PHOTOMETRICS REPORT

OVATION
H-55FC

CHAUVET PROFESSIONAL

Table of Contents

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 H-55FC: 80deg Filter , Full Power

Report Summary

Output

Total Lumens: 2698 lm
Peak Intensity: 3798 cd
Illuminance @ 5m: 152 lux
Fixture Efficacy: 42 lm/W

Optical

Horizontal Beam Angle (50%): 46.1°
Vertical Beam Angle (50%): 47.1°
Horizontal Field Angle (10%): 76.8°
Vertical Field Angle (10%): 77.1°
Horizontal Cutoff Angle (3%): 113.1°
Vertical Cutoff Angle (3%): 113.3°

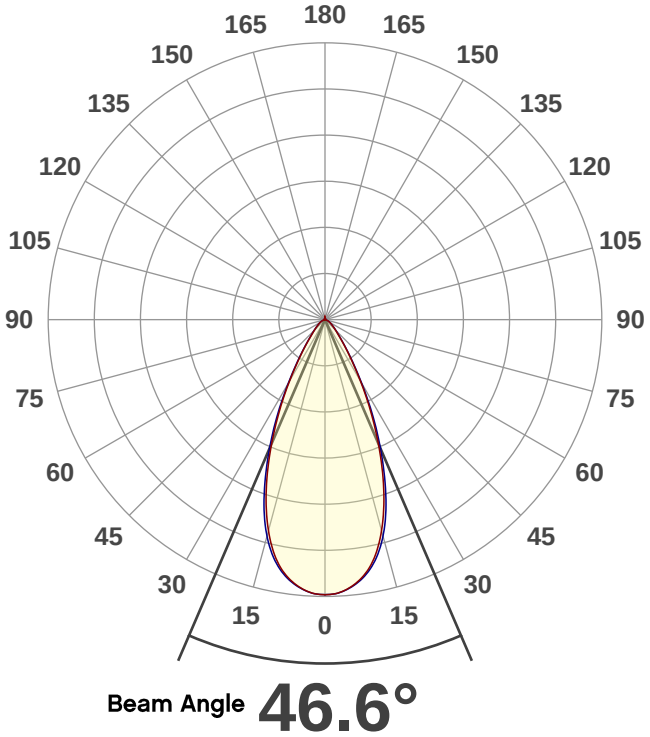
Conditions

AC Supply: 120 V, 60 Hz
Power: 65.02 W
Current: 0.543 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 2/7/2020 to LM-63-2002 Standards.

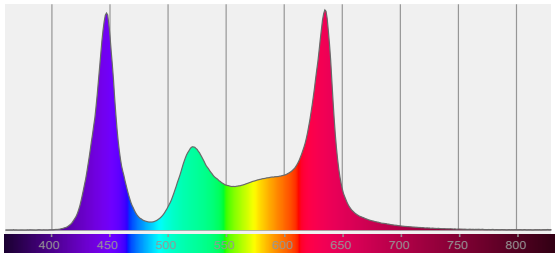
Overall Measurement

Angular Beam Distribution

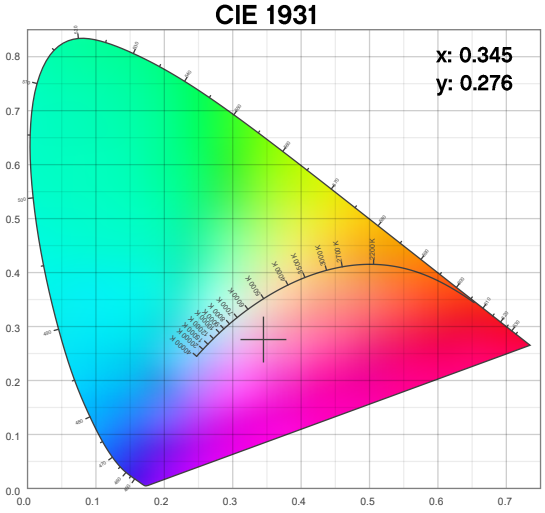


Beam Angle **46.6°**

Spectral Distribution



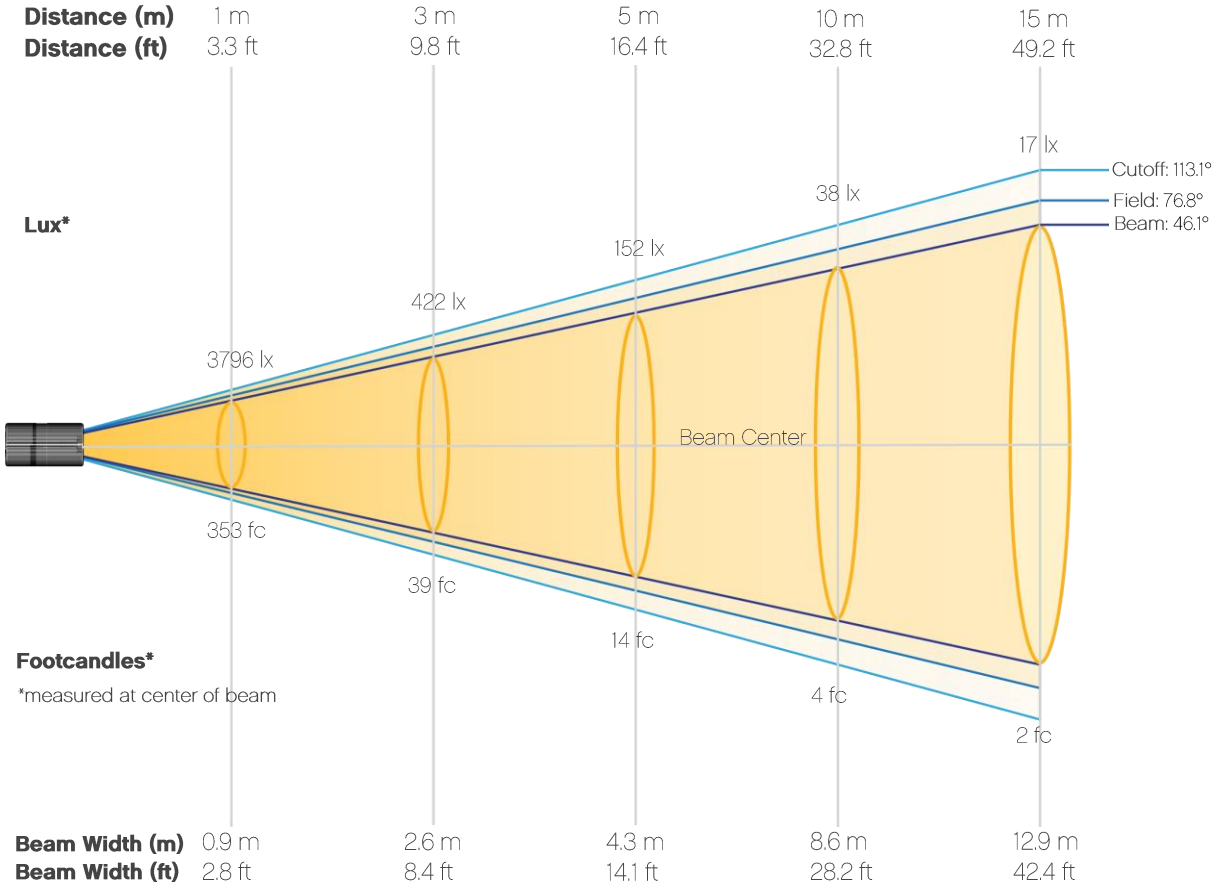
CIE 1931



Photometric Report

Ovation H-55FC: 80deg Filter , Full Power

Beam Details



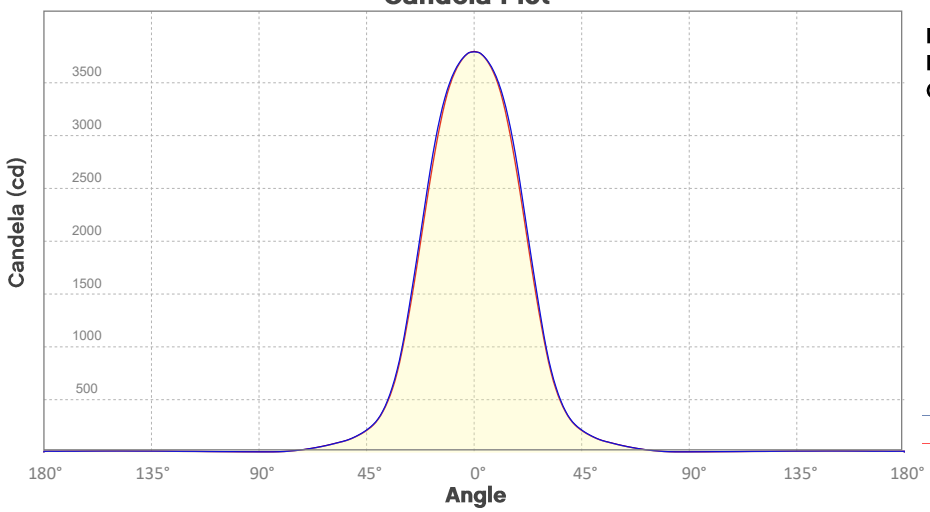
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	3796	949	422	237	152	105	77	59	47	38
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	31	26	22	19	17	15	13	12	11	9
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	353	88	39	22	14	10	7	6	4	4
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

Ovation H-55FC: 80deg Filter , Full Power

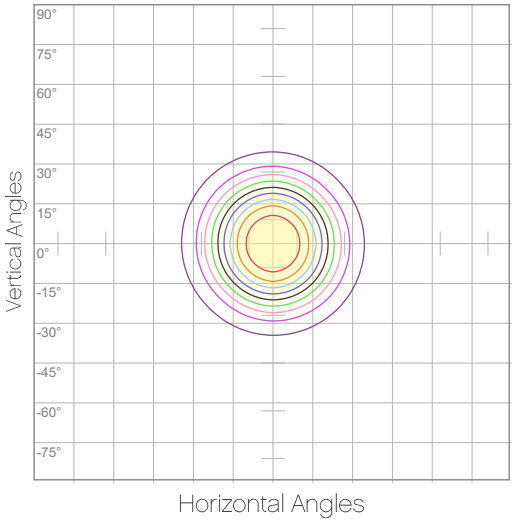
Candela Plot



Beam Angle (50%): 46.6°
Field Angle (10%): 76.8°
Cutoff Angle (3%): 113.1°

Horizontal Distribution
Vertical Distribution

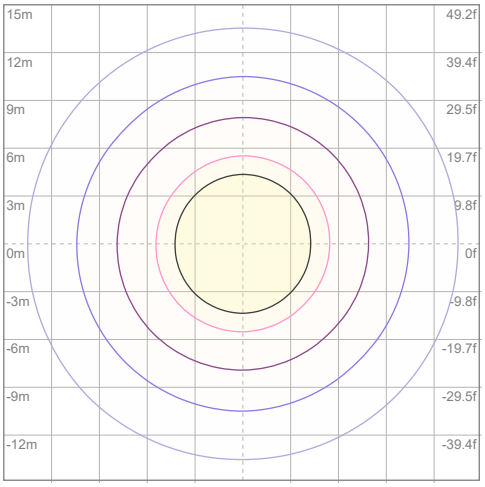
Polar Diagrams



iso-candela Diagram

10%	380 cd
20%	759 cd
30%	1139 cd
40%	1518 cd
50%	1898 cd
60%	2277 cd
70%	2657 cd
80%	3037 cd
90%	3416 cd

Conditions:
Number of c-planes: 8
Candela at center: 3796 cd



iso-illuminance Diagram

3%	1.14 lx
5%	1.90 lx
10%	3.80 lx
30%	11.4 lx
50%	19.0 lx

Conditions:
Number of c-planes: 8
Lux at center: 38.0 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 H-55FC: 65deg lens, Full Power

Report Summary

Output

Total Lumens: 2928 lm
Peak Intensity: 2886 cd
Illuminance @ 5m: 115 lux
Fixture Efficacy: 46 lm/W

Optical

Horizontal Beam Angle (50%): 63.3°
Vertical Beam Angle (50%): 61.5°
Horizontal Field Angle (10%): 86.9°
Vertical Field Angle (10%): 85.2°
Horizontal Cutoff Angle (3%): 103.7°
Vertical Cutoff Angle (3%): 102.5°

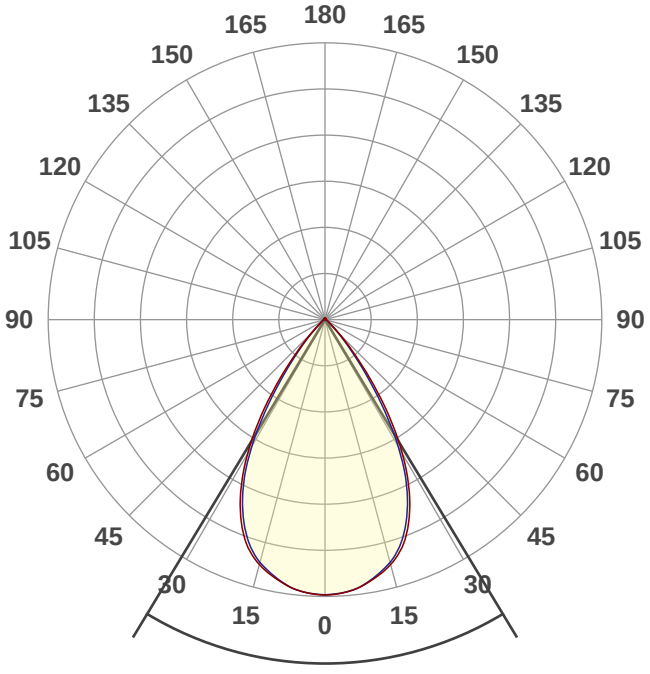
Conditions

AC Supply: 119 V, 60.1 Hz
Power: 64.51 W
Current: 0.541 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 12/13/2019 to LM-63-2002 Standards.

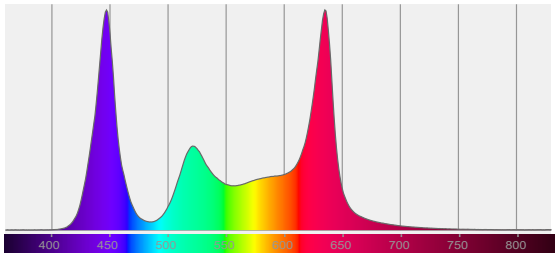
Overall Measurement

Angular Beam Distribution

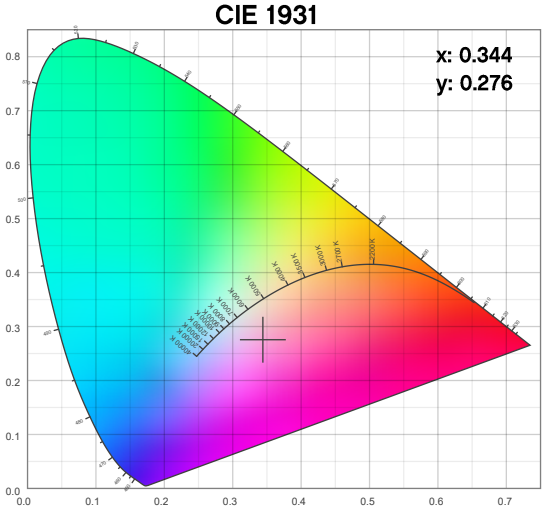


Beam Angle **62.3°**

Spectral Distribution



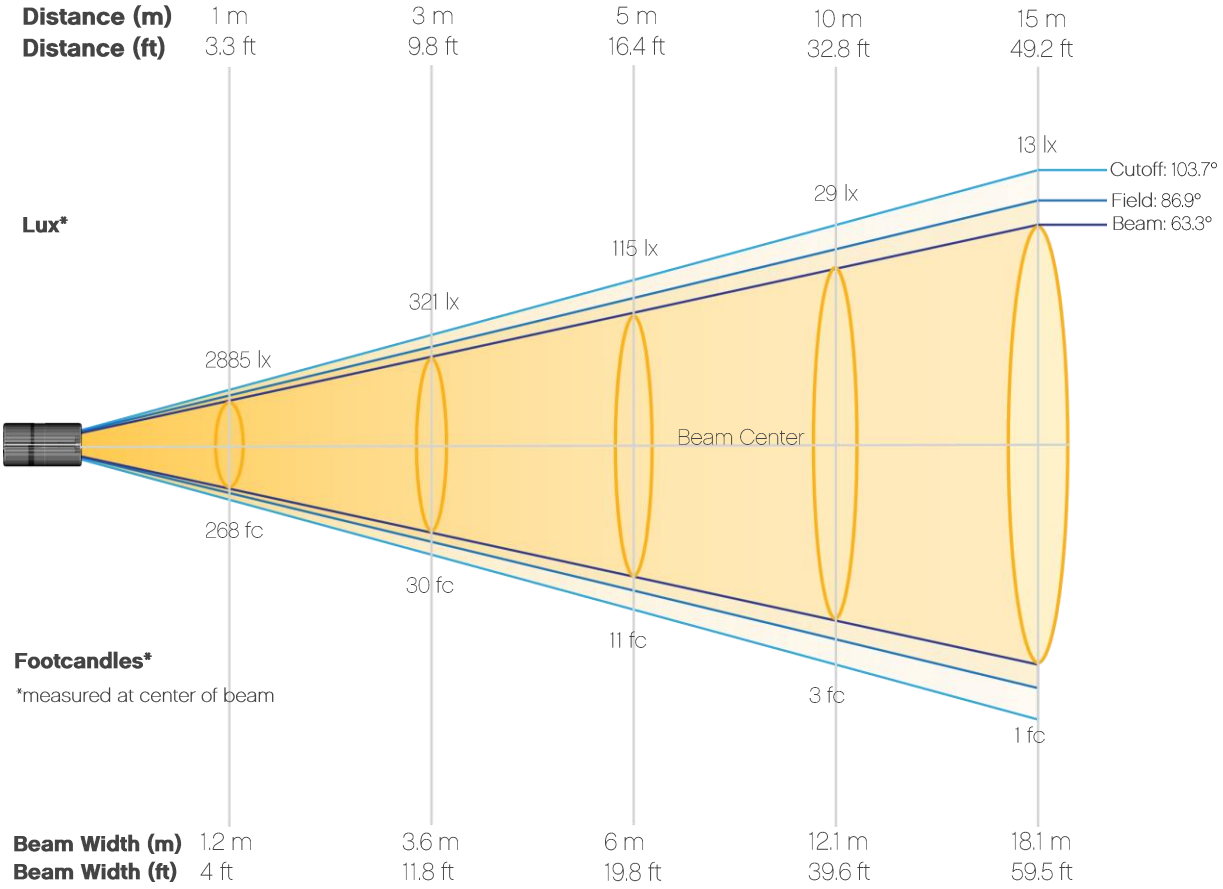
CIE 1931



Photometric Report

Ovation H-55FC: 65deg lens, Full Power

Beam Details



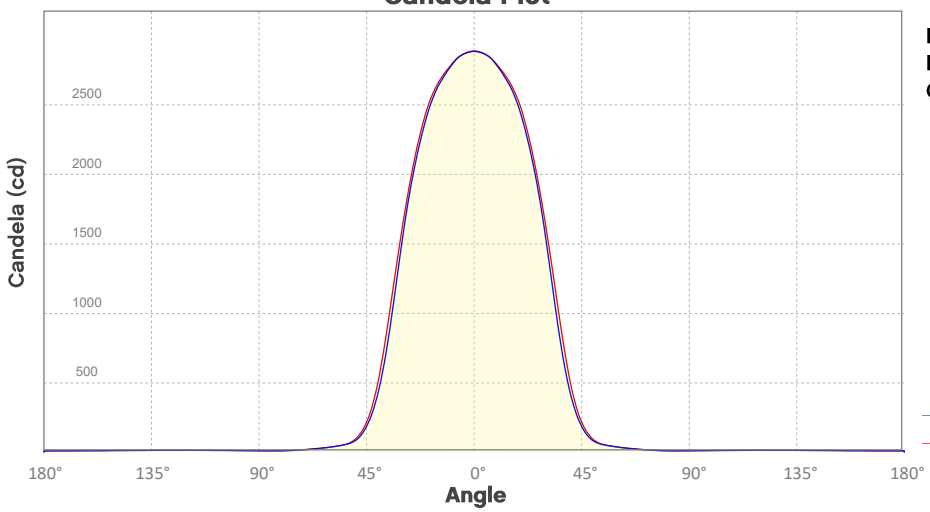
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	2885	721	321	180	115	80	59	45	36	29
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	24	20	17	15	13	11	10	9	8	7
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	268	67	30	17	11	7	5	4	3	3
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	2	2	2	1	1	1	1	1	1	1

Photometric Report

Ovation H-55FC: 65deg lens, Full Power

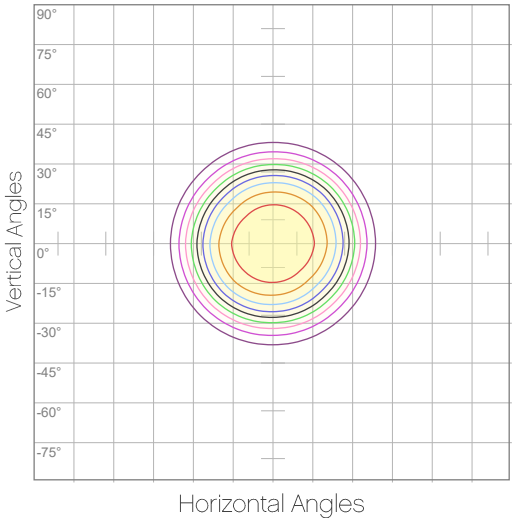
Candela Plot



Beam Angle (50%): 62.3°
Field Angle (10%): 86°
Cutoff Angle (3%): 103.2°

Horizontal Distribution
Vertical Distribution

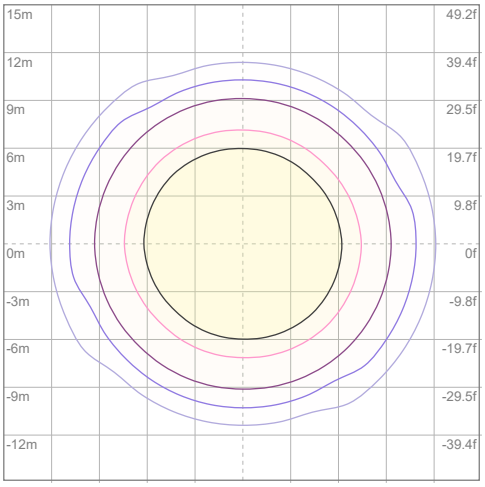
Polar Diagrams



iso-candela Diagram

10%	289 cd
20%	577 cd
30%	866 cd
40%	1154 cd
50%	1443 cd
60%	1731 cd
70%	2020 cd
80%	2308 cd
90%	2597 cd

Conditions:
Number of c-planes: 8
Candela at center: 2885 cd



iso-illuminance Diagram

3%	0.866 lx
5%	1.44 lx
10%	2.89 lx
30%	8.66 lx
50%	14.4 lx

Conditions:
Number of c-planes: 8
Lux at center: 28.9 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 H-55FC: 45deg lens, Full Power

Report Summary

Output

Total Lumens: 2691 lm
Peak Intensity: 4318 cd
Illuminance @ 5m: 173 lux
Fixture Efficacy: 42 lm/W

Optical

Horizontal Beam Angle (50%): 38.8°
Vertical Beam Angle (50%): 38°
Horizontal Field Angle (10%): 78.4°
Vertical Field Angle (10%): 77.2°
Horizontal Cutoff Angle (3%): 115.5°
Vertical Cutoff Angle (3%): 115.7°

Conditions

AC Supply: 119 V, 60 Hz
Power: 64.27 W
Current: 0.542 A
Power Factor: 1.0

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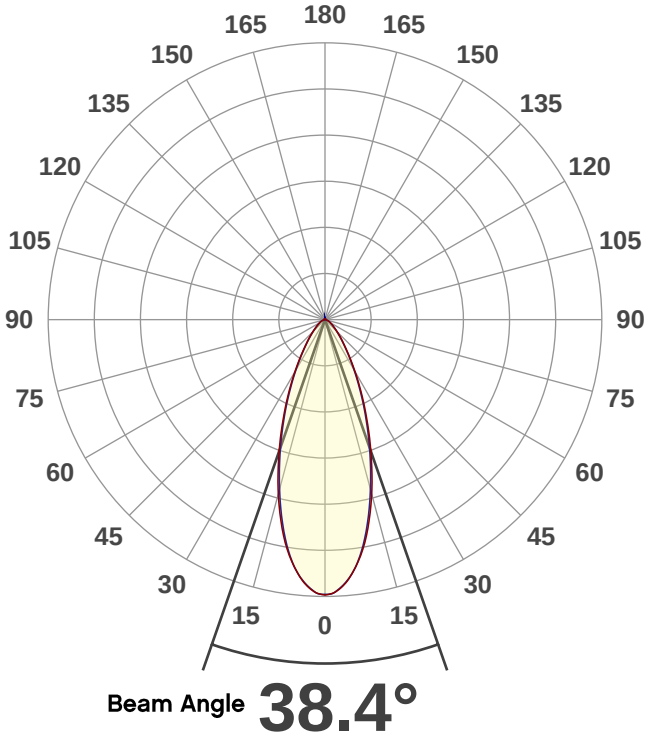
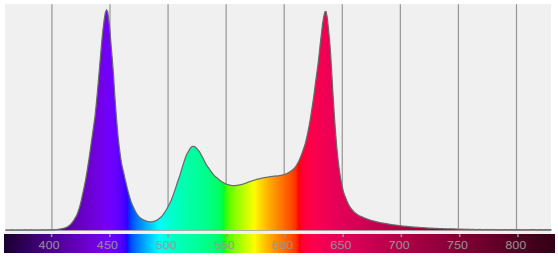
Overall Measurement

Angular Beam Distribution

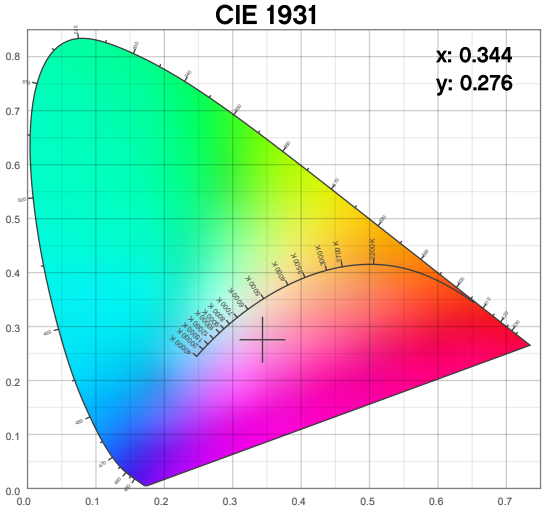


Beam Angle **38.4°**

Spectral Distribution



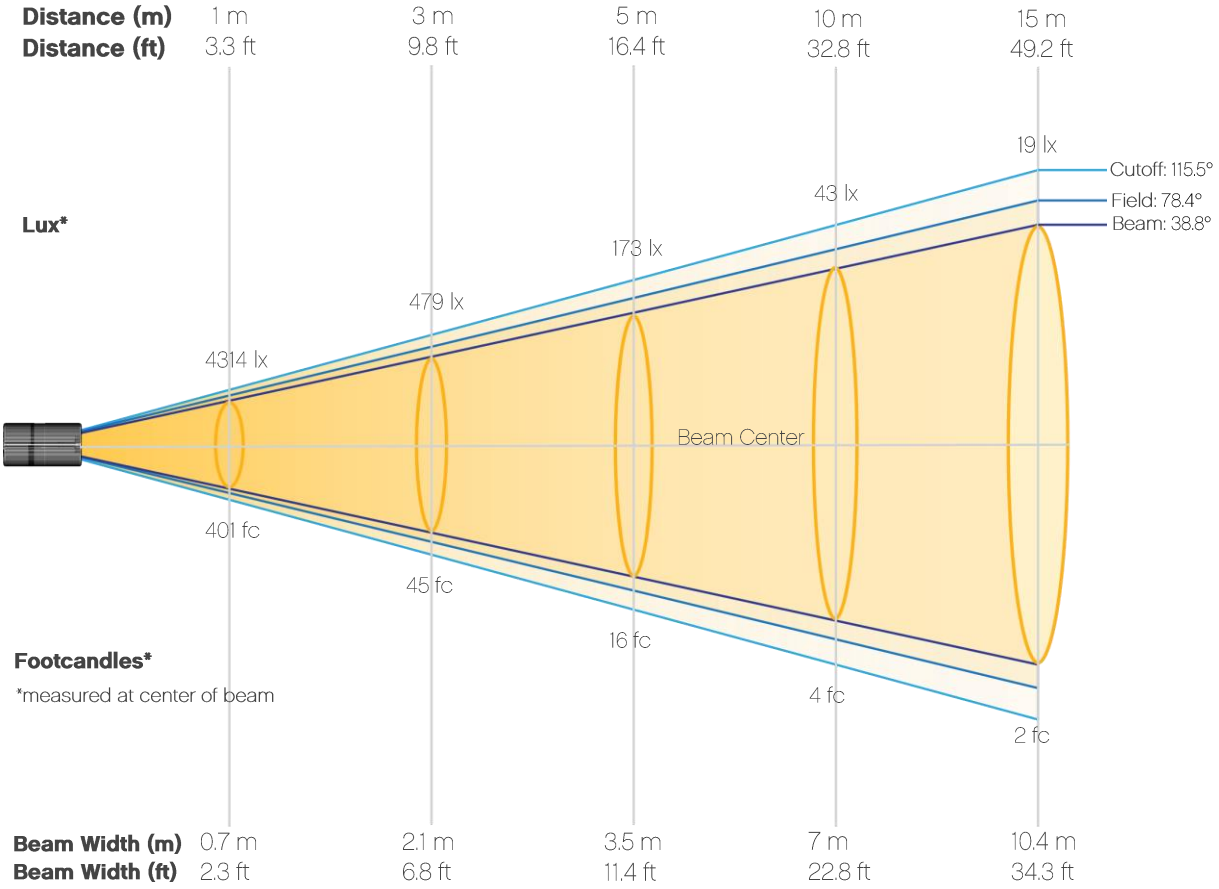
CIE 1931



Photometric Report

Ovation H-55FC: 45deg lens, Full Power

Beam Details



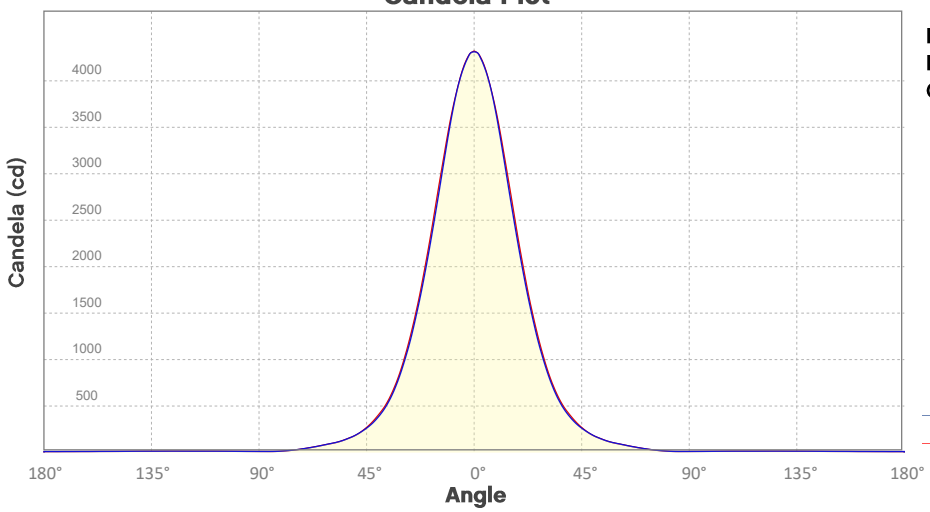
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	4314	1078	479	270	173	120	88	67	53	43
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	36	30	26	22	19	17	15	13	12	11
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	401	100	45	25	16	11	8	6	5	4
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	3	3	2	2	2	2	1	1	1	1

Photometric Report

Ovation H-55FC: 45deg lens, Full Power

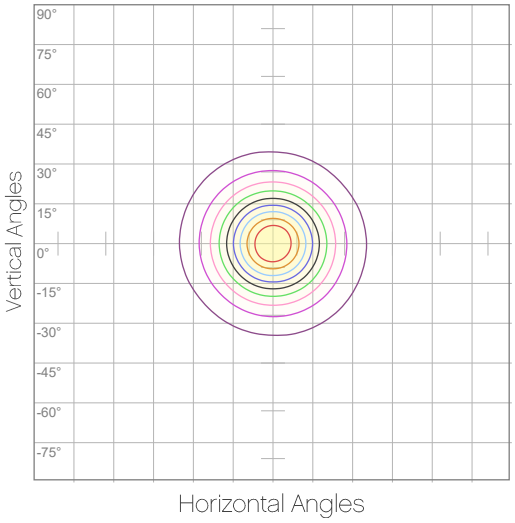
Candela Plot



Beam Angle (50%): 38.4°
Field Angle (10%): 77.7°
Cutoff Angle (3%): 115.7°

Horizontal Distribution
Vertical Distribution

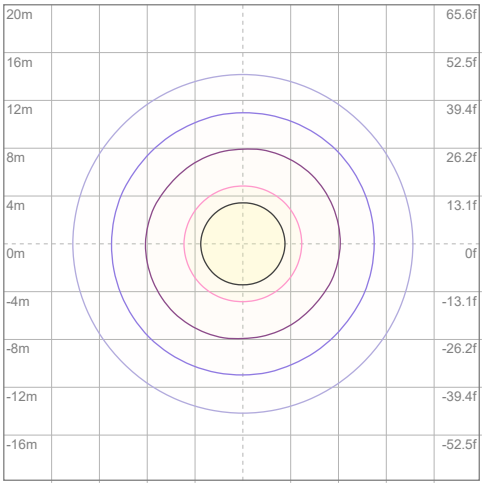
Polar Diagrams



iso-candela Diagram

10%	431 cd
20%	863 cd
30%	1294 cd
40%	1726 cd
50%	2157 cd
60%	2588 cd
70%	3020 cd
80%	3451 cd
90%	3883 cd

Conditions:
Number of c-planes: 8
Candela at center: 4314 cd



iso-illuminance Diagram

3%	1.29 lx
5%	2.16 lx
10%	4.31 lx
30%	12.9 lx
50%	21.6 lx

Conditions:
Number of c-planes: 8
Lux at center: 43.1 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 H-55FC: 25deg lens, Full Power

Report Summary

Output

Total Lumens: 2849 lm
Peak Intensity: 10778 cd
Illuminance @ 5m: 430 lux
Fixture Efficacy: 45 lm/W

Optical

Horizontal Beam Angle (50%): 24.7°
Vertical Beam Angle (50%): 24.4°
Horizontal Field Angle (10%): 46.7°
Vertical Field Angle (10%): 45.8°
Horizontal Cutoff Angle (3%): 73.9°
Vertical Cutoff Angle (3%): 70.3°

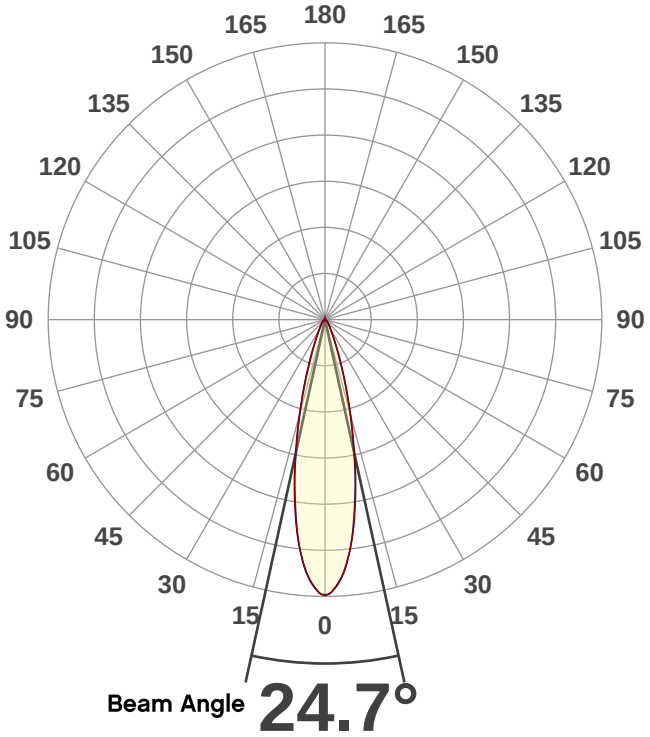
Conditions

AC Supply: 118 V, 60 Hz
Power: 63.71 W
Current: 0.538 A
Power Factor: 1.0

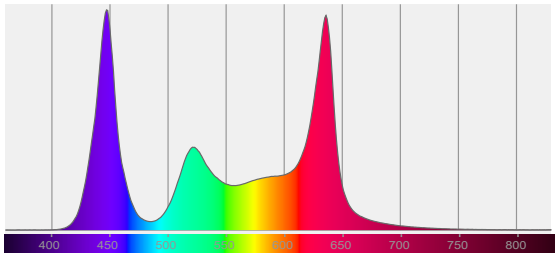
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 12/13/2019 to LM-63-2002 Standards.

Overall Measurement

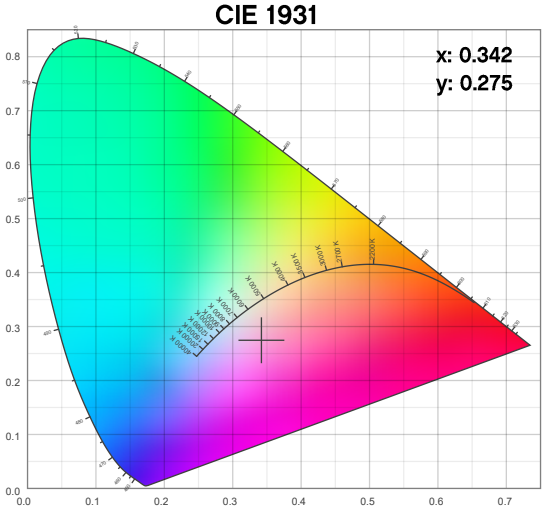
Angular Beam Distribution



Spectral Distribution



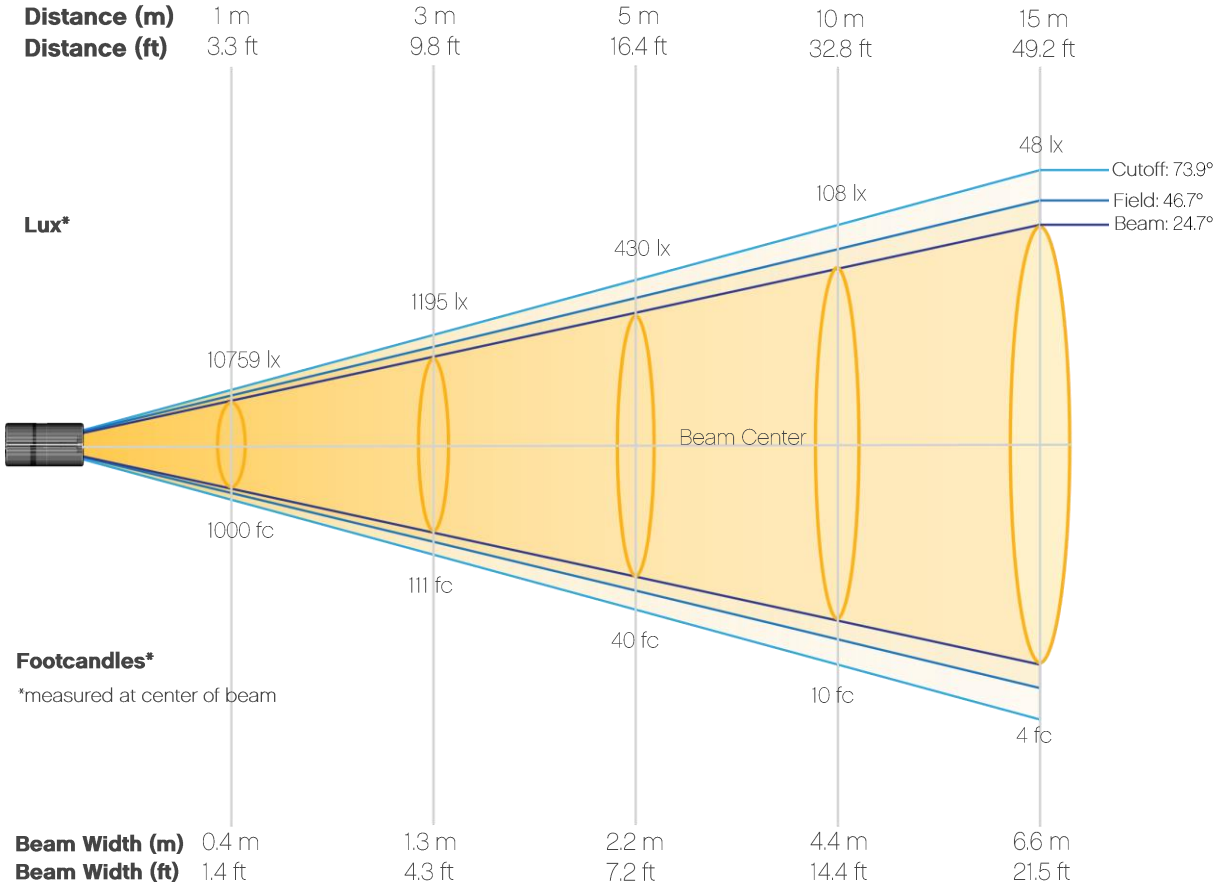
CIE 1931



Photometric Report

Ovation H-55FC: 25deg lens, Full Power

Beam Details



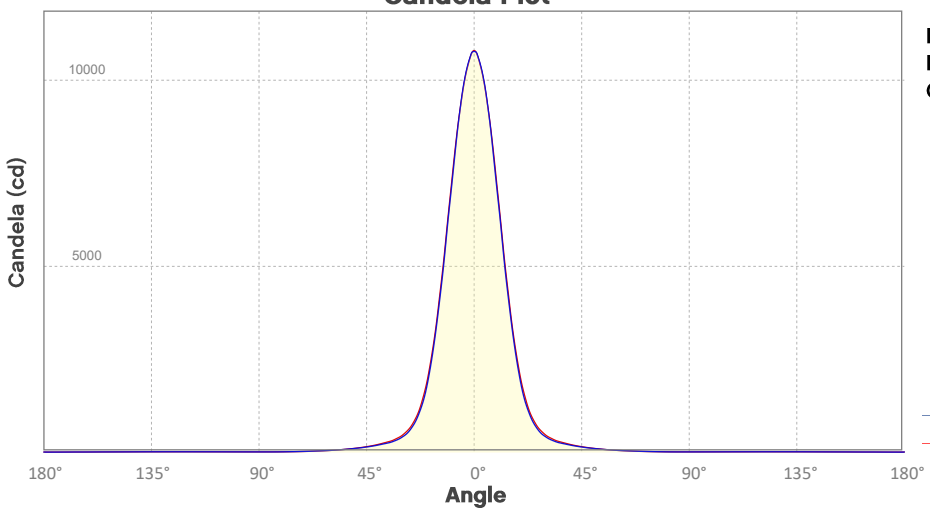
Beam Iluminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	10759	2690	1195	672	430	299	220	168	133	108
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	89	75	64	55	48	42	37	33	30	27
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	1000	250	111	62	40	28	20	16	12	10
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	8	7	6	5	4	4	3	3	3	2

Photometric Report

Ovation H-55FC: 25deg lens, Full Power

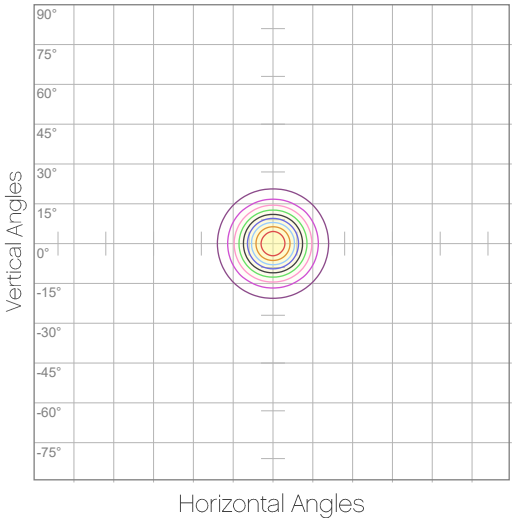
Candela Plot



Beam Angle (50%): 24.7°
Field Angle (10%): 46.3°
Cutoff Angle (3%): 72°

Horizontal Distribution
Vertical Distribution

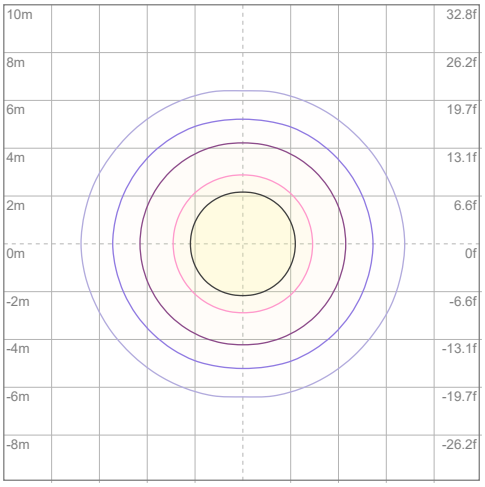
Polar Diagrams



iso-candela Diagram

10%	1076 cd
20%	2152 cd
30%	3228 cd
40%	4304 cd
50%	5380 cd
60%	6456 cd
70%	7531 cd
80%	8607 cd
90%	9683 cd

Conditions:
Number of c-planes: 8
Candela at center: 10759 cd



iso-illuminance Diagram

3%	3.23 lx
5%	5.38 lx
10%	10.8 lx
30%	32.3 lx
50%	53.8 lx

Conditions:
Number of c-planes: 8
Lux at center: 108 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 H-55FC: 3200K

Report Summary

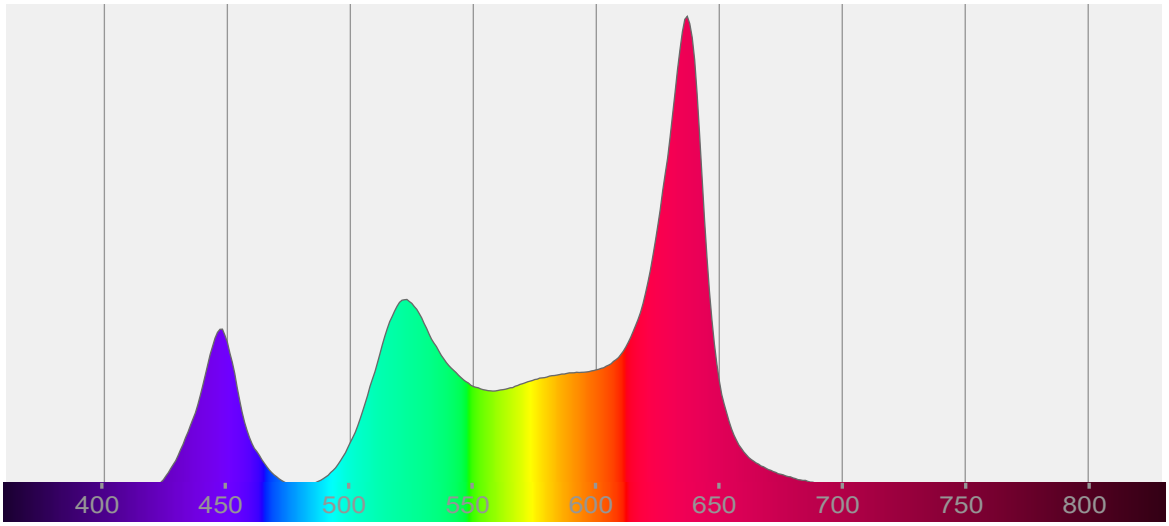
Measurements

Total Lumens: 2482 lm
Peak Intensity: 3972 cd
Fixture Efficacy: 47 lm/W

Correlated Color Temperature: 3232K
Δuv: -0.0036

CRI: 77.7 CRI R9 Value: 25.1
CQS: 84.7
TLCI: 54
TM-30-18 Rf: 82.7
TM-30-18 Rg: 116.7
1st Dominant Wavelength: 637 nM
2nd Dominant Wavelength: 523 nM

Spectral Distribution



Tested Color

3232 K
CIE 1931 Coordinates:
X: 0.417 Y: 0.388

Color Temperature

3232 K

Light Quality

CRI: 77.7

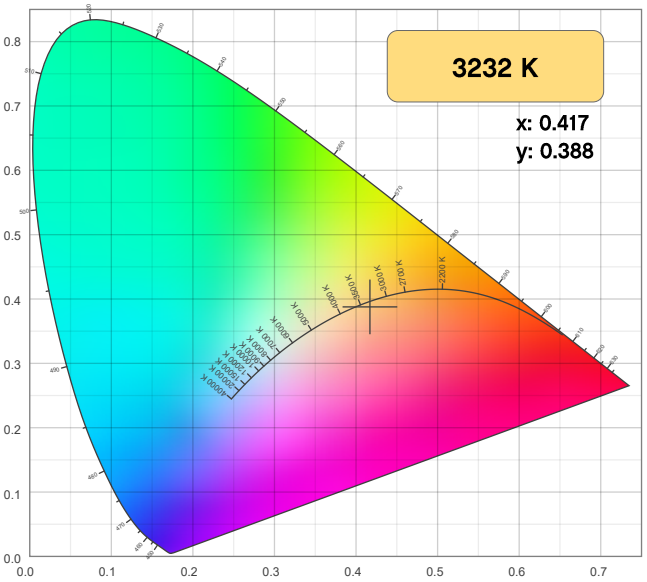
Notes:

Chromaticity Report

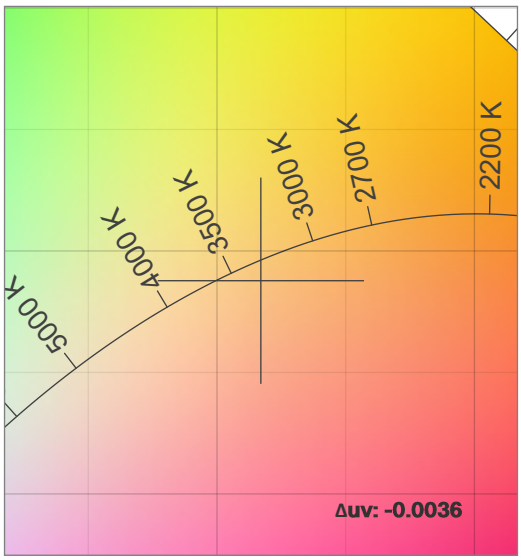
Ovation H-55FC: 3200K

Chromaticity

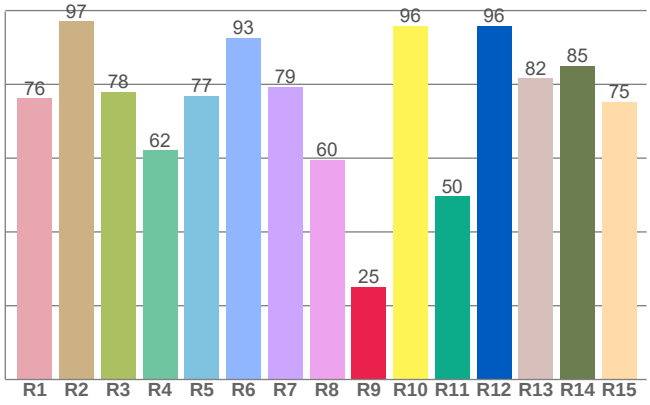
CIE 1931



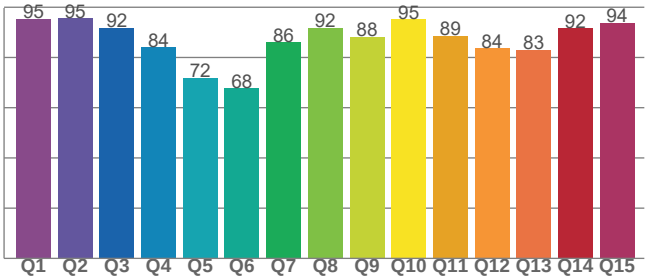
CIE 1931 - Zoom



CRI: 77.7 (R1-R8)



CQS: 84.7



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3232 K	0.417	0.388

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0036	0.388	0.245

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
77.7	25.1	84.7

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
54	82.7	116.7

Chromaticity Report

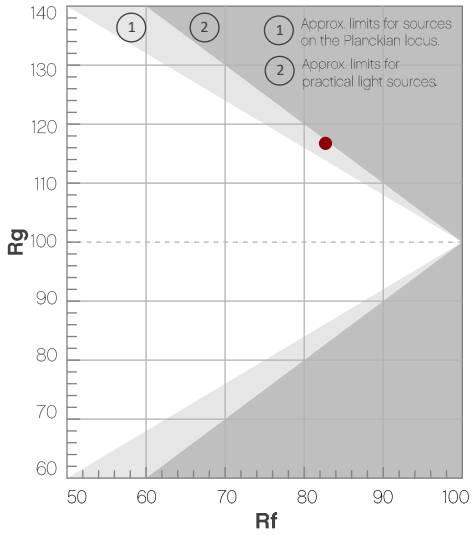
Ovation H-55FC: 3200K

TM-30-18 Details

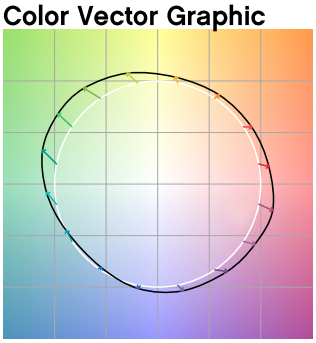
Rf 82.7
Fidelity Index (Rg)

Rg 116.7
Gamut Index (Rg)

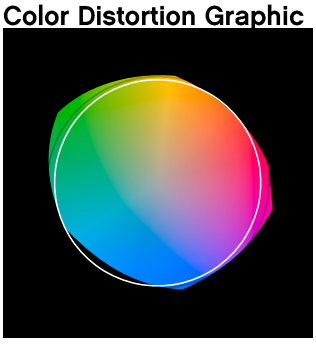
Hue Bin	R_f	Chroma Shift	Hue Shift
1	80	9%	-4%
2	84	6%	-5%
3	86	5%	-1%
4	88	5%	4%
5	83	11%	8%
6	72	17%	8%
7	71	18%	-3%
8	70	16%	-10%
9	79	7%	-13%
10	80	-1%	-12%
11	91	-2%	-1%
12	91	3%	2%
13	90	6%	4%
14	85	8%	9%
15	82	11%	4%
16	82	14%	-3%



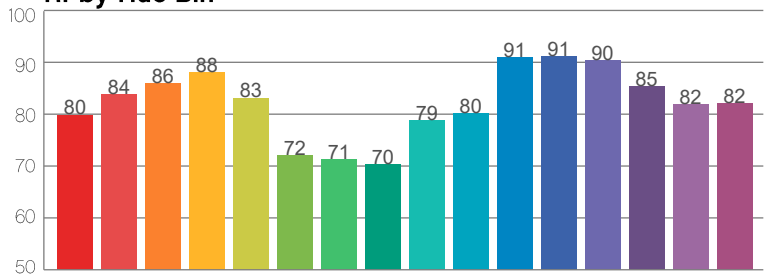
Color Vector Graphic



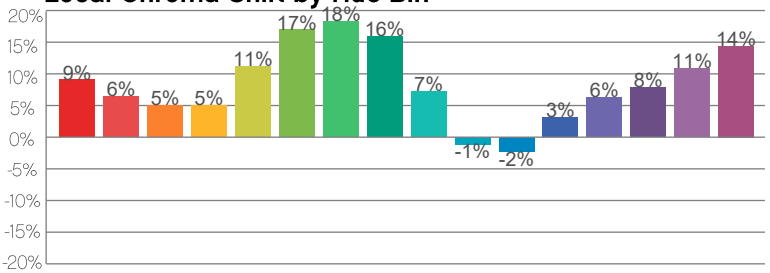
Color Distortion Graphic



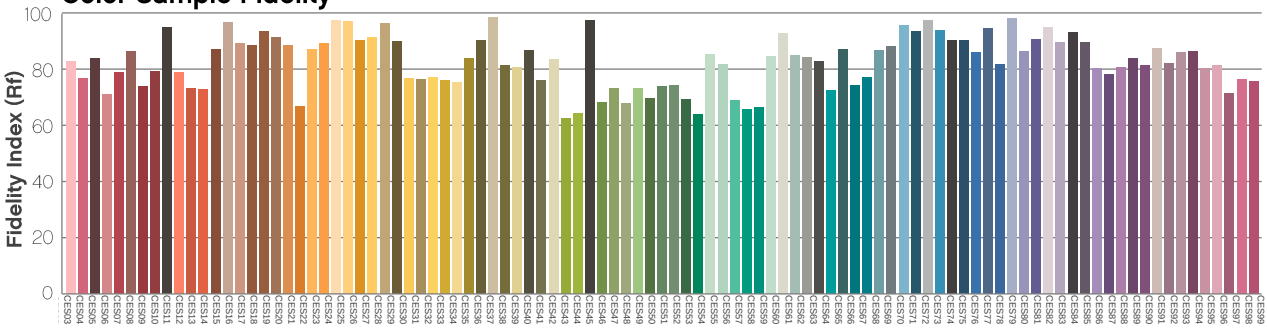
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chromaticity Report

Ovation H-55FC: 5600K

Report Summary

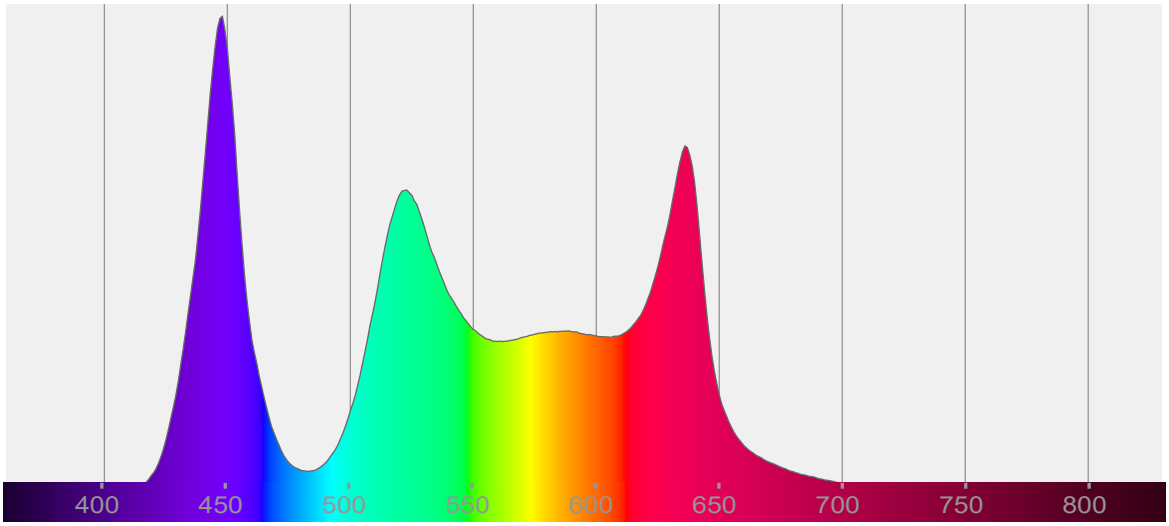
Measurements

Total Lumens: 2147 lm
Peak Intensity: 3427 cd
Fixture Efficacy: 47 lm/W

Correlated Color Temperature: 5600K
Δuv: -0.0070

CRI: 82.2 CRI R9 Value: 62.8
CQS: 87.3
TLCI: 70
TM-30-18 Rf: 81.9
TM-30-18 Rg: 113.1
1st Dominant Wavelength: 448 nM
2nd Dominant Wavelength: 636 nM

Spectral Distribution



Tested Color

5600 K
CIE 1931 Coordinates:
X: 0.330 Y: 0.332

Color Temperature

5600 K

Light Quality

CRI: 82.2

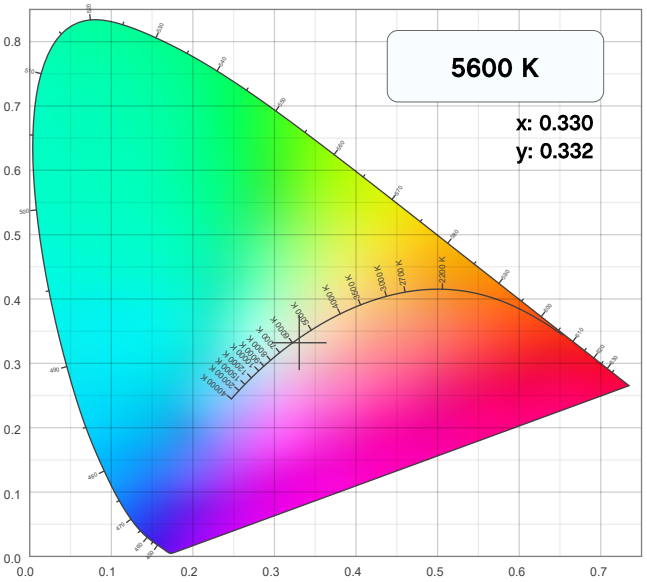
Notes:

Chromaticity Report

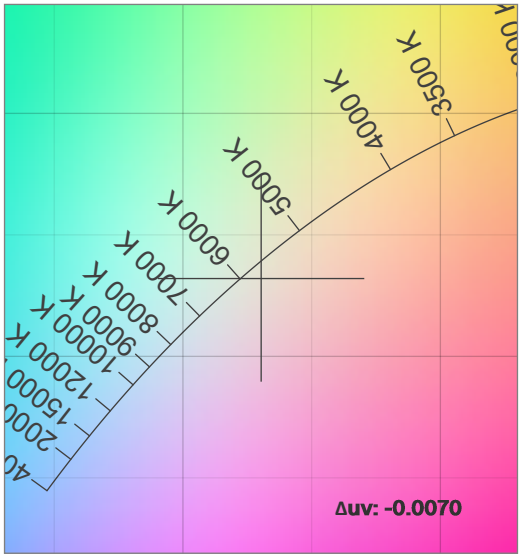
Ovation H-55FC: 5600K

Chromaticity

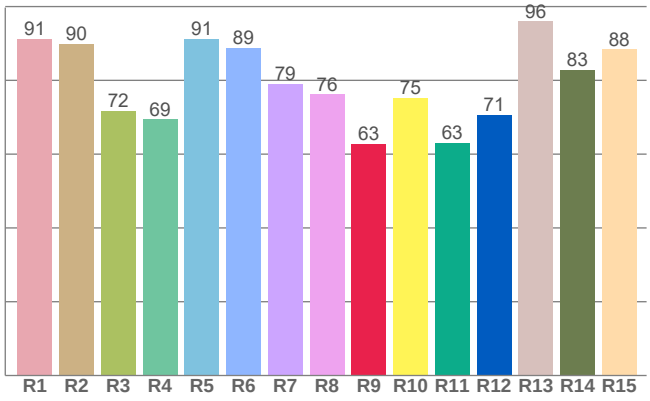
CIE 1931



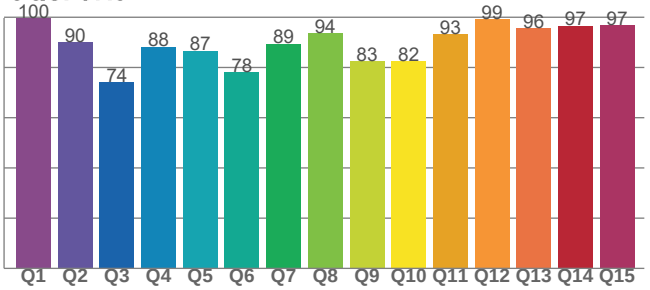
CIE 1931 - Zoom



CRI: 82.2 (R1-R8)



CQS: 87.3



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
5600 K	0.330	0.332

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0070	0.332	0.209

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
82.2	62.8	87.3

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
70	81.9	113.1

Chromaticity Report

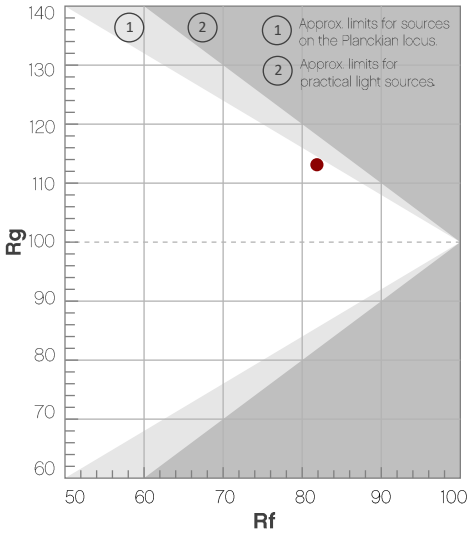
Ovation H-55FC: 5600K

TM-30-18 Details

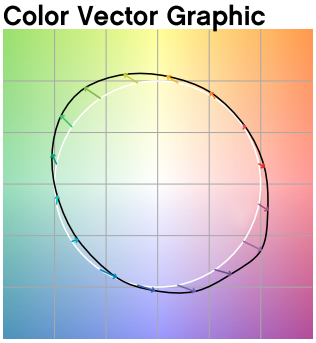
Rf 81.9
Fidelity Index (Rg)

Rg 113.1
Gamut Index (Rg)

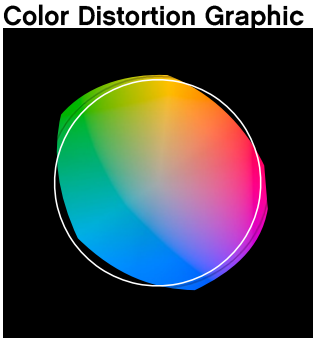
Hue Bin	R_f	Chroma Shift	Hue Shift
1	87	5%	-4%
2	94	2%	-1%
3	87	2%	7%
4	81	4%	11%
5	78	11%	11%
6	74	17%	7%
7	78	15%	-3%
8	83	6%	-8%
9	90	-2%	-7%
10	89	-6%	2%
11	73	-3%	17%
12	76	2%	17%
13	81	9%	15%
14	75	12%	11%
15	80	19%	3%
16	83	10%	-4%



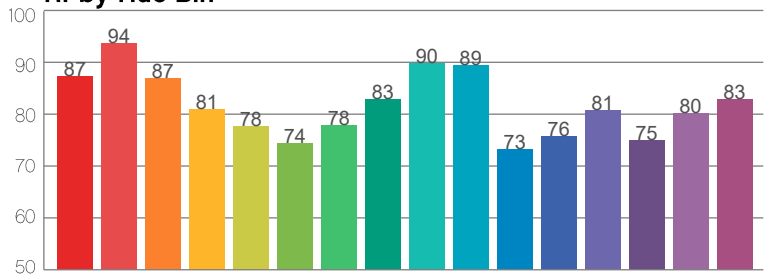
Color Vector Graphic



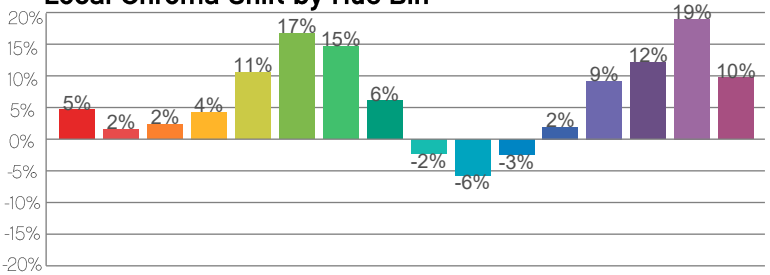
Color Distortion Graphic



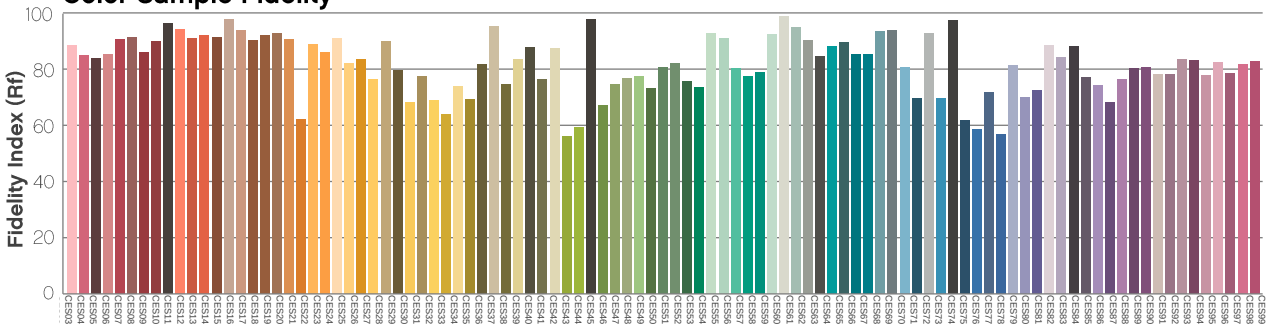
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



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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.