

## STRADA-2X2-FS3

Forward throw beam optimized for European tunnels, resulting in extremely efficient lighting with counter-beam method.

### TECHNICAL SPECIFICATIONS:

Dimensions	50.0 x 50.0 mm
Height	12 mm
Fastening	pin, screw
ROHS compliant	yes ⓘ

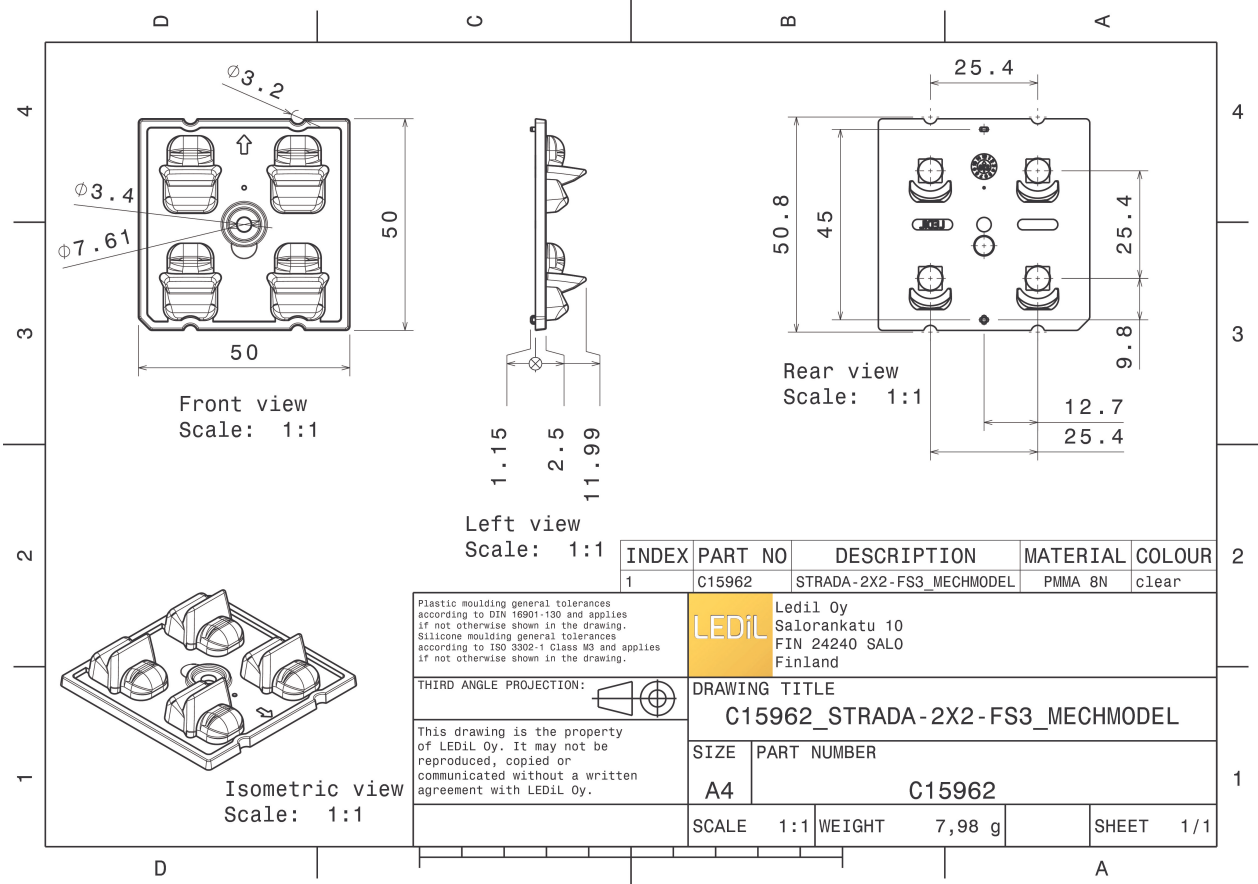


### MATERIAL SPECIFICATIONS:

Component	Type	Material	Colour	Finish
STRADA-2X2-FS3	Multi-lens	PMMA	clear	


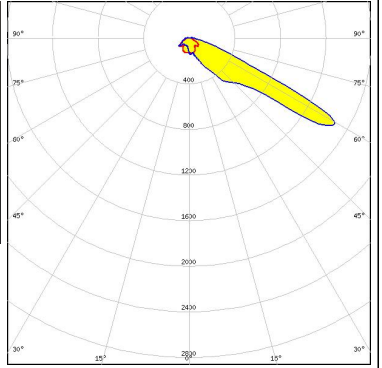

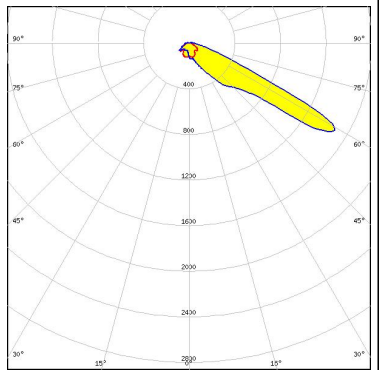
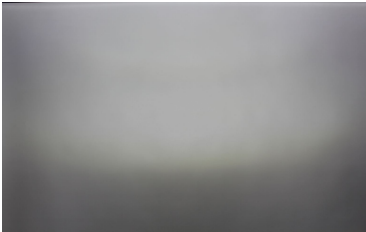
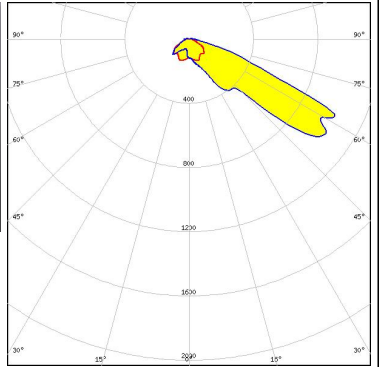

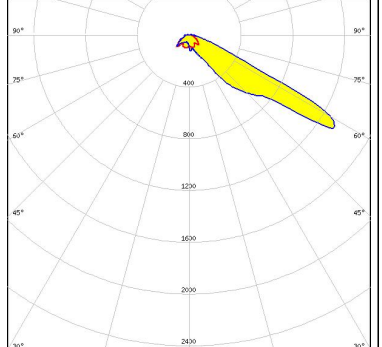
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C15962_STRADA-2X2-FS3 » Box size: 480 x 280 x 300 mm	800	160	160	7.1



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

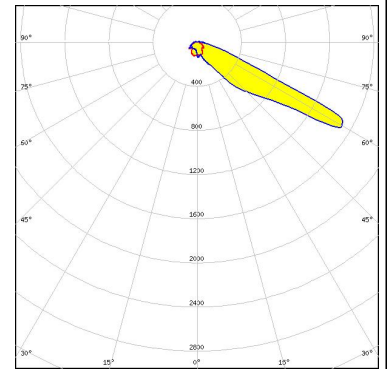
#### PHOTOMETRIC DATA (MEASURED):

<p><b>COMET ELECTRONICS</b></p> <p>LED QUICK FLUX XTP 2x4 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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><b>COMET ELECTRONICS</b></p> <p>LED QUICK FLUX XTP 2x6 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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><b>CREE</b></p> <p>LED XD16</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 4</p> <p>Light colour White</p> <p>Required components:</p>		
<p><b>CREE</b></p> <p>LED XD16</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 2.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

#### PHOTOMETRIC DATA (MEASURED):

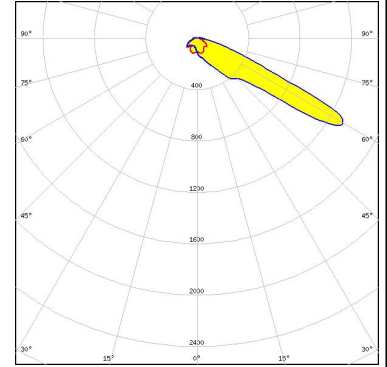
#### CREE

LED XP-G2  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



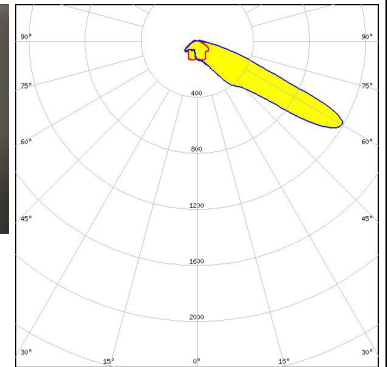
#### CREE

LED XP-G3  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



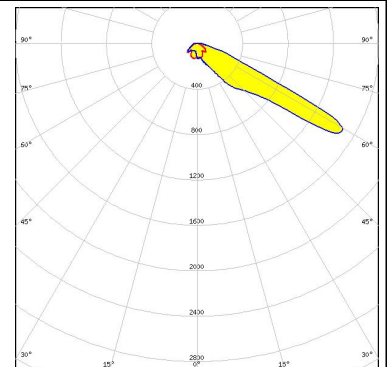
#### LUMILEDS

LED LUXEON V  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### LUMILEDS

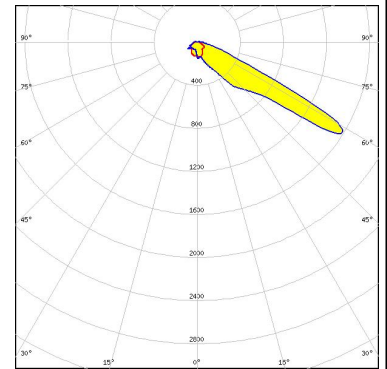
LED LUXEON V2  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

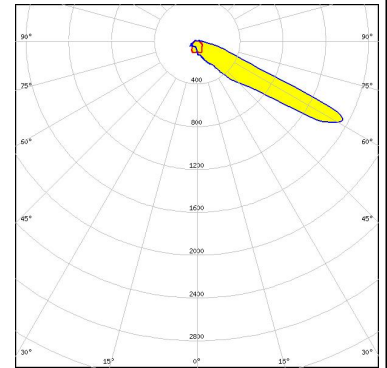
#### MST Your solutions

LED RecLED 122x50mm 1900lm 730 2x4 Opt G1  
 FWHM / FWTM Asymmetric  
 Efficiency 95 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



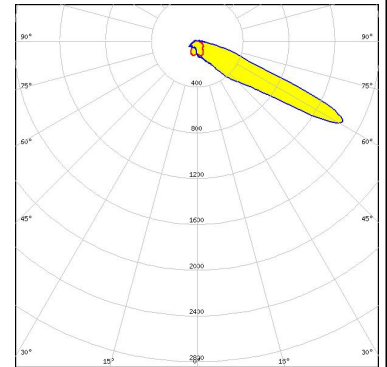
#### NICHIA

LED NVSW219F  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



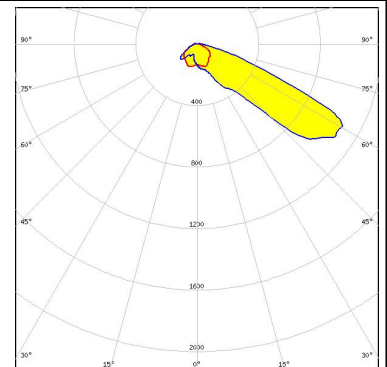
#### NICHIA

LED NVSW319B  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM Opto Semiconductors

LED Duris S8  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

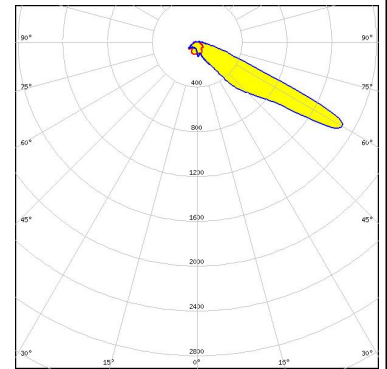


#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

Opto Semiconductors

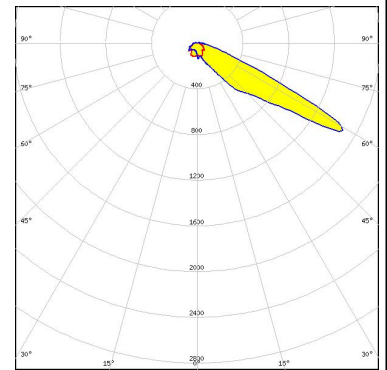
LED OSLON Square CSSRM2/CSSRM3  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

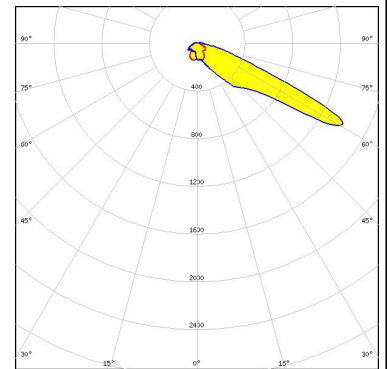
Opto Semiconductors

LED OSLON Square PC  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



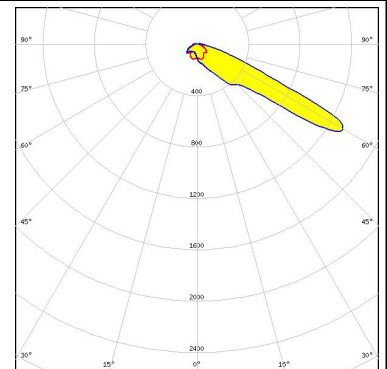
#### PHILIPS

LED Fortimo FastFlex LED 2x8 DA G4+  
 FWHM / FWTM Asymmetric  
 Efficiency 95 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHILIPS

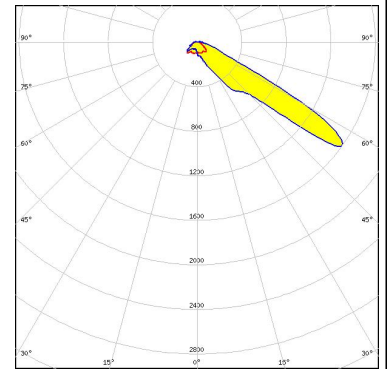
LED Fortimo FastFlex LED 2x8 DAX G4  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

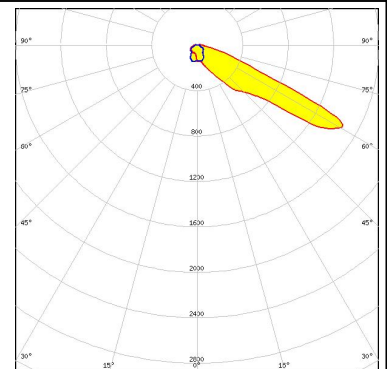
### SAMSUNG

LED HiLOM RC12 Z (LH181B)  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.1 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



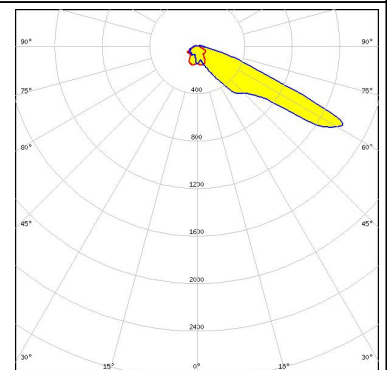
### SAMSUNG

LED HiLOM RH16 (LH351C)  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



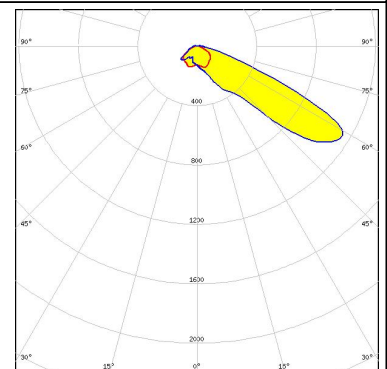
### SAMSUNG

LED HiLOM RM12 Z (LH502C)  
 FWHM / FWTM Asymmetric  
 Efficiency 95 %  
 Peak intensity 1.5 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

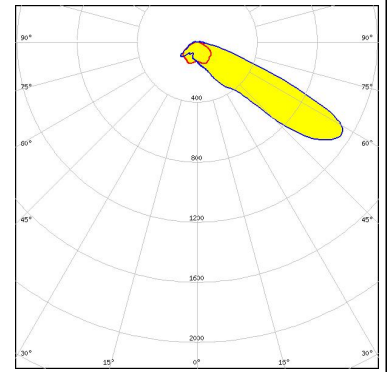
LED HiLOM RM12 Z (LH502C)  
 FWHM / FWTM Asymmetric  
 Efficiency 95 %  
 Peak intensity 1.1 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

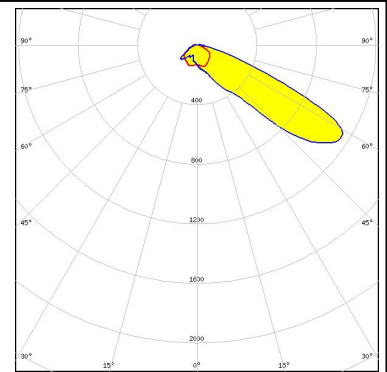
### SAMSUNG

LED HiLOM RM16 Z (LH502C)  
 FWHM / FWTM Asymmetric  
 Efficiency 96 %  
 Peak intensity 1.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

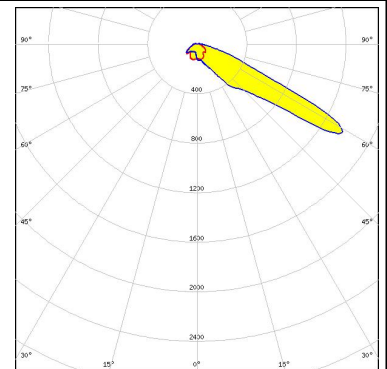
LED HiLOM RM8 Z (LH502C)  
 FWHM / FWTM Asymmetric  
 Efficiency 96 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED LED-Pa-L15c2W11c2-xxx-C050-01  
 FWHM / FWTM Asymmetric  
 Efficiency 96 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



LED Z5M3  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.6 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





#### PHOTOMETRIC DATA (MEASURED):

	
SEoul SEMIconDUCTOR	
LED	Z8Y22
FWHM / FWTM	Asymmetric
Efficiency	94 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

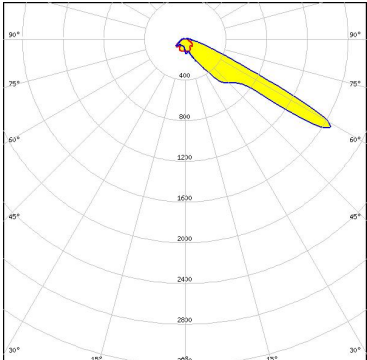


### TRIDONIC

LED	RLE 2x4 2000lm HP EXC2 OTD
FWHM / FWTM	Asymmetric
Efficiency	94 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

### TRIDONIC

LED	RLE 2x8 4000lm HP EXC2 OTD
FWHM / FWTM	Asymmetric
Efficiency	94 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



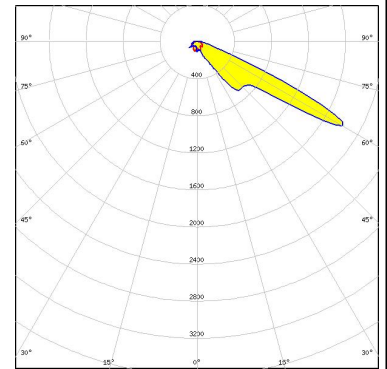
#### PHOTOMETRIC DATA (SIMULATED):

<p><b>bridgelux</b></p> <p>LED: Bridgelux SMD 5050            FWHM / FWTM: Asymmetric            Efficiency: 86 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b></p> <p>LED: XP-G2 HE            FWHM / FWTM: Asymmetric            Efficiency: 87 %            Peak intensity: 1.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>CREE</b></p> <p>LED: XP-G3            FWHM / FWTM: Asymmetric            Efficiency: 73 %            Peak intensity: 1.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON 3030 2D (Round LES)            FWHM / FWTM: Asymmetric            Efficiency: 76 %            Peak intensity: 1.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### LUMILEDS

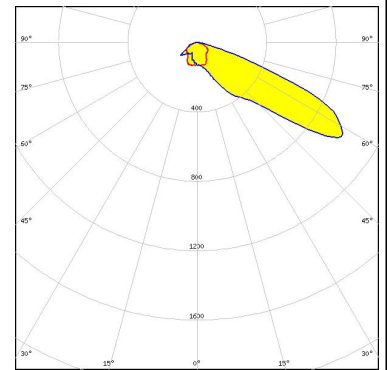
LED LUXEON 3030 2D (Round LES)  
 FWHM / FWTM Asymmetric  
 Efficiency 90 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### LUMILEDS

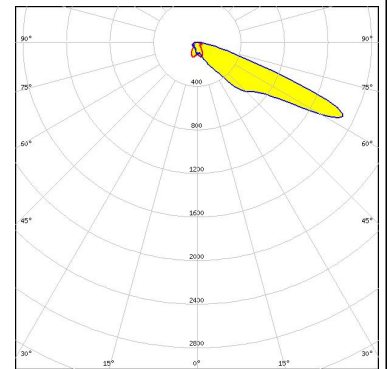
LED LUXEON 5050 Square LES  
 FWHM / FWTM Asymmetric  
 Efficiency 78 %  
 Peak intensity 1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



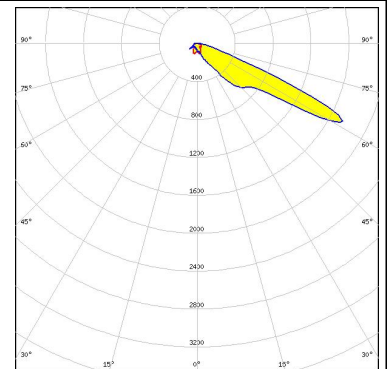
#### LUMILEDS

LED LUXEON HL2X  
 FWHM / FWTM Asymmetric  
 Efficiency 87 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

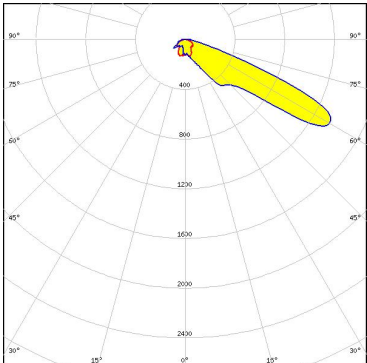
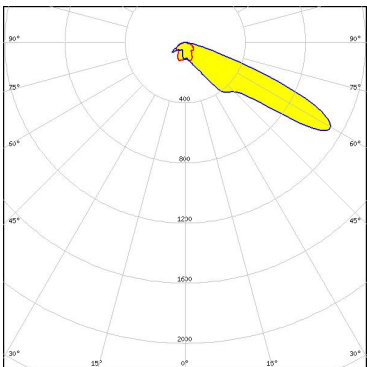
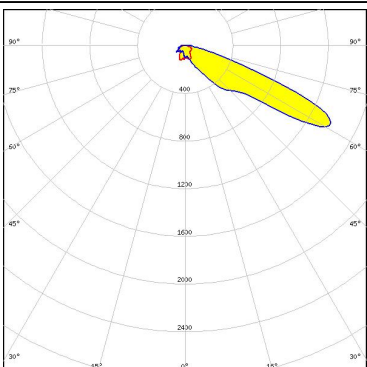
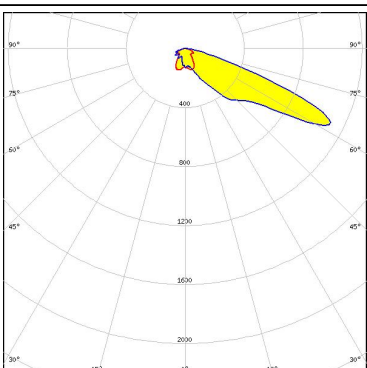


#### LUMILEDS

LED LUXEON TX  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



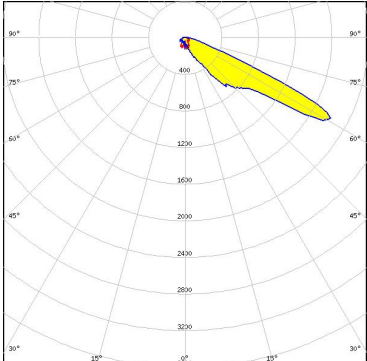
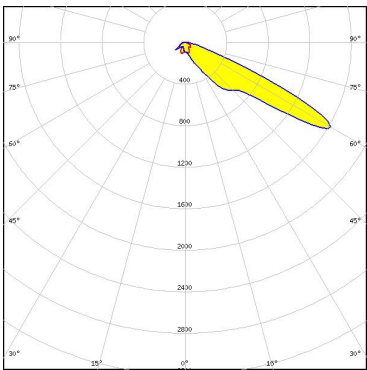
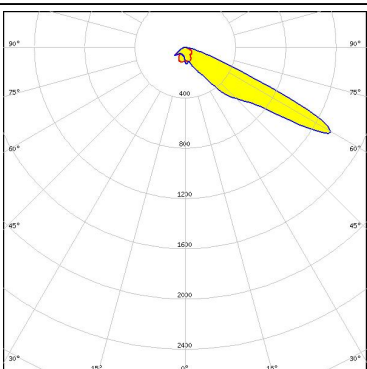
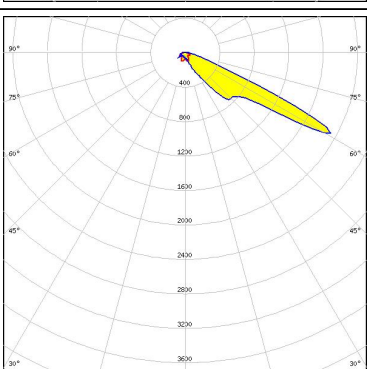
#### PHOTOMETRIC DATA (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: Asymmetric            Efficiency: 91 %            Peak intensity: 1.3 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NV4WB35AM            FWHM / FWTM: Asymmetric            Efficiency: 76 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	
<p><b>NICHIA</b></p> <p>LED: NVSW3x9A            FWHM / FWTM: Asymmetric            Efficiency: 89 %            Peak intensity: 1.4 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSW519A            FWHM / FWTM: Asymmetric            Efficiency: 82 %            Peak intensity: 1.1 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p>Protective plate, glass</p>	

#### PHOTOMETRIC DATA (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NVSW519A            FWHM / FWTM: Asymmetric            Efficiency: 89 %            Peak intensity: 1.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSxE21A            FWHM / FWTM: Asymmetric            Efficiency: 90 %            Peak intensity: 1.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NVSxx19B/NVSxx19C            FWHM / FWTM: Asymmetric            Efficiency: 90 %            Peak intensity: 1.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b>  <small>Opto Semiconductors</small></p> <p>LED: Duris S5 (2 chip)            FWHM / FWTM: Asymmetric            Efficiency: 91 %            Peak intensity: 1.9 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	

#### PHOTOMETRIC DATA (SIMULATED):

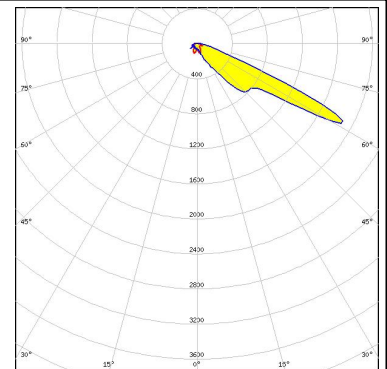
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3737 (2W version)</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSCONIQ P 3737 Flat</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.6 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 Asymmetric</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p> <p style="background-color: #ADD8E6; padding: 2px;">Protective plate, glass</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED OSLON Square Flat</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

#### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

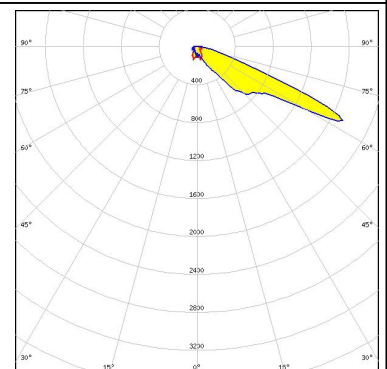
Opto Semiconductors

LED OSTAR Projection Compact (Kx.CSLNM1.xx)  
 FWHM / FWTM Asymmetric  
 Efficiency 93 %  
 Peak intensity 1.9 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHILIPS

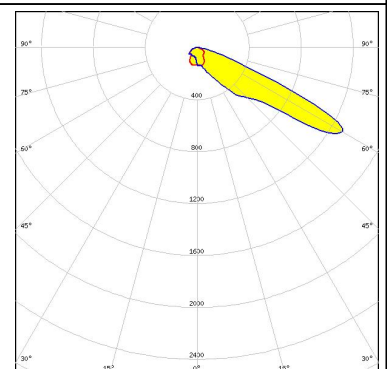
LED Fortimo FastFlex LED 2x8 DA G4  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED HiLOM RH16 (LH351C)  
 FWHM / FWTM Asymmetric  
 Efficiency 83 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

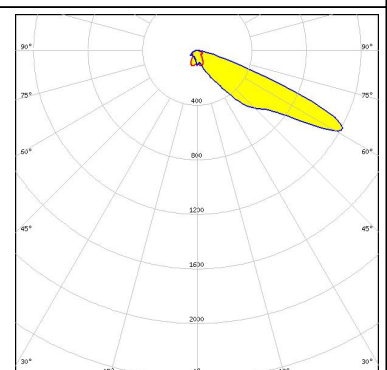
Protective plate, glass



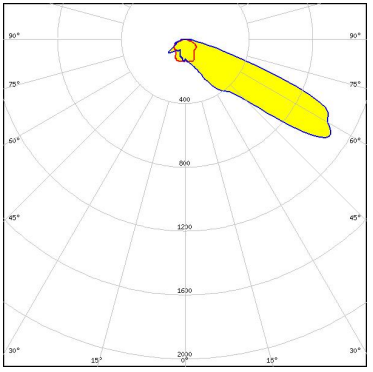
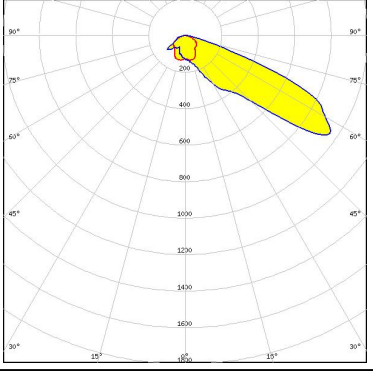
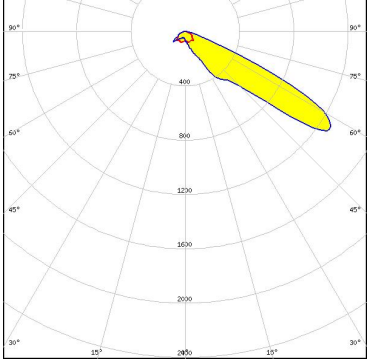
#### SAMSUNG

LED LH351B  
 FWHM / FWTM Asymmetric  
 Efficiency 75 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



#### PHOTOMETRIC DATA (SIMULATED):

<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED: SEOUL DC 5050 6V</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 90 %</p> <p>Peak intensity: 1.1 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p><b>SEOUL SEMICONDUCTOR</b></p> <p>LED: SEOUL DC 5050 6V</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 78 %</p> <p>Peak intensity: 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>SEOUL SEMICONDUCTOR</b></p> <p>LED: Z8Y22</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 78 %</p> <p>Peak intensity: 1.3 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p> <p>Protective plate, glass</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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