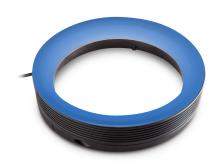


LTRN165B45 | DATASHEET

Ring LED illuminator, inner diameter 135.0mm, oblique type, blue, 470 nm





Mechanically fitting Opto Engineering optics

Each lens integrates specific mechanical interfaces.

Specific illumination geometry

Illumination path matches Opto Engineering lenses viewing angle and numerical aperture.

High performance to price ratio

Cost-effective, without quality compromises.

LTRNOB series are LED ring illuminators specifically designed for a wide range of Opto Engineering products. Especially the oblique type models perfectly fit Opto Engineering® 360° view optics.









SPECIFICATIONS

Lighting specifications

Illumination area outer diameter	(mm)	164.5
Illumination area inner diameter	(mm)	134.5
Optimal working distance (Min-Max)	(mm)	30-50
Number of LED rows		1
Emission angle	(°)	45
Light color, peak wavelength		blue, 470 nm
Illuminance at min WD ¹	(lux)	9000
Illuminance at max WD ¹	(lux)	7490

Electrical specifications

Supply voltage ²	(V)	24
Current	(mA)	480
Power consumption	(W)	11.6
Estimated MTBF ³	(hours)	> 20000
Max pulse voltage ⁴	(V)	24-48 (36 recomended)
Max pulse current ⁵	(mA)	1440
Max duty Cycle	(%)	10
Max pulse duration	(ms)	10
Connector ⁶		Flying leads
Cable length	(mm)	1000

Mechanical specifications

-		
Outer diameter	(mm)	175.0
Inner diameter	(mm)	135.0
Height	(mm)	36.5
Mass	(g)	560

Environment

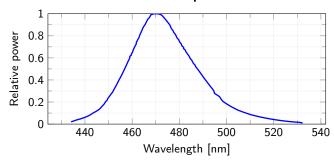
Operating temperature	(°C)	0-45
Operating humidity	(%)	20-85, non condensing

Eye safety

Dial, (CELENI CO 471, 2010)	Dial 2
Risk group (CFI FN 62471:2010)	Risk group 2

- ¹ ±15%.
- ² Tolerance $\pm 2\%$.
- ³ At 25°C.
- ⁴ Constant voltage power supply.
- ⁵ Constant current power supply.
- ⁶ Red Cable is V+, white cable is V-.

LED color spectrum



COMPATIBLE PRODUCTS

Full list of compatible products available here.

OPTICS	LIGHTING	CAMERAS	SOFTWARE	ACCESSORIES
		O Total		The same state of
A wide select	ion of innova	ative machine	e vision comp	onents.

All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.