

Product Family: **FLORA**

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FLORA is the family of single lenses with a diameter of 50mm ideal for retail lighting, as well as for architectural and accent lighting in every space.

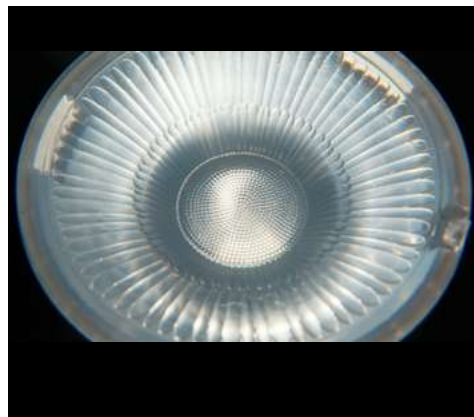
FLORA lenses are conceived for COB LEDs with **LES ranging from 9mm to 13.5mm** in diameter.

Made of optical grade PMMA. They are available in three variants of holders (made of PC): White, Black and Clear.

FLORA can be used with all kinds of COBs: white, Tunable White and Dim to Warm.

Compatible with **Zhaga Book 10 Connectors**.

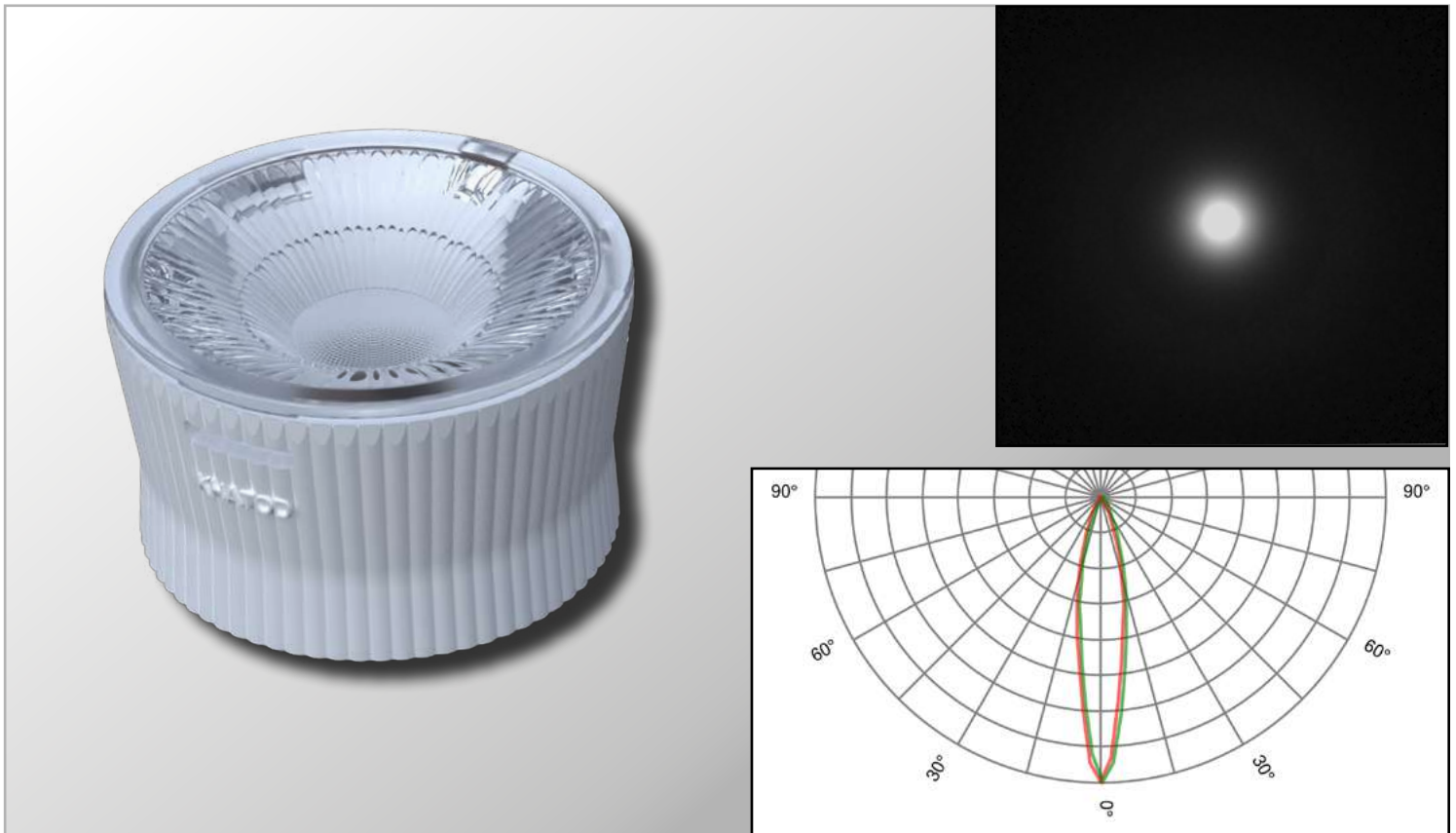
Beam angles available: **Medium, Wide** and **Extra Wide**



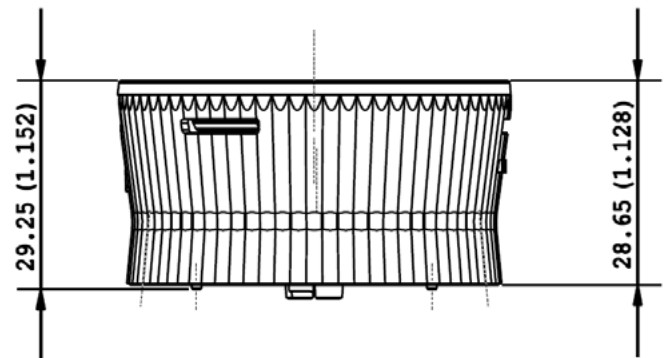
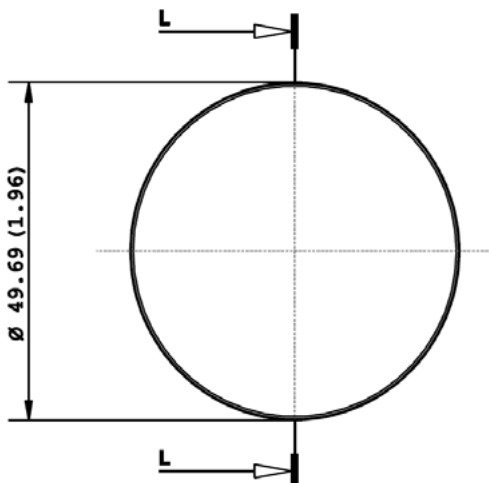
**Twist and Lock assembly
on Zhaga Book 10 Connectors.**



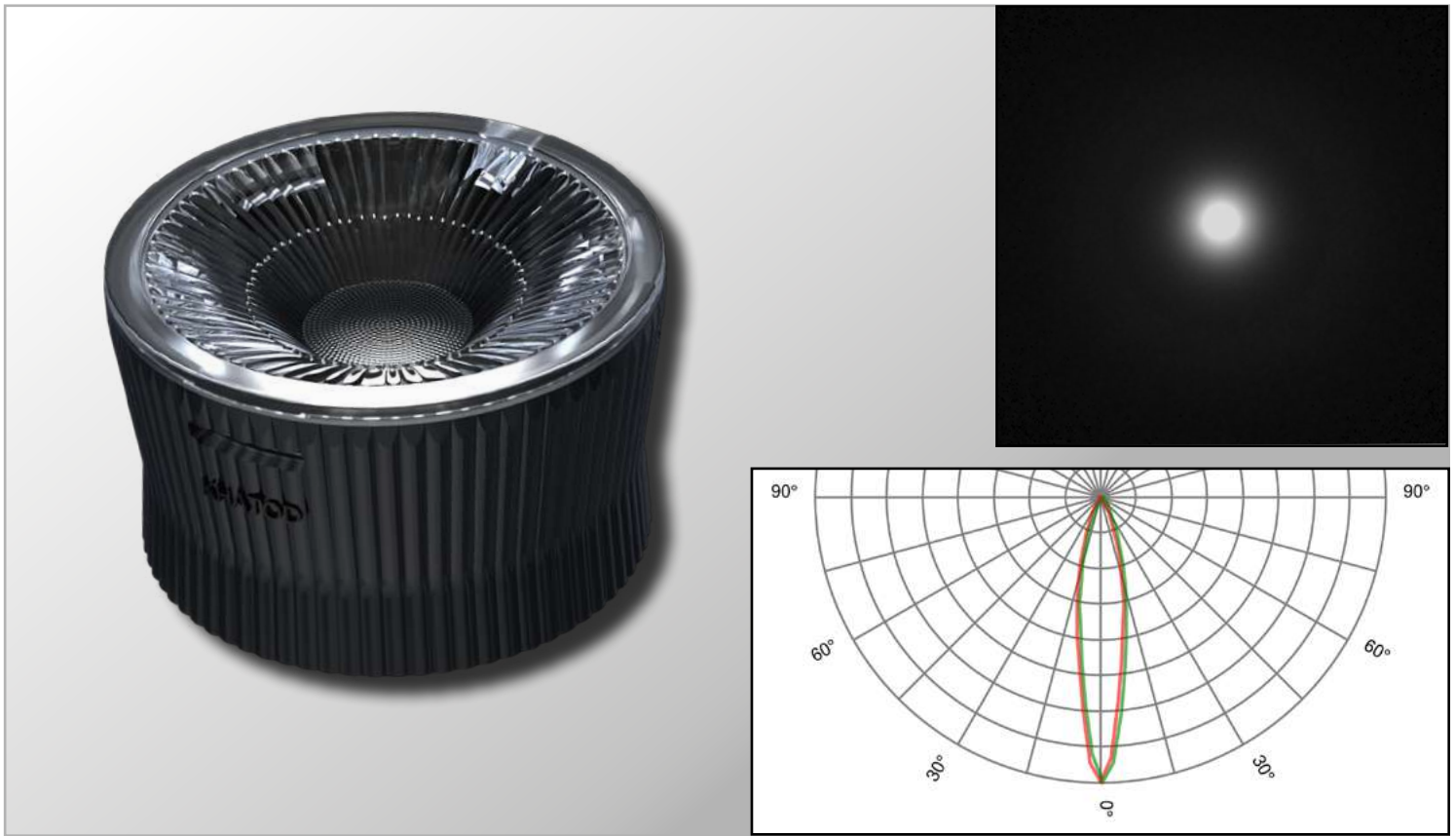
FLORA50/ME - Medium Beam - White Holder



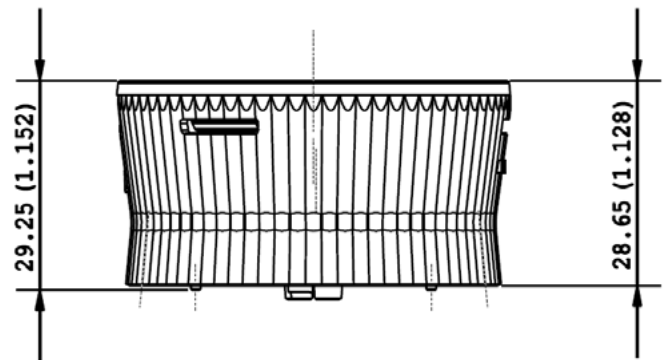
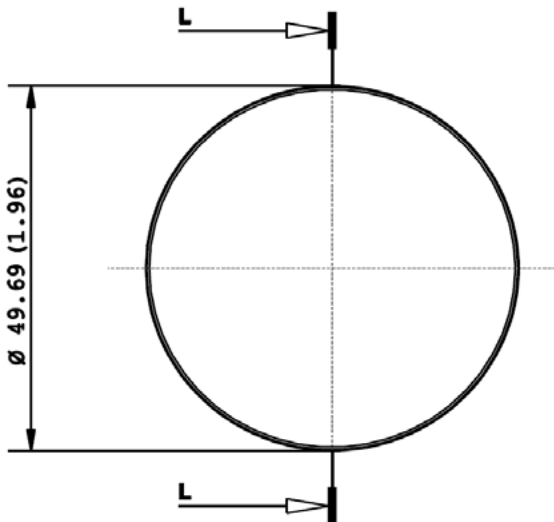
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC WHITE	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 20° • Full angle at 10% from maximum: ~ 50° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



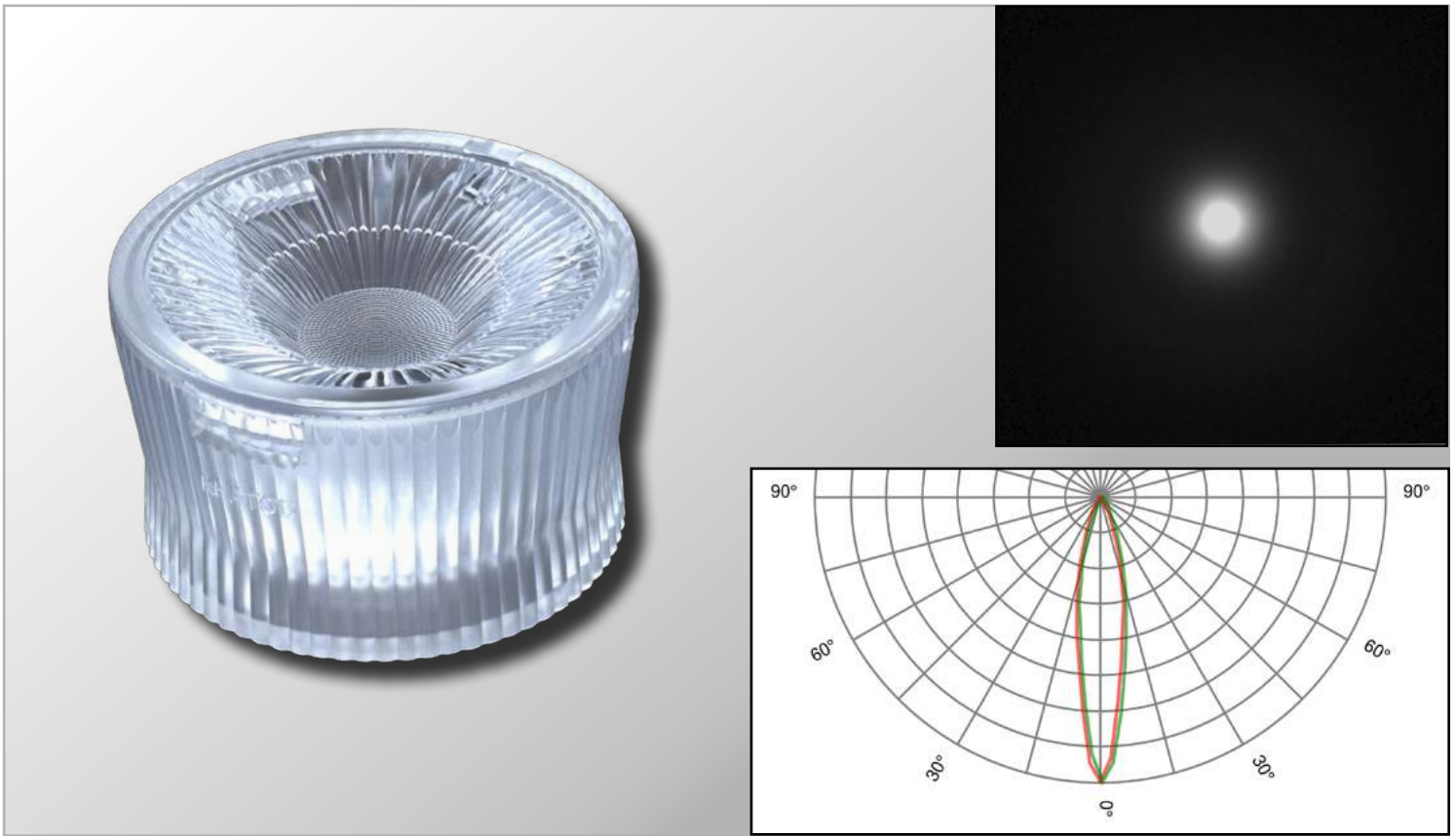
FLORA50/ME01 - Medium Beam - Black Holder



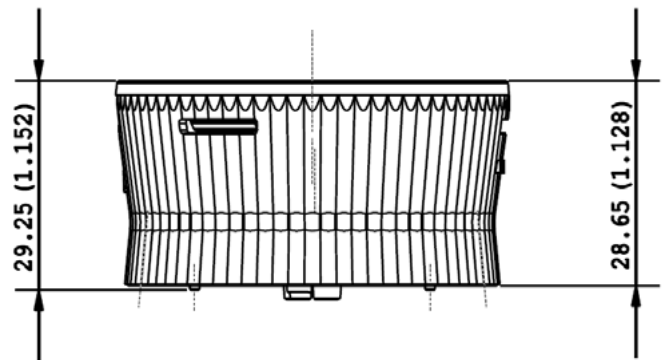
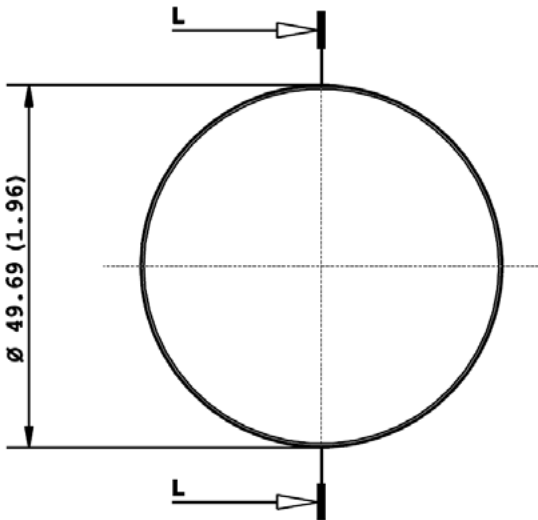
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC BLACK	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 20° • Full angle at 10% from maximum: ~ 50° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



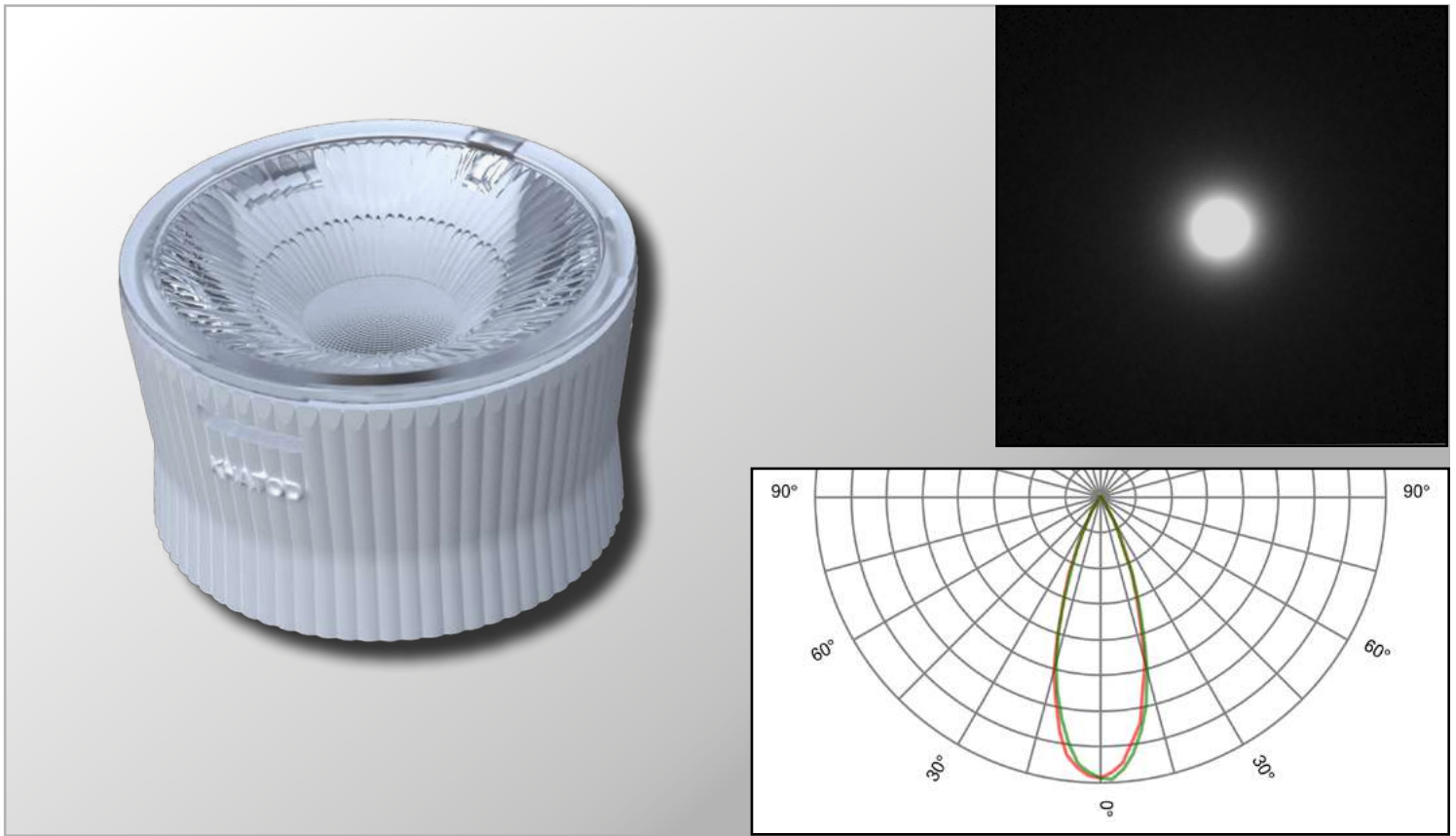
FLORA50/ME02 - Medium Beam - Clear Holder



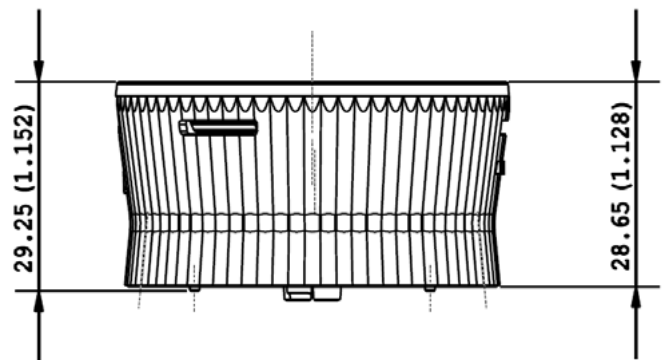
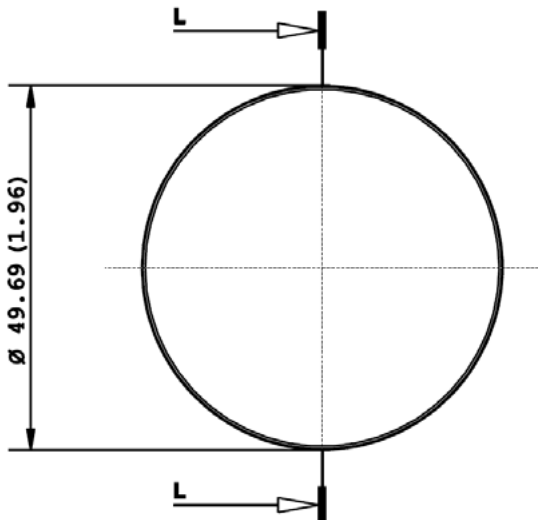
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC CLEAR	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 20° • Full angle at 10% from maximum: ~ 50° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



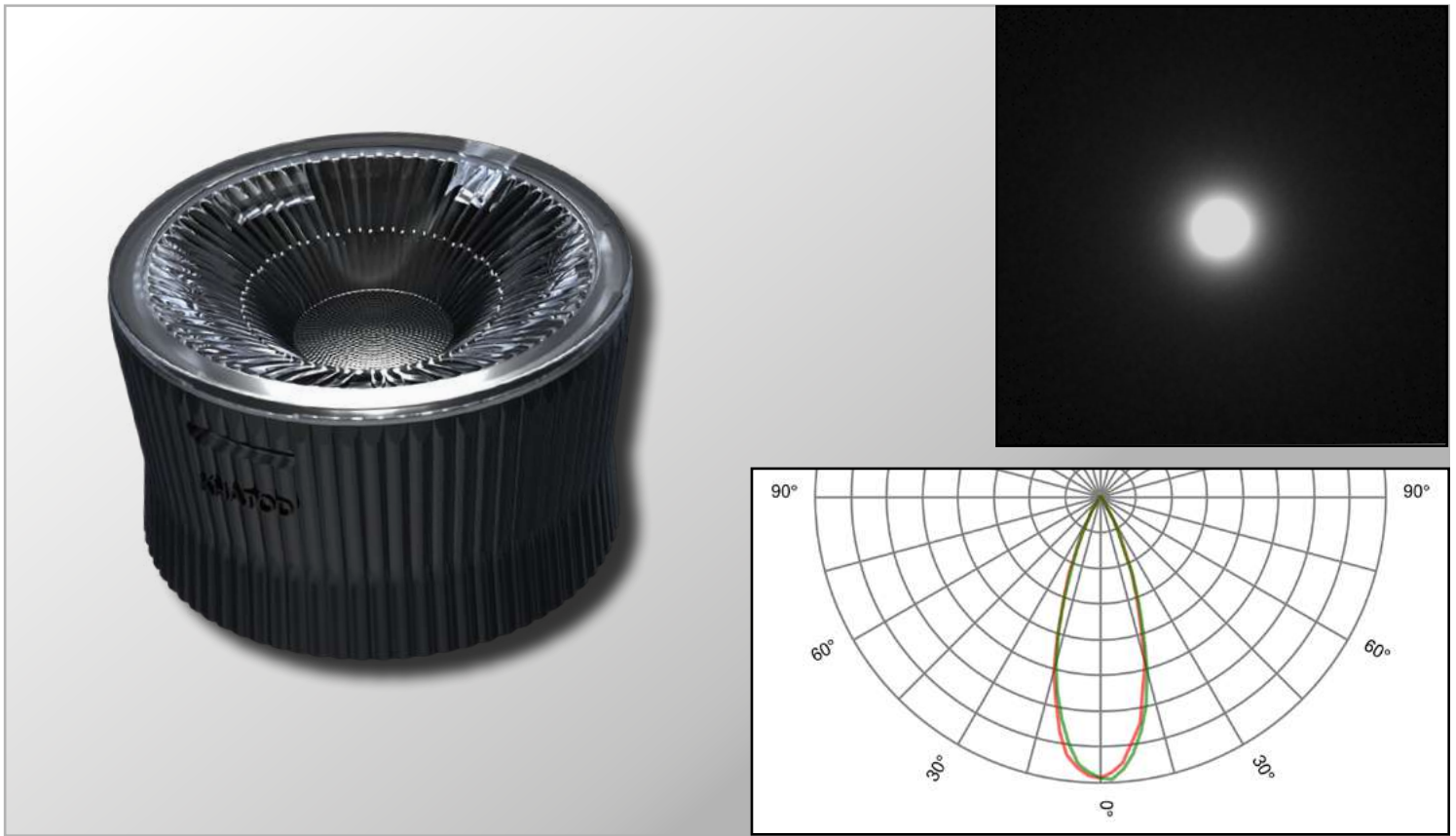
FLORA50/WI - Wide Beam - White Holder



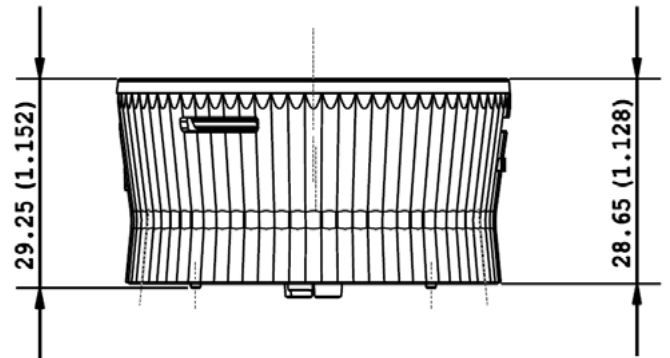
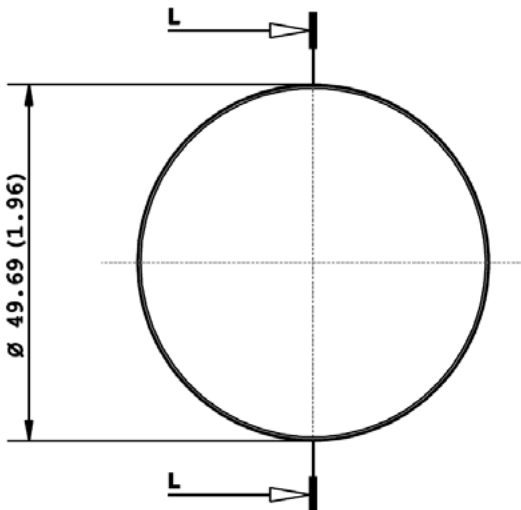
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC WHITE	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 35° • Full angle at 10% from maximum: ~ 60° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



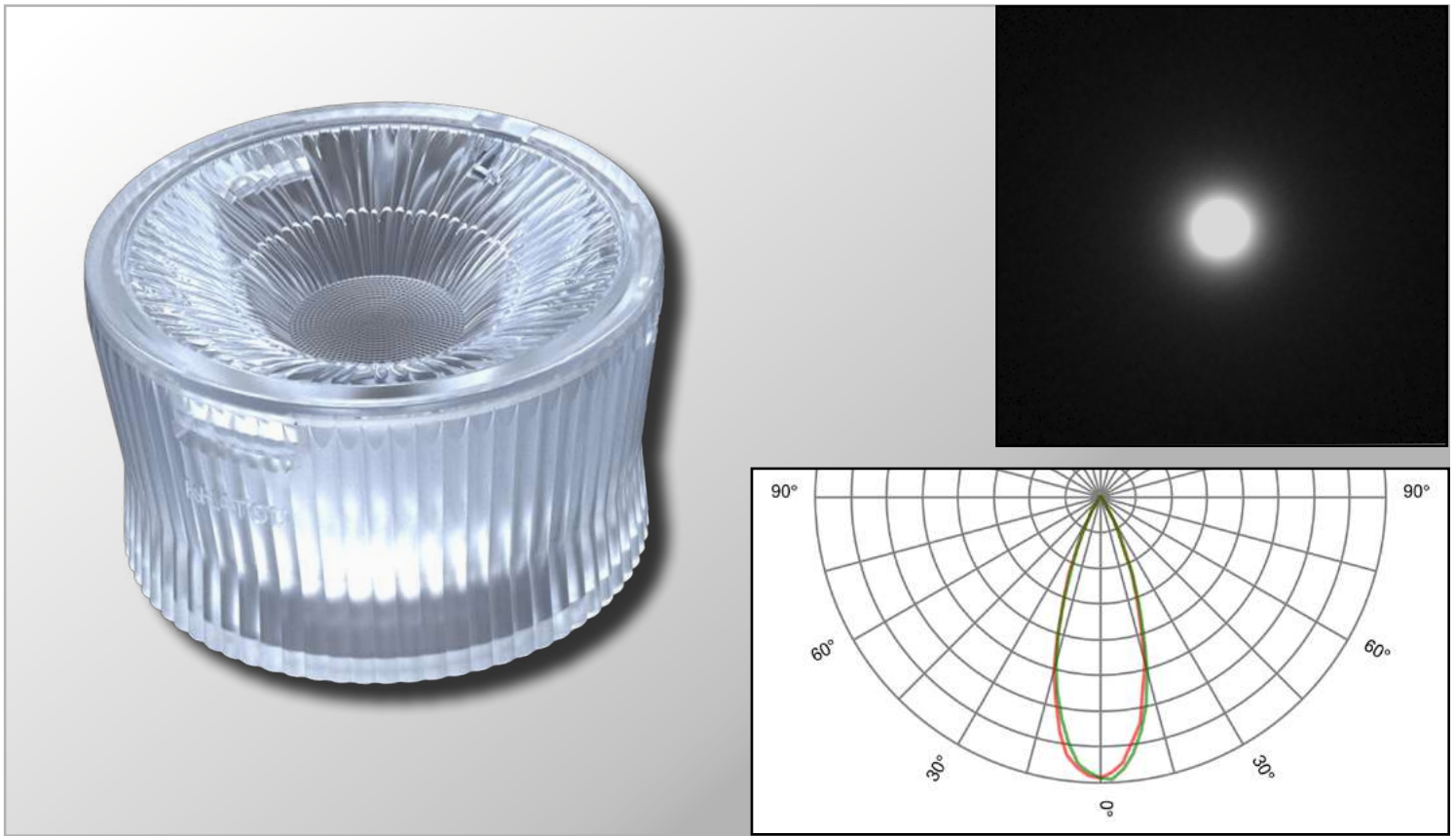
FLORA50/WI01 - Wide Beam - Black Holder



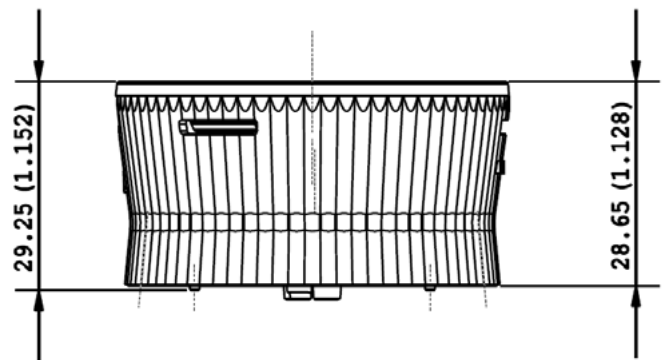
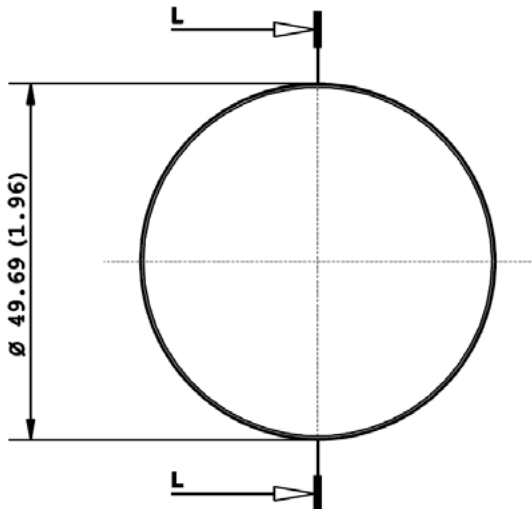
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC BLACK	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 35° • Full angle at 10% from maximum: ~ 60° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



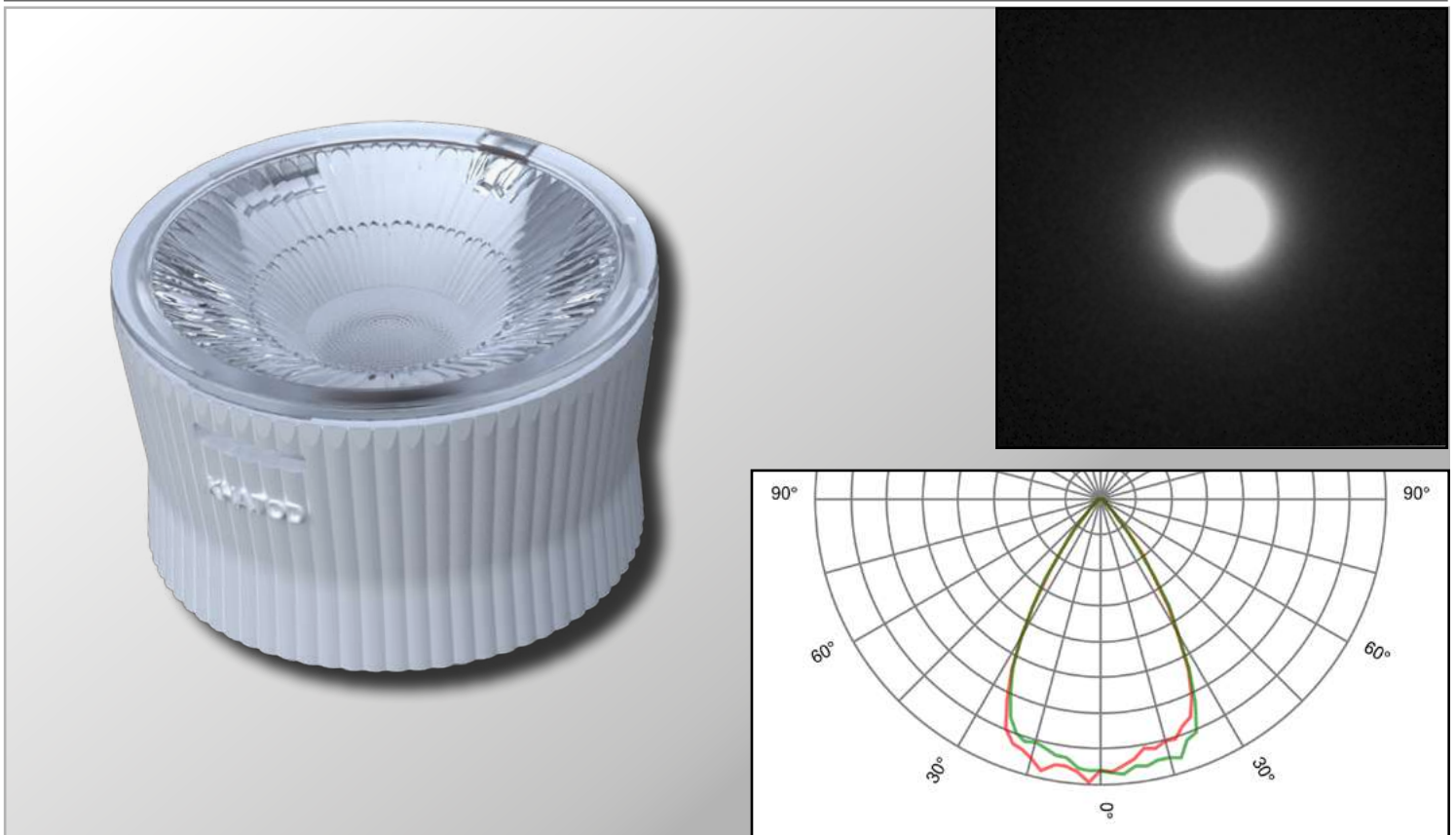
FLORA50/WI02 - Wide Beam - Clear Holder



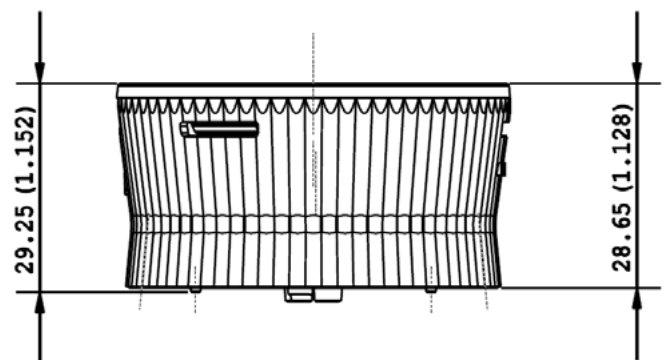
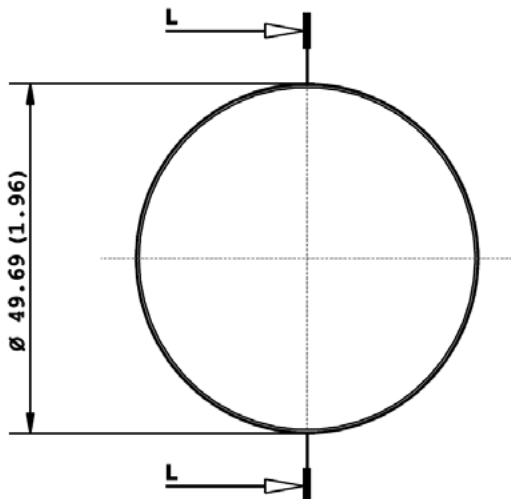
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC CLEAR	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 35° • Full angle at 10% from maximum: ~ 60° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



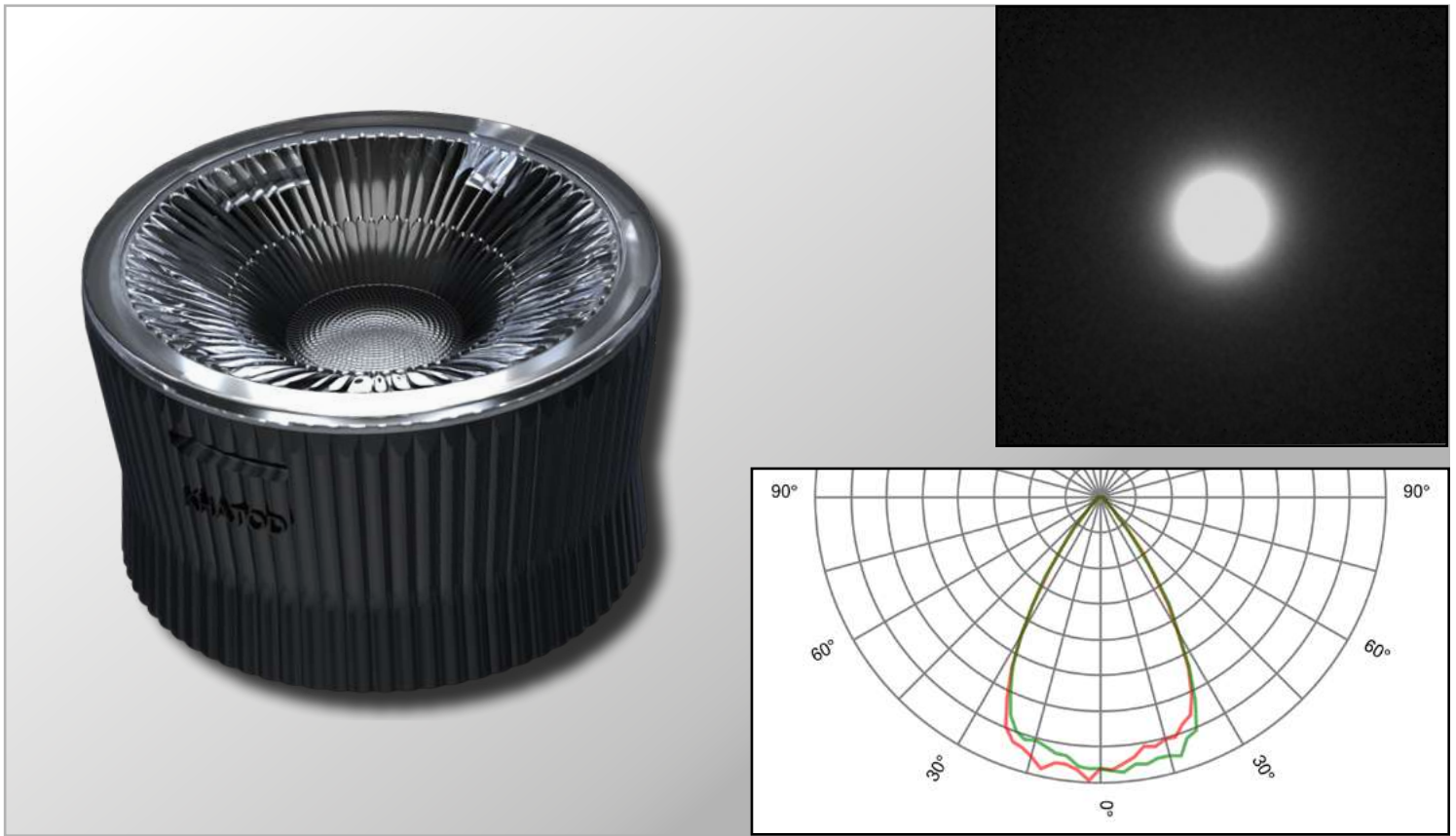
FLORA50/EW - Extra Wide Beam - White Holder



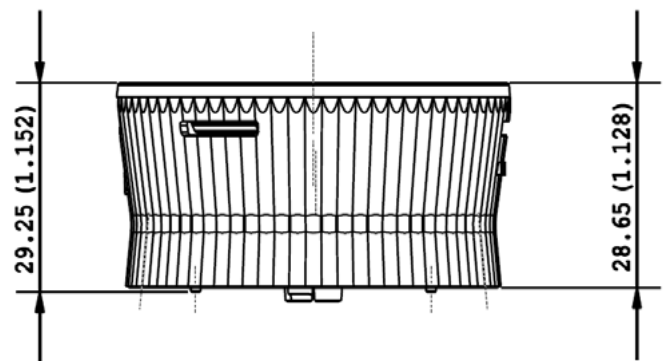
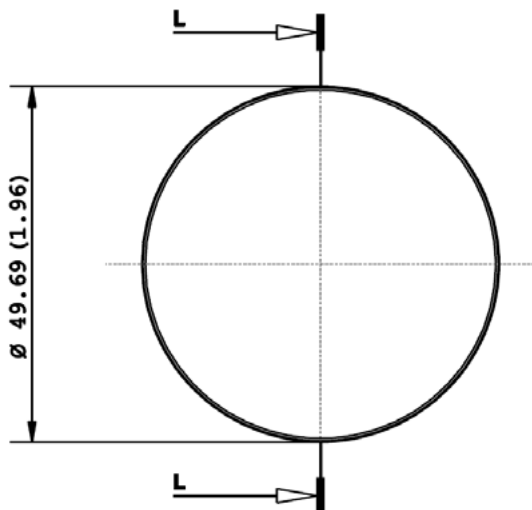
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC WHITE	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 60° • Full angle at 10% from maximum: ~ 80° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



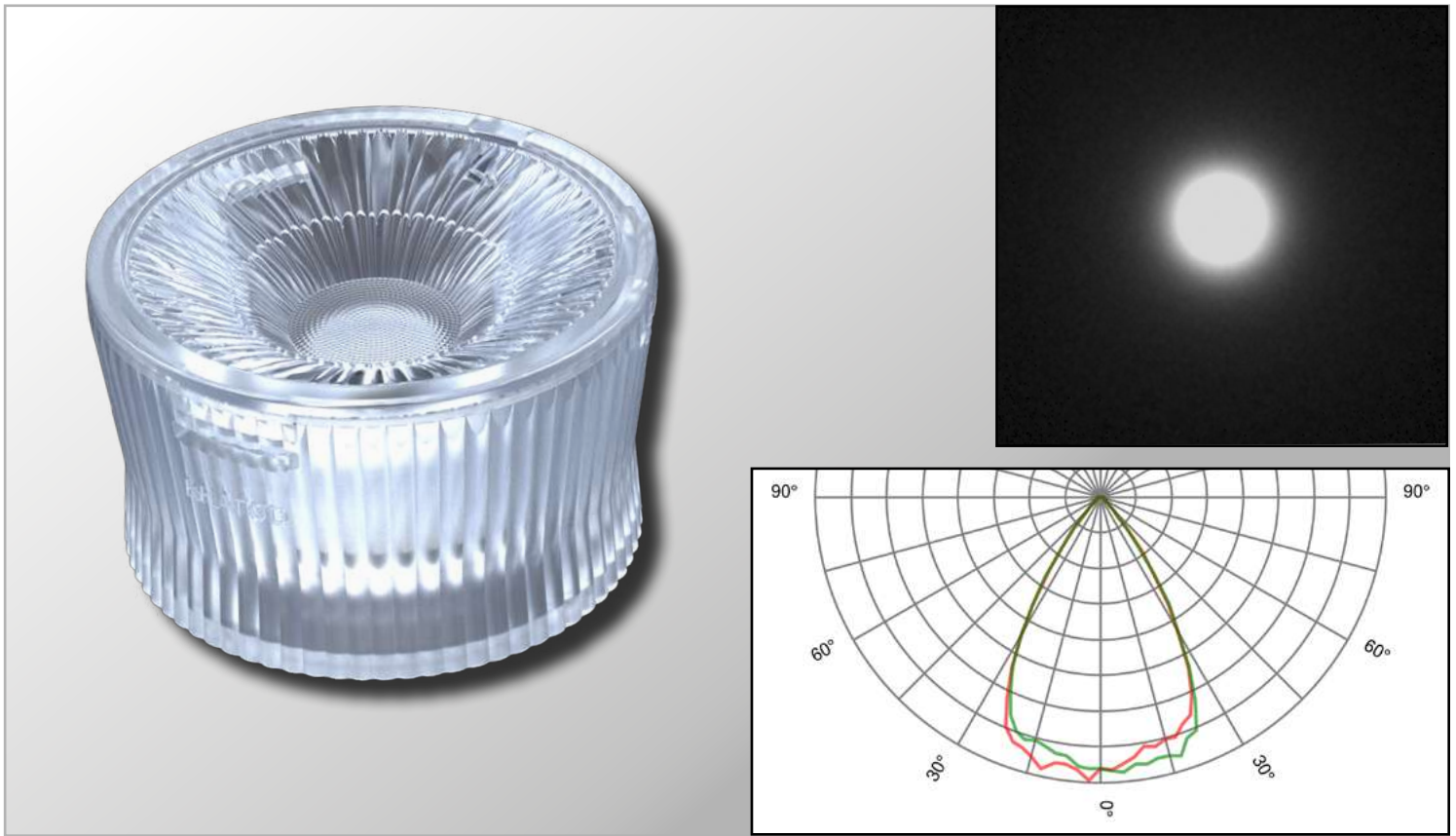
FLORA50/EW01 - Extra Wide Beam - Black Holder



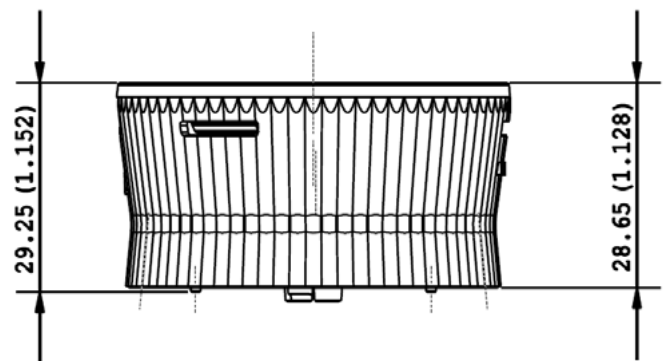
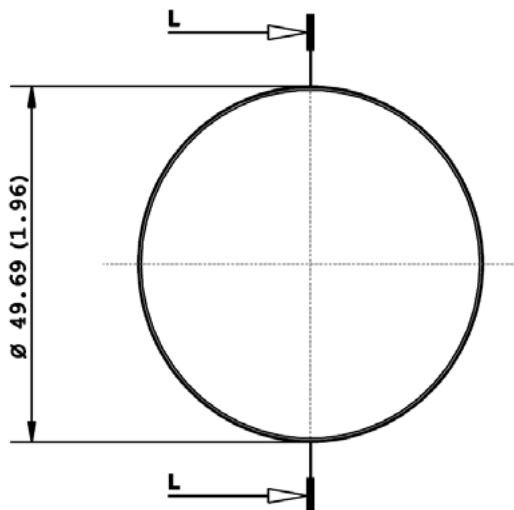
Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC BLACK	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 60° • Full angle at 10% from maximum: ~ 80° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



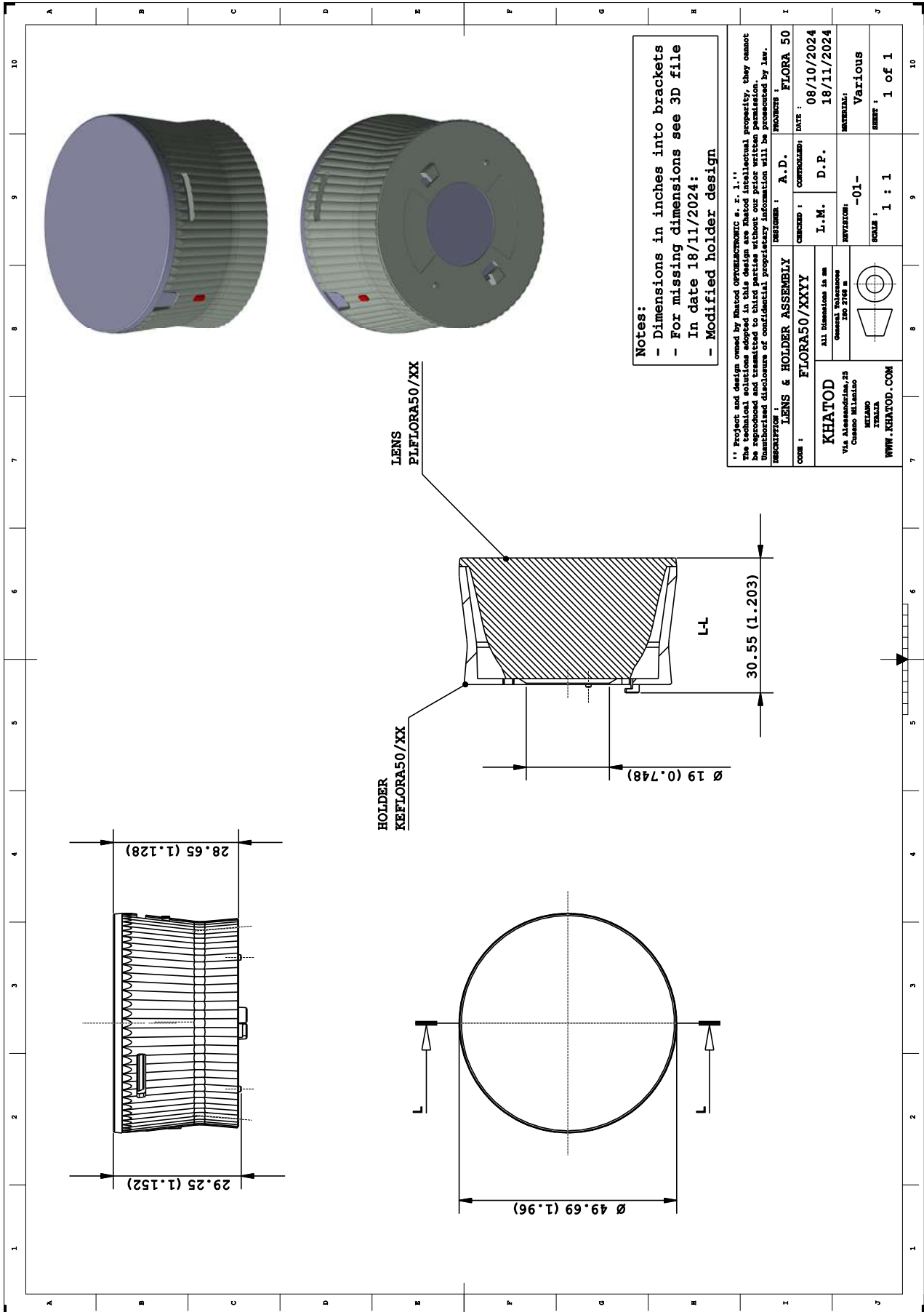
FLORA50/EW02 - Extra Wide Beam - Clear Holder



Dimensions	Material	Beams	LED
49.69mm diameter- 28.65mm height	Lens: PMMA Holder: PC CLEAR	<ul style="list-style-type: none"> • Full angle at 50% from maximum: ~ 60° • Full angle at 10% from maximum: ~ 80° 	The light spots here represented refer to tests carried out with COBs 9mm LES with Dim-to-Warm functionality.



Mechanical Drawing



Materials

Material	Temperatures
PMMA	-40° / + 90°C
• Temperature resistance: long-term exposure	-40° / + 85°C
• Temperature resistance: short exposure	up to + 90°C

Notes:

- The optical values shown are the result of optical simulations carried out with LIGHTTOOLS, ASAP and ZEMAX software systems. The optical simulations are carried out on the basis of the typical values provided in the LED manufacturers' official datasheets. The photometric analysis has been carried out on physical samples. On request, by supplying your PCB, we can provide the measurement photometric file.

Use and Maintenance

- DO NOT HANDLE OR INSTALL LENSES WITHOUT WEARING GLOVES, SKIN OILS MAY DAMAGE LENS OR LIGHT TRANSMISSION;
- CLEAN LENSES WITH MILD SOAP AND WATER AND A SOFT CLOTH;
- DO NOT USE ANY COMMERCIAL CLEANING SOLVENTS ON LENSES.

Disclaimer

Please note that flow lines and weld lines on the external surfaces of the lenses are acceptable if the optical performance of the lens is within the specifications.

Should you require further information, please contact Khatod for advice. All lens testing must be subject to identical conditions as Khatod test condition. Khatod Optoelectronic, Milan, Italy, manufactures lenses for LEDs. Any other use of the lens shall void our liability and warranty. The lenses are an inert component to be used in the manufacture of various products. Our warranty and liability are limited only to the manufacture of the lens. You may not modify, copy, distribute reproduce, license or alter the lens and related materials of Khatod. Khatod does not warrant against damages or defects arising out of the use or misuse of the products; against defects or damage arising from improper installation, or against defects in the product or in its components. No warranty of any kind, expressed or implied, is made regarding the safety of the products. The entire risk as to the quality or performance of the product is with the buyer. In no event

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