

## FLORENCE-Z90

~90° wide beam. Ideal for retail and industrial lighting. Can be used for general office lighting with shade.

### TECHNICAL SPECIFICATIONS:

Dimensions	61.0 x 286.0 mm
Height	8.5 mm
Fastening	screw
ROHS compliant	yes ⓘ

### MATERIAL SPECIFICATIONS:

Component	Type
FLORENCE-Z90	Linear lens

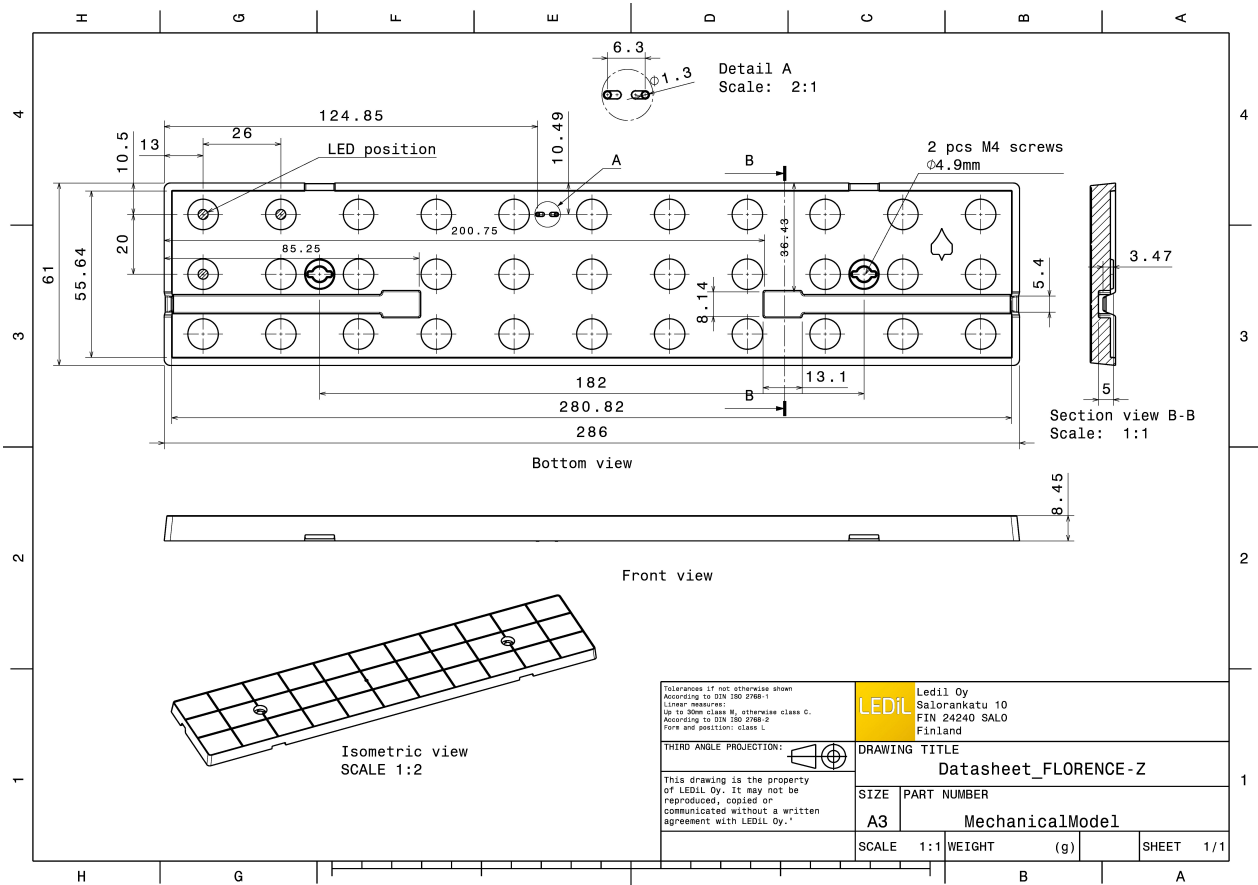


Material	Colour	Finish
PMMA	clear	

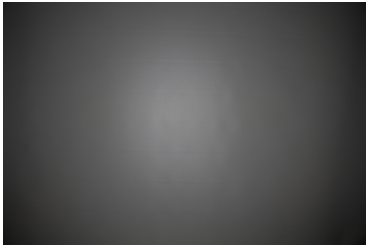
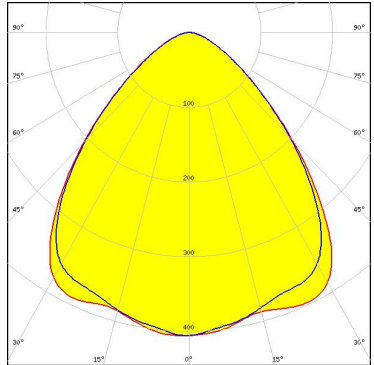
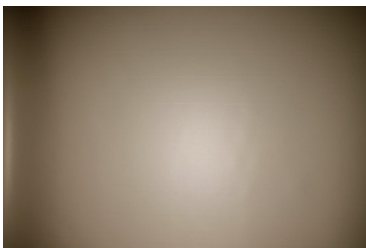
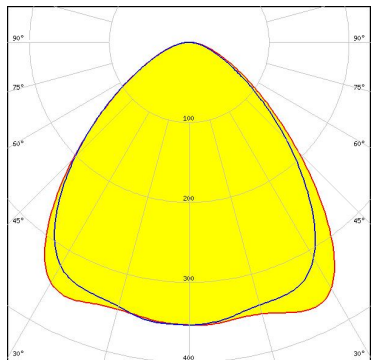
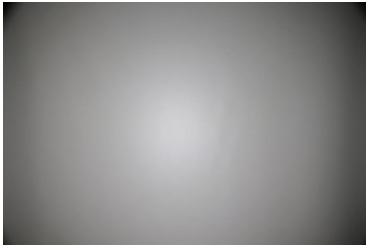
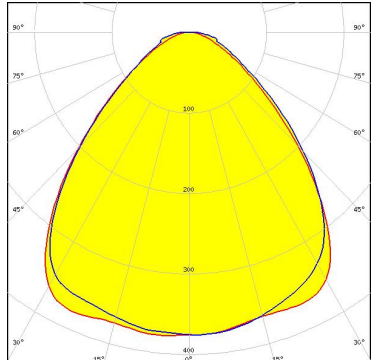
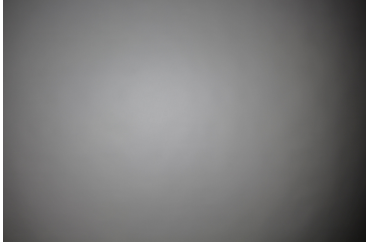
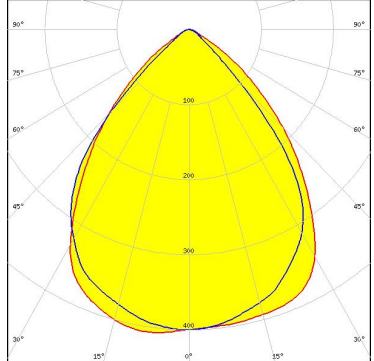
### ORDERING INFORMATION:

Component
F13853_FLORENCE-Z90
» Box size: 398 x 298 x 140 mm

Qty in box	MOQ	MPQ	Box weight (kg)
72	18	6	7.8



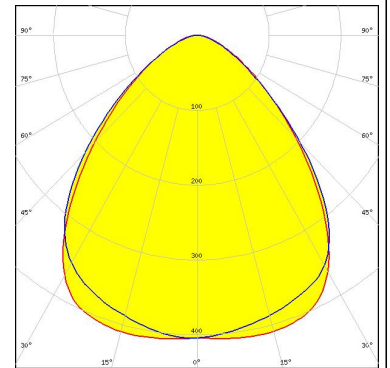
#### PHOTOMETRIC DATA (MEASURED):

<p><b>COMET ELECTRONICS</b></p> <p>LED TRIDINO R3 8x0 1100 1ft HV            FWHM 92.0°            Efficiency 87 %            Peak intensity 0.410 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>CREE</b></p> <p>LED XH-B/G            FWHM 95.0°            Efficiency 82 %            Peak intensity 0.370 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>LG Innotek</b></p> <p>LED LG 5630            FWHM 93.0°            Efficiency 87 %            Peak intensity 0.390 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>LG Innotek</b></p> <p>LED LG 6030            FWHM 83.0°            Efficiency 70 %            Peak intensity 0.400 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14592_FLORENCE-3R-SHD-BLK</p>		

#### PHOTOMETRIC DATA (MEASURED):

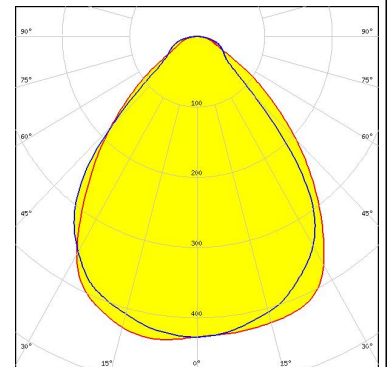
##### LG Innotek

LED LG 6030  
 FWHM 92.0°  
 Efficiency 88 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



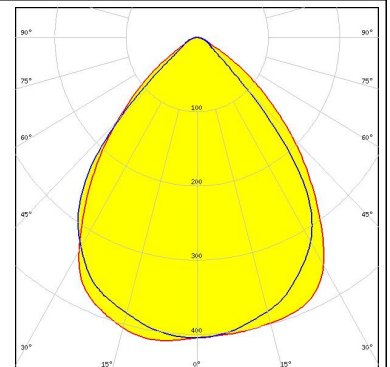
##### LG Innotek

LED LG 6030  
 FWHM 85.0°  
 Efficiency 84 %  
 Peak intensity 0.440 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14646\_FLORENCE-3R-SHD-WHT



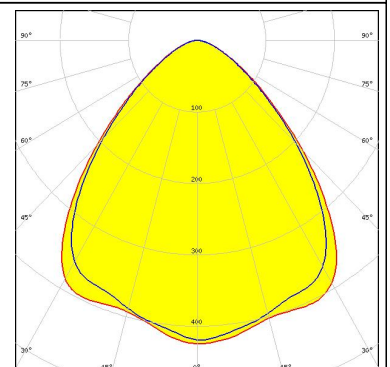
##### LG Innotek

LED LG 6030  
 FWHM 83.0°  
 Efficiency 72 %  
 Peak intensity 0.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:  
 C14453\_FLORENCE-3R-SHD-GR



##### LUMILEDS

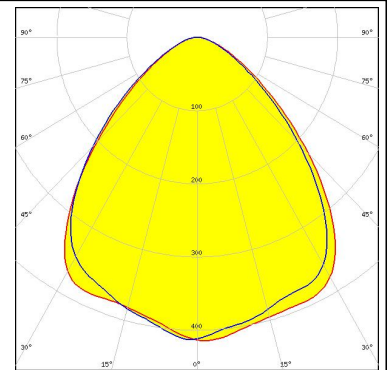
LED LUXEON 3030 2D (Round LES)  
 FWHM 91.0°  
 Efficiency 87 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

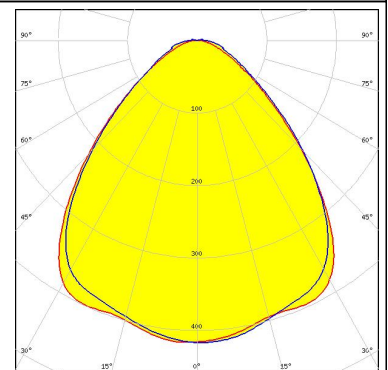
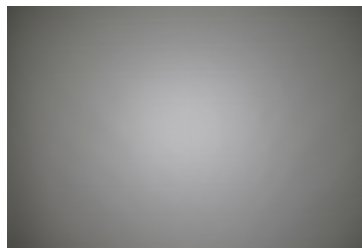
##### LUMILEDS

LED LUXEON 3535 2D  
 FWHM 92.0°  
 Efficiency 87 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



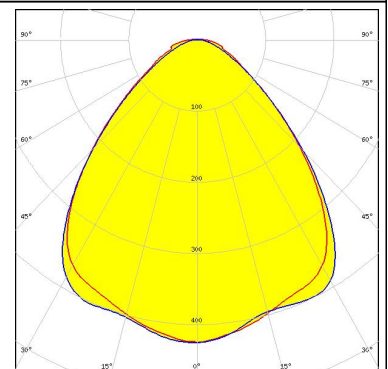
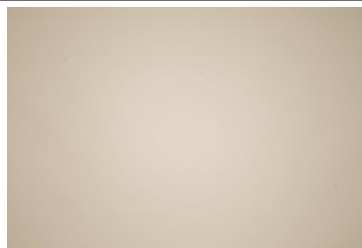
##### LUMILEDS

LED LUXEON 3535L HE  
 FWHM 92.0°  
 Efficiency 93 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



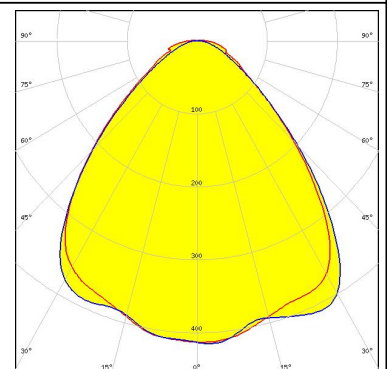
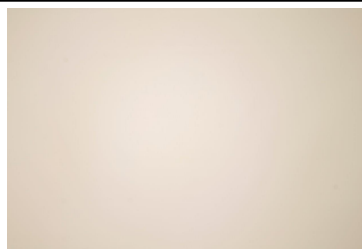
##### LUMILEDS

LED LUXEON XR-3535L (L202 - xxxx033C30001)  
 FWHM 91.0°  
 Efficiency 93 %  
 Peak intensity 0.430 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


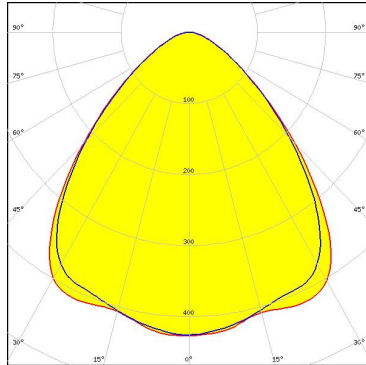
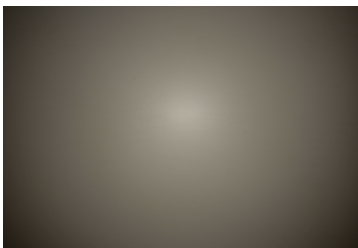
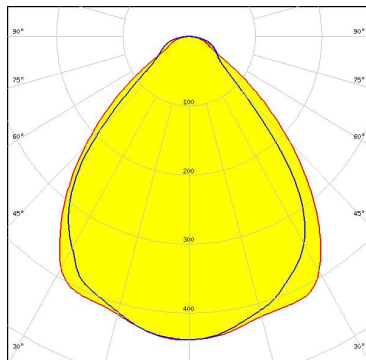

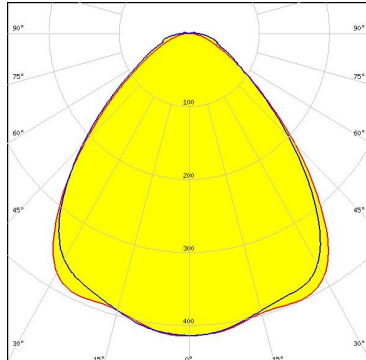
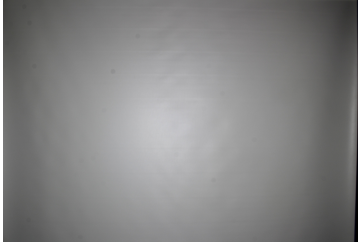
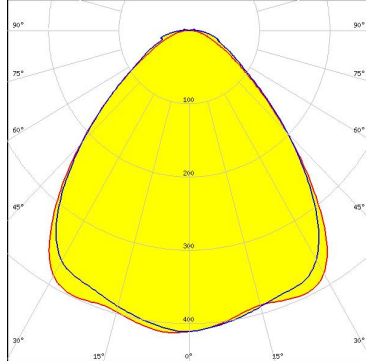


##### LUMINUS

LED MP-2016  
 FWHM 90.0°  
 Efficiency 91 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



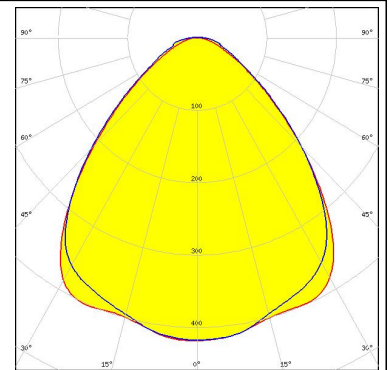
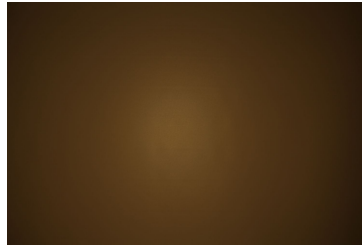
#### PHOTOMETRIC DATA (MEASURED):

<p><b>NICHIA</b></p> <p>LED NF2x757D            FWHM 92.0°            Efficiency 90 %            Peak intensity 0.430 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>NICHIA</b></p> <p>LED NFSW757H            FWHM 90.0 + 83.0°            Efficiency 87 %            Peak intensity 0.439 cd/lm            LEDs/each optic 1            Light colour White            Required components:            C14646_FLORENCE-3R-SHD-WHT</p>		
<p><b>NICHIA</b></p> <p>LED NFSW757H            FWHM 91.0 + 90.0°            Efficiency 92 %            Peak intensity 0.415 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		
<p><b>OSRAM</b></p> <p>LED PL-BAR-G3 1100 280x55            FWHM 90.0°            Efficiency 92 %            Peak intensity 0.410 cd/lm            LEDs/each optic 1            Light colour White            Required components:</p>		

**PHOTOMETRIC DATA (MEASURED):**

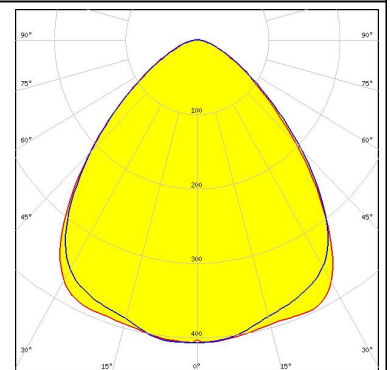
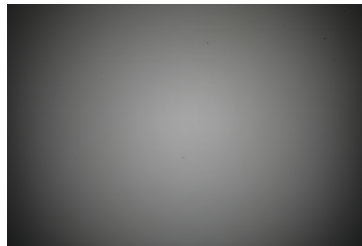
**OSRAM**

LED PLG2-BAR-1100-xxx-280x55-DC  
 FWHM 92.0°  
 Efficiency 92 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



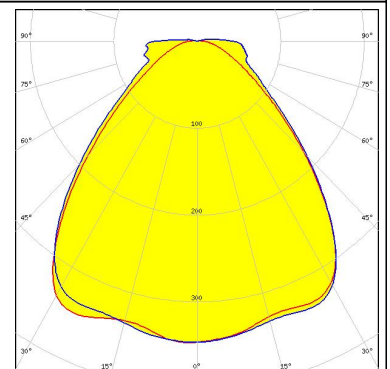
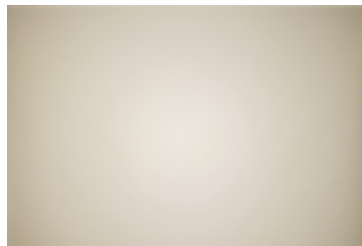
**OSRAM**  
Opto Semiconductors

LED Duris E5  
 FWHM 92.0°  
 Efficiency 88 %  
 Peak intensity 0.400 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



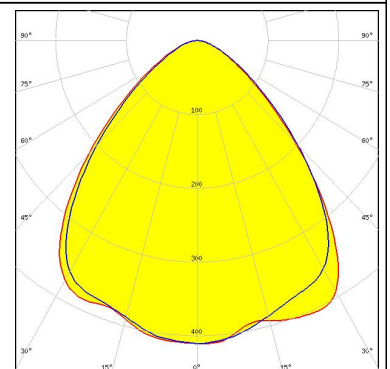
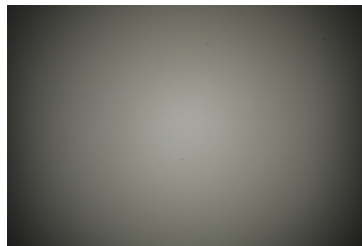
**OSRAM**  
Opto Semiconductors

LED Duris S2  
 FWHM 95.0°  
 Efficiency 90 %  
 Peak intensity 0.350 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



**OSRAM**  
Opto Semiconductors

LED Duris S5 (Single chip)  
 FWHM 91.0°  
 Efficiency 88 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

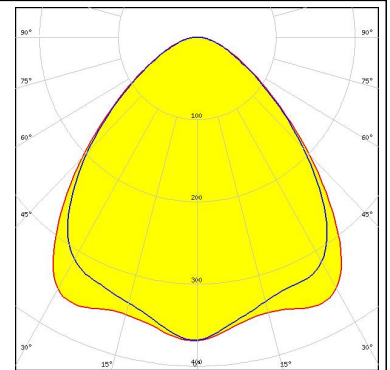


#### PHOTOMETRIC DATA (MEASURED):

#### OSRAM

Opto Semiconductors

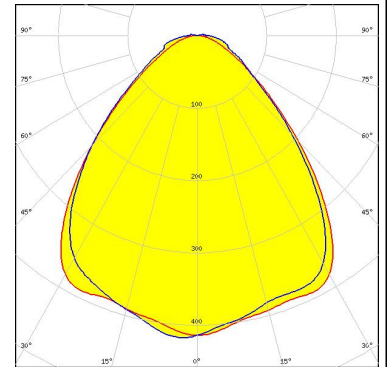
LED OSCONIQ P 2226  
 FWHM 94.0°  
 Efficiency 83 %  
 Peak intensity 0.370 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### OSRAM

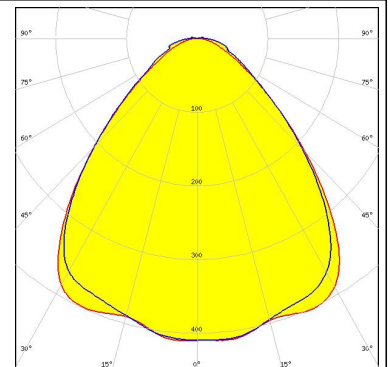
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
 FWHM 91.0°  
 Efficiency 93 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



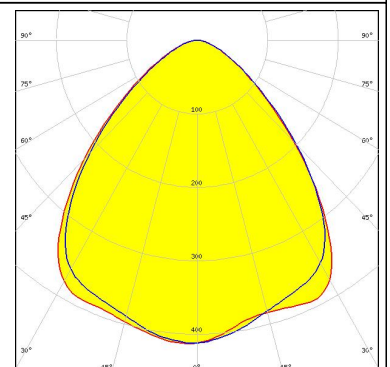
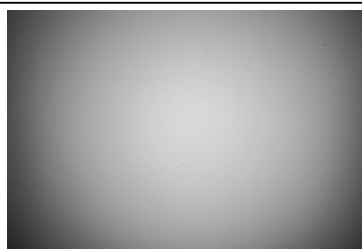
#### PHILIPS

LED Fortimo LED Line 1ft 650lm 3R HV4 & LV4  
 FWHM 90.0°  
 Efficiency 93 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### SAMSUNG

LED LM231 A/B  
 FWHM 91.0°  
 Efficiency 88 %  
 Peak intensity 0.414 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:

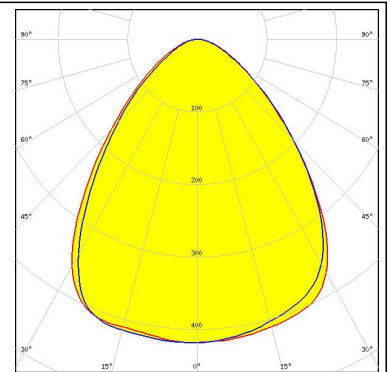




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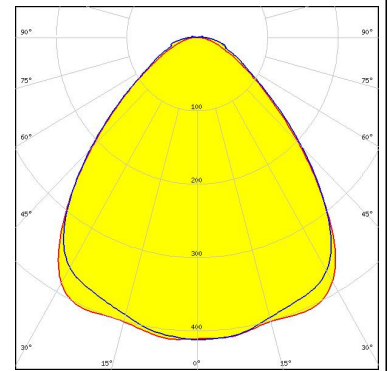
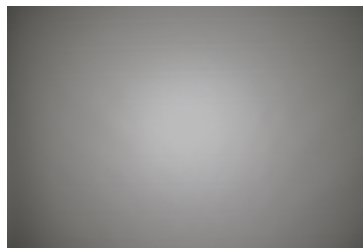
#### SAMSUNG

LED LM561B  
 FWHM 86.0°  
 Efficiency 85 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



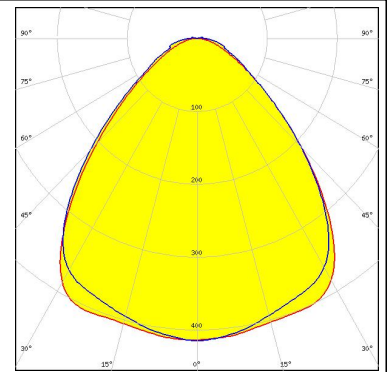
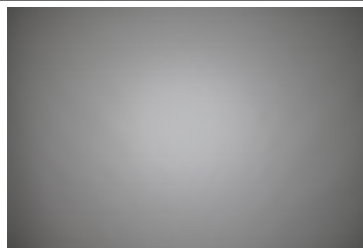
#### SAMSUNG

LED LM561B Plus  
 FWHM 92.0°  
 Efficiency 93 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



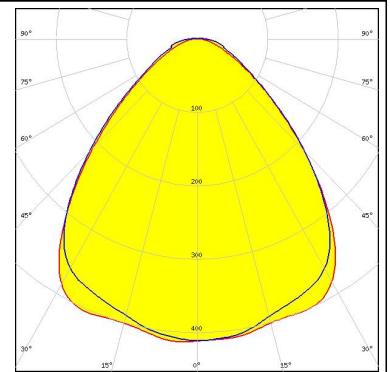
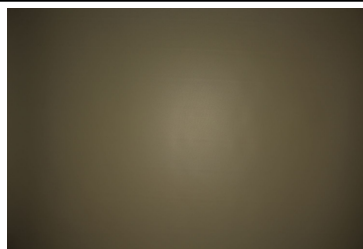
#### SAMSUNG

LED LM561C  
 FWHM 92.0°  
 Efficiency 93 %  
 Peak intensity 0.420 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:


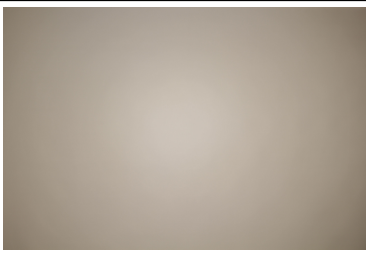
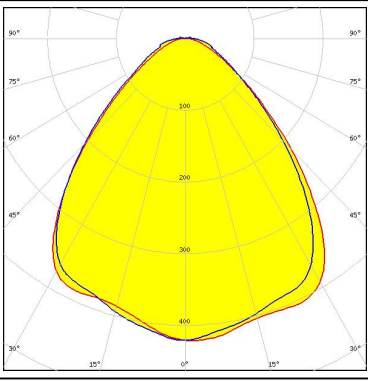


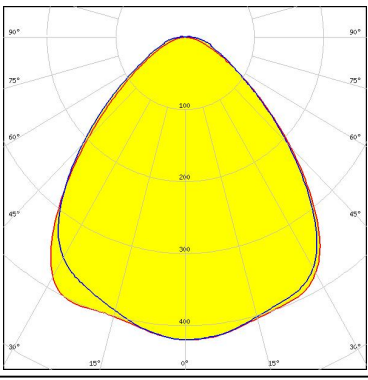

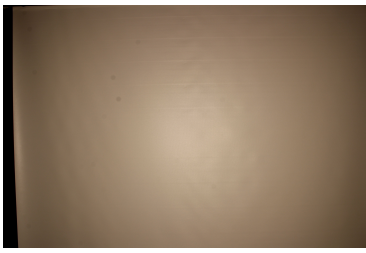
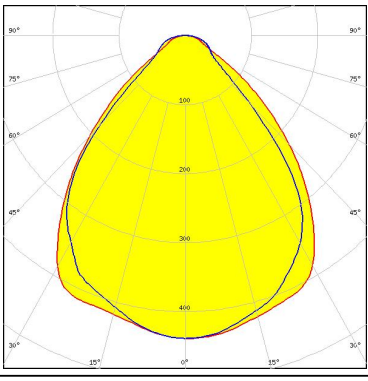


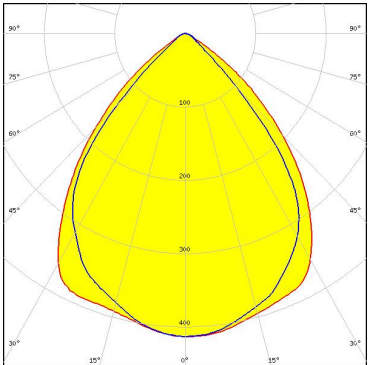


#### SAMSUNG


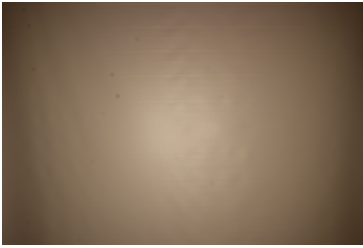
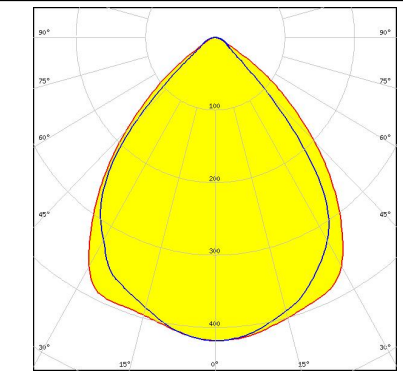

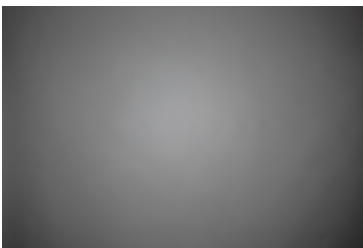
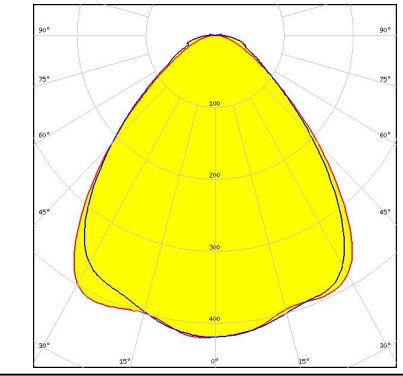
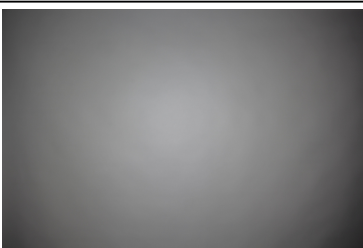
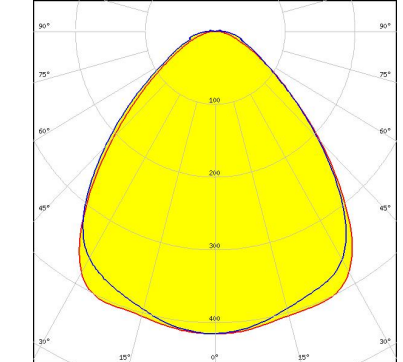
LED LT-R286A  
 FWHM 93.0°  
 Efficiency 93 %  
 Peak intensity 0.410 cd/lm  
 LEDs/each optic 1  
 Light colour White  
 Required components:



#### PHOTOMETRIC DATA (MEASURED):

<p> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL 3030            FWHM: 91.0°            Efficiency: 91 %            Peak intensity: 0.420 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL 5630C            FWHM: 90.0°            Efficiency: 91 %            Peak intensity: 0.420 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:</p>		
<p> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL 5630C            FWHM: 89.0 + 83.0°            Efficiency: 86 %            Peak intensity: 0.440 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:            C14646_FLORENCE-3R-SHD-WHT</p>		
<p> SEOL SEMICONDUCTOR</p> <p>LED: SEOUL 5630C            FWHM: 87.0 + 81.0°            Efficiency: 71 %            Peak intensity: 0.410 cd/lm            LEDs/each optic: 1            Light colour: White            Required components:            C14592_FLORENCE-3R-SHD-BLK</p>		

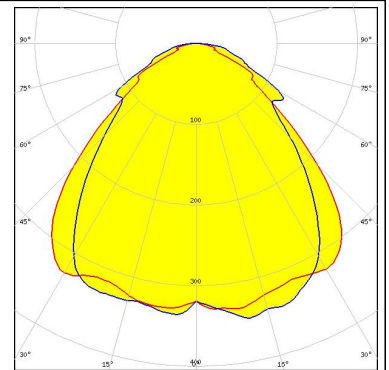
**PHOTOMETRIC DATA (MEASURED):**

<p> SEOUL SEMICONDUCTOR</p> <p>LED                SEOUL 5630C FWHM            87.0 + 81.0° Efficiency        74 % Peak intensity   0.420 cd/lm LEDs/each optic 1 Light colour     White Required components: C14453_FLORENCE-3R-SHD-GR</p>		
<p> SEOUL SEMICONDUCTOR</p> <p>LED                SEOUL DC 3030 FWHM            90.0° Efficiency        93 % Peak intensity   0.420 cd/lm LEDs/each optic 1 Light colour     White Required components:</p>		
<p><b>TRIDONIC</b></p> <p>LED                LLE G2 55x280mm 2000lm FWHM            91.0° Efficiency        93 % Peak intensity   0.420 cd/lm LEDs/each optic 1 Light colour     White Required components:</p>		

#### PHOTOMETRIC DATA (SIMULATED):

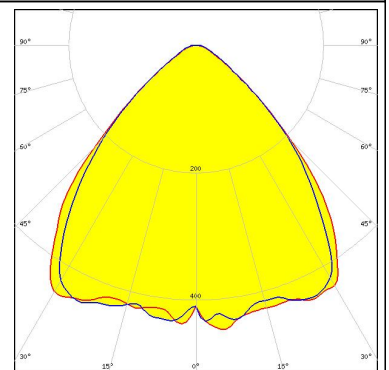
##### **LG Innotek**

LED LG 7030  
FWHM 91.0°  
Efficiency %  
Peak intensity 0.320 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



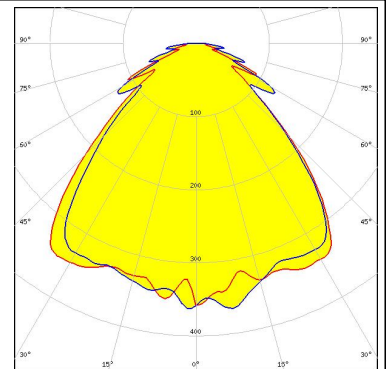
##### **LUMILEDS**

LED LUXEON 5050 Round LES  
FWHM 90.0°  
Efficiency 91 %  
Peak intensity 0.460 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



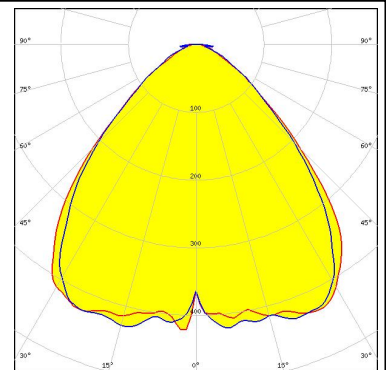
##### **NICHIA**

LED NF2x757G  
FWHM 90.0°  
Efficiency 80 %  
Peak intensity 0.370 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



##### **NICHIA**

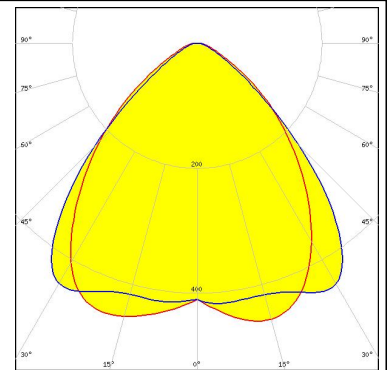
LED NFMW48xA  
FWHM 89.0°  
Efficiency 92 %  
Peak intensity 0.440 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



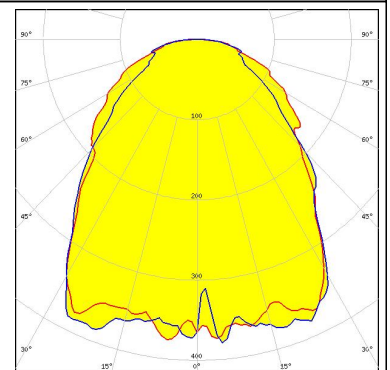
#### PHOTOMETRIC DATA (SIMULATED):



LED NFSx757G  
FWHM 86.0 + 90.0°  
Efficiency 92 %  
Peak intensity 0.458 cd/lm  
LEDs/each optic 2  
Light colour White  
Required components:

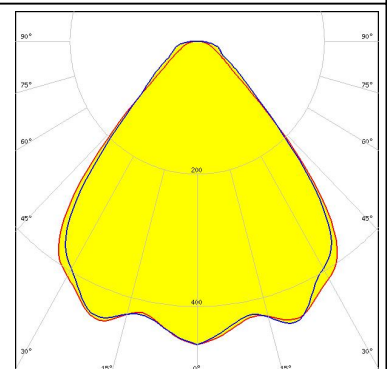


LED NVSxE21A  
FWHM 90.0°  
Efficiency 94 %  
Peak intensity 0.390 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



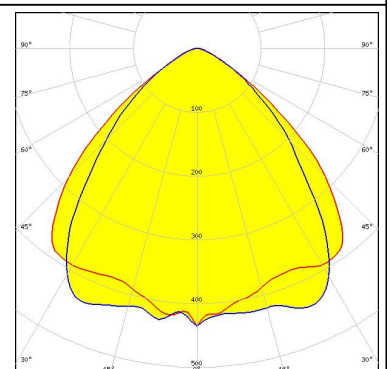
Opto Semiconductors

LED Duris E 2835  
FWHM 85.0°  
Efficiency 87 %  
Peak intensity 0.460 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



Opto Semiconductors

LED Duris E 2835  
FWHM 86.0 + 87.0°  
Efficiency 92 %  
Peak intensity 0.400 cd/lm  
LEDs/each optic 2  
Light colour White  
Required components:

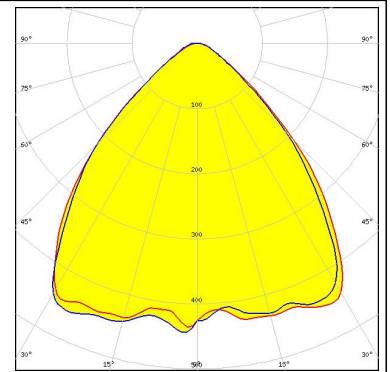


#### PHOTOMETRIC DATA (SIMULATED):

#### OSRAM

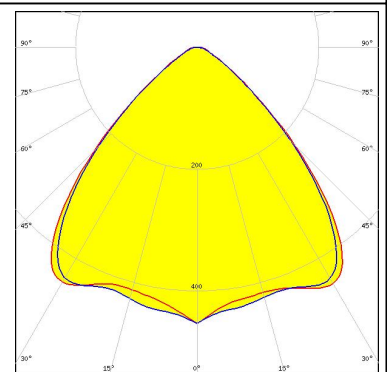
Opto Semiconductors

LED Duris S8  
FWHM 83.0°  
Efficiency 91 %  
Peak intensity 0.470 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



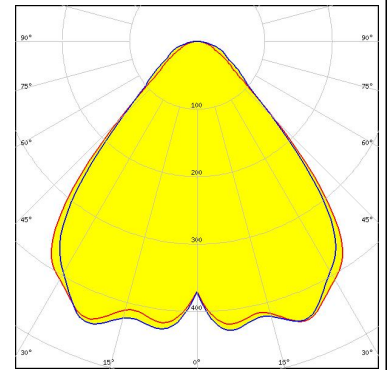
#### SAMSUNG

LED LM28xB Series  
FWHM 90.0°  
Efficiency 93 %  
Peak intensity 0.450 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



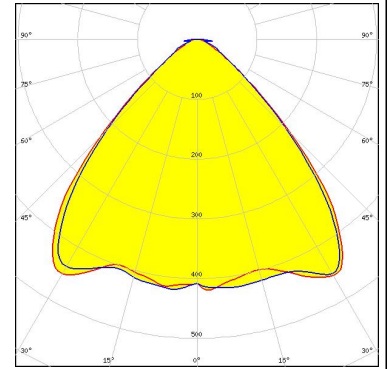
SEOUL SEMICONDUCTOR

LED SEOUL 5630D  
FWHM 83.0°  
Efficiency 84 %  
Peak intensity 0.450 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



SEOUL SEMICONDUCTOR

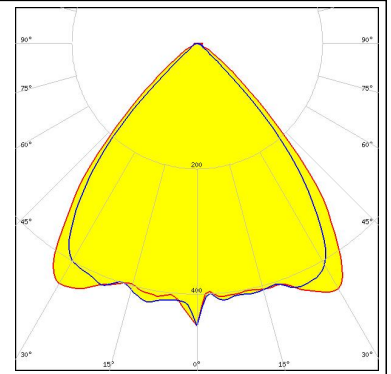
LED SEOUL DC 3030C  
FWHM 89.0°  
Efficiency 94 %  
Peak intensity 0.457 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:



## PHOTOMETRIC DATA (SIMULATED):

### TRIDONIC

LED LLE G2 55x280mm 2000lm  
FWHM 85.0 + 81.0°  
Efficiency 77 %  
Peak intensity 0.456 cd/lm  
LEDs/each optic 1  
Light colour White  
Required components:  
C14592\_FLORENCE-3R-SHD-BLK



#### 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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