HB-2X2MX-8-M

~30° wide beam. New revision.

SPECIFICATION:

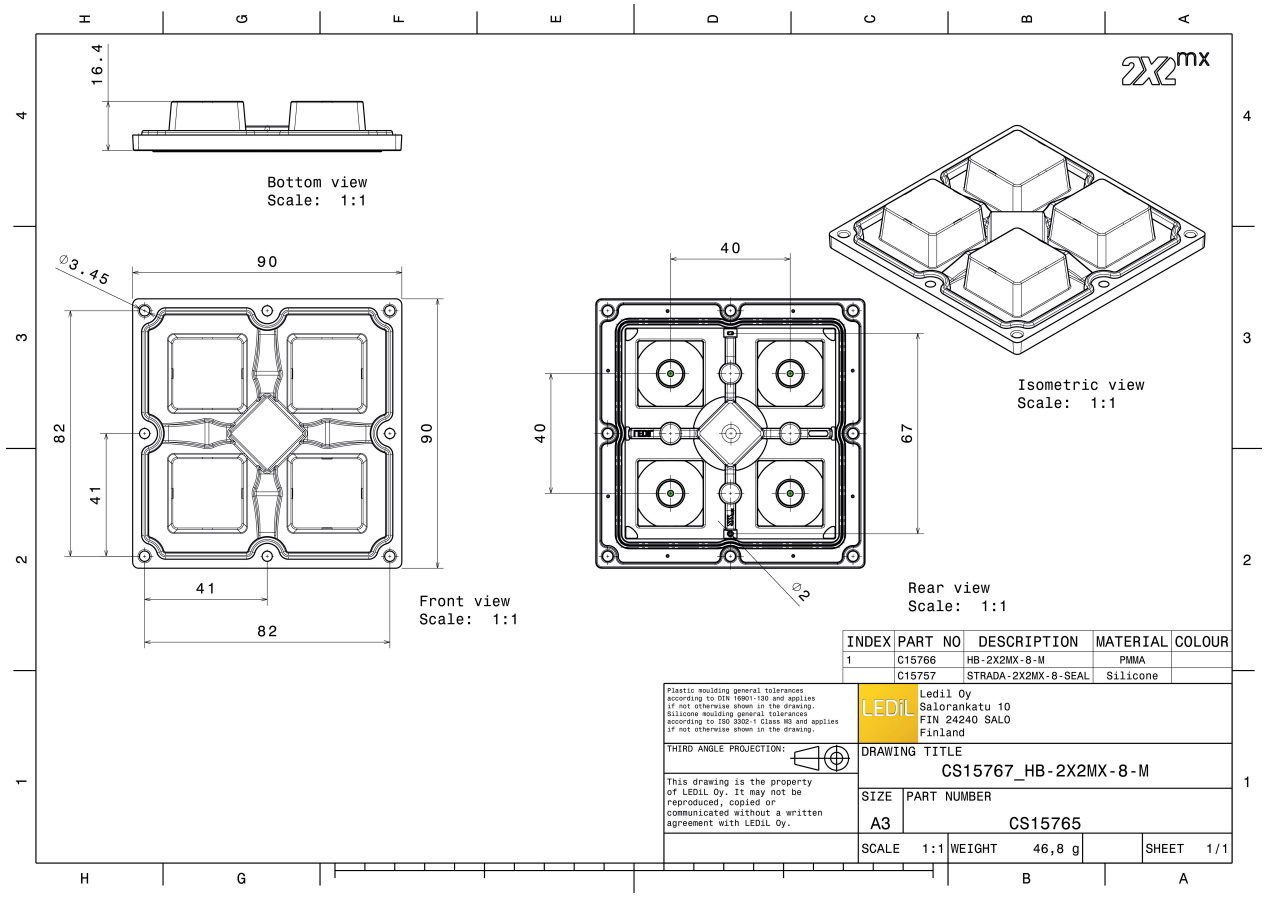
Dimensions	90.0 x 90.0
Height	16.4 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-2X2MX-8-M	Multi-lens	PMMA	clear		
STRADA-2X2MX-8-SEAL	Seal	Silicone	clear		

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS15767_HB-2X2MX-8-M » Box size: 480 x 280 x 300 mm	Multi-lens	156	52	52	8.3



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C15766	HB-2X2MX-8-M	PMMA	
	C15757	STRADA-2X2MX-8-SEAL	Silicone	

Plastic moulding general tolerances according to DIN 16901-130 and applies if not otherwise shown in the drawing. Silicone moulding general tolerances according to ISO 3302-1 Class M3 and applies if not otherwise shown in the drawing.

THIRD ANGLE PROJECTION:

Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

DRAWING TITLE
CS15767_HB-2X2MX-8-M

SIZE	PART NUMBER		
A3	CS15765		
SCALE 1:1	WEIGHT 46,8 g		SHEET 1/1

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

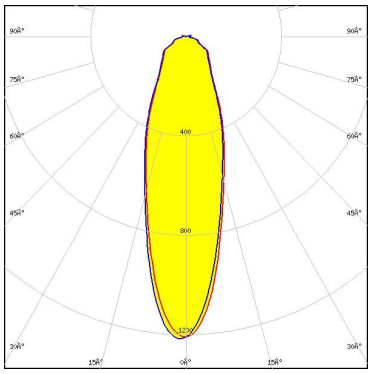
OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	CXA/B 15xx
FWHM / FWTM	31.0° / 101.0°
Efficiency	91 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

Bender Wirth: 441 Typ 2x2MX HV

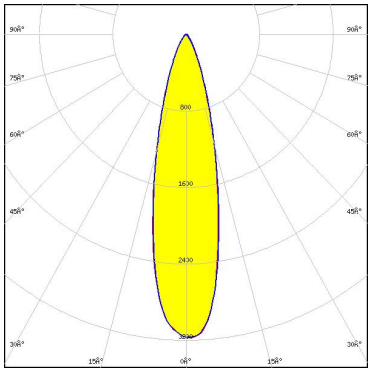


Light distribution files

LUMILEDS

LED	LUXEON M/MX
FWHM / FWTM	25.0° / 52.0°
Efficiency	94 %
Peak intensity	3.2 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

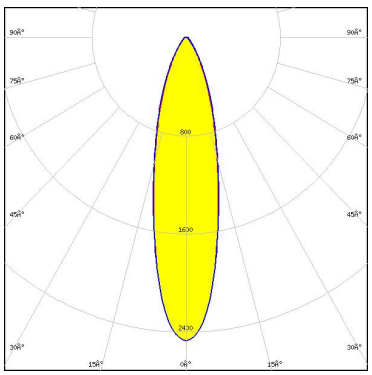


Light distribution files

LUMILEDS

LED	LUXEON XR-7070 (L224-xxxx004MLU010)
FWHM / FWTM	26.0° / 61.0°
Efficiency	94 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White

Required components:

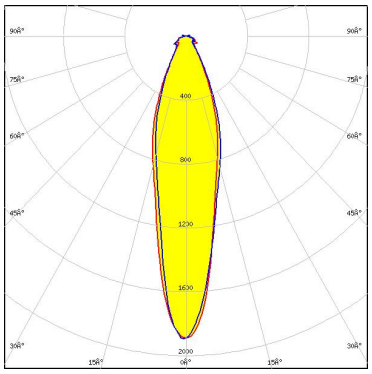


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

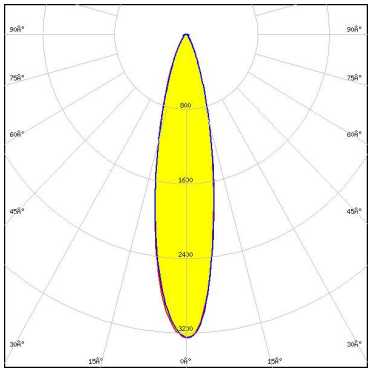
LED	HiLOM SC16 (LH181B)
FWHM / FWTM	25.0° / 64.0°
Efficiency	93 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SCIOLUX

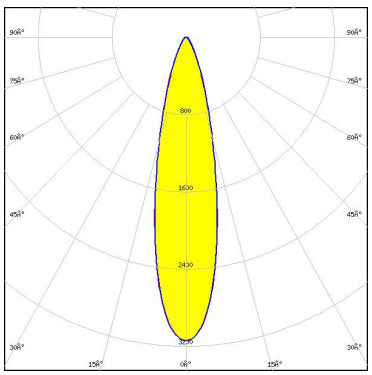
LED	XLE-S22C4XD16 (XD16)
FWHM / FWTM	23.0° / 50.0°
Efficiency	93 %
Peak intensity	3.3 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	WICOP 5050
FWHM / FWTM	24.0° / 51.0°
Efficiency	95 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

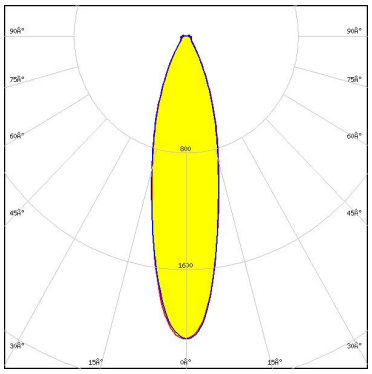


Light distribution files

OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR

LED	Z8Y22
FWHM / FWTM	27.0° / 63.0°
Efficiency	91 %
Peak intensity	2.1 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	

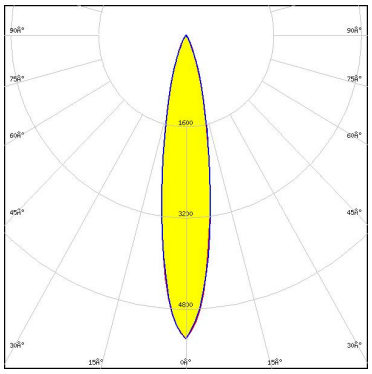


Light distribution files

OPTICAL RESULTS (SIMULATED):

bridgelux

LED	Bridgelux SMD 5050
FWHM / FWTM	19.0° / 43.0°
Efficiency	94 %
Peak intensity	5.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

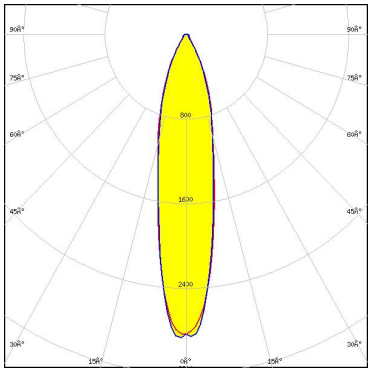


Light distribution files

CITIZEN

LED	CLU700/701/702/703
FWHM / FWTM	22.0° / 58.0°
Efficiency	92 %
Peak intensity	2.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 434 Typ 2x2MX HV

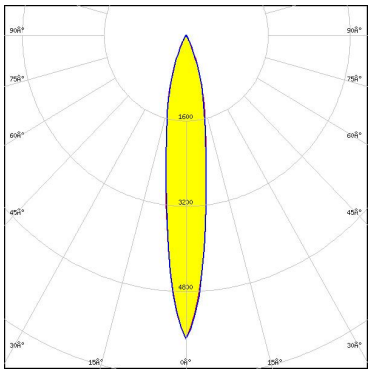


Light distribution files

CREE LEDs

LED	CMA1303
FWHM / FWTM	16.0° / 44.0°
Efficiency	96 %
Peak intensity	5.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Bender Wirth: 448 Typ 2x2MX HV

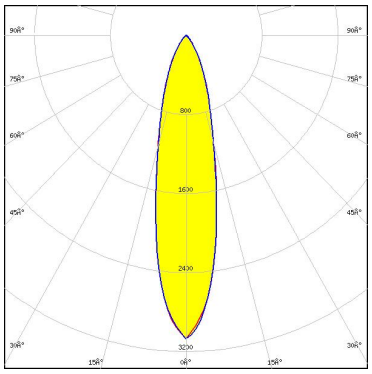


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

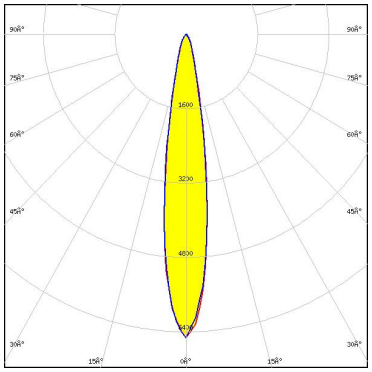
LED	J Series 7070B K Class
FWHM / FWTM	24.0° / 58.0°
Efficiency	97 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

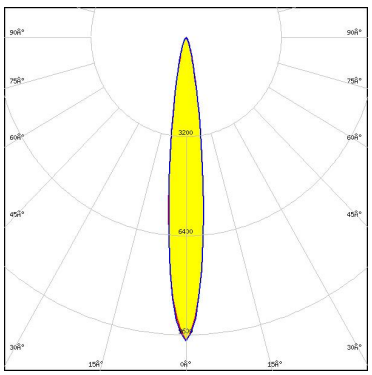
LED	XHP35 HD
FWHM / FWTM	17.0° / 34.0°
Efficiency	94 %
Peak intensity	6.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XHP35 HI
FWHM / FWTM	14.0° / 30.0°
Efficiency	94 %
Peak intensity	9.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

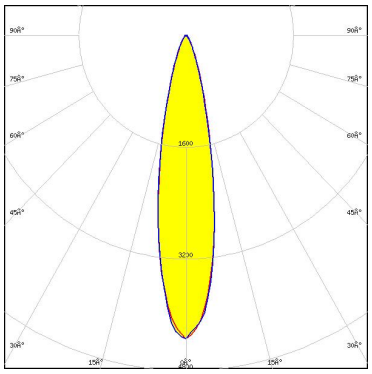


Light distribution files

OPTICAL RESULTS (SIMULATED):

CREE LEDs

LED	XHP50.2
FWHM / FWTM	22.0° / 44.0°
Efficiency	94 %
Peak intensity	4.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

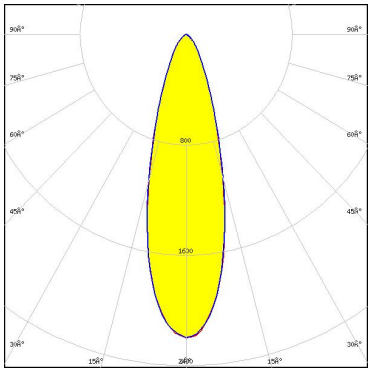


Light distribution files

CREE LEDs

LED	XHP70.2
FWHM / FWTM	30.0° / 62.0°
Efficiency	91 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

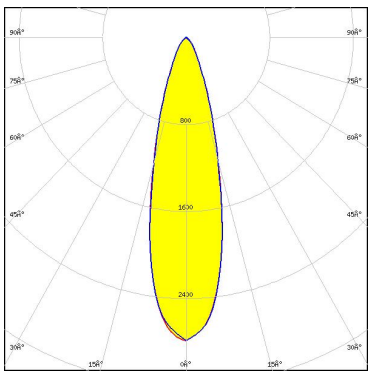
Protective plate, glass



Light distribution files

CREE LEDs

LED	XHP70.3 HD
FWHM / FWTM	28.0° / 56.0°
Efficiency	96 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

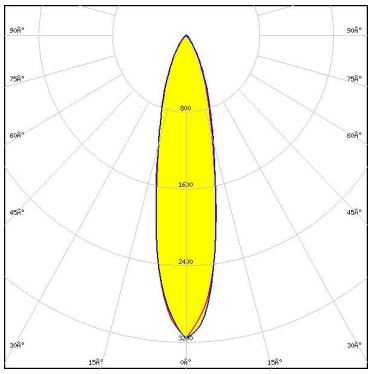


Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMILEDS

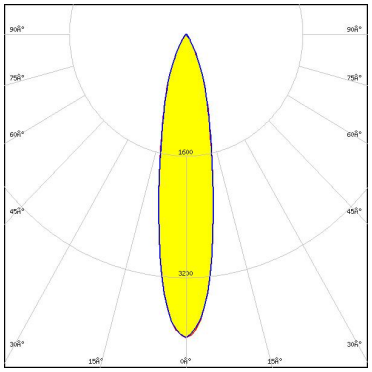
LED	LUXEON 7070
FWHM / FWTM	24.0° / 58.0°
Efficiency	96 %
Peak intensity	3.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMINUS

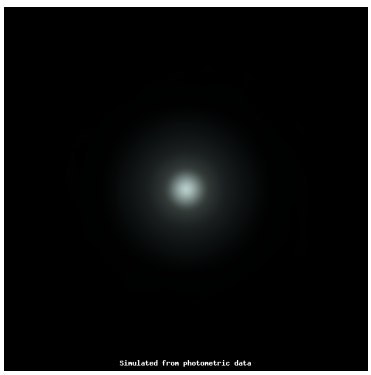
LED	MP 7070
FWHM / FWTM	22.0° / 52.0°
Efficiency	97 %
Peak intensity	4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

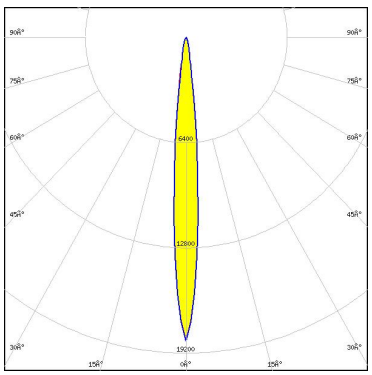


Light distribution files

LUMINUS

LED	SFT-40 Gen2
FWHM / FWTM	10.0° / 20.0°
Efficiency	97 %
Peak intensity	18.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



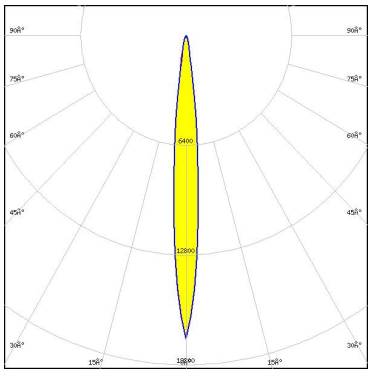


Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMINUS

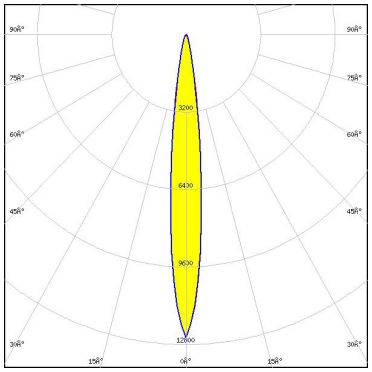
LED	SFT-40-WCS
FWHM / FWTM	10.0° / 20.0°
Efficiency	97 %
Peak intensity	17.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMINUS

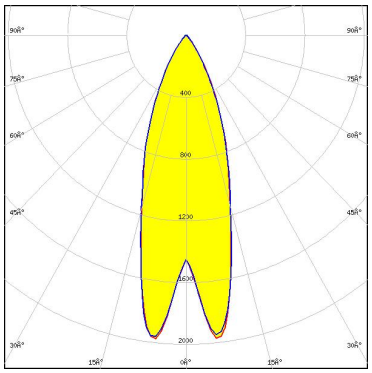
LED	SFT-70X-WCS
FWHM / FWTM	12.0° / 26.0°
Efficiency	97 %
Peak intensity	12.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NF2x757G
FWHM / FWTM	34.0° / 66.0 + 67.0°
Efficiency	97 %
Peak intensity	2 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	

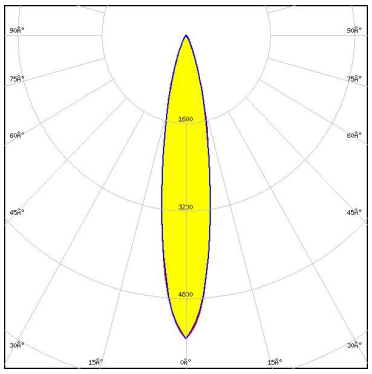


Light distribution files

OPTICAL RESULTS (SIMULATED):

NICHIA

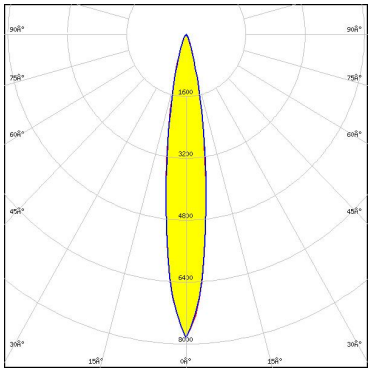
LED	NFMW48xA
FWHM / FWTM	19.0° / 42.0°
Efficiency	94 %
Peak intensity	5.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

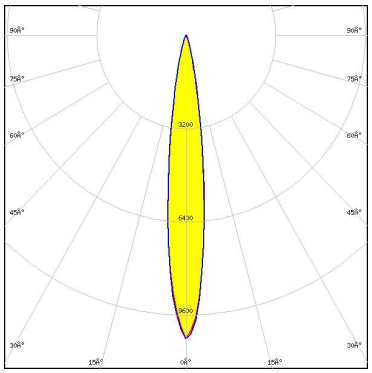
LED	NV4WB35AM
FWHM / FWTM	16.0° / 34.0°
Efficiency	97 %
Peak intensity	7.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSxE21A
FWHM / FWTM	14.0° / 28.0°
Efficiency	94 %
Peak intensity	10.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

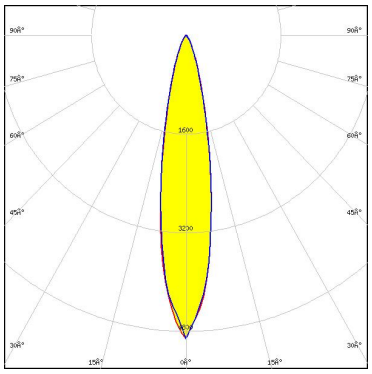


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

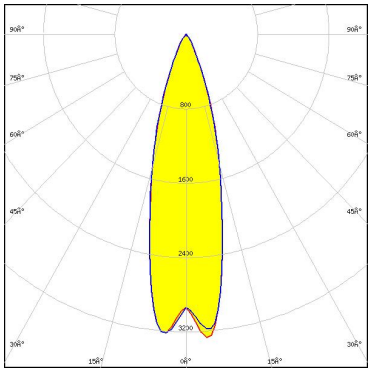
LED	Duris S10
FWHM / FWTM	20.0° / 43.0°
Efficiency	94 %
Peak intensity	4.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

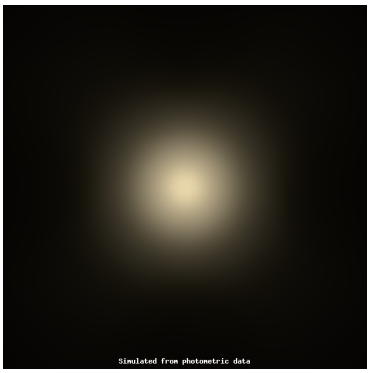
LED	OSCONIQ C 2424 Gen1
FWHM / FWTM	28.0° / 52.0°
Efficiency	97 %
Peak intensity	3.3 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	

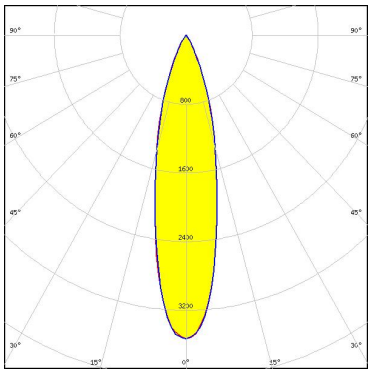


Light distribution files

OSRAM
Opto Semiconductors

LED	OSCONIQ C 2424 Gen2 2x2 cluster
FWHM / FWTM	24.0° / 52.0°
Efficiency	97 %
Peak intensity	3.5 cd/lm
LEDs/each optic	4
Light colour/type	White
Required components:	



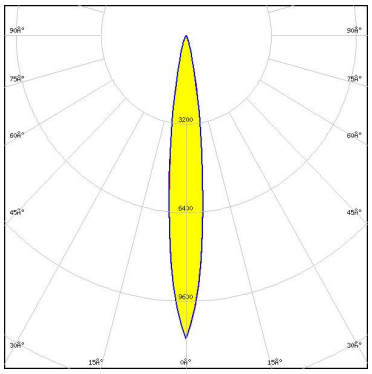


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

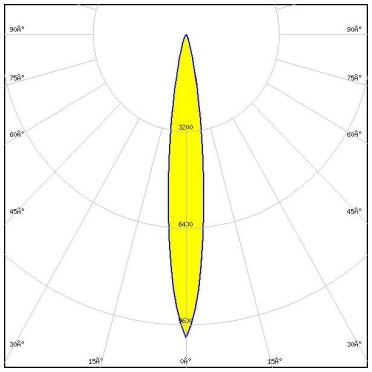
LED	LH181B
FWHM / FWTM	14.0° / 28.0°
Efficiency	96 %
Peak intensity	11 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

LED	LH231B
FWHM / FWTM	14.0° / 30.0°
Efficiency	96 %
Peak intensity	10 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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.

Due to use of high power COB's with this product, special attention to proper thermal design is highly recommended. LEDiL has no liability for direct, indirect or consecutive damages arising from the LEDiL products being used outside of the recommended temperature range.

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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