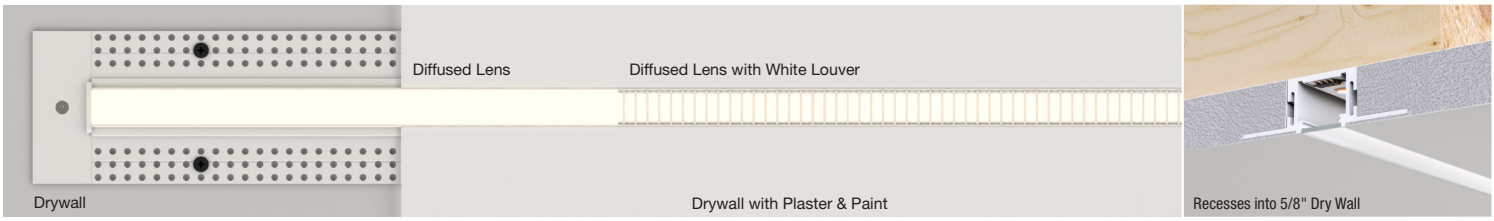
TRULINE .5A TRUCOLOR™ RGB & TUNABLE WHITE

24VDC 5/8" DRYWALL PLASTER-IN LED SYSTEM, 5 CHANNEL CONTROL

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 06.16.23



DESCRIPTION

Truline .5A with **TruColor**™ **RGBTW** light engine is another original and innovative design that comes from the family of Plaster-in 24VDC systems pioneered by PureEdge that recesses within 5/8" drywall, without any framing modification required. Redefining the relationship between Lighting and Interior Design, this innovative and highly efficient system blends seamlessly into the drywall, becoming part of the architecture. The Power Feeds included with this fixture contains a 5 channel WiZ Pro CV Bridgebox allowing for wireless control of the Truline luminaire with the WiZ Pro software suite and Pure Smart Wi-Fi Room Controller. The slim extrusions, LED strips, and lenses are field-cuttable and ordered in 1' increments (up to 20' before re-feeding). Multiple runs of channel mount flawlessly together providing smooth and glare-free general illumination using designer-grade color rendering LEDs (95+ CRI). With the ability to run in vertical, horizontal, and diagonal directions, the compositions are truly endless. TruLine .5A Plaster-in LED System is offered in multiple color temperatures and wattage options. Click here for all Other Color Temperatures. Includes a 5-year pro-rated warranty. For custom quotes and layout assistance, send your drawings and ideas to our design team: design@PureEdgeLighting.com.

DESIGN NOTE

TruLine .5A can be installed on a single surface, join runs on multiple planes from wall to ceiling, or from one wall to an adjacent wall. Use TruLine .5A Do-It-Yourself **(DIY)** with pre-formed components to create desired configurations, including Mitered Picture Frame and Outside or Inside Corners for room wrapping installations. Create square or rectangular compositions with TruQuad .5A.

ORDERING & INSTALLATION

TruLine .5A can be secured to studs spaced 13"-24" apart or between studs with provided mounting straps. Requires Remote Power Supply PSBR-96W-24VDC (ordered separately) Order in 1' increments, field-cuttable to any length.

APPLICATIONS

Designed for any indoor space with drywall, including damp locations. Ideal applications in residential, commercial, retail, and hospitality projects.

SPECIFICATIONS

- 24VDC
- 5W5: 5W RGB & 5W Tunable White, 5 watts total per foot
- 5W7: 5W RGB & 7W Tunable White, 7 watts total per foot

MAXIMUM LENGTHS BEFORE RE-FEEDING

- 5W5 – Pure Smart™ WiZ Pro: 20ft
- 5W7 – Pure Smart™ WiZ Pro: 12ft

TRUCOLOR™ RGB & TUNABLE WHITE LIGHT ENGINE

Pure Smart **TruColor**™ technology uses five channels of tunable LEDs, composed of **RGBTW** red, blue, green, and Tunable White (**1500K-6500K**). With our precision-engineered, proprietary color mixing, we produce one of the widest, most accurate spectrums available, giving our customers access to the warm glow of the sunset (1500K-2400K golden hour) to the pure white light of the mid-day sun (5700K) and everything in between. **TruColor**™ LED's achieve an average CRI-Color Rendering Index of 94+ and a Duv of +-.0020 in relation to the blackbody curve at any point on the spectrum of tunable white CCT. Dynamic Color Changing functionality provides millions of possibilities for intricate customization, rich saturated secondary colors, and unprecedented ease of installation, making **RGBTW** the ideal choice for residential and commercial applications. **TruColor**™ **RGBTW** adds more than just decorative flexibility; it also helps to support a healthy Circadian Rhythm and well-being. Let **TruColor**™ transform your space and the people within it. **TruColor**™ **RGBTW** is optimized for control with WiZ Pro Wi-Fi based smart control system.

LUMEN PERFORMANCE

- **TruColor**™ **RGBTW** Red, Green, and Blue with Tunable White (**1500K-6500K**)
- 5W5 226LM/FT 5W @3000K
- 5W7 330LM/FT 7W @3000K

AVERAGE PERFORMANCE 2000K-5500K

- Average CRI (5W7): 97+
- Average DUV (5W7): +-0.0002
- Average R9: 91, Rg: 102, Rf: 93
- Average life: 50,000 hours

REMOTE POWER SUPPLIES, DIMMERS & CONTROLS (SOLD SEPARATELY)

24VDC, Class 2 wiring

- Pure Smart™ WiZ Pro PSBR Power Supplies

Pure Smart™ PSBR Power Supply for Remote Bridgebox is developed to support Pure Smart TC TruColor RGBTW luminaires connected by WiZ Pro.

- Pure Smart™ Wi-Fi Controller

Features ON/OFF buttons, CCT and brightness control as well as four preset/custom scenes programmable in the WiZ app. Communicates via 2.4GHz Wi-Fi. No Hub needed. Voice control with Goggle Assistant, Alexa, Siri, Shortcuts, and IFTTT

COMPLIANCE

ETL, RoHS, Class 2, Damp Location, Made in USA.

PureEdge is the Original Designer of 5/8" Drywall Lighting Products with the Most Experience in the industry.

System	Watts Per Foot	Control System	Length in Feet	Color Temperature
TL.5A	**5W5**	**WZ**	**16FT**	**TC**
TL.5A TruLine .5A **TL.5AW** TruLine .5A with White Louver	**5W5** TruColor™ 5 watts RGB & 5 watts Tunable White **5W7** TruColor™ 5 watts RGB & 7 watts Tunable White	**WZ** WiZ Pro Connected CV Smart Bridgebox (included)	**1-20FT** 1-20 feet **1-12FT** 1-12 feet	**TC** TruColor™ RGBTW, Red, Blue, Green & Tunable 1500K-6500K

PROJECT		FIXTURE TYPE		DATE	

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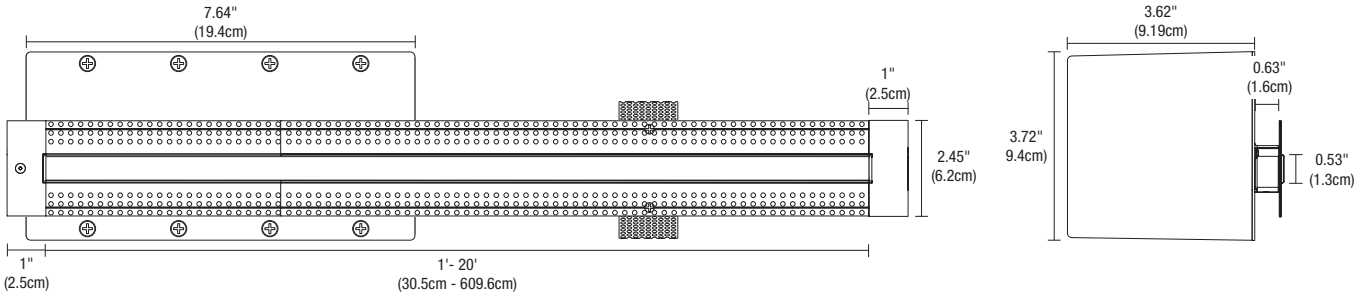
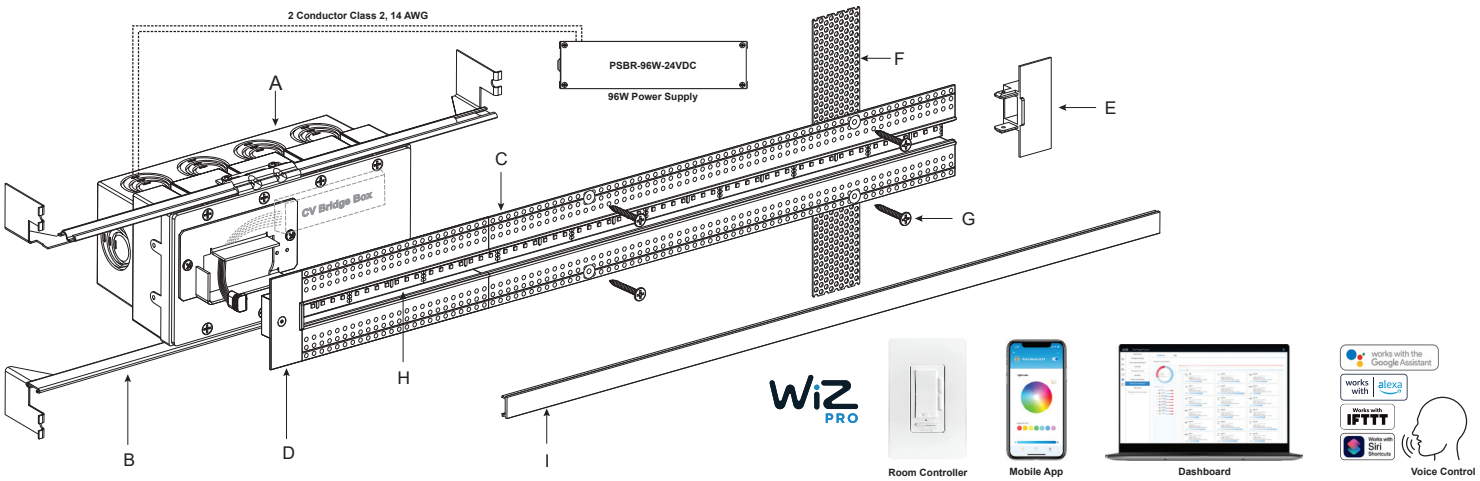
NOMINAL DELIVERED LUMENS

DESCRIPTION	**S5W5 5W RGB & 5W TUNABLE WHITE**									**S5W7 5W RGB & 7W TUNABLE WHITE**									
WATTS PER FOOT	**5W Maximum**									**7W Maximum**									
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	57K	65K	20K	22K	24K	27K	30K	35K	40K	57K	65K	
LUMENS PER FOOT (lm/ft)	107	161	195	219	226	239	258	181	167	132	221	284	322	330	348	341	200	181	
LUMENS PER WATT (lm/w)	73	35	88	52	53	103	61	116	69	40	57	46	54	54	57	58	58	60	
CRI	91.8	93.8	94.5	94.9	95.5	96.9	97.2	92.1	89.8	93	95	96	97	97	98	97	95	93	
Duv	-0.004	-0.0012	-0.0034	-0.0058	-0.0055	-0.0033	-0.0014	-0.0049	-0.0063	-0.0030	0.0002	0.0030	0.0030	0.0030	0.0009	0.0000	0.0030	0.0030	
Rf	91	93	94	94	95	94	94	92	90	92	93	95	95	95	95	94	92	91	
Rg	105	101	103	105	104	102	100	102	103	104	100	102	103	103	101	100	102	103	
R9	90	90	90	94	97	97	91	81	70	91	90	90	94	95	93	93	79	67	
R13	92	94	95	95	94	96	99	90	87	92	95	96	96	97	99	99	91	88	
R15	99	99	99	98	97	97	97	89	85	99	99	99	99	99	98	97	90	85	
WATTS/FOOT	2.7	4.55	4.35	4.25	4.25	4.35	4.2	2.95	2.4	3.35	3.85	6.15	5.95	6.15	6.15	5.84	3.45	3	

To determine the necessary wire gauge use our Voltage Drop Calculator



INCLUDED COMPONENTS: Pure Smart/WiZ Pro Controlled



A. 4 GANG JUNCTION BOX WITH CV BRIDGE BOX TL.5A-WZ-EP4G-RGBTW (INCLUDED)
Mounts to the framing with the included Adjustable Mounting Bars. 24VDC, Class 2, low voltage wires from PSBR Remote Power Supply connect to input wires on the CV Bridgebox inside the j-box. Low Voltage 24VDC wires from Remote Power Supply connect to input wires from bridgebox wires inside box. Junction Box opening is covered by the included mounting plate and channel. Junction box is necessary for electrical rough-in prior to Truline channel installation. Junction Box and CV Bridgebox are included with each Truline RGBTW complete fixture.

B. ADJUSTABLE MOUNTING BARS
Provide flexibility for mounting in a variety of spaces and orientations. May be secured to studs that are spaced 13"-24" apart.

C. TRULINE .5A CHANNEL
5/8" deep extrusion houses single row of LED Strip.

D. POWER END CAP
Provides a finished look and prevents light leak at the feed-end of a run where LED Strip enters channel.

E. TAKE-UP BOX
Prevents dark spots at the end of a run by tucking excess LED Strip safely behind the wall.

F. MOUNTING STRAP
Secures channel to drywall when wall stud is unavailable.

G. DRYWALL SCREW
Secures channel to drywall and stud.

H. LED STRIP
Your selection of LED Strip CCT.

I. LENS
0.5" wide diffused white lens projects a clean line of light without pixelation.

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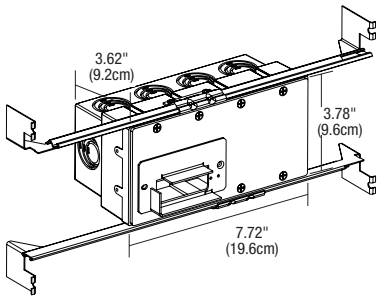


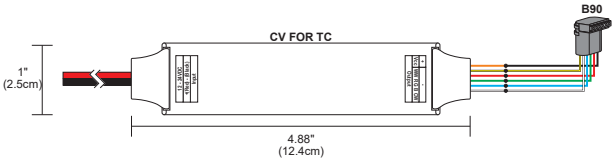
PURE SMART 4 GANG JUNCTION BOX WITH MOUNTING PLATE (INCLUDED WITH TL.5A COMPLETE FIXTURE ORDERING CODE)

Includes a 4 gang Junction Box with adjustable bar hangers. This part can be quick shipped if needed for rough in. Two Class 2, 14 AWG stranded conductors from remote located power supply to 4 gang Junction Box.

System		Type
TL.5A	–	1RE4G

TL.5A TruLine .5A

1RE4G 1" Rectangle End Feed with 4 Gang Junction Box



PURE SMART/WIZ PRO CV BRIDGEBOX

WiZ Pro CV Bridgeboxes are included with TruLine .5A RGBTW ordering codes. The part numbers below are to be used for replacement only. Pure Smart/WiZ Pro CV Bridgeboxes are pre-programmed with Pure Smart app icons, and proprietary color mixing for tunable white and RGBTW.

Type		Type		Component		Color Temperature Options		System
BR	–	B90	–	CV96W	–	TC5W5	–	RL

BR Bridgebox

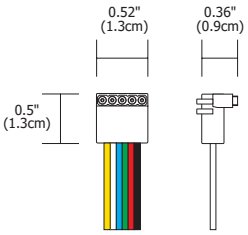
B90 90° Connector

CV96W Slim Profile WiZ Bridgebox

TC5W5 TruColor™ RGBTW 5 watts RGB & 5 watts Tunable White

TC5W7 TruColor™ RGBTW 5 watts RGB & 7 watts Tunable White

RL Recessed Linear



RGBTW B90 Connector

B90 CONNECTORS

B90 Connectors are supplied with End Power Components. The ordering code below is to be used for replacements only.

System		Type		Component		Color Temperature Options
LC	–	PFE	–	B90	–	RGBTW

LC LED Connector

PFE Power Feed

B90 Bends 90°

RGBTW TruColor™ RGBTW (RGB + Tunable White 1500k-6500K)

LENGTH LOAD CHART

5W5 WATTS PER FOOT			
Length In Feet	RGB Wattage	Tunable White Wattage	Pure Smart™ WiZ Pro Wattage
1	5	5	5
2	10	10	10
3	15	15	15
4	20	20	20
5	25	25	25
6	30	30	30
7	35	35	35
8	40	40	40
9	45	45	45
10	50	50	50
11	55	55	55
12	60	60	60
13	65	65	65
14	70	70	70
15	75	75	75
16	80	80	80
17	85	85	85
18	90	90	90
19	95	95	95
20	100	100	100

5W7 WATTS PER FOOT			
Length In Feet	RGB Wattage	Tunable White Wattage	Pure Smart™ WiZ Pro Wattage
1	5	7	7
2	10	14	14
3	15	21	21
4	20	28	28
5	25	35	35
6	30	42	42
7	35	49	49
8	40	56	56
9	45	63	63
10	50	70	70
11	55	77	77
12	60	84	84

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LED STRIP TM30 DATA

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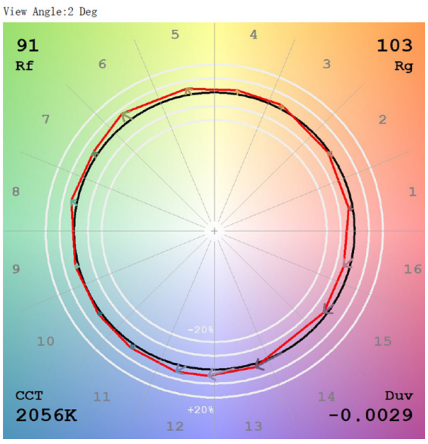
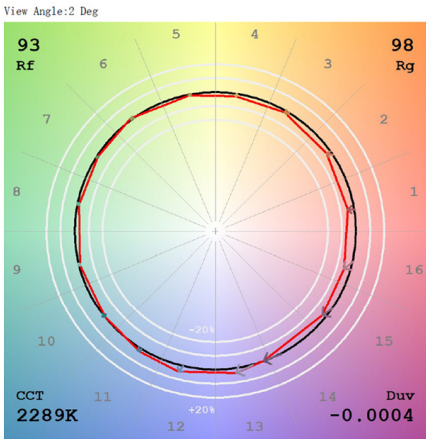
TM-30-15 DATA: The data below is for TruColor™ RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

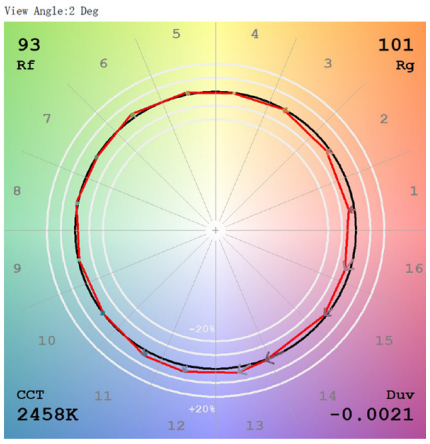
2000K (TruColor™ RGBTW)



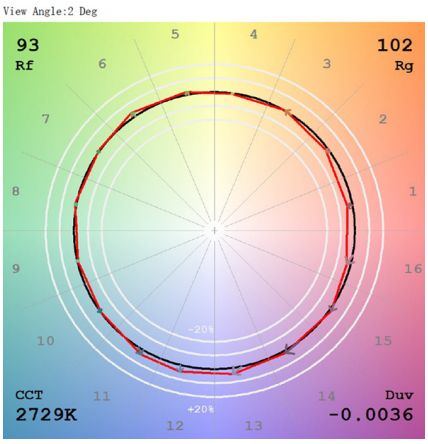
2200K (TruColor™ RGBTW)



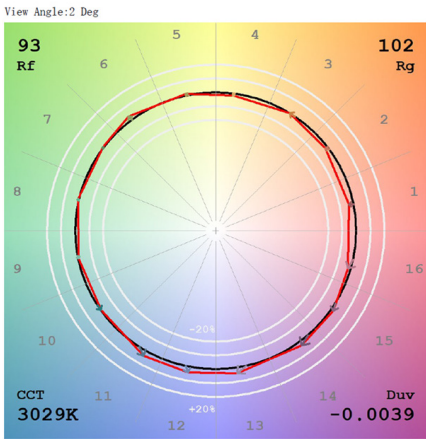
2400K (TruColor™ RGBTW)



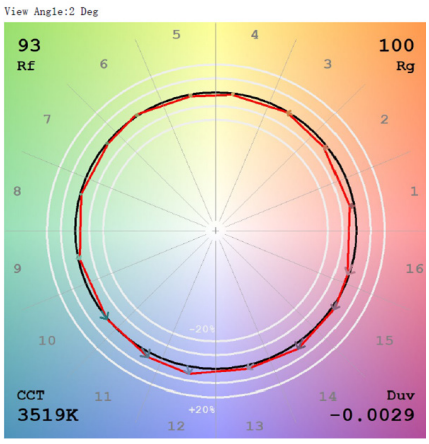
2700K (TruColor™ RGBTW)



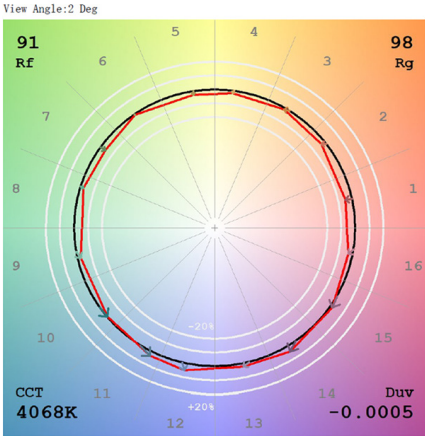
3000K (TruColor™ RGBTW)



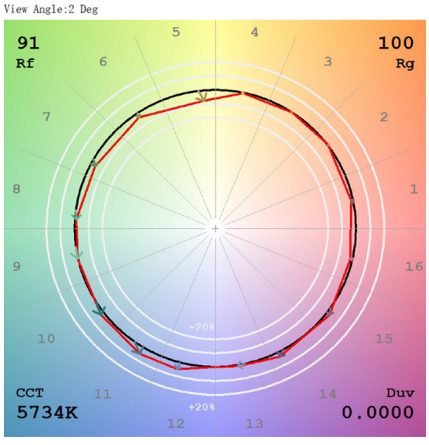
3500K (TruColor™ RGBTW)



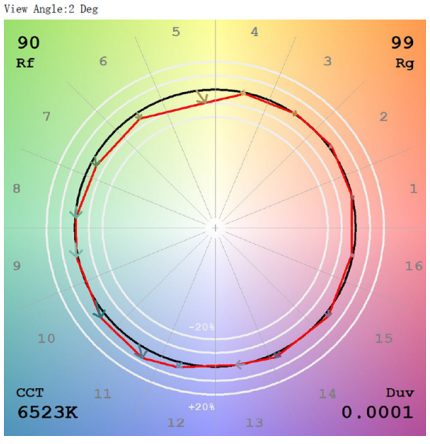
4000K (TruColor™ RGBTW)



5700K (TruColor™ RGBTW)



6500K (TruColor™ RGBTW)



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