

PrimaPanel Tunable White Flexible LED Sheet



The PrimaPanel Tunable White LED Sheet is a fully modular, flexible, and cuttable solution for backlighting applications such as displays, translucent materials, showcases and more. Featuring a wide tuning range from warm 2700K to a cool 6500K and a high 92+ CRI. The LED sheet can create a hotspot-free look and offers easy installation with 3M™ adhesive tape or by using nails or screws at the designated areas on the sheet.

- High density of LED chips contributes to a smooth distribution of light
- Can be cut vertically, horizontally or at a 45° angle
- High CRI of 92.6 (2700K-5000K) and 96.8 (6500K) for excellent color rendering
- Includes two 4.5-inch jumper cables, two 6-inch hardwire cables, and six screws
- Acrylic standoffs are available for purchase to create space between the PrimaPanel and overlaying material to ensure even illumination and protection

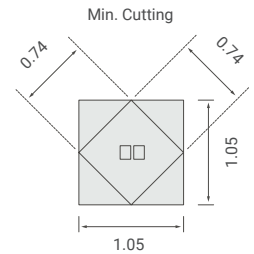
TECHNICAL INFORMATION

|                             |                                                                     |
|-----------------------------|---------------------------------------------------------------------|
| Color Temperature           | 2700K–6500K                                                         |
| Power Consumption per Sheet | 25.6 Watts                                                          |
| Current per Sheet           | 1.075 A                                                             |
| Input Voltage               | 24V DC                                                              |
| Diodes per Sheet            | 324                                                                 |
| Diode Spacing               | 0.94 inches                                                         |
| Sheet Height                | 0.07 inches                                                         |
| Beam Angle                  | 120°                                                                |
| Minimum Cutting Size        | 1.05 x 1.05 in. (Horizontal/Vertical)<br>0.74 x 0.74 in. (Diagonal) |

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Maximum Number of Daisy-chained Sheets | 3 sheets                                    |
| Dimmable                               | Yes                                         |
| Diode Type                             | 2835 SMD                                    |
| Mounting                               | Screws, nails and 3M™ VHB™ Adhesive Backing |
| Operating Temperature                  | -4° F to 140° F                             |
| Ambient Temperature                    | -4° F to 158° F                             |
| Environment                            | Indoor, Outdoor (IP64)                      |
| Sheet Dimensions (LxWxH)               | 18.9 x 9.45 x 0.07 in.                      |
| Certifications                         | UL Listed                                   |
| Warranty                               | 6 Year Limited                              |

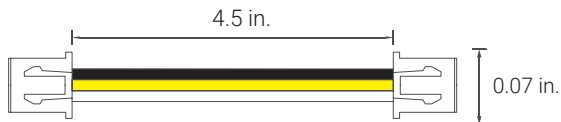
## PRODUCT INFORMATION

| Item Number   | Voltage | Color Temperature | CRI  | R9 Values | R13 Values | TM30 | CQS  | Lumens per Sheet |
|---------------|---------|-------------------|------|-----------|------------|------|------|------------------|
| AL-01-91-2401 | 24V DC  | 2700K             | 95.9 | 96        | 95         | 94.6 | 95.3 | 1163             |
|               |         | 6500K             | 96.8 | 97        | 96         | 92.3 | 95.3 | 1353             |
|               |         | 2700K-6500K       | 92.6 | 77        | 90         | 92.8 | 96.3 | 2485             |



## ACCESSORIES

Includes two 3-inch jumper cables, two 6-inch hardwire cables, and six screws. Additional cables and acrylic standoffs are available for purchase.

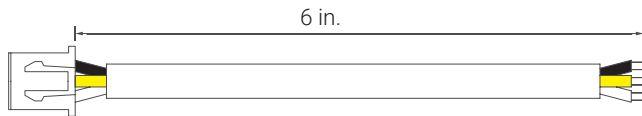


**Jumper Cable - 4.5 in.**

AL-01-91-9902

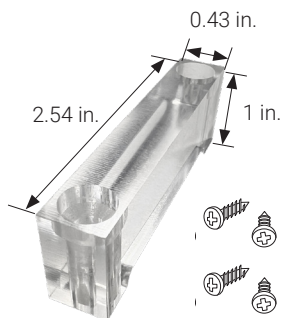


**6 Screws**



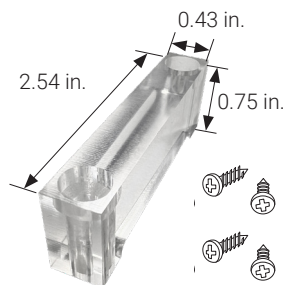
**Hardwire Power Cable - 6 in.**

AL-01-91-9908



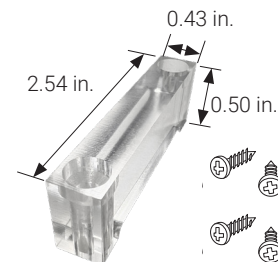
**Acrylic Standoff - Pack of 4 - 1 in.  
8 screws**

AL-01-91-99STND100-4



**Acrylic Standoff - Pack of 4 - 0.75 in.  
8 screws**

AL-01-91-99STND075-4

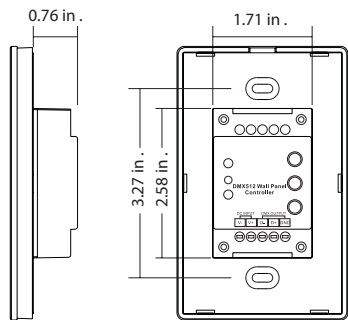


**Acrylic Standoff - Pack of 4 - 0.5 in.  
8 screws**

AL-01-91-99STND050-4

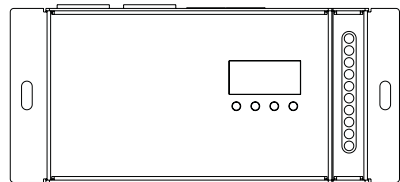
ACCESSORIES (SOLD SEPARATELY)

Recommended Accessories



DMX Touch Wall Controller

| Item Number   | Description                                       |
|---------------|---------------------------------------------------|
| AL-60-03-0011 | DMX Touch Wall Controller - RGBTW - 12V or 24V DC |



DMX Decoder with RDM

| Item Number       | Voltage    | Wattage      | Dimensions            |
|-------------------|------------|--------------|-----------------------|
| AL-60-03-0007-RDM | 12V-24V DC | 5X (96-192W) | 6.46 x 2.87 x 1.5 in. |



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

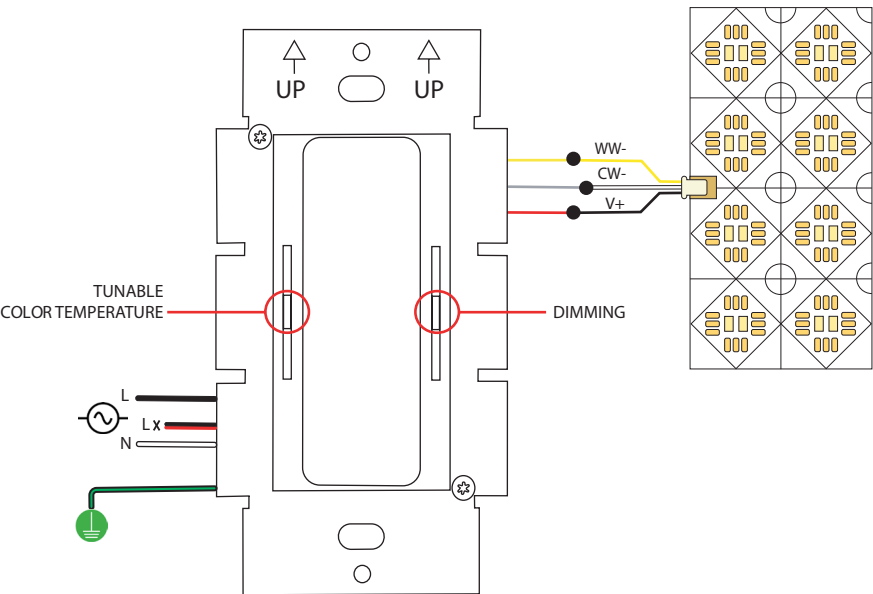
RECOMMENDED POWER SUPPLIES(SOLD SEPARATELY)



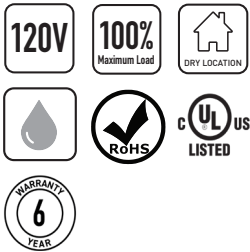
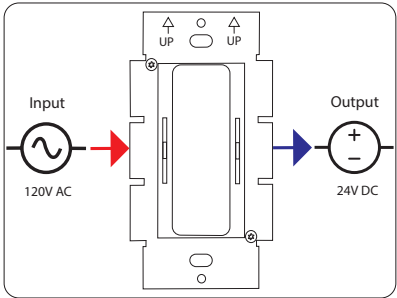
AdaptDrive VariTune Tunable White provides seamless control over both brightness and color temperature from a single interface.



PrimaPanel T unabled White



Be sure to correctly align polarity. Connector polarity of the panel may change depending on side being connected.



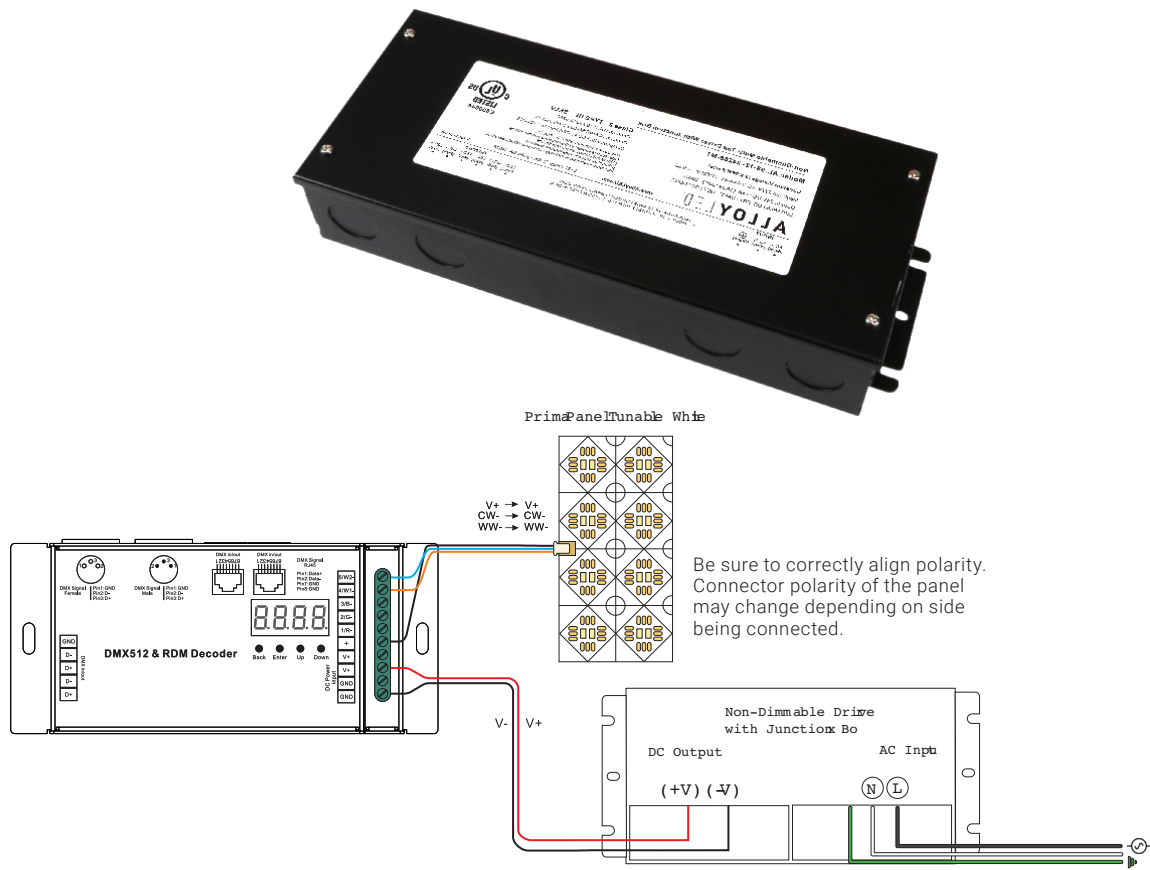
| Item Number    | Output | Input  | Wattage | Minimum Load | Dimensions (L x W x H) |
|----------------|--------|--------|---------|--------------|------------------------|
| AL-97-03-24096 | 24V    | 120Vac | 96W     | 10%          | 4.13 x 2.12 x 1.59in.  |
| AL-97-03-24160 | 24V    | 120Vac | 160 W   | 10%          | 4.13 x 2.12 x 1.59in.  |

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

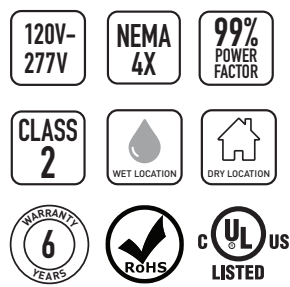
RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



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



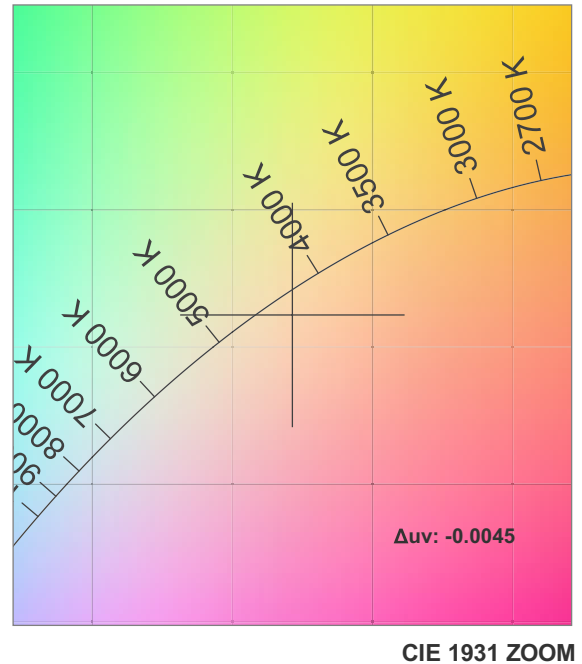
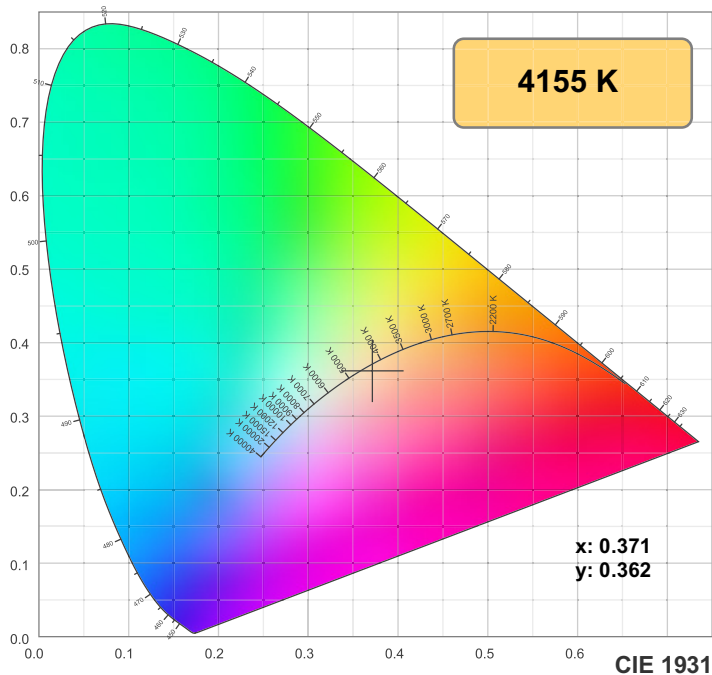
Wiring diagram is for reference only. Please refer to DMX Decoder with RDM specifications sheet for accurate directions.



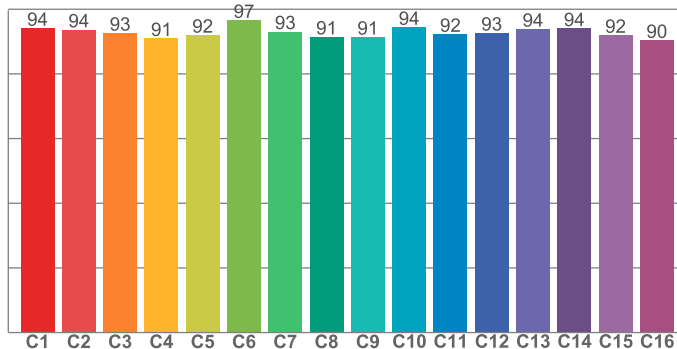
| Item Number       | Output Voltage | Wattage | Wet Location  | Minimum Load | Dimensions (Junction box) (L x W x H) | Class 2 |
|-------------------|----------------|---------|---------------|--------------|---------------------------------------|---------|
| AL-98-12-24030    | 24V DC         | 30W     | 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.

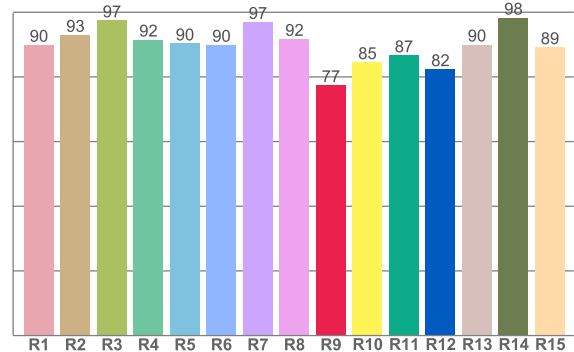
## COOL WHITE & WARM WHITE ON



### TM-30: 92.8



### CRI: 92.6 (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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89.9 | 93.0 | 97.4 | 91.5 | 90.3 | 89.9 | 97.0 | 91.7 | 77.4 | 84.5 | 86.6 | 82.3 | 90.0 | 98.3 | 89.1 |

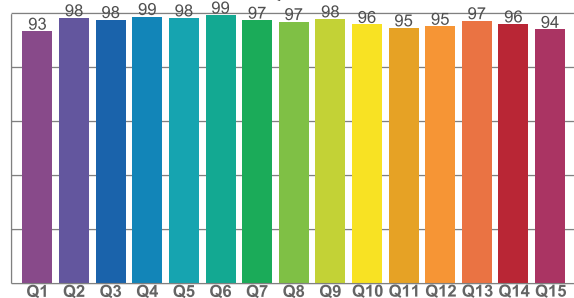
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 94.1 | 93.7 | 92.6 | 91.0 | 92.0 | 96.6 | 93.1 | 91.5 | 91.4 | 94.4 | 92.3 | 92.7 | 93.9 | 94.0 | 92.0 | 90.4 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93.4 | 98.4 | 97.7 | 98.8 | 98.3 | 99.4 | 97.5 | 96.9 | 98.0 | 95.9 | 94.6 | 95.2 | 97.3 | 96.1 | 94.0 |

### CQS: 96.3



### Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 4155 K            | 92.6                  | 77.4          | 92.8           | 102.3       | 96.3                | 0.371                     | 0.362                     | 0.225            | 0.329            | -0.0045                         |



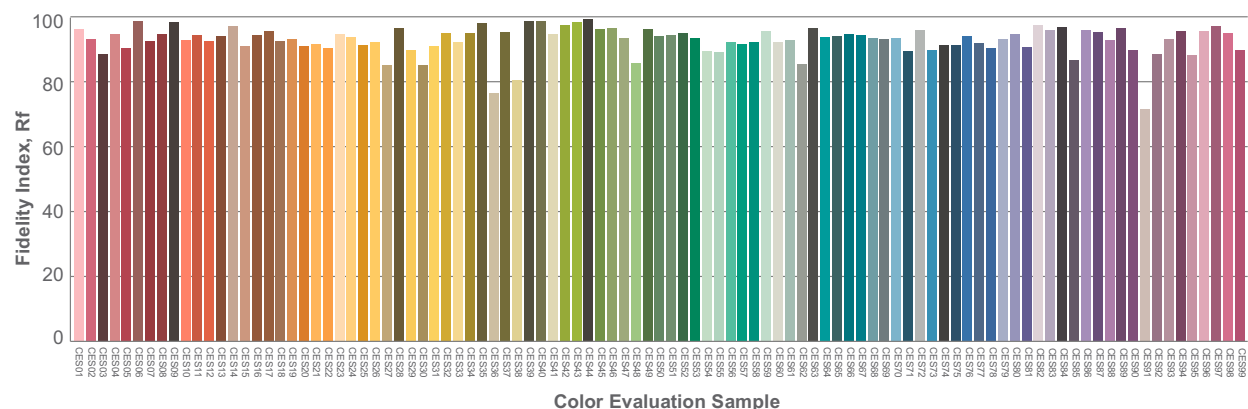
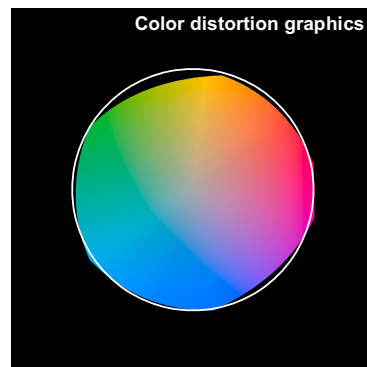
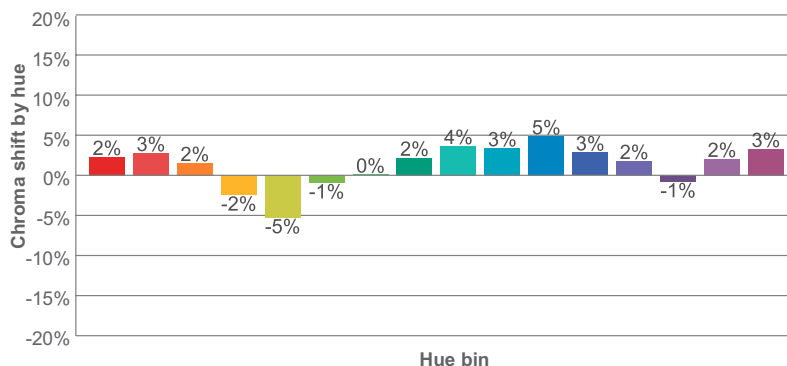
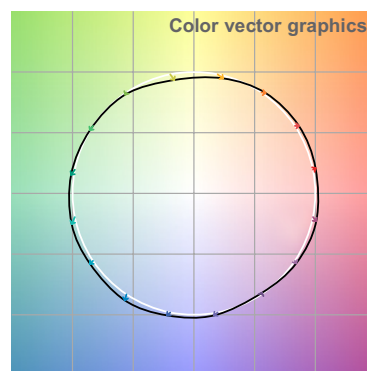
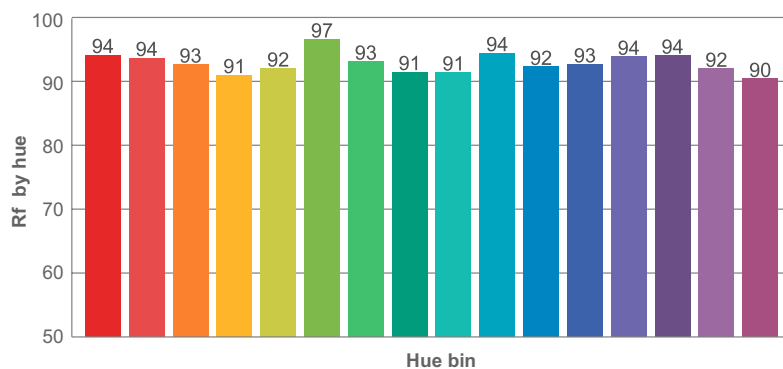
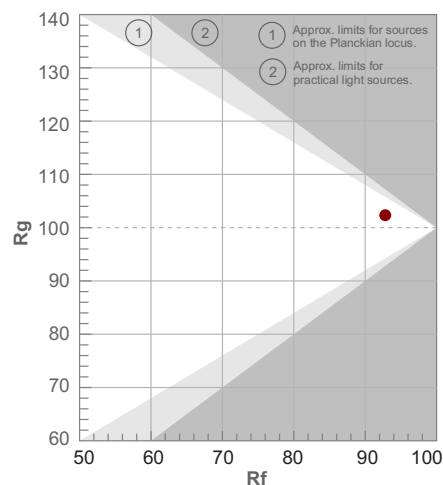
Note: specifications are representative of the diode type and not a particular tape light article.

# COOL WHITE & WARM WHITE ON

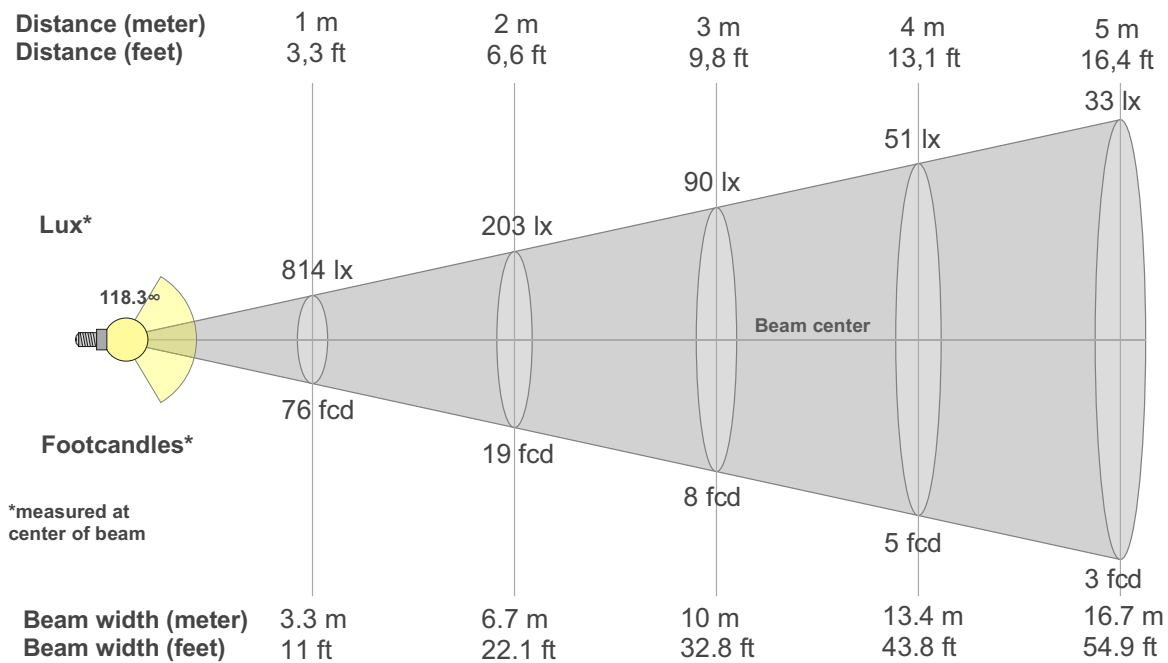
**Rf 92.8**  
Fidelity index Rf

**Rg 102.3**  
Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |     |
|---------|----------------|------------|-----|
|         |                | Chroma     | Hue |
| 1       | 94             | 2%         | 1%  |
| 2       | 94             | 3%         | -2% |
| 3       | 93             | 2%         | -3% |
| 4       | 91             | -2%        | -5% |
| 5       | 92             | -5%        | -2% |
| 6       | 97             | -1%        | 2%  |
| 7       | 93             | 0%         | 4%  |
| 8       | 91             | 2%         | 5%  |
| 9       | 91             | 4%         | 5%  |
| 10      | 94             | 3%         | 1%  |
| 11      | 92             | 5%         | 2%  |
| 12      | 93             | 3%         | -2% |
| 13      | 94             | 2%         | -3% |
| 14      | 94             | -1%        | 1%  |
| 15      | 92             | 2%         | -1% |
| 16      | 90             | 3%         | -3% |



## COOL WHITE & WARM WHITE ON



### 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 |
| 814lx   | 203lx   | 90lx   | 51lx   | 33lx   | 23lx   | 17lx   | 13lx   | 10lx   | 8lx    | 7lx    | 6lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    | 3lx    | 2lx    | 2lx    |
| 75.6fcd | 18.9fcd | 8.4fcd | 4.7fcd | 3fcd   | 2.1fcd | 1.5fcd | 1.2fcd | 0.9fcd | 0.8fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd |

### 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 814  | 812  | 803 | 787 | 766 | 738 | 705 | 666 | 621 | 571 | 515 | 454 | 388 | 319 | 245 | 170 | 99  | 40  | 5   | 2   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 82% | 76% | 70% | 63% | 56% | 48% | 39% | 30% | 21% | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 814  | 810  | 802 | 789 | 770 | 745 | 714 | 678 | 635 | 585 | 530 | 469 | 403 | 331 | 255 | 177 | 102 | 41  | 5   | 2   |
| 100% | 100% | 99% | 97% | 95% | 92% | 88% | 83% | 78% | 72% | 65% | 58% | 50% | 41% | 31% | 22% | 13% | 5%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 814  | 812  | 803 | 788 | 767 | 739 | 706 | 667 | 622 | 571 | 515 | 454 | 388 | 318 | 244 | 169 | 98  | 39  | 6   | 2   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 82% | 76% | 70% | 63% | 56% | 48% | 39% | 30% | 21% | 12% | 5%  | 1%  | 0%  |

### Intensities in 270°c-plane

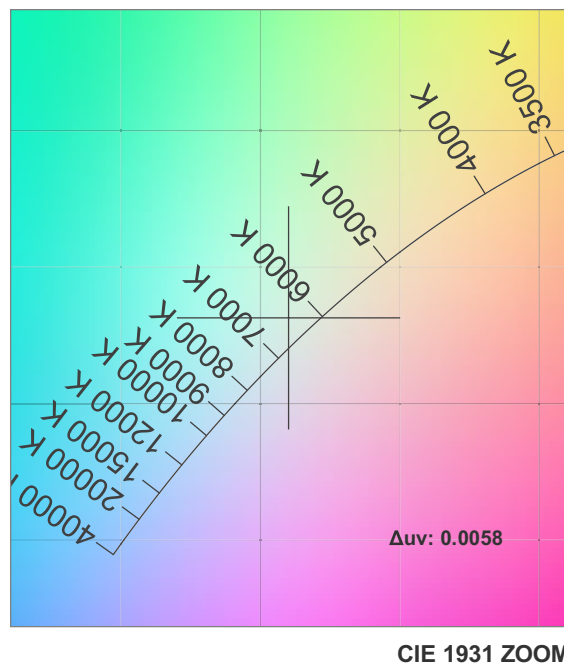
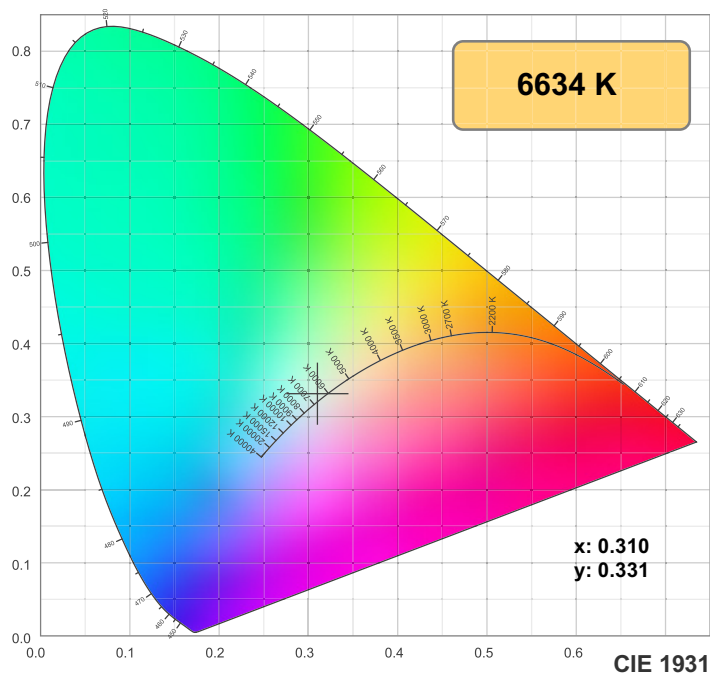
| 0°   | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 814  | 809 | 801 | 786 | 767 | 741 | 710 | 673 | 630 | 582 | 528 | 468 | 403 | 333 | 259 | 183 | 109 | 46  | 7   | 2   |
| 100% | 99% | 98% | 97% | 94% | 91% | 87% | 83% | 77% | 72% | 65% | 58% | 50% | 41% | 32% | 22% | 13% | 6%  | 1%  | 0%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5° | Intensity ratio in 120°cone | Intensity ratio in 90°cone |
|----------------|-----------------|-------------------|-----------------------------|----------------------------|
| 118.3°         | 163.1°          | 174.7°            | 77.2%                       | 51.7%                      |

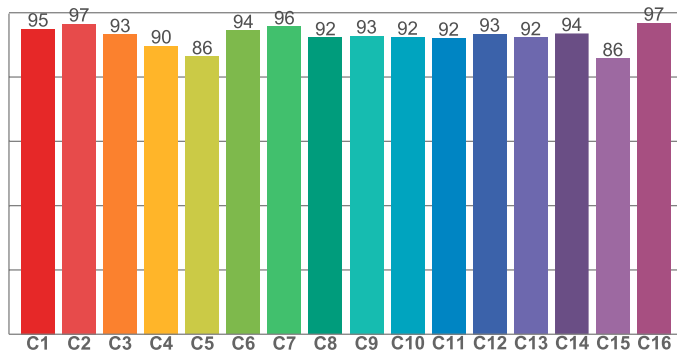


Note: specifications are representative of the diode type and not a particular tape light article.

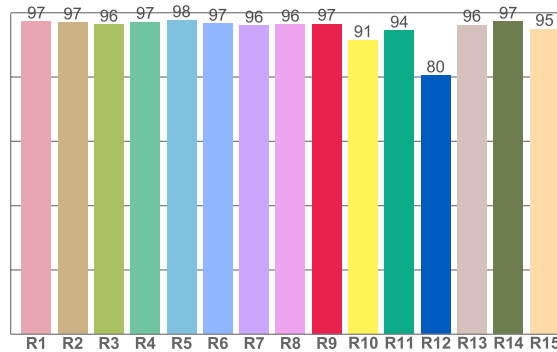
## 6500K - COOL WHITE ON



### TM-30: 92.3



### 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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 97.2 | 97.0 | 96.3 | 97.1 | 97.7 | 96.6 | 96.0 | 96.3 | 96.6 | 91.4 | 94.4 | 80.5 | 96.3 | 97.2 | 95.0 |

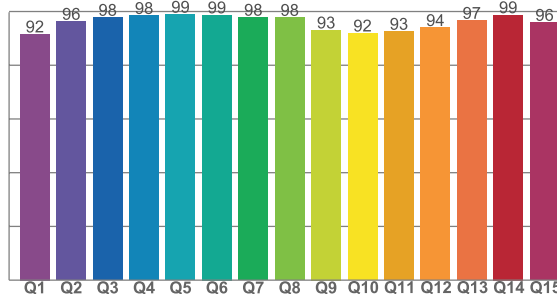
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95.0 | 96.5 | 93.2 | 89.7 | 86.3 | 94.5 | 95.7 | 92.2 | 92.8 | 92.4 | 92.1 | 93.4 | 92.2 | 93.5 | 85.8 | 96.8 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91.6 | 96.3 | 97.8 | 98.5 | 98.9 | 98.7 | 97.8 | 97.8 | 93.1 | 91.9 | 92.6 | 94.0 | 96.7 | 98.8 | 95.9 |

### CQS: 95.3



### Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color division from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|--------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | Δuv                            |
| 6634 K            | 96.8                  | 96.6          | 92.3           | 99.2        | 95.3                | 0.310                     | 0.331                     | 0.195            | 0.313            | 0.0058                         |

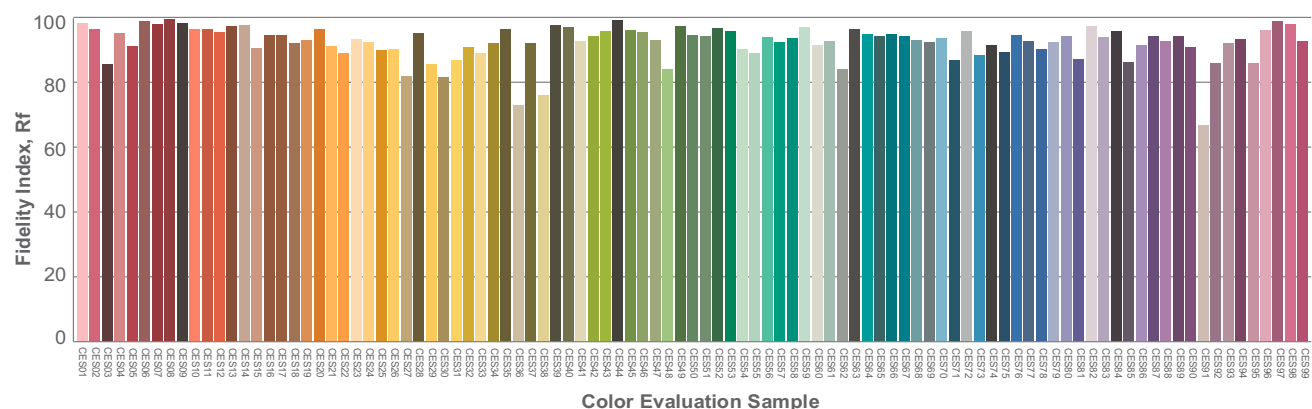
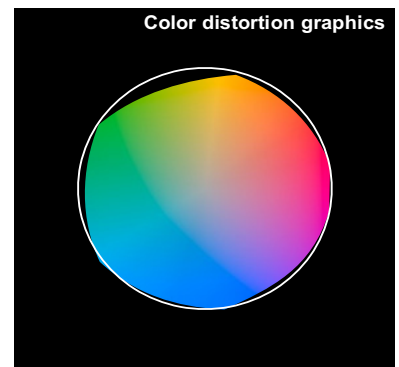
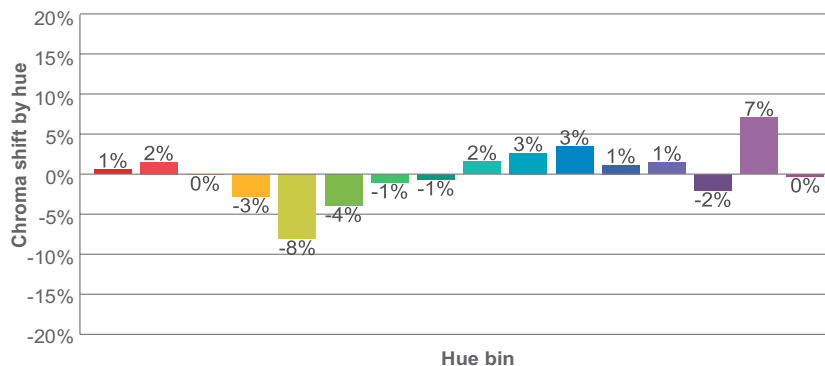
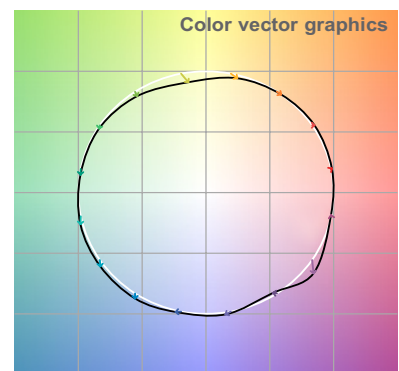
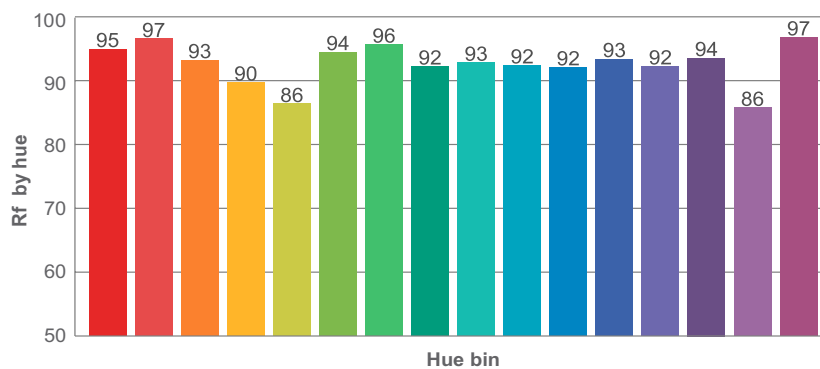
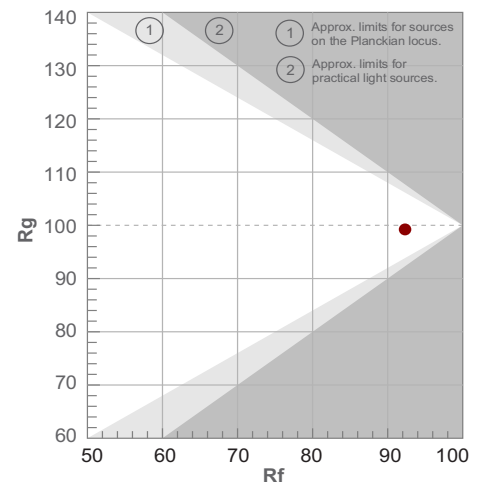
Note: specifications are representative of the diode type and not a particular tape light article.

# 6500K - COOL WHITE ON

**Rf 92.3**  
Fidelity index Rf

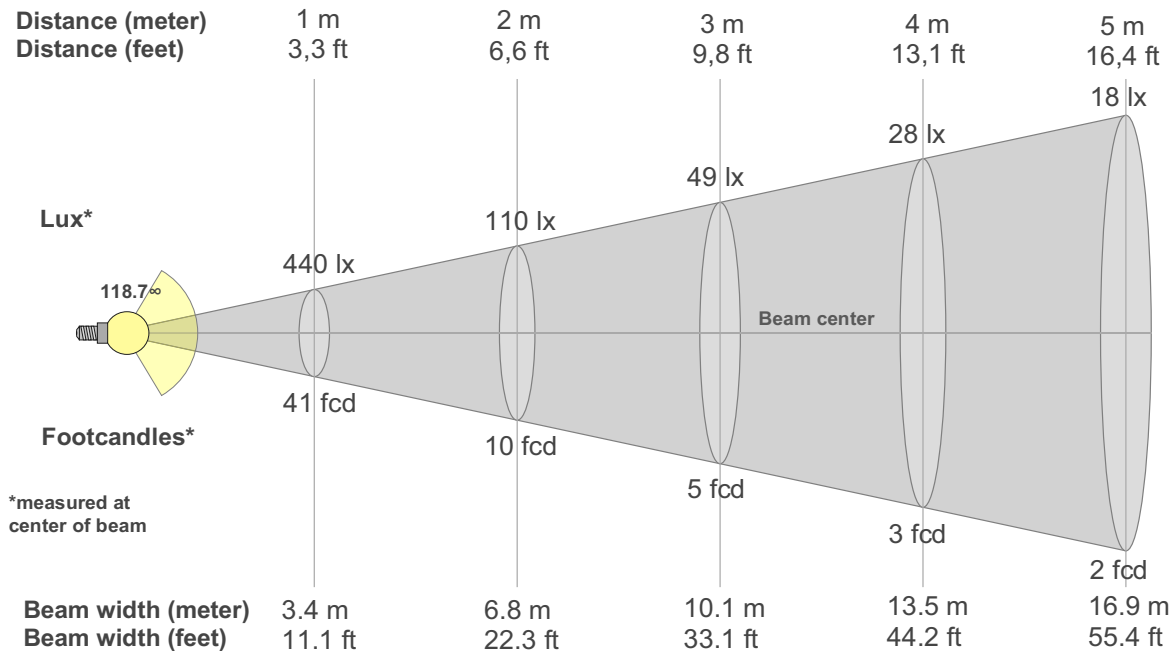
**Rg 99.2**  
Gamut index Rg

| Hue Bin | R <sub>f</sub> | Shifts (%) |     |
|---------|----------------|------------|-----|
|         |                | Chroma     | Hue |
| 1       | 95             | 1%         | 0%  |
| 2       | 97             | 2%         | -1% |
| 3       | 93             | 0%         | -4% |
| 4       | 90             | -3%        | -6% |
| 5       | 86             | -8%        | -4% |
| 6       | 94             | -4%        | 1%  |
| 7       | 96             | -1%        | 3%  |
| 8       | 92             | -1%        | 5%  |
| 9       | 93             | 2%         | 6%  |
| 10      | 92             | 3%         | 5%  |
| 11      | 92             | 3%         | 2%  |
| 12      | 93             | 1%         | -4% |
| 13      | 92             | 1%         | -5% |
| 14      | 94             | -2%        | -2% |
| 15      | 86             | 7%         | -9% |
| 16      | 97             | 0%         | 1%  |



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

## 6500K - COOL WHITE ON



### 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 |
| 440lx   | 110lx   | 49lx   | 28lx   | 18lx   | 12lx   | 9lx    | 7lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    |
| 40.9fcd | 10.2fcd | 4.5fcd | 2.6fcd | 1.6fcd | 1.1fcd | 0.8fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd | 0.1fcd | 0.1fcd | 0.1fcd |

### Intensities in 0°c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 440  | 440  | 435 | 427 | 416 | 401 | 383 | 363 | 338 | 311 | 281 | 248 | 212 | 174 | 133 | 92  | 54  | 21  | 3   | 1   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 82% | 77% | 71% | 64% | 56% | 48% | 39% | 30% | 21% | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 440  | 438  | 434 | 427 | 418 | 404 | 388 | 369 | 346 | 319 | 289 | 256 | 220 | 180 | 139 | 96  | 56  | 23  | 3   | 1   |
| 100% | 100% | 99% | 97% | 95% | 92% | 88% | 84% | 78% | 72% | 66% | 58% | 50% | 41% | 32% | 22% | 13% | 5%  | 1%  | 0%  |

### Intensities in 180°c-plane

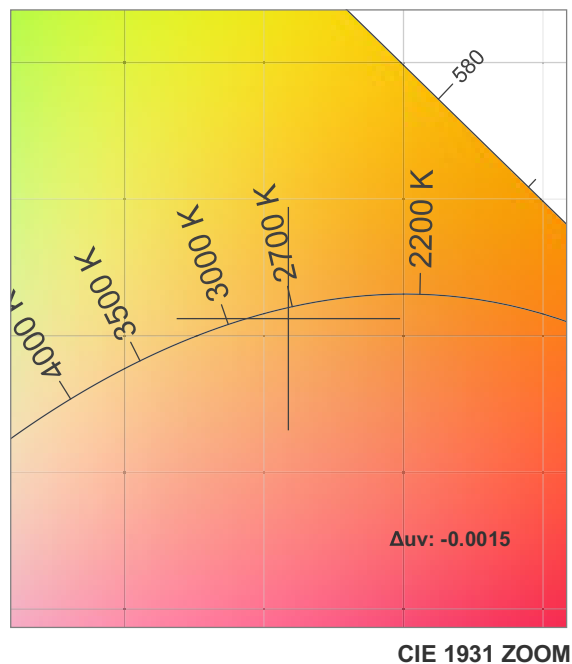
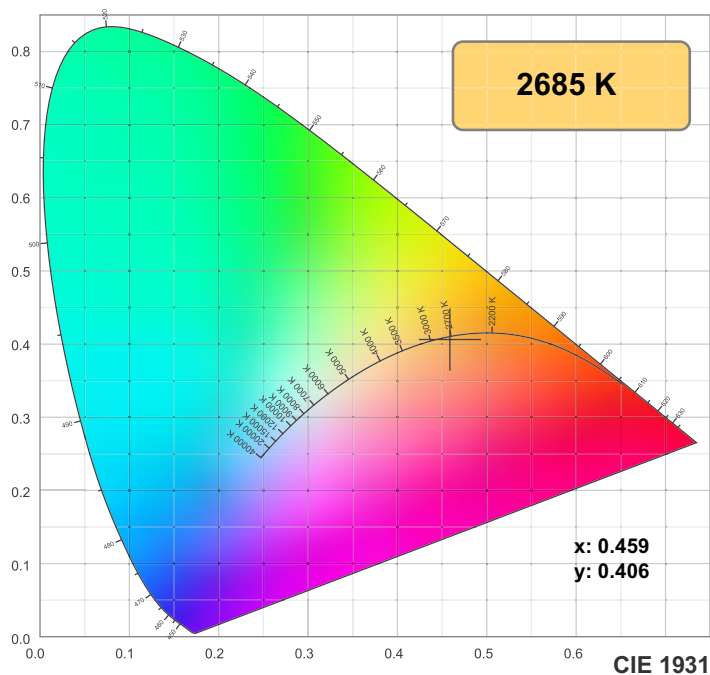
| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 440  | 440  | 435 | 427 | 416 | 401 | 384 | 363 | 338 | 311 | 281 | 248 | 212 | 174 | 133 | 92  | 53  | 21  | 4   | 1   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 82% | 77% | 71% | 64% | 56% | 48% | 39% | 30% | 21% | 12% | 5%  | 1%  | 0%  |

### Intensities in 270°c-plane

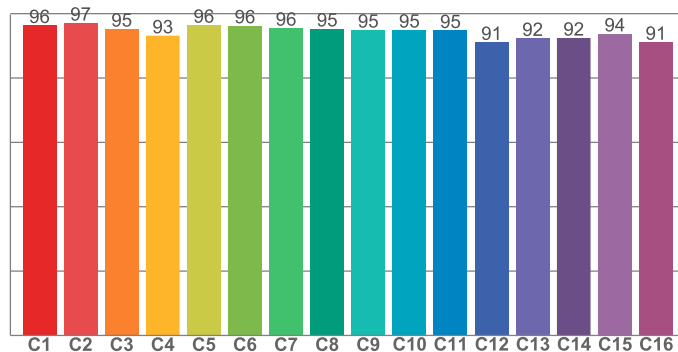
| 0°   | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 440  | 438 | 433 | 426 | 415 | 402 | 385 | 366 | 343 | 317 | 288 | 255 | 220 | 181 | 141 | 99  | 59  | 25  | 4   | 1   |
| 100% | 99% | 98% | 97% | 94% | 91% | 87% | 83% | 78% | 72% | 65% | 58% | 50% | 41% | 32% | 22% | 13% | 6%  | 1%  | 0%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5° | Intensity ratio in 120°cone | Intensity ratio in 90°cone |
|----------------|-----------------|-------------------|-----------------------------|----------------------------|
| 118.7°         | 163.1°          | 174.8°            | 77.1%                       | 51.6%                      |

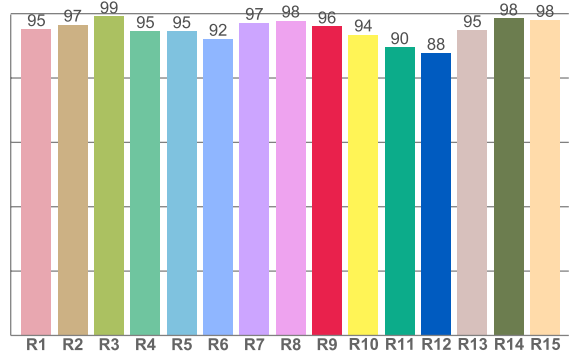
## 2700K - WARM WHITE ON



### TM-30: 94.6



### CRI: 95.9 (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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95.2 | 96.6 | 99.1 | 94.6 | 94.5 | 92.2 | 97.1 | 97.9 | 96.0 | 93.5 | 89.6 | 87.8 | 94.9 | 98.5 | 98.0 |

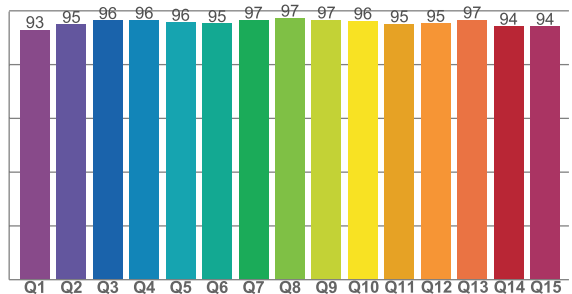
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96.3 | 97.1 | 95.2 | 93.2 | 96.4 | 96.3 | 95.5 | 95.3 | 94.9 | 94.9 | 94.8 | 91.1 | 92.3 | 92.4 | 93.7 | 91.1 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 93.0 | 94.9 | 96.4 | 96.5 | 95.7 | 95.2 | 96.5 | 97.3 | 96.6 | 96.2 | 95.2 | 95.3 | 96.6 | 94.2 | 94.2 |

### CQS: 95.3



### Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | $\Delta uv$                     |
| 2685 K            | 95.9                  | 96.0          | 94.6           | 101.4       | 95.3                | 0.459                     | 0.406                     | 0.264            | 0.350            | -0.0015                         |

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

2700K - WARM WHITE ON

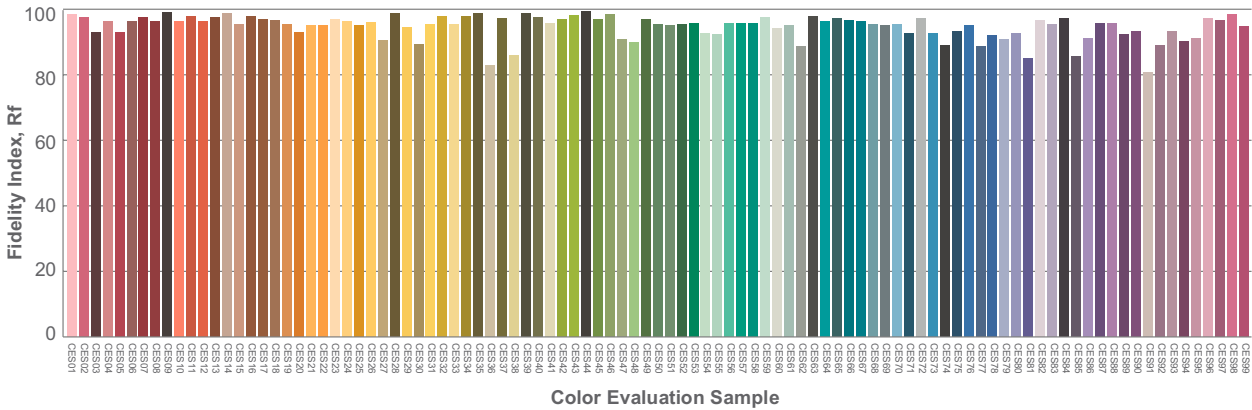
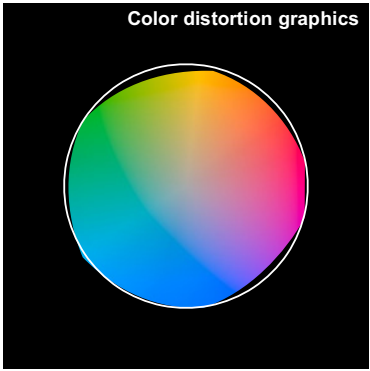
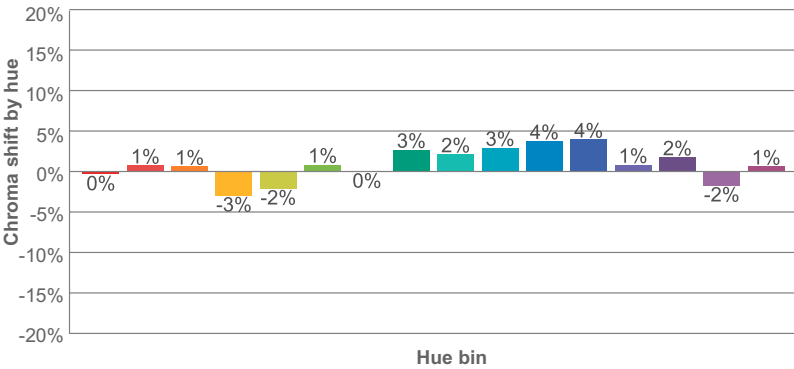
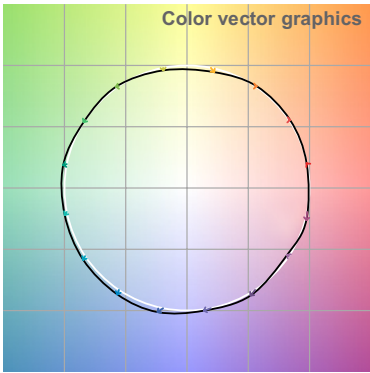
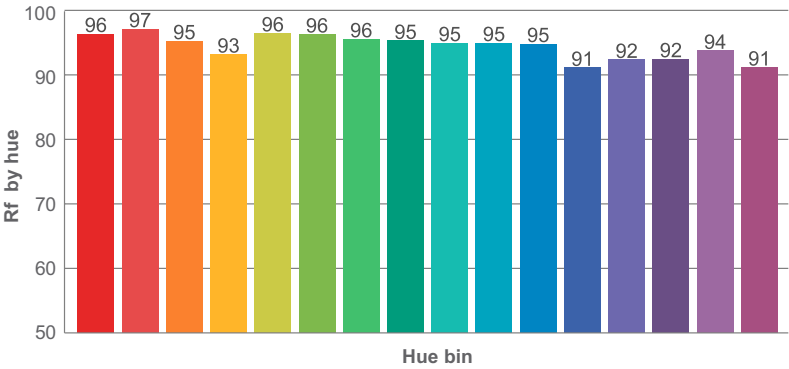
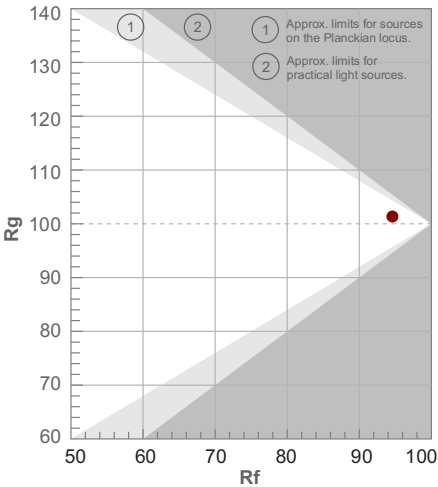
**Rf 94.6**

Fidelity index Rf

**Rg 101.4**

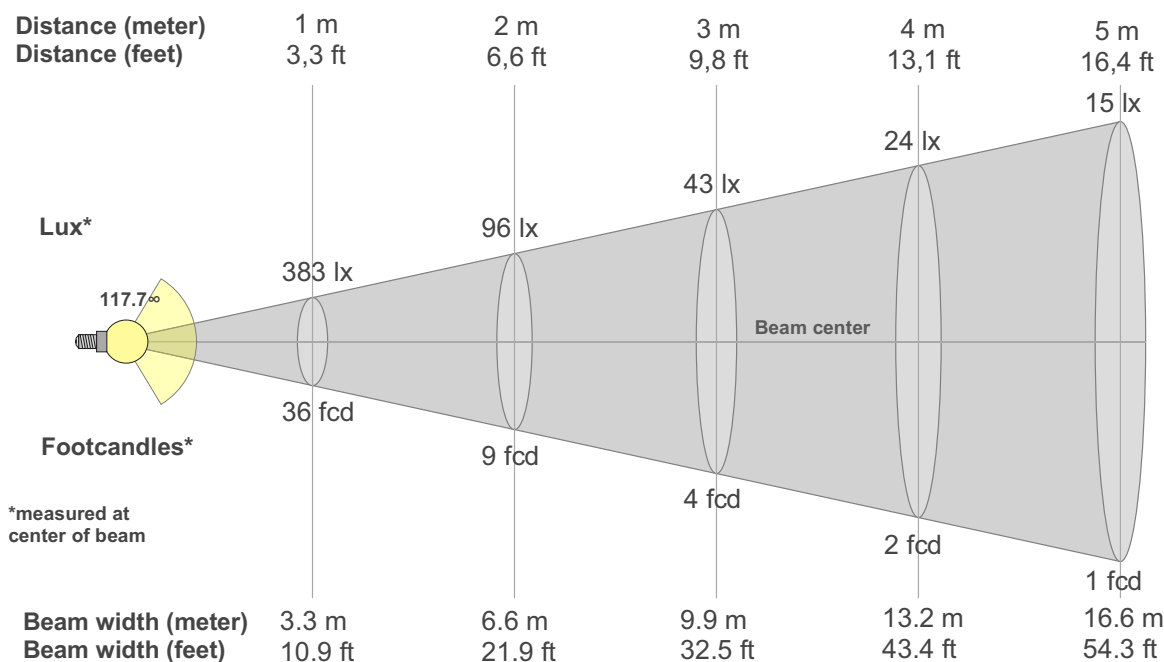
Gamut index Rg

| Hue Bin | Rf | Shifts (%) |     |
|---------|----|------------|-----|
|         |    | Chroma     | Hue |
| 1       | 96 | 0%         | 1%  |
| 2       | 97 | 1%         | -1% |
| 3       | 95 | 1%         | -1% |
| 4       | 93 | -3%        | -3% |
| 5       | 96 | -2%        | 0%  |
| 6       | 96 | 1%         | 2%  |
| 7       | 96 | 0%         | 2%  |
| 8       | 95 | 3%         | 1%  |
| 9       | 95 | 2%         | 2%  |
| 10      | 95 | 3%         | 2%  |
| 11      | 95 | 4%         | 1%  |
| 12      | 91 | 4%         | -4% |
| 13      | 92 | 1%         | -6% |
| 14      | 92 | 2%         | -6% |
| 15      | 94 | -2%        | 0%  |
| 16      | 91 | 1%         | -7% |



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

## 2700K - WARM WHITE ON



### 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 |
| 383lx   | 96lx   | 43lx  | 24lx   | 15lx   | 11lx   | 8lx    | 6lx    | 5lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    |
| 35.6fcd | 8.9fcd | 4fcd  | 2.2fcd | 1.4fcd | 1fcd   | 0.7fcd | 0.6fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd | 0.1fcd | 0.1fcd | 0.1fcd | 0.1fcd |

### Intensities in 0°c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 383  | 382  | 378 | 370 | 360 | 346 | 330 | 312 | 290 | 266 | 240 | 212 | 181 | 149 | 115 | 80  | 47  | 19  | 3   | 1   |
| 100% | 100% | 99% | 97% | 94% | 90% | 86% | 81% | 76% | 70% | 63% | 55% | 47% | 39% | 30% | 21% | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 383  | 381  | 377 | 371 | 361 | 349 | 335 | 317 | 297 | 273 | 248 | 219 | 188 | 155 | 120 | 84  | 49  | 19  | 3   | 1   |
| 100% | 100% | 99% | 97% | 94% | 91% | 87% | 83% | 78% | 71% | 65% | 57% | 49% | 41% | 31% | 22% | 13% | 5%  | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 383  | 382  | 378 | 371 | 360 | 347 | 331 | 313 | 291 | 267 | 241 | 212 | 181 | 148 | 114 | 79  | 46  | 18  | 2   | 1   |
| 100% | 100% | 99% | 97% | 94% | 91% | 86% | 82% | 76% | 70% | 63% | 55% | 47% | 39% | 30% | 21% | 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 383  | 381 | 376 | 370 | 360 | 348 | 333 | 315 | 295 | 272 | 247 | 219 | 188 | 156 | 121 | 86  | 51  | 21  | 3   | 1   |
| 100% | 99% | 98% | 97% | 94% | 91% | 87% | 82% | 77% | 71% | 64% | 57% | 49% | 41% | 32% | 22% | 13% | 5%  | 1%  | 0%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5° | Intensity ratio in 120°cone | Intensity ratio in 90°cone |
|----------------|-----------------|-------------------|-----------------------------|----------------------------|
| 117.7°         | 163°            | 174.6°            | 77.2%                       | 51.7%                      |