



A COMPLETE RANGE OF TOP MARKET EFFICIENCY OPTICS FOR HIGH POWER LEDs

PRODUCTS

- Top quality TIR lenses, shortest on market
- Different light beam angles available
 - Spot
 - Flood
 - Diffuse
 - Line
- Standard size $\varnothing 26\text{mm}$, $\varnothing 19.7\text{mm}$
- Snap-in single holder or MR16 models
- Easy to mount holders with screw or glue

APPLICATIONS

- Indoor lighting
- Accent lighting
- Reading lamps
- Torches and flashlamps
- Signaling
- Floor illumination

The Power Optics Series is a set of optics especially designed to work with High Power LEDs. The Power Optics Series is compact, efficient and available with 4 different beam angles. Snap-in lens holders are available as accessories, ensuring easy fixing and mounting. These accessories make the family very complete and suitable to provide cost-effective solutions to many different applications in the Solid-State Lighting field.

To ease customer code management and cost reduction, lenses and holders are supplied separately.



Lenses for Solid-State Lighting

GENERAL CHARACTERISTICS

Storage Temperature	-20° / +70°	
Operating Temperature	-20° / +60°	
Material	Optical Grade UV stable PMMA (acrylic)	
Index of refraction n_d	1.492	
Chemical Resistance	Weak Acids	Poor
	Strong Acids	Poor
	Weak Alkalis	Good
	Strong Alkalis	Fair
	Organic Solvents	Poor
	Alcohols	Poor
	Hydro Carbons	Poor
	Fuels	Fair
UV Radiation	Good	

POWER OPTICS 19 SERIES FOR LUXEON AND LUXEON III LED¹

Order Number	Description	Diameter	FWHM Beam Angle ²	On axis beam intensity ³		
				○	●●●	●●●●●
950001000	Power Spot 19LL	19.7mm	8°	130 cd	145 cd	170 cd
950001010	Power Flood 19LL		25°	30 cd	32 cd	34 cd
950001020	Power Diffuse 19LL		45°	18 cd	18 cd	20 cd
950001030	Power Line 19LL		8°x30°	53 cd	55 cd	58 cd

POWER OPTICS 26 SERIES FOR LUXEON AND LUXEON III LED¹

Order Number	Description	Diameter	FWHM Beam Angle ²	On axis intensity ³		
				○	●●●	●●●●●
950001040	Power Spot 26LL	26mm	6°	250 cd	275 cd	290 cd
950001050	Power Flood 26LL		25°	35 cd	36 cd	37 cd
950001060	Power Diffuse 26LL		45°	20 cd	22 cd	25 cd
950001070	Power Line 26LL		8°x30°	75 cd	77 cd	79 cd

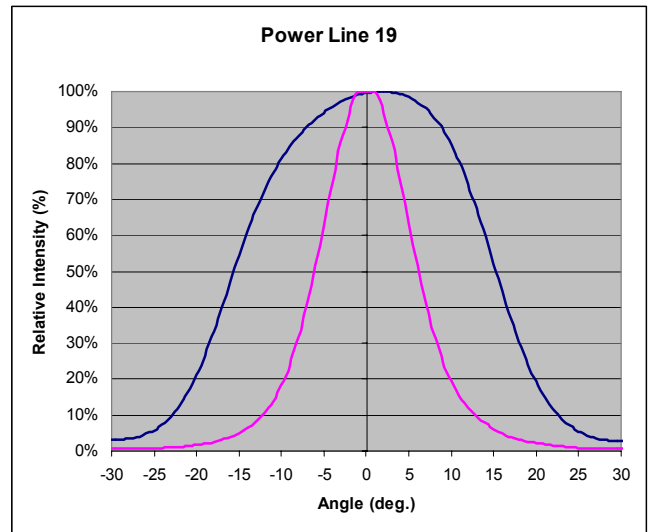
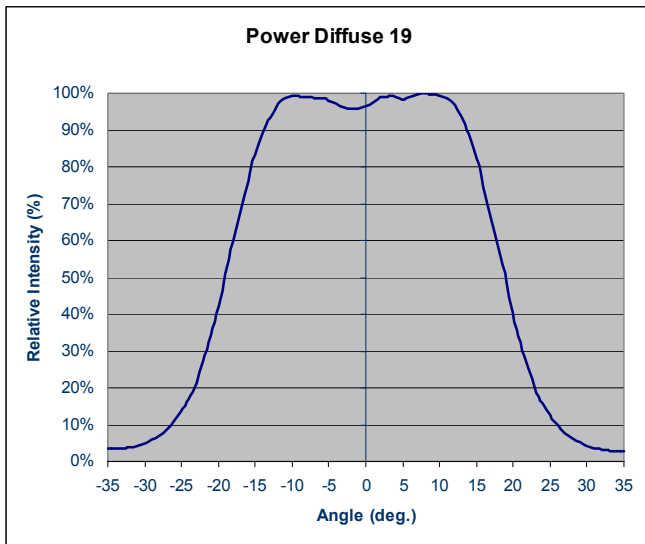
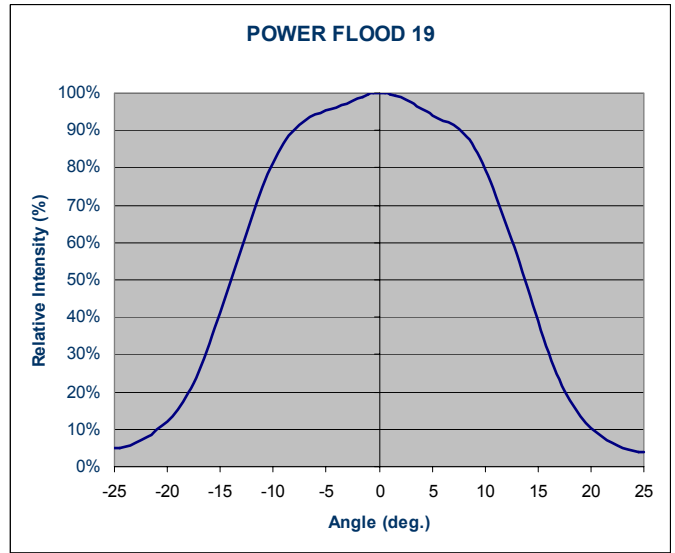
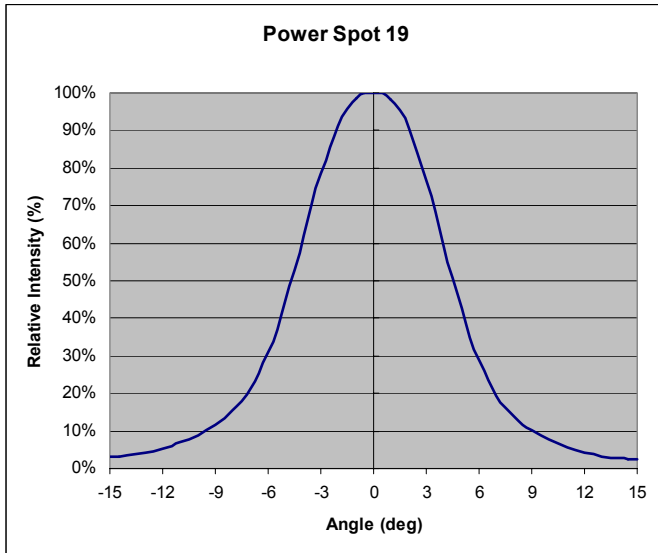
¹ The Power Optics LL Series has been designed to fulfil the Luxeon lambertian pattern LED from Lumileds. Luxeon, Luxeon III and Luxeon V are fully supported.

² FWHM – Full Width Half Maximum is the full angle measured where the intensity is the half of the peak

³ The intensity is measured on axis for every colour with a LEDs calibrated to 10lm of luminous flux.



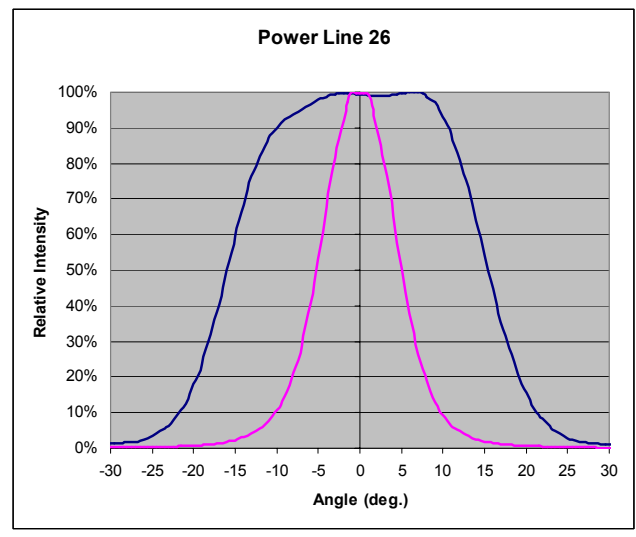
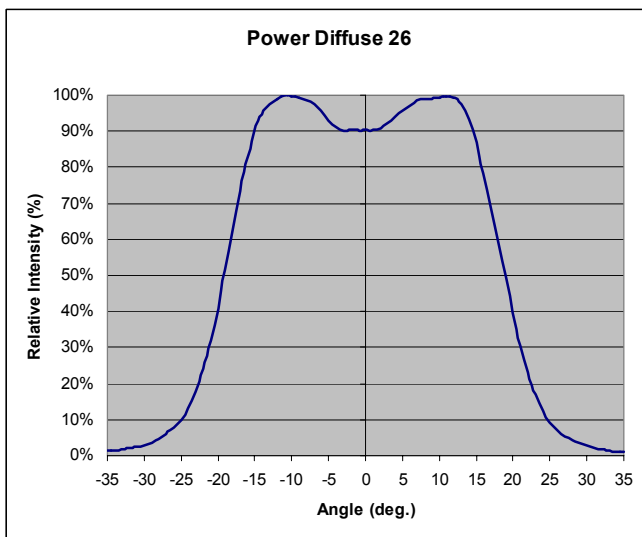
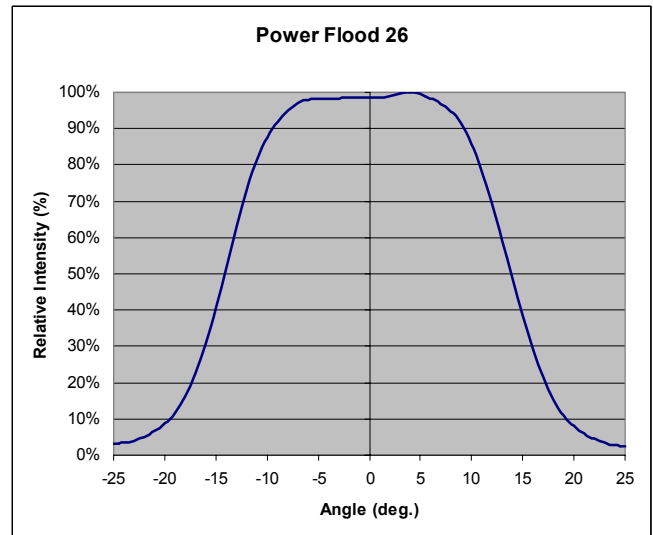
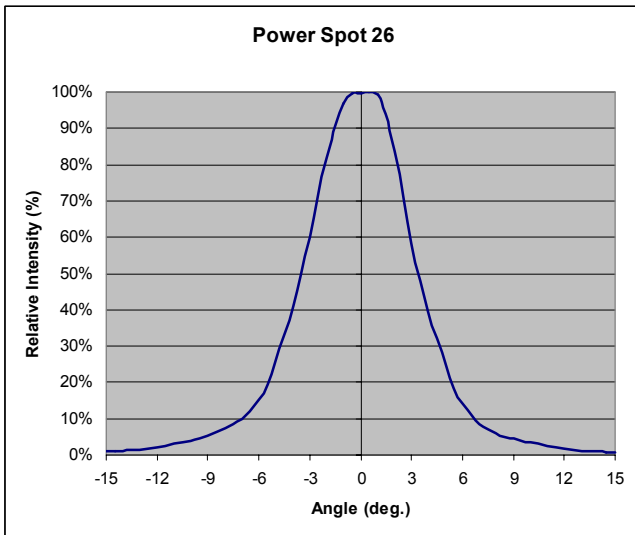
POWER OPTICS 19 – ANGULAR DISTRIBUTION PATTERN



--- minor axis --- major axis



POWER OPTICS 26 – ANGULAR DISTRIBUTION PATTERN

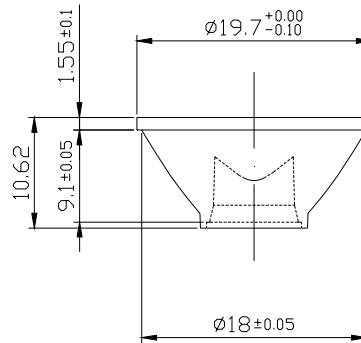


-- minor axis -- major axis

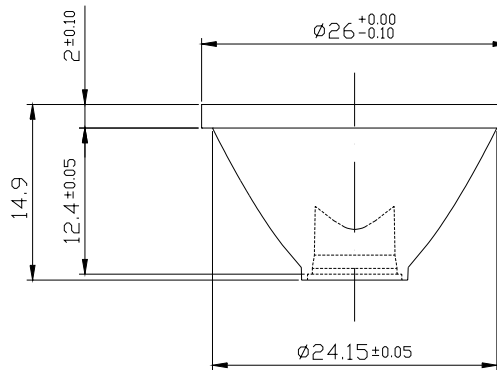


POWER OPTICS LL SERIES: DIMENSIONS AND LAYOUTS

**POWER OPTICS
19LL**
(Dimensions are in mm;
Tolerances where not
specified $\pm 0.1\text{mm}$)



**POWER OPTICS
26LL**
(Dimensions are in mm;
Tolerances where not
specified $\pm 0.1\text{mm}$)





Lens Holders

GENERAL CHARACTERISTICS

Storage Temperature	-20° / +70°	
Operating Temperature	-20° / +60°	
Material	PC-ABS Blend	
Colour	Black	
Chemical Resistance	Weak Acids	Excellent
	Strong Acids	Good
	Weak Alkalis	Good
	Strong Alkalis	Fair
	Organic Solvents	Poor
	Alcohols	Poor
	Hydro Carbons	Poor
	Fuels	Poor
	UV Radiation	Fair

POWER OPTICS LL SERIES: DIMENSIONS AND LAYOUTS

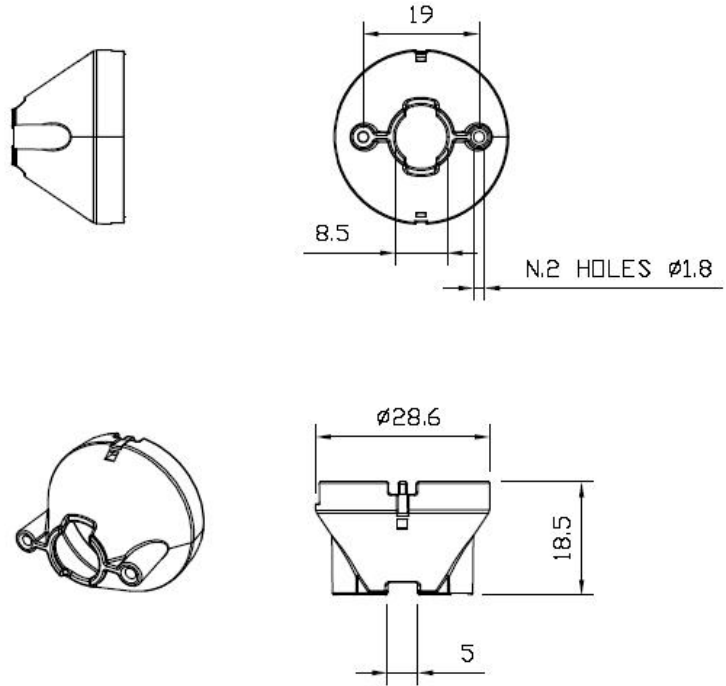
**SINGLE LENS HOLDER
FOR POWER OPTICS
19xx**
(Dimensions are in mm;
Tolerances where not specified
±0.1mm)

N.2 HOLES $\varnothing 1.8$



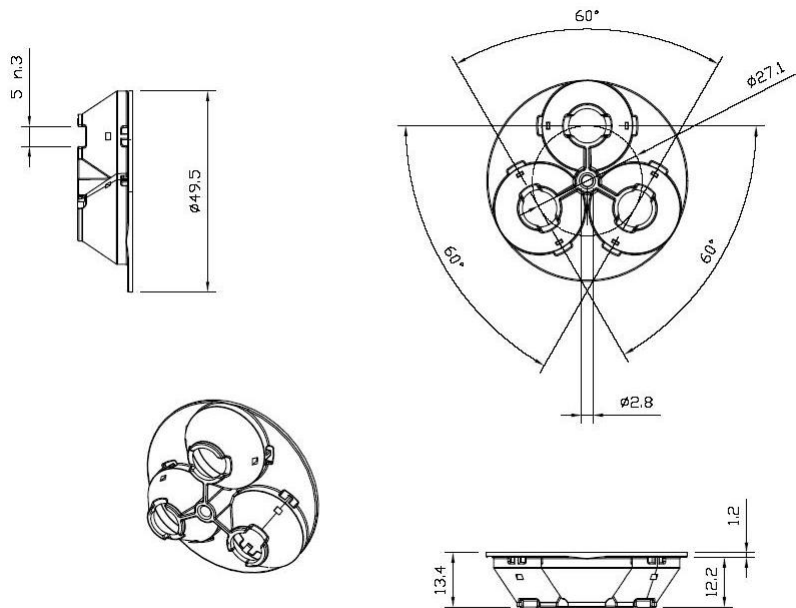
SINGLE LENS HOLDER FOR POWER OPTICS 26xx

(Dimensions are in mm; Tolerances where not specified $\pm 0.1\text{mm}$)



MR16 COMPATIBLE LENS HOLDER FOR POWER OPTICS 19xx

(Dimensions are in mm; Tolerances where not specified $\pm 0.1\text{mm}$)





Models

Description	Order number
POWER OPTICS 19 SPOT LL	950001000
POWER OPTICS 19 FLOOD LL	950001010
POWER OPTICS 19 DIFFUSE LL	950001020
POWER OPTICS 19 LINE LL	950001030
POWER OPTICS 26 SPOT LL	950001040
POWER OPTICS 26 FLOOD LL	950001050
POWER OPTICS 26 DIFFUSE LL	950001060
POWER OPTICS 26 LINE LL	950001070
POWER OPTICS 25 SPOT LL	950001080
LENS HOLDER 26 mm POWER OPTICS	950001090
LENS HOLDER 19,7 mm POWER OPTICS	950001100
LENS HOLDER MR16 POWER OPTICS	950001110

Datasensor Optics endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use Datasensor Optics can guarantee only the data indicated in the instruction manual supplied with the products.