

LUXroll WD

Flexible LED Module

Warm Dim

Cuttable Every 1/2"

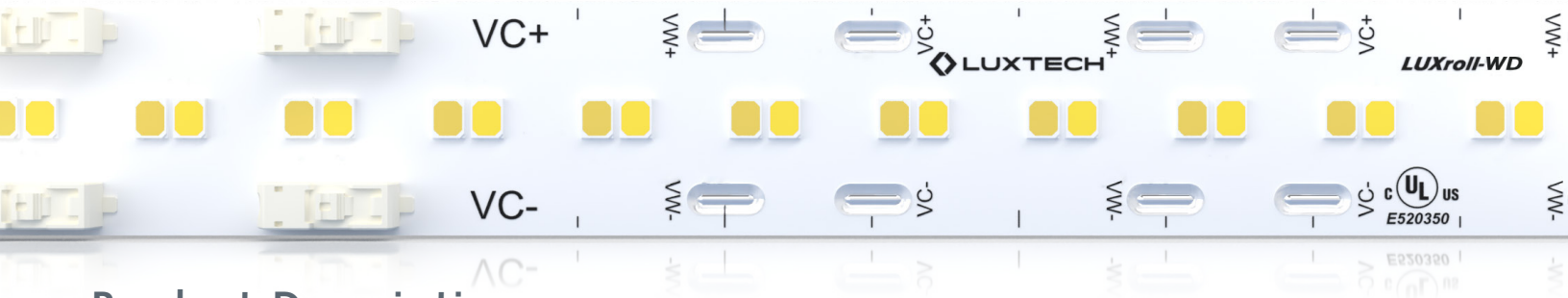


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About LUXTECH

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



Product Description

LUXroll Warm Dim is LUXTECH's premium architectural grade flexible LED product. Designed with people in mind, LUXroll Warm Dim is constant current, cuttable every 1/2 inch, and stocked with 90+ CRI LEDs standard with a 22K-35K tuning range. With a nominal 36V forward voltage, long runs are even more achievable at distances specified down to the 1/2 inch.

Technical Specifications

Mechanical Information:

- » Flexible reeled form factor
- » Cuttable Every 1/2 in
- » LED Pitch: 1/2 in
- » Width: 0.787 in (20mm)
- » Reel Length: 44'
- » Specification Grade 3M 300LSE Adhesive Backing

Photometric Performance:

- » Max Warm Lumen Output: 2260 lm/ft (2200K, 90CRI)
- » Max Cool Lumen Output: 2867 lm/ft (3500K, 90CRI)
- » Nominal Warm Efficacy: 108 lm/W (2200K, 90CRI, 800 lm/ft)
- » Nominal Cool Efficacy: 140 lm/W (3500K, 90CRI, 800 lm/ft)
- » Beam Angle: 120°
- » Tuning Range: 2200K - 3500K
- » 90+ CRI Standard (80 CRI Available)
- » 3-Step MacAdam Ellipse Color Binning

Electrical Information:

- » UL 2108 Listed: E520350
- » Poke-In Connectors
- » Forward Voltage: 33V (90CRI, 800 lm/ft)
- » On Board ESD Protection
- » Max Recommended Run Length: 8 ft
- » 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	CCT1	CCT2	CRI
LUXROLL-WD	22K	30K	90*
	27K*	35K*	
		40K	

*Normally Stocked

Example: LUXROLL-WD-22K-35K-90

ELECTRICAL CHARACTERISTICS

Instructions: Multiply the length of your run of LUXroll in inches by the desired flux and current to find the total values needed for your fixture.

2200K, 90 CRI, 45 °C

EACH 1" SEGMENT					
Current (mA/1")	10	20	30	45	60
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm/1")	36	70	102	146	184

1 FOOT					
Current (mA)	120	240	360	540	720
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm)	432	841	1225	1749	2205

8 FEET					
Current (mA)	960	1920	2880	4320	5760
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm)	3457	6729	9800	13993	17643

3500K, 90 CRI, 45 °C

EACH 1" SEGMENT					
Current (mA/1")	10	20	30	45	60
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm/1")	46	89	129	185	233

1 FOOT					
Current (mA)	120	240	360	540	720
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm)	548	1067	1554	2218	2797

8 FEET					
Current (mA)	960	1920	2880	4320	5760
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm)	4385	8534	12429	17747	22377

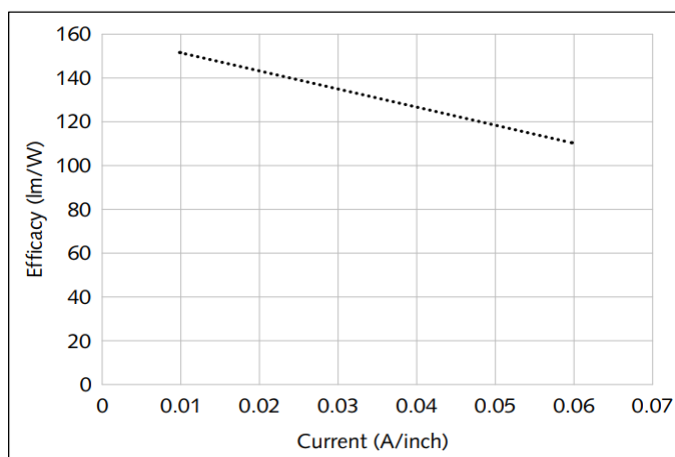
COLOR MIXING

- » Approximated from nominal current of 240mA per foot.
- » Flux derating relative to 3500K LEDs

CCT (K)	2200	2700	3000	3500
Current, 22K (%)	100%	54%	32%	0%
Current, 35K (%)	0%	46%	68%	100%
Flux (%)	79%	91%	95%	100%
SDCM	3	3.5	3.5	3

*Performances will vary based on installation and thermal conditions.

WHITE EFFICACY VS. CURRENT



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

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ABSOLUTE MAXIMUM RATINGS

Channel 35K, 90 CRI, 45 °C

PER 1" SEGMENT	
Current (mA)	60
Voltage (V)	39
Flux (lm)	273
Temperature (°C)	95

COMPONENTS	
Max Connector Current (A)	9
Max Recommended Run Length (ft)	8

Channel 22K, 90 CRI, 45 °C

PER 1" SEGMENT	
Current (mA)	60
Voltage (V)	39
Flux (lm)	193
Temperature (°C)	95

*Max ratings determined from LED Specifications.

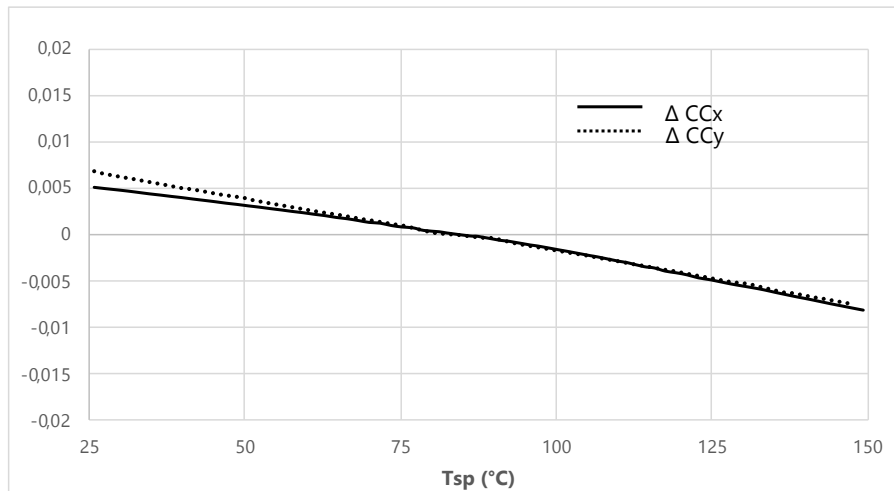
LUXTECH advises to measure the solder point temperature (Ts) of each application to confirm it is below our recommended max temperature.

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DERATING

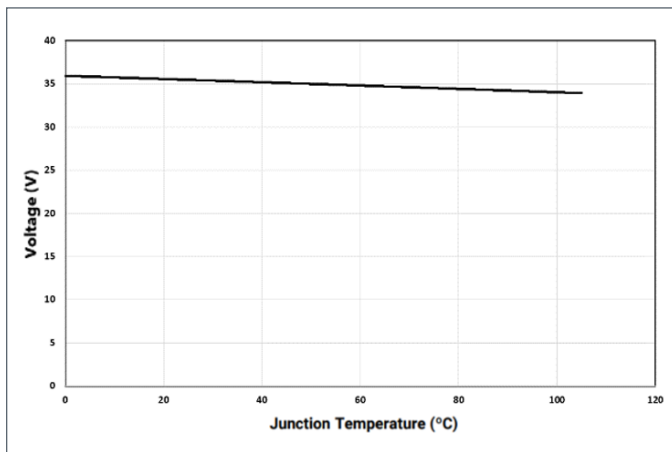
CRI	LIGHT OUTPUT
80 CRI	118%
90 CRI	100%

CHROMATICITY VS. TEMPERATURE

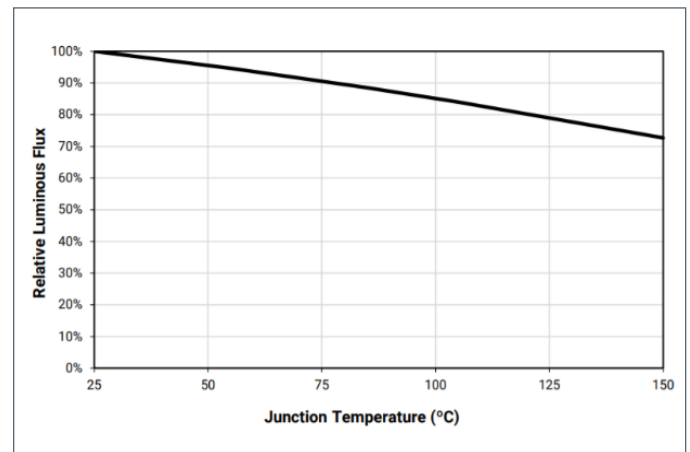


Chromaticity binned @ 85°C

VOLTAGE VS. TEMPERATURE



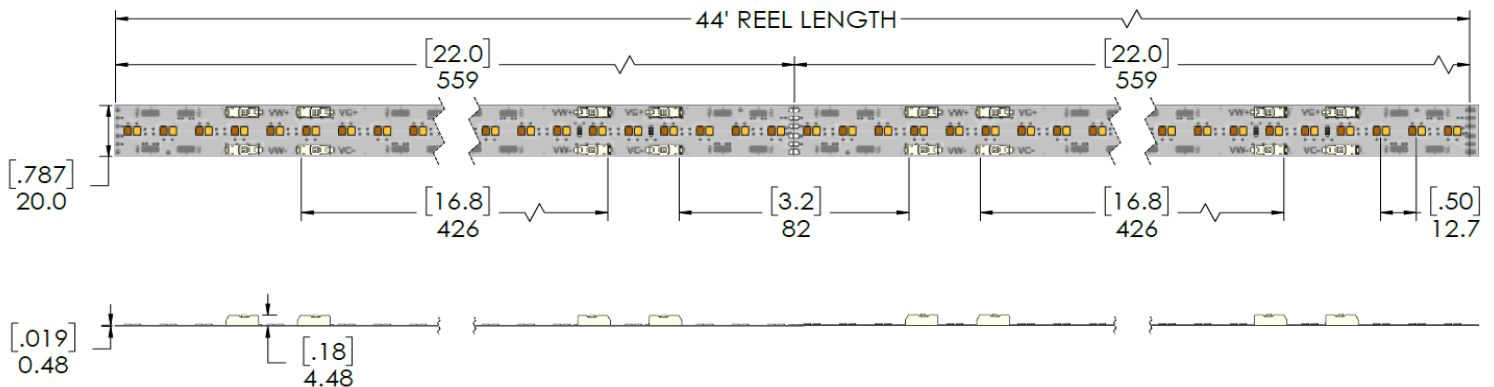
FLUX VS. TEMPERATURE



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MECHANICAL CHARACTERISTICS

TECHNICAL DRAWING



Units: [inches] mm

PRODUCT DIMENSIONS

PARAMETER	SPECIFICATION
Width	0.787"
Reel Length	44'
Connector Pattern	Repeating Pairs Every 22"
Solder Pad Spacing	2.0"
Cut Length	0.5"
PCB Thickness	0.009"
Module Thickness, to Connector Top	0.17"

WIRING

PARAMETER	SPECIFICATION
Wire Size	18-24 AWG

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

[Request Samples & Pricing Here](#)

DRIVER SELECTION

Recommended for use with the following two-channel drivers.

BRAND	MODEL	PROGRAMMABLE DRIVE CURRENT (mA)	OUTPUT VOLTAGE (V)	DIMMING	CONTROL
EldoLED	DUALDrive 1060/M	200mA - 1050mA	2V - 57V	CCR, PWM	DALI
	DUALDrive 560/L	150mA - 1400mA	2V - 55V	CCR, PWM	DALI
	DUALDrive 1060/S	200mA - 1050mA	2V - 57V	CCR, PWM	DALI
	DUALDrive 560/S	150mA - 1400mA	2V - 55V	CCR, PWM	DALI
Moons	MU050S150BQI501	150mA - 1500mA	8V - 55V	CCR, PWM	DALI
	MU050S150BQI201	150mA - 1500mA	8V - 55V	CCR	0-10V

CONTROLLER SELECTION

Recommended for use with the following controllers.

BRAND	MODEL	CONTROL TYPE	NEEDED ACCESSORIES
Lunatone	DALI Touchpanel	DALI	Lunatone PS2 30mA DALI Bus Power supply
Lutron	Maestro	0-10V Dimmer	1x dimmer per channel
Legrand	Radiant	0-10V Dimmer	1x dimmer per channel
Leviton	Decora DS710-10Z	0-10V Dimmer	1x dimmer per channel

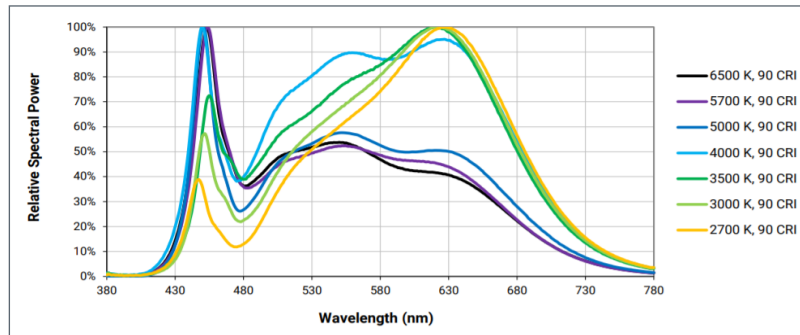
Design resources: Performance Calculator and CAD files available at [LUXTECH.com](https://luxtech.com)

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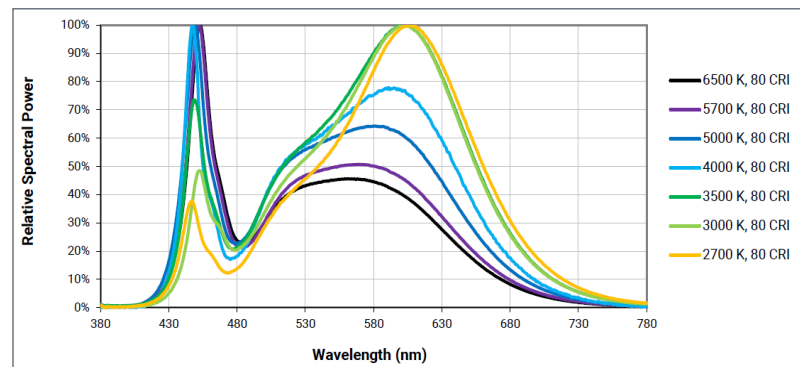
OPTICAL SPECIFICATIONS

SPECTRAL POWER DISTRIBUTION

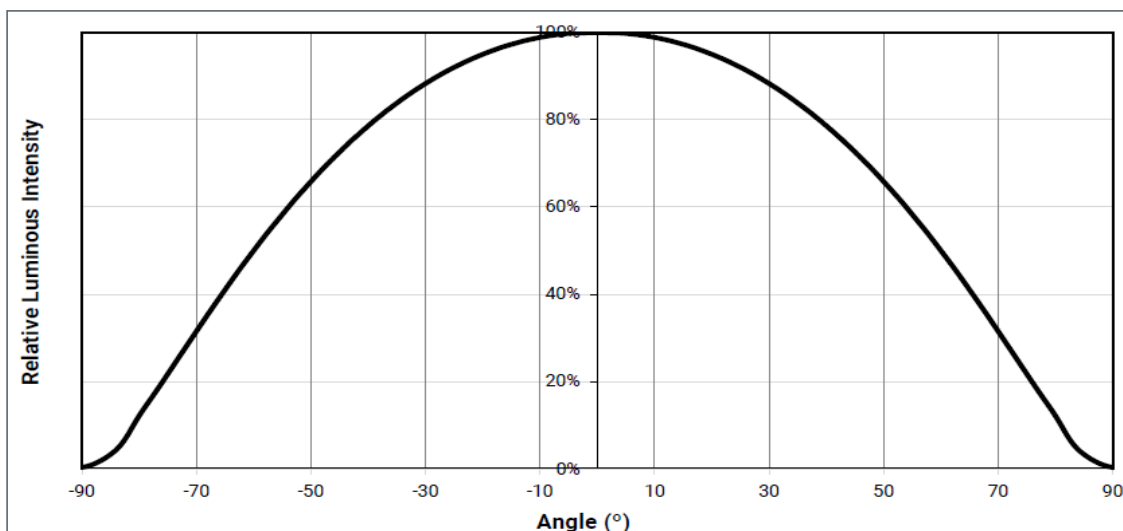
90 CRI



80 CRI



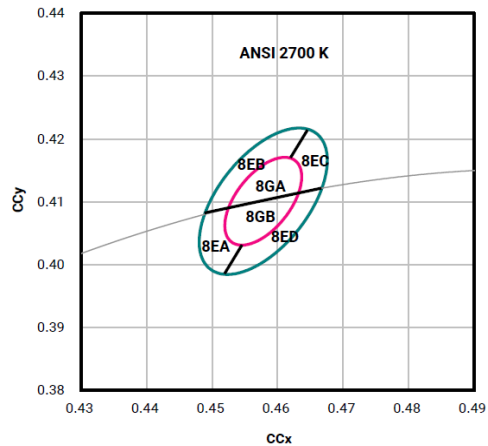
BEAM ANGLE



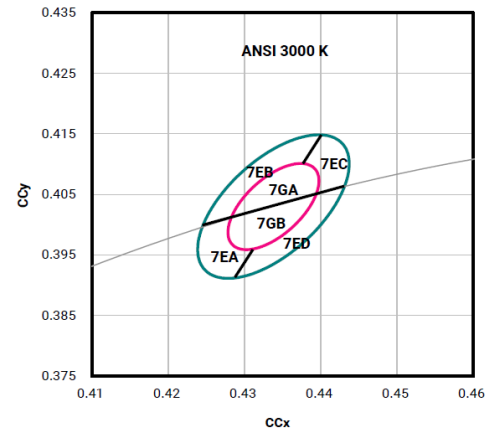
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COLOR BINNING INFORMATION

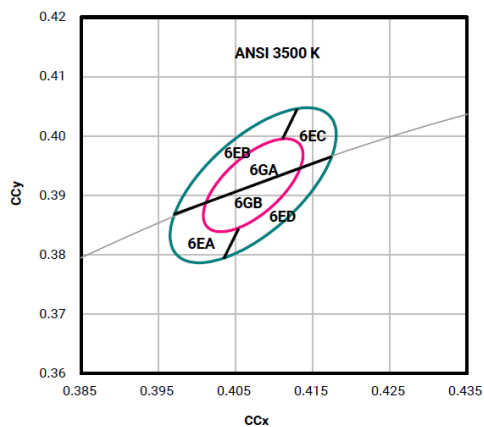
2700K 3-STEP (8GA, 8GB)



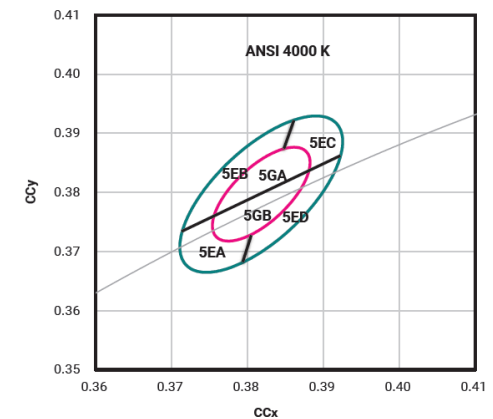
3000K 3-STEP (7GA, 7GB)



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



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



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ORDERING CODES

Product Name	CCT1	CCT2	CRI
LUXROLL-WD	22K*	30K	90*
	27K	35K*	
		40K	

*Normally Stocked

Example: LUXROLL-WD-22K-35K-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