

LINNEA-60

~60° + 90° beam optimized for 1.0 mm metal sheet or profile. Variant made from PC.

SPECIFICATION:

Dimensions	285.0 x 40.0 mm
Height	9.5 mm
Fastening	clips
ROHS compliant	yes ⓘ

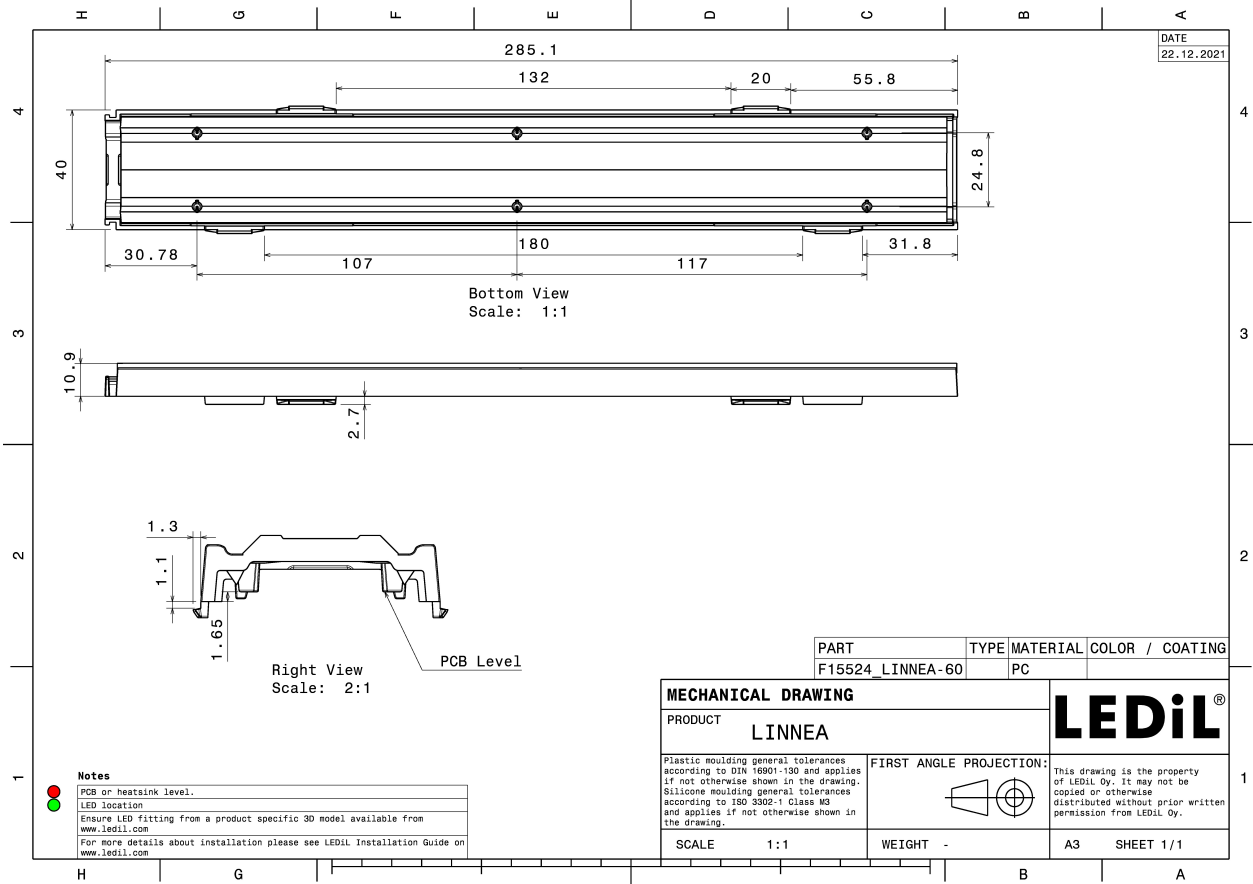
MATERIALS:

Component	Type	Material	Colour	Finish
LINNEA-60	Linear lens	PC	clear	

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
F15524_LINNEA-60 » Box size: 398 x 298 x 265 mm	153	36	36	8.3



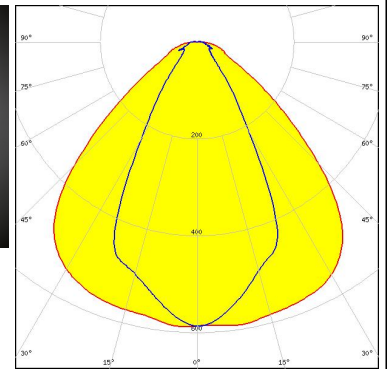
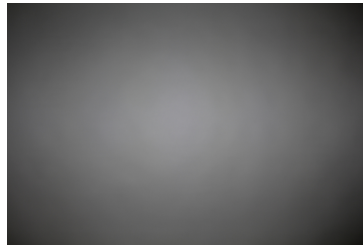


See also our general installation guide: www.ledil.com/installation_guide

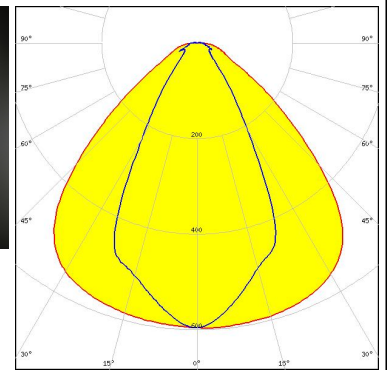
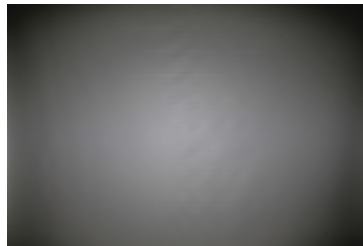
OPTICAL RESULTS (MEASURED):



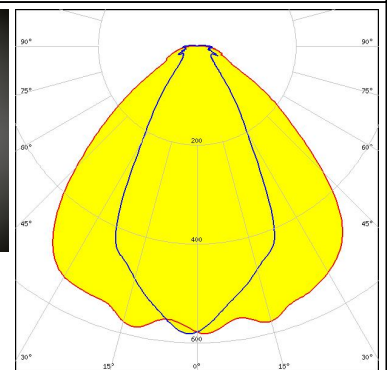
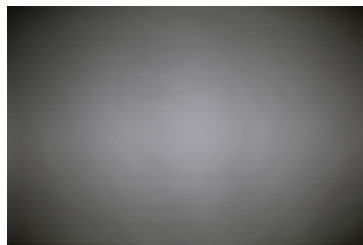
LED CALOSNU405-M7W1
 FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°
 Efficiency 84 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



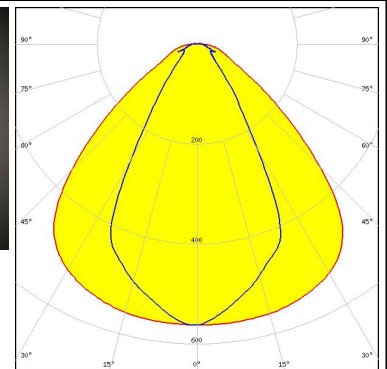
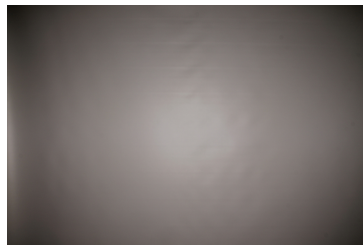
LED CALOSNU410-M7W1
 FWHM / FWTM 95.0 + 55.0° / 139.0 + 86.0°
 Efficiency 84 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




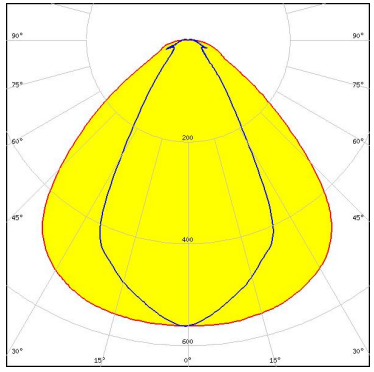
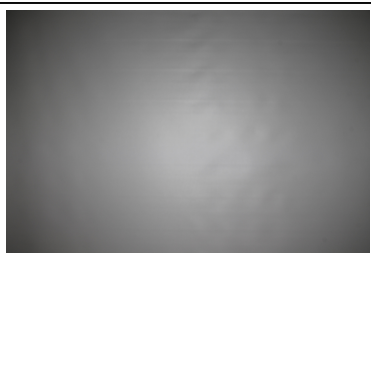
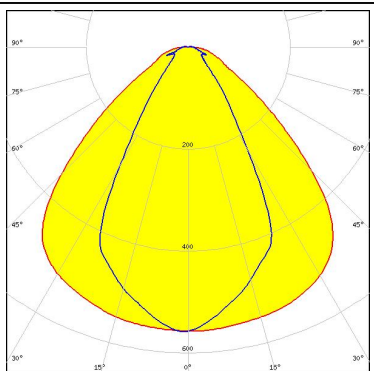
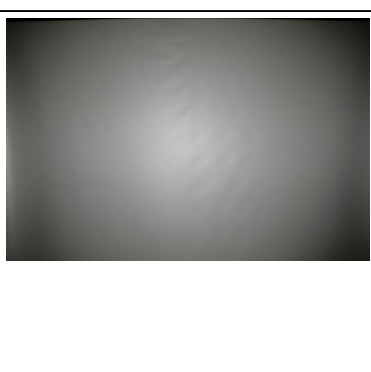
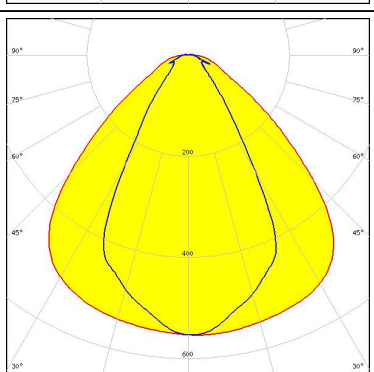
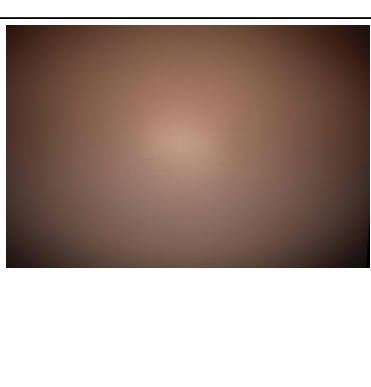
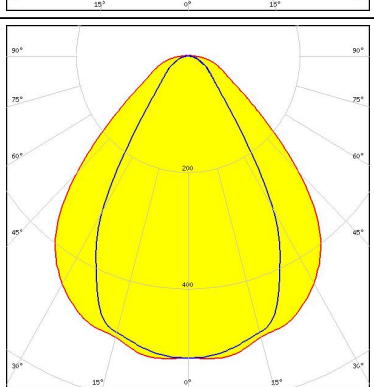
LED XP-E
 FWHM / FWTM 96.0 + 54.0° / 139.0 + 86.0°
 Efficiency 83 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED L-iC-282-827-865-011A
 FWHM / FWTM 97.0 + 58.0° / 142.0 + 91.0°
 Efficiency 84 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



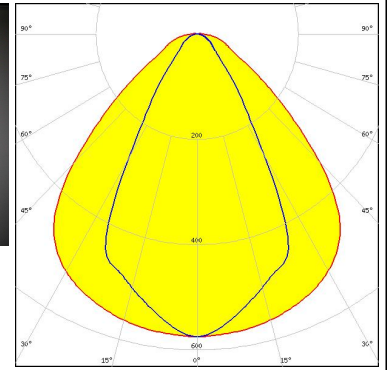
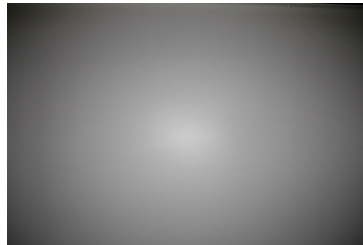
OPTICAL RESULTS (MEASURED):

<p>Helvar</p> <p>LED LP-282-840-009A 60/300 FWHM / FWTM 97.0 + 58.0° / 142.0 + 91.0° Efficiency 84 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>Helvar</p> <p>LED LS-282-840-011A FWHM / FWTM 97.0 + 58.0° / 145.0 + 91.0° Efficiency 84 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>Helvar</p> <p>LED LX-282-840-023A FWHM / FWTM 96.0 + 59.0° / 144.0 + 92.0° Efficiency 85 % Peak intensity 0.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMITRONIX[®] <small>High-Performance LED-Technologies & Solutions</small></p> <p>LED LinearZ 280-112 Circadian TW FWHM / FWTM 92.0 + 64.0° / 147.0 + 104.0° Efficiency 85 % Peak intensity 0.5 cd/lm LEDs/each optic 1 Light colour Tunable White Required components:</p>		

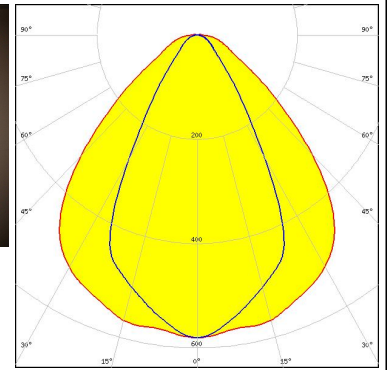
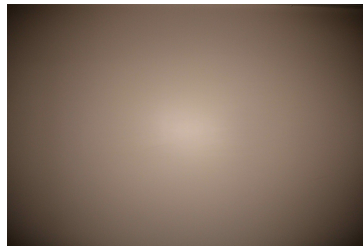
OPTICAL RESULTS (MEASURED):



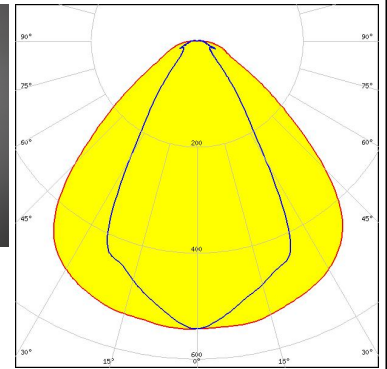
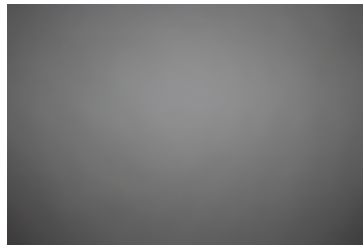
LED LinearZ 280-26
FWHM / FWTM 96.0 + 59.0° / 145.0 + 92.0°
Efficiency 85 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



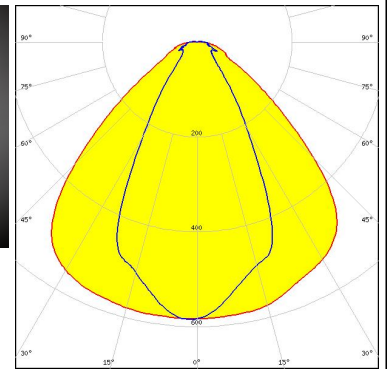
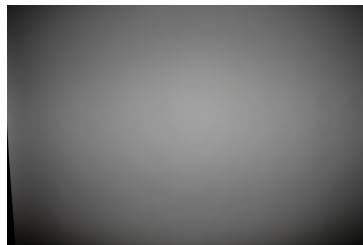
LED LinearZ 280-40 TW
FWHM / FWTM 94.0 + 59.0° / 142.0 + 92.0°
Efficiency 85 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour Tunable White
Required components:




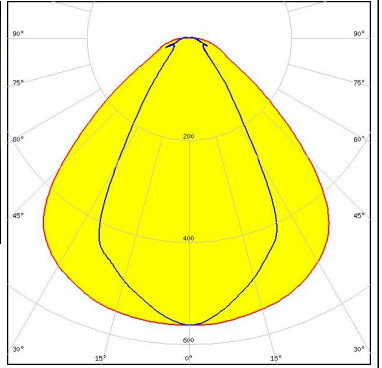

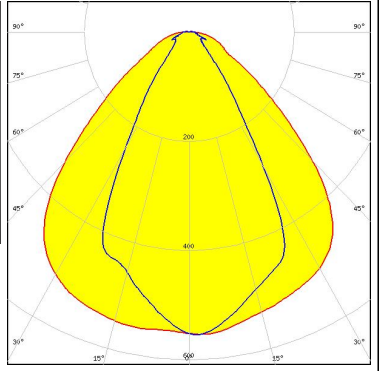
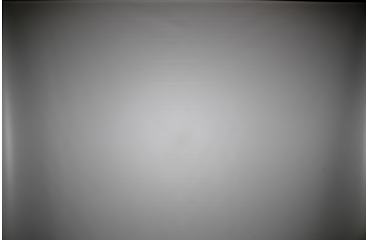
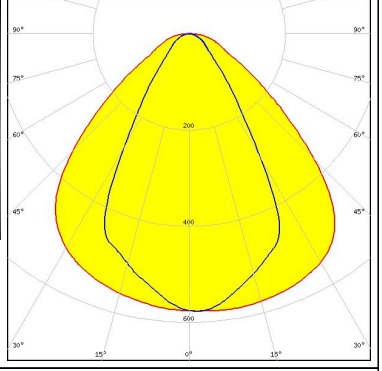
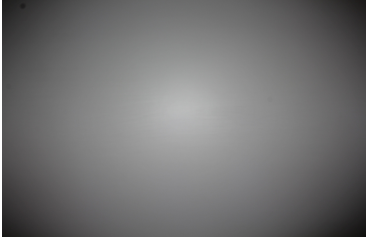
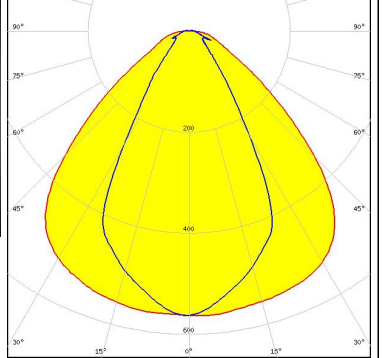
LED LinLED 280x24mm 1100lm 830 2C 30V LINNEA-GC G1
FWHM / FWTM 96.0 + 59.0° / 143.0 + 89.0°
Efficiency 85 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED NF2x757G
FWHM / FWTM 96.0 + 54.0° / 141.0 + 87.0°
Efficiency 84 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:



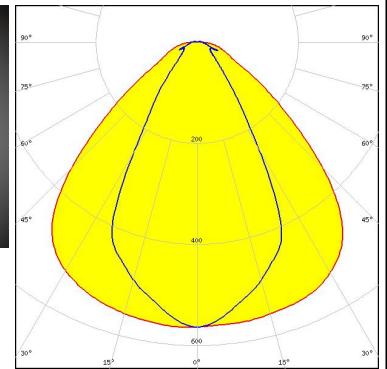
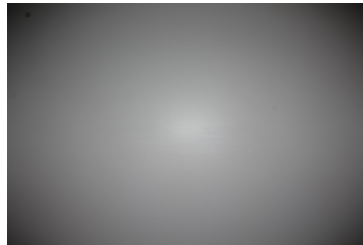
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NFSW757H</p> <p>FWHM / FWTM 96.0 + 60.0° / 145.0 + 93.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>NICHIA</p> <p>LED NFSx757G</p> <p>FWHM / FWTM 96.0 + 59.0° / 145.0 + 88.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>OSRAM</p> <p>LED PL-LIN-IND-Z1 2800 560x24</p> <p>FWHM / FWTM 96.0 + 60.0° / 144.0 + 96.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>OSRAM</p> <p>LED PL-LIN-Z5 1100 280x20</p> <p>FWHM / FWTM 97.0 + 58.0° / 143.0 + 91.0°</p> <p>Efficiency 84 %</p> <p>Peak intensity 0.6 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

OSRAM

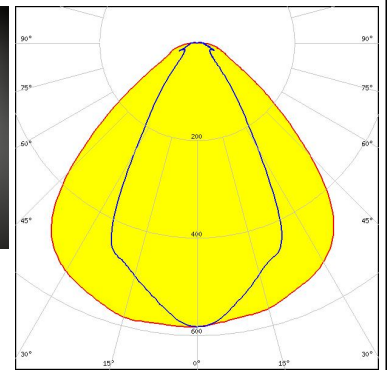
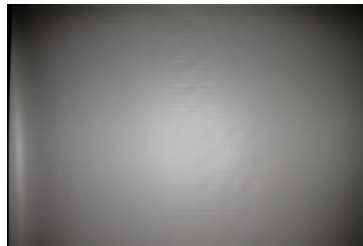
LED PL-LIN-Z5 2000 280x20
 FWHM / FWTM 97.0 + 58.0° / 143.0 + 91.0°
 Efficiency 84 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

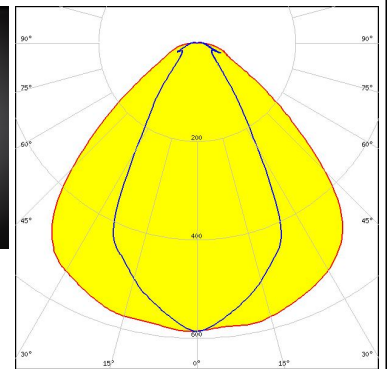
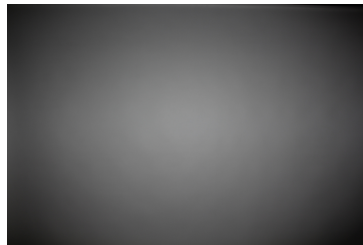
LED Duris S5 (2 chip)
 FWHM / FWTM 95.0 + 57.0° / 140.0 + 88.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

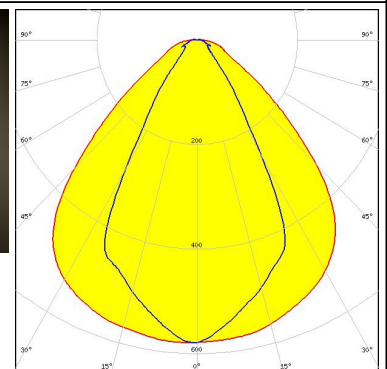
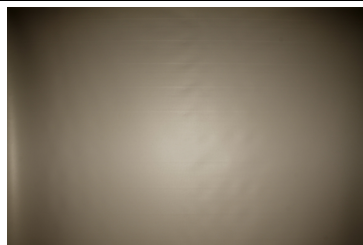
Opto Semiconductors

LED Duris S5 (Single chip)
 FWHM / FWTM 96.0 + 57.0° / 143.0 + 91.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHILIPS

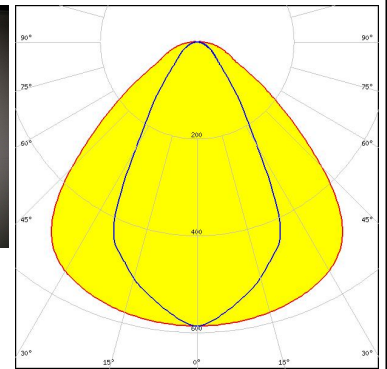
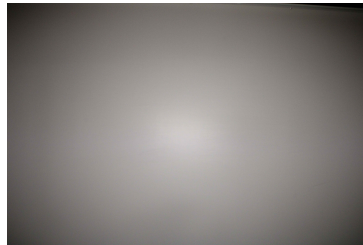
LED Fortimo LED Strip 1ft 1100lm FC HV4 & LV4
 FWHM / FWTM 95.0 + 59.0° / 141.0 + 88.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

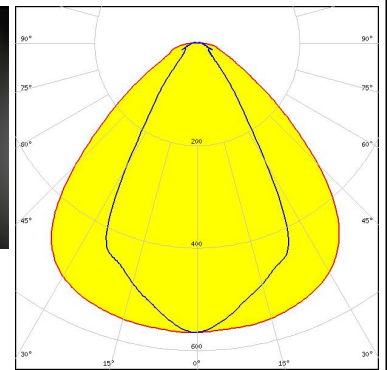
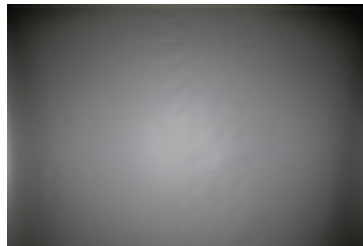
PHILIPS

LED Fortimo LED Strip 1ft 1100lm FC HV5 & LV5
 FWHM / FWTM 97.0 + 58.0° / 145.0 + 95.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



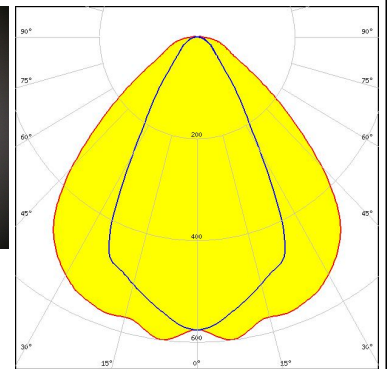
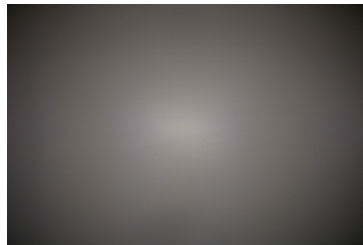
PHILIPS

LED Fortimo LED Strip 1ft 650lm FC HV4 & LV4
 FWHM / FWTM 95.0 + 59.0° / 139.0 + 89.0°
 Efficiency 84 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



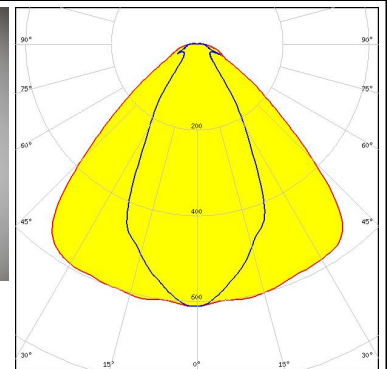
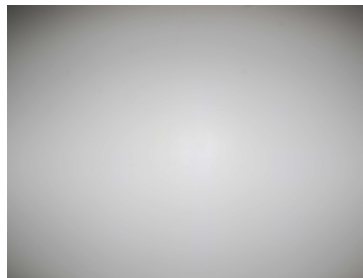
PHILIPS

LED Fortimo LED Strip 1ft 650lm FC HV5 & LV5
 FWHM / FWTM 96.0 + 58.0° / 143.0 + 94.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

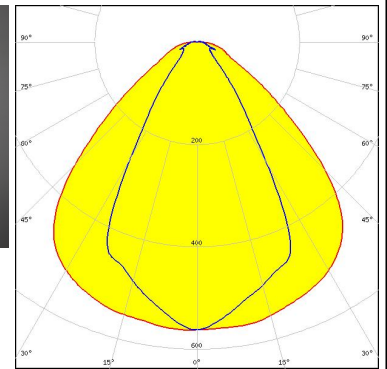
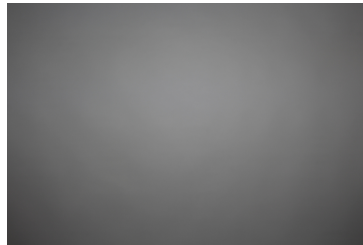
LED LM28xB Series
 FWHM / FWTM 95.0 + 53.0° / 136.0 + 106.0°
 Efficiency 84 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

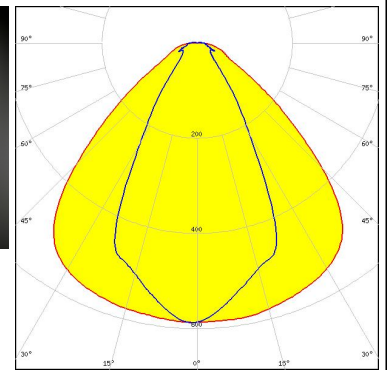
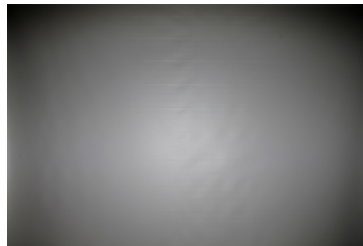
SAMSUNG

LED LM561B Plus
 FWHM / FWTM 96.0 + 59.0° / 143.0 + 89.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



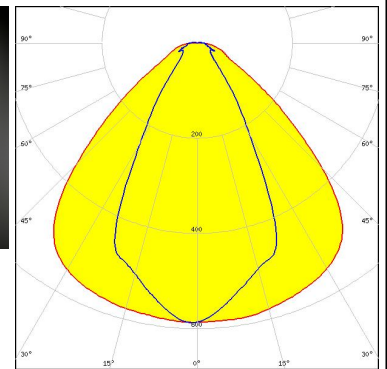
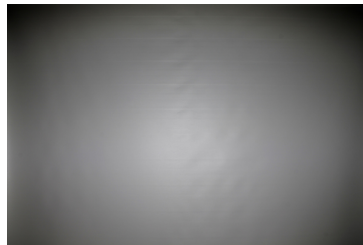
SAMSUNG

LED LT-H282C
 FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



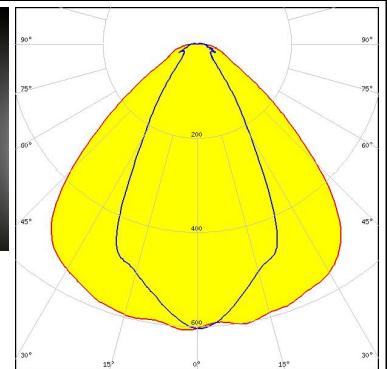
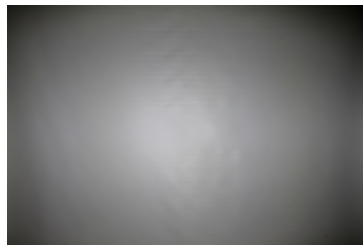
SAMSUNG

LED LT-H562C
 FWHM / FWTM 96.0 + 55.0° / 141.0 + 87.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

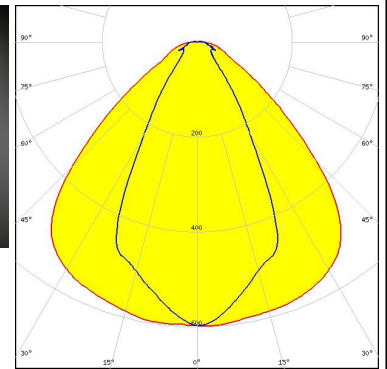
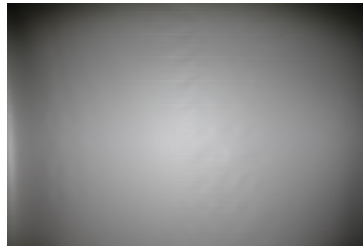
LED LT-Q282B
 FWHM / FWTM 95.0 + 54.0° / 138.0 + 86.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

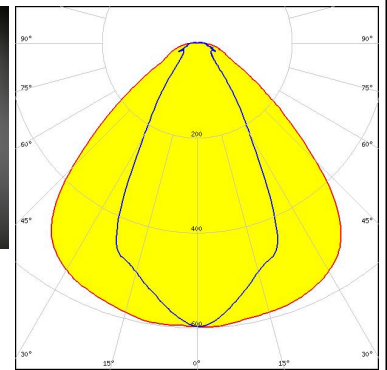
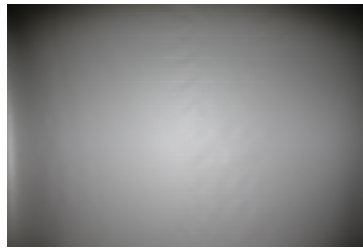
SAMSUNG

LED LT-S282H
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



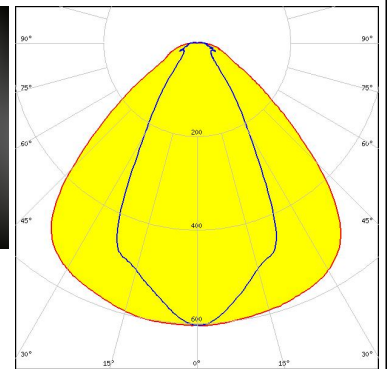
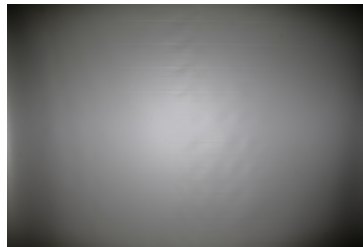
SAMSUNG

LED LT-S562H
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°
 Efficiency 85 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



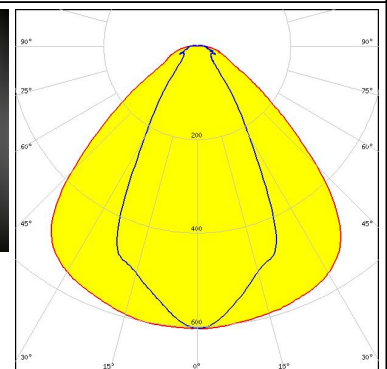
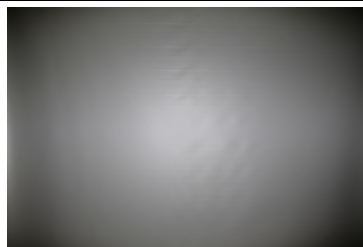
SAMSUNG

LED LT-V282E
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


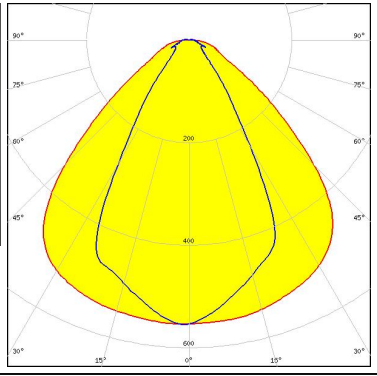

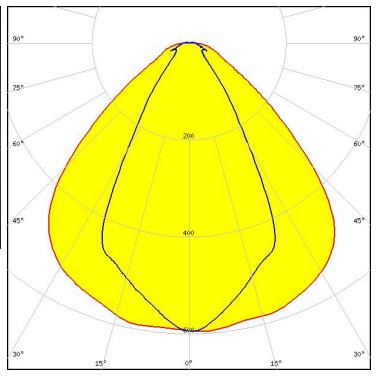

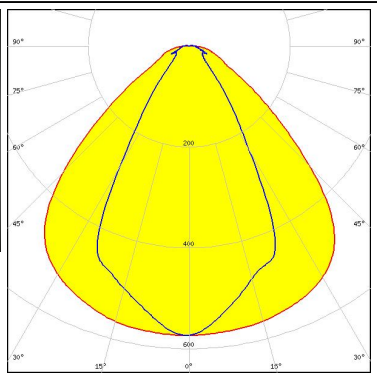

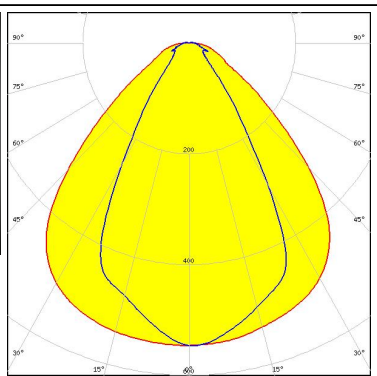


SAMSUNG

LED LT-V562E
 FWHM / FWTM 96.0 + 54.0° / 140.0 + 86.0°
 Efficiency 86 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



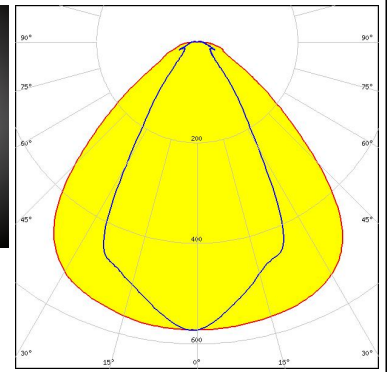
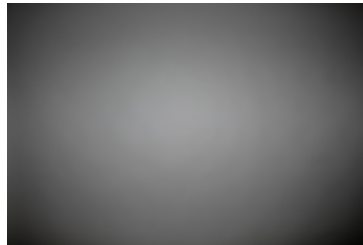
OPTICAL RESULTS (MEASURED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL 5630D</p> <p>FWHM / FWTM: 73.0° / 112.0°</p> <p>Efficiency: 84 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3030</p> <p>FWHM / FWTM: 96.0 + 57.0° / 139.0 + 88.0°</p> <p>Efficiency: 86 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>		
<p>TRIDONIC</p> <p>LED: LLE G4 24x280mm 1250lm</p> <p>FWHM / FWTM: 96.0 + 58.0° / 141.0 + 88.0°</p> <p>Efficiency: 85 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>		
<p>TRIDONIC</p> <p>LED: LLE G4 24x280mm 2000lm ADV</p> <p>FWHM / FWTM: 95.0 + 60.0° / 143.0 + 91.0°</p> <p>Efficiency: 85 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>		


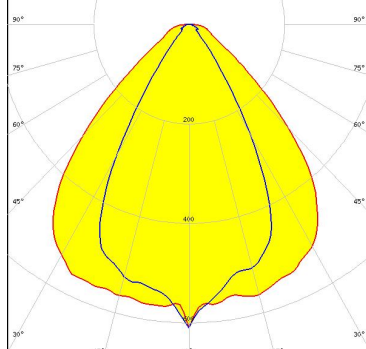

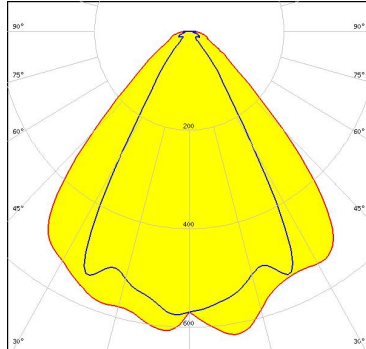

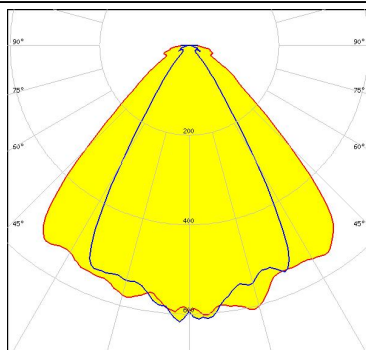

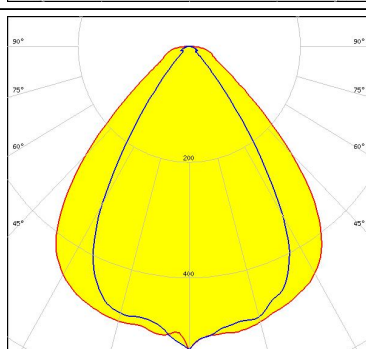
OPTICAL RESULTS (MEASURED):

TRIDONIC

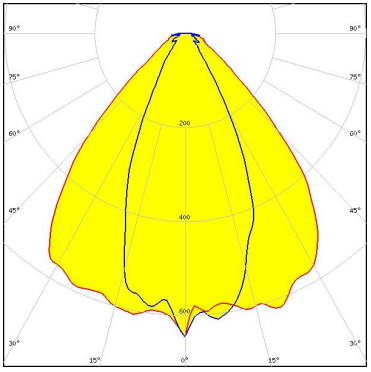
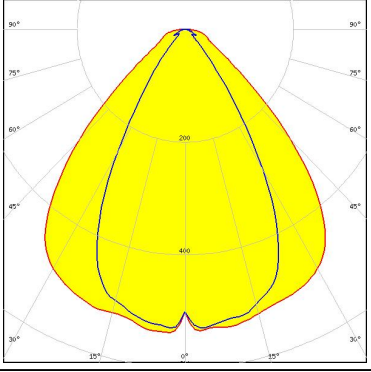
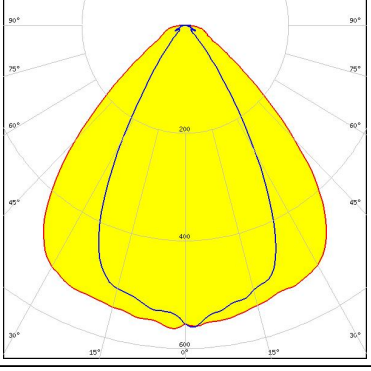
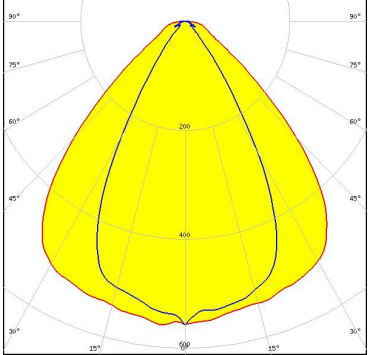
LED LLE G4 24x280mm 650lm
FWHM / FWTM 95.0 + 59.0° / 140.0 + 89.0°
Efficiency 85 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour White
Required components:




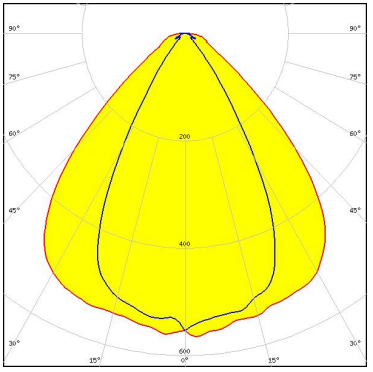

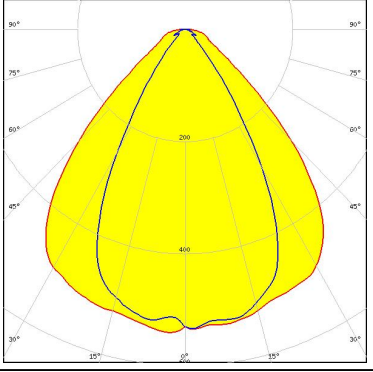

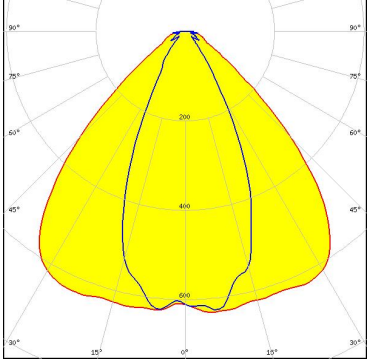
OPTICAL RESULTS (SIMULATED):

<p> bridgelux</p> <p>LED: Bridgelux SMD 2835 FWHM / FWTM: 90.0 + 58.0° / 127.0 + 82.0° Efficiency: 81 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> LUMILEDS</p> <p>LED: LUXEON 3030 2D (Round LES) FWHM / FWTM: 89.0 + 60.0° / 125.0 + 80.0° Efficiency: 84 % Peak intensity: 0.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3030C FWHM / FWTM: 92.0 + 60.0° / 134.0 + 80.0° Efficiency: 85 % Peak intensity: 0.7 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528 FWHM / FWTM: 90.0 + 65.0° / 131.0 + 87.0° Efficiency: 78 % Peak intensity: 0.5 cd/lm LEDs/each optic: 2 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>SEOU SEOU SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 88.0 + 48.0° / 122.0 + 76.0°</p> <p>Efficiency: 76 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 2</p> <p>Light colour: White</p> <p>Required components:</p>	 <p>A beam spread diagram showing a yellow teardrop-shaped light distribution on a grid. The grid has vertical lines at 15°, 0°, and 15° from the center, and horizontal lines at 30°, 45°, 60°, 75°, and 90°. The light distribution is wider at the top and tapers towards the bottom. Two concentric lines are drawn, labeled '200' and '400', representing beam spread metrics.</p>
<p>SEOU SEOU SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 90.0 + 60.0° / 128.0 + 85.0°</p> <p>Efficiency: 77 %</p> <p>Peak intensity: 0.5 cd/lm</p> <p>LEDs/each optic: 2</p> <p>Light colour: White</p> <p>Required components:</p>	 <p>A beam spread diagram showing a yellow teardrop-shaped light distribution on a grid. The grid has vertical lines at 15°, 0°, and 15° from the center, and horizontal lines at 30°, 45°, 60°, 75°, and 90°. The light distribution is wider at the top and tapers towards the bottom. Two concentric lines are drawn, labeled '200' and '400', representing beam spread metrics.</p>
<p>SEOU SEOU SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 92.0 + 59.0° / 127.0 + 82.0°</p> <p>Efficiency: 77 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	 <p>A beam spread diagram showing a yellow teardrop-shaped light distribution on a grid. The grid has vertical lines at 15°, 0°, and 15° from the center, and horizontal lines at 30°, 45°, 60°, 75°, and 90°. The light distribution is wider at the top and tapers towards the bottom. Two concentric lines are drawn, labeled '200' and '400', representing beam spread metrics.</p>
<p>SEOU SEOU SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 92.0 + 59.0° / 128.0 + 82.0°</p> <p>Efficiency: 77 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	 <p>A beam spread diagram showing a yellow teardrop-shaped light distribution on a grid. The grid has vertical lines at 15°, 0°, and 15° from the center, and horizontal lines at 30°, 45°, 60°, 75°, and 90°. The light distribution is wider at the top and tapers towards the bottom. Two concentric lines are drawn, labeled '200' and '400', representing beam spread metrics.</p>

OPTICAL RESULTS (SIMULATED):

<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 92.0 + 59.0° / 128.0 + 82.0°</p> <p>Efficiency: 78 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 90.0 + 60.0° / 128.0 + 85.0°</p> <p>Efficiency: 77 %</p> <p>Peak intensity: 0.5 cd/lm</p> <p>LEDs/each optic: 2</p> <p>Light colour: White</p> <p>Required components:</p>	
<p> SEOUL SEMICONDUCTOR</p> <p>LED: SEOUL DC 3528</p> <p>FWHM / FWTM: 91.0 + 48.0° / 122.0 + 77.0°</p> <p>Efficiency: 76 %</p> <p>Peak intensity: 0.6 cd/lm</p> <p>LEDs/each optic: 1</p> <p>Light colour: White</p> <p>Required components:</p>	

GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

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