

# **WAVE Series**

### LED Flexible Border Tube

#### **DESCRIPTION**

Similar to our already popular FBTCJ, the WAVE offers additional flexibility to your creative designs due to its back to front bending orientation. Corners and angles can now be installed seamlessly with the Wave.

The Wave Series combines constant current technology with a flexible polyvinyl chloride housing to create a durable, extremely bright, uniform illumination with a versatility that makes it perfect for any custom design application.

The Wave has a low square profile that allows for a tighter more precise viewing pattern while providing an increase in the lumens due to its internal optic.

### **Features**

- Energy efficient LEDs consume 3.4W/ft or less, saving up to
- 70% or more over traditional neon
- · Indoor and outdoor rated
- Flexible PVC housing can conform to almost any angle, virtually unbreakable
- Opaque jacket housing with "colored" LEDs every .04 inches
- · Uniform lighting with no hotspots

#### **LED Characteristics**

- Nichia surface mount LEDs (33 LEDs/ft)
- · L70% Maintenance: 50,000 hours
- LEDs available in Warm White (2700K), Pure White (3500K), Cool White (4500K), Daylight White (5700K), Red, Blue and Green

#### **Electrical**

- WAVE input voltage: 24VDC
- Constant current drivers available for 120-277VAC, 50/60Hz
- Operating Product Length: 65' when power is supplied to both ends
- Dimming: Compatible with most low voltage (24VDC) magnetic dimmers

### **Product Specifications**

- Flexible, shatterproof, cool to touch, UV inhibited, PVC housing
- 2 wire, single color, flexible border tubing
- Roll length: 65 feet (Maximum)
- Mounting: Mounting clips (WAVE-MC) or mounting channel available in standard (WAVE-LCH) or locking model (WAVE-LCH-L)
- Dimensions: 0.63" wide, 0.63" high
- Viewing angle: 160°

### **Testing & Compliance**

- UL2108/IP68/LM-79/LM-80/RoHS/CE/Exceeds ANSI C78.377A
- California Title 24 Compliant
- Operating temperature: -22°F +140° F (-30°C +60°C)

### Warranty

Any component that fails due to a manufacturing defect is guaranteed for five years. The warranty does not cover physical damage, abuse or instances of uncontrollable natural forces. See the full specialtyLED warranty document for detailed information. (Terms and conditions apply)













#### **APPLICATIONS**

- Borders
- · Cove lighting
- Bridges
- Gazebos

- Roof lines
- Signage
- Accent lighting

### Ordering Information (Example: WAVE-WW-65-24V)

Series	Color <sup>1</sup>		Length	Voltage
WAVE	WW = Warm White (2700K)	R = Red	65 = 65 Feet	24V <sup>3</sup> = 24 Volt DC
	WP = Pure White (3500K)	G = Green	XX <sup>2</sup> = Custom Length	
	WC = Cool White (4500K)	B = Blue		
	WD = Daylight White (5700K)			

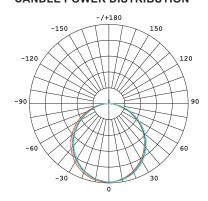
#### **Notes**

### **TECHNICAL / ILLUMINATION INFORMATION**

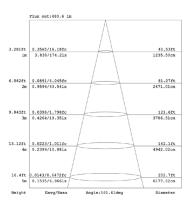
Color	Voltage	Rated Power W/ft	<b>Cutting Increment</b>	Max Run <sup>1</sup>	<b>CCT or Wavelength</b>	Lumens Im/ft
Warm White	24VDC	3.4	2.19"	65'	2700K	137
Pure White	24VDC	3.4	2.19"	65'	3500K	137
Cool White	24VDC	3.4	2.19"	65'	4500K	137
Daylight White	24VDC	3.4	2.19"	65'	5700K	137
Red	24VDC	2.2	3.28"	65'	620-630 nm	55
Green	24VDC	3.4	2.19"	65'	520-530 nm	110
Blue	24VDC	3.4	2.19"	65'	465-475 nm	15

<sup>&</sup>lt;sup>1</sup> When unit has non-dimming power supplied to both ends

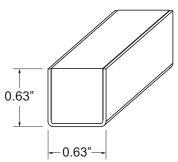
### **CANDLE POWER DISTRIBUTION**



### **ILLUMINANCE CHARACTERISTICS**



### **DIMENSIONS**



### 24VDC NON-DIMMING TRANSFORMER ORDERING INFORMATION (ORDER AS SEPARATE LINE ITEM)

Example: XFMR-24-60

Part Number	Description	Dimensions (AxBxC)
XFMR-24-20	24 Volt, 20 Watt, Class 2 Power Supply	4.65" x 1.37" x 1.0"
XFMR-24-35	24 Volt, 35 Watt, Class 2 Power Supply	5.8" x 1.57" x 1.18"
XFMR-24-60	24 Volt, 60 Watt, Class 2 Power Supply	6.39" x 1.67" x 1.25"
XFMR-24-150	24 Volt, 150 Watt, Class 2 Power Supply	8.74" x 2.67" x 1.52"



<sup>&</sup>lt;sup>1</sup> Color temperature can vary ±5%

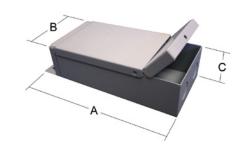
<sup>&</sup>lt;sup>2</sup> Custom lengths ordered specific to product cutting increments

<sup>&</sup>lt;sup>3</sup> Requires transformer, ordered separately

### 24VDC DIMMING TRANSFORMER ORDERING INFORMATION (ORDER AS SEPARATE LINE ITEM)

Example: XFMR-DIM-24-60

Part Number	Description	Enclosure Dimensions (AxBxC)
XFMR-DIM-24-20	24 Volt, 20 Watt, Class 2 Power Supply	8.5" x 3.5" x 3"
XFMR-DIM-24-40	24 Volt, 40 Watt, Class 2 Power Supply	8.5" x 3.5" x 3"
XFMR-DIM-24-60	24 Volt, 60 Watt, Class 2 Power Supply	8.5" x 3.5" x 3"
XFMR-DIM-24-96	24 Volt, 96 Watt, Class 2 Power Supply	8.5" x 3.5" x 3"
XFMR-DIM-24-192	24 Volt, 192 Watt, Class 2 Power Supply	14" x 8" x 5"
XFMR-DIM-24-288	24 Volt, 288 Watt, Class 2 Power Supply	14" x 8" x 5"



Note: All transformers are to be installed per NEC requirements. Wire leads on the 24 volt product are 18 gauge. Transformer is to be mounted within 10 feet of product. If transformer is mounted more than 10 feet from product, voltage drop and maximum operating distances should be taken into account when making transformer selection. Dimming transformer does not include dimming wall switch.

### ACCESSORIES (ORDER AS SEPARATE LINE ITEM)

Part Number	Image	Description	Part Number	Image	Description
WAVE-LCR- 24V-F1M		Seemless injection-molded line cord right feed, factory installed (IP68), 3.28" Length F3M = 9.84" F5M = 16.40"	WAVE-LCRBE- 24V-F1M		Seemless injection-molded line cord bottom right feed, factory installed, 3.28" Length F3M = 9.84" F5M = 16.40"
WAVE-LCL- 24V-F1M		Seemless injection-molded line cord left feed, factory installed (IP68), 3.28" Length F3M = 9.84" F5M = 16.40"	WAVE-LCLBE- 24V-F1M		Seemless injection-molded line cord bottom left feed, factory installed, 3.28" Length F3M = 9.84" F5M = 16.40"
WAVE-EC-F		Seemless injection-molded end cap, factory installed	WAVE-LCRSE- 24V-F1M		Seemless injection-molded line cord right side feed, factory installed, 3.28" Length F3M = 9.84" F5M = 16.40"
WAVE-MC		Mounting Clip 0.75" x 0.6875" x 2"	WAVE-LCLSE- 24V-F1M		Seemless injection-molded line cord left side feed, factory installed, 3.28" Length F3M = 9.84" F5M = 16.40"
WAVE-LCH		Aluminum Linear Channel 0.75" x 0.6875" x 3.28"			

## CUSTOM ORDERING EXAMPLE (W/O DIMMING, 65' RUN)

Qty 1 WAVE Flexible Border Tube (WAVE-R-65-24V)

Qty 13 Linear Channel (WAVE-LCH)

Qty 1 Line Cord connector assembly (WAVE-LCR-24V-F1M)

Qty 1 Line Cord connector assembly (WAVE-LCL-24V-F1M)

Qty 2 Transformer (XFMR-24-150)