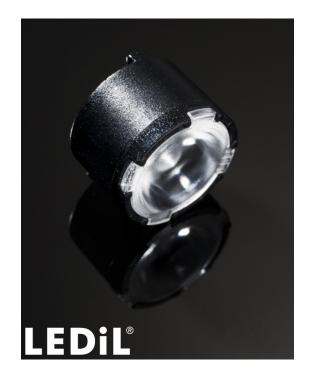


LISA2-WW-PIN

~45° wide beam. 6.8 mm high variant with location pin installation.

SPECIFICATION:

Dimensions	Ø 9.9 mm
Height	6.8 mm
Fastening	glue, pin
ROHS compliant	yes 🛈



MATERIALS:

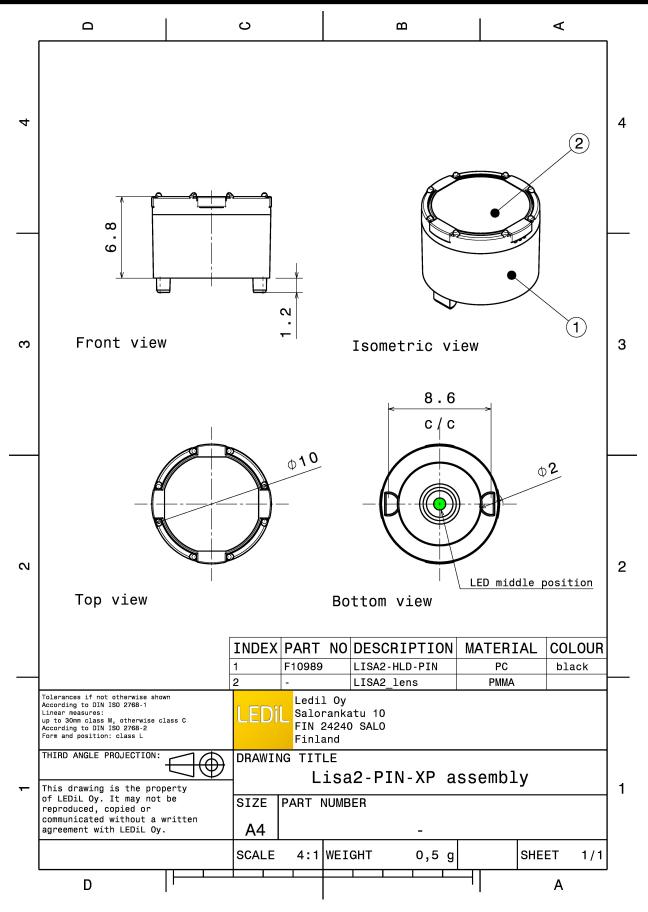
Component	Туре	Material	Colour	Finish
LISA2-WW	Single lens	PMMA	clear	
LISA2-HLD-PIN	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP13026_LISA2-WW-PIN	Single lens	2000		100	1.4
» Box size:					



PRODUCT DATASHEET FP13026_LISA2-WW-PIN



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



OPTICAL RESULTS (MEASURED):

			90*	909
LED	XP-E2			
FWHM / FWTM	43.0° / 79.0°		781	1
Efficiency	88 %		400	$X \times X$
Peak intensity	1.4 cd/lm		box -	
LEDs/each optic	1			
Light colour	White		aze	
Required compone				
			1230	A
			30° 0°	15° 30°
			90*	90*
LED	XP-G2			
FWHM / FWTM	47.0° / 83.0°		73	2.
Efficiency	88 %		60.5	
Peak intensity	1.2 cd/lm			$ \sim $
LEDs/each optic	1			\times \times
Light colour	White		954	42.
Required compone	nts:	_		
				$//$ \times
			30° 1250	36*
			139 00	15'
			90°	32 ₄
LED	XP-G3			15°
LED FWHM / FWTM	XP-G3 42.0° / 76.0°			25
LED FWHM / FWTM Efficiency	XP-G3 42.0° / 76.0° 84 %			57 25
LED FWHM / FWTM Efficiency Peak intensity	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm			60, 25, 25,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1			6. 6. 25.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White			12°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White			12°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White			12°.
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White			57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White			22, 20, 22, 22, 22, 22, 22, 22, 22, 22,
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts:		5° 5° 5° 5° 5° 5° 5°	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts:		54 54 54 54 50 50 50 50 50 50 50 50 50 50	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts:		54 54 54 54 54 55 55 55 55 55	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts:		54 54 54 54 50 50 50 50 50 50 50 50 50 50	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0°		54 54 54 54 50 50 50 50 50 50 50 50 50 50	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 %		54 54 54 54 50 50 50 50 50 50 50 50 50 50	25°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 % 1.1 cd/lm		54 54 54 54 50 50 50 50 50 50 50 50 50 50	12° 13° 12° 13°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 % 1.1 cd/lm 1 White		54 54 54 54 50 50 50 50 50 50 50 50 50 50	12° 13° 12° 13°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 % 1.1 cd/lm 1 White		54 54 54 54 50 50 50 50 50 50 50 50 50 50	12° 13° 12° 13°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 % 1.1 cd/lm 1 White		54 54 54 54 50 50 50 50 50 50 50 50 50 50	12° 13° 12° 13°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone CREE (LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	XP-G3 42.0° / 76.0° 84 % 1.5 cd/lm 1 White nts: XT-E 47.0° / 82.0° 84 % 1.1 cd/lm 1 White		54 54 54 54 50 50 50 50 50 50 50 50 50 50	5°



OPTICAL RESULTS (MEASURED):

ØNICHI		8°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NCSxx19B 41.0° / 78.0° 86 % 1.5 cd/lm 1 White nts:	
OSRAM Opto Semiconductors		R ⁴
LED	OSLON Square EC	
FWHM / FWTM	46.0° / 86.0°	
Efficiency	84 %	60 60 00
Peak intensity	1.6 cd/lm	
LEDs/each optic	1	
Light colour	White	gr et
Required compone	nts:	20°
SAMSU	JNG	80° 80°
LED	LH351Z	
FWHM / FWTM	60.0° / 91.0°	
Efficiency	90 %	est est
Peak intensity	1 cd/lm	
LEDs/each optic	1	
Light colour	White	er weiter er
Required compone	nts:	24" 20 <u>0</u> 25" 200 29" 25" 25"



LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XP-G2 HE 69.0° / 100.0° 87 % 0.7 cd/lm 1 White	20 20 20 20 20 20 20 20 20 20
		159 00 159
CONTINUED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON IR 2720 31.0° / 70.0° 74 % 1.7 cd/lm 1 IR	5° 5° 5° 5°
)E	
CONTRACTOR OF CO	LUXEON TX 40.0° / 61.0° 94 % 2.1 cd/lm 1 White	39° 39° 99° 99° 90° 100° 100° 100° 100° 10° 10° 10
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	SST-20 36.0° / 58.0° 96 % 2.6 cd/lm 1 White	54 ⁴ 54 ⁴ 54 54 54 55 55 55 55 55 55 55



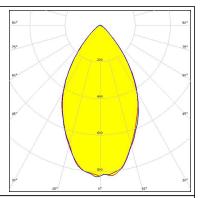
ΜΝΙCΗΙΛ

LED	NCSxE17A
Assembly	NULL
FWHM / FWTM	30.0° / 72.0°
Efficiency	86 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

ØNICHIΛ

LED	
FWHM / FWTM	(
Efficiency	ł
Peak intensity	
LEDs/each optic	
Light colour	,
Required components:	





ØΝΙCΗΙΛ

LED	NVSxE21A
Assembly	NULL
FWHM / FWTM	38.0° / 74.0°
Efficiency	84 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

Ø ΝΙCΗΙΛ		90 ⁴
LED	NVSxx19B/NVSxx19C	
Assembly	NULL	
FWHM / FWTM	55.0° / 88.0°	
Efficiency	88 %	
Peak intensity	1 cd/lm	
LEDs/each optic	1	45*
Light colour	White	
Required component	ts:	



OSRAM Opto Semiconductors		90 ⁴
LED	OSLON Black	75
FWHM / FWTM	36.0° / 78.0°	400
Efficiency	93 %	60 ⁴ 60 ⁴
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	g*
Required components:		- 1220
		30° 30°
OSDAM		15° 0° 15°
OSRAM Opto Semiconductors		90° 90°
LED	OSLON Square CSSRM2/CSSRM3	23*
FWHM / FWTM	57.0° / 89.0°	
Efficiency	92 %	60°
Peak intensity	1.1 cd/lm	400
LEDs/each optic	1	
Light colour	White	az. az.
Required components:		
		30° 30°
		15° 0° 15°
OSRAM Opto Semiconductors		90° 90°
OSRAM Opto Semiconductors LED	OSLON SSL 80	99°
Opto Semiconductors	OSLON SSL 80 55.0° / 87.0°	
Opto Semiconductors		
Opto Semiconductors LED FWHM / FWTM	55.0° / 87.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	55.0° / 87.0° 91 % 1.1 cd/lm 1	27 69 60 60 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	55.0° / 87.0° 91 % 1.1 cd/lm 1	27 69 60 60 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1	27 69 60 60 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1	27 69 60 60 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1	27 69 60 60 60 60
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 87.0° 91 % 1.1 cd/lm 1	77 61 61 61 60 60 60 60 67 67 67 67 67 67 67 67 67 67
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1	75 60 ⁴ 60 ⁴
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	55.0° / 87.0° 91 % 1.1 cd/lm 1 White	Ba. Ba. Ba.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS	77 61 61 61 61 61 61 61 61 61 61
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0°	Ba. Ba. Ba.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS	Ba. Ba. Ba.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0°	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0° 92 %	Ba. Ba. Ba.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0° 92 % 1	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	55.0° / 87.0° 91 % 1.1 cd/lm 1 White SFH 4715AS 36.0° / 75.0° 92 % 1	



OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4725AS 38.0° / 76.0° 91 % 1 IR	20° 0° 12° 0° 23°
Cost Semiconductors	SFH 4725S 27.0° / 52.0° 94 % 1 IR	5°' 5°' 6°' 500 5°' 500 5°' 500 5°' 5°' 500 5°' 5°' 5°' 5°' 5°' 5°' 5°' 5°'
SEQUIL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Z8Y22P 50.0° / 88.0° 86 % 1.1 cd/lm 1 White	



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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LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc. 228 West Page Street Suite D Sycamore IL 60178 USA

Ledil Optics Technology (Shenzhen) Co., Ltd. # 405 , Block B Casic Motor Building Shenzhen 518057 P.R.CHINA

Local sales and technical support www.ledil.com/ where_to_buy

Shipping locations Salo, Finland Hong Kong, China

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