

FLEX NEON LRT7 0.7" THREE SIDED LENS INDOOR/OUTDOOR

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

ASSEMBLED IN AMERICA

REV 11.14.22



DESCRIPTION

LRT7 Flexible Neon Bends Left to Right with a 0.7" wide three-sided lens, offering superior color quality and performance while creating uniform illumination without visible dots. Flex Neon can be Flush or Surface Mounted. Choose from 9 different color temperatures ranging from 2000K to 3500K, including two Warm Dim options of 2400K (24D) or 2700K (27D) and Tunable White (2K6K). Tunable White technology grants independent control for adjusting LED color temperature and brightness. 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. The (S) Seamless (for continuous, seamless runs), is rated for Indoor Damp Locations ONLY and uses Class 2 bare wire connectors. Fixture includes a 5-year pro-rated warranty. Patent pending.

SPECIFICATIONS

Flat top view 0.5" wide 0.75" high	
INPUT	24VDC with 5" leads
POWER SUPPLIES	Remote 24VDC power supply required
POWER CONSUMPTION	2.5, 4.4 or 7.3 watts per foot
INCREMENTS	2.4" or 3"
MAX LENGTH	2W - 40', 5W- 20', 7W- 12'
BENDING	4" Minimum Radius
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 3000K 7W PER FOOT (SEE COMPLETE CHART PG 2)

LUMEN OUTPUT	560 lm/ft	EFFICIENCY	77 lm/watt
CRI	94	R9	76
BEAM ANGLE	120°	BEAM TOLERANCE	+/- 30CCT



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

24VDC, Class 2 wiring

OUTDOOR/WET LOCATION

Static White & Warm Dim

- [Pure Smart™ Wiz Pro Power Supplies & Controls](#)
- [UNI Driver: Universal Dimming \(TRIAC, ELV, 0-10V\)](#)

Tunable White

- [Pure Smart™ Wiz Pro Power Supplies & Controls](#)
- [0-10V](#): Requires two dimmers, one for intensity and one for color temperature
- [DMX Dynamic Color Changing](#): Must be used with PureEdge [Controllers](#)

INDOOR

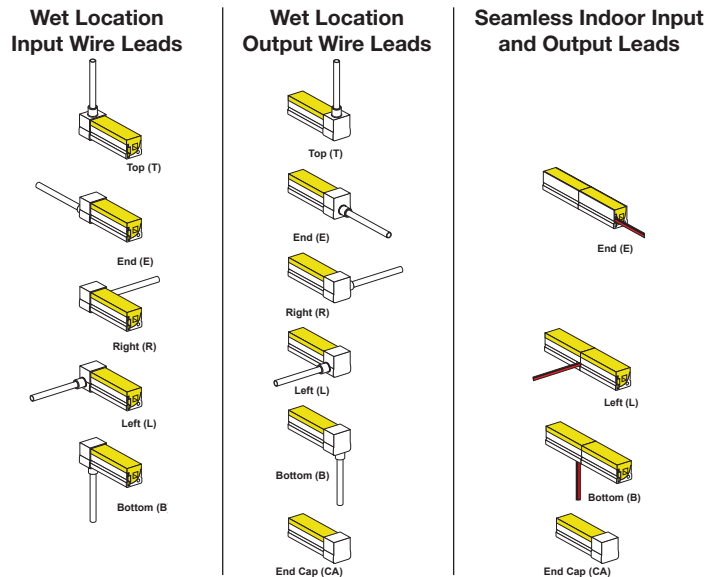
Static White & Warm Dim

- [Pure Smart™ Wiz Pro Power Supplies & Controls](#)
- [UNI Driver: Universal Dimming \(TRIAC, ELV, 0-10V\)](#)

Tunable White

- [Pure Smart™ Wiz Pro Power Supplies & Controls](#)
- [0-10V](#): Requires two dimmers, one for intensity and one for color temperature
- [DMX Dynamic Color Changing & Controllers](#)

*In-Wall Mounting and drop ceiling Kits available for select power supplies



System	Viewing Angle Model Shape	Wattage	Length in Inches	Color Temperature	5" Input Wire Feed	5" Output Wire	Environment
FN	LRT7	2W	120	27K	E	L	W
FN Flex Neon 24V	LRT7 Left or Right side bend Three Sided Lens 0.6" x 0.75"	2W 2.5 watts per foot 5W 5 watts per foot 7W 7.5 watts per foot	6-480 (40ft max) 6-240 (20ft max) 6-144 (12ft max)	20K 2000K Candle Light White 22K 2200K Amber White 24K 2400K Very Warm White 24D* 2400K Warm Dim, Dims to 1800K 27K 2700K Incandescent White	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	S Seamless Indoor/Damp location bare wire leads Bottom and Left Feed Only W Outdoor wet location Barrel Connector cable leads

*Static & Tunable White: 2.4" Increments Warm Dim: 3" increments
*5 Watt Only
*Seamless indoor: E, L, B Only

PROJECT	FIXTURE TYPE	DATE
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FLEX NEON LRT7 0.7" THREE SIDED LENS INDOOR/OUTDOOR

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

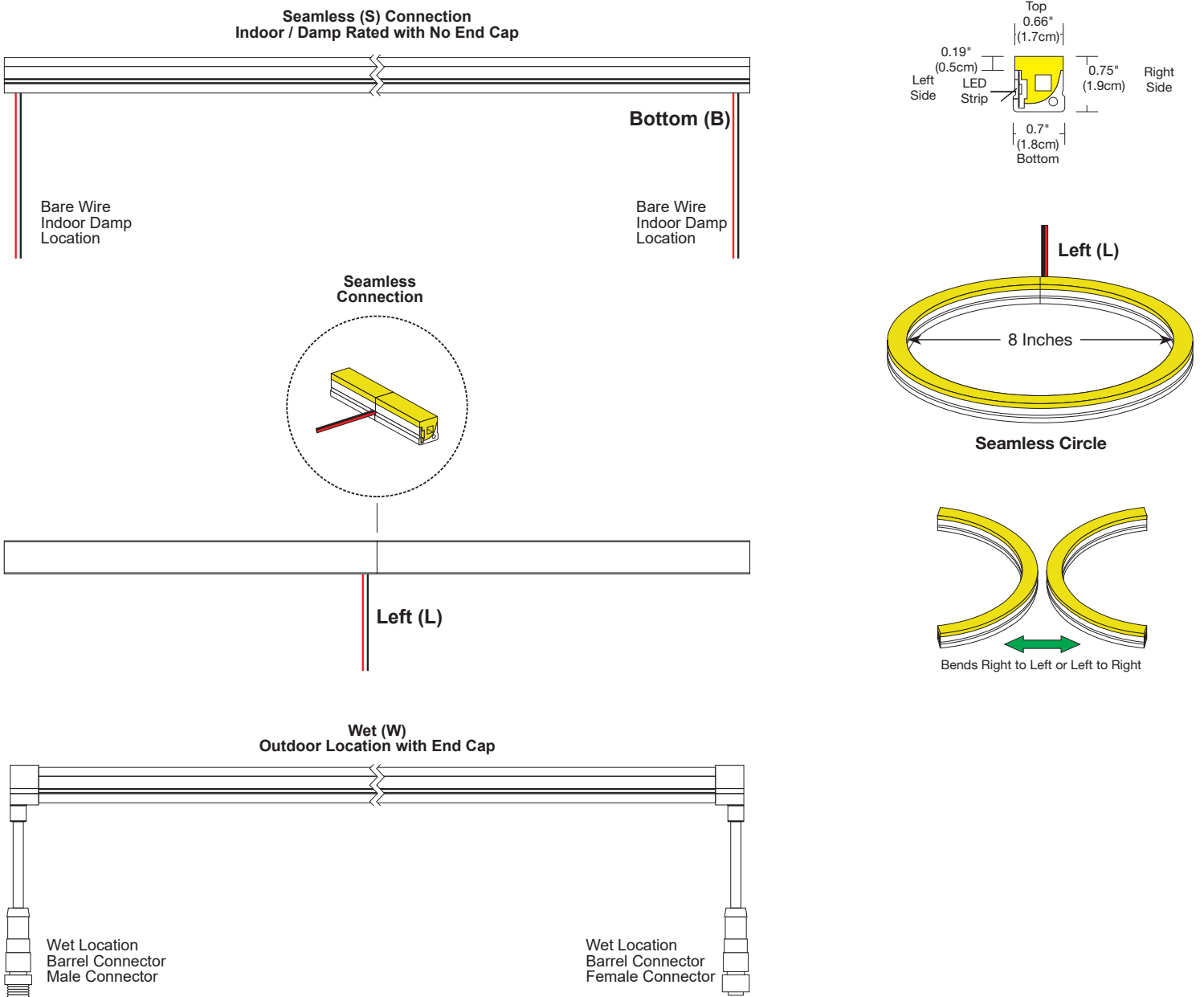
Lamp Data: Lamp Data for Flex Neon LRT7

WATTS PER FOOT	FN-LRT7																							
	2W							5W							7W									
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	57K	20K	22K	24K	24D*	27K	27D*	30K	35K	57K	20K	22K	24K	27K	30K	35K	40K	57K
LUMENS PER FOOT (lm/ft)	143	158	175	193	211	262	278	278	308	339	425	371	465	424	461	491	374	420	466	513	560	642	698	742
LUMENS PER WATT (lm/w)	57	63	70	77	84	105	111	63	70	77	89	84	97	96	105	112	51	58	64	70	77	88	96	102
CRI	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92

WATTS PER FOOT	2K6K*							
	5w							
COLOR TEMPERATURE	20K	24K	27K	30K	35K	40K	57K	65K
LUMENS PER FOOT (lm/ft)	288	323	301	312	324	320	318	317
LUMENS PER WATT (lm/w)	56	63	67	68	69	70	71	72
CRI	92	93	93	92	92	92	84	85

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

Drawings: Flex Neon LRT7

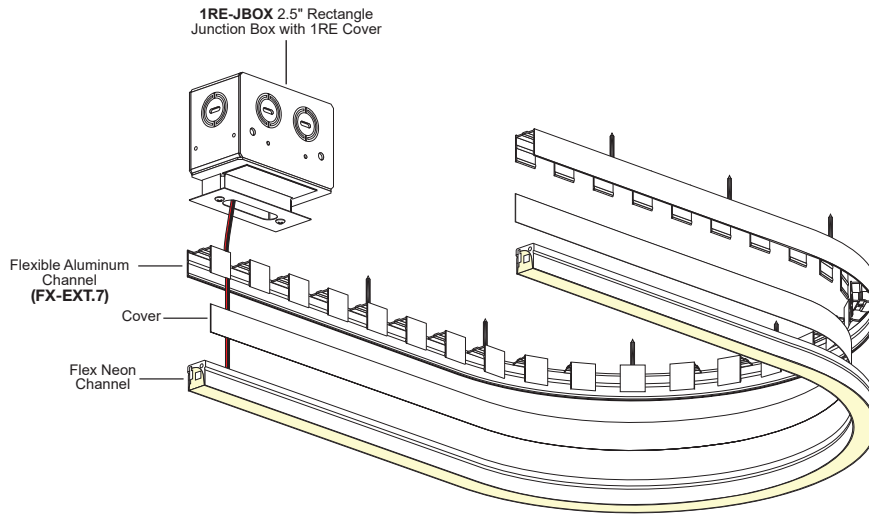
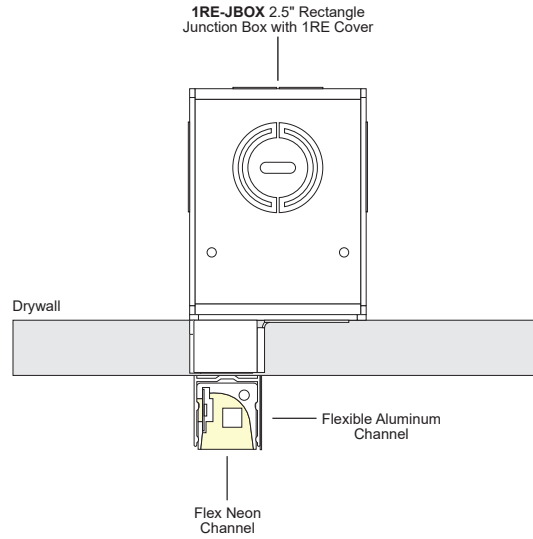


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FLEX NEON LRT7 0.7" THREE SIDED LENS INDOOR/OUTDOOR

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

Drawings: Exploded View for Flexible Aluminum Channel with 1RE J-box



PROJECT	FIXTURE TYPE	DATE

FLEX NEON LRT7 0.7" THREE SIDED LENS INDOOR/OUTDOOR

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

LENGTH CHART Actual lengths for Flex Neon LRT7

LENGTH CHART - STATIC WHITE

Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length
3	3.15	72	72.75	142	142.35	212	211.95	281	281.55	348	348.75	416	415.95
5	5.55	75	75.15	144	144.75	214	214.35	284	283.95	351	351.15	418	418.35
8	7.95	77	77.55	147	147.15	216	216.75	286	286.35	353	353.55	420	420.75
10	10.35	80	79.95	149	149.55	219	219.15	288	288.75	356	355.95	423	423.15
12	12.75	82	82.35	152	151.95	221	221.55	291	291.15	358	358.35	425	425.55
15	15.15	84	84.75	154	154.35	224	223.95	293	293.55	360	360.75	428	427.95
17	17.55	87	87.15	156	156.75	226	226.35	296	295.95	363	363.15	430	430.35
20	19.95	89	89.55	159	159.15	228	228.75	298	298.35	365	365.55	432	432.75
22	22.35	92	91.95	161	161.55	231	231.15	300	300.75	368	367.95	435	435.15
24	24.75	94	94.35	164	163.95	233	233.55	303	303.15	370	370.35	437	437.55
27	27.15	96	96.75	166	166.35	236	235.95	305	305.55	372	372.75	440	439.95
29	29.55	99	99.15	168	168.75	238	238.35	308	307.95	375	375.15	442	442.35
32	31.95	101	101.55	171	171.15	240	240.75	310	310.35	377	377.55	444	444.75
34	34.35	104	103.95	173	173.55	243	243.15	312	312.75	380	379.95	447	447.15
36	36.75	106	106.35	176	175.95	245	245.55	315	315.15	382	382.35	449	449.55
39	39.15	108	108.75	178	178.35	248	247.95	317	317.55	384	384.75	452	451.95
41	41.55	111	111.15	180	180.75	250	250.35	320	319.95	387	387.15	454	454.35
44	43.95	113	113.55	183	183.15	252	252.75	322	322.35	389	389.55	456	456.75
46	46.35	116	115.95	185	185.55	255	255.15	324	324.75	392	391.95	459	459.15
48	48.75	118	118.35	188	187.95	257	257.55	327	327.15	394	394.35	461	461.55
51	51.15	120	120.75	190	190.35	260	259.95	329	329.55	396	396.75	464	463.95
53	53.55	123	123.15	192	192.75	262	262.35	332	331.95	399	399.15	466	466.35
56	55.95	125	125.55	195	195.15	264	264.75	334	334.35	401	401.55	468	468.75
58	58.35	128	127.95	197	197.55	267	267.15	336	336.75	404	403.95	471	471.15
60	60.75	130	130.35	200	199.95	269	269.55	339	339.15	406	406.35	473	473.55
63	63.15	132	132.75	202	202.35	272	271.95	341	341.55	408	408.75	476	475.95
65	65.55	135	135.15	204	204.75	274	274.35	344	343.95	411	411.15	478	478.35
68	67.95	137	137.55	207	207.15	276	276.75	346	346.35	413	413.55	480	480.75
70	70.35	140	139.95	209	209.55	279	279.15						

LENGTH CHART - WARM DIM

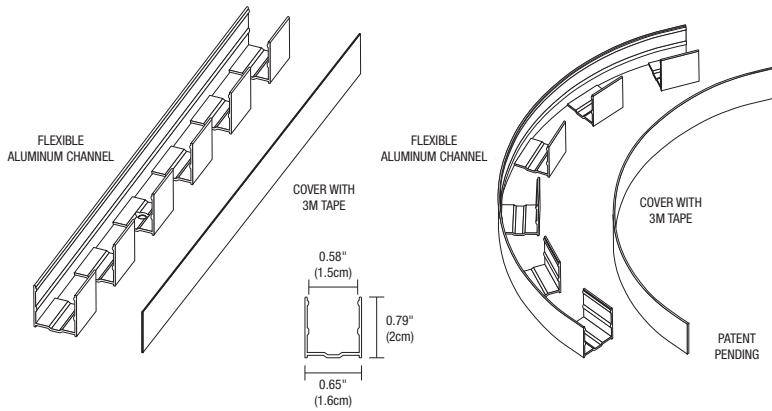
Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length	Ordering Code (Nominal Size)	Actual Length
3	3.75	75	75.75	138	138.75	207	207.75	276	276.75	345	345.75	414	414.75
6	6.75	78	78.75	141	141.75	210	210.75	279	279.75	348	348.75	417	417.75
9	9.75	81	81.75	144	144.75	213	213.75	282	282.75	351	351.75	420	420.75
12	12.75	84	83.75	147	147.75	216	216.75	285	285.75	354	354.75	423	423.75
15	15.75	87	86.75	150	150.75	219	219.75	288	288.75	357	357.75	426	426.75
18	18.75	90	89.75	153	153.75	222	222.75	291	291.75	360	360.75	429	429.75
21	21.75	93	92.75	156	156.75	225	225.75	294	294.75	363	363.75	432	432.75
24	24.75	96	95.75	159	159.75	228	228.75	297	297.75	366	366.75	435	435.75
27	27.75	99	98.75	162	162.75	231	231.75	300	300.75	369	369.75	438	438.75
30	30.75	102	101.75	165	165.75	234	234.75	303	303.75	372	372.75	441	441.75
33	33.75	105	104.75	168	168.75	237	237.75	306	306.75	375	375.75	444	444.75
36	36.75	108	107.75	171	171.75	240	240.75	309	309.75	378	378.75	447	447.75
39	39.75	111	110.75	174	174.75	243	243.75	312	312.75	381	381.75	450	450.75
42	42.75	114	113.75	177	177.75	246	246.75	315	315.75	384	384.75	453	453.75
45	45.75	117	116.75	180	180.75	249	249.75	318	318.75	387	387.75	456	456.75
48	48.75	120	119.75	183	183.75	252	252.75	321	321.75	390	390.75	459	459.75
51	51.75	123	122.75	186	186.75	255	255.75	324	324.75	393	393.75	462	462.75
54	54.75	126	125.75	189	189.75	258	258.75	327	327.75	396	396.75	465	465.75
57	57.75	129	128.75	192	192.75	261	261.75	330	330.75	399	399.75	468	468.75
60	60.75	132	131.75	195	195.75	264	264.75	333	333.75	402	402.75	471	471.75
63	63.75	135	133.75	198	198.75	267	267.75	336	336.75	405	405.75	474	474.75
66	66.75			201	201.75	270	270.75	339	339.75	408	408.75	477	477.75
69	69.75			204	204.75	273	273.75	342	342.75	411	411.75	480	480.75
72	72.75												

PROJECT		FIXTURE TYPE		DATE	
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FLEX NEON OUTDOOR ACCESSORIES & J-BOXES

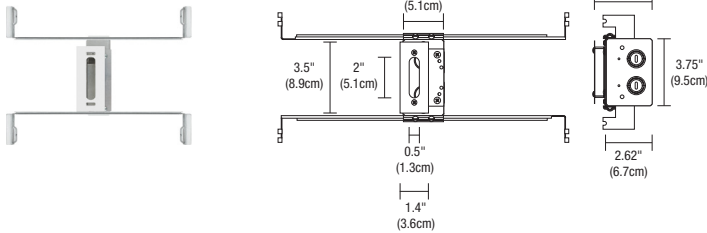
24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE



FLEXIBLE ALUMINUM CHANNEL

Flexible aluminum channel is designed to work specifically with Flex Neon for practical and professional mounting. The channel can make large radius 90° turns and sweeping bends that follow the form of architectural details, soffits, signage and more - consider using this channel to guide your linear LED lighting design. Patent Pending.

Product	Length	Finish
FX-EXT.7	4FT	WH
FX-EXT.7 Flexible Extrusion 0.7" Wide	4FT 4 Feet	BK Black WH White

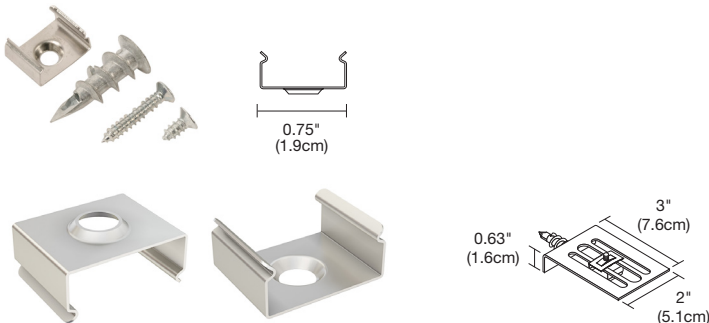


1" RECTANGLE CANOPY & J-BOX*

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.

*Only to be used with Seamless Indoor Bottom Lead-In and Out

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



MOUNTING CLIPS

NX.5-MCL mounting clips are provided with every 12" of Flex Neon and may be ordered separately as replacement parts.

System	Product
NX.5	MCL
NX.5 Flex Neon .5" Mounting Clip	MCL Mounting Clip

PROJECT	FIXTURE TYPE	DATE
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FLEX NEON OUTDOOR ACCESSORIES & J-BOXES

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

FLEX NEON 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

DIRECT BURIAL LOCATION CABLE ORDER PER FOOT

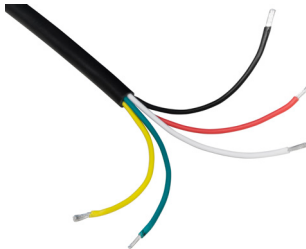
Our Direct Burial, 2 Conductor Plus ground, 12 Gauge Cable is a durable and adaptable cable suitable for transmitting power, control, and switching in outdoor wet and in ground environments. Keep within 60 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by 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 needed by the foot. Keep within 50 ft between fixture and power supply. Cable sold by the foot, simply specify the length needed by the foot.



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

PROJECT	FIXTURE TYPE	DATE
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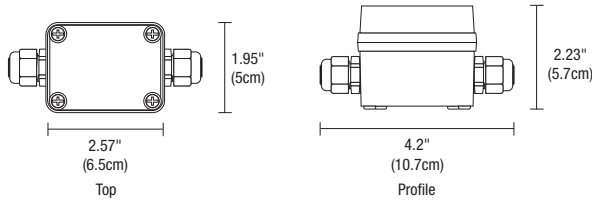


FLEX NEON OUTDOOR ACCESSORIES & J-BOXES

24VDC 2W | 5W | 7W BENDS LEFT/RIGHT STATIC WHITE, WARM DIM & TUNABLE WHITE

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

RGB OR RGBW WET LOCATION JUNCTION BOX WITH 6" POWER CABLE

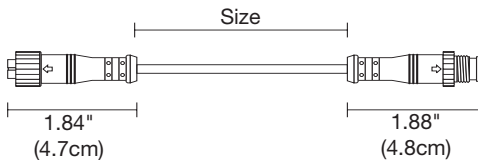
This watertight, multi-fixture Junction Box is especially designed for lighting in wet and damp locations. It is versatile, rugged and simple to install. The Junction Box comes standard with a 6" Flexible Cable providing easy, safe, and reliable connections for 24V low voltage luminaires. This box is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



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

RGB OR RGBW 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.



Product	Type	Size	Type	Option
SS	CFX	12IN	RGBW	W
SS Soft Strip and Flex Neon	CFX Flexible 4 Wire Connector	12IN 12" 96IN 96"	RGBW Red, Green, Blue and White	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.



Product	Type	Option
SS	TC	W
SS Soft Strip and Flex Neon	TC T-Connector 4 Wire	W Wet Location

PROJECT	FIXTURE TYPE	DATE
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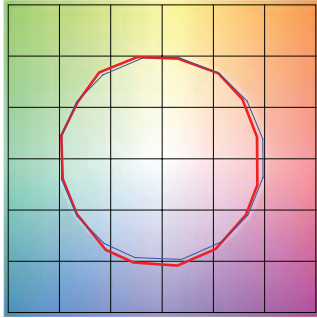
LED STRIP TM30 DATA

24VDC, 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

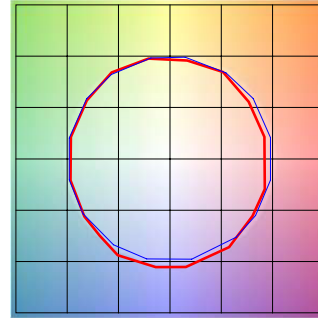


■ Test ■ Reference

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

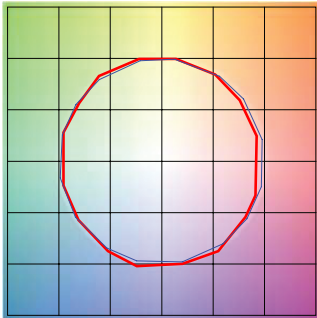


■ Test ■ Reference

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

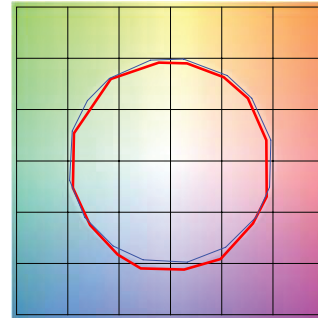


■ Test ■ Reference

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

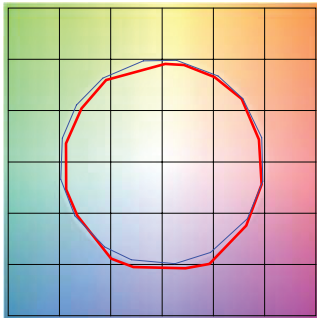


■ Test ■ Reference

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

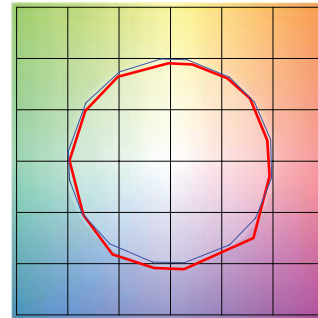


■ Test ■ Reference

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%

5700K | Rf: 87.6 | Rg: 98.0

Color Vector Graphic



■ Test ■ Reference

GRAPHIC SHIFTS %			
HUE BIN	Rf	CHROMA	HUE
1	87.9	-3.9%	1.5%
2	92.3	-1.7%	2.7%
3	91.0	-1.2%	2.4%
4	91.5	-1.2%	1.6%
5	86.2	-5.9%	-0.4%
6	93.5	-3.2%	-0.2%
7	93.1	-3.8%	0.6%
8	85.9	-4.6%	5.9%
9	83.6	-4.0%	12.7%
10	75.8	-0.6%	13.6%
11	80.2	4.3%	10.4%
12	83.4	3.4%	1.8%
13	90.8	5.0%	-2.0%
14	91.8	1.3%	-3.3%
15	79.4	8.6%	-12.7%
16	93.4	-2.7%	-0.2%

PROJECT	FIXTURE TYPE	DATE
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