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LUXroll CC

FLEXIBLE LED MODULE DATA SHEET

Request Samples & Pricing [Here](#)

PRODUCT DESCRIPTION

LUXroll CC is LUXTECH's premium architectural grade flexible LED product. Designed with people in mind, LUXroll CC is constant current, cuttable every 1/2 inch and stocked with 90+ CRI LEDs standard. 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
- Specification-Grade 3M 300LSE Adhesive Backing
- LED Pitch: 0.5 in
- Width: 0.787 in (20mm)
- Reel Length: 88'

Photometric Performance

- Nominal Lumen Output: 800 lm/ft (3500K, 90CRI)
- Nominal Efficacy: 140 lm/W (3500K, 90CRI, 800 lm/ft)
- Beam Angle: 120°
- CCT Range: 2700K - 6500K
- 90+ CRI Standard (80 CRI Available)
- 3-Step MacAdam Ellipse Color Binning

Electrical Information

- UL 2108 Listed: E520350
- Poke-In Connectors
- Forward Voltage: 33V (3500K, 90CRI, 800 lm/ft)
- Compatible with Industry-Standard 36V Drivers (0-2.8A)
- 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



REQUESTING SAMPLES & PRICING

PRODUCT NAME	REEL LENGTH	COLOR TEMPERATURE	CRI
LUXroll-CC	88 ft*	27K*	80*
	198 ft	30K*	90*
		35K*	
		40K*	
		50K	
		65K	

*Normally Stocked

Example: LUXroll-CC-88ft-30K-90

ELECTRICAL CHARACTERISTICS

Assuming 35K, 90 CRI, 45 °C

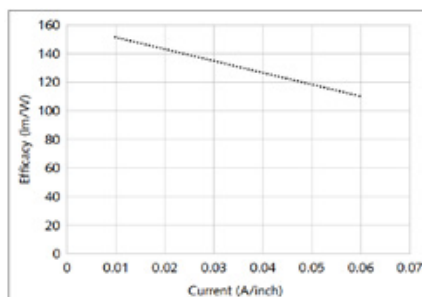
EACH 1" SEGMENT					
Current (mA/1")	10	20	30	45	60
Voltage (V)	32.7	33.9	35.0	36.3	37.2
Flux (lm/1")	46	89	129	185	233

2 FEET					
Current (mA)	240	480	720	1080	1440
Voltage (V)	32.6	33.7	34.7	36.0	36.9
Flux (lm)	1096	2134	3107	4437	5594

4 FEET					
Current (mA)	480	960	1440	2160	2880
Voltage (V)	32.6	33.7	34.7	36.0	36.9
Flux (lm)	2192	4267	6214	8874	11188

8 FEET					
Current (mA)	960	1920	2880	4320	5760
Voltage (V)	32.6	33.7	34.7	36.0	36.9
Flux (lm)	4385	8534	12429	17747	22377

WHITE EFFICACY VS. CURRENT



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

*Performances will vary based on specific installation and thermal conditions.

ABSOLUTE MAXIMUM RATINGS

Assuming 35K, 90 CRI

PER 1" SEGMENT	
Current (mA)	60
Voltage (V)	39
Flux (lm)	233
Temperature (°C)	95

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

Max Drive Current = Run Length (in) x 60 (mA)

*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.

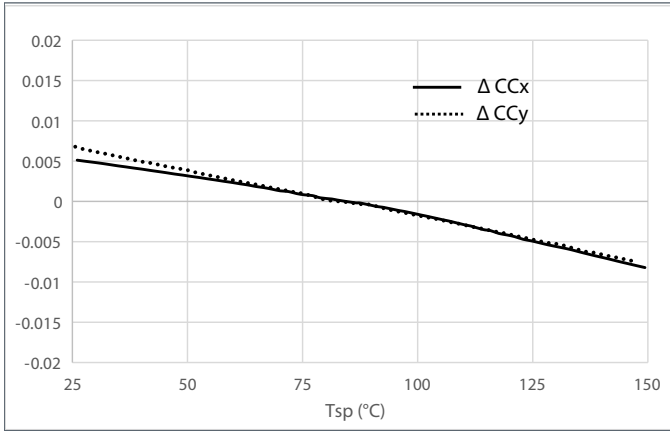
DERATING

COLOR TEMPERATURE (80CRI)	LIGHT OUTPUT
2700K	93%
3000K	98%
3500K	100%
4000K	103%
5000K	103%
6500K	103%

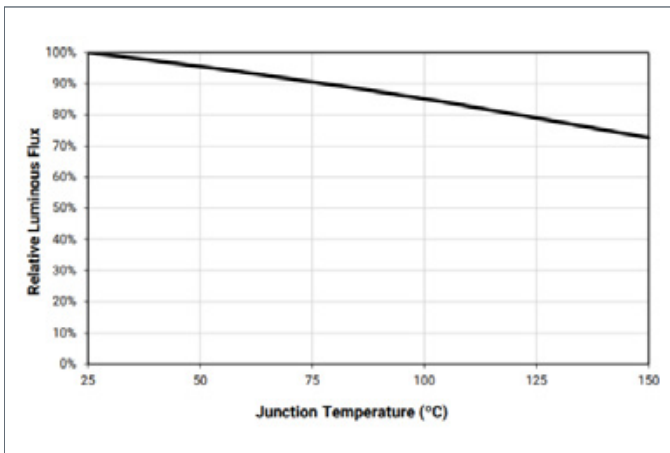
CRI	LIGHT OUTPUT
80 CRI	118%
90 CRI	88%

CHROMATICITY VS. TEMPERATURE

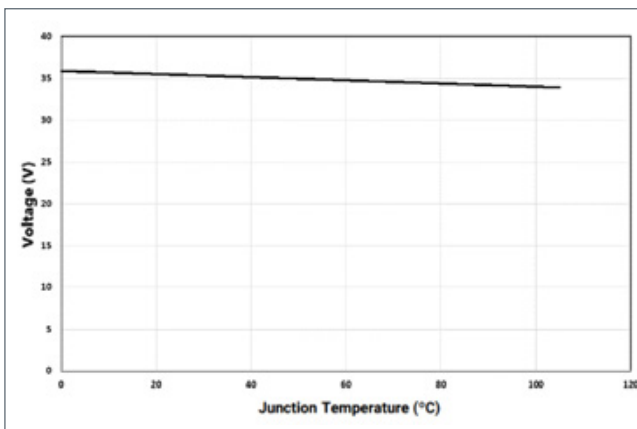
Chromaticity binned @ 85 °C



FLUX VS. TEMPERATURE



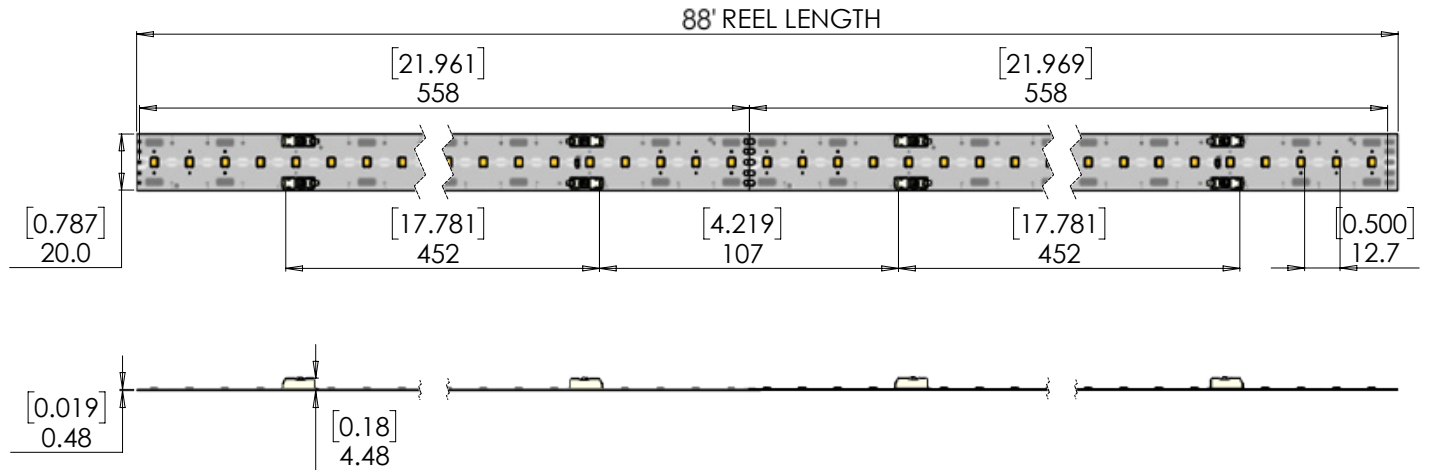
VOLTAGE VS. TEMPERATURE



MECHANICAL CHARACTERISTICS

Technical Drawing

Units: [inches] mm



Product Dimensions

PARAMETER	SPECIFICATION (IN)
Width	0.787"
Reel Length	88'
Connector Pattern	22" repeating segments
Solder Pad Spacing	1"
Cut Length	0.5"
Module Thickness, to Connector Top	0.18"
PCB Thickness	0.009"

Wiring

PARAMETER	SPECIFICATION
Wire Size	18-24 AWG

RECOMMENDED COMPATIBLE DRIVERS

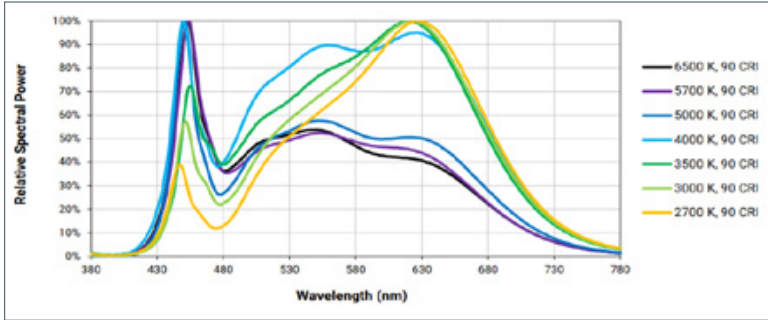
BRAND	MODEL	PROGRAMMABLE DRIVE CURRENT (MA)	OUTPUT VOLTAGE (V)	DIMMING
AC Electronics	AC-50CD1.4APC7	400-1400	15-55	0-10V
EldoLED	SOLOdrive 566/U (A/S/L)	150-1400	15-55	0-10V
Osram	OPTOTRONIC Intelligent	150-1400	10-56	DALI/DEXAL

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

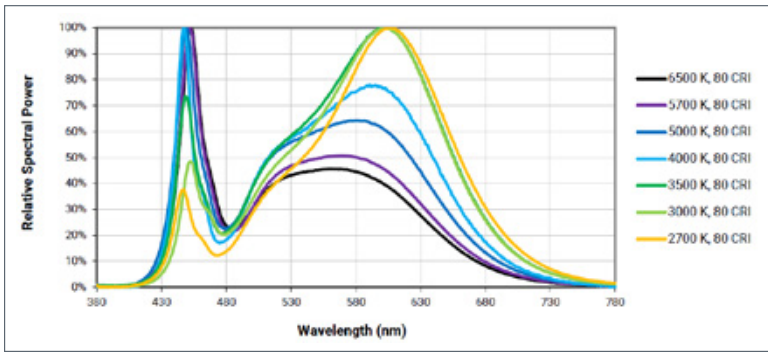
OPTICAL SPECIFICATIONS

Spectral Power Distribution

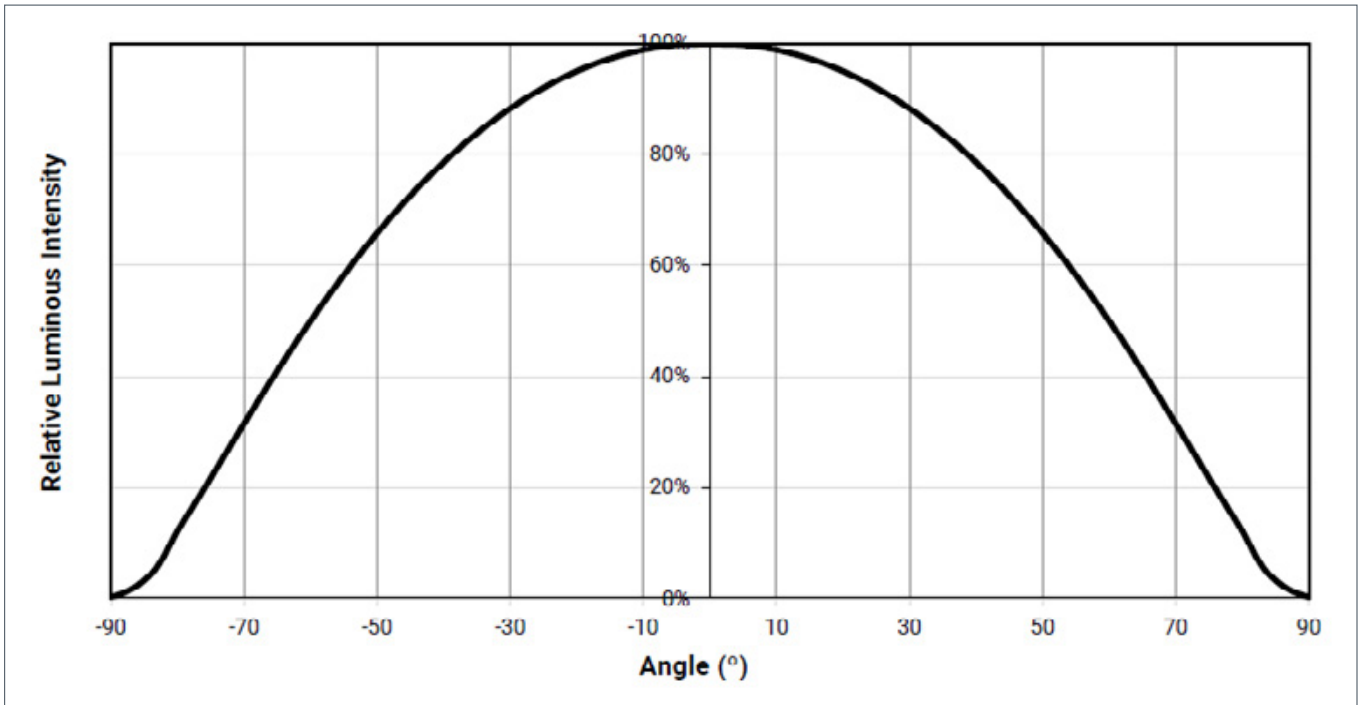
90 CRI



80 CRI



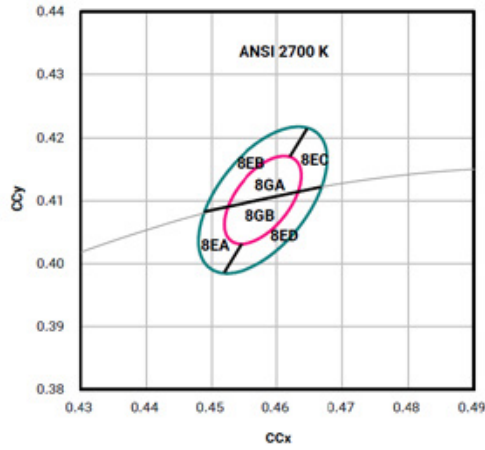
BEAM ANGLE



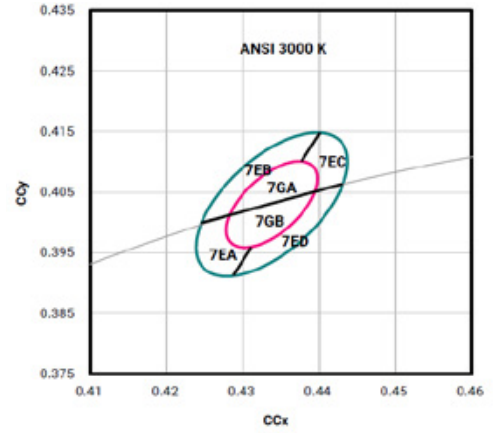
COLOR BINNING INFORMATION

BEAM ANGLE

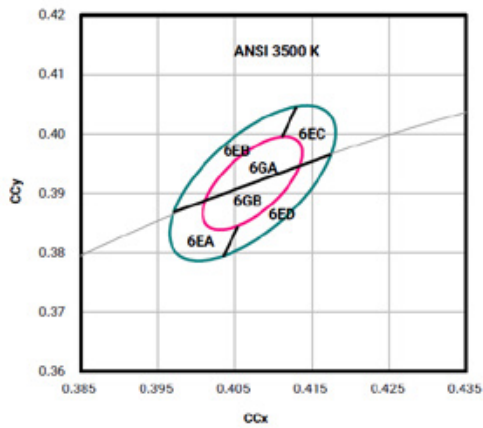
2700K 3-Step (8GA, 8GB)



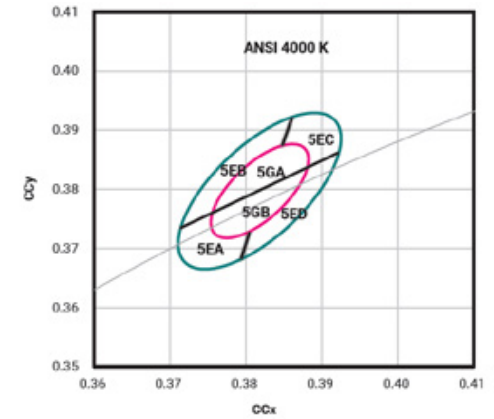
3000K 3-Step (7GA, 7GB)



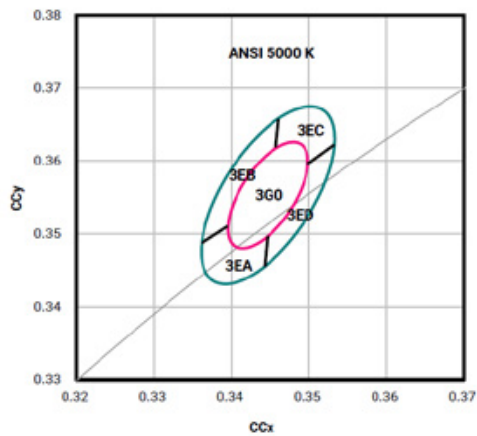
3500K 3-Step (6GA, 6GB)



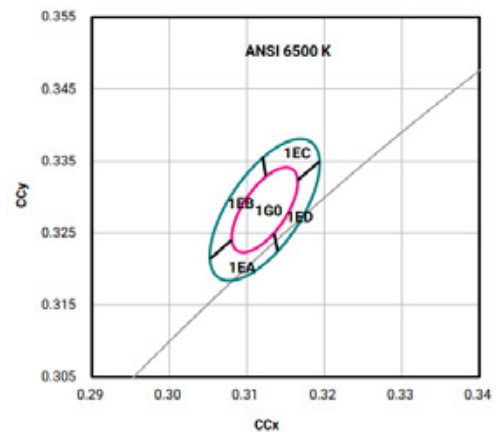
4000K 3-Step (5GA, 5GB)



5000K 3-Step (3G0)



6500K 3-Step (1G0)



ORDERING CODES

PRODUCT NAME	REEL LENGTH	COLOR TEMPERATURE	CRI
LUXroll-CC	88 ft*	27K*	80*
	198 ft	30K*	90*
		35K*	
		40K*	
		50K	
		65K	

*Normally Stocked

Example: LUXroll-CC-88ft-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 for first release
 - Shipment of balance at end of term

Expedite Services

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