



Standard Back Light Series

ELECTRICAL:

Input Voltage: 24VDC (25VDC Maximum)

Input Current per square inch:

-470 18mA typical (20mA Maximum); -530 16mA typical (20mA Maximum)

-660 15mA typical (20mA Maximum); -880 25mA typical (30mA Maximum)

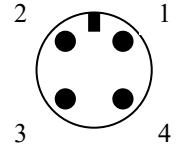
-WHI 18mA typical (20mA Maximum)

Strobe Impedance: 9400 ohms per sq inch (i.e. BL44-XXX = 9400 ohms / 16 sq inch = 588 ohms)

Connector: Quick Connect, 4 pin Euro / Micro

Wiring:

Pin #	Wire Color	Function
1	Brown	+24VDC
2	White	NPN Strobe Input: GND for "ON", Open or >Vin-1V for "OFF" *
3	Blue	0VDC
4	Black	PNP Strobe Input: < 1 VDC for "OFF" +5VDC to +24VDC for "ON"
* Requires 4 or 5 wire cable, available as extra cost		



ENVIRONMENTAL:

Operating Temperature: 0 to 50°C

Relative Humidity: 5 to 85% non-condensing

MECHANICAL:

Dimensions: <https://www.spectrumillumination.com>

Standard sizes are available from 2" x 2" to 12" x 12"

Custom sizes are available in 1" x 2" increments

ILLUMINATION:

Light Source: LED – 4 Colors, IR

Quantity LED's: 12 per square inch

Light Emitting Pattern: See individual dimension drawings

LED Life: up to 100,000 hours*

*Contact us for LED life information

DIFFUSERS:

White, Opaque – Standard

White, Opaque for Conveyor – Option /WDC

Clear Cover – Option /CC

Standard Diffuser – Option /SD

Thin Film Diffuser – Option /TFD

Polarizer – Option /P

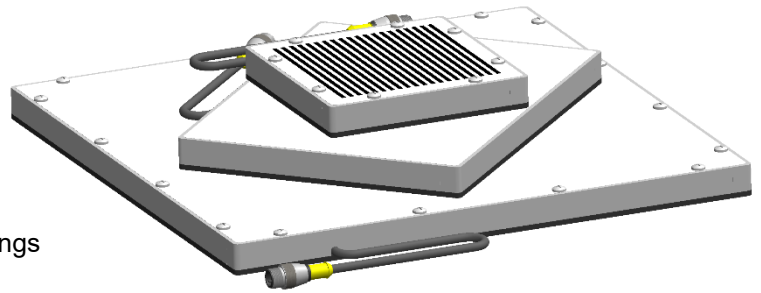
Distortion Diffuser – Option /DD

Light Collimating Film – Option /LCF

PART NUMBER DESIGNATION:

SBL48-XXX for 4"x8" back light

XXX = Light Color -470, -530, -660, -880 & -WHI



Light includes 4-meter cable - cable also available in 8, 15, and 30 meter lengths

Color	Dash #	λ Dominant Typical	λ Dominant Range	Spectral Half-width $\Delta\lambda_{1/2}$	λ Peak Typical	Units
Infrared	-880	n/a	n/a	50	880	nm
Red	-660	657	648-667	17	660	nm
Green	-530	525	520-535	35	530	nm
Blue	-470	470	465-475	25	468	nm
White	-WHI	Color Temp 4000K typ (3750K to 4250K) 80 CRI min				

When operating in continuous mode, -880 light must be mounted to metal structure to provide additional heat dissipation.

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