



# White Hi-Flux LED Frosted Tube Lights, 12VDC / UL-Listed

TBL5xxF(C)-TPW-012V-UL



Lengths 6"/12"/24"/48" — Energy-Efficient Replacements for Incandescents/Fluorescents

True White – 4800K-5200K Color — Wide Diffused Beam



## FEATURES

- **Lamp Warranty:** 3 Years
- **Long Operating Life:** Continuous Burn – White LEDs Last up to 50,000+ Hours
- **Input Voltage:** 12VDC — Runs on Solar Cells, 12V Batteries or 120VAC-to-12VDC Power-Pack Converters
- **Safety Assurance:** U.S. & Canadian UL-Listed
- **True White Color Temperature:** Not Too Cool, Not Too Warm
- **Housing Material:** Polycarbonate, UV-Protected, Scratch- & Impact-Resistant
- **Mounting Clip Material:** Polycarbonate, UV-Protected, Scratch- & Impact-Resistant
- **Weatherproof:** Enclosure Is Sealed & Water-Resistant
- **Solid-State:** High-Shock & High-Vibration-Resistant
- **Easy Installation:** Quick Mounting Brackets Provide Troublefree Setup and Lower Installation Costs
- **Wide Ambient Operating Temperature Range:** ~-22°F to ~+122°F [~-30°C to ~+50°C]



- Can be ordered with leads on one end or interconnecting leads at both ends.

- Each module comes with two (2) mounting clips. Additional clips optional.

U.S. Patent No. 6,997,576 B1



Canada/US UL-Listed

3KPU

IFDR.311089

IFDR7.311089 Certified for Canada

**Ideal for Use with Alternate or Renewable Energy Resources – Solar & Wind Power**

White LED technology is patent protected in the United States. LEDtronics white LED products are covered under these patents.

## SPECIFICATIONS

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PART NUMBER	LED EMITTING COLOR	COLOR TEMPERATURE	INPUT VOLTAGE	MODULE LENGTH	CURRENT PER MODULE	WATTS PER MODULE	MAX. MODULE PER 1 AMP	TOTAL CANDELA	TOTAL LUMENS	EFFICACY	FULL BEAM ANGLE
<b>6" TUBE – One end has wire leads</b>											
TBL506F-TPW-012V-UL	True White	4800K~5200K	12VDC	6 in.	0.060mA	0.72W	16	-	-	-	Diffused
<b>6" TUBE – Wire leads at both ends</b>											
TBL506FC-TPW-012V-UL	True White	4800K~5200K	12VDC	6 in.	0.060mA	0.72W	16	-	-	-	Diffused
<b>12" TUBE – One end has wire leads</b>											
TBL512F-TPW-012V-UL	True White	4800K~5200K	12VDC	12 in.	0.123mA	1.5W	8	19.2 cd	82 lm	54.7 lm/W	Diffused
<b>12" TUBE – Wire leads at both ends</b>											
TBL512FC-TPW-012V-UL	True White	4800K~5200K	12VDC	12 in.	0.123mA	1.5W	8	19.2 cd	82 lm	54.7 lm/W	Diffused
<b>24" TUBE – One end has wire leads</b>											
TBL524F-TPW-012V-UL	True White	4800K~5200K	12VDC	24 in.	0.176mA	2.1W	4	27.2 cd	111 lm	52.8 lm/W	Diffused
<b>24" TUBE – Wire leads at both ends</b>											
TBL524FC-TPW-012V-UL	True White	4800K~5200K	12VDC	24 in.	0.176mA	2.1W	4	27.2 cd	111 lm	52.8 lm/W	Diffused
<b>48" TUBE – One end has wire leads</b>											
TBL548F-TPW-012V-UL	True White	4800K~5200K	12VDC	48 in.	0.411mA	4.9W	2	100.4 cd	431 lm	88.0 lm/W	Diffused
<b>48" TUBE – Wire leads at both ends</b>											
TBL548FC-TPW-012V-UL	True White	4800K~5200K	12VDC	48 in.	0.411mA	4.9W	2	100.4 cd	431 lm	88.0 lm/W	Diffused

**LEDTRONICS®**  
Creating the Future of Light Since 1983™

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## APPLICATIONS

- Recreational Vehicle Interiors
- Marine Recreation Applications
- Bus/Shuttle/Railcar Passenger Interiors
- Uninterrupted Emergency Lighting
- Focused Reading & Task Lighting
- Interior Design Uses / Concealed Accent Lighting

LEDtronics blue tube-lights provide accents in a shopping mall in Guadalajara, Mexico



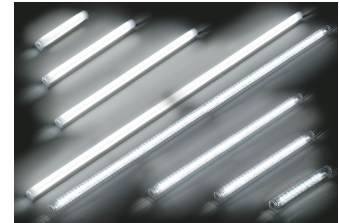
- Retail Store Displays, Undercounter/Undercabinet Lighting
- Cubicle/Workbench Lighting
- Coolers, Freezers
- Closet Illumination
- Cove Lighting
- Edge Lighting

## CUSTOM OPTIONS [For qualified applications & large-quantity OEM orders]

- Special Operating Voltages
- Choice of Narrow (15°), Medium (30°) or Wide-Angle (125°) Beam-Width LEDs
- Frosted Tube Housings for Diffused Light
- Different-Color LEDs or White-Color Temperatures

## BENEFITS

- Major Power Savings:** Up to 90% Compared to Incandescents
- Even Lighting:** High Intensity / No Halation
- Safer:** No Harmful UV or IR; No Threat of High-Voltage Electrocutation; No Danger of Broken Glass
- Eco-Friendly:** No Hazard of Mercury or Lead Entering the Environment
- Reduces Light Pollution, Enhances Night Vision
- No RF Interference
- Cool Operation:** LEDs Produce Little or No Heat
- Quiet:** No Buzzing Noise, No Fluorescent Flickering
- Instant Lighting from a Cold Start
- Maintenance-Free



## POWER SUPPLIES / LED DRIVERS

- UL Recognized (US & Canada) Modular & Wall Socket Power Supplies
- 120VAC-to-12VDC / 1 Amp to 5.2 Amps



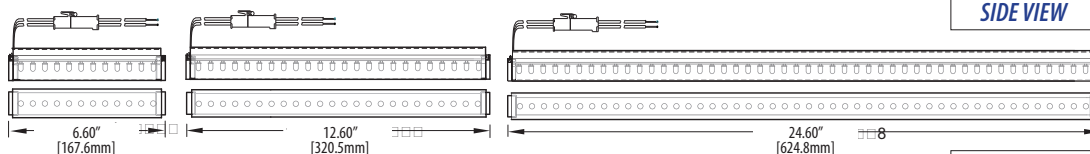
- PWR-LP1020-12  
20W – 90-264VAC-to-12VDC
- PWR-LP1025-12  
25W – 100-277VAC-to-12VDC
- PWR-12VCV-3.33A-PF  
40W – 90-264VAC-to-12VDC
- PWR-LP1060-12  
60W – 90-264VAC-to-12VDC / 5.0A
- PWR-LP1090-12-001  
96W – 90-264/277VAC-to-12VDC / 5.0A
- PLT-1003-301  
12W – 120VAC-to-12VDC
- PLT-1003-303  
28.8W – 100-240VAC-to-12VDC / 2.4A
- PLT-1003-304  
62.4W – 100-240VAC-to-12VDC / 5.2A

## ACCESSORIES

- 12-inch Wire with Female Coaxial Connector  
ADPT-STP-002
- Additional Mounting Clips for Flat Surfaces  
MTG-CLIP-STP-001

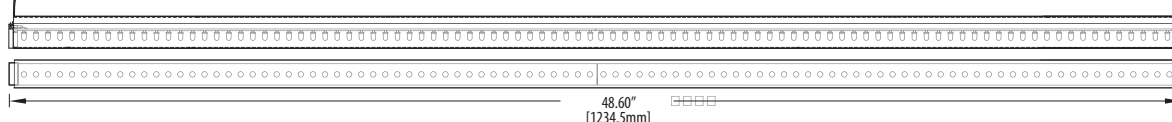


**6"** Series TBL506F/506FC    **12"** Series TBL512F/512FC    **24"** Series TBL524F/524FC



12" 18ga Leads w/Quick Connect

**48"** Series TBL548F/548FC

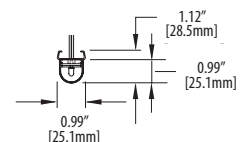


DIMENSIONS IN INCH [MM]

SIDE VIEW

BOTTOM VIEW

END VIEW



## TBL512FC)-TPW-012V-UL

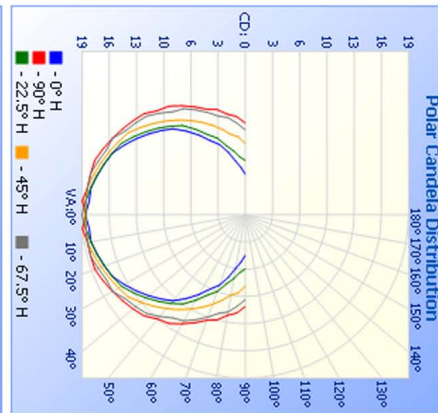
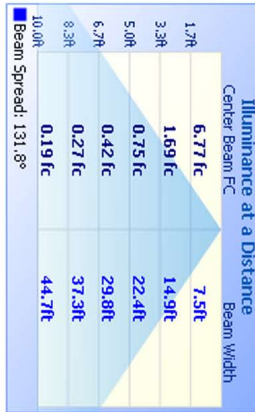
### Luminaire Photometric Report

Filename: TBL512FC)-TPW-012V-UL  
TBL512FC)-TPW-012V-UL  
Manufacturer: LEDTRONICS -  
Luminaire: FROSTED LENS, 1.5W, 12VDC  
Luminaire Cat: TBL512FC)-TPW-012V-UL  
TBL512FC)-TPW-012V-UL  
Lamp: LUMEN RATING: 82, 11lm.  
Lamp Output: 1 lamp(s), rated lamp lumens: 82, 1  
Max Candela: 19.2 at Horizontal: 67.5, Vertical: 0  
Luminous Opening: Point  
Test: 3-29-10

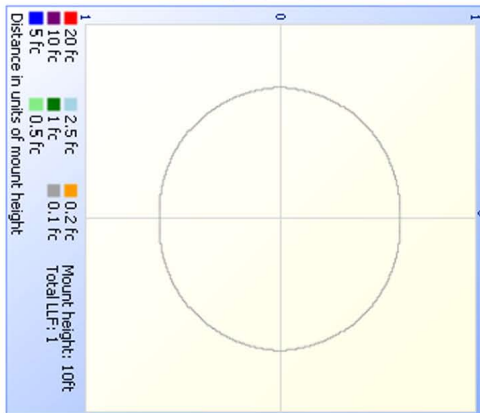
#### Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	15.2	18.5%	18.4%
0-40	25.6	31.2%	31.2%
0-60	49.7	60.6%	60.6%
60-90	32.4	39.5%	39.4%
0-90	82.1	100.1%	100%
0-180	82.1	100.1%	100%

Total Efficiency: 100.1%



#### Isofootcandle Plot



## TBL524FC)-TPW-012V-UL

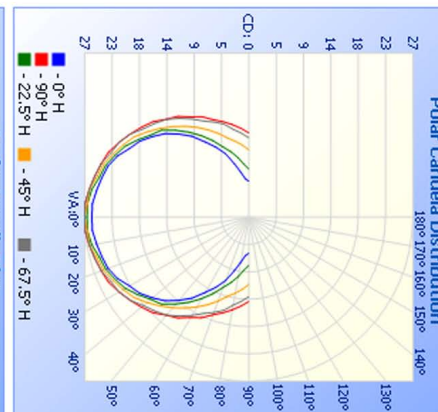
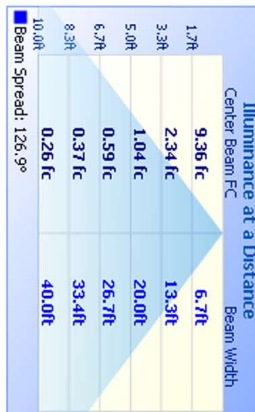
### Luminaire Photometric Report

Filename: TBL524FC)-TPW-012V-UL  
TBL524FC)-TPW-012V-UL  
Manufacturer: LEDTRONICS -  
Luminaire: FROSTED LENS, 2.1W, 12VDC  
Luminaire Cat: TBL524FC)-TPW-012V-UL  
TBL524FC)-TPW-012V-UL  
Lamp: LUMEN RATING: 110, 9lm.  
Lamp Output: 1 lamp(s), rated lamp lumens: 110, 9  
Max Candela: 27.2 at Horizontal: 45, Vertical: 0  
Luminous Opening: Point  
Test: 3-29-10

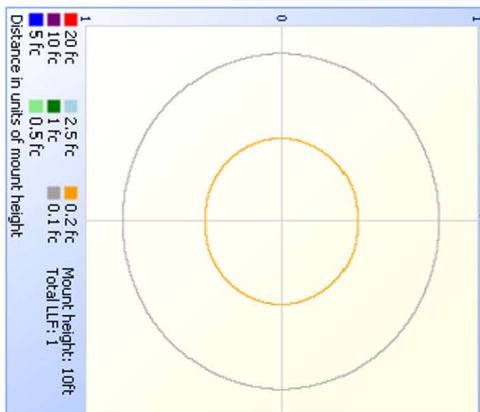
#### Zonal Lumen Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	21.4	19.3%	19.3%
0-40	35.8	32.3%	32.3%
0-60	68.6	61.9%	61.9%
60-90	42.3	38.1%	38.1%
0-90	110.9	100%	100%
0-180	110.9	100%	100%

Total Efficiency: 100%



#### Isofootcandle Plot





**TBL548F(C)-TPW-012V-UL**

**Luminaire Photometric Report**

**Filename:** TBL548F-TPW-012V-UL  
TBL548FC-TPW-012V-UL

**Manufacturer:** LEDTRONICS -

**Luminaire:** FROSTED LENS, 4.9W, 12VDC

**Luminaire Cat:** TBL548F-TPW-012V-UL

TBL548FC-TPW-012V-UL

**Lamp:** LUMEN RATING: 431.3Lms.

**Lamp Output:** 1 lamp(s), rated lamp lumens: 431.3

**Max Candela:** 100.4 at Horizontal: 67.5, Vertical: 0

**Luminous Opening:** Point

**Test:** 3-29-10

**Zonal Lumen Summary**

Zone	Lumens	% Lamp	% Luminaire
0-30	79.9	18.5%	18.5%
0-40	134.7	31.2%	31.2%
0-60	261.6	60.7%	60.7%
60-90	169.7	39.4%	39.3%
0-90	431.3	100%	100%
0-180	431.3	100%	100%

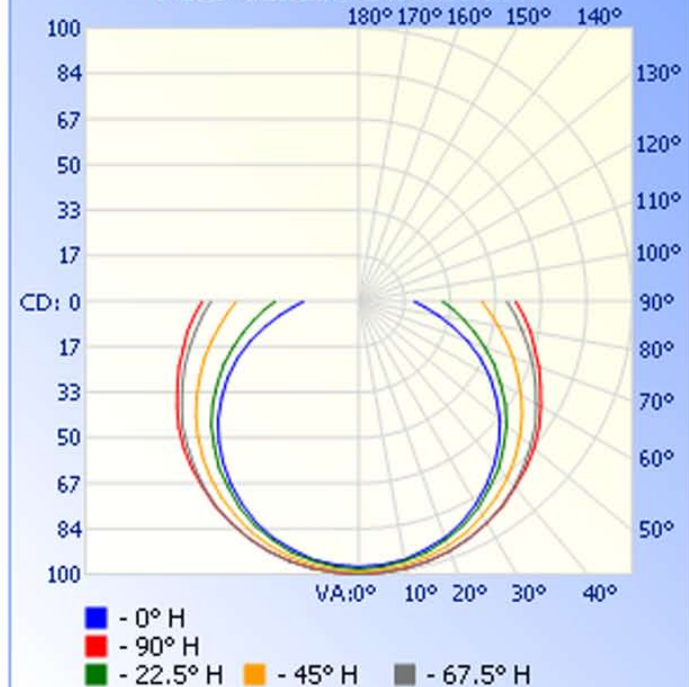
**Total Efficiency:** 100%

**Illuminance at a Distance**

	Center Beam FC	Beam Width
1.7ft	35.14 fc	7.0ft
3.3ft	8.78 fc	13.9ft
5.0ft	3.90 fc	20.9ft
6.7ft	2.20 fc	27.9ft
8.3ft	1.41 fc	34.8ft
10.0ft	0.98 fc	41.8ft

■ Beam Spread: 128.9°

**Polar Candela Distribution**



**Isofootcandle Plot**

