

PHOTOMETRICS REPORT
OVATION
FD-205WW



CHAUVENT
PROFESSIONAL

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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 FD-205WW: Full Flood, Full Power-750W

Report Summary

Output

Total Lumens: 12121 lm
Peak Intensity: 10752 cd
Illuminance @ 5m: 394 lux
Fixture Efficacy: 62 lm/W

Optical

Horizontal Beam Angle (50%): 65.5°
Vertical Beam Angle (50%): 65.3°
Horizontal Field Angle (10%): 84.9°
Vertical Field Angle (10%): 84.2°
Horizontal Cutoff Angle (3%): 106.7°
Vertical Cutoff Angle (3%): 104.7°

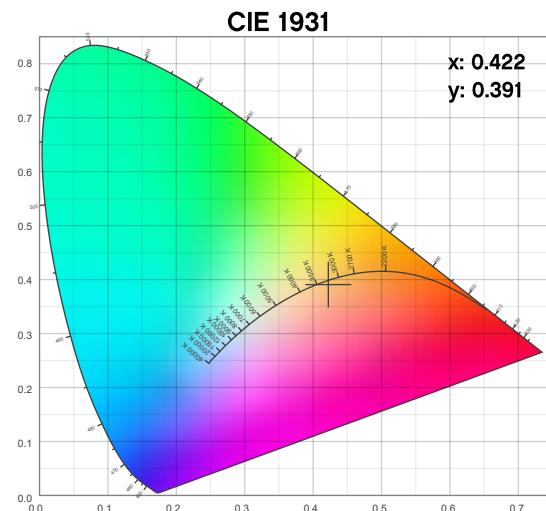
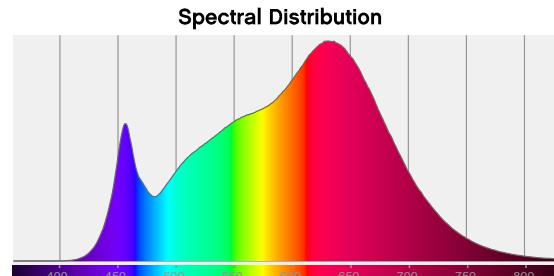
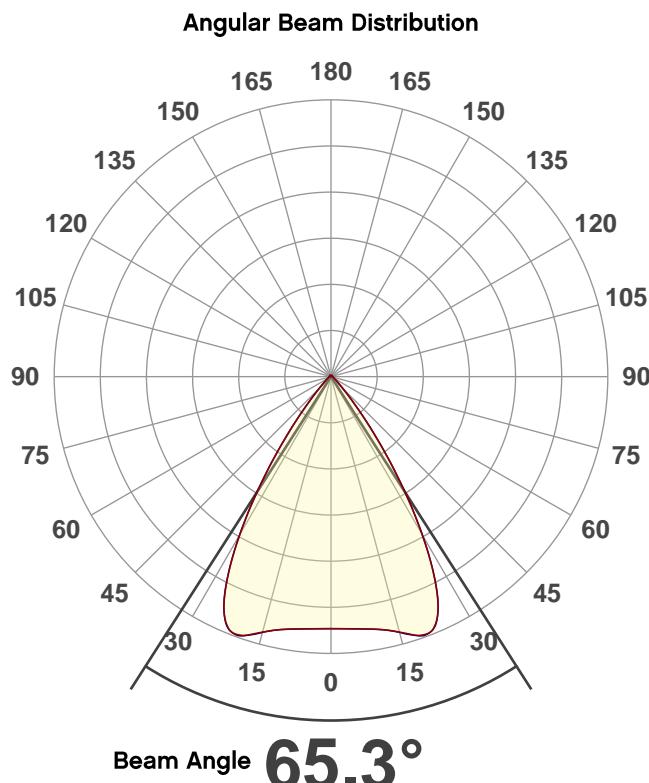
Conditions

AC Supply: 120 V, 60.1 Hz
Power: 194.53 W
Current: 1.62 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 10/31/2019 to LM-63-2002 Standards.

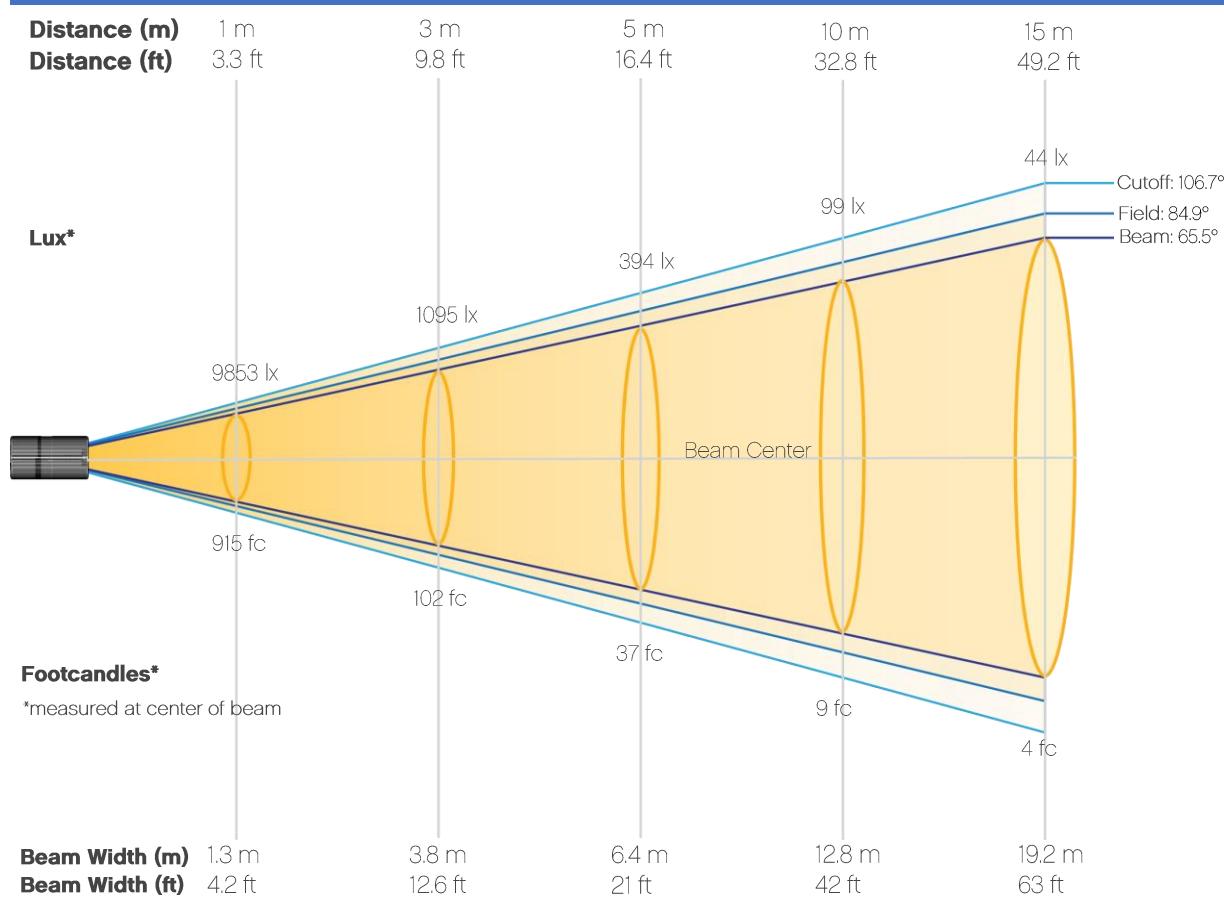
Overall Measurement



Photometric Report

Ovation FD-205WW: Full Flood, Full Power-750W

Beam Details

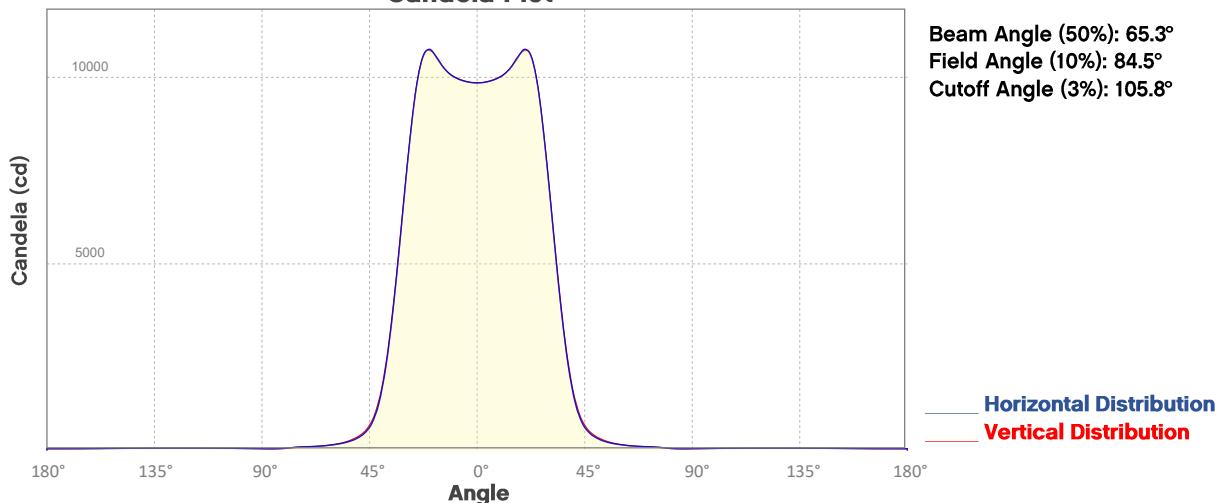


Beam Illuminances from 1-20m (3.3-65.6ft)

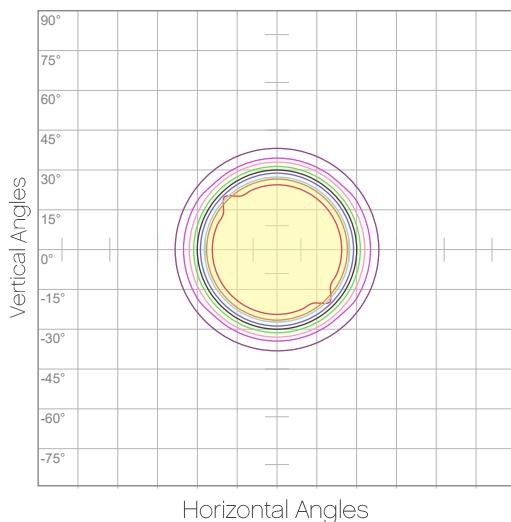
Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	9853	2463	1095	616	394	274	201	154	122	99
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
LUX	81	68	58	50	44	38	34	30	27	25
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	915	229	102	57	37	25	19	14	11	9
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	8	6	5	5	4	4	3	3	3	2

Photometric Report

Ovation FD-205WW: Full Flood, Full Power-750W
Candela Plot



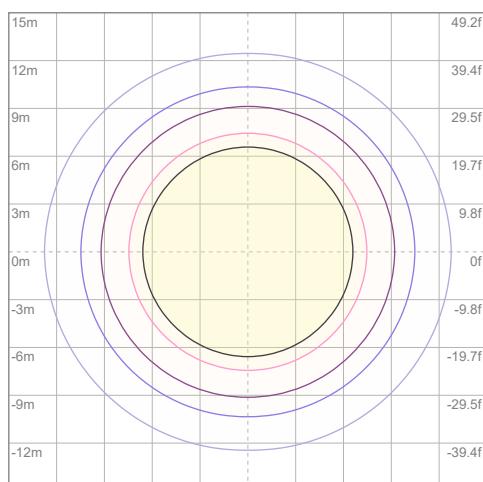
Polar Diagrams



iso-candela Diagram

10%	985 cd
20%	1971 cd
30%	2956 cd
40%	3941 cd
50%	4926 cd
60%	5912 cd
70%	6897 cd
80%	7882 cd
90%	8868 cd

Conditions:
Number of c-planes: 8
Candela at center: 9853 cd



iso-illuminance Diagram

3%	2.96 lx
5%	4.93 lx
10%	9.85 lx
30%	29.6 lx
50%	49.3 lx

Conditions:
Number of c-planes: 8
Lux at center: 98.5 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 FD-205WW: 50% Zoom, Full Power-750W

Report Summary

Output

Total Lumens: 11294 lm
Peak Intensity: 29587 cd
Illuminance @ 5m: 1105 lux
Fixture Efficacy: 58 lm/W

Optical

Horizontal Beam Angle (50%): 36.6°
Vertical Beam Angle (50%): 35.9°
Horizontal Field Angle (10%): 49.3°
Vertical Field Angle (10%): 48.5°
Horizontal Cutoff Angle (3%): 58.4°
Vertical Cutoff Angle (3%): 57.5°

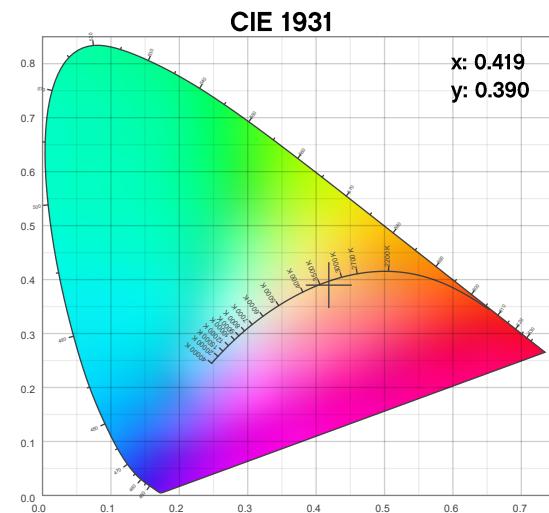
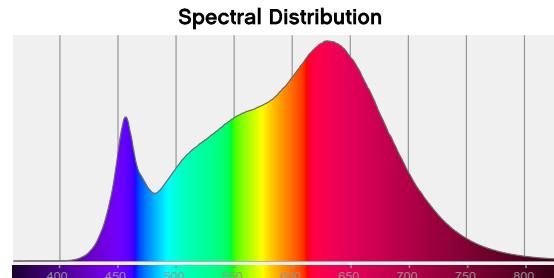
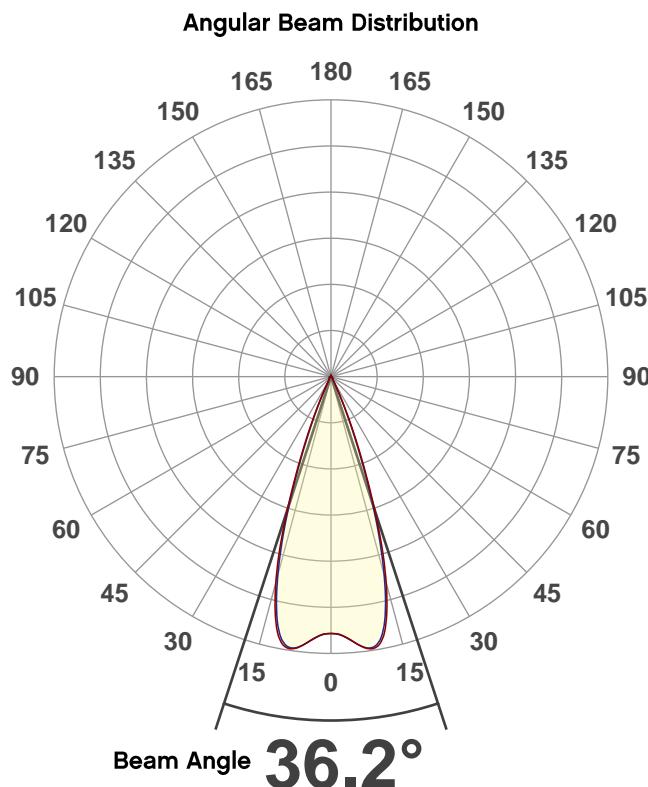
Conditions

AC Supply: 120 V, 60.1 Hz
Power: 194.24 W
Current: 1.62 A
Power Factor: 1.0



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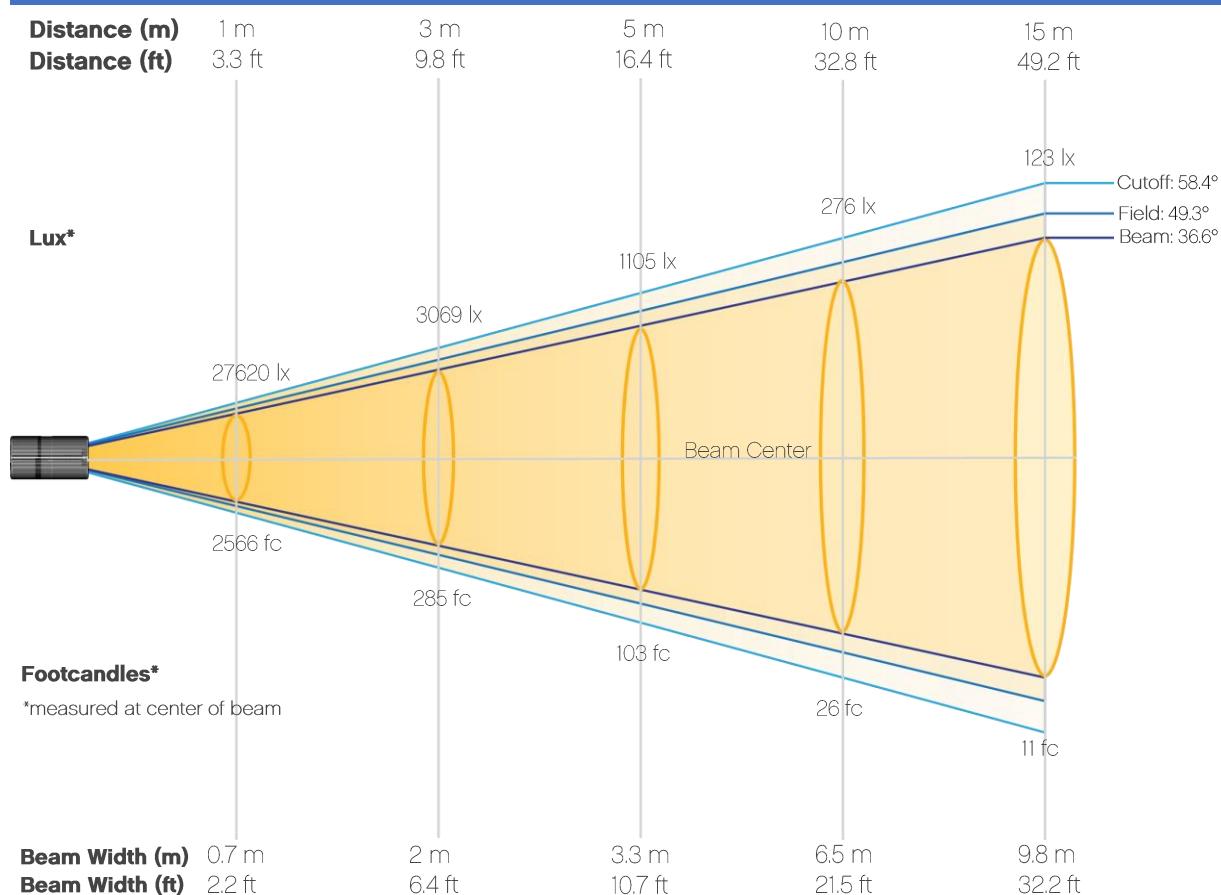
Overall Measurement



Photometric Report

Ovation FD-205WW: 50% Zoom, Full Power-750W

Beam Details



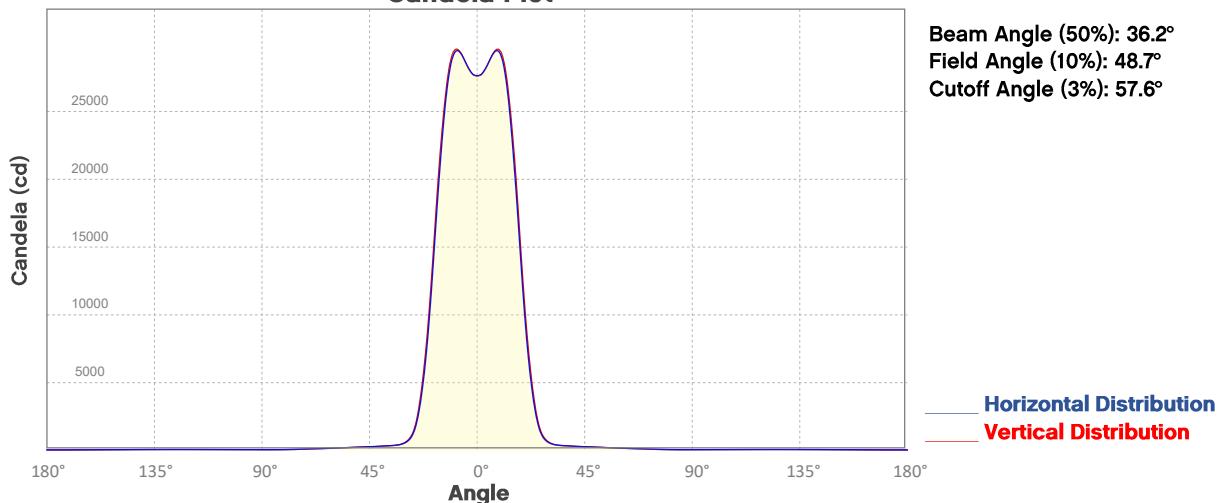
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	27620	6905	3069	1726	1105	767	564	432	341	276
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	228	192	163	141	123	108	96	85	77	69
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	2566	642	285	160	103	71	52	40	32	26
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	21	18	15	13	11	10	9	8	7	6

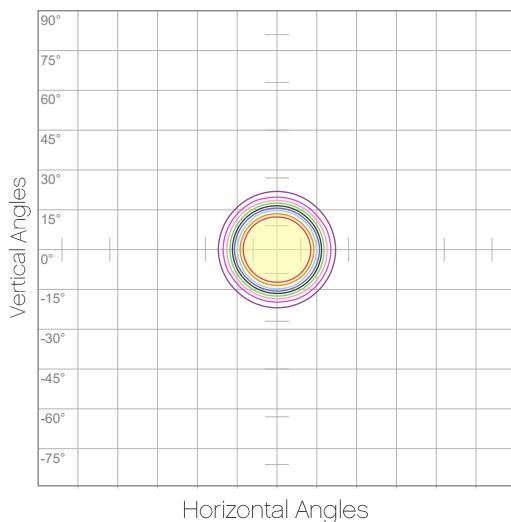
Photometric Report

Ovation FD-205WW: 50% Zoom, Full Power-750W

Candela Plot



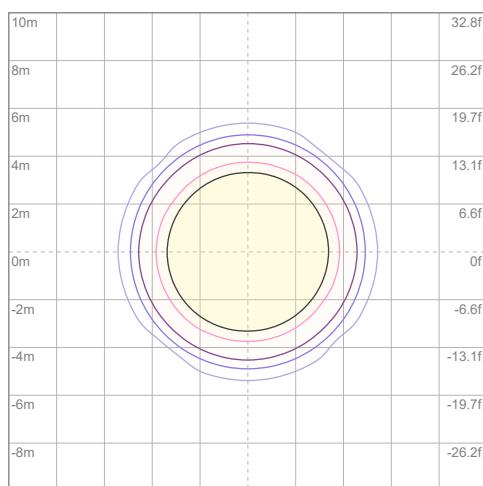
Polar Diagrams



iso-candela Diagram

10%	2762 cd
20%	5524 cd
30%	8286 cd
40%	11048 cd
50%	13810 cd
60%	16572 cd
70%	19334 cd
80%	22096 cd
90%	24858 cd

Conditions:
Number of c-planes: 8
Candela at center: 27620 cd



iso-illuminance Diagram

3%	8.29 lx
5%	13.8 lx
10%	27.6 lx
30%	82.9 lx
50%	138 lx

Conditions:
Number of c-planes: 8
Lux at center: 276 lx

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

Mounting height: 10 meters / 33 feet

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All product specifications, measurements and dimensions are subject to change without notice

Photometric Report

Ovation FD-205WW: Full Spot, Full Power-750W

Report Summary

Output

Total Lumens: 6973 lm
Peak Intensity: 118993 cd
Illuminance @ 5m: 4757 lux
Fixture Efficacy: 35 lm/W

Optical

Horizontal Beam Angle (50%): 12.6°
Vertical Beam Angle (50%): 12.3°
Horizontal Field Angle (10%): 22.2°
Vertical Field Angle (10%): 21.6°
Horizontal Cutoff Angle (3%): 28.2°
Vertical Cutoff Angle (3%): 27.3°

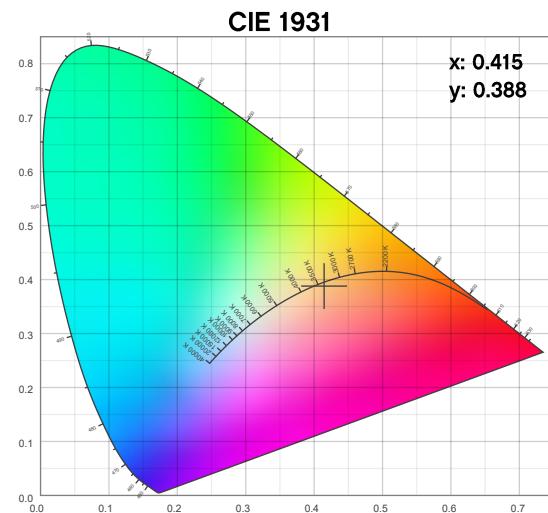
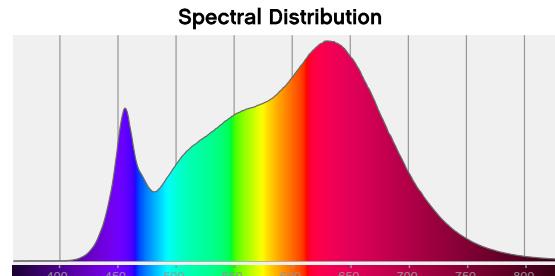
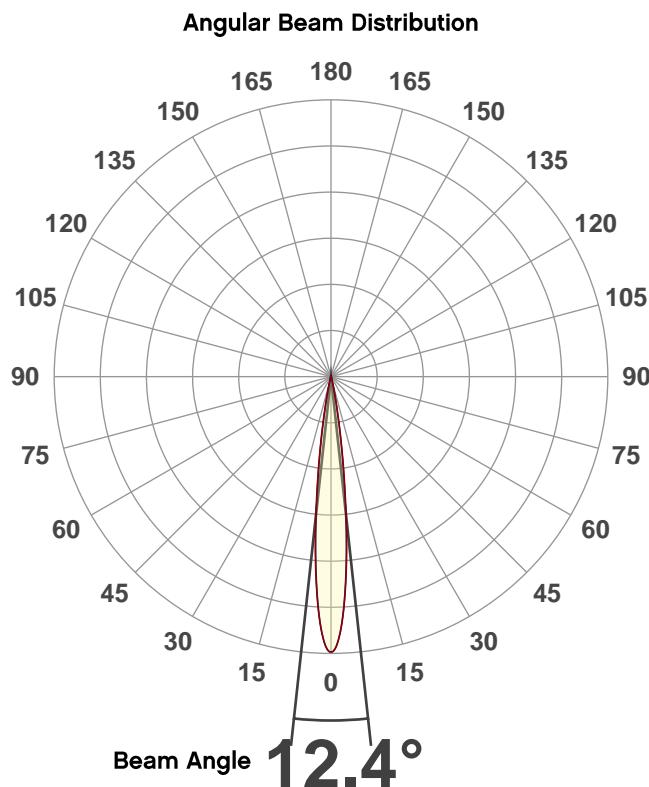
Conditions

AC Supply: 120 V, 60.2 Hz
Power: 198.62 W
Current: 1.66 A
Power Factor: 1.0



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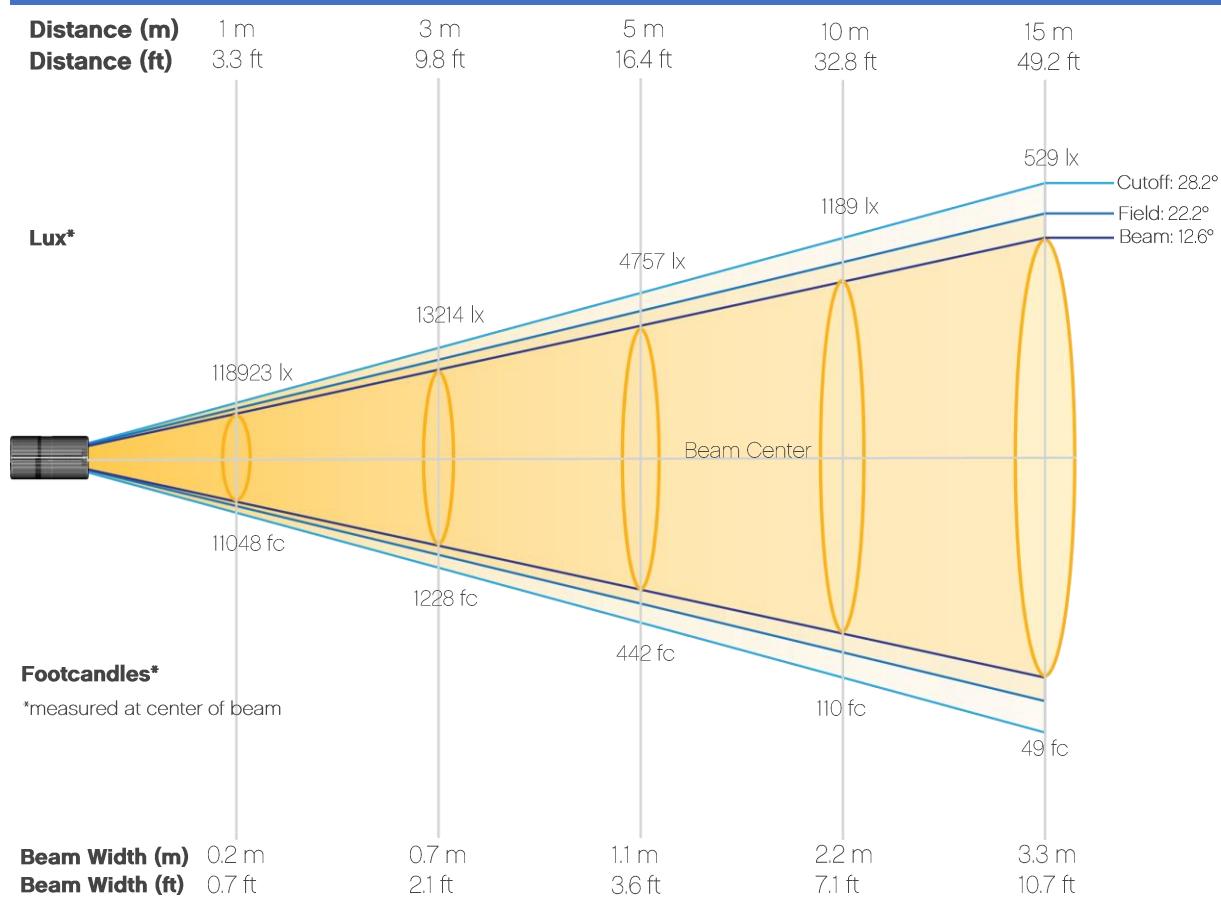
Overall Measurement



Photometric Report

Ovation FD-205WW: Full Spot, Full Power-750W

Beam Details

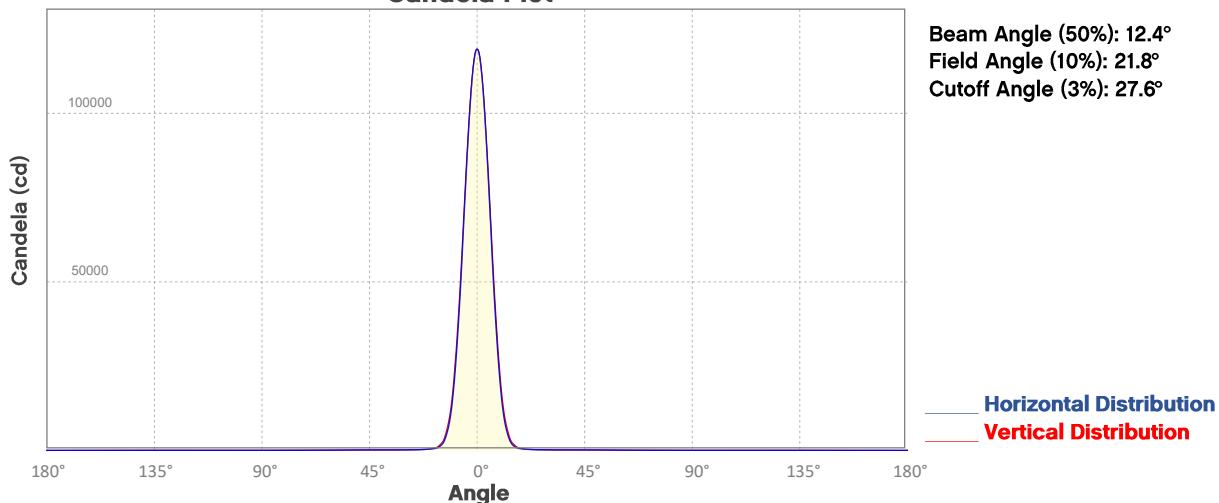


Beam Illuminances from 1-20m (3.3-65.6ft)

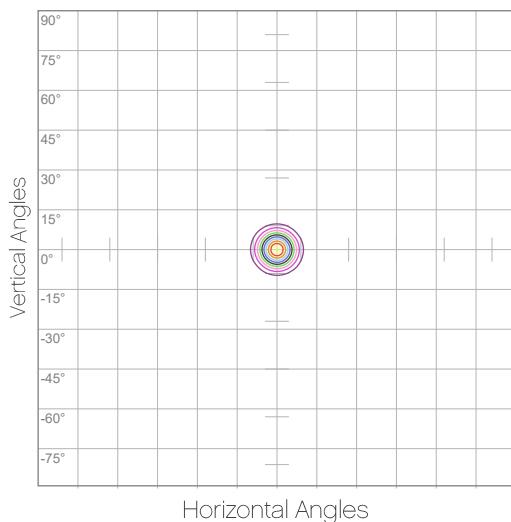
Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	118923	29731	13214	7433	4757	3303	2427	1858	1468	1189
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	983	826	704	607	529	465	411	367	329	297
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	11048	2762	1228	691	442	307	225	173	136	110
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	91	77	65	56	49	43	38	34	31	28

Photometric Report

Ovation FD-205WW: Full Spot, Full Power-750W
Candela Plot



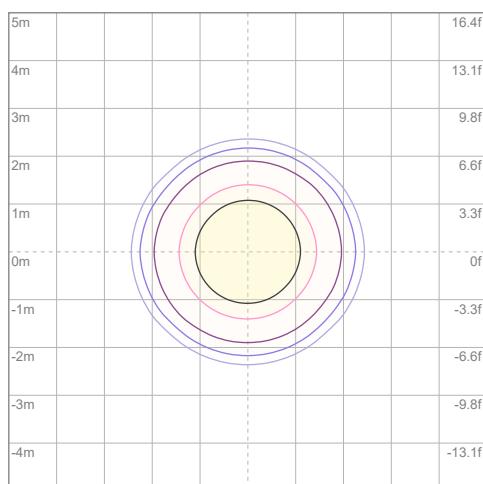
Polar Diagrams



iso-candela Diagram

10%	11892 cd
20%	23785 cd
30%	35677 cd
40%	47569 cd
50%	59461 cd
60%	71354 cd
70%	83246 cd
80%	95138 cd
90%	107030 cd

Conditions:
Number of c-planes: 8
Candela at center: 118923 cd



iso-illuminance Diagram

3%	35.7 lx
5%	59.5 lx
10%	119 lx
30%	357 lx
50%	595 lx

Conditions:
Number of c-planes: 8
Lux at center: 1189 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 FD-205WW: Full Power-750W

Report Summary

Measurements

Total Lumens: 11294 lm

Peak Intensity: 29587 cd

Fixture Efficacy: 58 lm/W

Correlated Color Temperature: 3218K

Δu_v : -0.0031

CRI: 97.7 CRI R9 Value: 95.9

CQS: 95.0

TLCI: 98

TM-30-18 Rf: 93.8

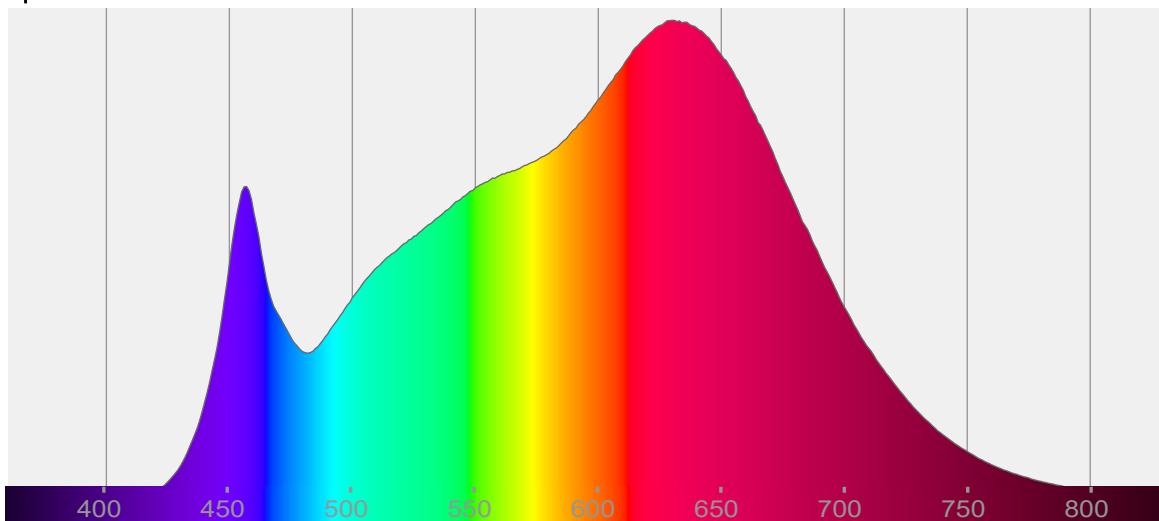
TM-30-18 Rg: 100.8

1st Dominant Wavelength: 630 nm

2nd Dominant Wavelength: 457 nm



Spectral Distribution



Tested Color

3218 K

CIE 1931 Coordinates:

X: 0.419 Y: 0.390

Color Temperature

3218 K

Light Quality

CRI: 97.7

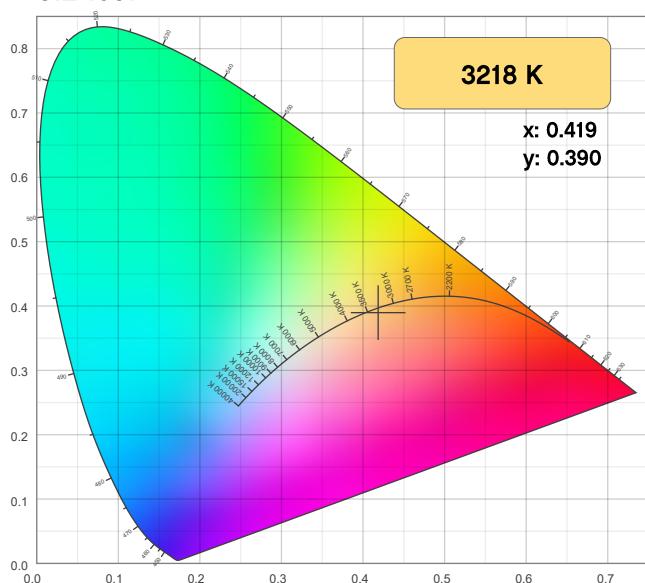
Notes:

Chromaticity Report

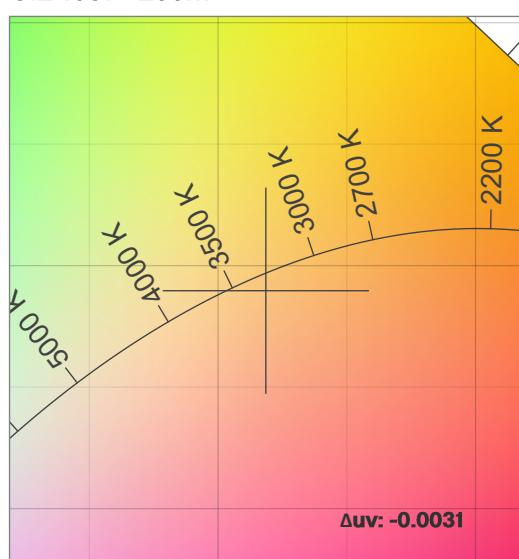
Ovation FD-205WW: Full Power-750W

Chromaticity

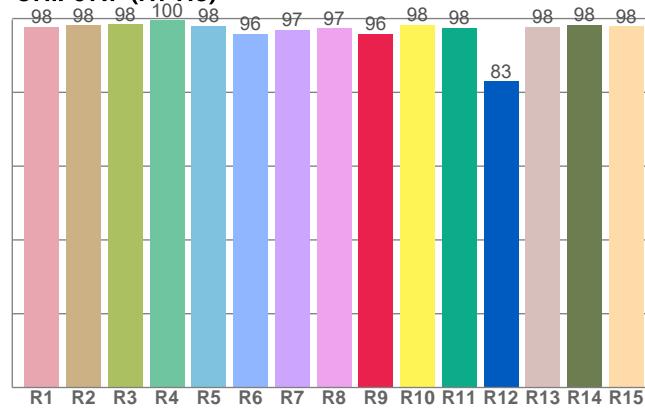
CIE 1931



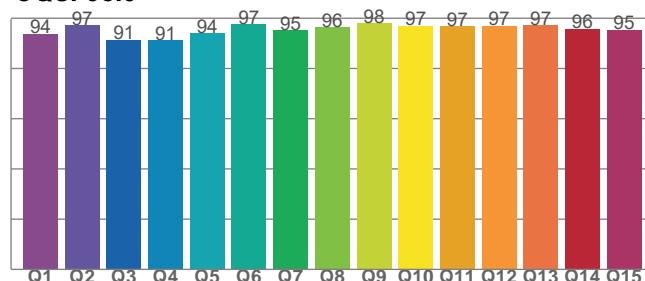
CIE 1931 - Zoom



CRI: 97.7 (R1-R8)



CQS: 95.0



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3218 K	0.419	0.390

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0031	0.390	0.245

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
97.7	95.9	95.0

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
98	93.8	100.8

Chromaticity Report

Ovation FD-205WW: Full Power-750W

TM-30-18 Details

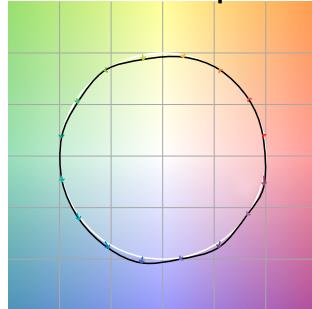
Rf 93.8

Fidelity Index
(Rg)

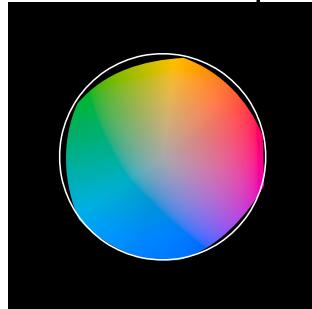
Rg 100.8

Gamut Index (Rg)

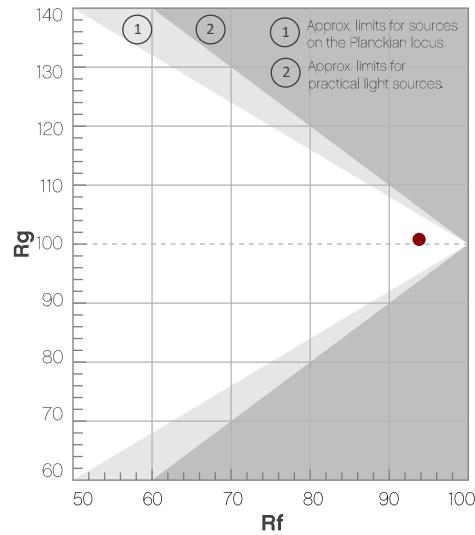
Color Vector Graphic



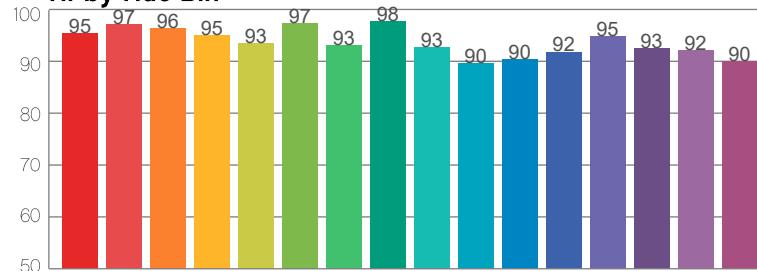
Color Distortion Graphic



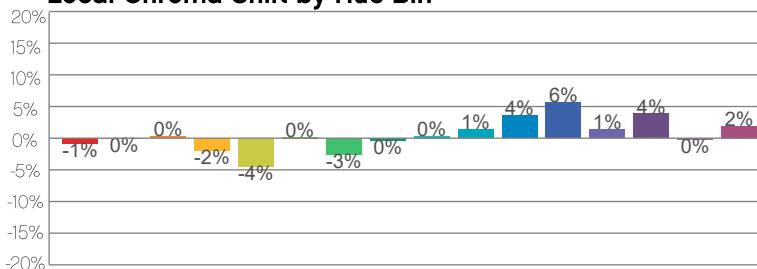
Hue Bin	R _f	Chroma Shift	Hue Shift
1	95	-1%	1%
2	97	0%	0%
3	96	0%	1%
4	95	-2%	-1%
5	93	-4%	0%
6	97	0%	1%
7	93	-3%	3%
8	98	0%	1%
9	93	0%	5%
10	90	1%	6%
11	90	4%	6%
12	92	6%	0%
13	95	1%	-3%
14	93	4%	-4%
15	92	0%	-2%
16	90	2%	-8%



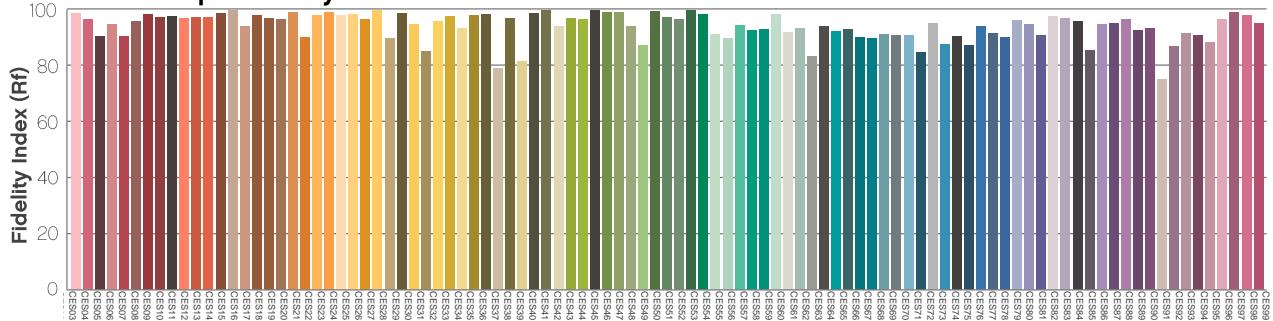
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



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All product specifications, measurements and dimensions are subject to change without notice

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.

