

VERONICA-SQ-W

~50° wide beam

SPECIFICATION:

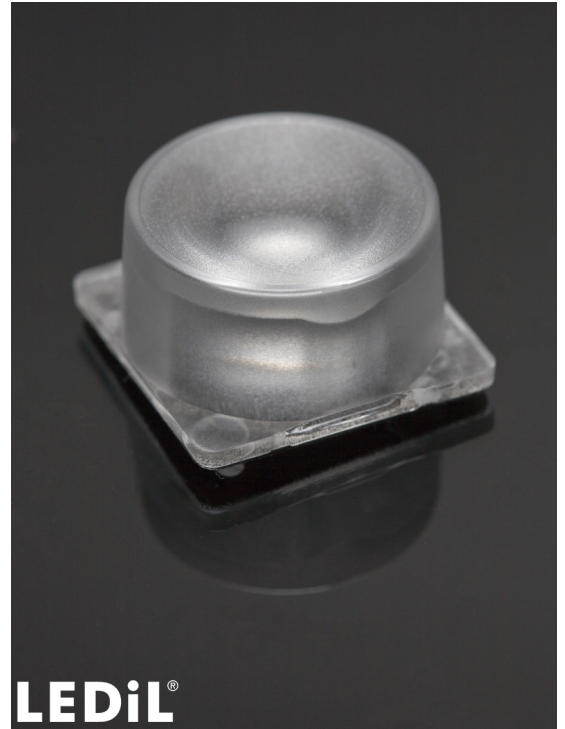
Dimensions	22.5 x 22.5 mm
Height	11.8 mm
Fastening	tape
ROHS compliant	yes ⓘ

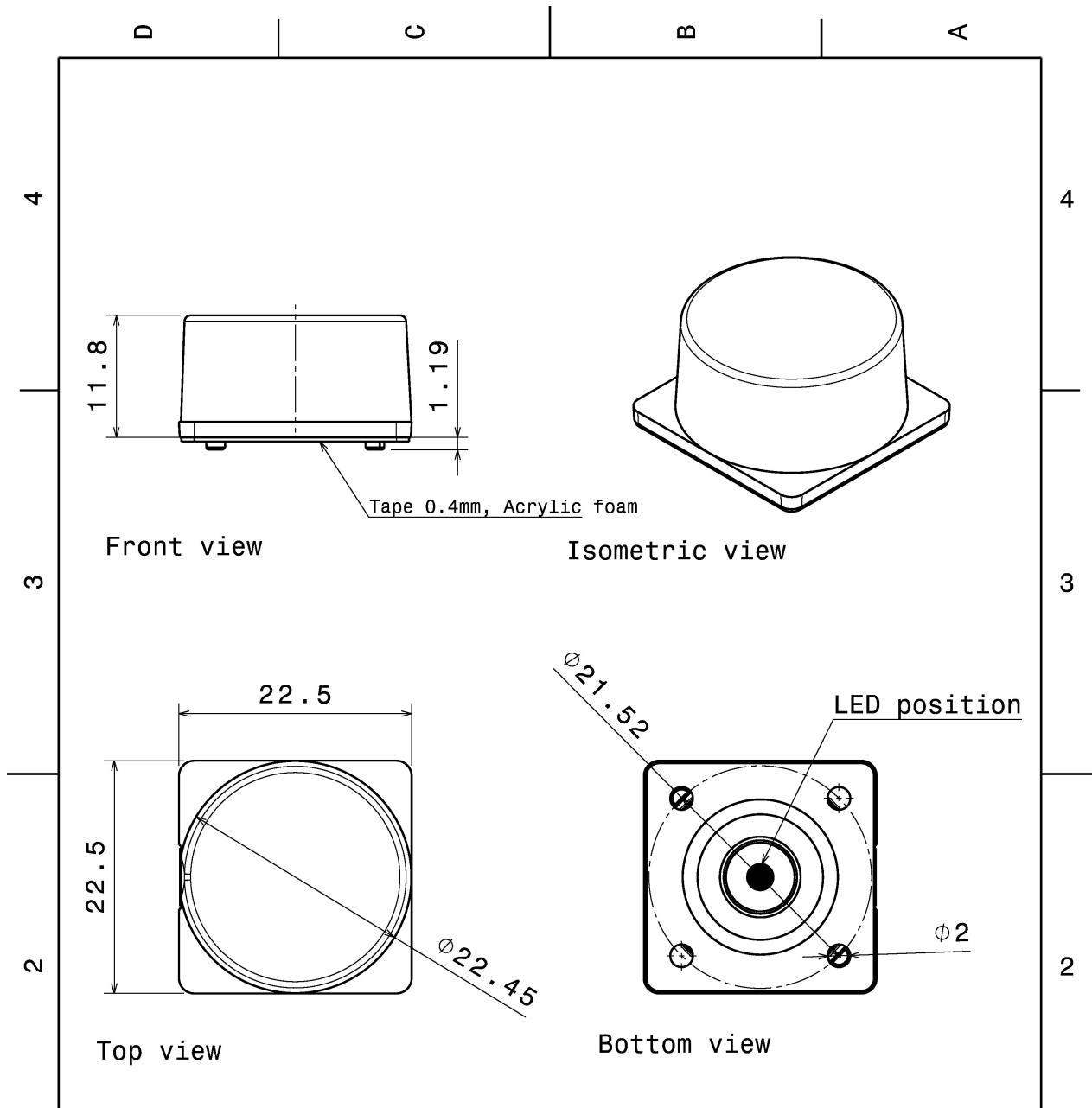
MATERIALS:

Component	Type	Material	Colour	Finish
VERONICA-SQ-W	Single lens	PMMA	clear	
VERONICA-TAPE	Tape	Acrylic foam	clear	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA14442_VERONICA-SQ-W	Single lens	1980	360	180	8.8
» Box size: 476 x 273 x 197 mm					





INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C14447	VERONICA-SQ-W	PMMA	clear

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C
According to DIN ISO 2768-2
Form and position: class L



Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
CA14442_VERONICA-SQ-W

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SIZE	PART NUMBER
A4	CA14442

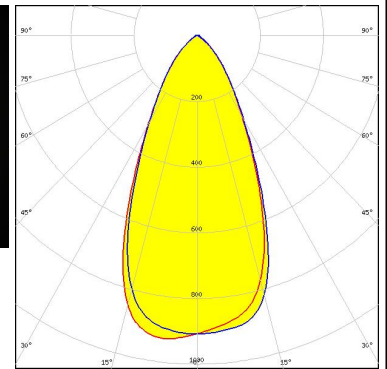
SCALE	2:1	WEIGHT	3,90 g	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

CREE LED

LED XB-H
 FWHM / FWTM 50.0° / 90.0°
 Efficiency 80 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



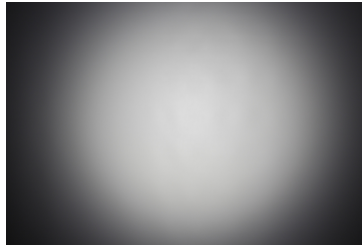
CREE LED

LED XHP35 HD
 FWHM / FWTM 52.0° / 92.0°
 Efficiency 78 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



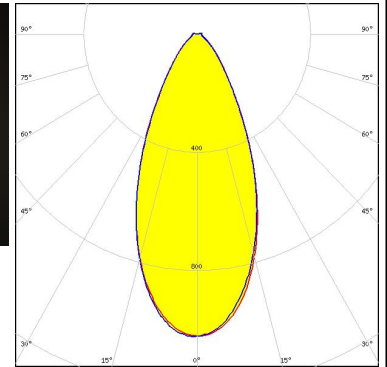
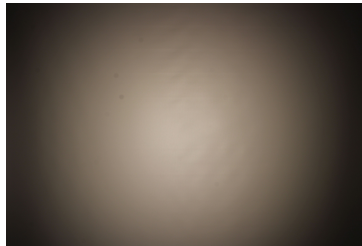
CREE LED

LED XHP35 HI
 FWHM / FWTM 49.0° / 86.0°
 Efficiency 81 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



CREE LED

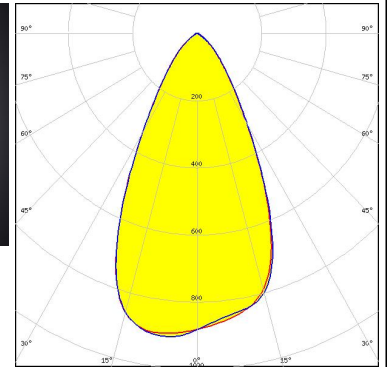
LED XHP50.2
 FWHM / FWTM 47.0° / 89.0°
 Efficiency 86 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

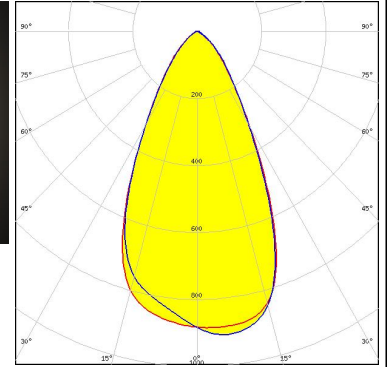
CREE → LED

LED XM-L
 FWHM / FWTM 53.0° / 90.0°
 Efficiency 81 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



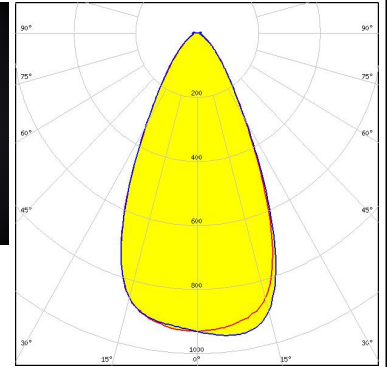
CREE → LED

LED XM-L2
 FWHM / FWTM 53.0° / 91.0°
 Efficiency 80 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



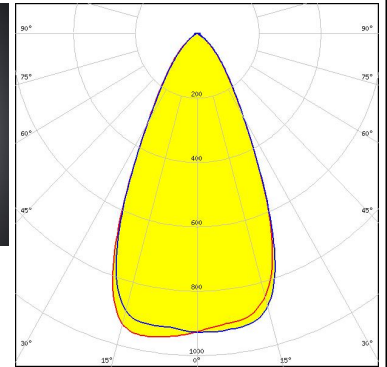
CREE → LED

LED XM-L3
 FWHM / FWTM 52.0° / 90.0°
 Efficiency 87 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

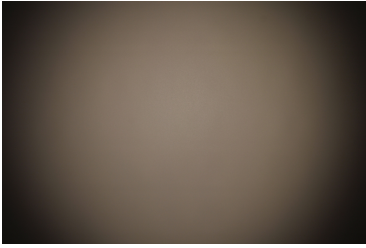
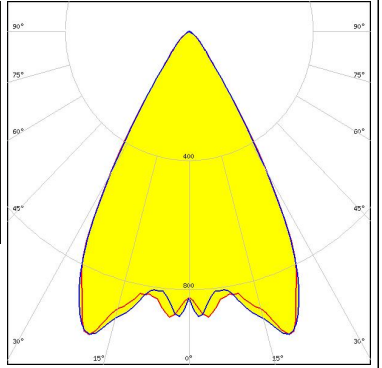
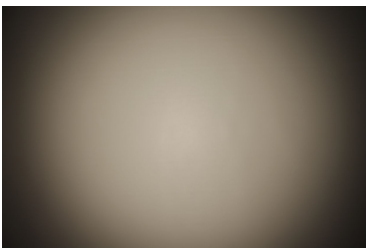
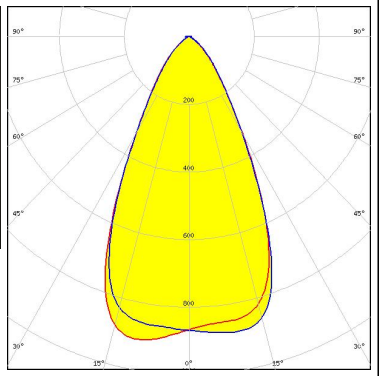

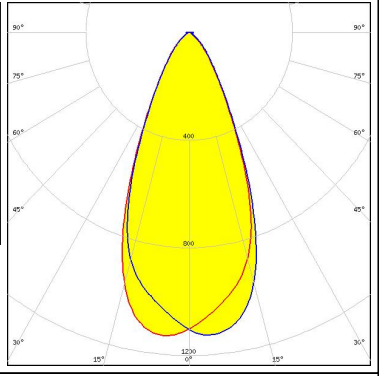
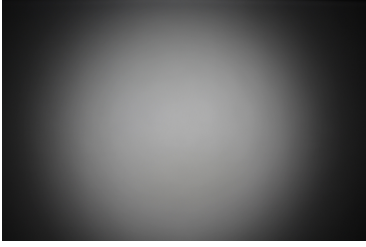
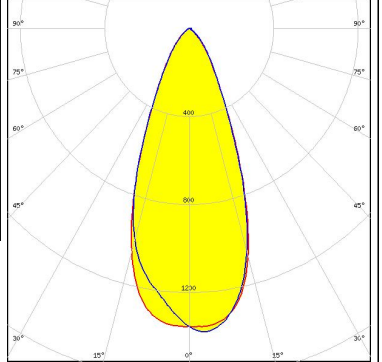


CREE → LED

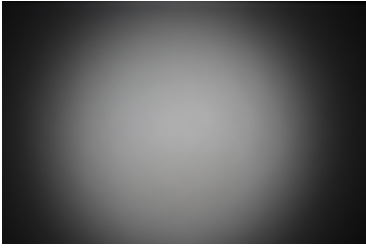
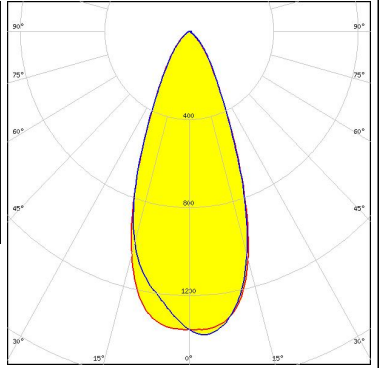
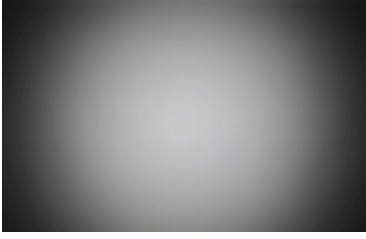
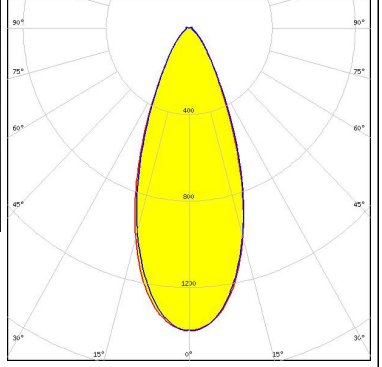
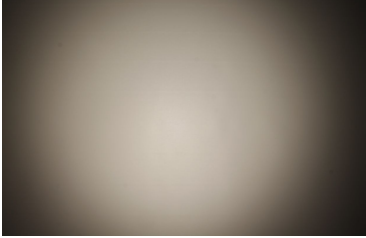
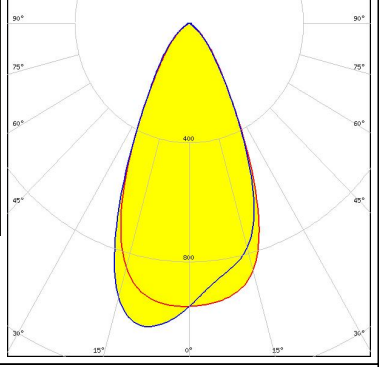
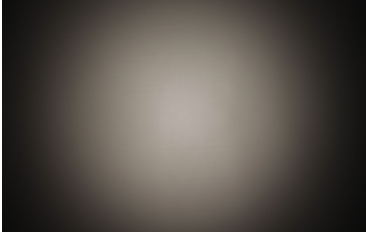
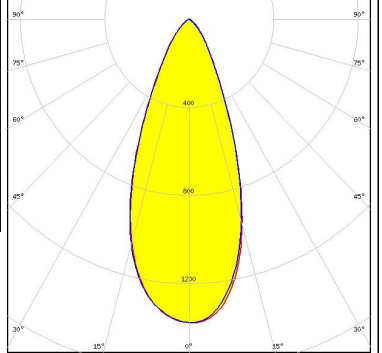
LED XP-E
 FWHM / FWTM 51.0° / 88.0°
 Efficiency 81 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



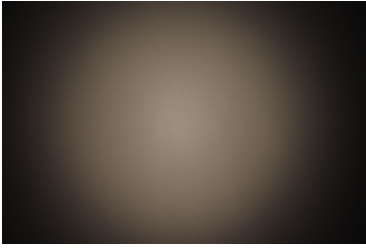
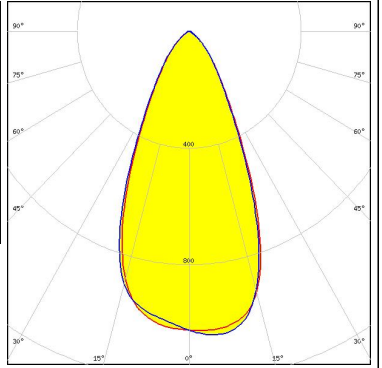
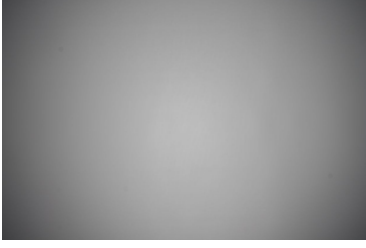
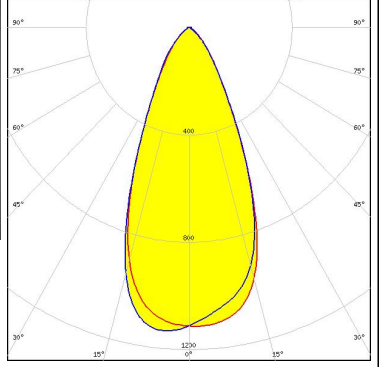
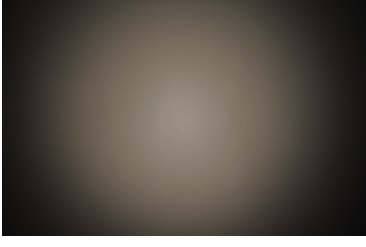
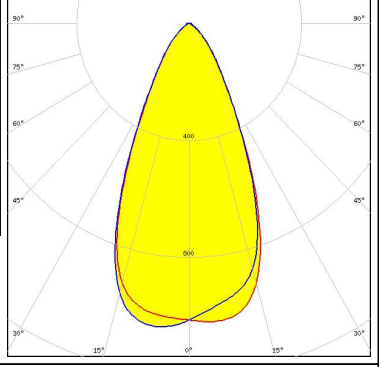
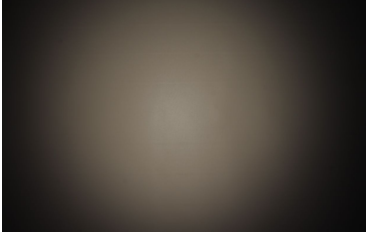
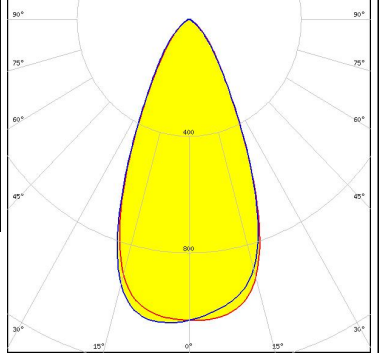
OPTICAL RESULTS (MEASURED):

<p>CREE → LED</p> <p>LED XP-E2 FWHM / FWTM 52.0° / 94.0° Efficiency 92 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE → LED</p> <p>LED XP-G FWHM / FWTM 53.0° / 90.0° Efficiency 81 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>CREE → LED</p> <p>LED XT-E FWHM / FWTM 46.0° / 81.0° Efficiency 80 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON 3030 2D (Round LES) FWHM / FWTM 42.0° / 76.0° Efficiency 83 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON 3030 2D (Square LES)</p> <p>FWHM / FWTM 42.0° / 76.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON 5050 Round LES</p> <p>FWHM / FWTM 41.0° / 77.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON A</p> <p>FWHM / FWTM 50.0° / 86.0°</p> <p>Efficiency 79 %</p> <p>Peak intensity 1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON MZ</p> <p>FWHM / FWTM 41.0° / 75.0°</p> <p>Efficiency 83 %</p> <p>Peak intensity 1.4 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

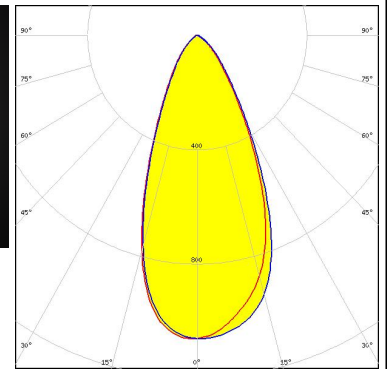
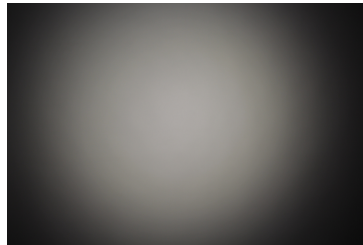
OPTICAL RESULTS (MEASURED):

<p>LUMILEDS</p> <p>LED LUXEON R</p> <p>FWHM / FWTM 48.0° / 85.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON Rebel ES</p> <p>FWHM / FWTM 46.0° / 82.0°</p> <p>Efficiency 80 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON T</p> <p>FWHM / FWTM 49.0° / 86.0°</p> <p>Efficiency 82 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>LUMILEDS</p> <p>LED LUXEON TX</p> <p>FWHM / FWTM 48.0° / 85.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

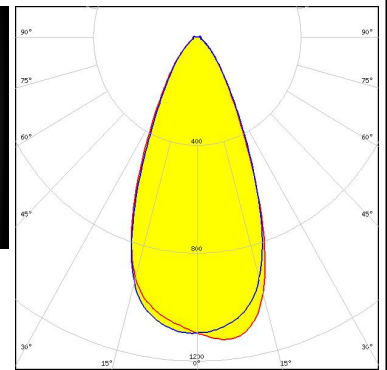
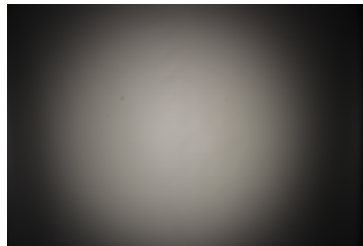
LUMILEDS

LED LUXEON V
 FWHM / FWTM 46.0° / 84.0°
 Efficiency 79 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



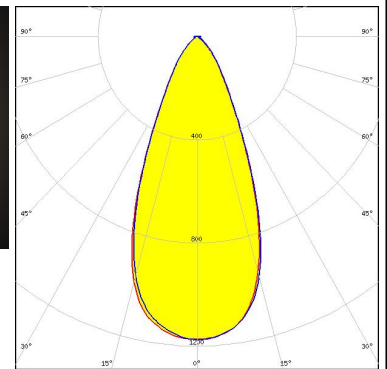
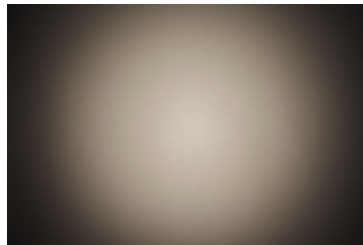
LUMILEDS

LED LUXEON V2
 FWHM / FWTM 47.0° / 85.0°
 Efficiency 88 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



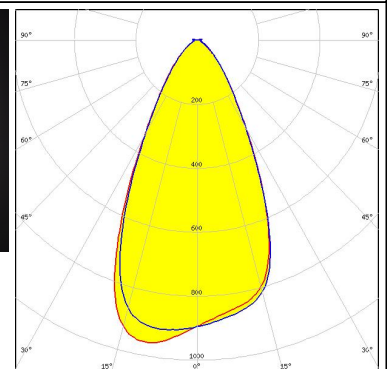
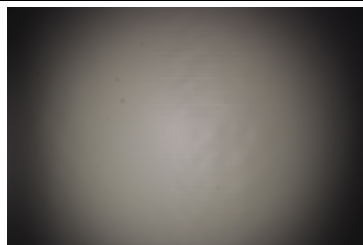
NICHIA

LED NCSxx19B
 FWHM / FWTM 45.0° / 80.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

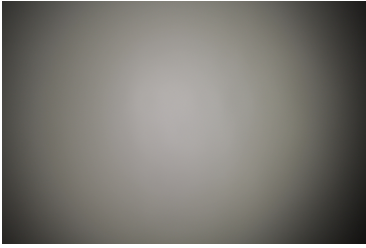
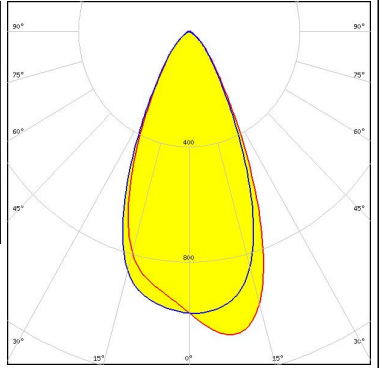
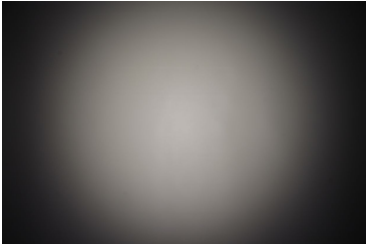
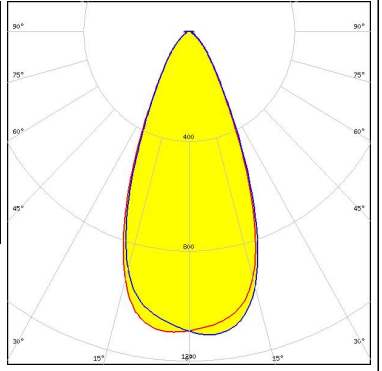
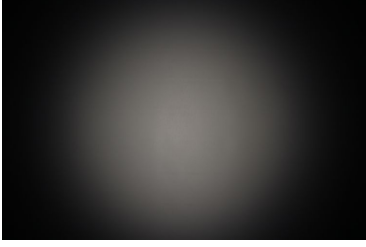
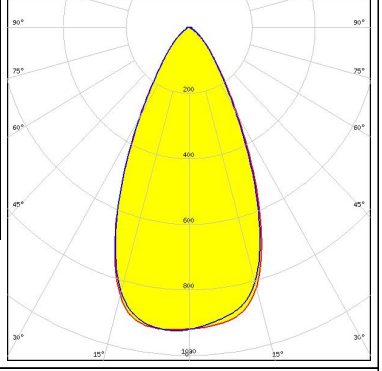
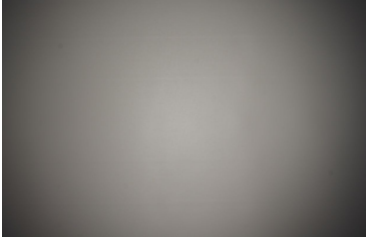
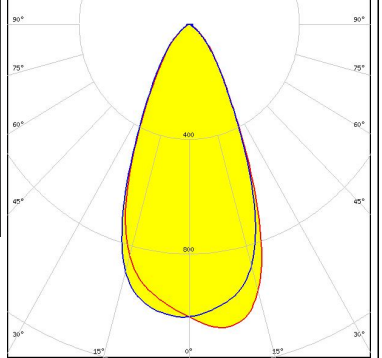


NICHIA

LED NVSW219F
 FWHM / FWTM 52.0° / 92.0°
 Efficiency 88 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

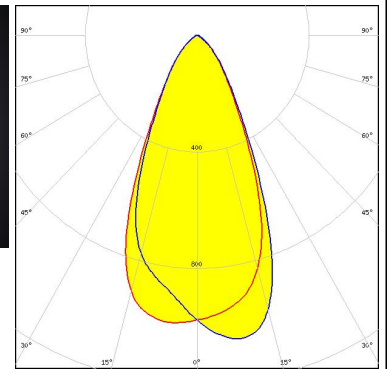
<p>NICHIA</p> <p>LED NVSW3x9A FWHM / FWTM 48.0° / 83.0° Efficiency 78 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 46.0° / 81.0° Efficiency 81 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NWSx229A FWHM / FWTM 51.0° / 87.0° Efficiency 78 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLON Square EC FWHM / FWTM 48.0° / 86.0° Efficiency 80 % Peak intensity 1.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

OSRAM

Opto Semiconductors

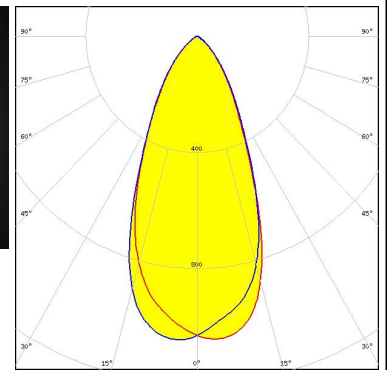
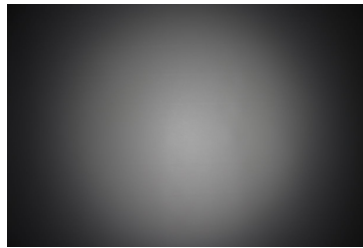
LED OSLON Square PC
 FWHM / FWTM 48.0° / 87.0°
 Efficiency 79 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

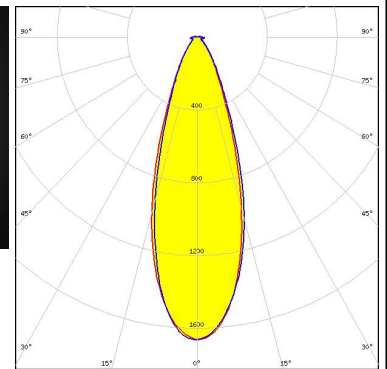
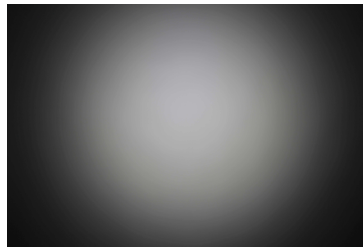
Opto Semiconductors

LED OSLON SSL 80
 FWHM / FWTM 46.0° / 88.0°
 Efficiency 80 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



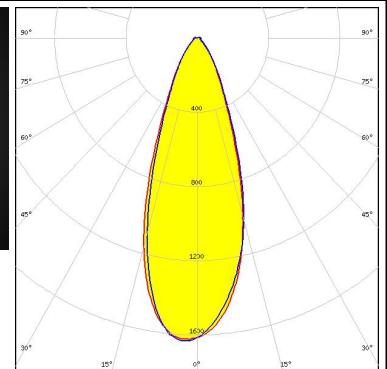
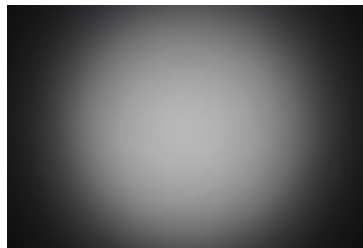
SAMSUNG

LED LH181A
 FWHM / FWTM 34.0° / 68.0°
 Efficiency 87 %
 Peak intensity 1.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


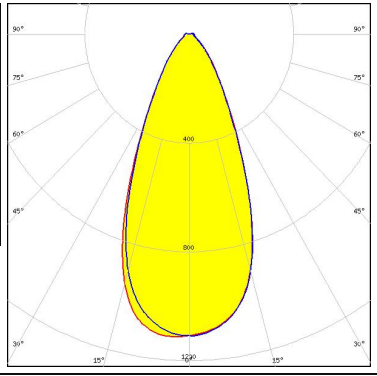

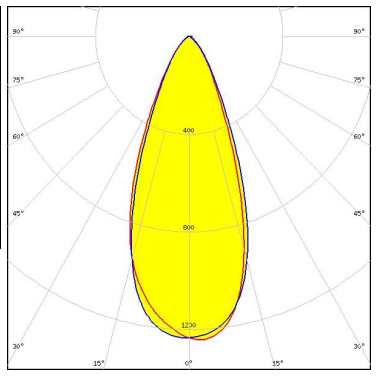

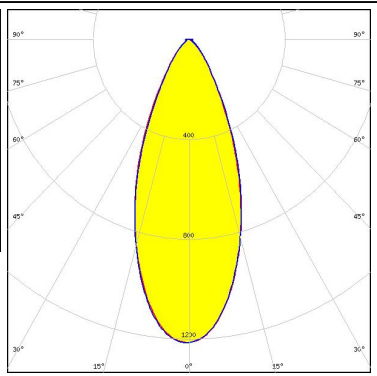


SAMSUNG

LED LH181B
 FWHM / FWTM 37.0° / 71.0°
 Efficiency 90 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



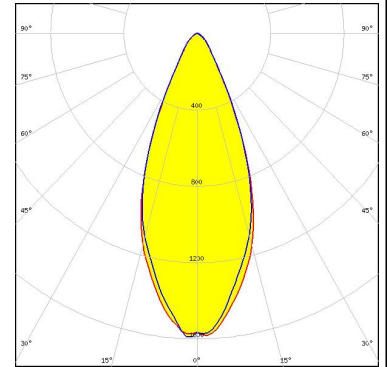
OPTICAL RESULTS (MEASURED):

<p>SEOUL SEMICONDUCTOR</p> <p>LED Z5M3</p> <p>FWHM / FWTM 46.0° / 85.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM 42.0° / 75.0°</p> <p>Efficiency 78 %</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 Z8Y50P</p> <p>FWHM / FWTM 42.0° / 77.0°</p> <p>Efficiency 77 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

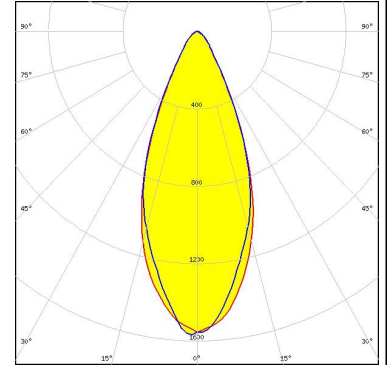
OPTICAL RESULTS (SIMULATED):



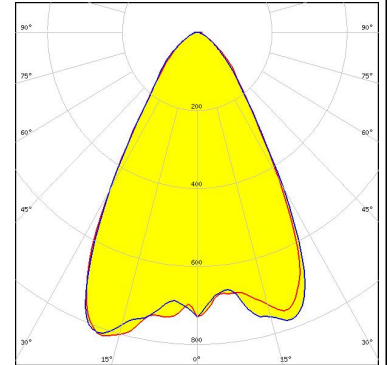
LED J Series 5050 Round LES
 FWHM / FWTM 42.0° / 71.0°
 Efficiency 94 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



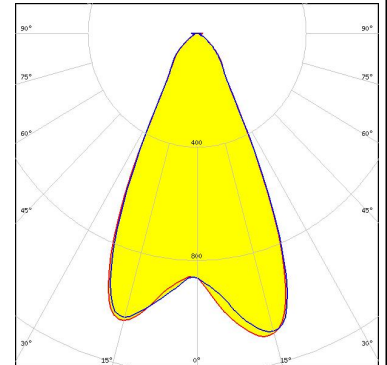
LED J Series 5050 Square LES 6V
 FWHM / FWTM 42.0° / 72.0°
 Efficiency 94 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XP-G2 HE
 FWHM / FWTM 62.0° / 105.0°
 Efficiency 97 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



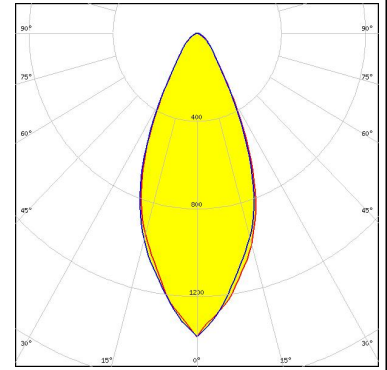
LED XQ-E HI
 FWHM / FWTM 52.0° / 91.0°
 Efficiency 94 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

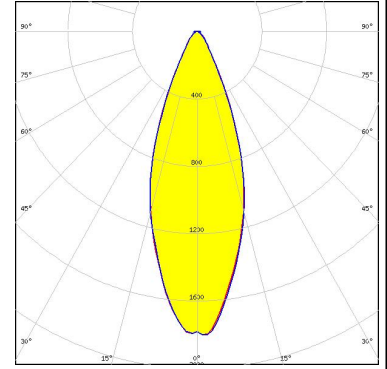
LUMILEDS

LED LUXEON M/MX
 FWHM / FWTM 45.0° / 78.0°
 Efficiency 94 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



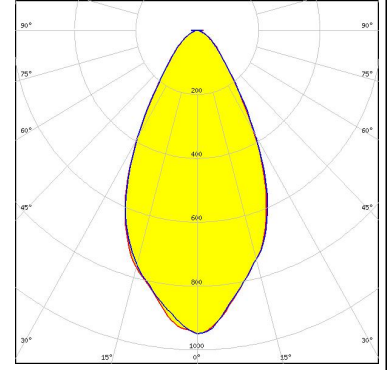
NICHIA

LED NCSxE17A
 FWHM / FWTM 36.0° / 64.0°
 Efficiency 91 %
 Peak intensity 1.8 cd/lm
 LEDs/each optic 4
 Light colour White
 Required components:



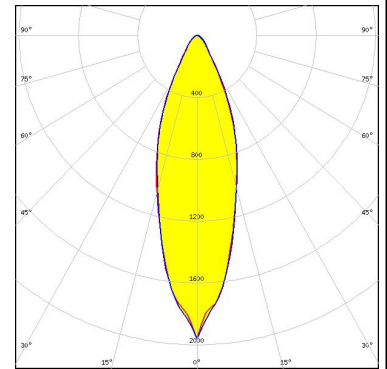
NICHIA

LED NV4x144A
 FWHM / FWTM 54.0° / 96.0°
 Efficiency 89 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM


Opto Semiconductors
 LED OSCONIQ C 2424
 FWHM / FWTM 32.0° / 67.0°
 Efficiency 94 %
 Peak intensity 2 cd/lm
 LEDs/each optic 4
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3030</p> <p>FWHM / FWTM 48.0° / 81.0°</p> <p>Efficiency 95 %</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>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 7070</p> <p>FWHM / FWTM 42.0° / 78.0°</p> <p>Efficiency 90 %</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>OSRAM Opto Semiconductors</p> <p>LED OSLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 50.0° / 90.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED MJT 3030</p> <p>FWHM / FWTM 48.0° / 80.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.3 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

 SEOUL SEMICONDUCTOR		
LED	Z5M4	
FWHM / FWTM	45.0° / 77.0°	
Efficiency	94 %	
Peak intensity	1.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
 SEOUL SEMICONDUCTOR		
LED	Z8Y22T	
FWHM / FWTM	41.0° / 69.0°	
Efficiency	94 %	
Peak intensity	1.7 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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