LT2BC144180-W | DATASHEET

OPTO ENGINEERING

High uniformity continuous LED backlight, 144 x 180 mm illumination area, white

KEY ADVANTAGES

Excellent uniformity

Test report with measured uniformity

Ultra high-power light output and strobe mode operation
For inspection and measurement of fast moving objects and an extended LED lifetime

Suitable for frequent cleaning
Thanks to the optical grade and scratch resistant protective cover

Wide selection and modular design
Size options range from 48 x 36 to 288 x 216 mm available in red, white, green, blue and infrared

Compact design with reduced thickness (26 mm)

Special continuous alignment mode

Optional integrated collimation film

The LT2BC series offers high power LED backlights designed to provide exceptional illumination performances and excellent uniformity.

SPECIFICATIONS

Lighting specifications

Modules		3x5
Illumination area width	(mm)	144
Illumination area height	(mm)	180
Number of LEDs		720
Light color, peak wavelength		white, > 4500 K
Spectral FWHM	(nm)	-
Illuminance[1]	(klux)	16
Irradiance[1]	(W/m^2)	-
Diffuser		yes
Collimation film		no

Electrical specifications

Supply voltage	(V)	24
Current[2]	(mA)	1140
Power consumption[2]	(W)	27.4
Typical pulse voltage	(V)	36.0
Max pulse current[3]	(mA)	2500
Peak power consumption	(W)	90.0
Max duty cycle	(%)	1.5
Max pulse duration	(ms)	1
Connector		M8
Included cable		CBLT003

Mechanical specifications

Length	(mm)	156.0
Width	(mm)	200.0
Height	(mm)	26.0
Mass	(g)	1400
Clamping system		4x M6 threaded holes

Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85 non condensing
IP rating		IP40
Installation		Indoor use only

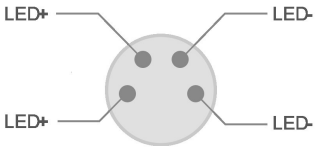
Eye safety

Risk group (CEI EN 62471:2010)	Exempt

[1] Minimum value, at max driving current, on emitting surface. Where n.a. is reported data is available upon request.
[2] Tolerance ±10%
[3] At 25°C. At max pulse width (1 ms), max pulse frequency = 15 Hz.

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.

CONNECTOR PINOUT



Device side

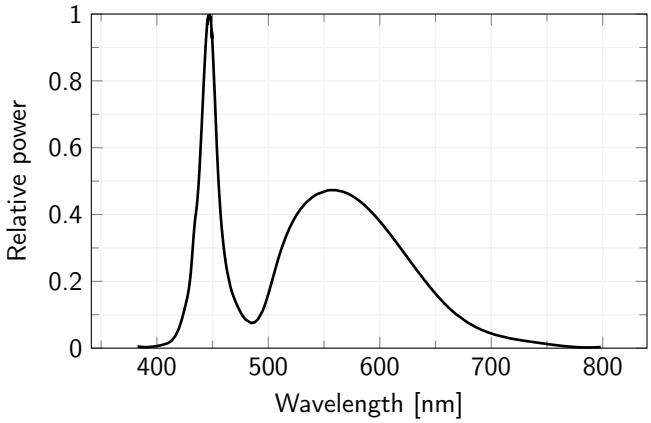
Function	Cable color
LED +	Brown
LED +	White
LED -	Blue
LED -	Black

COMPATIBLE PRODUCTS

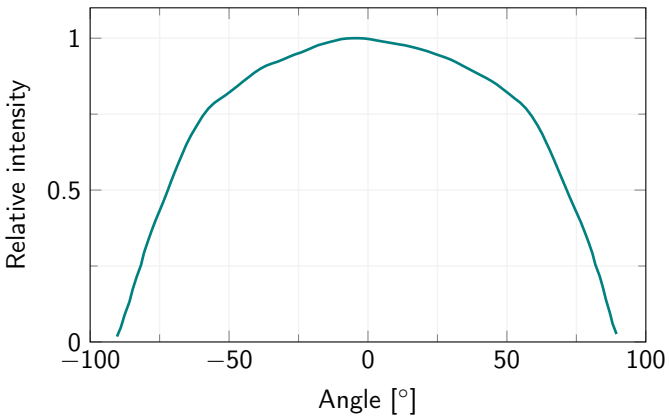
Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

LED color spectrum



Emission angle



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