

TRULINE 1A TRUCOLOR™ RGB & TUNABLE WHITE

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

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REV 06.16.23



Let The Drywall Be Your Canvas

DESCRIPTION

Truline 1A 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 contain 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 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 designs and quotes, send drawings to 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 1A](#).

ORDERING & INSTALLATION

TruLine 1A 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

Commonly used in residential, commercial, retail, hospitality, and restaurant projects where clean, minimal linear luminaires with wireless full color control is desirable.

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 +-0.0020 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 240LM/FT 5W @3000K
- 5W7 351LM/FT 7W @3000K

AVERAGE PERFORMANCE 2000K-5500K

- Average CRI (5W7): 94+
- Average DUV (5W7): +-0.004
- 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 Listed, RoHS, Class 2, Damp Location, Made in USA.

| System | Watts Per Foot | Control System | Length in Feet | Color Temperature |
|--------------------------------|--|---|--|--|
| TL1A | 5W5 | WZ | 20FT | TC |
| <small>TL1A TruLine 1A</small> | <small>5W5 TruColor™ 5 watts RGB & 5 watts Tunable White 5W7 TruColor™ 5 watts RGB & 7 watts Tunable White</small> | <small>WZ WiZ Pro Connected CV Smart Bridgebox (included)</small> | <small>1-20FT 1-20 feet 1-12FT 1-12 feet</small> | <small>TC TruColor™ RGBTW, Red, Green, Blue, & Tunable 1500K-6500K</small> |

| | | |
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| PROJECT | FIXTURE TYPE | DATE |
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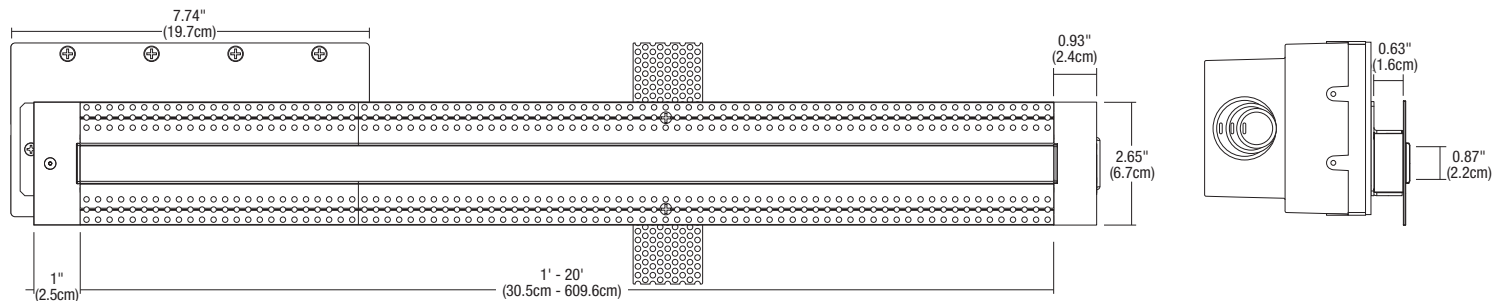
TRULINE 1A TRUCOLOR™ RGB & TUNABLE WHITE

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

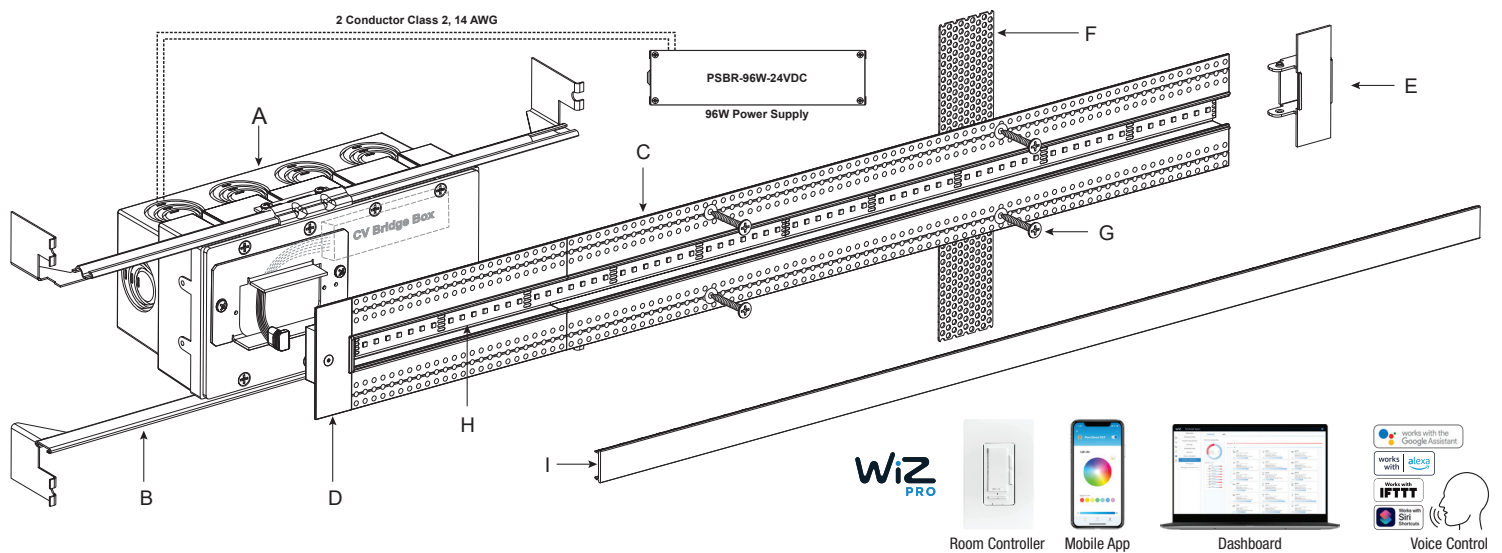
REV 06.16.23

DELIVERED LUMENS

| DESCRIPTION | 5W5 5W RGB & 5W TUNABLE WHITE | | | | | | | | | | 5W7 5W RGB & 7W TUNABLE WHITE | | | | | | | | |
|-------------------------|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|--|
| | 5W Maximum | | | | | | | | | | 7W Maximum | | | | | | | | |
| WATTS PER FOOT | | | | | | | | | | | | | | | | | | | |
| 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) | 114 | 171 | 207 | 233 | 240 | 254 | 274 | 192 | 177 | 141 | 235 | 301 | 342 | 351 | 369 | 362 | 213 | 193 | |
| LUMENS PER WATT (lm/w) | 73 | 38 | 88 | 55 | 57 | 103 | 65 | 116 | 74 | 42 | 61 | 49 | 58 | 57 | 60 | 62 | 62 | 64 | |
| 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. 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 1A CHANNEL

5/8" deep extrusion house for a 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 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 SCREWS

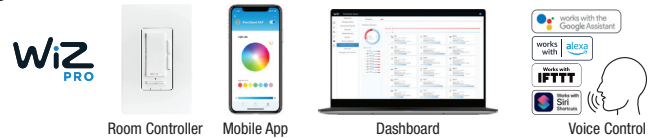
Secures channel to drywall and stud.

H. LED STRIP

Your selection of LED Strip CCT.

I. LENS

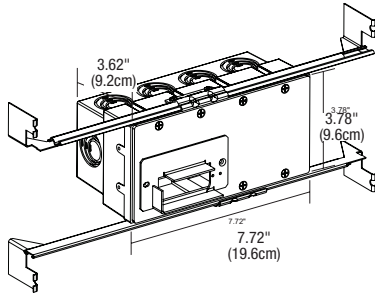
0.8" wide diffused white lens projects a clean line of light without pixelation.



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

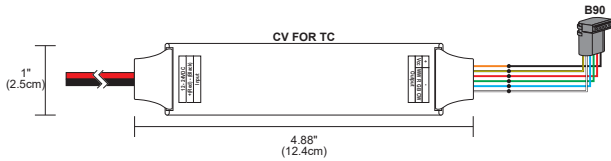


PURE SMART 4 GANG JUNCTION BOX WITH MOUNTING PLATE (INCLUDED WITH TL1A COMPLETE FIXTURE ORDERING CODE)
Includes a 4 gang Junction Box with adjustable bar hangers. This part can be quick shipped if needed for rough in. Two Class 2, 14 AWG stranded conductors from remote located power supply to 4 gang Junction Box.

| | |
|----------------------------|--|
| System | Type |
| TL1A | 1RE4G |
| TL1A TruLine & TruCurve 1A | 1RE4G 1" Rectangle End Feed with 4 Gang Junction Box |

PURE SMART/WIZ PRO CV BRIDGEBOX

WIZ Pro CV Bridgeboxes are included with TruLine 1A 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.

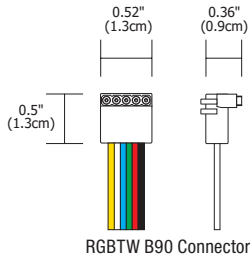


| | | | | |
|--------------|-------------------|----------------------------------|--|--------------------|
| Type | Type | Component | Color Temperature Options | System |
| BR | B90 | CV96W | TC5W5 | RL |
| BR Bridgebox | B90 90° Connector | CV96W Slim Profile WIZ Bridgebox | TC5W5 TruColor™ RGBTW 5 watts RGB & 5 watts Tunable White TC5W7 TruColor™ RGBTW 5 watts RGB & 7 watts Tunable White | RL Recessed Linear |

WIZ PRO

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](#).

| 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 |

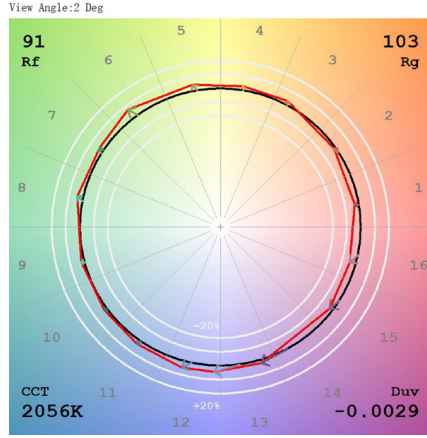
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TM30 DATA

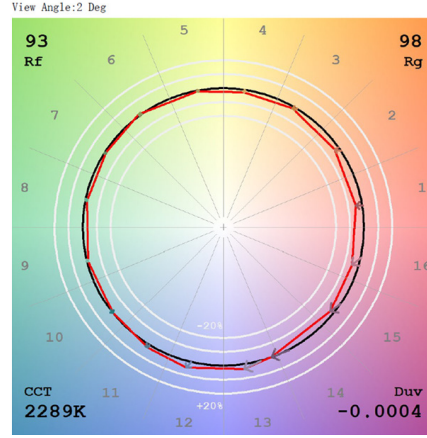
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TM-30-15 DATA: The data below is for TruColor™ RGBTW (S5W7) bare LED Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color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

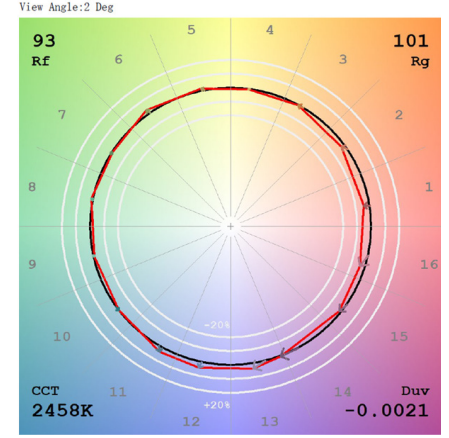
2000K (TruColor™ RGBTW)



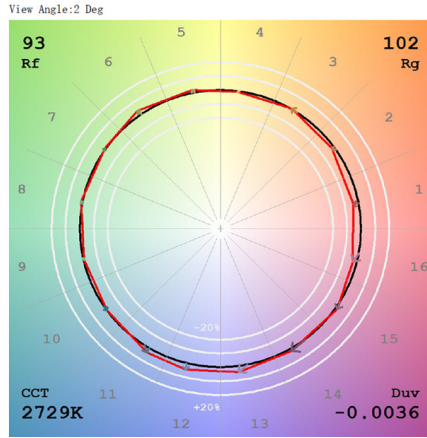
2200K (TruColor™ RGBTW)



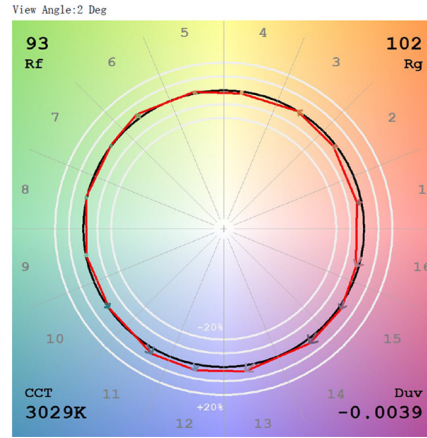
2400K (TruColor™ RGBTW)



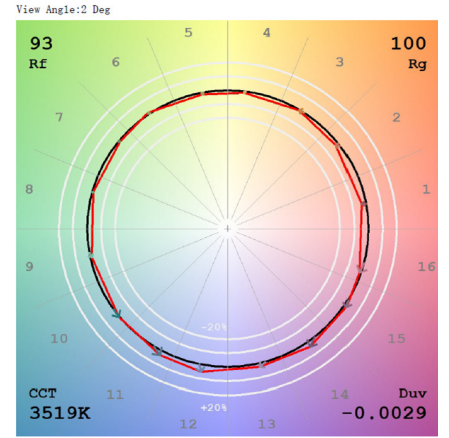
2700K (TruColor™ RGBTW)



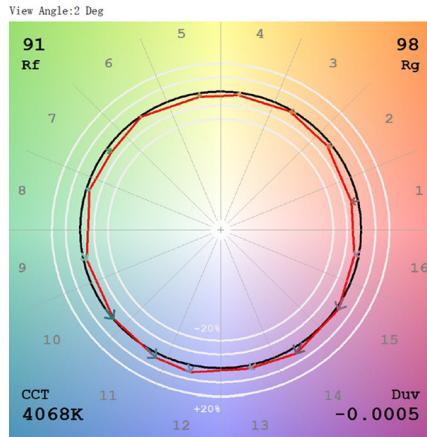
3000K (TruColor™ RGBTW)



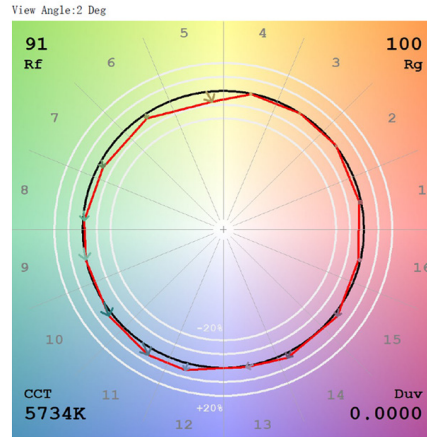
3500K (TruColor™ RGBTW)



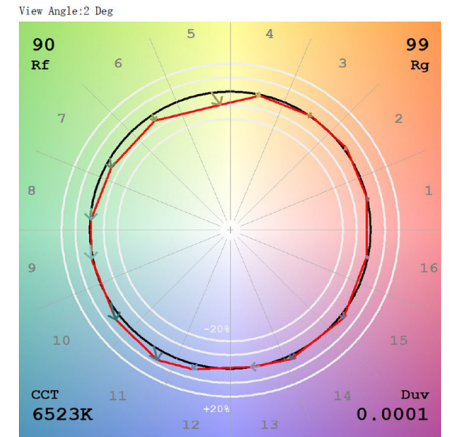
4000K (TruColor™ RGBTW)



5700K (TruColor™ RGBTW)



6500K (TruColor™ RGBTW)



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