

## SPORT-2X2-S1

~10° spot beam.

### SPECIFICATION:

Dimensions	50.0 x 50.0 mm
Height	16 mm
Fastening	screw
ROHS compliant	yes ⓘ

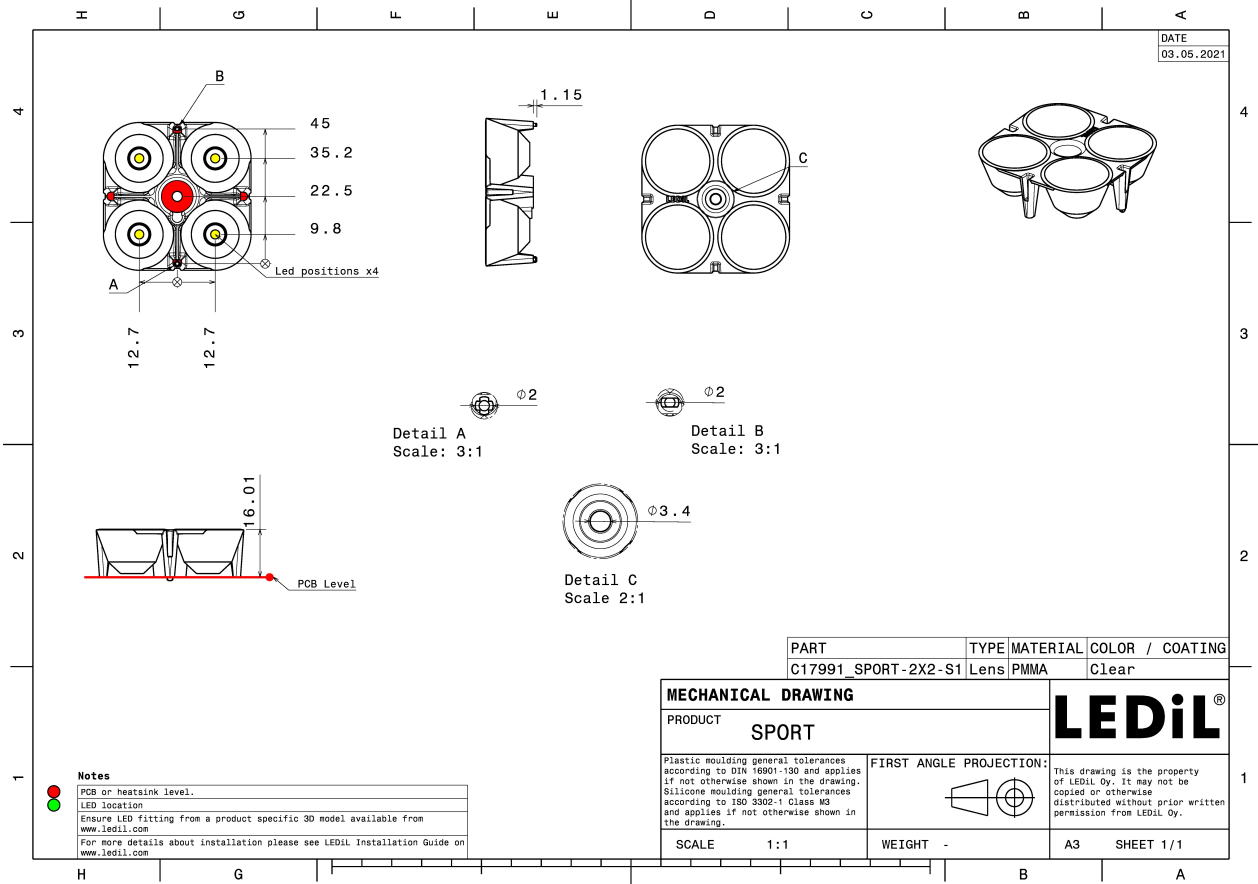
### MATERIALS:

Component	Type	Material	Colour	Finish
SPORT-2X2-S1	Multi-lens	PMMA	clear	



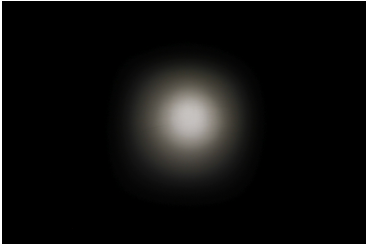
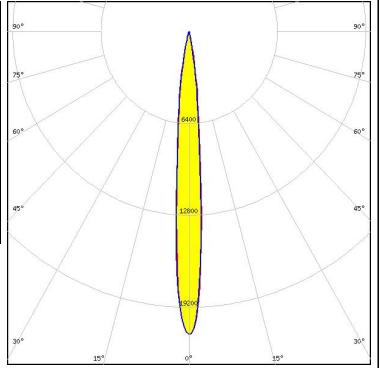
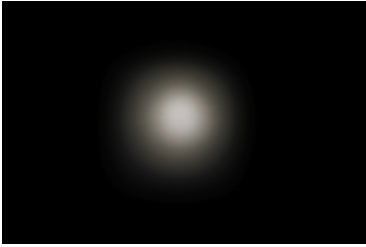
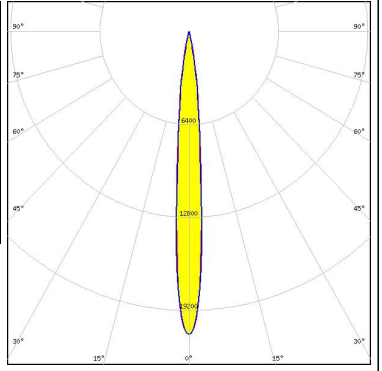

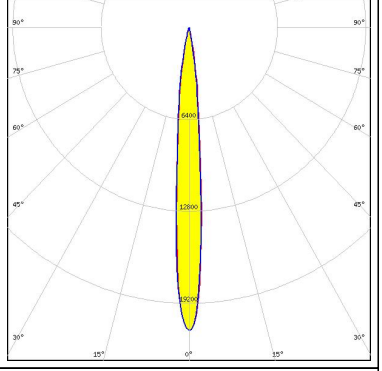
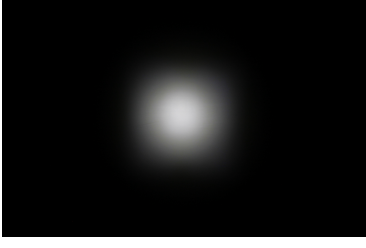
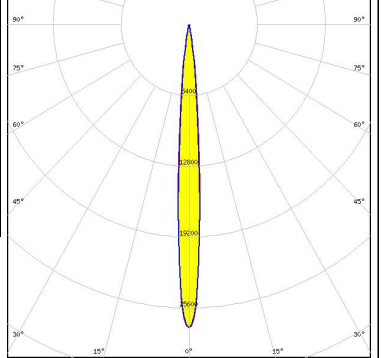
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C17991_SPORT-2X2-S1 » Box size: 480 x 280 x 300 mm	512	128	32	10.8



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

#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON HL2X</p> <p>FWHM / FWTM 10.0° / 21.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 21.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON HL2X</p> <p>FWHM / FWTM 10.0° / 21.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 20.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>		
<p><b>LUMILEDS</b></p> <p>LED LUXEON HL2X</p> <p>FWHM / FWTM 10.0° / 21.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 21.1 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 CSSRM2/CSSRM3</p> <p>FWHM / FWTM 9.0° / 18.0°</p> <p>Efficiency 97 %</p> <p>Peak intensity 27.5 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### OPTICAL RESULTS (MEASURED):






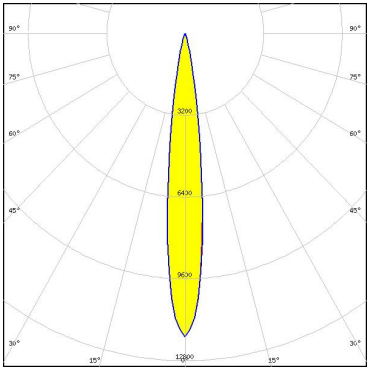

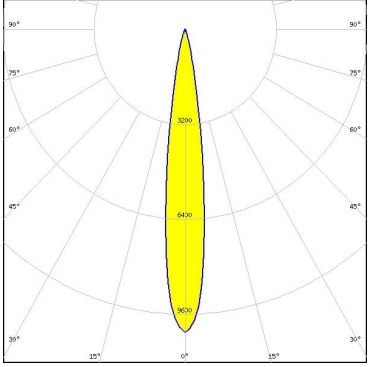

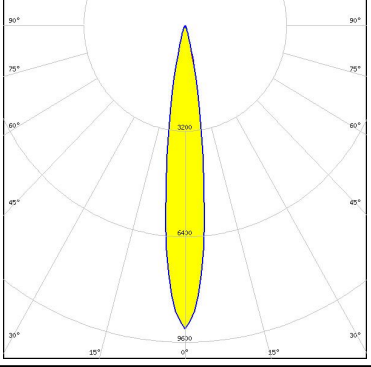

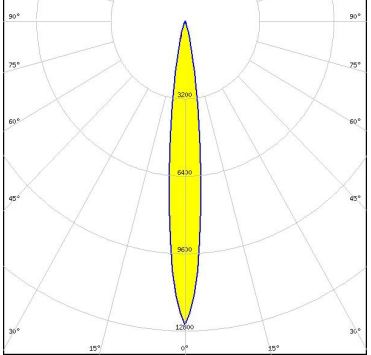
#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE LED</b></p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM 16.0° / 32.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 8.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>CREE LED</b></p> <p>LED J Series 5050 Round LES</p> <p>FWHM / FWTM 16.0° / 32.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 7.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE LED</b></p> <p>LED J Series 5050 Square LES 6V</p> <p>FWHM / FWTM 18.0° / 34.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 6.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE LED</b></p> <p>LED J Series 5050 Square LES 6V</p> <p>FWHM / FWTM 16.0° / 34.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 7.6 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> LED</p> <p>LED: XD16            FWHM / FWTM: 8.0° / 16.0°            Efficiency: 87 %            Peak intensity: 28.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE</b> LED</p> <p>LED: XHP35.2 HD            FWHM / FWTM: 16.0° / 34.0°            Efficiency: 95 %            Peak intensity: 7.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> LED</p> <p>LED: XHP35.2 HD            FWHM / FWTM: 18.0° / 34.0°            Efficiency: 86 %            Peak intensity: 6.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE</b> LED</p> <p>LED: XHP35.2 HI            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 87 %            Peak intensity: 10.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	

#### OPTICAL RESULTS (SIMULATED):

	<p>LED: XHP35.2 HI            FWHM / FWTM: 14.0° / 26.0°            Efficiency: 95 %            Peak intensity: 11.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XHP50.3 HI            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 95 %            Peak intensity: 10.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XHP50.3 HI            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 87 %            Peak intensity: 9.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
	<p>LED: XM-L3            FWHM / FWTM: 12.0° / 26.0°            Efficiency: 95 %            Peak intensity: 12.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → <b>LED</b></p> <p>LED XM-L3            FWHM / FWTM 12.0° / 28.0°            Efficiency 87 %            Peak intensity 11 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED XP-E            FWHM / FWTM 6.0° / 14.0°            Efficiency 95 %            Peak intensity 52.2 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED XP-G2            FWHM / FWTM 10.0° / 20.0°            Efficiency 90 %            Peak intensity 21.3 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED XP-G2 HE            FWHM / FWTM 10.0° / 20.0°            Efficiency 91 %            Peak intensity 23.7 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p> <p>Protective plate, glass</p>	

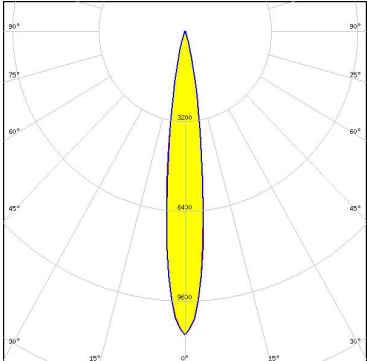
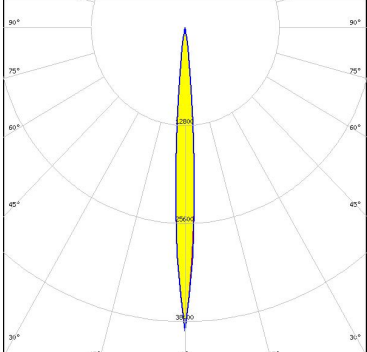
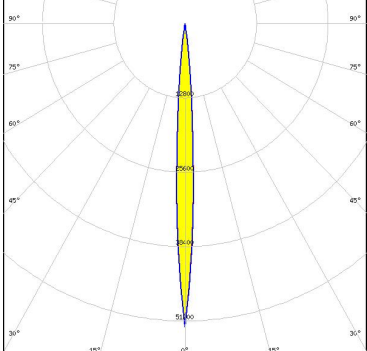
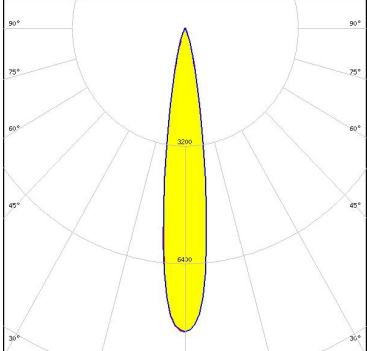
#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-G2 HE            FWHM / FWTM: 8.0° / 18.0°            Efficiency: 95 %            Peak intensity: 28.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-G3            FWHM / FWTM: 10.0° / 22.0°            Efficiency: 95 %            Peak intensity: 18.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-G3            FWHM / FWTM: 10.0° / 22.0°            Efficiency: 86 %            Peak intensity: 16.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p style="background-color: #e0f0ff; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-L HD            FWHM / FWTM: 12.0° / 26.0°            Efficiency: 95 %            Peak intensity: 13.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE → LED</b></p> <p>LED: XP-L HD            FWHM / FWTM: 12.0° / 26.0°            Efficiency: 90 %            Peak intensity: 12.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE → LED</b></p> <p>LED: XP-L HI            FWHM / FWTM: 8.0° / 18.0°            Efficiency: 96 %            Peak intensity: 26.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE → LED</b></p> <p>LED: XP-L HI            FWHM / FWTM: 10.0° / 20.0°            Efficiency: 87 %            Peak intensity: 22.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>CREE → LED</b></p> <p>LED: XP-L2            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 86 %            Peak intensity: 9.7 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-L2            FWHM / FWTM: 14.0° / 28.0°            Efficiency: 95 %            Peak intensity: 10.8 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-P            FWHM / FWTM: 8.0° / 14.0°            Efficiency: 86 %            Peak intensity: 39.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p style="background-color: #e0f0ff; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p><b>CREE</b> → <b>LED</b></p> <p>LED: XP-P            FWHM / FWTM: 6.0° / 14.0°            Efficiency: 95 %            Peak intensity: 52.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 5050 HE            FWHM / FWTM: 16.0° / 32.0°            Efficiency: 95 %            Peak intensity: 8.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

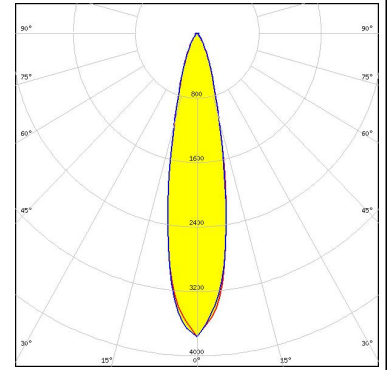
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Round LES</p> <p>FWHM / FWTM 18.0° / 34.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 6.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Round LES</p> <p>FWHM / FWTM 18.0° / 34.0°</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><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM 20.0° / 36.0°</p> <p>Efficiency 95 %</p> <p>Peak intensity 6.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED LUXEON 5050 Square LES</p> <p>FWHM / FWTM 20.0° / 36.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 5.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	



#### OPTICAL RESULTS (SIMULATED):

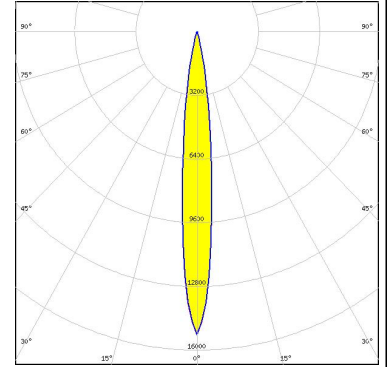
##### LUMILEDS

LED LUXEON 7070  
 FWHM / FWTM 22.0° / 48.0°  
 Efficiency 93 %  
 Peak intensity 3.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### LUMILEDS

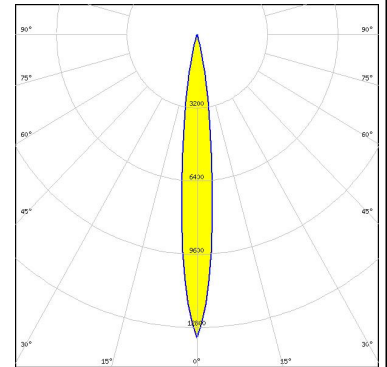
LED LUXEON HL2X-D  
 FWHM / FWTM 12.0° / 26.0°  
 Efficiency 96 %  
 Peak intensity 15.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### LUMILEDS

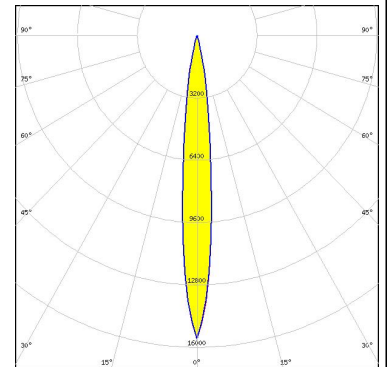
LED LUXEON HL2X-D  
 FWHM / FWTM 12.0° / 26.0°  
 Efficiency 88 %  
 Peak intensity 13.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



##### LUMILEDS

LED LUXEON HL2X-P  
 FWHM / FWTM 12.0° / 26.0°  
 Efficiency 95 %  
 Peak intensity 15.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



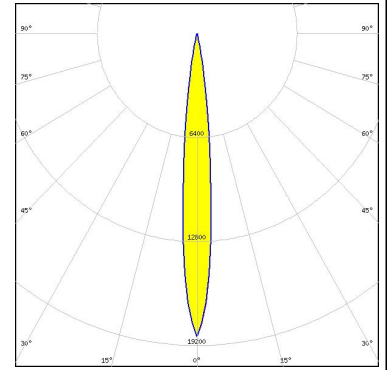
#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON HL2Z</p> <p>FWHM / FWTM: 8.0° / 18.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 27.9 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: 12.0° / 24.0°</p> <p>Efficiency: 96 %</p> <p>Peak intensity: 16.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: 12.0° / 24.0°</p> <p>Efficiency: 88 %</p> <p>Peak intensity: 14.1 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>LUMINUS</b></p> <p>LED: SFT-40-WCS</p> <p>FWHM / FWTM: 8.0° / 18.0°</p> <p>Efficiency: 95 %</p> <p>Peak intensity: 30.1 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

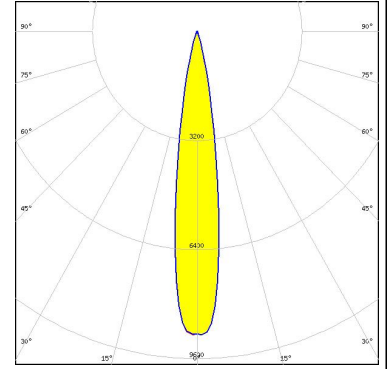
#### OPTICAL RESULTS (SIMULATED):



LED SFT-70X-WCS  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 96 %  
 Peak intensity 18.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

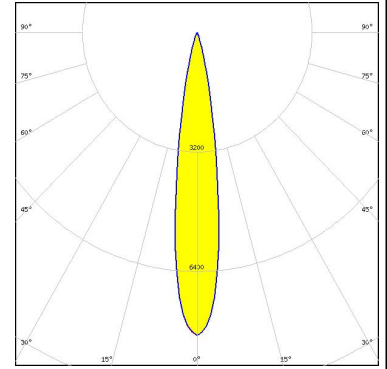


LED SST-70X-WCS  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 96 %  
 Peak intensity 8.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

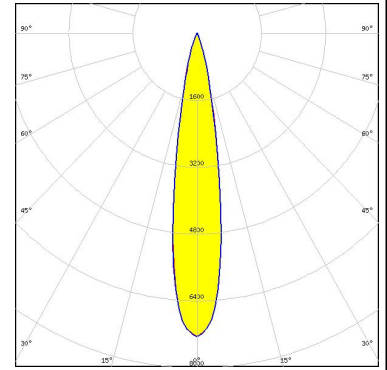


LED SST-70X-WCS  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 87 %  
 Peak intensity 8.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



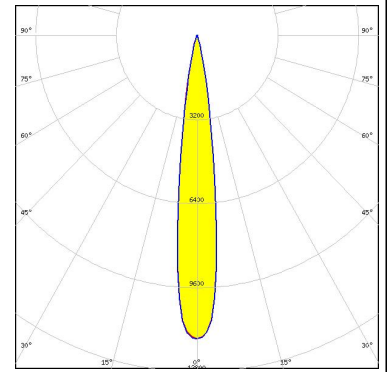
LED NFMW48xA  
 FWHM / FWTM 18.0° / 34.0°  
 Efficiency 95 %  
 Peak intensity 7.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

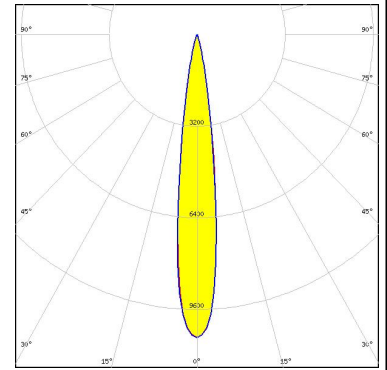


LED NV4WB35AM  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 96 %  
 Peak intensity 11.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



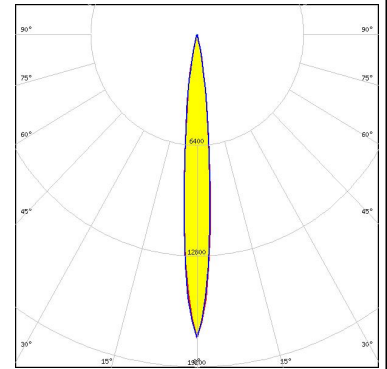
LED NV4WB35AM  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 87 %  
 Peak intensity 10.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



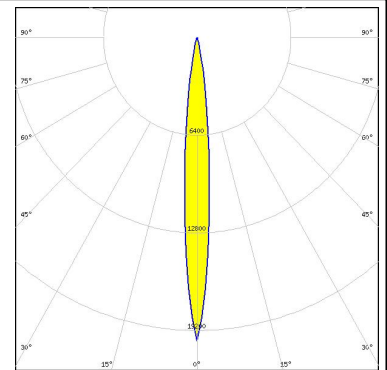
LED NVSW219F  
 Assembly NULL  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 90 %  
 Peak intensity 17.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



LED NVSW219F  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 95 %  
 Peak intensity 19.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

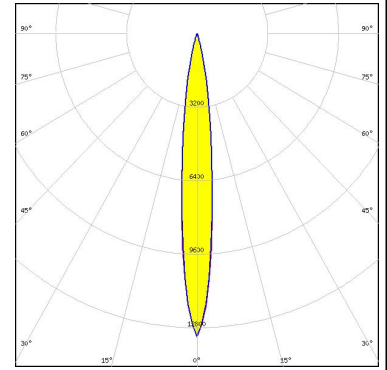
Protective plate, glass



#### OPTICAL RESULTS (SIMULATED):

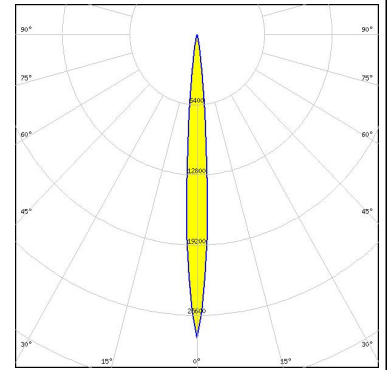


LED NVSW519A  
 FWHM / FWTM 12.0° / 27.0°  
 Efficiency 94 %  
 Peak intensity 13.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

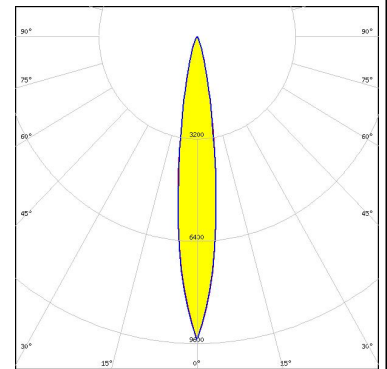


LED NVSxE21A  
 FWHM / FWTM 8.0° / 18.0°  
 Efficiency 88 %  
 Peak intensity 27.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

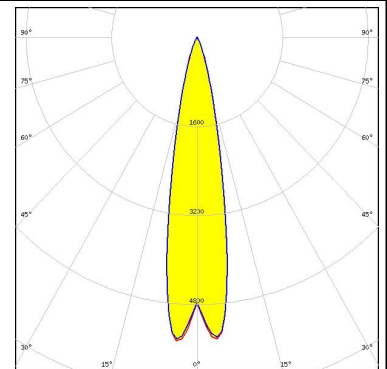
Protective plate, glass



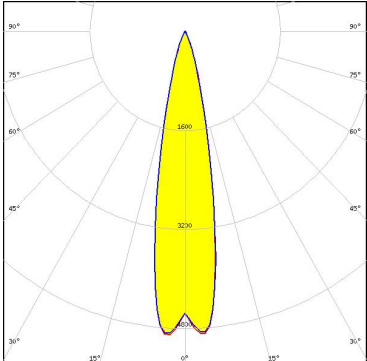
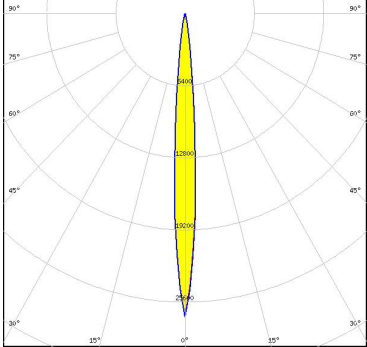
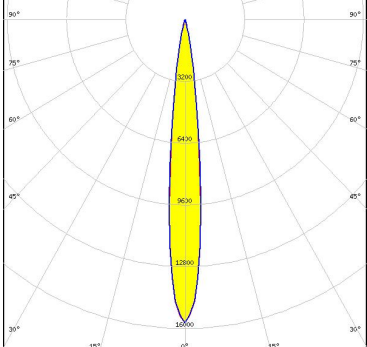
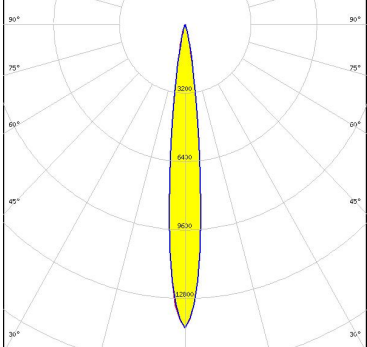
LED DURIS E 5050 (GW J9LHS1.4M)  
 FWHM / FWTM 14.0° / 32.0°  
 Efficiency 95 %  
 Peak intensity 9.5 cd/lm  
 LEDs/each optic 1  
 Light colour RGBW  
 Required components:



LED Duris S8  
 FWHM / FWTM 20.0° / 38.0°  
 Efficiency 95 %  
 Peak intensity 5.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (SIMULATED):

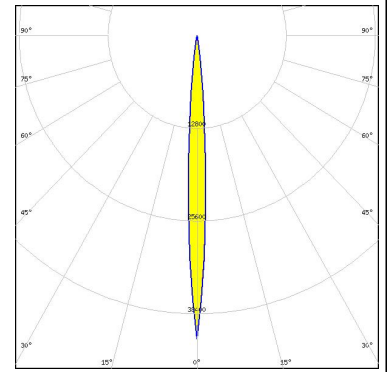
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED Duris S8</p> <p>FWHM / FWTM 22.0° / 40.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 4.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM 8.0° / 18.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 26.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (3W version)</p> <p>FWHM / FWTM 12.0° / 24.0°</p> <p>Efficiency 96 %</p> <p>Peak intensity 15.7 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 3737 (3W version)</p> <p>FWHM / FWTM 12.0° / 24.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 14.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p>Protective plate, glass</p>	

#### OPTICAL RESULTS (SIMULATED):

#### OSRAM

Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
 FWHM / FWTM 6.0° / 14.0°  
 Efficiency 92 %  
 Peak intensity 41.9 cd/lm  
 LEDs/each optic 1  
 Light colour Far Red  
 Required components:

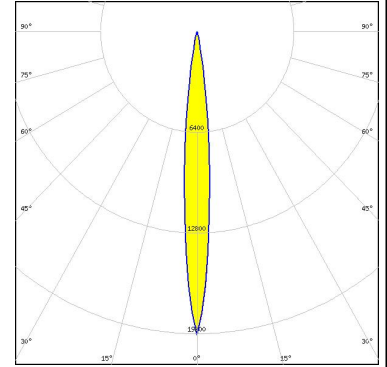


#### OSRAM

Opto Semiconductors

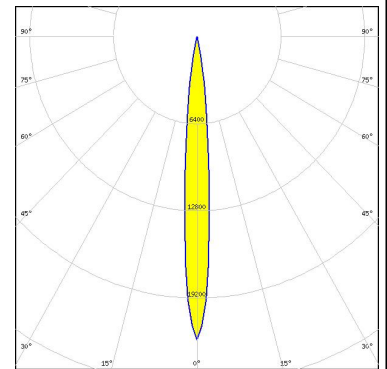
LED OSLON Square CSSRM2/CSSRM3  
 FWHM / FWTM 10.0° / 20.0°  
 Efficiency 86 %  
 Peak intensity 19.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



#### SAMSUNG

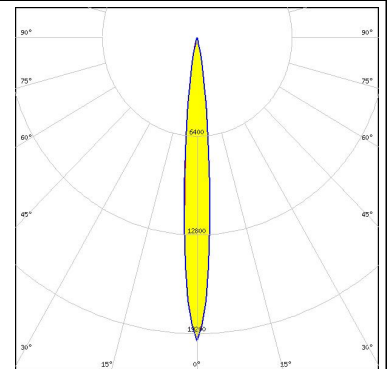
LED LH351B  
 FWHM / FWTM 10.0° / 20.0°  
 Efficiency 96 %  
 Peak intensity 22.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED LH351B  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 87 %  
 Peak intensity 19.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass

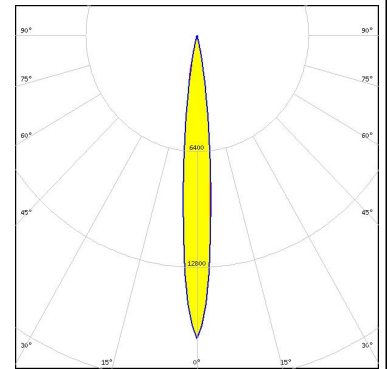


#### OPTICAL RESULTS (SIMULATED):

### SAMSUNG

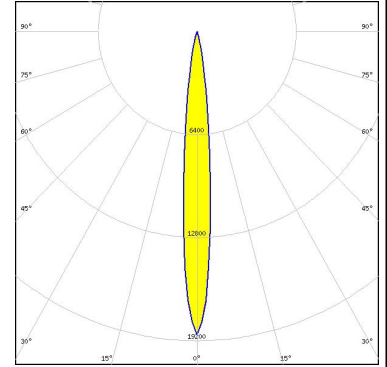
LED LH351C  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 88 %  
 Peak intensity 16.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



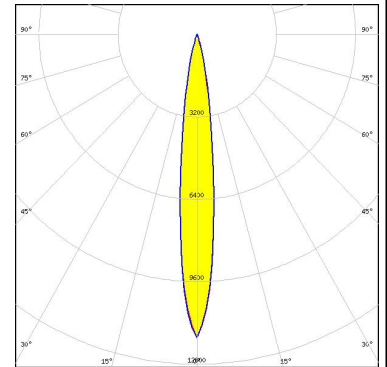
### SAMSUNG

LED LH351C  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 96 %  
 Peak intensity 18.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

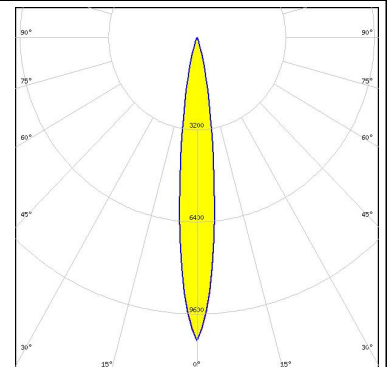
LED LH351D  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 95 %  
 Peak intensity 11.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

LED LH351D  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 90 %  
 Peak intensity 10.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass

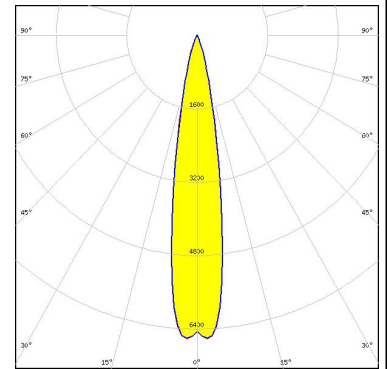




#### OPTICAL RESULTS (SIMULATED):

### SAMSUNG

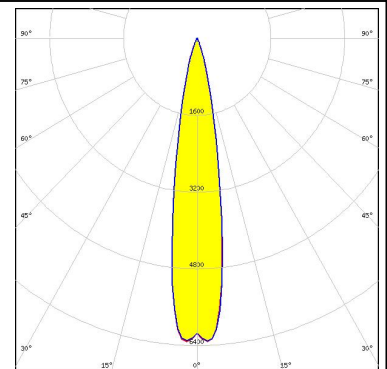
LED LH502C  
 FWHM / FWTM 18.0° / 36.0°  
 Efficiency 95 %  
 Peak intensity 6.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

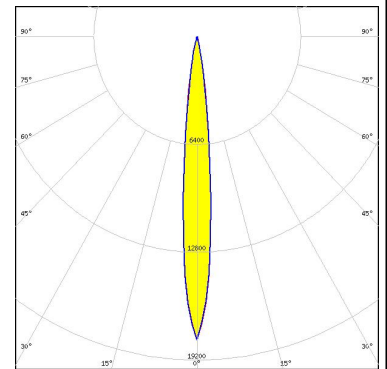
LED LH502C  
 FWHM / FWTM 18.0° / 35.0°  
 Efficiency 90 %  
 Peak intensity 6.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



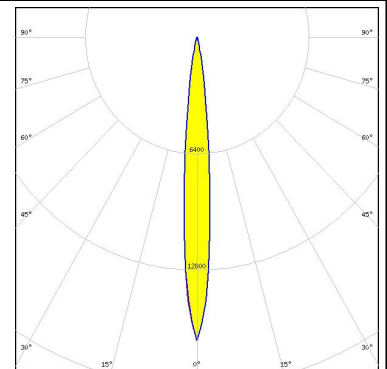
SEOUL SEMICONDUCTOR  
 LED Z5M4  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 90 %  
 Peak intensity 18 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



SEOUL SEMICONDUCTOR  
 LED Z8Y22  
 FWHM / FWTM 10.0° / 22.0°  
 Efficiency 86 %  
 Peak intensity 16.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



#### 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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