

PowerLine™ 400 Plug-In 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
- Plug-In High Voltage LED Tape Light
- Cut Points Every 4 Inches
- Up to 400 Lumens / Foot



Stocked Color Temps (Kelvin)*	2700K, 3000K, 4200K
Power Consumption per foot	4 Watts / 33mA
Input Voltage	120V AC
Lumens per ft.	<400
Spool Length	164 ft.
Tape Dimensions (W x H)	0.6 x 0.23 in.
End Cap Dimensions (L x W x H)	1.2 x 1.16 x 0.59 in.
Max. Run Length	164 ft.
Dimmable	No
Beam Angle	120°

Cut Points	Every 4 in.
Power Cable Length	4 ft.
Diode Type	3056
Diodes per foot	18
Diode Spacing	0.68 in.
Location	dry / wet (IP65)
Operating Temp.	<194° F / 90° C
Ambient Temp.	-4° F to 107° F / -20° C to 42° C
Certifications	ETL Listed, UL 2388, RoHS
Warranty	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

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

AL - 11 - 06 - A - [CCT]	- [FEET]	[INCHES]
[Choice of Kelvin temp.]	[Choice of length 1 ft. increments] 001-164 ft.**	[OPTIONAL 4 in. increments**] 04 = 4 in. 08 = 8 in.
27 = 2700K		
30 = 3000K		
42 = 4200K		

Examples:

AL - 11 - 06 - A - 27 - 064
PowerLine 400 AC Tape - 2700K - 64 feet

AL - 11 - 06 - A - 30 - 064 08
PowerLine 400 AC Tape - 3000K - 64 feet, 8 inches

→ See next page for specifications and bulk spool ordering information

**End cap/connection assembly adds 1 inch to overall tape light length. For example, an 8 inch section is 9 inches once assembled, not including power cable length.

→ Alloy LED Light Lab™ Specifications

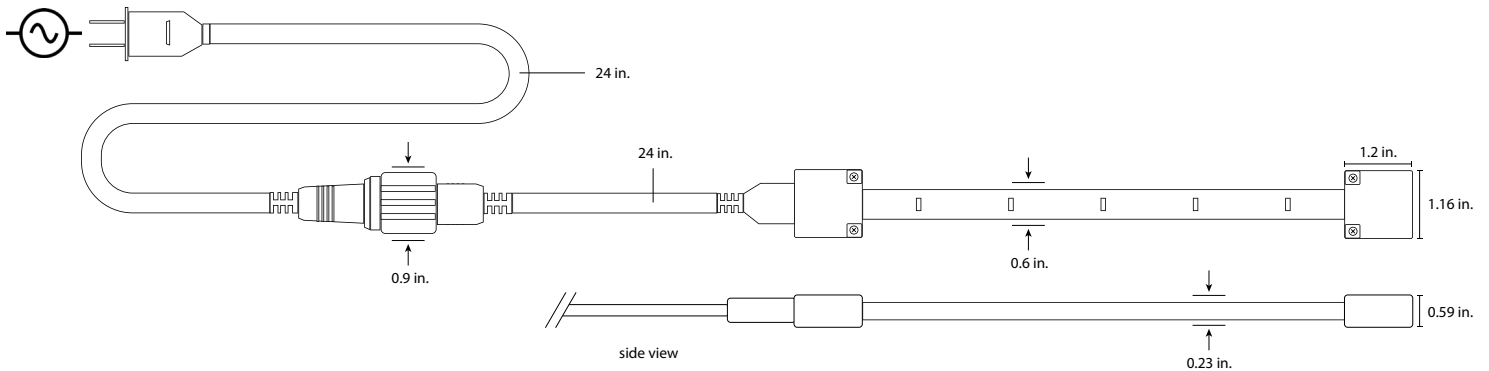
Max. Run = 164'

Spool Item #	Length	Voltage	Kelvin temp. [CCT] *	CRI	R9 Value	R13 Value	TM-30	CQS	Lumens / foot
AL-11-06-A-27-164	164 ft.	120V AC	2700K	93	72	94	92	92	308
AL-11-06-A-30-164	164 ft.	120V AC	3000K	92	68	92	90	91	374
AL-11-06-A-42-164	164 ft.	120V AC	4200K	94	71	96	89	92	383

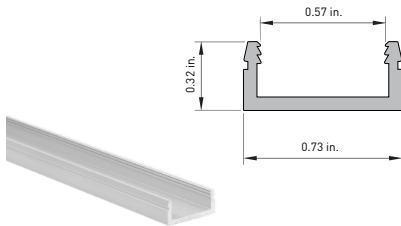


NOTE: ETL listing is voided when tape is cut in the field.

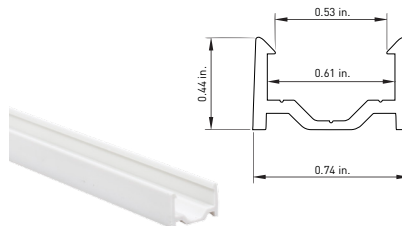
→ Diagram



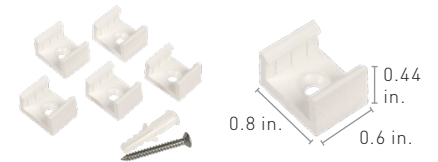
→ Mounting Accessories (sold separately)



Mounting Channel
AL-11-06-9923-AL (4 ft. - aluminum)



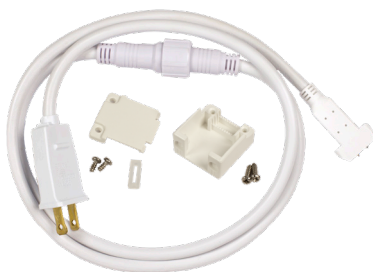
Mounting Channel
AL-11-06-9930 (4 ft. - plastic)



Plastic Mounting Clips/Screws/Anchors
AL-11-06-9901-MC (5 pack)
Includes 5 screws (1 in.) and anchors

→ Additional Accessories (sold separately)

NOTE: ETL listing is voided when tape is cut in the field.



Power Cable / Connection Assembly
AL-11-06-9901-USD (4 ft. - White)

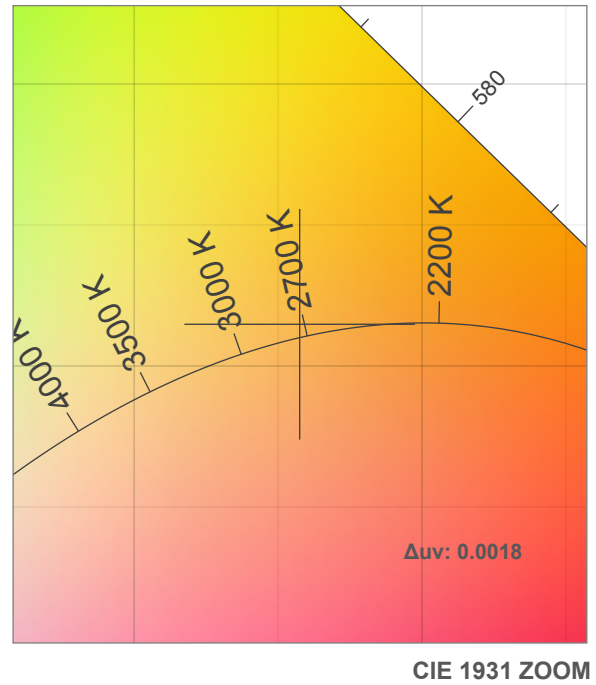
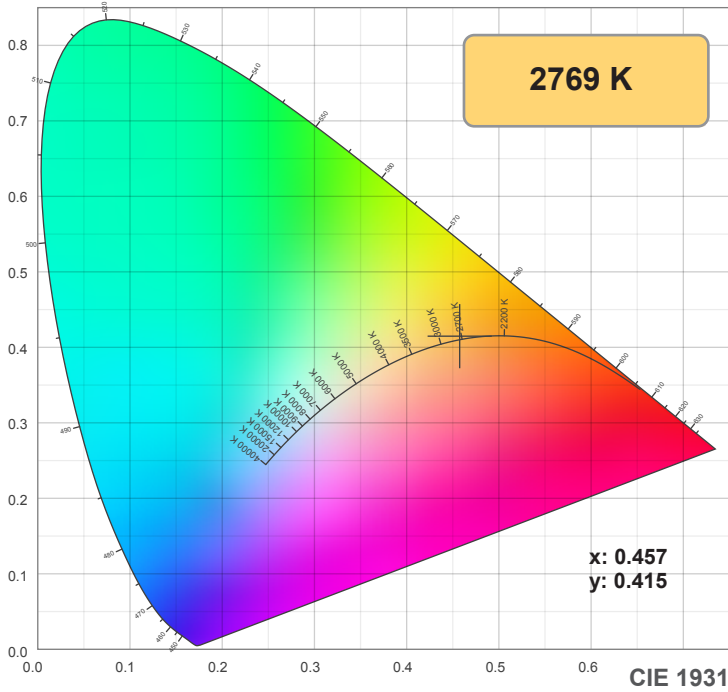


End Cap
AL-11-06-9901-EC (White)
AL-11-06-9901-EC-10 (White - 10 pack)

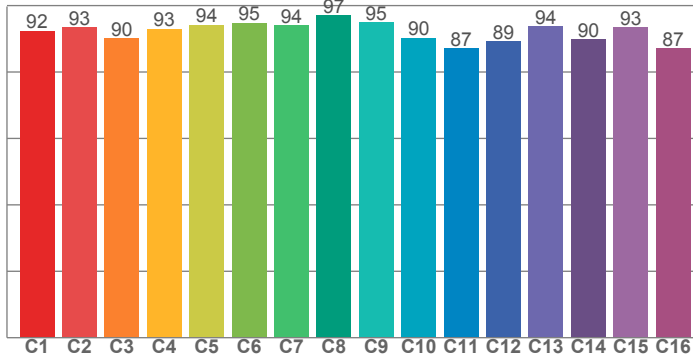


Extension Cable
AL-11-06-9901-EXT (2 ft. - White)

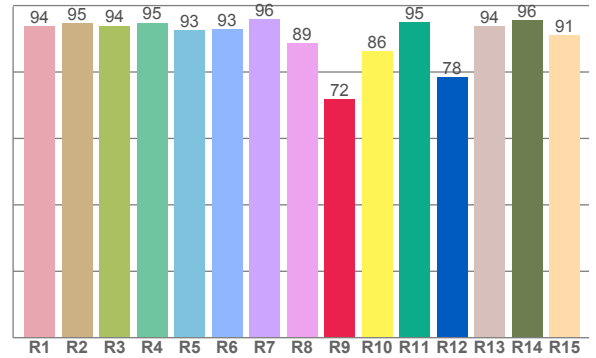
2700K



TM30: 92.0



CRI: 93.4 (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
93.8	94.7	93.9	94.8	92.6	92.9	96.0	88.5	71.8	86.3	95.0	78.3	93.7	95.6	91.0

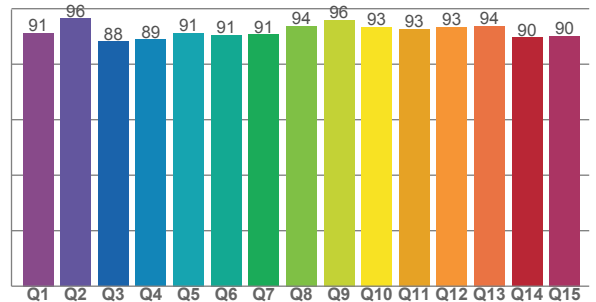
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.4	93.5	90.1	93.0	94.2	94.8	94.1	97.1	94.9	90.2	87.0	89.2	93.6	89.9	93.4	87.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.3	96.5	88.2	88.9	91.3	90.6	90.7	93.7	95.9	93.3	92.7	93.3	93.8	89.7	90.2

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
2769 K	93.4	71.8	92.0	100.2	91.6	0.457	0.415	0.259	0.352	0.0018

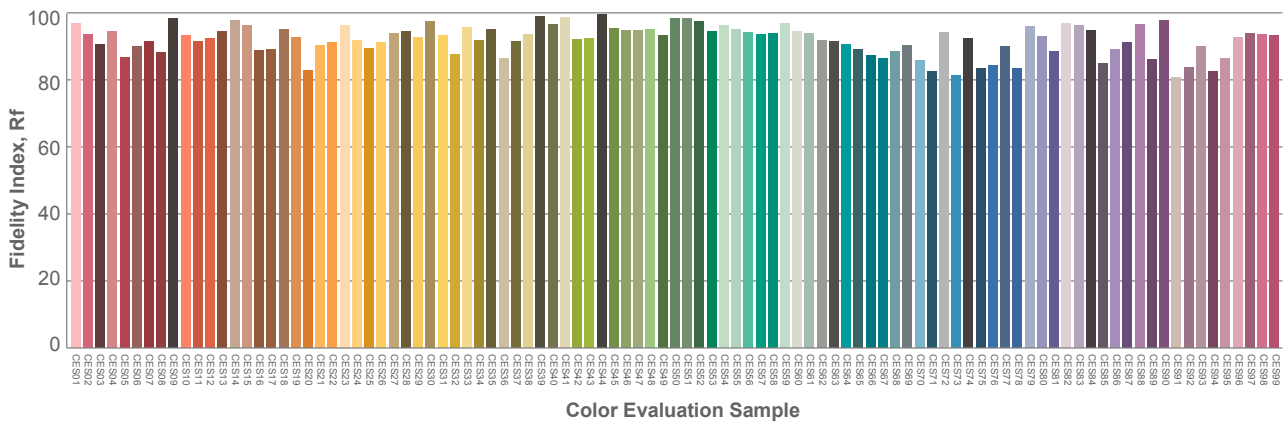
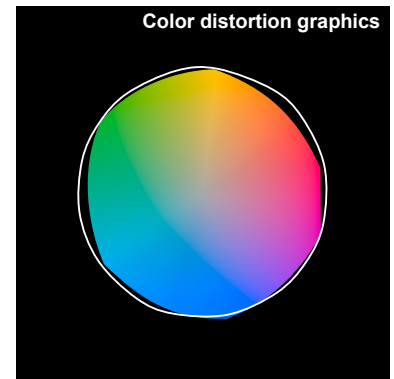
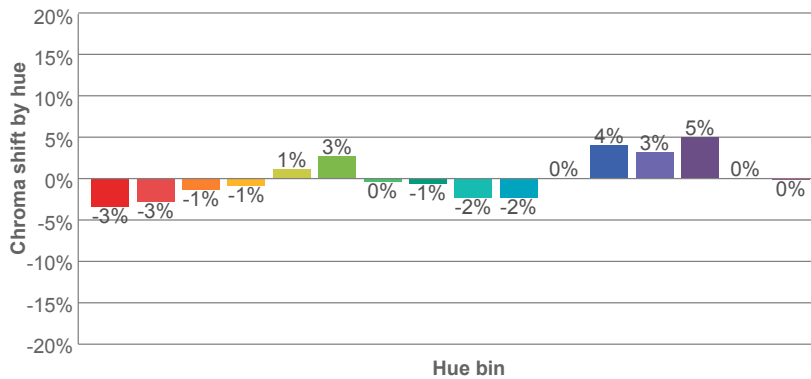
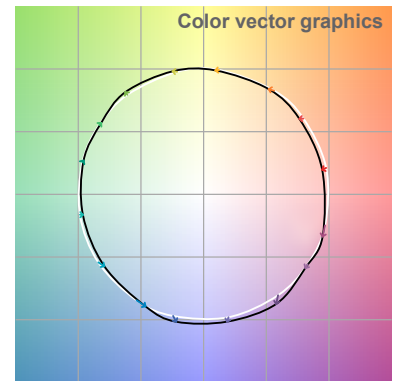
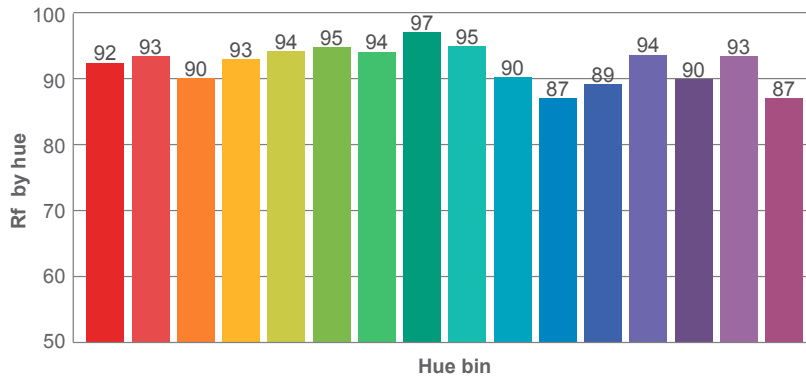
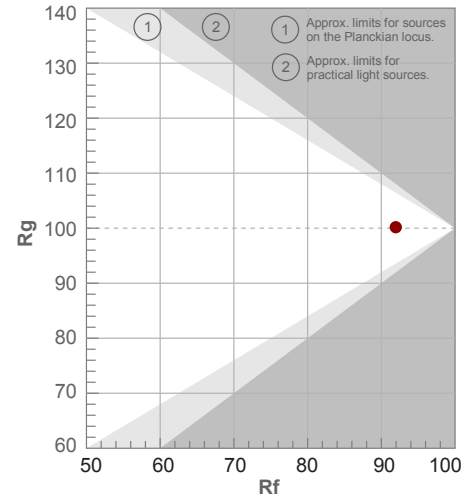
Note: specifications are representative of the diode type and not a particular tape light article.

2700K

Rf 92.0
Fidelity index Rf

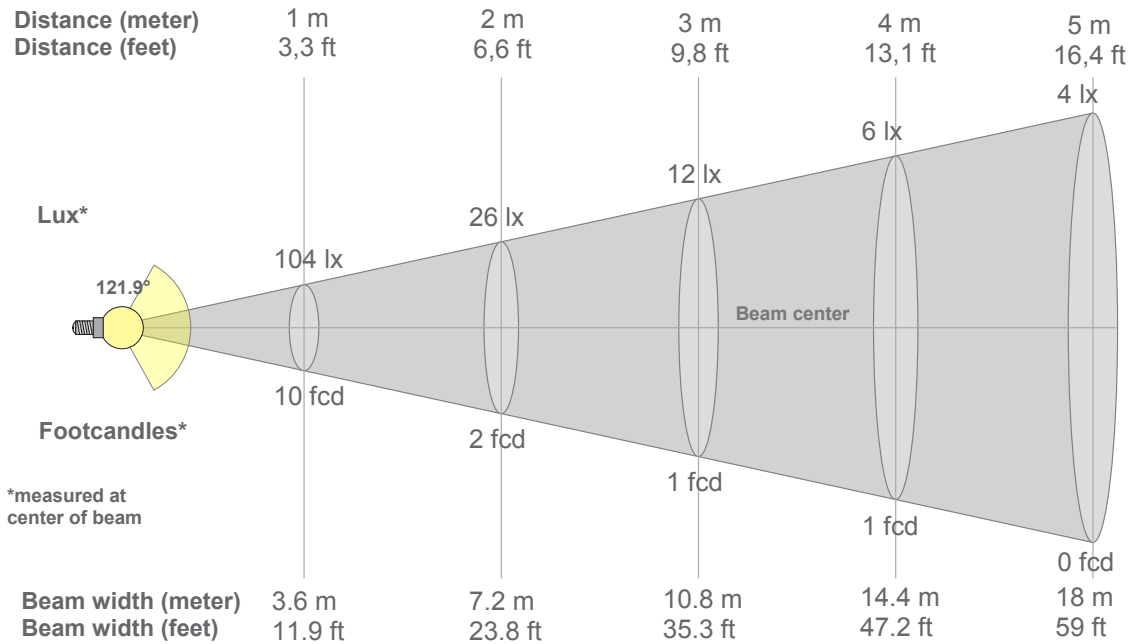
Rg 100.2
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-1%
2	93	-3%	2%
3	90	-1%	4%
4	93	-1%	3%
5	94	1%	3%
6	95	3%	0%
7	94	0%	-2%
8	97	-1%	-2%
9	95	-2%	0%
10	90	-2%	5%
11	87	0%	9%
12	89	4%	3%
13	94	3%	-2%
14	90	5%	-5%
15	93	0%	-3%
16	87	0%	-9%



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
104lx	26lx	12lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
9.7fcd	2.4fcd	1.1fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
104	104	102	100	98	95	91	86	81	76	71	65	55	39	23	7	3	1	1	1
100%	100%	98%	97%	94%	91%	87%	83%	78%	73%	68%	63%	53%	38%	22%	6%	3%	1%	1%	1%

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°
104	104	102	100	98	95	91	86	81	76	71	65	55	39	23	7	3	1	1	1
100%	100%	98%	97%	94%	91%	87%	83%	78%	73%	68%	63%	53%	38%	22%	6%	3%	1%	1%	1%

Intensities in 180° c-plane

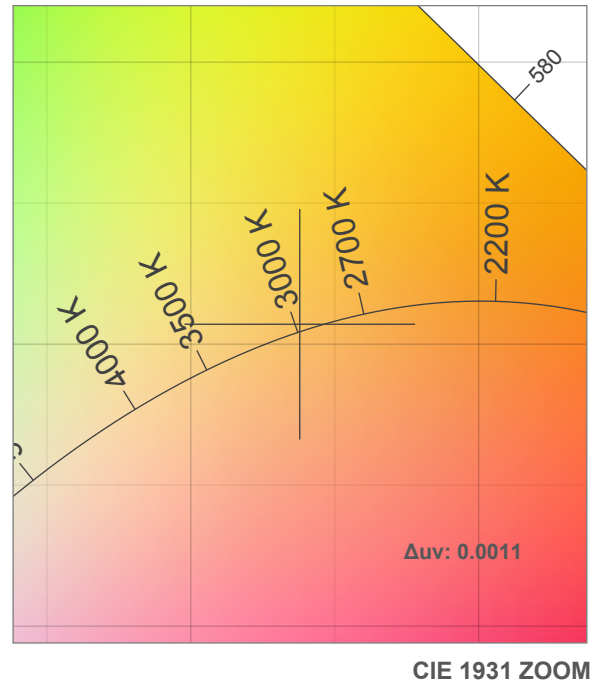
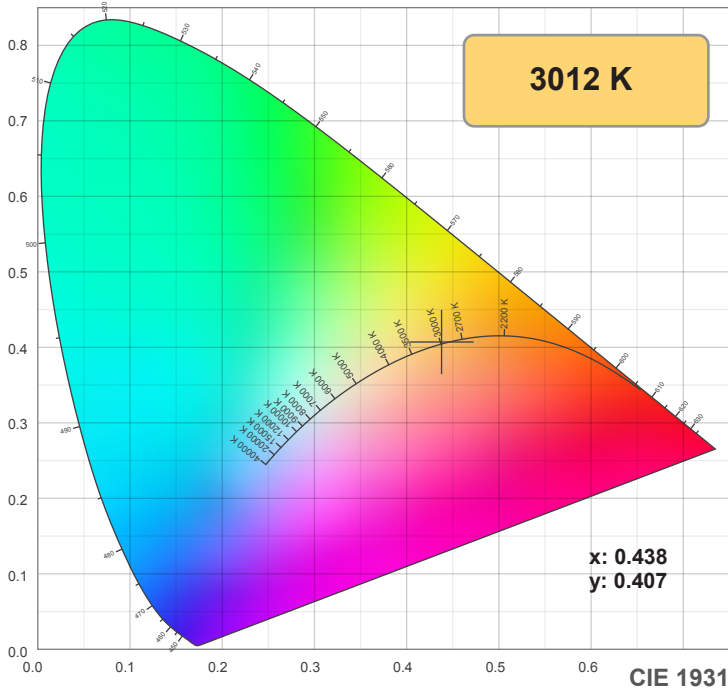
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
104	104	102	101	98	95	91	87	82	77	71	63	54	41	25	8	3	2	1	1
100%	100%	99%	97%	94%	91%	87%	84%	79%	74%	68%	61%	52%	40%	24%	8%	3%	2%	1%	1%

Intensities in 270° c-plane

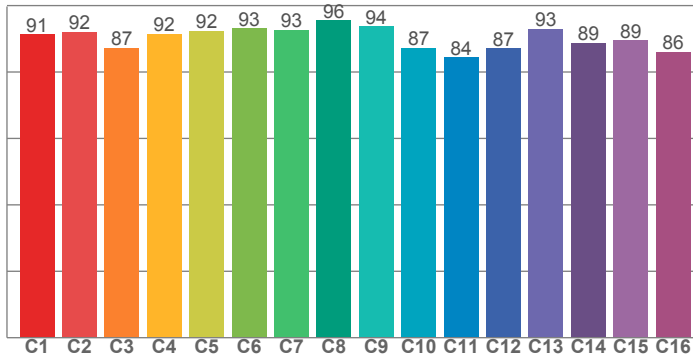
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
104	104	102	101	98	95	91	87	82	77	71	63	54	41	25	8	3	2	1	1
100%	100%	99%	97%	94%	91%	87%	84%	79%	74%	68%	61%	52%	40%	24%	8%	3%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
121.9°	147.7°	161.7°	82.1%	53.7%

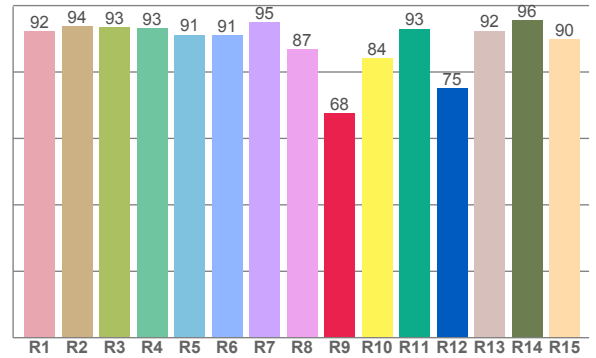
3000K



TM30: 90.4



CRI: 92.1 (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
92.4	93.7	93.4	93.1	91.2	91.1	94.9	86.9	67.5	84.1	93.0	75.2	92.4	95.5	89.8

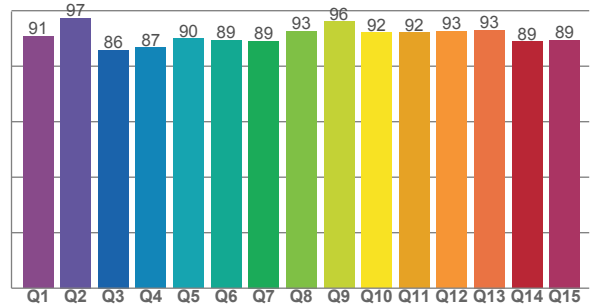
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.3	92.0	87.2	91.5	92.3	93.1	92.6	95.6	93.8	87.2	84.4	87.1	92.9	88.8	89.5	86.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.8	97.3	85.8	86.8	90.0	89.3	89.0	92.6	96.1	92.0	92.2	92.6	93.0	88.9	89.4

CQS: 90.5



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
3012 K	92.1	67.5	90.4	100.7	90.5	0.438	0.407	0.250	0.348	0.0011

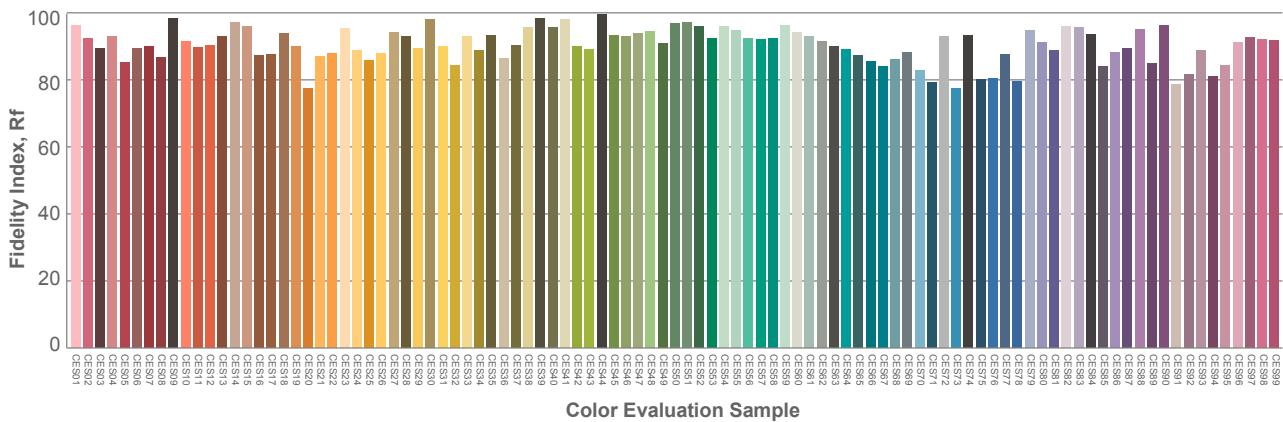
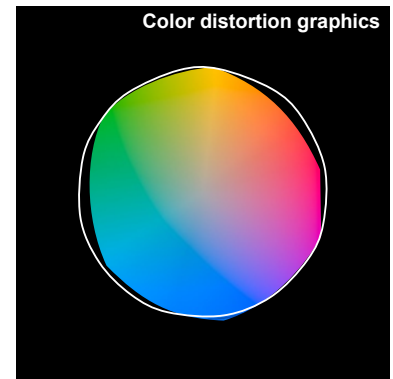
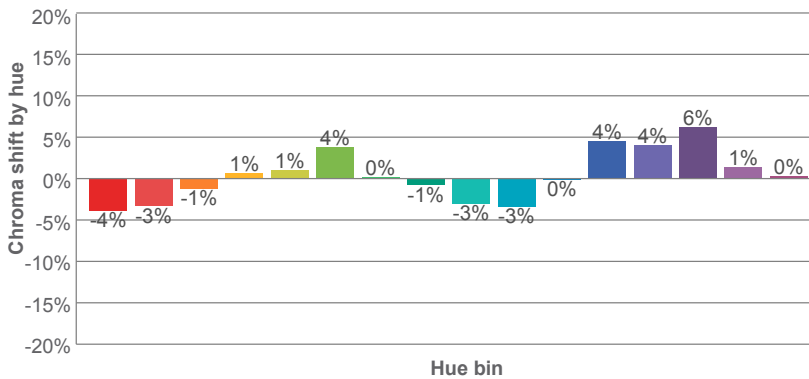
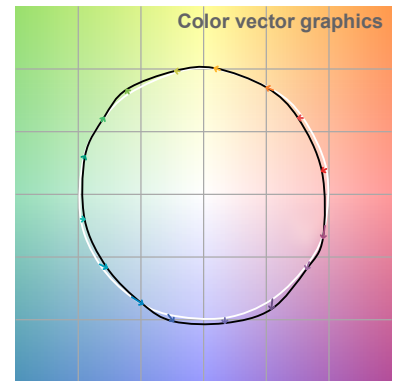
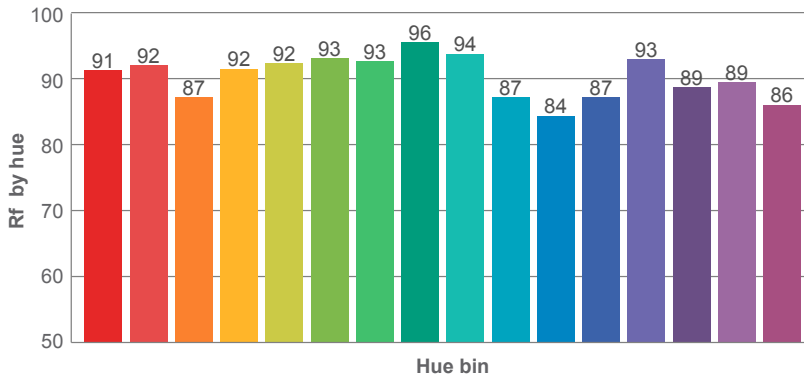
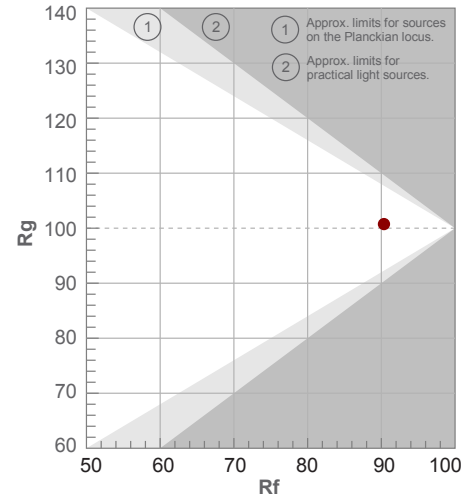
Note: specifications are representative of the diode type and not a particular tape light article.

3000K

Rf 90.4
Fidelity index Rf

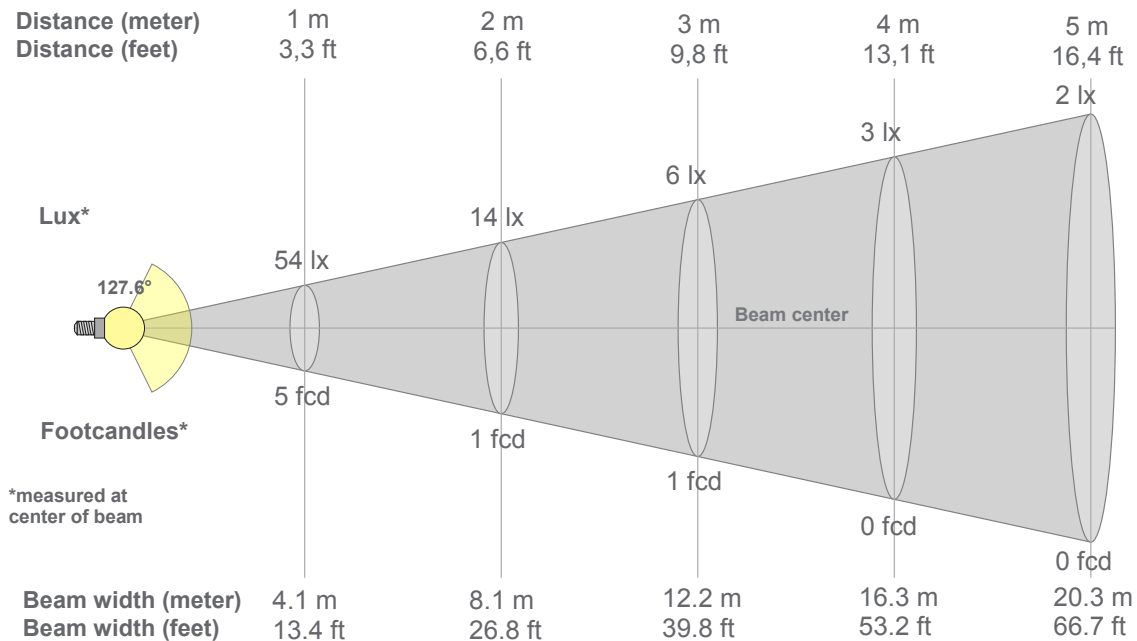
Rg 100.7
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-1%
2	92	-3%	2%
3	87	-1%	6%
4	92	1%	5%
5	92	1%	4%
6	93	4%	0%
7	93	0%	-4%
8	96	-1%	-2%
9	94	-3%	1%
10	87	-3%	6%
11	84	0%	10%
12	87	4%	5%
13	93	4%	-1%
14	89	6%	-5%
15	89	1%	-6%
16	86	0%	-10%



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

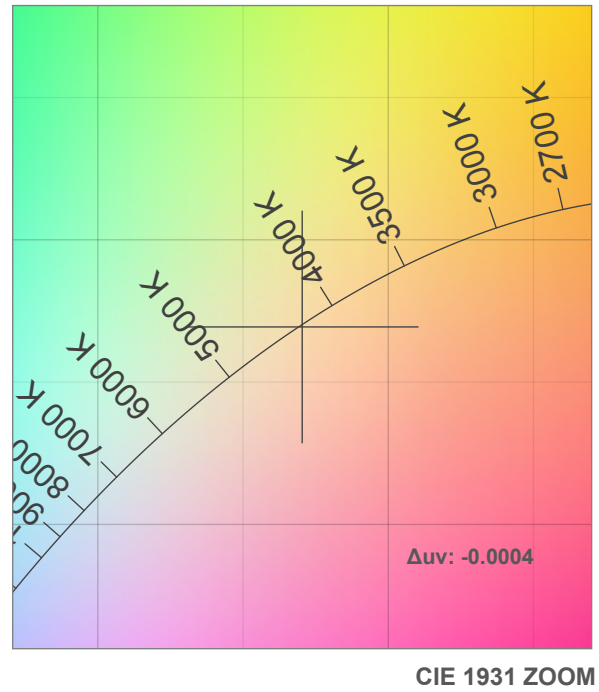
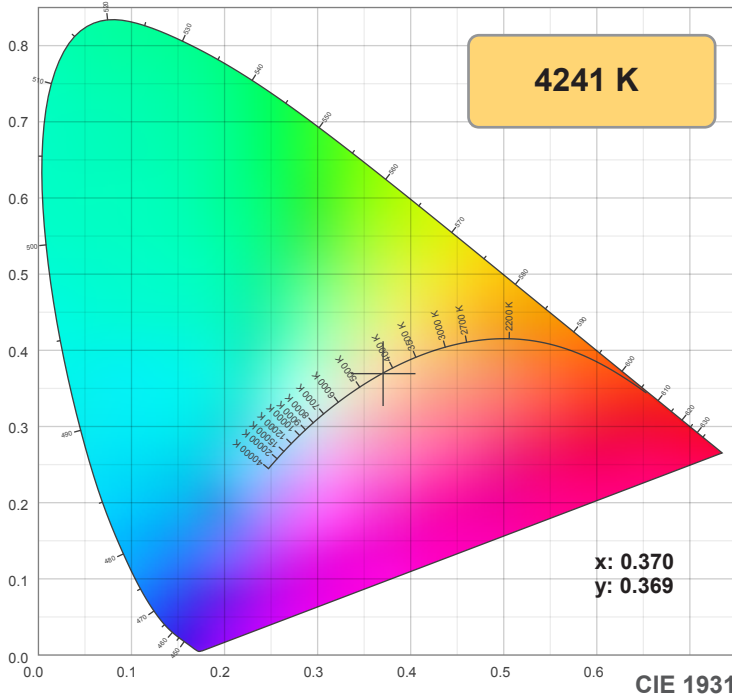
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	54.9	54.1	51.4	47.0	40.9	34.3	28.0	21.6	15.7	10.3	6.5	4.9	4.1	3.5	2.8	1.6	1.2	1.1	1.0
100%	101%	100%	95%	87%	76%	64%	52%	40%	29%	19%	12%	9%	7%	6%	5%	3%	2%	2%	2%

Intensities in 270° c-plane

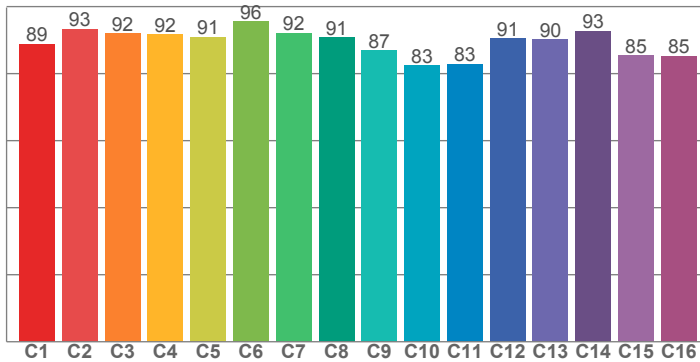
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
54.1	54.9	54.1	51.4	47.0	40.9	34.3	28.0	21.6	15.7	10.3	6.5	4.9	4.1	3.5	2.8	1.6	1.2	1.1	1.0
100%	101%	100%	95%	87%	76%	64%	52%	40%	29%	19%	12%	9%	7%	6%	5%	3%	2%	2%	2%

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%

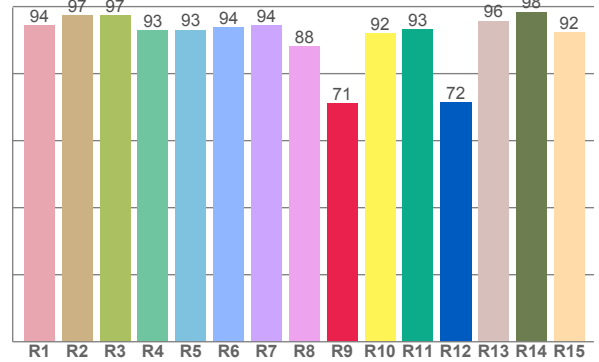
4200K



TM30: 89.3



CRI: 93.9 (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
94.5	97.3	97.4	93.0	93.1	93.8	94.4	88.1	71.1	91.9	93.3	71.5	95.7	98.4	92.3

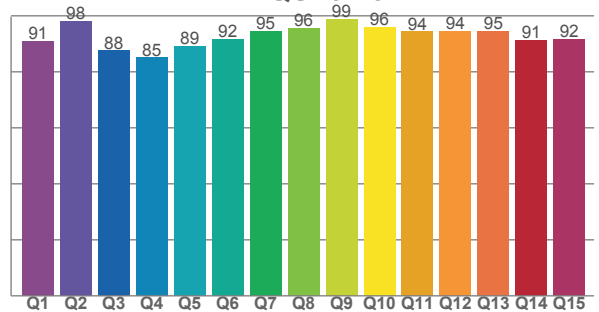
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.9	93.4	92.0	91.6	90.9	95.5	92.2	90.7	86.8	82.5	82.9	90.5	90.1	92.8	85.4	85.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.0	98.2	87.5	85.1	89.2	91.6	94.5	95.6	98.8	95.9	94.4	94.5	94.6	91.3	91.6

CQS: 92.0



Color parameters

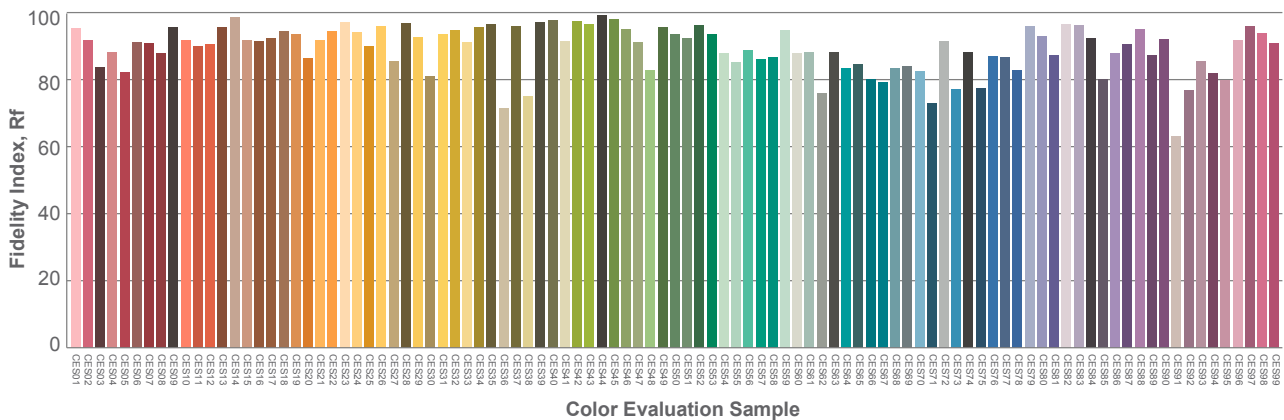
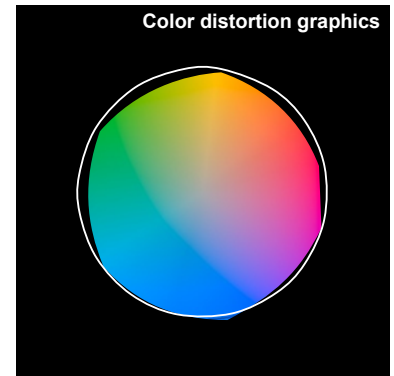
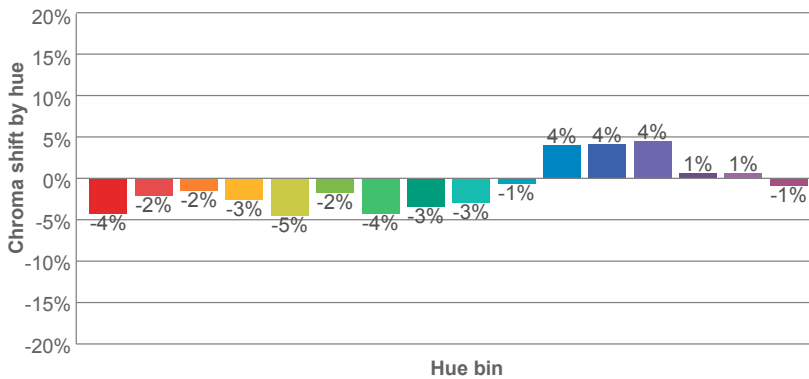
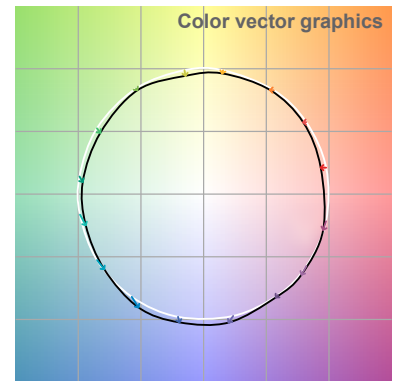
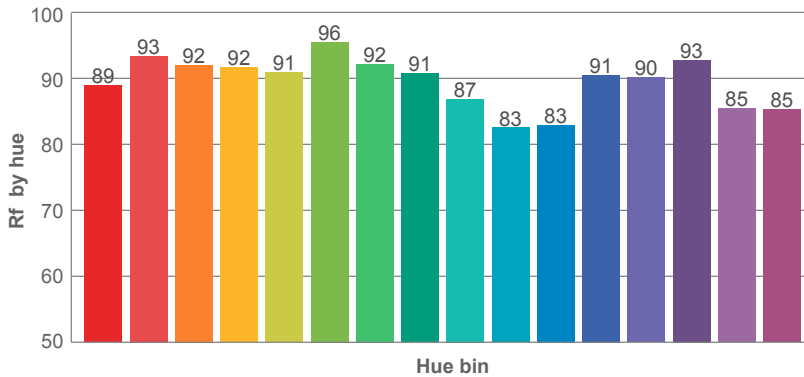
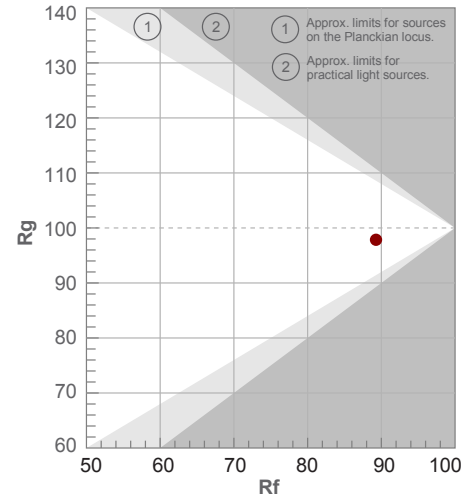
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4241 K	93.9	71.1	89.3	97.9	92.0	0.370	0.369	0.221	0.331	-0.0004

4200K

Rf 89.3
Fidelity index Rf

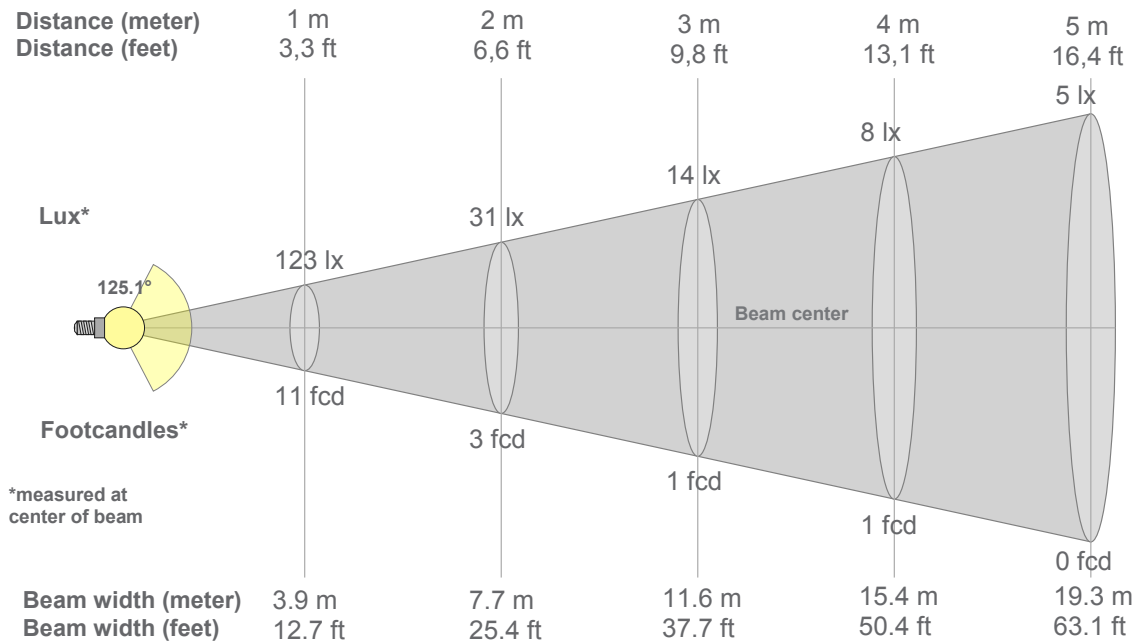
Rg 97.9
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-4%	1%
2	93	-2%	1%
3	92	-2%	3%
4	92	-3%	0%
5	91	-5%	0%
6	96	-2%	0%
7	92	-4%	1%
8	91	-3%	4%
9	87	-3%	9%
10	83	-1%	9%
11	83	4%	9%
12	91	4%	2%
13	90	4%	-5%
14	93	1%	-3%
15	85	1%	-8%
16	85	-1%	-7%



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
123lx	31lx	14lx	8lx	5lx	3lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx
11.4fcd	2.9fcd	1.3fcd	0.7fcd	0.5fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
123	123	122	120	117	113	108	103	99	93	85	76	67	55	32	14	8	5	4	3
100%	100%	99%	98%	95%	92%	88%	84%	80%	75%	69%	62%	55%	45%	26%	12%	6%	4%	3%	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°
123	123	122	120	117	113	108	103	99	93	85	76	67	55	32	14	8	5	4	3
100%	100%	99%	98%	95%	92%	88%	84%	80%	75%	69%	62%	55%	45%	26%	12%	6%	4%	3%	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°
123	122	121	119	116	113	109	104	99	93	86	79	70	53	27	10	4	3	2	1
100%	100%	99%	97%	94%	92%	89%	85%	80%	76%	70%	64%	57%	43%	22%	8%	3%	2%	1%	1%

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°
123	122	121	119	116	113	109	104	99	93	86	79	70	53	27	10	4	3	2	1
100%	100%	99%	97%	94%	92%	89%	85%	80%	76%	70%	64%	57%	43%	22%	8%	3%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
125.1°	149.2°	176.6°	79.2%	51.7%