

PHOTOMETRICS REPORT
OVATION
FTD-55WW



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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 FTD-55WW: Full Flood, Full Power

Report Summary

Output

Total Lumens: 2243 lm
Peak Intensity: 2436 cd
Illuminance @ 5m: 97 lux
Fixture Efficacy: 64 lm/W

Optical

Horizontal Beam Angle (50%): 60.2°
Vertical Beam Angle (50%): 61.4°
Horizontal Field Angle (10%): 74.2°
Vertical Field Angle (10%): 75.1°
Horizontal Cutoff Angle (3%): 80.6°
Vertical Cutoff Angle (3%): 81.8°

Conditions

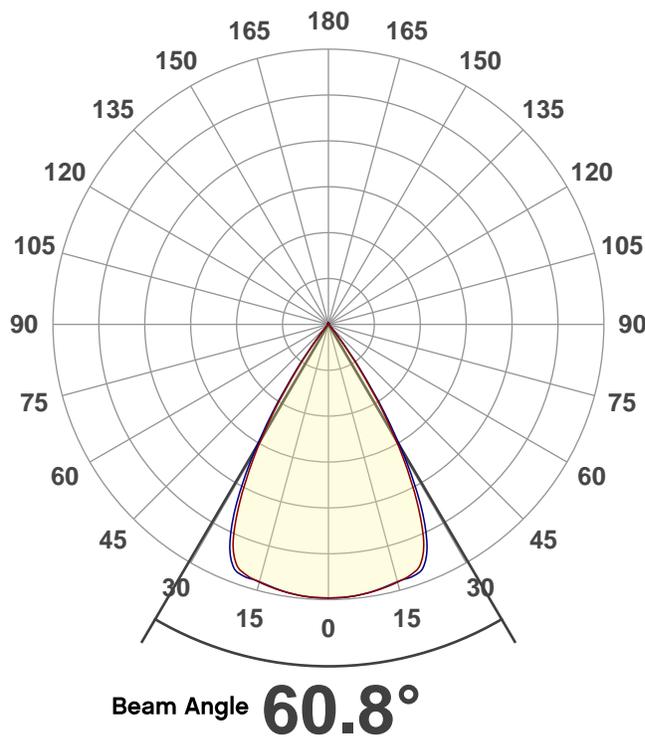
AC Supply: 118 V, 60 Hz
Power: 35.22 W
Current: 0.298 A
Power Factor: 1.0



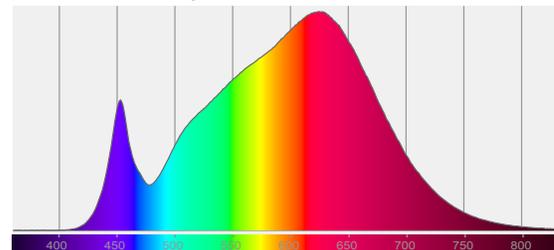
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/17/2019 to LM-63-2002 Standards.

Overall Measurement

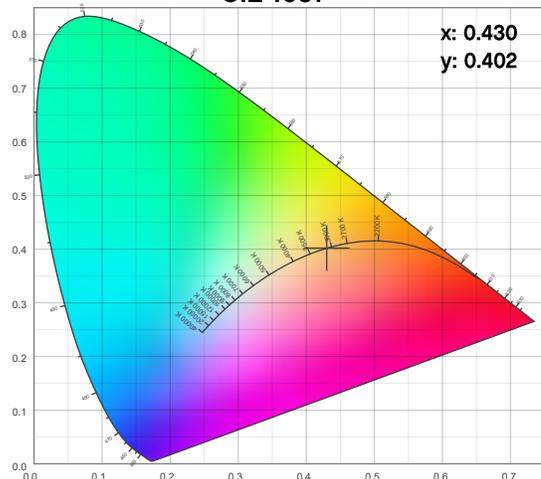
Angular Beam Distribution



Spectral Distribution



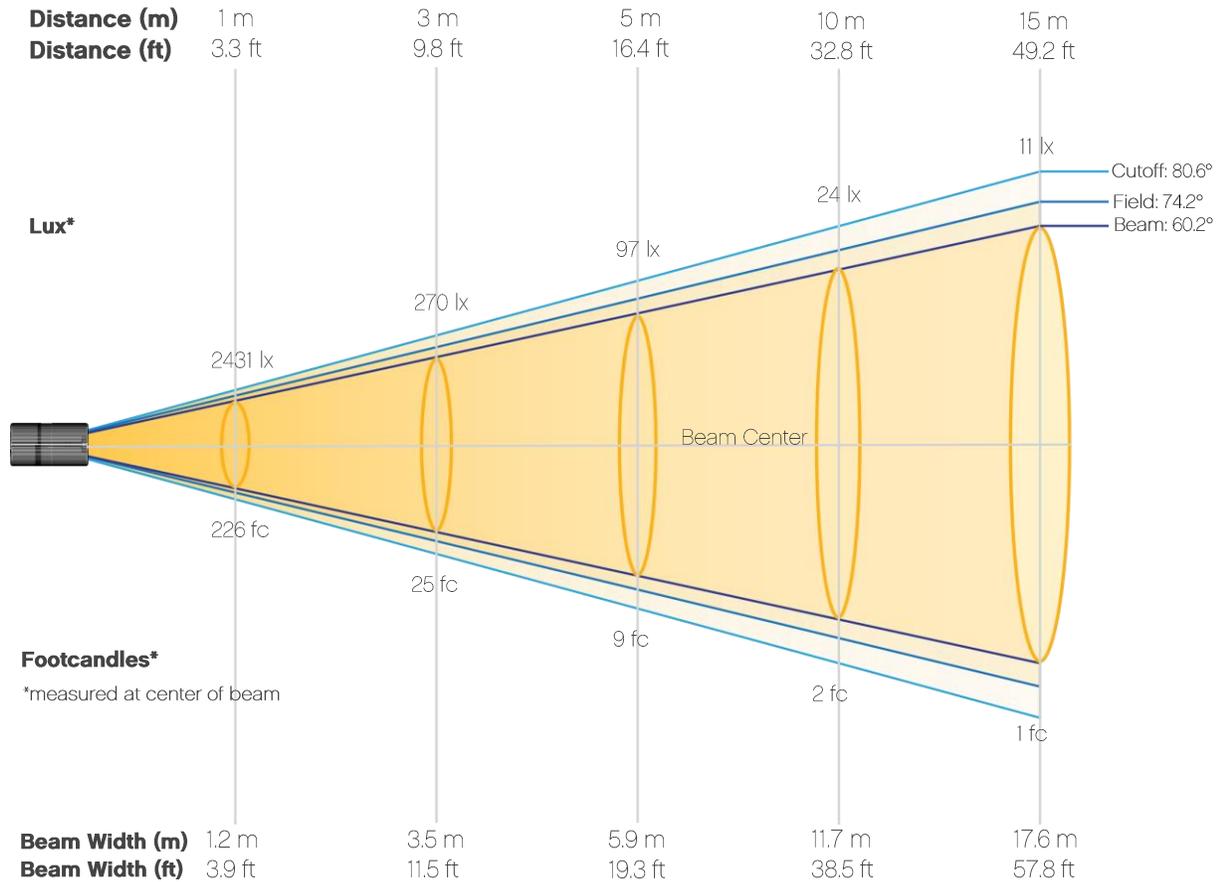
CIE 1931



Photometric Report

Ovation FTD-55WW: Full Flood, Full Power

Beam Details

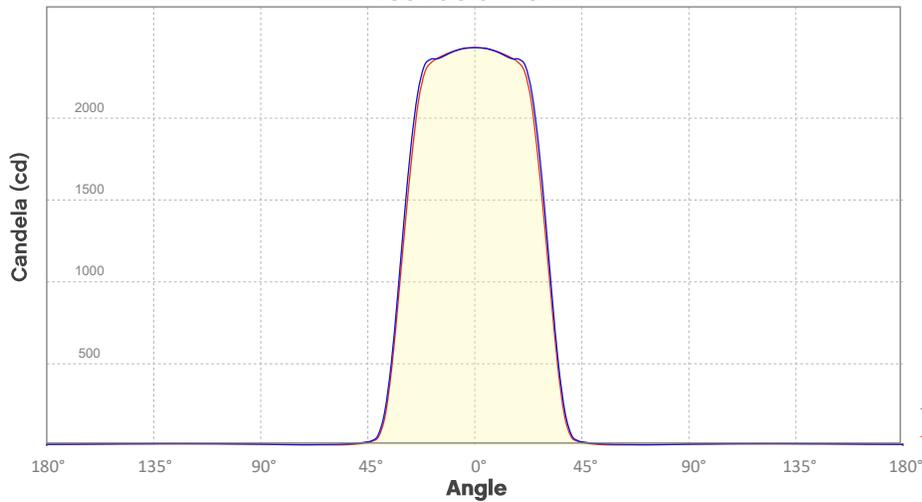


Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	2431	608	270	152	97	68	50	38	30	24
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	20	17	14	12	11	9	8	8	7	6
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	226	56	25	14	9	6	5	4	3	2
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	2	2	1	1	1	1	1	1	1	1

Photometric Report

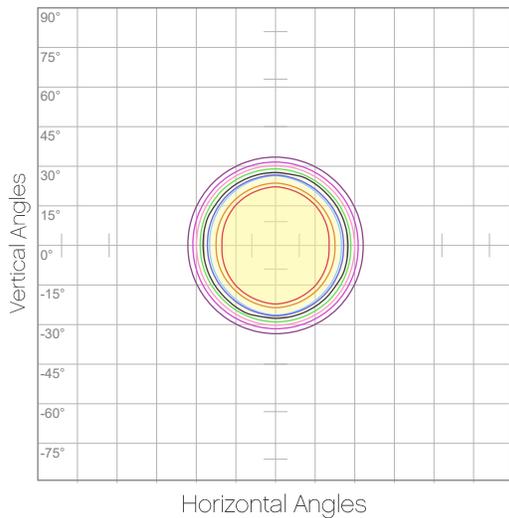
Ovation FTD-55WW: Full Flood, Full Power
Candela Plot



Beam Angle (50%): 60.8°
Field Angle (10%): 74.9°
Cutoff Angle (3%): 81.7°

— Horizontal Distribution
— Vertical Distribution

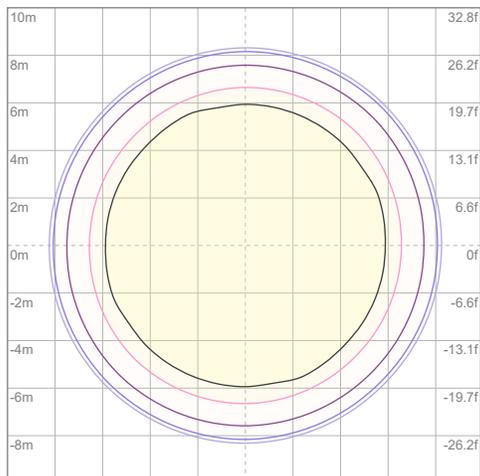
Polar Diagrams



iso-candela Diagram

10%	243 cd
20%	486 cd
30%	729 cd
40%	972 cd
50%	1216 cd
60%	1459 cd
70%	1702 cd
80%	1945 cd
90%	2188 cd

Conditions:
Number of c-planes: 8
Candela at center: 2431 cd



iso-illuminance Diagram

3%	0.729 lx
5%	1.22 lx
10%	2.43 lx
30%	7.29 lx
50%	12.2 lx

Conditions:
Number of c-planes: 8
Lux at center: 24.3 lx

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

Mounting height: 10 meters / 33 feet

Photometric Report

Ovation FTD-55WW: 50% Zoom, Full Power

Report Summary

Output

Total Lumens: 1748 lm
Peak Intensity: 3656 cd
Illuminance @ 5m: 143 lux
Fixture Efficacy: 51 lm/W

Optical

Horizontal Beam Angle (50%): 41°
Vertical Beam Angle (50%): 42.8°
Horizontal Field Angle (10%): 52.2°
Vertical Field Angle (10%): 54.7°
Horizontal Cutoff Angle (3%): 57.8°
Vertical Cutoff Angle (3%): 61.1°

Conditions

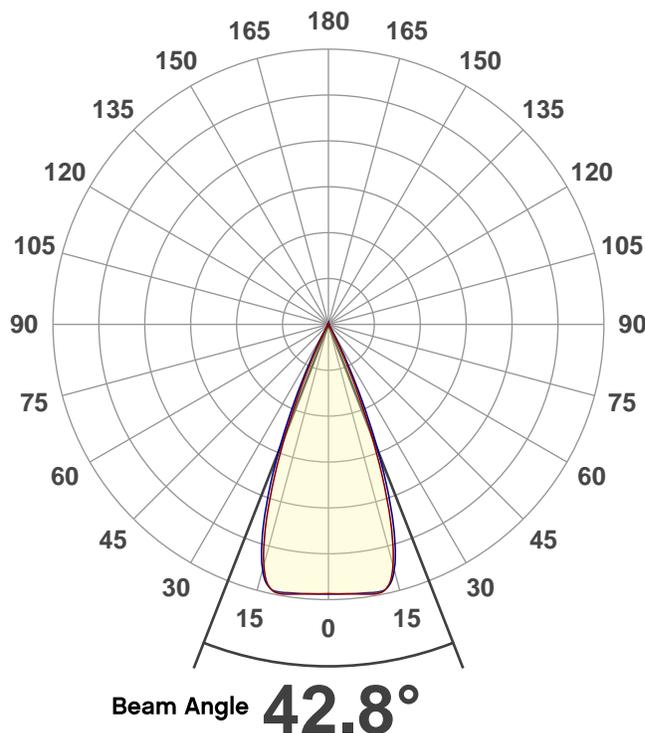
AC Supply: 118 V, 60 Hz
Power: 34.71 W
Current: 0.295 A
Power Factor: 1.0



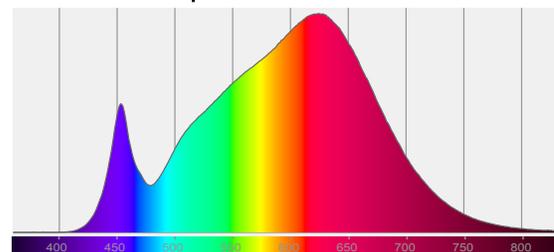
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/17/2019 to LM-63-2002 Standards.

Overall Measurement

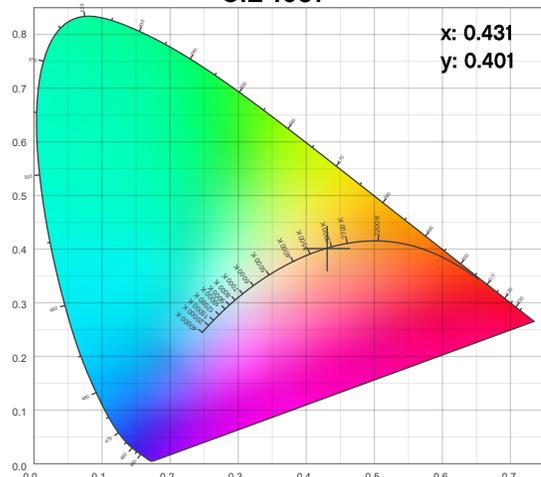
Angular Beam Distribution



Spectral Distribution



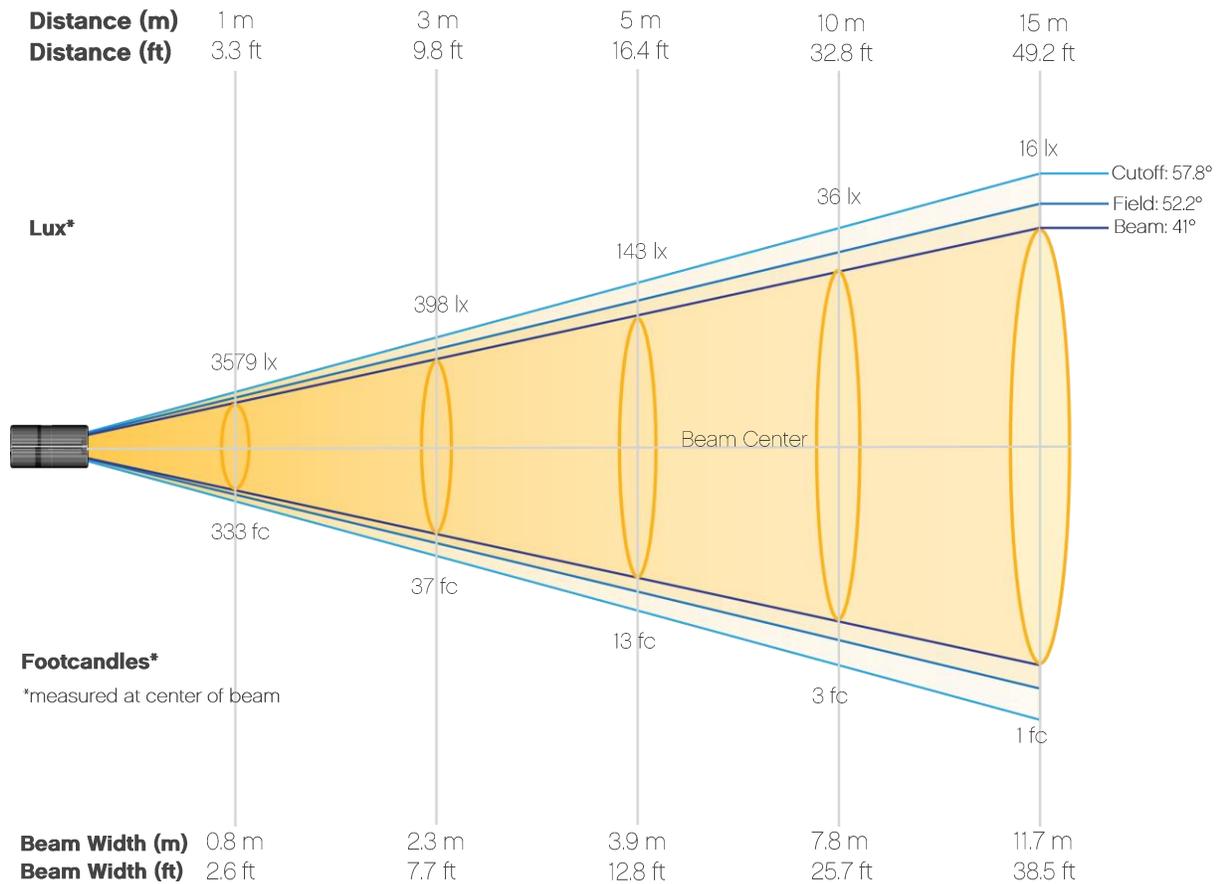
CIE 1931



Photometric Report

Ovation FTD-55WW: 50% Zoom, Full Power

Beam Details



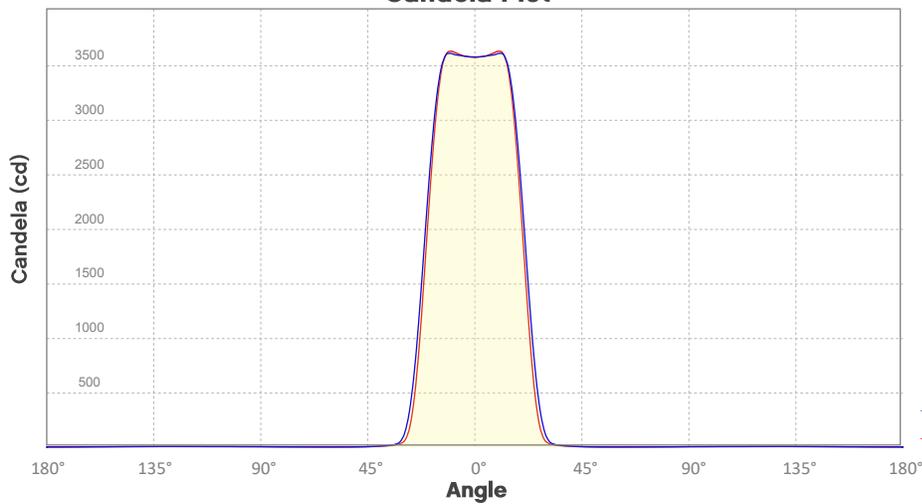
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	3579	895	398	224	143	99	73	56	44	36
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	30	25	21	18	16	14	12	11	10	9
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	333	83	37	21	13	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	1	1	1	1	1	1

Photometric Report

Ovation FTD-55WW: 50% Zoom, Full Power

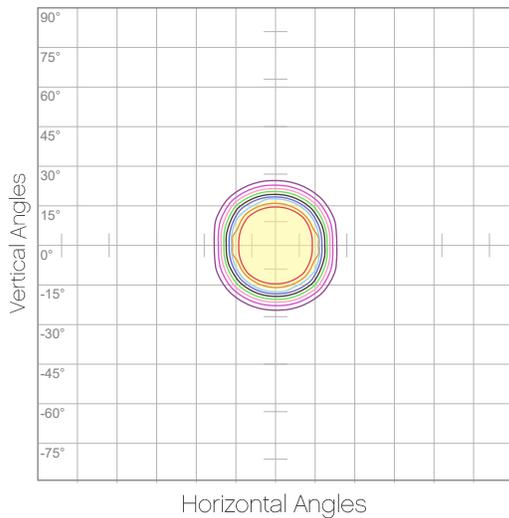
Candela Plot



Beam Angle (50%): 42.8°
Field Angle (10%): 54.8°
Cutoff Angle (3%): 60.7°

— Horizontal Distribution
— Vertical Distribution

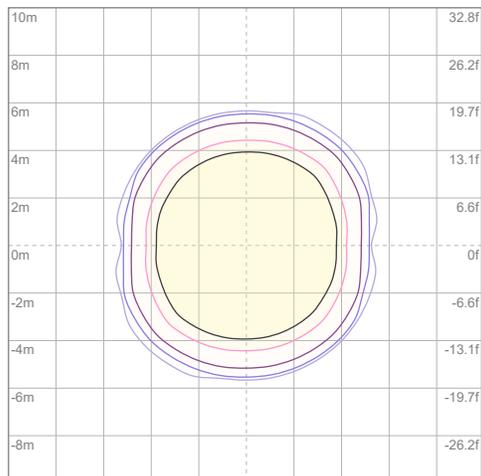
Polar Diagrams



iso-candela Diagram

10%	358 cd
20%	716 cd
30%	1074 cd
40%	1432 cd
50%	1790 cd
60%	2148 cd
70%	2505 cd
80%	2863 cd
90%	3221 cd

Conditions:
Number of c-planes: 8
Candela at center: 3579 cd



iso-illuminance Diagram

3%	1.07 lx
5%	1.79 lx
10%	3.58 lx
30%	10.7 lx
50%	17.9 lx

Conditions:
Number of c-planes: 8
Lux at center: 35.8 lx

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

Mounting height: 10 meters / 33 feet

Photometric Report

Ovation FTD-55WW: Full Spot, Full Power

Report Summary

Output

Total Lumens: 959 lm
Peak Intensity: 7842 cd
Illuminance @ 5m: 313 lux
Fixture Efficacy: 27 lm/W

Optical

Horizontal Beam Angle (50%): 19.7°
Vertical Beam Angle (50%): 20.1°
Horizontal Field Angle (10%): 30.6°
Vertical Field Angle (10%): 31.5°
Horizontal Cutoff Angle (3%): 35.3°
Vertical Cutoff Angle (3%): 36.6°

Conditions

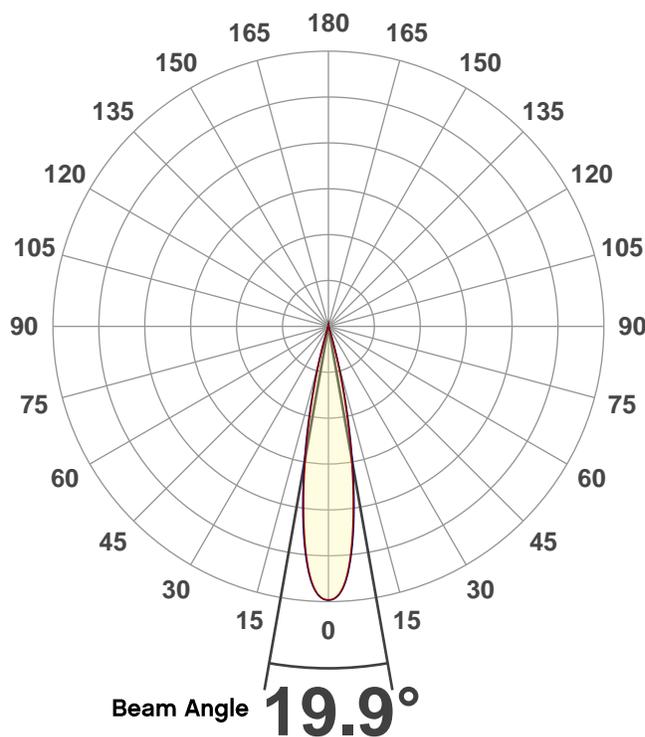
AC Supply: 117 V, 60 Hz
Power: 35.49 W
Current: 0.303 A
Power Factor: 1.0



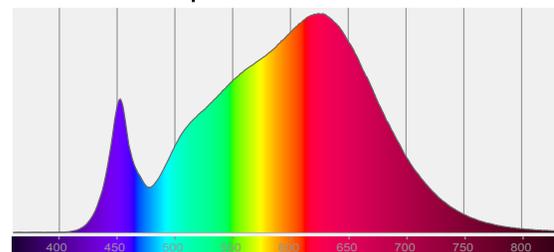
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/17/2019 to LM-63-2002 Standards.

Overall Measurement

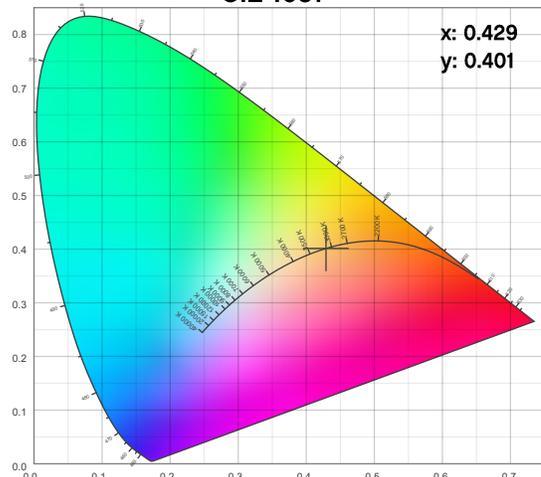
Angular Beam Distribution



Spectral Distribution



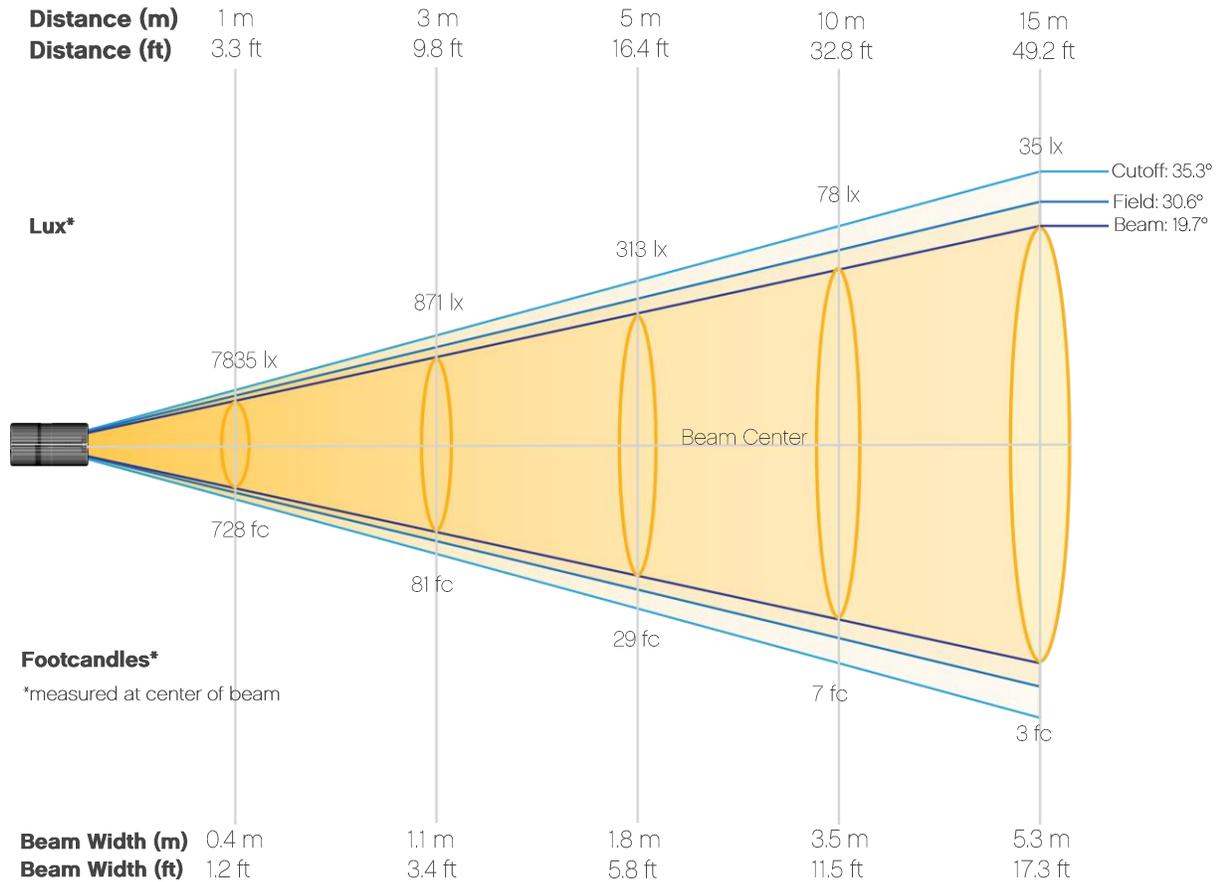
CIE 1931



Photometric Report

Ovation FTD-55WW: Full Spot, Full Power

Beam Details



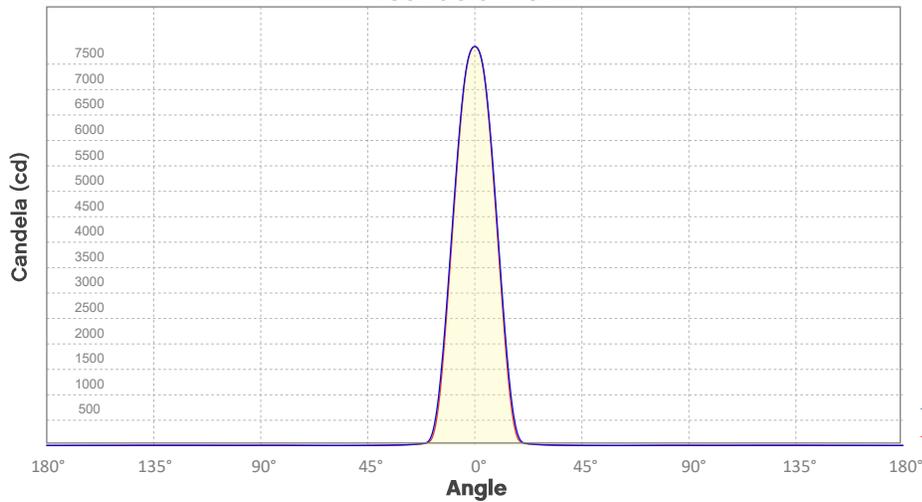
Beam luminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	7835	1959	871	490	313	218	160	122	97	78
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	65	54	46	40	35	31	27	24	22	20
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	728	182	81	45	29	20	15	11	9	7
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	6	5	4	4	3	3	3	2	2	2

Photometric Report

Ovation FTD-55WW: Full Spot, Full Power

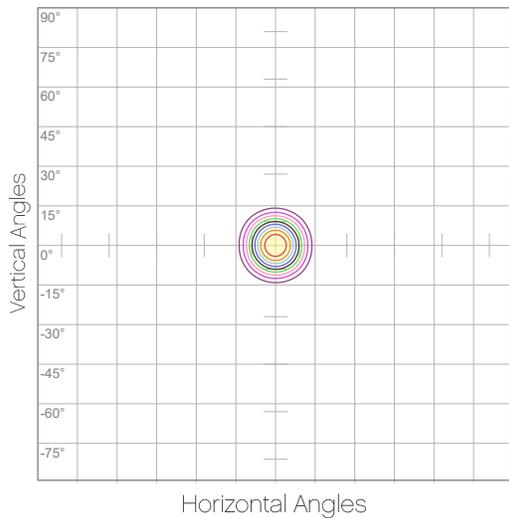
Candela Plot



Beam Angle (50%): 19.9°
 Field Angle (10%): 31.3°
 Cutoff Angle (3%): 36.3°

— Horizontal Distribution
 — Vertical Distribution

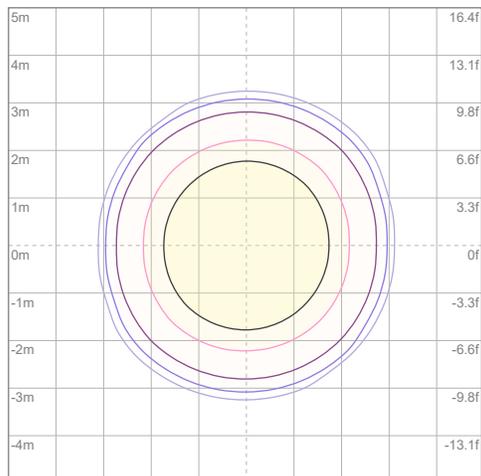
Polar Diagrams



iso-candela Diagram

10%	784 cd
20%	1567 cd
30%	2351 cd
40%	3134 cd
50%	3918 cd
60%	4701 cd
70%	5485 cd
80%	6268 cd
90%	7052 cd

Conditions:
 Number of c-planes: 8
 Candela at center: 7835 cd



iso-illuminance Diagram

3%	2.35 lx
5%	3.92 lx
10%	7.84 lx
30%	23.5 lx
50%	39.2 lx

Conditions:
 Number of c-planes: 8
 Lux at center: 78.4 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 FTD-55WW: Full Power

Report Summary

Measurements

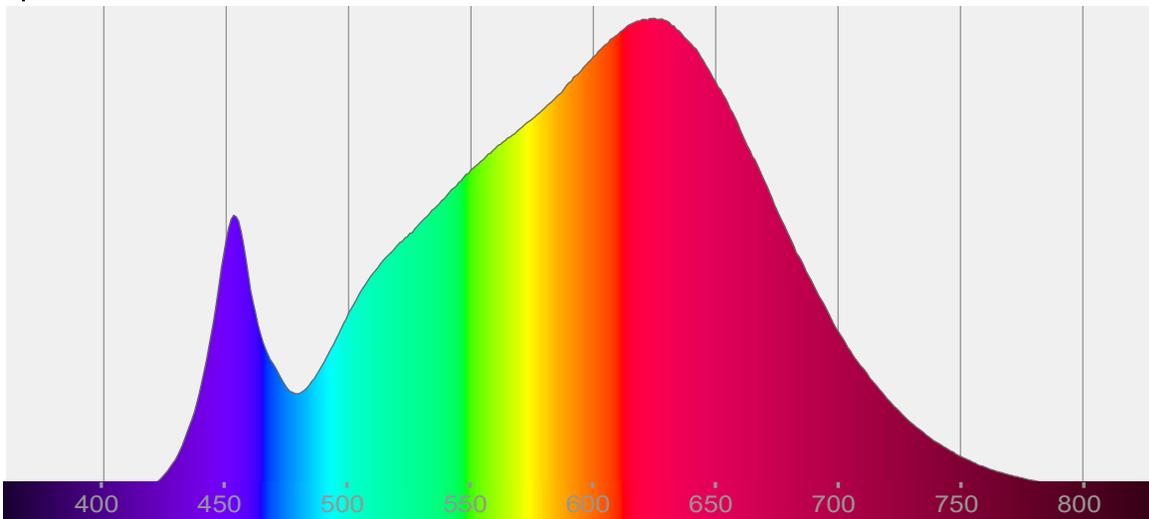
Total Lumens: 1748 lm
Peak Intensity: 3656 cd
Fixture Efficacy: 51 lm/W

Correlated Color Temperature: 3086K
 Δuv : -0.0004

CRI: 92.5 CRI R9 Value: 63.9
CQS: 90.5
TLCI: 93
TM-30-18 Rf: 91.3
TM-30-18 Rg: 100.1
1st Dominant Wavelength: 625 nm
2nd Dominant Wavelength: 453 nm



Spectral Distribution



Tested Color

3086 K
CIE 1931 Coordinates:
X: 0.431 Y: 0.401

Color Temperature

3086 K

Light Quality

CRI: 92.5

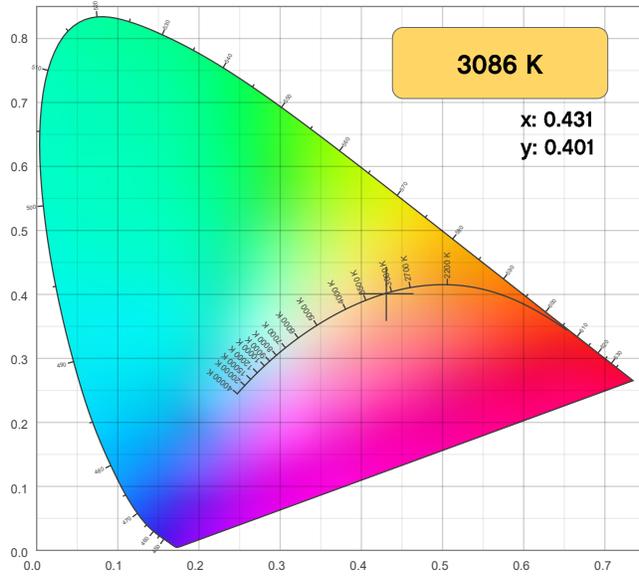
Notes:

Chromaticity Report

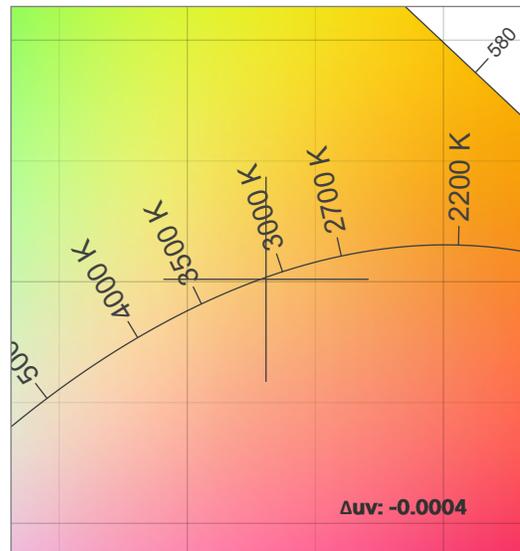
Ovation FTD-55WW: Full Power

Chromaticity

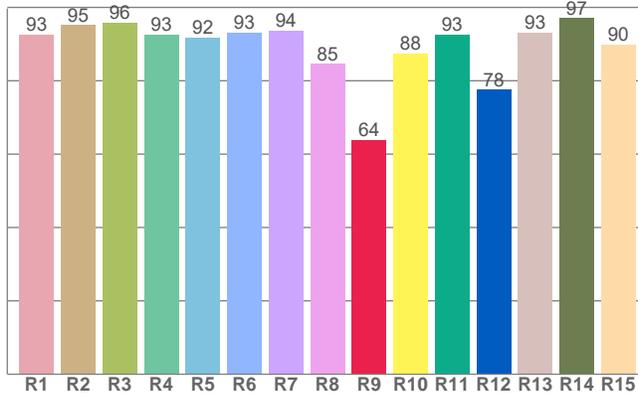
CIE 1931



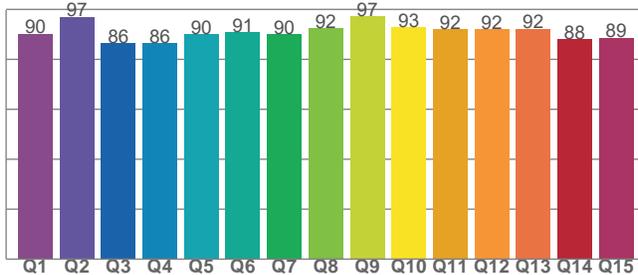
CIE 1931 - Zoom



CRI: 92.5 (R1-R8)



CQS: 90.5



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3086 K	0.431	0.401

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δ_{uv}	y	u
-0.0004	0.401	0.248

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
92.5	63.9	90.5

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
93	91.3	100.1

Chromaticity Report

Ovation FTD-55WW: Full Power

TM-30-18 Details

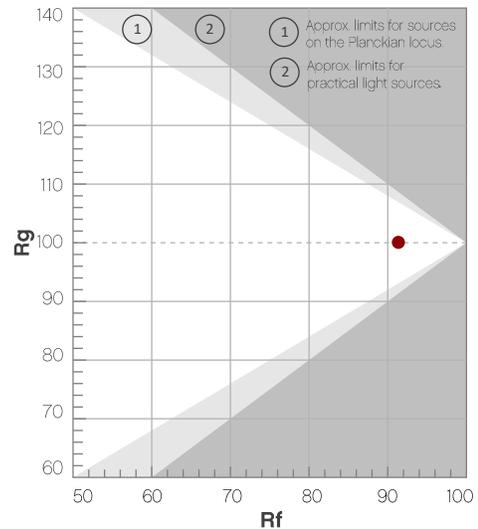
Rf 91.3

Fidelity Index
(R_f)

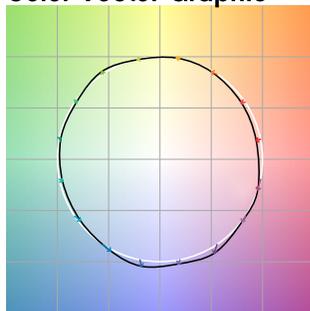
Rg 100.1

Gamut Index (R_g)

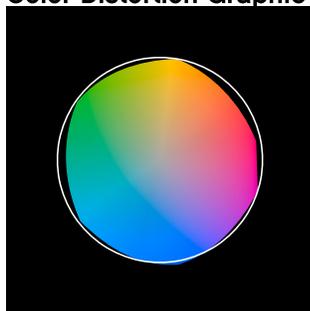
Hue Bin	R _f	Chroma Shift	Hue Shift
1	91	-4%	0%
2	92	-3%	3%
3	89	-1%	6%
4	94	0%	3%
5	93	0%	3%
6	95	3%	0%
7	94	-1%	-2%
8	97	-1%	-1%
9	94	-3%	3%
10	88	-2%	7%
11	86	1%	10%
12	90	6%	3%
13	93	4%	-3%
14	89	6%	-7%
15	90	0%	-6%
16	87	-1%	-11%



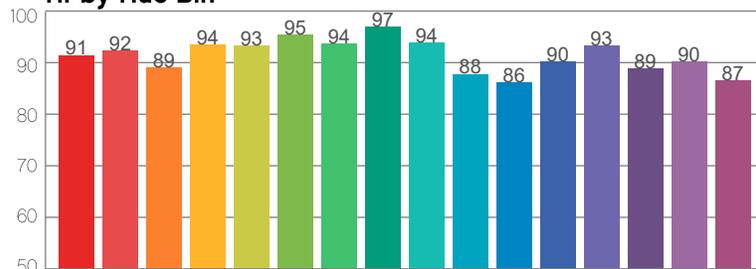
Color Vector Graphic



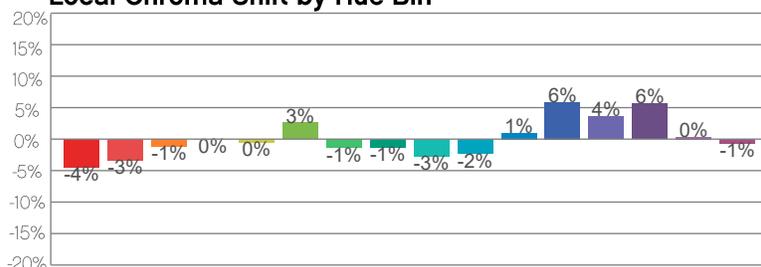
Color Distortion Graphic



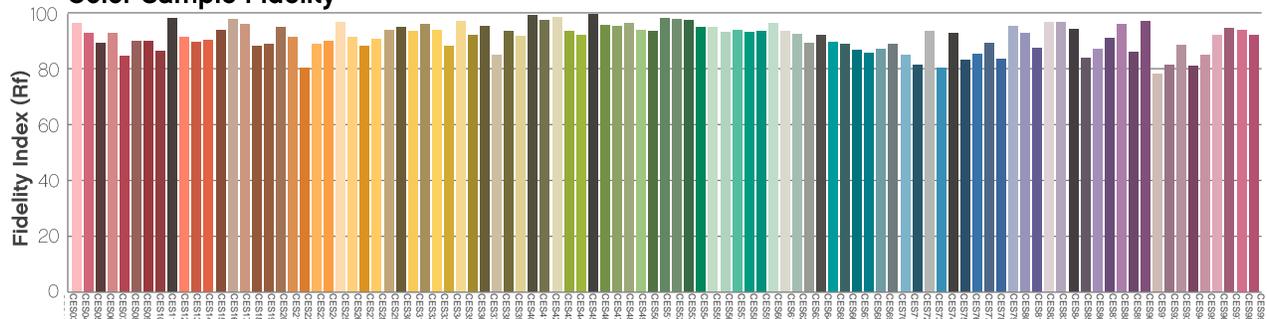
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Contact Us

General Information	Technical Support
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Stokstraat 18 9770 Kruishoutem, Belgium Voice: +32 (9) 388 93 97	Email: BNLtech@chauvetlighting.eu Website: www.chauvetprofessional.eu
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Chauvet Mexico	
Av. de las Partidas 34 - 3B (Entrance by Calle 2) Zona Industrial Lerma Lerma, Edo. de México, CP 52000 Voice: +52 (728) 690-2010	Email: servicio@chauvetlighting.de Website: www.chauvetprofessional.eu

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.

