



BRAMAL LED

WWW.BRAMALLED.COM

Introducing the **ONE Tube solution**

Replaces all T8 and T12 Fluorescent tubes

Bramal LED tube solution for Electronic & Magnetic ballasts or direct AC connection

Representing a true state of the art, cost-effective and environmental technology[†], **Bramal LED** tube lamps are “the” new versatile solution for industrial and commercial lighting applications. Whether re-lamping or retrofitting, the multi-use **Bramal LED** tube yields remarkably higher instant energy savings and improved lighting quality. Thanks to their revolutionary integrated universal power supply[†], replacing existing T8/T12 fluorescents lamps with **Bramal LED** tubes requires no professional help. NO need to bypass the existing ballast – simply snap the **Bramal LED** tube in, flip the switch and immediately start saving!

FEATURES OF THE LED T10

- » **OPERATES WITH MOST COMMON EXISTING FLUORESCENT BALLASTS IN FIXTURES** (electronic or magnetic) or via a direct AC voltage connection (see installation instructions for full details)
- » **MINIMUM 80,000 HOUR RATED LIFETIME**
- » **EQUIPPED WITH A UNIQUE INTERNAL CONSTANT CURRENT SOURCE[†]** ensuring proper electrical regulation over it's entire lifespan
- » **VIEWING ANGLE OF 120 DEGREES WITH CLEAR OR FROSTED LENS**
- » **INSTANTLY STARTS IN ANY CLIMATE CONDITION:** cold, hot or humid
- » **SAVES UP TO 70% IN ENERGY CONSUMPTION** versus conventional fluorescents lamps
- » **GENERATES LESS HEAT:** ideal for refrigerated applications and air conditioned spaces
- » **MANUFACTURED WITH THERMOPLASTIC POLYMERS:** flexible, shatterproof and recyclable
- » **ENVIRONMENTALLY FRIENDLY:** components are RoHS (free of lead, mercury and cadmium), with zero persistent and volatile organic pollutants
- » **STANDARD SIZES AVAILABLE:** 2, 3, 4, 5, 6 & 8ft and metric versions of standard sizes
- » **CUSTOM SIZES AVAILABLE**
- » **UNIQUE BUILT IN SAFTY CIRCUIT – ALL PINS MUST BE CONNECTED FOR UNIT TO POWER UP**
- » **ONE SKU FITS ALL APPLICATIONS – NO MODIFICATION OR EXTERNAL DRIVERS REQUIRED**

[†] Patented Canadian Innovation – PATENT NUMBER 9,232,578



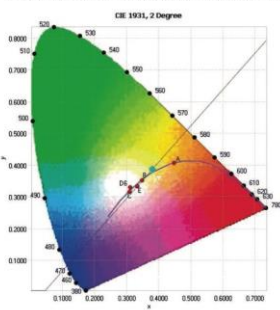
Tel: (450) 763-1443
BRAMALLED.COM



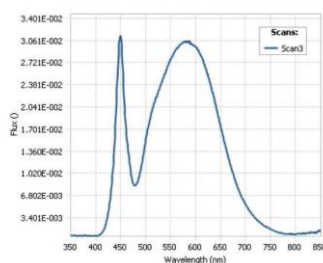
SPECIFICATIONS – LED-T10-4FT-XXXX-G13

MODEL: 4' LED T-10		CLEAR LENS	FROSTED LENS*
Power Consumption		16W	16W
Input Voltage		120, 208, 220, 240, 277, 347, 408 VAC, Magnetic & Electronic Ballasts	120, 208, 220, 240, 277, 347, 408 VAC, Magnetic & Electronic Ballasts
Operation Frequencies		40 Hz-200 kHz	40 Hz-200 kHz
Power Factor / V/A / THD%		>0.95-0.99 / 0.2/6.8%	>0.95-0.99 / 0.2/6.8%
Luminous Efficiency (Bare Lamp)	3500K	120.5lm/w	111.7lm/w
	4200K	123.5lm/w	116.5lm/w
	5000K	126.4lm/w	120.5lm/w
	6500K	129.4lm/w	122.3lm/w
Light Output (Bare Lamp)	3500K	2050lm	1900lm
	4200K	2100lm	1980lm
	5000K	2150lm	2050lm
	6500K	2200lm	2080lm
Color Rendering Index (CRI)	3500K	83	
	4200K	83	
	5000K	82	
	6500K	80	
Standard Color Temperatures		3500K / 4200K / 5000K / 6500K	
Lumen Maintenance L70		97%	
Ambient Operating Temperature		20°C (-40 to +40°C)	
Length (FACE TO FACE)		47 5/32" or 1198mm	
Length (Pin to Pin)		47 23/32" or 1212mm	
Lifespan		80 000+ hours	
Warranty		5 years standard	
Construction		Thermoplastic polymers	
Certifications		C.S.A C22.2 – 1993, C22.2 – 250.0 TIL – 79 UL 1993, 1598, 1598C, 8750 NSF 2, 51, 169 (sanitation pending) FCC part 15 & 18	

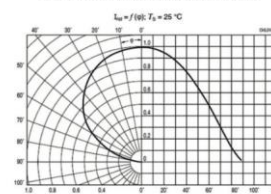
CIE 1931 CHROMATICITY DIAGRAM



SPECTRAL FLUX GRAPH



RADIATION CHARACTERISTIC



Build your Bramal LED **ONE** tube spec

LED-T10-XXFT-(Metric)-XXXX-End cap Example LED-T10-4FT-5000-G13 (4FT, 5000k, with G13 end cap)

Note datasheet values subject to +/- 5% tolerance *Note – frosted lens version not currently DLC approved

Warning - not all ballasts are compatible with LED tubes, please read our disclaimer notice in the documents section of our site or contact our technical team for more information prior to installation.

