

Fingerboard RGBW

RGBW LED Module

Area-Filling Light Source



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About LUXTECH

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

Product Description

LUXTECH's Fingerboard is designed to make high quality area illumination easier than ever before. Fingerboard RGBW combines architectural grade white LEDs with RGB LEDs, poke in connectors, and a cuttable sections every half finger for easy installation in any application.

Technical Specifications

Mechanical Information:

- » PCB Material: 1.6mm FR4
- » Cuttable Every 1/2 Finger
- » LED Pitch: 1.38 in
- » Dimensions: 10.6 in x 10.6 in
- » Screw Size: #8, M4
- » Specification-Grade 3M 300LSE Adhesive Backing

Photometric Performance:

- » Nominal White Output: 1568 lum/Board (3500K, 90CRI)
- » Board to Board Color Uniformity
- » Beam Angle: 120°
- » 90+ CRI Standard
- » 3-Step MacAdam Ellipse Color Binning

Electrical Information:

- » Poke-In Connectors
- » 24V Constant Voltage Input, Common Anode
- » DMX Controllable in 4 channels
- » On Board ESD Protection
- » Power Draw: 38.1 W/Board
- » 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

[Request Samples & Pricing Here](#)

REQUESTING SAMPLES & PRICING

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

*Normally Stocked

Example: Fingerboard-RGBW-30K-90

ELECTRICAL CHARACTERISTICS

Assuming 35K, 90 CRI, 45 °C

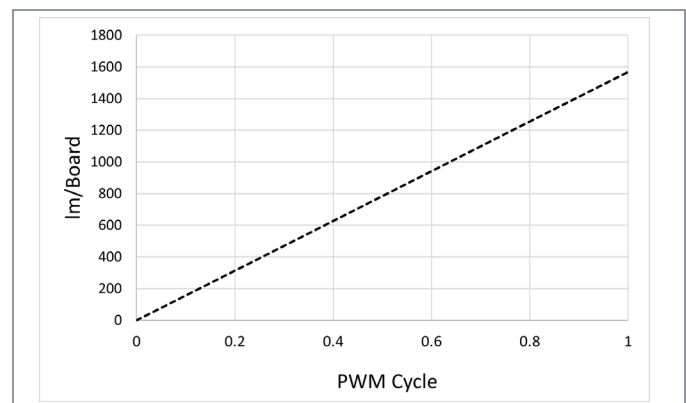
Current (mA/board)	640
Voltage (V)	24.0
Flux (lm/board)	1,568

RED	
Current (mA/board)	312
Voltage (V)	24.0
Flux (mcd/board)	25,600

GREEN	
Current (mA/board)	291
Voltage (V)	24.0
Flux (mcd/board)	5,120

BLUE	
Current (mA/board)	291
Voltage (V)	24.0
Flux (mcd/board)	12,800

WHITE OUTPUT VS. PWM CYCLE



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

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ABSOLUTE MAXIMUM RATINGS

WHITE, 35K 90 CRI	
Current (mA/board)	837
Voltage (V)	26
Flux (lm/board)	2144
Temperature (°C)	95

RED	
Current (mA/board)	344
Voltage (V)	26
Temperature (°C)	85

GREEN	
Current (mA/board)	320
Voltage (V)	26
Temperature (°C)	85

BLUE	
Current (mA/board)	320
Voltage (V)	26
Temperature (°C)	85

COMPONENTS	
Max Connector Current (Common Anode)	9
Max Connector Current (4x Cathode)	9

DERATING

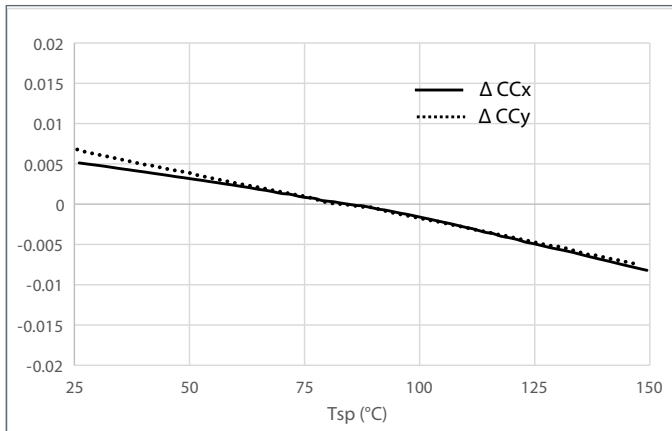
WHITE

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%

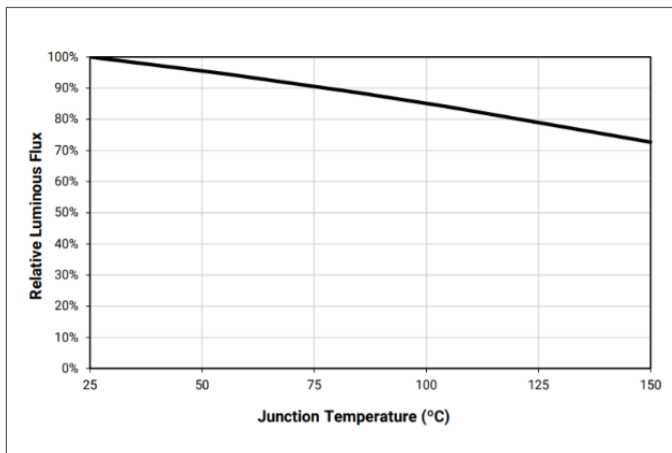
[Request Samples & Pricing Here](#)

WHITE CHROMATICITY VS. TEMPERATURE

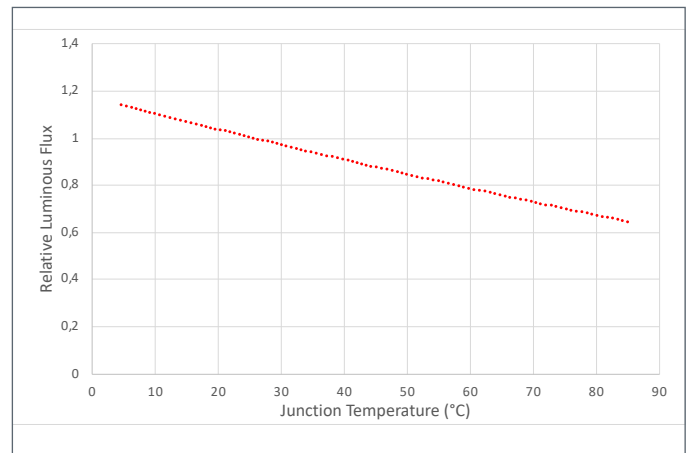


FLUX VS. TEMPERATURE

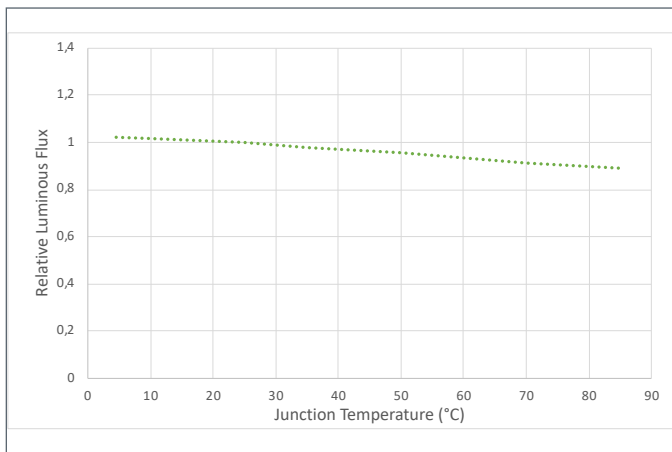
WHITE



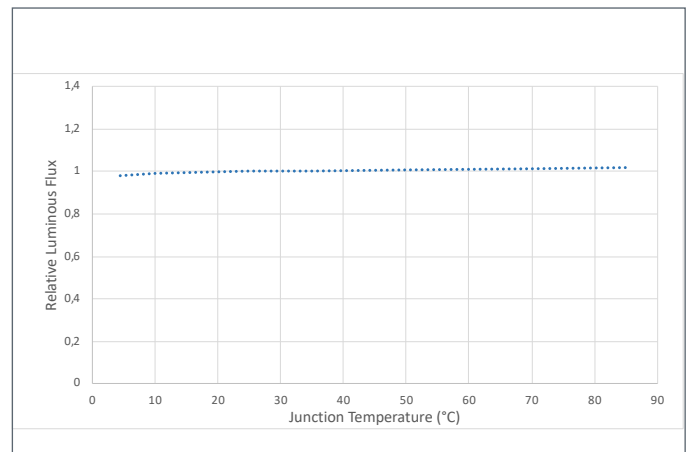
RED



GREEN



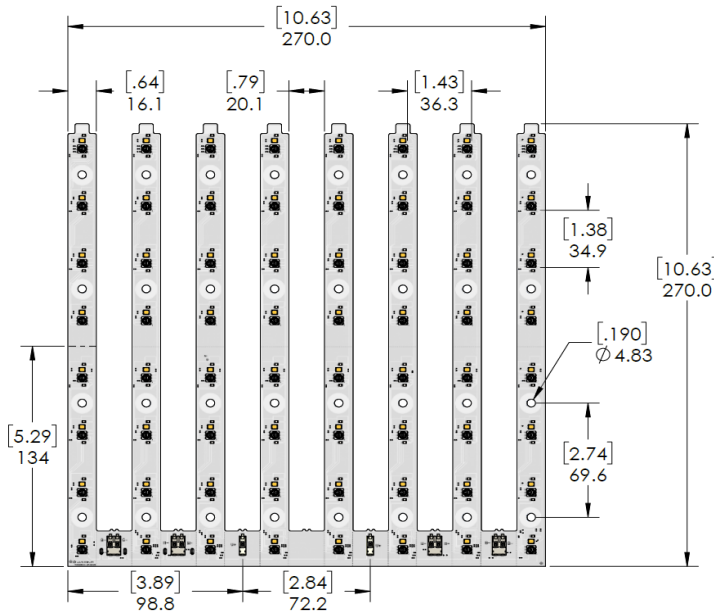
BLUE



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MECHANICAL CHARACTERISTICS

TECHNICAL DRAWING



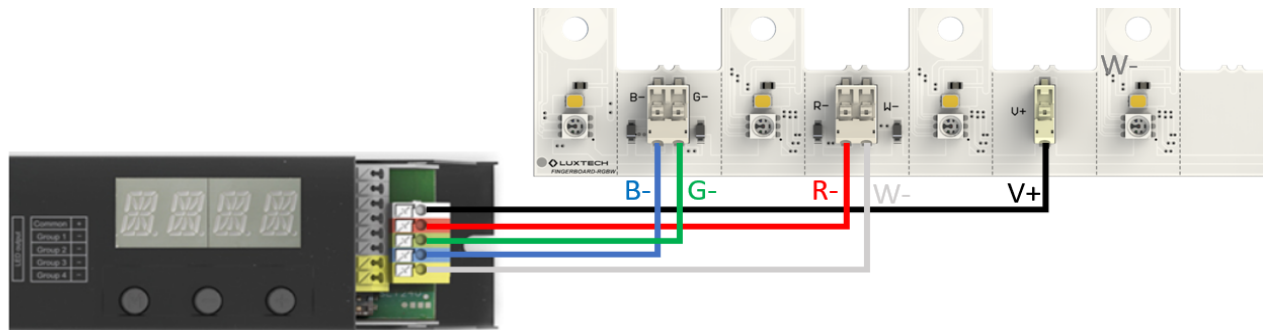
PRODUCT DIMENSIONS

PARAMETER	SPECIFICATION
Width	10.63"
Height	10.63"
PCB Thickness	0.063"
Mounting Hole Diameter	0.19"
Module Thickness, to Connector Top	0.22"

WIRING

PARAMETER	SPECIFICATION
Wire Size	18-24 AWG

Units: [inches] mm



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

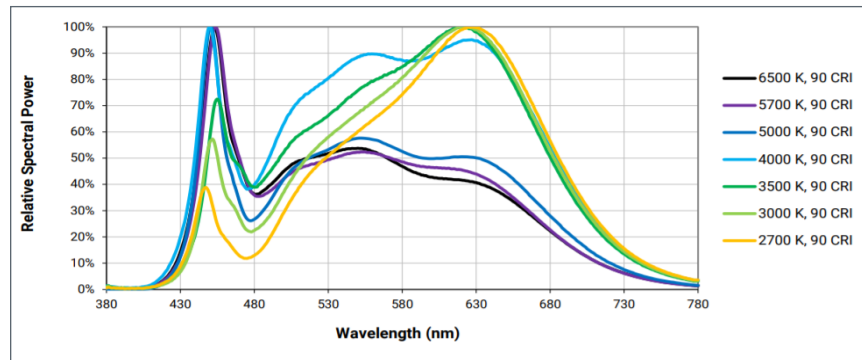
Design resources: Performance Calculator and CAD files available at LUXTECH.com

[Request Samples & Pricing Here](#)

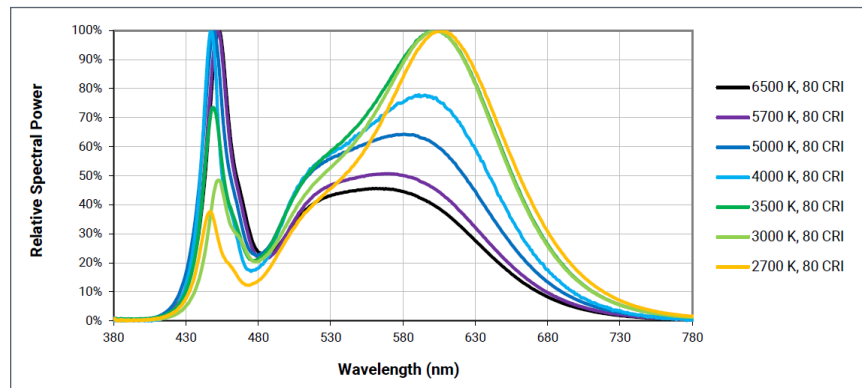
OPTICAL SPECIFICATIONS

SPECTRAL POWER DISTRIBUTION

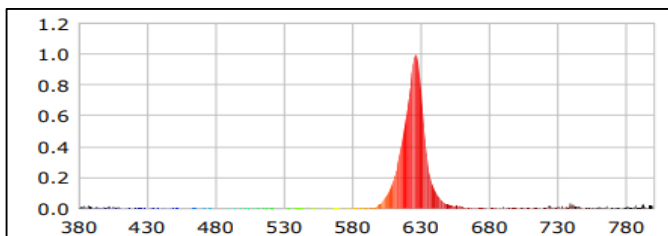
White 90 CRI



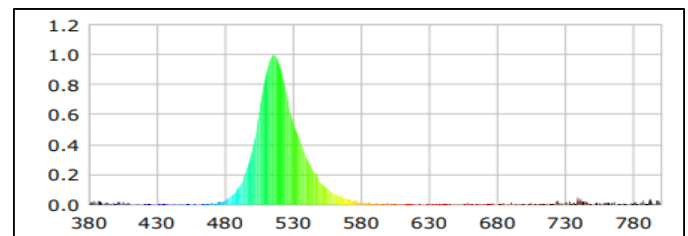
White 80 CRI



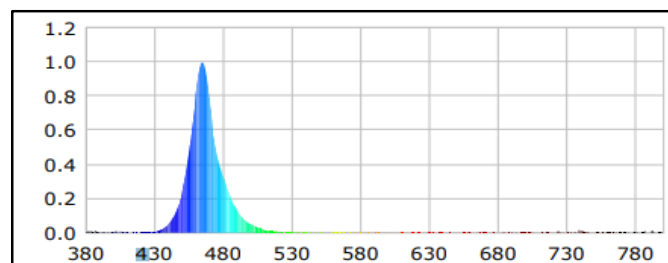
Red



Green

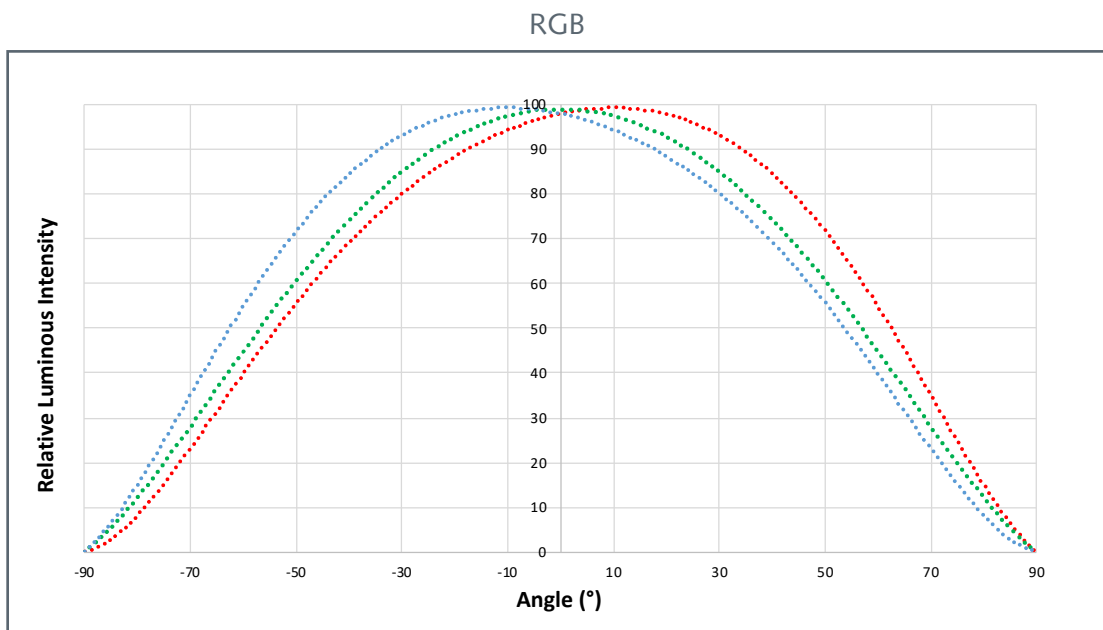
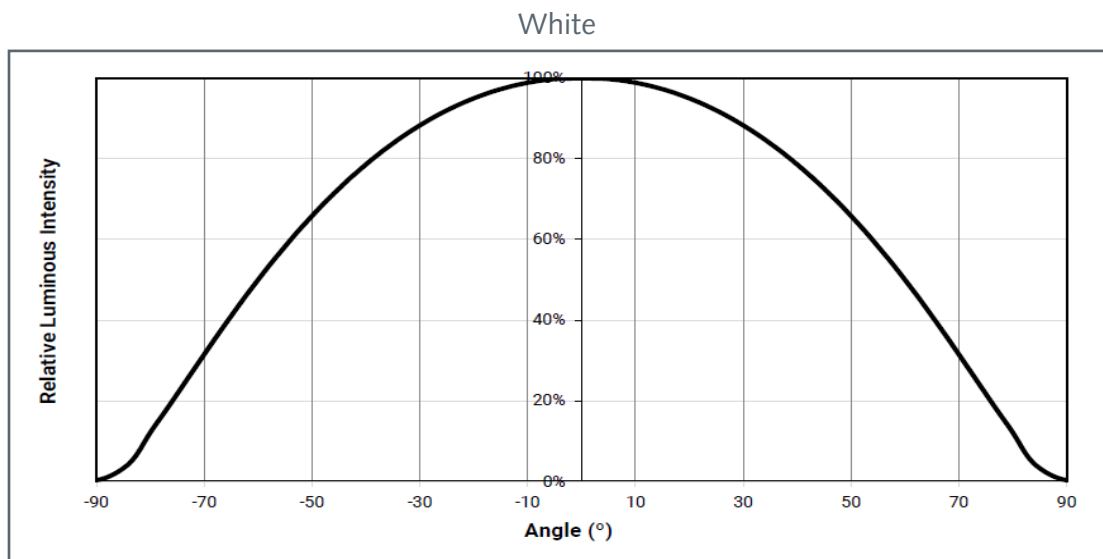


Blue



OPTICAL SPECIFICATIONS

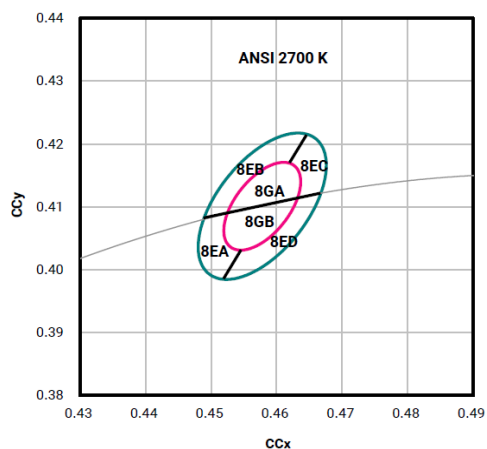
BEAM ANGLE



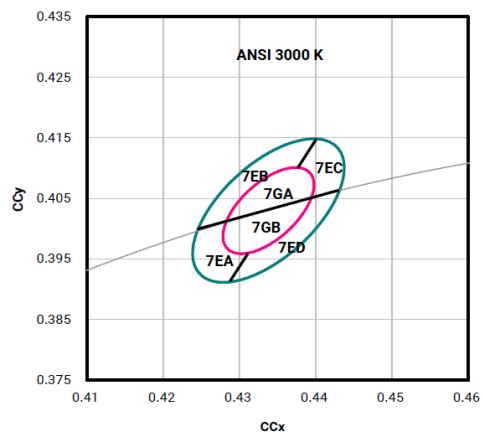
[Request Samples & Pricing Here](#)

COLOR BINNING INFORMATION

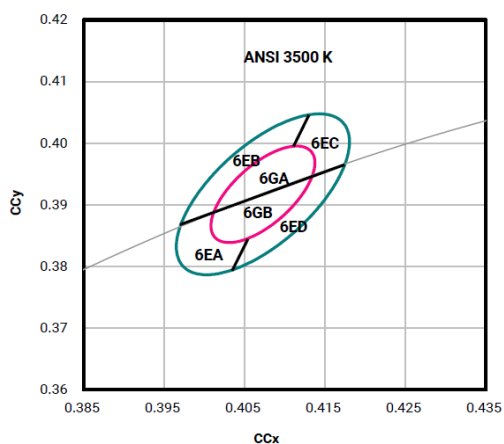
2700K 3-STEP (8GA, 8GB)



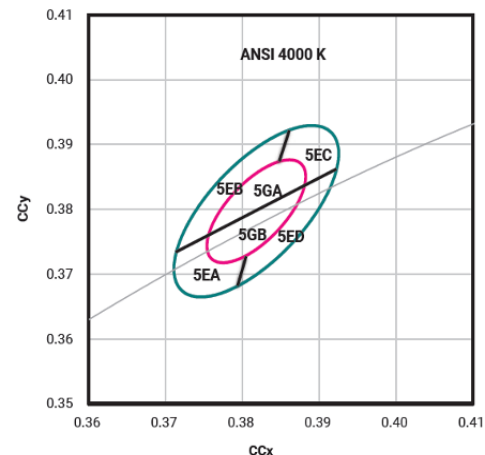
3000K 3-STEP (7GA, 7GB)



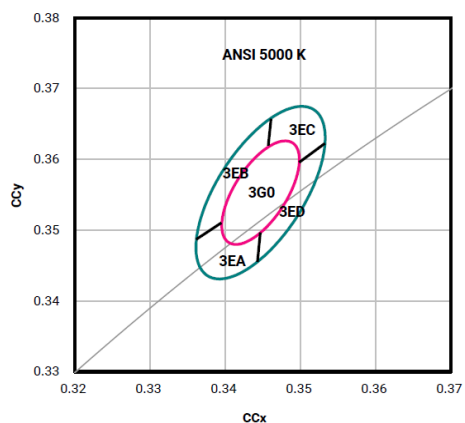
3500K 3-STEP (6GA, 6GB)



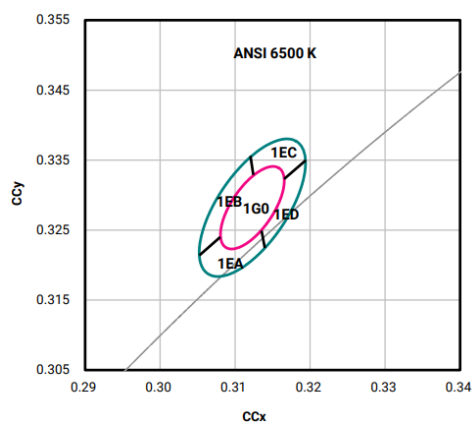
4000K 3-STEP (5GA, 5GB)



5000K 3-STEP (3G0)



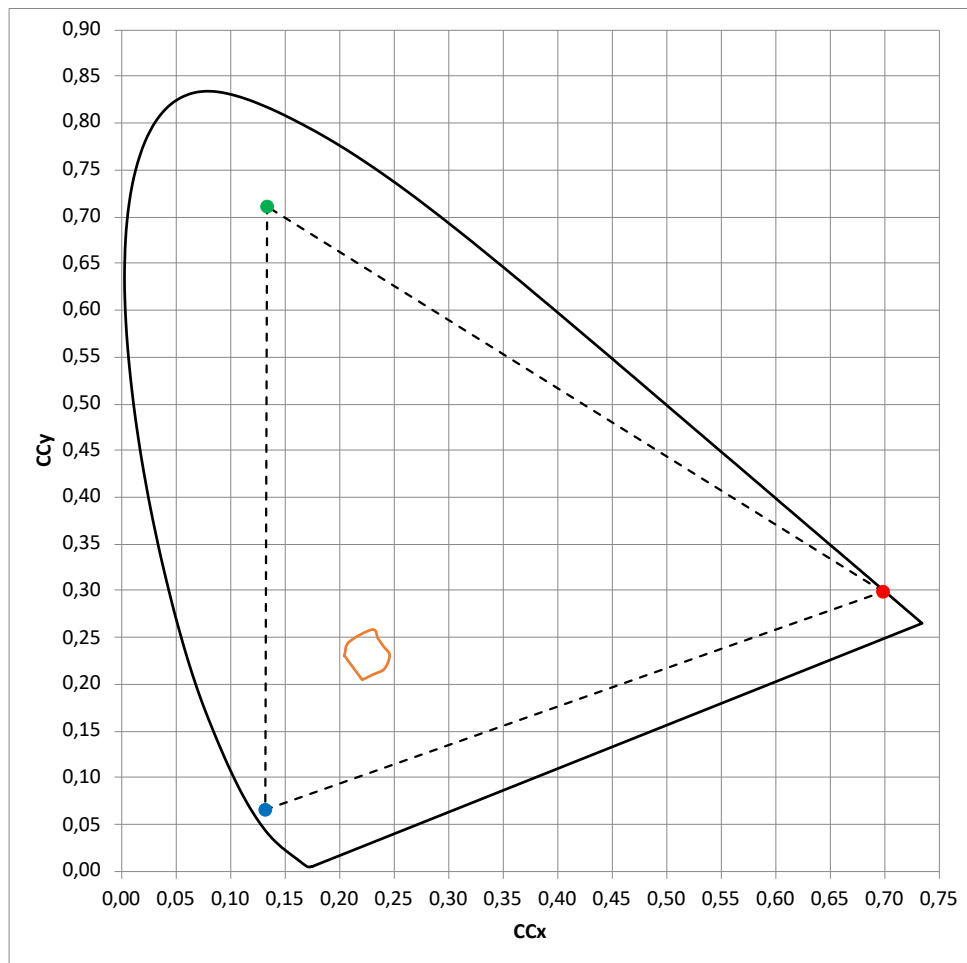
6500K 3-STEP (1G0)



[Request Samples & Pricing Here](#)

COLOR BINNING INFORMATION

RGB WHITE BIN



[Request Samples & Pricing Here](#)

ORDERING CODES

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	30K*	90*
	35K*	
	40K	
	50K	
	65K	

*Normally Stocked

Example: Fingerboard-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