

PrimaLine® 1.5 XT Long-Run Wet Location LED Tape Light



PrimaLine 1.5 XT offers extended maximum run lengths of 82 feet with the same lumen output, CRI, and wattage as the 12V model of PrimaLine 1.5. This dimmable tape supplies the perfect brightness for the ambient and close application task lighting for longer applications like hallways, toe kicks, soffits, and coves.

- Extended maximum run length of 82 feet
- Saves installation costs by eliminating multiple home runs
- Industry-leading 95+ CRI (Color Rendering Index)
- Indoor and outdoor wet location use

TECHNICAL INFORMATION

Color Temperature	2700K, 3000K, 3500K, 4200K, 5000K*
Power Consumption per Foot	1.44 Watts/60mA
Input Voltage	24V DC
Diodes per foot	18
Diode Spacing	0.65 inches
Tape Height	0.2 inches
Beam Angle	120°
Field Cuttable (UL 2108)	Every 4 inches
Maximum Run Length	82 ft.
Dimmable	Yes

Diode Type	3528 SMD
Mounting	3M™ Self-Adhesive Tape (Acrylic Foam), Mounting Clips (Included)
Operating Temperature	-13° F to 140° F
Ambient Temperature	-40° F to 186° F
Spool Lengths**	20 ft., 40 ft.
Environment	Indoor/Outdoor, Dry/Wet, IP68
Certifications	UL Listed, UL 2108, CE, RoHS
Standards	Certified to the CA Energy Commission in accordance with the Title 24 JA8 2016 std.
Warranty	6 Year Limited

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

**Each spool includes 36 in., CL2 rated 20 AWG tinned lead wires at both ends of the tape light.

PRODUCT INFORMATION

20 ft. Spool Item Number	40 ft. Spool Item Number	Voltage	Color Temperature	CRI	R9 Value	R13 Value	TM30	CQS	Lumens per Foot
AL-01-04-2471	AL-01-04-2481	24V DC	2700K	97	87.3	97.5	92.8	91.1	90
AL-01-04-2472	AL-01-04-2482	24V DC	3000K	95.3	82.5	95.7	90.6	92.6	101
AL-01-04-2473	AL-01-04-2483	24V DC	4200K	95.2	86.6	95.2	91.8	94.4	110
AL-01-04-2474	AL-01-04-2484	24V DC	5000K	95	84.4	94.1	91	93.4	113
AL-01-04-2478	AL-01-04-2488	24V DC	3500K	96.2	90.7	97.2	90.4	94.4	103

VOLTAGE DROP GUIDANCE CHART

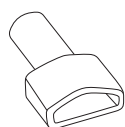
XT Long-Run 24V Voltage Drop and Wire Length Distance Chart (3% Drop or 24V)

Wire Gauge	Copper Wire Resistance (Ω/kFT)	10W (0.42A)	20W (0.83A)	30W (1.25A)	40W (1.67A)	50W (2.08A)	60W (2.50A)	70W (2.92A)	80W (3.33A)	90W (3.75A)	96W (4A)
22 AWG	16.14	90 ft.	45 ft.	30 ft.	23 ft.	18 ft.	15 ft.	13 ft.	12 ft.	10 ft.	10 ft.
20 AWG	10.15	142 ft.	71 ft.	48 ft.	36 ft.	29 ft.	24 ft.	21 ft.	18 ft.	16 ft.	15 ft.
18 AWG	6.39	226 ft.	113 ft.	76 ft.	57 ft.	46 ft.	38 ft.	33 ft.	29 ft.	26 ft.	24 ft.
16 AWG	4.02	359 ft.	180 ft.	120 ft.	90 ft.	72 ft.	60 ft.	52 ft.	45 ft.	40 ft.	38 ft.
14 AWG	2.53	571 ft.	286 ft.	191 ft.	143 ft.	115 ft.	96 ft.	82 ft.	72 ft.	64 ft.	60 ft.
12 AWG	1.59	907 ft.	454 ft.	303 ft.	227 ft.	182 ft.	152 ft.	130 ft.	114 ft.	101 ft.	95 ft.
10 AWG	0.99	1442 ft.	721 ft.	481 ft.	361 ft.	289 ft.	241 ft.	206 ft.	181 ft.	161 ft.	151 ft.

Note: These tables provide general guidelines for determining Wire Gauge based on total load and distance from LED driver to beginning of luminaire.

ACCESSORIES (INCLUDED)

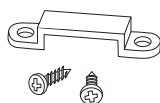
Mounting and Installation Accessories



5 Splice Sleeves



10 Waterproof End Caps



10 Mounting Clips
20 Screws



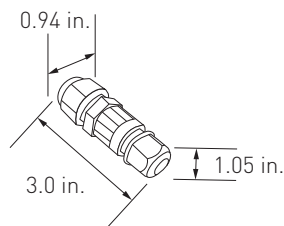
3M 9731 Silicone Rated Adhesive Tape

AL-01-01-9992 (50 ft.)
AL-01-01-9993 (100 ft.)

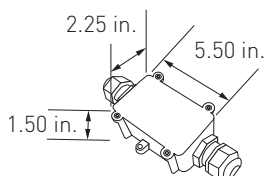
ACCESSORIES (SOLD SEPARATELY)

Wet Location Junction Boxes

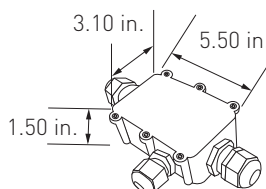
Provide a waterproof seal for wire connections, and are useful for connections between LED fixtures and low voltage power.



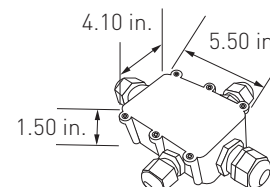
AL-98-05-99001



AL-98-05-99002-2



AL-98-05-99002-3

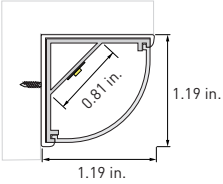
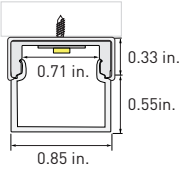
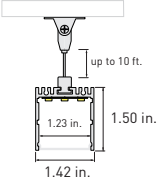
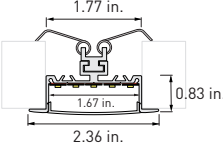
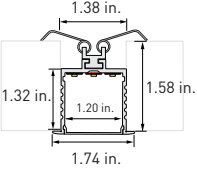


AL-98-05-99002-4

Item Number	Description	Maximum Voltage	Dimensions
AL-98-05-99001	Waterproof Cable Interconnector	450V AC	2.05 x 0.84 x 0.84 in.
AL-98-05-99002-2	Waterproof Junction Box - 2 Port	450V AC	5.5 x 2.25 x 1.46 in.
AL-98-05-99002-3	Waterproof Junction Box - 3 Port	450V AC	5.5 x 3.1 x 1.46 in.
AL-98-05-99002-4	Waterproof Junction Box - 4 Port	450V AC	5.5 x 4.1 x 1.46 in.

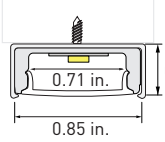
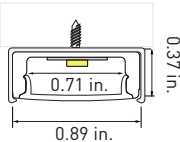
COMPATIBLE CHANNELS (Diagrams below not to scale)

Reduced Hotspot Pairings (Hotspot Rating from 0-5)

Surfa 2X: Corner-Mount  Hotspot Rating: 0 ☐ Solder ☒ Connector ☐ AmpChamp	Surfa 6 Surround: Surface-Mount  Hotspot Rating: 0 ☐ Solder ☒ Connector ☐ AmpChamp	Suspan 1: Suspended  Hotspot Rating: 0 ☐ Solder ☒ Connector ☐ AmpChamp
Ankr 1: In-Wall  Hotspot Rating: 1 ☐ Solder ☒ Connector ☐ AmpChamp	Ankr 2: In-Wall  Hotspot Rating: 0 ☐ Solder ☒ Connector ☐ AmpChamp	

COMPATIBLE CHANNELS (Diagrams below not to scale)

Other Compatible Pairings (Hotspot Rating from 0-5)

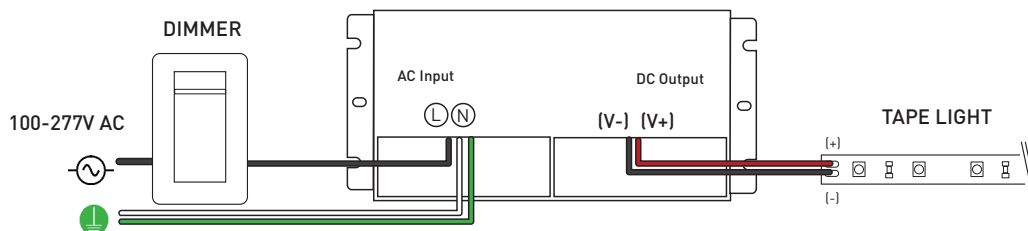
Surfa 6: Surface-Mount  Hotspot Rating: 5 ☐ Solder ☐ Connector ☐ AmpChamp	Polymer: Surface-Mount  Hotspot Rating: 5 ☐ Solder ☒ Connector ☐ AmpChamp
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ALLOY LED® Specifications

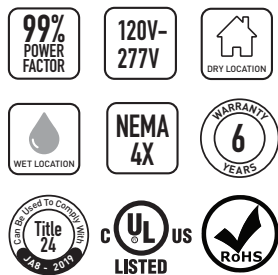
RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



Alloy LED PowerFactor™ Dimmable Power Supplies with Integrated UL Listed Junction Box
Compact, highly efficient, and code-compliant power supply with versatile and smooth dimming capabilities.



Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.



Single Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12030	12V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-12060	12V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-12120	12V DC	120W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	No
AL-98-10-24030	24V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-24060	24V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-24096	24V DC	96W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-10-24150	24V DC	150W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24200	24V DC	200W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24300	24V DC	300W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	No

Class 2 Compliant Multi-Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12300-MT	12V DC	300W	Yes (NEMA 4X)	10%	11.85 x 4.33 x 1.77 in.	Yes
AL-98-10-24192-MT	24V DC	192W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	Yes
AL-98-10-24288-MT	24V DC	288W	Yes (NEMA 4X)	10%	11.85 x 4.33 x 1.77 in.	Yes

Note: PowerFactor assumes 80% load.
Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.

ALLOY LED® Specifications

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies with ETL Listed Junction Box

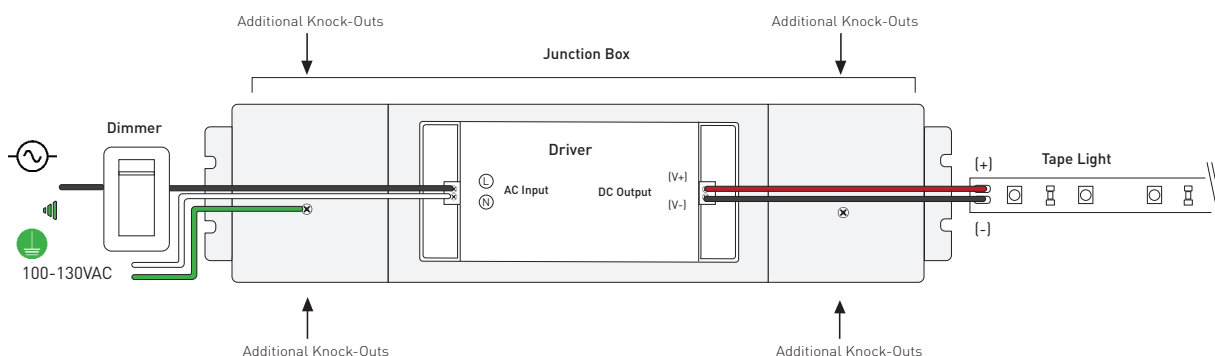
Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with Incandescent, On/Off, ELV and MLV dimmers.



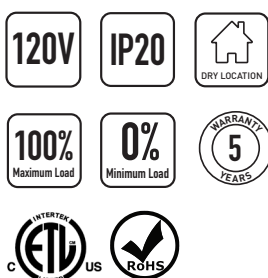
Dry Location Model
White model for 60W and lower



Wet Location Model
Black model for 80W and higher



Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.



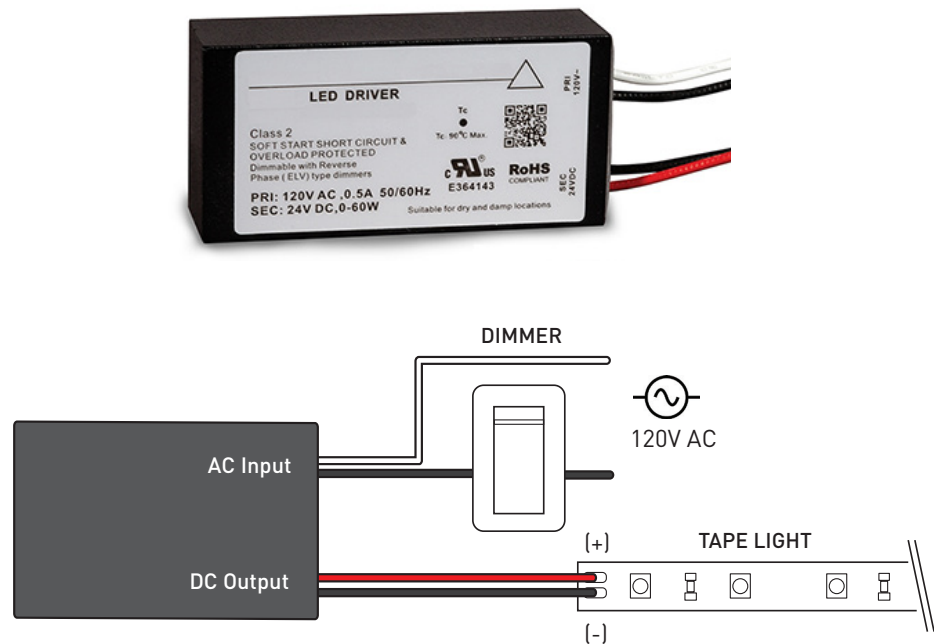
Item Number	Output Voltage	Wattage	Minimum Load	Dimensions (Junction Box) (L x W x H)	Class 2
AL-98-03-12024-NM	12V DC	24W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12048-NM	12V DC	48W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12060-NM	12V DC	60W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12080-NM	12V DC	80W	0%	14.96 x 3.03 x 2.24 in.	No
AL-98-03-12120-NM	12V DC	120W	0%	14.96 x 3.03 x 2.24 in.	No
AL-98-03-24024-NM	24V DC	24W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24048-NM	24V DC	48W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24060-NM	24V DC	60W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24080-NM	24V DC	80W	0%	14.96 x 3.03 x 2.24 in.	Yes
AL-98-03-24096-NM	24V DC	96W	0%	14.96 x 3.03 x 2.24 in.	Yes
AL-98-03-24150-NM	24V DC	150W	0%	15.98 x 3.43 x 2.36 in.	No
AL-98-03-24200-NM	24V DC	200W	0%	15.98 x 3.43 x 2.36 in.	No

Note: Alloy LED strongly recommends using Listed Class 2 power supplies for all installations. Always install in accordance with local and national electrical code regulations. Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

ELV Dimmable Power Supplies for Remote Enclosures

The drivers are derated, but when installed in a small enclosure with no heatsink or air circulation, we recommend a maximum load of 40W.



Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.

120V

98%
POWER
FACTOR

WARRANTY
5
YEARS

0%
Min. Load

us

Item Number	Output	Wattage	Dimensions (L x W x H)	Class 2
AL-98-08-12060	12V DC	60W	2.66 x 1.30 x 0.83 in.	Yes
AL-98-08-24060	24V DC	60W	2.66 x 1.30 x 0.83 in.	Yes

Note: Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.

ALLOY LED® Specifications

DIMMING ACCESSORIES (SOLD SEPARATELY)

Lutron® Dimming Accessories

By participating in Lutron's OEM Advantage program, Alloy LED is able to offer a range of the highest quality low voltage power supplies and selected controls on the market.



Hi-lume Premier
0.1% EcoSystem /
3-wire LED Driver
(96W 24VDC)



Hi-lume 1% LED Driver 40W
- EcoSystem / 3-wire control
- 2-wire 120V forward
phase control



Lutron Vive PowPak RF Module
- RF module for EcoSystem LED
driver control
- Use with the Lutron EcoSystem
drivers shown to "Vive-enable"
Alloy LED products

Lutron® Hi-lume LED Drivers

Item Number	Output	Wattage	Minimum Load	Class 2
AL-98-07-12040	12V DC	40W	N/A	Yes
AL-98-07-12040-3WIRE	12V DC	40W	N/A	Yes
AL-98-07-24040	24V DC	40W	N/A	Yes
AL-98-07-24040-3WIRE	24V DC	40W	N/A	Yes
AL-98-07-24096-3WIRE	24V DC	96W	N/A	Yes

Lutron® Controls

Item Number	Description	Voltage
AL-98-07-9901	EcoSystem Control Module	N/A
AL-98-07-9901-8	EcoSystem Control Module - 8-pack	N/A
AL-98-07-9950	CL Dimmer	120V AC
AL-98-07-9950-FPLATE	CL Dimmer faceplate	N/A

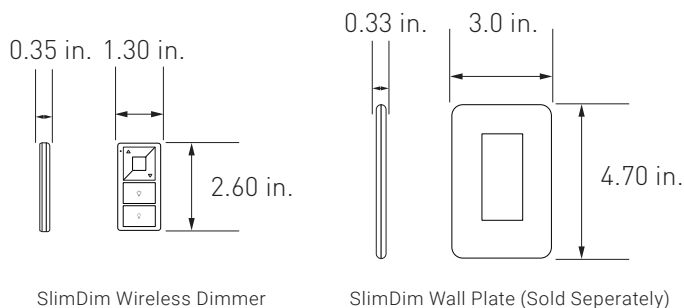
DIMMING ACCESSORIES (SOLD SEPARATELY)

Dimmers and Switches

SlimDim Wireless Dimmer Switch

Using long-range RF technology, these LED dimmers connect wirelessly to a receiver, offering freedom to mount anywhere. Can also be used as a fob for mobile, hand-held control.

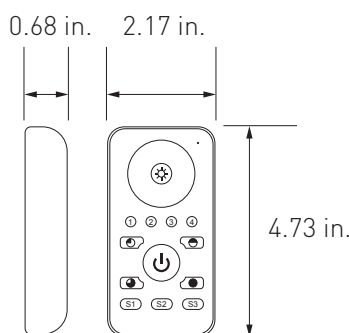
AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W max.) (sold separately) 
AL-98-07-9950 -FPLATE	SlimDim Wall Plate (sold separately)



Remote Control Dimmer Switch

Provides full dimming and on/off control, and includes a touch wheel that allows for direct visual selection of brightness. It can also operate up to four independent zones.

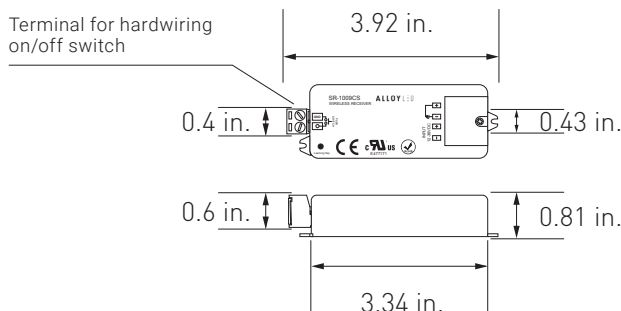
AL-60-03-0001	Remote Control Dimmer Switch
AL-70-01-0002	Single Channel Receiver (sold separately) 
AL-60-03-0004-V2	Wireless Receiver (RGB & RGBW) (sold separately) 



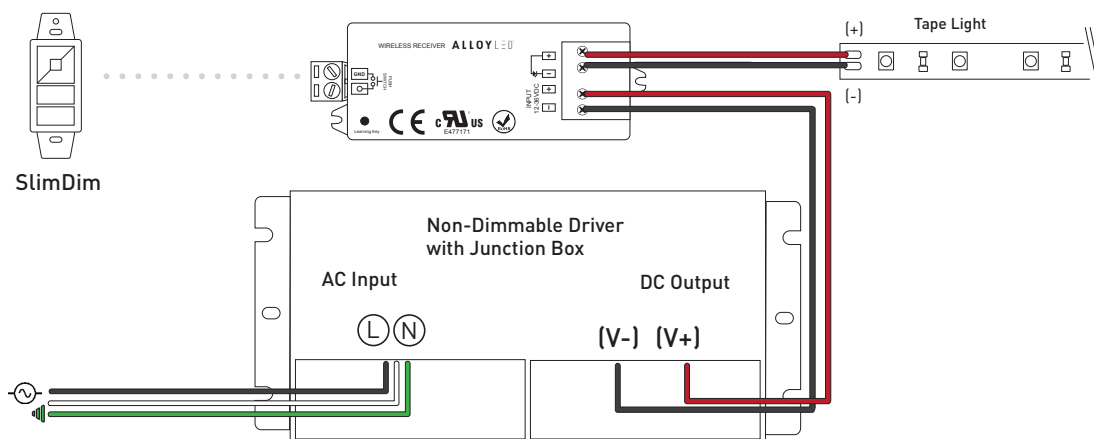
Single Channel Wireless Receiver

Pair with the Remote Control Dimmer Switch or the SlimDim Wireless Dimmer to dim PrimaLine tape lights. Use one remote to make independent lighting zones with multiple receivers with certain controllers.

AL-70-01-0002	Single Channel Wireless Receiver
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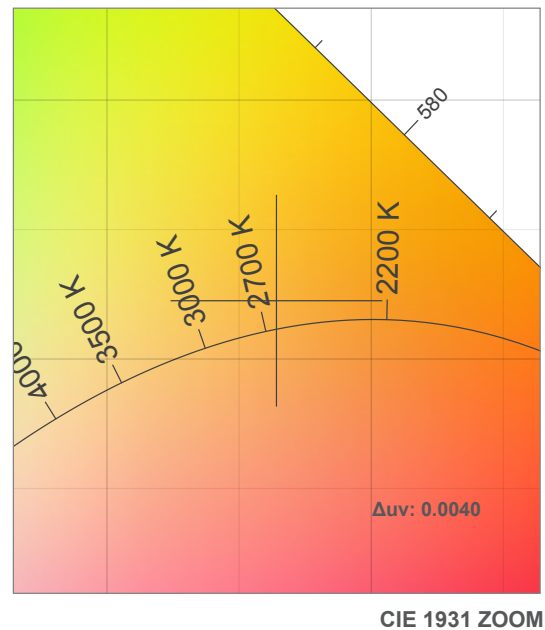
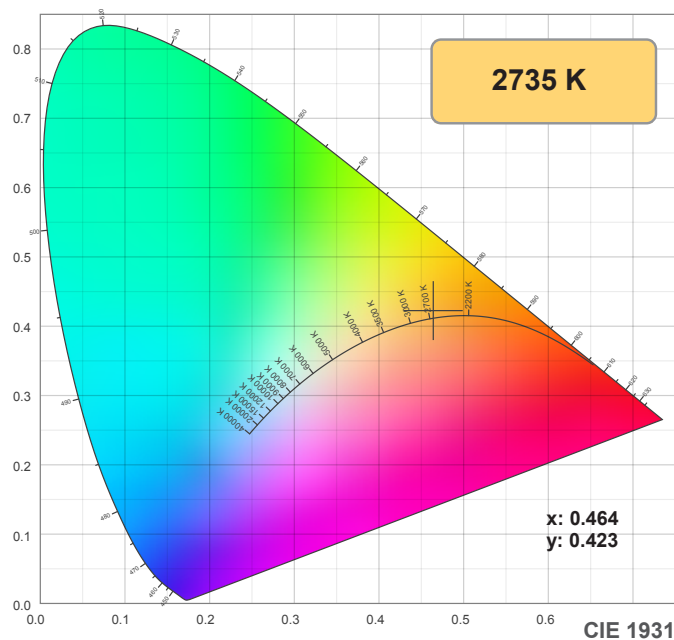


WIRING DIAGRAM

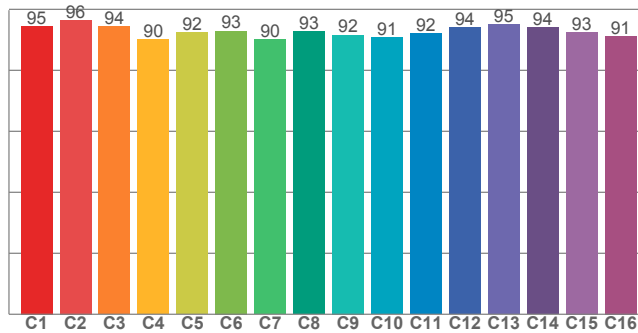


Note: specifications are representative of the diode type and not a particular tape light article.

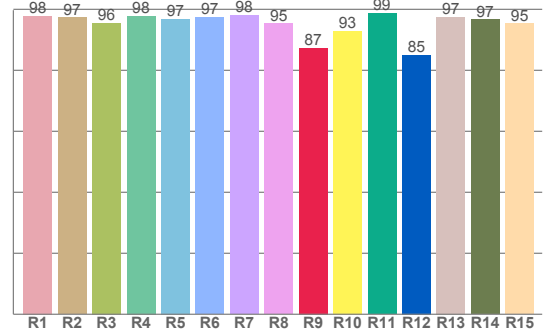
2700K



TM30: 92.8



CRI: 97.0 (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
97.9	97.3	95.5	97.8	96.8	97.3	98.0	95.3	87.3	92.8	98.7	85.0	97.5	96.6	95.3

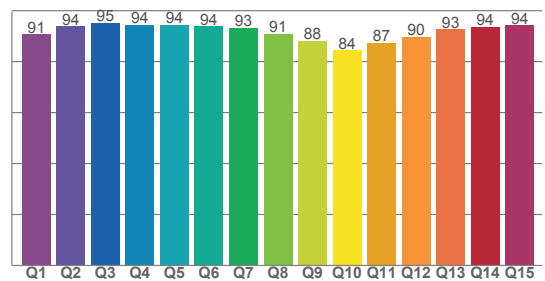
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.5	96.5	94.4	90.2	92.4	92.9	90.1	92.7	91.6	90.8	92.1	94.0	95.0	94.0	92.6	91.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.7	93.8	95.1	94.4	94.4	93.8	93.3	91.0	88.2	84.4	87.3	89.7	92.7	93.7	94.2

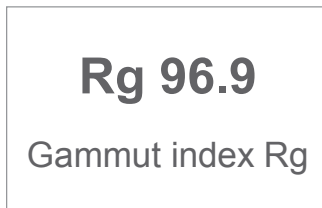
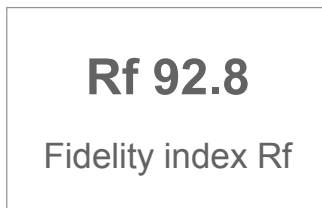
CQS: 91.1



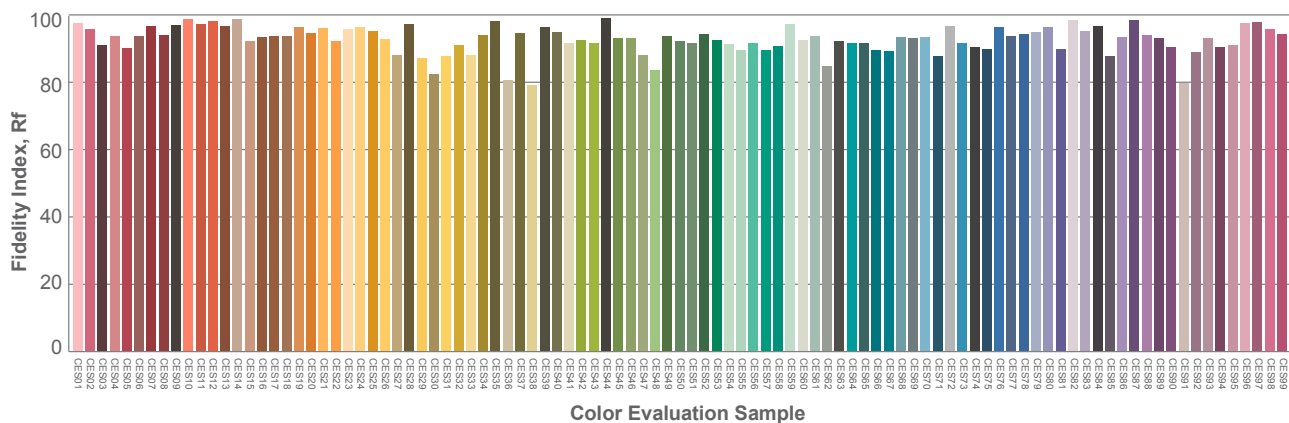
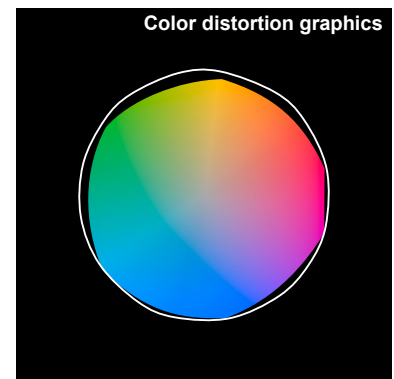
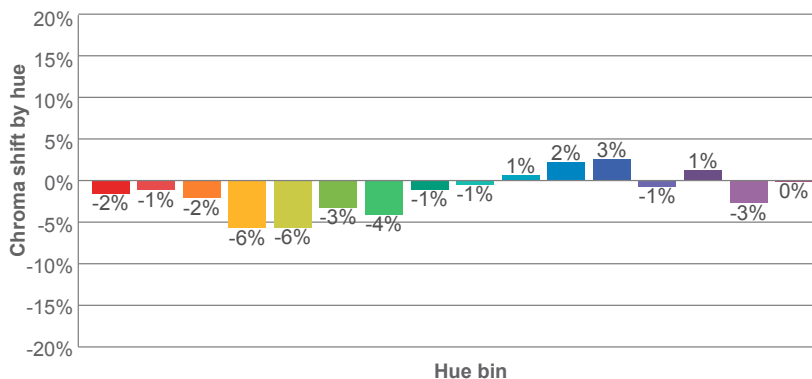
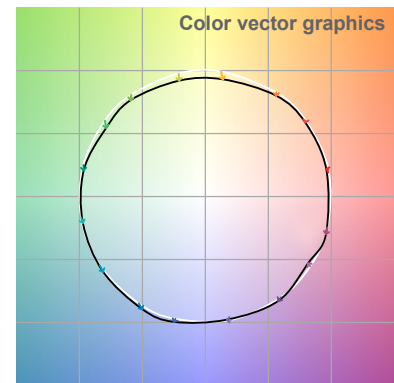
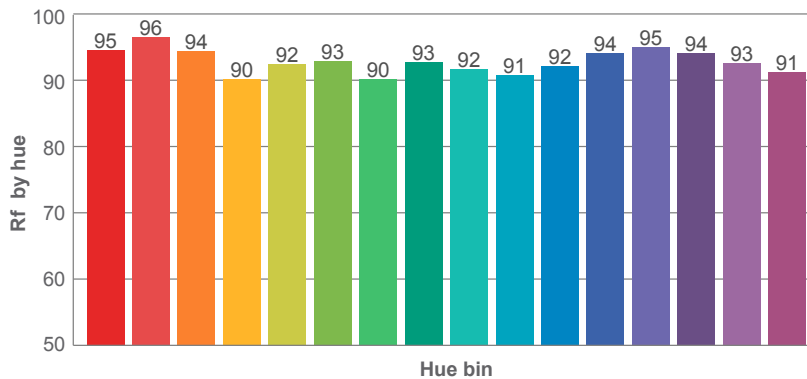
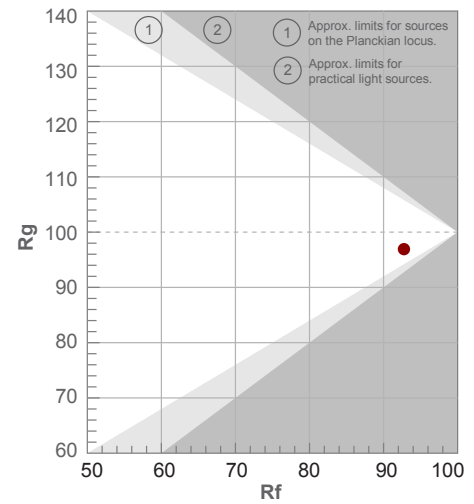
Color parameters

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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2735 K	97.0	87.3	92.8	96.9	91.1	0.464	0.423	0.260	0.355	0.0040

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

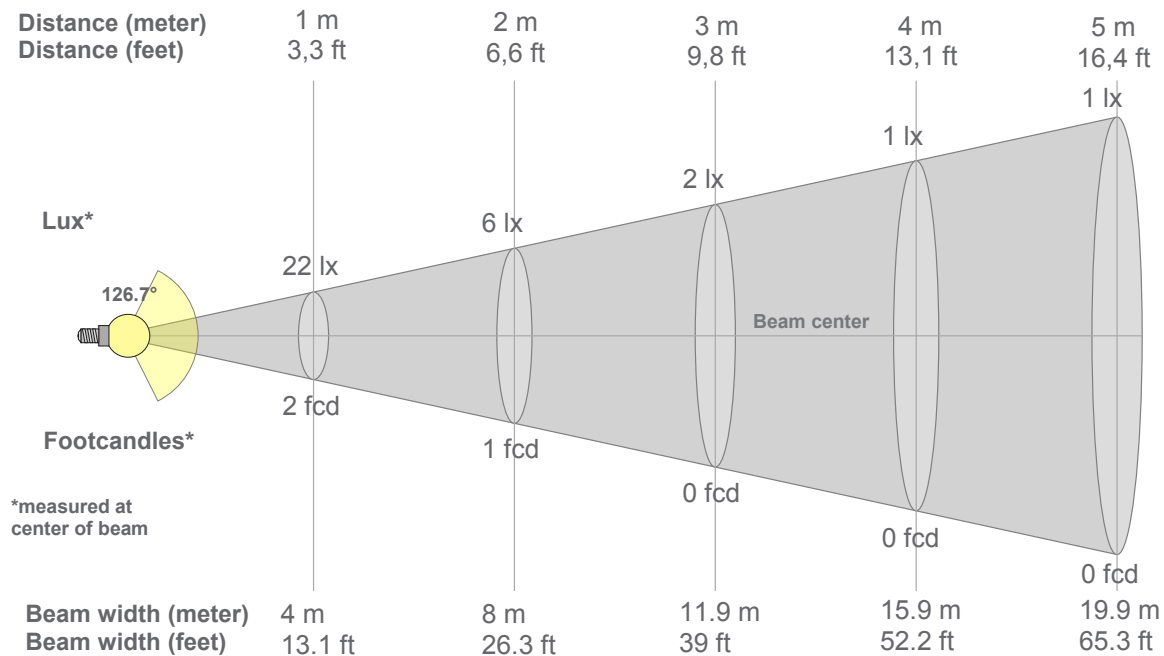


		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	95	-2%	1%
2	96	-1%	-1%
3	94	-2%	-1%
4	90	-6%	-3%
5	92	-6%	1%
6	93	-3%	3%
7	90	-4%	4%
8	93	-1%	4%
9	92	-1%	4%
10	91	1%	6%
11	92	2%	5%
12	94	3%	-1%
13	95	-1%	-3%
14	94	1%	-3%
15	93	-3%	1%
16	91	0%	-6%



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
22lx	6lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.1fcd	0.5fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	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°
22.2	21.9	21.3	20.1	18.5	16.4	14.0	11.2	8.1	4.8	2.3	1.9	2.7	3.1	3.2	2.9	2.0	1.4	0.7	0.4
100%	99%	96%	91%	84%	74%	63%	51%	36%	22%	10%	9%	12%	14%	15%	13%	9%	6%	3%	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°
22.2	21.9	21.3	20.1	18.5	16.4	14.0	11.2	8.1	4.8	2.3	1.9	2.7	3.1	3.2	2.9	2.0	1.4	0.7	0.4
100%	99%	96%	91%	84%	74%	63%	51%	36%	22%	10%	9%	12%	14%	15%	13%	9%	6%	3%	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°
22.2	21.9	21.2	20.0	18.3	16.3	13.8	11.2	8.3	5.2	2.5	1.6	2.3	3.0	3.4	3.4	1.9	0.4	0.2	0.2
100%	99%	96%	90%	83%	73%	62%	51%	37%	24%	11%	7%	10%	14%	15%	15%	9%	2%	1%	1%

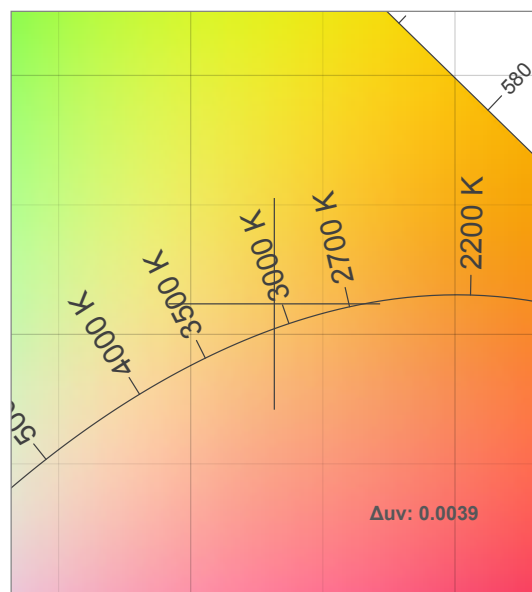
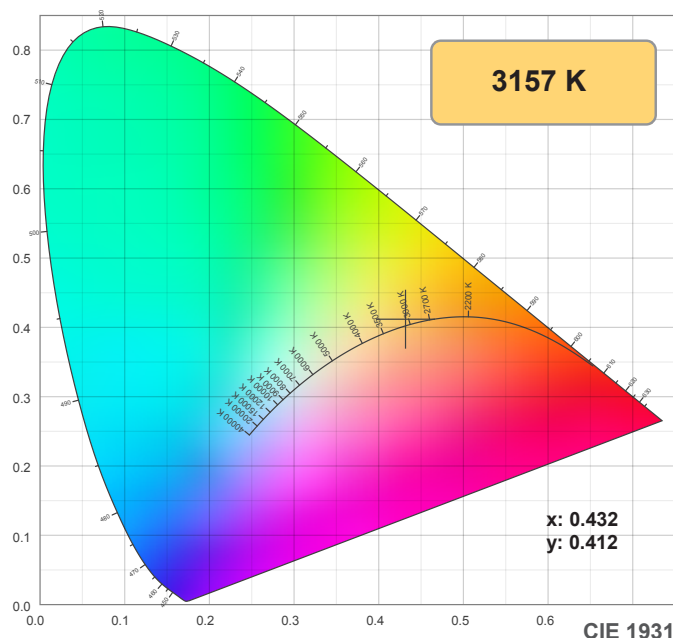
Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
22.2	21.9	21.2	20.0	18.3	16.3	13.8	11.2	8.3	5.2	2.5	1.6	2.3	3.0	3.4	3.4	1.9	0.4	0.2	0.2
100%	99%	96%	90%	83%	73%	62%	51%	37%	24%	11%	7%	10%	14%	15%	15%	9%	2%	1%	1%

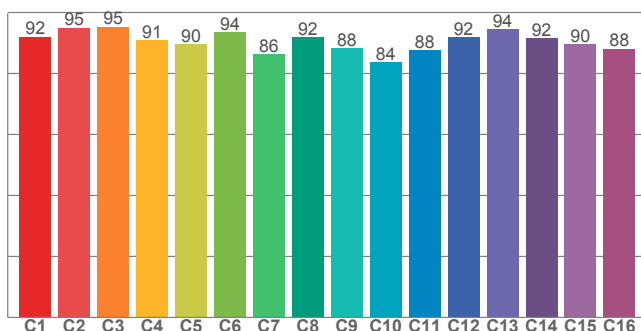
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
126.7°	284.5°	315.5°	59.7%	39.2%

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

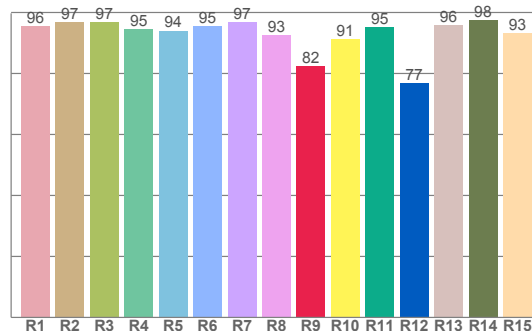
3000K



TM30: 90.6



CRI: 95.3 (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
95.6	96.7	96.8	94.6	94.1	95.5	96.7	92.7	82.5	91.4	95.1	76.9	95.7	97.5	93.3

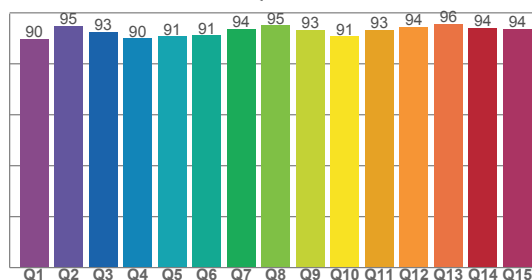
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.1	95.0	95.3	90.8	89.5	93.5	86.4	91.8	88.2	83.7	87.6	92.0	94.5	91.5	89.6	88.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.9	94.9	92.5	90.0	90.7	91.1	93.8	95.1	93.2	90.8	93.2	94.4	95.6	94.1	93.6

CQS: 92.6



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 division from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3157 K	95.3	82.5	90.6	96.7	92.6	0.432	0.412	0.244	0.349	0.0039

3000K

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

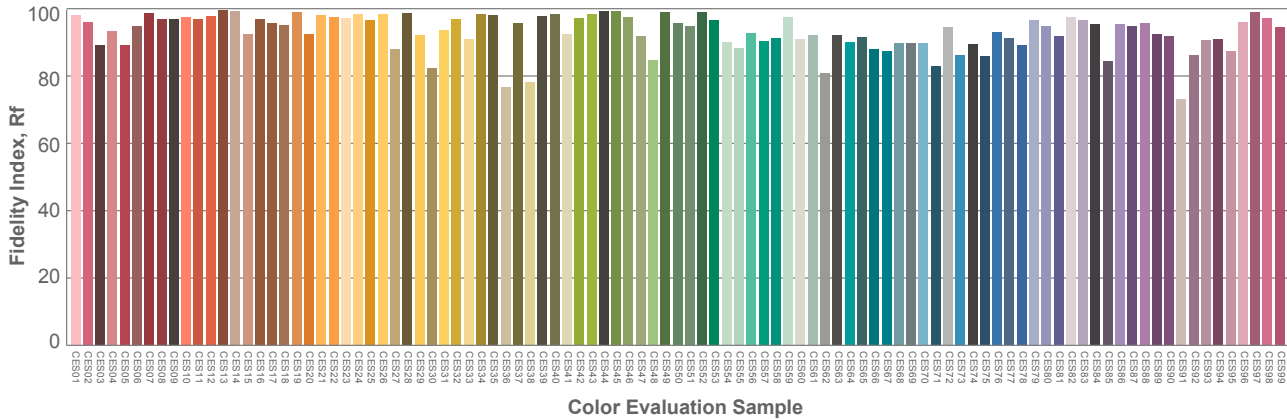
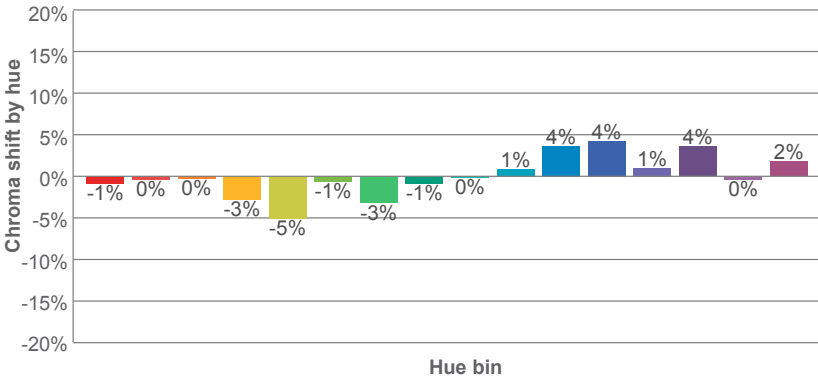
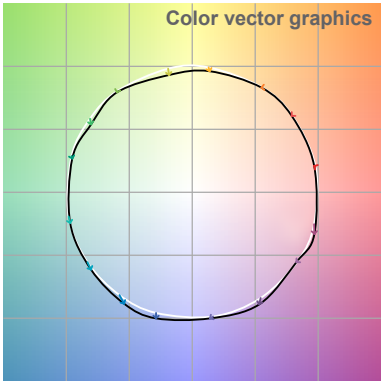
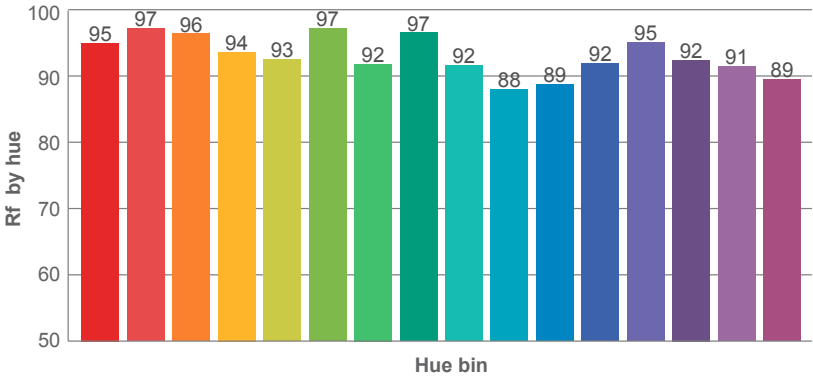
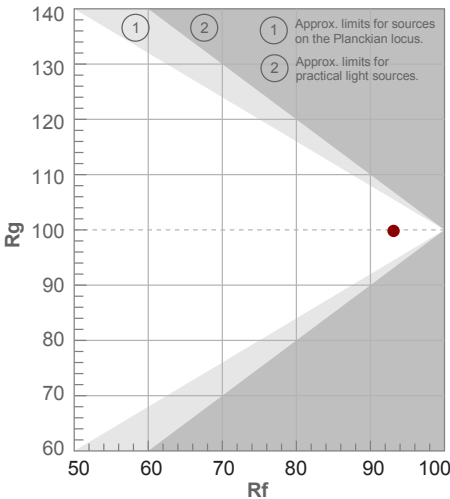
Rf 93.1

Fidelity index Rf

Rg 99.8

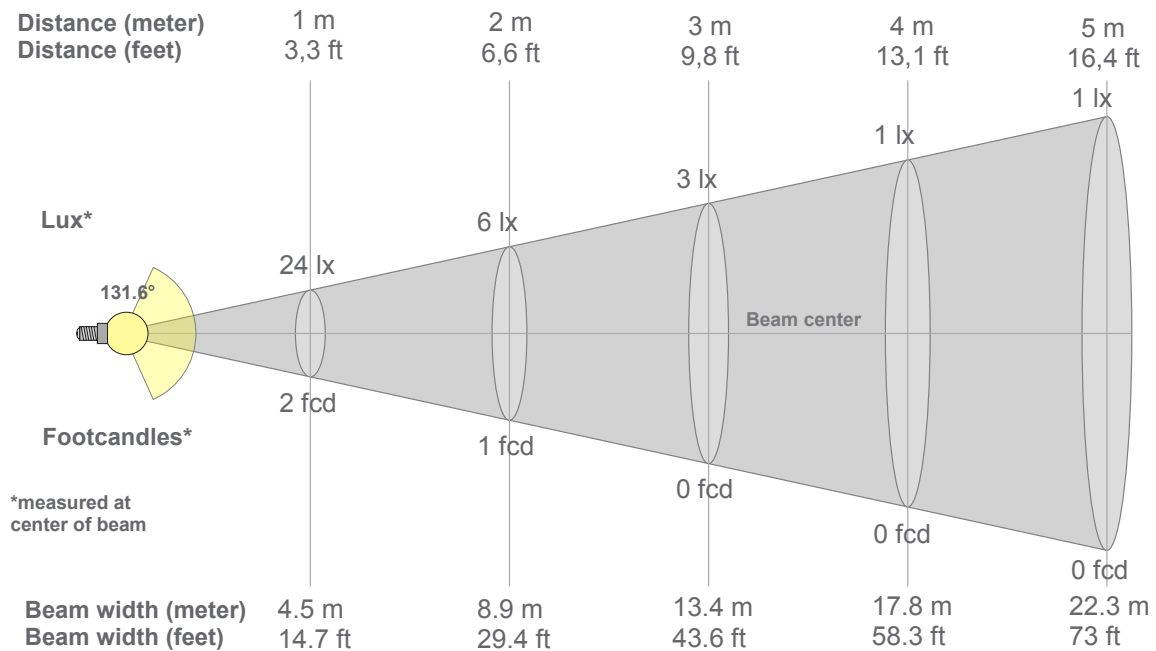
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	96	0%	0%
4	94	-3%	-1%
5	93	-5%	0%
6	97	-1%	1%
7	92	-3%	3%
8	97	-1%	2%
9	92	0%	5%
10	88	1%	6%
11	89	4%	7%
12	92	4%	1%
13	95	1%	-3%
14	92	4%	-4%
15	91	0%	-2%
16	89	2%	-8%



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
24lx	6lx	3lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.2fcd	0.6fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	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°
23.7	23.6	23.0	21.9	20.1	18.0	15.4	12.7	10.4	7.8	4.4	2.4	2.3	2.7	3.0	3.0	2.6	2.3	1.6	0.3
100%	99%	97%	92%	85%	76%	65%	54%	44%	33%	18%	10%	10%	12%	13%	13%	11%	10%	7%	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°
23.7	23.6	23.0	21.9	20.1	18.0	15.4	12.7	10.4	7.8	4.4	2.4	2.3	2.7	3.0	3.0	2.6	2.3	1.6	0.3
100%	99%	97%	92%	85%	76%	65%	54%	44%	33%	18%	10%	10%	12%	13%	13%	11%	10%	7%	1%

Intensities in 180° c-plane

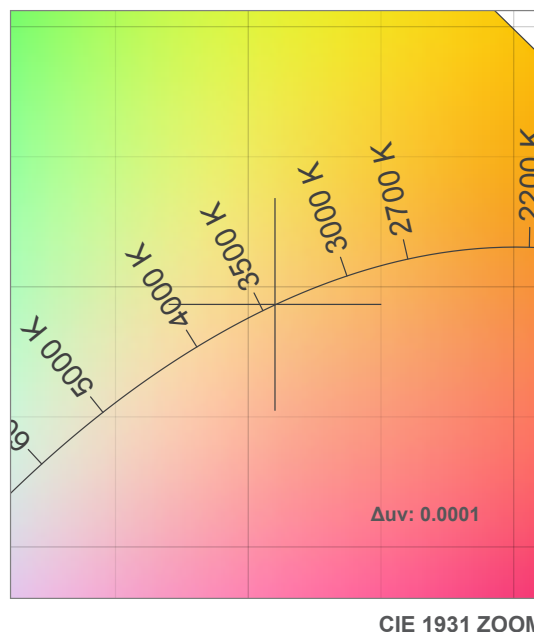
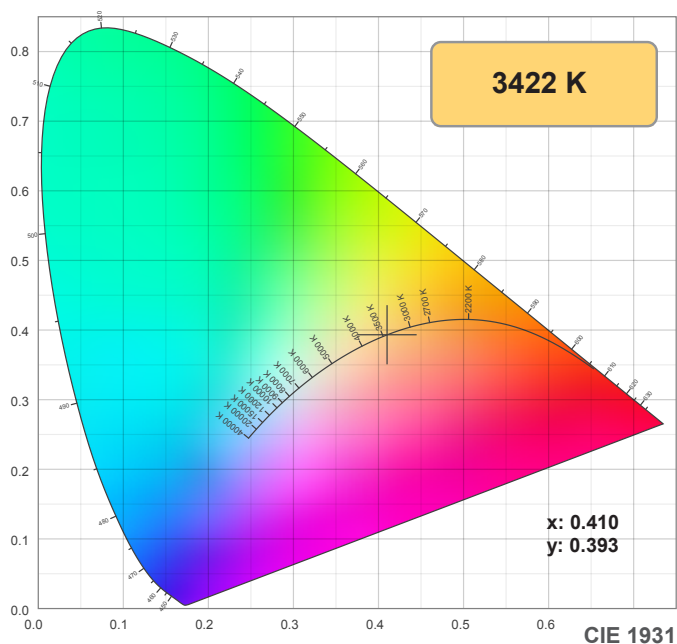
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
23.7	23.4	22.4	20.9	19.0	16.8	14.4	12.5	10.0	6.4	3.8	2.3	2.2	2.5	2.7	2.6	2.3	2.0	1.7	0.6
100%	98%	94%	88%	80%	71%	61%	52%	42%	27%	16%	10%	9%	11%	11%	11%	9%	9%	7%	2%

Intensities in 270° c-plane

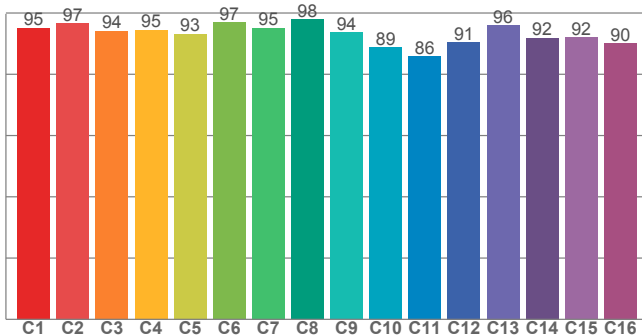
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
23.7	23.4	22.4	20.9	19.0	16.8	14.4	12.5	10.0	6.4	3.8	2.3	2.2	2.5	2.7	2.6	2.3	2.0	1.7	0.6
100%	98%	94%	88%	80%	71%	61%	52%	42%	27%	16%	10%	9%	11%	11%	11%	9%	9%	7%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
131.6°	291°	338.5°	56.9%	37.3%

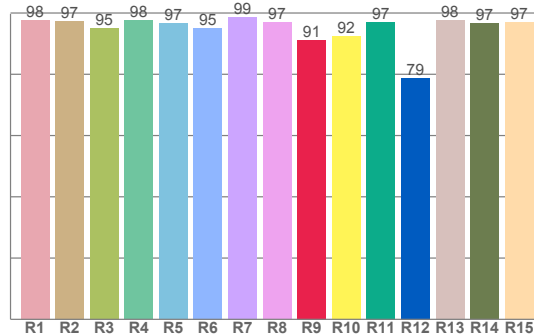
3500K



TM30: 93.1



CRI: 96.9 (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
97.7	97.4	95.0	97.6	96.5	95.1	98.7	96.9	91.2	92.4	97.0	78.8	97.6	96.6	97.2

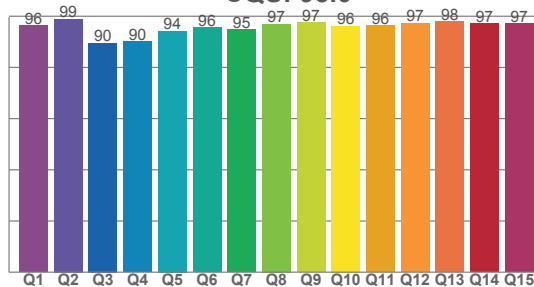
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.2	96.7	94.2	94.5	93.2	96.9	95.1	97.9	93.6	88.7	85.9	90.5	96.0	91.9	92.0	90.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
96.3	99.0	89.6	90.1	94.2	95.7	94.8	97.0	97.5	96.1	96.3	97.3	98.0	97.2	97.1

CQS: 95.0



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
3422 K	96.9	91.2	93.1	100.7	95.0	0.410	0.393	0.238	0.342	0.0001

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

3500K

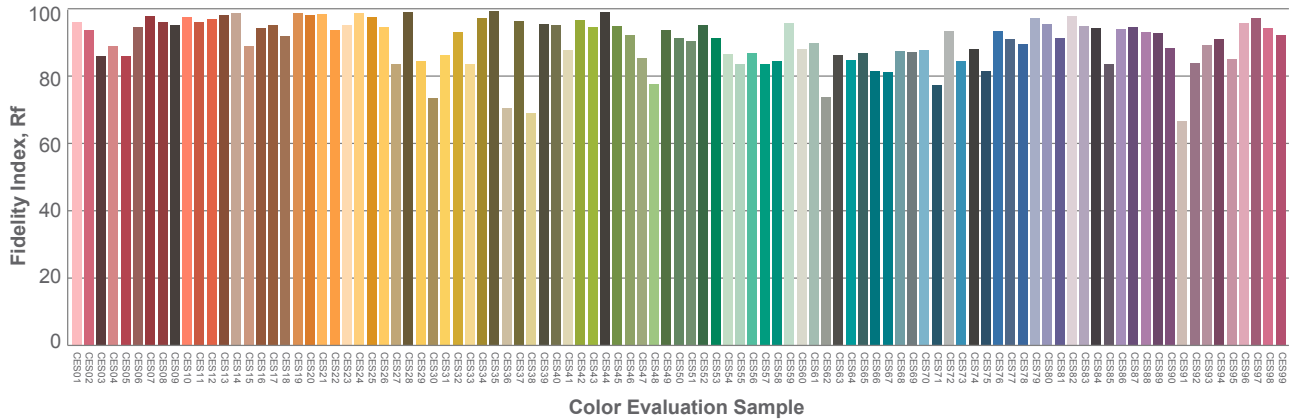
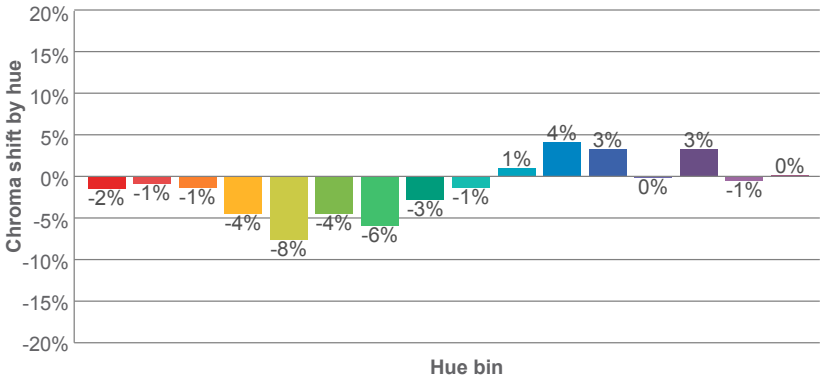
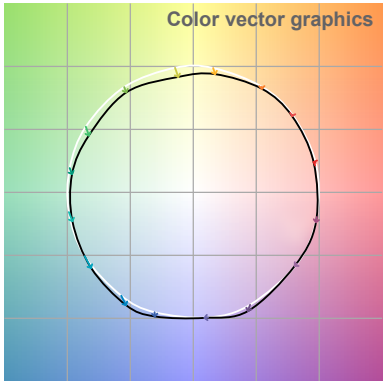
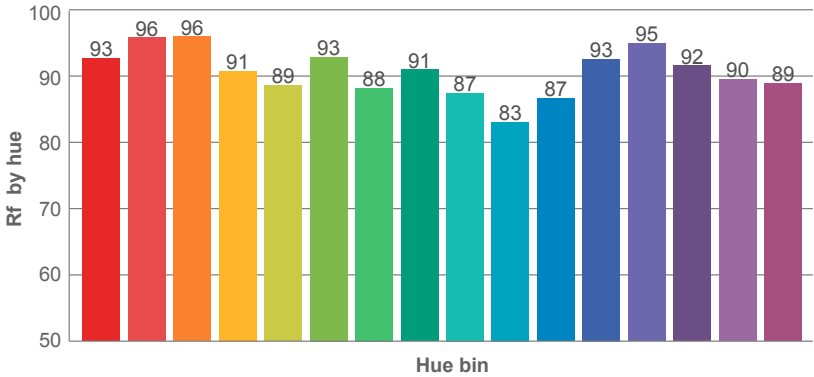
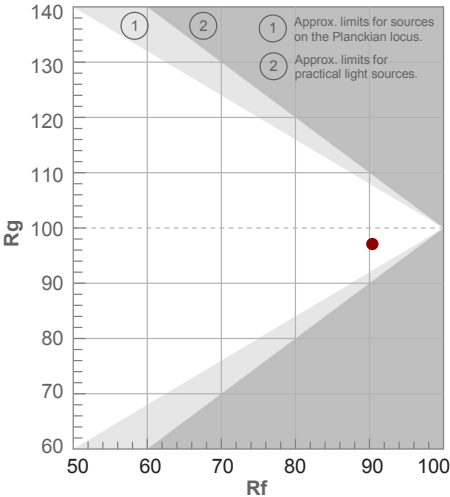
Rf 90.4

Fidelity index Rf

Rg 97.1

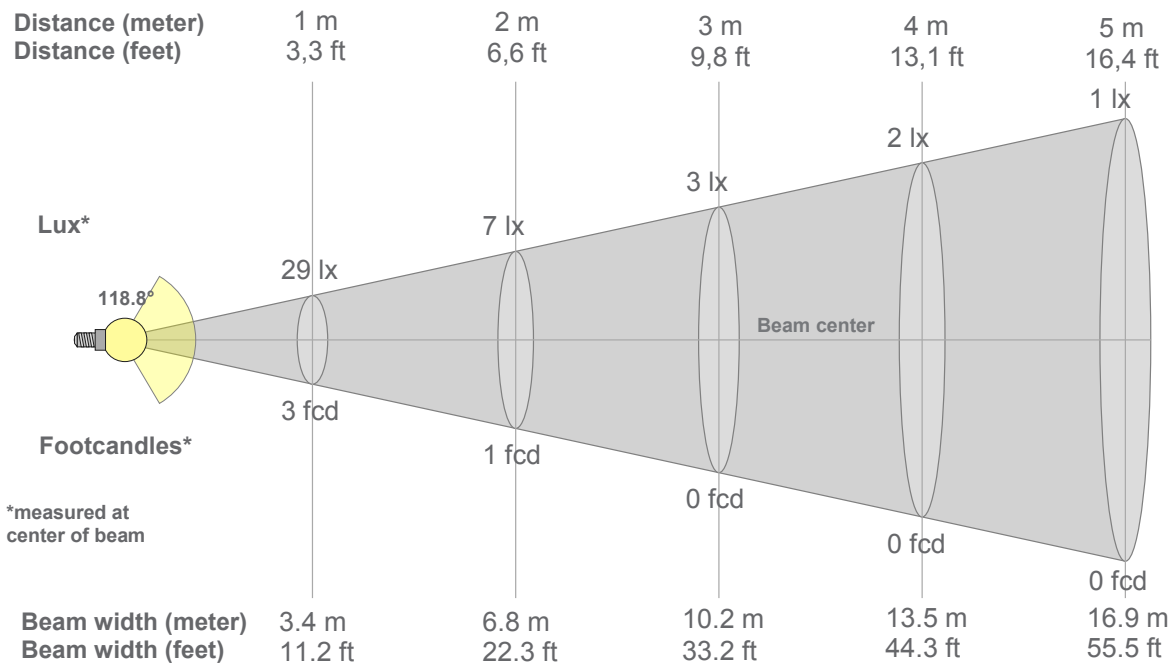
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-2%	1%
2	96	-1%	-1%
3	96	-1%	-1%
4	91	-4%	-2%
5	89	-8%	-1%
6	93	-4%	1%
7	88	-6%	4%
8	91	-3%	4%
9	87	-1%	8%
10	83	1%	11%
11	87	4%	7%
12	93	3%	1%
13	95	0%	-3%
14	92	3%	-4%
15	90	-1%	-3%
16	89	0%	-4%



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

3500K



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
29lx	7lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.7fcd	0.7fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	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°
28.6	28.5	28.2	27.7	27.0	26.1	24.9	23.6	22.0	20.3	18.3	16.3	14.1	11.7	9.2	6.7	4.3	2.1	0.7	0.3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	23%	15%	7%	2%	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°
28.6	28.5	28.2	27.7	27.0	26.1	24.9	23.6	22.0	20.3	18.3	16.3	14.1	11.7	9.2	6.7	4.3	2.1	0.7	0.3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	23%	15%	7%	2%	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°
28.6	28.6	28.2	27.7	27.0	26.0	24.8	23.5	21.9	20.2	18.3	16.2	14.1	11.7	9.3	6.8	4.4	2.3	0.8	0.2
100%	100%	99%	97%	94%	91%	87%	82%	77%	70%	64%	57%	49%	41%	32%	24%	15%	8%	3%	1%

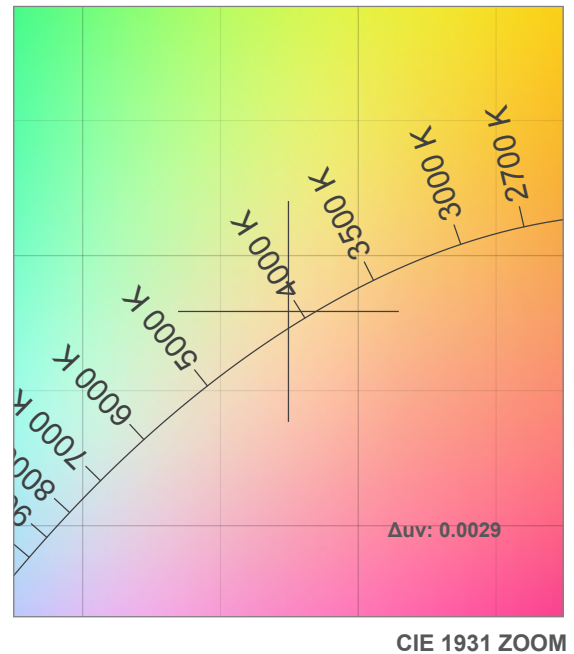
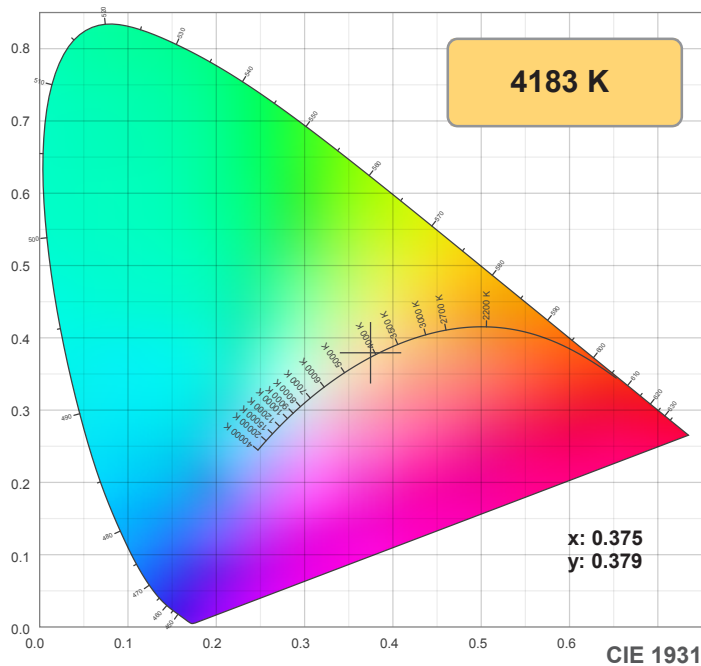
Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
28.6	28.6	28.2	27.7	27.0	26.0	24.8	23.5	21.9	20.2	18.3	16.2	14.1	11.7	9.3	6.8	4.4	2.3	0.8	0.2
100%	100%	99%	97%	94%	91%	87%	82%	77%	70%	64%	57%	49%	41%	32%	24%	15%	8%	3%	1%

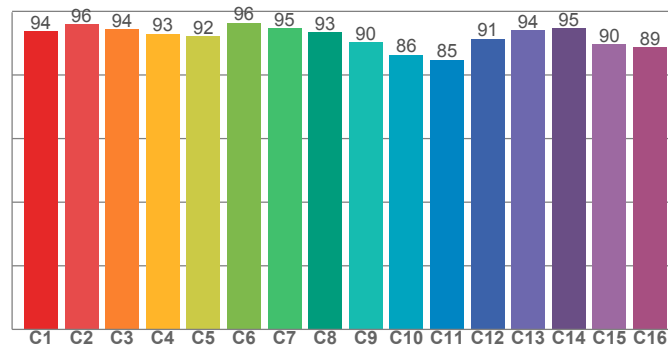
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
118.8°	166.9°	180.5°	74.8%	50.0%

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

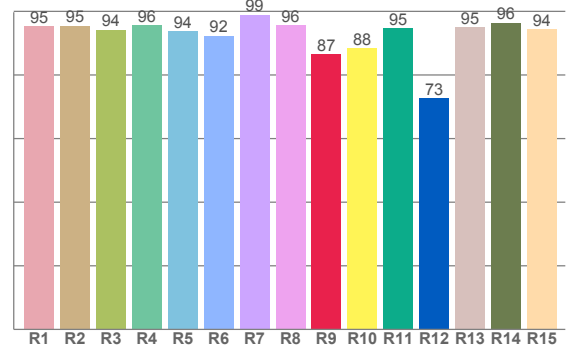
4200K



TM30: 91.8



CRI: 95.2 (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
95.3	95.5	94.3	95.6	93.8	92.4	99.0	95.6	86.6	88.3	94.8	72.7	95.2	96.5	94.4

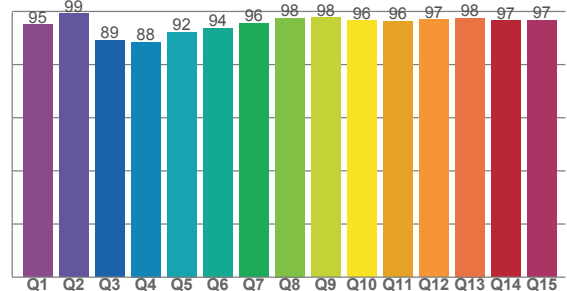
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.7	95.9	94.4	93.0	92.2	96.4	94.6	93.3	90.2	86.4	84.8	91.3	94.1	94.7	89.6	88.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.1	99.2	89.2	88.5	92.3	93.8	95.6	97.5	97.8	96.5	96.3	97.0	97.6	96.6	96.7

CQS: 94.4



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 divition from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4183 K	95.2	86.6	91.8	99.1	94.4	0.375	0.379	0.220	0.335	0.0029

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

4200K

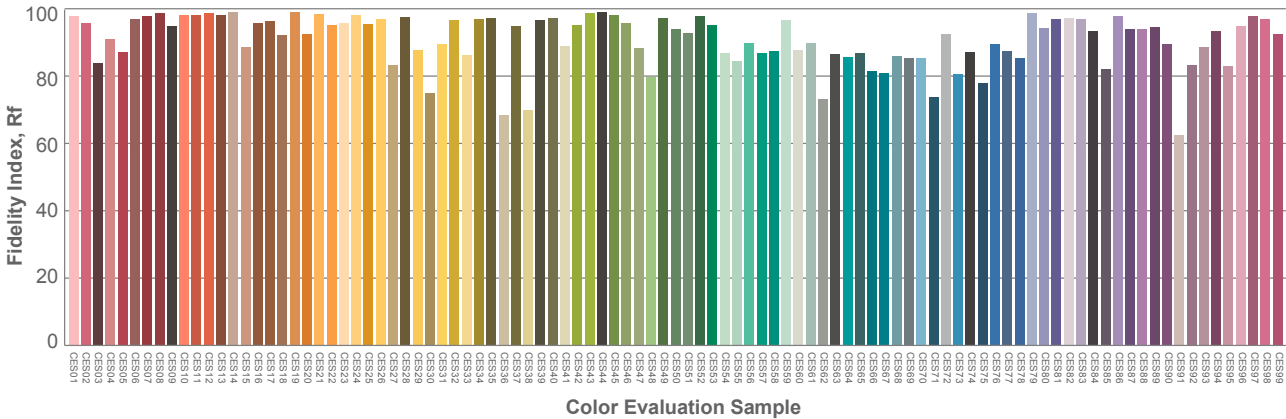
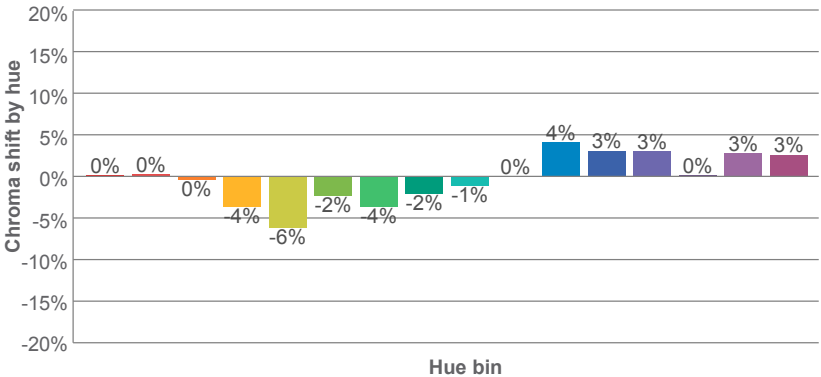
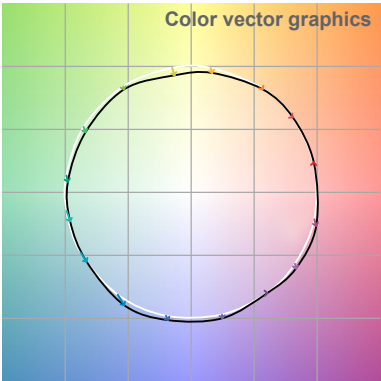
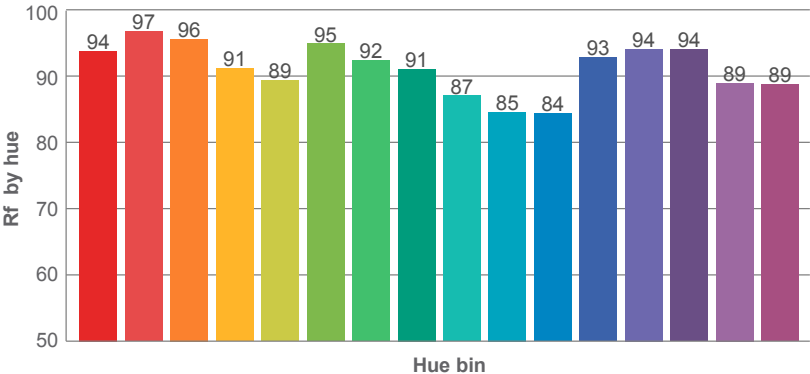
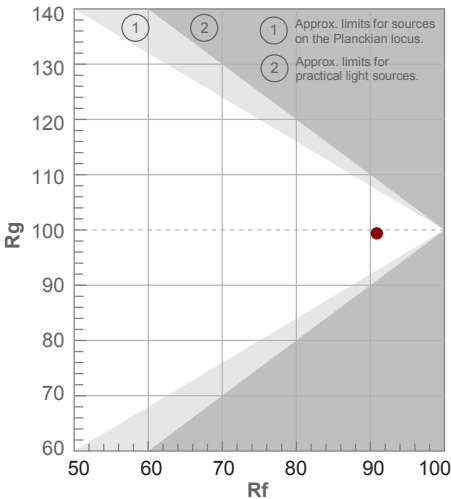
Rf 90.9

Fidelity index Rf

Rg 99.4

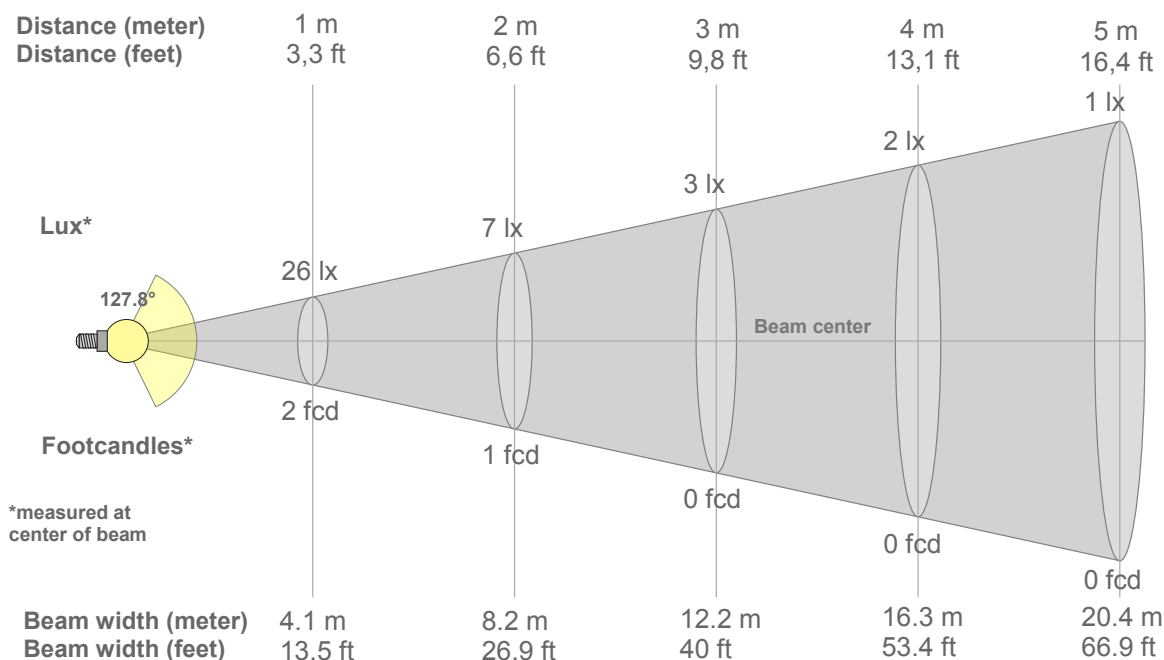
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	94	0%	1%
2	97	0%	-1%
3	96	0%	-1%
4	91	-4%	-2%
5	89	-6%	-1%
6	95	-2%	1%
7	92	-4%	3%
8	91	-2%	5%
9	87	-1%	9%
10	85	0%	9%
11	84	4%	9%
12	93	3%	2%
13	94	3%	0%
14	94	0%	0%
15	89	3%	-3%
16	89	3%	-5%



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

4200K



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
26lx	7lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.5fcd	0.6fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	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°
26.5	26.0	25.1	23.6	21.7	19.3	16.6	13.6	10.3	6.9	3.6	1.5	1.5	1.8	1.8	1.7	1.5	1.1	0.7	0.4
100%	98%	95%	89%	82%	73%	63%	51%	39%	26%	14%	6%	6%	7%	7%	6%	6%	4%	3%	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°
26.5	26.0	25.1	23.6	21.7	19.3	16.6	13.6	10.3	6.9	3.6	1.5	1.5	1.8	1.8	1.7	1.5	1.1	0.7	0.4
100%	98%	95%	89%	82%	73%	63%	51%	39%	26%	14%	6%	6%	7%	7%	6%	6%	4%	3%	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°
26.5	26.3	25.7	24.4	22.5	20.0	17.0	13.6	9.8	6.2	3.7	3.0	4.2	4.9	5.3	4.8	4.0	2.3	0.5	0.3
100%	99%	97%	92%	85%	76%	64%	51%	37%	23%	14%	11%	16%	18%	20%	18%	15%	9%	2%	1%

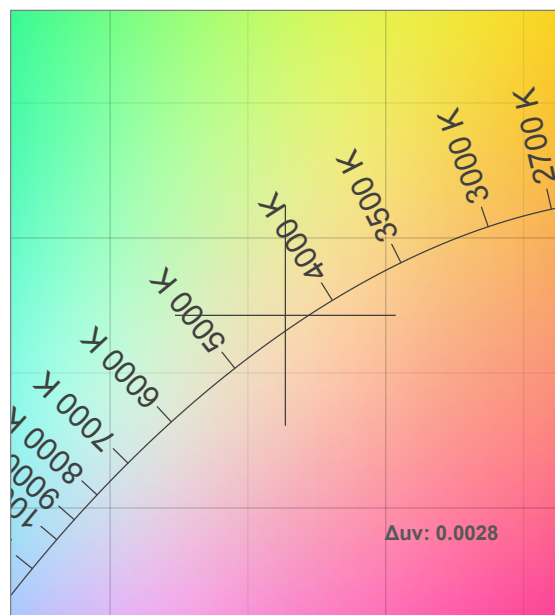
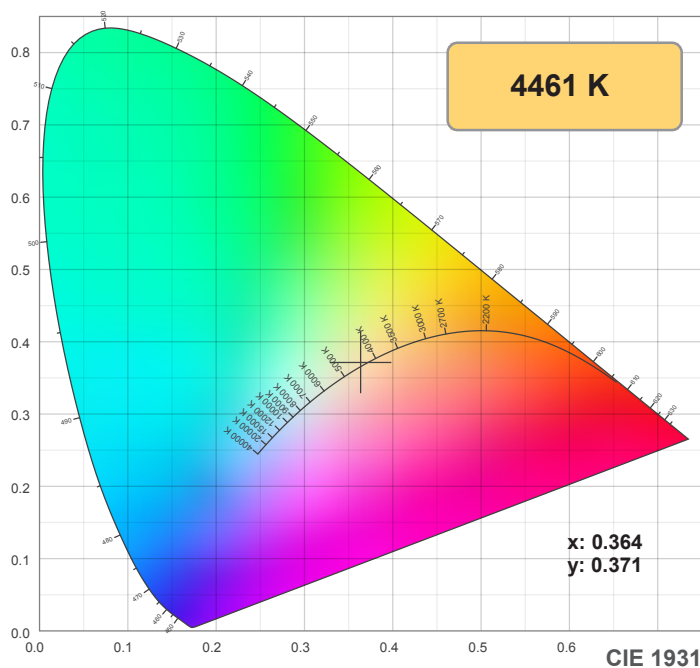
Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
26.5	26.3	25.7	24.4	22.5	20.0	17.0	13.6	9.8	6.2	3.7	3.0	4.2	4.9	5.3	4.8	4.0	2.3	0.5	0.3
100%	99%	97%	92%	85%	76%	64%	51%	37%	23%	14%	11%	16%	18%	20%	18%	15%	9%	2%	1%

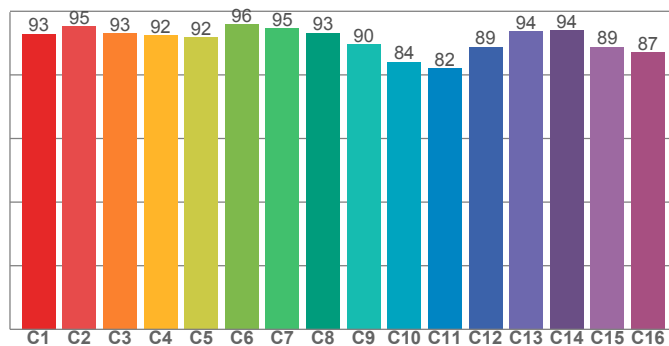
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
127.8°	245.4°	323.8°	59.1%	38.7%

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

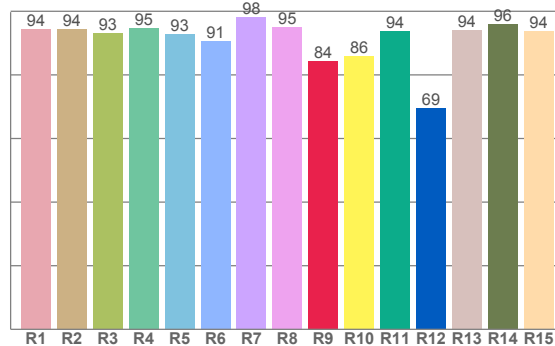
5000K



TM30: 91.0



CRI: 94.1 (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
94.3	94.4	93.0	94.8	92.8	90.6	98.1	95.0	84.4	85.9	93.7	69.4	94.1	95.9	93.6

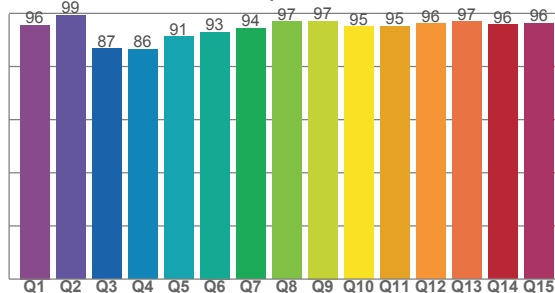
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.9	95.3	93.1	92.4	91.9	95.9	94.7	93.2	89.7	84.0	82.0	88.8	93.6	93.9	88.8	87.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.6	99.3	86.8	86.5	91.3	93.0	94.4	96.9	97.1	95.1	95.1	96.2	96.9	95.8	96.3

CQS: 93.4



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
4461 K	94.1	84.4	91.0	99.5	93.4	0.364	0.371	0.216	0.331	0.0028

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

5000K

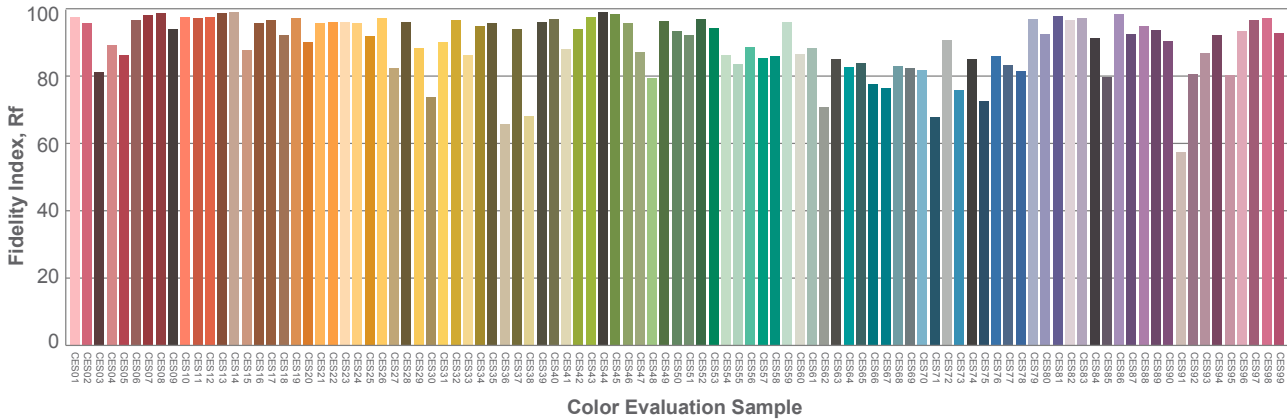
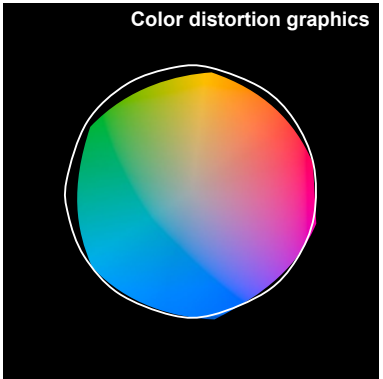
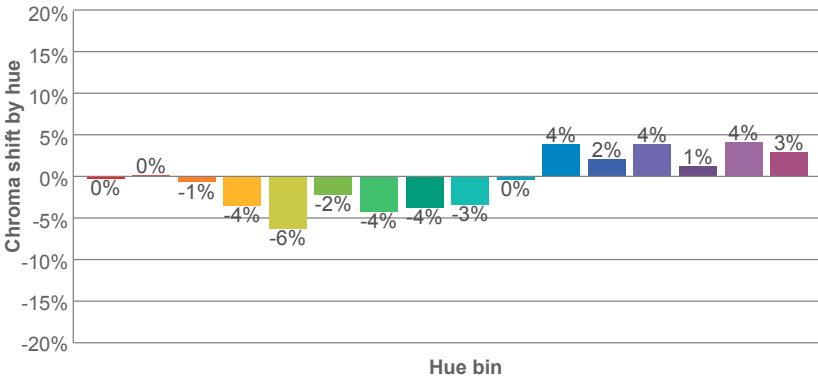
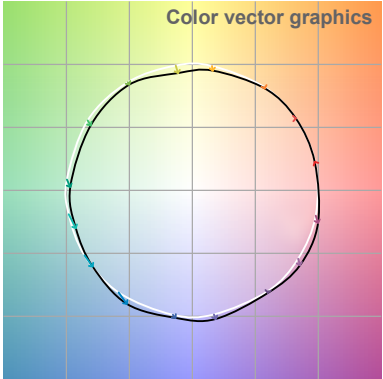
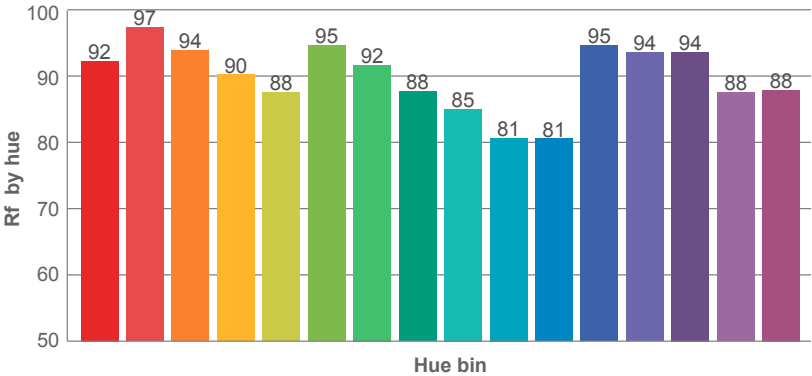
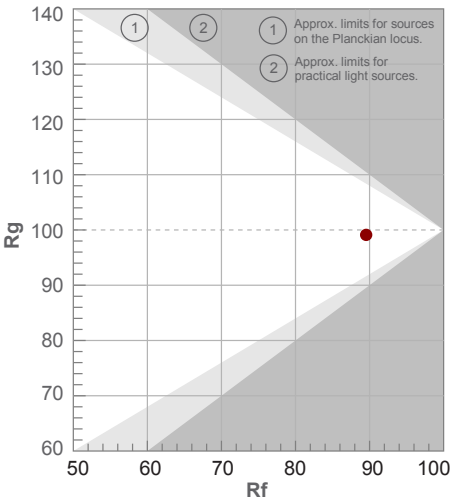
Rf 89.5

Fidelity index Rf

Rg 99.1

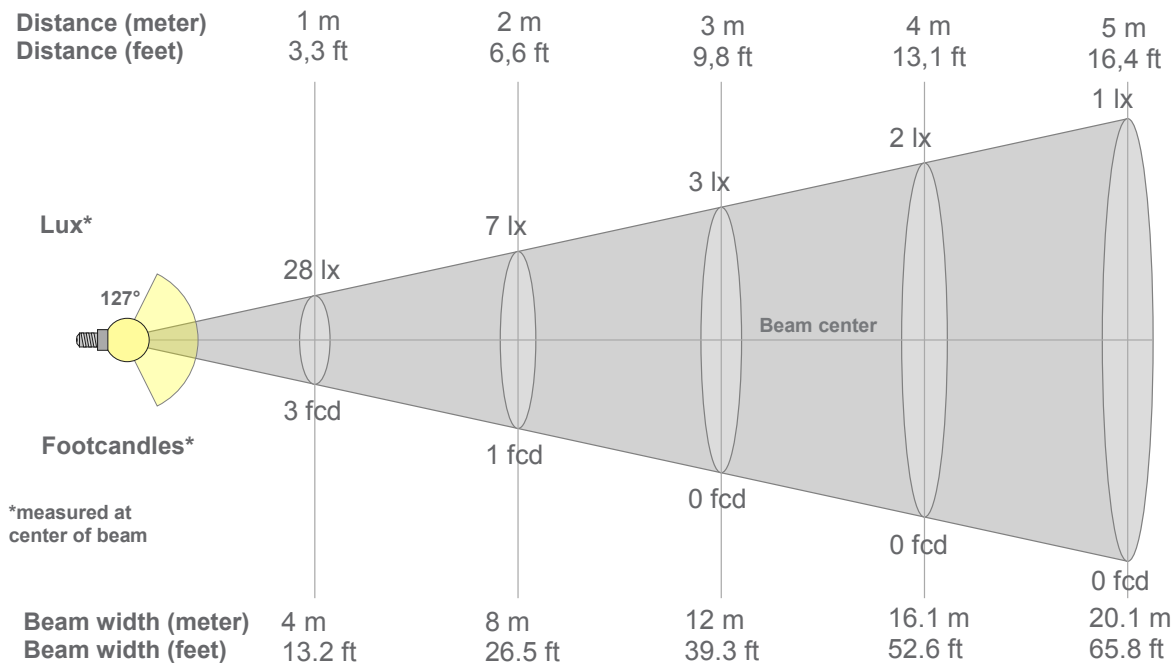
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	0%	1%
2	97	0%	0%
3	94	-1%	-1%
4	90	-4%	-1%
5	88	-6%	-1%
6	95	-2%	0%
7	92	-4%	2%
8	88	-4%	5%
9	85	-3%	12%
10	81	0%	11%
11	81	4%	10%
12	95	2%	3%
13	94	4%	1%
14	94	1%	-1%
15	88	4%	-3%
16	88	3%	-5%



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
28lx	7lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.6fcd	0.7fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	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°
28.3	28.0	27.1	25.5	23.4	20.9	17.8	14.4	10.5	6.4	2.7	1.9	2.5	3.0	3.4	3.4	2.4	1.3	0.7	0.3
100%	99%	96%	90%	83%	74%	63%	51%	37%	23%	10%	7%	9%	11%	12%	12%	8%	4%	2%	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°
28.3	28.0	27.1	25.5	23.4	20.9	17.8	14.4	10.5	6.4	2.7	1.9	2.5	3.0	3.4	3.4	2.4	1.3	0.7	0.3
100%	99%	96%	90%	83%	74%	63%	51%	37%	23%	10%	7%	9%	11%	12%	12%	8%	4%	2%	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°
28.3	28.1	27.2	25.8	23.8	21.1	18.0	14.4	10.5	6.3	2.8	1.9	2.5	3.2	3.7	3.5	2.9	1.5	0.4	0.3
100%	99%	96%	91%	84%	75%	63%	51%	37%	22%	10%	7%	9%	11%	13%	12%	10%	5%	1%	1%

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°
28.3	28.1	27.2	25.8	23.8	21.1	18.0	14.4	10.5	6.3	2.8	1.9	2.5	3.2	3.7	3.5	2.9	1.5	0.4	0.3
100%	99%	96%	91%	84%	75%	63%	51%	37%	22%	10%	7%	9%	11%	13%	12%	10%	5%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
127°	286.1°	319.3°	61.3%	40.2%