

EMERALD-A

Asymmetric beam. Assembly with installation tape.

SPECIFICATION:

Dimensions	Ø 21.6 mm
Height	7.3 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

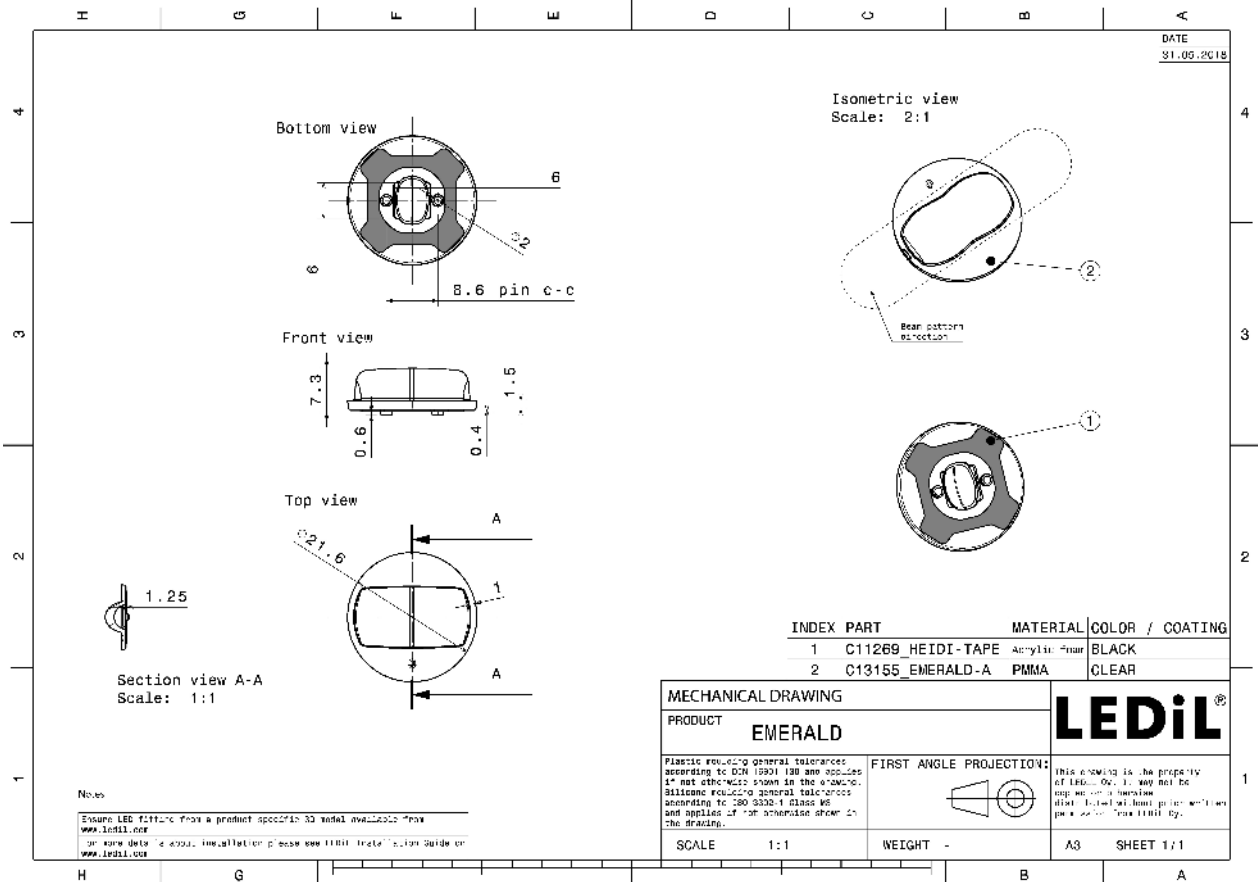


MATERIALS:

Component	Type	Material	Colour	Finish
EMERALD-A	Single lens	PMMA	clear	
HEIDI-TAPE	Tape	Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA13156_EMERALD-A	Single lens	2128	336	112	4.9
» Box size: 480 x 280 x 300 mm					

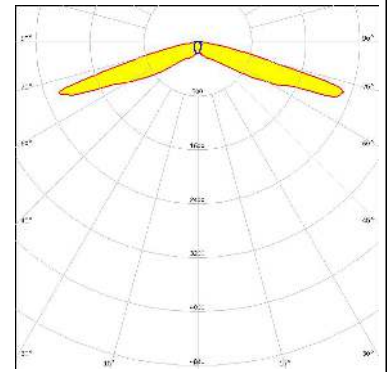


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

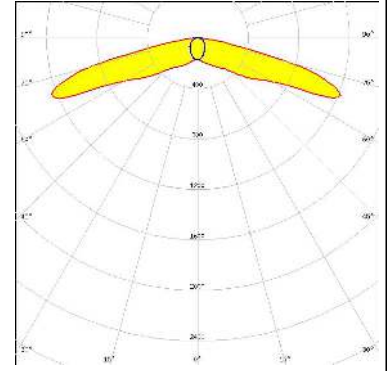
CREE LED

LED XB-D
 FWHM / FWTM 150.0 + 63.0°
 Efficiency 88 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



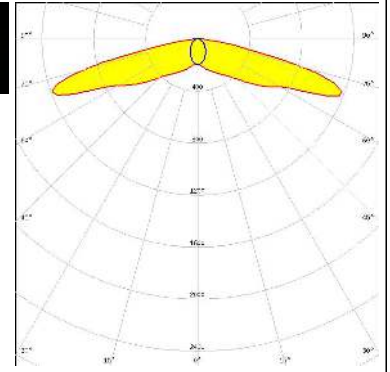
CREE LED

LED XM-L
 FWHM / FWTM 152.0 + 81.0°
 Efficiency 91 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



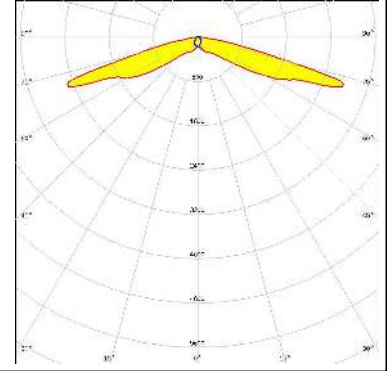
CREE LED

LED XM-L2
 FWHM / FWTM 167.0 + 71.0°
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

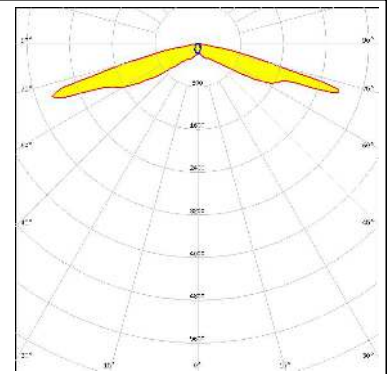
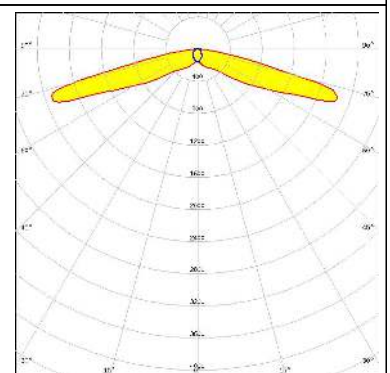
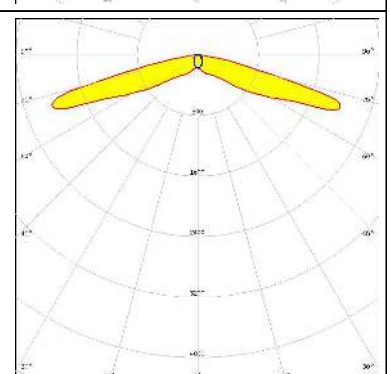
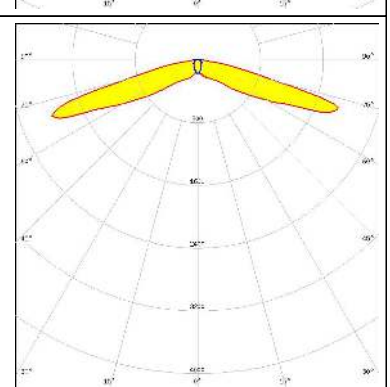


CREE LED

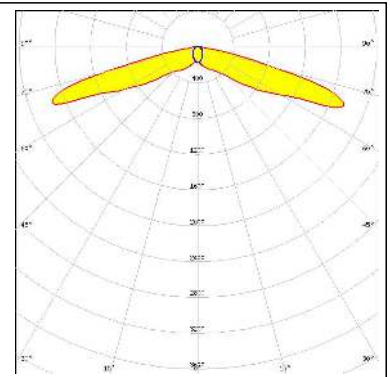
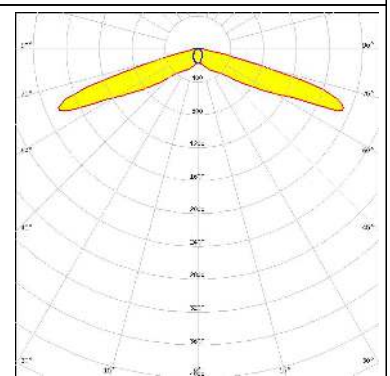
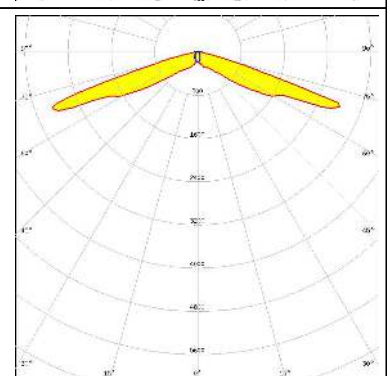
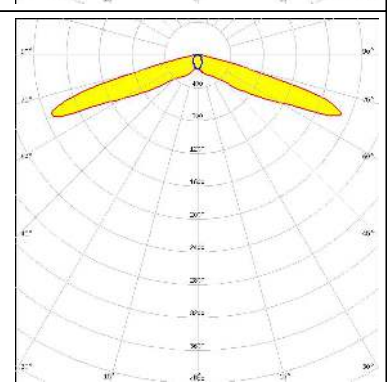
LED XP-E
 FWHM / FWTM 152.0 + 71.0°
 Efficiency 93 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

<p>CREE ⇄ LED</p> <p>LED XP-E2 FWHM / FWTM 153.0 + 70.0° Efficiency 93 % Peak intensity 2.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED XP-G FWHM / FWTM 153.0 + 92.0° Efficiency 88 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED XP-G2 FWHM / FWTM 151.0 + 75.0° Efficiency 91 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>CREE ⇄ LED</p> <p>LED XT-E FWHM / FWTM 150.0 + 64.0° Efficiency 88 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	

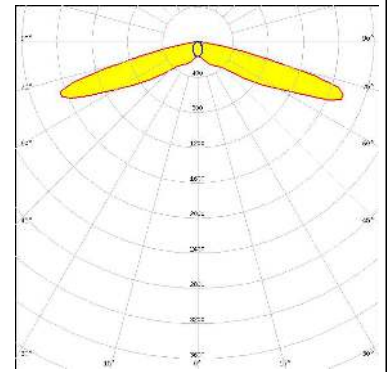
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON A</p> <p>FWHM / FWTM 151.0 + 73.0°</p> <p>Efficiency 89 %</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>LUMILEDS</p> <p>LED LUXEON R</p> <p>FWHM / FWTM 147.0 + 71.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON Rebel</p> <p>FWHM / FWTM 146.0 + 64.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 2.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>LUMILEDS</p> <p>LED LUXEON Rebel ES</p> <p>FWHM / FWTM 147.0 + 73.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (MEASURED):

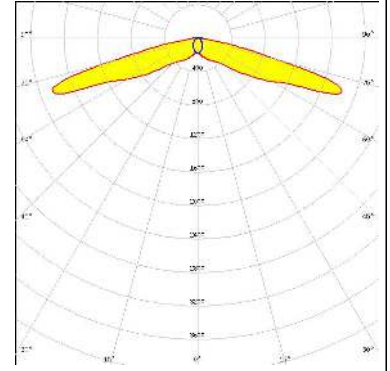
LUMILEDS

LED LUXEON T
 FWHM / FWTM 151.0 + 75.0°
 Efficiency 93 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



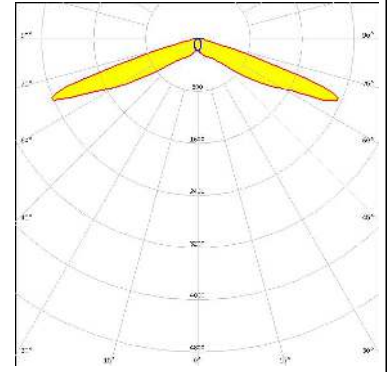
LUMILEDS

LED LUXEON TX
 FWHM / FWTM 151.0 + 71.0°
 Efficiency 92 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



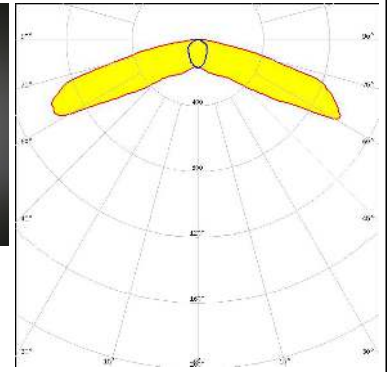
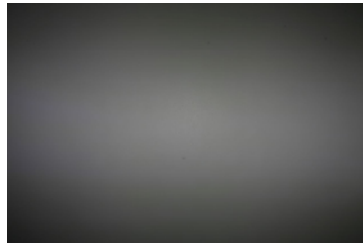
NICHIA

LED NCSxx19A
 FWHM / FWTM 145.0 + 64.0°
 Efficiency 88 %
 Peak intensity 2.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

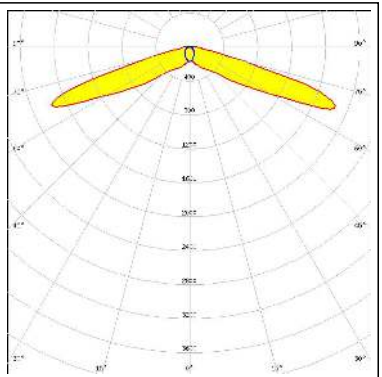

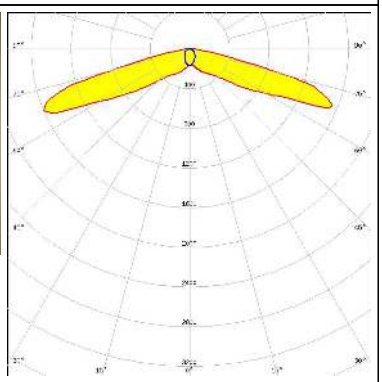
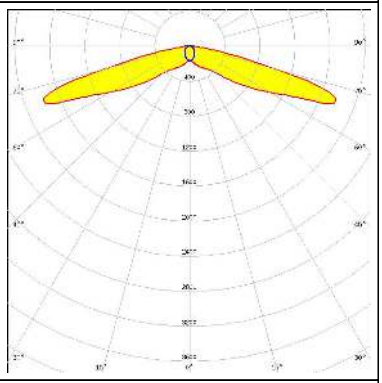
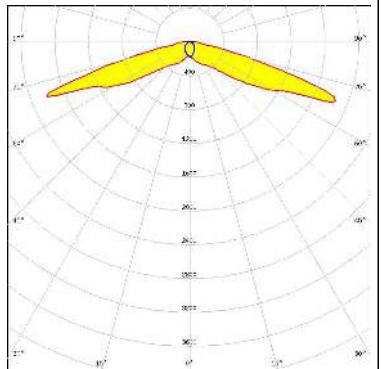


NICHIA

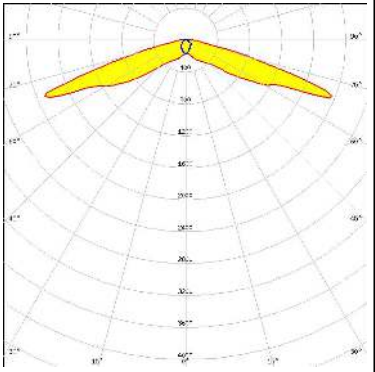
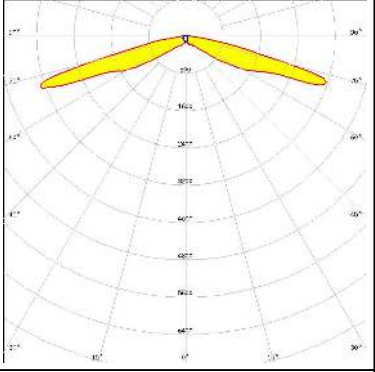
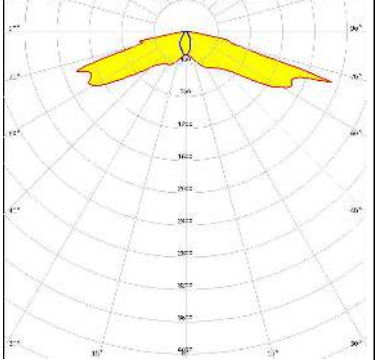
LED NS9x383
 FWHM / FWTM 150.0 + 82.0°
 Efficiency 89 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



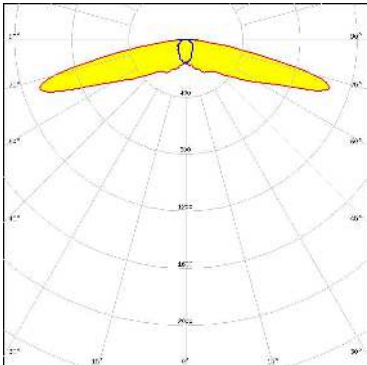
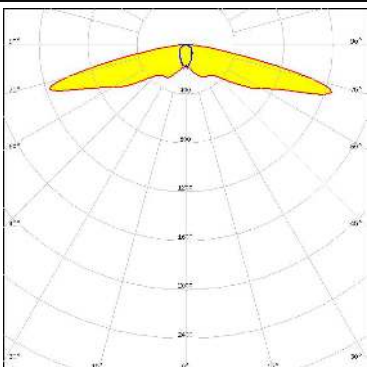
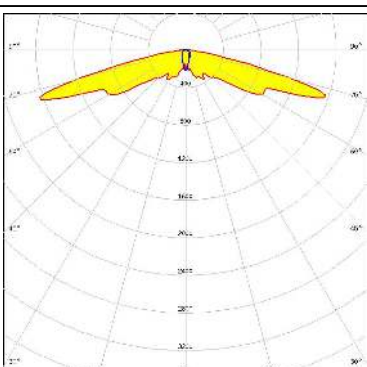
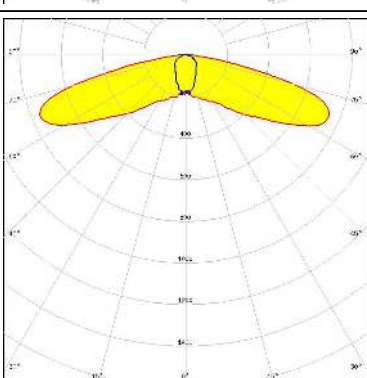
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NVSxx19A FWHM / FWTM 147.0 + 70.0° Efficiency 87 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 151.0 + 77.0° / 163.0 + 152.0° Efficiency 87 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 152.0 + 76.0° / 163.0 + 158.0° Efficiency 90 % Peak intensity 1.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square EC FWHM / FWTM 150.0 + 76.0° Efficiency 89 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

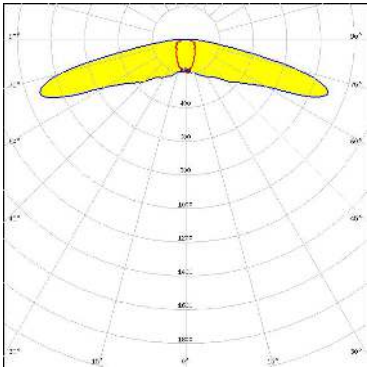
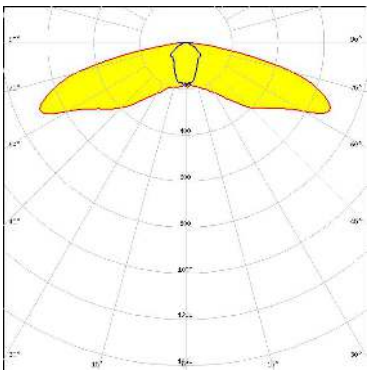
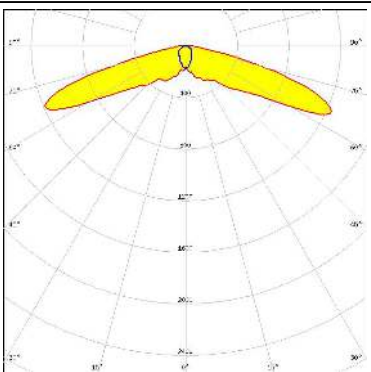
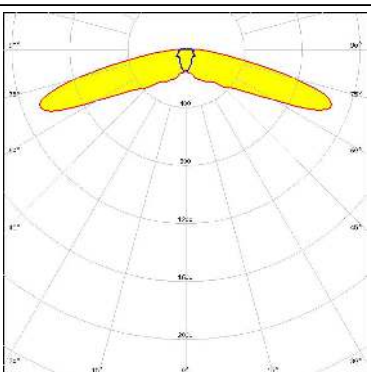
OPTICAL RESULTS (MEASURED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square PC</p> <p>FWHM / FWTM 150.0 + 86.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON SSL 150</p> <p>FWHM / FWTM 152.0 + 99.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 2.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON SSL 80</p> <p>FWHM / FWTM 148.0 + 53.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 2.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>CREE LED</p> <p>LED: XP-G3 FWHM / FWTM: 157.0 + 79.0° / 171.0 + 182.0° Efficiency: 88 % Peak intensity: 1.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LED</p> <p>LED: XP-L HI FWHM / FWTM: 156.0 + 64.0° / 168.0 + 166.0° Efficiency: 90 % Peak intensity: 1.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>CREE LED</p> <p>LED: XP-P FWHM / FWTM: 153.0 + 39.0° / 165.0 + 148.0° Efficiency: 91 % Peak intensity: 1.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON 5050 Round LES FWHM / FWTM: Asymmetric Efficiency: 87 % Peak intensity: 0.8 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED LUXEON V</p> <p>FWHM / FWTM 64.0 + 156.0° / 176.0 + 175.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 0.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ S 5050</p> <p>FWHM / FWTM 154.0 + 72.0° / 168.0 + 154.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z5M4</p> <p>FWHM / FWTM 149.0 + 67.0° / 164.0 + 140.0°</p> <p>Efficiency 89 %</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>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM 154.6 + 110.7° / 172.0 + 180.0°</p> <p>Efficiency 93 %</p> <p>Peak intensity 1.1 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:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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