

# LTCLCR048-G | DATASHEET

Telecentric CORE illuminator, beam dimension  $\varnothing=56.0$ ,  $x=50.0$  mm, green



## KEY ADVANTAGES

### Deliver excellent performances

LTCLHP CORE telecentric illuminators deliver exactly the same excellent optical performances as other Opto Engineering® telecentric illuminators.

### Downsize your vision system

LTCLHP CORE telecentric illuminators are up to 60% smaller than other telecentric illuminators on the market.

### Easy retrofitting into existing systems

LTCLHP CORE illuminators can be mounted in different directions in your machine.

### Improve your system performances

LTCLHP CORE illuminators may be used instead of flat backlights to improve your system.

### Cut costs and sell more

A smaller system means less expenses and less space and is preferred by the industry.

### Homogeneity test report with measured values



The **LTCLHP CORE Series** offers ultra compact telecentric illuminators. They are up to 60% more compact than other collimated illuminators on the market.

## SPECIFICATIONS

### Lighting specifications

Beam dimension <sup>1</sup>	(mm)	$\varnothing=56.0$ , $x=50.0$
Working distance	(mm)	90 - 180
Light color, peak wavelength <sup>2</sup>		green, 525 nm
Spectral FWHM	(nm)	40

### Electrical specifications

Supply voltage <sup>3</sup>	(V)	12-24
Max power consumption	(W)	2.5
Led forward voltage typical (max) <sup>4</sup>	(V)	3.3 (4.0)
Max led forward current <sup>5</sup>	(mA)	350
Max pulse current <sup>6</sup>	(mA)	2000
Connector		M8
Included cable		CB244P1500

### Mechanical specifications

A	(mm)	76.9
B	(mm)	106.0
C <sup>7</sup>	(mm)	117.1
Mass	(g)	1030

### Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only

### Eye safety

Risk group (CEI EN 62471:2010)	Exempt
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<sup>1</sup> Beam shape is not circular.

<sup>2</sup> Opto Engineering recommends green light for high precision measurements application

<sup>3</sup> Tolerance  $\pm 10\%$

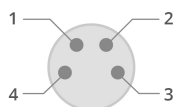
<sup>4</sup> At max forward current. Tolerance is  $\pm 0.06V$  on forward voltage measurements

<sup>5</sup> In continuous mode (not pulsed)

<sup>6</sup> At pulse with  $\leq 10ms$  and duty cycle  $\leq 10\%$ . Built in electronics board must be bypassed.

<sup>7</sup> Nominal value, with no spacers in place.

## M8 CONNECTOR PINOUT

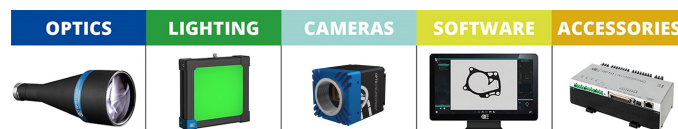


Device side

Pin	Function	Cable color
1	Earth	Yellow/Green
2	Ground	Black
3	Anode	Blue
4	Power supply (+12/24 V)	Brown

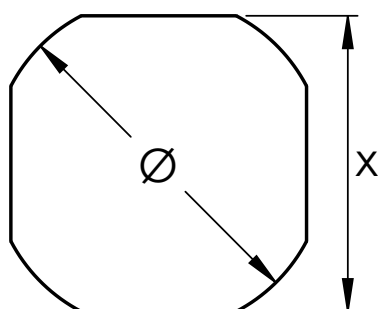
## COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).

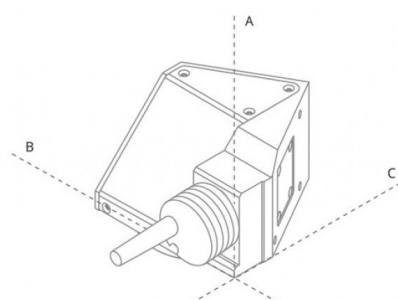


A wide selection of innovative machine vision components.

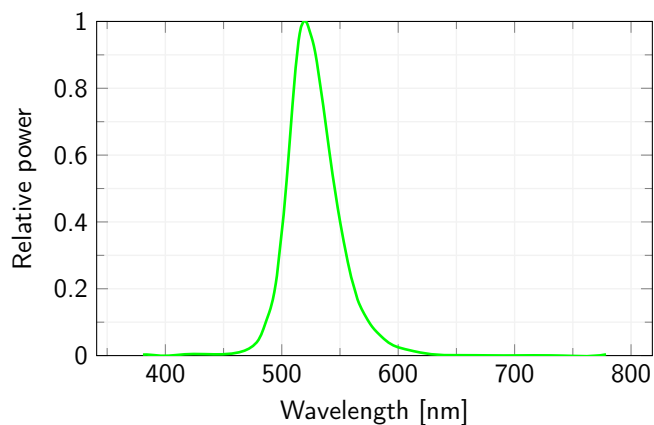
## BEAM SHAPE



## LTCLHP CORE illuminator dimensions (A, B, C)



## LED color spectrum



## Forward Current Characteristics

