

# PrimaLine® 1.5 XT Extended Run LED Tape Light



PrimaLine 1.5 XT offers extended maximum run lengths of 40 feet with the same lumen output, CRI, and power consumption as the 12V model of PrimaLine 1.5 Tape Light. This dimmable tape supplies the perfect level of brightness for the ambient and close application task lighting that is ideal for longer applications like hallways, toe kicks, soffits, and coves.

- Extended maximum run length of 40 feet
- Saves installation costs by eliminating multiple home runs
- Industry-leading 95+ CRI (Color Rendering Index)
- High R9 and R13 values for superb rendering of warm tones
- 6-year warranty

## TECHNICAL INFORMATION

<b>Stocked CCTs (Kelvin Temp.)*</b>	2700K, 3000K, 3500K, 4200K, 5000K*
<b>Power Consumption per ft.</b>	1.44 Watts/60mA
<b>Input Voltage</b>	24V DC
<b>Diodes per foot</b>	18
<b>Diode Spacing</b>	0.65 inches
<b>Tape Height</b>	0.1 inches
<b>Beam Angle</b>	120°
<b>Field Cuttable (UL 2108)</b>	Every 4 inches
<b>Max Run Length</b>	40 ft.
<b>Dimmable</b>	Yes
<b>Diode Type</b>	3528 SMD

<b>Mounting</b>	3M™ Self-Adhesive Tape (Non-porous)
<b>Operating Temp.</b>	-13° F to 140° F
<b>Ambient Temp.</b>	-40° F to 186° F
<b>Spool Lengths**</b>	20 ft., 40 ft.
<b>Environment</b>	Indoor, Dry
<b>Certifications</b>	UL Listed, UL 2108, CE, RoHS, UL Closet Rated
<b>Standards</b>	Certified to the CA Energy Commission in accordance with the Title 24 JA8 2016 std.
<b>Warranty</b>	6 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.

\*\*Each spool comes with 36 in. CL2 rated 20 AWG tinned lead wires at each end.

## PRODUCT INFORMATION

20 ft. spool Item #	40 ft. spool Item #	Voltage	Kelvin temp. (CCT) *	CRI	R9 Value	R13 Value	TM30	CQS	Lumens / foot
AL-01-04-2401	AL-01-04-2421	24V DC	● 2700K	98.2	95.4	98.6	93.8	95	104
AL-01-04-2402	AL-01-04-2422	24V DC	● 3000K	98.3	94.8	99.7	93.1	94.9	109
AL-01-04-2403	AL-01-04-2423	24V DC	○ 4200K	97.2	95.4	98.9	90.9	94.7	119
AL-01-04-2404	AL-01-04-2424	24V DC	● 5000K	96.8	96.2	99.4	89.5	93.2	121
AL-01-04-2408	AL-01-04-2428	24V DC	● 3500K	96.9	91.2	97.6	93.1	95	90.1

## VOLTAGE DROP GUIDANCE CHART

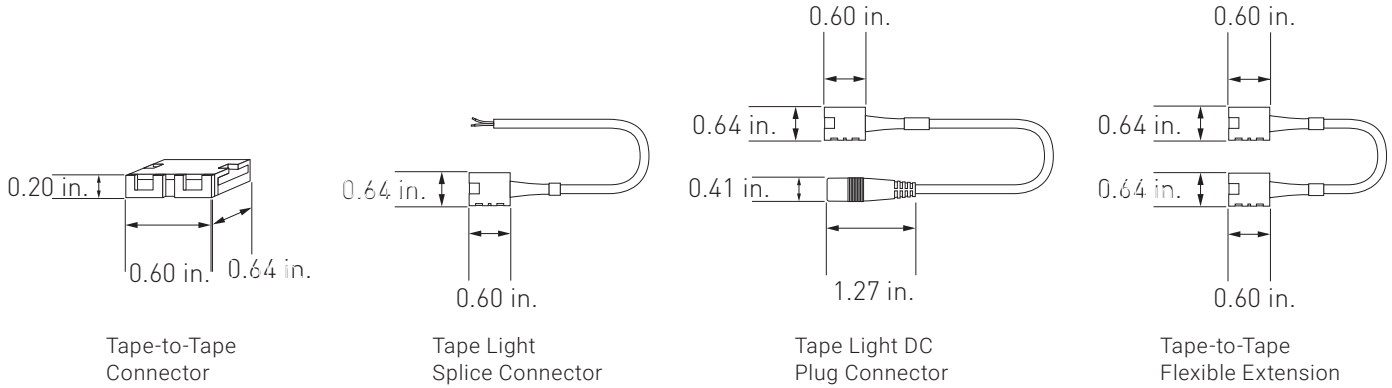
### XT eXTended Run 24V Voltage Drop & Wire Length Distance Chart (3% Drop or 24V)\*

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)
<b>22 AWG</b>	16.14	90 ft.	45 ft.	30 ft.	23 ft.	18 ft.	15 ft.	13 ft.	12 ft.	10 ft.	10 ft.
<b>20 AWG</b>	10.15	142 ft.	71 ft.	48 ft.	36 ft.	29 ft.	24 ft.	21 ft.	18 ft.	16 ft.	15 ft.
<b>18 AWG</b>	6.39	226 ft.	113 ft.	76 ft.	57 ft.	46 ft.	38 ft.	33 ft.	29 ft.	26 ft.	24 ft.
<b>16 AWG</b>	4.02	359 ft.	180 ft.	120 ft.	90 ft.	72 ft.	60 ft.	52 ft.	45 ft.	40 ft.	38 ft.
<b>14 AWG</b>	2.53	571 ft.	286 ft.	191 ft.	143 ft.	115 ft.	96 ft.	82 ft.	72 ft.	64 ft.	60 ft.
<b>12 AWG</b>	1.59	907 ft.	454 ft.	303 ft.	227 ft.	182 ft.	152 ft.	130 ft.	114 ft.	101 ft.	95 ft.
<b>10 AWG</b>	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 (SOLD SEPARATELY)

### In-Wall-Rated Tape Light Connectors (20 AWG)



Tape-to-Tape Connector

Tape Light Splice Connector

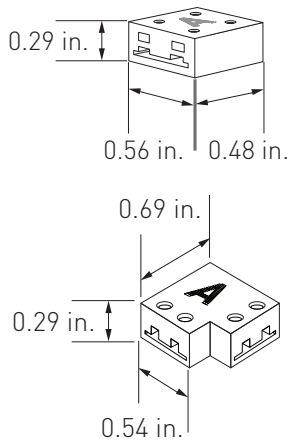
Tape Light DC Plug Connector

Tape-to-Tape Flexible Extension

Item #	Description	Wire Length
AL-01-04-9901	Tape-to-Tape Connector	n/a
AL-01-04-9902	Tape Light Splice Connector	6 in.
AL-01-04-9907	Tape Light Splice Connector	36 in.
AL-01-04-9910	Tape Light Splice Connector	8 ft.

Item #	Description	Wire Length
AL-01-04-9911	Tape-to-Tape Flexible Extension	3 in.
AL-01-04-9912	Tape-to-Tape Flexible Extension	6 in.
AL-01-04-9917	Tape-to-Tape Flexible Extension	36 in.
AL-01-04-9922	Tape Light DC Plug Connector	6 in.
AL-01-04-9927	Tape Light DC Plug Connector	36 in.

### Amp Champ: For a more secure connection



Accepts many combinations of tape and wire. Includes spade connectors for stranded wire, 3M® adhesive backing, and pre-attached 6 inch in-wall-rated 18 AWG lead wire.

Note: Amp Champ Corner does not include the pre-attached 6 inch in-wall-rated 18 AWG lead wire.

#### Standard Amp Champ

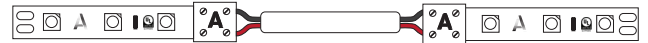
AL-01-04-9900  
AL-01-04-9900-10 (10 pack)

#### Amp Champ Corner

AL-01-04-9900-L

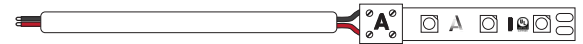
### Amp Champ Jumper and Power Feed Kits

**Amp Champ Jumper Kit** includes 2 Amp Champs and 1 pre-tinned 18AWG jumper wire.



AL-01-04-9900-3IN-JK (3" jumper wire)  
AL-01-04-9900-6IN-JK (6" jumper wire)  
AL-01-04-9900-36IN-JK (36" jumper wire)

**Amp Champ Power Feed Kit** includes 1 Amp Champ and 1 pre-tinned 18AWG power feed wire.

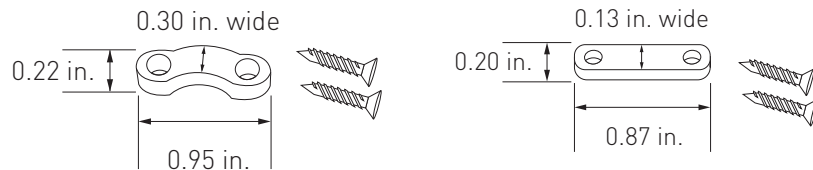


AL-01-04-9900-36IN-PK (36" power feed wire)  
AL-01-04-9900-8FT-PK (8' power feed wire)

### Wire and Tape Light Management

We recommend the use of the wire and tape harness.

- At least 1 wire harness at the beginning to secure the lead wire; for longer lead wires, place a harness every 2 feet
- 1 tape harness every 2 feet and 1 harness at the end of the tape light to secure it



#### Wire Harness

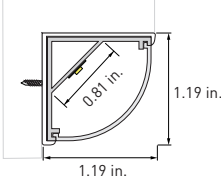
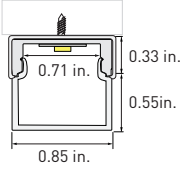
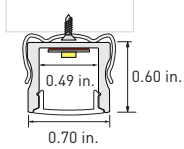
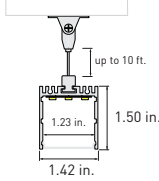
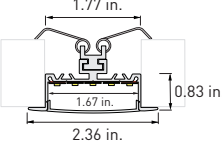
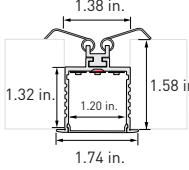
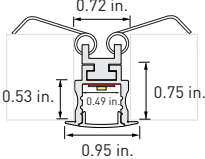
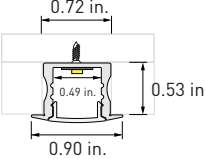
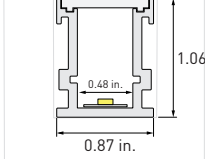
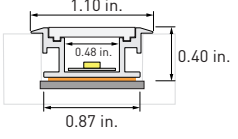
Holds wire in place securely  
AL-01-99-9901-10 (10 pack)

#### Tape Harness

Provides extra security for tape light, especially at the ends of a run  
AL-01-99-9900-10 (10 pack)

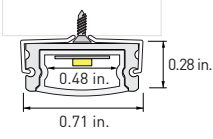
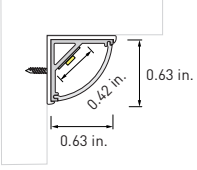
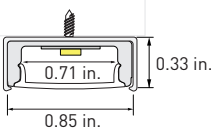
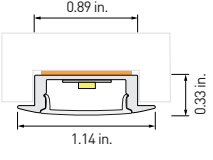
## COMPATIBLE CHANNELS (Diagrams below not to scale)

### Reduced Hotspot Pairings (Hotspot Rating from 0-5)

<p><b>Surfa 2X:</b> Corner-Mount</p>  <p>Hotspot Rating: 0</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>	<p><b>Surfa 6 Surround:</b> Surface-Mount</p>  <p>Hotspot Rating: 0</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>	<p><b>Surfa 7:</b> Surface-Mount</p>  <p>Hotspot Rating: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>
<p><b>Suspan 1:</b> Suspended</p>  <p>Hotspot Rating: 0</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>	<p><b>Ankr 1:</b> In-Wall</p>  <p>Hotspot Rating: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>	<p><b>Ankr 2:</b> In-Wall</p>  <p>Hotspot Rating: 0</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>
<p><b>Ankr 3:</b> In-Wall</p>  <p>Hotspot Rating: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>	<p><b>Ankr 4:</b> Mud-In</p>  <p>Hotspot Rating: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>	<p><b>Duro 1:</b> In-Ground</p>  <p>Hotspot Rating: 0</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>
<p><b>Duro 2:</b> In-Ground</p>  <p>Hotspot Rating: 1</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>		

## COMPATIBLE CHANNELS (Diagrams below not to scale)

### Other Compatible Pairings (Hotspot Rating from 0-5)

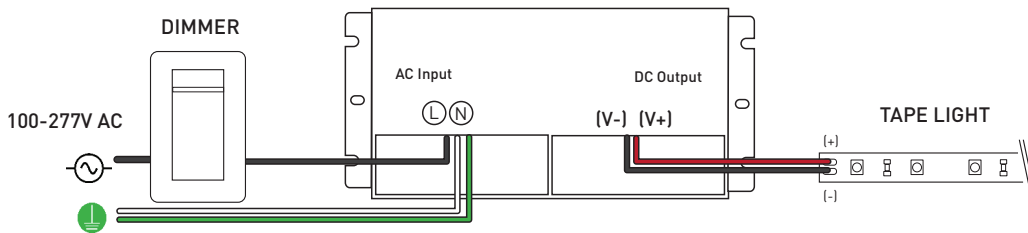
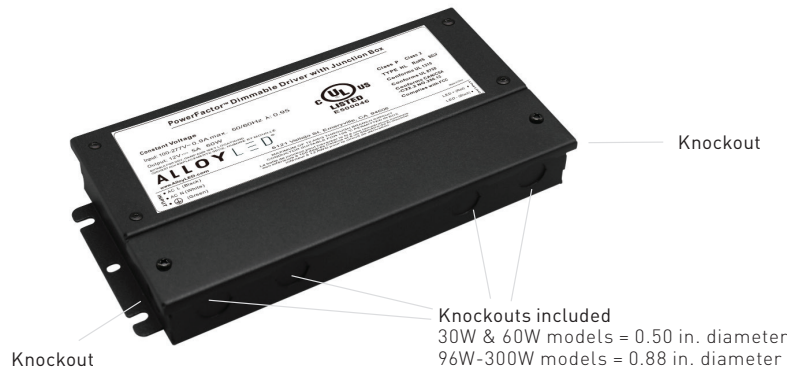
<p><b>Surfa 1: Surface-Mount</b></p>  <p>Hotspot Rating: 5</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>	<p><b>Surfa 2: Corner-Mount</b></p>  <p>Hotspot Rating: 2</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input type="checkbox"/> Connector</li> <li><input type="checkbox"/> Amp Champ</li> </ul>	<p><b>Surfa 6: Surface-Mount</b></p>  <p>Hotspot Rating: 5</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>
<p><b>Naro 4: Recessed</b></p>  <p>Hotspot Rating: 5</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Solder</li> <li><input checked="" type="checkbox"/> Connector</li> <li><input checked="" type="checkbox"/> Amp Champ</li> </ul>		

# ALLOY LED<sup>®</sup> Specifications

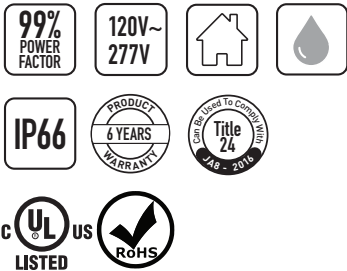
## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



Alloy LED PowerFactor™ Dimmable Power Supplies w/ 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 #	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12030	12V DC	30W	N	10%	6.50 x 3.72 x 1.02 in.	Y
AL-98-10-12060	12V DC	60W	N	10%	7.40 x 3.72 x 1.02 in.	Y
AL-98-10-12120	12V DC	120W	Y (IP66)	10%	8.66 x 3.72 x 1.57 in.	N
AL-98-10-24030	24V DC	30W	N	10%	6.50 x 3.72 x 1.02 in.	Y
AL-98-10-24060	24V DC	60W	N	10%	7.40 x 3.72 x 1.02 in.	Y
AL-98-10-24096	24V DC	96W	Y (IP66)	10%	8.66 x 3.72 x 1.57 in.	Y
AL-98-10-24150	24V DC	150W	Y (IP66)	10%	10.24 x 4.13 x 1.77 in.	N
AL-98-10-24200	24V DC	200W	Y (IP66)	10%	10.24 x 4.13 x 1.77 in.	N
AL-98-10-24300	24V DC	300W	Y (IP66)	10%	10.94 x 4.33 x 1.77 in.	N

### Class 2 Compliant Multi-Tap Models

Item #	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12300-MT	12V DC	300W	Y (IP66)	10%	11.85 x 4.33 x 1.77 in.	Y
AL-98-10-24192-MT	24V DC	192W	Y (IP66)	10%	10.94 x 4.33 x 1.77 in.	Y
AL-98-10-24288-MT	24V DC	288W	Y (IP66)	10%	10.85 x 4.33 x 1.77 in.	Y

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)

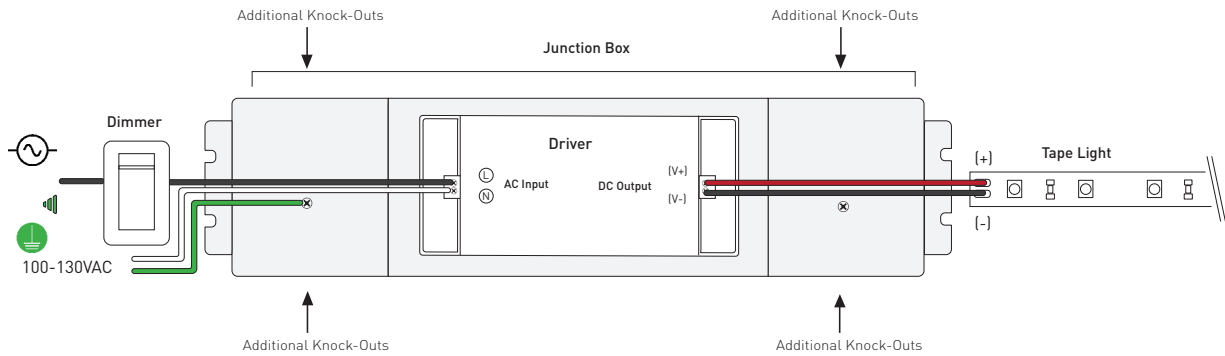
Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies w/ETL Listed Junction Box  
Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with ELV, MLV, and TRIAC dimmers.



White model for 60W and lower



Black model for 80W and higher



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



Item #	Output Voltage	Wattage	Dry/Damp Location	Min. Load	Dimensions (Junction box) (L x W x H)	Class 2
AL-98-03-12024-NM	12V DC	24W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-12048-NM	12V DC	48W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-12060-NM	12V DC	60W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-12080-NM	12V DC	80W	Y	0%	14.96 x 3.03 x 2.24 in.	N
AL-98-03-12120-NM	12V DC	120W	Y	0%	14.96 x 3.03 x 2.24 in.	N
AL-98-03-24024-NM	24V DC	24W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-24048-NM	24V DC	48W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-24060-NM	24V DC	60W	Y	0%	13.77 x 3.03 x 1.45 in.	Y
AL-98-03-24080-NM	24V DC	80W	Y	0%	14.96 x 3.03 x 2.24 in.	Y
AL-98-03-24096-NM	24V DC	96W	Y	0%	14.96 x 3.03 x 2.24 in.	Y
AL-98-03-24150-NM	24V DC	150W	Y	0%	15.98 x 3.42 x 2.36 in.	N
AL-98-03-24200-NM	24V DC	200W	Y	0%	15.98 x 3.42 x 2.36 in.	N

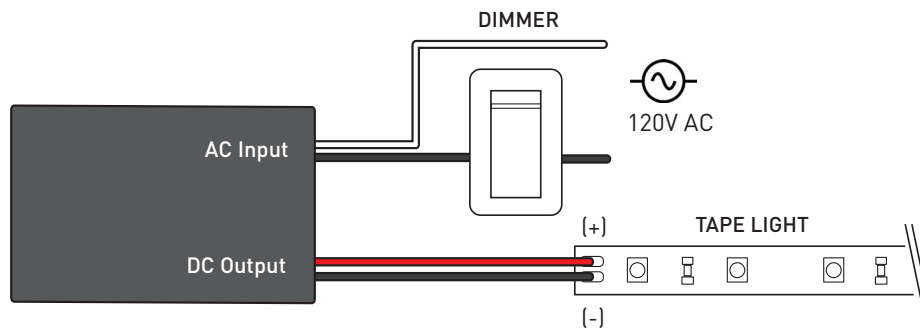
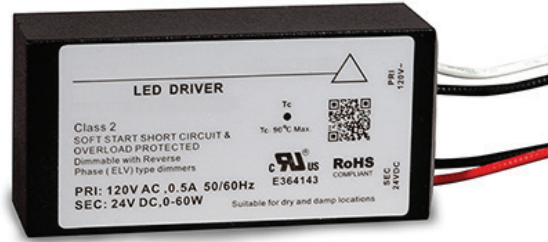
Note: Alloy LED strongly recommends using Listed Class 2 power supplies for all installations. Always install in accordance with local and national electrical code regulations. Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

# ALLOY LED® Specifications

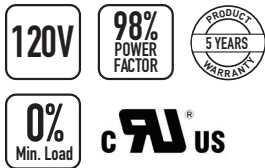
## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

### 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 max. load of 40W.



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



Item #	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.	Y
AL-98-08-24060	24V DC	60W	2.66 x 1.30 x 0.83 in.	Y

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 #	Output	Wattage	Min. Load	Class 2
AL-98-07-12040	12V DC	40W	n/a	Y
AL-98-07-12040-3WIRE	12V DC	40W	n/a	Y
AL-98-07-24040	24V DC	40W	n/a	Y
AL-98-07-24040-3WIRE	24V DC	40W	n/a	Y
AL-98-07-24096-3WIRE	24V DC	96W	n/a	Y

### Lutron® Controls

Item #	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

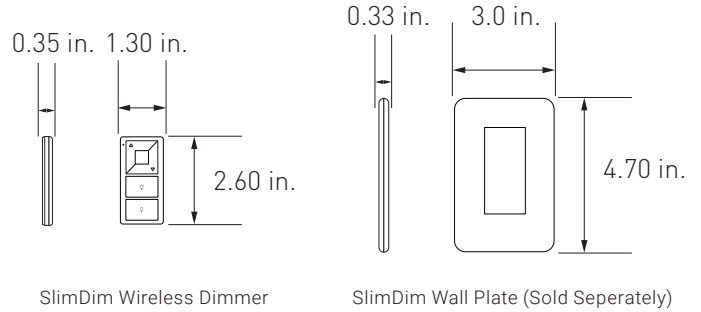
## DIMMING ACCESSORIES (SOLD SEPARATELY)

### Dimmers & Switches

#### SlimDim Wireless Dimmers

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.

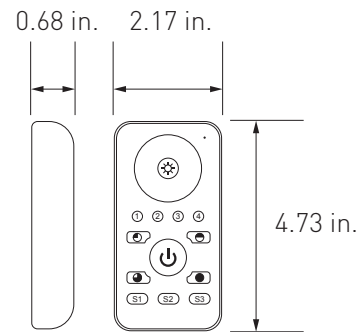
AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W max.) (sold separately)
AL-98-07-9950-FPLATE	SlimDim Wall Plate (sold separately)



#### 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.

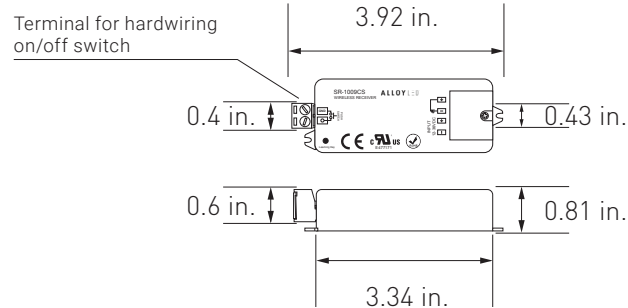
AL-60-03-0001	Remote Control Dimmer Switch
AL-70-01-0002	Single Channel Receiver (sold separately)
AL-60-03-0004-V2	Wireless Receiver (RGB & RGB-W) (sold separately)



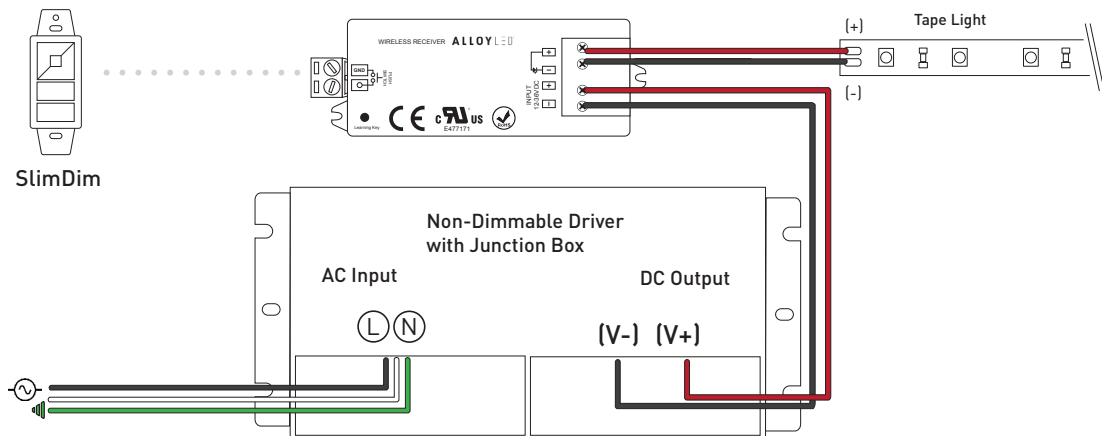
#### Single Channel Wireless Receiver

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
---------------	----------------------------------

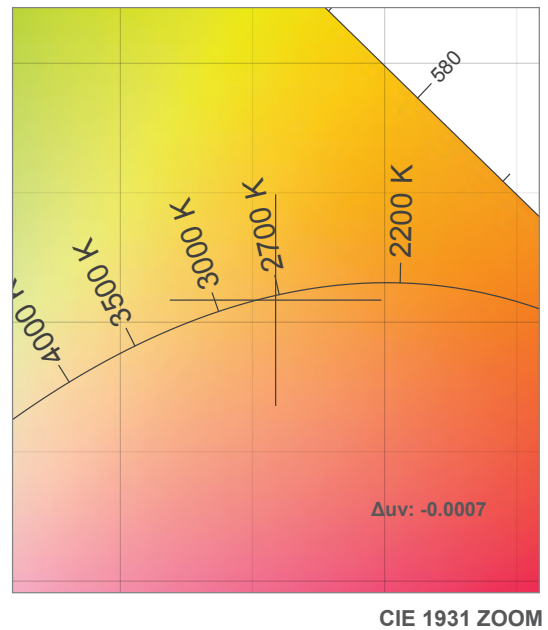
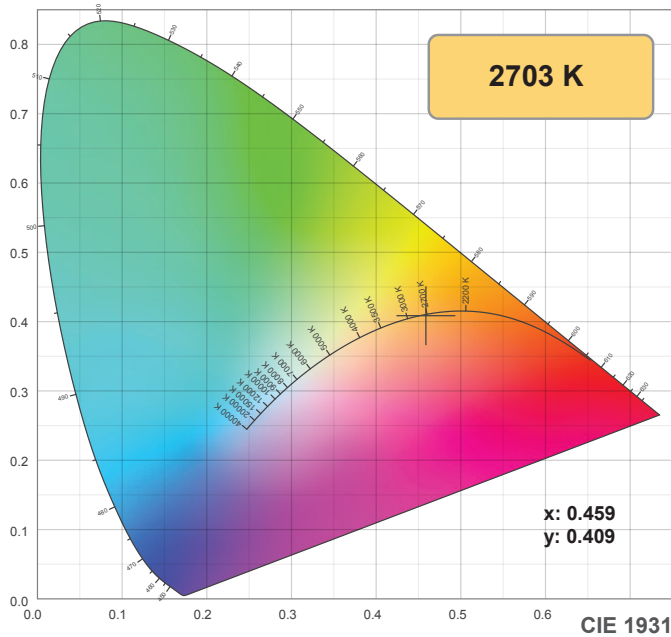


## WIRING DIAGRAM

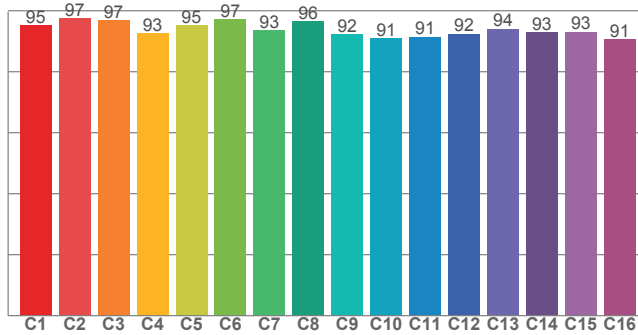


Note: specifications are representative of the diode type and not a particular tape light article.

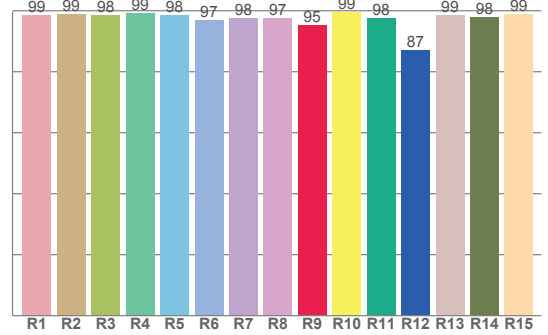
2700K



TM30: 93.8



CRI: 98.2 (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
98.7	99.0	98.4	99.2	98.5	97.0	97.6	97.5	95.4	99.5	97.6	87.2	98.6	98.0	98.8

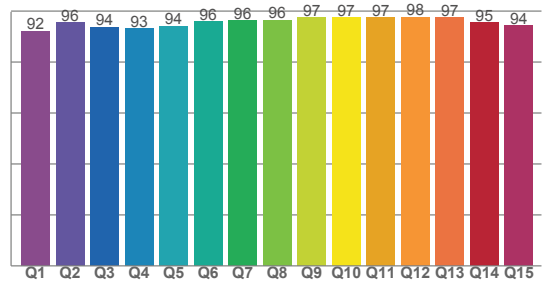
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.2	97.4	96.9	92.7	95.2	97.1	93.5	96.5	92.3	90.9	91.4	92.4	94.0	92.9	93.1	90.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.2	95.6	93.7	93.1	94.2	95.8	96.2	96.5	97.4	97.3	97.4	97.6	97.4	95.4	94.4

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
2703 K	98.2	95.4	93.8	99.8	95.0	0.459	0.409	0.263	0.351	-0.0007

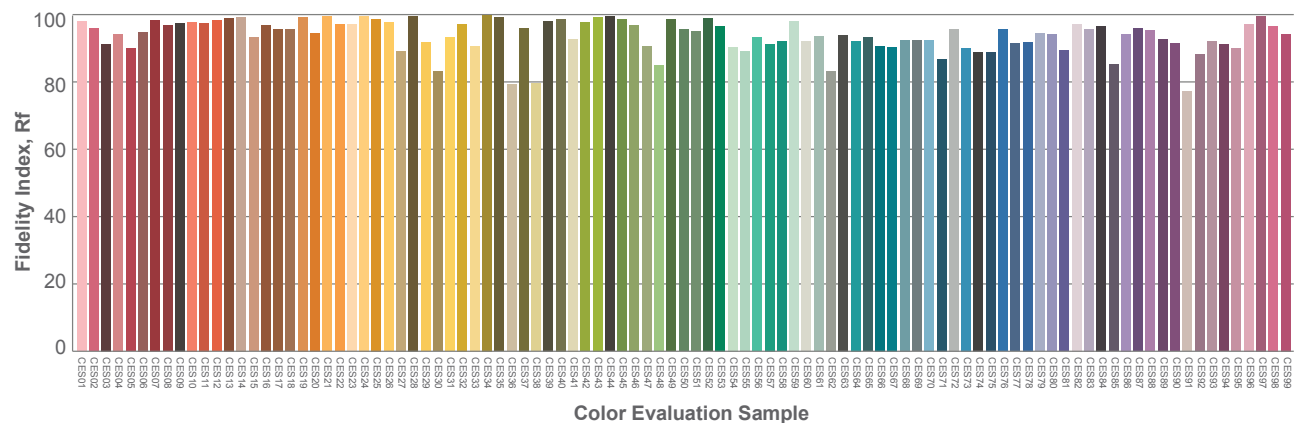
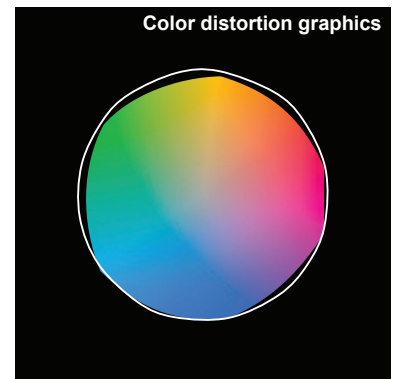
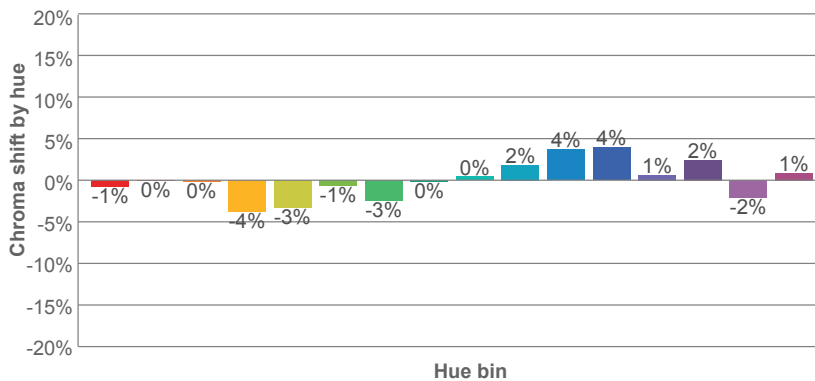
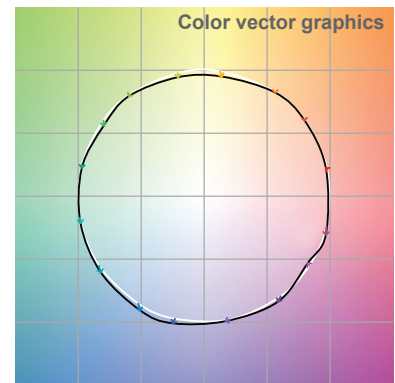
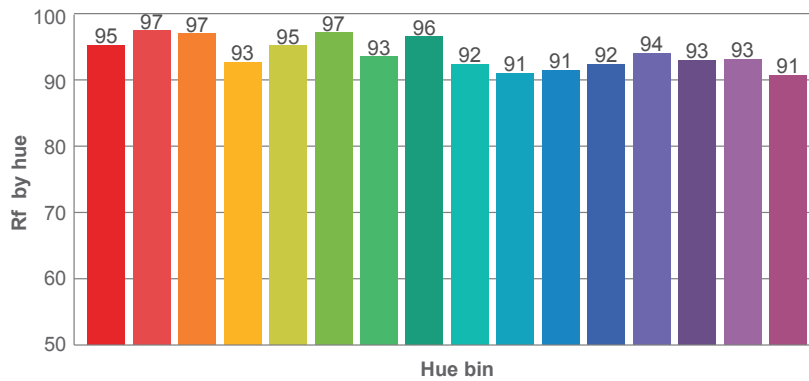
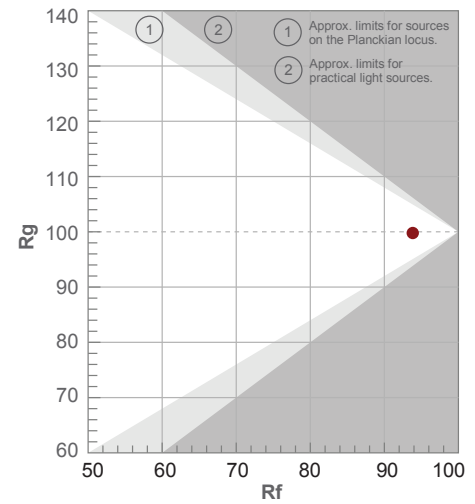
Note: specifications are representative of the diode type and not a particular tape light article.

2700K

**Rf 93.8**  
Fidelity index Rf

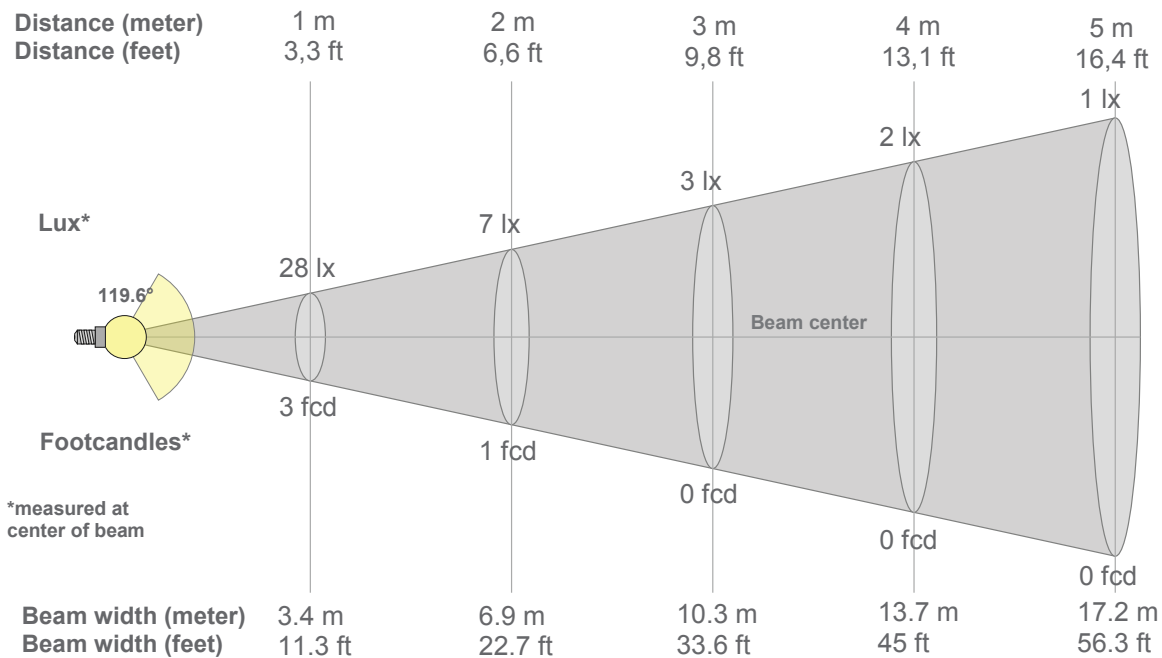
**Rg 99.8**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	1%
2	97	0%	0%
3	97	0%	0%
4	93	-4%	-2%
5	95	-3%	0%
6	97	-1%	1%
7	93	-3%	3%
8	96	0%	2%
9	92	0%	4%
10	91	2%	5%
11	91	4%	5%
12	92	4%	-1%
13	94	1%	-4%
14	93	2%	-4%
15	93	-2%	0%
16	91	1%	-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
28lx	7lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.6fcd	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°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
27.5	27.4	27.1	26.6	25.8	24.9	23.8	22.5	21.0	19.4	17.7	15.7	13.7	11.5	9.3	7.0	4.8	2.8	1.2	0.4
100%	99%	99%	97%	94%	91%	86%	82%	77%	71%	64%	57%	50%	42%	34%	25%	17%	10%	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°
27.5	27.4	27.1	26.6	25.8	24.9	23.8	22.5	21.0	19.4	17.7	15.7	13.7	11.5	9.3	7.0	4.8	2.8	1.2	0.4
100%	99%	99%	97%	94%	91%	86%	82%	77%	71%	64%	57%	50%	42%	34%	25%	17%	10%	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°
27.5	27.4	27.1	26.6	25.9	25.0	23.9	22.6	21.2	19.6	17.8	15.8	13.7	11.4	9.0	6.6	4.2	2.3	1.0	0.4
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	57%	50%	41%	33%	24%	15%	8%	4%	1%

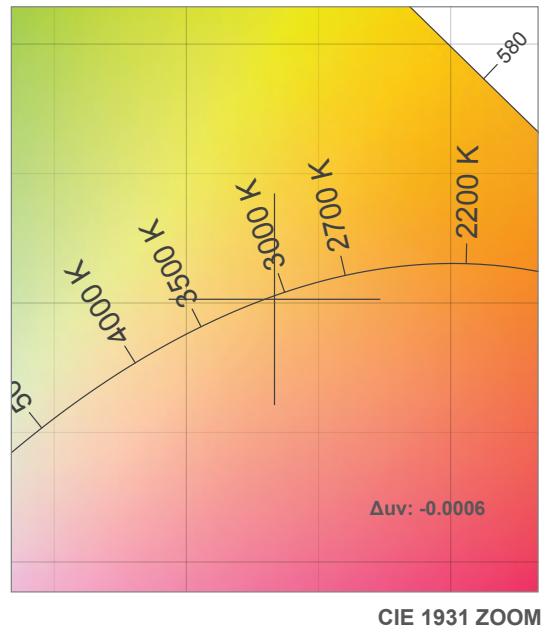
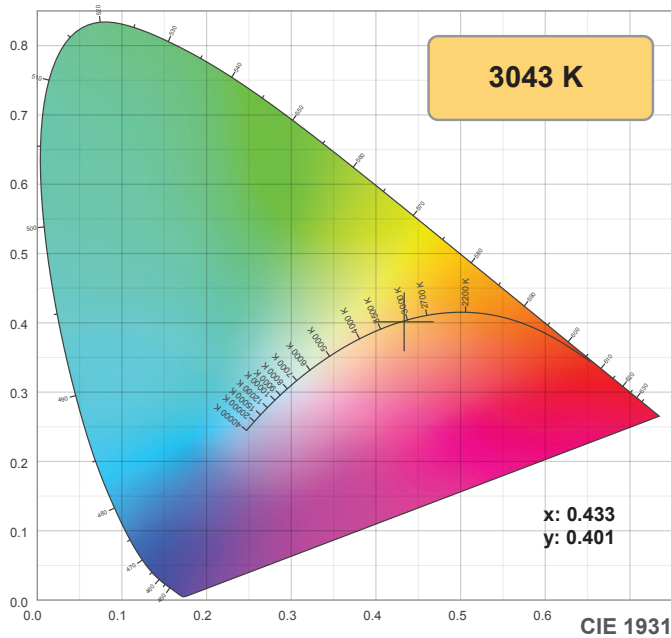
**Intensities in 270° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
27.5	27.4	27.1	26.6	25.9	25.0	23.9	22.6	21.2	19.6	17.8	15.8	13.7	11.4	9.0	6.6	4.2	2.3	1.0	0.4
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	57%	50%	41%	33%	24%	15%	8%	4%	1%

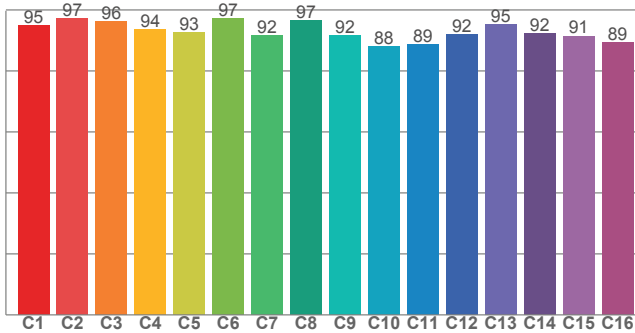
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
119.6°	168.9°	184.3°	73.7%	49.2%

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

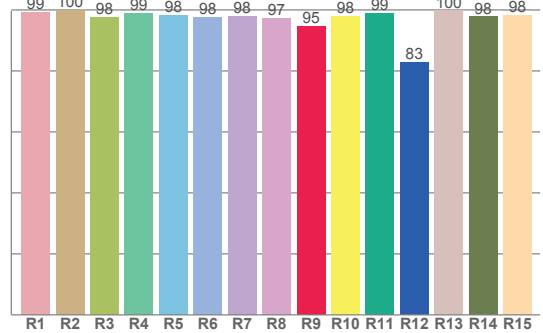
3000K



TM30: 93.1



CRI: 98.3 (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
99.2	99.8	97.6	98.9	98.3	97.6	97.9	97.3	94.8	98.0	98.9	82.9	99.7	97.8	98.2

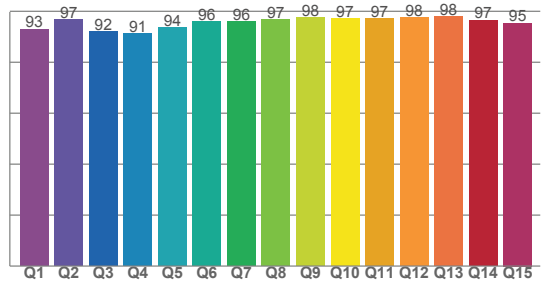
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.0	97.2	96.4	93.6	92.5	97.2	91.8	96.5	91.6	88.0	88.7	91.9	95.1	92.4	91.5	89.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.0	96.8	91.9	91.2	93.6	95.9	96.0	96.7	97.5	97.2	97.1	97.6	97.8	96.5	95.4

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	$\Delta uv$
3043 K	98.3	94.8	93.1	99.8	94.9	0.433	0.401	0.249	0.347	-0.0006

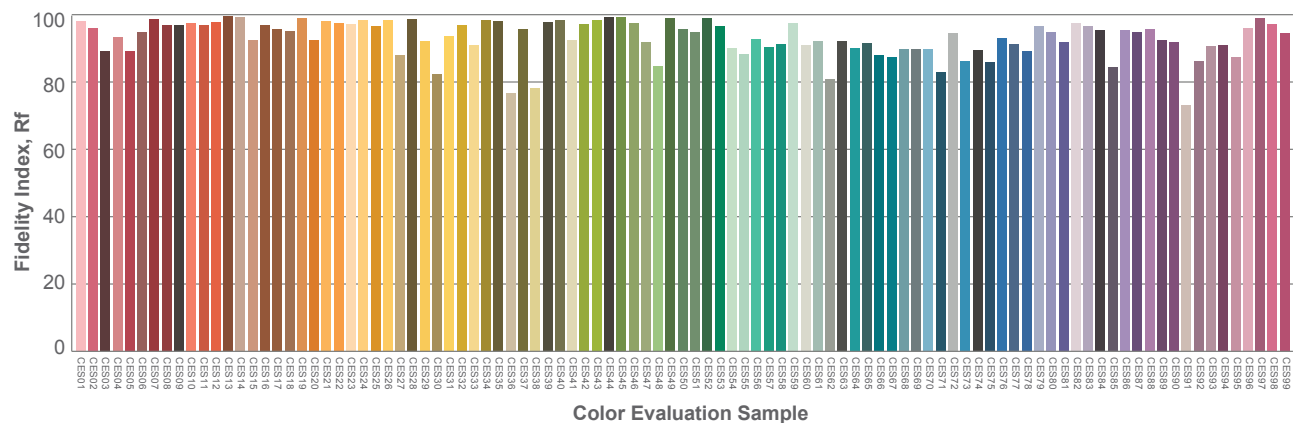
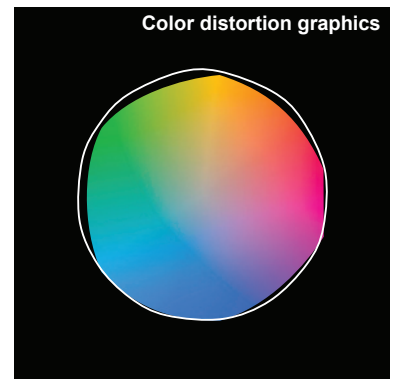
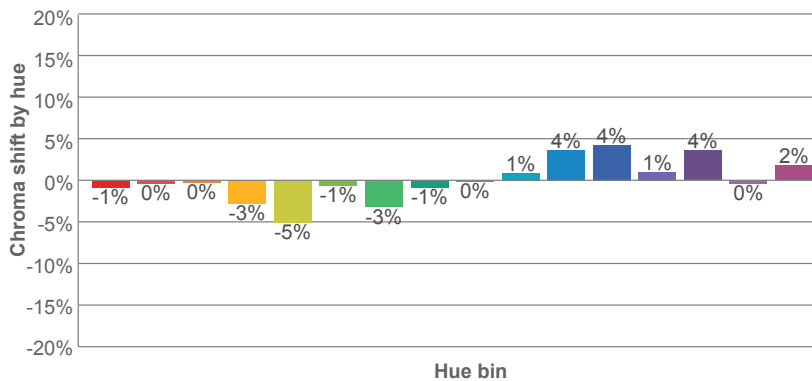
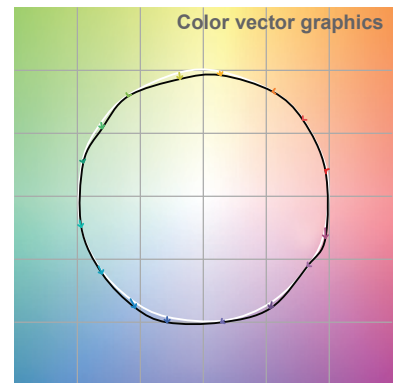
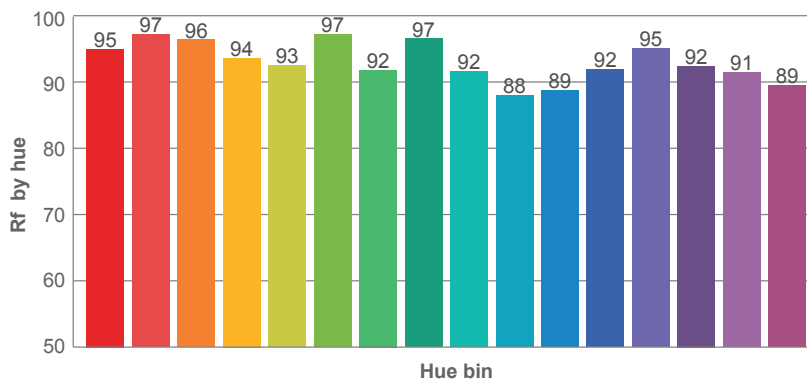
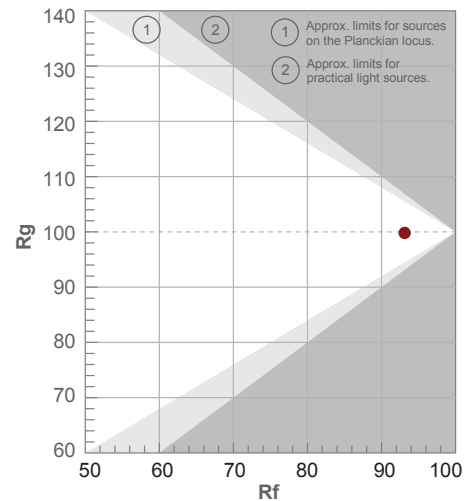
Note: specifications are representative of the diode type and not a particular tape light article.

3000K

**Rf 93.1**  
Fidelity index Rf

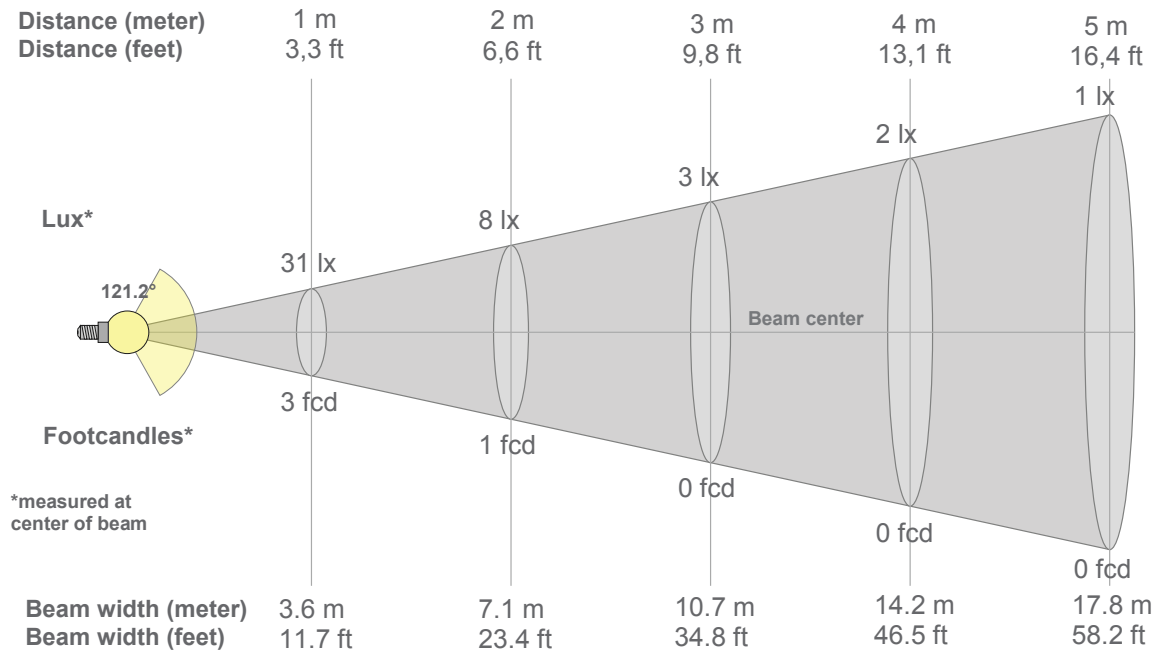
**Rg 99.8**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	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
31lx	8lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.9fcd	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°
30.9	30.7	30.4	29.8	29.0	28.0	26.8	25.3	23.8	22.0	20.1	18.0	15.7	13.3	10.7	8.0	5.4	3.0	1.1	0.2
100%	100%	98%	96%	94%	91%	87%	82%	77%	71%	65%	58%	51%	43%	35%	26%	17%	10%	3%	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°
30.9	30.7	30.4	29.8	29.0	28.0	26.8	25.3	23.8	22.0	20.1	18.0	15.7	13.3	10.7	8.0	5.4	3.0	1.1	0.2
100%	100%	98%	96%	94%	91%	87%	82%	77%	71%	65%	58%	51%	43%	35%	26%	17%	10%	3%	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°
30.9	30.8	30.5	30.0	29.1	28.2	27.0	25.6	24.0	22.2	20.2	18.1	15.7	13.3	10.7	8.0	5.4	3.0	1.1	0.3
100%	100%	99%	97%	94%	91%	87%	83%	78%	72%	66%	59%	51%	43%	35%	26%	17%	10%	3%	1%

**Intensities in 270° c-plane**

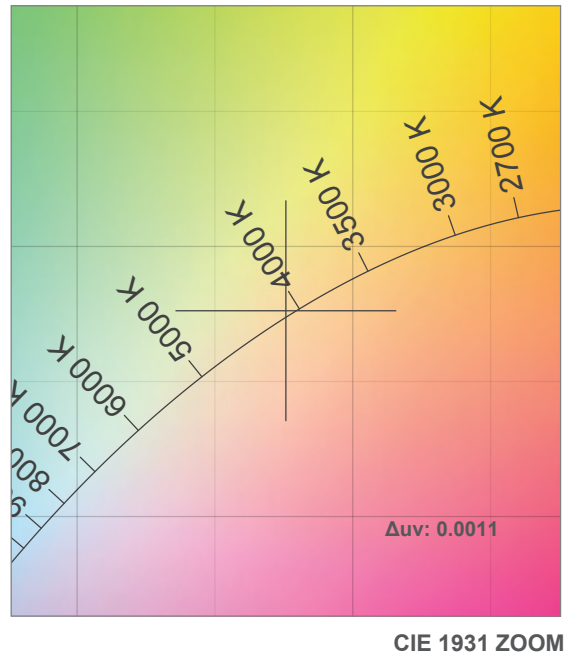
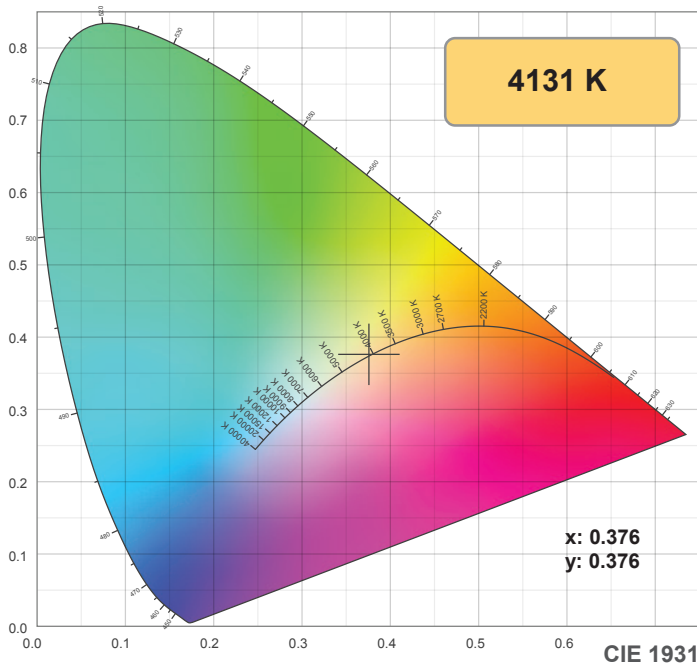
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
30.9	30.8	30.5	30.0	29.1	28.2	27.0	25.6	24.0	22.2	20.2	18.1	15.7	13.3	10.7	8.0	5.4	3.0	1.1	0.3
100%	100%	99%	97%	94%	91%	87%	83%	78%	72%	66%	59%	51%	43%	35%	26%	17%	10%	3%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
121.2°	169.4°	183.8°	73.4%	48.6%

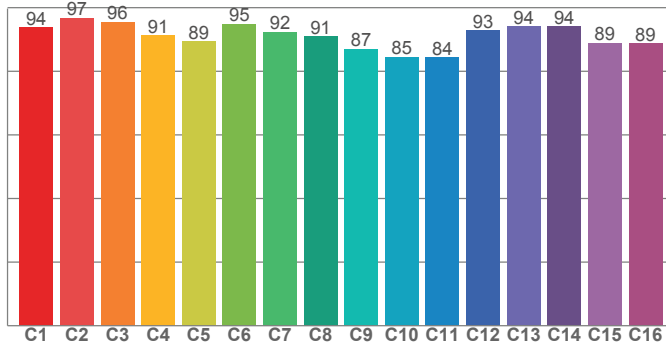


Note: specifications are representative of the diode type and not a particular tape light article.

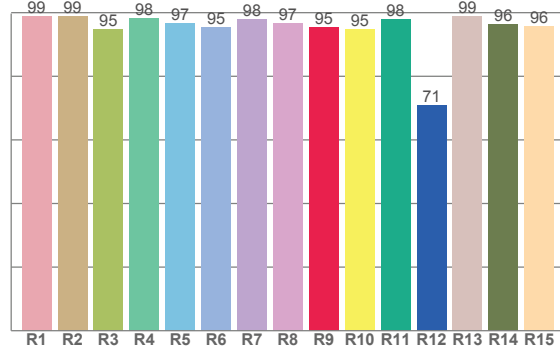
4200K



TM30: 90.9



CRI: 97.2 (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
98.7	98.9	94.7	98.1	96.8	95.5	97.9	96.8	95.4	94.9	97.9	71.0	98.9	96.4	95.8

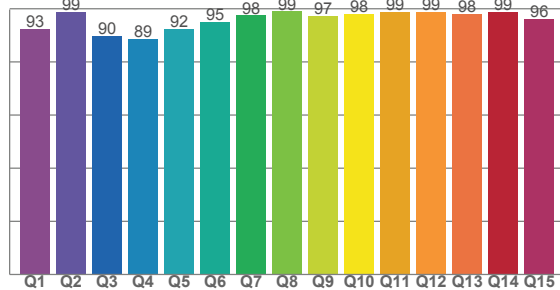
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.8	96.8	95.6	91.2	89.3	94.9	92.4	91.1	87.0	84.6	84.4	92.8	94.1	94.0	89.0	88.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.5	98.9	89.8	88.6	92.3	95.0	97.5	99.0	97.2	98.0	98.7	98.7	98.1	98.9	96.2

CQS: 94.7



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
4131 K	97.2	95.4	90.9	99.4	94.7	0.376	0.376	0.222	0.334	0.0011

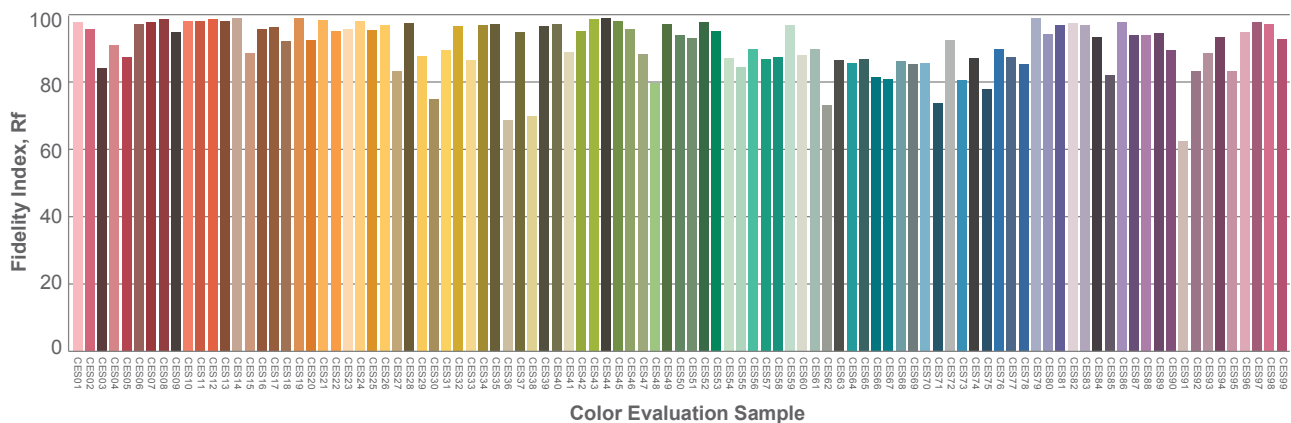
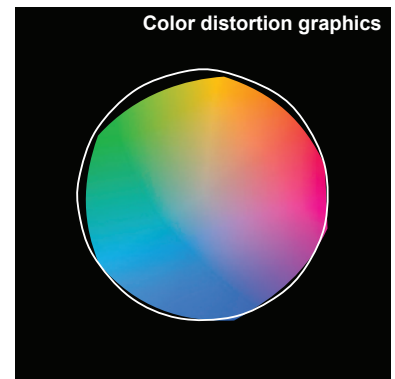
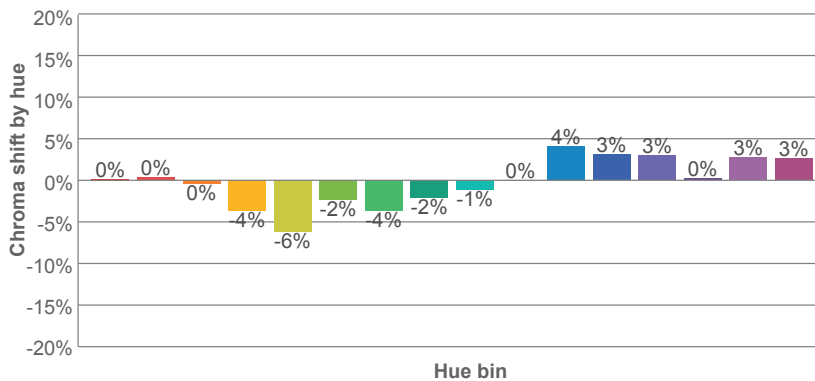
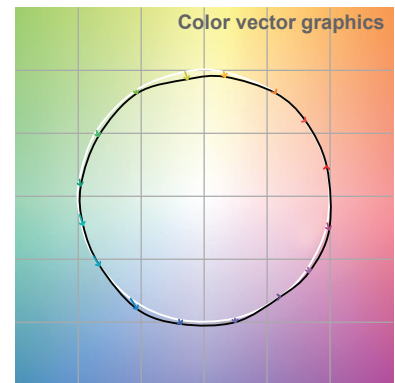
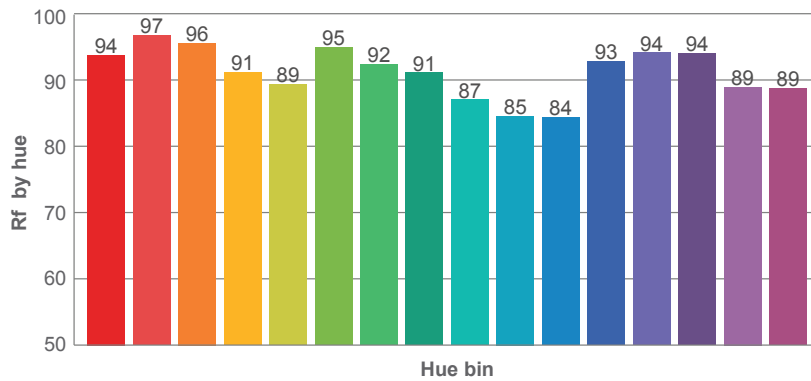
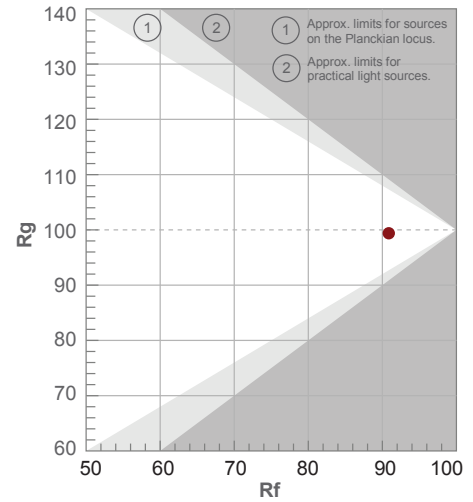
Note: specifications are representative of the diode type and not a particular tape light article.

4200K

**Rf 90.9**  
Fidelity index Rf

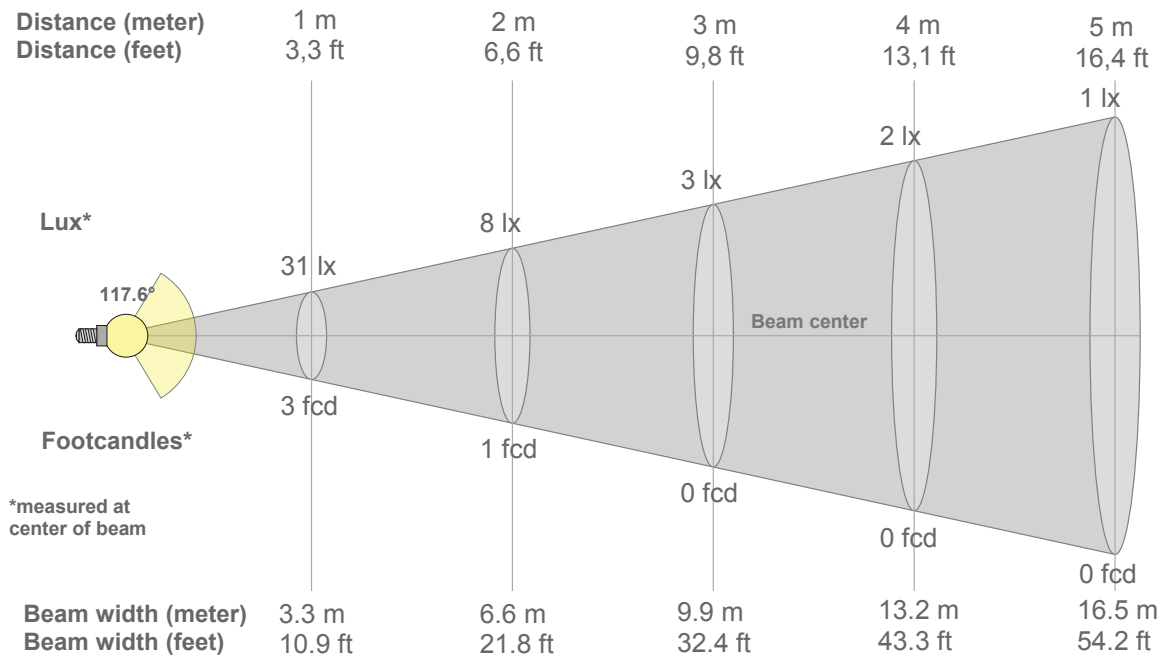
**Rg 99.4**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	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
31lx	8lx	3lx	2lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
2.9fcd	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°
31.1	31.0	30.6	30.0	29.1	28.1	26.8	25.3	23.6	21.7	19.7	17.4	15.0	12.4	9.8	7.1	4.6	2.3	0.7	0.2
100%	99%	98%	96%	94%	90%	86%	81%	76%	70%	63%	56%	48%	40%	31%	23%	15%	8%	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°
31.1	31.0	30.6	30.0	29.1	28.1	26.8	25.3	23.6	21.7	19.7	17.4	15.0	12.4	9.8	7.1	4.6	2.3	0.7	0.2
100%	99%	98%	96%	94%	90%	86%	81%	76%	70%	63%	56%	48%	40%	31%	23%	15%	8%	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°
31.1	31.0	30.6	30.1	29.3	28.2	26.9	25.5	23.7	21.8	19.7	17.4	15.0	12.4	9.7	7.0	4.5	2.3	0.7	0.1
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	40%	31%	23%	15%	7%	2%	0%

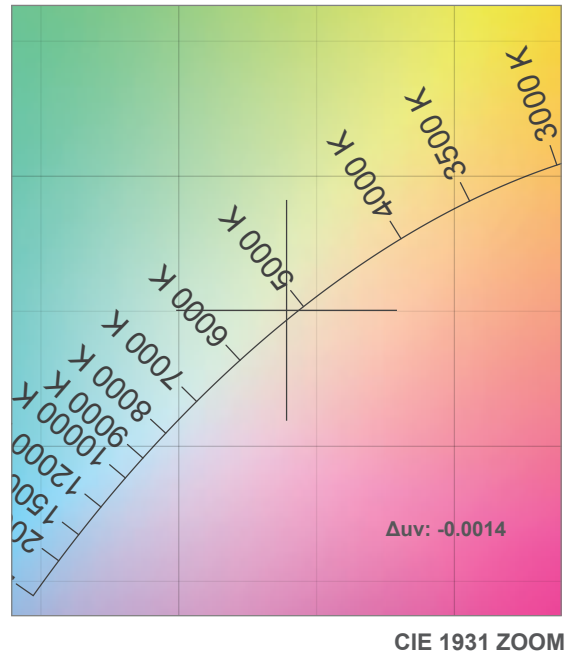
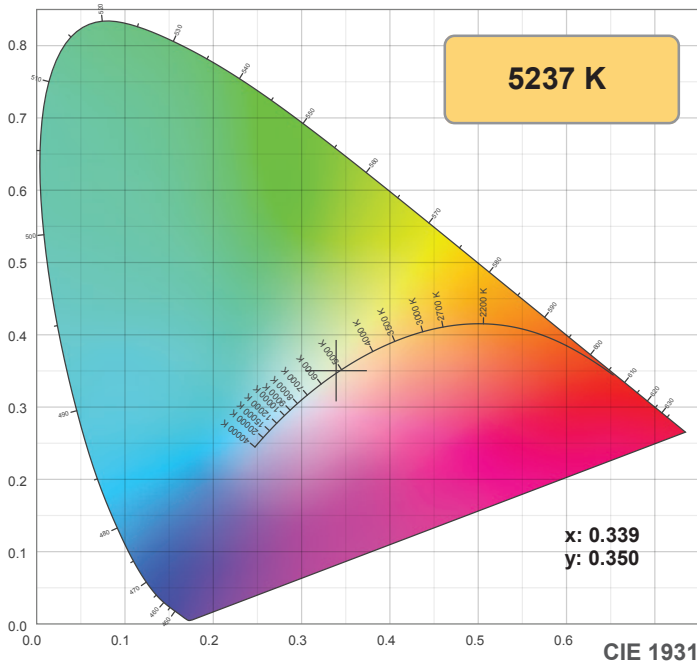
**Intensities in 270° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
31.1	31.0	30.6	30.1	29.3	28.2	26.9	25.5	23.7	21.8	19.7	17.4	15.0	12.4	9.7	7.0	4.5	2.3	0.7	0.1
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	40%	31%	23%	15%	7%	2%	0%

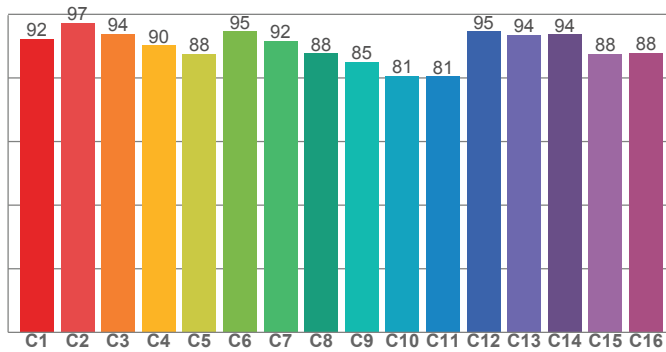
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
117.6°	166.1°	178.9°	75.2%	50.4%

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

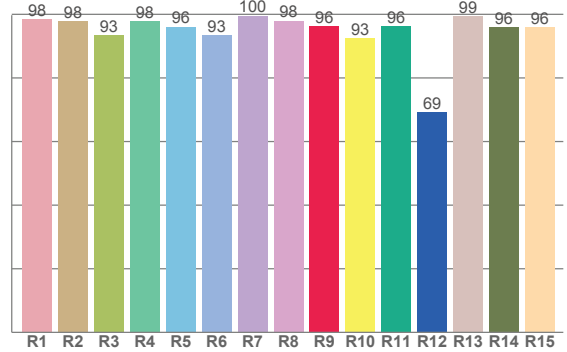
5000K



TM30: 89.5



CRI: 96.8 (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
98.4	98.0	93.4	97.9	96.1	93.4	99.6	98.0	96.2	92.6	96.2	69.3	99.4	95.9	95.9

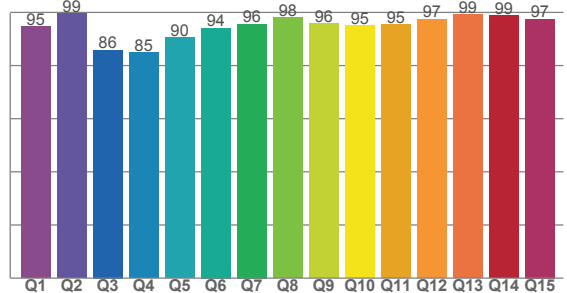
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92.3	97.3	93.9	90.2	87.5	94.6	91.7	87.7	85.0	80.7	80.5	94.6	93.5	93.6	87.6	87.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.8	99.5	85.8	84.8	90.5	94.1	95.7	98.1	95.7	95.1	95.3	97.4	99.2	98.8	97.5

CQS: 93.2



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
5237 K	96.8	96.2	89.5	99.1	93.2	0.339	0.350	0.208	0.322	-0.0014

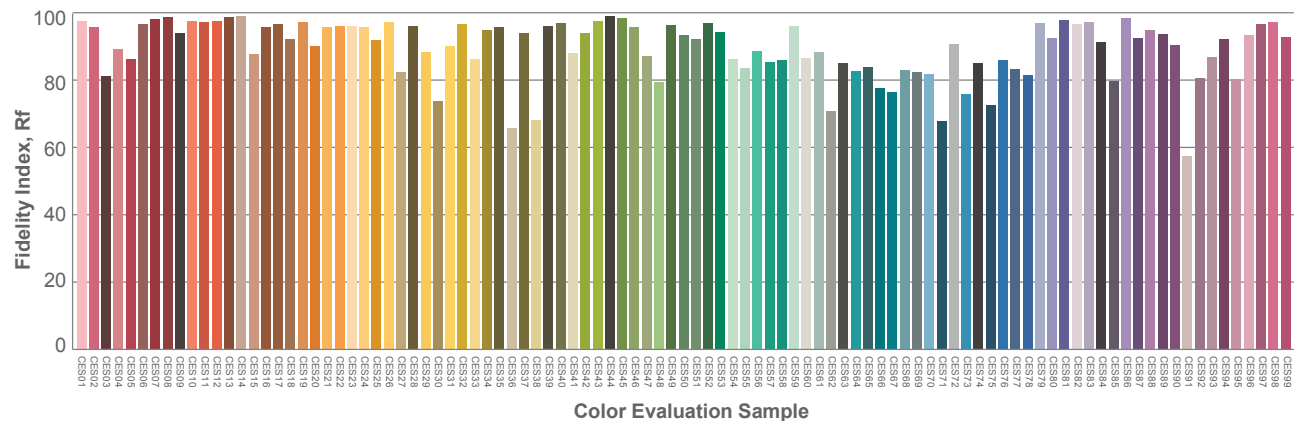
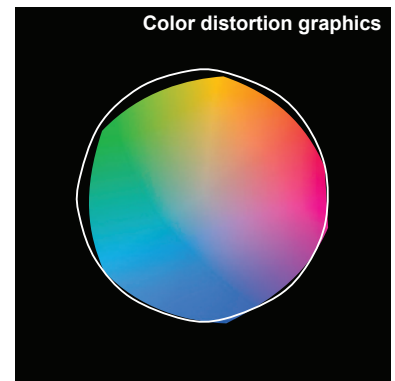
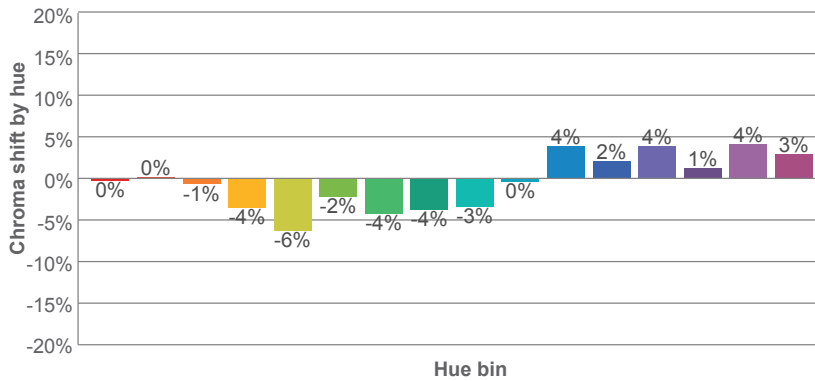
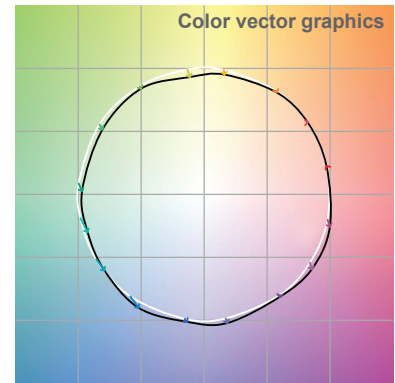
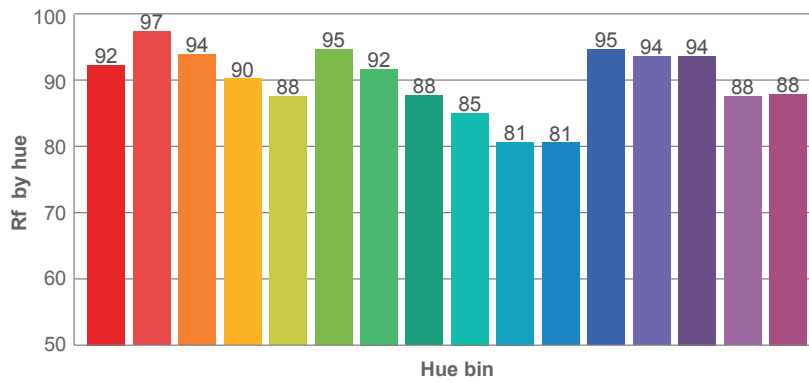
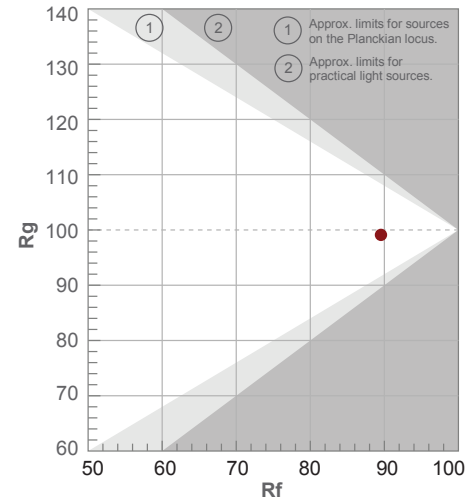
Note: specifications are representative of the diode type and not a particular tape light article.

5000K

**Rf 89.5**  
Fidelity index Rf

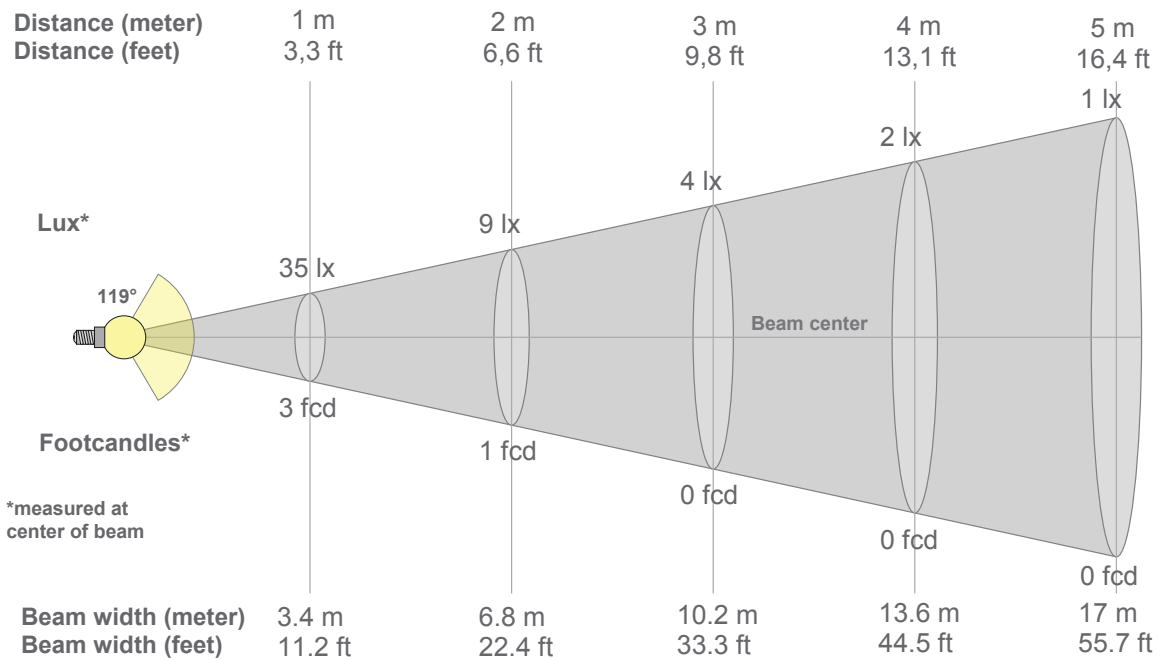
**Rg 99.1**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	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
35lx	9lx	4lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
3.2fcd	0.8fcd	0.4fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
34.6	34.4	34.0	33.4	32.5	31.3	30.0	28.4	26.6	24.4	22.2	19.7	17.0	14.0	11.0	7.9	4.9	2.4	0.7	0.2
100%	99%	98%	96%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	23%	14%	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°
34.6	34.4	34.0	33.4	32.5	31.3	30.0	28.4	26.6	24.4	22.2	19.7	17.0	14.0	11.0	7.9	4.9	2.4	0.7	0.2
100%	99%	98%	96%	94%	91%	87%	82%	77%	71%	64%	57%	49%	41%	32%	23%	14%	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°
34.6	34.5	34.1	33.5	32.6	31.6	30.1	28.6	26.7	24.6	22.2	19.8	17.0	14.1	11.1	8.0	4.9	2.4	0.7	0.2
100%	100%	98%	97%	94%	91%	87%	83%	77%	71%	64%	57%	49%	41%	32%	23%	14%	7%	2%	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°
34.6	34.5	34.1	33.5	32.6	31.6	30.1	28.6	26.7	24.6	22.2	19.8	17.0	14.1	11.1	8.0	4.9	2.4	0.7	0.2
100%	100%	98%	97%	94%	91%	87%	83%	77%	71%	64%	57%	49%	41%	32%	23%	14%	7%	2%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
119°	165.3°	178.6°	75.4%	50.4%