

# PRODUCT FAMILY DATASHEET LISA3CSP

# LISA

Miniature TIR-lenses for jewellery shops, reading lights, torches and head lamps.

LISA series of lenses, measuring less than 10 mm in diameter and less than 7 mm tall, achieves up to 90 % light transmission efficiency through superior design and materials. Each lens is mounted in a molded polycarbonate (PC) housing and attaches to the PCB by means of locating pins or optional mounting clips and is built to maintain its physical integrity over the usable life of the luminaire.

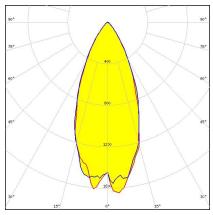
### LISA3CSP

Ø10.0 mm variant with glue mounting for top side emitting CSP LEDs



### **PRODUCTS:**

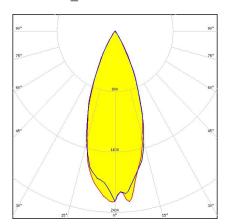
#### FP16610\_LISA3CSP-WW-PIN



Dimensions: 10.0 mm x 10.0 mm Height: 7.20 mm

~45° wide beam

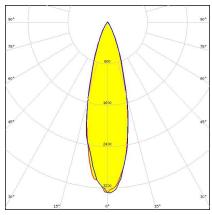
#### FP16609\_LISA3CSP-W-PIN



Dimensions: 10.0 mm x 10.0 mm Height: 7.20 mm

~35° wide beam

# FP16608\_LISA3CSP-M-PIN



Dimensions: 10.0 mm x 10.0 mm

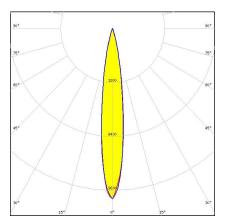
Height: 7.20 mm ~25° medium beam



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# **PRODUCTS:**

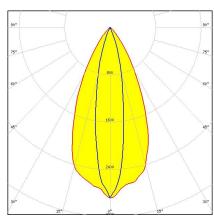
# FP16607\_LISA3CSP-RS-PIN



Dimensions: 10.0 mm x 10.0 mm Height: 7.20 mm

~15° spot beam

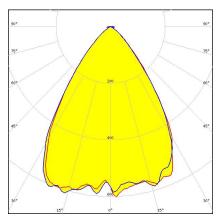
# FP16612\_LISA3CSP-O-PIN



Dimensions: 10.0 mm x 10.0 mm Height: 7.20 mm

~20° + 50° ovat beam

# FP16611\_LISA3CSP-WWW-PIN



Dimensions: 10.0 mm x 10.0 mm

Height: 7.20 mm ~60° wide beam



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#### **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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# Local sales and technical support

www.ledil.com/ where\_to\_buy

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#### **Distribution Partners**

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