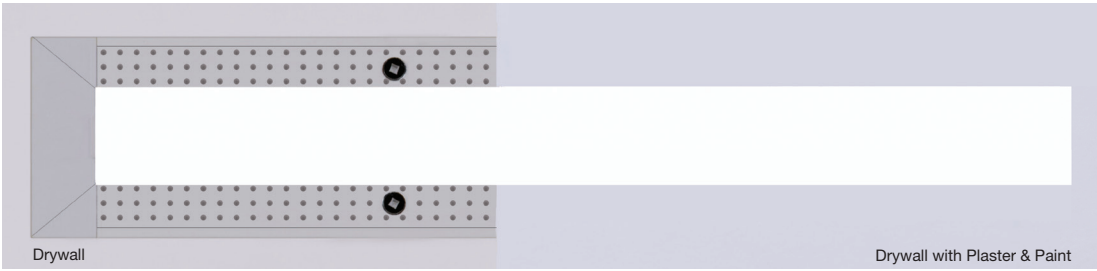
TRULINE 1.6A TRUCOLOR™ RGB & TUNABLE WHITE

24VDC, 5/8” DRYWALL PLASTER-IN LED SYSTEM

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 06.16.23



Drywall

Drywall with Plaster & Paint

Recesses into 5/8" Dry Wall

Let the Drywall Be Your Canvas

DESCRIPTION

Truline 1.6A 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 1.6A 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 1.6A Build-It-Yourself **(BIY)** 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 1.6A.

ORDERING & INSTALLATION

Truline 1.6A may be secured to studs spaced 13"-24" apart or between studs with provided mounting straps. Order in 1' increments, field-cuttable to any length. Requires Remote Power Supply PSBR-96W-24VDC(ordered separately).

SPECIFICATIONS

- 24VDC
- ~~5W5~~: 2x5W RGB & 2x5W Tunable White, 10 watts/ft ~~total~~
- ~~5W7~~: 2x5W RGB & 2x7W Tunable White, 14 watts/ft ~~total~~

MAXIMUM LENGTH BEFORE RE-FEEDING

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

APPLICATIONS

Designed for any indoor space with drywall construction. Ideal applications in residential, commercial, retail, and hospitality environments.

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~~ 578 LM/FT 2x5W @3000K
- ~~5W7~~ 963LM/FT 2x7W @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, Class 2, RoHS, Damp Location, Made in USA.

For quick & easy reference, plus the most up-to-date pricing, use our Truline 1.6A Configurator

System	Watts Per Foot	Control System	Length in Feet	Color Temperature
TL1.6A	~~5W5~~	WZ	20FT	TC

TL1.6A TruLine 1.6A

5W5 2x5watts RGB & 2x5 watts Tunable White
SW7 2x5watts RGB & 2x7 watts Tunable White

WZ WiZ Pro Connected CV Smart Bridgebox Included

1-20FT
1-12FT

TC TruColor RGBTW, Red, Blue, Green Tunable 1500K-6500K

PROJECT		FIXTURE TYPE		DATE	

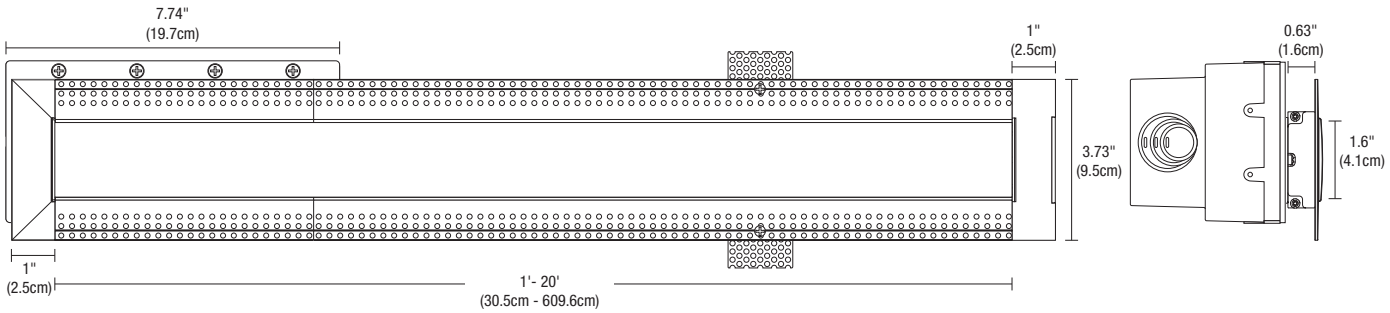
TRULINE 1.6A TRUCOLOR™ RGB & TUNABLE WHITE

24VDC, 5/8” DRYWALL PLASTER-IN LED SYSTEM

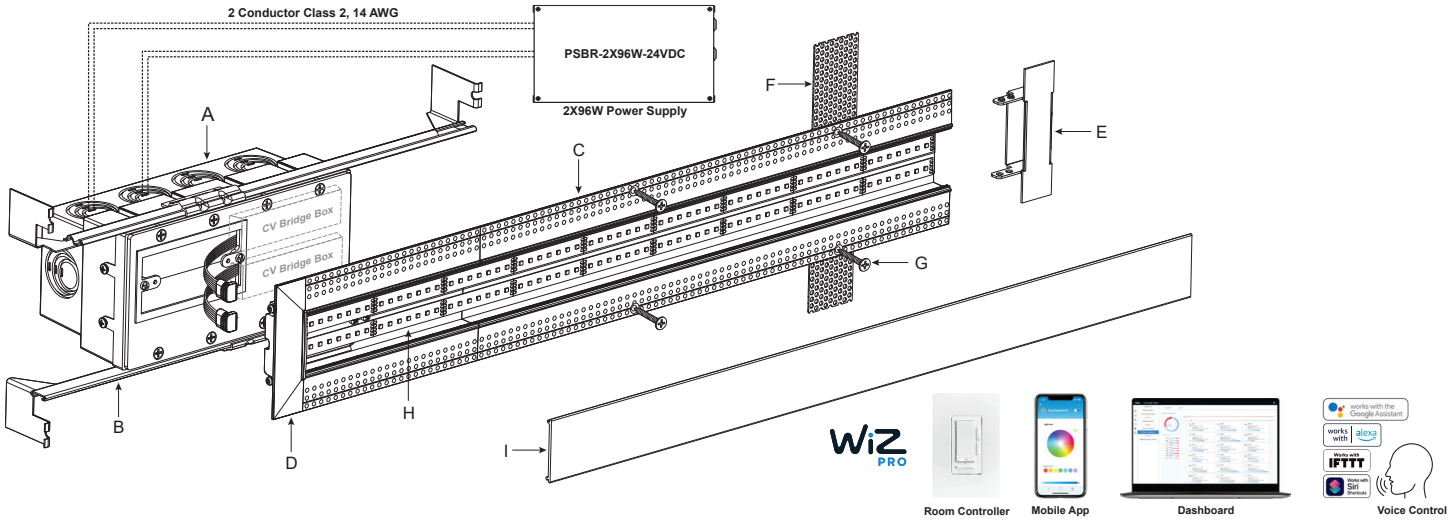
REV 06.16.23

NOMINAL DELIVERED LUMENS

DESCRIPTION	5W5 5W RGB & 5W TUNABLE WHITE									5W7 5W RGB & 7W TUNABLE WHITE								
WATTS PER FOOT	5W Tunable White									7W Tunable White								
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)	274	411	499	559	578	610	658	462	426	338	564	724	822	843	888	870	511	463
LUMENS PER WATT (lm/w)	73	90	88	132	136	103	157	116	177	101	147	118	138	137	144	149	148	154
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



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. Contains ~~CV Bridgebox~~ which allows for wireless control with the WiZ Pro Software Suite or the Pure Smart Wi-Fi Room Controller. Junction Box opening is covered by the channel, and required at the beginning of each run.

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 1.6A CHANNEL
5/8" deep extrusion house for two rows of LED Strips.

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

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

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

G. DRYWALL SCREW
Secures channel to drywall and stud.

H. LED STRIPS
Your selection of LED Strip CCT. TruLine 1.6A comes with two LED Strips.

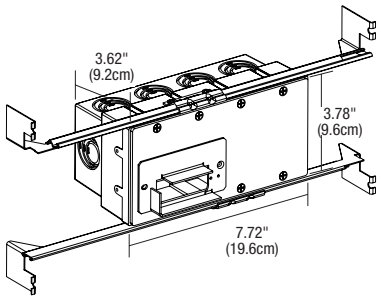
I. LENS
1.6" wide diffused white lens projects a clean line of light without pixelation.

PROJECT		FIXTURE TYPE		DATE	

TRULINE 1.6A TRUCOLOR™ RGB & TUNABLE WHITE

24VDC, 5/8” DRYWALL PLASTER-IN LED SYSTEM

REV 06.16.23



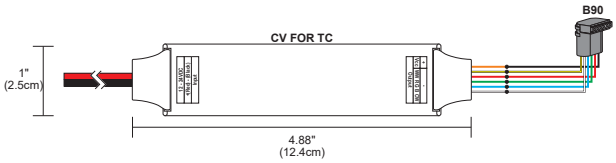
PURE SMART 4 GANG JUNCTION BOX WITH MOUNTING PLATE (INCLUDED WITH TL1.6A COMPLETE FIXTURE ORDERING CODE)

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
TL1.6A	–	1RE4G

TL1.6A TruLine 1.6A

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



PURE SMART/WIZ PRO CV BRIDGEBOX

WiZ Pro CV Bridgeboxes are included with TruLine 1.6A 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

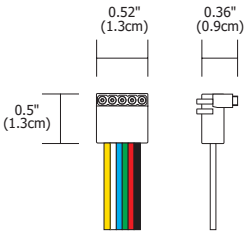
B90 90° Connector

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 CHARTS: To determine the necessary wire gauge use our Voltage Drop Calculator.

10 WATTS PER FOOT (2 X 5W)	
LENGTH IN FEET	WATTS
1	10
2	19
3	29
4	38
5	48
6	58
7	67
8	77

14 WATTS PER FOOT (2 X 7W)	
LENGTH IN FEET	WATTS
1	14
2	28
3	42
4	56
5	70
6	84

PROJECT		FIXTURE TYPE		DATE	

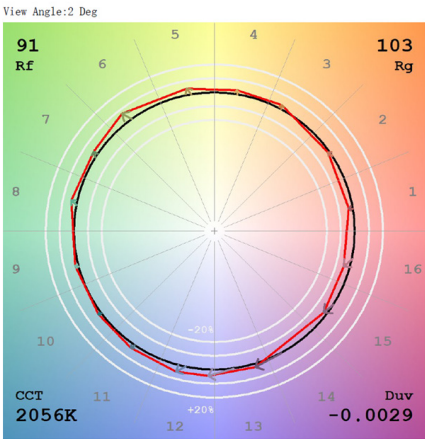
LED STRIP TM30 DATA

24VDC, 5/8” DRYWALL PLASTER-IN LED SYSTEM

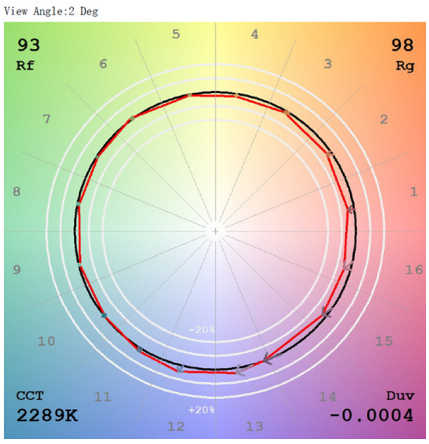
REV 06.16.23

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.

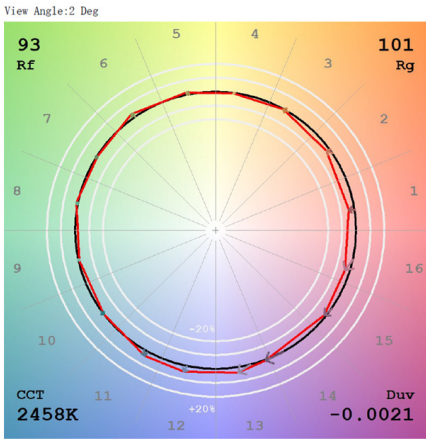
2000K (TruColor™ RGBTW)



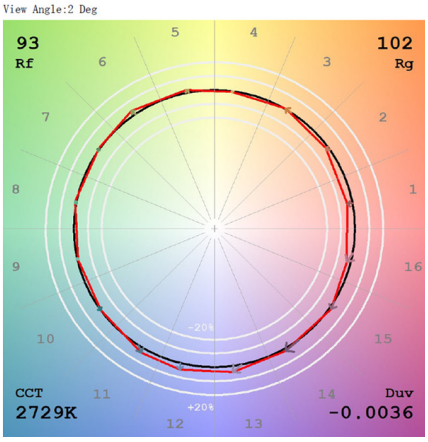
2200K (TruColor™ RGBTW)



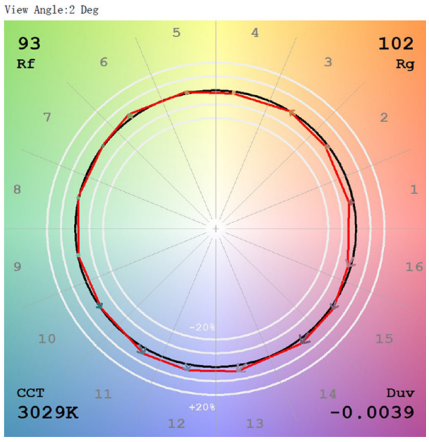
2400K (TruColor™ RGBTW)



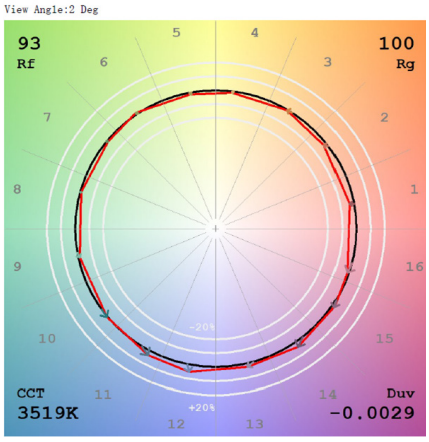
2700K (TruColor™ RGBTW)



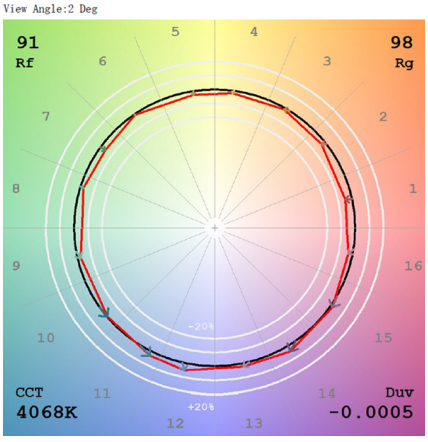
3000K (TruColor™ RGBTW)



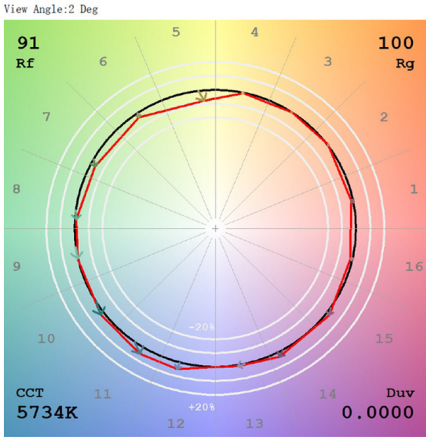
3500K (TruColor™ RGBTW)



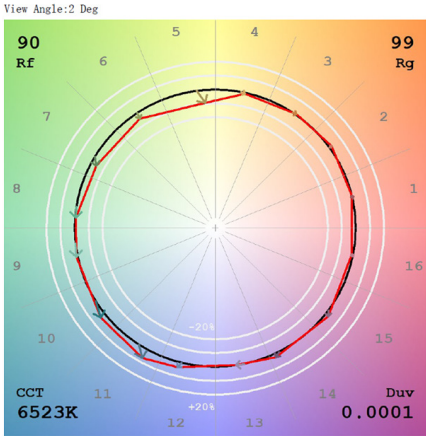
4000K (TruColor™ RGBTW)



5700K (TruColor™ RGBTW)



6500K (TruColor™ RGBTW)



PROJECT		FIXTURE TYPE		DATE	