

PHOTOMETRICS REPORT

Ovation

H-55WW



Table of Contents

1. Testing Process	1
2. Photometric Reports	2
80° Filter, Full Power	2
Report Summary	2
Overall Measurement	2
Beam Details	3
Polar Diagrams	4
65° Lens, Full Power	5
Report Summary	5
Overall Measurement	5
Beam Details	6
Polar Diagrams	7
45° Lens, Full Power	8
Report Summary	8
Overall Measurement	8
Beam Details	9
Polar Diagrams	10
25° Lens, Full Power	11
Report Summary	11
Overall Measurement	11
Beam Details	12
Polar Diagrams	13
3. Chromaticity Report	14
Report Summary	14
Chromaticity	15
TM-30-18 Details	16
4. Contact Us	17

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-55WW: 80deg Filter, Full Power

Report Summary

Output

Total Lumens: 3415 lm
Peak Intensity: 3242 cd
Illuminance @ 5m: 130 lux
Fixture Efficacy: 56 lm/W

Optical

Horizontal Beam Angle (50%): 41.2°
Vertical Beam Angle (50%): 41.3°
Horizontal Field Angle (10%): 131.3°
Vertical Field Angle (10%): 131.4°
Horizontal Cutoff Angle (3%): 155.5°
Vertical Cutoff Angle (3%): 155.5°

Conditions

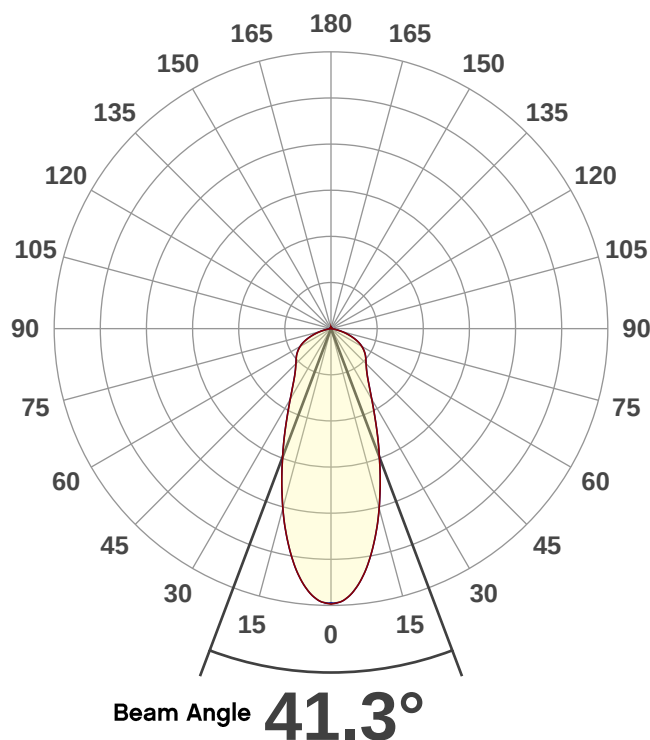
AC Supply: 124 V, 60 Hz
Power: 61.6 W
Current: 0.496 A
Power Factor: 1.0



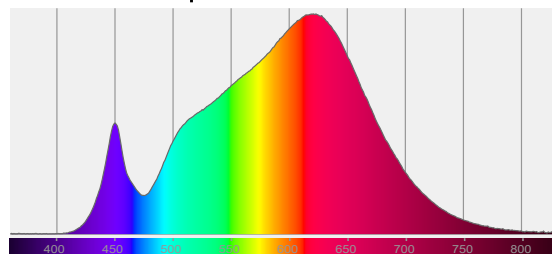
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 11/13/2019 to LM-63-2002 Standards.

Overall Measurement

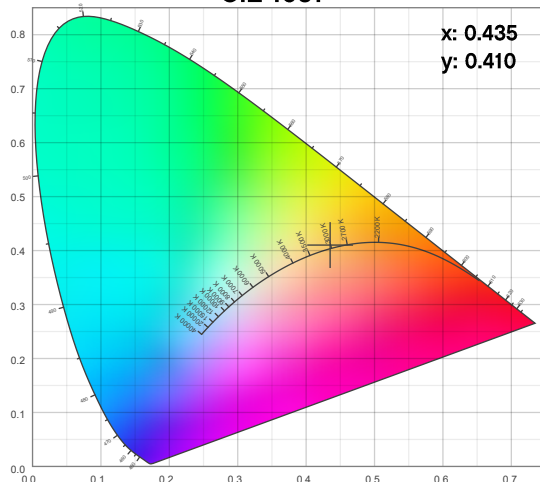
Angular Beam Distribution



Spectral Distribution



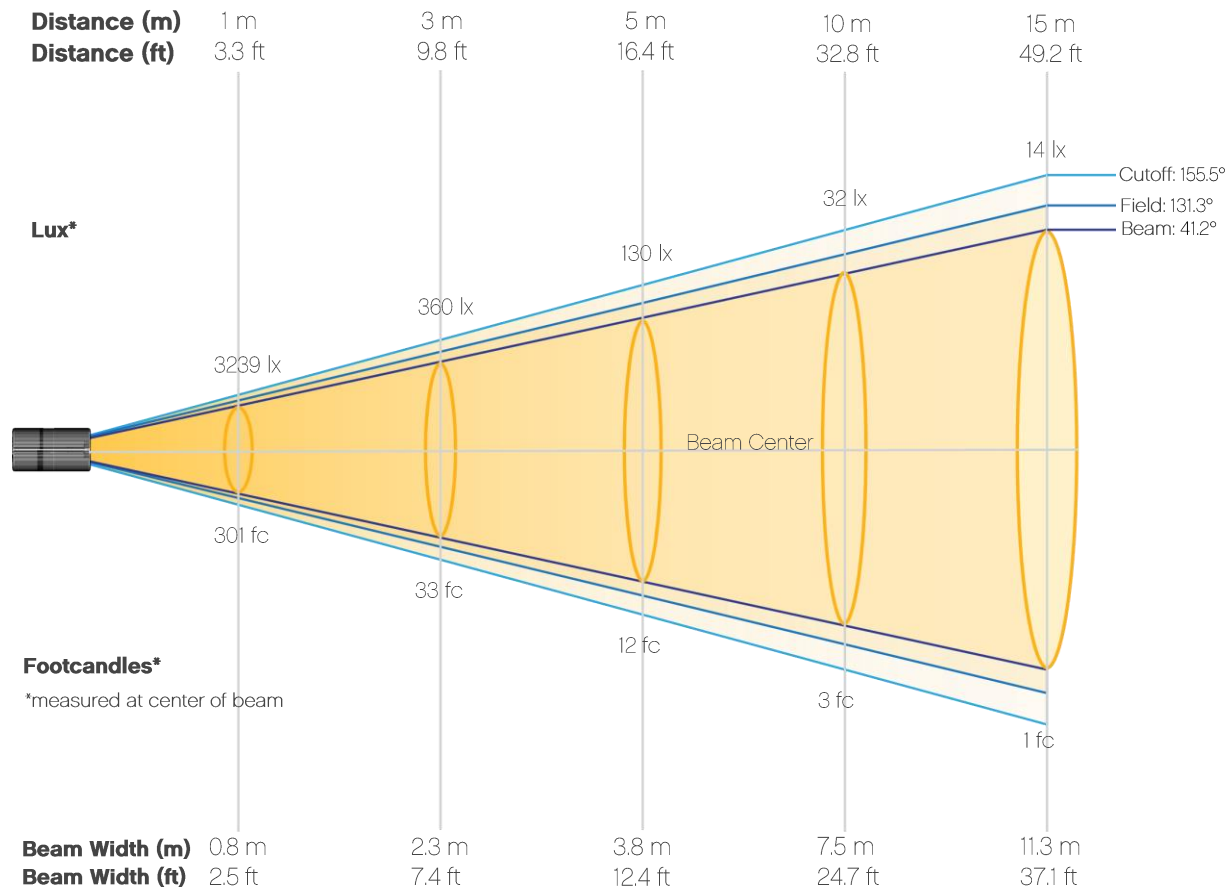
CIE 1931



Photometric Report

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

Beam Details



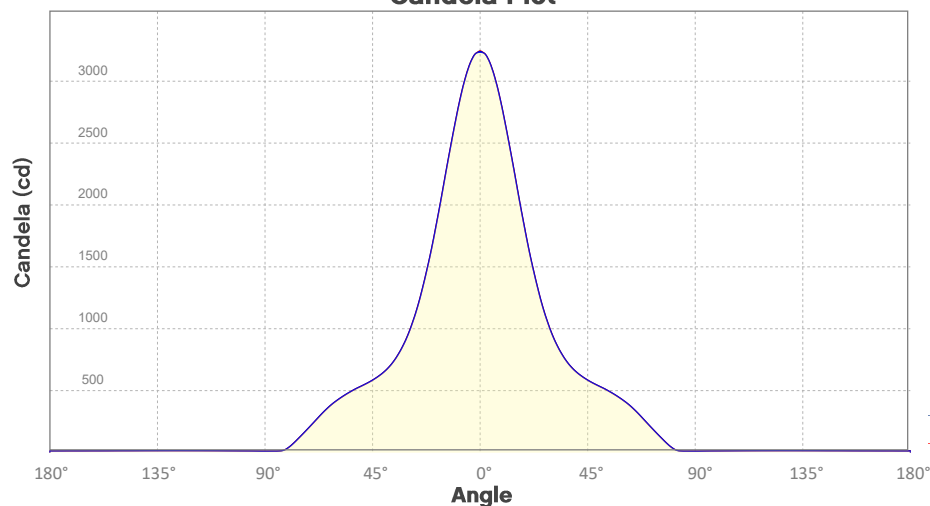
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	3239	810	360	202	130	90	66	51	40	32
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	27	22	19	17	14	13	11	10	9	8
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	301	75	33	19	12	8	6	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	2	2	2	2	1	1	1	1	1	1

Photometric Report

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

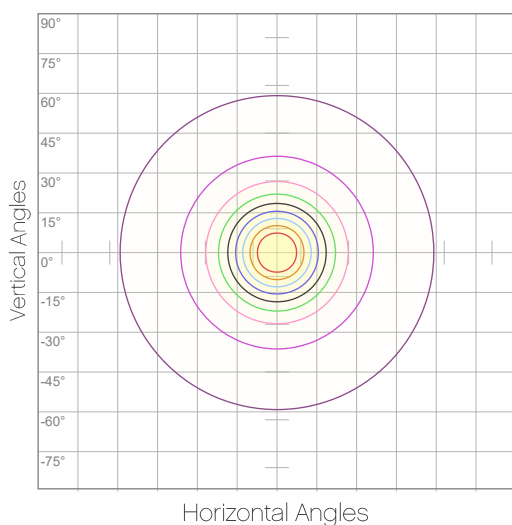
Candela Plot



Beam Angle (50%): 41.3°
Field Angle (10%): 131.4°
Cutoff Angle (3%): 155.4°

— Horizontal Distribution
— Vertical Distribution

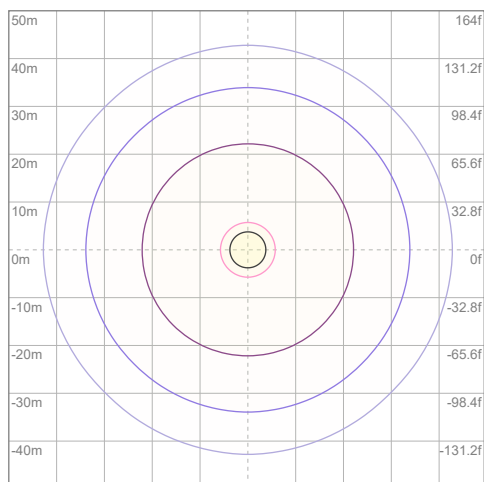
Polar Diagrams



iso-candela Diagram

10%	324 cd
20%	648 cd
30%	972 cd
40%	1296 cd
50%	1620 cd
60%	1943 cd
70%	2267 cd
80%	2591 cd
90%	2915 cd

Conditions:
Number of c-planes: 8
Candela at center: 3239 cd



iso-illuminance Diagram

3%	0.972 lx
5%	1.62 lx
10%	3.24 lx
30%	9.72 lx
50%	16.2 lx

Conditions:
Number of c-planes: 8
Lux at center: 32.4 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-55WW: 65deg lens, Full Power

Report Summary

Output

Total Lumens: 4304 lm
Peak Intensity: 4294 cd
Illuminance @ 5m: 171 lux
Fixture Efficacy: 69 lm/W

Optical

Horizontal Beam Angle (50%): 62.5°
Vertical Beam Angle (50%): 62.5°
Horizontal Field Angle (10%): 85.5°
Vertical Field Angle (10%): 85.6°
Horizontal Cutoff Angle (3%): 100.8°
Vertical Cutoff Angle (3%): 100.6°

Conditions

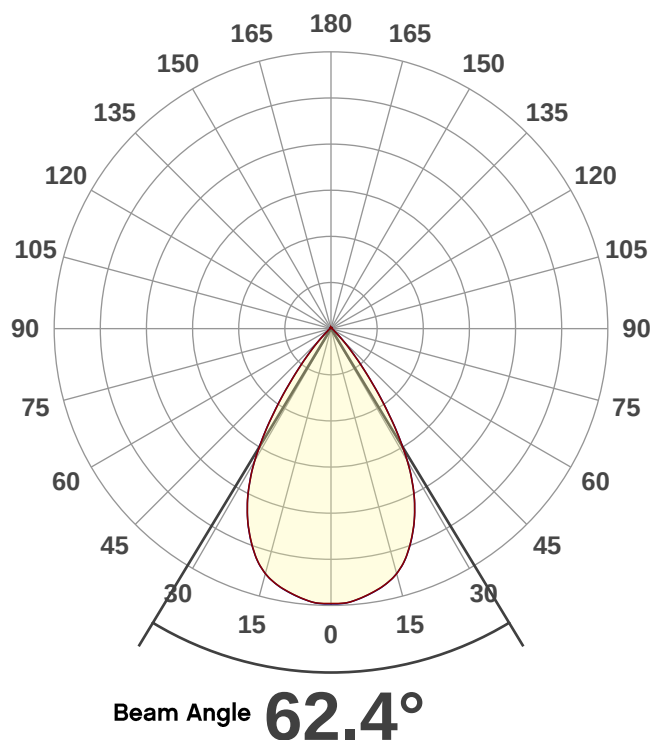
AC Supply: 125 V, 60 Hz
Power: 62.86 W
Current: 0.505 A
Power Factor: 1.0



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Overall Measurement

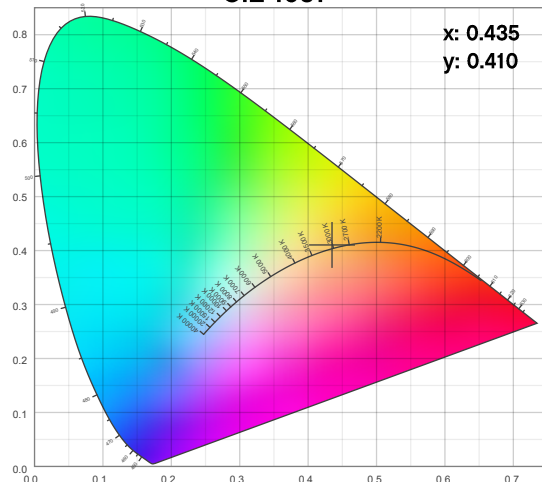
Angular Beam Distribution



Spectral Distribution



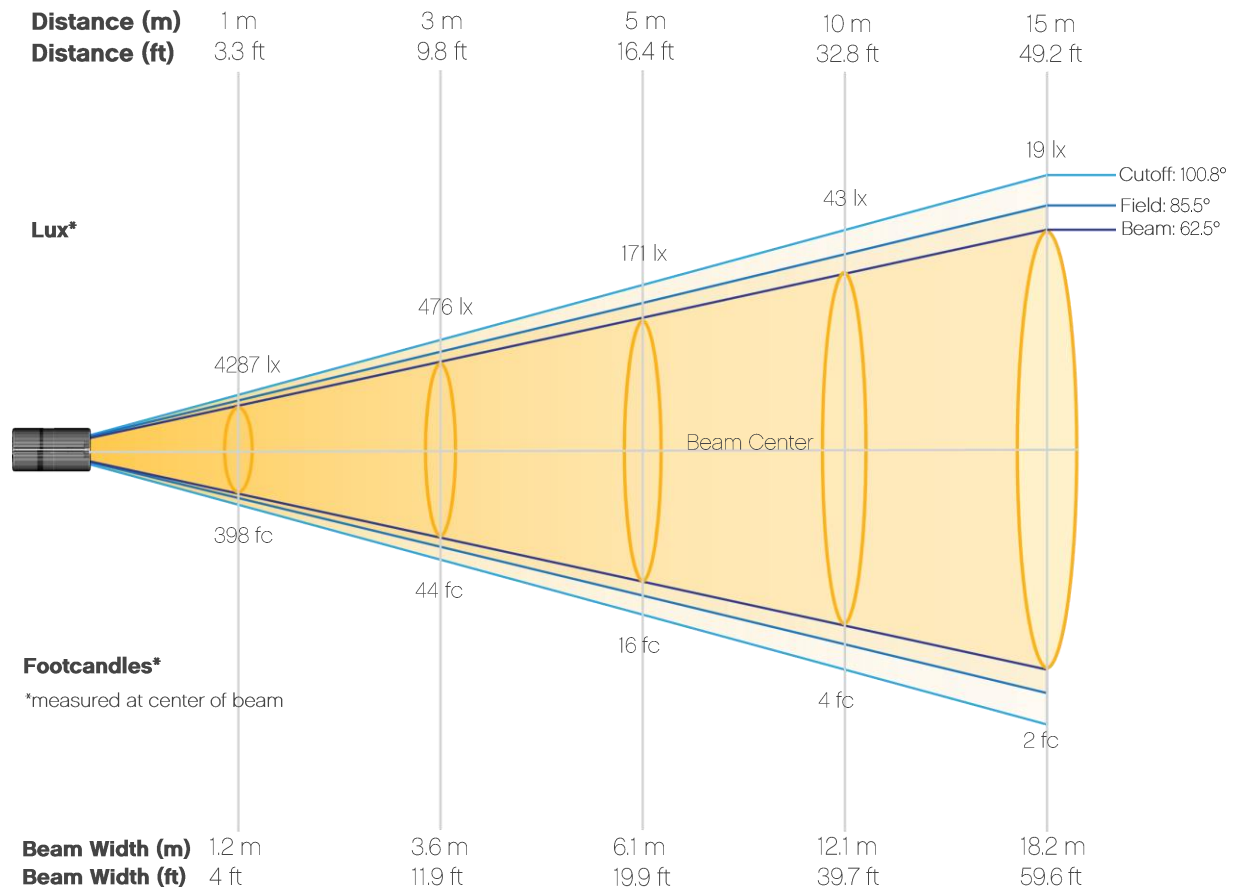
CIE 1931



Photometric Report

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

Beam Details



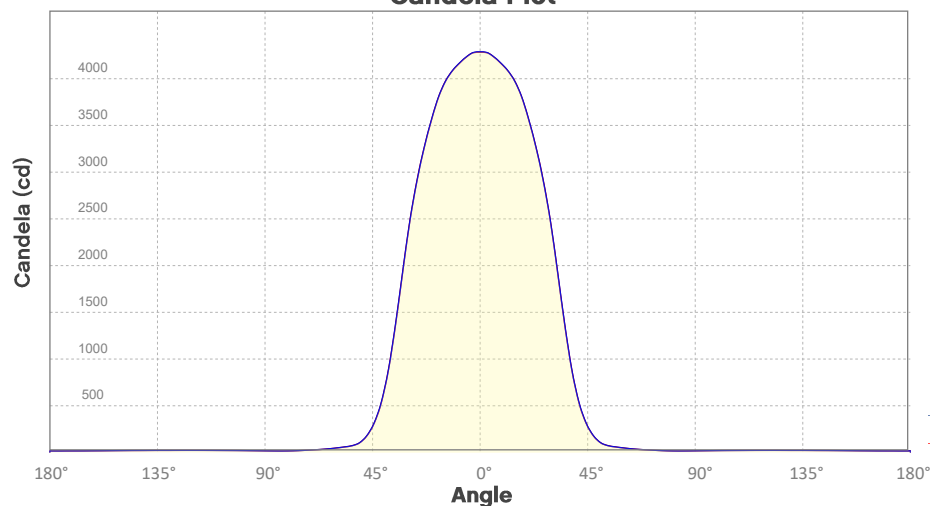
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	4287	1072	476	268	171	119	87	67	53	43
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	35	30	25	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	398	100	44	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

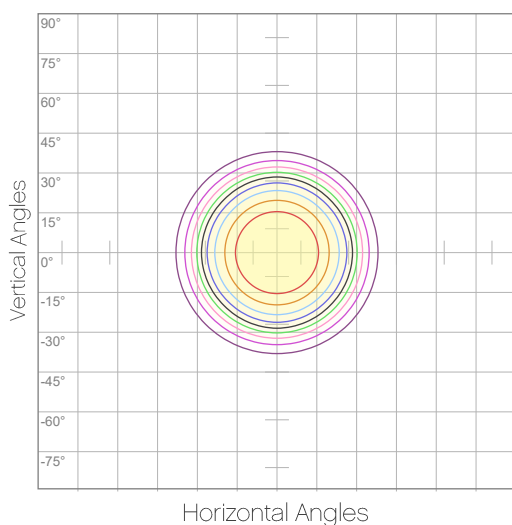
Ovation H-55WW: 65deg lens, Full Power

Candela Plot



Beam Angle (50%): 62.4°
Field Angle (10%): 85.3°
Cutoff Angle (3%): 100.8°

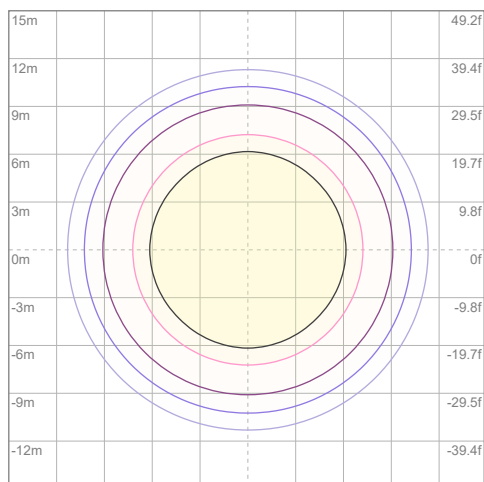
Polar Diagrams



iso-candela Diagram

10%	429 cd
20%	857 cd
30%	1286 cd
40%	1715 cd
50%	2144 cd
60%	2572 cd
70%	3001 cd
80%	3430 cd
90%	3858 cd

Conditions:
Number of c-planes: 8
Candela at center: 4287 cd



iso-illuminance Diagram

3%	1.29 lx
5%	2.14 lx
10%	4.29 lx
30%	12.9 lx
50%	21.4 lx

Conditions:
Number of c-planes: 8
Lux at center: 42.9 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-55WW: 45deg lens, Full Power

Report Summary

Output

Total Lumens: 3978 lm
Peak Intensity: 6573 cd
Illuminance @ 5m: 263 lux
Fixture Efficacy: 64 lm/W

Optical

Horizontal Beam Angle (50%): 37.7°
Vertical Beam Angle (50%): 37.7°
Horizontal Field Angle (10%): 76.4°
Vertical Field Angle (10%): 76.4°
Horizontal Cutoff Angle (3%): 113.4°
Vertical Cutoff Angle (3%): 113.4°

Conditions

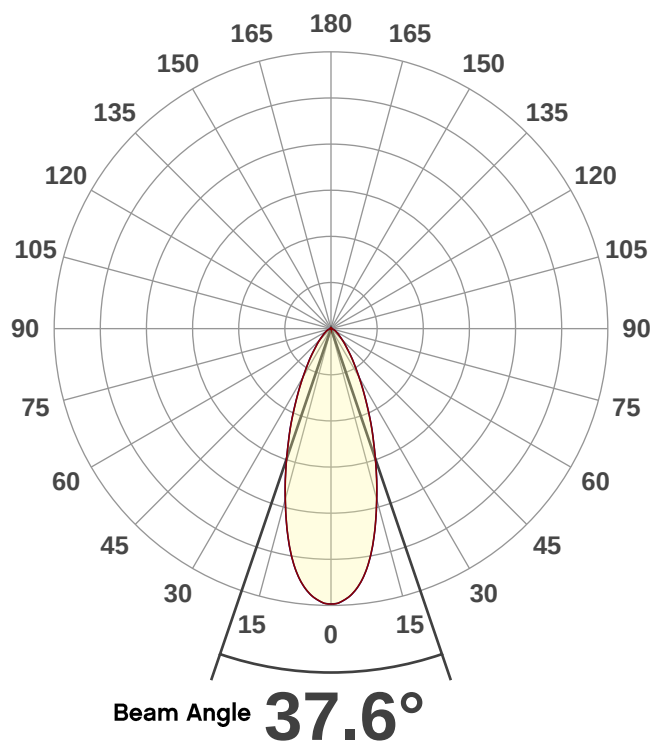
AC Supply: 124 V, 60 Hz
Power: 62.52 W
Current: 0.503 A
Power Factor: 1.0



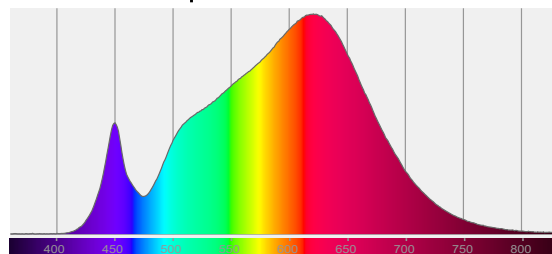
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 11/13/2019 to LM-63-2002 Standards.

Overall Measurement

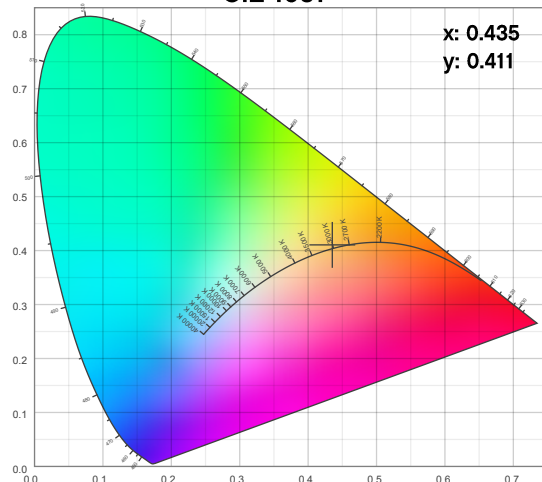
Angular Beam Distribution



Spectral Distribution



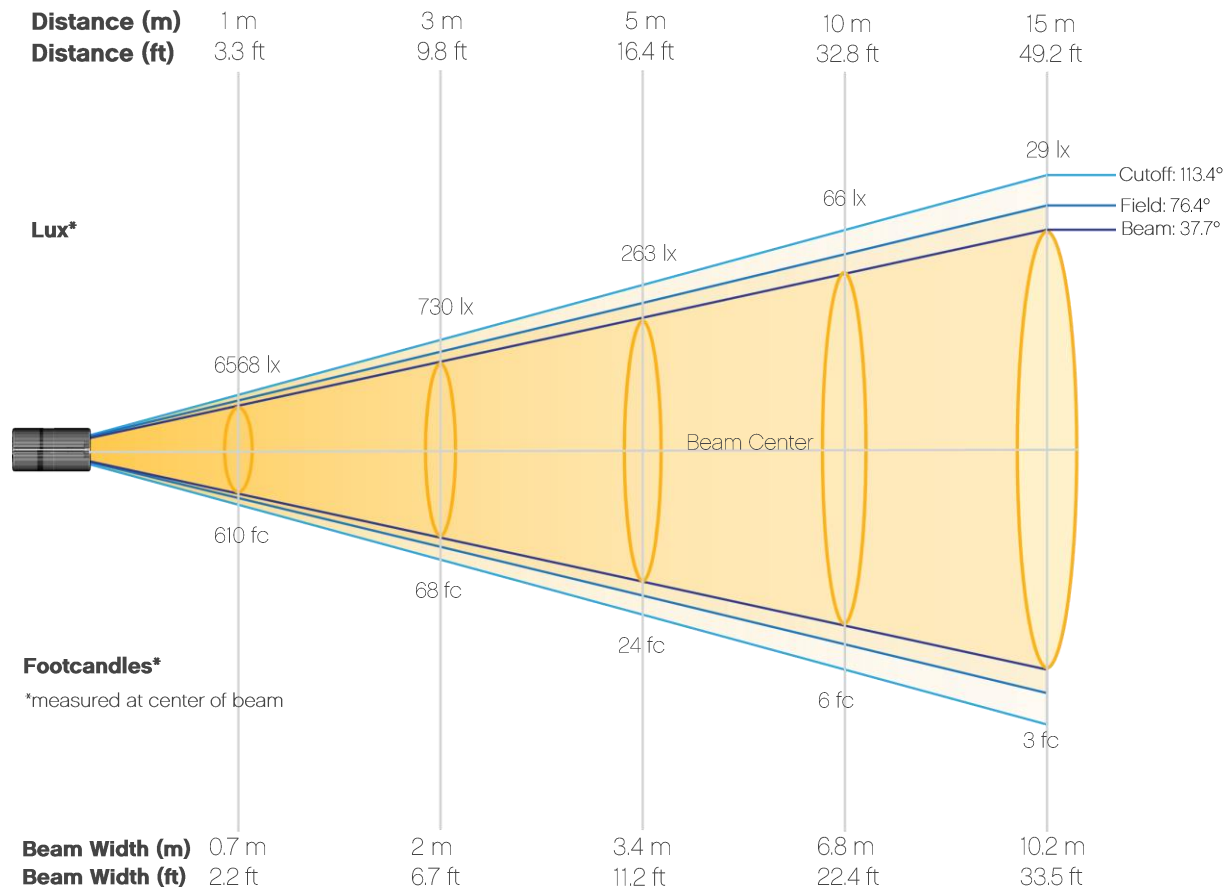
CIE 1931



Photometric Report

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

Beam Details



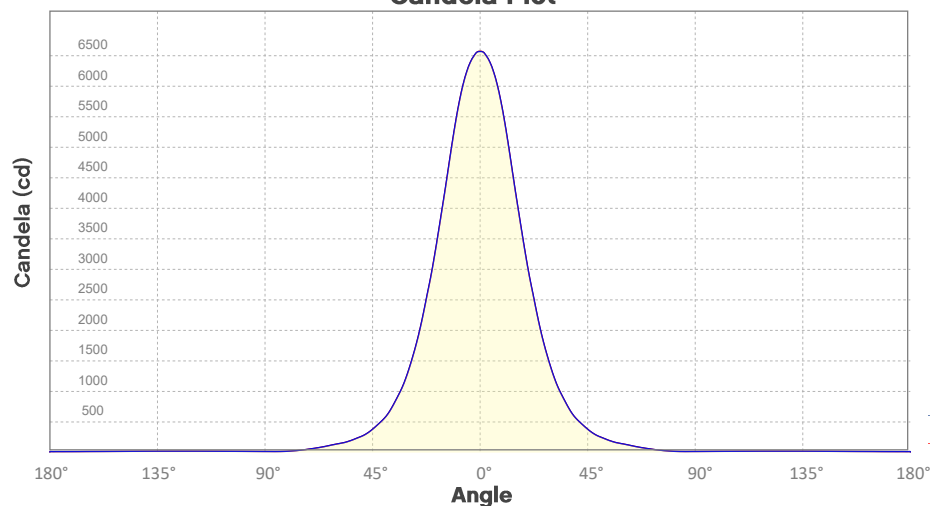
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	6568	1642	730	410	263	182	134	103	81	66
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	54	46	39	34	29	26	23	20	18	16
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	610	153	68	38	24	17	12	10	8	6
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	5	4	4	3	3	2	2	2	2	2

Photometric Report

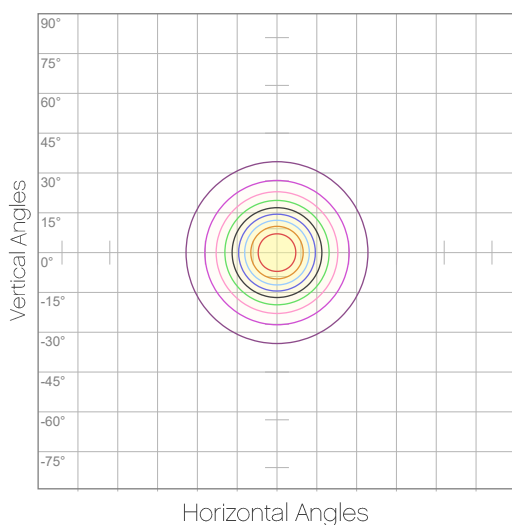
Ovation H-55WW: 45deg lens, Full Power

Candela Plot



Beam Angle (50%): 37.6°
Field Angle (10%): 76.3°
Cutoff Angle (3%): 113.6°

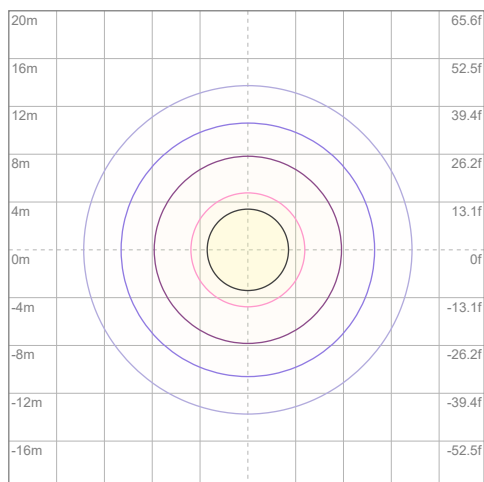
Polar Diagrams



iso-candela Diagram

10%	657 cd
20%	1314 cd
30%	1970 cd
40%	2627 cd
50%	3284 cd
60%	3941 cd
70%	4597 cd
80%	5254 cd
90%	5911 cd

Conditions:
Number of c-planes: 8
Candela at center: 6568 cd



iso-illuminance Diagram

3%	1.97 lx
5%	3.28 lx
10%	6.57 lx
30%	19.7 lx
50%	32.8 lx

Conditions:
Number of c-planes: 8
Lux at center: 65.7 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-55WW: 25deg lens, Full Power

Report Summary

Output

Total Lumens: 4188 lm
Peak Intensity: 17827 cd
Illuminance @ 5m: 712 lux
Fixture Efficacy: 68 lm/W

Optical

Horizontal Beam Angle (50%): 24.6°
Vertical Beam Angle (50%): 24.6°
Horizontal Field Angle (10%): 40.9°
Vertical Field Angle (10%): 40.8°
Horizontal Cutoff Angle (3%): 65.5°
Vertical Cutoff Angle (3%): 65.6°

Conditions

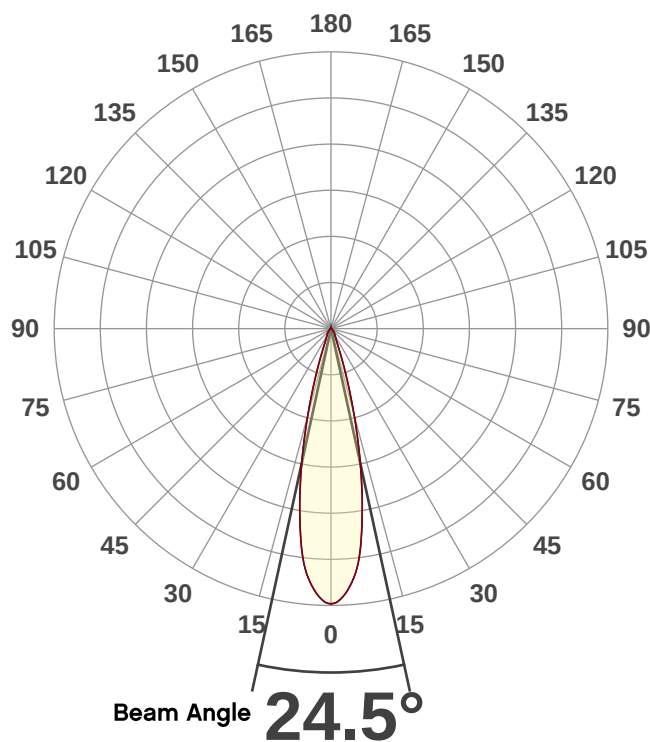
AC Supply: 124 V, 60 Hz
Power: 61.97 W
Current: 0.499 A
Power Factor: 1.0



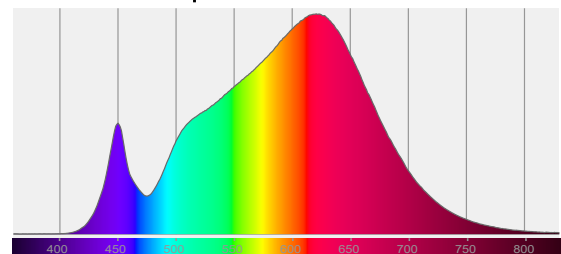
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Overall Measurement

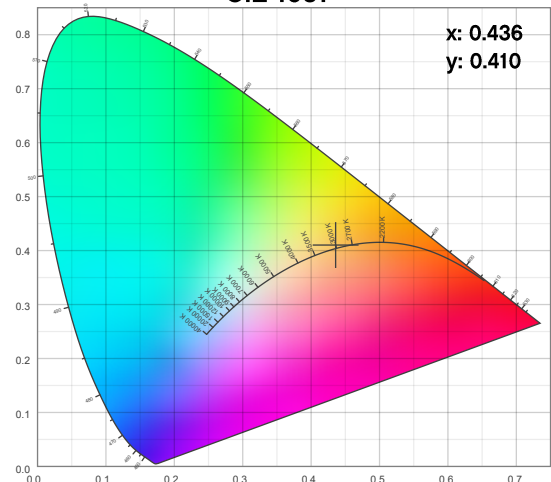
Angular Beam Distribution



Spectral Distribution



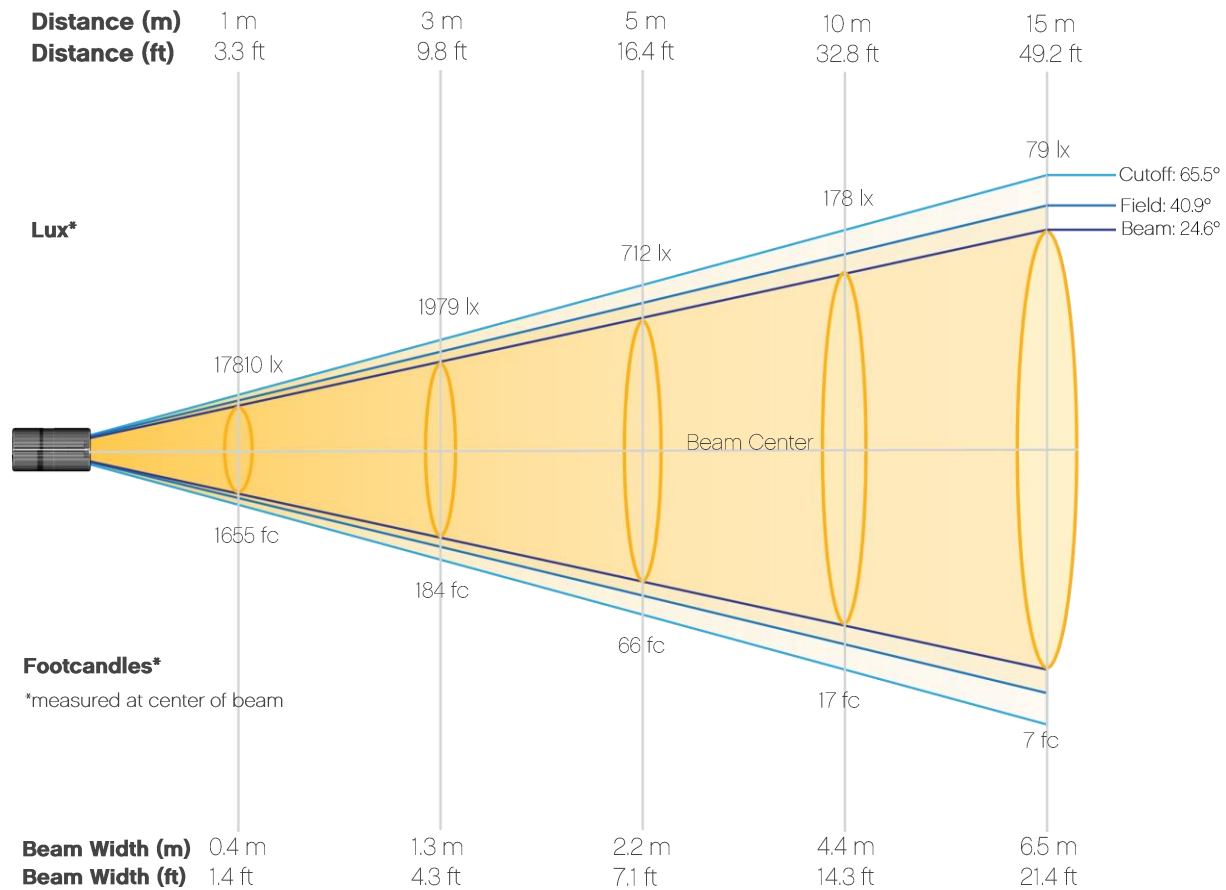
CIE 1931



Photometric Report

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

Beam Details



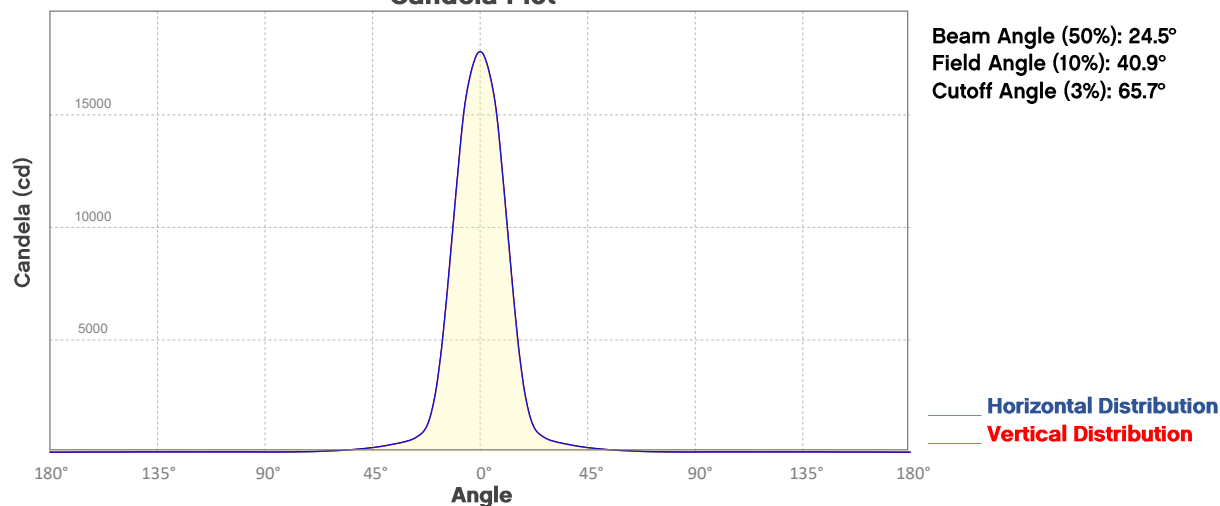
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	17810	4453	1979	1113	712	495	363	278	220	178
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	147	124	105	91	79	70	62	55	49	45
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	1655	414	184	103	66	46	34	26	20	17
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	14	11	10	8	7	6	6	5	5	4

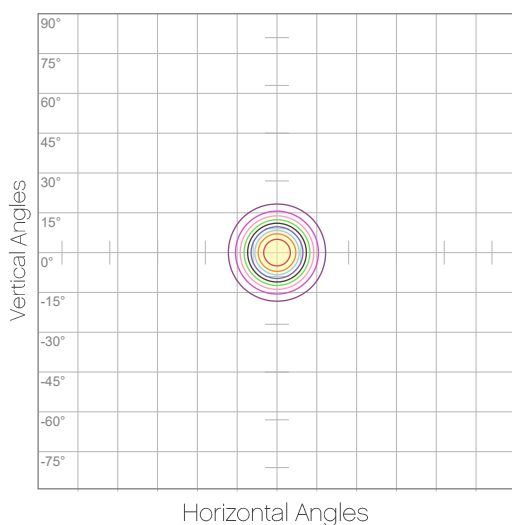
Photometric Report

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

Candela Plot



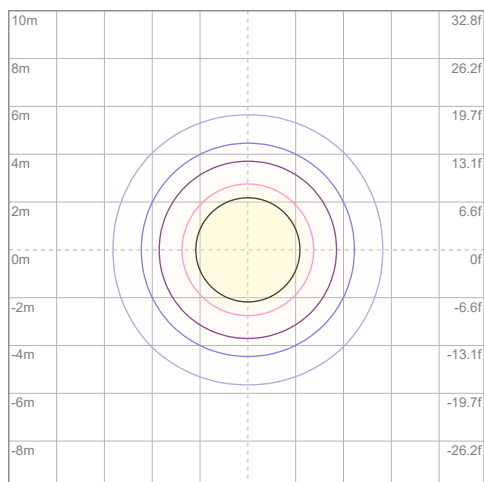
Polar Diagrams



iso-candela Diagram

10%	1781 cd
20%	3562 cd
30%	5343 cd
40%	7124 cd
50%	8905 cd
60%	10686 cd
70%	12467 cd
80%	14248 cd
90%	16029 cd

Conditions:
 Number of c-planes: 8
 Candela at center: 17810 cd



iso-illuminance Diagram

3%	5.34 lx
5%	8.91 lx
10%	17.8 lx
30%	53.4 lx
50%	89.1 lx

Conditions:
 Number of c-planes: 8
 Lux at center: 178 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-55WW: Full Power-Stable

Report Summary

Measurements

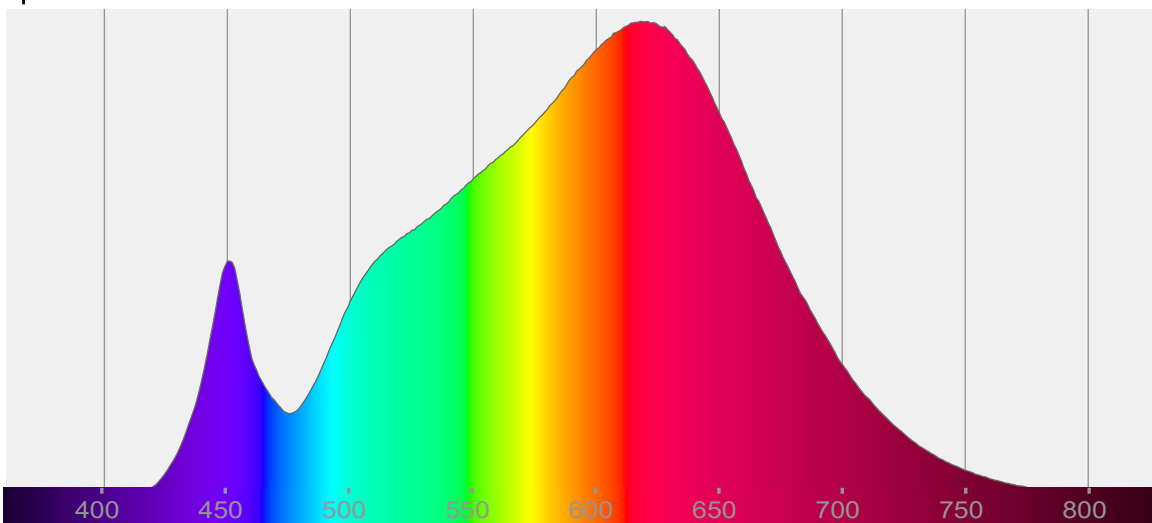
Total Lumens: 4161 lm
Peak Intensity: 4114 cd
Fixture Efficacy: 70 lm/W

Correlated Color Temperature: 3083K
 Δuv : 0.0024

CRI: 91.7 CRI R9 Value: 54.1
CQS: 90.9
TLCI: 90
TM-30-18 Rf: 92.1
TM-30-18 Rg: 99.1
1st Dominant Wavelength: 618 nm
2nd Dominant Wavelength: 451 nm



Spectral Distribution



Tested Color

3083 K

CIE 1931 Coordinates:

X: 0.435 Y: 0.409

Color Temperature

3083 K

Light Quality

CRI: 91.7

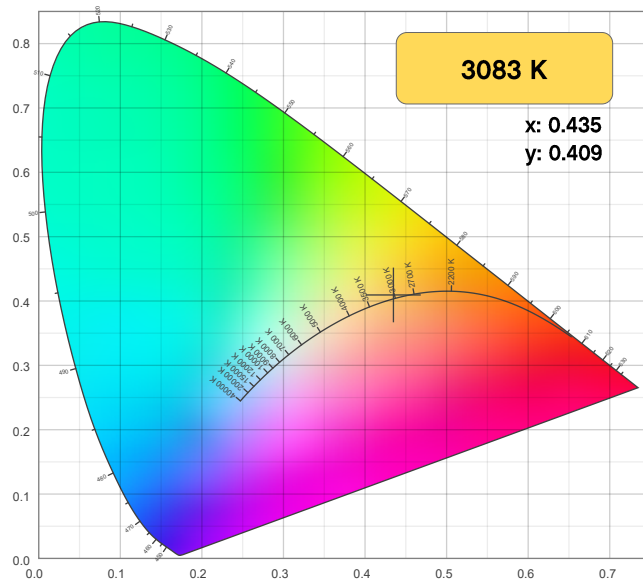
Notes:

Chromaticity Report

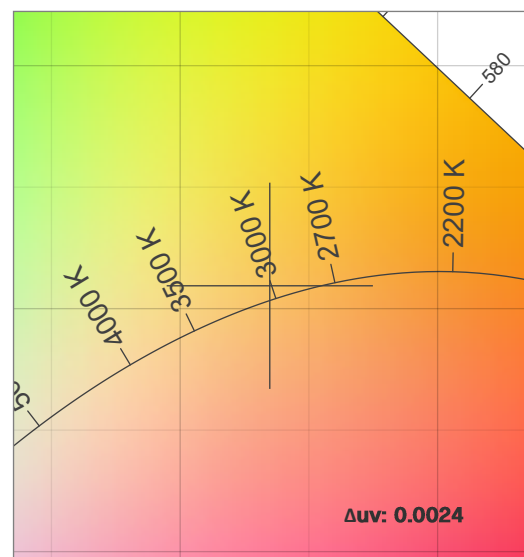
Ovation H-55WW: Full Power-Stable

Chromaticity

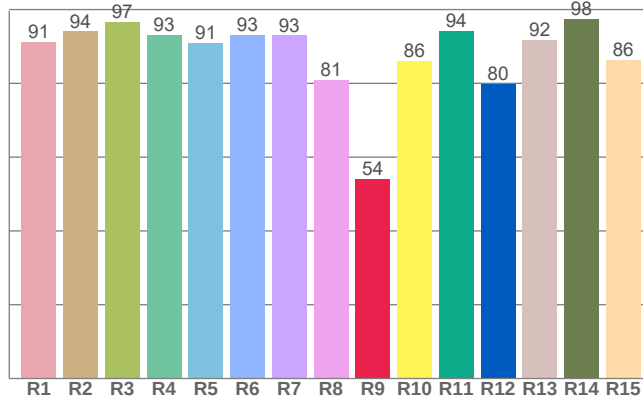
CIE 1931



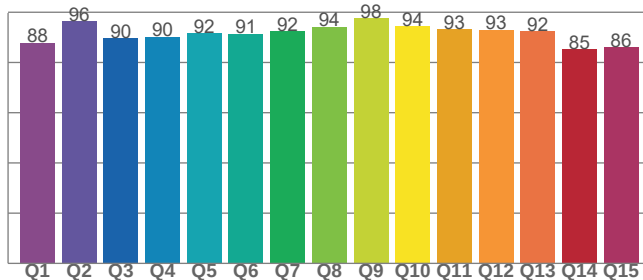
CIE 1931 - Zoom



CRI: 91.7 (R1-R8)



CQS: 90.9



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3083 K	0.435	0.409

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
0.0024	0.409	0.247

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
91.7	54.1	90.9

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
90	92.1	99.1

Chromaticity Report

Ovation H-55WW: Full Power-Stable

TM-30-18 Details

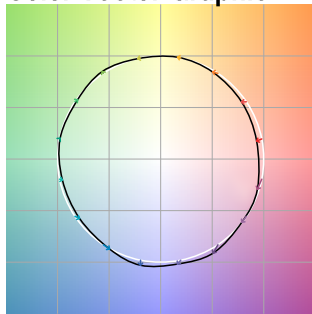
Rf 92.1

Fidelity Index
(R_f)

Rg 99.1

Gamut Index (R_g)

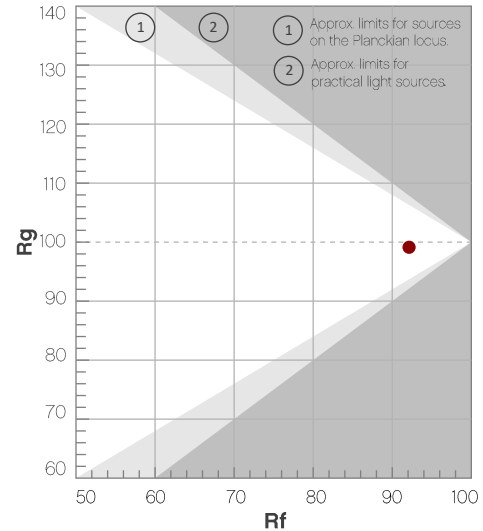
Color Vector Graphic



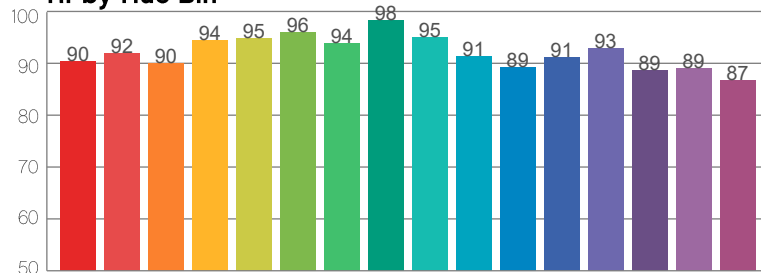
Color Distortion Graphic



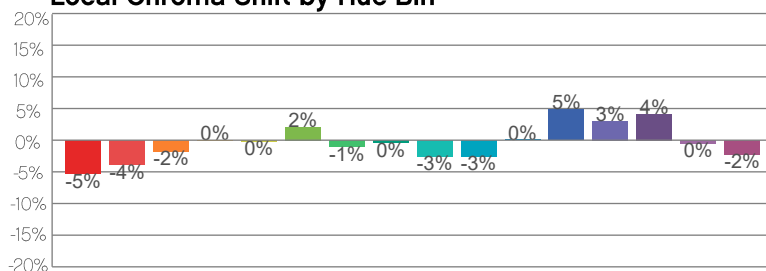
Hue Bin	R _f	Chroma Shift	Hue Shift
1	90	-5%	-1%
2	92	-4%	2%
3	90	-2%	5%
4	94	0%	3%
5	95	0%	3%
6	96	2%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-3%	1%
10	91	-3%	4%
11	89	0%	7%
12	91	5%	1%
13	93	3%	-4%
14	89	4%	-8%
15	89	0%	-7%
16	87	-2%	-10%



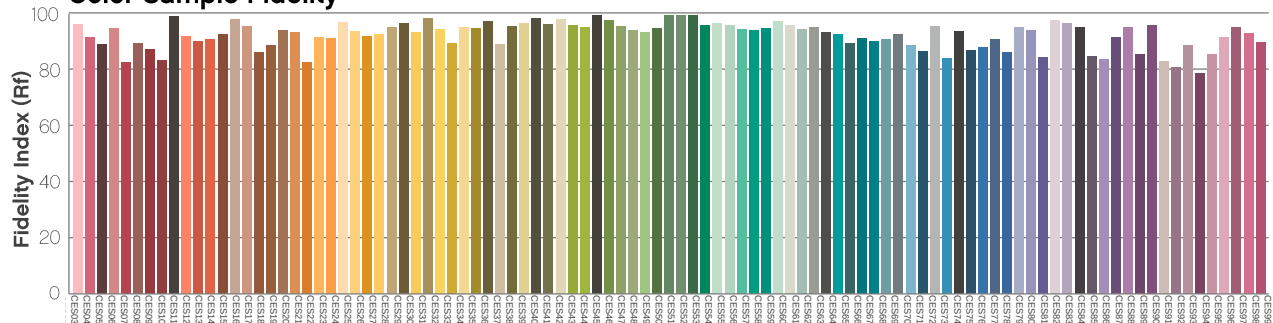
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Contact Us

General Information	Technical Support
Chauvet World Headquarters	
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Chauvet Europe Ltd	
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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.

