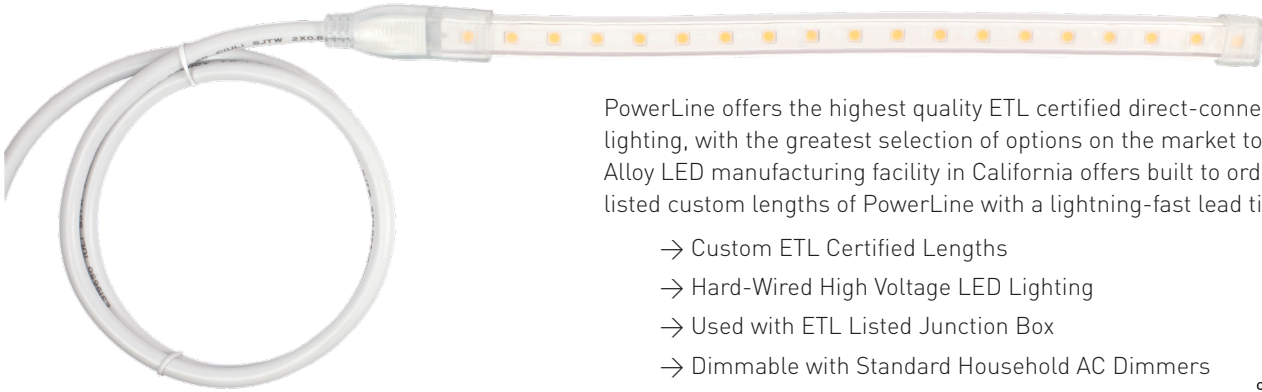


## PowerLine™ 200 Hard-Wired AC LED Tape Light



PowerLine offers the highest quality ETL certified direct-connect LED lighting, with the greatest selection of options on the market today. The Alloy LED manufacturing facility in California offers built to order, ETL listed custom lengths of PowerLine with a lightning-fast lead time.

- Custom ETL Certified Lengths
- Hard-Wired High Voltage LED Lighting
- Used with ETL Listed Junction Box
- Dimmable with Standard Household AC Dimmers
- 200 Lumens / foot (avg.)



<b>Stocked Color Temps (Kelvin)*</b>	2700K, 3000K, 4200K, red, blue
<b>Power Consumption per foot</b>	2.7 Watts / 22mA
<b>Input Voltage</b>	120V AC
<b>Lumens per ft.</b>	200 (avg.)
<b>Tape Dimensions (W x H)</b>	0.57 x 0.3 in.
<b>End Cap Dimensions (W x H)</b>	0.72 x 0.44 in.
<b>Max. Run Length</b>	150 ft.
<b>Dimmable</b>	Yes
<b>Compatible Dimmers</b>	see page 3
<b>Beam Angle</b>	120°

<b>Cut Points</b>	Every 12 in.
<b>Diode Type</b>	5050
<b>Diodes per foot</b>	20
<b>Diode Spacing</b>	0.6 in.
<b>Location</b>	Indoor, Outdoor (IP65)
<b>Operating Temp.</b>	-22° F to 122° F / -30° C to 50° C
<b>Ambient Temp.</b>	-4° F to 104° F / -20° C to 40° C
<b>Certifications / Standards</b>	ETL Listed, UL 1598, RoHS
<b>Warranty</b>	5 Year Limited

\* In addition to stocked colors, a wide variety of kelvin temperatures is also available by special order. Please call or email to order.

### → ETL Listed Custom Lengths

**AL - 11 - 11 - A - [CCT] - [LENGTH]**  
 (Choice of Kelvin temp.) (Choice of length  
 27 = 2700K 1 ft. increments)  
 30 = 3000K 001-150 ft.  
 42 = 4200K  
 R = Red  
 B = Blue

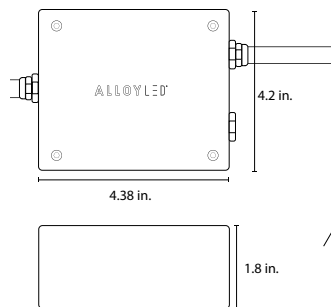
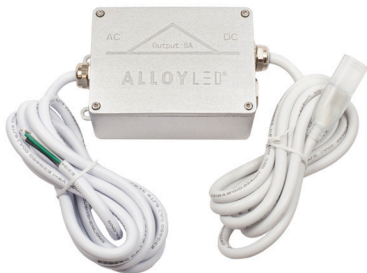
Use the SKU builder to fill in the CCT (Kelvin temp.) and length (in feet).

#### Example:

**AL-11-11-A-30-039**

PowerLine 200 AC Tape - 3000K - 39 feet

### → Required Accessory (sold separately)



ETL Listed Junction Box  
 AL-11-99-900W-JBOX  
 (Required / sold separately)

<b>Input Voltage</b>	120V AC
<b>Dimensions (LxWxH)</b>	4.38 x 4.2 x 1.8 in.
<b>Max. Power</b>	900W
<b>Cable Length (to tape)</b>	69 in.
<b>Cable Length (to power)</b>	69 in.
<b>Knockouts / Outputs</b>	2
<b>Compatible Wire</b>	<12AWG / 14AWG Molex
<b>Wire Nut Diameter</b>	18mm / 20mm
<b>Lid Bolts (L = 10mm)</b>	2.5mm hex

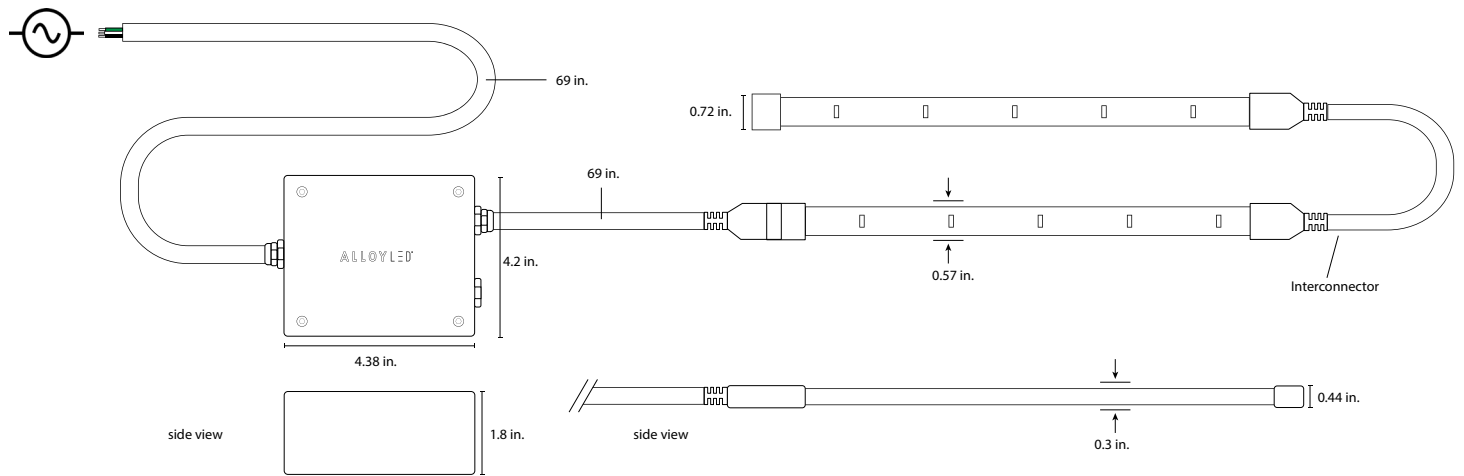
→ See next page for available accessories

## → Alloy LED Light Lab™ Specifications

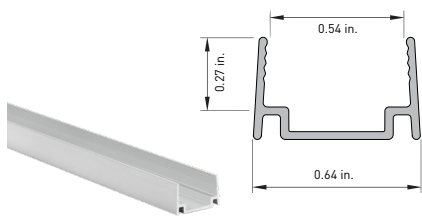
Max. Run = 150'

Item #	Voltage	Kelvin temp. (CCT) *	CRI	R9 Value	R13 Value	TM-30	CQS	Lumens / foot
AL-11-11-A-27-XXX	120V AC	2700K	94	84	93	90	92	179
AL-11-11-A-30-XXX	120V AC	3000K	95	87	94	95	96	211
AL-11-11-A-42-XXX	120V AC	4200K	98	93	99	92	95	167
AL-11-11-A-R-XXX	120V AC	red	n/a	n/a	n/a	n/a	n/a	n/a
AL-11-11-A-B-XXX	120V AC	blue	n/a	n/a	n/a	n/a	n/a	n/a

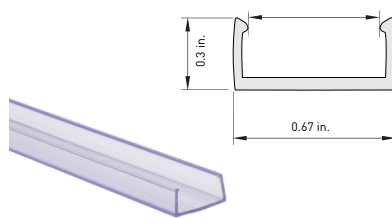
## → Diagram



## → Mounting Accessories (sold separately)



**Mounting Channels**  
AL-11-11-9923-AL (4 ft. - aluminum)  
Pilot holes every 1 ft.  
Incl. 4 screws - 0.6 in.



**Mounting Channels**  
AL-11-11-9930 (4 ft. - plastic)



**Plastic Mounting Clips/Screws**  
AL-11-11-9922 (5 pack w/10 screws)

## → Additional Accessories (sold separately)



**Splice Connector**  
AL-11-11-9907-WH (12 ft. - White)



**Interconnector (incl. 2x two-pin connectors)**  
AL-11-11-9910-WH (6 in. - White)  
AL-11-11-9915-WH (36 in. - White)



**End Cap**  
AL-11-11-9921-10 (Clear - 10 pack)



**Cable Connector (for second knockout)**  
AL-11-11-9901

## → Dimmer Compatibility

PowerLine 200 is dimmable when used with standard household AC dimmers.

### Alloy LED Light Lab Tested Dimmers for PowerLine 200 Tape

BRAND	MODEL	MODEL #	INPUT
LUTRON	SKYLARK	CTCL-153P	100-130V
	MAESTRO	MACL-153M	100-130V
	MAESTRO	MACL-153MR	100-130V

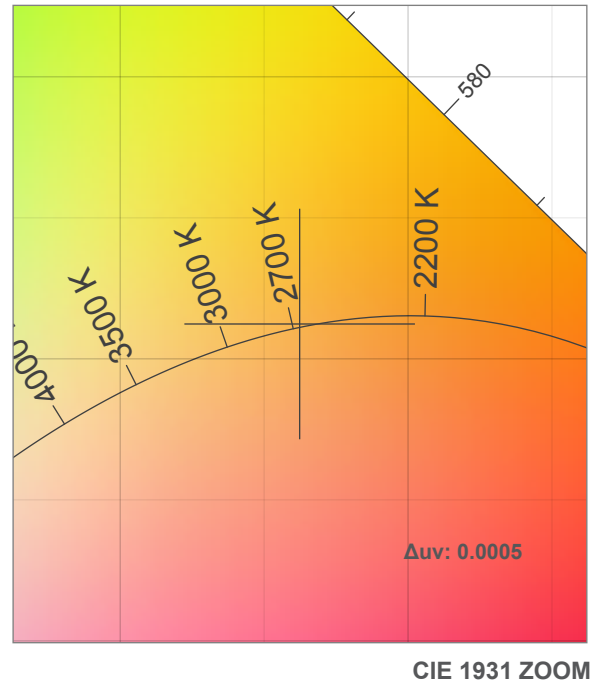
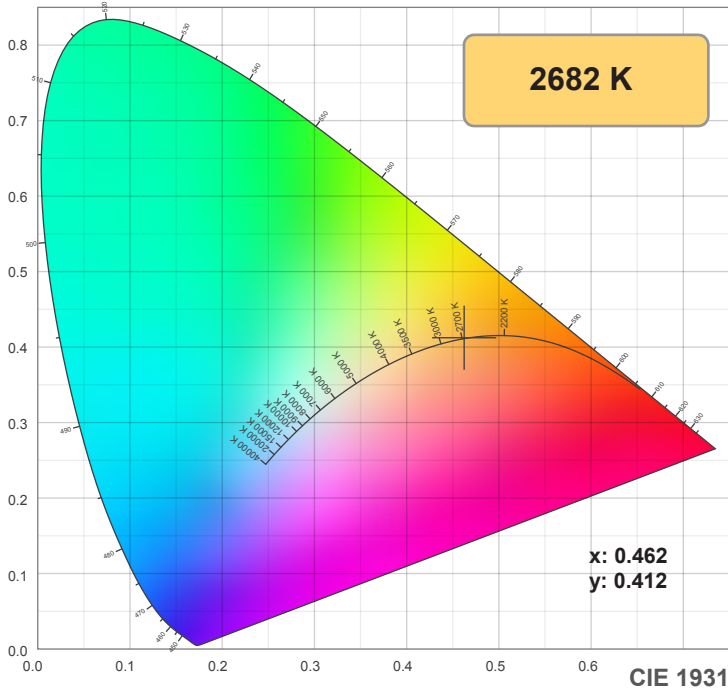
LEGRAND	ADORNE SOFTAP	ADTP700RMTUW1	100-130V
---------	---------------	---------------	----------

LEVITON	DECORA	6161-A	100-130V
	SURESLIDE	6633	100-130V
	SURESLIDE	6633-PLW	100-130V
	SURESLIDE	6633-POG	100-130V
	DECORA SURESLIDE	6674	100-130V

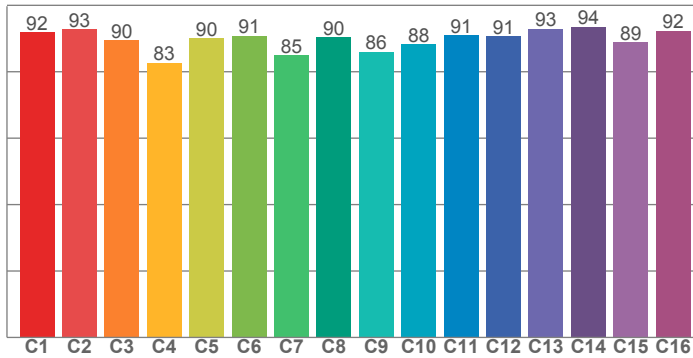
INSTEON	6 BUTTON KEYPAD	2334-232	100-130V
	SWITCHLINC	2477D	100-130V
	LAMPLINC	2457D2	100-130V

GE	Z-WAVE	12724	100-130V
	Z-WAVE	45602	100-130V
	PUSH ON/OFF	52136	100-130V

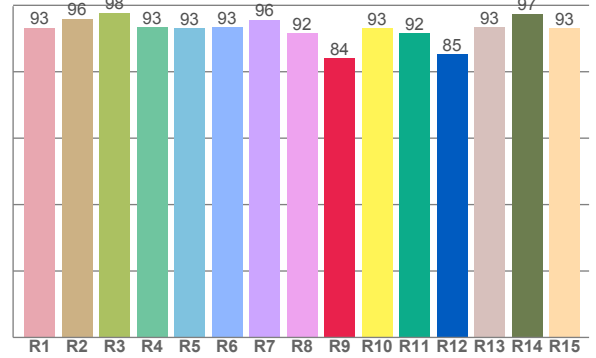
## 2700K



**TM30: 89.6**



**CRI: 94.3 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.2	96.0	97.8	93.4	93.2	93.5	95.7	91.7	84.1	93.2	91.6	85.3	93.4	97.5	93.2

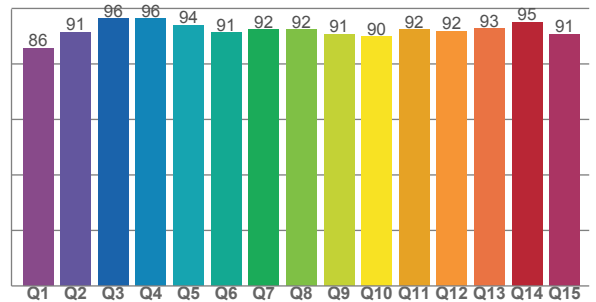
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.9	92.8	89.5	82.6	90.1	90.8	85.0	90.3	86.1	88.3	90.9	90.7	92.9	93.5	88.8	92.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85.7	91.4	96.2	96.4	93.9	91.2	92.4	92.4	90.8	89.8	92.4	91.9	92.7	95.0	90.7

**CQS: 91.6**



### Color parameters

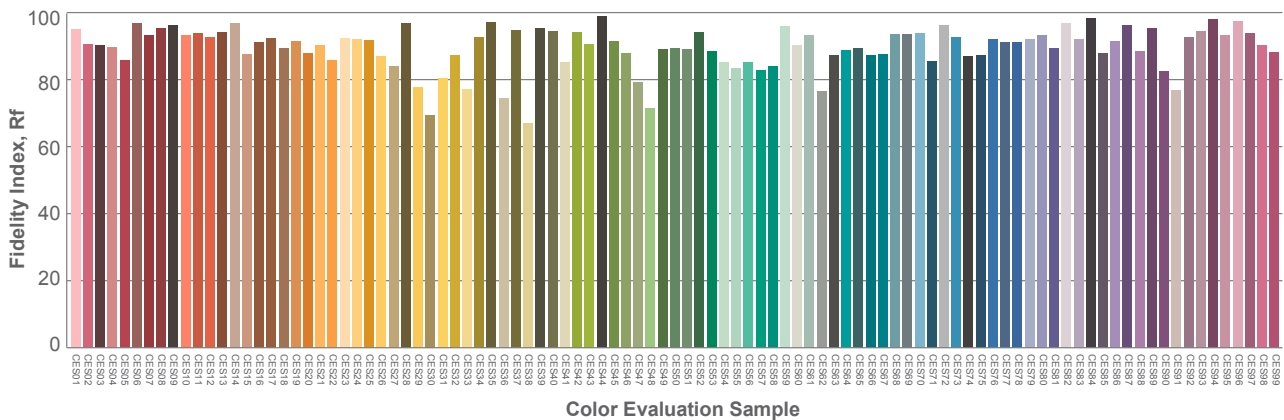
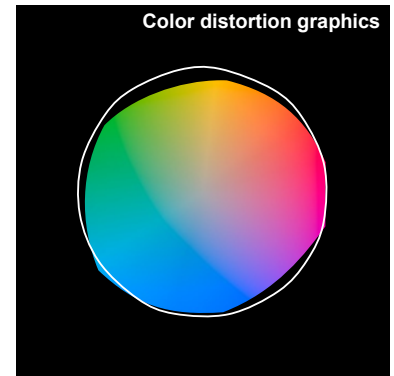
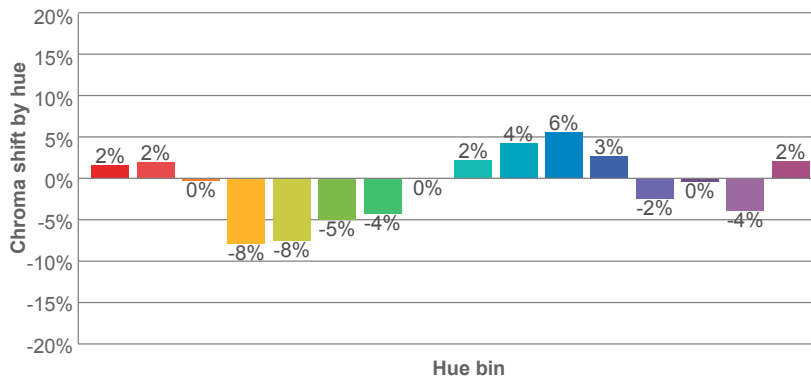
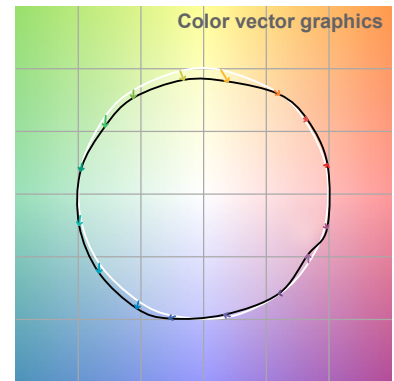
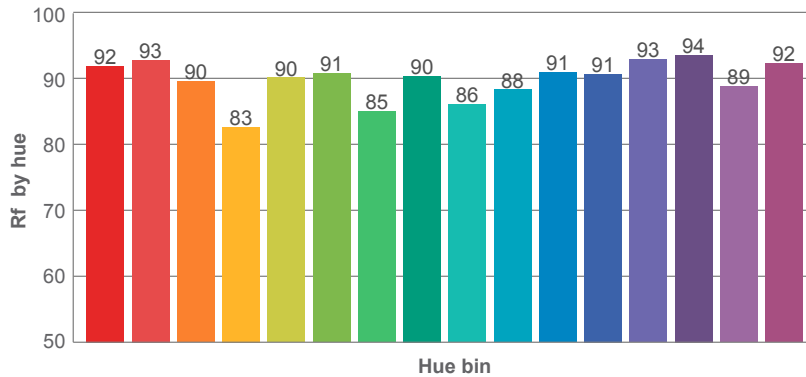
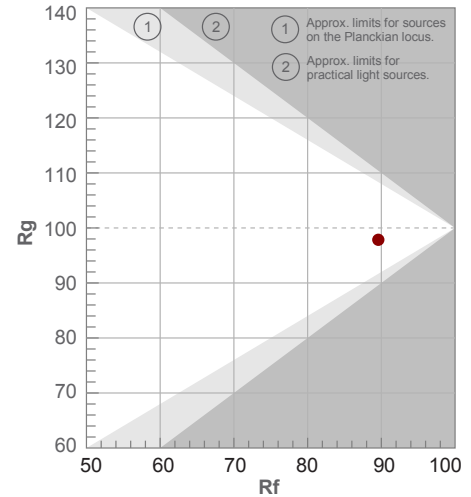
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2682 K	94.3	84.1	89.6	97.8	91.6	0.462	0.412	0.263	0.352	0.0005

2700K

**Rf 89.6**  
Fidelity index Rf

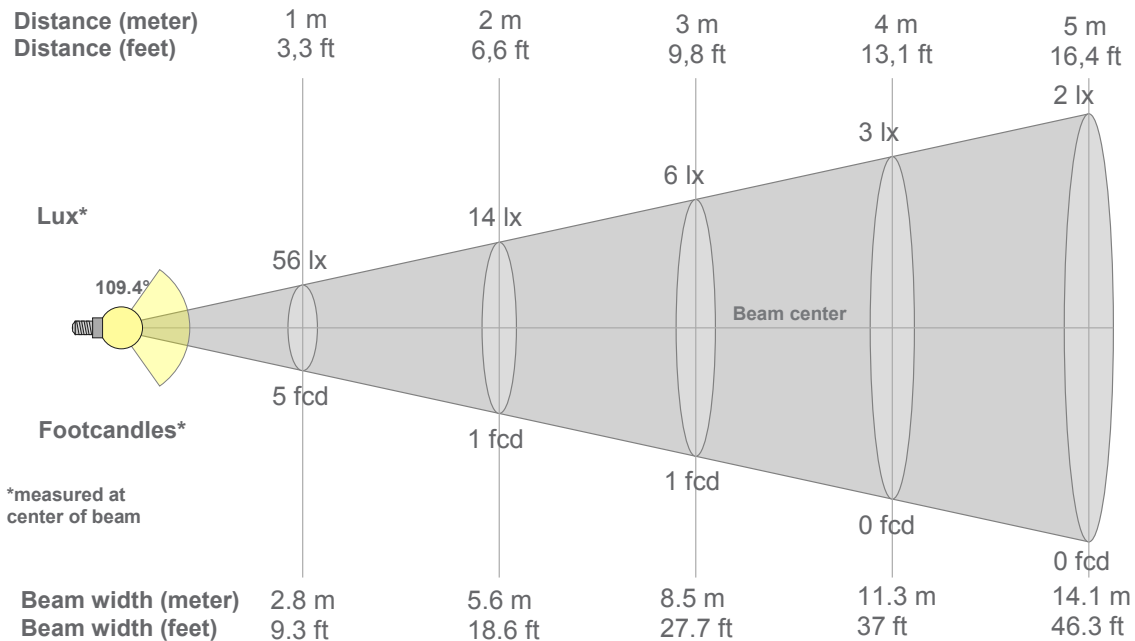
**Rg 97.8**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	2%	2%
2	93	2%	-3%
3	90	0%	-5%
4	83	-8%	-7%
5	90	-8%	-1%
6	91	-5%	4%
7	85	-4%	8%
8	90	0%	6%
9	86	2%	7%
10	88	4%	6%
11	91	6%	2%
12	91	3%	-4%
13	93	-2%	-4%
14	94	0%	-1%
15	89	-4%	5%
16	92	2%	-3%



2700K

## Beam details



### Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
56lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
5.2fcd	1.3fcd	0.6fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

### Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
55.9	54.4	51.2	47.1	41.5	35.1	28.4	22.2	16.4	11.4	6.6	2.8	0.9	0.6	0.7	0.8	0.9	1.0	1.1	1.1
100%	97%	92%	84%	74%	63%	51%	40%	29%	20%	12%	5%	2%	1%	1%	1%	2%	2%	2%	2%

### Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
55.9	54.4	51.2	47.1	41.5	35.1	28.4	22.2	16.4	11.4	6.6	2.8	0.9	0.6	0.7	0.8	0.9	1.0	1.1	1.1
100%	97%	92%	84%	74%	63%	51%	40%	29%	20%	12%	5%	2%	1%	1%	1%	2%	2%	2%	2%

### Intensities in 180° c-plane

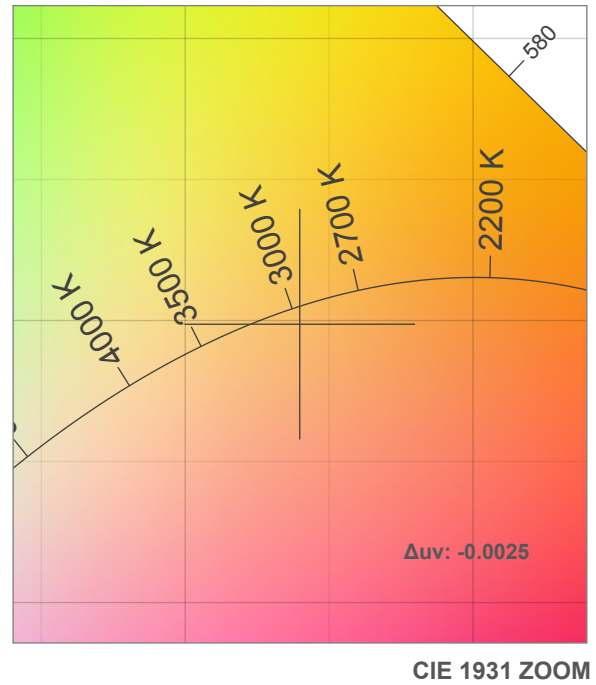
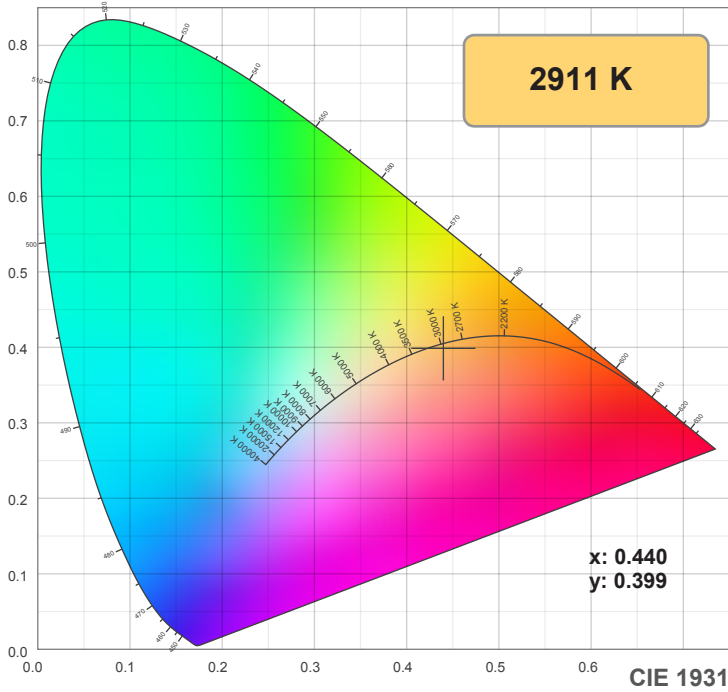
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
55.9	54.4	51.2	46.8	41.3	35.4	28.5	21.7	15.4	11.0	6.8	4.8	3.7	2.6	1.7	0.9	0.9	0.9	1.1	1.1
100%	97%	92%	84%	74%	63%	51%	39%	28%	20%	12%	9%	7%	5%	3%	2%	2%	2%	2%	2%

### Intensities in 270° c-plane

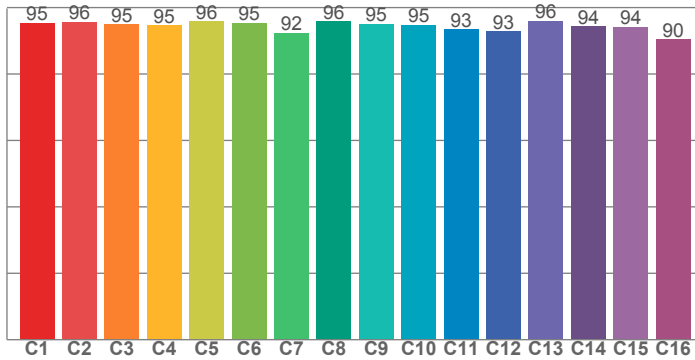
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
55.9	54.4	51.2	46.8	41.3	35.4	28.5	21.7	15.4	11.0	6.8	4.8	3.7	2.6	1.7	0.9	0.9	0.9	1.1	1.1
100%	97%	92%	84%	74%	63%	51%	39%	28%	20%	12%	9%	7%	5%	3%	2%	2%	2%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
109.4°	186.7°	234°	67.3%	45.9%

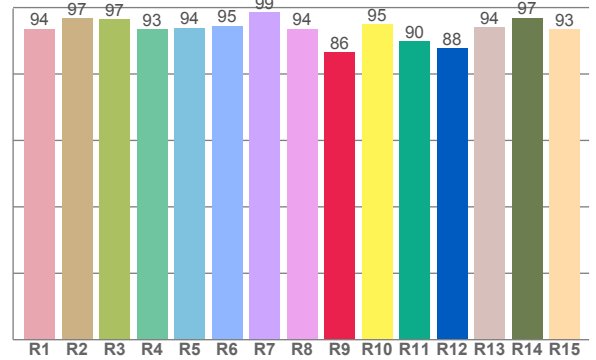
## 3000K



### TM30: 94.5



### CRI: 95.1 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
93.6	96.9	96.6	93.4	93.9	94.5	98.7	93.6	86.5	95.0	89.7	87.8	94.0	96.9	93.5

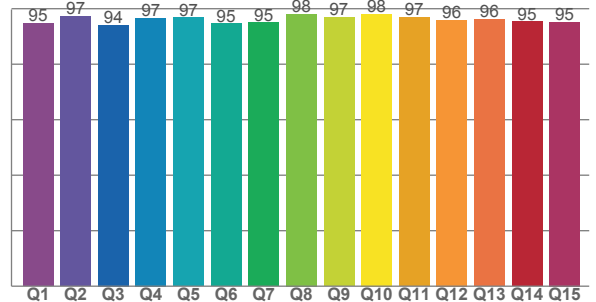
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.4	95.6	94.9	94.5	95.9	95.4	92.3	95.8	95.1	94.7	93.4	92.8	95.9	94.4	94.1	90.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.8	97.3	94.2	96.7	96.8	94.6	94.9	98.1	96.9	98.0	96.9	96.0	96.2	95.4	95.2

### CQS: 95.8



### Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2911 K	95.1	86.5	94.5	103.0	95.8	0.440	0.399	0.255	0.346	-0.0025

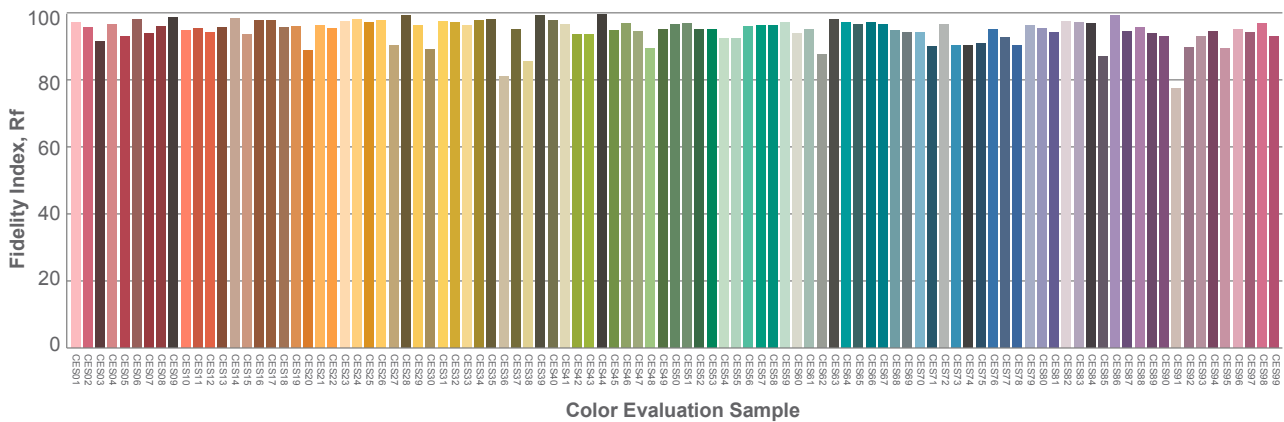
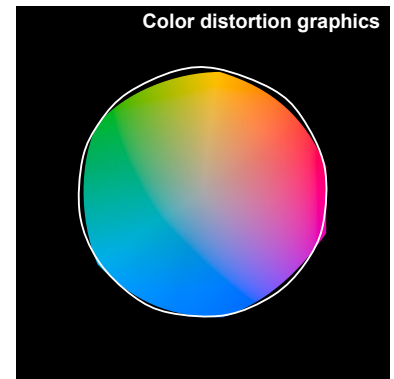
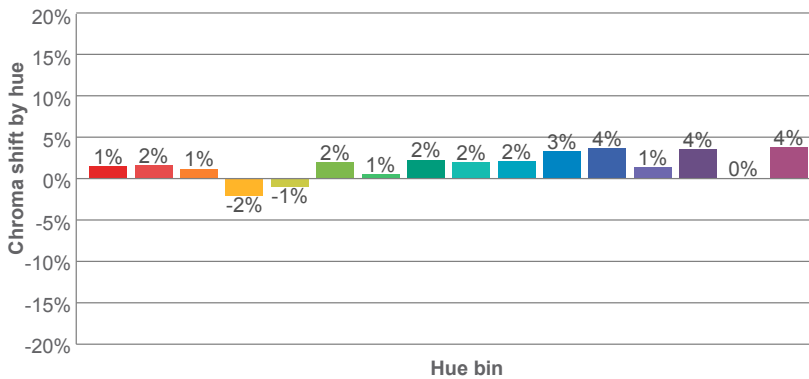
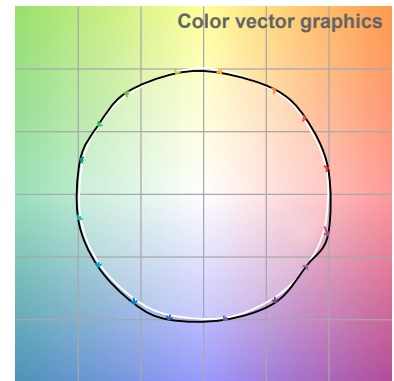
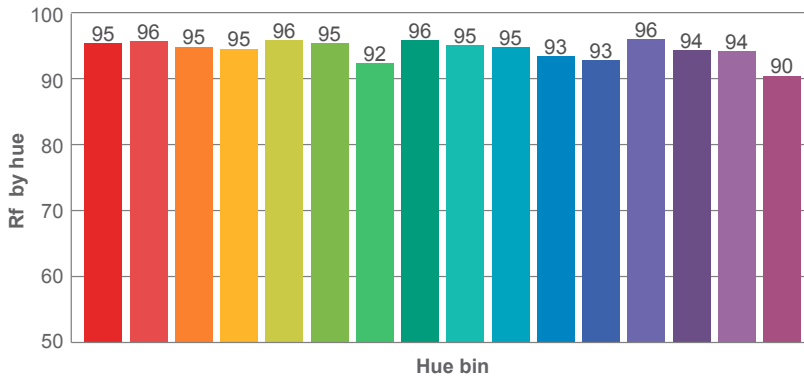
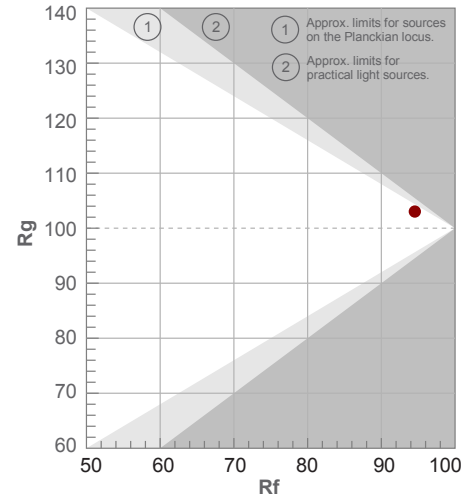
Note: specifications are representative of the diode type and not a particular tape light article.

3000K

**Rf 94.5**  
Fidelity index Rf

**Rg 103.0**  
Gammut index Rg

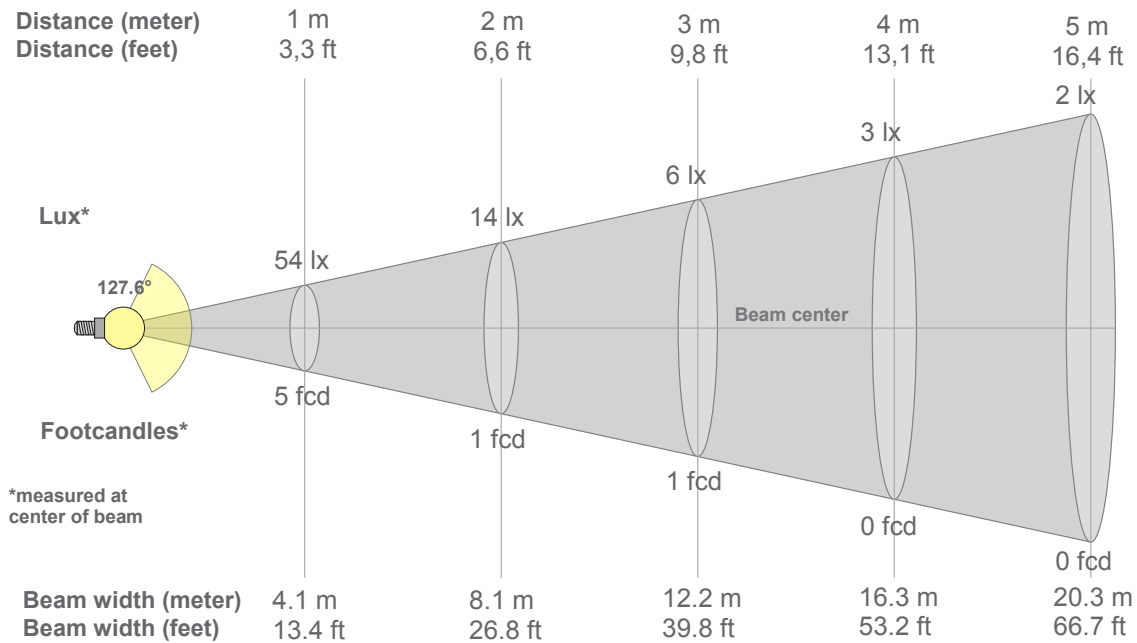
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	1%	0%
2	96	2%	-1%
3	95	1%	-1%
4	95	-2%	-2%
5	96	-1%	1%
6	95	2%	2%
7	92	1%	3%
8	96	2%	0%
9	95	2%	2%
10	95	2%	2%
11	93	3%	3%
12	93	4%	0%
13	96	1%	-2%
14	94	4%	-2%
15	94	0%	1%
16	90	4%	-6%





3000K

## Beam details



### Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
54lx	14lx	6lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
5fcd	1.3fcd	0.6fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

### Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	51.7	48.5	44.2	40.3	37.3	33.2	27.9	22.9	16.2	9.9	4.4	1.3	0.8	0.6	0.5	0.6	0.6	0.7	0.7
100%	96%	90%	82%	74%	69%	61%	52%	42%	30%	18%	8%	2%	2%	1%	1%	1%	1%	1%	1%

### Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	51.7	48.5	44.2	40.3	37.3	33.2	27.9	22.9	16.2	9.9	4.4	1.3	0.8	0.6	0.5	0.6	0.6	0.7	0.7
100%	96%	90%	82%	74%	69%	61%	52%	42%	30%	18%	8%	2%	2%	1%	1%	1%	1%	1%	1%

### Intensities in 180° c-plane

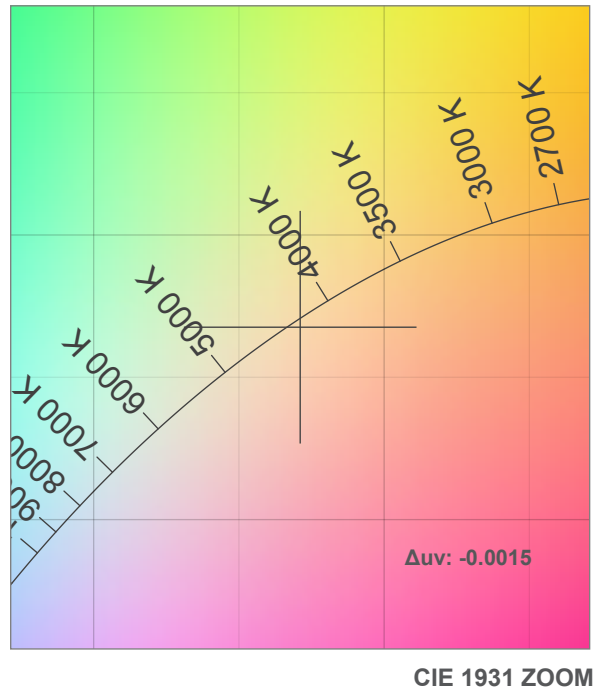
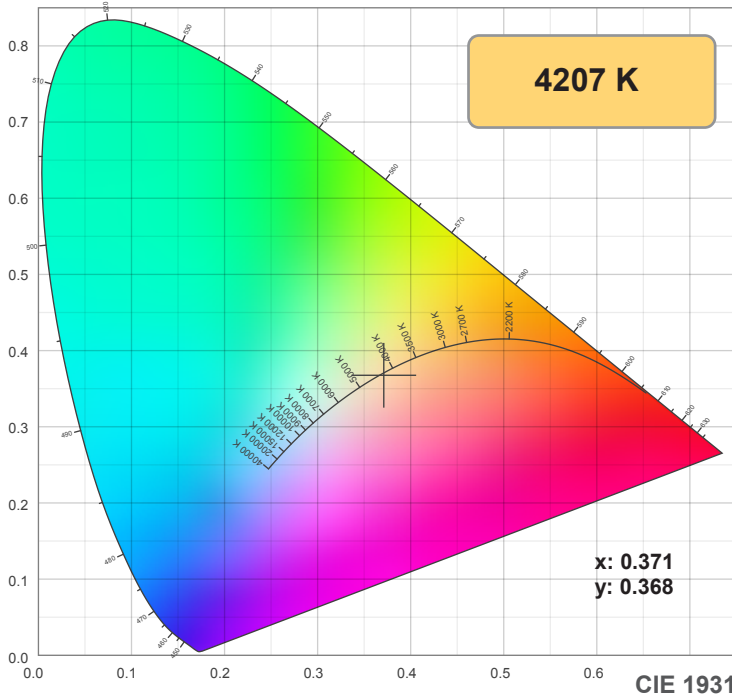
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	54.9	54.1	51.4	47.0	40.9	34.3	28.0	21.6	15.7	10.3	6.5	4.9	4.1	3.5	2.8	1.6	1.2	1.1	1.0
100%	101%	100%	95%	87%	76%	64%	52%	40%	29%	19%	12%	9%	7%	6%	5%	3%	2%	2%	2%

### Intensities in 270° c-plane

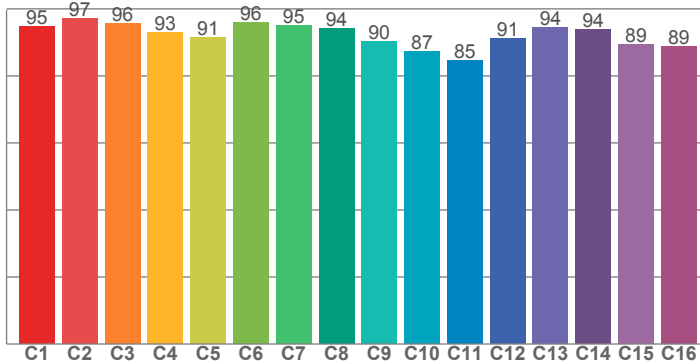
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	54.9	54.1	51.4	47.0	40.9	34.3	28.0	21.6	15.7	10.3	6.5	4.9	4.1	3.5	2.8	1.6	1.2	1.1	1.0
100%	101%	100%	95%	87%	76%	64%	52%	40%	29%	19%	12%	9%	7%	6%	5%	3%	2%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
127.6°	200.5°	254.9°	61.4%	40.2%

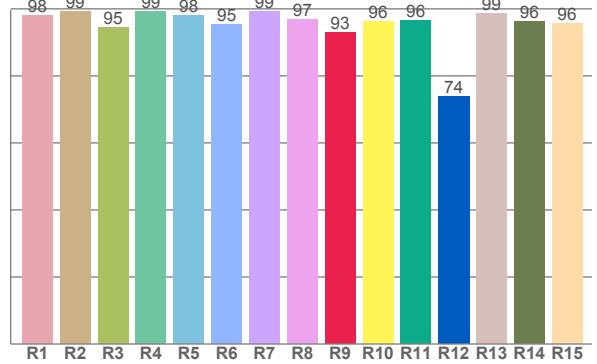
## 4200K



### TM30: 92.1



### CRI: 97.6 (R1-R8)



#### CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98.0	99.3	94.6	99.2	98.1	95.5	99.2	96.8	93.0	96.3	96.4	73.9	98.7	96.3	95.8

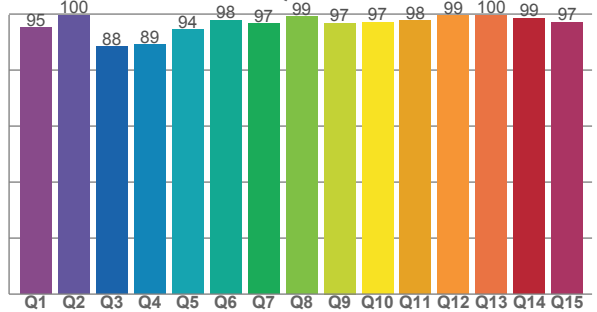
#### TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.7	97.2	95.7	93.0	91.3	95.8	95.0	94.1	90.2	87.2	84.6	91.1	94.4	93.8	89.4	88.9

#### CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.1	99.6	88.4	89.0	94.5	97.8	96.5	99.0	96.8	97.1	97.7	99.4	99.6	98.5	97.1

### CQS: 95.1



### Color parameters

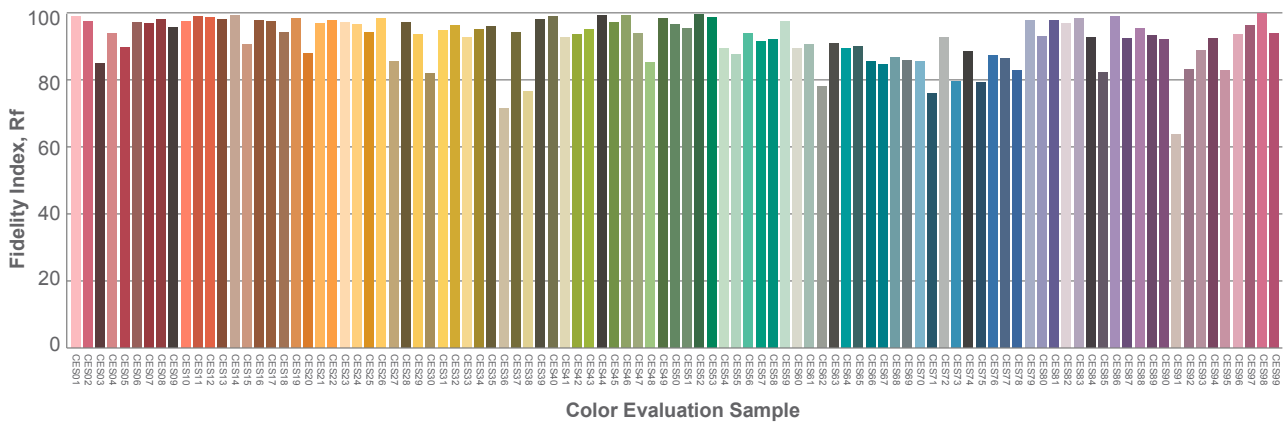
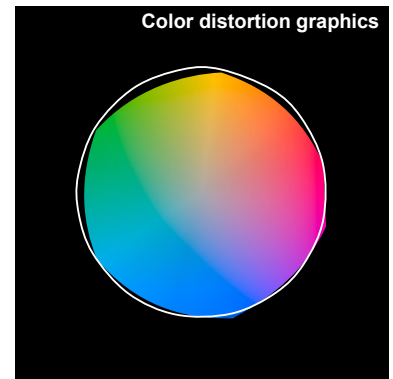
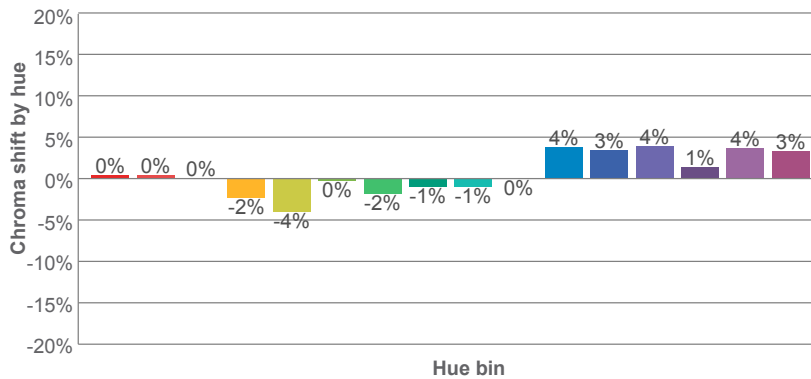
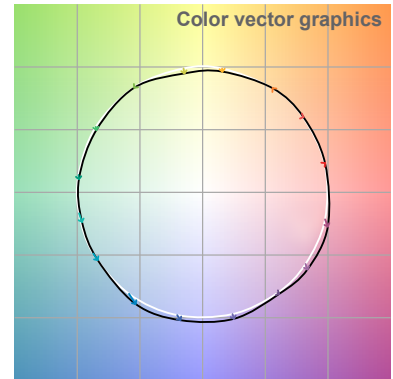
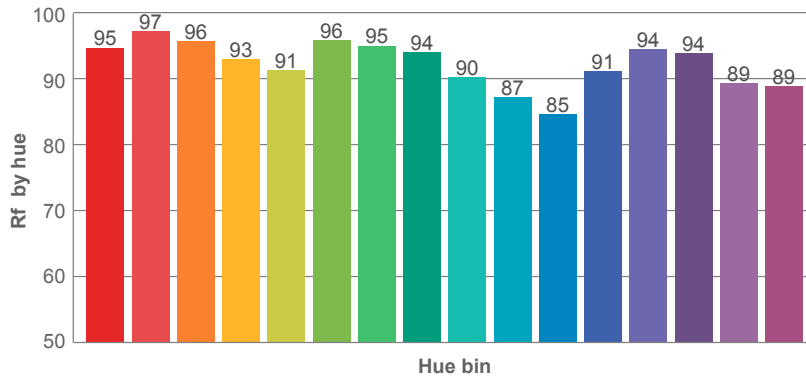
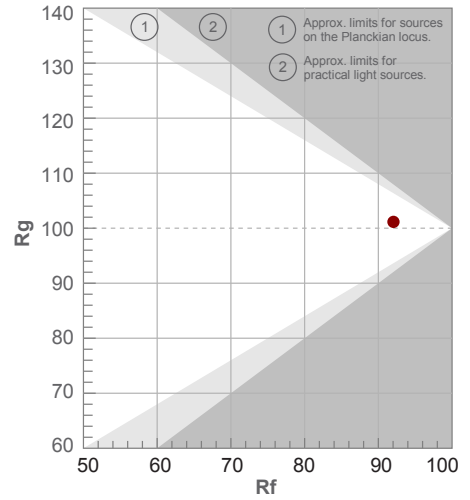
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4207 K	97.6	93.0	92.1	101.2	95.1	0.371	0.368	0.223	0.331	-0.0015

4200K

**Rf 92.1**  
Fidelity index Rf

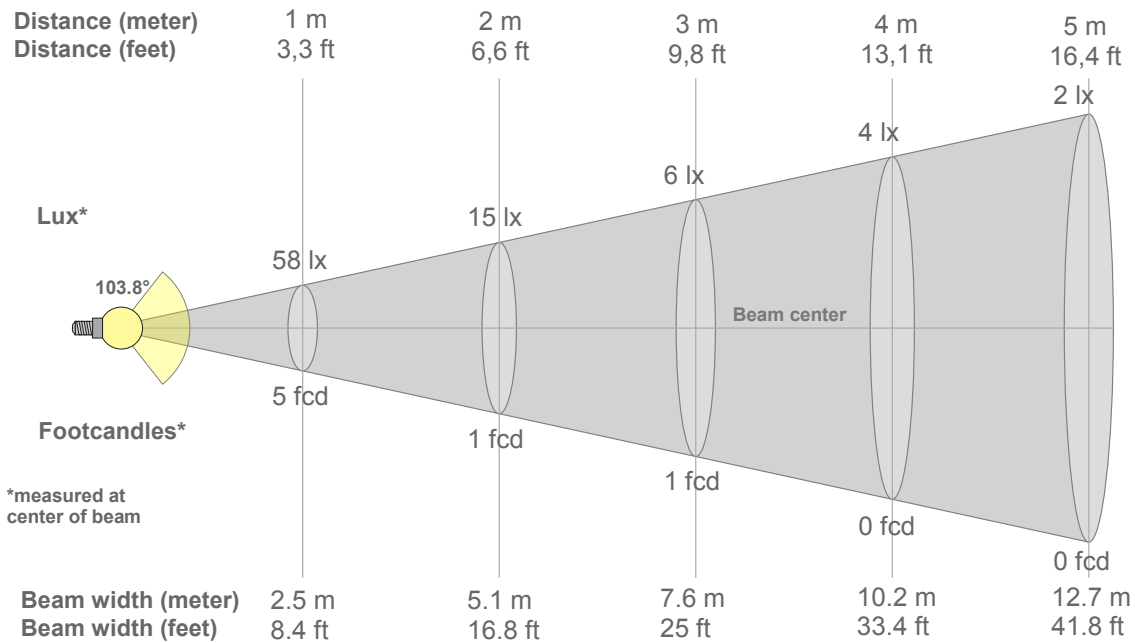
**Rg 101.2**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	0%	0%
2	97	0%	-1%
3	96	0%	0%
4	93	-2%	-1%
5	91	-4%	0%
6	96	0%	1%
7	95	-2%	2%
8	94	-1%	3%
9	90	-1%	7%
10	87	0%	6%
11	85	4%	9%
12	91	3%	3%
13	94	4%	0%
14	94	1%	1%
15	89	4%	-3%
16	89	3%	-5%



4200K

## Beam details



### Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
58lx	15lx	6lx	4lx	2lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
5.4fcd	1.4fcd	0.6fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

### Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
58.4	58.0	57.1	55.6	53.4	50.5	46.9	42.6	39.0	35.1	30.9	26.5	22.4	18.0	14.1	10.5	7.2	4.5	2.6	1.4
100%	99%	98%	95%	91%	86%	80%	73%	67%	60%	53%	45%	38%	31%	24%	18%	12%	8%	5%	2%

### Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
58.4	58.0	57.1	55.6	53.4	50.5	46.9	42.6	39.0	35.1	30.9	26.5	22.4	18.0	14.1	10.5	7.2	4.5	2.6	1.4
100%	99%	98%	95%	91%	86%	80%	73%	67%	60%	53%	45%	38%	31%	24%	18%	12%	8%	5%	2%

### Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
58.4	58.0	57.2	55.8	53.8	50.9	47.7	43.5	38.9	34.7	30.8	26.7	22.7	19.0	15.9	12.8	9.4	6.6	4.5	3.0
100%	99%	98%	96%	92%	87%	82%	74%	67%	59%	53%	46%	39%	33%	27%	22%	16%	11%	8%	5%

### Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
58.4	58.0	57.2	55.8	53.8	50.9	47.7	43.5	38.9	34.7	30.8	26.7	22.7	19.0	15.9	12.8	9.4	6.6	4.5	3.0
100%	99%	98%	96%	92%	87%	82%	74%	67%	59%	53%	46%	39%	33%	27%	22%	16%	11%	8%	5%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
103.8°	168.7°	360°	73.3%	51.1%