

# PRODUCT DATASHEET FP16559\_LISA3-M-PIN

# LISA3-M-PIN

~25° medium beam with location pin installation

#### **SPECIFICATION:**

Dimensions	Ø 10.0 mm
Height	7.9 mm
Fastening	glue
ROHS compliant	yes 🛈



#### MATERIALS:

**Component** LISA3-M LISA3-HLD-PIN

### **Type** Single lens Holder

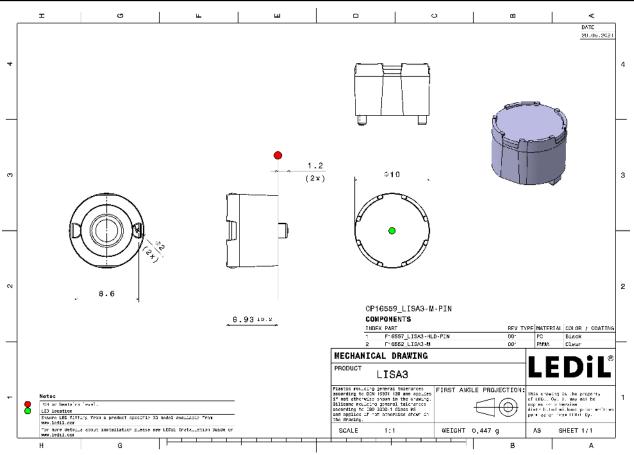
Material	Colour	Finish
PMMA	clear	
PC	black	

#### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16559_LISA3-M-PIN	Single lens	2000	300	100	1.3
» Box size: 310 x 230 x 60 mm					



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See also our general installation guide: <u>www.ledil.com/installation\_guide</u>



#### **OPTICAL RESULTS (MEASURED):**

		•×
LED	XD16	and the
FWHM / FWTM	26.0° / 49.0°	
Efficiency	76 %	
Peak intensity	3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required componer	nts:	
		8.5 A
LED	XP-E2	
FWHM / FWTM	25.0° / 47.0°	25
Efficiency	88 %	
Peak intensity	3.6 cd/lm	
LEDs/each optic	1	$X \neq (-) \times X$
Light colour	White	e X e
Required componer	nts:	
		$\times$
		the at
		£5
LED	XP-G3	
LED FWHM / FWTM	31.0° / 58.0°	
LED FWHM / FWTM Efficiency	31.0° / 58.0° 81 %	
LED FWHM / FWTM Efficiency Peak intensity	31.0° / 58.0° 81 % 2.3 cd/lm	1."
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	31.0° / 58.0° 81 % 2.3 cd/lm 1	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 58.0° 81 % 2.3 cd/lm 1 White	1."
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	31.0° / 58.0° 81 % 2.3 cd/lm 1 White	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 58.0° 81 % 2.3 cd/lm 1 White	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 58.0° 81 % 2.3 cd/lm 1 White	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 58.0° 81 % 2.3 cd/lm 1 White	50
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required componen	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts:	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LUMIL LED FWHM / FWTM	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0°	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency Peak intensity	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 % 4.3 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 % 4.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component Equired component Component Equired component Component Equired component Component Equired component Equired	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 % 4.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component Equired component Component Equired component Component Equired component Component Equired component Equired	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 % 4.3 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Component Equired component Component Equired component Component Equired component Component Equired component Equired	31.0° / 58.0° 81 % 2.3 cd/lm 1 White nts: EDS LUXEON CZ 23.0° / 43.0° 87 % 4.3 cd/lm 1 White	



#### **OPTICAL RESULTS (MEASURED):**

<b>ØNICHI</b>		8-7 (Provide State Stat
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NF2x757G 28.0° / 54.0° 79 % 2.6 cd/lm 1 White	
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219F 32.0° / 59.0° 88 % 2.4 cd/lm 1 White	
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSCONIQ C 2424 24.0° / 46.0° 87 % 3.8 cd/lm 1 White ents:	
Orbo Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	OSLON Square CSSRM2/CSSRM3 30.0° / 55.0° 87 % 2.5 cd/lm 1 White ents:	



### **OPTICAL RESULTS (MEASURED):**

SAMS	JNG	E
LED	LH351C	
FWHM / FWTM	31.0° / 58.0°	
Efficiency	89 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	at here
Required compone	ents:	
		L. T
SEQUE SEMICONDUCTOR	Z5M4	
FWHM / FWTM	33.0° / 61.0°	
Efficiency	88 %	
Peak intensity	2.3 cd/lm	
LEDs/each optic	1	
Light colour	White	e v
Required compone	ents:	



		E7
LED	J Series 2835	
FWHM / FWTM	25.0° / 50.0°	
	88 %	XAM
Efficiency	86 % 3.5 cd/lm	
Peak intensity		
LEDs/each optic	1	
Light colour	White	
Required components:		
LED	XP-E	
FWHM / FWTM	28.0° / 45.0°	
Efficiency	90 %	
Peak intensity	3.5 cd/lm	
LEDs/each optic	1	X / T X X
Light colour	White	
Required components:		
		X   X   X
		1 And A
		$\times$ / $\times$ / $\times$
	XP-G	
LED	XP-G 30.0° / 50.0°	
LED FWHM / FWTM		
LED	30.0° / 50.0°	
LED FWHM / FWTM Efficiency Peak intensity	30.0° / 50.0° 88 %	
LED FWHM / FWTM Efficiency	30.0° / 50.0° 88 % 2.7 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	30.0° / 50.0° 88 % 2.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1	121 121 121 121 121 121 121 121 121 121
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	30.0° / 50.0° 88 % 2.7 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	30.0° / 50.0° 88 % 2.7 cd/lm 1 White	122 122 122 122 122 122 122 122 122 122
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0°	121 121 121 121 121 121 121 121 121 121
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 %	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: CREE LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	30.0° / 50.0° 88 % 2.7 cd/lm 1 White XP-G2 HE 34.0° / 66.0° 86 % 2 cd/lm 1	



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		8.7 Sec. 907
LEDS	XT-E	
FWHM / FWTM	24.0° / 46.0°	m A A A
Efficiency	82 %	r / / w
Peak intensity	3.6 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
		X   X
		×
	os	1.7 M
LED	LUXEON 2835 Line	
FWHM / FWTM	23.0° / 46.0°	
	23.0° / 46.0° 89 %	
Efficiency Peak intensity	89 % 4.2 cd/lm	5° / 10°
LEDs/each optic	1	
Light colour	White	
Required components:		
	5	27
LED		
	LUXEON 3030 2D (Round LES)	n A A A
FWHM / FWTM	25.0° / 45.0°	
Efficiency	85 %	
Peak intensity	4.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
	DS	
LED	LUXEON C	
FWHM / FWTM	28.0° / 54.0°	
Efficiency	75 %	$\mathbb{N}$
Peak intensity	2.6 cd/lm	
LEDs/each optic	1	
Light colour	Deep Red	
Required components:	Deep Neu	
Required components:		
		)* _/ _ *



	DS S	E.5
LED	LUXEON C	
FWHM / FWTM	26.0° / 52.0°	
Efficiency	76 %	5 / / M
Peak intensity	2.8 cd/lm	X / X
LEDs/each optic	1	
Light colour	Green	
Required components:		$\times \Lambda \Lambda \times$
		/
	DS	er
LED	LUXEON C	
FWHM / FWTM	27.0° / 51.0°	
Efficiency	76 %	
Peak intensity	2.9 cd/lm	X / X
LEDs/each optic	1	
Light colour	Royal Blue	
Required components:		
	5	2.5 XX 2.5 XX
LED	LUXEON C	
FWHM / FWTM	28.0° / 52.0°	
Efficiency	80 %	DX A N
Peak intensity	2.9 cd/lm	
LEDs/each optic	1	
Light colour	White	82 A 100 A
Required components:		
		5.7
LED	LUXEON TX	- A A A
FWHM / FWTM	28.0° / 50.0°	XMARX
Efficiency	87 %	× X/
Peak intensity	3.1 cd/lm	
LEDs/each optic	1	
Light colour Required components:	White	
Required components:		



)S	2.7 99
LUXEON V2 30.0° / 56.0° 90 % 2.7 cd/lm 1 White	
)S	10 ×
LUXEON Z 20.0° / 38.0° 88 % 6.1 cd/lm 1 White	
	3 V V
LUXEON Z ES 22.0° / 41.0° 89 % 5 cd/lm 1 White	
SST-20 26.0° / 46.0° 87 % 3.8 cd/lm 1 White	1
	30.0° / 56.0° 90 % 2.7 cd/m 1 White



<b>ØNICHIA</b>		*
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	NCSU276C 30.0° / 52.0° 89 % 1 UV-A	22 25 05 05 05 05 05 05 05 05 05 05 05 05 05
<b>ØNICHIA</b>		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NCSxx19B 26.0° / 49.0° 83 % 3.3 cd/lm 1 White	25
Required components:		N N N N N
<b>WNICHIA</b>		*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NV4WB35AM 38.0° / 66.0° 85 % 1.8 cd/lm 1 White	25
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxx19B/NVSxx19C 29.0° / 56.0° 86 % 2.7 cd/lm 1 White	22 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29



OSRAM Opto Semiconductors		a.s
LED	Duris E 2835	
FWHM / FWTM	23.0° / 46.0°	
Efficiency	87 %	5° / 10°
Peak intensity	4.1 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
OSRAM		
OSRAM Opto Semiconductors		·· · · · · · · · · · · · · · · · · · ·
LED	Duris S5 (2 chip)	
FWHM / FWTM	25.0° / 45.0°	
Efficiency	89 %	
Peak intensity	3.2 cd/lm	$ \times / \times 1$
LEDs/each optic	1	
Light colour	White	
Required components:		$\times \Lambda \Pi X$
OSRAM Opto Semiconductors		
LED	Duris S5 (Single chip)	
FWHM / FWTM	25.0° / 45.0°	
Efficiency	86 %	
Peak intensity	3.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
OSRAM		
Opto Semiconductors LED	OSCONIQ P 3030	
FWHM / FWTM	22.0° / 42.0°	
Efficiency	85 %	
Peak intensity	4.7 cd/lm	· · · · · · · · · · · · · · · · · · ·
LEDs/each optic	1	
Light colour	White	
Required components:		



OSRAM Opto Semiconductors		w
LED	OSLON Black	sta A A
FWHM / FWTM	18.0° / 34.0°	
Efficiency	88 %	
Peak intensity	6.8 cd/lm	
LEDs/each optic	1	$X \neq D$ $X \times X$
Light colour	White	• X •
Required components:		
		$\times$ $($ $\times$ $)$ $\times$ $)$
OSRAM Opto Semiconductors		w
LED	OSLON Square EC	
FWHM / FWTM	26.0° / 49.0°	
Efficiency	88 %	e
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	$\times$ / 7 $\sim$ X
Light colour	White	
Required components:		
		$\times$ $(\Lambda \tilde{D} \Lambda \times M)$
		10 / W
1		10 10
OSRAM		
Opto Semiconductors	OSI ON Square Elat	
Opto Semiconductors LED	OSLON Square Flat	
Opto Semiconductors LED FWHM / FWTM	24.0° / 45.0°	
Opto Semiconductors LED FWHM / FWTM Efficiency	24.0° / 45.0° 78 %	
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	24.0° / 45.0° 78 % 3.6 cd/lm	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	24.0° / 45.0° 78 % 3.6 cd/lm 1	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 45.0° 78 % 3.6 cd/lm	10 10 10 10 10 10 10 10
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	24.0° / 45.0° 78 % 3.6 cd/lm 1	12 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 45.0° 78 % 3.6 cd/lm 1	12 12 12 10 10 10 10 10 10 10 10 10 10 10 10 10
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 45.0° 78 % 3.6 cd/lm 1	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM	24.0° / 45.0° 78 % 3.6 cd/lm 1	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 45.0° 78 % 3.6 cd/lm 1 White	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	24.0° / 45.0° 78 % 3.6 cd/m 1 White OSLON SSL 120 23.0° / 41.0°	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 %	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm 1	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:  Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm 1	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm 1	
Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	24.0° / 45.0° 78 % 3.6 cd/lm 1 White OSLON SSL 120 23.0° / 41.0° 91 % 4.8 cd/lm 1	



Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON SSL 150 25.0° / 45.0° 89 % 4 cd/lm 1 White		E.4 35 56 67 50 50 57 50 50 57 50 50 50 50 50 50 50 50 50 50 50 50 50
OSRAM Opte Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	OSLON SSL 80 21.0° / 40.0° 87 % 5 cd/lm 1 White		
Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4715S 20.0° / 35.0° 87 % 1 IR	Polar intensity graph	22 22 23 25 25 25 25 25 25 25 25 25 25 25 25 25
Costa Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4716S 22.0° / 44.0° 86 % 1 IR	Polar intensity graph	



OSRAM Opto Semiconductors		1."
LED	SYNIOS S2222	
FWHM / FWTM	23.0° / 44.0°	
Efficiency	97 %	
Peak intensity	4.7 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required components:		
		$\times$ / $\times$ / $\times$
SAMSUN	IG	•
LED	LH351D	
FWHM / FWTM	36.0° / 70.0°	19 <sup>1</sup>
Efficiency	85 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	e X - X - X - X - X - X - X - X - X - X
Required components:		
		$\times A \mid A \mid X$
		1 And N
сласия	10	
SAMSUN	IG	
LED	LM301A	
LED FWHM / FWTM	LM301A 22.0° / 41.0°	
LED FWHM / FWTM Efficiency	LM301A 22.0° / 41.0° 87 %	
LED FWHM / FWTM Efficiency Peak intensity	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1	Б
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1	51 57 57 57 57 57 57 57 57 57 57 57 57 57
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White	1 1 1 1 1 1 1 1 1 1 1 1 1 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White	1 1 1 1 1 1 1 1 1 1 1 1 1 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White	1 1 1 1 1 1 1 1 1 1 1 1 1 1
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White	Normal and the second sec
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm	Normal and the second sec
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm 1	Notes
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SANNSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SAMSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SANNSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components: <b>SANNSUN</b> LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LM301A 22.0° / 41.0° 87 % 3.6 cd/lm 1 White LM302A 25.0° / 47.0° 87 % 3.9 cd/lm 1	



LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	FWR1108MS 25.0° / 46.0° 89 % 1 IR	22 20 20 20 20 20 20 20 20 20 20 20 20 2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	MFN1108MS 21.0° / 37.0° 91 % 6 cd/lm 1 IR	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	MGN1108MS 22.0° / 37.0° 91 % 5.9 cd/lm 1 IR	5. 1
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	MJN1108MS 25.0° / 46.0° 90 % 1 IR	50 50 50 50 50 50 50 50 50 50 50 50 50 5



# PRODUCT DATASHEET FP16559\_LISA3-M-PIN

#### **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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