

PHOTOMETRICS REPORT

onAir

PANEL 1 IP



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Testing Process

Total Illuminance Measurements

Illuminance is measured using the Viso Systems LabSpion[®], which takes multiple measurements across a light beam to calculate the total delivered lumens, beam, and field of a product. These values can be described as the empirical output of the product as it projects from the lens or lenses. All photometric data contained in this report are obtained from the actual illuminance of the tested Chauvet light source and are never theoretical values derived from calculations.

Testing Lab Equipment and Process

The Chauvet headquarters in Sunrise, Florida has a climate- and light-controlled photometric testing laboratory where Chauvet products are analyzed and photometric data are measured using the Viso Systems LabSpion[®] light measurement solution.

This system includes a spectrometer sensor, which measures the precise light and color output of the fixture, and a two-axis goniometer, which rotates the product to allow for multi-angle and multi-directional measurement. The Viso Light Inspector software then collects and summarizes the data. From the data gathered, the software can also measure the beam and field angles, accurate color temperature, color quality, and illuminance at multiple distances. The custom-built, Chauvet-specific template presents this information in the photometric and chromaticity reports that follow.

IES (Illuminating Engineering Society) files, an industry-standard file format, are also generated from each test for easy distribution of photometric data.

Several light meters are also used for specific products or to recheck for precision. Accuracy is verified using one or more of the devices listed below:

- Sekonic SpectroMaster C-700-U
- EXTECH HD450 Datalogging Heavy Duty Light Meter
- Asensetek Essence Lighting Passport

To ensure accurate measurements in every photometric or chromaticity test, Chauvet routinely calibrates the LabSpion[®] system every six months as recommended by Viso Systems.

Photometric Report

onAir Panel 1 IP: Medium Filter Optics - Full Power

Report Summary

Output

Total Lumens: 9224 lm
Peak Intensity: 3678 cd
Illuminance @ 5m: 146 lux
Fixture Efficacy: 46 lm/W

Optical

Horizontal Beam Angle (50%): 101.1°
Vertical Beam Angle (50%): 101.3°
Horizontal Field Angle (10%): 155.4°
Vertical Field Angle (10%): 155°
Horizontal Cutoff Angle (3%): 174.1°
Vertical Cutoff Angle (3%): 169.4°



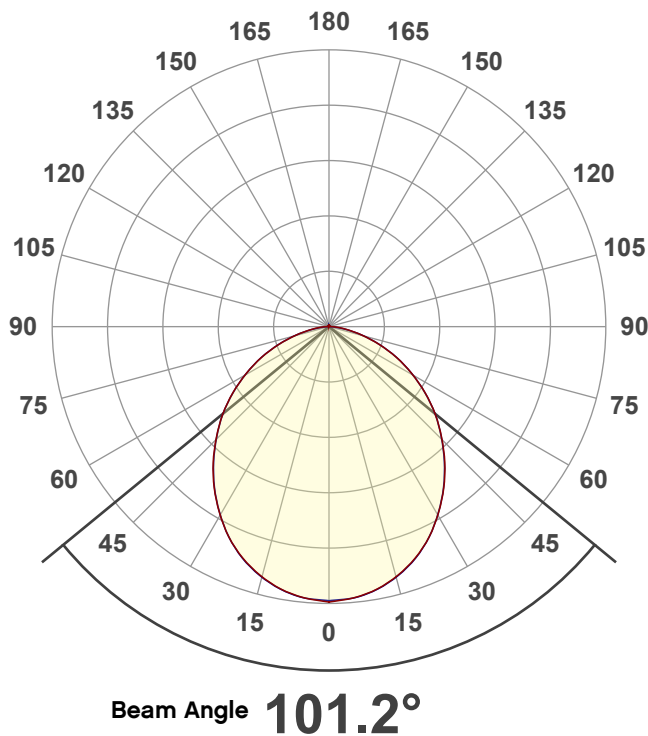
Conditions

AC Supply: 120 V, 60 Hz
Power: 202.48 W
Current: 1.69 A
Power Factor: 0.99

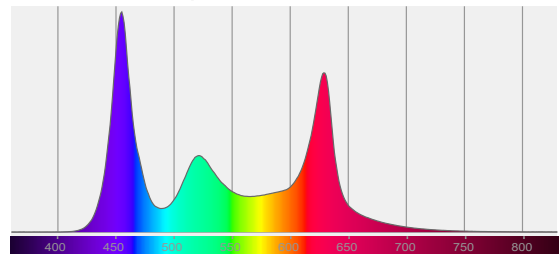
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/30/2021 to LM-63-2002 Standards.

Overall Measurement

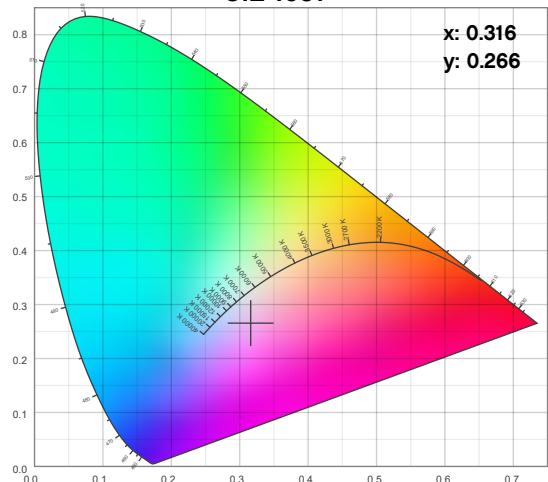
Angular Beam Distribution



Spectral Distribution



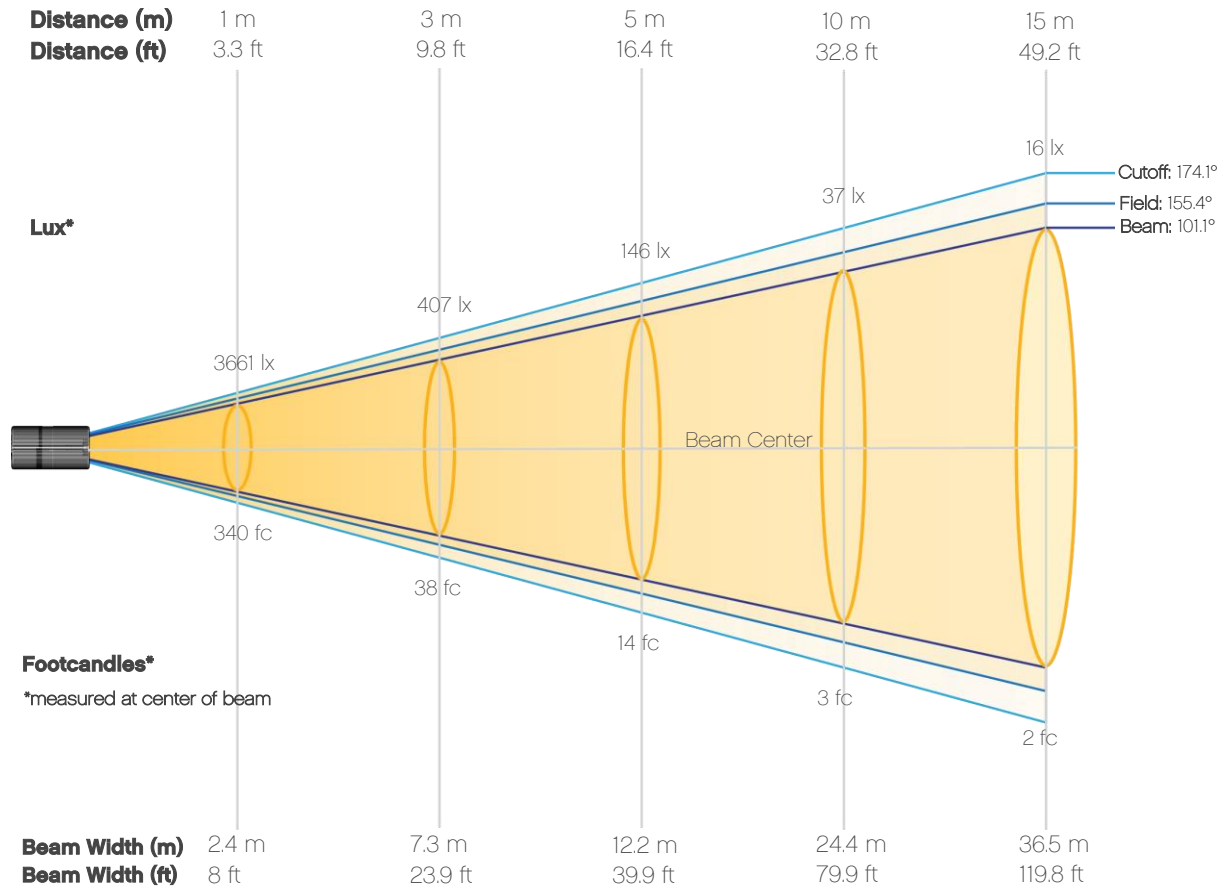
CIE 1931



Photometric Report

onAir Panel 1 IP: Medium Filter Optics - Full Power

Beam Details



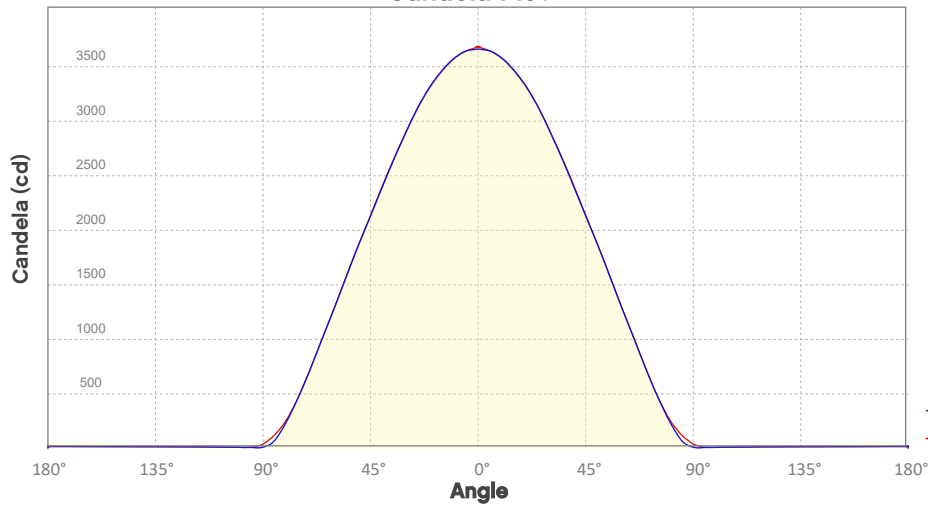
Beam illuminances from 1-20m (3.3-65.6ft)

| | | | | | | | | | | |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Distance | 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m |
| Lux | 3661 | 915 | 407 | 229 | 146 | 102 | 75 | 57 | 45 | 37 |
| Distance | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
| Lux | 30 | 25 | 22 | 19 | 16 | 14 | 13 | 11 | 10 | 9 |
| Distance | 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft | 26.2ft | 29.5ft | 32.8ft |
| FC | 340 | 85 | 38 | 21 | 14 | 9 | 7 | 5 | 4 | 3 |
| Distance | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| FC | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |

Photometric Report

onAir Panel 1 IP: Medium Filter Optics - Full Power

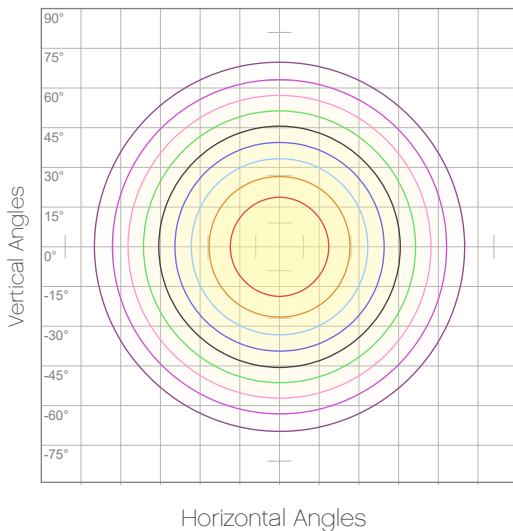
Candela Plot



Beam Angle (50%): 101.2°
Field Angle (10%): 155.1°
Cutoff Angle (3%): 170.7°

— Vertical Distribution
 — Horizontal Distribution

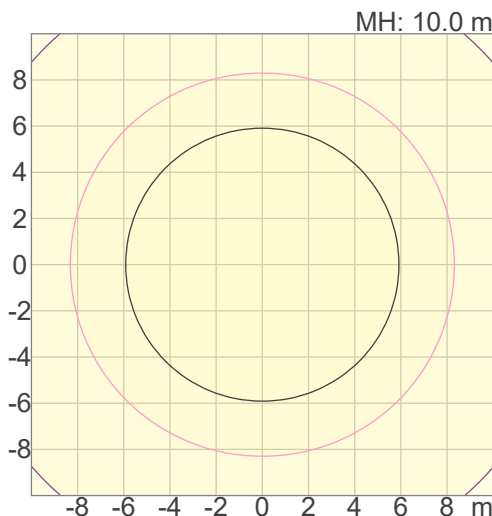
Polar Diagrams



iso-candela Diagram

| | |
|-----|---------|
| 10% | 366 cd |
| 20% | 732 cd |
| 30% | 1098 cd |
| 40% | 1464 cd |
| 50% | 1830 cd |
| 60% | 2196 cd |
| 70% | 2563 cd |
| 80% | 2929 cd |
| 90% | 3295 cd |

Conditions:
 Number of c-planes: 8
 Candela at center: 3661 cd



iso-illuminance Diagram

| | |
|-----|---------|
| 3% | 1.10 lx |
| 5% | 1.83 lx |
| 10% | 3.66 lx |
| 30% | 11.0 lx |
| 50% | 18.3 lx |

Conditions:
 Number of c-planes: 8
 Lux at center: 366 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

Mounting height: 10 meters / 33 feet

Chromaticity Report

onAir Panel 1 IP: Medium Filter - 3200K

Report Summary

Measurements

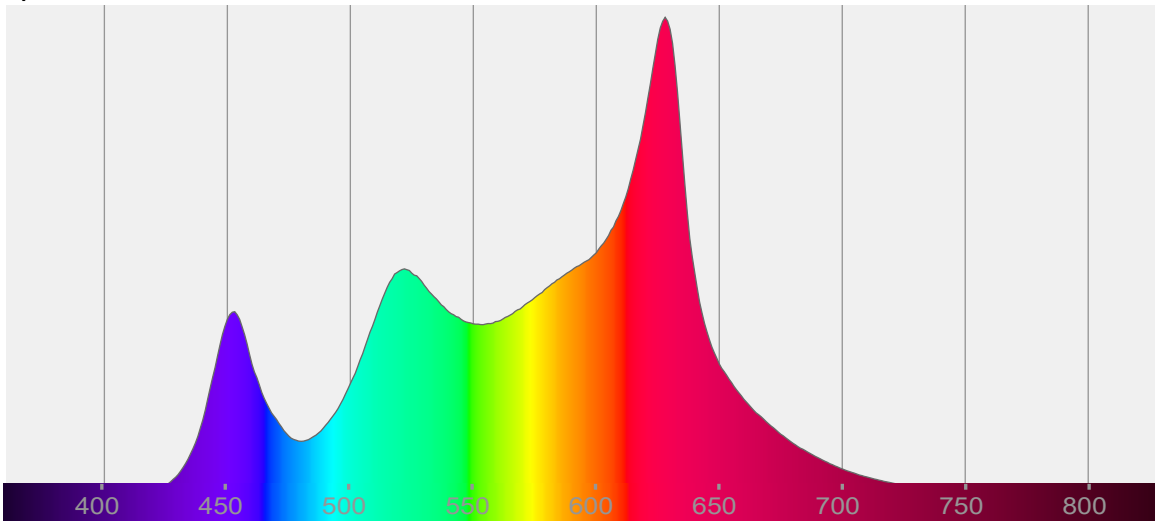
Total Lumens: 12368 lm
Peak Intensity: 4936 cd
Fixture Efficacy: 123 lm/W

Correlated Color Temperature: 3190K
 Δuv : -0.0005

CRI: 94.1 CRI R9 Value: 87.7
CQS: 93.5
TLCI: 84
TM-30-18 Rf: 92.5
TM-30-18 Rg: 104.0
1st Dominant Wavelength: 628 nm
2nd Dominant Wavelength: 522 nm



Spectral Distribution



Tested Color

3190 K
CIE 1931 Coordinates:
X: 0.424 Y: 0.398

Color Temperature

3190 K

Light Quality

CRI: 94.1

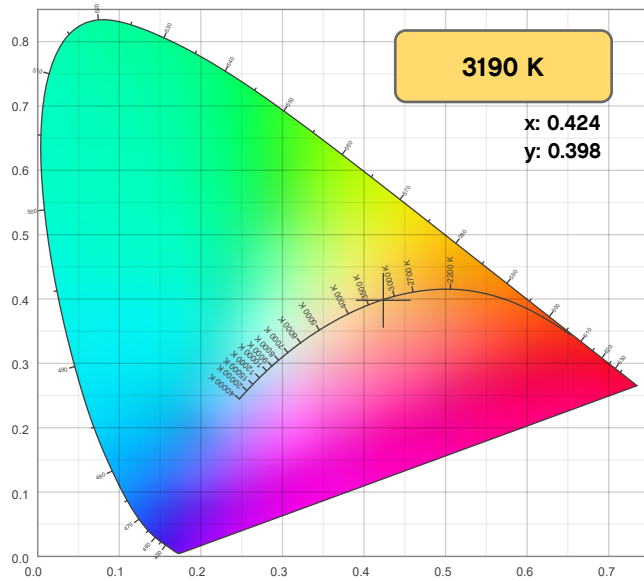
Notes:

Chromaticity Report

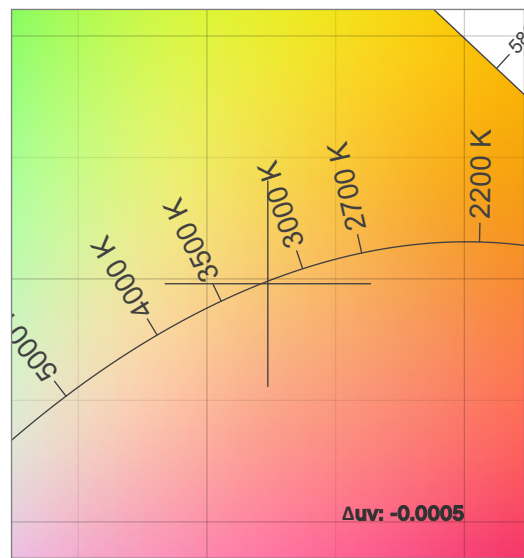
onAir Panel 1 IP: Medium Filter - 3200K

Chromaticity

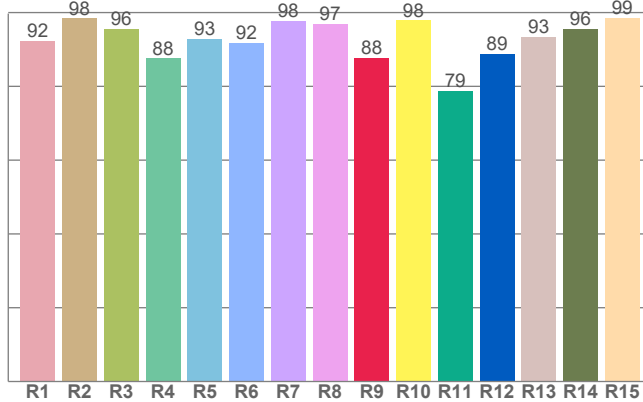
CIE 1931



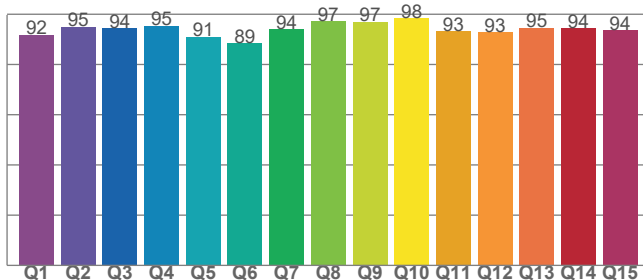
CIE 1931 - Zoom



CRI: 94.1 (R1-R8)



CQS: 93.5



Color Parameters

| Color Temperature | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 |
|-------------------|---------------------------|---------------------------|
| CCT | x | y |
| 3190 K | 0.424 | 0.398 |

| Color Deviation from Black Body Curve | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 |
|---------------------------------------|---------------------------|---------------------------|
| Δuv | y | u |
| -0.0005 | 0.398 | 0.245 |

| Color Rendering Index | Red Component | Color Quality Scale |
|-----------------------|---------------|---------------------|
| CRI | CRI - R9 | CQS |
| 94.1 | 87.7 | 93.5 |

| Television Lighting Consistency Index | Color Fidelity | Color Gamut |
|---------------------------------------|----------------|-------------|
| TLCI | TM-30-18 - Rf | TM-30-18 Rg |
| 84 | 92.5 | 104.0 |

Chromaticity Report

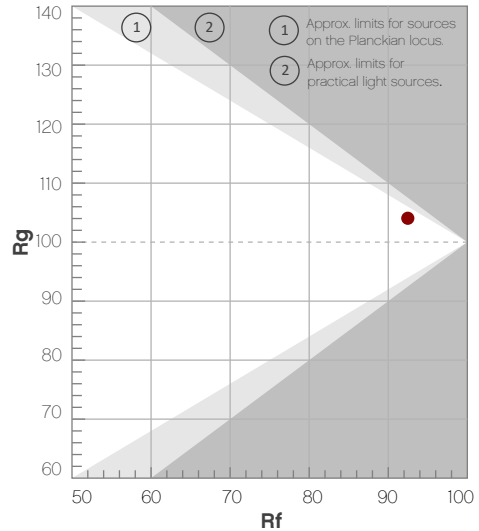
onAir Panel 1 IP: Medium Filter - 3200K

TM-30-18 Details

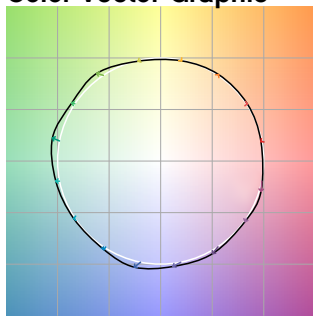
Rf 92.5
Fidelity Index (R_f)

Rg 104.0
Gamut Index (R_g)

| Hue Bin | R _f | Chroma Shift | Hue Shift |
|---------|----------------|--------------|-----------|
| 1 | 94 | -1% | 0% |
| 2 | 95 | 1% | -1% |
| 3 | 93 | 1% | 0% |
| 4 | 96 | -1% | -1% |
| 5 | 93 | -1% | 3% |
| 6 | 90 | 5% | 4% |
| 7 | 93 | 3% | 1% |
| 8 | 88 | 7% | -1% |
| 9 | 94 | 4% | -1% |
| 10 | 95 | 1% | -1% |
| 11 | 94 | 2% | 2% |
| 12 | 87 | 6% | -5% |
| 13 | 89 | 3% | -8% |
| 14 | 89 | 3% | -8% |
| 15 | 90 | 1% | -3% |
| 16 | 87 | 1% | -10% |



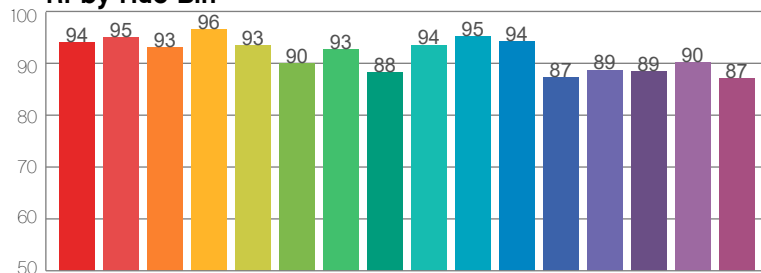
Color Vector Graphic



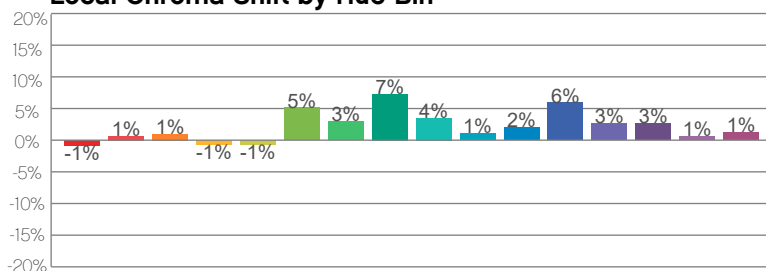
Color Distortion Graphic



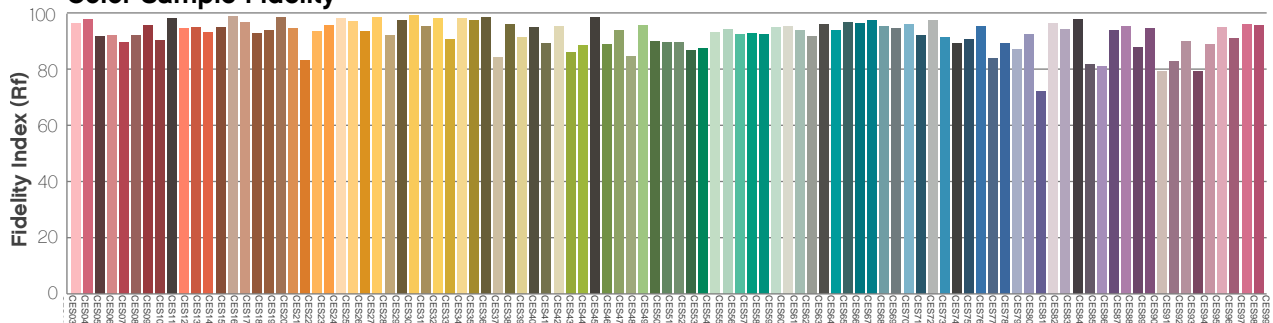
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chromaticity Report

onAir Panel 1 IP: Medium Filter - 5600K

Report Summary

Measurements

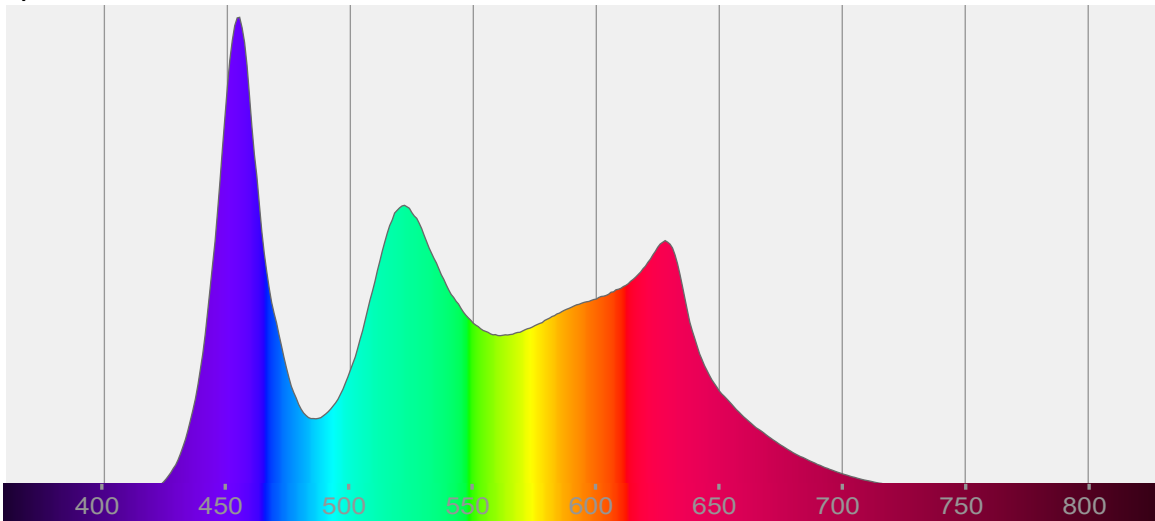
Total Lumens: 11368 lm
Peak Intensity: 4524 cd
Fixture Efficacy: 114 lm/W

Correlated Color Temperature: 5762K
 Δuv : -0.0038

CRI: 94.3 CRI R9 Value: 95.8
CQS: 94.1
TLCI: 92
TM-30-18 Rf: 91.1
TM-30-18 Rg: 104.2
1st Dominant Wavelength: 455 nm
2nd Dominant Wavelength: 522 nm



Spectral Distribution



Tested Color

5762 K

CIE 1931 Coordinates:
X: 0.327 Y: 0.335

Color Temperature

5762 K

Light Quality

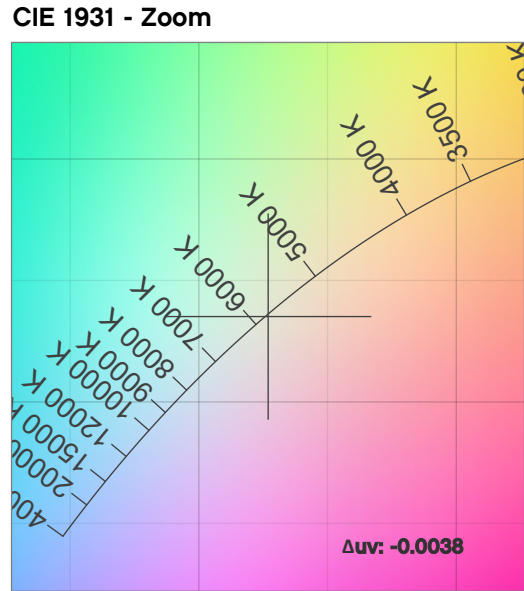
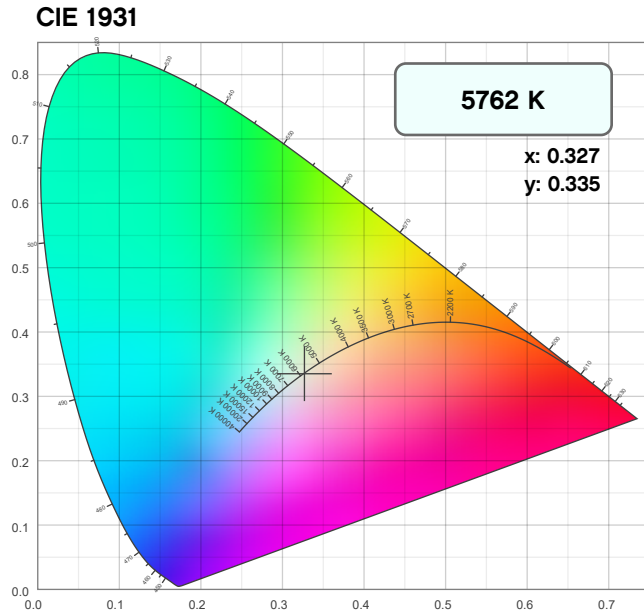
CRI: 94.3

Notes:

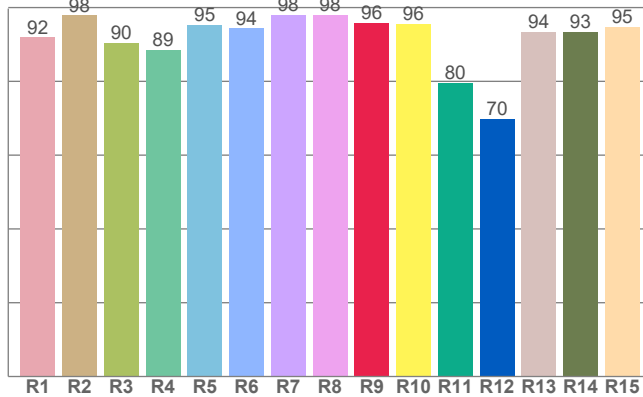
Chromaticity Report

onAir Panel 1 IP: Medium Filter - 5600K

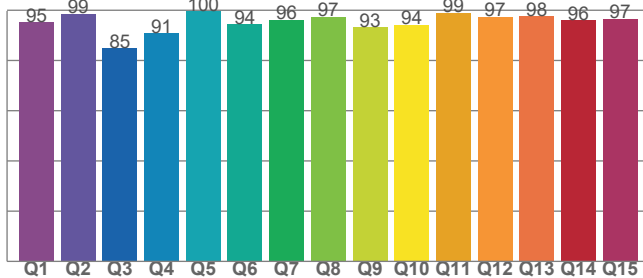
Chromaticity



CRI: 94.3 (R1-R8)



CQS: 94.1



Color Parameters

| Color Temperature | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 |
|-------------------|---------------------------|---------------------------|
| CCT | x | y |
| 5762 K | 0.327 | 0.335 |

| Color Deviation from Black Body Curve | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 |
|---------------------------------------|---------------------------|---------------------------|
| Δuv | y | u |
| -0.0038 | 0.335 | 0.205 |

| Color Rendering Index | Red Component | Color Quality Scale |
|-----------------------|---------------|---------------------|
| CRI | CRI - R9 | CQS |
| 94.3 | 95.8 | 94.1 |

| Television Lighting Consistency Index | Color Fidelity | Color Gamut |
|---------------------------------------|----------------|-------------|
| TLCI | TM-30-18 - Rf | TM-30-18 Rg |
| 92 | 91.1 | 104.2 |

Chromaticity Report

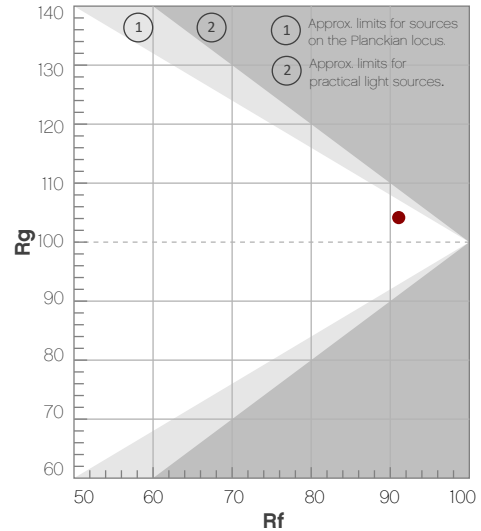
onAir Panel 1 IP: Medium Filter - 5600K

TM-30-18 Details

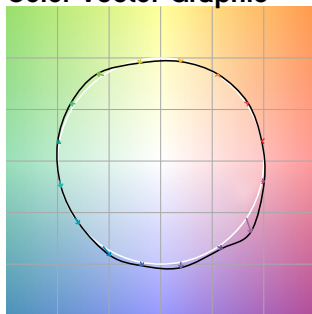
Rf 91.1
Fidelity Index (R_f)

Rg 104.2
Gamut Index (R_g)

| Hue Bin | R _f | Chroma Shift | Hue Shift |
|---------|----------------|--------------|-----------|
| 1 | 94 | 0% | 0% |
| 2 | 96 | 2% | 0% |
| 3 | 95 | 1% | 0% |
| 4 | 94 | -2% | 0% |
| 5 | 89 | -3% | 2% |
| 6 | 91 | 4% | 4% |
| 7 | 91 | 4% | 2% |
| 8 | 93 | 2% | 3% |
| 9 | 92 | 0% | 6% |
| 10 | 89 | -1% | 7% |
| 11 | 83 | 3% | 10% |
| 12 | 93 | 3% | 2% |
| 13 | 92 | 5% | -1% |
| 14 | 90 | 4% | 2% |
| 15 | 83 | 11% | -8% |
| 16 | 94 | 2% | 0% |



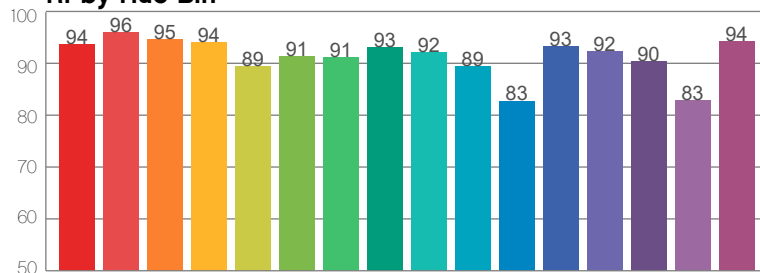
Color Vector Graphic



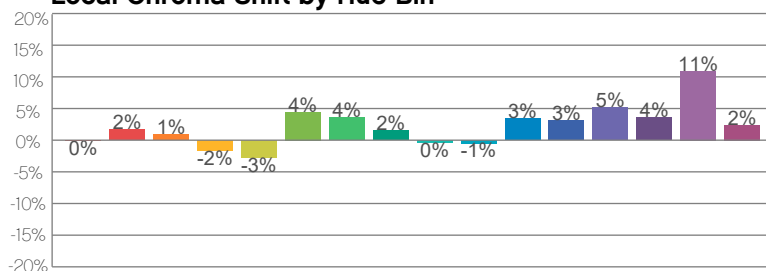
Color Distortion Graphic



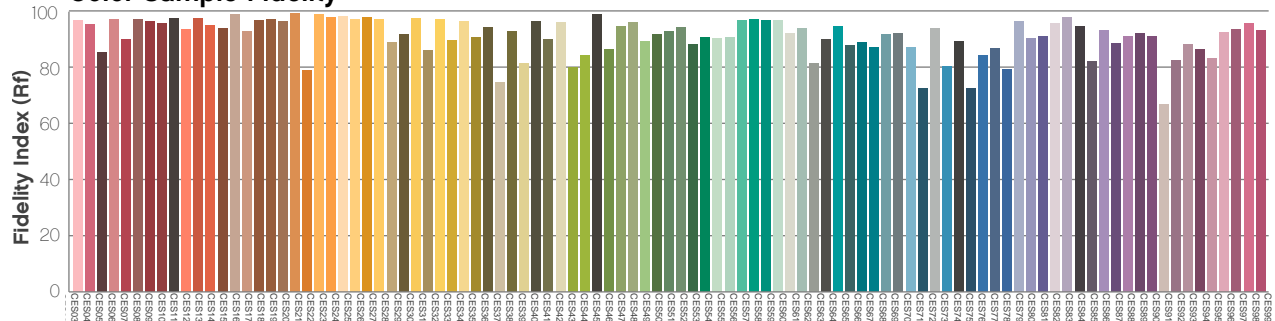
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Contact Us

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Visit the applicable website above to verify our contact information and instructions to request support. Outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico, contact the dealer of the record.