

# PRODUCT DATASHEET FP10995\_LISA2-M-PIN

# LISA2-M-PIN

~20° medium beam. 6.8 mm high variant with location pin installation.

### **TECHNICAL SPECIFICATIONS:**

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



### **MATERIAL SPECIFICATIONS:**

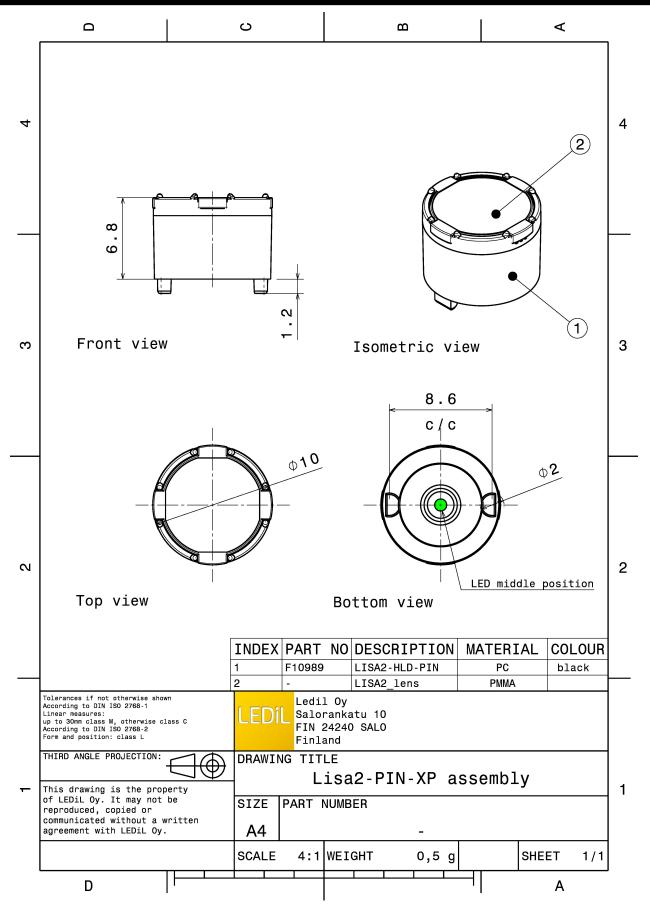
Component	Туре	Material	Colour	Finish
LISA2-M	Single lens	PMMA	clear	
LISA2-HLD-PIN	Holder	PC	black	

### **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP10995_LISA2-M-PIN	Single lens	2000	300	100	1.4
» Box size: 310 x 230 x 60 mm					



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



ED       XB-D White         WMM / FVTM       26.0°         Bitclency       97 %         'eak intensity       2.7 cd/m         EDs/ach optic       1         jitclolou       White         kequired components:       Image: State Stat			
WHM FVTM 26.0° glin color White Edwards optic 1 glin color White ED XP-E WMM FVTM 24.0° ffiliency 92% EDS/sadh optic 1 iglin color White Edwards optic 1 iglin color White			
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Pack Intensity 2.7 cdlm EDs/ach optic 1 jigit colour White Here VA10 <sup>7</sup> 53.0° ifficiency 74 % reak Intensity 2.8 cdlm EDs/ach optic 1 light colour White EDs/ach optic 1 light colour White EDs/ach optic 1 light colour White EDS/ach optic 1 light colour White EDS/ach optic 1 light colour White EDS XP-E EDS X	FWHM / FWTM	26.0°	
Pack Intensity 2.7 cdlm EDs/ach optic 1 jigit colour White Here VA10 <sup>7</sup> 53.0° ifficiency 74 % reak Intensity 2.8 cdlm EDs/ach optic 1 light colour White EDs/ach optic 1 light colour White EDs/ach optic 1 light colour White EDS/ach optic 1 light colour White EDS/ach optic 1 light colour White EDS XP-E EDS X	Efficiency	87 %	
EDskend optie 1 ight colour White tequired components:	Peak intensity		
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CREE • LED         ED       XD16         WMM / FWTM       24.0° / 53.0°         fiftciency       74.%         Yeak intensity       2.8 cd/m         EDS/each optic       1         ight colour       White         tequired components:       Image: Components         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92.%         ED/components:       Image: Components         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92.%         ED/components:       Image: Components         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92.%         ED/components:       Image: Components         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92.%         ED/components:       Image: Components         ED       XP-G         WHM / FWTM       34.0° / 60.0°         ifficiency       91 %         Yeak kinensity       2.2 cd/m         ED/seach optic       1         ight colou       White			
ED XD16 WHM /FVTM 24.0° / 53.0° ifficiency 74 % reak intensity 2.8 cd/m EDs/each optic 1 ight colour White EQ XP-E WHM /FVTM 24.0° ifficiency 92 % ED XP-E WHM /FVTM 24.0° ifficiency 92 % EDs/each optic 1 ight colour White Required components: ED XP-F WHM /FVTM 24.0° ifficiency 91 % Required components: ED XP-G WHM /FVTM 34.0° / 60.0° ifficiency 91 % reak intensity 2.2 cd/m EDs/each optic 1 ight colour White			
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WHM / FVTM 24.0° / 53.0° fficiency 74 % Peak intensity 2.8 collm Ebs/each optic 1 ight colour White ED XP-E WHM / FVTM 24.0° ifficiency 92 % EDS/each optic 1 ight colour White Equired components: ED XP-E WHM / FVTM 24.0° ifficiency 92 % EDs/each optic 1 ight colour White ED XP-G WHM / FVTM 34.0° / 60.0° ifficiency 91 % Pack intensity 2.2 collm EDs/each optic 1 ight colour White			90 <sup>*</sup>
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ight colour White Required components: ED XP-E WHM / FWTM 24.0° ifficiency 92 % EDs/each optic 1 ight colour White EQUIPE Components: ED XP-E WHM / FWTM 24.0° ifficiency 92 % EDs/each optic 1 ight colour White EQUIPE Components: ED XP-G WHM / FWTM 34.0° / 60.0° ifficiency 91 % Peak intensity 2.2 col/m EDs/each optic 1 ight colour White			1600
CREE CLED ED XP-E WHM / FWTM 24.0° ifficiency 92 % EDs/each optic 1 ight colour White Required components: ED XP-G WHM / FWTM 34.0° / 60.0° ifficiency 91 % reak intensity 2.2 cd/lm EDs/each optic 1 ight colour White			67° 63°
CREE\$LED         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92 %         EDs/each optic       1         ight colour       White         Required components:       Image: Component State St	Required compone	nts:	
CREE\$LED         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92 %         EDs/each optic       1         ight colour       White         Required components:       Image: Component State St			2430
CREE\$LED         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92 %         EDs/each optic       1         ight colour       White         Required components:       Image: Component State St			
CREE\$LED         ED       XP-E         WHM / FWTM       24.0°         ifficiency       92 %         EDs/each optic       1         ight colour       White         Required components:       Image: Component State St			30* 33*
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Efficiency 92 % EDs/each optic 1 ight colour White Required components: ED XP-G WHM / FWTM 34.0° / 60.0° Efficiency 91 % Peak intensity 2.2 cd/lm EDs/each optic 1 ight colour White			
EDs/each optic 1 ight colour White Required components: CREE CED ED XP-G WHM / FWTM 34.0° / 60.0° Efficiency 91 % Peak intensity 2.2 cd/m EDs/each optic 1 ight colour White			60* 60*
light colour White Required components: ED XP-G WHM / FWTM 34.0° / 60.0° Efficiency 91 % Peak intensity 2.2 cd/lm EDS/each optic 1 ight colour White			
Required components: ED XP-G WHM / FWTM 34.0° / 60.0° Efficiency 91 % Peak intensity 2.2 cd/m EDS/each optic 1 ight colour White			gr
CREE©LED ED XP-G WHM / FWTM 34.0° / 60.0° Efficiency 91 % Peak intensity 2.2 cd/m EDs/each optic 1 ight colour White			2430
ED     XP-G       WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White	Required component	10.	
ED     XP-G       WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White			
ED     XP-G       WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White			220
ED     XP-G       WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White			30° 12° 0° 35° 35°
ED     XP-G       WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White			90 <sup>4</sup> 90 <sup>5</sup>
WHM / FWTM     34.0° / 60.0°       Efficiency     91 %       Peak intensity     2.2 cd/lm       EDs/each optic     1       Light colour     White	LED		
Efficiency 91 % Peak intensity 2.2 cd/lm EDs/each optic 1 light colour White			23.
Peak intensity     2.2 cd/lm       EDs/each optic     1       ight colour     White			
EDs/each optic 1 ight colour White			60° 60°
ight colour White			
			gr
		no.	
30° 200 30° 10° 10° 10°			30° 2450 30° 30°



	5	90 <sup>4</sup> 90 <sup>9</sup>
LED	XQ-E HI	
FWHM / FWTM	20.0° / 43.0 + 42.0°	
Efficiency	85 %	
Peak intensity	4.6 cd/lm	6 <sup>04</sup> 500 64
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	200 200 200 200 200 0 <sup>1</sup> 20 <sup>1</sup> 20 <sup>1</sup>
		90* 99
LED	XT-E	
FWHM / FWTM	31.0° / 60.0°	
Efficiency	85 %	9 <sup>1</sup>
Peak intensity	2.3 cd/lm	
LEDs/each optic	1	
Light colour	White	5° ×
Required compone		200 200 200 200 200 200 200 200 200 200
UMIL	EDS	90* 90
LED	LUXEON C	
FWHM / FWTM	24.0° / 46.0°	
Efficiency	89 %	60
Peak intensity	4 cd/lm	
LEDs/each optic	1 White	
Light colour Required compone		20 <sup>10</sup> 20 <sup>10</sup> 20 <sup>10</sup> 20 <sup>10</sup> 20 <sup>10</sup>
UMIL	EDS	
LED	LUXEON Z	
FWHM / FWTM	19.0° / 41.0°	
Efficiency	86 %	
Peak intensity	5.3 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	nts:	



	.EDS		90* 90
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LUXEON Z ES 23.0° / 48.0° 87 % 4 cd/lm 1 White		20 <sup>-</sup> 10 <sup>-</sup> 10 <sup>-</sup> 10 <sup>-</sup>
ØNICHI/			
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	NCSxE17A 26.0° / 57.0° 74 % 2.4 cd/lm 1 White		2 27 27 27 27 27 20 20 20 20 20 20 20 20 20 20 20 20 20
OSRAM		 	20 <sup>10</sup> 22 <sup>21</sup> 0 <sup>21</sup> 22 <sup>21</sup> 30
Opto Semiconductors			
LED	SFH 4170S		
FWHM / FWTM	14.0° / 38.0°		
Efficiency LEDs/each optic	% 1		
Light colour	IR		
Required compone			
OSRAM Opto Semiconductors		 	 
LED	SFH 4180S		
FWHM / FWTM	14.0° / 38.0°		
Efficiency	%		
LEDs/each optic	1		
Light colour	IR		
Required compone	ents:		



SAMS LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	LH181B 27.0° / 59.0° 74 % 2.2 cd/lm 1 White		99 <sup>4</sup> 75 75 75 75 76 76 76 76 76 76 76 76 77 77
SHA LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required compone	Double Dome (GM2BB) 28.0° 88 % 1 White		



## PHOTOMETRIC DATA (SIMULATED):

CREE LED LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	XQ-E HD 27.5° / 63.0° 91 % 3.1 cd/lm 1 White	
	LUXEON IR 2720	<u>994</u> <u>995</u> <u>755</u>
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	23.0° / 47.0° 91 % 1 IR	500 500 60 60 60 60 60 60 60 60 60 60
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NVSxE21A 27.0° / 54.0° 86 % 3 cd/lm 1 White	57 57 50 50 50 50 50 50 50 50 50 50
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4170S 20.0° / 41.0° 79 % 1 IR	20 20 20 20 20 20 20 20 20 20



## PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors		59 <sup>4</sup> 50 <sup>5</sup>
LED	SFH 4770S	72 75'
FWHM / FWTM	25.0° / 52.0°	
Efficiency	91 %	
Peak intensity	3.5 cd/lm	
LEDs/each optic	1	
Light colour	White	9° (
Required component	s:	34 <sup>4</sup> 25 <sup>4</sup> 4 <sup>5</sup> 27 <sup>4</sup> 27 <sup>4</sup>



# PRODUCT DATASHEET FP10995\_LISA2-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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