



*Optics Development Kits*

## APPLICATION

Ease – performance – flexibility – are some of the attributes designed-in to our precision-engineered lenses, sub-lenses and lens holders. Manufactured using optical grade PMMA acrylic, Dialight Lumidrives offers these components in development kits designed for LUXEON®, Osram, Cree and Nichia LEDs. The direct PCB mount version allows for maximum board real-estate, with snap-in lenses in various diffusing patterns (LUXEON I, III, V, K2, and Golden Dragon). Our self-adhesive version is easy to configure and the secondary sub-lenses simply snap-on to the spot base module to provide various diffusing patterns (LUXEON I, III, V, K2, Osram Golden Dragon®, Cree XLamp®, Nichia Jupiter®).



## LUXEON L2-KL1 LENS SYSTEM



HOLDERS* (26 TOTAL)			
Dialight P/N	Reference P/N	Description	
OHES1WH	OH-ES1-WH	LUXEON I, III, V & Star I - Direct PCB Mount - White	
OHES1BK	OH-ES1-BK	LUXEON I, III, V & Star I - Direct PCB Mount - Black	
OHES1CL	OH-ES1-CL	LUXEON I, III, V & Star I - Direct PCB Mount - Clear	
OHS35WH	OH-S35-WH	For Drop-Through Mount & LUXEON Star 3 & 5 - White	
OHS35BK	OH-S35-BK	For Drop-Through Mount & LUXEON Star 3 & 5 - Black	
OHS35CL	OH-S35-CL	For Drop-Through Mount & LUXEON Star 3 & 5 - Clear	
LENS			
Dialight P/N	Reference P/N	Description (Qty)	Degree**
OP520	OP-520	Oval Lens (8)	5° X 20°
OP005	OP-005	Spot Lens (8)	5°
OP025	OP-025	Wide Lens (8)	25°
OPFL	OP-FL	Flare Lens (1)	10° X 80°
*Holder colors may vary between kits			
**All angles refer to half divergence			



## OSRAM GOLDEN DRAGON L2-KL2 LENS SYSTEM



HOLDERS			
Dialight P/N	Reference P/N	Description (Qty)	
OHGDBK	OH-GD-BK	Osram Golden Dragon LEDs - Black (10)	
OHGDCL	OH-GD-CL	Suitable for Osram Golden Dragon LEDs - Clear (8)	
OHGDWH	OH-GD-WH	Suitable for Osram Golden Dragon LEDs - White (8)	
LENS			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OP520	OP-520	Oval Lens (8)	5° X 20°
OP005	OP-005	Spot Lens (8)	5°
OP025	OP-025	Wide Lens (8)	25°
OP015	OP-015	Medium Lens (8)	15°
*All angles refer to half divergence			

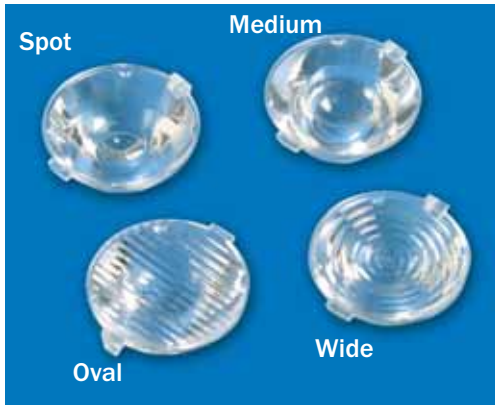
## LUXEON K2 L2-KL3 LENS SYSTEM



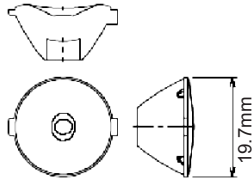
HOLDERS			
Dialight P/N	Reference P/N	Description (Qty)	
OHK2BK	OH-K2-BK	LUXEON K2 LEDs - Black (10)	
OHK2CL	OH-K2-CL	Suitable for LUXEON K2 LEDs - Clear (8)	
OHK2WH	OH-K2-WH	Suitable for LUXEON K2 LEDs - White (8)	
LENS			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OP520	OP-520	Oval Lens (8)	5° X 20°
OP005	OP-005	Spot Lens (8)	5°
OP025	OP-025	Wide Lens (8)	25°
OPFL	OP-FL	Flare Lens (1)	10° X 80°
*All angles refer to half divergence			



## MECHANICAL DRAWINGS



**F-Form Lenses**

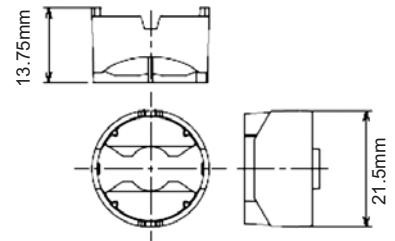


L2 Optics 20mm F-Form Series lenses are made from optical grade PMMA (acrylic) with an optical efficiency of 85% minimum. When used with the appropriate lens holders (below), these are suitable for LUXEON I, III, V and K2 as well as the Osram Golden Dragon range of LEDs.

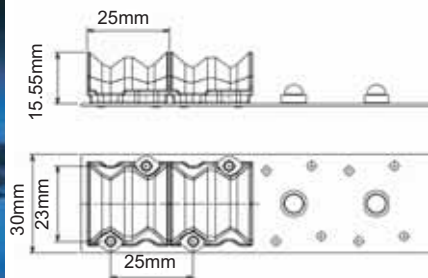
There are currently 4 different holders for: LUXEON Emitters / Star 1W, Star 3/5W, LUXEON K2 and Osram Golden Dragon. Each of these optic holders is available in clear, white or black.



**Lens Holders**



**Flare Lens**



The flare lens has been designed for use with all Lumileds™ LUXEON Emitters. These lenses are assembled directly on the PCB without an additional holder.



## OSRAM GOLDEN DRAGON L2-KL4-GD LENS SYSTEM



BASE LENSES			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OPGD1002	OPGD-1-002	OPGD Series Spot Base Module	2°
SUB-LENSES			
OPAA1DF	OPGD-1-DIF5	OPGD Series Spot Diffuser Sub-Lens (4)	5°
OPAA1WSL	OPGD-1-015S	OPGD Series Wide Sub-Lens (4)	15°
OPAA1OSL	OPGD-1-427S	OPGD Series Oval Sub-Lens (4)	4° X 27°
*All angles refer to half divergence			

## CREE XLAMP 7090 L2-KL5-XL LENS SYSTEM



BASE LENSES			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OPTX1006	OPTX-1-006	OPTX Series Spot Base Module (4)	6°
SUB-LENSES			
OPAA1DF	OPTX-1-DIF8	OPTX Series Spot Diffuser Sub-Lens (4)	8°
OPAA1WSL	OPTX-1-016S	OPTX Series Wide Sub-Lens (4)	16°
OPAA1OSL	OPTX-1-825S	OPTX Series Oval Sub-Lens (4)	8° X 25°
*All angles refer to half divergence			



## NICHIA JUPITER L2-KL6-IO LENS SYSTEM



BASE LENSES			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OPIO1011	OPIO-1-011	OPIO Series Spot Base Module	11°
SUB-LENSES			
OPAA1DF	OPIO-1-DIF13	OPIO Series Spot Diffuser Sub-Lens (4)	13°
OPAA1WSL	OPIO-1-018S	OPIO Series Wide Sub-Lens (4)	18°
OPAA1OSL	OPIO-1-1224S	OPIO Series Oval Sub-Lens (4)	12° X 24°
*All angles refer to half divergence			

## LUXEON K2 L2-KL7-K2 LENS SYSTEM



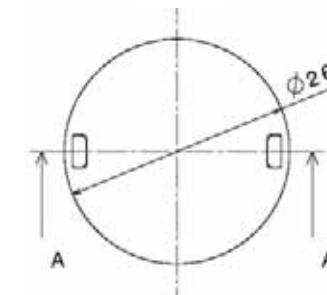
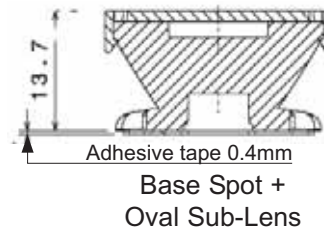
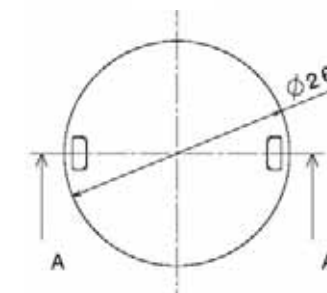
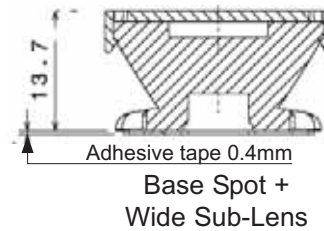
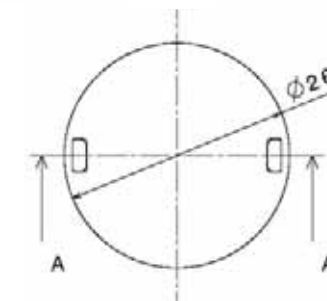
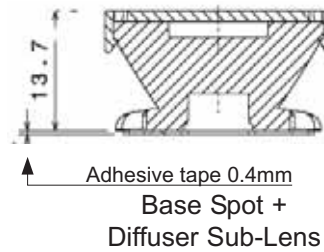
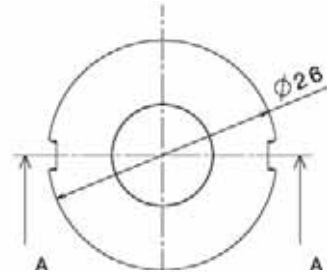
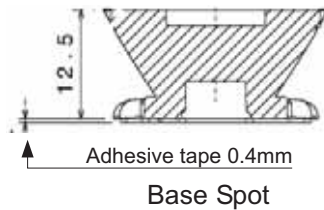
BASE LENSES			
Dialight P/N	Reference P/N	Description (Qty)	Degree*
OPK21003	OPK2-1-003	OPK2 Series Spot Base Module (4)	3°
SUB-LENSES			
OPAA1DF	OPK2-1-DIF6	OPK2 Series Spot Diffuser Sub-Lens (4)	6°
OPAA1WSL	OPK2-1-012S	OPK2 Series Wide Sub-Lens (4)	12°
OPAA1OSL	OPK2-1-427S	OPK2 Series Oval Sub-Lens (4)	4° X 27°
*All angles refer to half divergence			



## APPLICATION

OPT Series 1 base spot lenses position easily and accurately over the LED. They are easy to fix onto the PCB using the integral self-adhesive pad. The snap-on 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 : diffused, wide and oval.

## MECHANICAL DRAWINGS



Note: Above Base Spot dimensions are for Cree, Golden Dragon, LUXEON K2.  
For Nichia - Base Spot dimension is 13.3mm (plus lenses).





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