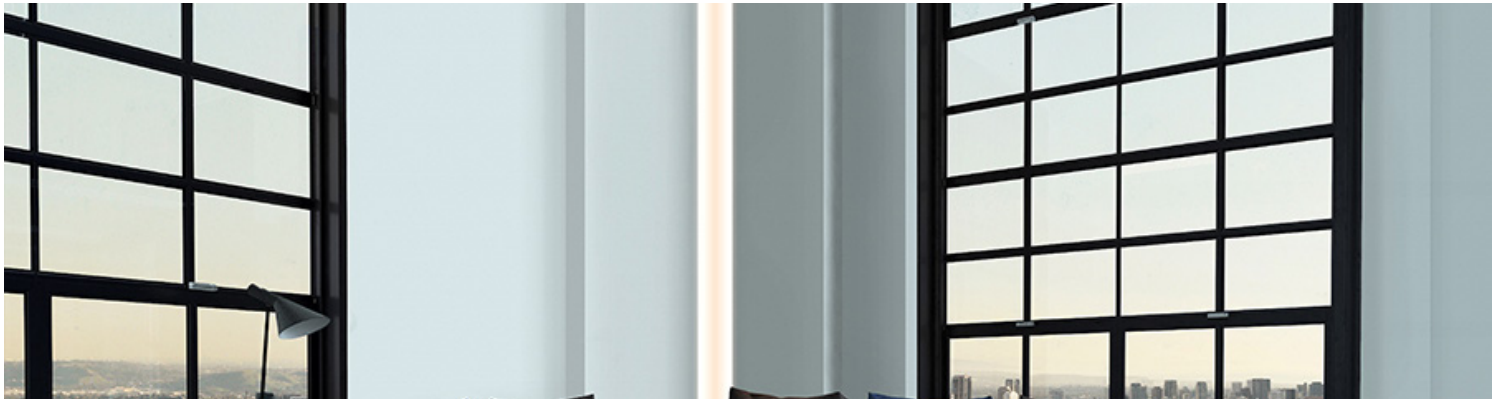


# VERGE CORNER 24VDC PLASTER-IN LED SYSTEM

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 12.08.20



## DESCRIPTION

Verge Corner is an innovative design that comes from the family of Plaster-in 24VDC systems pioneered by PureEdge mounts directly to wall studs or ceiling joist, without any modification, and is recessed, then plastered into 5/8" or thicker drywall. Continuing to redefine the relationship between Lighting and Interior Design, the Verge system creates visually interesting and dramatic illumination by highlighting the inside Corners of two drywall surfaces such as ceiling, coves and skylights. Field-cuttable, Verge Corner is ordered in 1' increments up to 20', the slim plaster-in aluminum channel has a 4" paintable backer plate. Our Designer-grade High **CRI** Color Rendering LEDs are offered in several standard Color Temperatures: Static white 2200K-5700K, Warm Dim (**27D or 30D**) and, Dynamic/Tunable White (**2K4K and 27K6**) as well as four wattage options of 5WDC, 10WDC and 14WDC. Remote Power supplies are required and sold separately. Coordinate installation with electrical and drywall contractors. **PureEdge** is the Original Designer of 5/8" Drywall Lighting Products with the Most Experience in the industry. Includes a 5-year pro-rated warranty. For custom quotes and layout assistance, send drawings to [design@PureEdgeLighting.com](mailto:design@PureEdgeLighting.com). Designed by Gregory Kay.

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

- Electronic Low Voltage Dimming (**ELV**)<sup>†</sup>
- Uni Driver: Universal dimming (**ELV, 0-10V, TRIAC**)
- 0-10 Volt (**0-10**) Dimming
- Dynamic Color Changing (**DMX**)
- Lutron Hi-Lume<sup>®</sup>

\*In-Wall Mounting Kits available for select Power Supplies

<sup>†</sup>With N-Lite Dimming Do Not use ELV power supply's, use only 0-10 volt or Uni drivers power supplies

## ORDERING

Verge Corner is installed behind drywall with Adjustable Mounting Bars Requires Remote Power Supply (ordered separately) In-Wall Mounting Kits are available for select power supplies. Order in 1' increments (12") field-cuttable to any length.

## MAXIMUM LENGTHS BEFORE RE-FEEDING:

- 5WDC - 20' (2 x 2.5 watts)
- 10WDC - 10' (2 x 5 watts)
- 14WDC - 6' (2 x 7.5 watts)

PureEdge is the Original Designer of 5/8" Drywall Products, Backed by Over 30 Years of Precision Manufacturing and Design.

## DESIGN NOTE

Verge Corner can be installed on multiple surfaces that form inside Corners, as well as in Coves, Windows and Skylights. Ambient and harmonious, the plaster-in LED system blends into 5/8" thick drywall to enhance the contemporary aesthetic of interior spaces. Verge offers unsurpassed precision and flexibility that transforms spaces into thoughtful and refined works of art.

## LAMP

- 7 Static White Color Temperatures 22K-57K
- Warm Dim: 27D and 30D dim down to 1900K, resembling incandescent light sources
- Dynamic/Tunable White: 2K4K and 27K6 allow for independent control of color temperatures and dimming
- Average life: 50,000 hours

## INCLUDED COMPONENTS

(2) Junction Boxes, Adjustable Mounting Bars, (2) Backer Plates, (2) Verge Corner Channels, Drywall Screws, (2) LED Soft Strips, and (2) Lenses

## APPLICATIONS

Indoor damp or dry locations only. Ideal for inside corners of drywall surfaces such as Walls and Ceilings, Coves, Windows and Skylights in Residential, Commercial, Retail and Hospitality environments.

## COMPLIANCE

Title 24, ETL, Class 2, Damp Location, Made in USA. **1-hour fire rating uses Two pieces of Type X Gypsum board, for 2-Hour fire rating use Three pieces of Type X Gypsum board.**

Use our Configurator to see List Price, Complete Ordering Code and Overall Length. [Verge Corner](#)

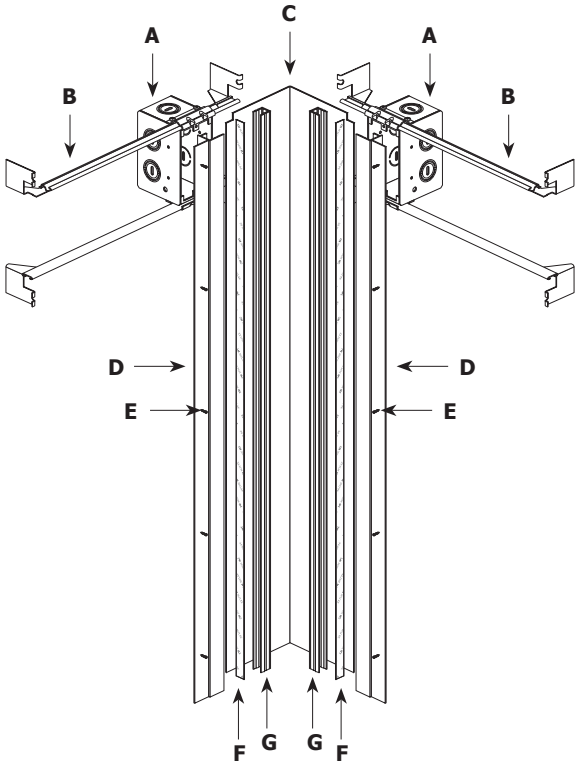
System	Watts Per Foot	Length in Feet	Color Temperature
<b>VGCO</b>	<b>5WDC</b>	<b>1-20FT</b>	<b>27K</b>
<b>VGCO</b> Verge Corner	<b>5WDC</b> 2x2.5 Watts (20 ft Max) <b>10WDC</b> 2x5 Watts (10 ft Max) <b>14WDC</b> 2x7.5 Watts (6 ft Max)	<b>1-20FT</b>	<b>22K</b> 2200K Amber White <b>24K</b> 2400K Very Warm White <b>27K</b> 2700K Incandescent White <b>27D</b> 2700K Warm Dim (10W Only) <b>30K</b> 3000K Warm White <b>30D</b> 3000K Warm Dim (10W Only) <b>35K</b> 3500K Neutral White <b>40K</b> 4000K Cool White <b>57K</b> 5700K Daylight White <b>2K4K</b> Tunable White 2000K-4000K (10W & 14W only) <b>27K6</b> Tunable White 2700K-6500K (10W & 14W only)

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\*27D, 30D - Warm Dim 5 Watts Only. Lumen values are based on the 3000K LED test.

2

**INCLUDED COMPONENTS**



**A. JUNCTION BOX**

Mounts behind drywall with Adjustable Mounting Bars. Low Voltage 24VDC wires from Remote Power Supply connect to LED wires inside box. Junction Box opening is covered by the Backer Plate, and required at the beginning of each run.

**B. ADJUSTABLE MOUNTING BARS**

Provide flexibility for mounting in a variety of spaces. Verge Corner includes two sets of mounting hardware.

**C. BACKER PLATE**

4" paintable aluminum plates conceal junction box and reflect light.

**D. VERGE CHANNEL**

Two 5/8" deep extrusions each house a single row of LED Soft Strip.

**E. DRYWALL SCREWS**

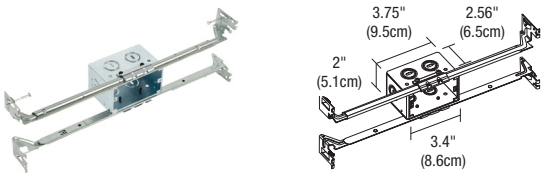
Secure channels to drywall and studs.

**F. LED SOFT STRIP**

Commercial-grade White or Dynamic Color Changing LED Soft Strip. See lamp data on for additional details. Standard Color Temperatures 22K-57K, Warm Dim (**27D** or **30D**) and Dynamic/Tunable White (**2K4K**).

**G. LENS**

0.6" wide Diffused White lens projects a clean line of light without LED dots. Verge Corner includes two lenses.



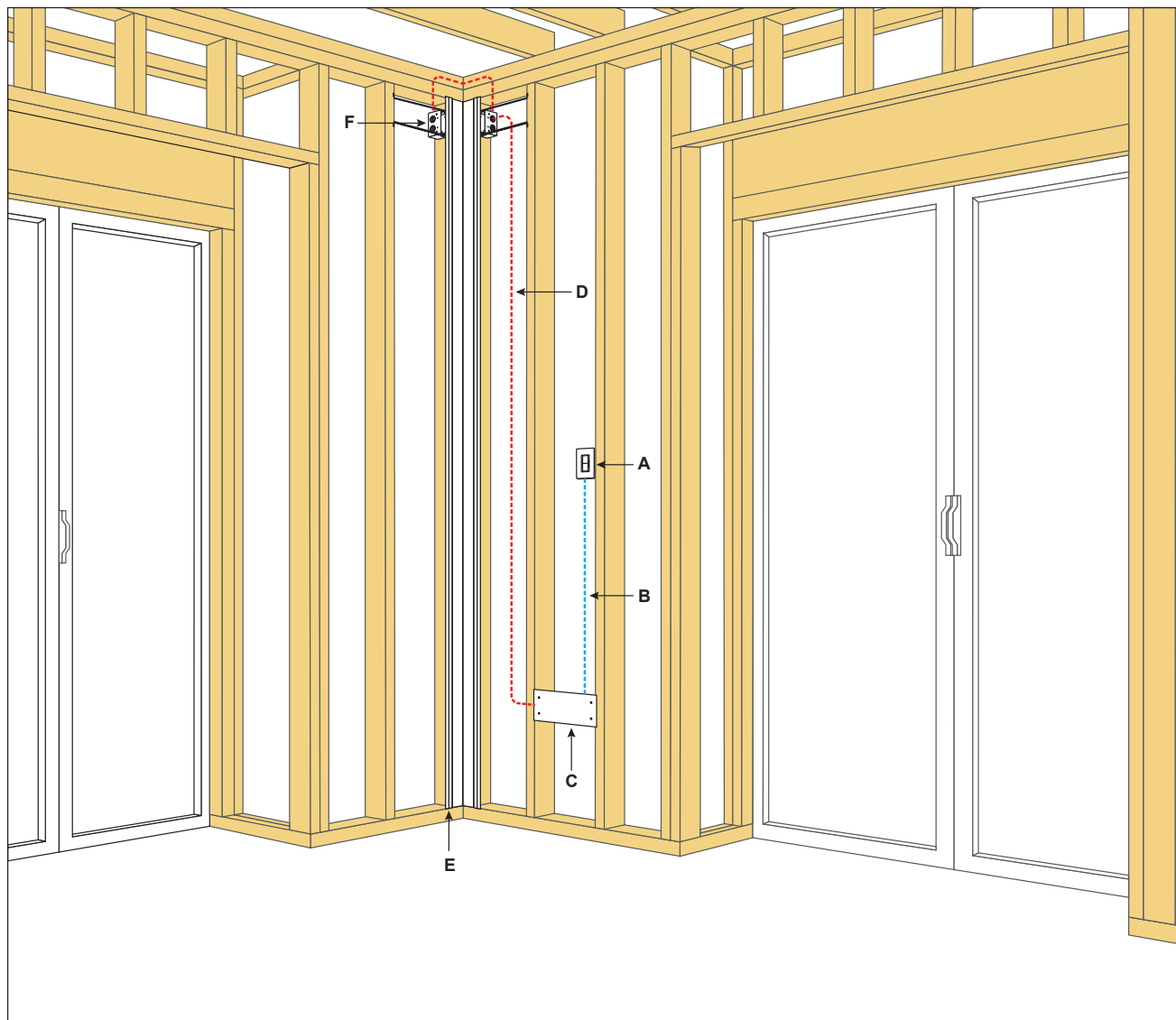
**JUNCTION BOX ROUGH-IN COMPONENT**

One Junction Box is included with Verge Wall and two Junction Boxes are included with Verge Corner. Order additional Junction Box(es) separately to rough-in electrical wiring before drywall installation. Quick shipment available.

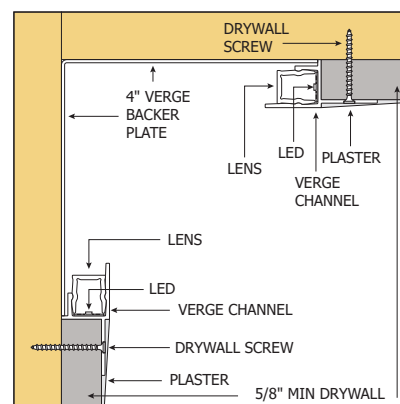
System	Size	Component
<b>VG</b>	<b>1RE</b>	<b>JBOX</b>
VG Verge	1RE 1" Rectangle	JBOX Junction Box
*For RGB+W use VG-1RD-JBOX-RGBW		

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### INSTALLATION



- A. DIMMER OR SWITCH
- B. 120VAC WIRING
- C. 120V/24VDC REMOTE POWER SUPPLY FOR IN-WALL MOUNTING KIT
- D. 24VDC, CLASS 2 WIRING
- E. VERGE CORNER CHANNEL
- F. JUNCTION BOX



PROJECT		FIXTURE TYPE		DATE	
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# VERGE CORNER 24VDC

## PLASTER-IN LED SYSTEM

### 2 X 2.5 WATTS PER FOOT








LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS
1	2 x 3	11	2 x 27	21	2 x 51	31	2 x 75
2	2 x 5	12	2 x 29	22	2 x 54	32	2 x 78
3	2 x 8	13	2 x 32	23	2 x 56	33	2 x 80
4	2 x 10	14	2 x 34	24	2 x 58	34	2 x 82
5	2 x 13	15	2 x 37	25	2 x 61	35	2 x 85
6	2 x 15	16	2 x 39	26	2 x 63	36	2 x 87
7	2 x 17	17	2 x 41	27	2 x 66	37	2 x 90
8	2 x 20	18	2 x 44	28	2 x 68	38	2 x 92
9	2 x 22	19	2 x 46	29	2 x 70	39	2 x 94
10	2 x 25	20	2 x 48	30	2 x 73	40	2 x 96

### 2 X 5 WATTS PER FOOT

LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS
1	2 x 5	6	2 x 29	11	2 x 53	16	2 x 77
2	2 x 10	7	2 x 34	12	2 x 58	17	2 x 82
3	2 x 14	8	2 x 38	13	2 x 63	18	2 x 87
4	2 x 19	9	2 x 43	14	2 x 67	19	2 x 91
5	2 x 24	10	2 x 48	15	2 x 72	20	2 x 96

### 2 X 7.5 WATTS PER FOOT

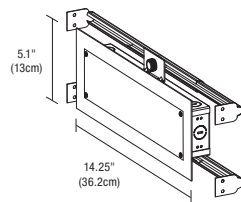
LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS
1	2 x 7.5	3	2 x 22.5	5	2 x 37.5
2	2 x 15	4	2 x 30	6	2 x 45

ELECTRONIC LOW-VOLTAGE (ELV) POWER SUPPLIES & RECOMMENDED DIMMERS†‡					
ORDERING CODES	PS-60L-ELV-24VDC	PSB-60W-ELV-24VDC	PSB-2X60W-ELV-24VDC	PSB-100W-ELV-24VDC	
					
	SPECIFICATIONS				
	MAXIMUM LOAD	60W NON-IC, 50W-IC (FITS IN JBOX)	60W	2X60W	96W
	INPUT VOLTAGE	120VAC	120VAC	120VAC	120VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC	
DIMENSIONS	2.25" X 1.25" X 0.83"	8.125" X 2" X 1.75"	12.15" X 6.48" X 2.18"	9.25" X 3.5" X 2"	
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2	
IN WALL MOUNTING	N/A	PSB-60W-ELV-24VDC-IW	PSB-2X60W-ELV-24VDC-IW	PSB-100W-ELV-24VDC-IW	
ELECTRONIC LOW-VOLTAGE (ELV) POWER SUPPLIES & RECOMMENDED DIMMERS†‡					
ORDERING CODES	PSB-2X100W-ELV-24VDC	PSB-3X100W-ELV-24VDC	PSB-4X100W-ELV-24VDC		
					
	SPECIFICATIONS				
	MAXIMUM LOAD	2X96W	3X96W	4X96W	
	INPUT VOLTAGE	120VAC	120VAC	120VAC	
OUTPUT VOLTAGE	24VDC	24VDC	24VDC		
DIMENSIONS	12.15" X 6.48" X 2.18"	14" X 10" X 3"	17" X 13" X 3"		
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2		
IN WALL MOUNTING	PSB-2X100W-ELV-24VDC-IW	N/A	N/A		
DIMMING AND CONTROLS					
LUTRON DIVA: DVELV-300P	•	•	•		
LUTRON SKYLARK: SELV-300P	•	•	•		
LUTRON RADIO RA2: RRD-6NA	•	•	•		
LUTRON MAESTRO: MAELV-600	•	•	•		
LEGRAND ADORNE: ADTP-703TUM4	•	•	•		

†22K - 57K color temperatures are compatible with 0-10V, ELV, and Lutron Hi-lume® Power Supplies. Warm Dim (27D, 30D) color temperatures are only compatible with ELV power supplies. Tunable White color temperature is compatible with 0-10V, ELV, DMX, and Lutron Hi-lume® Power Supplies. Dynamic Color (RGB, RGB+W) and Static Color (Amber, Blue, Green, or Red) are compatible with DMX Power Supplies.

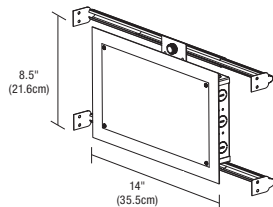
‡Electrical Panels using Seimens/Murray AFCI breakers are not compatible with this ELV transformer. Use 0-10 Volt power supplies with this breaker

With N-Lite Dimming Do Not use ELV power supplies, use only 0-10 volt or Uni drivers power supplies



**5.1 x 14.25 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

**Ordering Codes:** PSB-60W-ELV-24VDC-IW  
PSB-100W-ELV-24VDC-IW



**8.5 x 14 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

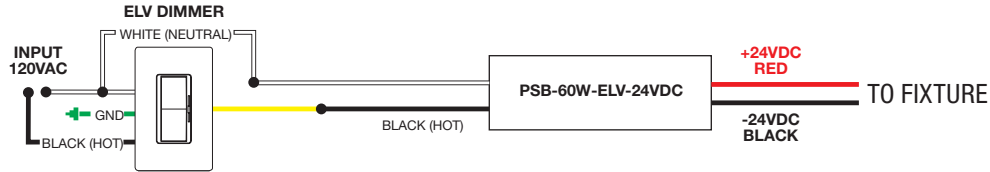
**Ordering Codes:** PSB-2X60W-ELV-24VDC-IW  
PSB-2X100W-ELV-24VDC-IW

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## SAMPLE WIRING DIAGRAMS 24VDC ELV

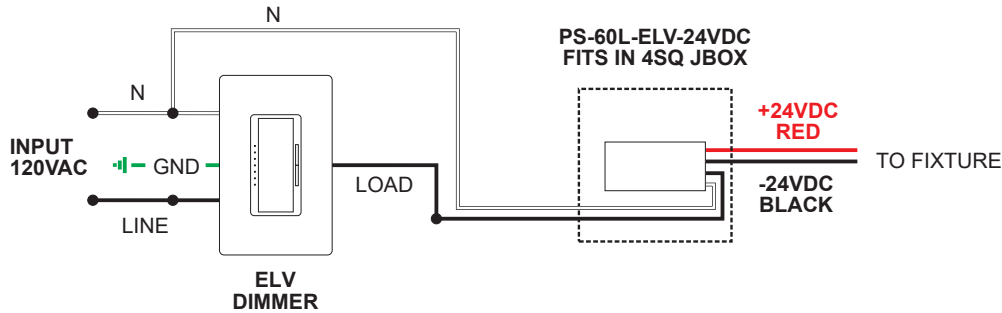
**Application:** ELV dimming for Static White

**Dimming:** Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and Radio Ra 2



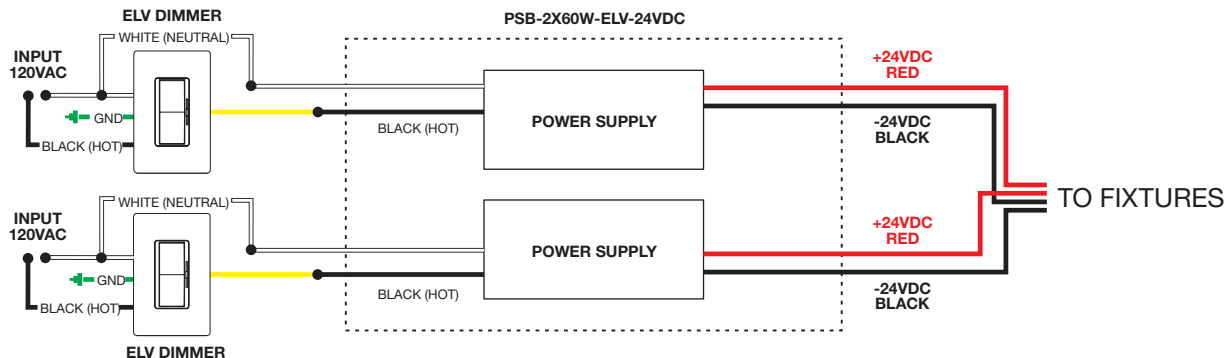
**Application:** ELV dimming for Static White

**Dimming:** Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and Radio Ra 2



**Application:** Dual ELV dimming for Dynamic/Tunable White

**Dimming:** Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and Radio Ra 2









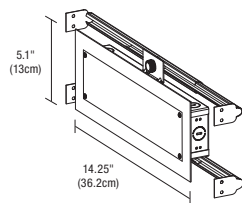
PROJECT		FIXTURE TYPE		DATE	
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# INDOOR CONSTANT VOLTAGE 0-10V REMOTE POWER SUPPLIES

24VDC 0-10V REMOTE POWER SUPPLY, STATIC & DYNAMIC TUNABLE WHITE DUAL CONTROL.

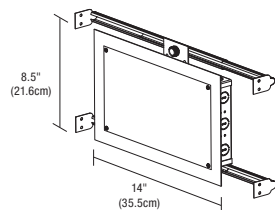
REV 12.08.20

0-10 VOLT (010) POWER SUPPLIES & RECOMMENDED DIMMERS <sup>†</sup>				
ORDERING CODE	PSB-25W-010-24VDC	PSB-60W-010-24VDC	PSB-96W-010-24VDC	PSB-2X96W-010-24VDC
				
SPECIFICATIONS				
MAXIMUM LOAD	25W	60W	96W	2X96W
INPUT VOLTAGE	120VAC	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC
DIMENSIONS	12.4" X 3.12" X 2.18"	12.4" X 3.12" X 2.18"	12.4" X 3.12" X 2.18"	12.15" X 6.48" X 2.18"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2
IN-WALL MOUNTING	PSB-25W-010-24VDC-IW	PSB-60W-010-24VDC-IW	PSB-96W-010-24VDC-IW	PSB-2X96W-010-24VDC-IW
0-10 VOLT (010) POWER SUPPLIES & RECOMMENDED DIMMERS <sup>†</sup>				
ORDERING CODE	PSB-3X96W-010-24VDC	PSB-4X96W-010-24VDC		
				
SPECIFICATIONS				
MAXIMUM LOAD	3X96W		4X96W	
INPUT VOLTAGE	120-277VAC		120-277VAC	
OUTPUT VOLTAGE	24VDC		24VDC	
DIMENSIONS	14" X 10" X 3"		17" X 13" X 3"	
CLASSIFICATION	CLASS 2		CLASS 2	
IN-WALL MOUNTING	N/A		N/A	
DIMMING & CONTROLS				
PHILIPS SUNRISE: SR1200ZTUNV	•		•	
LUTRON DIVA: DVTV-WH, DVSTV-WH	•		•	
LUTRON NOVA T: NTSTV-DV-XX	•		•	
LUTRON GRAFIX EYE QS: QSGRJ-XP	•		•	
LUTRON RADIO RA2: RRD-10ND	•		•	
LEVITON: LEV40050	•		•	
LEVITON IP710-LFZ	•		•	
LEGRAND: ADPD4FBL3P2W4	•		•	



**5.1 x 14.25 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

**Ordering Codes:** PSB-25W-010-24VDC-IW, PSB-60W-010-24VDC-IW, PSB-96W-010-24VDC-IW



**8.5 x 14 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

**Ordering Codes:** PSB-2X96W-010-24VDC-IW

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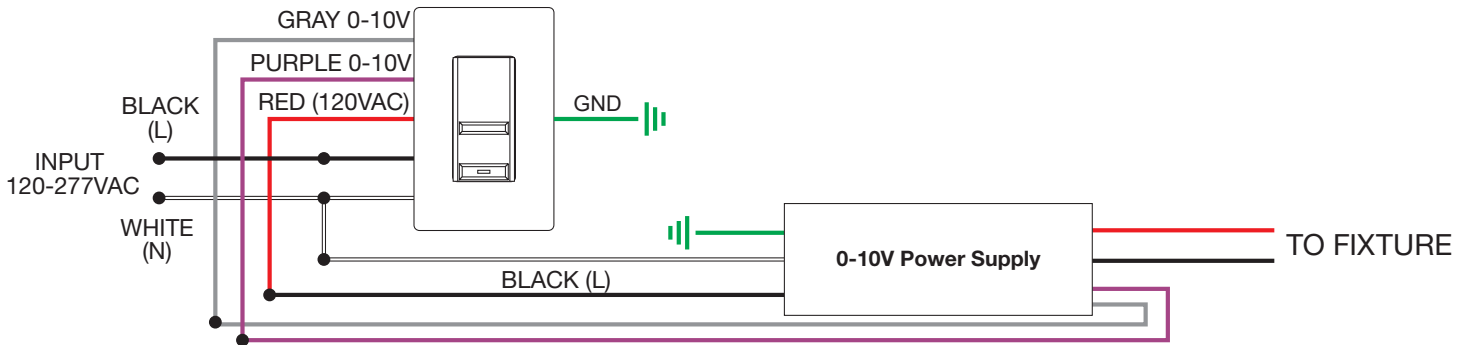


### SAMPLE WIRING DIAGRAMS 24VDC 010

**Application:** 0-10V Dimming Applications For Static White and Warm Dim 0-10V Dual Dimming.

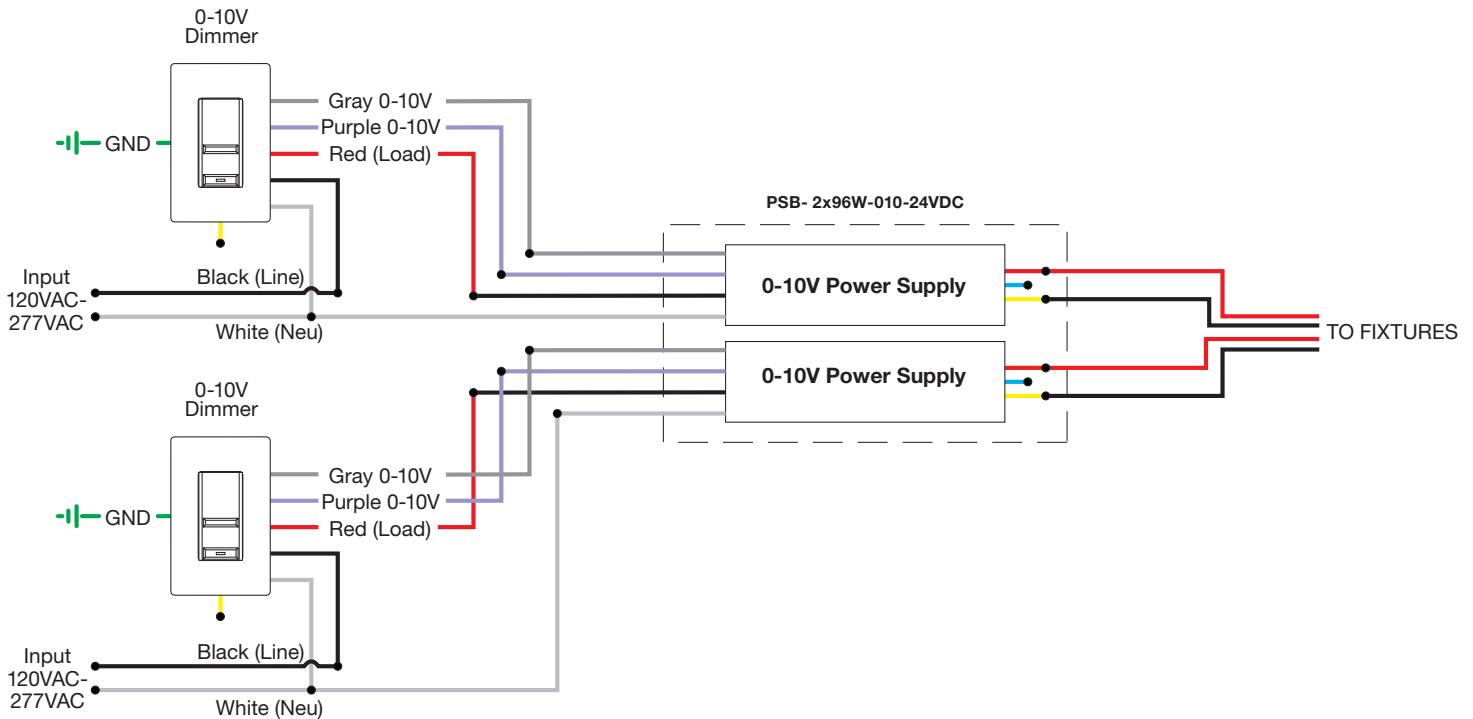
**Dimming:** Dimmable with 0-10V dimmers: Signify (Phillips) Sunrise: SR1200ZTUNV, Leviton Dimmers: LEV40050, IP710-LFZ, \*IP710-DLZ \*(Built in LED locator light) Legrand Dimmer: ADPD4FBL3P2W4 Lutron Systems: Lutron GRAFIX Eye QS Main Unit (with DRX-TVI) Radio Ra2 (with GRX-TVI)

#### 0-10V DIMMER



**Application:** Dual 0-10V dimming for Dynamic/Tunable White

**Dimming:** Dimmable with Dual 0-10V dimmers: Signify (Phillips) Sunrise: SR1200ZTUNV, Leviton Dimmers: LEV40050, IP710-LFZ, \*IP710-DLZ \*(Built in LED locator light), Legrand Dimmer: ADPD4FBL3P2W4, Lutron Systems: Lutron GRAFIX Eye QS Main Unit (with DRX-TVI) Radio Ra2 (with GRX-TVI)



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# INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES

24VDC, UNI - UNIVERSAL DIMMING WITH ELV, TRIAC, & 0-10V

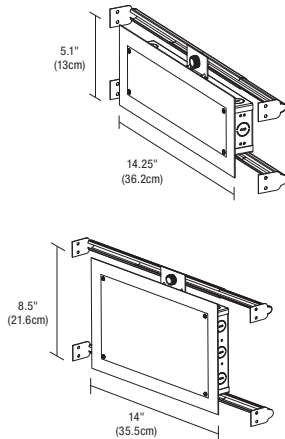
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UNIVERSAL POWER SUPPLIES & RECOMMENDED DIMMERS				
ORDERING CODE	PSB-40W-UNI-24VDC	PSB-60W-UNI-24VDC	PSB-2X40W-UNI-24VDC	PSB-2X60W-UNI-24VDC
SPECIFICATIONS				
MAXIMUM LOAD	40W	60W	2X40W	2X60W
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC
DIMENSIONS	12.4" X 3.12" X 2.18"	12.4" X 3.12" X 2.18"	12.15" X 6.48" X 2.18"	12.15" X 6.48" X 2.18"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2
IN-WALL MOUNTING	PSB-40W-UNI-24VDC-IW	PSB-60W-UNI-24VDC-IW	PSB-2X40W-UNI-24VDC-IW	PSB-2X60W-UNI-24VDC-IW
UNIVERSAL POWER SUPPLIES & RECOMMENDED DIMMERS				
ORDERING CODE	PSB-96W-UNI-24VDC	PSB-2X96W-UNI-24VDC	PSB-3X96W-UNI-24VDC	PSB-4X96W-UNI-24VDC
SPECIFICATIONS				
MAXIMUM LOAD	96W	2X96W	3X96W	4X96W
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC
DIMENSIONS	12.4" X 3.12" X 2.18"	12.15" X 6.48" X 2.18"	14" X 10" X 3"	17" X 13" X 3"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2
IN-WALL MOUNTING	PSB-96W-UNI-24VDC-IW	PSB-2X96W-UNI-24VDC-IW	NA	NA
ELV DIMMING & CONTROLS				
LUTRON DIVA: DVELV-300P	•	•	•	•
LUTRON SKYLARK: SELV-300P	•	•	•	•
LUTRON RADIO RA2: RRD-6NA	•	•	•	•
LUTRON MAESTRO: MAELV-600	•	•	•	•
LEGRAND ADORNE: ADTP-703TUM4	•	•	•	•
0-10 DIMMING & CONTROLS				
PHILIPS SUNRISE: SR1200ZTUNV	•	•	•	•
LUTRON DIVA: DDTV-WH, DVSTV-WH	•	•	•	•
LUTRON NOVA T: NTSTV-DV-XX	•	•	•	•
LUTRON GRAFIX EYE QS: QSGRJ-XP	•	•	•	•
LUTRON RADIO RA2: RRD-10ND	•	•	•	•
LEVITON: LEV40050	•	•	•	•
LEVITON IP710-LFZ	•	•	•	•
LEGRAND: ADPD4FBL3P2W4	•	•	•	•
TRIAC DIMMING & CONTROLS				
LUTRON SKYLARK: S2-L-WH	•	•	•	•
LUTRON DIVA DVLV-600P-WH	•	•	•	•
LUTRON DIVA DVLV-603P-WH	•	•	•	•
LUTRON MAESTRO MALV-600-WH	•	•	•	•
LUTRON MAESTRO MALV-1000-WH	•	•	•	•
LUTRON MAESTRO MA-R-XX	•	•	•	•

- Flicker free dimming
- Aluminum casing for optimal heat dissipation
- Isolated output power per NEC and UL safety requirements
- UL & ETL recognized/ listed, meets UL 8750, 1310 requirements
- Auto-reset: short circuit, overload and thermal protection
- Class 2 power supply
- Efficient, High power factor > 0.90
- The Solid State Constant Voltage Uni-Power Supply is compatible with most commercially available Dimmers:
  - Triac Dimmer : (Forward Phase) Typically used for the dimming of Incandescent and Low Voltage Magnetic Transformers
  - ELV Dimmer : (Reverse Phase) Dimming of Electronic Low Voltage Transformers and Power Supply's used for LED lighting
  - 0-10 Dimmer : Dims the Low Voltage side of a 0-10 volt power supply commonly used in large scale lighting or commercial applications.
- The Uni-Power Supply is recommended with any Siemens/Murray brand of arc fault breaker to overcome the issues with tripping the breakers with an ELV LED Low Voltage Drivers.

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## IN WALL MOUNTING OPTIONS



**In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

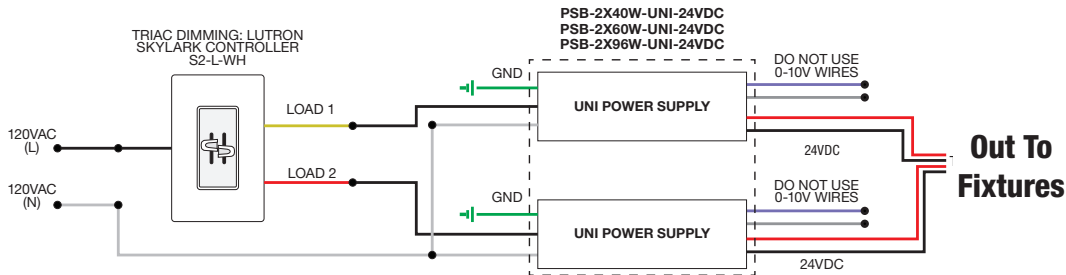
**Ordering Codes 5.1 x 14.25 inch:** PSB-40W-UNI-24VDC-IW  
PSB-60W-UNI-24VDC-IW  
PSB-96W-UNI-24VDC-IW

**Ordering Codes 8.5 x 14.25 inch:** PSB-2X40W-UNI-24VDC-IW  
PSB-2X60W-UNI-24VDC-IW  
PSB-2X96W-UNI-24VDC-IW

## WIRING DIAGRAMS UNIVERSAL POWER SUPPLY

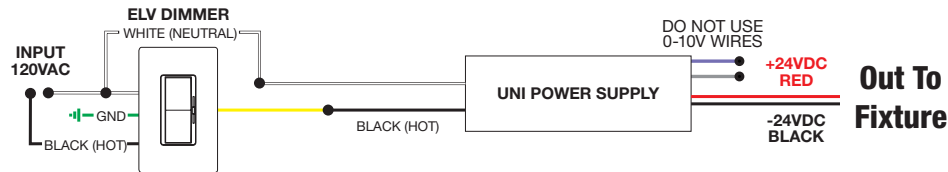
**Application:** Triac dimming for two power supplies, use for Static White, Dynamic/Tunable White

**Dimming:** Dimmable with Triac dimmer: Lutron: Skylark S2-L



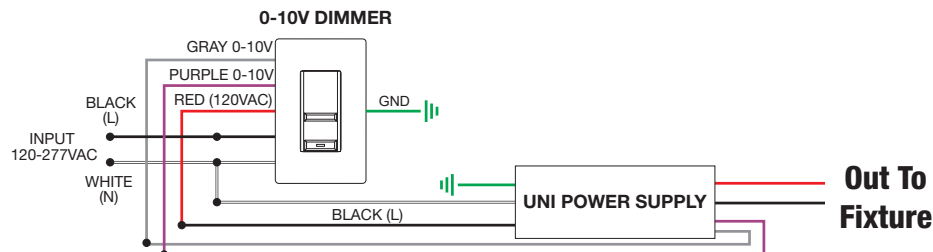
**Application:** ELV dimming for Static White and Warm Dim

**Dimming:** Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and Radio Ra 2



**Application:** 0-10V dimming for Static White

**Dimming:** Dimmable with 0-10V dimmer: Philips Sunrise: SR1200ZTUNV; Lutron Diva: DVTV-WH, DVSTV-WH; Lutron Nova T: NTSTV-DV-XX; Lutron Grafix EYE QS: QSGRJ-XP; Lutron Radio Ra2: RRD-10ND; Leviton: LEV40050; Leviton IP710-LFZ; Legrand: ADPD4FBL3P2W4

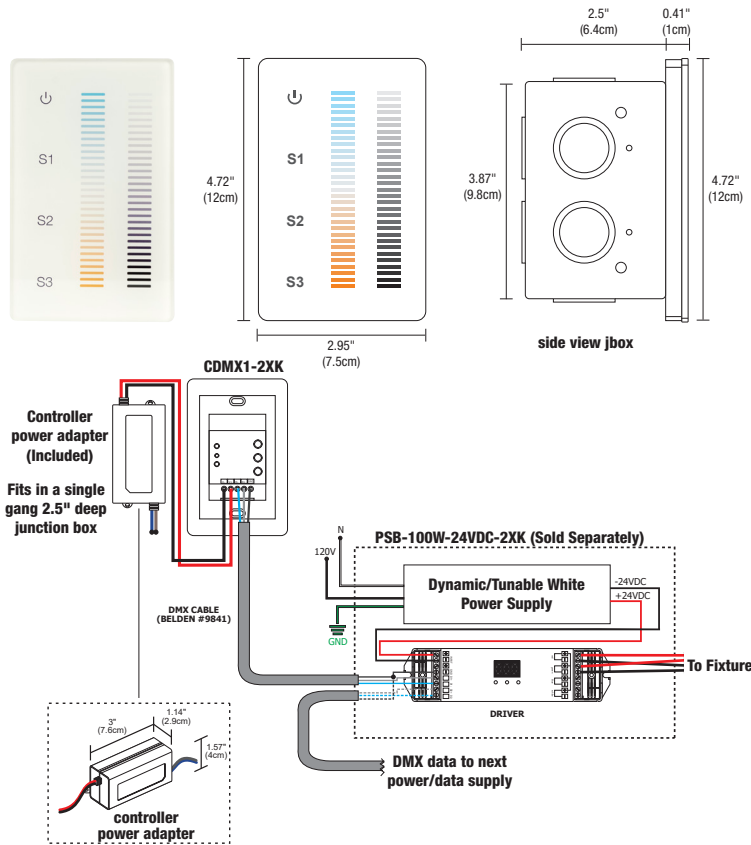


PROJECT		FIXTURE TYPE		DATE	
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# DYNAMIC/TUNABLE WHITE CONTROLLER AND POWER SUPPLIES

24VDC INDOOR CONSTANT VOLTAGE POWER SUPPLIES WITH DMX DRIVERS

REV 12.08.20



## DESCRIPTION:

The Dynamic/Tunable White (**2K4K or 27K6**) Touch Controller offers fast and accurate Color Temperature adjustment and the ability to regulate the Brightness Independently. The modern Glass faceplate features illuminated indicators, and a back-lit night light that softly illuminates the controller when powered off. Designed for Dynamic/Tunable White, and dual-color LED installations within a single zone. The two Vertical Touch sliders are precise and sensitive, allowing you to fine-tune your perfect Color Temperature at any point between **2000K** (Sunset) to **4000K** (Cool White) or from **2700K** (Incandescent White) to **6500K** (Daylight White) while selecting over 250 levels of Brightness in a smooth, uninterrupted transition. Create Thousands of Dynamic White Color Combinations while maintaining even Brightness and overall saturation. Easily save three pre-set scenes for different times of the day. Support health, performance, and general well-being using Human-Centric lighting by fine-tuning the biological effects that light has on the circadian cycle using the latest in LED technology. Includes a power adapter that fits behind the controller within a standard junction box and fits inside a standard single-gang receptacle (not for use in a multi-gang box). Use with an insulated, 24 AWG stranded, tinned copper wire (Belden #9841). Power Supplies are Sold Separately. Includes a 5 year pro-rated warranty.

## APPLICATIONS:

Indoor

## OUTPUT SIGNAL:

USITT DMX 512 (1990)

## INSTALLATION:

Fits in a single gang 2.5 inch deep junction box. Not compatible with multi-gang boxes.

## LABELS:





ROHS, FCC, Damp Location, ETL/UL

## POWER INPUT:

120-240VAC

Product	Type	Finish
<b>CDMX1</b>	<b>2XK</b>	<b>WH</b>
CDMX1 DMX Single Zone Touch Controller	2XK Tunable White	WH White

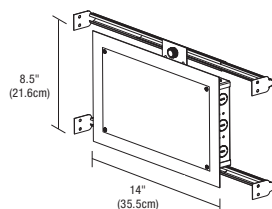
## DYNAMIC COLOR CHANGING (DMX) POWER SUPPLIES & RECOMMENDED CONTROLLERS\*

ORDERING CODE	PSB-100W-24VDC-2XK	PSB-2X100W-24VDC-2XK	PSB-3X100W-24VDC-2XK	PSB-4X100W-24VDC-2XK
				
SPECIFICATIONS				
MAXIMUM LOAD OF LED STRIP LENGTH	100W 5 WATTS - 20FT MAX. 10 WATTS - 10FT MAX.	2X100W 5 WATTS 2 X 20FT MAX. 10 WATTS - 2 X 10FT MAX.	3X100W 5 WATTS 3 X 20FT MAX. 10 WATTS - 3 X 10FT MAX.	4X100W 5 WATTS 4 X 20FT MAX. 10 WATTS - 4 X 10FT MAX.
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC
DIMENSIONS	12.4" X 6.48" X 2.18"	14" X 10" X 3"	17" X 10" X 3"	17" X 10" X 3"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2
IN-WALL MOUNTING	PSB-100W-24VDC-2XK-IW	NA	NA	NA
DMX DYNAMIC/TUNABLE WHITE DIMMING & CONTROLS				
TUNABLE WHITE TOUCH CONTROLLER (CDMX1-2XK)	•	•	•	•

- Flicker free dimming
- Aluminum casing for optimal heat dissipation
- Isolated output power per NEC and UL safety requirements
- UL & ETL recognized/ listed, meets UL 8750, 1310 requirements

- Auto-reset; short circuit, overload and thermal protection
- Class 2 power supply
- Efficient, High power factor > 0.90

## IN WALL MOUNTING OPTIONS



**8.5 x 14 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.




**Ordering Codes:** PSB-100W-24VDC-2XK-IW

PROJECT	FIXTURE TYPE	DATE
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# INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES

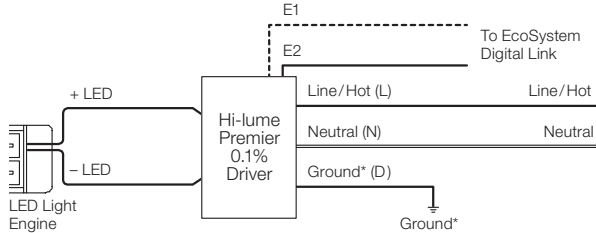
24VDC, LUTRON ECOSYSTEM

REV 12.08.20

LUTRON HI-LUME® PREMIER .1% ECOSYSTEM®†			
ORDERING CODES	L3D0-96W24V-U	2-WIRE ECOSYSTEM LTEA4U1UKL-CV240	3-WIRE ECOSYSTEM L3DA4U1UKL-CV240
			
SPECIFICATIONS			
MAXIMUM LOAD	96W	5W-40W	5W-40W
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC
DIMENSIONS	10.5" X 5.5" X 2"	4" X 4.89" X 2.62"	4" X 4.89" X 2.62"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2
DIMMING AND CONTROLS			
RADIO RA2	•	•	•
HOMEWORKS QS	•	•	•
PHPM-3F-120	•	•	•
PHPM-3F-DV	•	•	•
BCI-0-10	•	•	•

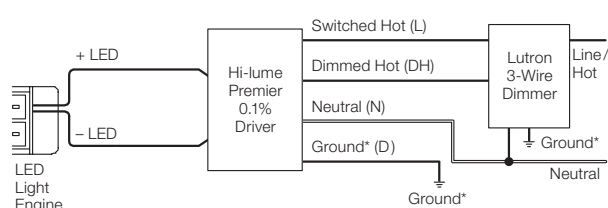
†24K - 57K color temperatures are compatible with 0-10V, ELV, and Lutron Hi-lume® Power Supplies. Warm Dim (27D, 30D) color temperatures are only compatible with ELV power supplies.

2-Wire EcoSystem Wiring Diagram



LTEA4U1UKL-CV240

3-Wire Wiring Diagram



L3DA4U1UKL-CV240




PROJECT		FIXTURE TYPE		DATE	
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# INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES

24VDC, LUTRON ECOSYSTEM

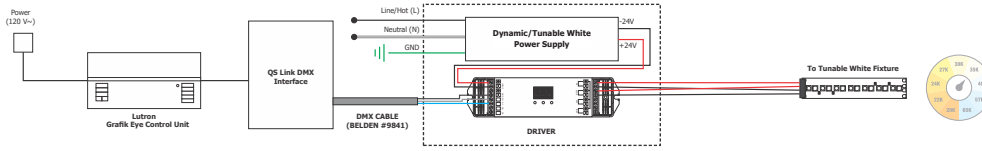
REV 12.08.20

Dynamic/Tunable White uses one or two power supplies, dependent on the controller or dimmer(s) used. Lutron Hi-Lume® can be used in both single or dual power formats, dependent on the controller or dimmer(s).

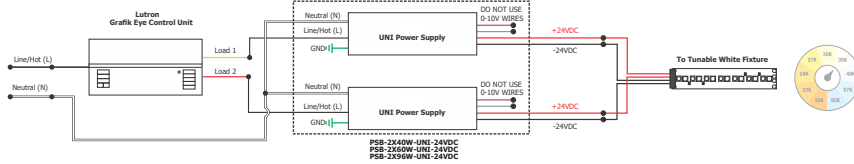
LUTRON HI-LUME® PREMIER .1% ECOSYSTEM®†			
ORDERING CODES	L3D0-96W24V-U	2-WIRE ECOSYSTEM LTEA4U1UKL-CV240	3-WIRE ECOSYSTEM L3DA4U1UKL-CV240
			
SPECIFICATIONS			
MAXIMUM LOAD	96W	5W-40W	5W-40W
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC
DIMENSIONS	10.5" X 5.5" X 2"	4" X 4.89" X 2.62"	4" X 4.89" X 2.62"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2
DIMMING AND CONTROLS			
RADIO RA2	•	•	•
HOMEWORKS QS	•	•	•
PHPM-3F-120	•	•	•
PHPM-3F-DV	•	•	•
BCI-0-10	•	•	•

\*Tunable White Color Temperature is compatible with 0-10V, ELV, DMX, and Lutron Hi-Lume® Power Supplies.

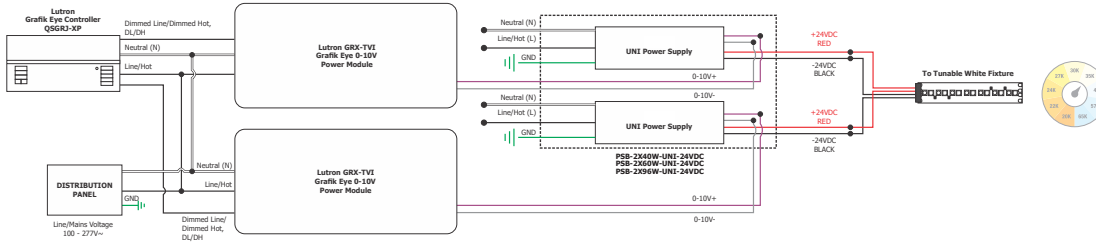
## WIRING DIAGRAM: DMX Control with Lutron Grafik Eye Control Unit



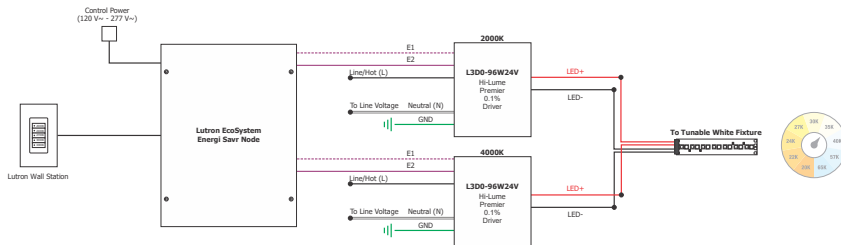
## WIRING DIAGRAM: Line Voltage Dimming with Lutron Grafik Eye Control Unit



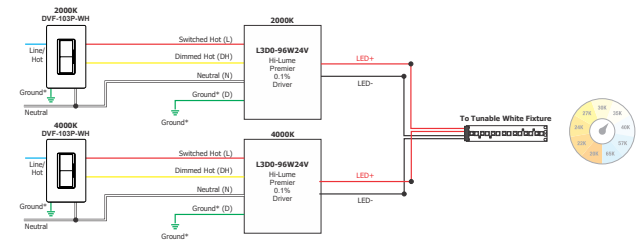
## WIRING DIAGRAM: 0-10V Dimming with Lutron Grafik Eye Control Unit or Wall box controller



## WIRING DIAGRAM: 2-Wire EcoSystem Panel



## WIRING DIAGRAM: 3-Wire EcoSystem Wall Box



PROJECT	FIXTURE TYPE	DATE
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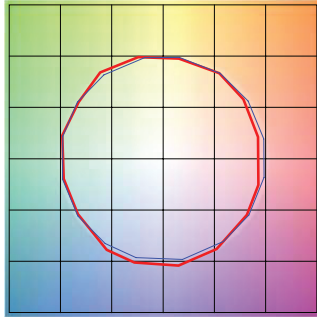
# LED STRIP TM30 DATA

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

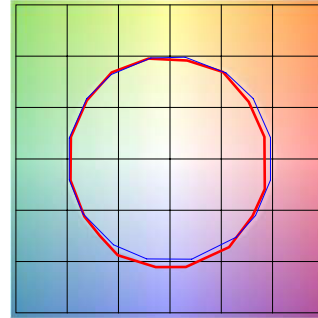


■ Test ■ Reference

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

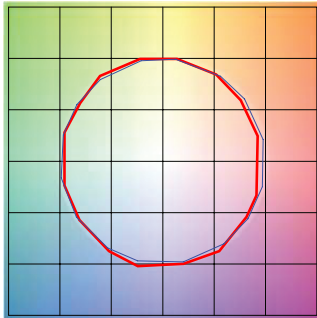


■ Test ■ Reference

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

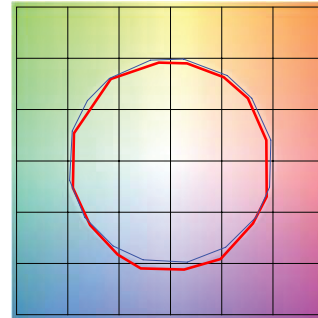


■ Test ■ Reference

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

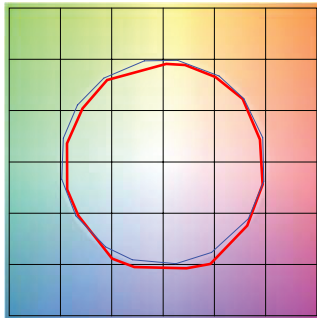


■ Test ■ Reference

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

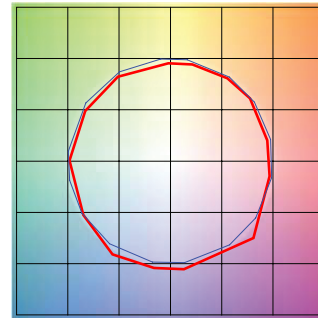


■ Test ■ Reference

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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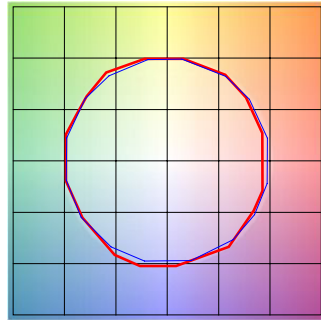
# LED STRIP TM30 DATA

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.

**2700D** | Rf: 90.7 | Rg: 101.1

Color Vector Graphic

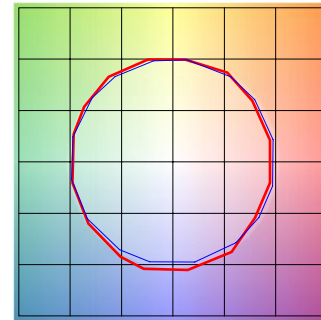


■ Test ■ Reference

HUE BIN	Rf	GRAPHIC SHIFTS %	
		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%

**3000D** | Rf: 90.6 | Rg: 101.1

Color Vector Graphic

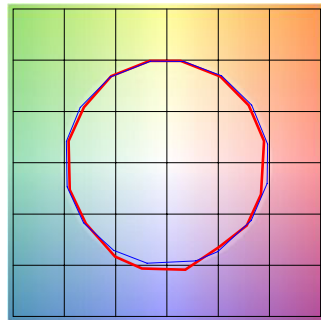


■ Test ■ Reference

HUE BIN	Rf	GRAPHIC SHIFTS %	
		CHROMA	HUE
1	91.5	-3.5%	1.3%
2	92.2	-1.8%	3.0%
3	89.3	0.5%	4.8%
4	92.7	-1.1%	0.6%
5	93.3	0.5%	1.4%
6	93.8	2.7%	-0.8%
7	91.2	-2.1%	-0.2%
8	97.0	-0.5%	-0.7%
9	92.5	-0.7%	3.8%
10	88.3	0.9%	7.1%
11	87.5	3.9%	7.6%
12	88.2	6.2%	-0.2%
13	89.9	3.4%	-6.0%
14	86.9	4.4%	-8.5%
15	91.9	-1.9%	-2.9%
16	84.7	-1.3%	-10.6%

**2000K ONLY (2K4K)** | Rf: 90.6 | Rg: 98.5

Color Vector Graphic

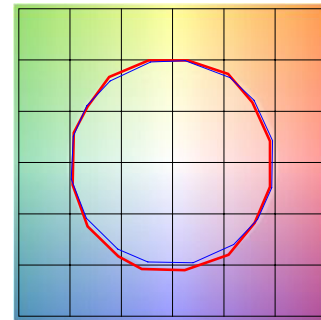


■ Test ■ Reference

HUE BIN	Rf	GRAPHIC SHIFTS %	
		CHROMA	HUE
1	87.7	-5.5%	1.2%
2	88.7	-3.9%	4.2%
3	90.5	-1.5%	4.3%
4	95.0	-1.7%	0.8%
5	95.2	-0.2%	2.1%
6	94.2	1.6%	1.9%
7	95.9	-0.8%	-2.2%
8	95.5	-1.7%	1.3%
9	93.8	-1.4	2.6%
10	91.9	-0.7%	4.2%
11	91.3	3.6%	3.7%
12	91.2	4.2%	-1.0%
13	86.6	3.8%	-12.7%
14	67.2	-3.0%	-16.3%
15	84.9	-3.3%	-9.4%
16	84.2	-5.7%	-7.5%

**3000K (2K4K)** | Rf: 90.5 | Rg: 100.7

Color Vector Graphic

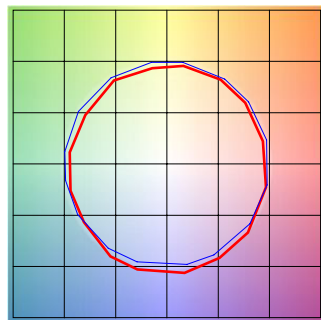


■ Test ■ Reference

HUE BIN	Rf	GRAPHIC SHIFTS %	
		CHROMA	HUE
1	91.5	-3.5%	1.2%
2	92.4	-1.8%	2.7%
3	89.8	0.3%	4.5%
4	92.4	-1.7%	0.4%
5	93.3	-0.1%	1.4%
6	94.5	2.1%	-0.6%
7	91.0	-2.5%	0.3%
8	96.9	-0.8%	-0.2%
9	91.6	-0.9%	4.6%
10	86.7	0.7%	7.8%
11	86.3	3.8%	8.5%
12	88.3	6.1%	0.6%
13	90.9	3.1%	-5.2%
14	87.3	4.7%	-7.9%
15	92.1	-1.9%	-2.5%
16	84.5	-0.9%	-10.9%

**4000K ONLY (2K4K)** | Rf: 86.4 | Rg: 96.1

Color Vector Graphic



■ Test ■ Reference

HUE BIN	Rf	GRAPHIC SHIFTS %	
		CHROMA	HUE
1	86.5	-5.5%	1.3%
2	90.4	-3.0%	2.3%
3	89.8	-2.1%	3.6%
4	89.1	-3.4%	0.4%
5	88.5	-5.9%	0.1%
6	93.6	-3.0%	-0.4%
7	88.9	-6.2%	1.7%
8	87.3	-5.0%	4.9%
9	82.4	-3.6%	11.3%
10	77.4	-1.8%	12.7%
11	79.8	4.9%	11.4%
12	88.7	4.4%	2.7%
13	88.7	4.0%	-5.1%
14	91.2	2.2%	-3.8%
15	82.7	-0.1%	-9.2%
16	82.8	-2.2%	-7.6%

PROJECT		FIXTURE TYPE		DATE	
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