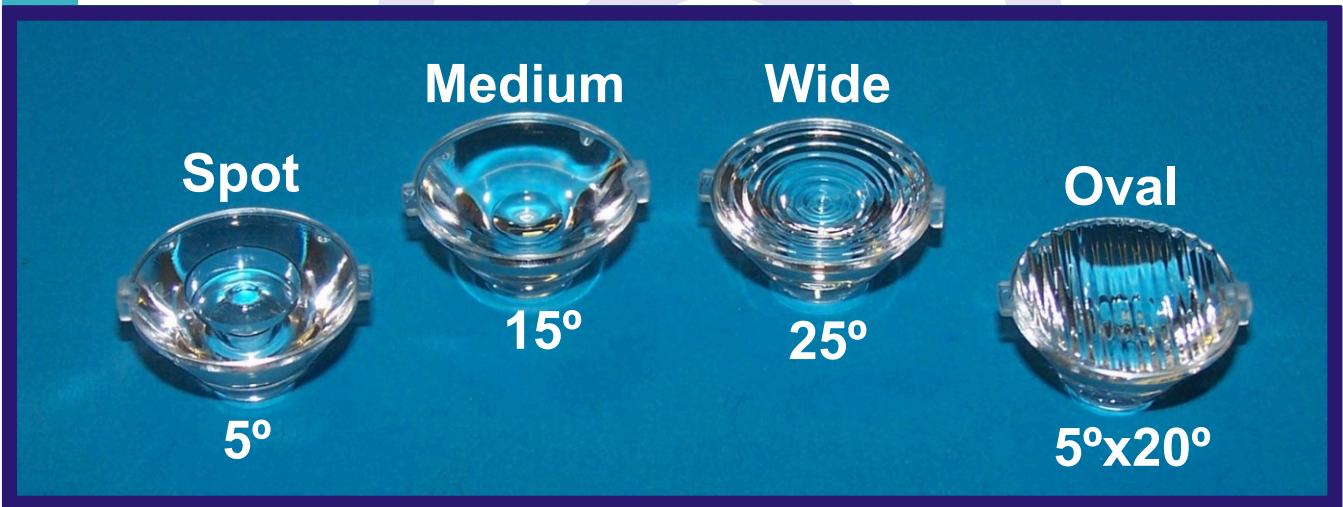


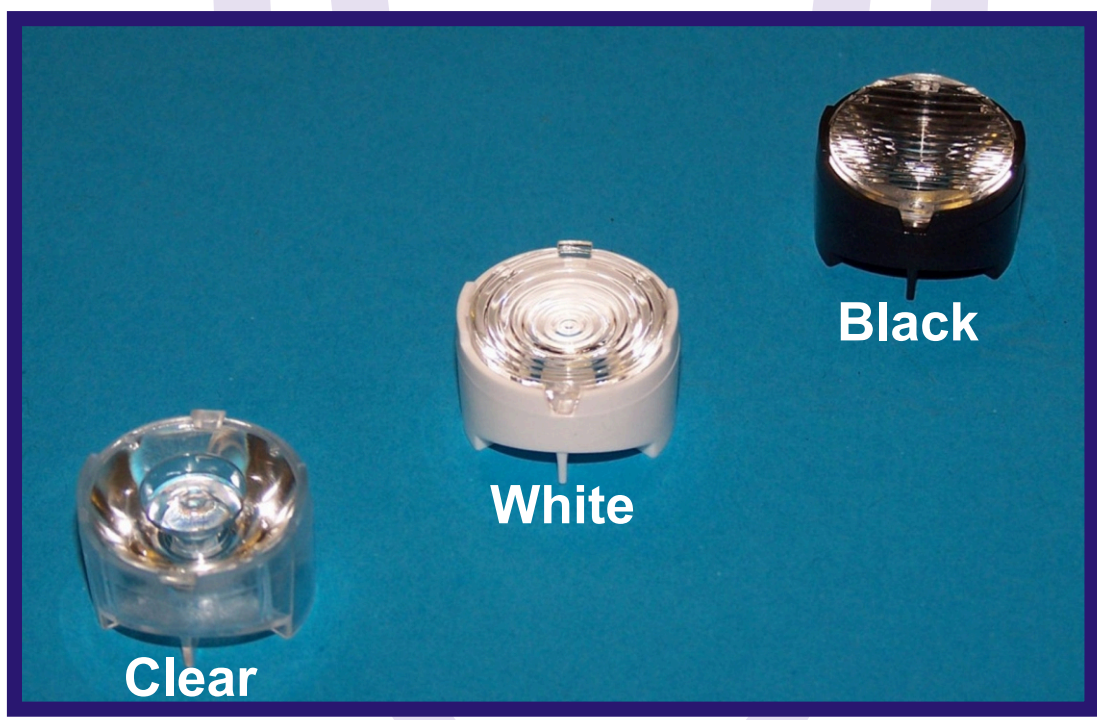


“clear innovation”

20mm Series Lenses and Holders for Luxeon LEDs



20mm Series Lenses



20mm Series Lenses With Holders



“clear innovation”

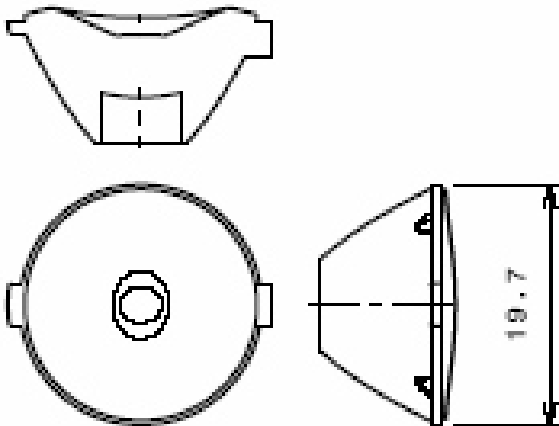
L₂Optics 20mm Series Lenses have been designed for use with all Lumileds' Luxeon series of LEDs.

There are four different illumination patterns available: spot, medium, wide and oval.

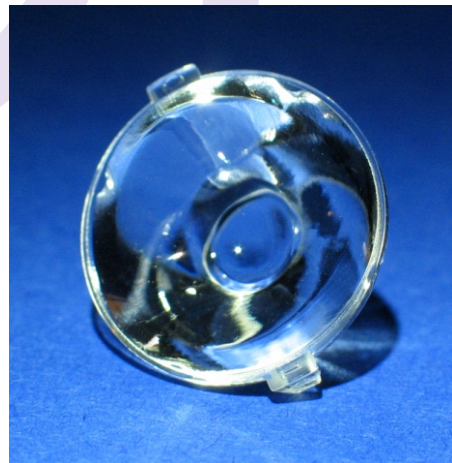
LED type, chip type and colour has an effect on illumination pattern, e.g., non-white LEDs give a narrower distribution. If you need more exact data on the issue, please contact **L₂Optics** for advice.

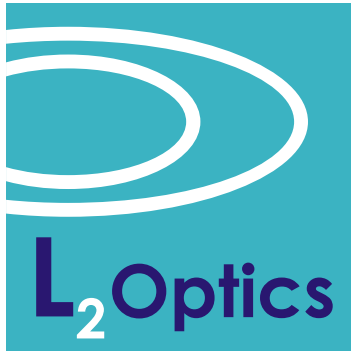
All **L₂Optics** 20mm Series Lenses are made from optical grade PMMA (acrylics) to ensure excellent optical properties as well as long-term material stability and durability.

L₂Optics 20mm Series Lenses can be supplied with or without holders. There are currently two different holders: for Luxeon Emitters and Star 1W, for Star 3/5W. Each of these optic holders is available in clear, white or black. For a complete description of the holders and their versions, please look at the Optic Holder section of this data sheet.



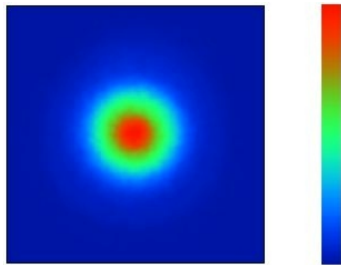
Optic Dimension



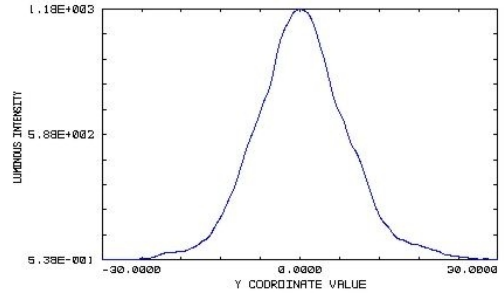


“clear innovation”

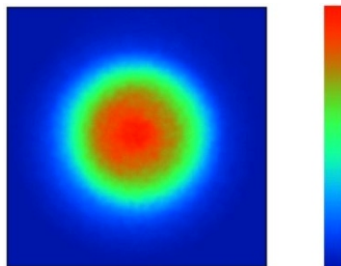
All **L₂Optics** 20mm Series lenses are made of optical grade PMMA (acrylics) to ensure excellent optical properties as well as long-term material stability and durability and have an optical efficiency of the lenses is 85% minimum.



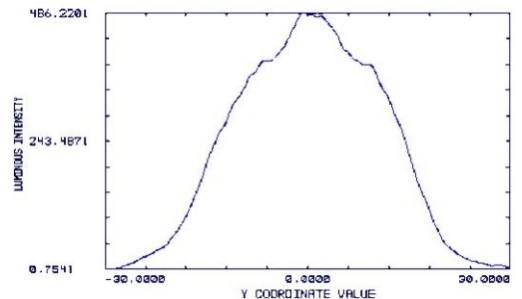
Typical Narrow Distribution
Spot Lens - 5°



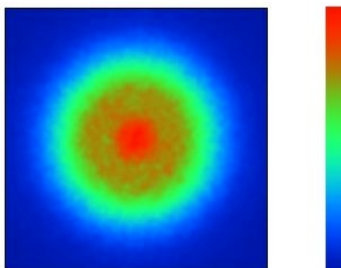
Typical half-angle divergence 5° when using 1W White Luxeon



Typical Medium Distribution
Medium Lens - 15°



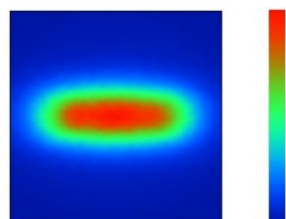
Typical half-angle divergence 15° when using 1W White Luxeon



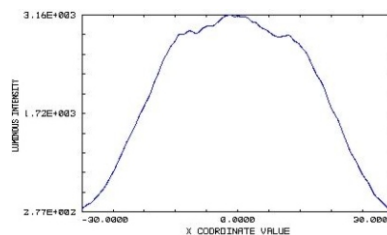
Typical Wide Distribution
Wide Lens - 25°



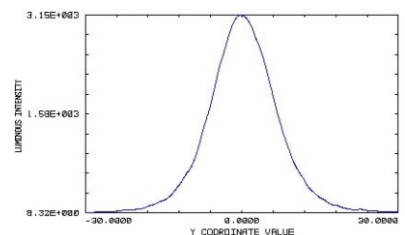
Typical half-angle divergence 25° when using 1W White Luxeon



Typical Oval Distribution
Oval Lens - 5° x 20°



Horizontal



Vertical

Typ. half-angle divergence 5° x 20° (1W White Luxeon)



“clear innovation”

Optics Holders for Luxeon



Clear



White



Black

L₂Optics have developed a new type of easy-to-use holder for use with Luxeon LEDs and **L₂Optics 20mm Series Lenses**. There are currently two different type of holders:

OH-ES1 for Luxeon Emitters & Star 1W
OH-S35 for Star 3W or 5W

The OH-S35 optic holder has a slightly lower profile and can also be used for drop-through LED mounting, using 0.8mm FR4 PCB with an 8.0mm hole for the LED slug, enabling it to be mounted directly on the heatsink surface beneath.

L₂Optics are happy to make you also a special customized holder to meet your specific needs. Please ask **L₂Optics** for a quotation.

L₂Optics holders position themselves easily and accurately on top of the LED. They are easy to fasten onto the PCB by using an appropriate adhesive.

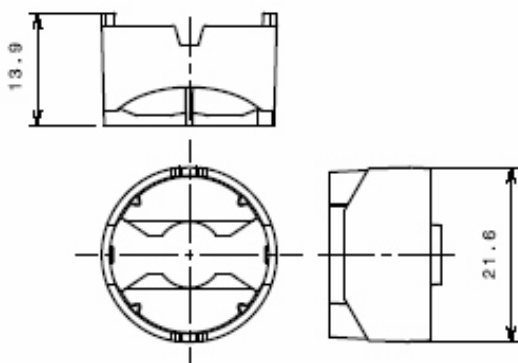
The snap-lock fastening of the lens is very secure and does not allow lens to move or drop out of the holder, once it has been placed.

L₂Optics holders are made of durable polycarbonate plastics. There are currently three standard colours available: clear, white and black. However, if you need a specific colour for your application, please ask **L₂Optics** for a quotation.

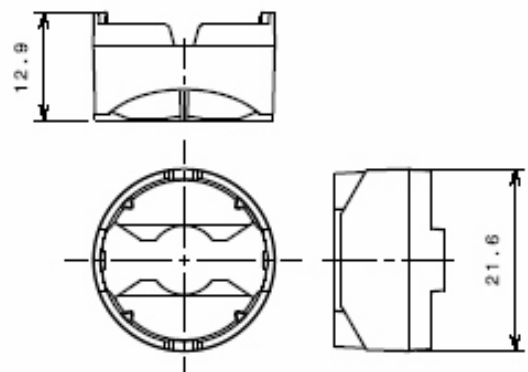


“clear innovation”

Lens Holder Dimensions



OH-ES1 - Luxeon Emitter, Star 1W



OH-S35 - Luxeon Star 3W or 5W

Part Numbers

Lenses

OP-005	20mm Series Spot Optic - 5°
OP-015	20mm Series Medium Optic - 15°
OP-025	20mm Series Wide Optic - 25°
OP-520	20mm Series Oval Optic - 520°

Optic Holders

OH-ES1-CL	Luxeon Emitter, Star 1W - Clear
OH-ES1-WH	Luxeon Emitter, Star 1W - White
OH-ES1-BK	Luxeon Emitter, Star 1W - Black

OH-S35-CL	Luxeon Star 3W or 5W - Clear
OH-S35-WH	Luxeon Star 3W or 5W - White
OH-S35-BK	Luxeon Star 3W or 5W - Black