



# The L<sub>2</sub> Optics Range

## Contents

- 28 Optics Introduction
- 29-30 OPTX – Cree
- 29-30 OPGD – Golden Dragon
- 29-30 OPIO - Nichia
- 29-30 OPK2 – K2
- 31 F'Form
- 32 Special Lenses

Dialight Lumidrives offers a comprehensive range of lenses which have been tailored to suit individual high powered LED families and common lighting applications used across the globe. All the L<sub>2</sub>Optics lenses are made from optical grade PMMA (acrylics) to ensure excellent optical properties, as well as long-term material stability and durability. Two distinctive lens ranges have been developed: the F'Form and OPT series.

## F'Form Range

The F'Form range consists of 20 mm lenses and holders that have been specifically designed for use with:

- Luxeon star 1W, 3W, 5W and K2
- Golden Dragon

The holders position themselves easily and accurately on top of the LED and can be simply fastened onto the PCB by using an appropriate adhesive.

## OPT Range

The OPT range consists of a unique spot base module onto which clip a selection of sub-lenses providing different beam angles. The series is available not only in a single but also a triple lens module complete with a choice of two sub-lenses. The optics are tailor-made for specific use with the following LED families:

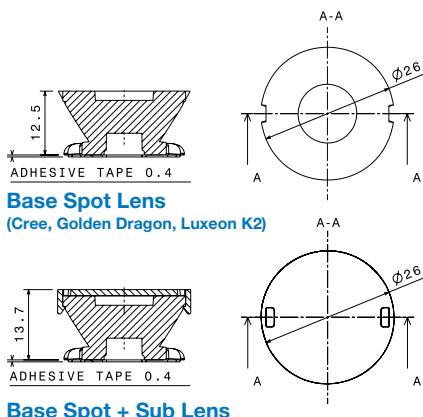
- Cree XLamp 7090
- Luxeon K2
- Nichia Jupiter
- Osram Golden Dragon

As well as our standard range, L<sub>2</sub>Optics are always looking to work with companies ready to develop unique optical solutions. Please contact [sales@l2optics.com](mailto:sales@l2optics.com) providing details of your specialist applications and we will be happy to advise you.



Visit the dedicated optics website at  
[www.l2optics.com](http://www.l2optics.com)

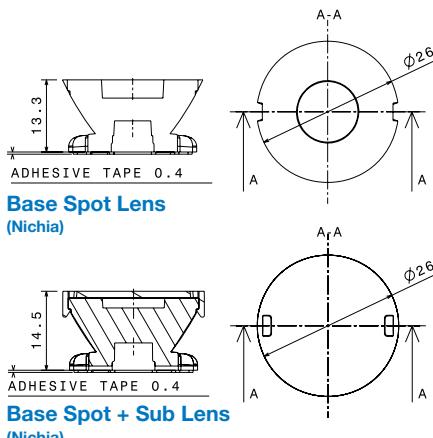
# L<sub>2</sub> Optics OPT Series 1



L<sub>2</sub>Optics OPT Series 1 base lenses position easily and accurately over the LED. They are easy to fix onto the PCB using the integral self-adhesive pad.

The snap-lock-sub-lenses attach easily, are very secure and do not move or drop out, once in place.

There are three different sub-lens illumination patterns available: spot, wide and oval.



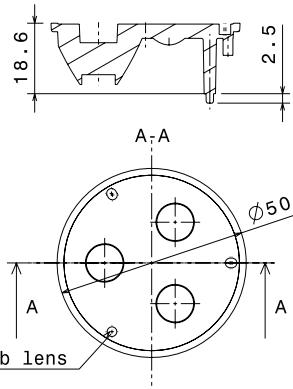
# L<sub>2</sub> Optics OPT Series 3



Fixing holes for additional sub lens

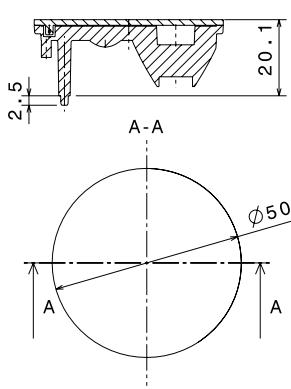
L<sub>2</sub>Optics OPT Series 3 spot triple is fixed over the LEDs on the PCB using locating pegs.

## Base Spot Lens



The snap-lock medium sub-lenses attach easily, using locating pegs into the base lens.

## Base Spot + Sub Lens



## Optic Series Lens Systems for Cree XLamp 7090 LEDs

### Base Lenses

OPTX-1-006	OPTX Series Spot Base Module	6°
OPTX-3-008	OPTX Triple Spot Base Module	8°

### Sub-Lenses

OPAA-1-DFL	Spot Diffuser Sub-Lens	8°
OPAA-1-WSL	Wide Sub-Lens	16°
OPAA-1-OSL	Oval Sub-Lens	8° x 25°
OPAA-3-WSL	Triple Wide Sub-Lens	14°
OPAA-3-MICRO	Triple Micro Sub-Lens	Micro

 Series 1

 Series 3

## Optic Series Lens Systems for Osram Golden Dragon LEDs

### Base Lenses

OPGD-1-002	OPGD Series Spot Base Module	2°
OPGD-3-006	OPGD Triple Spot Base Module	6°

### Sub-Lenses

OPAA-1-DFL	Spot Diffuser Sub-Lens	5°
OPAA-1-WSL	Wide Sub-Lens	15°
OPAA-1-OSL	Oval Sub-Lens	4° x 27°
OPAA-3-WSL	Wide Sub-Lens	15°
OPAA-3-MICRO	Micro Sub-Lens	Micro

 Series 1

 Series 3

## Optic Series Lens Systems for Nichia Jupiter LEDs

### Base Lenses

OPIO-1-011	OPIO Series Spot Base Module	11°
OPIO-3-011	OPIO Triple Spot Base Module	11°

### Sub-Lenses

OPAA-1-DFL	Spot Diffuser Sub-Lens	13°
OPAA-1-WSL	Wide Sub-Lens	18°
OPAA-1-OSL	Oval Sub-Lens	12° x 24°
OPAA-3-WSL	Wide Sub-Lens	18°
OPAA-3-MICRO	Micro Sub-Lens	Micro

 Series 1

 Series 3

## Optic Series Lens Systems for Luxeon K2 LEDs

### Base Lenses

OPK2-1-003	OPK2 Series Spot Base Module	3°
OPK2-3-006	OPK2 Series Triple Spot Base Module	6°

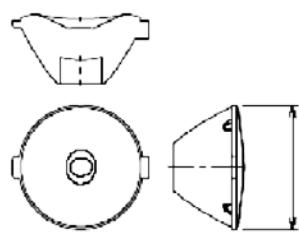
### Sub-Lenses

OPAA-1-DFL	Spot Diffuser Sub-Lens	6°
OPAA-1-WSL	Wide Sub-Lens	12°
OPAA-1-OSL	Oval Sub-Lens	4° x 27°
OPAA-3-WSL	Wide Sub-Lens	8°
OPAA-3-MICRO	Micro Sub-Lens	Micro

 Series 1

 Series 3

# F-Form Lenses

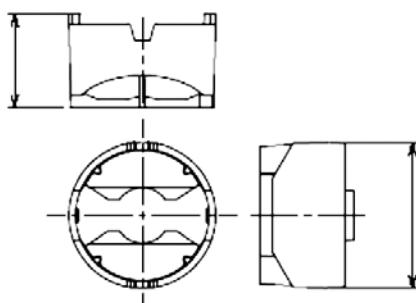


L<sub>2</sub>Optics 20mm F-Form Series lenses are made from optical grade PMMA (acrylics) with an optical efficiency of 85% minimum. When used with the appropriate lens holders (below) these are suitable for Luxeon 1W, 3W, 5W and K2 as well as the Osram Golden Dragon range of LEDs.

## Lens - Part Numbers

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	5 x 20°

# Lens Holders



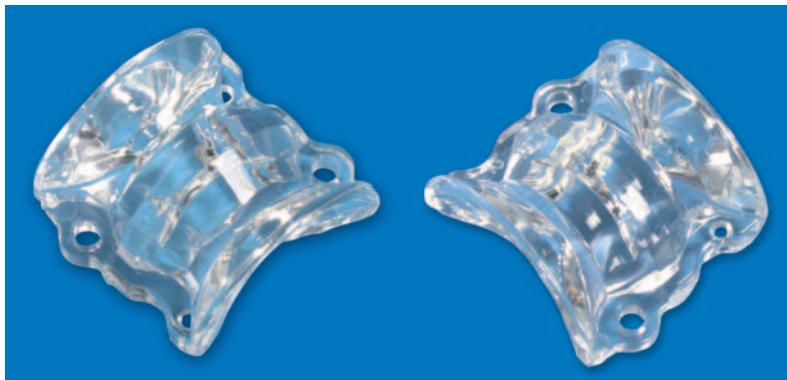
There are currently 4 different holders for: Luxeon 1W Emitters / Star 1W, Star 3/5W, Luxeon K2 and Osram Golden Dragon. Each of these optic holders is available in clear, white or black.

## Optic Holders - Part Numbers

OH-ES1-CL	Optic Holder - Luxeon Emitter, Star 1W	Clear
OH-ES1-WH	Optic Holder - Luxeon Emitter, Star 1W	White
OH-ES1-BK	Optic Holder - Luxeon Emitter, Star 1W	Black
OH-S35-CL	Optic Holder - Luxeon Star 3W or 5W	Clear
OH-S35-WH	Optic Holder - Luxeon Star 3W or 5W	White
OH-S35-BK	Optic Holder - Luxeon Star 3W or 5W	Black
OH-K2-CL	Optic Holder - Luxeon K2 Emitter	Clear
OH-K2-WH	Optic Holder - Luxeon K2 Emitter	White
OH-K2-BK	Optic Holder - Luxeon K2 Emitter	Black
OH-GD-CL	Optic Holder - Golden Dragon	Clear
OH-GD-WH	Optic Holder - Golden Dragon	White
OH-GD-BK	Optic Holder - Golden Dragon	Black

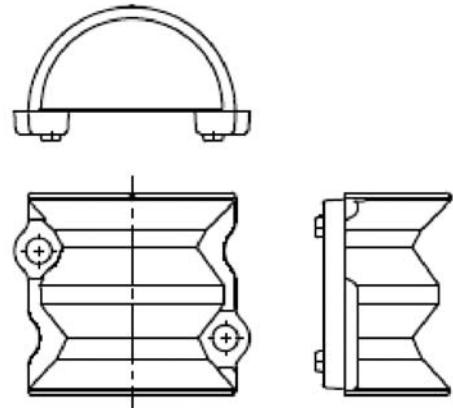


# Special Lenses from L<sub>2</sub>Optics



L<sub>2</sub>Optics are happy to design special customized lenses to meet your specific needs. Please ask L<sub>2</sub>Optics for a quotation.

L<sub>2</sub>Optics flare lens has been designed for use with all Luxeon Emitters. The illumination pattern is horizontally very wide, but vertically extremely narrow -  $\pm 10^\circ \times 80^\circ$



Flare Lens

OP-FL	Flare lens for Luxeon	10° x 80°
-------	-----------------------	-----------

## Examples of other Special Lenses



K2 3-Cell Optic



K2 Side Emitting Lens



K2 7-Cell Optic



K2 Side Emitting Lens