VERONICA-SQ-SE

~190° side emitter beam

SPECIFICATION:

Dimensions	22.5 x 22.5 mm
Height	11.4 mm
Fastening	tape
ROHS compliant	yes ⓘ

MATERIALS:

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

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA15902_VERONICA-SQ-SE	Single lens	3060	360	180	9.6
» Box size: 480 x 280 x 300 mm					

22.5

22.5

(12.2)

11.4

1.5

LED position

15.22

⌀1.95

15.22

21.52

⌀1.95

A

1.2

0.4
adhesive thickness

Detail A
(4:1)

Beam direction

Beam direction

⌀21.7

1

2

INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C15901	VERONICA-SQ-SE_Mech_Model	PMMA	CLEAR
2	C16105	VERONICA-TAPE	PU FOAM	BLACK

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
Ledil Oy
Joensuunkatu 13
FIN 24100 SALO
Finland

FIRST ANGLE PROJECTION:

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of LEDiL Oy. It may not be
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agreement with LEDiL Oy.

DRAWING TITLE
CA15902_STRADA-SQ-SE_Datasheet

SIZE	PART NUMBER
A4	CA15902

| SCALE | 2:1 | WEIGHT | 2,75g | SHEET | 1/1 |

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

OPTICAL RESULTS (MEASURED):

CREE LEDs

|	
LED	XHP35 HI
FWHM / FWTM	183.0° / 201.0°
Efficiency	88 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
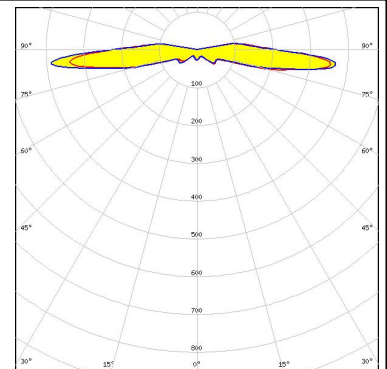
LED	XHP70.2
FWHM / FWTM	194.0° / 220.0°
Efficiency	84 %
Peak intensity	0.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
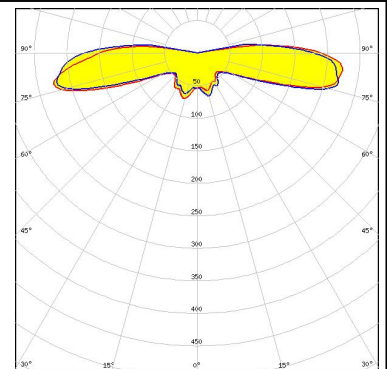
LED	XP-G2
FWHM / FWTM	184.0° / 196.0°
Efficiency	87 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
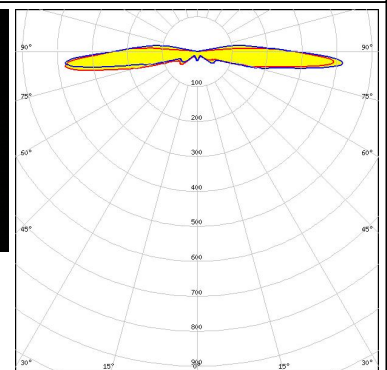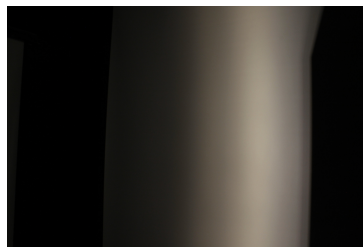
LED	XP-L HI
FWHM / FWTM	184.0° / 210.0°
Efficiency	87 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OPTICAL RESULTS (MEASURED):

CREE LEDs
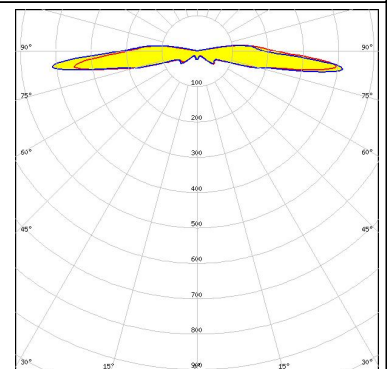
LED	XQ-E HI
FWHM / FWTM	176.0° / 195.0°
Efficiency	87 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

LUMILEDS
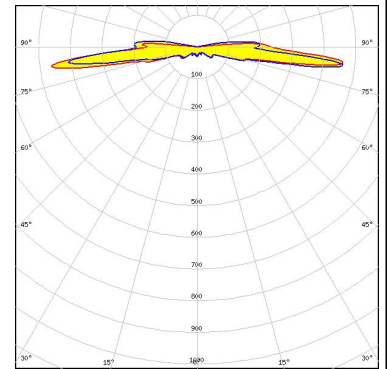
LED	LUXEON 5050 Round LES
FWHM / FWTM	180.0° / 200.0°
Efficiency	87 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

LUMILEDS
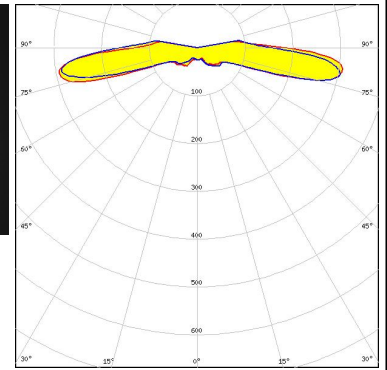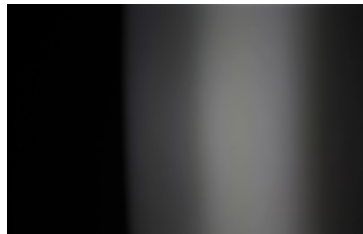
LED	LUXEON CZ
FWHM / FWTM	173.0° / 200.0°
Efficiency	90 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

LUMILEDS
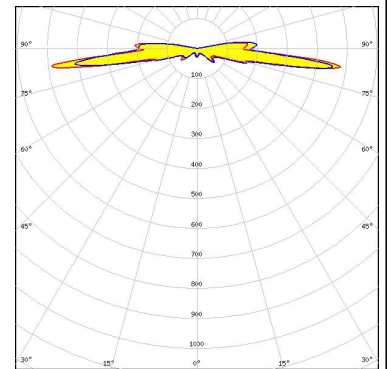
LED	LUXEON M/MX
FWHM / FWTM	189.0° / 225.0°
Efficiency	91 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
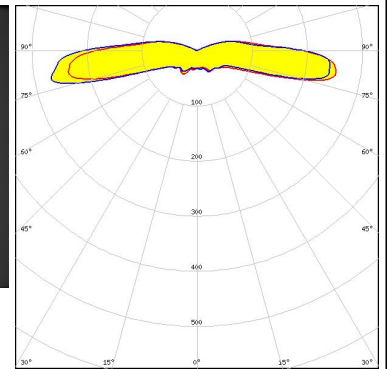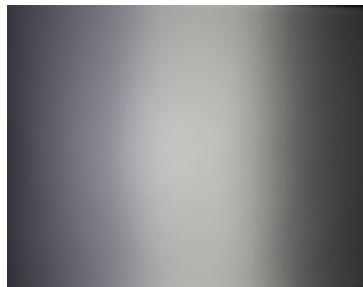
OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON TX
FWHM / FWTM	185.0° / 201.0°
Efficiency	88 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

NICHIA
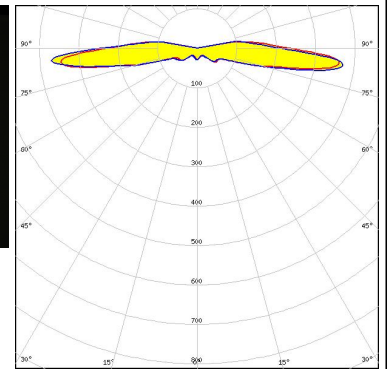
LED	NVSW219F
FWHM / FWTM	185.0° / 201.0°
Efficiency	89 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM
Opto Semiconductors
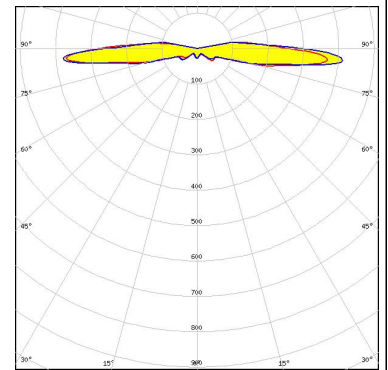
LED	Duris S8
FWHM / FWTM	182.0° / 201.0°
Efficiency	87 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM
Opto Semiconductors
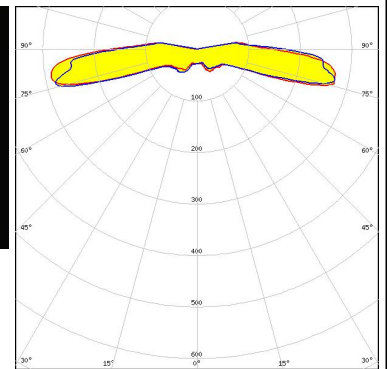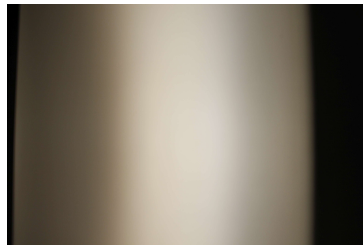
LED	OSLON Black Flat (LUW HWQP)
FWHM / FWTM	170.0° / 210.0°
Efficiency	89 %
Peak intensity	0.6 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
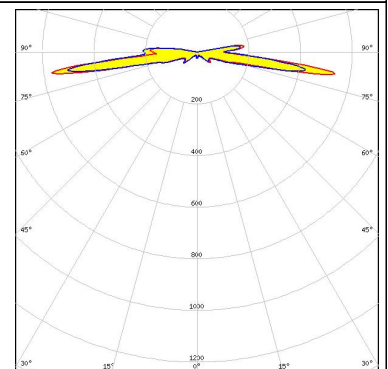
OPTICAL RESULTS (MEASURED):

OSRAM Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	186.0° / 220.0°
Efficiency	88 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
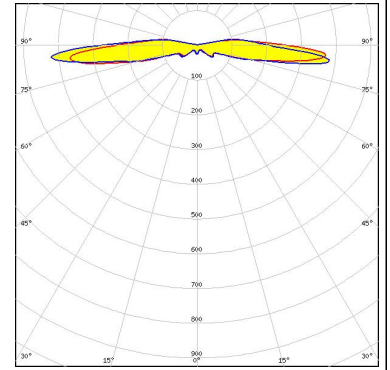
OSRAM Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	189.0° / 201.0°
Efficiency	88 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
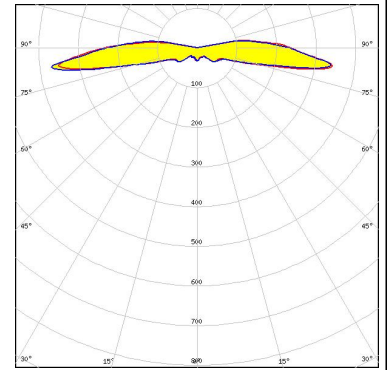
OSRAM Opto Semiconductors

LED	OSLON Square PC
FWHM / FWTM	187.0° / 200.0°
Efficiency	88 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
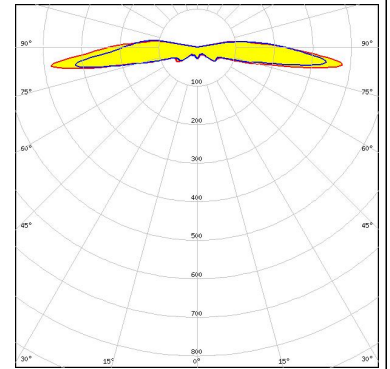
OSRAM Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	182.0° / 200.0°
Efficiency	89 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
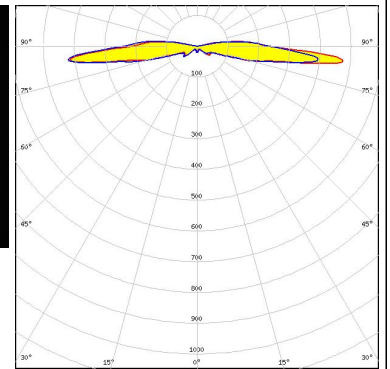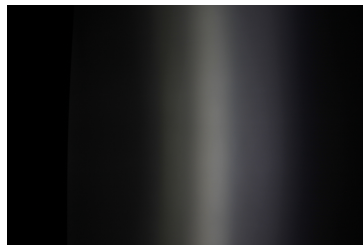
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED	LH181A
FWHM / FWTM	170.0° / 210.0°
Efficiency	91 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
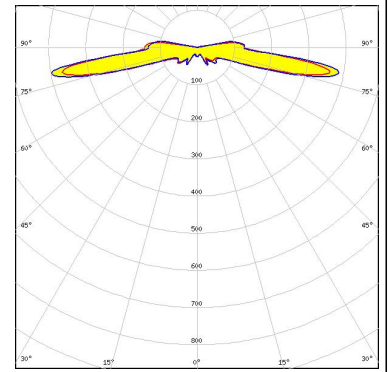
SAMSUNG

LED	LH181B
FWHM / FWTM	171.0° / 201.0°
Efficiency	88 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
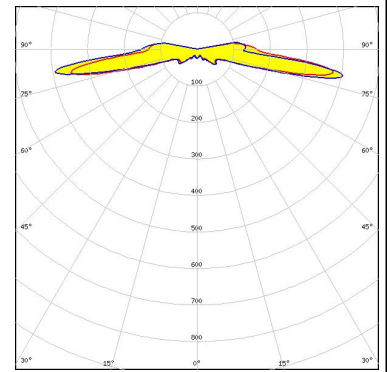
SEOUL SEMICONDUCTOR

LED	nPola
FWHM / FWTM	181.0° / 200.0°
Efficiency	89 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
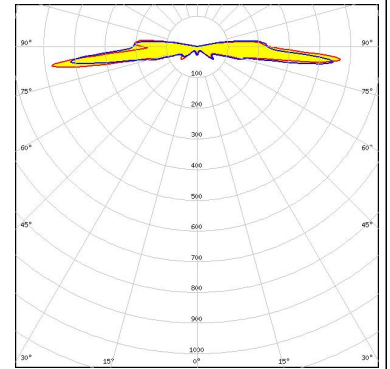
SEOUL SEMICONDUCTOR

LED	Z5M3
FWHM / FWTM	184.0° / 201.0°
Efficiency	89 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
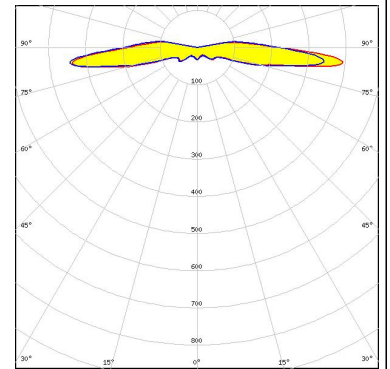
OPTICAL RESULTS (SIMULATED):

LED	J Series 5050 Round LES
FWHM / FWTM	180.0° / 182.0°
Efficiency	75 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
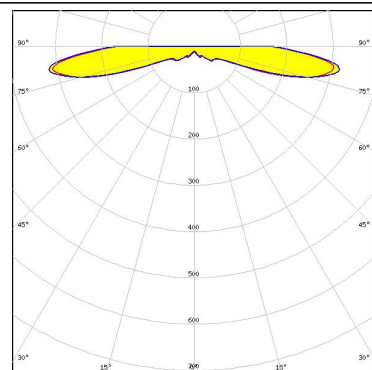
LED	J Series 5050B 30V K Class
FWHM / FWTM	180.0° / 182.0°
Efficiency	75 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
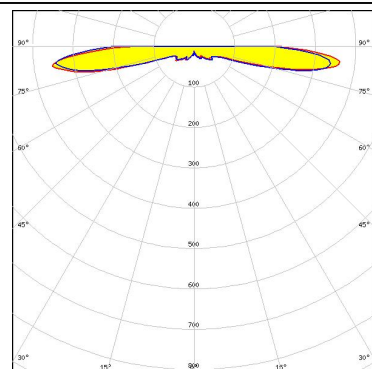
LED	J Series 5050B 6V K Class
FWHM / FWTM	180.0° / 182.0°
Efficiency	75 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
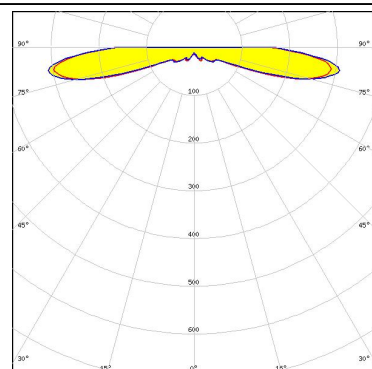
LED	XD16
FWHM / FWTM	188.0° / 223.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	7
Light colour	White
Required components:	
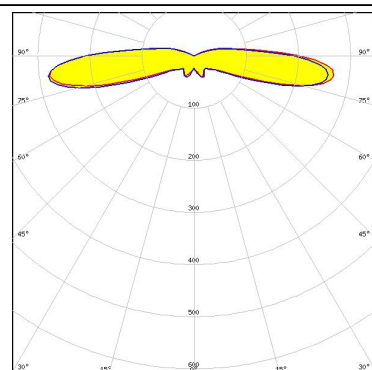
OPTICAL RESULTS (SIMULATED):

LED	XE-G
FWHM / FWTM	184.0° / 204.0°
Efficiency	96 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Blue
Required components:	
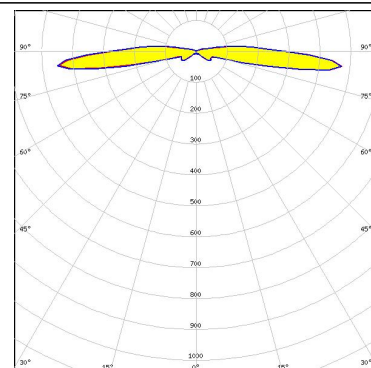
LED	XE-G
FWHM / FWTM	184.0° / 200.0°
Efficiency	94 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Green
Required components:	
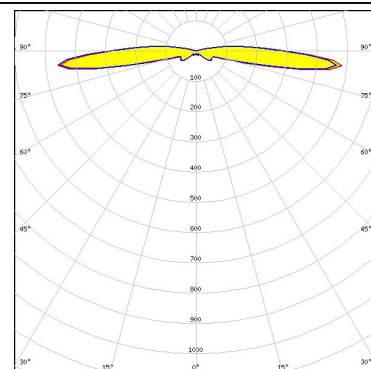
LED	XE-G
FWHM / FWTM	182.0° / 204.0°
Efficiency	96 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
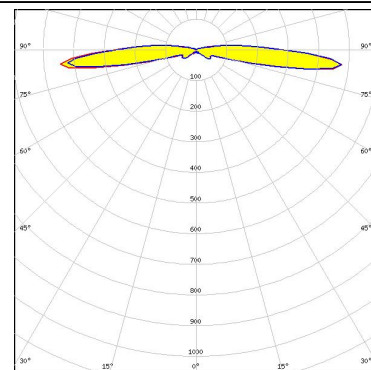
LED	XE-G
FWHM / FWTM	180.0° / 204.0°
Efficiency	96 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	

OPTICAL RESULTS (SIMULATED):

CREE LEDs
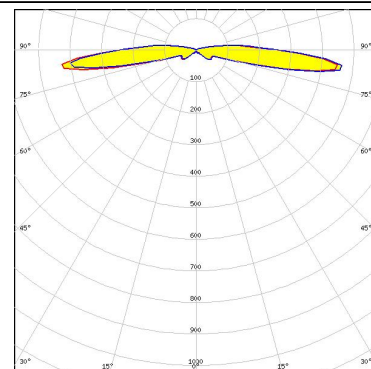
LED	XHP35 HD
FWHM / FWTM	194.0° / 216.0°
Efficiency	94 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
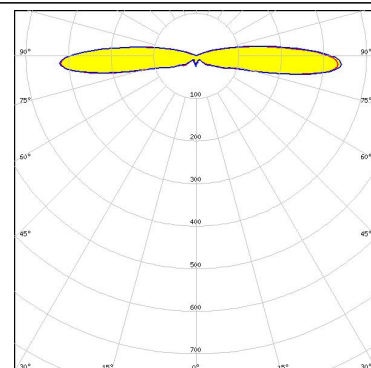
LED	XHP70
FWHM / FWTM	190.0° / 232.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
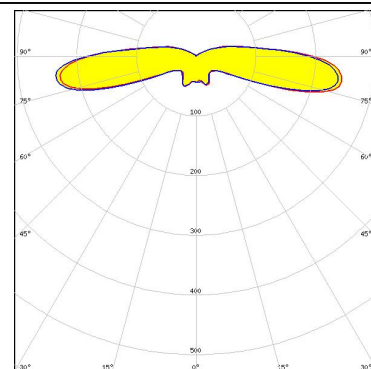
LED	XP-E2
FWHM / FWTM	188.0° / 206.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	

CREE LEDs
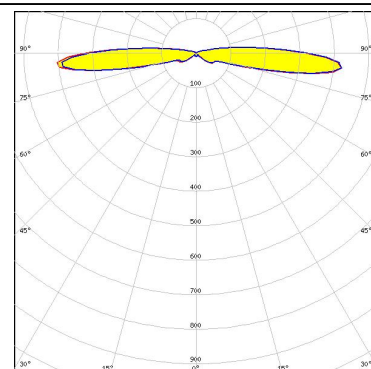
LED	XP-G2 HE
FWHM / FWTM	191.0° / 212.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OPTICAL RESULTS (SIMULATED):

CREE LEDs
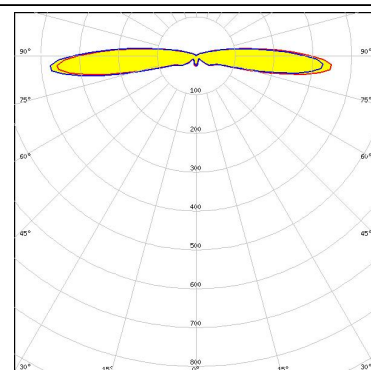
LED	XP-G3
FWHM / FWTM	186.0° / 211.0°
Efficiency	94 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

CREE LEDs
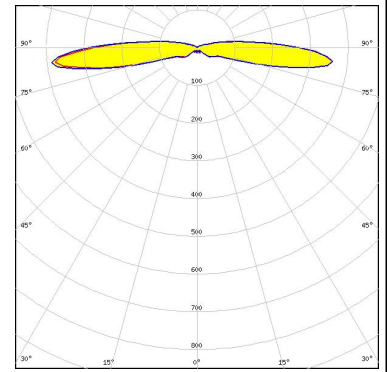
LED	XQ-E HI
FWHM / FWTM	183.0° / 221.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	4
Light colour	White
Required components:	

CREE LEDs
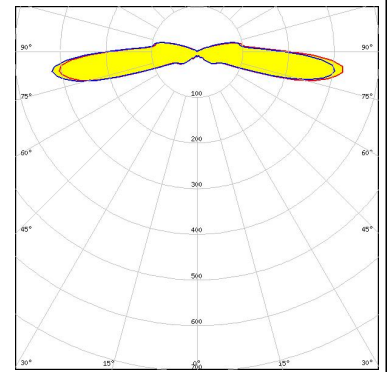
LED	XT-E
FWHM / FWTM	184.0° / 212.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
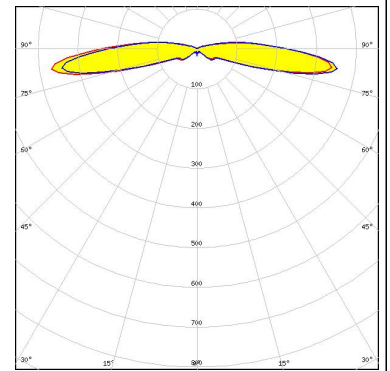
LUMILEDS

LED	LUXEON C
FWHM / FWTM	184.0° / 204.0°
Efficiency	91 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	
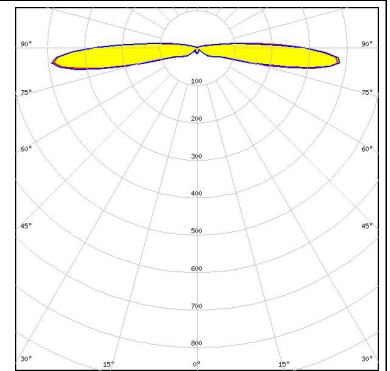
OPTICAL RESULTS (SIMULATED):

LUMILEDS

LED	LUXEON C
FWHM / FWTM	183.0° / 201.0°
Efficiency	92 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Green
Required components:	
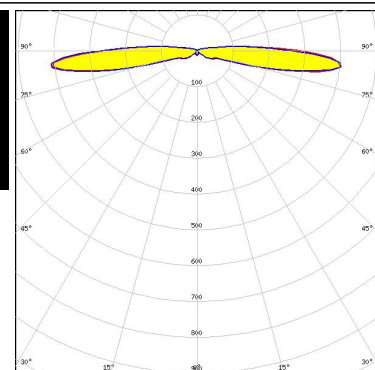
LUMILEDS

LED	LUXEON C
FWHM / FWTM	188.0° / 204.0°
Efficiency	93 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
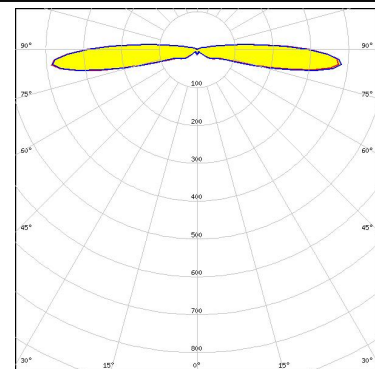
LUMILEDS

LED	LUXEON IR Compact
FWHM / FWTM	183.4° / 217.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
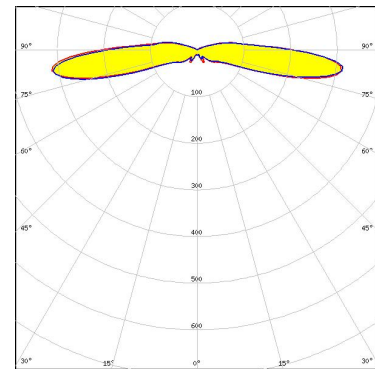
LUMILEDS

LED	LUXEON Rebel
FWHM / FWTM	180.0° / 182.0°
Efficiency	75 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	

OPTICAL RESULTS (SIMULATED):

LUMILEDS
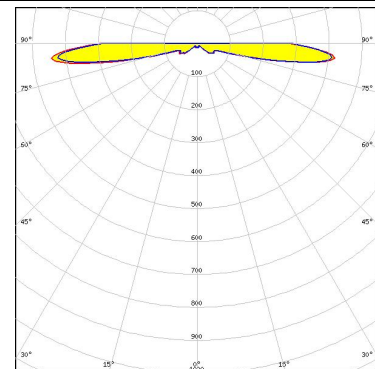
LED	LUXEON Z
FWHM / FWTM	183.4° / 218.0°
Efficiency	89 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

NICHIA
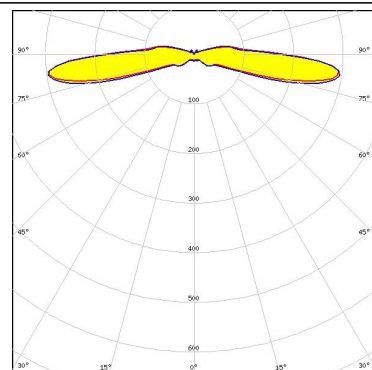
LED	NCSxE17A
FWHM / FWTM	173.0° / 208.0°
Efficiency	96 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

NICHIA
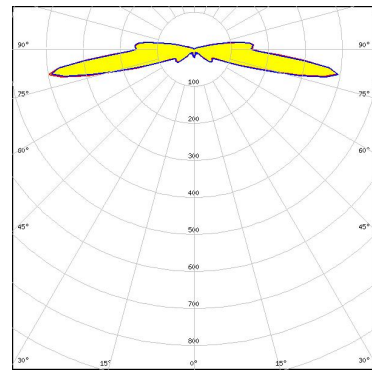
LED	NCSxE17A
FWHM / FWTM	180.0° / 226.0°
Efficiency	96 %
Peak intensity	0.3 cd/lm
LEDs/each optic	7
Light colour	White
Required components:	

NICHIA
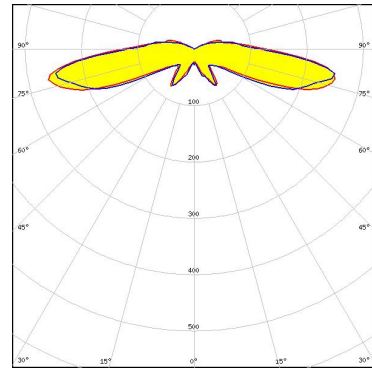
LED	NCSxE17A
FWHM / FWTM	179.0° / 228.0°
Efficiency	96 %
Peak intensity	0.3 cd/lm
LEDs/each optic	7
Light colour	White
Required components:	

OPTICAL RESULTS (SIMULATED):

NICHIA
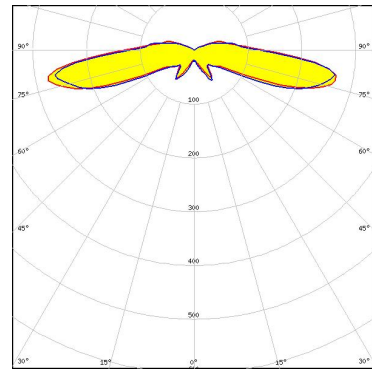
LED	NV4WB35AM
FWHM / FWTM	184.0° / 220.0°
Efficiency	95 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM Opto Semiconductors
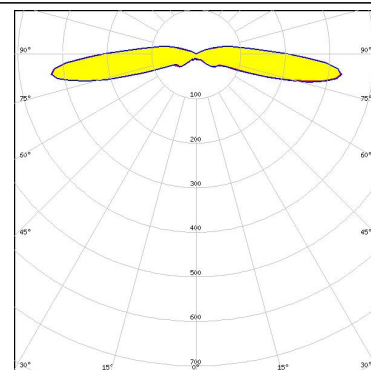
LED	OSCONIQ P 3030
FWHM / FWTM	181.0° / 208.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM Opto Semiconductors
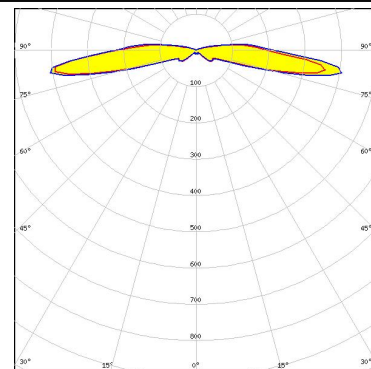
LED	OSCONIQ P 7070
FWHM / FWTM	192.0° / 226.0°
Efficiency	95 %
LEDs/each optic	1
Light colour	White
Required components:	

OSRAM Opto Semiconductors
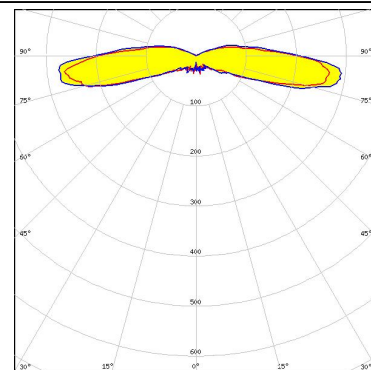
LED	OSLON Signal
FWHM / FWTM	186.0° / 203.0°
Efficiency	95 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	
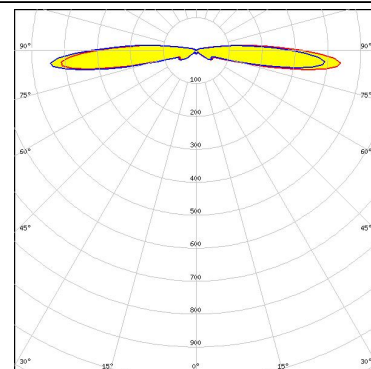
OPTICAL RESULTS (SIMULATED):

OSRAM Opto Semiconductors

LED	OSLON SSL 120
FWHM / FWTM	188.0° / 212.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
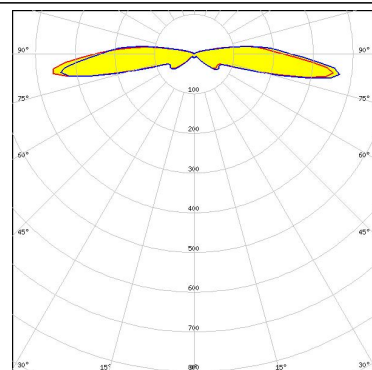
OSRAM Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	180.0° / 182.0°
Efficiency	78 %
Peak intensity	0.5 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	
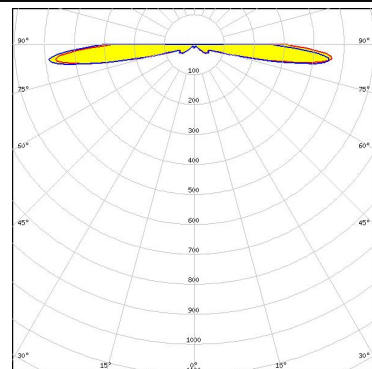
OSRAM Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	198.0° / 216.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	Blue
Required components:	
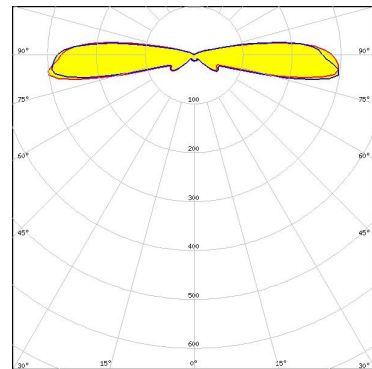
OSRAM Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	197.0° / 215.0°
Efficiency	96 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	
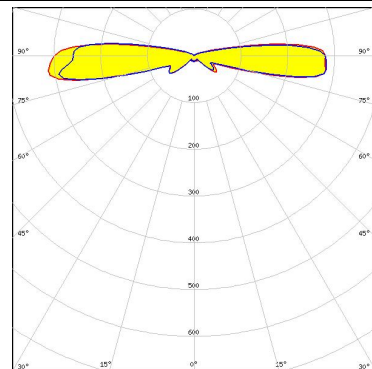
OPTICAL RESULTS (SIMULATED):

OSRAM Opto Semiconductors

LED	OSLON SSL 80
FWHM / FWTM	195.0° / 206.0°
Efficiency	93 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
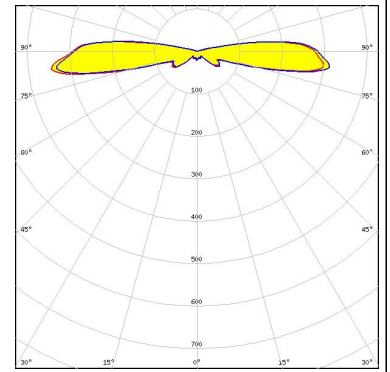
OSRAM Opto Semiconductors

LED	OSTAR Projection Compact (KW.CSLNM1.TG)
FWHM / FWTM	188.0° / 208.0°
Efficiency	96 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	
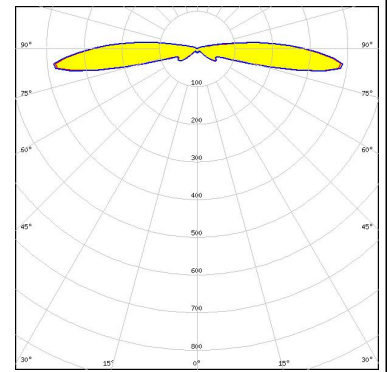
OSRAM Opto Semiconductors

LED	SFH 4170S
FWHM / FWTM	188.0° / 208.0°
Efficiency	87 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
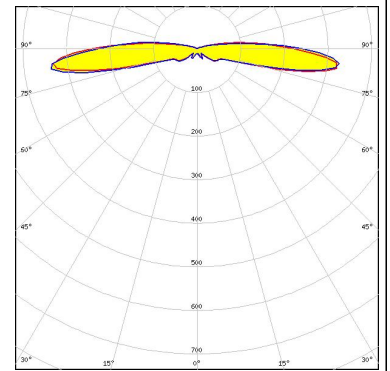
OSRAM Opto Semiconductors

LED	SFH 4715AS
FWHM / FWTM	202.0° / 221.0°
Efficiency	95 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
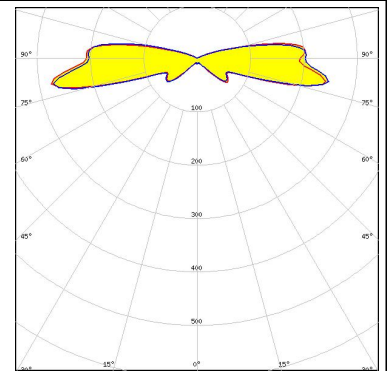
OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	SFH 4715S
FWHM / FWTM	196.0° / 216.0°
Efficiency	95 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
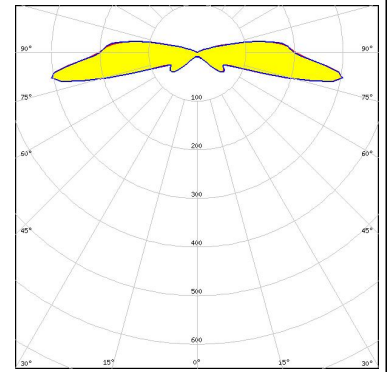
OSRAM
Opto Semiconductors

LED	SFH 4716AS
FWHM / FWTM	184.0° / 207.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
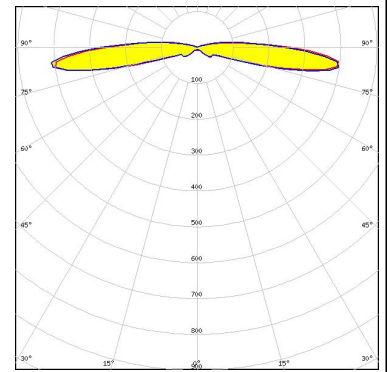
OSRAM
Opto Semiconductors

LED	SFH 4717AS
FWHM / FWTM	207.0° / 224.0°
Efficiency	95 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
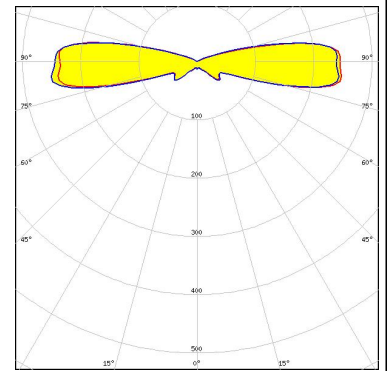
OSRAM
Opto Semiconductors

LED	SFH 4770S
FWHM / FWTM	185.0° / 212.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	
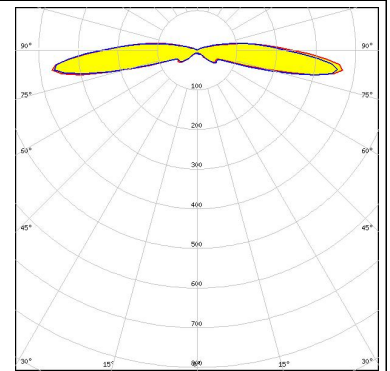
OPTICAL RESULTS (SIMULATED):

SAMSUNG

LED	LH351C
FWHM / FWTM	196.0° / 215.0°
Efficiency	96 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
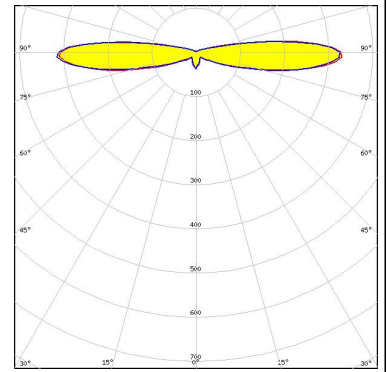
SAMSUNG

LED	LH351D
FWHM / FWTM	190.0° / 216.0°
Efficiency	94 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
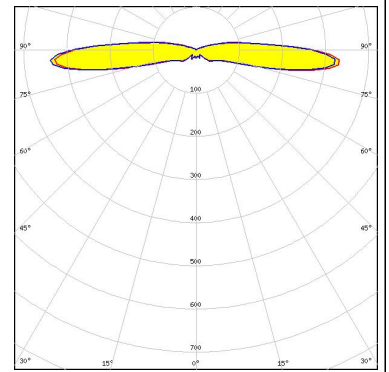
SEOUL SEMICONDUCTOR

LED	MJT 3030
FWHM / FWTM	184.0° / 212.0°
Efficiency	95 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
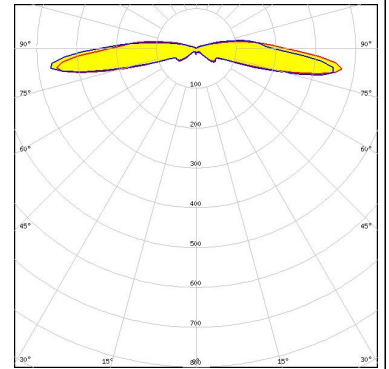
SEOUL SEMICONDUCTOR

LED	Z5M4
FWHM / FWTM	184.0° / 216.0°
Efficiency	95 %
Peak intensity	0.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

LED	Z8Y22P
FWHM / FWTM	181.4° / 210.6°
Efficiency	94 %
Peak intensity	0.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	
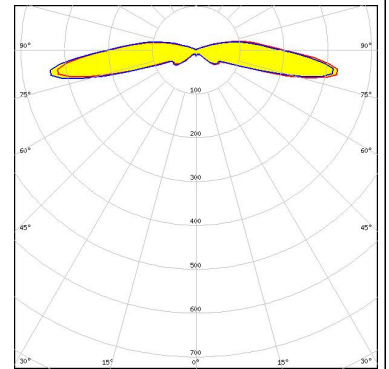
GENERAL INFORMATION:

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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