PHOTOMETRICS REPORT

OVATION
H-605FC

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-605FC: 80deg Filter, Full Power

Report Summary

Output

Total Lumens: 4409 lm
Peak Intensity: 3687 cd
Illuminance @ 5m: 147 lux
Fixture Efficacy: 31 lm/W

Optical

Horizontal Beam Angle (50%): 47.6°
Vertical Beam Angle (50%): 47.6°
Horizontal Field Angle (10%): 134.6°
Vertical Field Angle (10%): 135.1°
Horizontal Cutoff Angle (3%): 153.6°
Vertical Cutoff Angle (3%): 153.8°

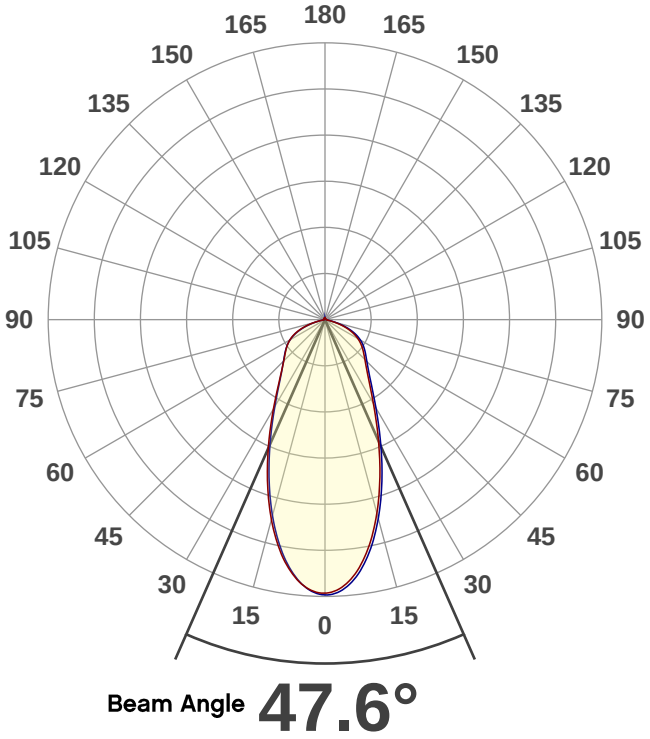
Conditions

AC Supply: 118 V, 60 Hz
Power: 144.75 W
Current: 1.23 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 6/13/2019 to LM-63-2002 Standards.

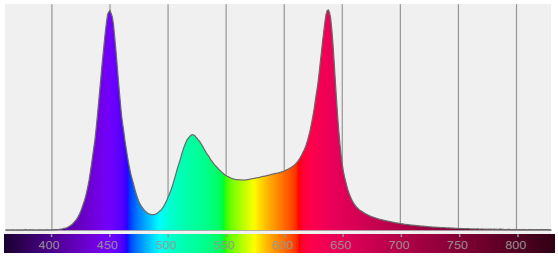
Overall Measurement

Angular Beam Distribution

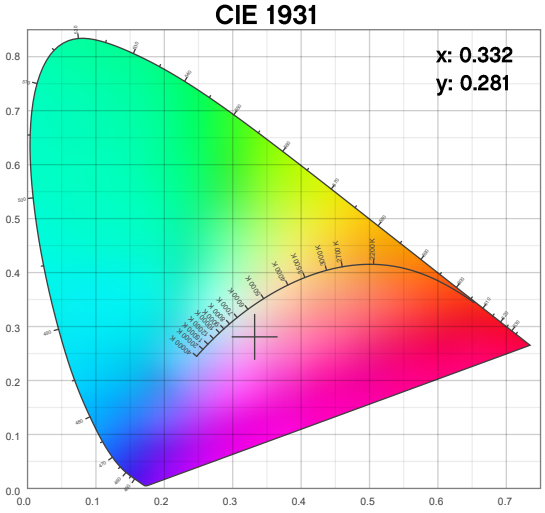


Beam Angle **47.6°**

Spectral Distribution



CIE 1931



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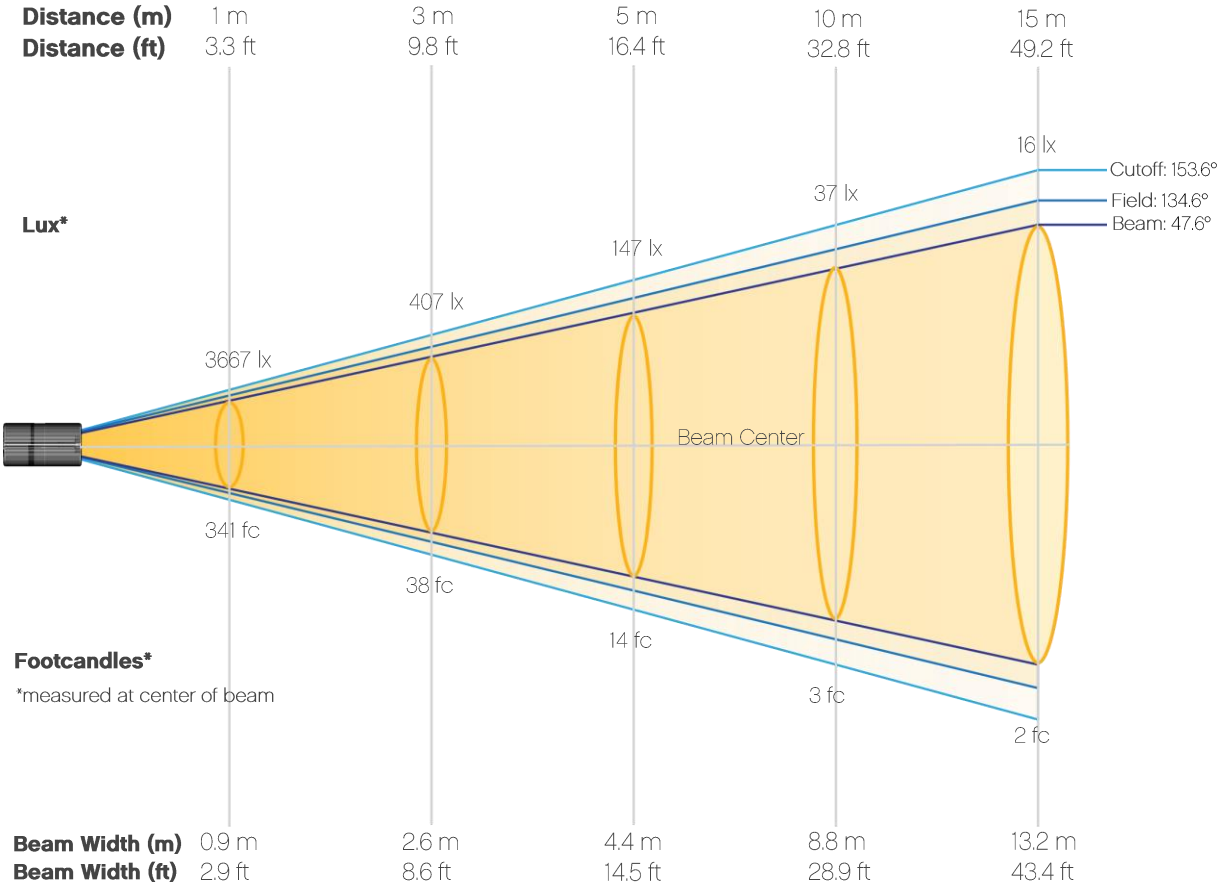
Photometric Report

Ovation H-605FC: 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	3667	917	407	229	147	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	341	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

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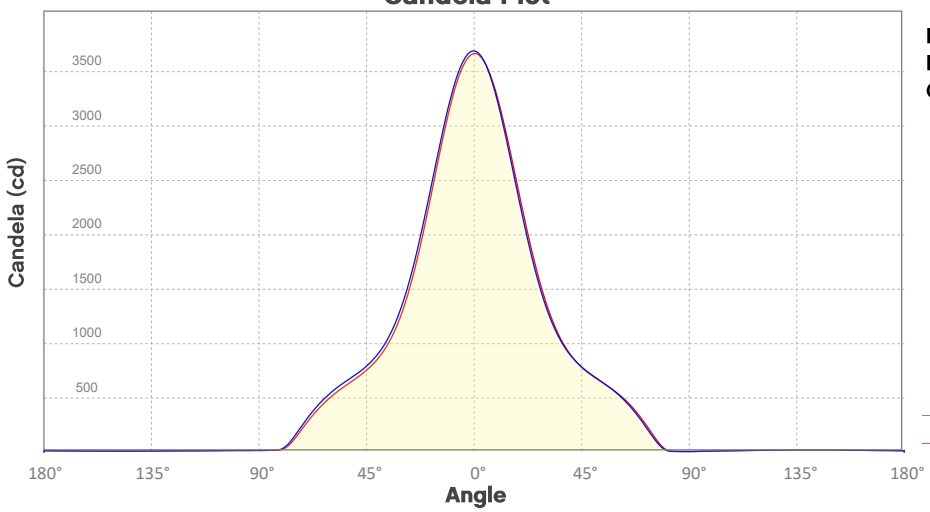
Photometric Report

Ovation H-605FC: 80deg Filter, Full Power

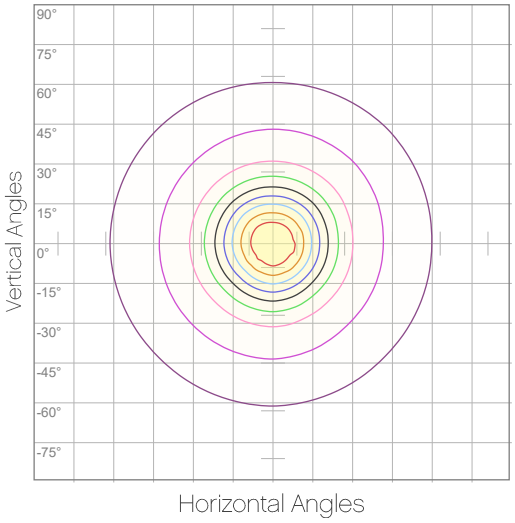
Candela Plot



Beam Angle (50%): 47.6°
Field Angle (10%): 134.8°
Cutoff Angle (3%): 153.7°

Horizontal Distribution
Vertical Distribution

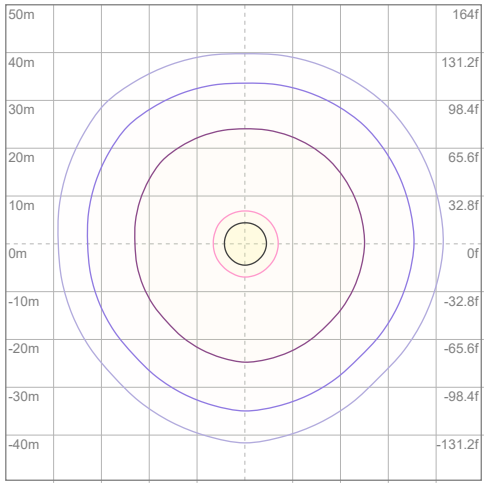
Polar Diagrams



iso-candela Diagram

10%	367 cd
20%	733 cd
30%	1100 cd
40%	1467 cd
50%	1833 cd
60%	2200 cd
70%	2567 cd
80%	2933 cd
90%	3300 cd

Conditions:
Number of c-planes: 8
Candela at center: 3667 cd



iso-illuminance Diagram

3%	1.10 lx
5%	1.83 lx
10%	3.67 lx
30%	11.0 lx
50%	18.3 lx

Conditions:
Number of c-planes: 8
Lux at center: 36.7 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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Photometric Report

Ovation H-605FC: 65deg lens, Full Power

Report Summary

Output

Total Lumens: 5288 lm
Peak Intensity: 4450 cd
Illuminance @ 5m: 178 lux
Fixture Efficacy: 37 lm/W

Optical

Horizontal Beam Angle (50%): 68.5°
Vertical Beam Angle (50%): 65.3°
Horizontal Field Angle (10%): 97.4°
Vertical Field Angle (10%): 93.4°
Horizontal Cutoff Angle (3%): 118.5°
Vertical Cutoff Angle (3%): 116.9°

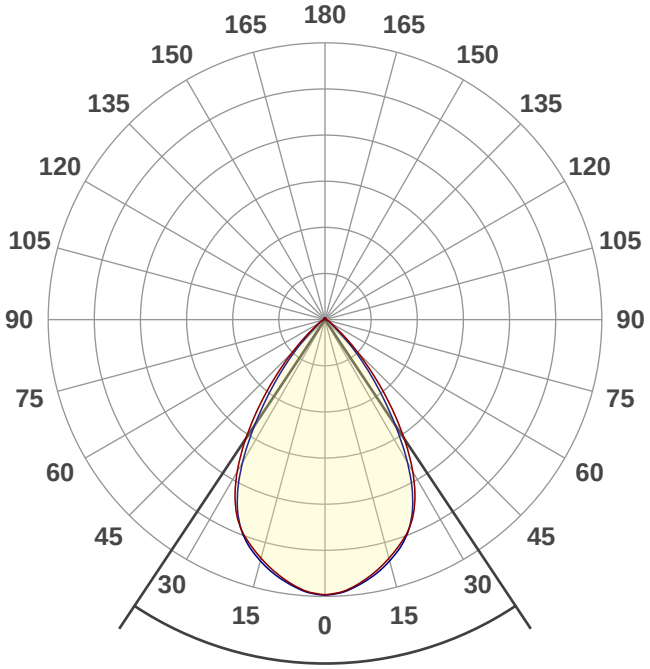
Conditions

AC Supply: 116 V, 60 Hz
Power: 145.24 W
Current: 1.25 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 6/11/2019 to LM-63-2002 Standards.

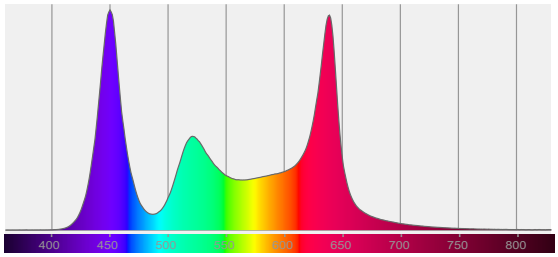
Overall Measurement

Angular Beam Distribution

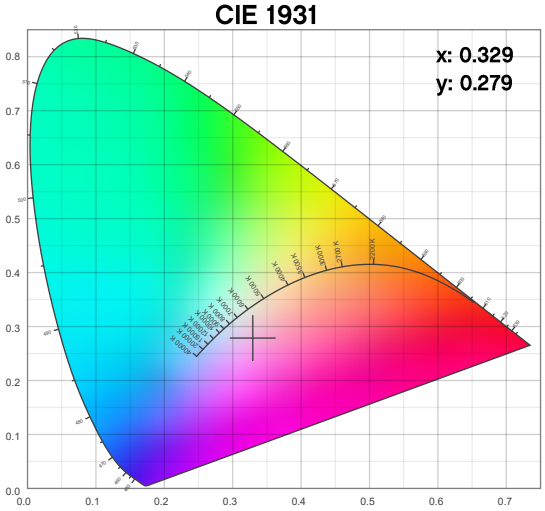


Beam Angle **67.3°**

Spectral Distribution



CIE 1931



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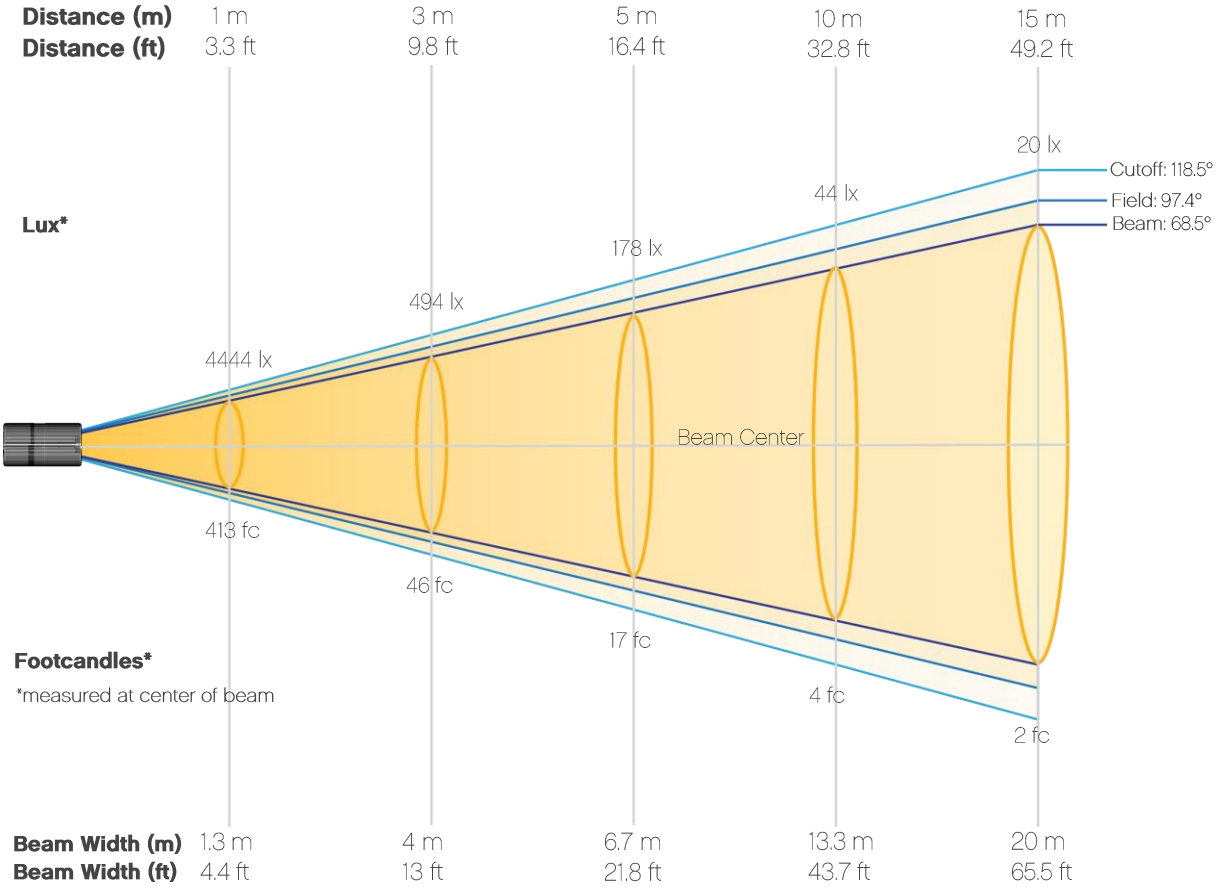
Photometric Report

Ovation H-605FC: 65deg 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	4444	1111	494	278	178	123	91	69	55	44
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	37	31	26	23	20	17	15	14	12	11
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	413	103	46	26	17	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

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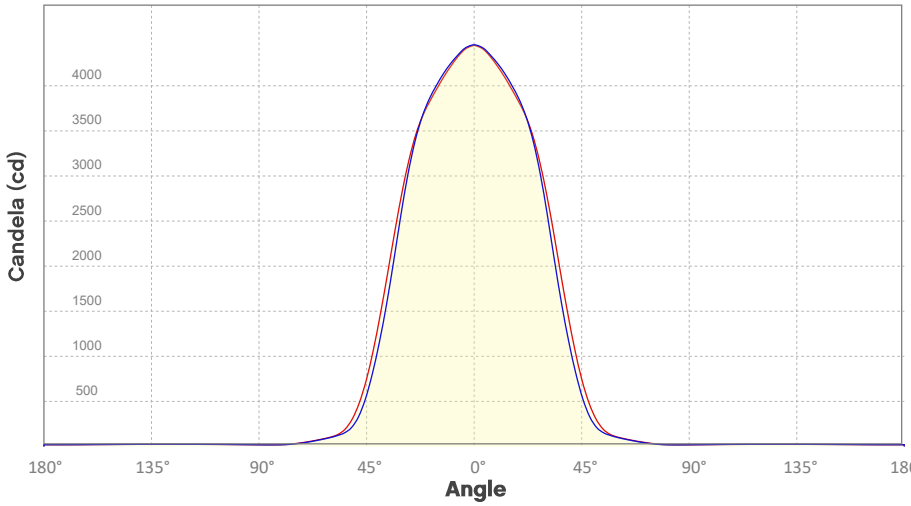
Photometric Report

Ovation H-605FC: 65deg lens, Full Power

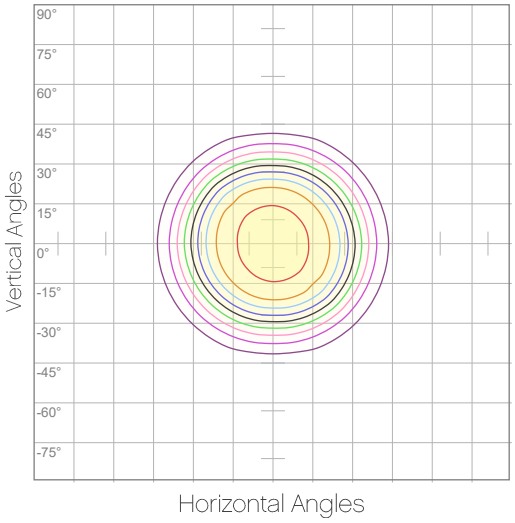
Candela Plot



Beam Angle (50%): 67.3°
Field Angle (10%): 95.6°
Cutoff Angle (3%): 117.7°

Horizontal Distribution
Vertical Distribution

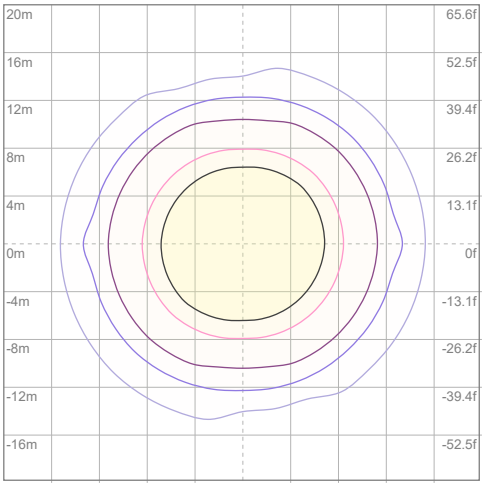
Polar Diagrams



iso-candela Diagram

10%	444 cd
20%	889 cd
30%	1333 cd
40%	1778 cd
50%	2222 cd
60%	2667 cd
70%	3111 cd
80%	3556 cd
90%	4000 cd

Conditions:
Number of c-planes: 8
Candela at center: 4444 cd



iso-illuminance Diagram

3%	1.33 lx
5%	2.22 lx
10%	4.44 lx
30%	13.3 lx
50%	22.2 lx

Conditions:
Number of c-planes: 8
Lux at center: 44.4 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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Photometric Report

Ovation H-605FC: 45deg lens, Full Power

Report Summary

Output

Total Lumens: 5446 lm
Peak Intensity: 8827 cd
Illuminance @ 5m: 353 lux
Fixture Efficacy: 36 lm/W

Optical

Horizontal Beam Angle (50%): 35.8°
Vertical Beam Angle (50%): 35.1°
Horizontal Field Angle (10%): 82°
Vertical Field Angle (10%): 81.3°
Horizontal Cutoff Angle (3%): 123°
Vertical Cutoff Angle (3%): 123.3°

Conditions

AC Supply: 117 V, 60 Hz
Power: 150.58 W
Current: 1.28 A
Power Factor: 0.99

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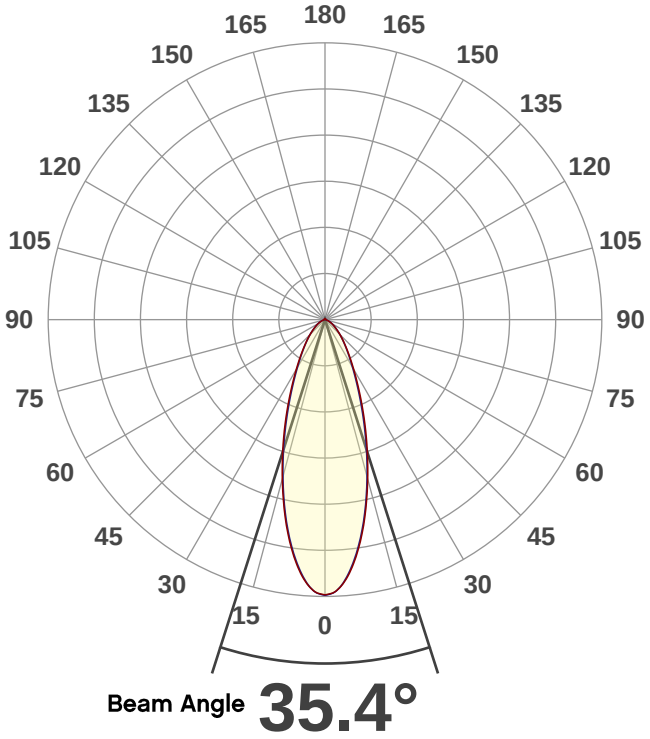
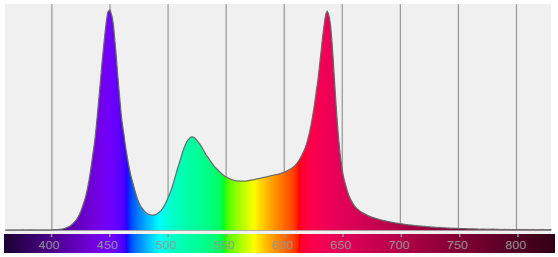
Overall Measurement

Angular Beam Distribution

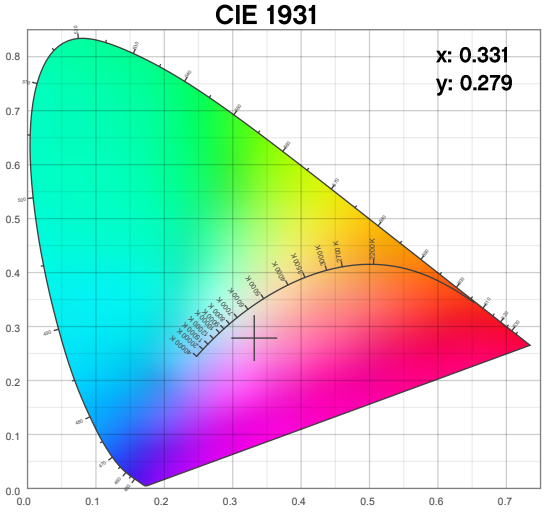


Beam Angle **35.4°**

Spectral Distribution



CIE 1931



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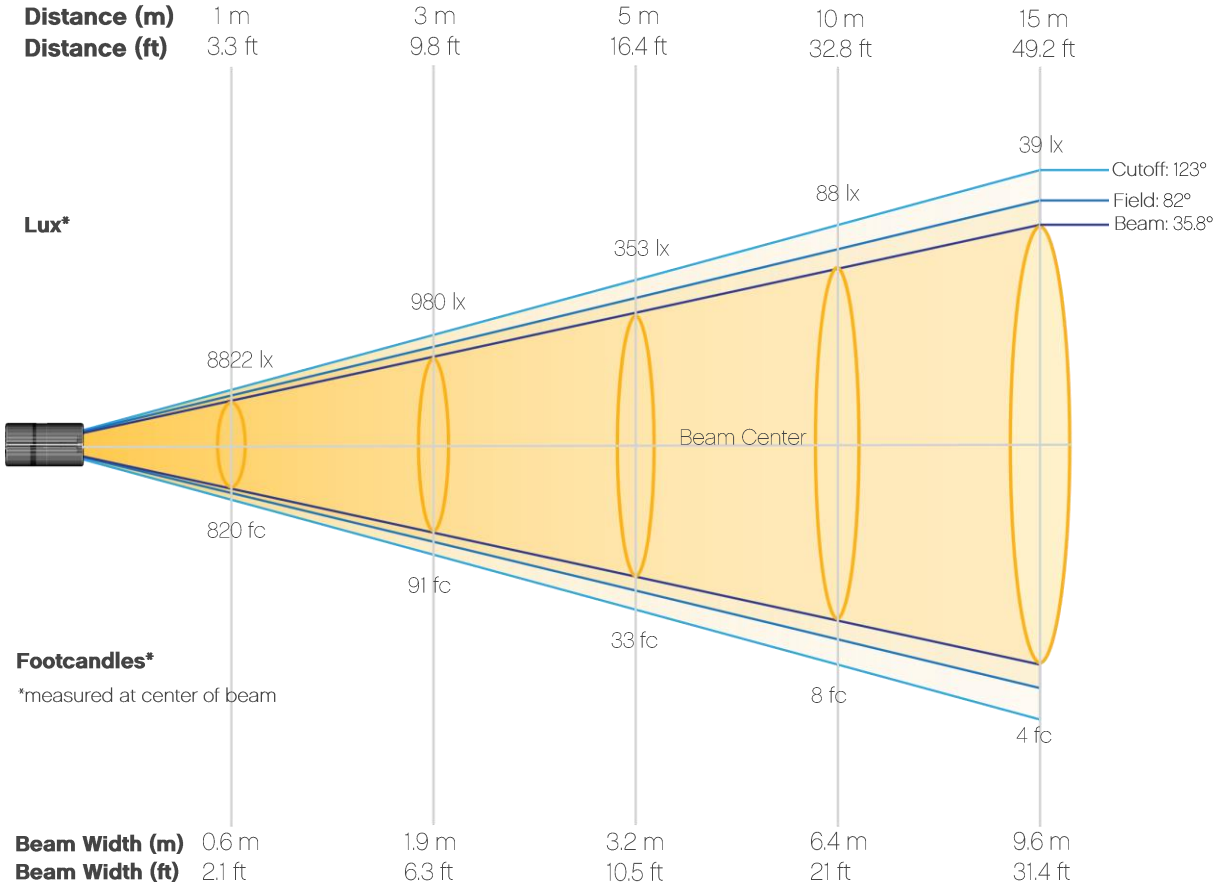
Photometric Report

Ovation H-605FC: 45deg 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	8822	2206	980	551	353	245	180	138	109	88
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	73	61	52	45	39	34	31	27	24	22
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	820	205	91	51	33	23	17	13	10	8
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	7	6	5	4	4	3	3	3	2	2

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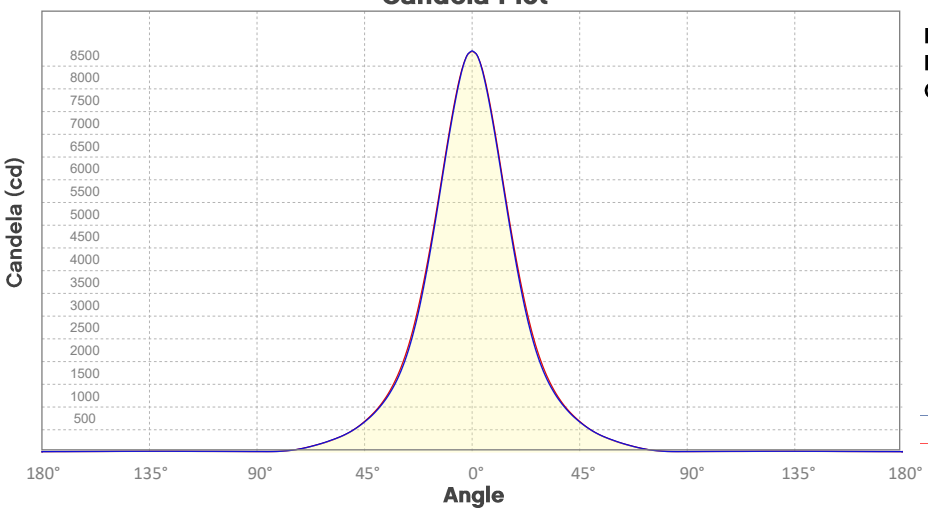
Photometric Report

Ovation H-605FC: 45deg lens, Full Power

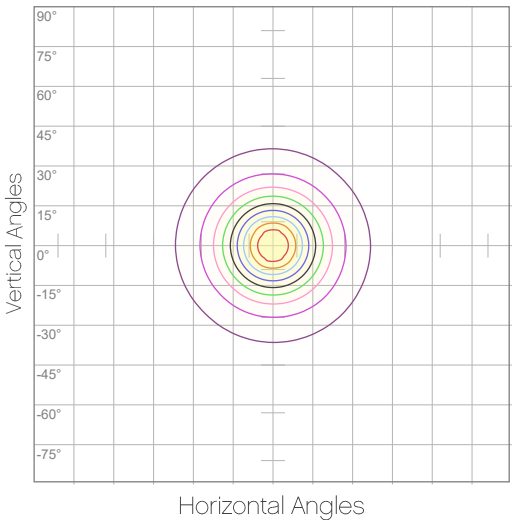
Candela Plot



Beam Angle (50%): 35.4°
Field Angle (10%): 81.4°
Cutoff Angle (3%): 123.1°

Horizontal Distribution
Vertical Distribution

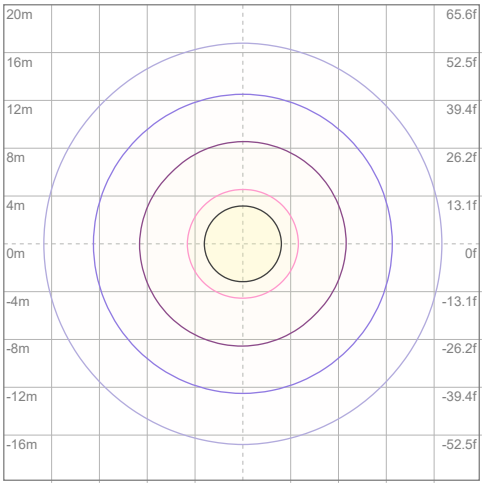
Polar Diagrams



iso-candela Diagram

10%	882 cd
20%	1764 cd
30%	2647 cd
40%	3529 cd
50%	4411 cd
60%	5293 cd
70%	6176 cd
80%	7058 cd
90%	7940 cd

Conditions:
Number of c-planes: 8
Candela at center: 8822 cd



iso-illuminance Diagram

3%	2.65 lx
5%	4.41 lx
10%	8.82 lx
30%	26.5 lx
50%	44.1 lx

Conditions:
Number of c-planes: 8
Lux at center: 88.2 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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Photometric Report

Ovation H-605FC: 25deg lens, Full Power

Report Summary

Output

Total Lumens: 5121 lm
Peak Intensity: 16325 cd
Illuminance @ 5m: 652 lux
Fixture Efficacy: 36 lm/W

Optical

Horizontal Beam Angle (50%): 25.9°
Vertical Beam Angle (50%): 26.2°
Horizontal Field Angle (10%): 47°
Vertical Field Angle (10%): 48.2°
Horizontal Cutoff Angle (3%): 95.8°
Vertical Cutoff Angle (3%): 97°

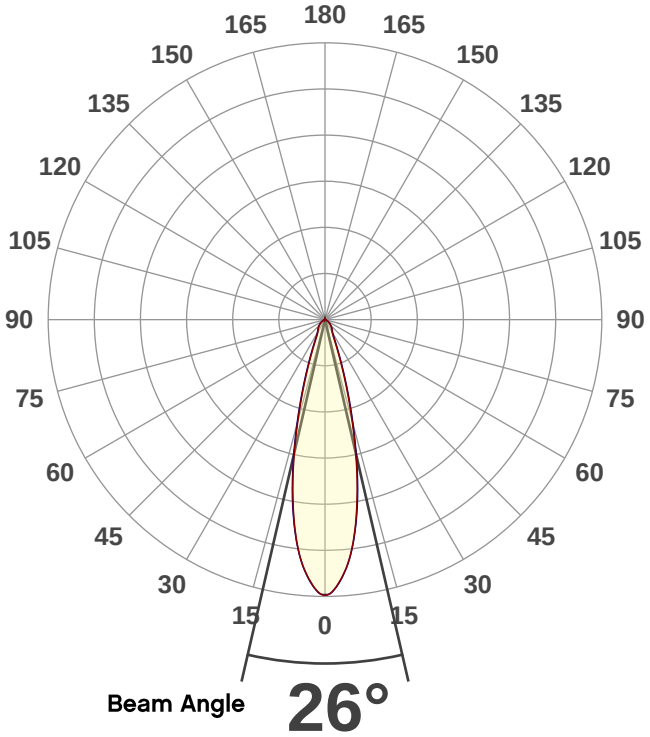
Conditions

AC Supply: 117 V, 60.1 Hz
Power: 143.75 W
Current: 1.23 A
Power Factor: 0.99

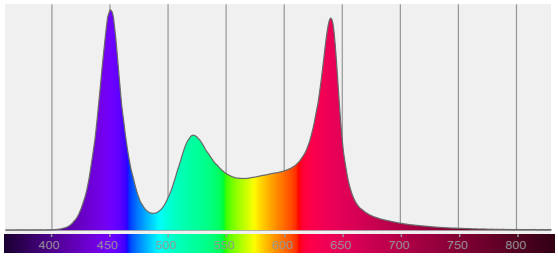
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/10/2019 to LM-63-2002 Standards.

Overall Measurement

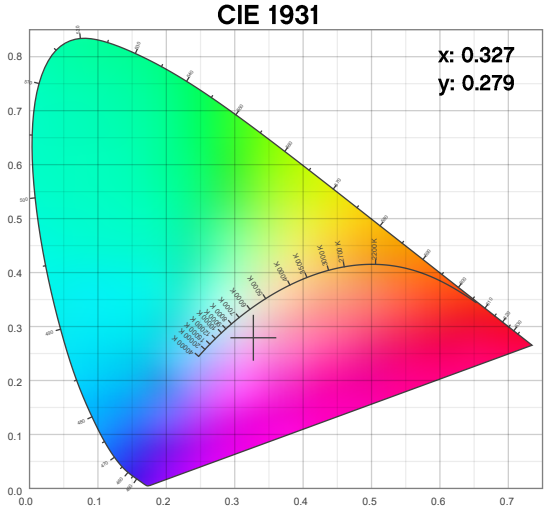
Angular Beam Distribution



Spectral Distribution



CIE 1931



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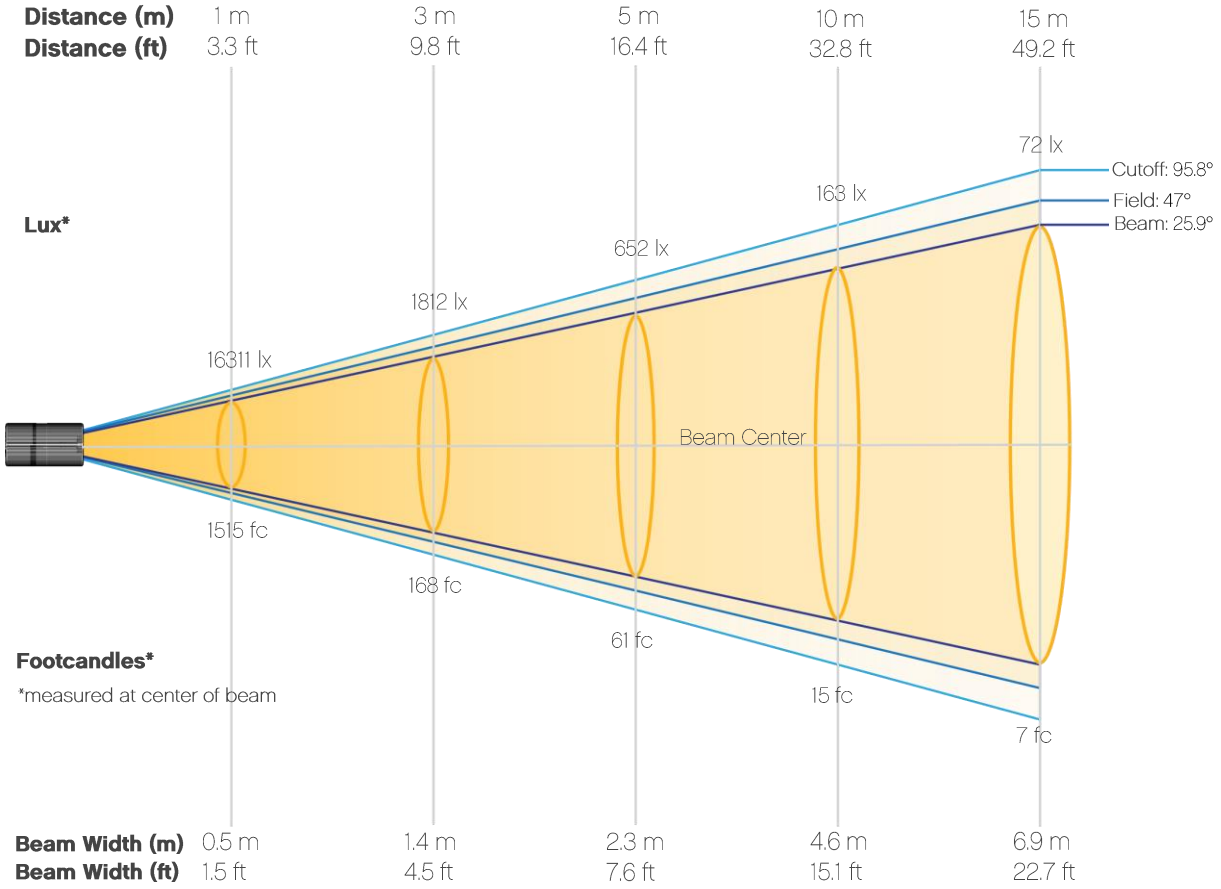
Photometric Report

Ovation H-605FC: 25deg 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	16311	4078	1812	1019	652	453	333	255	201	163
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	135	113	97	83	72	64	56	50	45	41
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	1515	379	168	95	61	42	31	24	19	15
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	13	11	9	8	7	6	5	5	4	4

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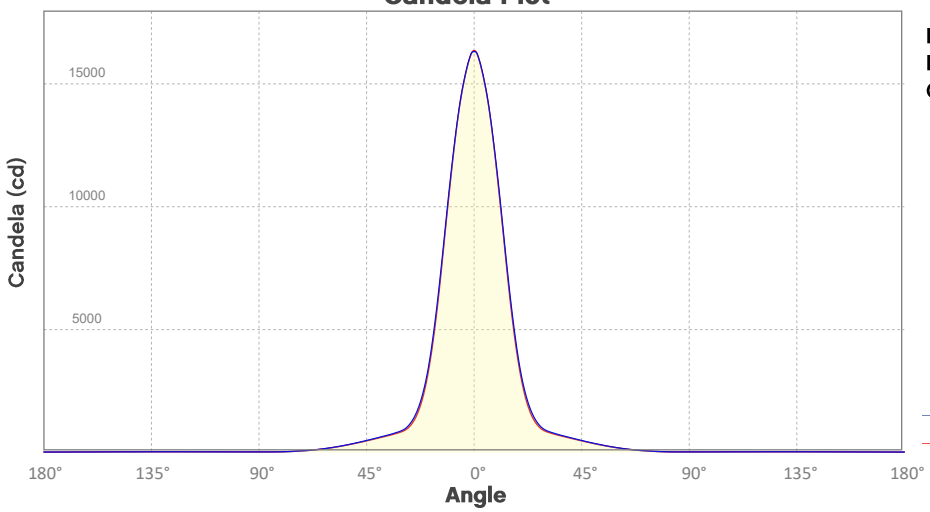
Photometric Report

Ovation H-605FC: 25deg lens, Full Power

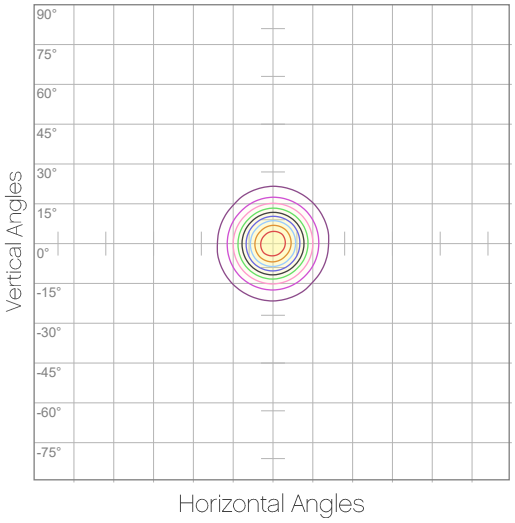
Candela Plot



Beam Angle (50%): 26°
Field Angle (10%): 47.5°
Cutoff Angle (3%): 96.4°

Horizontal Distribution
Vertical Distribution

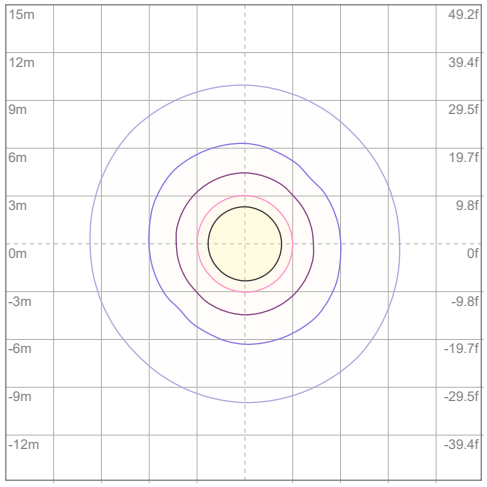
Polar Diagrams



iso-candela Diagram

10%	1631 cd
20%	3262 cd
30%	4893 cd
40%	6524 cd
50%	8155 cd
60%	9786 cd
70%	11417 cd
80%	13049 cd
90%	14680 cd

Conditions:
Number of c-planes: 8
Candela at center: 16311 cd



iso-illuminance Diagram

3%	4.89 lx
5%	8.16 lx
10%	16.3 lx
30%	48.9 lx
50%	81.6 lx

Conditions:
Number of c-planes: 8
Lux at center: 163 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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Chromaticity Report

Ovation H-605FC: 3200K

Report Summary

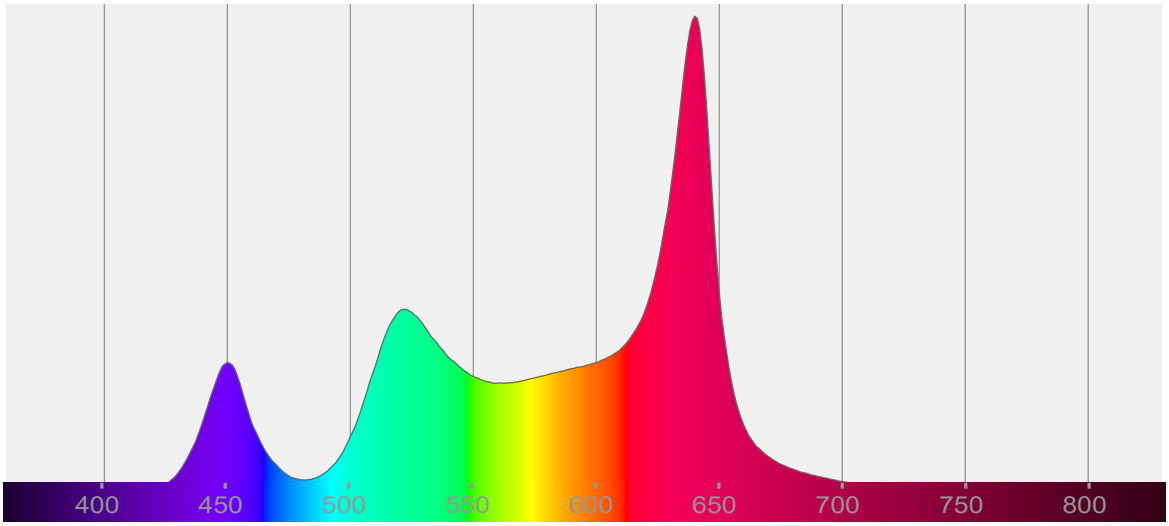
Measurements

Total Lumens: 4661 lm
Peak Intensity: 3928 cd
Fixture Efficacy: 40 lm/W

Correlated Color Temperature: 3202K
Δuv: 0.0001

CRI: 79.1 CRI R9 Value: 21.9
CQS: 86.1
TLCI: 67
TM-30-18 Rf: 85.8
TM-30-18 Rg: 113.4
1st Dominant Wavelength: 640 nM
2nd Dominant Wavelength: 523 nM

Spectral Distribution



Tested Color

3202 K
CIE 1931 Coordinates:
X: 0.423 Y: 0.399

Color Temperature

3202 K

Light Quality

CRI: 79.1

Notes:

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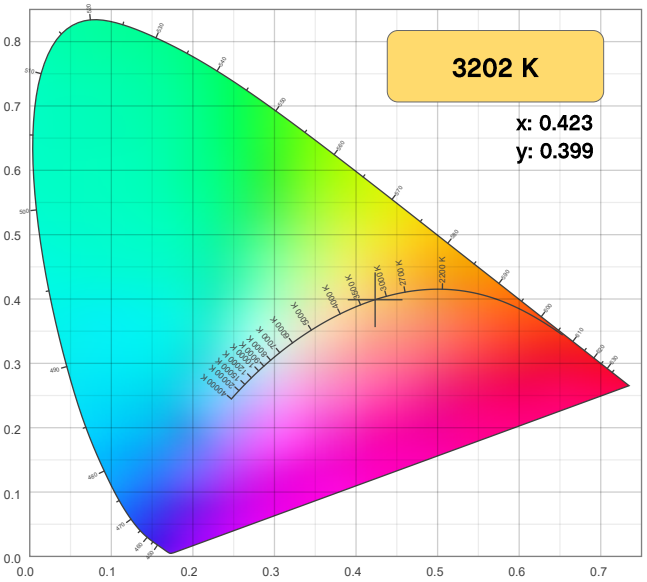
Chromaticity Report

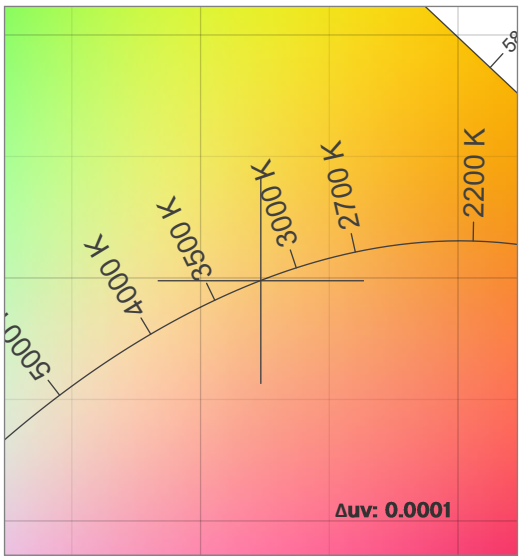
Ovation H-605FC: 3200K

Chromaticity

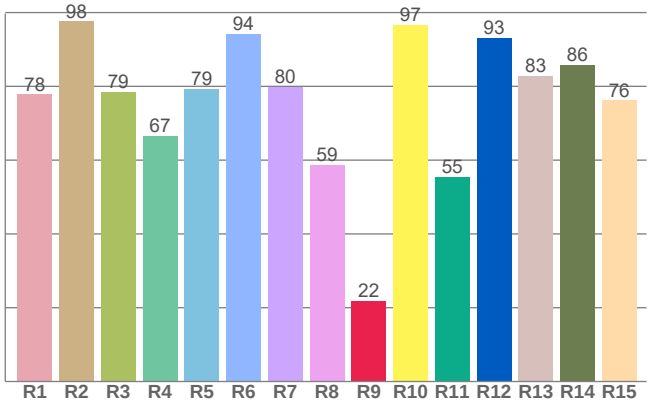
CIE 1931



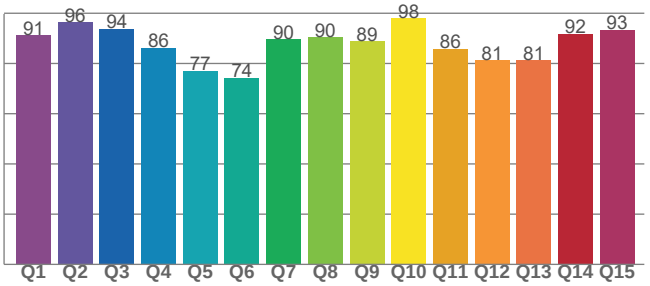
CIE 1931 - Zoom



CRI: 79.1 (R1-R8)



CQS: 86.1



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3202 K	0.423	0.399

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
0.0001	0.399	0.244

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
79.1	21.9	86.1

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
67	85.8	113.4

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Chromaticity Report

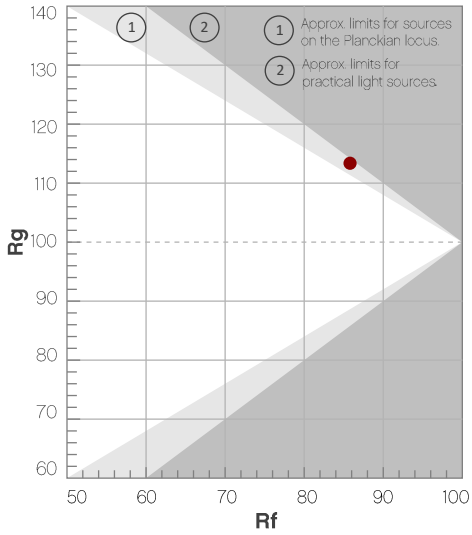
Ovation H-605FC: 3200K

TM-30-18 Details

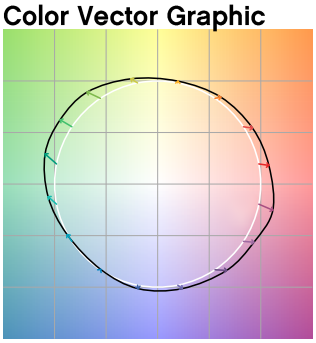
Rf 85.8
Fidelity Index (Rg)

Rg 113.4
Gamut Index (Rg)

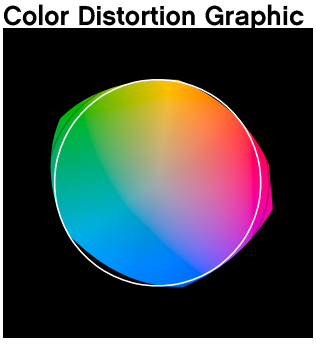
Hue Bin	R_f	Chroma Shift	Hue Shift
1	81	9%	-3%
2	84	7%	-6%
3	86	4%	-4%
4	93	2%	0%
5	89	5%	6%
6	79	12%	7%
7	79	13%	1%
8	77	13%	-7%
9	84	7%	-9%
10	86	0%	-8%
11	93	0%	0%
12	92	3%	1%
13	93	4%	4%
14	85	7%	9%
15	84	9%	5%
16	82	15%	-3%



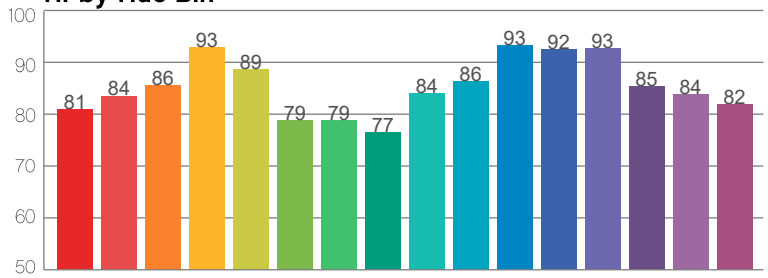
Color Vector Graphic



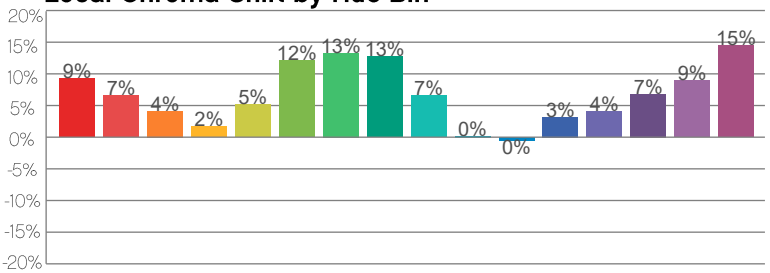
Color Distortion Graphic



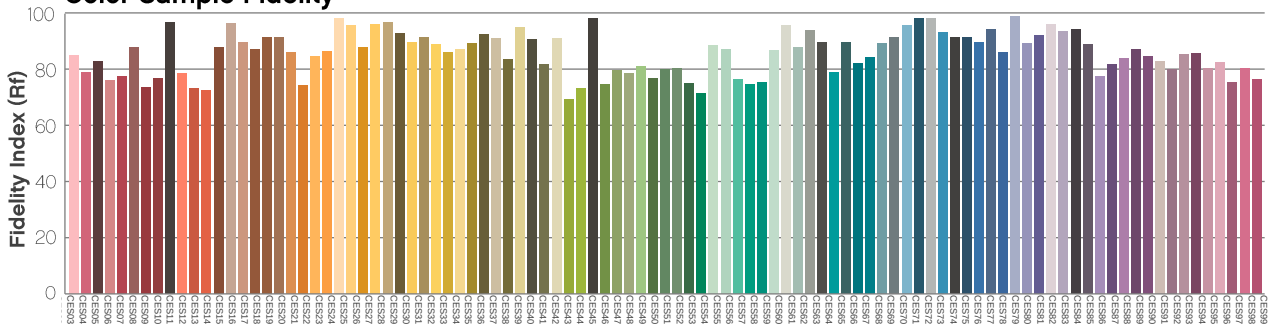
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



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Chromaticity Report

Ovation H-605FC: 5600K

Report Summary

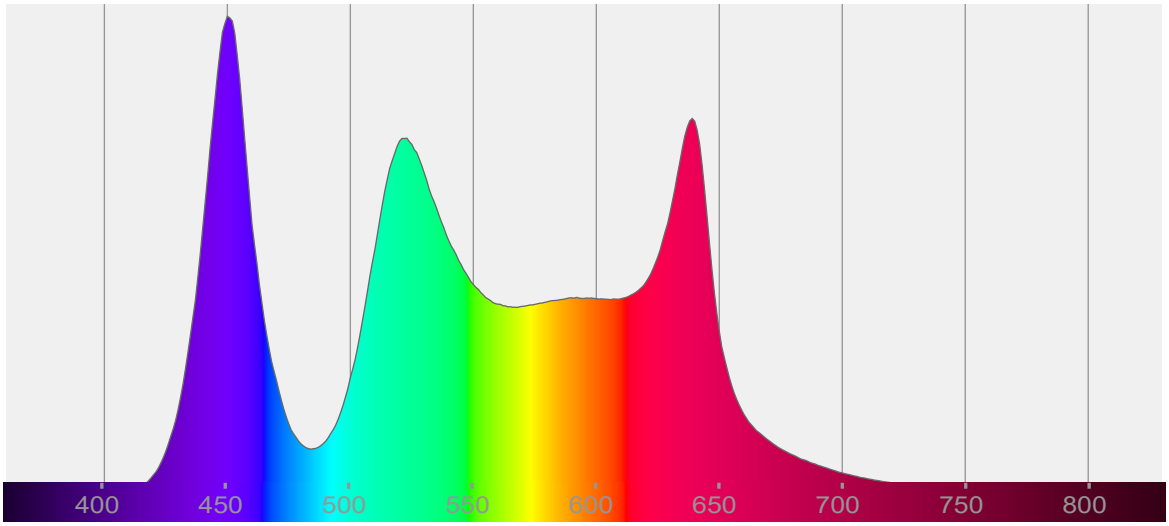
Measurements

Total Lumens: 4435 lm
Peak Intensity: 3730 cd
Fixture Efficacy: 40 lm/W

Correlated Color Temperature: 5602K
Δuv: -0.0008

CRI: 86.9 CRI R9 Value: 74.1
CQS: 90.3
TLCI: 82
TM-30-18 Rf: 87.1
TM-30-18 Rg: 108.8
1st Dominant Wavelength: 450 nM
2nd Dominant Wavelength: 639 nM

Spectral Distribution



Tested Color

5602 K
CIE 1931 Coordinates:
X: 0.330 Y: 0.344

Color Temperature

5602 K

Light Quality

CRI: 86.9

Notes:

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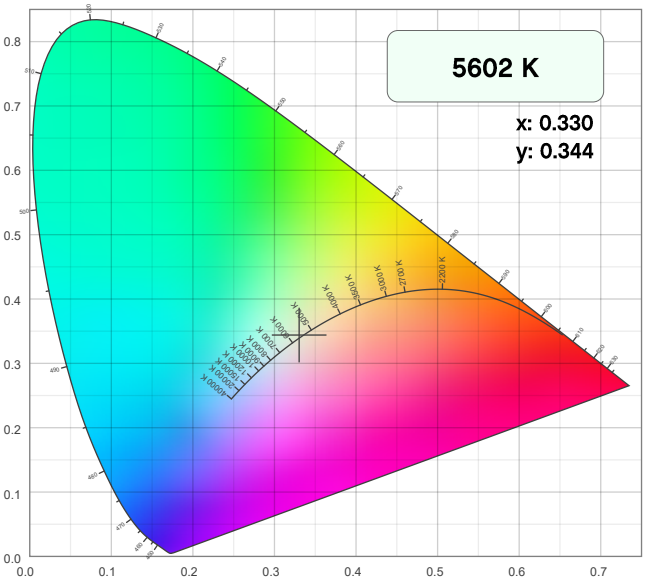
Chromaticity Report

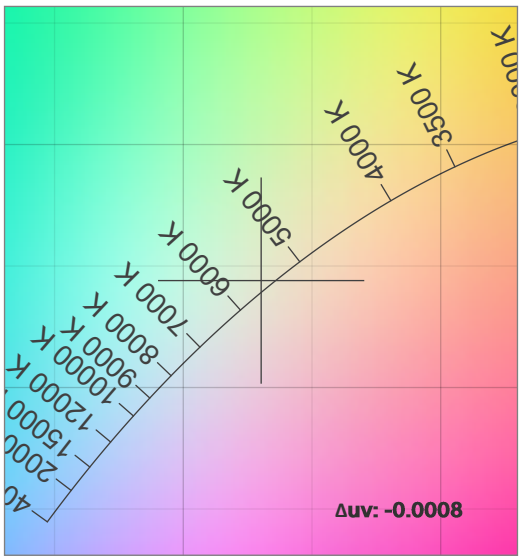
Ovation H-605FC: 5600K

Chromaticity

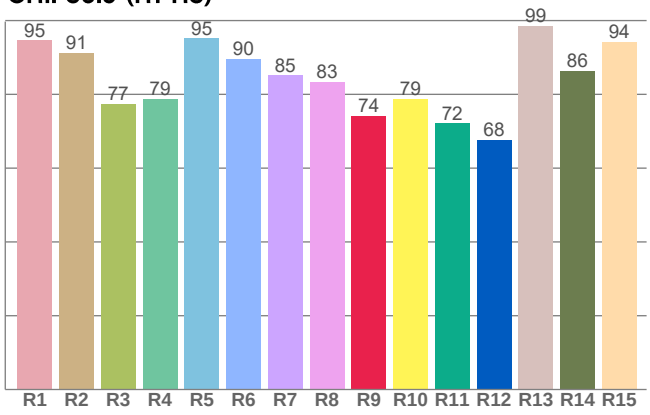
CIE 1931



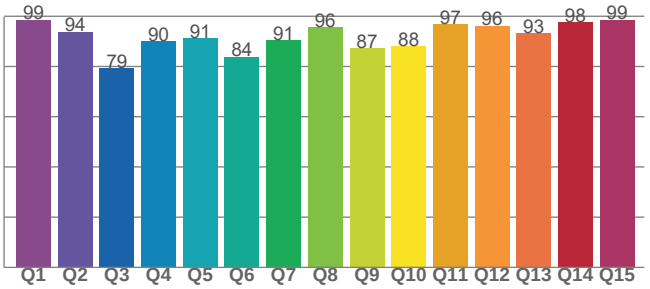
CIE 1931 - Zoom



CRI: 86.9 (R1-R8)



CQS: 90.3



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
5602 K	0.330	0.344

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0008	0.344	0.204

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
86.9	74.1	90.3

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
82	87.1	108.8

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Chromaticity Report

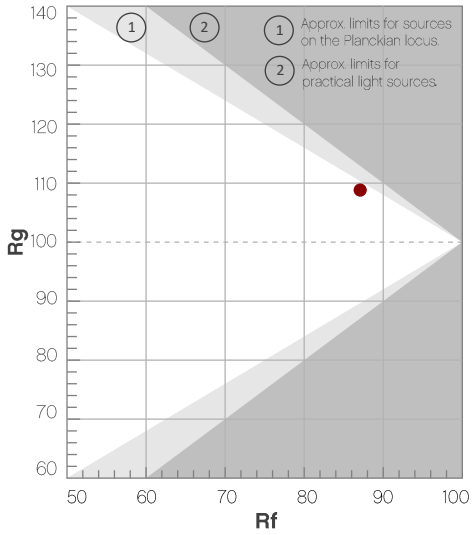
Ovation H-605FC: 5600K

TM-30-18 Details

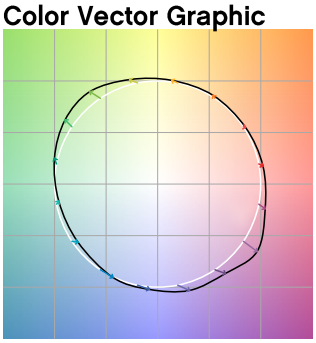
Rf 87.1
Fidelity Index (Rg)

Rg 108.8
Gamut Index (Rg)

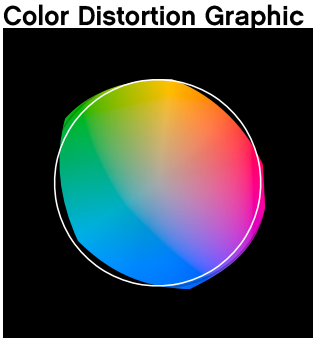
Hue Bin	R_f	Chroma Shift	Hue Shift
1	90	4%	-3%
2	95	1%	-2%
3	93	1%	3%
4	89	1%	6%
5	86	5%	7%
6	83	11%	5%
7	86	9%	-2%
8	90	3%	-5%
9	93	-3%	-2%
10	90	-4%	4%
11	77	-1%	14%
12	83	2%	12%
13	86	7%	10%
14	83	9%	7%
15	83	17%	-1%
16	87	7%	-3%



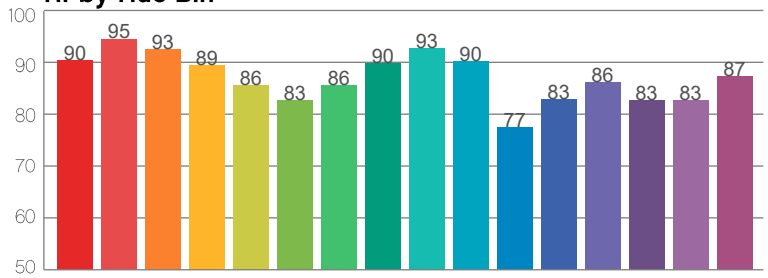
Color Vector Graphic



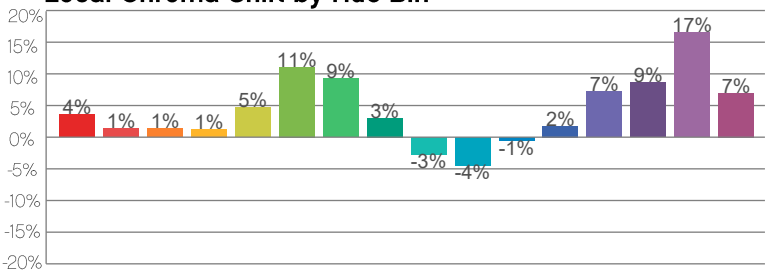
Color Distortion Graphic



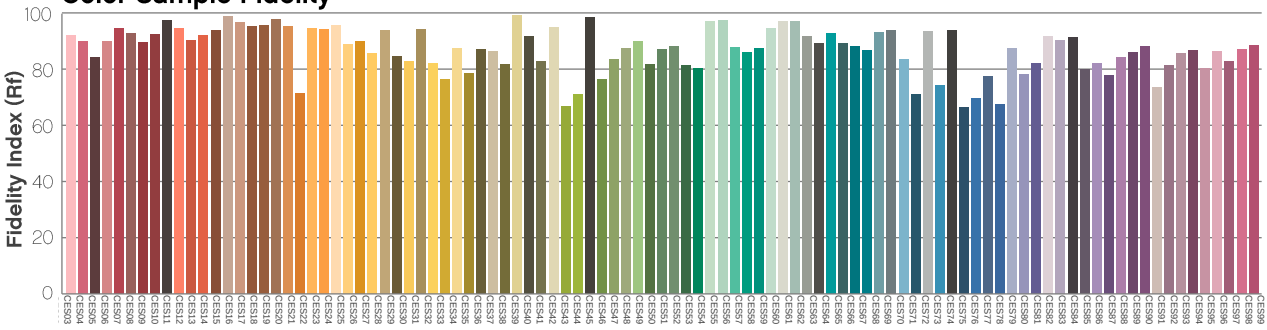
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



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