

LUXroll RGBW

Flexible, Cuttable Every 2"

Flexible RGBW LED Module



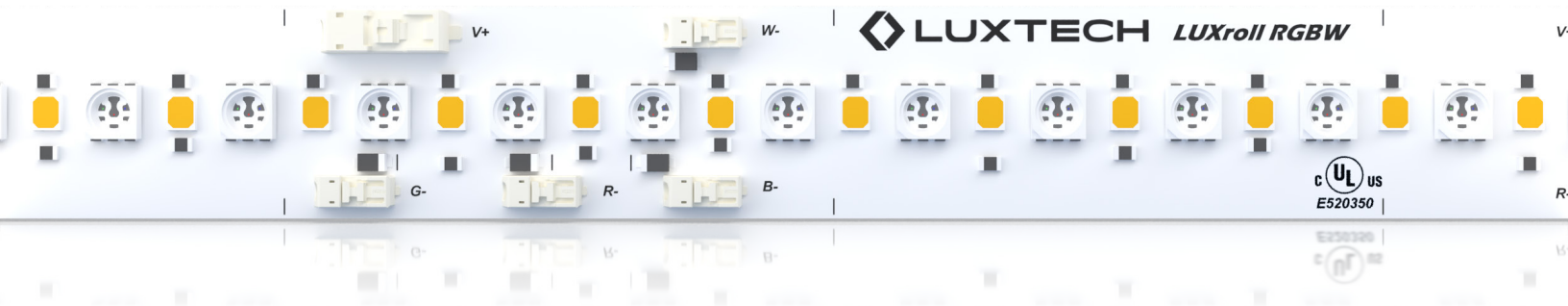
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About LUXTECH

LUXTECH Designs & Produces Versatile, Specification-Grade LED Modules for Architectural Lighting Manufacturers.



Product Description

LUXroll RGBW combines architectural grade white LEDs with RGB LEDs, poke in connectors, and a cut length of 2 inches for easy installation in any application. Color uniformity is matched across each order and for any run length up to 4 feet.

Technical Specifications

Mechanical Information:

- » Flexible reeled form factor
- » Cuttable Every 2 in
- » Specification-Grade 3M 300LSE Adhesive Backing
- » LED Pitch: 0.5 in
- » Width: 0.787 in (20mm)
- » Reel Length 44'

Photometric Performance:

- » Nominal White Output: 588 lum/ft (3500K, 90CRI, 240 mA/ft, 4' Run Length)
- » Reel to Reel Color Uniformity
- » Beam Angle: 120°
- » CCT Range: 2700K - 6500K
- » 90+ CRI Standard
- » 3-Step MacAdam Ellipse Color Binning

Electrical Information:

- » UL 2108 Listed: E520350
- » Poke-In Connectors
- » 24V Constant Voltage Input, Common Anode
- » DMX Controllable in 4 channels
- » On Board ESD Protection
- » Power Draw: 14.3 W/ft
- » Max Recommended Run Length: 4'
- » Wire Size: 18-24 AWG, solid or stranded

Lifetime Information:

- » LM-80 Tested LEDs by CREE
- » L80 > 72,000 Hrs for Ts = 55°C, 42mA Per Section
- » L80 = 60,500 Hrs for Ts = 105°C, 42mA Per Section
- » 5-Year Warranty



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REQUESTING SAMPLES & PRICING

Product Name	Color Temperature	CRI
LUXROLL-RGBW	27K	80
	30K*	90*
	35K*	
	40K	
	50K	
	65K	

*Normally Stocked

Example: LUXROLL-RGBW-30K-90

ELECTRICAL CHARACTERISTICS

Assuming 35K, 90 CRI, 45 °C

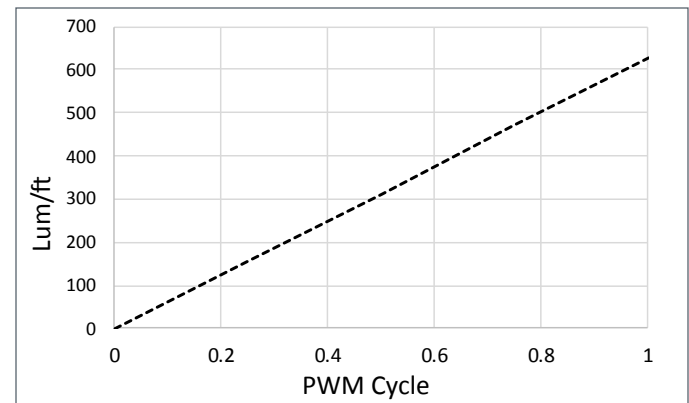
WHITE	
Current (mA/ft)	240
Voltage (V)	24.0
Flux (lm/ft)	588

RED	
Current (mA/ft)	94
Voltage (V)	24.0
Flux (mcd/ft)	10,750

GREEN	
Current (mA/ft)	109
Voltage (V)	24.0
Flux (mcd/ft)	19,200

BLUE	
Current (mA/ft)	109
Voltage (V)	24.0
Flux (mcd/ft)	4,800

WHITE OUTPUT VS. PWM CYCLE



*LUXTECH maintains a tolerance of 7% on flux measurements.

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ABSOLUTE MAXIMUM RATINGS

Assuming 35K, 90 CRI, 45 °C

WHITE	
Current (mA/ft)	314
Voltage (V)	26
Flux (lm/ft)	804
Temperature (°C)	95

RED	
Current (mA/ft)	106
Voltage (V)	26
Temperature (°C)	85

GREEN	
Current (mA/ft)	120
Voltage (V)	26
Temperature (°C)	85

BLUE	
Current (mA/ft)	120
Voltage (V)	26
Temperature (°C)	85

COMPONENTS	
Max Connector Current (Common Anode)	9
Max Connector Current (4x Cathode)	3
Max Recommended Run Length (ft)	4

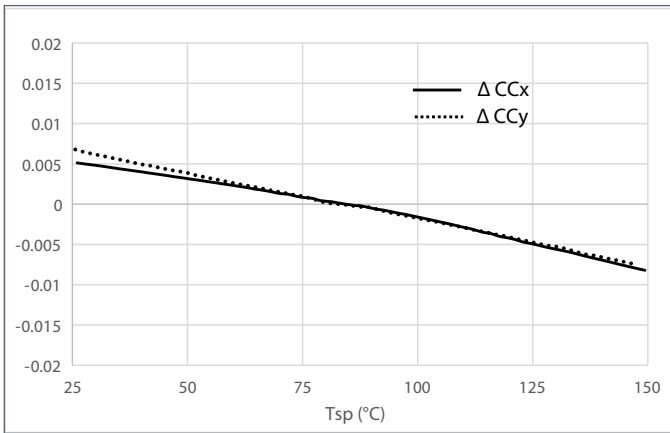
DERATING

COLOR TEMPERATURE (90CRI)	LIGHT OUTPUT
2700K	93%
3000K	98%
3500K	100%
4000K	103%
5000K	103%
6500K	103%

CRI	LIGHT OUTPUT
80 CRI	118%
90 CRI	100%

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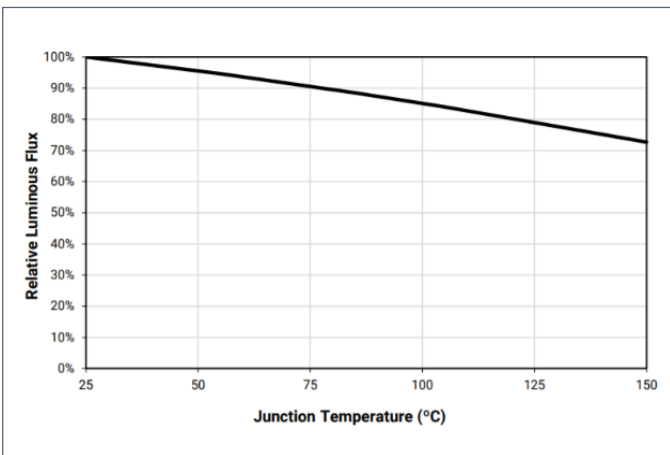
CHROMATICITY VS. TEMPERATURE



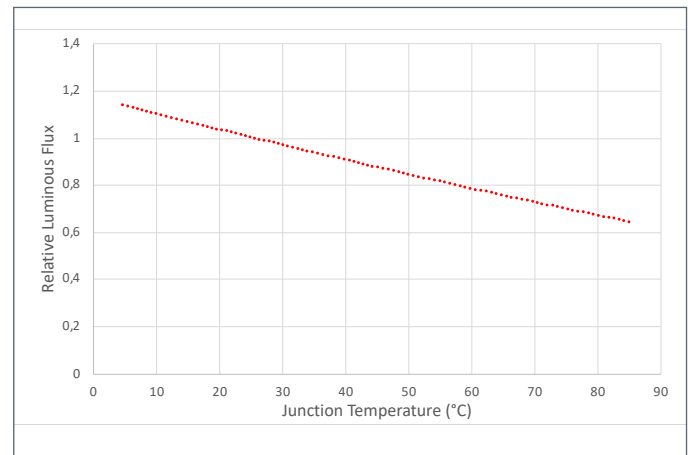
Chromaticity binned @ 85°C

FLUX VS. TEMPERATURE

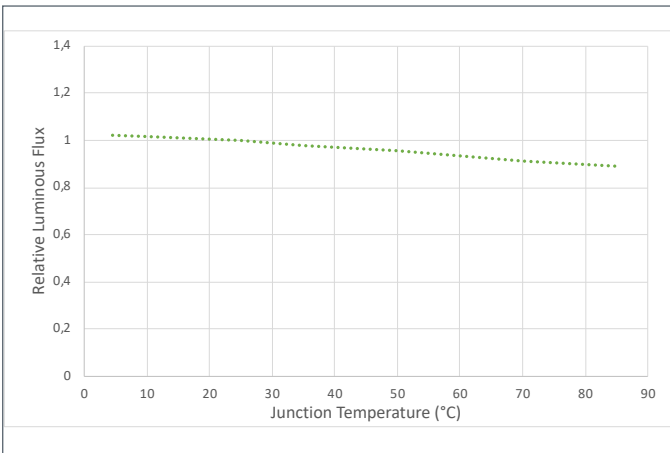
WHITE



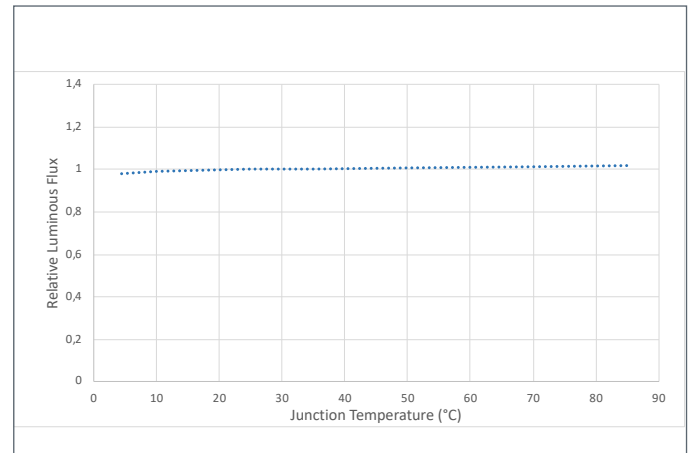
RED



GREEN



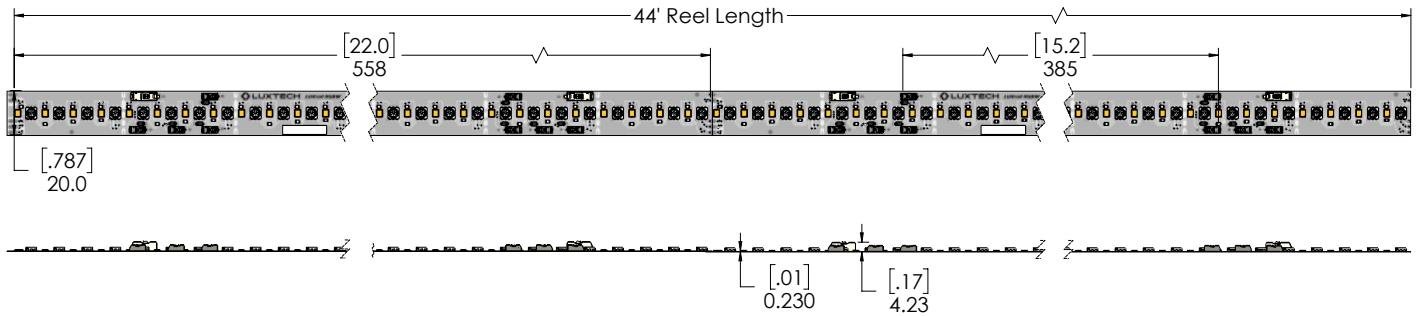
BLUE



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MECHANICAL CHARACTERISTICS

TECHNICAL DRAWING



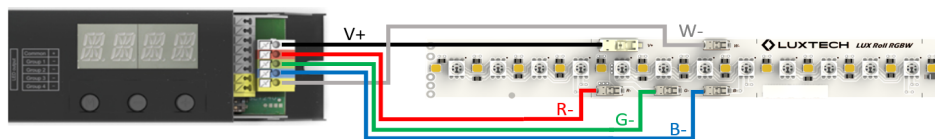
Units: [inches] mm

PRODUCT DIMENSIONS

PARAMETER	SPECIFICATION (IN)
Width	0.787
Length	44 ft (528 in) Reel
Cut Length	2.0
PCB Thickness	0.009
Module Thickness, to Connector Top	0.20
Solder Pad Spacing	4.0"

WIRING

PARAMETER	SPECIFICATION
Wire Size	18-24 AWG



RECOMMENDED COMPATIBLE DRIVERS

BRAND	MODEL	PROGRAMMABLE DRIVE CURRENT (MA)	OUTPUT VOLTAGE (V)	DIMMING
EldoLED	LINEARdrive	1000 per output	12-24	DMX / DALI

CONTROLLER SELECTION

RECOMMENDED BRANDS	MODEL	CONTROL TYPE	NEEDED ACCESSORIES
Lunatone	DALI Touchpanel	DALI	Lunatone PS2 30mA DALI Bus Power supply
Sunricher	SR-2812B(US)	DMX	12-24VDC Power Supply

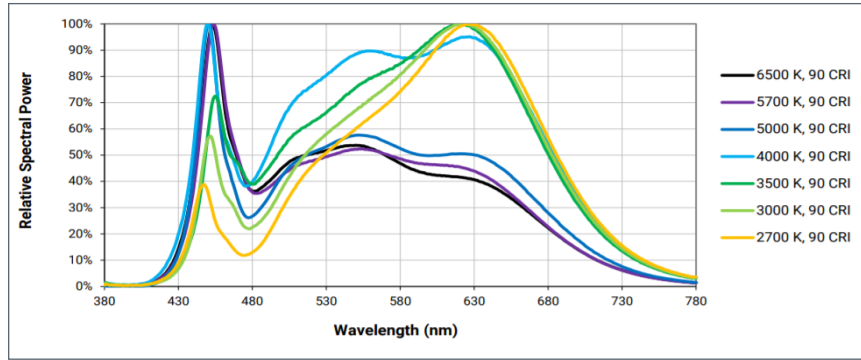
 Design resources: Performance Calculator and CAD files available at LUXTECH.com

Request Samples & Pricing [Here](#)

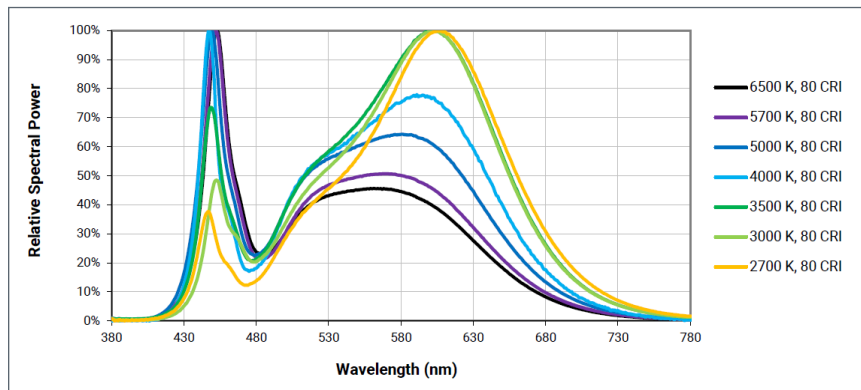
OPTICAL SPECIFICATIONS

SPECTRAL POWER DISTRIBUTION

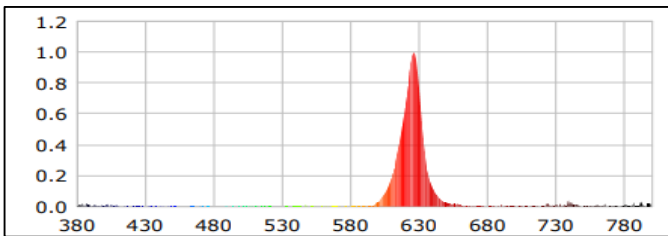
White 90 CRI



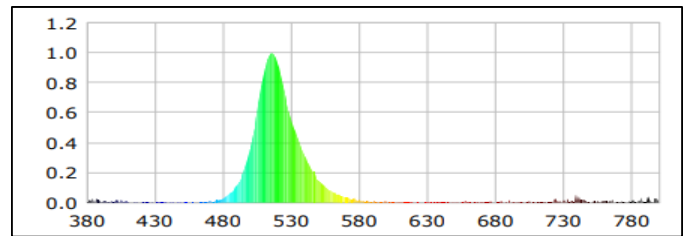
White 80 CRI



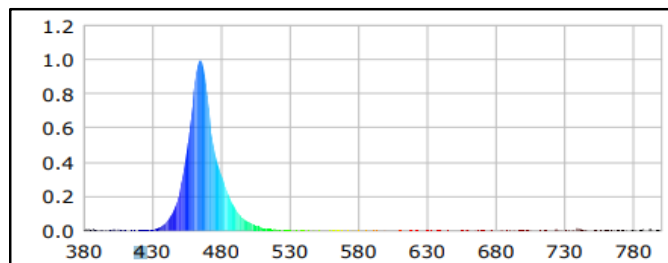
Red



Green



Blue

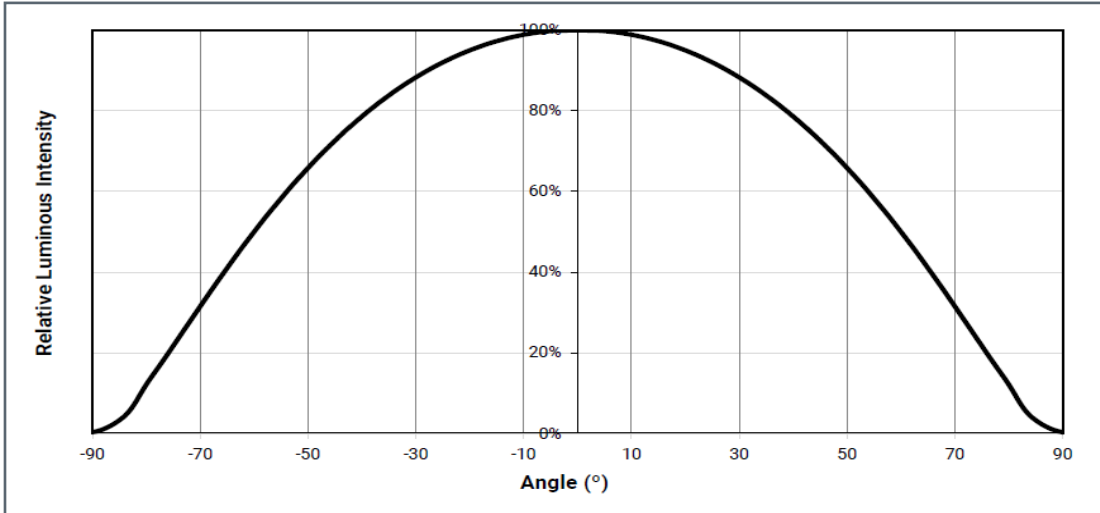


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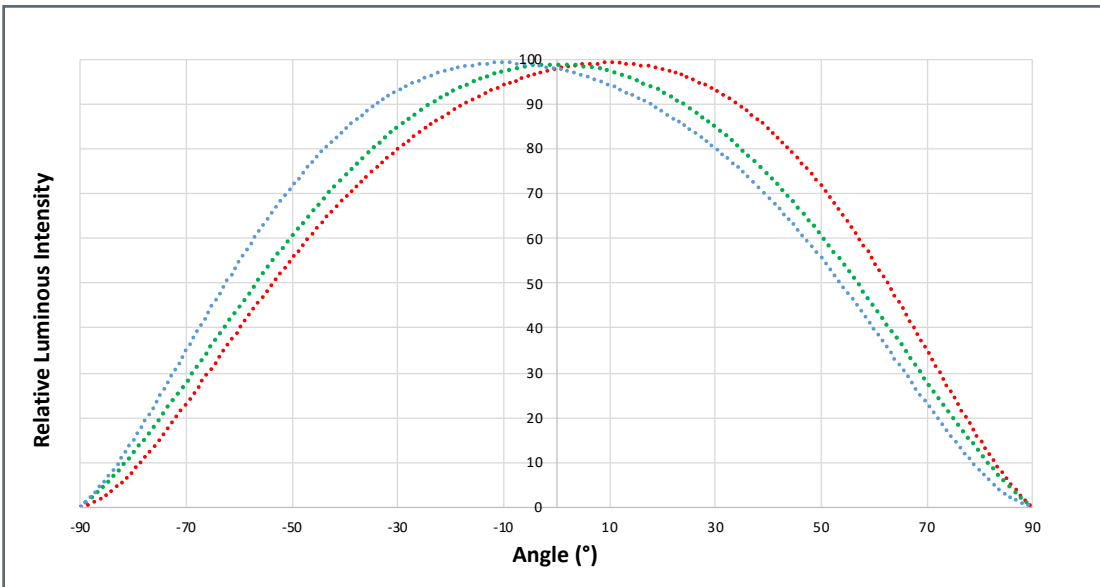
OPTICAL SPECIFICATIONS

BEAM ANGLE

White



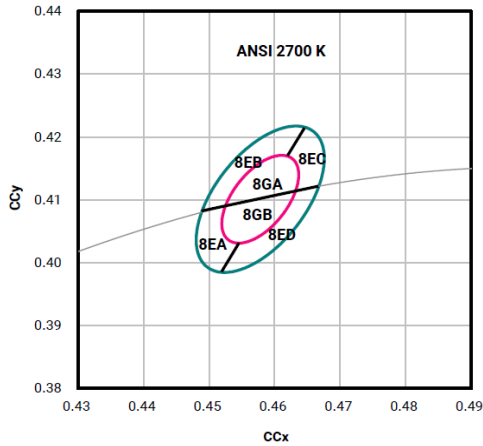
RGB



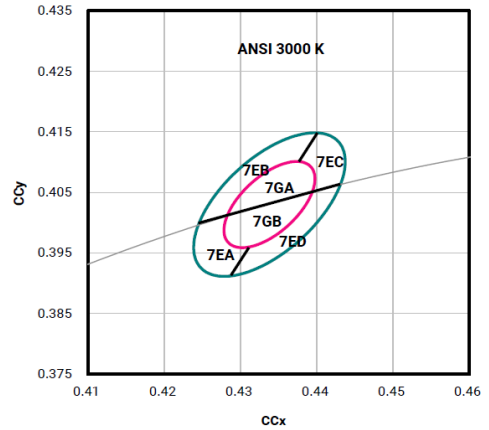
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COLOR BINNING INFORMATION

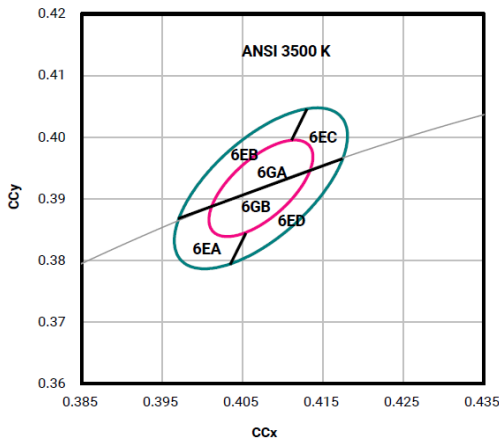
2700K 3-STEP (8GA, 8GB)



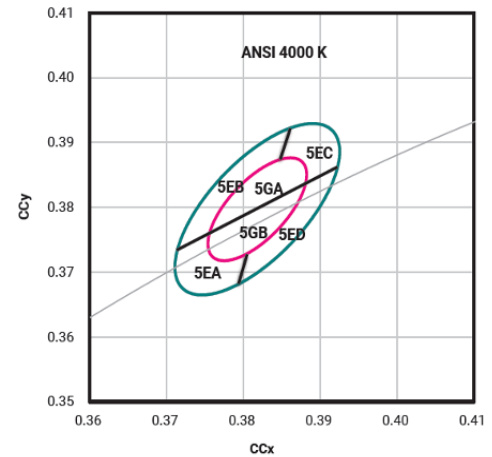
3000K 3-STEP (7GA, 7GB)



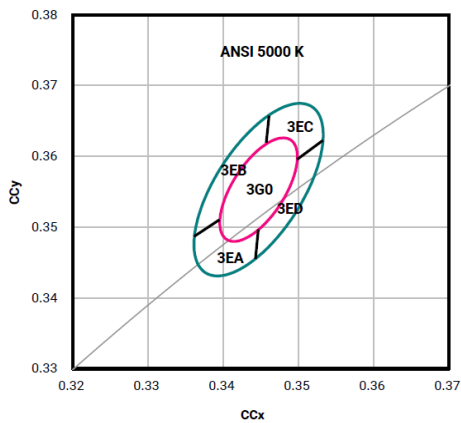
3500K 3-STEP (6GA, 6GB)



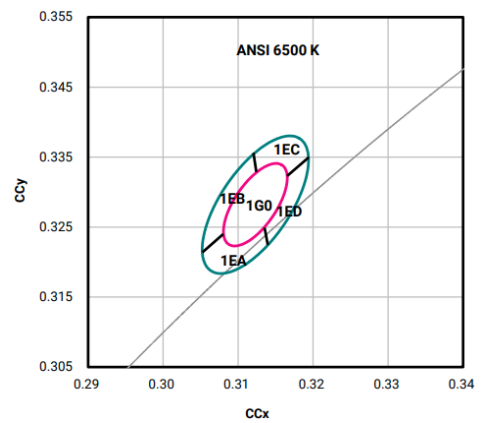
4000K 3-STEP (5GA, 5GB)



5000K 3-STEP (3G0)



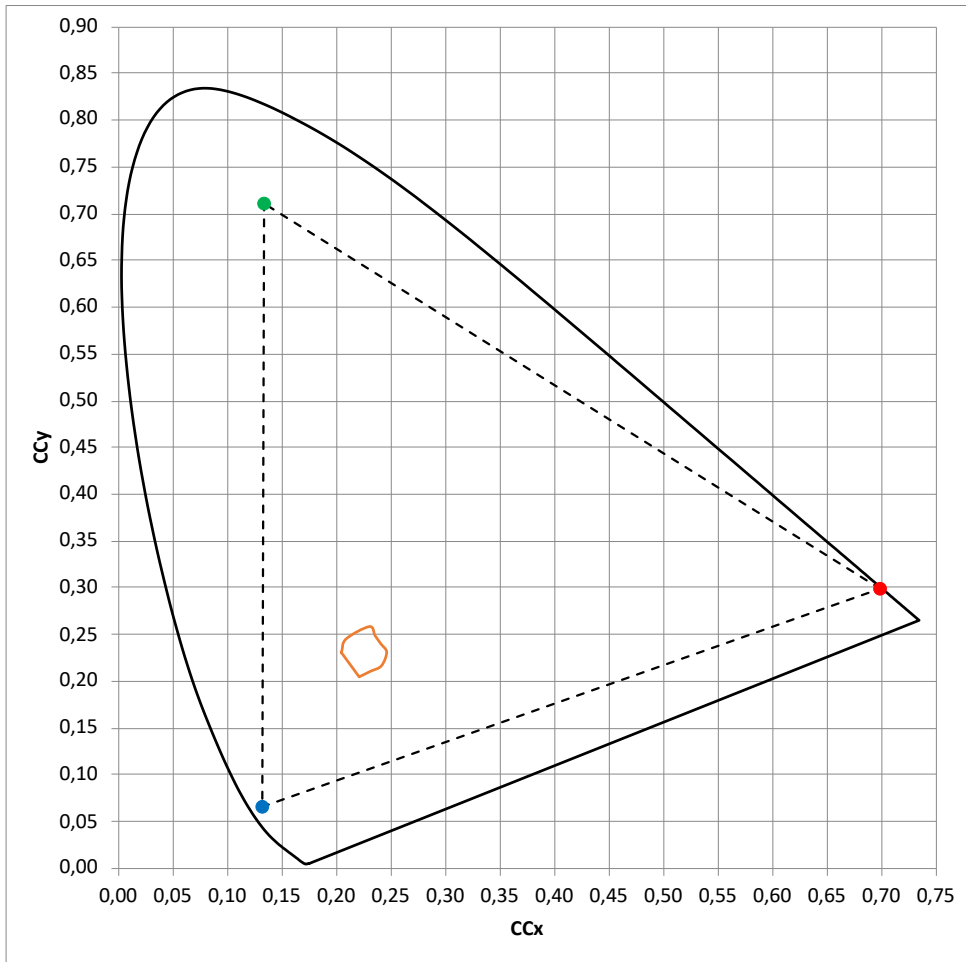
6500K 3-STEP (1G0)



[Request Samples & Pricing Here](#)

COLOR BINNING INFORMATION

RGB SINGLE BIN (WHITE-BINNED)



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ORDERING CODES

Product Name	Color Temperature	CRI
LUXROLL-RGBW	27K	80
	30K*	90*
	35K*	
	40K	
	50K	
	65K	

*Normally Stocked

Example: LUXROLL-RGBW-30K-90

IF CUSTOMIZATION IS REQUIRED: CONTACT SALES: SALES@LUXTECH.COM

PROTOTYPING

- » 3.5 week lead time for new design prototypes

SINGLE ORDER

- » MOQ: 250 pieces per SKU
- » Typical lead time: 6-8 weeks

BLANKET ORDER

- » MOQ: 1,000 pieces per SKU
- » Minimum release size: 250 pieces
- » Quantity per SKU must be specified
- » 2.5 week lead time for blanket releases
- » 6-8 week set up time for first release

- » 6 month term from first release
- » Shipment of balance at end of term

EXPEDITE SERVICES

- » Dedicated expedite facility can turn jobs in as little as 1 week