

PHOTOMETRICS REPORT

OVATION

CYC 1 FC



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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

Ovation CYC 1-FC: Standard Optics, Full Power

Report Summary

Output

Total Lumens: 10788 lm
Peak Intensity: 9420 cd
Illuminance @ 5m: 210 lux
Fixture Efficacy: 76 lm/W

Optical

Horizontal Beam Angle (50%): 81.1°
Vertical Beam Angle (50%): 87.1°
Horizontal Field Angle (10%): 124.6°
Vertical Field Angle (10%): 148.1°
Horizontal Cutoff Angle (3%): 152.6°
Vertical Cutoff Angle (3%): 180.2°



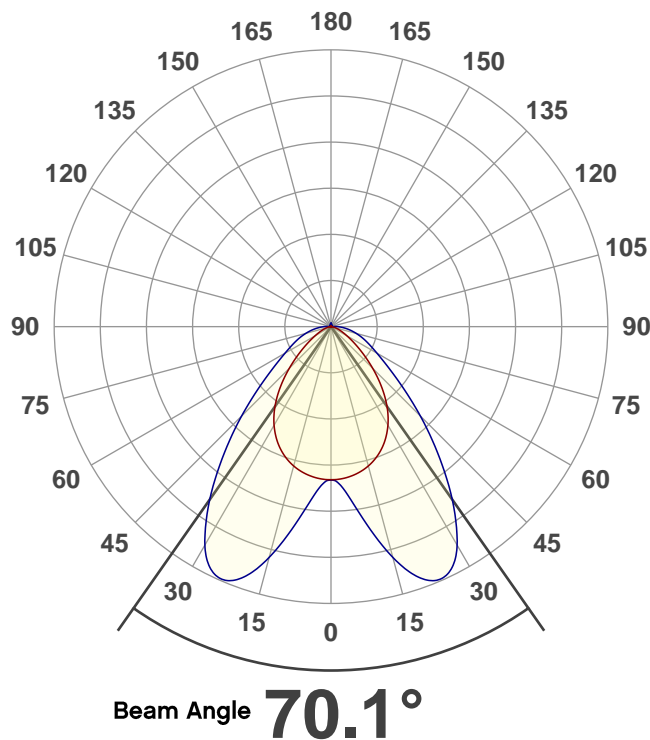
Conditions

AC Supply: 119 V, 60 Hz
Power: 142.29 W
Current: 1.20 A
Power Factor: 0.99

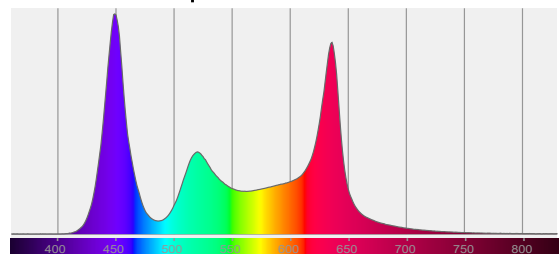
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/7/2020 to LM-63-2002 Standards.

Overall Measurement

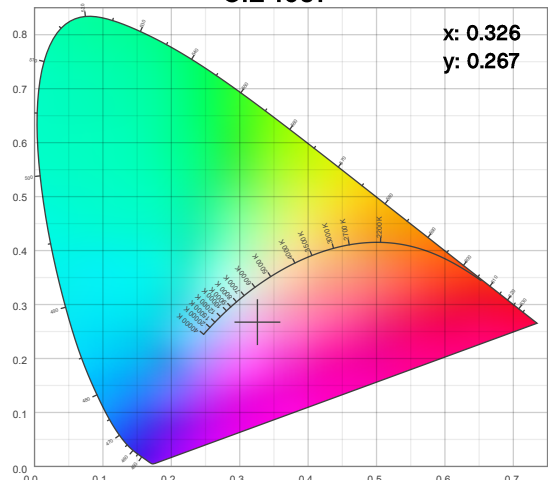
Angular Beam Distribution



Spectral Distribution



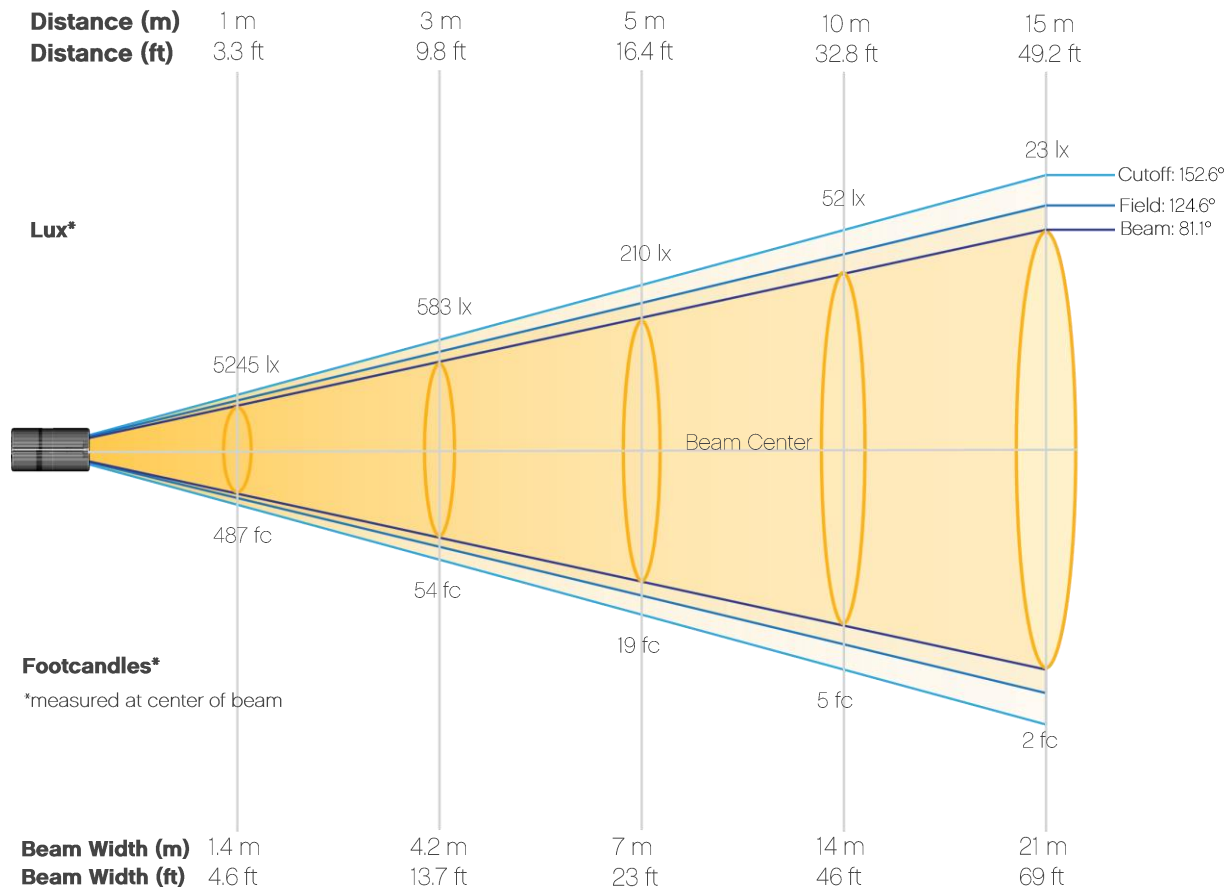
CIE 1931



Photometric Report

Ovation CYC 1-FC: Standard Optics, Full Power

Beam Details



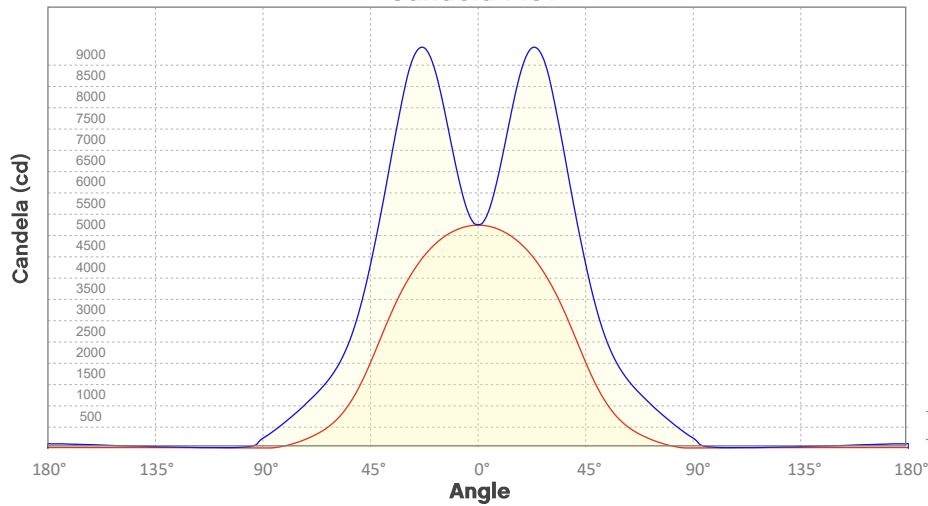
Beam luminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	5245	1311	583	328	210	146	107	82	65	52
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	43	36	31	27	23	20	18	16	15	13
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	487	122	54	30	19	14	10	8	6	5
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	4	3	3	2	2	2	2	2	1	1

Photometric Report

Ovation CYC 1-FC: Standard Optics, Full Power

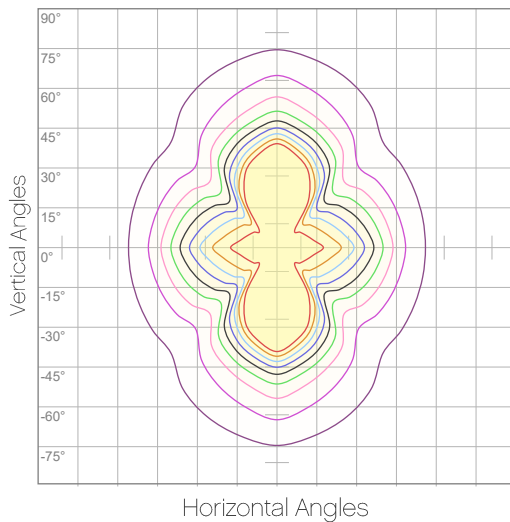
Candela Plot



Beam Angle (50%): 70.1°
Field Angle (10%): 130.9°
Cutoff Angle (3%): 166.7°

— Horizontal Distribution
— Vertical Distribution

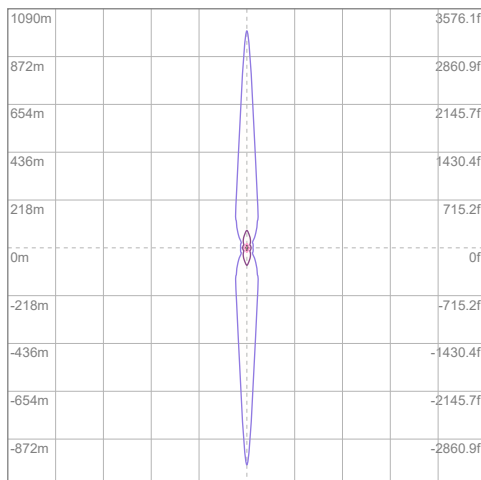
Polar Diagrams



iso-candela Diagram

10%	525 cd
20%	1049 cd
30%	1574 cd
40%	2098 cd
50%	2623 cd
60%	3147 cd
70%	3672 cd
80%	4196 cd
90%	4721 cd

Conditions:
Number of c-planes: 8
Candela at center: 5245 cd



iso-illuminance Diagram

3%	1.57 lx
5%	2.62 lx
10%	5.25 lx
30%	15.7 lx
50%	26.2 lx

Conditions:
Number of c-planes: 8
Lux at center: 52.5 lx

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

Mounting height: 10 meters / 33 feet

Chromaticity Report

Ovation CYC 1-FC: 3200K

Report Summary

Measurements

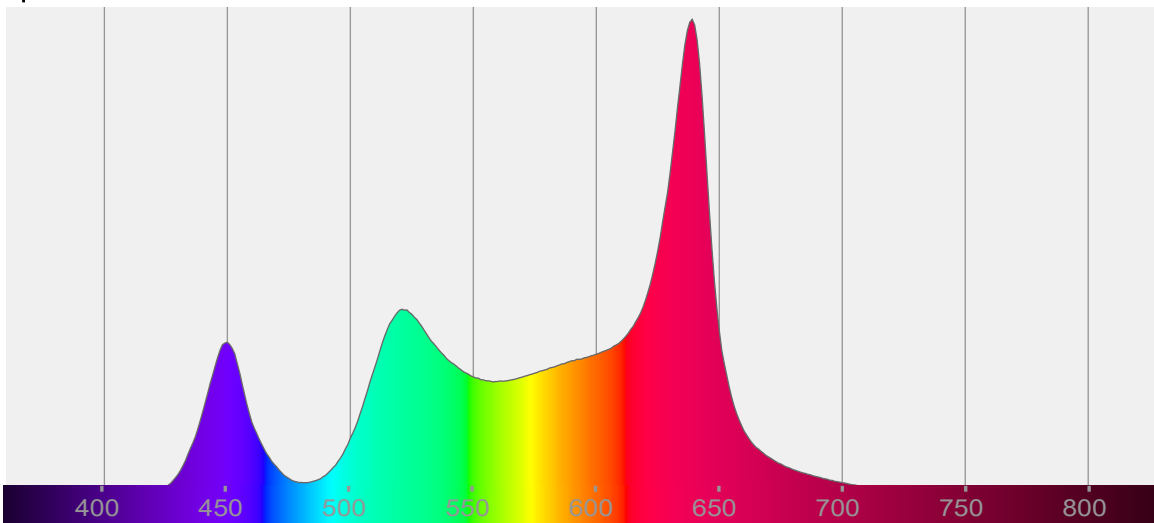
Total Lumens: 9051 lm
Peak Intensity: 7906 cd
Fixture Efficacy: 86 lm/W

Correlated Color Temperature: 3191K
 Δuv : -0.0027

CRI: 81.1 CRI R9 Value: 33.6
CQS: 87.2
TLCI: 79
TM-30-18 Rf: 86.2
TM-30-18 Rg: 113.8
1st Dominant Wavelength: 639 nm
2nd Dominant Wavelength: 521 nm



Spectral Distribution



Tested Color

3191 K
CIE 1931 Coordinates:
X: 0.421 Y: 0.392

Color Temperature

3191 K

Light Quality

CRI: 81.1

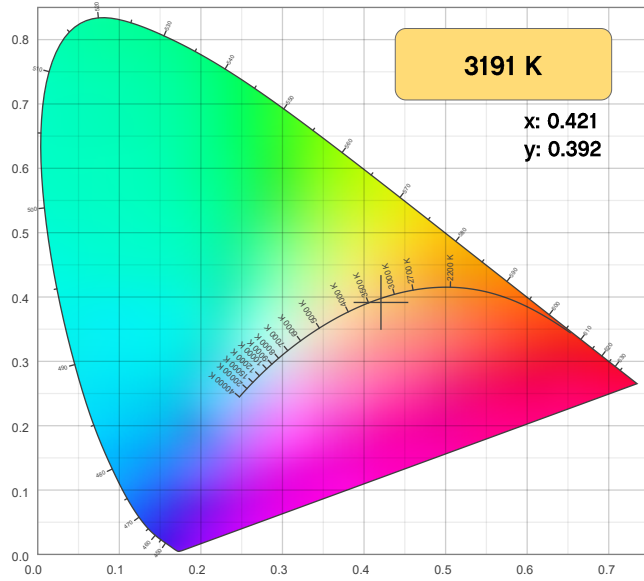
Notes:

Chromaticity Report

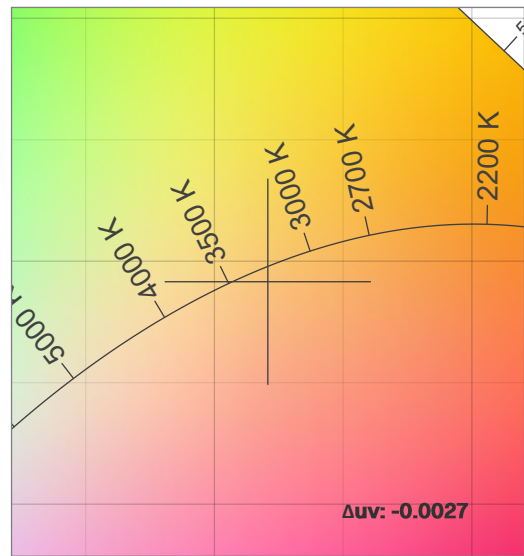
Ovation CYC 1-FC: 3200K

Chromaticity

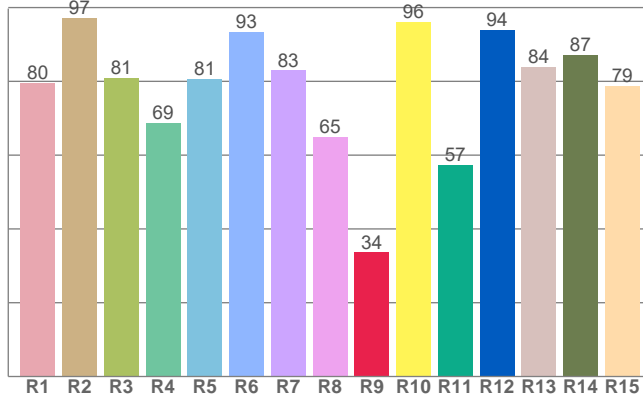
CIE 1931



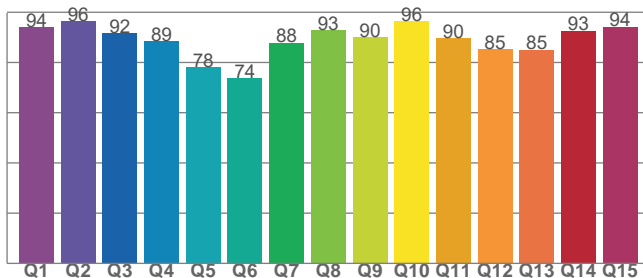
CIE 1931 - Zoom



CRI: 81.1 (R1-R8)



CQS: 87.2



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3191 K	0.421	0.392

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0027	0.392	0.245

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
81.1	33.6	87.2

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
79	86.2	113.8

Chromaticity Report

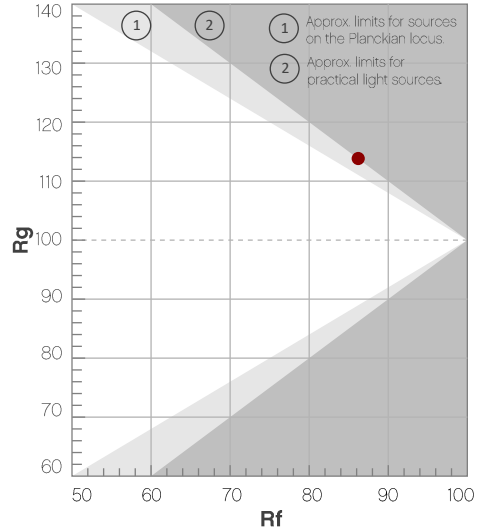
Ovation CYC 1-FC: 3200K

TM-30-18 Details

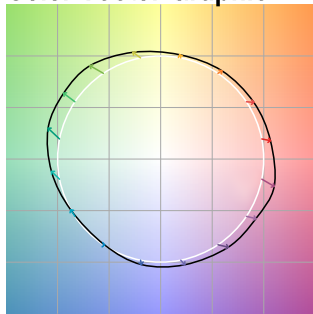
Rf 86.2
Fidelity Index (R_f)

Rg 113.8
Gamut Index (R_g)

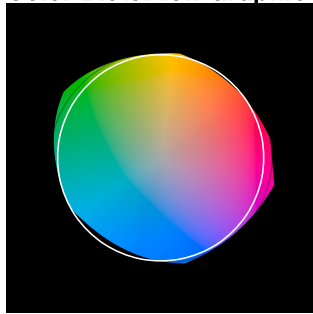
Hue Bin	R _f	Chroma Shift	Hue Shift
1	83	8%	-3%
2	86	6%	-4%
3	88	4%	-2%
4	92	3%	2%
5	87	7%	6%
6	78	13%	7%
7	78	14%	-1%
8	76	13%	-8%
9	84	6%	-9%
10	87	0%	-8%
11	93	-1%	1%
12	92	4%	2%
13	92	5%	3%
14	87	7%	7%
15	85	9%	3%
16	83	13%	-4%



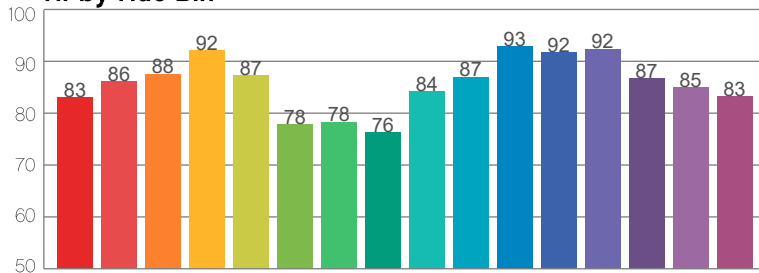
Color Vector Graphic



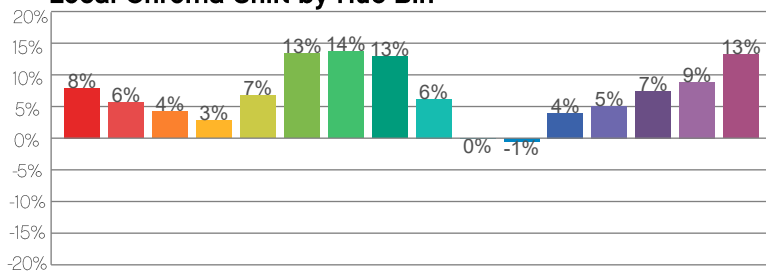
Color Distortion Graphic



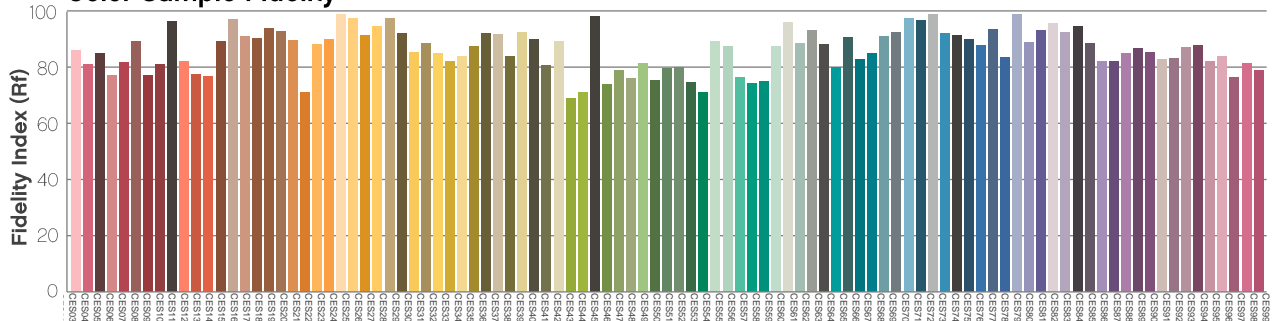
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chromaticity Report

Ovation CYC 1-FC: 5600K

Report Summary

Measurements

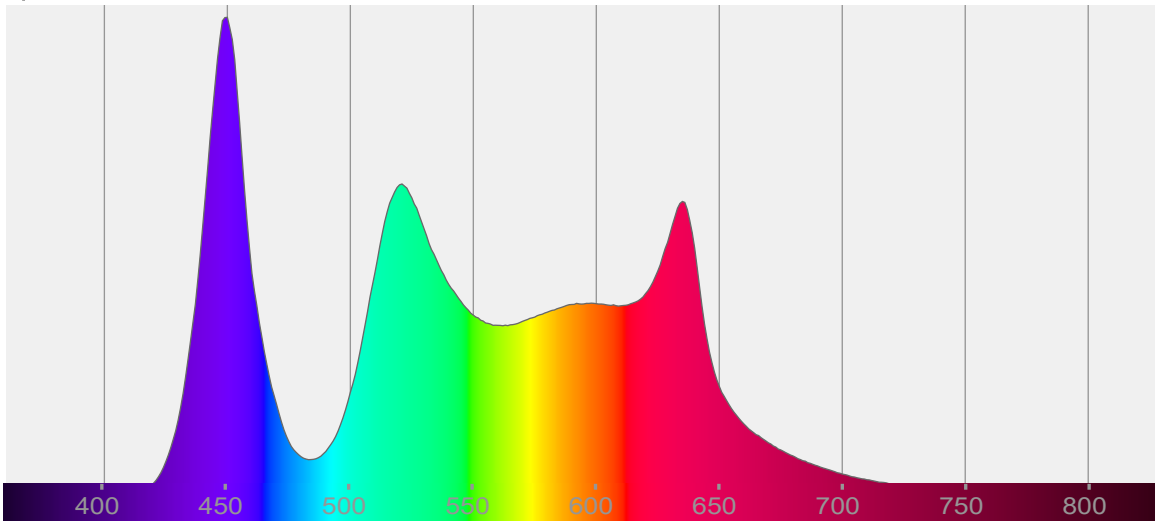
Total Lumens: 9022 lm
Peak Intensity: 7839 cd
Fixture Efficacy: 86 lm/W

Correlated Color Temperature: 5591K
 Δuv : -0.0049

CRI: 88.4 CRI R9 Value: 94.0
CQS: 89.8
TLCI: 79
TM-30-18 Rf: 86.4
TM-30-18 Rg: 108.9
1st Dominant Wavelength: 450 nm
2nd Dominant Wavelength: 521 nm



Spectral Distribution



Tested Color

5591 K
CIE 1931 Coordinates:
X: 0.331 Y: 0.336

Color Temperature

5591 K

Light Quality

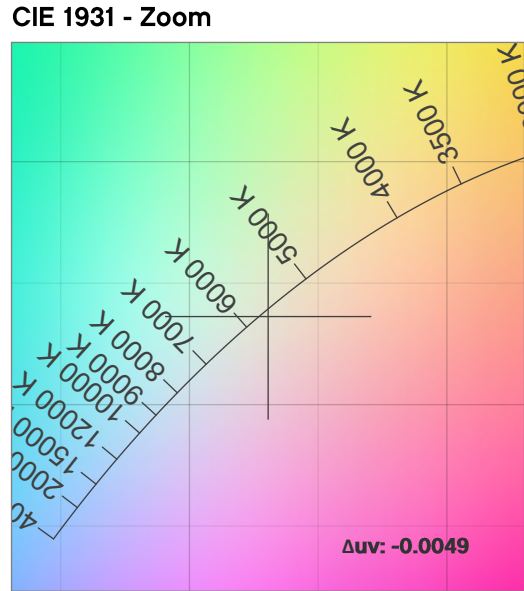
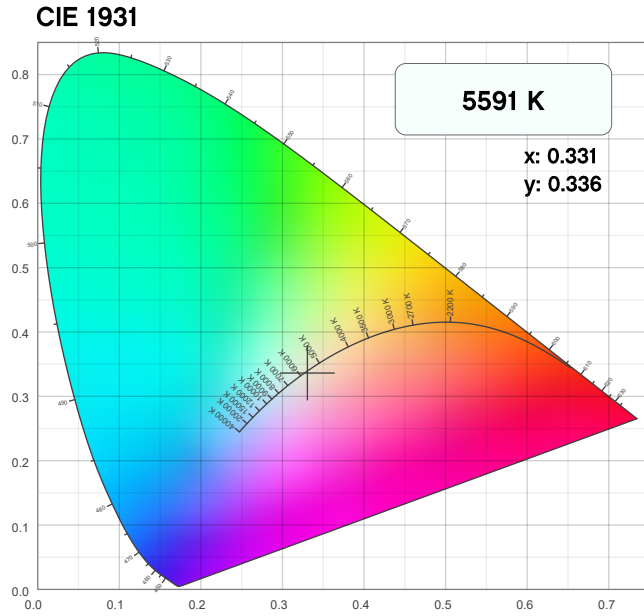
CRI: 88.4

Notes:

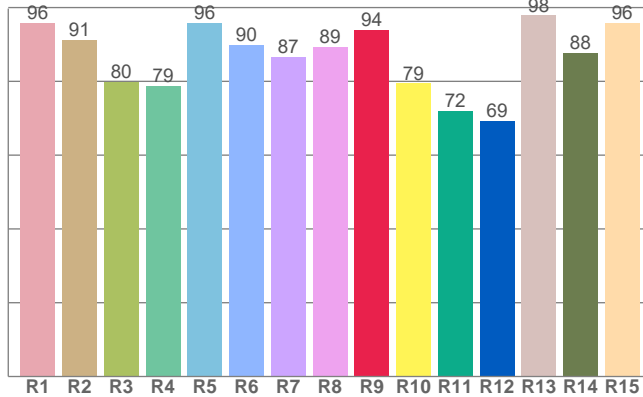
Chromaticity Report

Ovation CYC 1-FC: 5600K

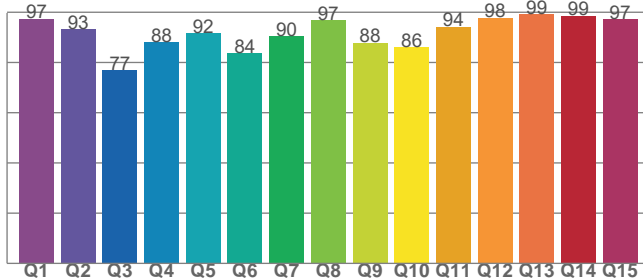
Chromaticity



CRI: 88.4 (R1-R8)



CQS: 89.8



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
5591 K	0.331	0.336

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0049	0.336	0.207

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
88.4	94.0	89.8

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
79	86.4	108.9

Chromaticity Report

Ovation CYC 1-FC: 5600K

TM-30-18 Details

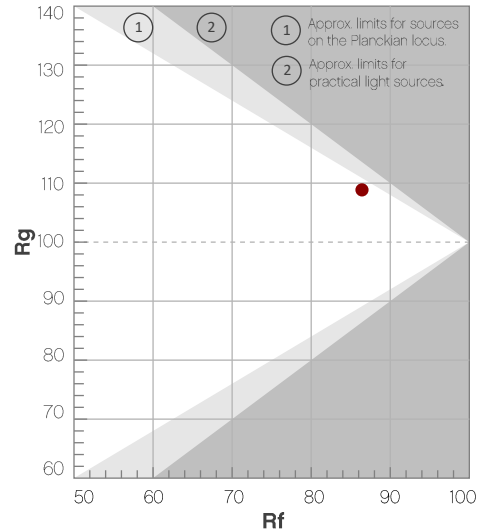
Rf 86.4

Fidelity Index
(R_f)

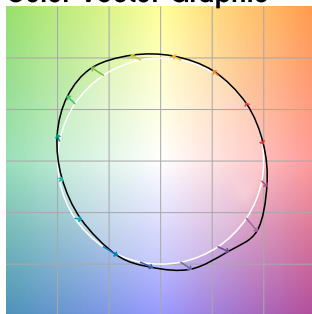
Rg 108.9

Gamut Index (R_g)

Hue Bin	R _f	Chroma Shift	Hue Shift
1	93	1%	-3%
2	96	0%	0%
3	89	1%	6%
4	87	2%	8%
5	84	6%	8%
6	81	12%	5%
7	85	10%	-2%
8	90	3%	-5%
9	93	-3%	-3%
10	89	-5%	4%
11	75	-1%	15%
12	82	3%	12%
13	87	9%	8%
14	82	9%	6%
15	83	15%	-4%
16	89	6%	-4%



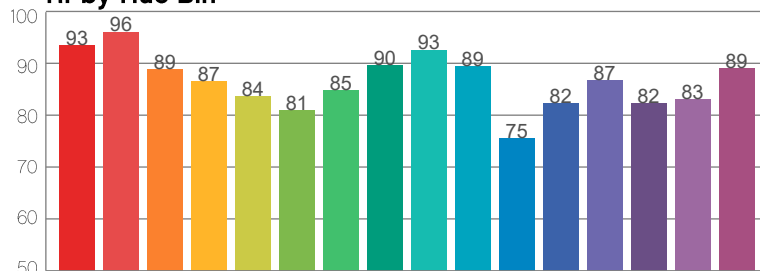
Color Vector Graphic



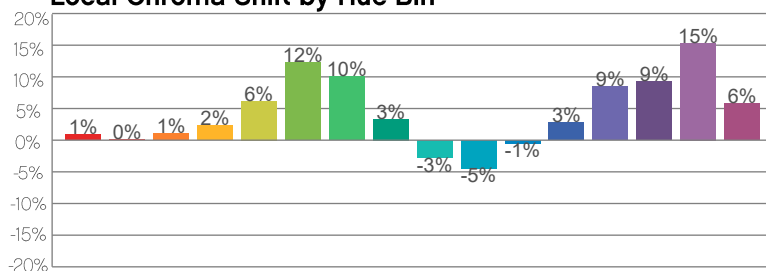
Color Distortion Graphic



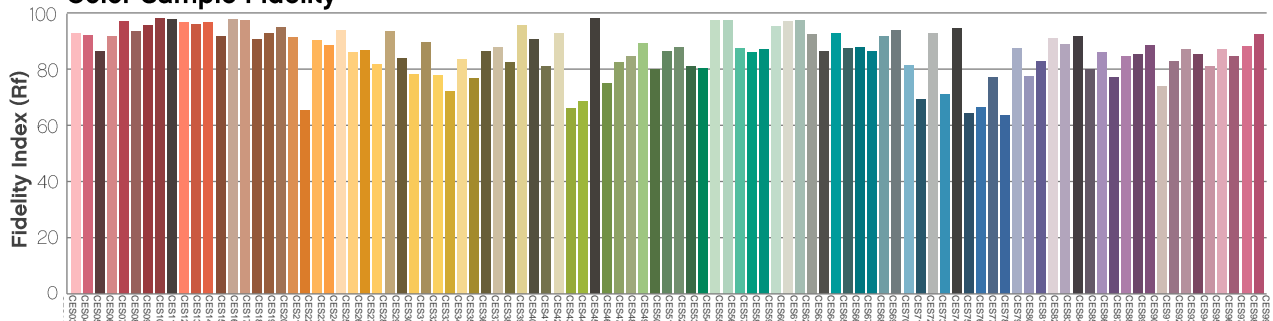
R_f by Hue Bin



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.