

CHANNEL NEON 0.5" FLAT LENS

24VDC, OUTDOOR | 5W | STATIC WHITE, WARM DIM & TUNABLE WHITE

ASSEMBLED IN AMERICA

REV 04.23.25



DESCRIPTION

Channel Neon is our Flex Neon fixture shipped within a channel for ease of installation. Channel Neon comes with a 0.5" wide Flat lens, offering superior color rendering while creating uniform illumination without visible diodes. May be surface or flush mounted. Choose from multiple color temperatures, including two Warm Dim options of 2400K (**24D**) or 2700K (**27D**) and Dynamic Tunable White (**2K6K** or **27K6**). Tunable White 2000K-6500K (**2K6K**) or 2700K-6500K (**27K6**) grants independent control and adjustment of color temperature and intensity from 2000K (Sunset) through 6500K (Day Light White). **2K6K** is ideal for residential spaces including, dining rooms, bedrooms, living spaces, and bathrooms by allowing the user to achieve a warm glow during the golden hours of the early mornings and evenings. For commercial environments, **27K6** promotes focus and alertness which is ideal for offices, healthcare and education, while still achieving warmer color temperatures best for hospitality and retail environments. Use with two dimmers or, our proprietary Tunable White Controller (**CDMX-1**) for fast and accurate adjustment with three pre-set scenes (Ordered separately). The (**W**) is an IP67 rated wet location fixture featuring watertight barrel connections. Patent pending. For custom quotes and layout assistance, send your drawings and ideas to our design team: design@PureEdgeLighting.com.

SPECIFICATIONS

INPUT	24VDC with 5" leads
POWER SUPPLIES	Remote 24VDC power supply required
POWER CONSUMPTION	5 watts per foot
INCREMENTS	2.4" or 3"
MAX LENGTH	5W - 10'
MATERIAL	UV Resistant PVC
OPERATING TEMPERATURE	-4° F (-20° C) to 122° F (+50° C)
AVERAGE LED LIFE	50,000 hrs
WARRANTY	5 Year pro-rated
COMPLIANCE	Class 2 Wiring Indoor Applications, Outdoor Wet Location with Water Tight Barrel Connectors IP67 Rated, ETL listed



LUMEN PERFORMANCE AT 2700K 5W PER FOOT

(SEE COMPLETE CHART PG 2)

LUMEN OUTPUT	212 lm/ft	EFFICIENCY	46 lm/watt
CRI	92	R9	76
Rf	89.5	Rg	98.3
BEAM ANGLE	120°	BEAM TOLERANCE	+/- 30CCT

REMOTE POWER SUPPLIES*, DIMMERS & CONTROLS (SOLD SEPARATELY)

STATIC WHITE & WARM DIM

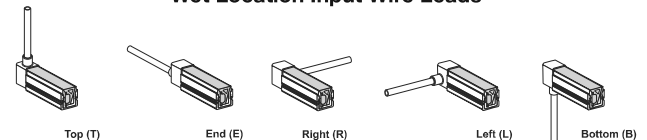
- **UNI Driver: Universal Dimming (TRIAC, ELV, 0-10V)**

TUNABLE WHITE

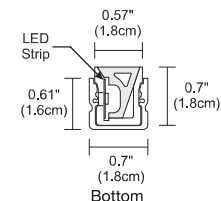
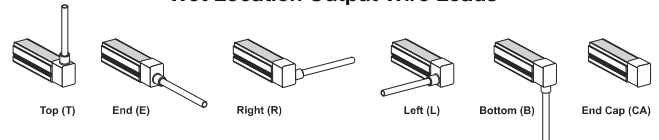
- **0-10V:** Requires two dimmers, one for intensity and one for color temperature
- **DMX Dynamic Color Changing:** Must be used with PureEdge Controllers

*In-Wall Mounting Kits available for select power supplies

Wet Location Input Wire Leads



Wet Location Output Wire Leads



System	Viewing Angle Model Shape	Wattage	Length in Inches	Color Temperature	5" Input Wire Feed	5" Output Wire	Environment
CN	F5	5W	120	27K	E	L	W
CN Channel Neon 24V	F5 Flat Lens 0.5" wide with channel 0.7" wide, 0.7" high	5W 5 watts per foot	6"-120" (10' max)	22K 2200K Amber White 24K 2400K Very Warm White 24D 2400K Warm Dim, Dims to 1800K 27K 2700K Incandescent White 27D 2700K Warm Dim, Dims to 2000K 30K 3000K Warm White 35K 3500K Neutral White 40K 4000K Cool White 2K6K Tunable White 2000K-6500K 27K6 Tunable White 2700K-6500K	T Top Power Input Wire E End Power Input Wire L Left Power Input Wire R Right Power Input Wire B Bottom Power Input Wire	T Top Wire Lead Out E End Wire Lead Out L Left Wire Lead Out R Right Wire Lead Out B Bottom Wire Lead Out CA Cap at end, no feed through	W Outdoor wet location Barrel Connector cable leads
			2.4" Increments Warm Dim 3" increments		Custom wire leads available up to 94"		

PROJECT		FIXTURE TYPE		DATE	
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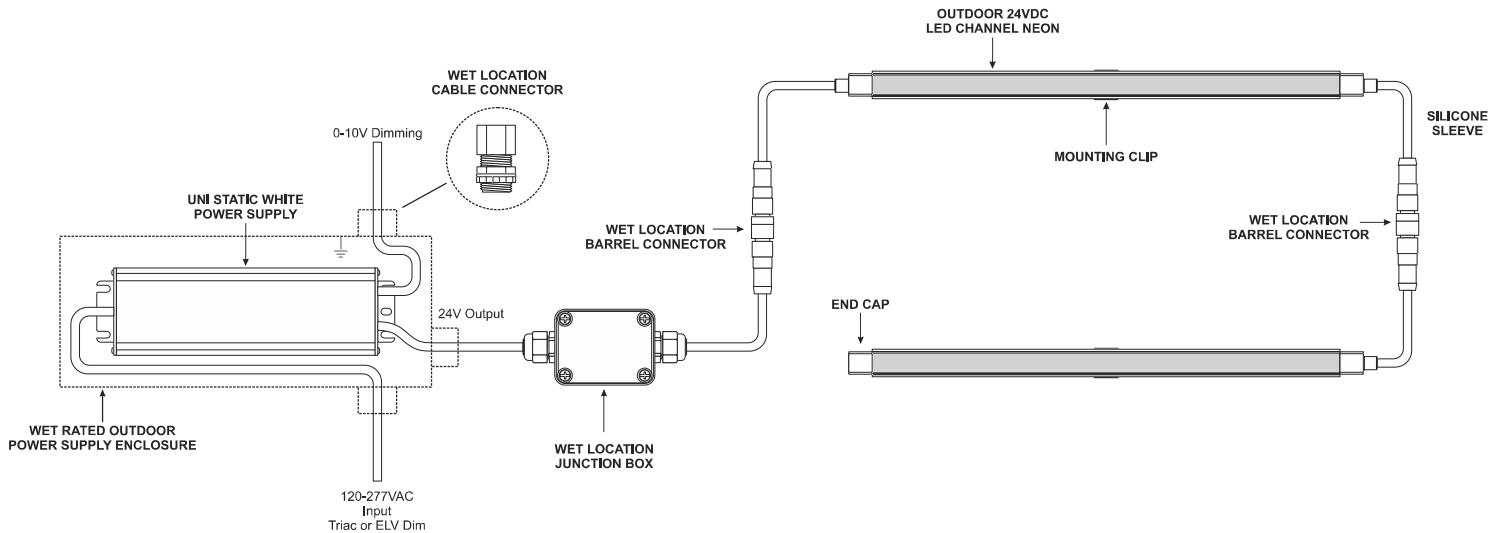
NOMINAL LAMP DATA The average LED Life is 50,000 hours.

CN-F5							
WATTS PER FOOT	5w						
COLOR TEMPERATURE	22K	24K	24D*	27K	27D*	30K	35K
LUMENS PER FOOT (lm/ft)	174	184	271	212	271	232	265
LUMENS PER WATT (lm/w)	38	42	56	46	56	50	58
CRI	92	92	93	92	93	84	85

TUNABLE WHITE 2K6K										TUNABLE WHITE 27K6*							
WATTS PER FOOT	5w									5w							
COLOR TEMPERATURE	18K	20K	24K	27K	30K	35K	40K	54K	63K	24K	27K	30K	35K	40K	54K	63K	
LUMENS PER FOOT (lm/ft)	170	157	175	191	213	238	188	177	180	164	168	174	181	188	177	180	
LUMENS PER WATT (lm/w)	37	34	38	42	46	52	44	44	45	41	42	43	44	44	44	45	
CRI	92	92	92	93	92	92	84	84	85	92	93	92	92	84	84	85	

*Warm Dim & Tunable White has a variance in color temperature due to the curvature of the material.

Drawings: Dimensions for the Channel Neon

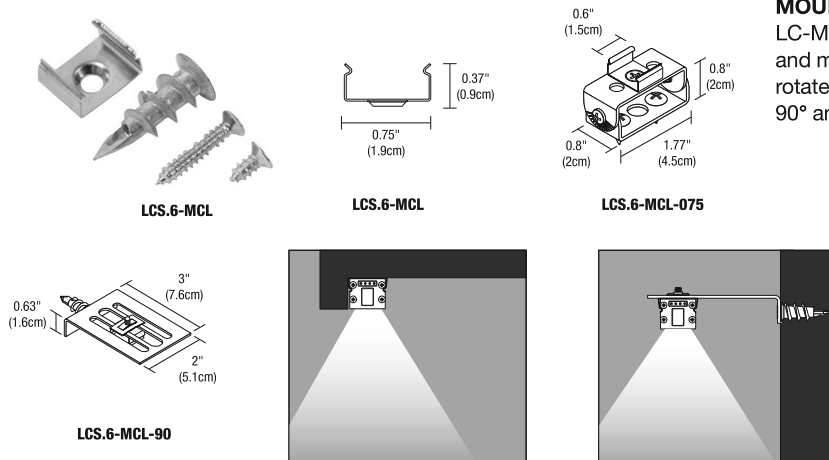


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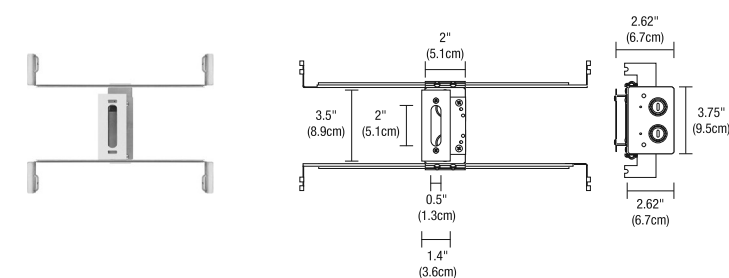
Accessories: Indoor Light Channel .6 Surface Mount, order based on lighting design or as replacement parts



MOUNTING CLIPS

LC-MCL mounting clips are provided with every two feet of Light Channel and may be ordered separately as replacement parts. The LC-MCL-075 rotates Light Channel up to 75°. LC-MCL-90 mounts Light Channel at a 90° angle.

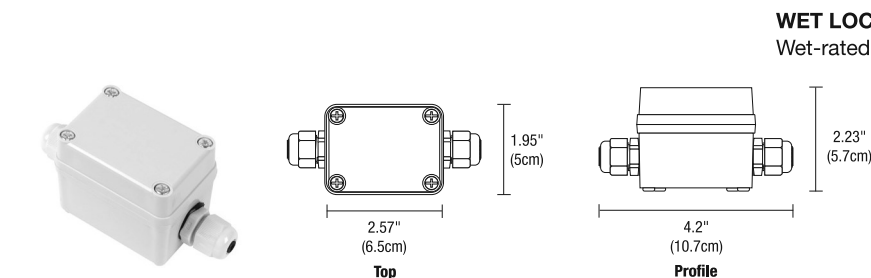
System	Product	Type
LCS.6	MCL	Standard (Leave Blank)
LCS.6 Light Channel 0.6" Surface Mount	MCL Mounting Clip	075 Adjusts 0-75° 90 Adjusts 90°



1" RECTANGLE CANOPY & J-BOX

The Slim-Profile Junction Box with Hanger Bars mounts to studs spaced between 14.5" and 25" apart behind drywall. Allows low voltage DC wires from Remote Power Supply to connect to channel wires. The Junction Box opening is covered by the fixture for a clean, safe connection. Includes a Goof Plate, for poor plastering around J-box.

Product	Canopy	Product
C	1RE	JBOX
C Channel	1RE 1" Rectangle	JBOX Junction Box



WET LOCATION JUNCTION BOX

Wet-rated low voltage Splice Box with connectors.

Product	Type	Option
2RE	JBOX	W
2RE 2" Rectangle	JBOX Junction Box	W Wet Location



WET LOCATION JUNCTION BOX WITH 6" POWER CABLE

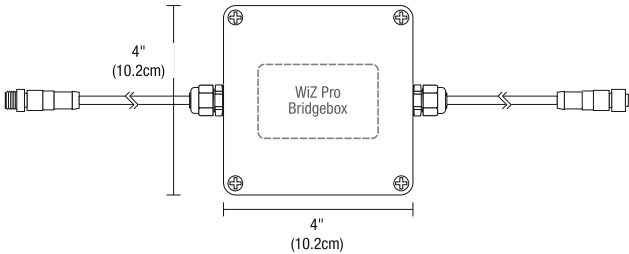
This watertight, multi-fixture Junction Box is especially designed for lighting in wet and damp locations. It is versatile, rugged and simple to install. The Junction Box comes standard with a 6" Flexible Cable providing easy, safe, and reliable connections for 24V low voltage luminaires. This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.

Product	Canopy	Product	Size	Option
SS	2RE	JBOX	6IN	W
SS LED Soft Strip Flex Neon	2RE 2" Rectangle	JBOX Junction Box	6IN 6" Four Wire Connection 96IN 96" Four Wire Connection	W Wet Location

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PURE SMART WET LOCATION JUNCTION BOX WITH 8FT POWER CABLE AND WIZ PRO UR BRIDGEBOX

This watertight Junction Box is especially designed for lighting in wet and damp locations. The Junction Box comes standard with a 8ft of outdoor cable and both male and female barrel connectors providing easy, safe, and reliable connections for 24V low voltage luminaires. Included with the Junction Box is one WiZ Pro type Bridgebox allowing wireless control of Flex Neon. This box is approved for indoor and outdoor usage and complies with all the requirements of UL1241 and the National Electric Code.

Product	Type	Wattage	Controls	Color Temperature	Option	System
BR	JBC	96W	WZ	DW	W	FN
BR Bridgebox for LED Soft Strip and Flex Neon	JBC Outdoor Junction Box with Two Barrel Connectors	96W 96 Watts	WZ Wiz Connected Bridgebox Included	DW Static White TW Tunable white	W Wet Location	FN Flex Neon

DIRECT BURIAL LOCATION CABLE ORDER PER FOOT

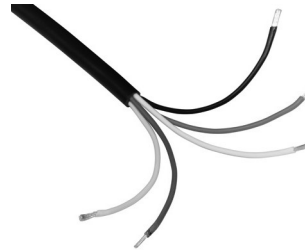
Our Direct Burial, 2 Conductor Plus ground, 12 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in outdoor wet and in ground environments. Keep within 60 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.



Product	Gauge	Cable
DB	12G	2C
DB Direct Burial	12G 12 Gauge	2C 2 Conductor

WET AND DAMP LOCATION CABLE ORDER PER FOOT

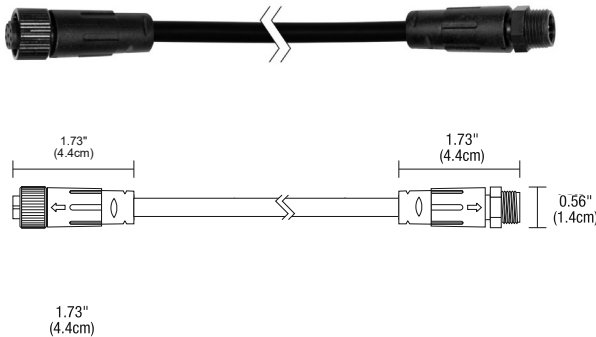
Our Wet Location, 5 Conductor, 14 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in indoor and outdoor wet and damp environments. Cable sold by the foot, simply specify the length. Keep within 50 ft between fixture and power supply.



Product	Gauge	Cable
OC	14G	5C
OC Outdoor Cable	14G 14 Gauge	5C 5 Conductor

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POWER CABLE CONNECTOR WET LOCATION

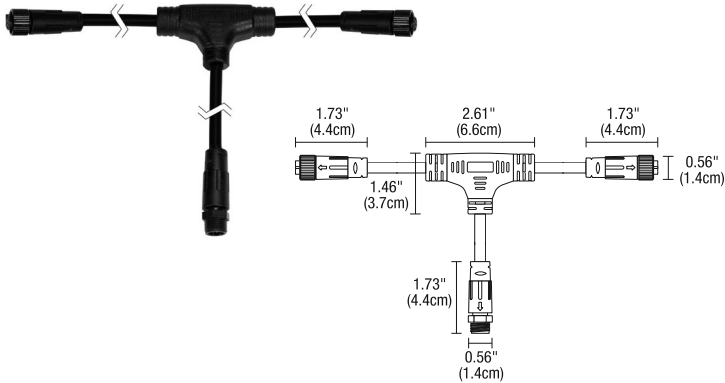
The flexible power cable connector is designed to work in outdoor environments for safe and reliable connections. This Flexible Connector is easy to install and configure, helping you create innovative lighting designs in an outdoor commercial or residential space.

Static White & Warm Dim

Product	Type	Size	Conductor	Option
SS	CFX	16IN	2C	W
SS Soft Strip and Flex Neon	CFX Flexible 4 Wire Connector	16IN 16" 96IN 96"	2C 2 Conductor	W Wet Location

All Other Color Temperatures

Product	Type	Size	Conductor	Option
SS	CFX	16IN	6C	W
SS Soft Strip and Flex Neon	CFX Flexible 4 Wire Connector	16IN 16" 96IN 96"	6C 6 Conductor	W Wet Location



WET LOCATION T-CONNECTOR

Our Wet Location T-Connector is a robust rugged design especially suited to withstand the challenges of damp and wet environments. This unique T-Connector has one Male and two Female Connectors and is suitable for multiple indoor and outdoor uses. Versatile design is easy to use, making installation quick and efficient.

Static White & Warm Dim

Product	Type	Size	Size	Option
SS	CFX	4IN	2YC	W
SS Soft Strip and Flex Neon	CFX Flexible 4 Wire Connector	4IN 4"	2YC Y-Shape 2 Conductor	W Wet Location

All Other Color Temperatures

Product	Type	Size	Size	Option
SS	CFX	4IN	6YC	W
SS Soft Strip and Flex Neon	CFX Flexible 4 Wire Connector	4IN 4"	6YC Y-Shape 6 Conductor	W Wet Location



TIE STRAP

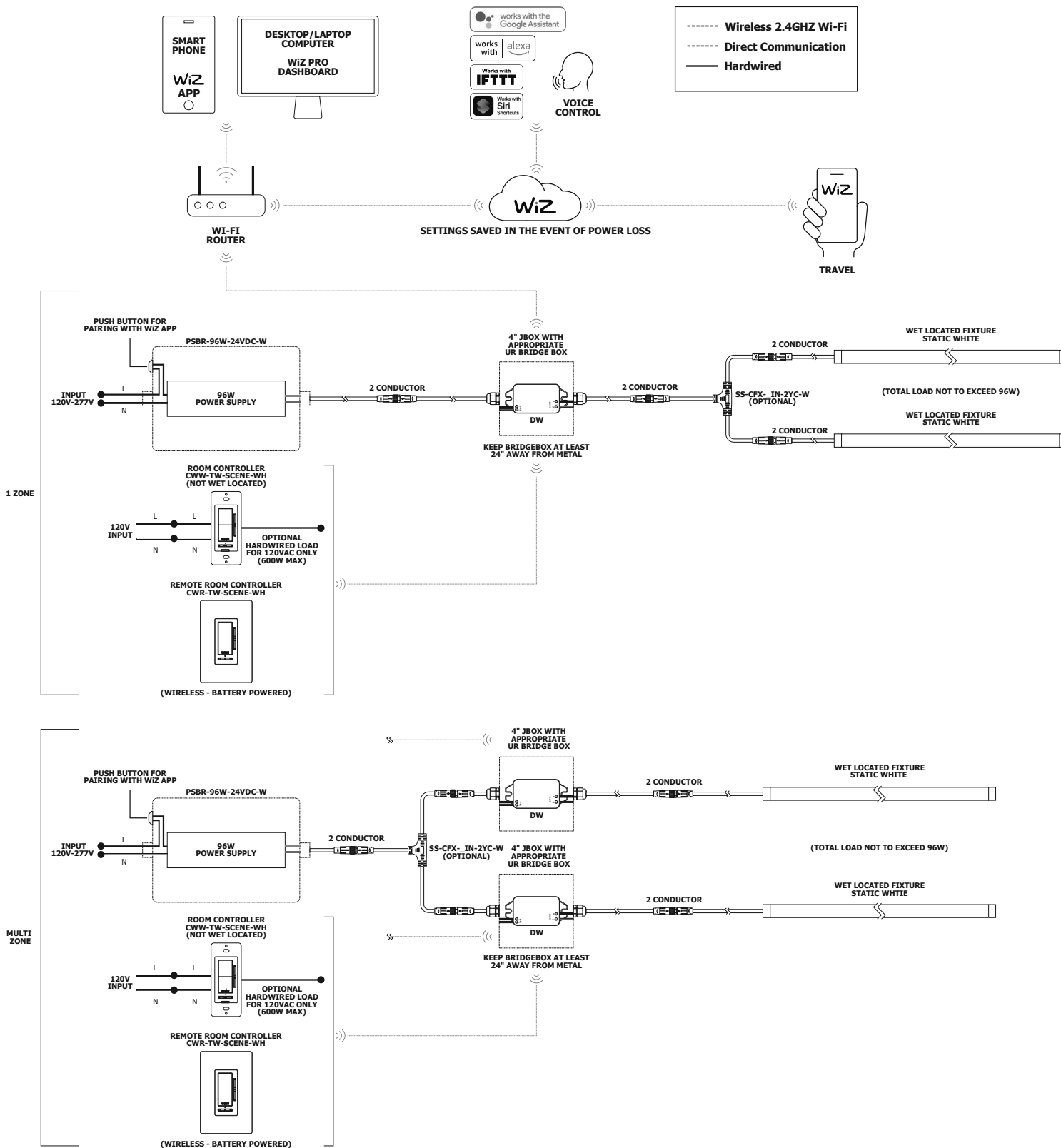
Use for mounting to poles for extra support, every 6"-12" (30 per package).

Product	Type
SS	ST
SS LED Flex Neon	ST Tie Strap

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NETWORK TOPOLOGY

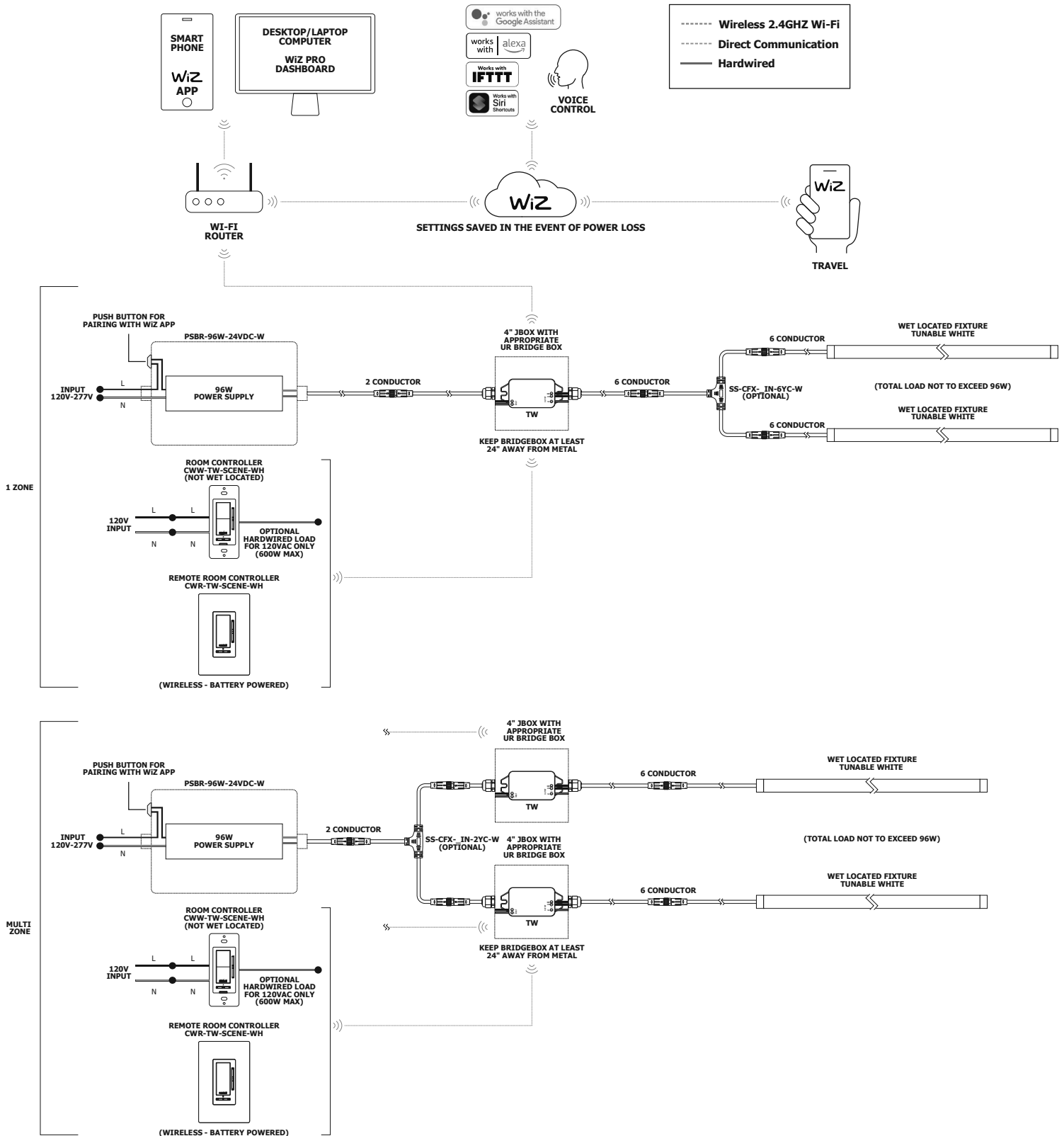


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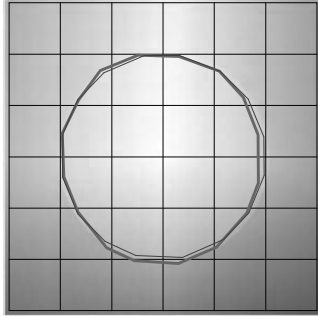
TM30 DATA

24VDC, OUTDOOR | 5W | STATIC WHITE, WARM DIM & DYNAMIC/TUNABLE WHITE

TM-30-15 DATA: The data below is for ST2A, ST5A, ST7A and ST10A bare LED Soft Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

2200K | Rf: 90.5 | Rg: 99.9

Color Vector Graphic

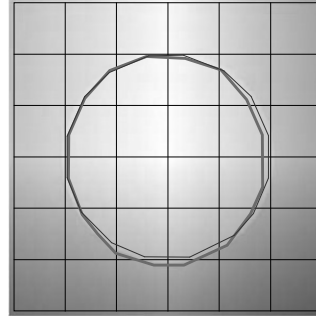


■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	88.3	-5.2%	1.0%
2	90.1	-3.6%	3.7%
3	87.5	-0.5%	5.6%
4	93.9	-1.2%	1.3%
5	94.7	0.7%	2.1%
6	93.7	2.6%	0.7%
7	93.5	-1.5%	-2.2%
8	97.8	-0.4%	-0.2%
9	93.7	-1.5%	2.4%
10	90.8	-0.8%	4.9%
11	89.3	3.7%	5.4%
12	90.2	4.6%	1.0%
13	89.0	4.4%	-9.7%
14	75.4	0.6%	-15.1%
15	90.7	-1.7%	-5.0%
16	84.2	-4.4%	-9.1%

2400K | Rf: 90.2 | Rg: 99.3

Color Vector Graphic

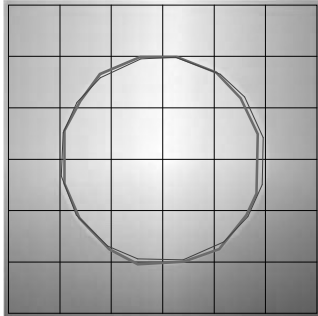


■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	89.0	-4.8%	1.1%
2	90.4	-3.7%	3.2%
3	88.1	-0.7%	5.2%
4	93.0	-2.1%	0.9%
5	94.5	-0.1%	2.0%
6	94.7	1.7%	0.6%
7	93.7	-1.9%	-1.5%
8	96.8	-1.2%	0.2%
9	91.9	-1.8%	3.7%
10	88.8	-0.9%	6.1%
11	87.5	3.8%	7.1%
12	89.6	4.3%	0.3%
13	88.1	4.2%	-9.1%
14	82.5	2.8%	-10.6%
15	91.4	-2.1%	-4.2%
16	84.0	-3.6%	-9.9%

2700K | Rf: 89.5 | Rg: 98.3

Color Vector Graphic

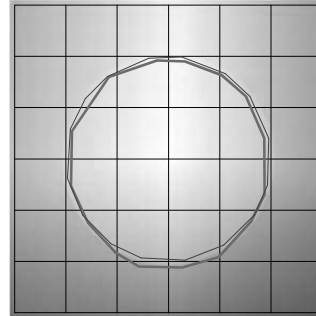


■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	88.6	-5.2%	0.9%
2	90.3	-3.6%	2.9%
3	88.4	-1.5%	5.0%
4	91.9	-2.5%	1.4%
5	93.5	-0.9%	2.3%
6	95.7	0.9%	-0.4%
7	91.1	-3.7%	-0.5%
8	95.8	-2.0%	0.4%
9	90.5	-2.6%	4.5%
10	84.9	-1.1%	8.7%
11	85.0	2.3%	9.8%
12	88.1	5.5%	1.5%
13	90.9	2.9%	-5.2%
14	86.2	4.3%	-8.9%
15	90.7	-2.4%	-3.6%
16	83.0	-2.7%	-11.3%

3000K | Rf: 88.7 | Rg: 98.2

Color Vector Graphic

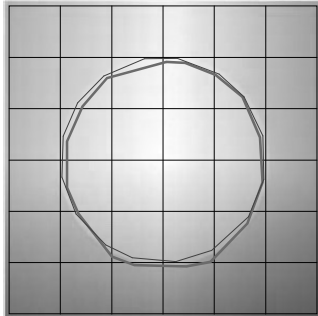


■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	88.3	-5.2%	0.8%
2	90.2	-3.7%	2.7%
3	88.3	-1.6%	4.9%
4	92.2	-2.0%	1.8%
5	91.0	-3.5%	1.8%
6	95.8	0.4%	-0.4%
7	90.2	-4.4%	-0.0%
8	94.8	-2.6%	0.8%
9	89.2	-2.9%	6.0%
10	81.4	-1.5%	9.7%
11	82.9	2.3%	10.5%
12	88.3	6.7%	1.9%
13	91.9	2.8%	-4.0%
14	86.3	4.9%	-8.3%
15	87.1	-1.2%	-6.1%
16	83.2	-1.7%	-11.6%

3500K | Rf: 88.1 | Rg: 97.1

Color Vector Graphic

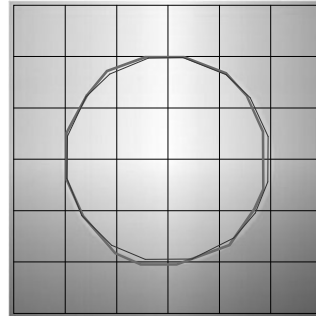


■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	87.8	-5.2%	1.0%
2	90.8	-3.3%	2.3%
3	89.8	-1.6%	3.9%
4	91.0	-2.7%	0.9%
5	90.0	-5.4%	0.7%
6	95.6	-0.9%	-0.4%
7	90.0	-5.3%	1.4%
8	91.8	-3.6%	3.0%
9	87.1	-2.9%	7.3%
10	80.1	-1.3%	12.2%
11	81.8	4.1%	10.5%
12	88.2	5.1%	2.3%
13	92.4	2.1%	-3.8%
14	86.6	5.0%	-7.9%
15	86.2	-0.7%	-6.8%
16	84.5	-2.1%	-7.0%

2700D | Rf: 90.7 | Rg: 101.1

Color Vector Graphic



■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	90.9	-4.1%	1.1%
2	91.8	-2.2%	3.2%
3	89.0	0.2%	5.0%
4	92.9	-1.1%	0.8%
5	93.9	1.1%	1.7%
6	93.3	3.3%	0.0%
7	93.1	-0.5%	-1.9%
8	97.2	-0.3%	-0.9%
9	93.4	-1.0%	3.2%
10	89.9	-0.1%	5.6%
11	87.0	4.7%	7.2%
12	89.2	5.8%	-0.2%
13	89.1	3.5%	-6.7%
14	86.3	4.1%	-9.2%
15	91.4	-2.0%	-3.6%
16	84.7	-2.1%	-10.3%

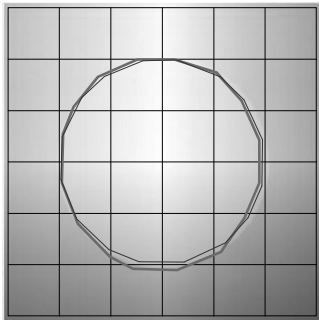
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TM-30-15 DATA: The data below is for ST2A, ST5A, ST7A and ST10A bare LED Soft Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

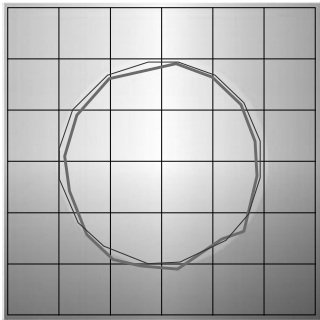
3000D | Rf: 90.6 | Rg: 101.1
Color Vector Graphic



Test Reference

Table with 4 columns: HUE BIN, Rf, CHROMA, HUE. Rows 1-16 showing color shift percentages.

6500K ONLY (27K6) | Rf: 86.8 | Rg: 96.8
Color Vector Graphic



Test Reference

Table with 4 columns: HUE BIN, Rf, CHROMA, HUE. Rows 1-16 showing color shift percentages.