

LIGHT CHANNEL COMPLETE FIXTURE 45° ANGLE

24VDC, SURFACE MOUNT, WARM DIM

DESIGNED BY GREGORY KAY | ASSEMBLED IN AMERICA

REV 03.14.25



DESCRIPTION

Our Warm Dim 45° Surface-mounted Light Channel is a versatile made-to-order, 24VDC Class 2 luminaire. The channel's 45° angle design provides designers with enhanced flexibility when it comes to illuminating challenging areas. Offered in lengths from 12" to 120"(10') in 3" increments for precise sizing. Available in two variations (**27D** & **30D**) our Warm Dim technology mimics an incandescent atmosphere by decreasing the color temperature as you dim. Our Warm Dim strips can be dimmed all the way down to a soothing amber hue at 1800K, reminiscent of candlelight along the halogen curve. With its combination of flexibility, customization, and lighting quality, the Light Channel 45° is an excellent choice for a wide range of applications. Click here for all [Other Color Temperatures](#). For Field cuttable runs, see DIY spec sheet. Fixture 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

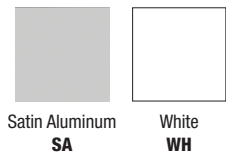
FEATURES AND BENEFITS

- Low voltage, 24VDC Power supplies can be remotely located up to 40' away provides installation flexibility
- Slim profile aluminum extrusion easily installs into small spaces
- 92+ CRI LED strip offers outstanding color accuracy
- Class 2 wiring, eliminates the need for conduit
- 45° angle design provides enhanced flexibility when it comes to illuminating challenging areas

LENS OPTIONS

- Clear Lens (**C**) provides maximum illumination using a 40° transparent clear lens, LED diodes will show
- Diffused White Lens (**D**) projects clean lines of light through a 100° lens eliminating pixelation
- Diffused Lens with Gel Color Filter (**G**) (Provided by Customer) Clear and Diffused Lens are Gel Color Filter Suitable allowing for color personalization. Zircon LED Gel filters recommended. Purchase Gel Lens from www.leefilters.com. See manufacturer spec sheet for more information.

FINISHES



Satin Aluminum
SA

White
WH

LAMP

- **27D** dims from 2700K down to 1800K, and **30D** dims from 3000K down to 2000K, resembling incandescent light sources
- Lumen Performance: Up to 313lm/ft at 3000K, 5W per foot
- 92+ CRI
- Average life: 50,000 hours
- For additional color temperatures refer to other specifications

SPECIFICATIONS

- 24VDC, Class 2
- 4.8 watts per foot
- 3-inch increments up to 120"(10ft)
- Operating temperature: -22°F to 140°F (-30°C to 60°C)

INCLUDED COMPONENTS

- 72" Power Connector (Included 1 per fixture). Order extra as needed based on your installation requirements.
- Mounting Clips (Included with every 2' of Channel)

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

24VDC, Class 2 wiring

- [Home Integration Solutions](#)
- [UNI Driver: Universal Dimming \(TRIAC, ELV, 0-10V\)](#)
- [Electronic Low Voltage \(ELV\)](#) 50W (fits inside junction box)
- [Lutron](#) Hi-Lume/Ecosystem

*In-wall mounting and drop ceiling kits available for select power supplies

MAKE IT SMART

[Pure Smart™ Wi-Fi Dimmer & Switch](#)

COMPLIANCE

*Title 24 JA8 listed when used with PureEdge remote Universal power Supplies, ETL, Class 2, Damp Location, Manufactured in the USA.

APPLICATIONS

Designed for indoor use only. Ideal applications include display shelving and cabinetry, under-cabinet, cabinet lightning, coves, and bars within residential, commercial, retail, and hospitality environments.

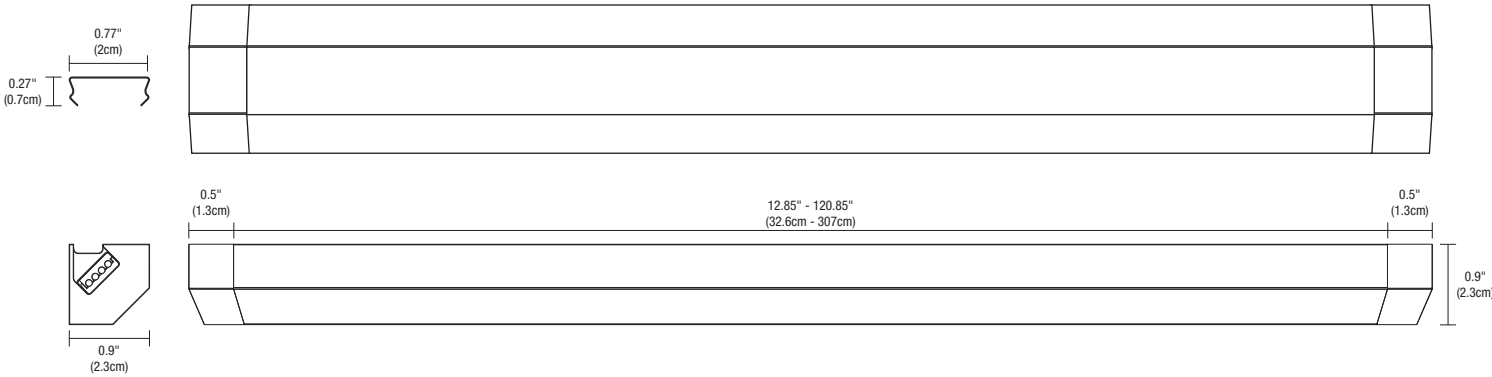
Product	Wattage	Nominal Length	Lens	Color Temperature	Finish
LC45	5W	60	D	27D	SA
LC45 Light Channel Surface Mount 45°	5W 4.8 Watts	12-120 Order in 3" increments from 12" to 120". See chart for exact lengths.	D Diffused Lens C Clear Lens G Diffused Lens with Gel Color (Color Provided by Customer)	27D 2700K-1800K Warm Dim 30D 3000K-2000K Warm Dim	SA Satin Aluminum WH White

PROJECT		FIXTURE TYPE		DATE	
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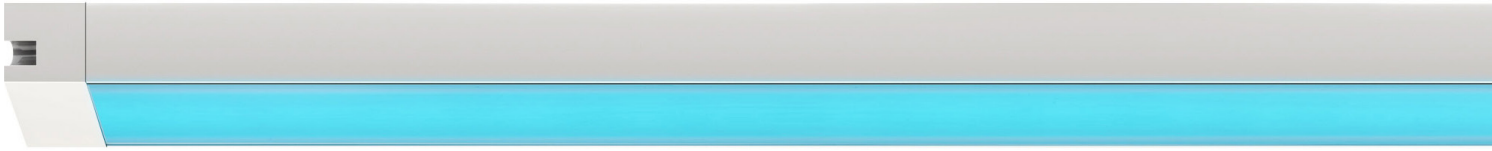
LENS OPTIONS



LC45 LIGHT CHANNEL 61° DIFFUSED LENS
White Diffused Lens projects clean lines of light, eliminating LED diodes



LC45 LIGHT CHANNEL 26° CLEAR LENS
Clear Lens provides maximum light levels and will show slight LED diodes



LC45 LIGHT CHANNEL DIFFUSED LENS WITH GEL COLOR FILTER (PROVIDED BY CUSTOMER)

Clear and Diffused Lens are Gel Color Filter Suitable allowing for color personalization. Zircon LED Gel filters are recommended and can be purchased from www.leefilters.com. Gel filter life is 5,000 hours before needing to be changed

NOMINAL DELIVERED LUMENS

	DIFFUSED LENS		CLEAR LENS	
WATTS PER FOOT	5w (4.8 watts)		5w (4.8 watts)	
COLOR TEMPERATURE	27D	30D	27D	30D
LUMENS PER FOOT (lm/ft)	256	267	300	313
LUMENS PER WATT (lm/w)	53	56	63	65
CRI	92+	92+	92+	92+
RF	90	90	90	90
RG	99	99	99	99

FOOT CANDLE CHARTS

30K 100° 5W DIFFUSED LENS		
DISTANCE	BEAM	FOOT CANDLE
12"	29"	240
18"	43"	106
24"	57"	60
36"	86"	26

30K 40° 5W CLEAR LENS		
DISTANCE	BEAM	FOOT CANDLE
12"	8"	720
18"	13"	320
24"	18"	180
36"	26"	80

*Foot Candle Data is based off 4' Channel.

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LIGHT CHANNEL COMPLETE FIXTURE 45° ANGLE

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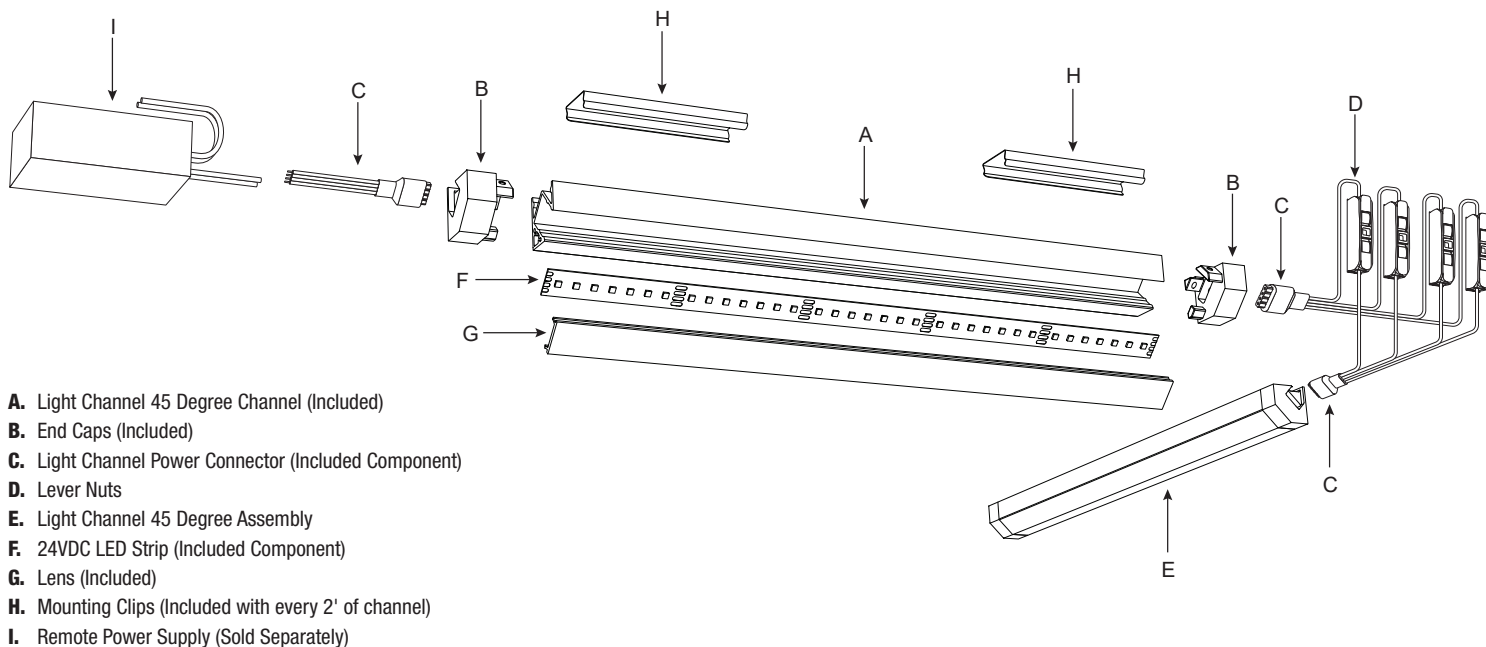
ACTUAL LENGTHS FOR LIGHT CHANNEL 45° WARM DIM			
ORDERING CODE (NOMINAL LENGTH) /ILLUMINATED LENGTH	ACTUAL LENGTH	ORDERING CODE (NOMINAL LENGTH) /ILLUMINATED LENGTH	ACTUAL LENGTH
12	13	66	67
15	16	69	70
18	19	72	73
21	22	75	76
24	25	78	79
27	28	81	82
30	31	84	85
33	34	87	88
36	37	90	91
39	40	93	94
42	43	96	97
45	46	99	100
48	49	102	103
51	52	105	106
54	55	108	109
57	58	111	112
60	61	114	115
63	64	117	118
		120	121

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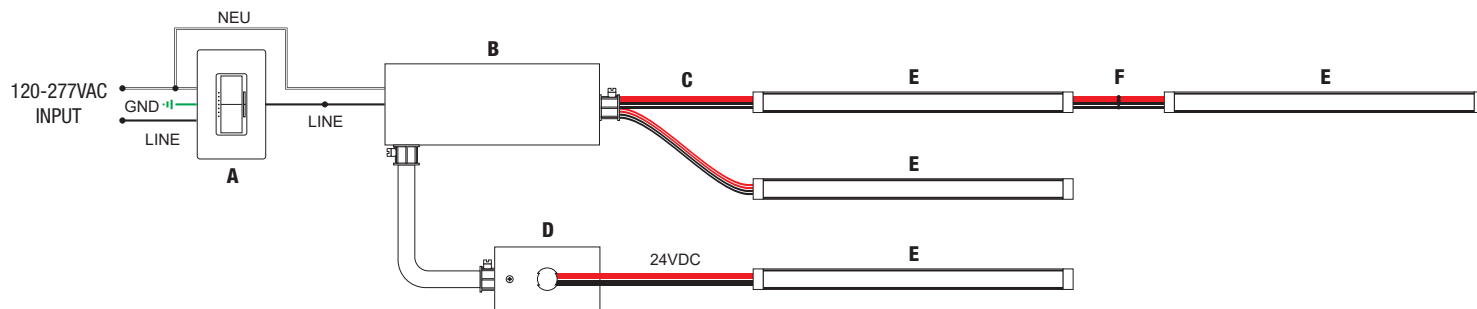
Components: Light Channel 45° system overview



WIRING DIAGRAM: Electronic Low Voltage (ELV) dimming for Indoor Light Channel 45°

Power Supply: 120VAC input, 24VDC 96 watt output

Dimming: Dimmable with low voltage electronic dimmer using power supply above. See power supply spec sheet for additional details. Lutron: Diva DVELV-300P; Skylark SELV-300P; Maestro MAELV-600 dimmers are recommended.

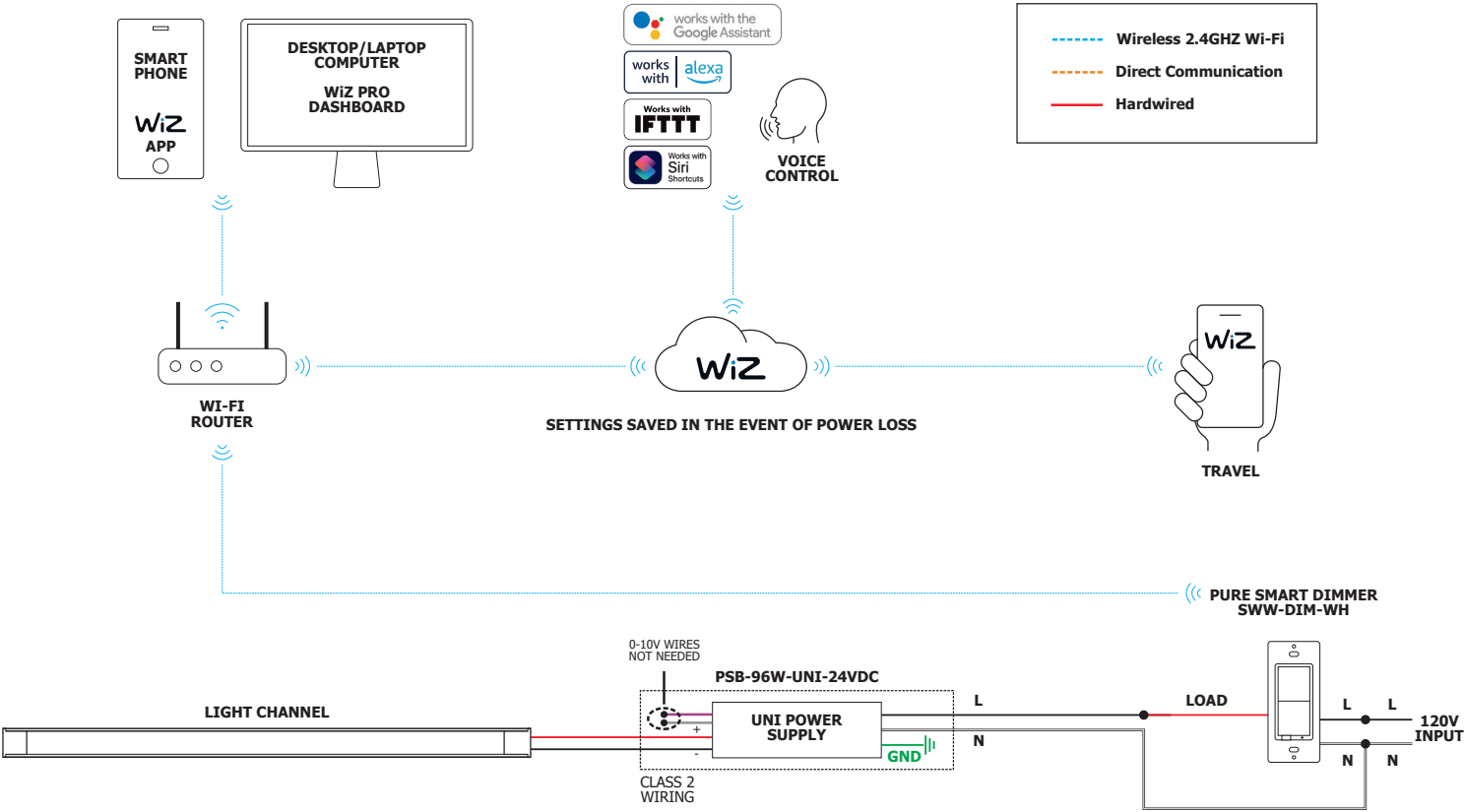


- A. Dimmer (ELV Dimmer shown)
- B. 96W 24VDC Power Supply
- C. Light Channel Power Connector SS-FE-CON-72IN-DW
- D. 3" Rectangle Canopy Cover 3RE-WH
- E. Light Channel Fixture
- F. Light Channel Flexible Connector SS-CFX-CON-__-DW

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NETWORK TOPOLOGY USING UNI DRIVER

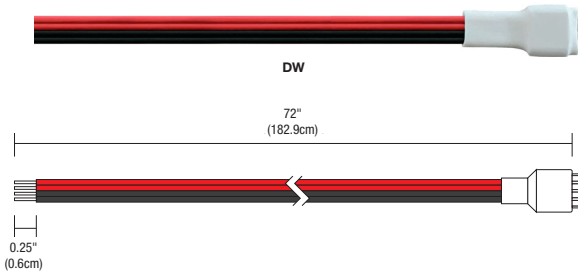


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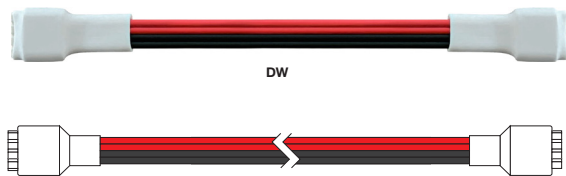
Accessories: Order based on your lighting design specifications or as replacement parts.



LIGHT CHANNEL POWER CONNECTOR

One Female Power Connector is included with each order of channel. For jumper connections, use our Flexible Connector or WAGO 221 lever nuts according to your specific application requirements.

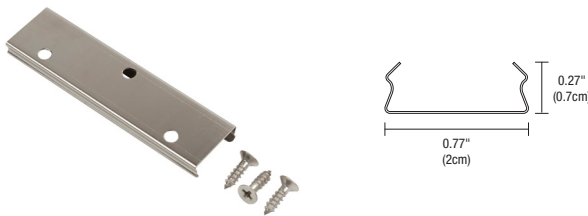
System	Type	Product	Length	Color Temperature
SS	FE	CON	72IN	DW
SS Stomp Strip/Soft Strip	FE Female Pin	CON Connector	72IN 72"	DW Static White/ Warm Dim



FLEXIBLE CONNECTOR

Flexible connectors link two sections of the Light Channel end to end. WAGO 221 lever nuts can also be used as jumper connections according to your specific application requirements.

System	Type	Product	Size	Color Temperature
SS	CFX	CON	12IN	DW
SS Stomp Strip/Soft Strip	CFX Flexible Connector	CON Connector	12IN 12 Inches 72IN 72 Inches	DW Static White/ Warm Dim



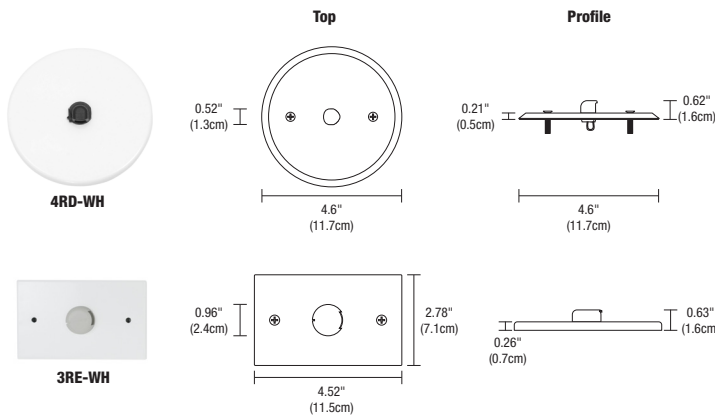
MOUNTING CLIP

Light Channel comes with standard mounting clips. LC45-MCL mounting clips are provided with every 2' of Light Channel.

System	Product
LC45	MCL
LC45 Light Channel 45°	MCL Mounting Clip

CANOPY COVER & SPLICE BOX

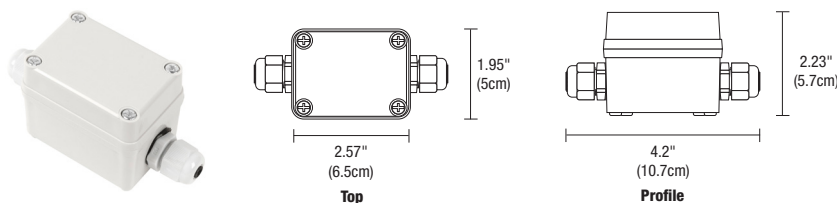
Use for remote located power supply. The 3 inch rectangle or 4 inch round white canopy covers the electrical box and feeds wires for Light Channel. The Splice Box provides a safe enclosure for low voltage connections.



Product	Finish
3RE	WH
3RE 3" Rectangle Canopy Cover	WH White
4RD 4" Round Canopy Cover	

JUNCTION BOX

Low voltage Splice Box with connectors.



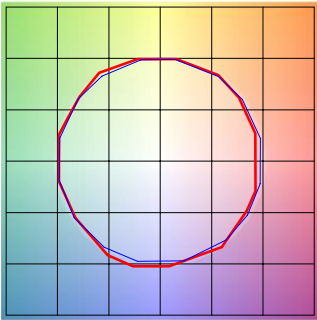
Product	Type	Option
2RE	JBOX	W
2RE 2" Rectangle	JBOX Junction Box	W Wet Location

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24VDC, SURFACE MOUNT, STATIC WHITE

TM-30-15 DATA: The data below is for bare LED Warm Dim Strip. 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.

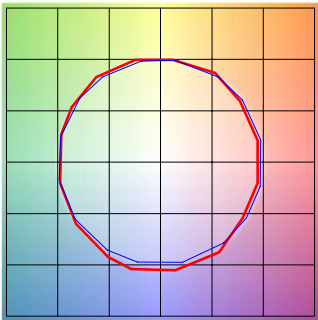
2700D | Rf: 90.7 | Rg: 101.1
Color Vector Graphic



Test Reference

Table with 4 columns: Hue Bin, Rf, Chroma, Hue. Rows 1-16 showing color shift data for 2700D.

3000D | Rf: 90.6 | Rg: 101.1
Color Vector Graphic



Test Reference

Table with 4 columns: Hue Bin, Rf, Chroma, Hue. Rows 1-16 showing color shift data for 3000D.