TRULINE 1A DIGITAL TRUCOLOR™ DRGBTW

24VDC 5/8" DRYWALL PLASTER-IN LED SYSTEM, 5 CHANNEL CONTROL EVERY 4 INCHES

PURE EDGE Pure Smart Lighting

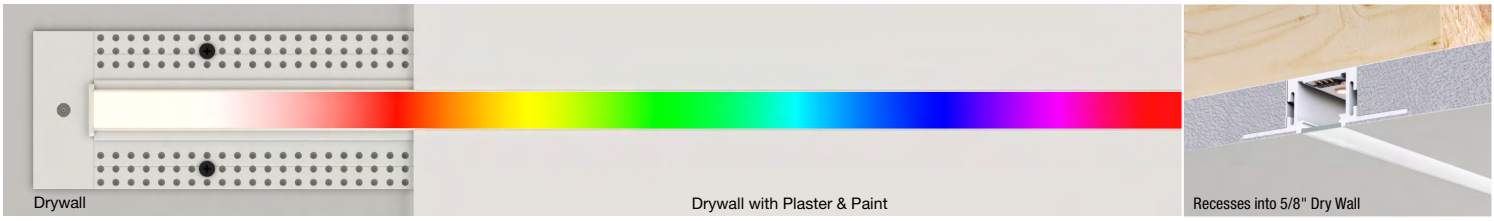
PROJECT

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DATE

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 08.25.26



DESCRIPTION

TruLine 1A with **Digital TruColor™ DRGBTW** 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 slim extrusions, LED strips, and lenses are field-cuttable and ordered in 1' increments (up to 20' before re-feeding), power feeds included. Multiple runs of channel mount flawlessly together providing smooth and glare-free general illumination using designer-grade color rendering LEDs (96+ CRI). With the ability to run in vertical, horizontal, and diagonal directions, the compositions are truly endless. TruLine 1A 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 1A 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 1A 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 1A can be secured to studs spaced 13"-24" apart or between studs with provided mounting straps. Requires Remote Power Supply PSB-100W-24VDC-DRGBTW (ordered separately). Order in 1' increments, field-cuttable to any length.

FEATURES & BENEFITS

- Intelligent reverse connect protection, the power supply reverse connection does not damage the IC
- The control circuit and the LED share the only power source
- Integration with both DMX and WiZ (Pure Smart Wall Controllers) allowing for multiple control methods
- Individual control of segments or grouping segments, allowing multiple DMX channels per run
- Built-in electric reset circuit and power lost reset circuit
- Each pixel of the three primary color can achieve 256 brightness display, completed 16777216 color full color display
- TruColor™ support, allowing for 1500K-6500K
- Can change up to 120 times per second, allowing for more detailed effects
- Custom effect palette allowing for curated designs

SPECIFICATIONS

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

MAXIMUM LENGTHS BEFORE RE-FEEDING

- 5W – Pure Smart™ DRGBTW: 20ft

DIGITAL TRUCOLOR™ RGB & TUNABLE WHITE LIGHT ENGINE

Pure Smart **Digital TruColor**™ technology uses five channels with 4 inch control IC chips composed of **RGBTW** red, blue, green, and Tunable White (**1500K-6500K**). The **Digital TruColor**™ can easily switch between the TruColor white funtions and the unique pixel chasing effects with a click of a button. 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. **Digital TruColor**™ LED's achieve an average CRI-Color Rendering Index of 96+ and a Duv of +-.0015 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 **DRGBTW** the ideal choice for residential and commercial applications. **Digital TruColor**™ **DRGBTW** adds more than just decorative flexibility and cool chasing effects; it also helps to support a healthy Circadian Rhythm and well-being. Let **Digital TruColor**™ transform your space and the people within it.

LUMEN PERFORMANCE

- **Digital TruColor™ DRGBTW** Red, Green, and Blue with Tunable White (**1500K-6500K**)
- 5W 265LM/FT 5W @3000K

AVERAGE PERFORMANCE 2000K-5500K

- Average CRI (5W): 90+
- Average DUV (5W): +-0.0015
- Average R9: 91, Rg: 102, Rf: 93
- Average life: 50,000 hours

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

24VDC, Class 2 wiring

- PSB-DRGBTW-INT
- PSB-100W-DRGBTW-24VDC
- Color Touch Panel
- Pure Smart Room Controller 120V Wall Control
- Pure Smart Room Controller Battery

APPLICATIONS

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

COMPLIANCE

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

System		Watts Per Foot		Length in Feet		Color Temperature
TL1A	–	**5W**	–	**10FT**	–	**DRGBTW**
TL1A TruLine 1A		**5W** Digital TruColor™ 5 watts RGB & 5 watts Tunable White		**1-20FT** 1-20 feet		**DRGBTW** Digital TruColor™ RGBTW, Red, Blue, Green & Tunable 1500K-6500K and pixel chasing

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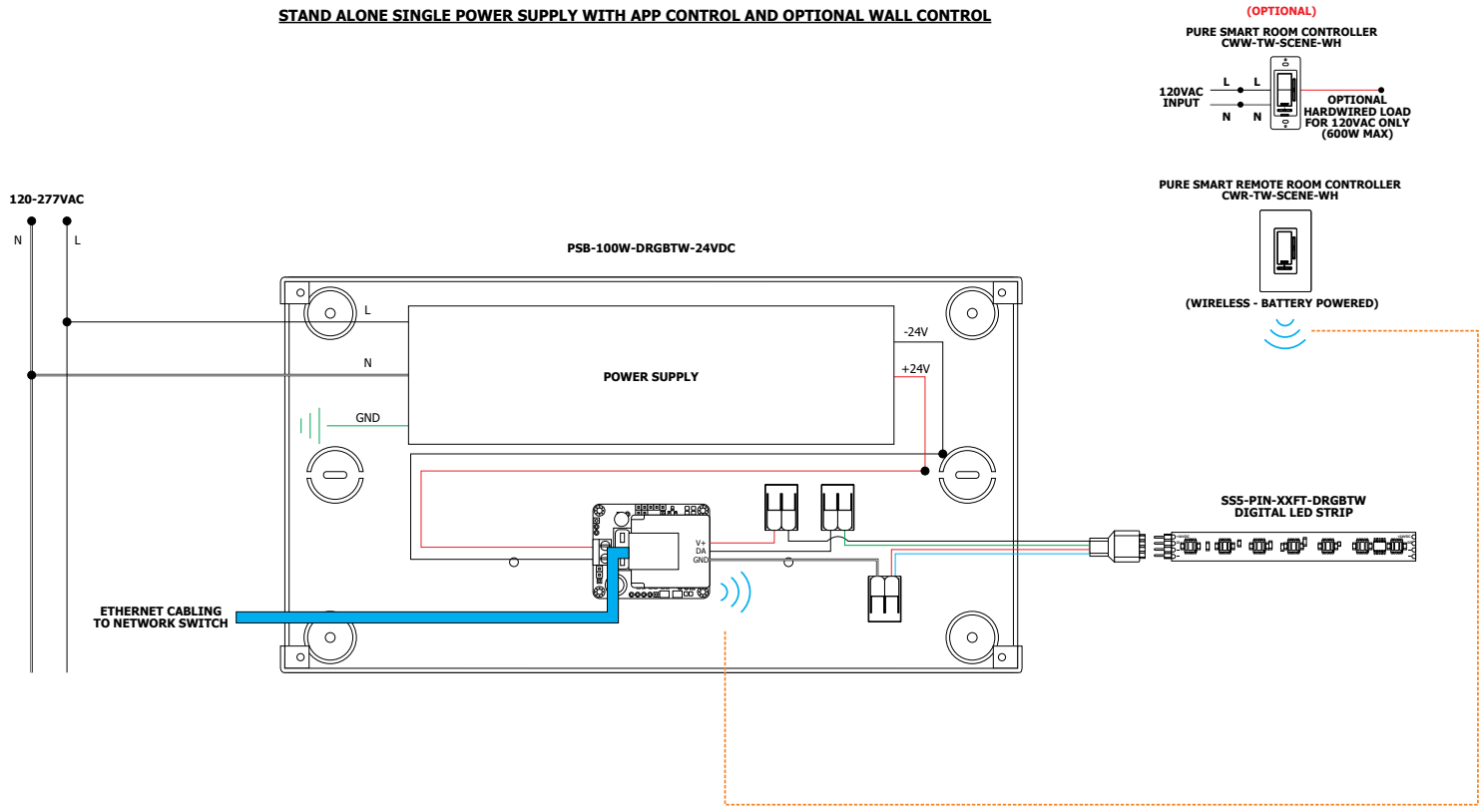
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NOMINAL DELIVERED LUMENS

DESCRIPTION	**5W RGB & 5W TUNABLE WHITE & DIGITAL**								
WATTS PER FOOT	**5W Maximum**								
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	57K	65K
LUMENS PER FOOT (lm/ft)	75	109	132	190	260	253	201	205	219
LUMENS PER WATT (lm/w)	27	33	37	45	51	54	51	55	53
CRI	90+	92+	92+	94+	94+	95+	95+	91+	88+
Duv	-0.003	0.0002	-0.0022	-0.0044	-0.004	-0.0015	0.0007	-0.001	-0.0005
Rf	89	89	92	93	93	92	91	89	87
Rg	103	99	102	103	101	100	98	98	98
R9	81	87	91	90	89	88	87	87	90
R13	91	91	91	93	95	96	97	95	89
R15	98	99	98	98	98	97	95	94	89
WATTS/FOOT	2.78	3.30	3.55	4.26	5.09	4.72	3.92	3.72	4.16

To determine the necessary wire gauge use our Voltage Drop Calculator

NETWORK TOPOLOGY



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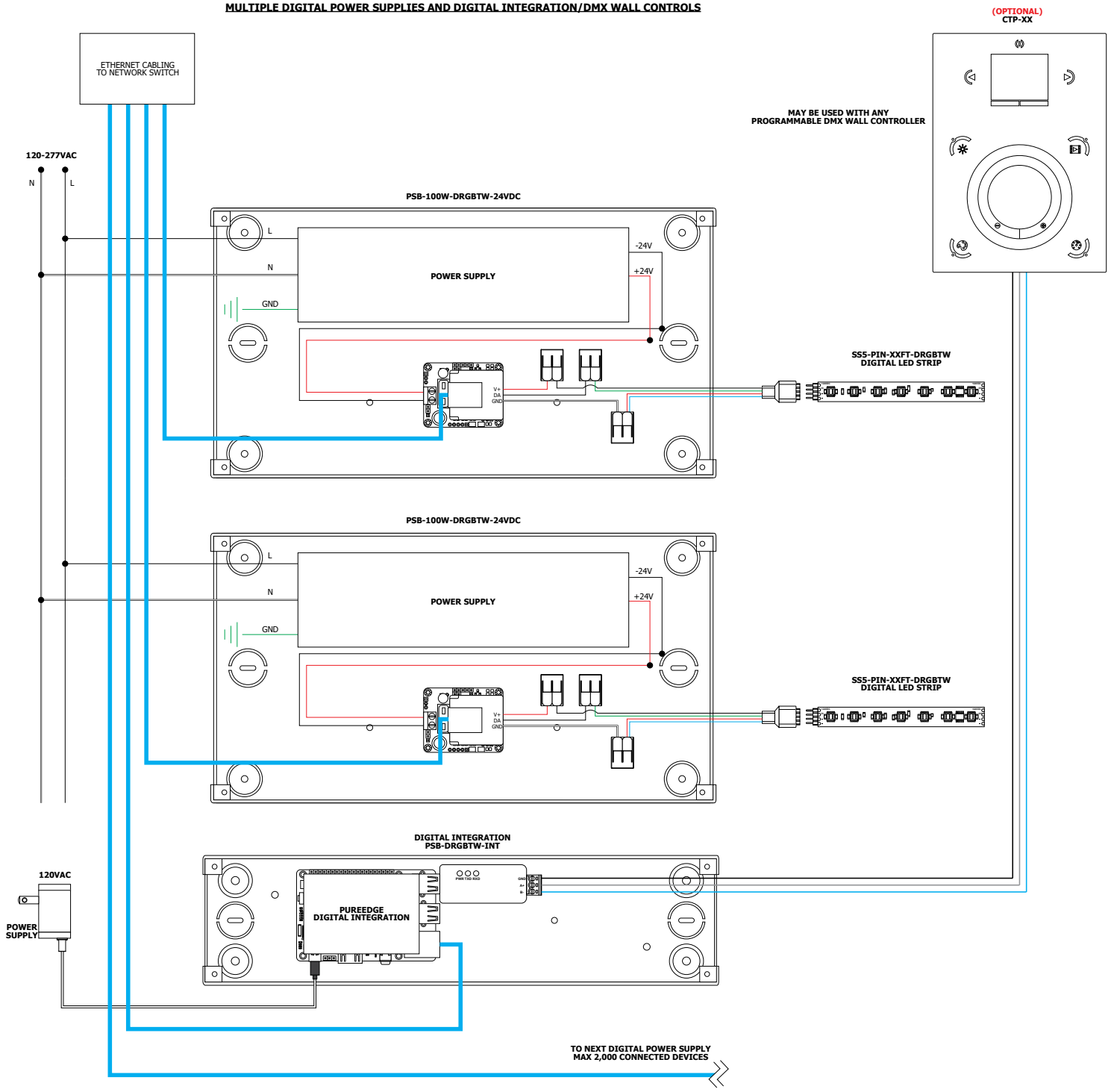
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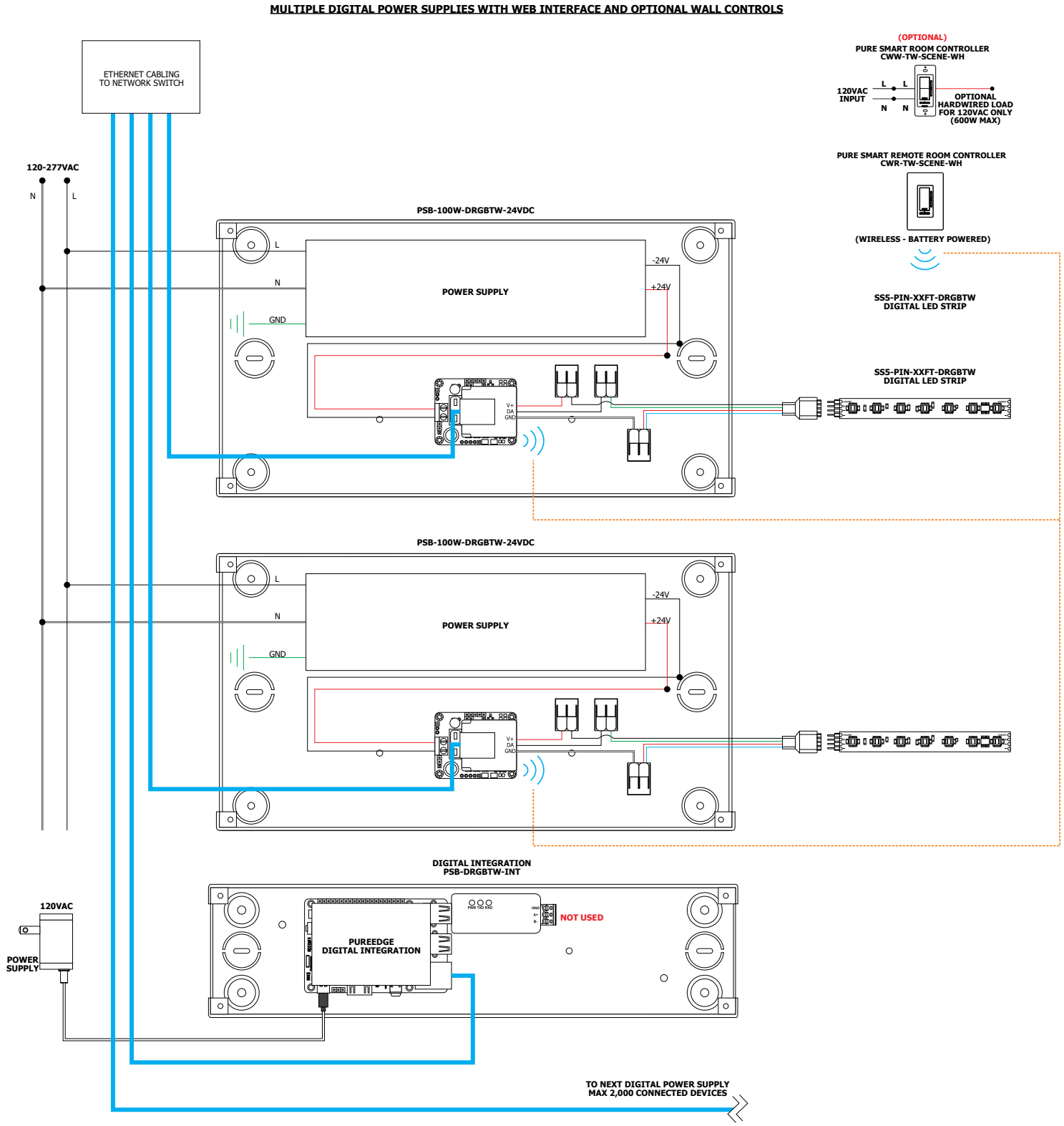
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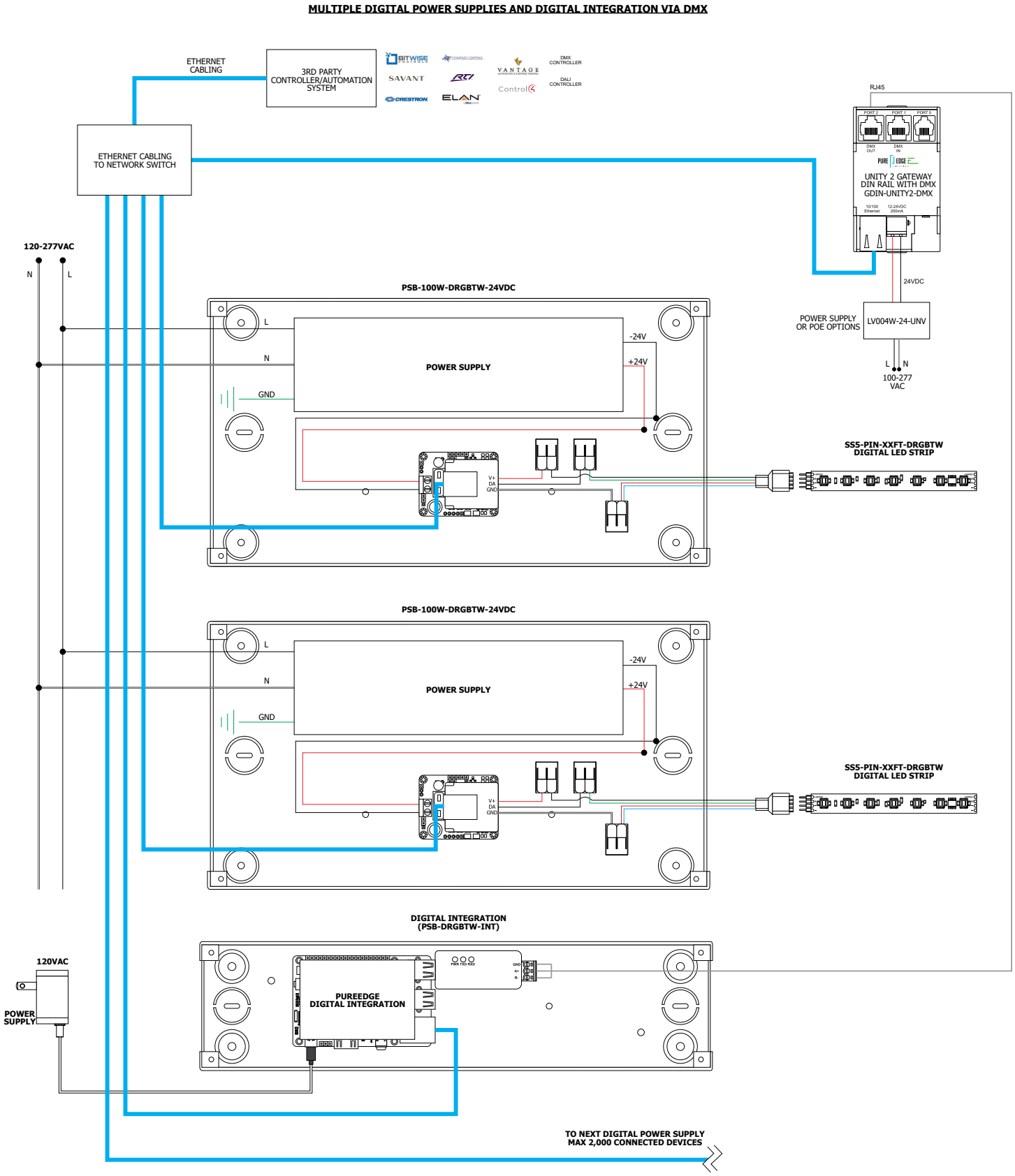
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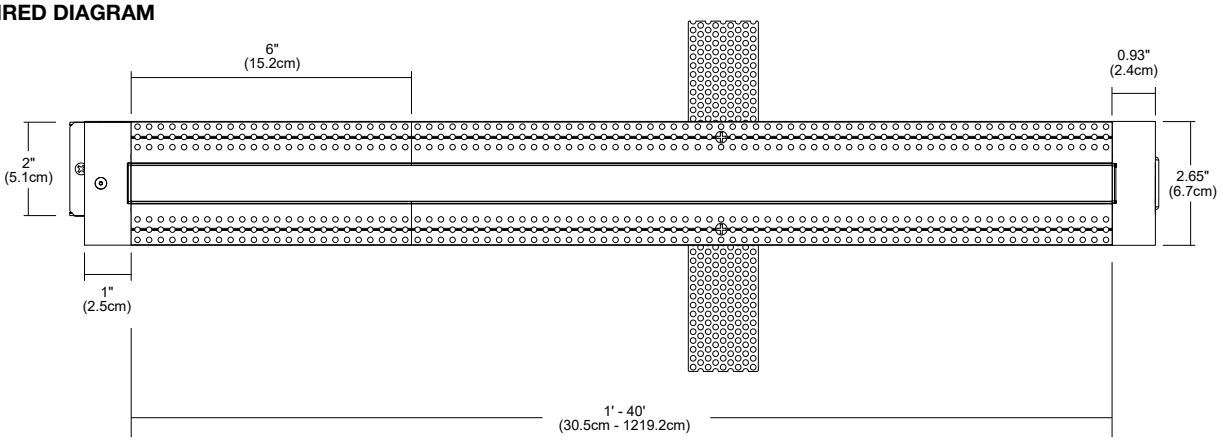
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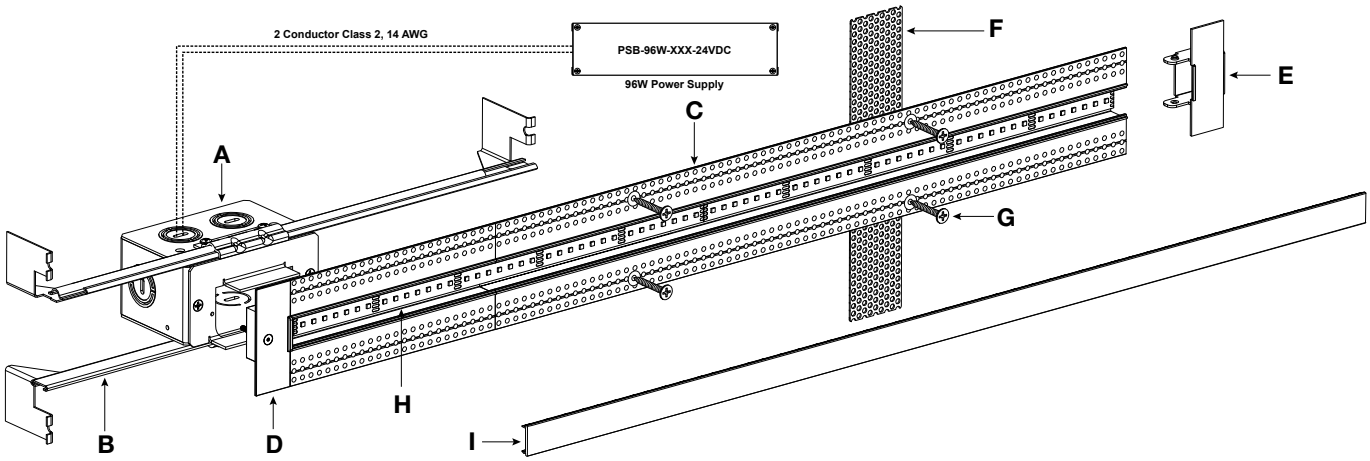
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HARDWIRED DIAGRAM



HARDWIRED CONTROLLED INCLUDED COMPONENTS



A. 1RE 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 channel. Required at the beginning of each run and necessary to rough-in electrical before TruLine installation. Junction Box is also included with each TruLine channel order

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 1A 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.

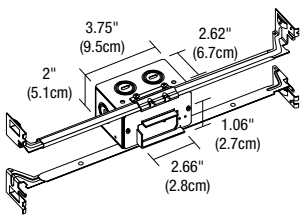
F. MOUNTING STRAP
Secures channel to drywall when wall stud is unavailable.

G. DRYWALL SCREW
Secures channel to drywall and stud.

H. LED STRIP
Your selection of LED Strip.

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





JUNCTION BOX ROUGH-IN COMPONENT
One Junction Box is included with TruLine 1A. Order additional Junction Box separately to rough-in electrical wiring before drywall installation. Quick shipment available.

System		Size		Component
TL1A	–	1RE	–	JBOX
TL1A TruLine 1A		**1RE** 1" Rectangle		**JBOX** Junction Box

LED STRIP TM30 DATA

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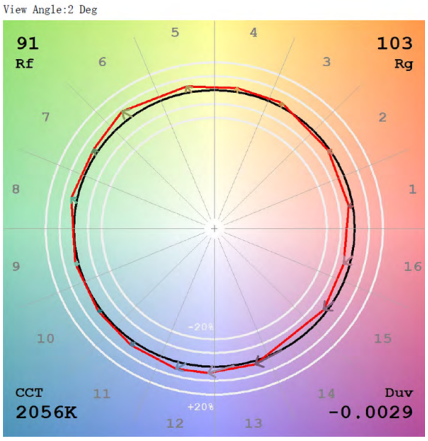
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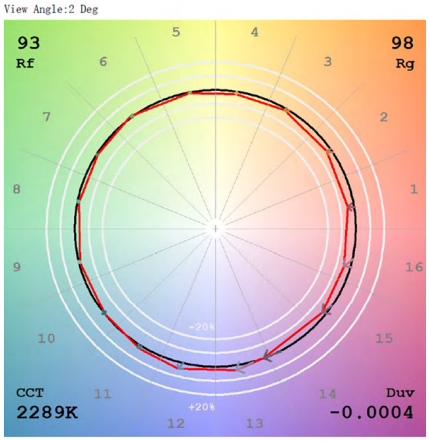
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TM-30-15 DATA: The data below is for TruColor™ RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color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

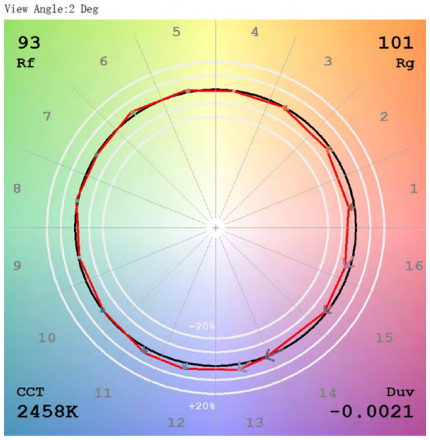
2000K (TruColor™ RGBTW)



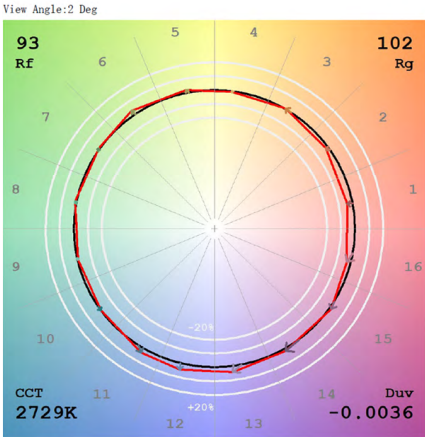
2200K (TruColor™ RGBTW)



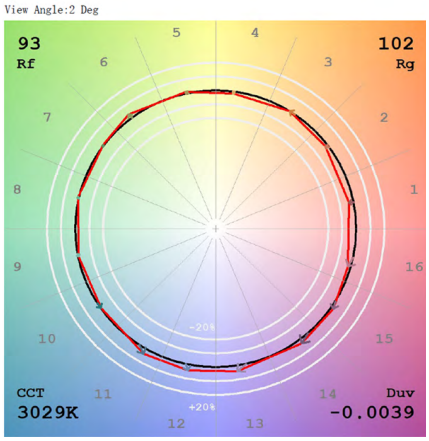
2400K (TruColor™ RGBTW)



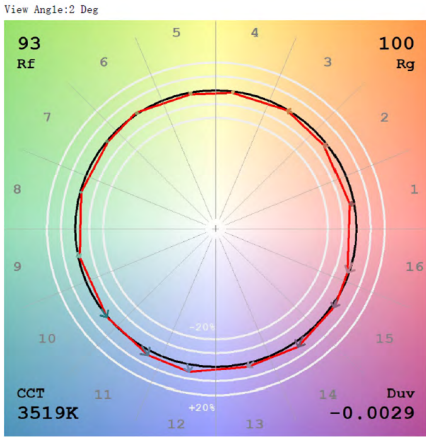
2700K (TruColor™ RGBTW)



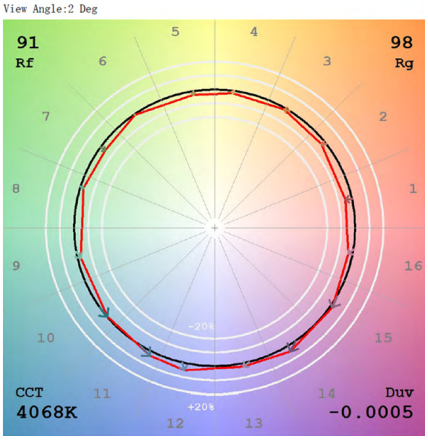
3000K (TruColor™ RGBTW)



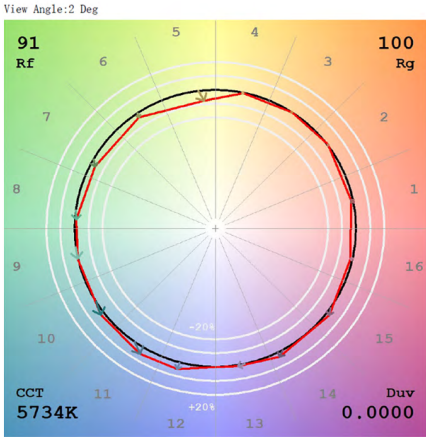
3500K (TruColor™ RGBTW)



4000K (TruColor™ RGBTW)



5700K (TruColor™ RGBTW)



6500K (TruColor™ RGBTW)

