

LISA2-R-PIN

White mini reflector with $\sim 80^{\circ}$ wide beam. 6.5 mm high with location pin installation.

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 9.9 mm
Height	6.5 mm
Fastening	glue, pin
Colour	white
Box size	254 x 298 x 241 mm
Box weight	4.1 kg
Quantity in Box	10000 pcs
ROHS compliant	yes 🛈



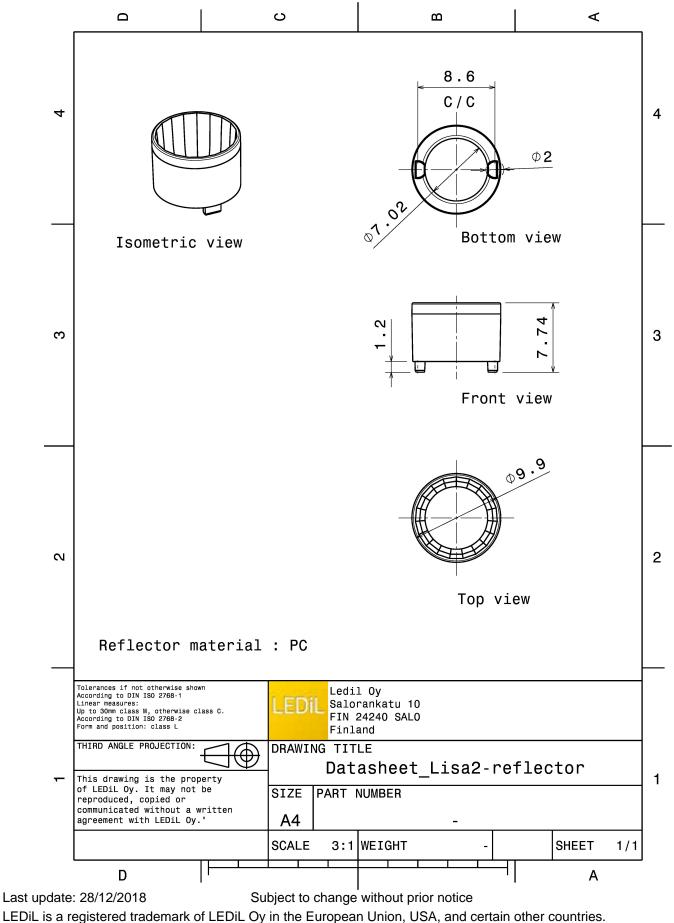
MATERIAL SPECIFICATIONS:

Component LISA2-R-PIN **Type** Reflector

Material HRPC **Colour** white

Coating





2/10



PHOTOMETRIC DATA (MEASURED):

FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1			
LED XP-G Flicency 83% Peak intensity 0.380 colim LEDSeach optic 1 LED XP-G Flicency 86% Peak intensity 0.380 colim LEDSeach optic 1 LEDSeach o	CREE 🗧	•	
FWHM 810° Efficiency 87% Peak intensity 0.380 od/m LEDS/each optic 1 Light colour White Required components: CREE LED XP-E FWHM 82.0° Efficiency 86% Peak intensity 0.330 od/m LEDS/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 89% Peak intensity 0.330 od/m Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 89% Peak intensity 0.330 od/m Light colour White Required components:			
Efficiency 87% Peak intensity 0.380 cod/m LED/each opto 1 Light colour White Required components:			
Peak intensity 0.380 cd/lm LEDs/each optic 1 LeD White Required components:			
LEDPreach optic 1 Light colour White Required components: CREE LED XP-E FWHM 82.0° Feak intensity 0.350 cd/lm LEDPreach optic 1 Light colour White Required components: CREE EED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDPreach optic 1 Light colour White Required components: CREE ED XP-G Fiftiency 89 % Peak intensity 0.330 cd/lm LEDPreach optic 1 Light colour White Required components:			
Light colour White Required components: CREE LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.330 cod/m LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cod/m LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cod/m LEDs/each optic 1 Light colour White			
Required components: CREE LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 LEDs/each optic 1 LEDs XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 LEDs/each optic 1 LEDs XP-G FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 LEDs/each			
CREE LED XP-E FWHM 82.0° Efficiency 88 % Peak intensity 0.350 cd/m LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/m LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/m LEDs/each optic 1 Light colour White Required components:			
LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:	Required compor	ients:	
LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:			
LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:			
LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:			
LED XP-E FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:	CREE -	•	
FWHM 82.0° Efficiency 86 % Peak intensity 0.350 cd/m LEDs/each optic 1 Light colour White Required components:			
Efficiency 86 % Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components:			
Peak intensity 0.350 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White			
LEDs/each optic 1 Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components:			
Light colour White Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
Required components: CREE LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
CREE \$ LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: Image: Colour of the second seco			
LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	Required compor	nents:	
LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
LED XP-G FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
FWHM 86.0° Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	CKFF -	N CONTRACTOR CONT	90* 90*
Efficiency 89 % Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	LED	XP-G	
Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	FWHM	86.0°	73%
Peak intensity 0.330 cd/lm LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	Efficiency	89 %	
LEDs/each optic 1 Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			50 ⁴ 604
Light colour White Required components: CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
Required components:			
CREE LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	i tequirea compor		
LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			460
LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			30° 15° 30°
LED XP-G3 FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
FWHM 86.0° Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			90* 90*
Efficiency 88 % Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White			
Peak intensity 0.380 cd/lm LEDs/each optic 1 Light colour White	FWHM		73°
LEDs/each optic 1 Light colour White	Efficiency		
LEDs/each optic 1 Light colour White	Peak intensity		50°
Light colour White			
	Light colour		45°
			× × × × × × × × × × × × × × × × × × ×
20. etc 20. 20 ⁻²			
			30° 15° 30°

PRODUCT DATASHEET

C12469_LISA2-R-PIN



CREE LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	XT-E 80.0° 85 % 0.460 cd/lm 1 White	
WHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	LUXEON A 83.0° 88 % 0.370 cd/lm 1 White	
Efficiency Peak intensity LEDs/each optic Light colour Required compor	LUXEON C 84.0° 83 % 0.380 cd/lm 1 White	
ED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compor	LUXEON Rebel 77.0° 88 % 0.410 cd/lm 1 White	99 ⁴ 79 ⁴ 79 ⁴ 60 ⁴ 70 ⁴ 7



	EDS
LED	LUXEON Rebel ES
FWHM	83.0°
Efficiency	90 %
Peak intensity	0.360 cd/lm
LEDs/each optic	
Light colour	White
Required compor	
	EDS
LED	LUXEON T
FWHM	82.0°
Efficiency	82 %
Peak intensity	0.400 cd/lm
LEDs/each optic	1
Light colour	White white
Required compor	nents:
🖉 LUMIL	EDS
LED	LUXEON Z
FWHM	78.0°
Efficiency	86 %
Peak intensity	0.440 cd/lm
LEDs/each optic	1
Light colour	White
Required compor	nents:
Ø NICHIA	
LED	NCSxx19A
FWHM	78.0°
Efficiency	84 %
Peak intensity	0.460 cd/lm
LEDs/each optic	
Light colour	White
Required compor	nents:



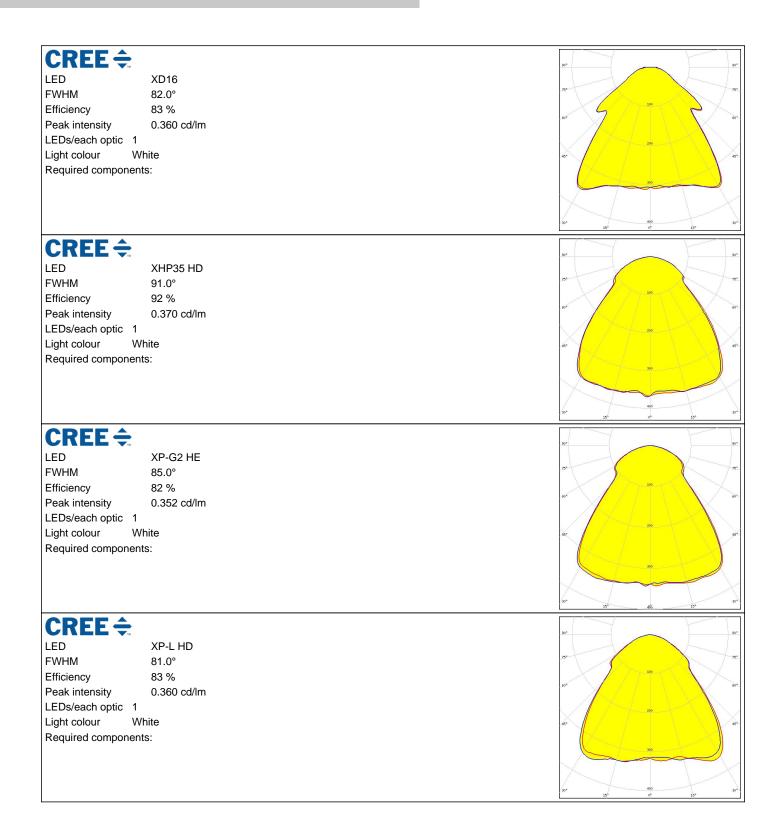
Ø NICHIA			
LED	NVSxx19A		
FWHM	80.0°		
Efficiency	84 %		
Peak intensity	0.400 cd/lm		
LEDs/each optic			
Light colour	White		
Required compor			
OSRAM		_	
Opto Semiconductors			90* 91
LED	OSCONIQ P 2226		751
FWHM	78.0°		∭ 100
Efficiency	83 %		69*
Peak intensity	0.400 cd/lm		
LEDs/each optic			
Light colour	White		5°
Required compor	ients:		
			30*
OSRAM Opto Semiconductors			
LED	OSLON Square EC		
FWHM	82.0°		750 77
Efficiency	85 %		G P
Peak intensity	0.370 cd/lm		60
LEDs/each optic			
Light colour	White		
Required compor			
rtequired compor			
			400
			30* 200 10* 3
OSRAM Opto Semiconductors			
LED	OSLON SSL 150		
FWHM	83.0°		
Efficiency	91 %		
Peak intensity	0.300 cd/lm		
LEDs/each optic			
Light colour	White		
Required compor	nents:		



OSRAM Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	50° (0) (2° (0) (2° (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)
SEOUL SEMICONDUCTOR LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	51 ⁴ 72 10 61 61 61 61 10 10 10 10 10 10 10 10 10 1
stoul staticonductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	
stout striconductor LED FWHM Efficiency Peak intensity LEDs/each optic Light colour Required compon	White	



PHOTOMETRIC DATA (SIMULATED):





PHOTOMETRIC DATA (SIMULATED):

CREE LED FWHM Efficiency Peak intensity LEDs/each optic 1 Light colour W Required componer	XQ-E HD 76.0° 90 % 0.450 cd/lm /hite ts:	
LUMILE ED FWHM Efficiency Peak intensity LEDs/each optic 1 Light colour W Required componer	LUXEON H50-2 80.0° 90 % 0.440 cd/lm /hite	
Opto Semiconductors LED FWHM Efficiency Peak intensity LEDs/each optic 1 Light colour IF Required componer		

PRODUCT DATASHEET C12469_LISA2-R-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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13 FI-24240 SALO Finland

LEDiL Inc.

228 West Page Street Suite D Sycamore IL 60178 USA

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

Shipping locations Salo, Finland Hong Kong, China

Distribution Partners www.ledil.com/ where_to_buy