

## STRADA-2X2-TF

Narrow forward throw beam optimized for European tunnels

### SPECIFICATION:

Dimensions	50.0 x 50.0 mm
Height	8.7 mm
Fastening	screw
ROHS compliant	yes ⓘ

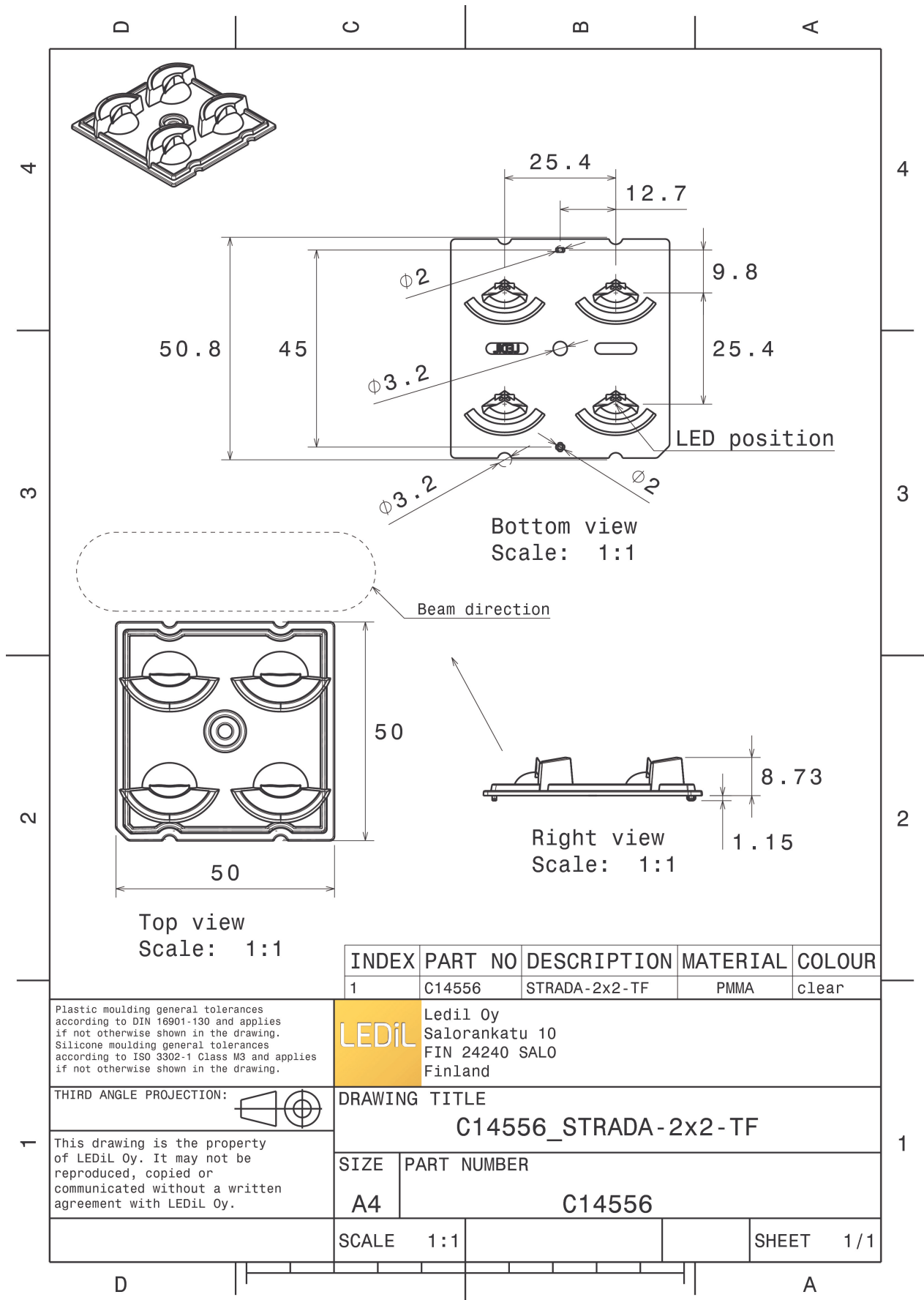


### MATERIALS:

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


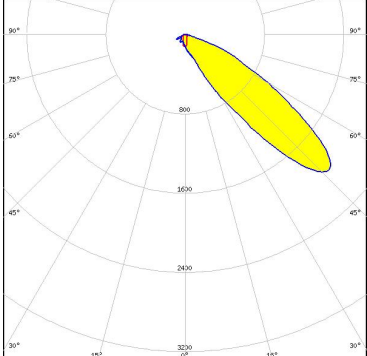

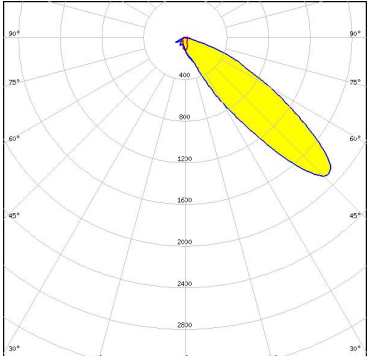

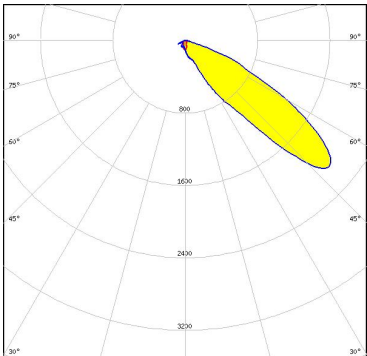

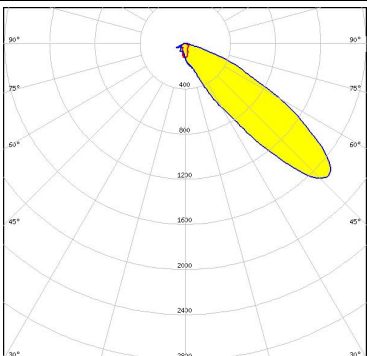
### ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C14556_STRADA-2X2-TF » Box size: 480 x 280 x 300 mm	800	160	160	6.5

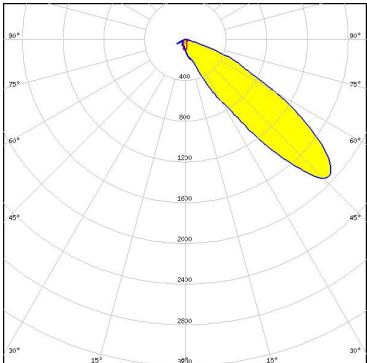
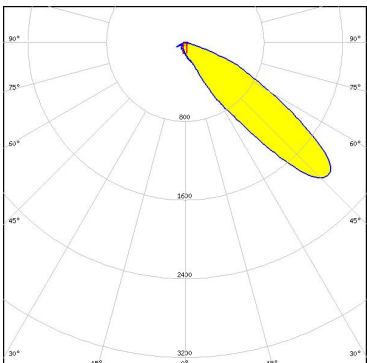
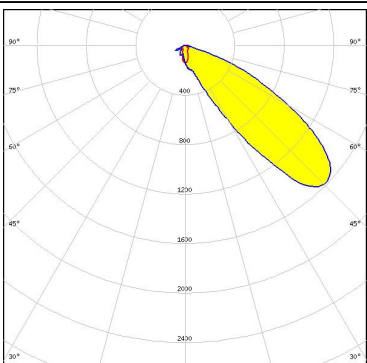
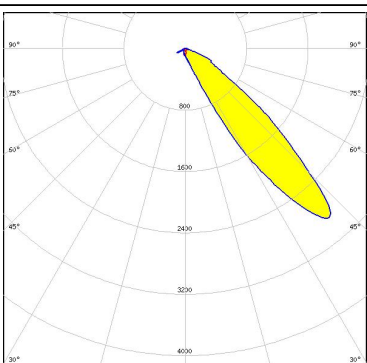


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):

<p></p> <p>LED QUICK FLUX XTP 2x4 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 2 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p></p> <p>LED QUICK FLUX XTP 2x6 xxx LS G5</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.9 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 Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p></p> <p>LED XP-G3</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.7 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

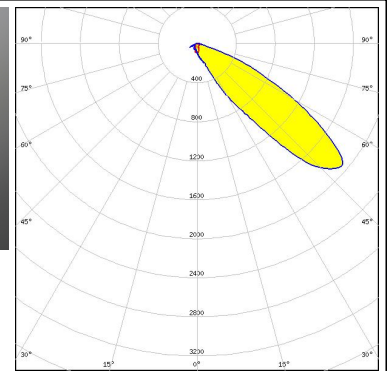
#### OPTICAL RESULTS (MEASURED):

<p><b>LUMILEDS</b></p> <p>LED LUXEON T</p> <p>FWHM / FWTM Asymmetric</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>	
<p><b>MST</b> <i>Your solutions</i></p> <p>LED RecLED 122x50mm 1900lm 730 2x4 Opt G1</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 97 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p><b>NICHIA</b></p> <p>LED NVSW3x9A</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</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>NICHIA</b></p> <p>LED NVSxE21A</p> <p>FWHM / FWTM Asymmetric</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

#### OPTICAL RESULTS (MEASURED):

### OSRAM

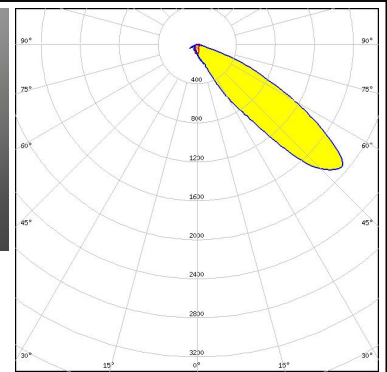
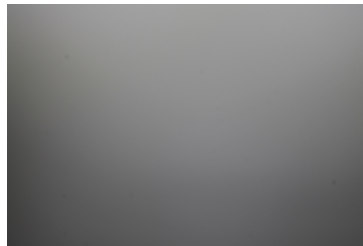
LED PrevaLED Brick HP 2x8  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OSRAM

Opto Semiconductors

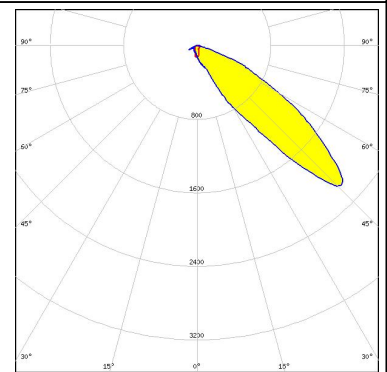
LED OSLOM Square CSSRM2/CSSRM3  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OSRAM

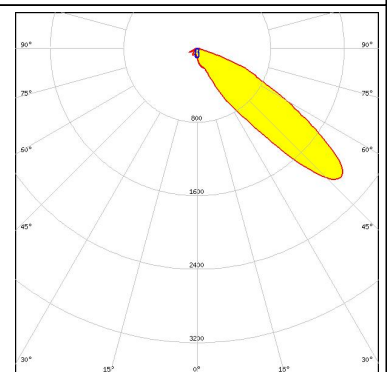
Opto Semiconductors

LED OSLOM Square PC  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### PHILIPS

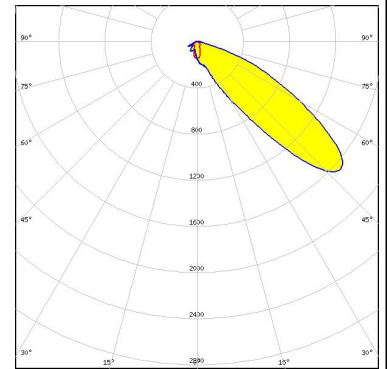
LED Fortimo FastFlex LED 2x8 DA G4  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

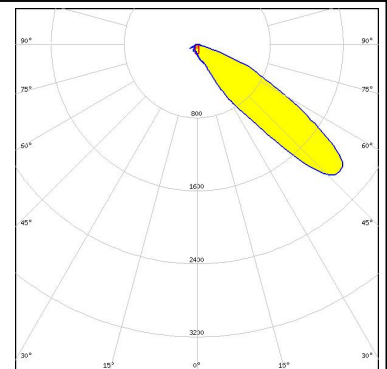
### PHILIPS

LED Fortimo FastFlex LED 2x8 DA G4+  
 FWHM / FWTM Asymmetric  
 Efficiency 97 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



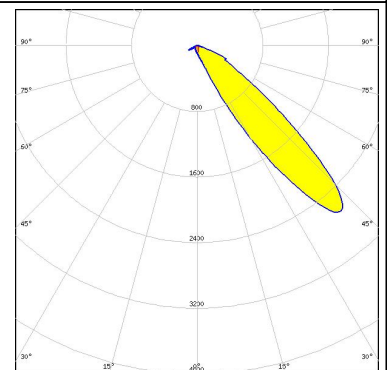
### PHILIPS

LED Fortimo FastFlex LED 2x8 DA G5  
 FWHM / FWTM Asymmetric  
 Efficiency 97 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



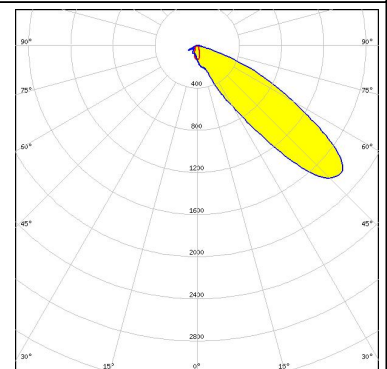
### SAMSUNG

LED HiLOM RC12 Z (LH181B)  
 FWHM / FWTM Asymmetric  
 Efficiency 99 %  
 Peak intensity 2.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### SAMSUNG

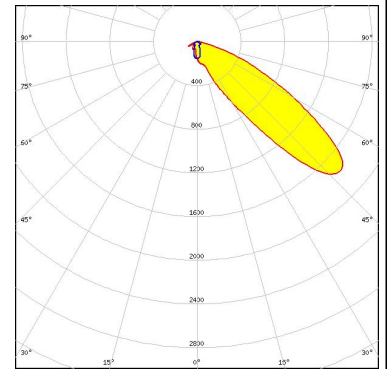
LED HiLOM RH12 Z (LH351C)  
 FWHM / FWTM Asymmetric  
 Efficiency 97 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

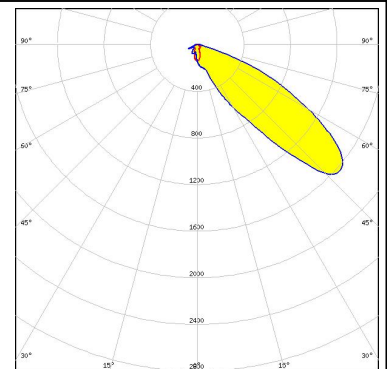
### SAMSUNG

LED HiLOM RH16 (LH351C)  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.8 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:

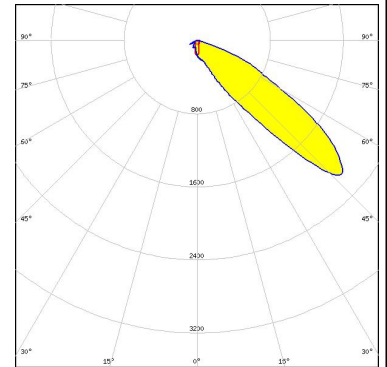


### SAMSUNG

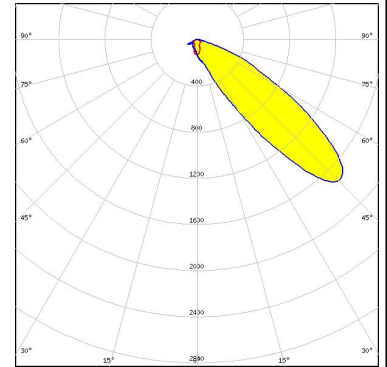
LED LH351B  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.6 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



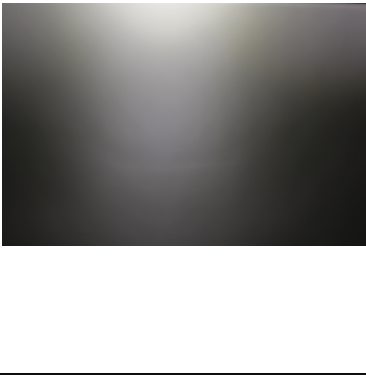
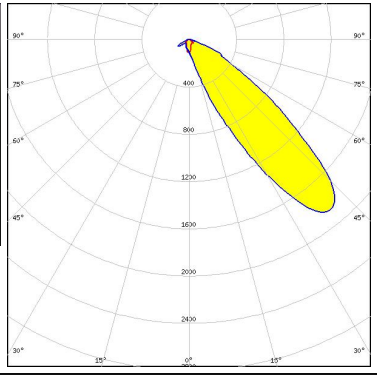

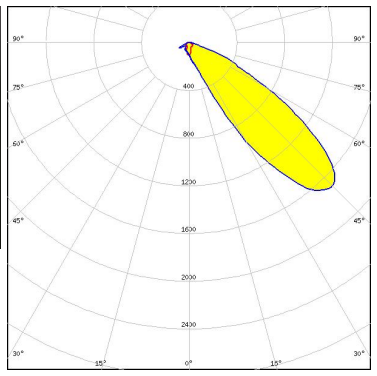

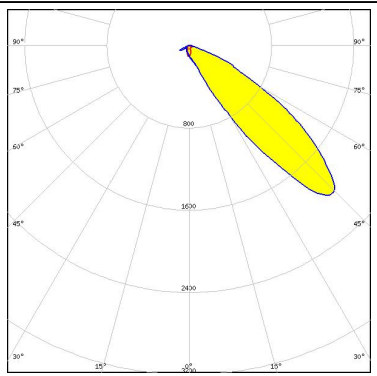
LED LED-Pa-L15c2W11c2-xxx-C050-01  
 FWHM / FWTM Asymmetric  
 Efficiency 97 %  
 Peak intensity 2.2 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEMI-LED  
 LED Z5M3  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.7 cd/m  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OPTICAL RESULTS (MEASURED):

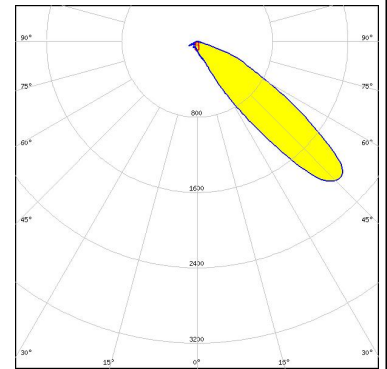
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22 FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>SEOL</b> SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM / FWTM Asymmetric Efficiency 94 % Peak intensity 1.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>TOSHIBA</b> Leading Innovation &gt;&gt;&gt;</p> <p>LED TL1L4 FWHM / FWTM Asymmetric Efficiency 91 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p><b>TRIDONIC</b></p> <p>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:</p>		



#### OPTICAL RESULTS (MEASURED):

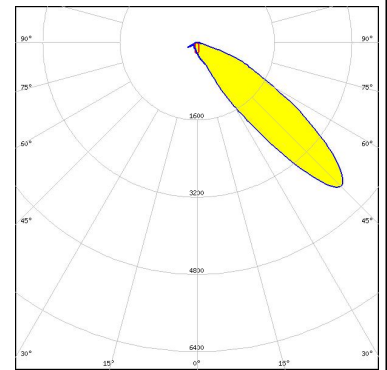
#### TRIDONIC

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:



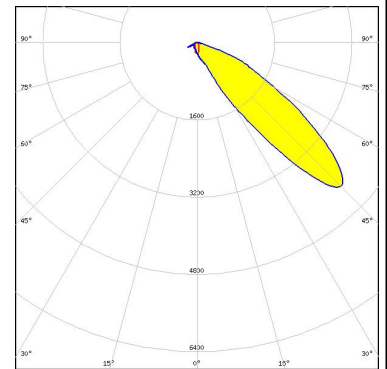
#### TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



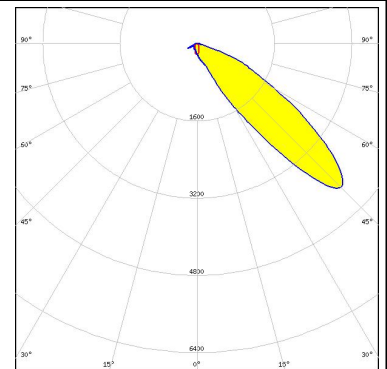
#### TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### TRIDONIC

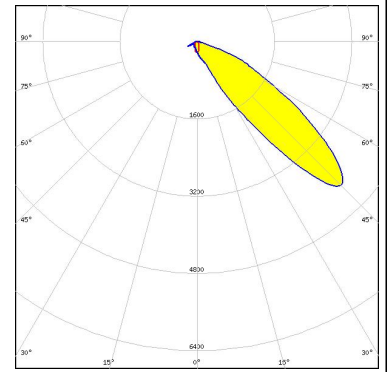
LED RLE G1 49x223mm 4000lm xxx EXC OTD  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 2.1 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

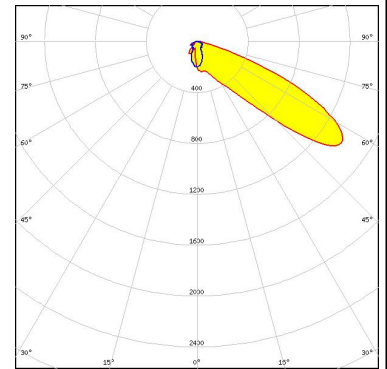
LED RLE G1 49x245mm 4000lm xxx EXC OTD  
FWHM / FWTM Asymmetric  
Efficiency 94 %  
Peak intensity 2.1 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



#### OPTICAL RESULTS (SIMULATED):

##### CREE LED

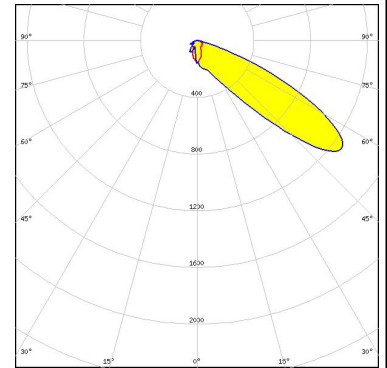
LED XP-G2 HE  
 FWHM / FWTM Asymmetric  
 Efficiency 91 %  
 Peak intensity 1.4 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



##### CREE LED

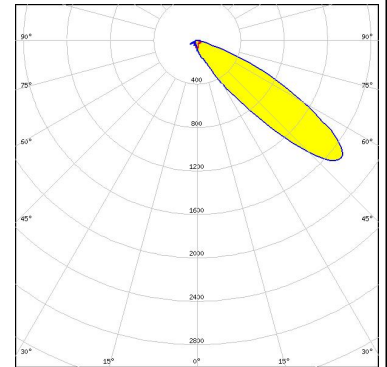
LED XP-G3  
 FWHM / FWTM Asymmetric  
 Efficiency 79 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



##### CREE LED

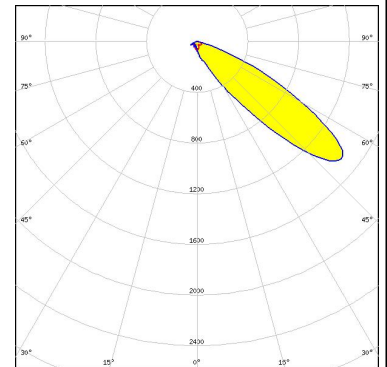
LED XT-E  
 FWHM / FWTM Asymmetric  
 Efficiency 92 %  
 Peak intensity 1.7 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



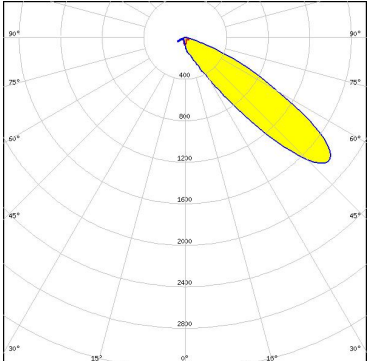
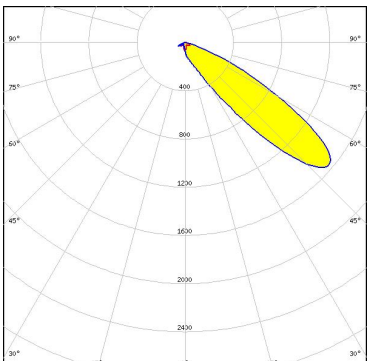
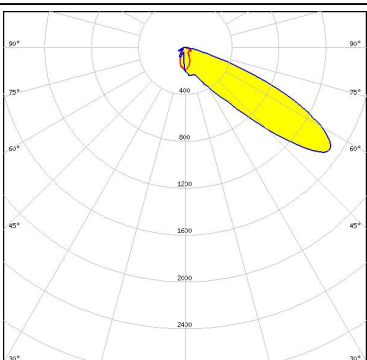
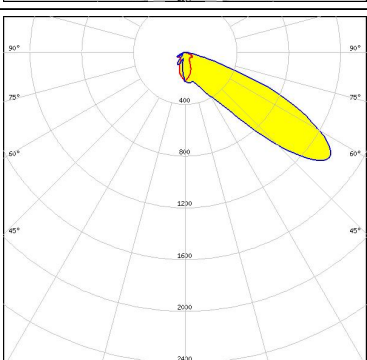
##### CREE LED

LED XT-E  
 FWHM / FWTM Asymmetric  
 Efficiency 78 %  
 Peak intensity 1.5 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



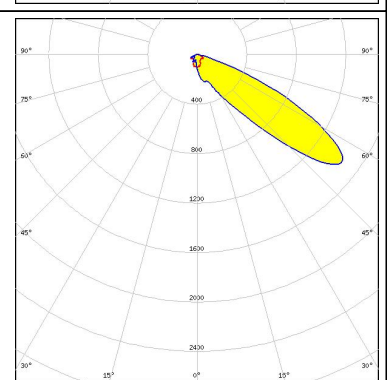
#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON 3030 2D (Round LES)</p> <p>FWHM / FWTM: Asymmetric</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><b>LUMILEDS</b></p> <p>LED: LUXEON 3030 2D (Round LES)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 80 %</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 style="background-color: #ADD8E6; padding: 2px; display: inline-block;">Protective plate, glass</p>	
<p><b>LUMILEDS</b></p> <p>LED: LUXEON HL2X</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 93 %</p> <p>Peak intensity: 1.5 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-D</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 94 %</p> <p>Peak intensity: 1.4 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

#### OPTICAL RESULTS (SIMULATED):

<p><b>LUMILEDS</b></p> <p>LED: LUXEON HL2X-D</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 80 %</p> <p>Peak intensity: 1.2 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> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 93 %</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><b>LUMILEDS</b></p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 94 %</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><b>LUMILEDS</b></p> <p>LED: LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)</p> <p>FWHM / FWTM: Asymmetric</p> <p>Efficiency: 80 %</p> <p>Peak intensity: 1.2 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p> <p>Protective plate, glass</p>	

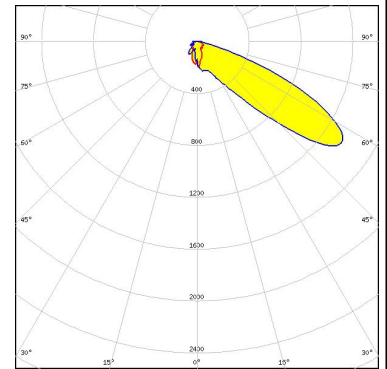
### OPTICAL RESULTS (SIMULATED):

<p><b>NICHIA</b></p> <p>LED: NVSxx19B/NVSxx19C            FWHM / FWTM: Asymmetric            Efficiency: 92 %            Peak intensity: 1.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>NICHIA</b></p> <p>LED: NWSx229A            FWHM / FWTM: Asymmetric            Efficiency: 92 %            Peak intensity: 1.2 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSCONIQ P 3737 Flat            FWHM / FWTM: Asymmetric            Efficiency: 94 %            Peak intensity: 1.6 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>	
<p><b>OSRAM</b> Opto Semiconductors</p> <p>LED: OSOLON Square CSSRM2/CSSRM3            FWHM / FWTM: Asymmetric            Efficiency: 84 %            Peak intensity: 1.5 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p> <p style="background-color: #ADD8E6; padding: 5px; display: inline-block;">Protective plate, glass</p>	

#### OPTICAL RESULTS (SIMULATED):

### PHILIPS

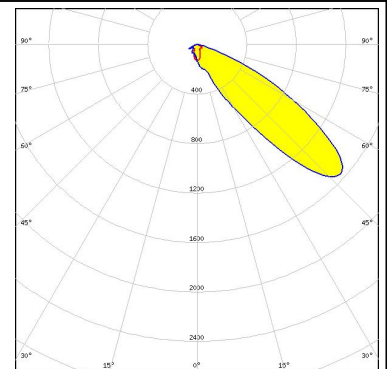
LED	Fortimo FastFlex LED 2x8 DAX G4
FWHM / FWTM	Asymmetric
Efficiency	93 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



### SAMSUNG

LED	HiLOM RH12 Z (LH351C)
FWHM / FWTM	Asymmetric
Efficiency	85 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

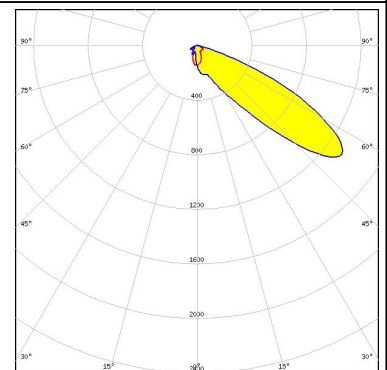
Protective plate, glass



### SAMSUNG

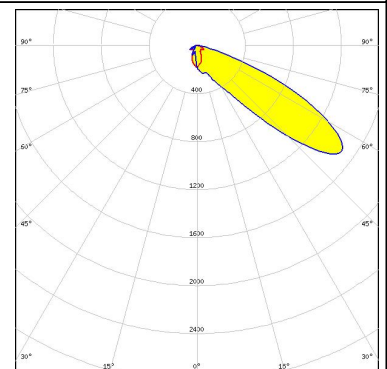
LED	LH351B
FWHM / FWTM	Asymmetric
Efficiency	81 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

Protective plate, glass



### SAMSUNG

LED	LH351C
FWHM / FWTM	Asymmetric
Efficiency	94 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

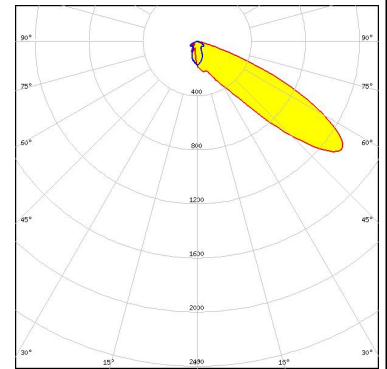


#### OPTICAL RESULTS (SIMULATED):

#### SAMSUNG

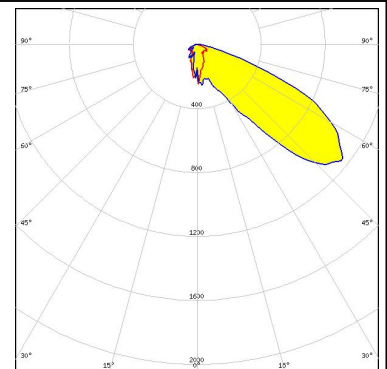
LED LH351C  
 FWHM / FWTM Asymmetric  
 Efficiency 83 %  
 Peak intensity 1.3 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

Protective plate, glass



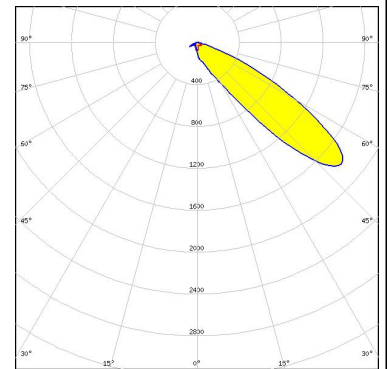
#### SAMSUNG

LED LH351D  
 FWHM / FWTM Asymmetric  
 Efficiency 88 %  
 Peak intensity 1.2 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



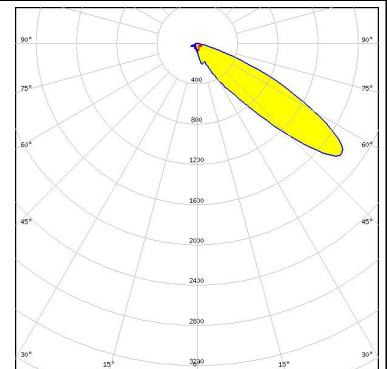
#### SAMSUNG

LED LM301B  
 FWHM / FWTM Asymmetric  
 Efficiency 95 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



SEOUL SEMICONDUCTOR

LED Z5M1/Z5M2  
 FWHM / FWTM Asymmetric  
 Efficiency 94 %  
 Peak intensity 1.8 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:





#### 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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