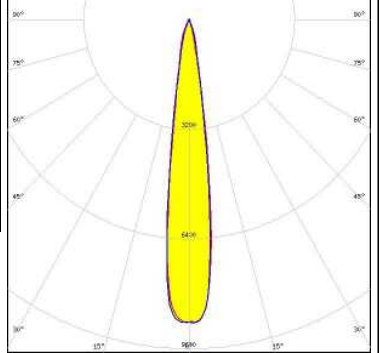


See also our general installation guide: www.ledil.com/installation_guide


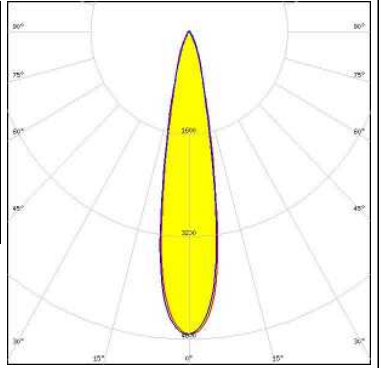

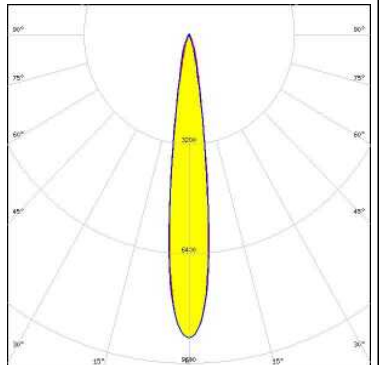

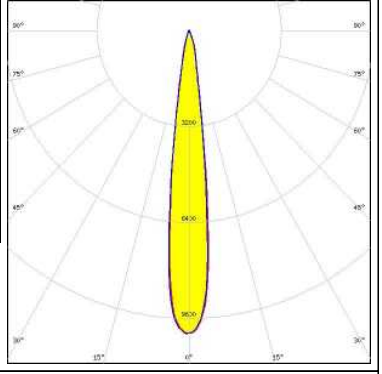
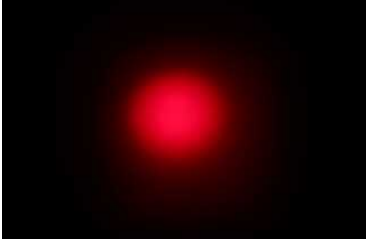
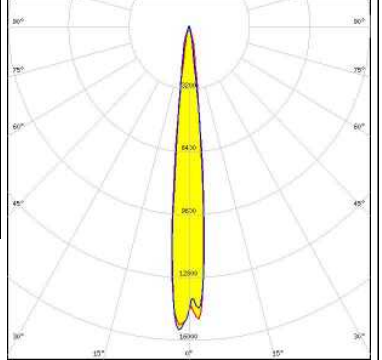
OPTICAL RESULTS (MEASURED):

<p>COMET ELECTRONICS</p> <p>LED QUICK FLUX 2x6 LED XG xxx G7+</p> <p>FWHM / FWTM 16.0° / 33.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 7.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>COMET ELECTRONICS</p> <p>LED QUICK FLUX 2x6 LED XT xxx G5</p> <p>FWHM / FWTM 13.0° / 26.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 10.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>CREE LEDs</p> <p>LED XM-L</p> <p>FWHM / FWTM 21.0° / 38.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 5.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-G2</p> <p>FWHM / FWTM 13.0° / 27.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 10.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

<p>CREE LEDs</p> <p>LED XP-L HD FWHM / FWTM 20.0° / 37.0° Efficiency 93 % Peak intensity 5.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XP-L2 FWHM / FWTM 22.0° / 43.0° Efficiency 93 % Peak intensity 4.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE LEDs</p> <p>LED XT-E HE FWHM / FWTM 13.0° / 26.0° Efficiency 94 % Peak intensity 11.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON T FWHM / FWTM 15.0° / 29.0° Efficiency 94 % Peak intensity 8.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

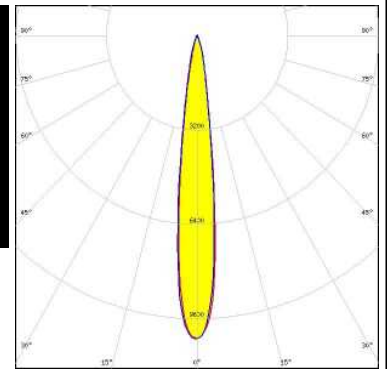
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON V</p> <p>FWHM / FWTM 20.0° / 41.0°</p> <p>Efficiency 92 %</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>LUMILEDS</p> <p>LED LUXEON V2</p> <p>FWHM / FWTM 15.0° / 30.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 8.9 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-TX (L2T0-xxxx012M0000)</p> <p>FWHM / FWTM 14.0° / 27.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 10.1 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 12.0° / 22.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 15.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Deep Red</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

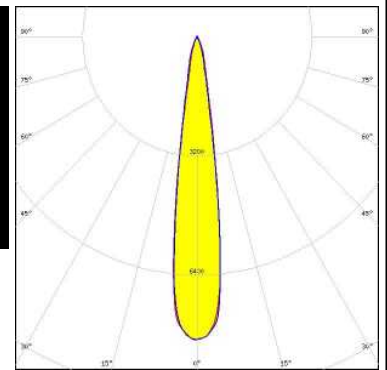
MST | Your solutions

LED RecLED 146x45mm 2900lm 730 2x6 IP G1
 FWHM / FWTM 14.0° / 27.0°
 Efficiency 95 %
 Peak intensity 10.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



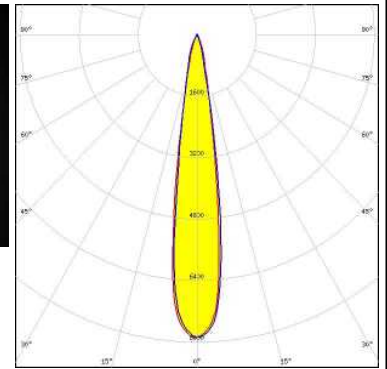
NICHIA

LED NVSW219D
 FWHM / FWTM 16.0° / 30.0°
 Efficiency 94 %
 Peak intensity 8.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



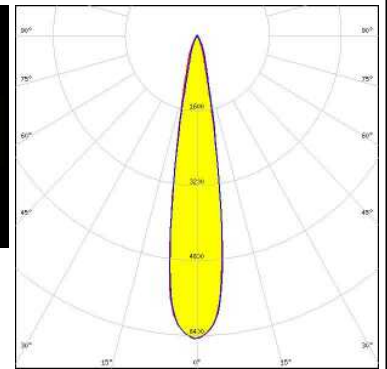
NICHIA

LED NVSW219F
 FWHM / FWTM 16.0° / 31.0°
 Efficiency 8 %
 Peak intensity 94 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



NICHIA

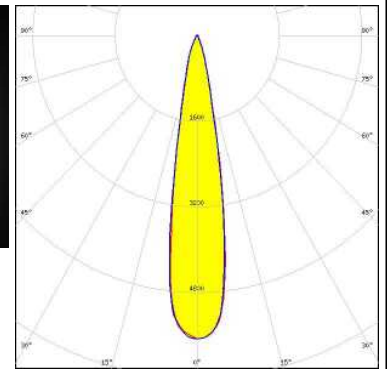
LED NVSW319B
 FWHM / FWTM 18.0° / 34.0°
 Efficiency 94 %
 Peak intensity 6.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



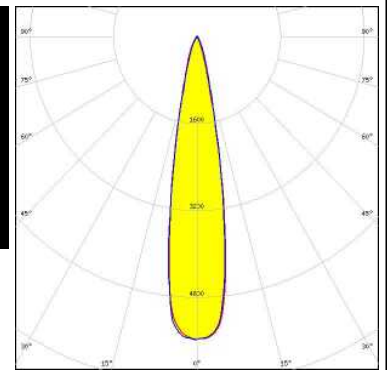
OPTICAL RESULTS (MEASURED):



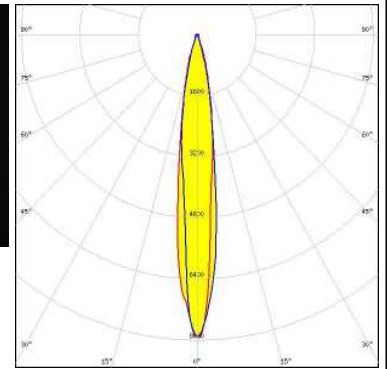
LED NVSW3x9A
 FWHM / FWTM 19.0° / 36.0°
 Efficiency 92 %
 Peak intensity 5.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



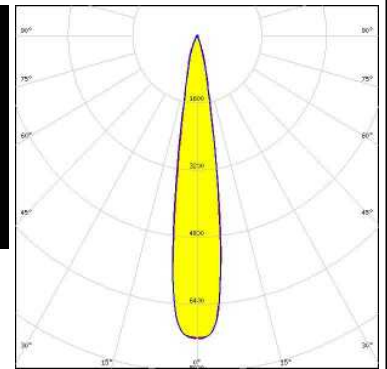
LED NVSW519A
 FWHM / FWTM 20.0° / 37.0°
 Efficiency 95 %
 Peak intensity 5.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED NVSxE21A
 FWHM / FWTM 13.0° / 33.0°
 Efficiency 94 %
 Peak intensity 8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED NVSxx19B/NVSxx19C
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 92 %
 Peak intensity 7.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

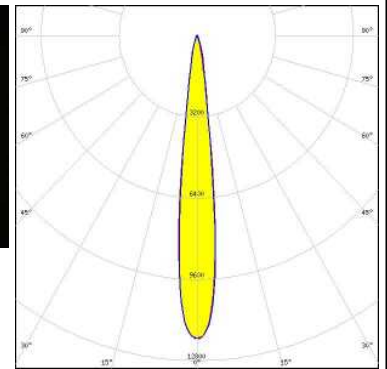


OPTICAL RESULTS (MEASURED):

OSRAM

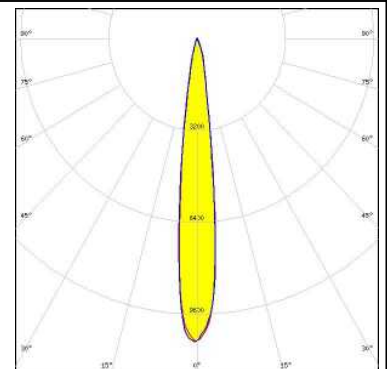
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 13.0° / 24.0°
 Efficiency 94 %
 Peak intensity 12 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



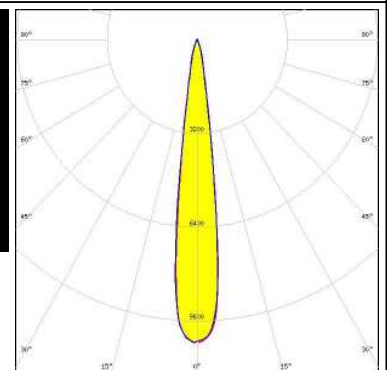
PHILIPS

LED Fortimo FastFlex LED 2x6 DP G4
 FWHM / FWTM 13.0° / 27.0°
 Efficiency 94 %
 Peak intensity 10.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



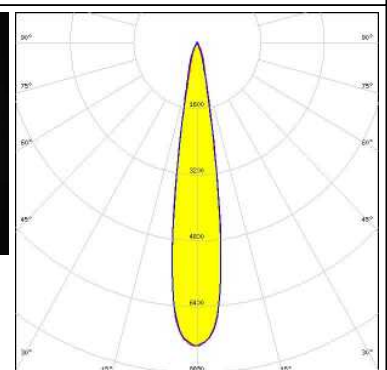
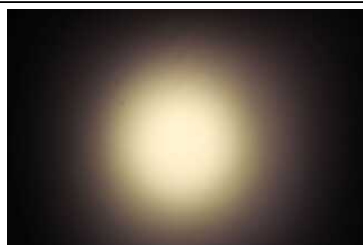
PHILIPS

LED Fortimo FastFlex LED 2x6 DP G5
 FWHM / FWTM 14.0° / 26.0°
 Efficiency 96 %
 Peak intensity 10.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


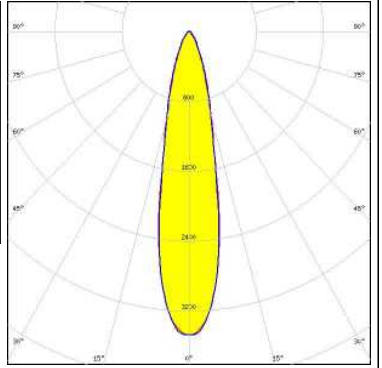

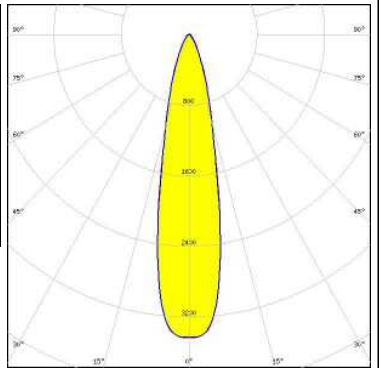

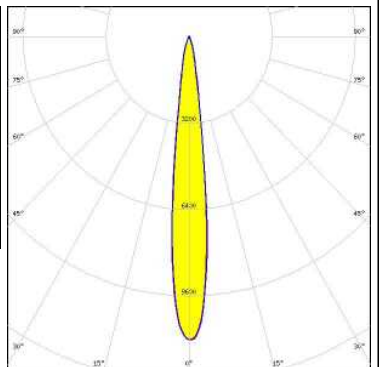

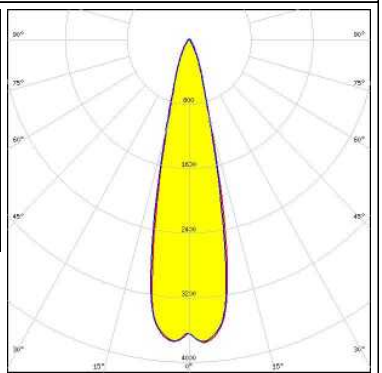


SAMSUNG


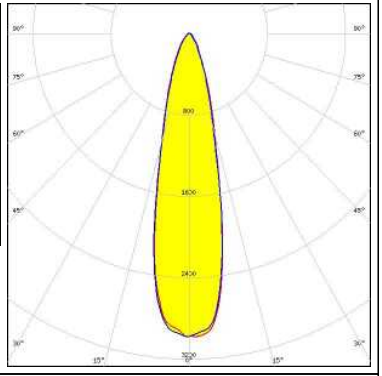

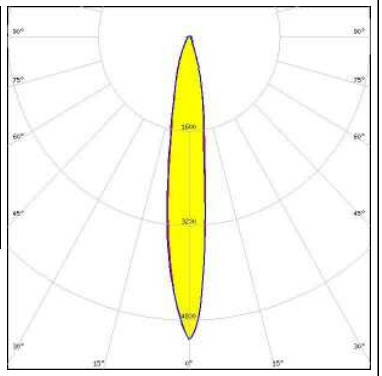

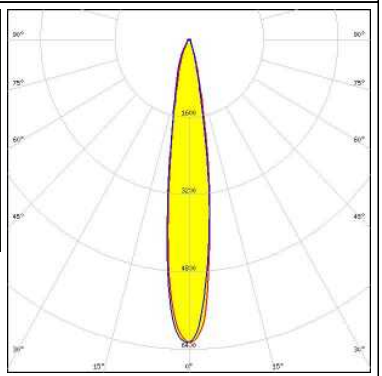

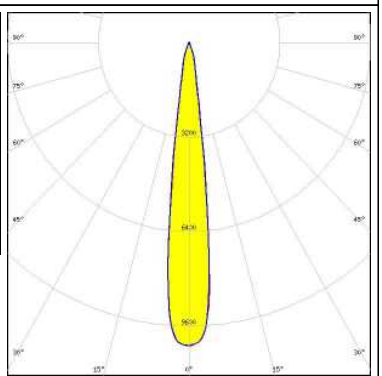
LED HiLOM RH12 (LH351C)
 FWHM / FWTM 17.0° / 31.0°
 Efficiency 94 %
 Peak intensity 7.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




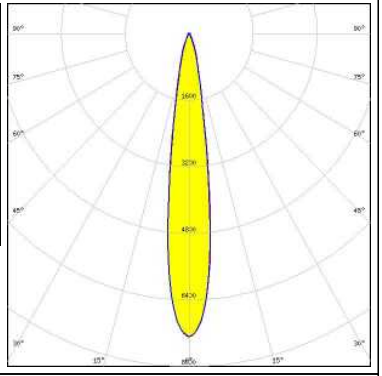

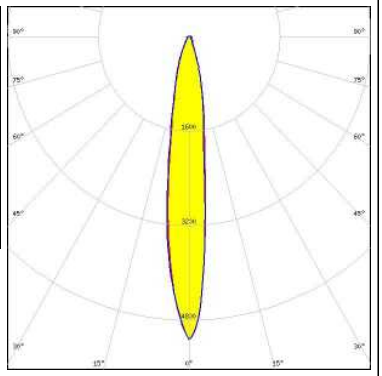

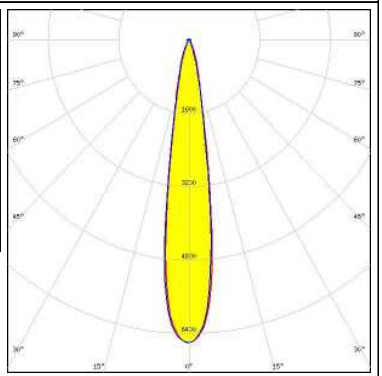

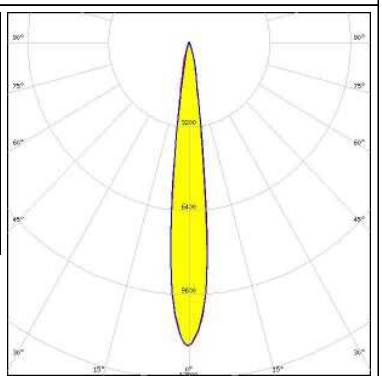
OPTICAL RESULTS (MEASURED):

<p>SCIOLUX</p> <p>LED BALAM-VP-5250-750-36</p> <p>FWHM / FWTM 22.0° / 50.0°</p> <p>Efficiency 95 %</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>SCIOLUX</p> <p>LED BALAMEC-VE-5700-740-36</p> <p>FWHM / FWTM 23.0° / 50.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 3.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SCIOLUX</p> <p>LED XLE-S22C4XTEHE (XT-E HE)</p> <p>FWHM / FWTM 13.0° / 26.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 11.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SCIOLUX</p> <p>LED XLE-S26XHP35 (XHP35 HD)</p> <p>FWHM / FWTM 24.0° / 45.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED 2x6 5050 module - SMJD-3625012F-XX</p> <p>FWHM / FWTM 24.0° / 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>SEOUL SEMICONDUCTOR</p> <p>LED SMJQ-D36W12Mx</p> <p>FWHM / FWTM 15.0° / 39.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 5.1 cd/lm</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 16.0° / 36.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 6.3 cd/lm</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 14.0° / 26.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 10 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

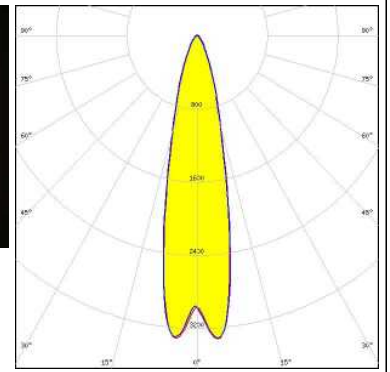
OPTICAL RESULTS (MEASURED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM 16.0° / 33.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 7.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22</p> <p>FWHM / FWTM 15.0° / 39.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 5.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM 17.0° / 34.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 6.6 cd/lm</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 13.0° / 25.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 11.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

TRIDONIC

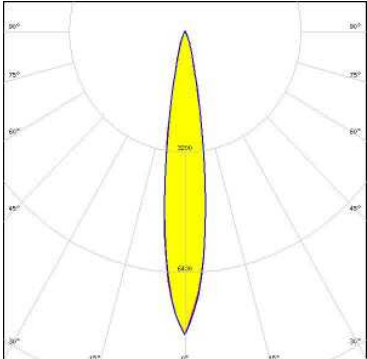
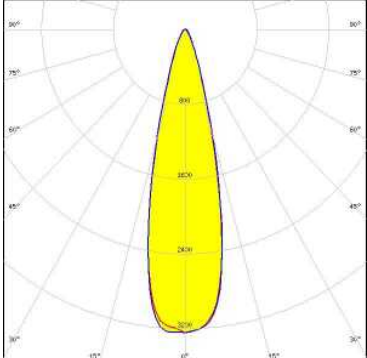
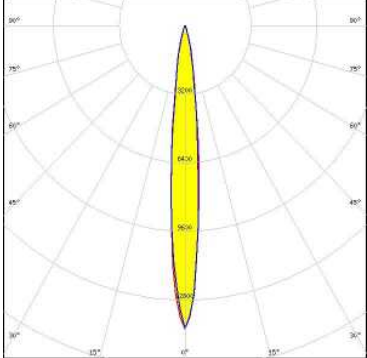
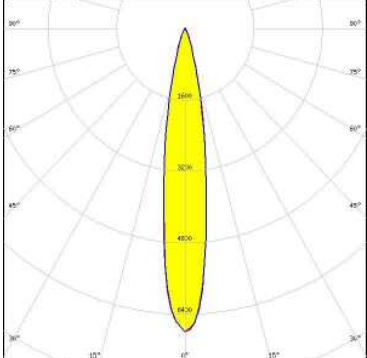
LED RLE 2x6 4500lm HP HE EXC3 OTD Z19
FWHM / FWTM 24.0° / 50.0°
Efficiency 96 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED J Series 5050 Round LES FWHM / FWTM 25.0° / 51.0° Efficiency 94 % Peak intensity 3.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED J Series 5050B 6V K Class FWHM / FWTM 24.0° / 52.0° Efficiency 94 % Peak intensity 3.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XB-H FWHM / FWTM 12.0° / 28.0° Efficiency 92 % Peak intensity 10.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE LEDs</p> <p>LED XHP35 HD FWHM / FWTM 22.0° / 46.0° Efficiency 93 % Peak intensity 3.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED: XHP35 HI FWHM / FWTM: 16.0° / 32.0° Efficiency: 93 % Peak intensity: 8.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XHP35.2 HD FWHM / FWTM: 26.0° / 48.0° Efficiency: 92 % Peak intensity: 3.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XP-E2 FWHM / FWTM: 11.0° / 26.0° Efficiency: 91 % Peak intensity: 14.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XP-G2 HE FWHM / FWTM: 17.0° / 35.0° Efficiency: 93 % Peak intensity: 6.9 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

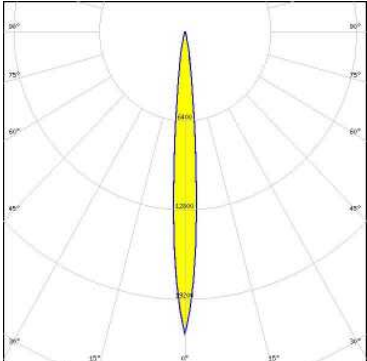
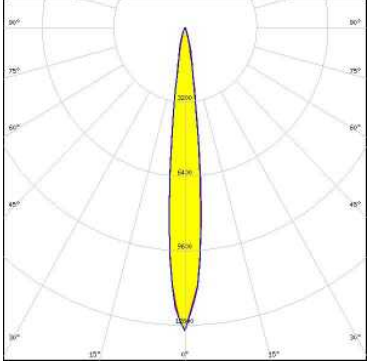
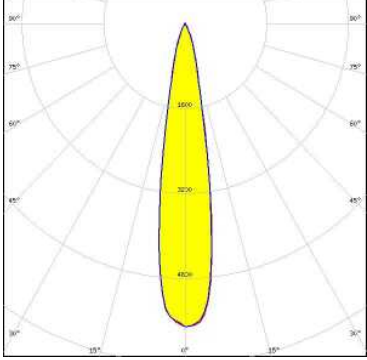
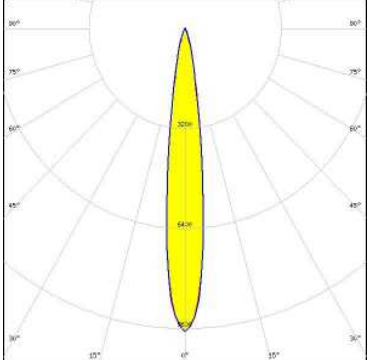
OPTICAL RESULTS (SIMULATED):

<p>CREE LEDs</p> <p>LED: XP-G4 FWHM / FWTM: 14.0° / 26.0° Efficiency: 93 % Peak intensity: 10.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LEDs</p> <p>LED: XQ-E HD FWHM / FWTM: 8.0° / 19.0° Efficiency: 92 % Peak intensity: 21.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON 5050 Round LES FWHM / FWTM: 23.0° / 50.0° Efficiency: 91 % Peak intensity: 3.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON 5050 Square LES FWHM / FWTM: 25.0° / 52.0° Efficiency: 94 % Peak intensity: 3.2 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON C FWHM / FWTM: 10.0° / 23.0° Efficiency: 91 % Peak intensity: 17.3 cd/lm LEDs/each optic: 1 Light colour: Cyan Required components:</p>	
<p>NICHIA</p> <p>LED: NV4WB35AM FWHM / FWTM: 22.0° / 40.0° Efficiency: 94 % Peak intensity: 4.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM</p> <p>LED: PrevaLED Brick HP IP 2x6 FWHM / FWTM: 14.0° / 28.0° Efficiency: 92 % Peak intensity: 10.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED: OSCONIQ C 2424 FWHM / FWTM: 11.0° / 22.0° Efficiency: 93 % Peak intensity: 16.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

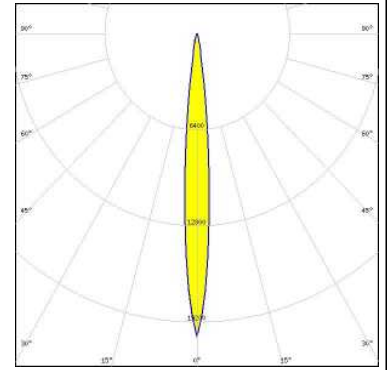
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 9.0° / 20.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 21.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM 12.0° / 25.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 13 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (3W version)</p> <p>FWHM / FWTM 19.0° / 37.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 6.1 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 OSCONIQ P 3737 Flat</p> <p>FWHM / FWTM 14.0° / 30.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 9.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

OSRAM

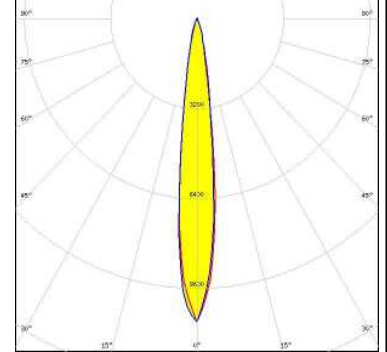
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 10.0° / 20.0°
 Efficiency 92 %
 Peak intensity 20.2 cd/lm
 LEDs/each optic 1
 Light colour Far Red
 Required components:



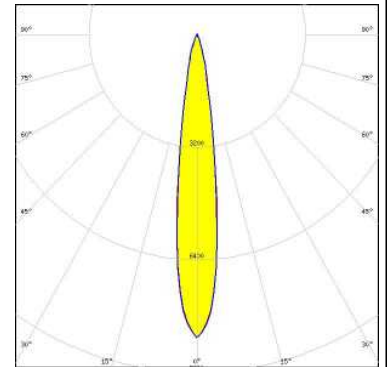
SAMSUNG

LED LH181B
 FWHM / FWTM 13.0° / 28.0°
 Efficiency 93 %
 Peak intensity 10.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



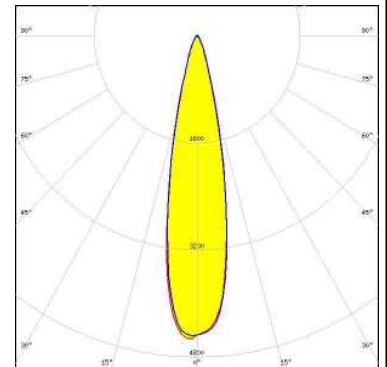
SAMSUNG

LED LH231B
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 93 %
 Peak intensity 8.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


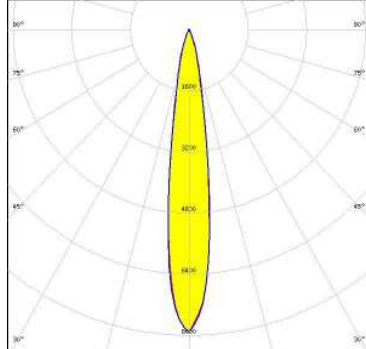


SAMSUNG

LED LH351D
 FWHM / FWTM 22.0° / 40.0°
 Efficiency 93 %
 Peak intensity 4.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p> SEOL SEMICONDUCTOR</p> <p>LED: Z5M4 FWHM / FWTM: 16.0° / 34.0° Efficiency: 93 % Peak intensity: 7.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> SEOL SEMICONDUCTOR</p> <p>LED: Z8Y22T FWHM / FWTM: 15.0° / 33.0° Efficiency: 93 % Peak intensity: 7.9 cd/lm LEDs/each optic: 1 Light colour: White 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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