

Radialux™ 5.8 LP (Low-Profile) RGBW LED Tape Light



Actual size shown

0.31 in. wide

Cut point every 1.97 in.



Radialux 5.8 LP (Low-Profile) RGBW is a compact, low-profile LED tape light that delivers full RGB color plus true white from a low-profile, space-saving form factor. Featuring a high-density 4-in-1 diode package, this tape light blends colors evenly at the source—eliminating color shadows and delivering smooth, hotspot-free output, even in shallow channels. Its narrow PCB design allows for easy integration into tight spaces, making it ideal for architectural accents, millwork, and low-clearance applications.

- Red, green, blue, and a dedicated white in a single 4-in-1 diode
- Narrow PCB fits into a wide range of low-profile channels
- Hotspot-free illumination, when paired with select Alloy LED channels
- Ideal for accent lighting, coves, cabinetry, and architectural millwork

TECHNICAL INFORMATION

Color	RGBW
Power Consumption Per Foot	5.8 Watts / 259 mA
Input Voltage	24V DC
Diodes per foot	36
Diode Spacing	0.33 inches
Tape Height	0.1 inches
Beam Angle	120°
Field Cuttable (UL 2108)	Every 1.97 in.
Color Temperature	3000K (white)
Max Run Length	16 ft.

Dimmable	Yes (with color controller)
Diode Type	5050 R/G/B/W
Mounting	3M™ Self-Adhesive Tape (Non-porous)
Operating Temperature	-13° F to 140° F
Ambient Temperature	-40° F to 176° F
Spool Lengths	16 ft.
Environment	Indoor, Dry
Certifications	UL 2108 Listed, RoHS
Warranty	6 Year Limited

Each spool comes with 36 in. 20 AWG tinned lead wires at both ends of the tape light.



CUSTOMIZATION

This product is ONLY offered with soldered leads. Contact us to learn more.

PRODUCT INFORMATION

Item Number	Length	Voltage	Lumens
AL-02-07-2401	16 ft.	24V DC	307

VOLTAGE DROP GUIDANCE CHART

24V Voltage Drop and Wire Length Distance Chart (3% Drop or 23.28V)

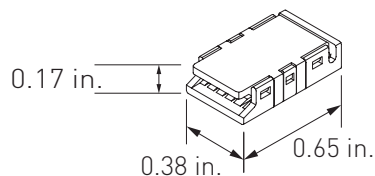
10W (0.42A)	20W (0.83A)	30W (1.3A)	40W (1.7A)	50W (2.1A)	60W (2.5A)	70W (2.9A)	80W (3.3A)	90W (3.75A)	100W (4.2A)	Wire Gauge
85 ft.	43 ft.	27 ft.	21 ft.	17 ft.	14 ft.	12 ft.	11 ft.	9 ft.	8 ft.	20 AWG
134 ft.	68 ft.	45 ft.	33 ft.	27 ft.	22 ft.	19 ft.	17 ft.	15 ft.	14 ft.	18 AWG
215 ft.	109 ft.	72 ft.	54 ft.	43 ft.	36 ft.	31 ft.	27 ft.	24 ft.	22 ft.	16 AWG
345 ft.	174 ft.	115 ft.	86 ft.	69 ft.	57 ft.	49 ft.	43 ft.	39 ft.	36 ft.	14 AWG
539 ft.	272 ft.	181 ft.	135 ft.	108 ft.	90 ft.	77 ft.	68 ft.	61 ft.	56 ft.	12 AWG
784 ft.	397 ft.	263 ft.	197 ft.	158 ft.	131 ft.	112 ft.	98 ft.	97 ft.	82 ft.	10 AWG

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

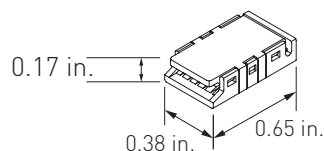
ACCESSORIES (SOLD SEPARATELY)

Recommended Accessories

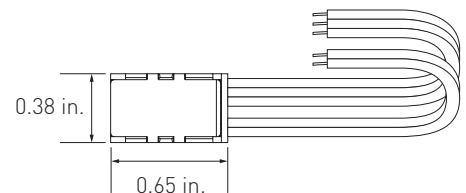
In-Wall-Rated Tape Light Connectors (20 AWG)



Tape-to-Tape
Connector



Tape Light
Splice Connector



Tape Light
Splice Connector

Item Number	Description
AL-02-07-9901	Tape-to-Tape Connector
AL-02-07-9901-10	Tape-to-Tape Connector (10-pack)

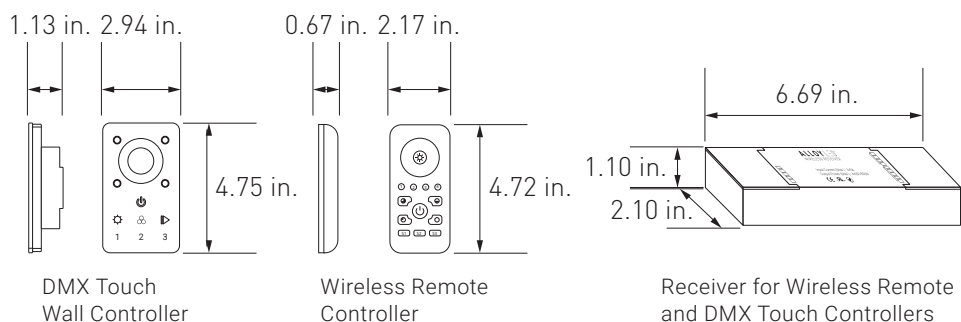
Item Number	Description	Wire
AL-02-07-9902	Tape Light Splice Connector	6 in.
AL-02-07-9902-10	Tape Light Splice Connector (10-pack)	6 in.

ALLOY LED® Specifications

ACCESSORIES (SOLD SEPARATELY)

Recommended Accessories

See our website for the full range of RGB/RGBW controllers and accessories.



Item Number	Description
AL-60-03-0002*	Wireless Remote Controller
AL-60-03-0003*	DMX Touch Wall Controller
AL-60-03-0004-V2	Receiver for Wireless Remote and DMX Touch Controllers

*Use with the Wireless Receiver AL-60-03-0004-V2 (sold separately)



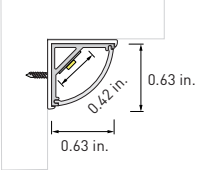
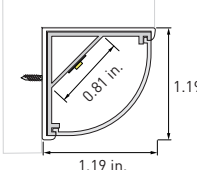
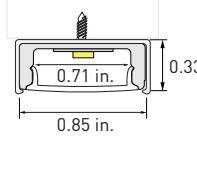
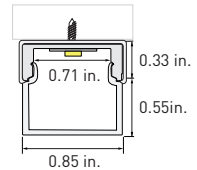
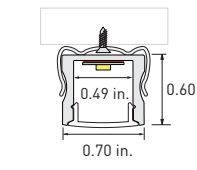
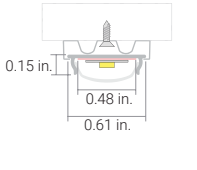
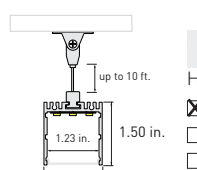
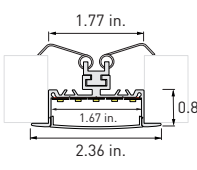
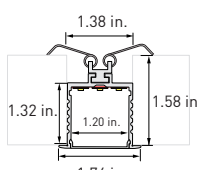
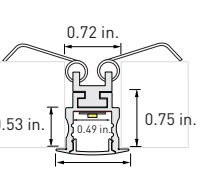
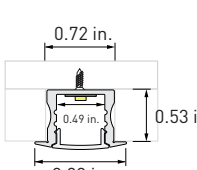
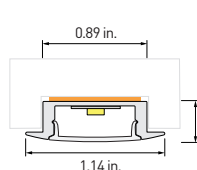
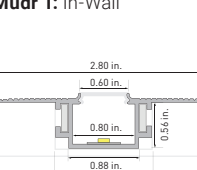
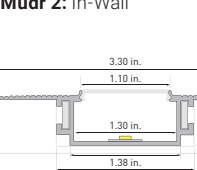
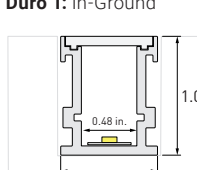
Mean Well Non-Dimmable Drivers

Item Number	Voltage	Wattage	Dimensions
AL-98-04-24036	24V DC	36W	5.83 x 1.58 x 1.18 in.
AL-98-04-24060	24V DC	60W	6.4 x 1.67 x 1.26 in.
AL-98-04-24100	24V DC	100W	7.5 x 2 x 1.46 in.
AL-98-04-24151	24V DC	151W	7.52 x 2.5 x 1.48 in.
AL-98-04-24200	24V DC	200W	8.47 x 5.43 x 1.18 in.

ALLOY LED® Specifications

COMPATIBLE CHANNELS (Diagrams below not to scale)

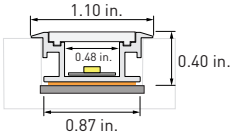
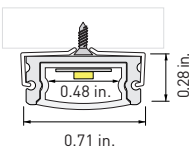
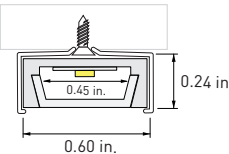
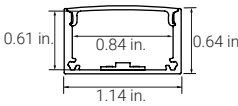
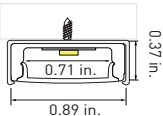
Hotspot Pairings (Hotspot Rating from 0-5)

Surfa 2: Corner-Mount  Hotspot Rating: 1 ☒ Solder ☐ Connector ☐ TapeMate	Surfa 2X: Corner-Mount  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Surfa 6: Surface-Mount  Hotspot Rating: 2 ☒ Solder ☐ Connector ☐ TapeMate
Surfa 6 Surround: Surface-Mount  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Surfa 7: Surface-Mount  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	SurfaFlex 1: Bendable Surface-Mount  Hotspot Rating: 4 ☒ Solder ☐ Connector ☐ TapeMate
Suspan 1: Suspended  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Ankr 1: In-Wall  Hotspot Rating: 1 ☒ Solder ☐ Connector ☐ TapeMate	Ankr 2: In-Wall  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate
Ankr 3: In-Wall  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Ankr 4: Mud-In  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Naro 4: Recessed  Hotspot Rating: 2 ☒ Solder ☐ Connector ☐ TapeMate
Mudr 1: In-Wall  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Mudr 2: In-Wall  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Duro 1: In-Ground  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate

ALLOY LED® Specifications

COMPATIBLE CHANNELS (Diagrams below not to scale)

Hotspot Pairings (Hotspot Rating from 0-5)

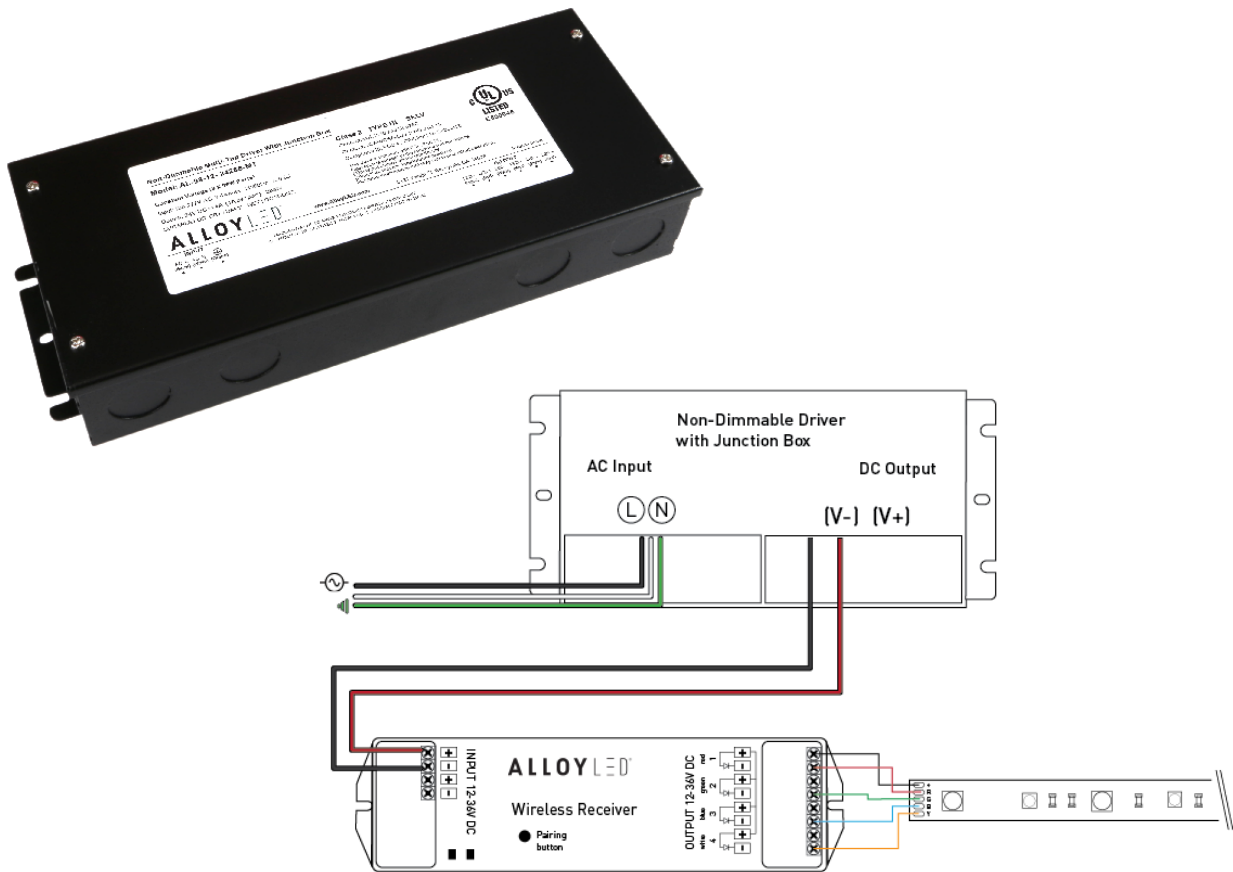
Duro 2: In-Ground  Hotspot Rating: 1 ☒ Solder ☐ Connector ☐ TapeMate	Surfa 1: Surface-Mount  Hotspot Rating: 3 ☒ Solder ☐ Connector ☐ TapeMate	Surfa 3: Surface-Mount  Hotspot Rating: 4 ☒ Solder ☐ Connector ☐ TapeMate
Surfa 8: Surface-Mount  Hotspot Rating: 0 ☒ Solder ☐ Connector ☐ TapeMate	Polymer LP: Surface-Mount  Hotspot Rating: 2 ☒ Solder ☐ Connector ☐ TapeMate	

ALLOY LED® Specifications

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



Alloy LED PowerFactor™ Non-Dimmable Power Supplies with Integrated UL Listed Junction Box
Reliable, efficient low voltage power to RGB and RGBW color controllers and for use with white tape light on an on/off switch



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

120V-277V

NEMA 4X

99% POWER FACTOR

CLASS 2

WET LOCATION

DRY LOCATION

WARRANTY 6 YEARS

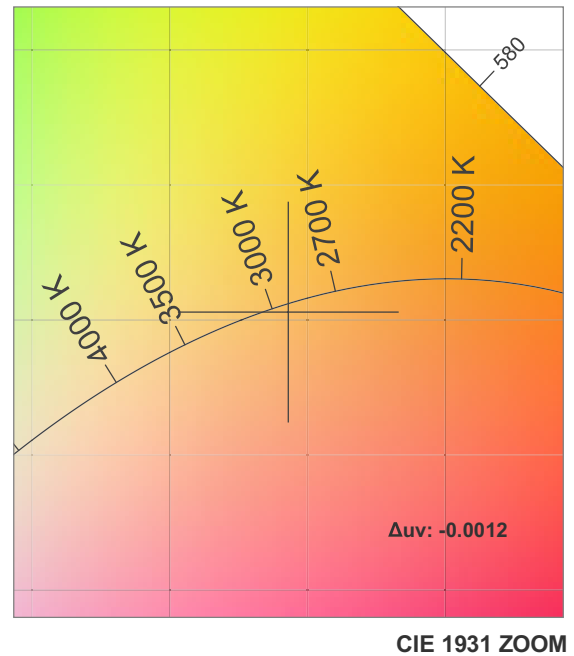
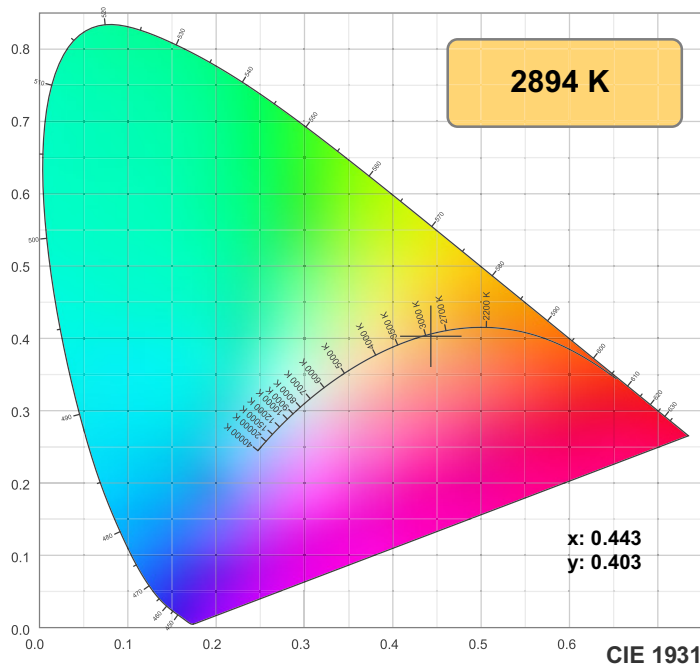
RoHS

UL LISTED

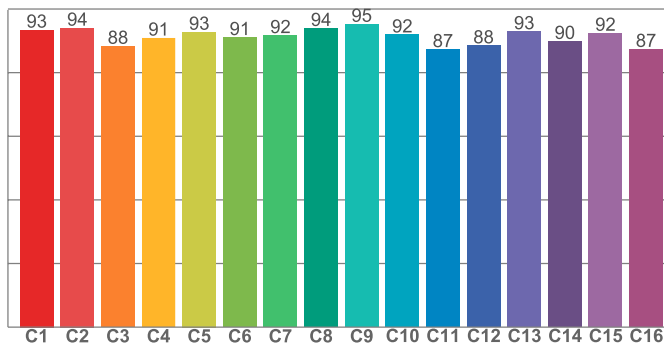
Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (Junction box) (L x W x H)	Class 2
AL-98-12-24030	24V DC	30W	Yes (NEMA 4X)	10%	6.5 x 3.72 x 1.57 in.	Yes
AL-98-12-24060	24V DC	60W	Yes (NEMA 4X)	10%	7.4 x 3.72 x 1.57 in.	Yes
AL-98-12-24080	24V DC	80W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-12-24096	24V DC	96W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-12-24192-MT	24V DC	2*96W	Yes (NEMA 4X)	10%	10.94 x 4.25 x 1.77 in.	Yes
AL-98-12-24288-MT	24V DC	3*96W	Yes (NEMA 4X)	10%	11.85 x 4.25 x 1.77 in.	Yes

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.

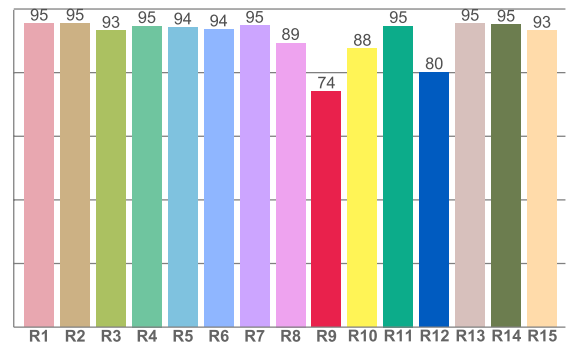
RGBW - 3000K WHITE ONLY



TM-30: 91.4



CRI: 93.8 (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
95.4	95.5	93.1	94.6	94.2	93.6	94.7	89.3	74.1	87.5	94.7	80.1	95.4	95.1	93.2

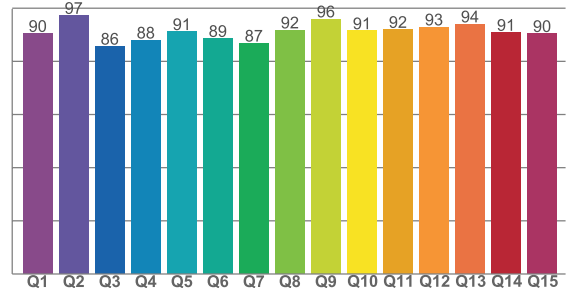
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.4	94.0	88.3	90.9	92.7	91.1	91.7	93.9	95.2	91.9	87.3	88.5	92.9	89.9	92.4	87.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90.5	97.2	85.7	88.0	91.1	88.6	86.8	91.8	95.9	91.5	92.0	92.9	94.0	90.9	90.4

CQS: 90.5



Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2894 K	93.8	74.1	91.4	102.8	90.5	0.443	0.403	0.255	0.348	-0.0012

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

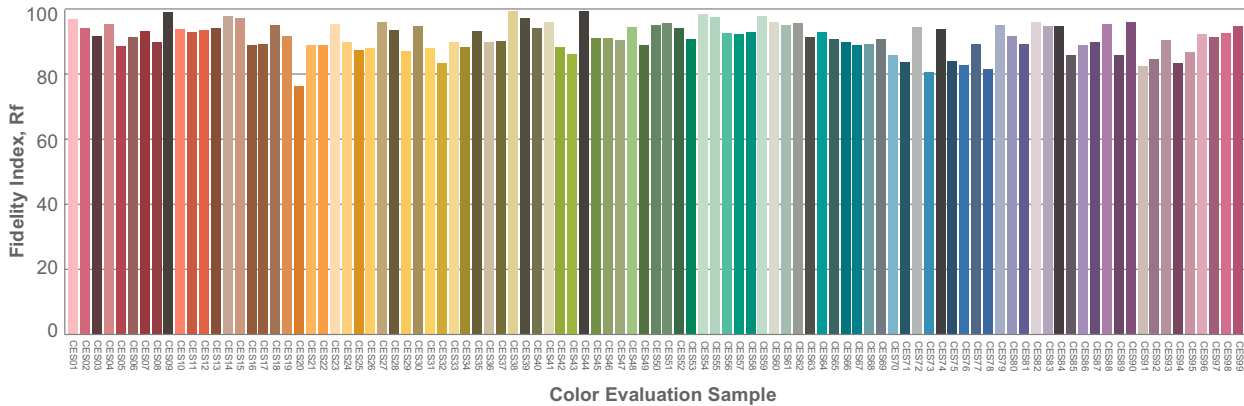
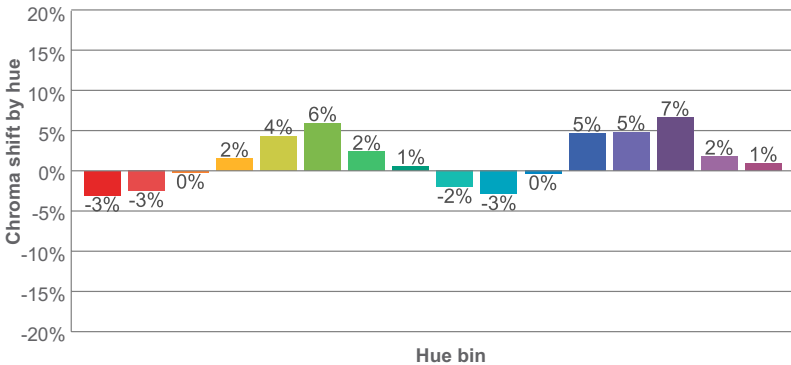
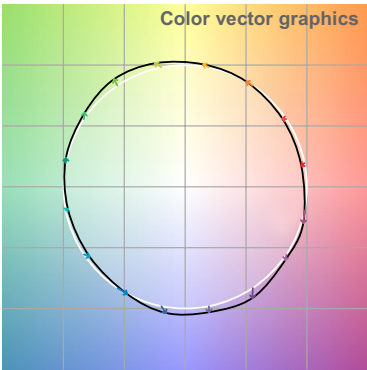
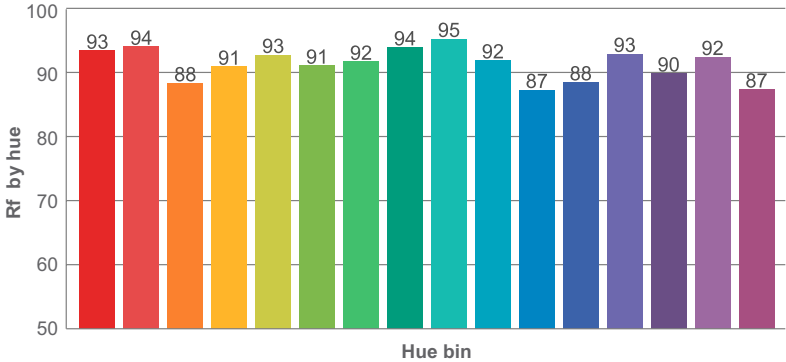
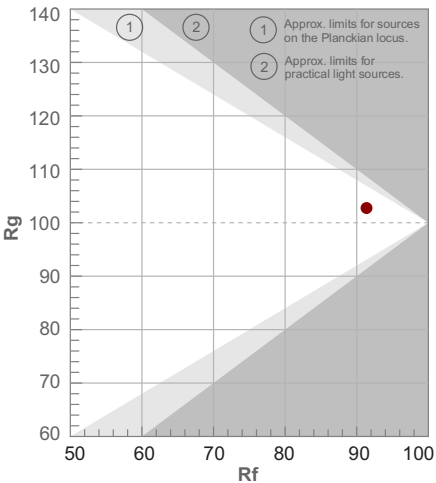
Rf 91.4

Fidelity index Rf

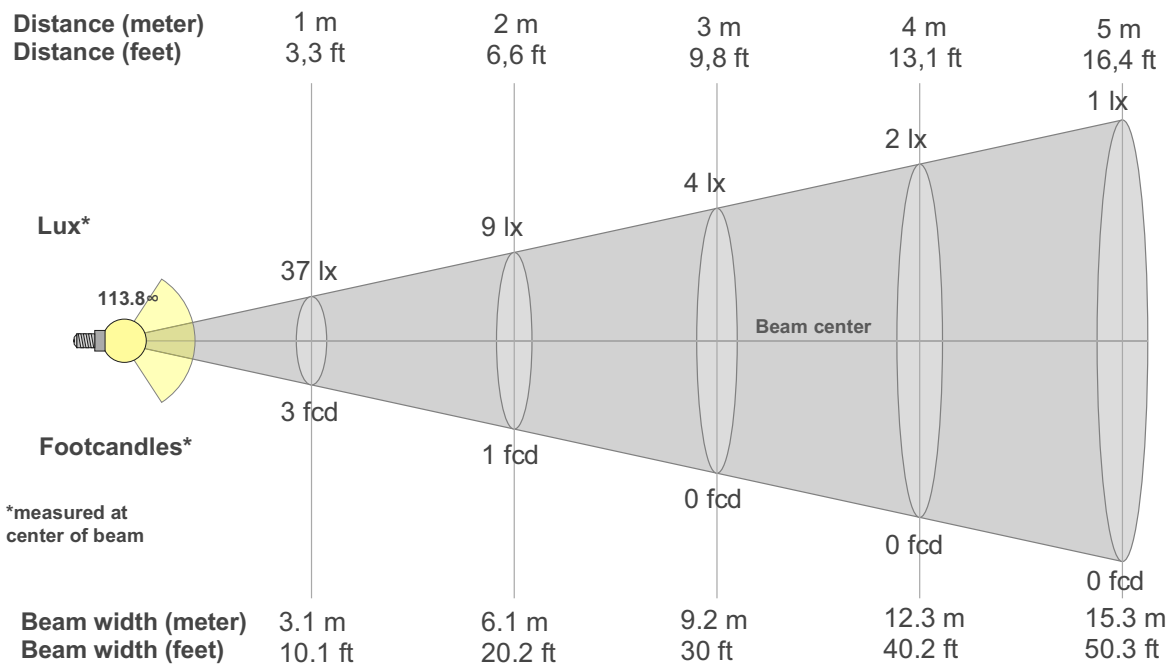
Rg 102.8

Gamut index Rg

Hue Bin	Rr	Shifts (%)	
		Chroma	Hue
1	93	-3%	-1%
2	94	-3%	2%
3	88	0%	6%
4	91	2%	5%
5	93	4%	4%
6	91	6%	0%
7	92	2%	-5%
8	94	1%	-4%
9	95	-2%	-1%
10	92	-3%	4%
11	87	0%	9%
12	88	5%	5%
13	93	5%	-1%
14	90	7%	-5%
15	92	2%	-4%
16	87	1%	-10%



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



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
37lx	9lx	4lx	2lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
3.4fcd	0.9fcd	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°
36.9	36.8	36.3	35.6	34.5	33.2	31.6	29.7	27.6	25.2	22.5	19.6	16.6	13.5	10.3	7.1	4.2	1.8	0.4	0.1
100%	100%	99%	97%	94%	90%	86%	81%	75%	68%	61%	53%	45%	37%	28%	19%	11%	5%	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°
36.9	36.5	36.1	35.3	34.2	32.9	31.3	29.3	27.2	24.7	22.1	19.3	16.5	13.6	10.6	7.6	4.8	2.3	0.4	0.1
100%	99%	98%	96%	93%	89%	85%	80%	74%	67%	60%	52%	45%	37%	29%	21%	13%	6%	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°
36.9	36.8	36.3	35.6	34.5	33.2	31.6	29.7	27.6	25.2	22.5	19.6	16.6	13.5	10.3	7.1	4.2	1.8	0.4	0.1
100%	100%	99%	97%	94%	90%	86%	81%	75%	68%	61%	53%	45%	37%	28%	19%	11%	5%	1%	0%

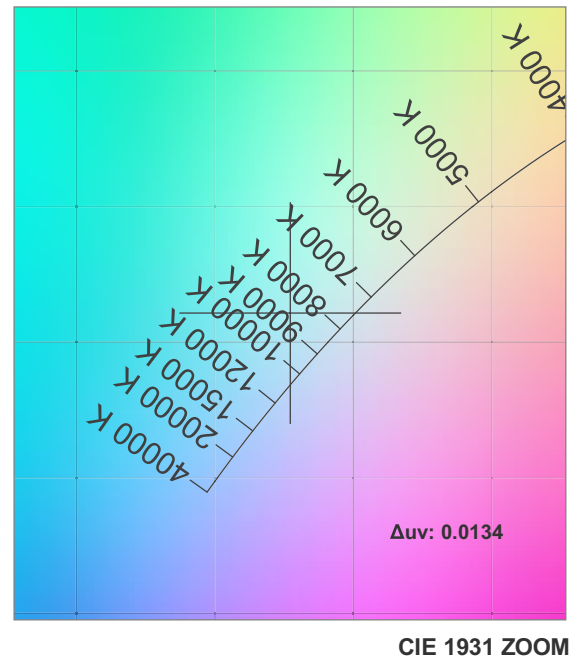
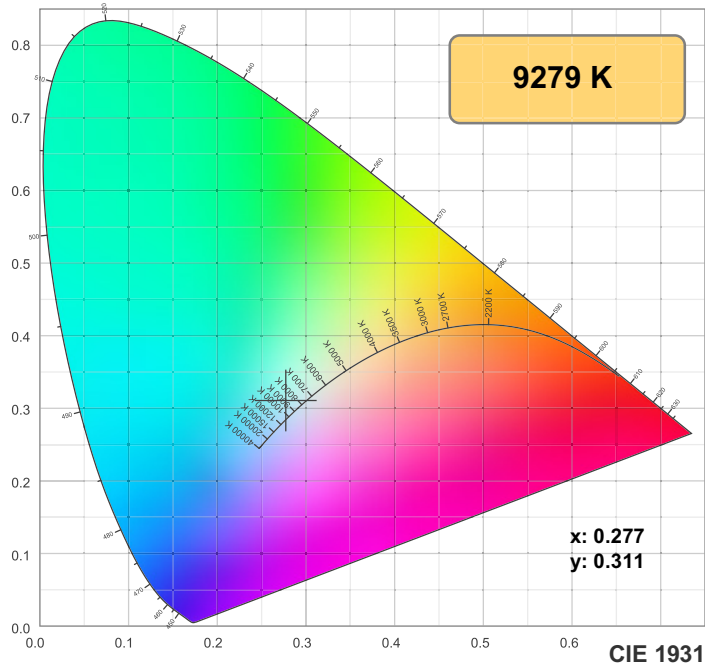
Intensities in 270°c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
36.9	36.5	36.1	35.3	34.2	32.9	31.3	29.3	27.2	24.7	22.1	19.3	16.5	13.6	10.6	7.6	4.8	2.3	0.4	0.1
100%	99%	98%	96%	93%	89%	85%	80%	74%	67%	60%	52%	45%	37%	29%	21%	13%	6%	1%	0%

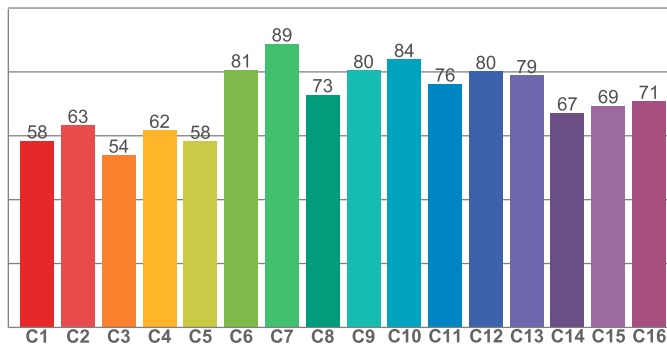
Beam angle 50°	Field angle 10°	Cutoff angle 2,5°	Intensity ratio in 120°cone	Intensity ratio in 90°cone
113.8°	163.7°	176.3°	77.4%	52.5%

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

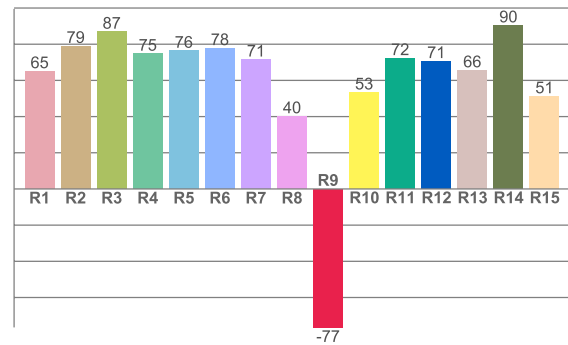
RGBW - RGB & 3000K WHITE



TM-30: 70.8



CRI: 71.4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
65.0	79.0	86.8	74.7	76.3	77.8	71.5	40.1	-76.5	53.3	72.2	70.6	65.5	90.4	51.2

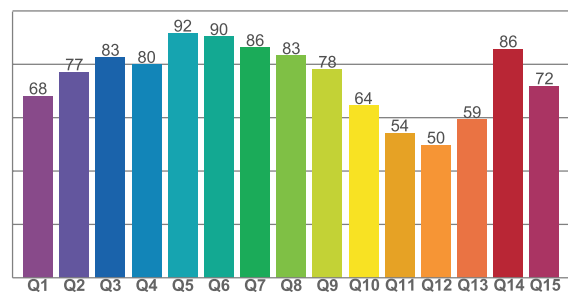
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
58.4	63.3	54.0	61.7	58.3	80.6	88.8	72.9	80.4	83.9	76.2	80.1	78.9	67.2	69.5	70.8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
68.2	77.1	82.6	79.9	91.6	90.4	86.2	83.2	78.1	64.5	54.3	49.7	59.3	85.8	71.9

CQS: 71.8



Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
9279 K	71.4	-76.5	70.8	98.9	71.8	0.277	0.311	0.180	0.302	0.0134

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

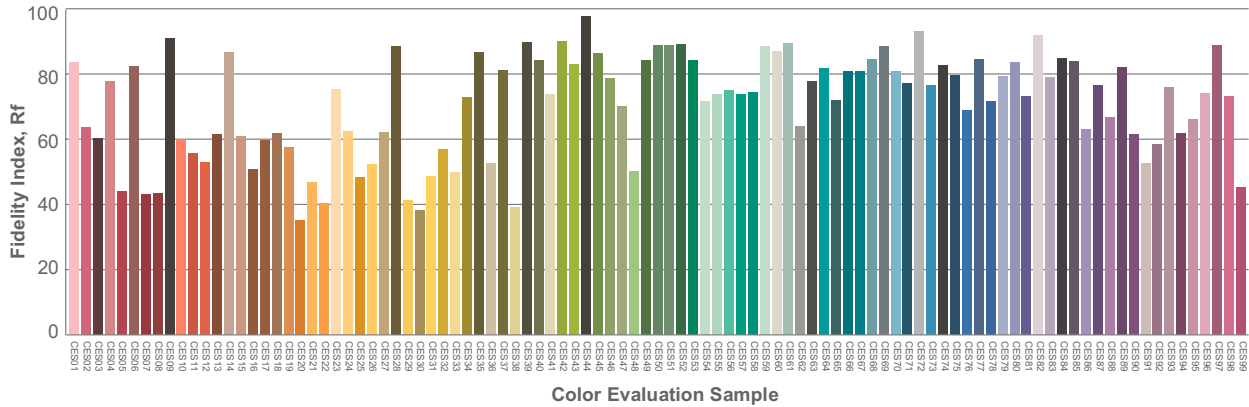
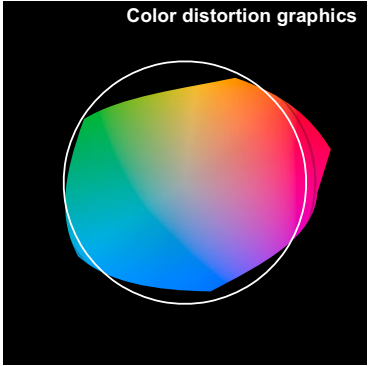
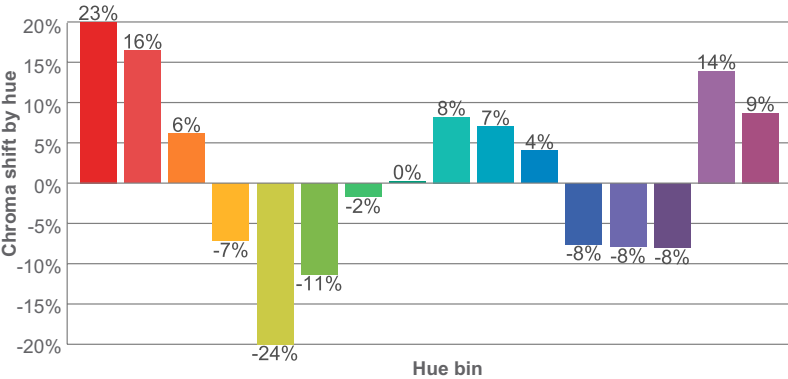
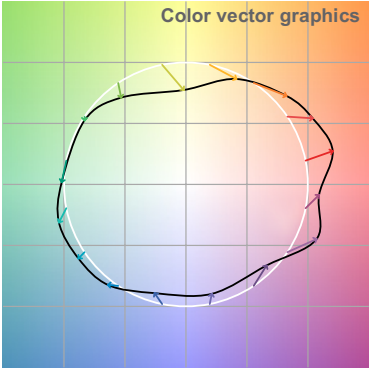
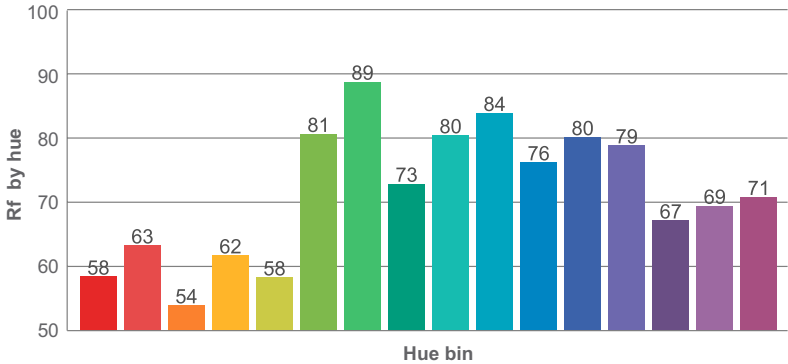
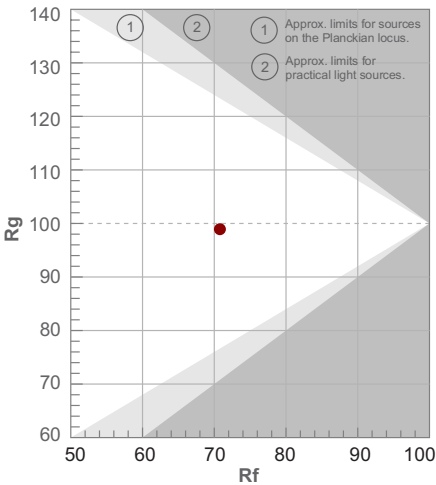
Rf 70.8

Fidelity index Rf

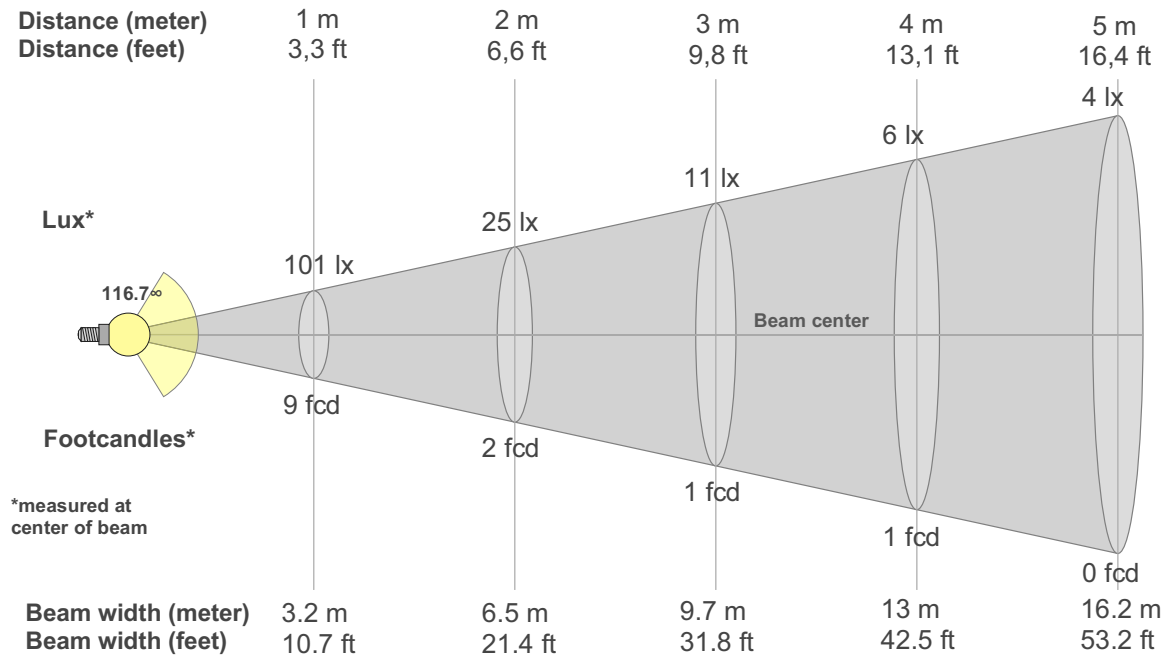
Rg 98.9

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	58	23%	3%
2	63	16%	-13%
3	54	6%	-28%
4	62	-7%	-24%
5	58	-24%	-13%
6	81	-11%	5%
7	89	-2%	3%
8	73	0%	18%
9	80	8%	10%
10	84	7%	2%
11	76	4%	-7%
12	80	-8%	-8%
13	79	-8%	3%
14	67	-8%	18%
15	69	14%	22%
16	71	9%	13%



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



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
101lx	25lx	11lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
9.4fcd	2.4fcd	1fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	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°
101	101	100	98	96	92	88	83	78	71	64	56	47	39	30	21	12	5	1	0
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	55%	47%	38%	29%	20%	12%	5%	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°
101	101	100	98	95	92	88	83	77	71	64	56	48	39	30	21	13	6	1	0
100%	99%	98%	96%	94%	91%	87%	82%	76%	70%	63%	55%	47%	39%	30%	21%	13%	6%	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°
101	101	100	98	96	92	88	83	78	71	64	56	47	39	30	21	12	5	1	0
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	55%	47%	38%	29%	20%	12%	5%	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°
101	101	100	98	95	92	88	83	77	71	64	56	48	39	30	21	13	6	1	0
100%	99%	98%	96%	94%	91%	87%	82%	76%	70%	63%	55%	47%	39%	30%	21%	13%	6%	1%	0%

Beam angle 50°	Field angle 10°	Cutoff angle 2,5°	Intensity ratio in 120°cone	Intensity ratio in 90°cone
116.7°	163.1°	175.6°	77.3%	52.0%