

Polara™ LED Puck Light



Polara LED Puck Lights provide bright, high quality dimmable LED lighting for close spaces such as cabinets, shelves, and cases. The Polara Puck is a compact, durable fixture with a brushed aluminum finish, and features a diffuser cover for hotspot-free LED light. This puck has the added feature of two installation options, surface mount or recessed, so it can be integrated into any installation.

TECHNICAL INFORMATION

Dimensions (dia. x height)	2.73 x 0.48 inches
Material	Aluminum
Power Consumption	3W
Input Voltage	12V DC
Diode Quantity	24

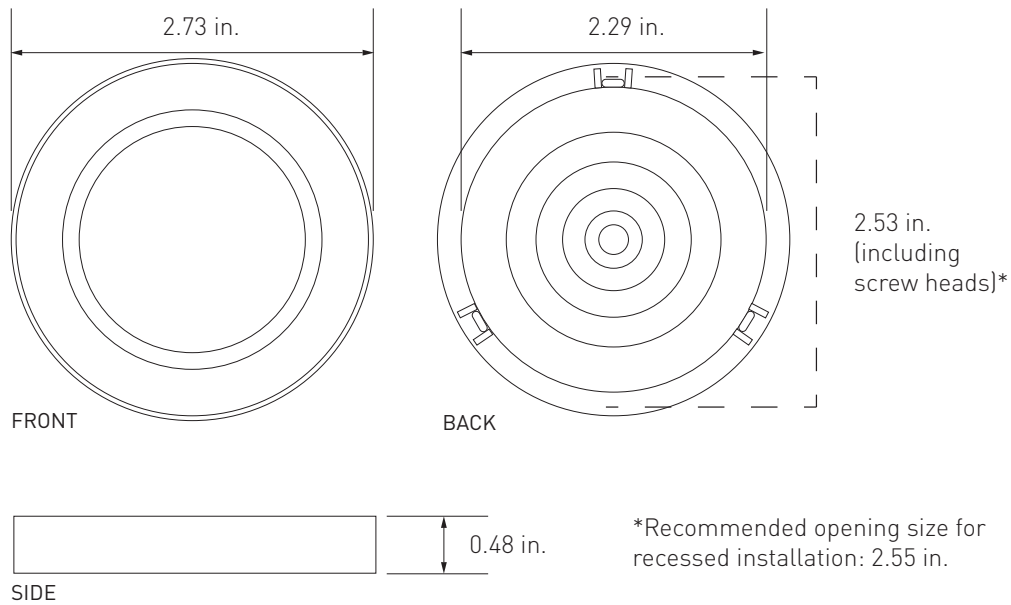
Diode Type	3014
Beam Angle	120°
Lead Wire	36 in. w/female DC plug
Operating Temperature	-4°F to 104°F, relative humidity
Environment	Indoor, Dry
Certifications	ETL, RoHS, CE
Warranty	3 year limited



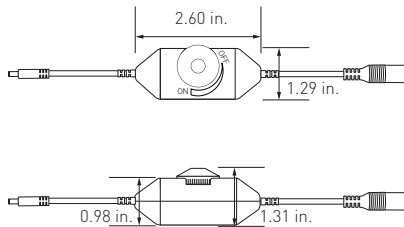
PRODUCT INFORMATION

Item #	Kelvin temp. (CCT)	Lumens	CRI	Finish
AL-04-01-1201-WH	2700K	141	98	White
AL-04-01-1202-AL	2700K	141	98	Aluminum
AL-04-01-1203-BL	2700K	141	98	Black
AL-04-01-1211-WH	3000K	133	98	White
AL-04-01-1212-AL	3000K	133	98	Aluminum
AL-04-01-1213-BL	3000K	133	98	Black
AL-04-01-1231-WH	5000K	204	95	White
AL-04-01-1232-AL	5000K	204	95	Aluminum
AL-04-01-1233-BL	5000K	204	95	Black

DIMENSIONS



DIMMING ACCESSORY (SOLD SEPARATELY)



Inline Rotary LED Dimmer Switch
AL-97-99-9917

SAFETY & TIPS

- DO NOT CONNECT LED PUCK LIGHTS DIRECTLY TO 120V AC POWER.
- This fixture should be powered only by a Class 2, UL Listed 12V DC power supply.
- Do not overload the 12V DC power supply. Overloading the power supply may cause shorting, overheating, and possibly fire.
- Do not expose this fixture to direct moisture.
- Do not cut or otherwise alter the DC plug attached to this fixture.

INSTALLATION

Surface Mounting

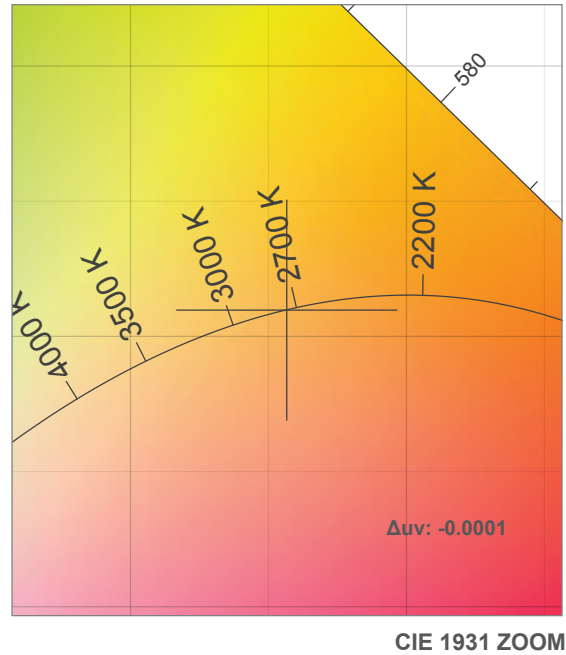
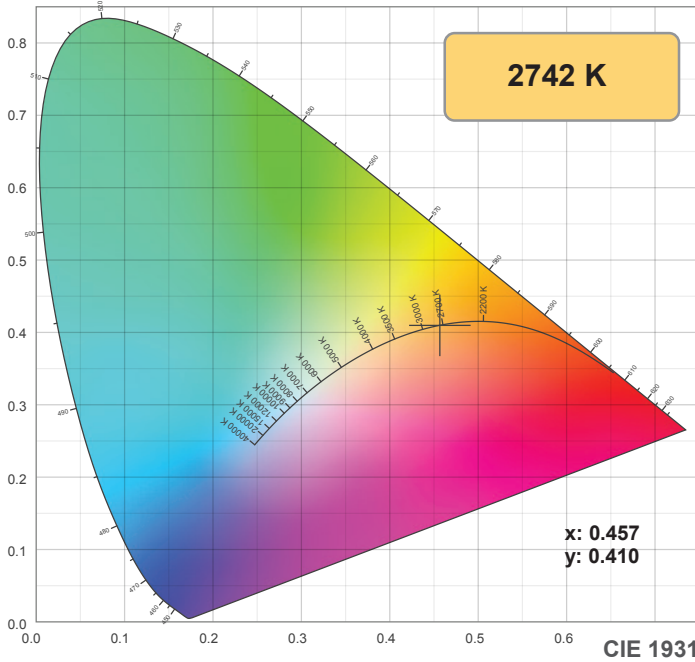
1. Remove mounting ring from puck.
2. Thread the puck cable through the ring and seat it in the ring's notch.
3. Secure the mounting ring to the surface with the included screws.
4. Snap the puck into the mounting ring.

Recessed mounting

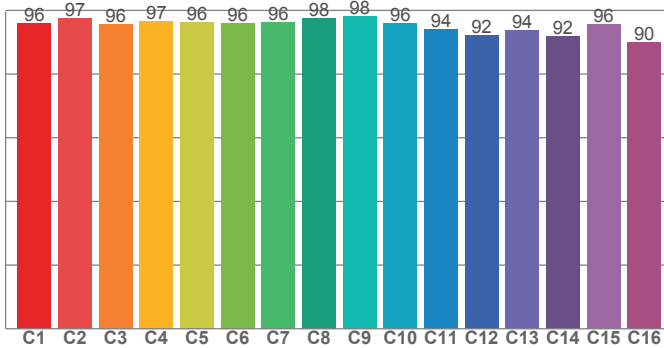
1. Cut a 2.55 in. opening where the puck will be installed. This size opening leaves room for the heads of the screws that hold the puck's flanges.
2. Thread the cable into the opening and snap the puck into place.

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

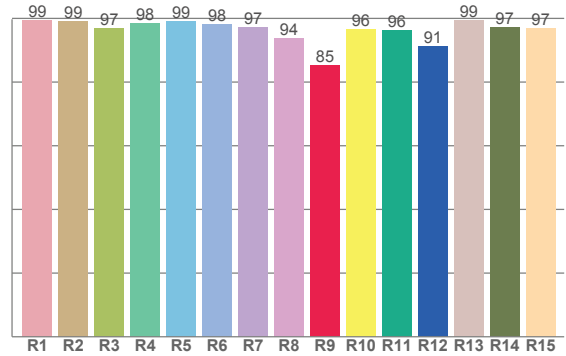
2700K



TM30: 95.3



CRI: 97.8 (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
99.3	99.0	96.8	98.4	99.2	98.3	97.1	93.9	85.3	96.5	96.4	91.2	99.5	97.2	96.8

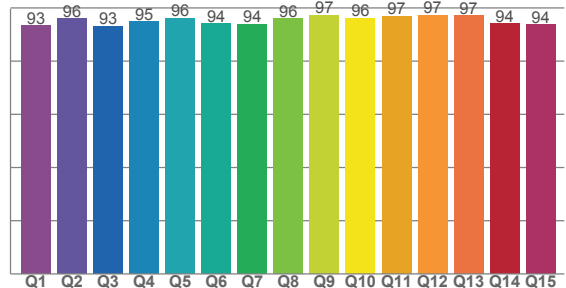
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.0	97.5	95.7	96.5	96.2	95.8	96.3	97.6	98.0	96.0	94.0	92.1	93.7	91.9	95.6	90.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.4	96.0	93.2	94.9	96.2	94.1	93.9	96.0	97.3	96.2	97.0	97.3	97.2	94.0	93.7

CQS: 94.9



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
2742 K	97.8	85.3	95.3	101.2	94.9	0.457	0.410	0.261	0.351	-0.0001

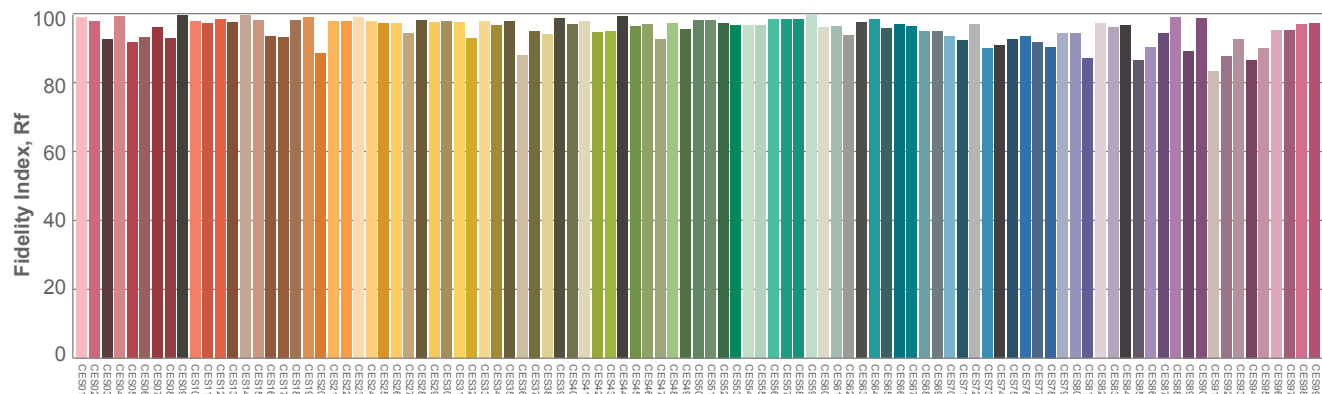
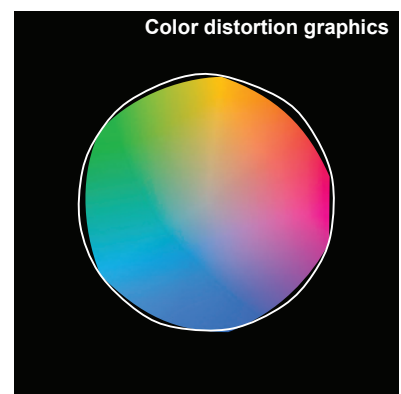
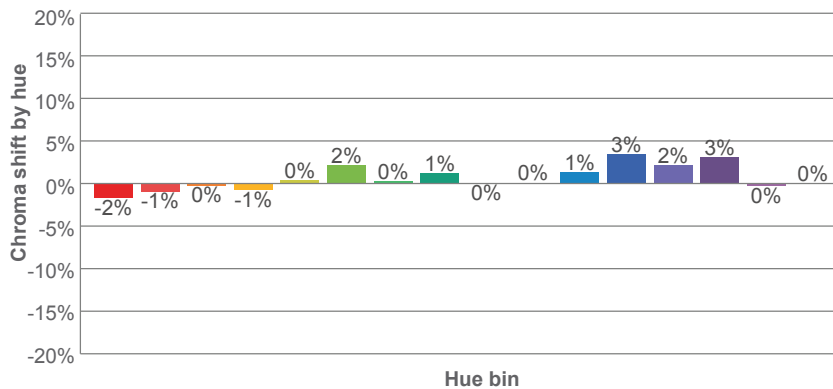
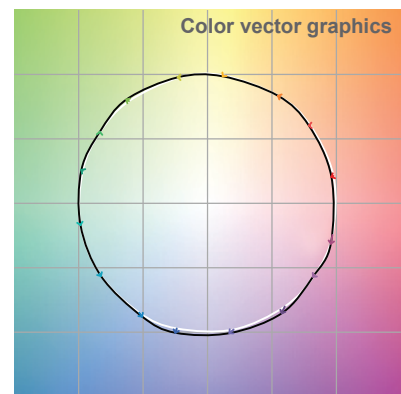
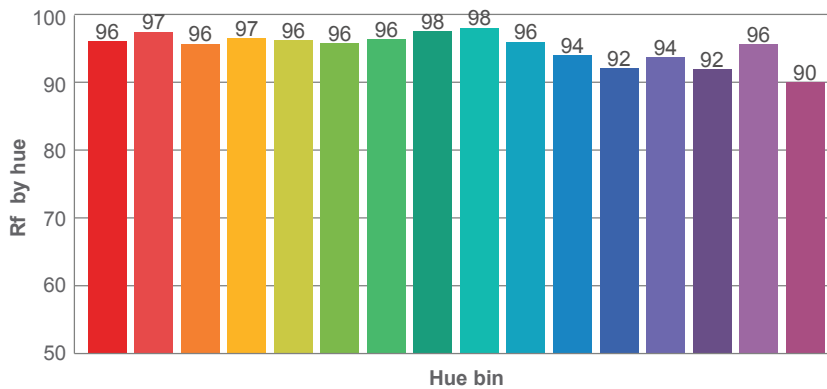
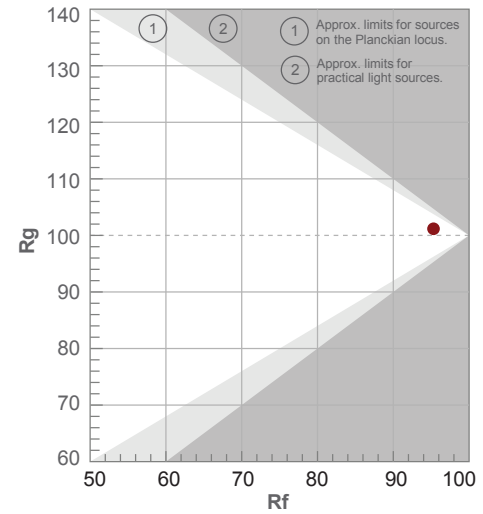
Note: specifications are representative of the diode type and not a particular tape light article.

2700K

Rf 95.3
Fidelity index Rf

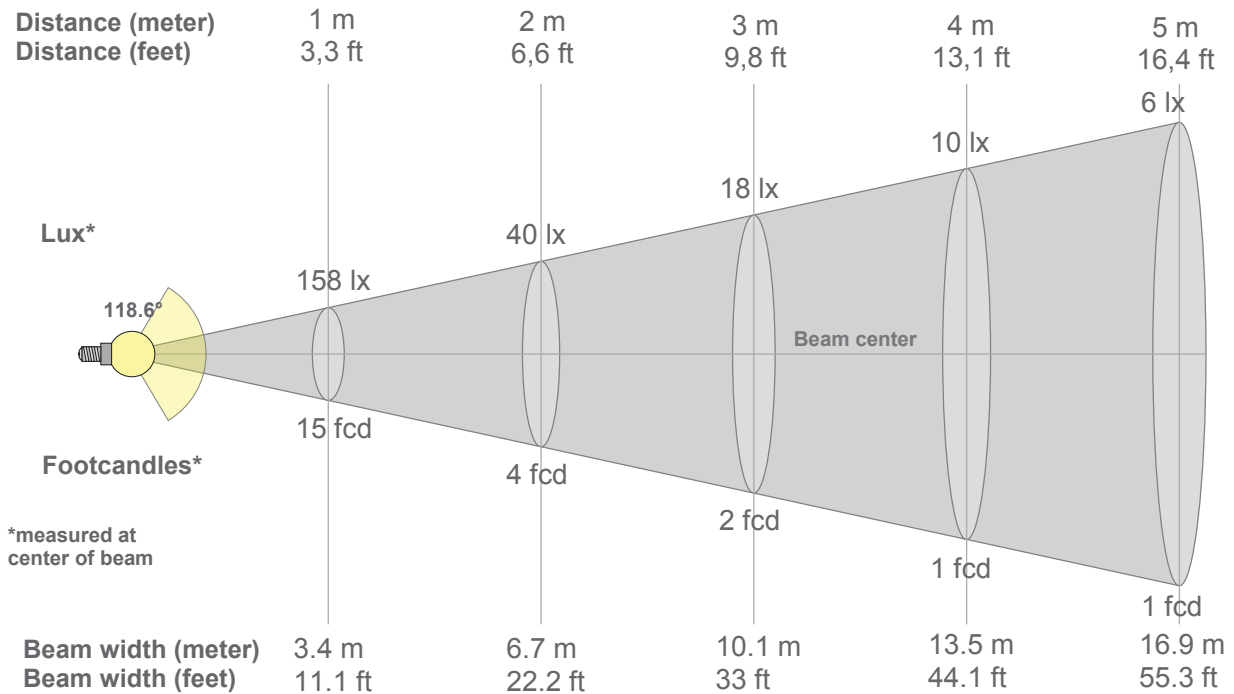
Rg 101.2
Gammut index Rg

Hue Bin	Rf	Graphic shifts (%)	
		Chroma	Hue
1	96	-2%	0%
2	97	-1%	1%
3	96	0%	2%
4	97	-1%	0%
5	96	0%	2%
6	96	2%	1%
7	96	0%	-1%
8	98	1%	-1%
9	98	0%	0%
10	96	0%	2%
11	94	1%	4%
12	92	3%	0%
13	94	2%	-4%
14	92	3%	-5%
15	96	0%	-2%
16	90	0%	-7%



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

2700K



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
158lx	40lx	18lx	10lx	6lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx
14.7fcd	3.7fcd	1.6fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
158	158	156	153	149	143	137	129	121	111	101	90	77	64	51	37	24	10	2	0
100%	100%	98%	97%	94%	90%	87%	82%	76%	70%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

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°
158	158	156	153	149	143	137	129	121	111	101	90	77	64	51	37	24	10	2	0
100%	100%	98%	97%	94%	90%	87%	82%	76%	70%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

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°
158	157	156	153	148	143	137	129	120	111	101	89	77	64	51	37	24	11	2	0
100%	100%	98%	96%	94%	90%	86%	82%	76%	70%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

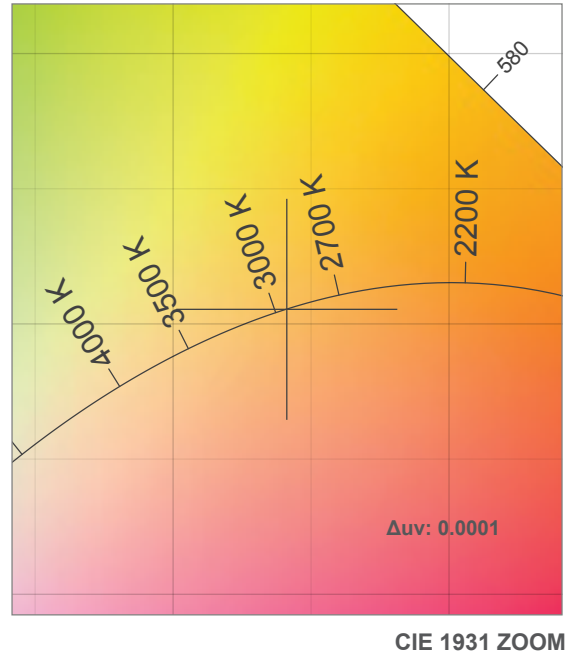
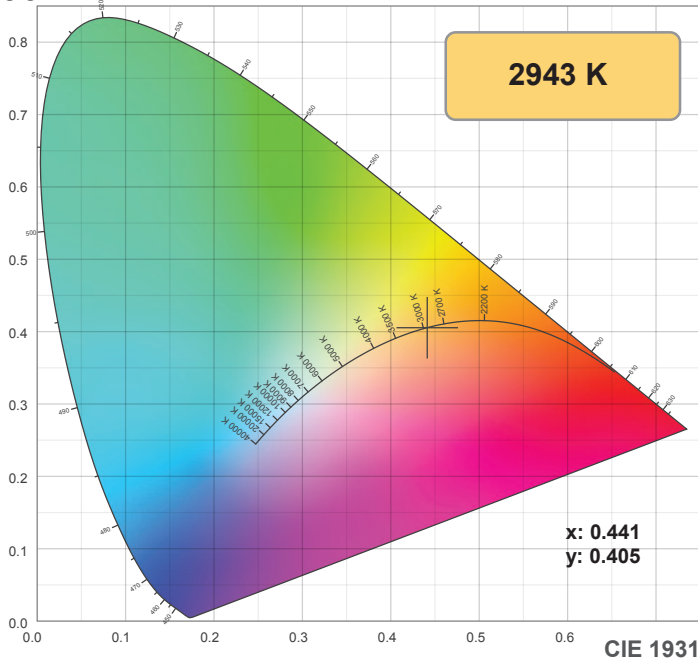
Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
158	157	156	153	148	143	137	129	120	111	101	89	77	64	51	37	24	11	2	0
100%	100%	98%	96%	94%	90%	86%	82%	76%	70%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

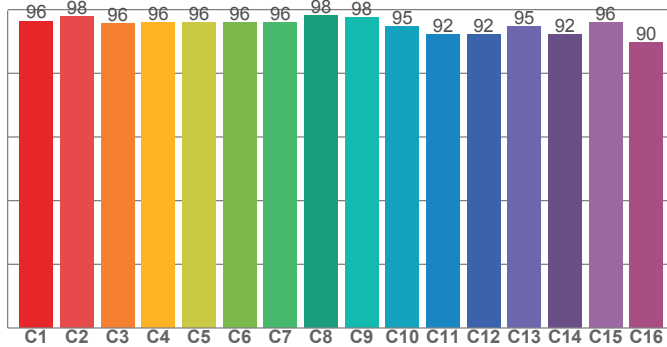
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
118.6°	166.1°	176.7°	75.8%	50.7%

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

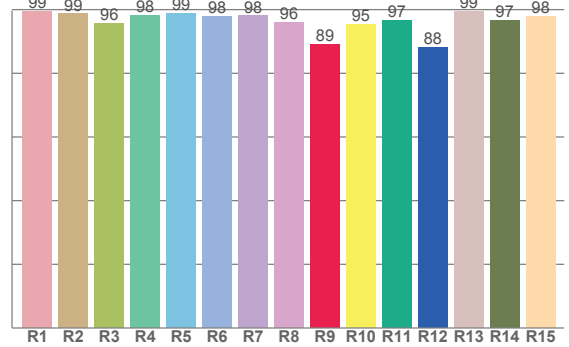
3000K



TM30: 95.1



CRI: 97.8 (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
99.4	98.6	95.8	98.1	98.9	97.8	98.0	95.9	89.1	95.4	96.6	88.1	99.4	96.7	97.8

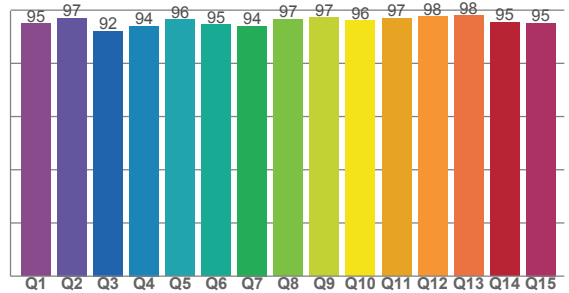
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.4	97.8	95.5	95.8	95.9	95.9	95.9	98.0	97.5	94.6	92.2	92.0	94.8	92.3	95.9	89.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.9	97.1	92.2	94.0	96.4	94.6	94.1	96.6	97.2	96.1	97.0	97.7	98.0	95.5	95.2

CQS: 95.3



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 division from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2943 K	97.8	89.1	95.1	101.4	95.3	0.441	0.405	0.253	0.348	0.0001

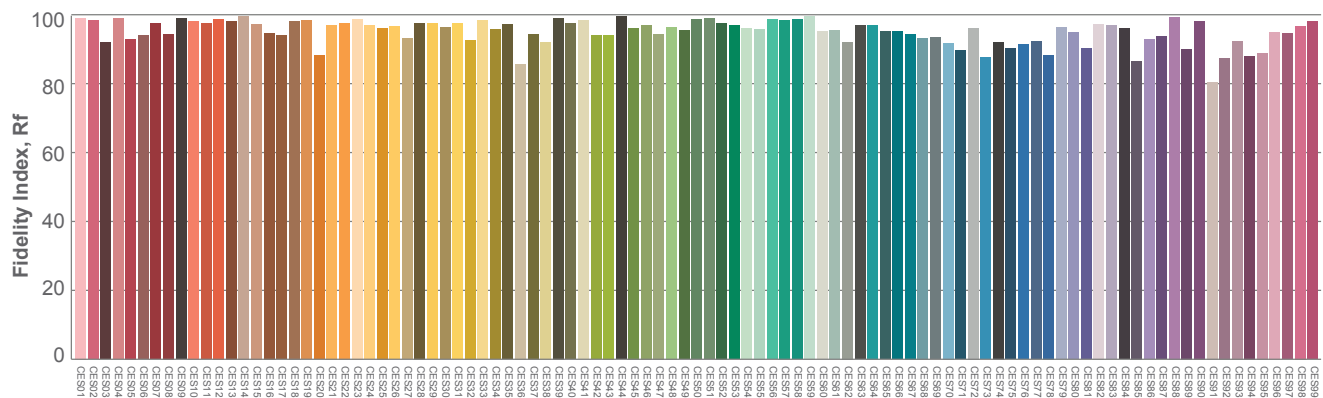
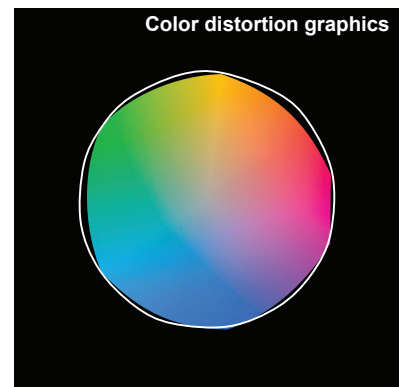
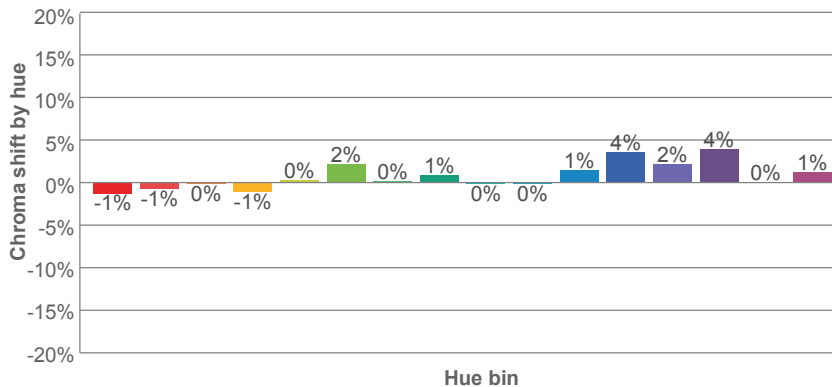
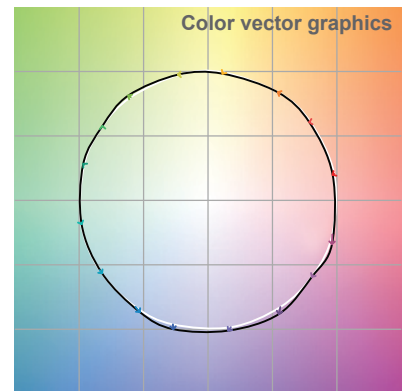
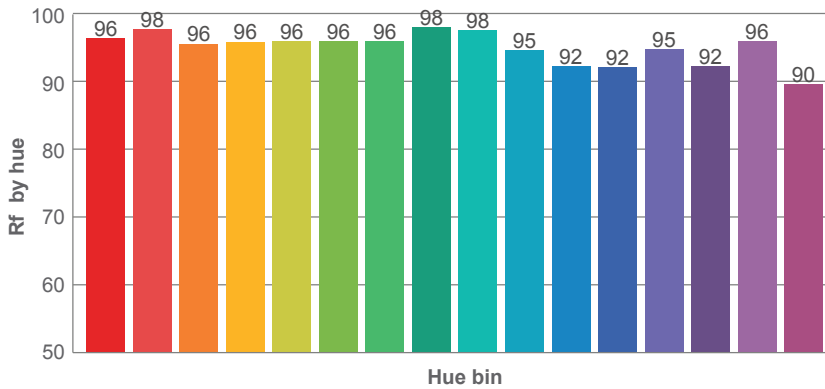
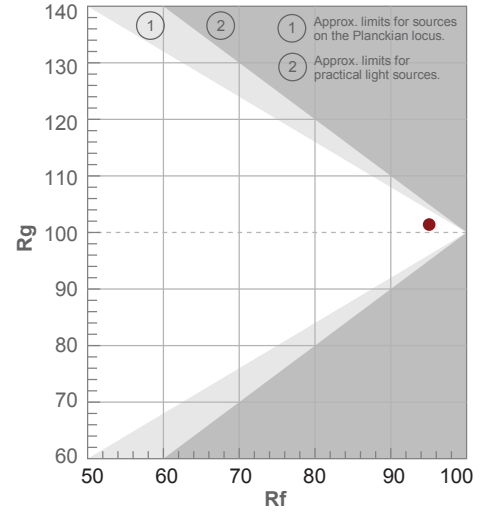
Note: specifications are representative of the diode type and not a particular tape light article.

3000K

Rf 95.1
Fidelity index Rf

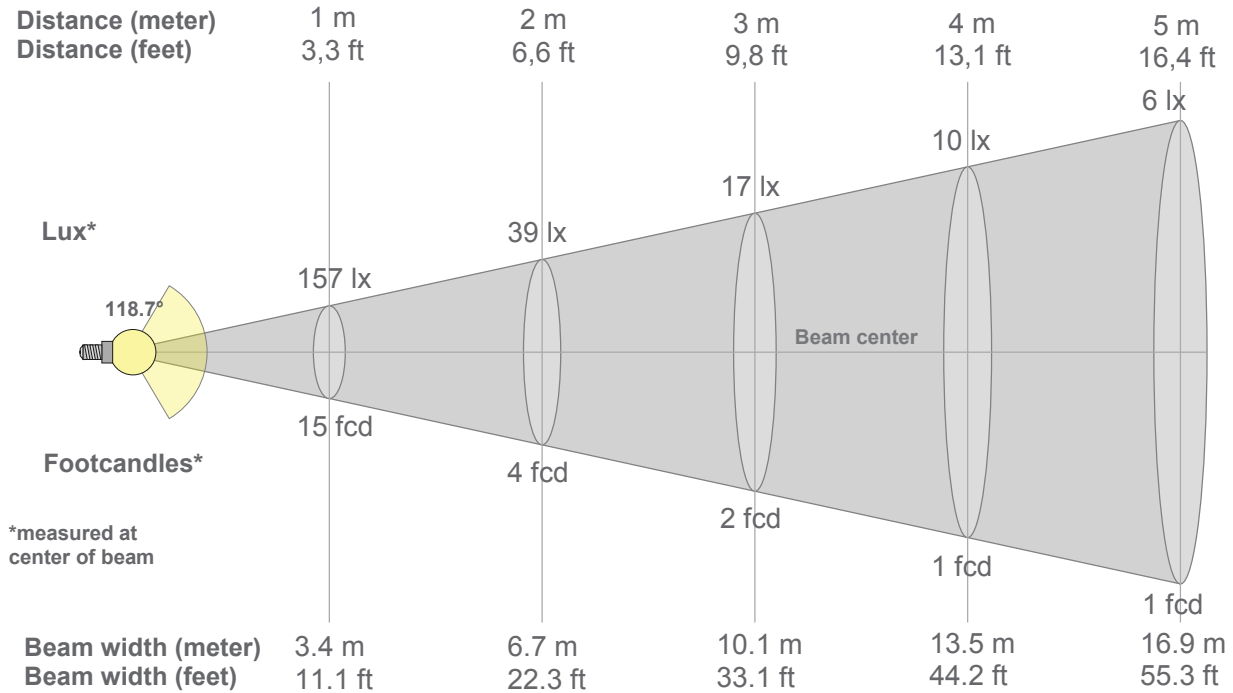
Rg 101.4
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	0%
2	98	-1%	0%
3	96	0%	2%
4	96	-1%	0%
5	96	0%	2%
6	96	2%	1%
7	96	0%	0%
8	98	1%	-1%
9	98	0%	1%
10	95	0%	3%
11	92	1%	5%
12	92	4%	1%
13	95	2%	-2%
14	92	4%	-4%
15	96	0%	-2%
16	90	1%	-7%



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

3000K



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
157lx	39lx	17lx	10lx	6lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx
14.6fcd	3.7fcd	1.6fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
157	157	155	152	147	142	136	128	120	110	100	89	77	65	51	38	25	12	3	1
100%	100%	98%	97%	94%	90%	86%	82%	76%	70%	64%	57%	49%	41%	33%	24%	16%	8%	2%	0%

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°
157	157	155	152	147	142	136	128	120	110	100	89	77	65	51	38	25	12	3	1
100%	100%	98%	97%	94%	90%	86%	82%	76%	70%	64%	57%	49%	41%	33%	24%	16%	8%	2%	0%

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°
157	157	155	152	148	143	137	129	121	111	101	89	77	64	51	37	23	10	1	0
100%	100%	98%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

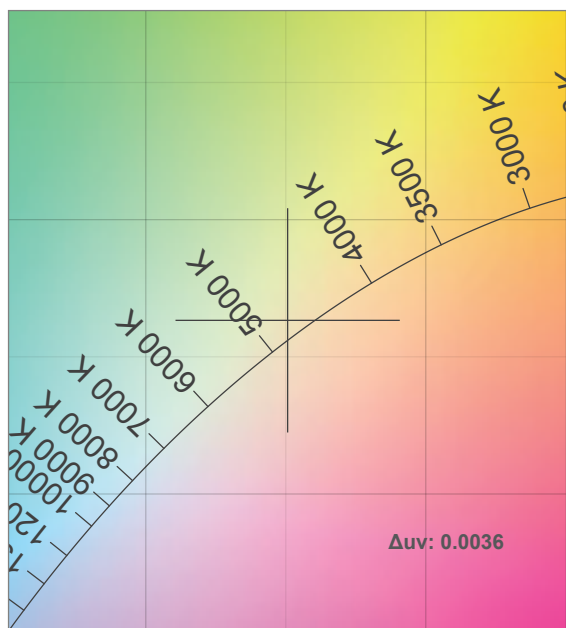
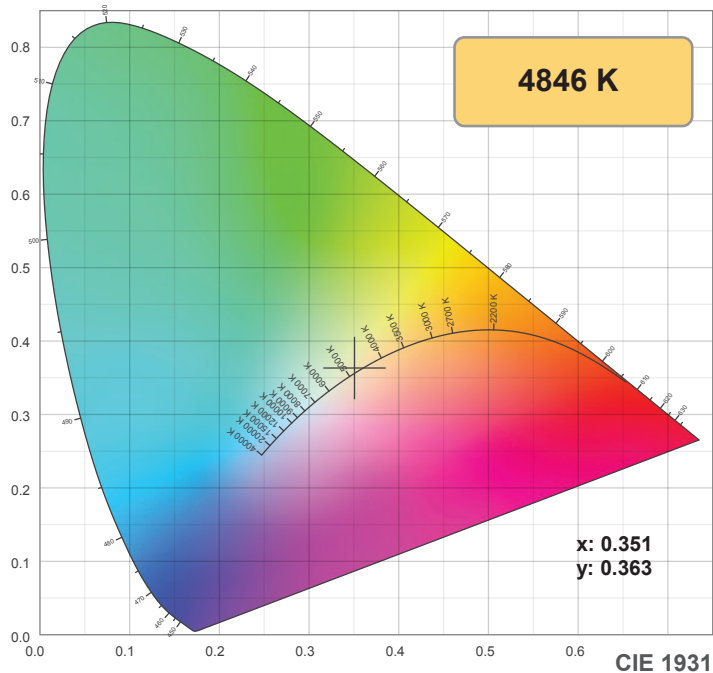
Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
157	157	155	152	148	143	137	129	121	111	101	89	77	64	51	37	23	10	1	0
100%	100%	98%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	24%	15%	7%	1%	0%

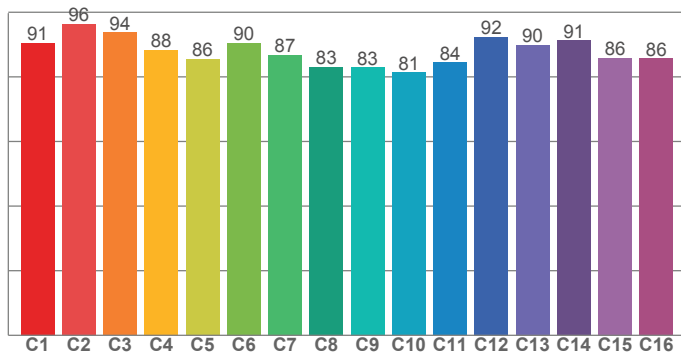
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
118.7°	166.4°	177.4°	75.5%	50.5%

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

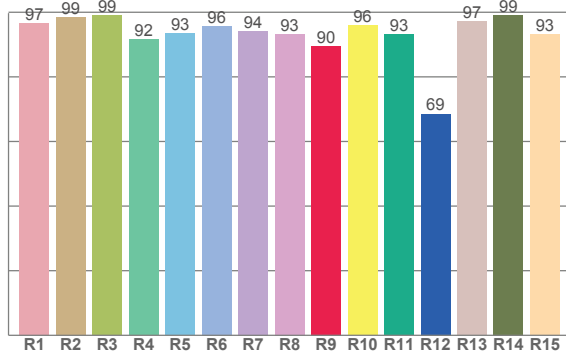
5000K



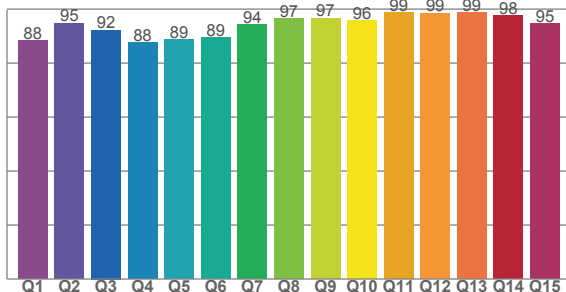
TM30: 87.9



CRI: 95.3 (R1-R8)



CQS: 93.0



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
96.6	98.6	99.0	91.5	93.5	95.7	94.2	93.2	89.5	95.9	93.1	68.6	97.2	99.2	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
90.5	96.4	93.8	88.4	85.6	90.5	86.8	83.1	83.0	81.4	84.5	92.4	89.9	91.2	85.8	85.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.3	94.8	92.3	87.6	88.7	89.4	94.2	96.5	96.7	95.7	98.6	98.5	98.7	97.7	94.5

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
4846 K	95.3	89.5	87.9	96.1	93.0	0.351	0.363	0.211	0.327	0.0036

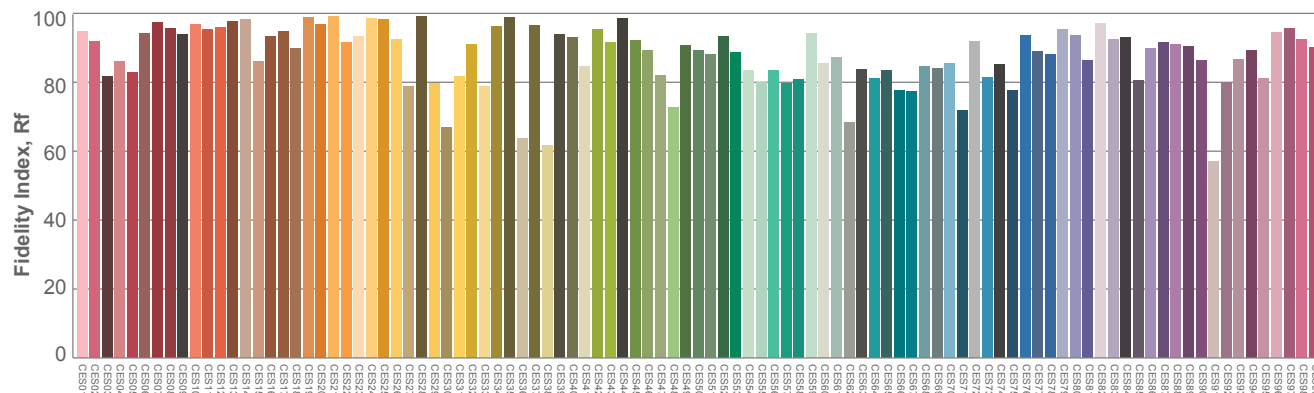
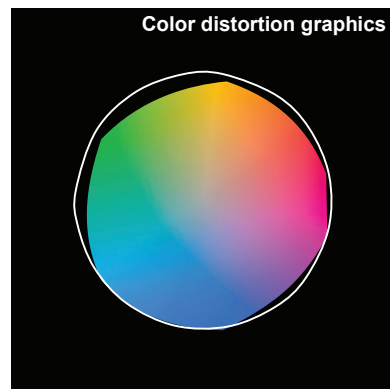
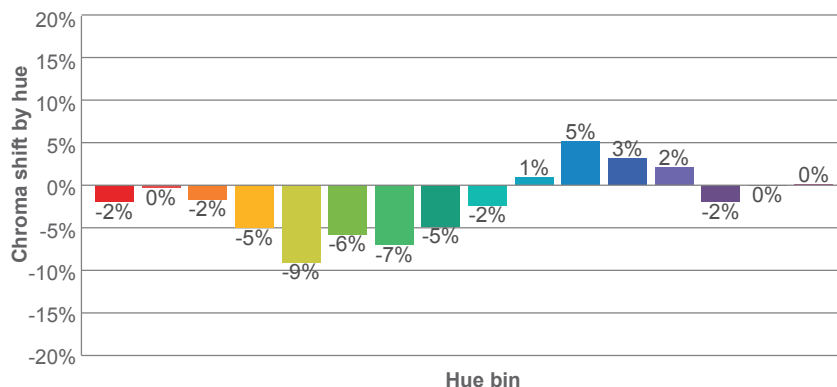
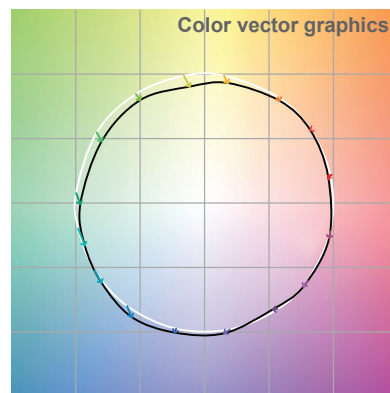
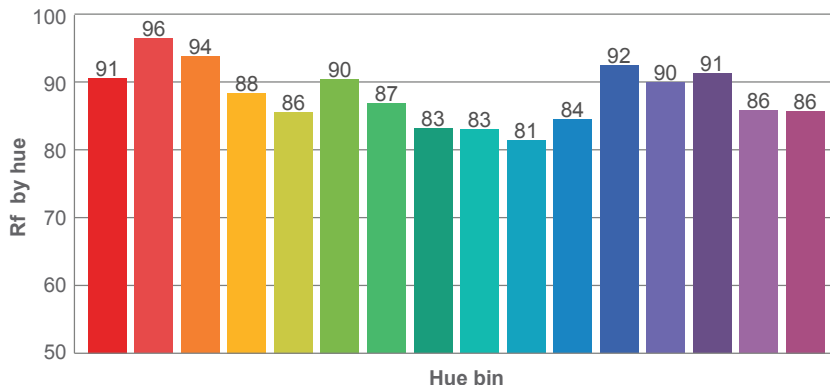
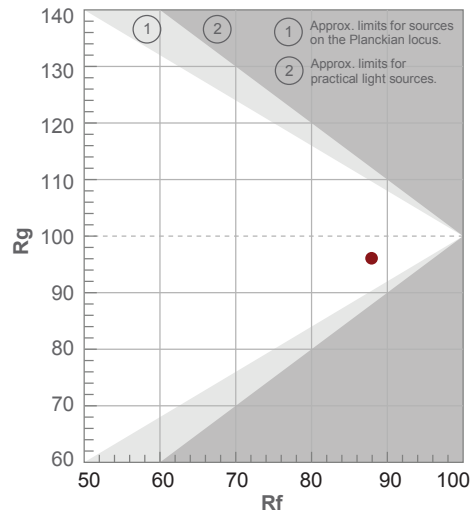
Note: specifications are representative of the diode type and not a particular tape light article.

5000K

Rf 87.9
Fidelity index Rf

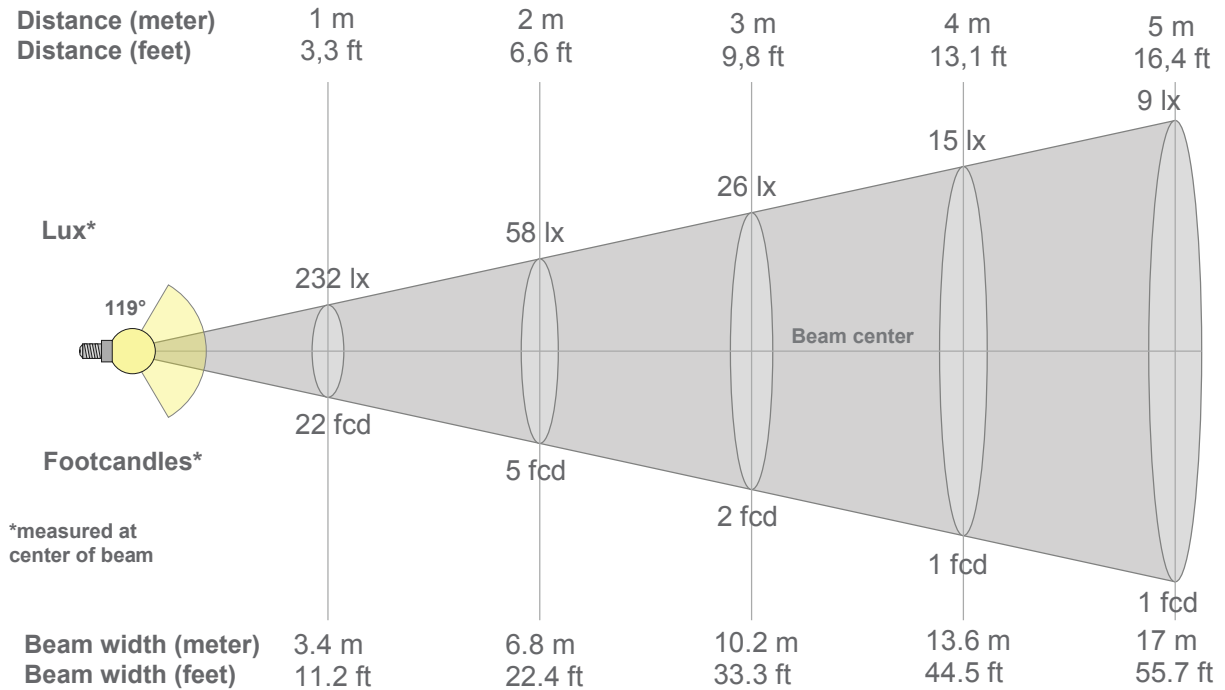
Rg 96.1
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-2%	2%
2	96	0%	0%
3	94	-2%	-2%
4	88	-5%	-4%
5	86	-9%	-3%
6	90	-6%	0%
7	87	-7%	4%
8	83	-5%	8%
9	83	-2%	14%
10	81	1%	11%
11	84	5%	8%
12	92	3%	-1%
13	90	2%	-5%
14	91	-2%	-3%
15	86	0%	-5%
16	86	0%	-6%



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

5000K



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
232lx	58lx	26lx	15lx	9lx	6lx	5lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
21.6fcd	5.4fcd	2.4fcd	1.3fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd

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°
232	232	229	225	219	211	201	191	178	164	149	132	114	95	75	56	36	17	5	1
100%	100%	98%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	24%	15%	7%	2%	0%

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°
232	232	229	225	219	211	201	191	178	164	149	132	114	95	75	56	36	17	5	1
100%	100%	98%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	24%	15%	7%	2%	0%

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°
232	232	229	225	219	211	202	191	178	164	149	132	114	95	76	56	36	17	3	0
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	33%	24%	15%	7%	1%	0%

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°
232	232	229	225	219	211	202	191	178	164	149	132	114	95	76	56	36	17	3	0
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	33%	24%	15%	7%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
119°	166.6°	178°	75.5%	50.5%