

PHOTOMETRICS REPORT
OVATION
F-415VW



CHAUVET
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 F-415VW: Full Flood, Full Power

Report Summary

Output

Total Lumens: 2865 lm

Peak Intensity: 3419 cd

Illuminance @ 5m: 137 lux

Fixture Efficacy: 22 lm/W

Optical

Horizontal Beam Angle (50%): 55.2°

Vertical Beam Angle (50%): 55.6°

Horizontal Field Angle (10%): 82.2°

Vertical Field Angle (10%): 82.9°

Horizontal Cutoff Angle (3%): 94.5°

Vertical Cutoff Angle (3%): 94.3°



Conditions

AC Supply: 116 V, 60.1 Hz

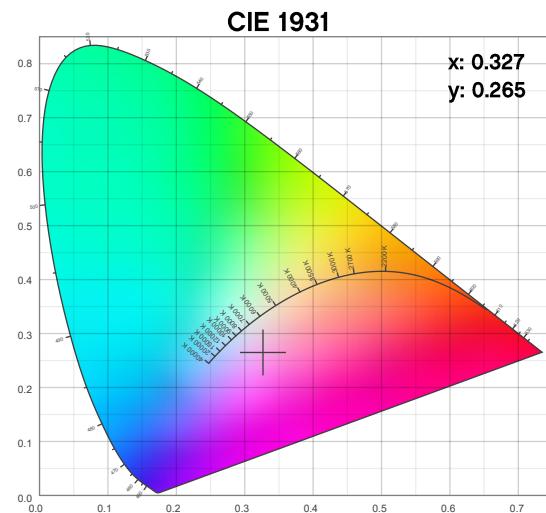
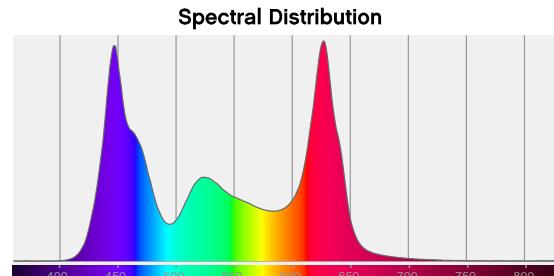
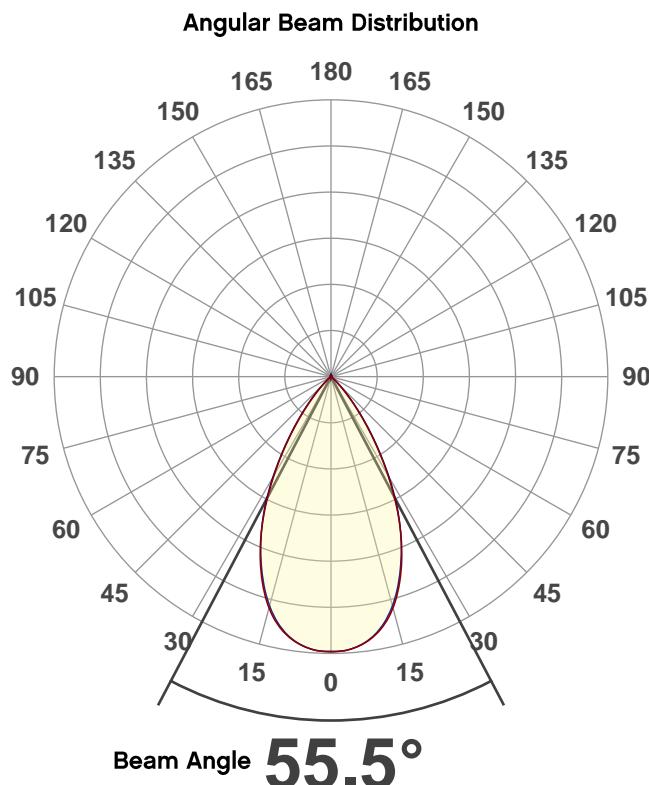
Power: 128.83 W

Current: 1.11 A

Power Factor: 0.99

This data sheet conforms to American National Standard E1.19 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpon Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/17/2019 to LM-63-2002 Standards.

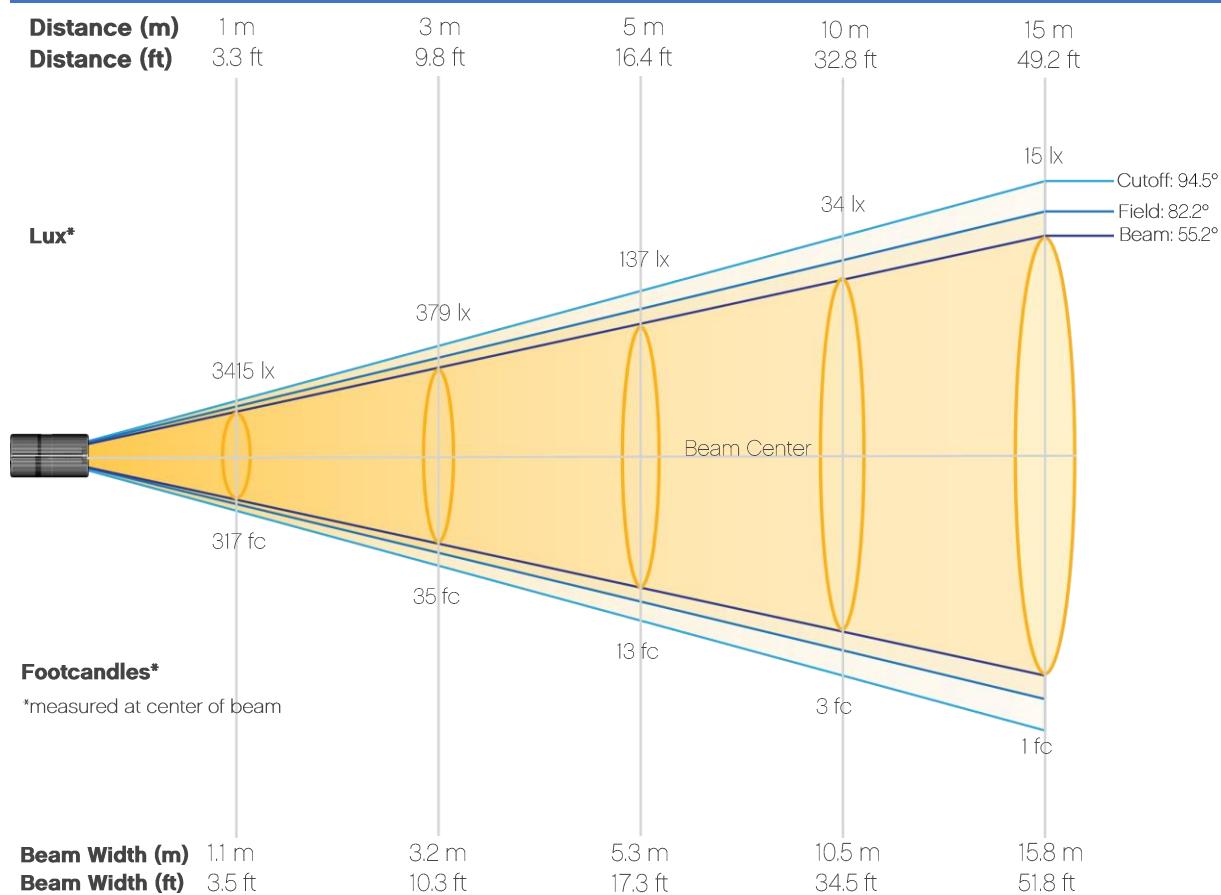
Overall Measurement



Photometric Report

Ovation F-415VW: Full Flood, Full Power

Beam Details

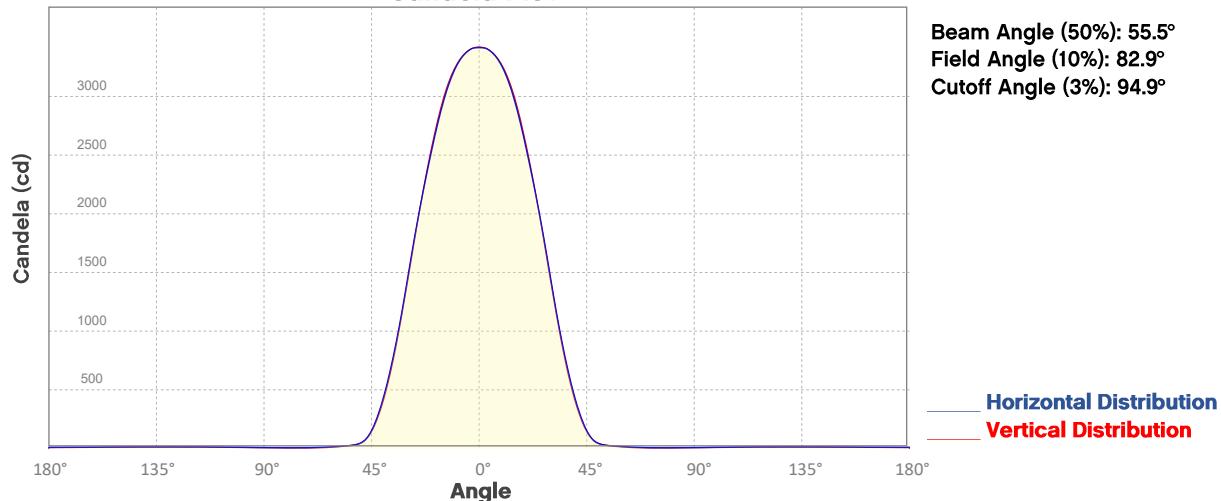


Beam Illuminances from 1-20m (3.3-65.6ft)

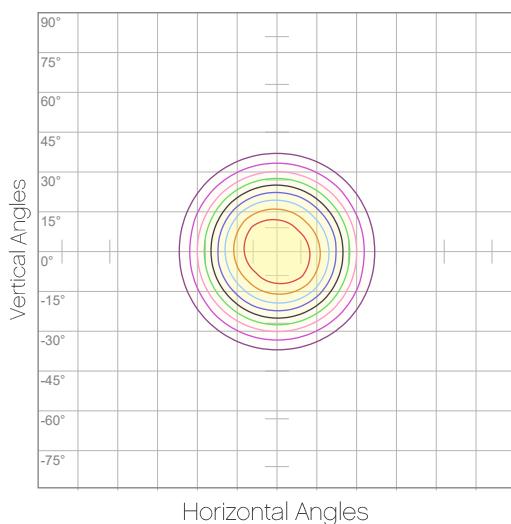
| Distance | 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lux | 3415 | 854 | 379 | 213 | 137 | 95 | 70 | 53 | 42 | 34 |
| Distance | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
| Lux | 28 | 24 | 20 | 17 | 15 | 13 | 12 | 11 | 9 | 9 |
| Distance | 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft | 26.2ft | 29.5ft | 32.8ft |
| FC | 317 | 79 | 35 | 20 | 13 | 9 | 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 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |

Photometric Report

Ovation F-415VW: Full Flood, Full Power Candela Plot



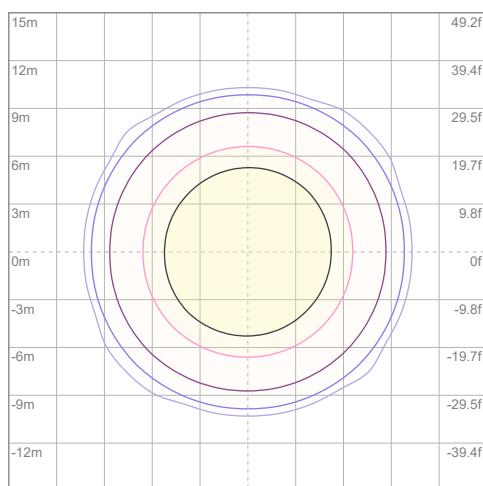
Polar Diagrams



iso-candela Diagram

| | |
|-----|---------|
| 10% | 342 cd |
| 20% | 683 cd |
| 30% | 1025 cd |
| 40% | 1366 cd |
| 50% | 1708 cd |
| 60% | 2049 cd |
| 70% | 2391 cd |
| 80% | 2732 cd |
| 90% | 3074 cd |

Conditions:
Number of c-planes: 8
Candela at center: 3415 cd



iso-illuminance Diagram

| | |
|-----|---------|
| 3% | 1.02 lx |
| 5% | 1.71 lx |
| 10% | 3.42 lx |
| 30% | 10.2 lx |
| 50% | 17.1 lx |

Conditions:
Number of c-planes: 8
Lux at center: 34.2 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 F-415VW: 50% Zoom, Full Power

Report Summary

Output

Total Lumens: 2833 lm
Peak Intensity: 8325 cd
Illuminance @ 5m: 333 lux
Fixture Efficacy: 22 lm/W



Optical

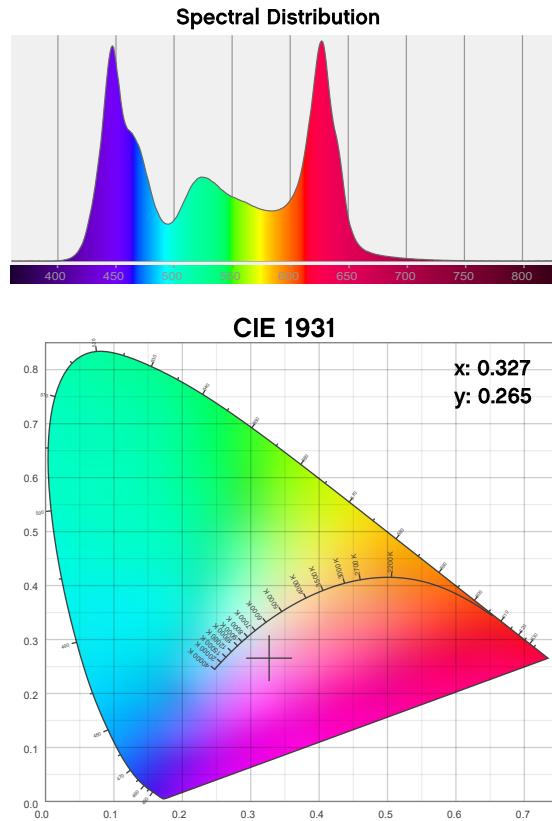
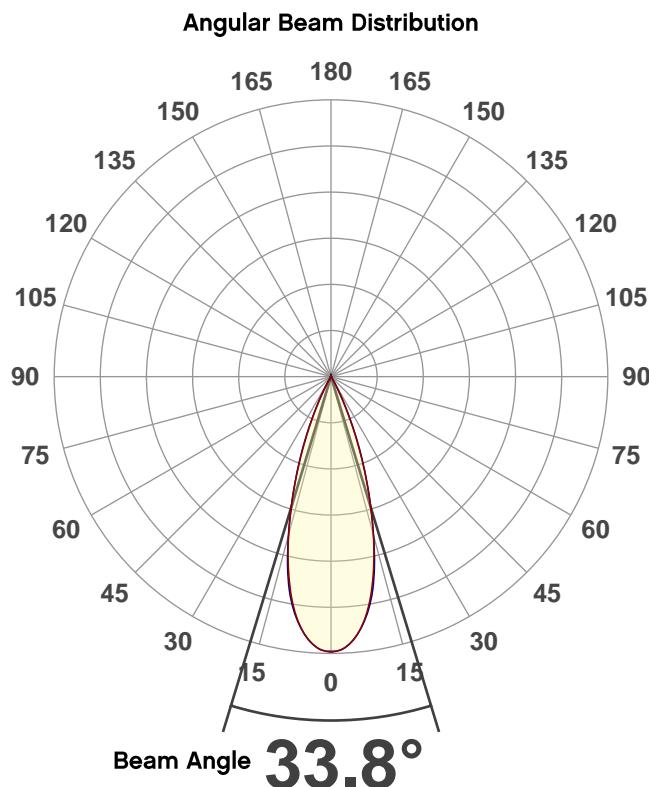
Horizontal Beam Angle (50%): 33.8°
Vertical Beam Angle (50%): 33.7°
Horizontal Field Angle (10%): 52.4°
Vertical Field Angle (10%): 52.5°
Horizontal Cutoff Angle (3%): 60.2°
Vertical Cutoff Angle (3%): 60°

Conditions

AC Supply: 116 V, 60.1 Hz
Power: 128.6 W
Current: 1.11 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 LabSpin Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/17/2019 to LM-63-2002 Standards.

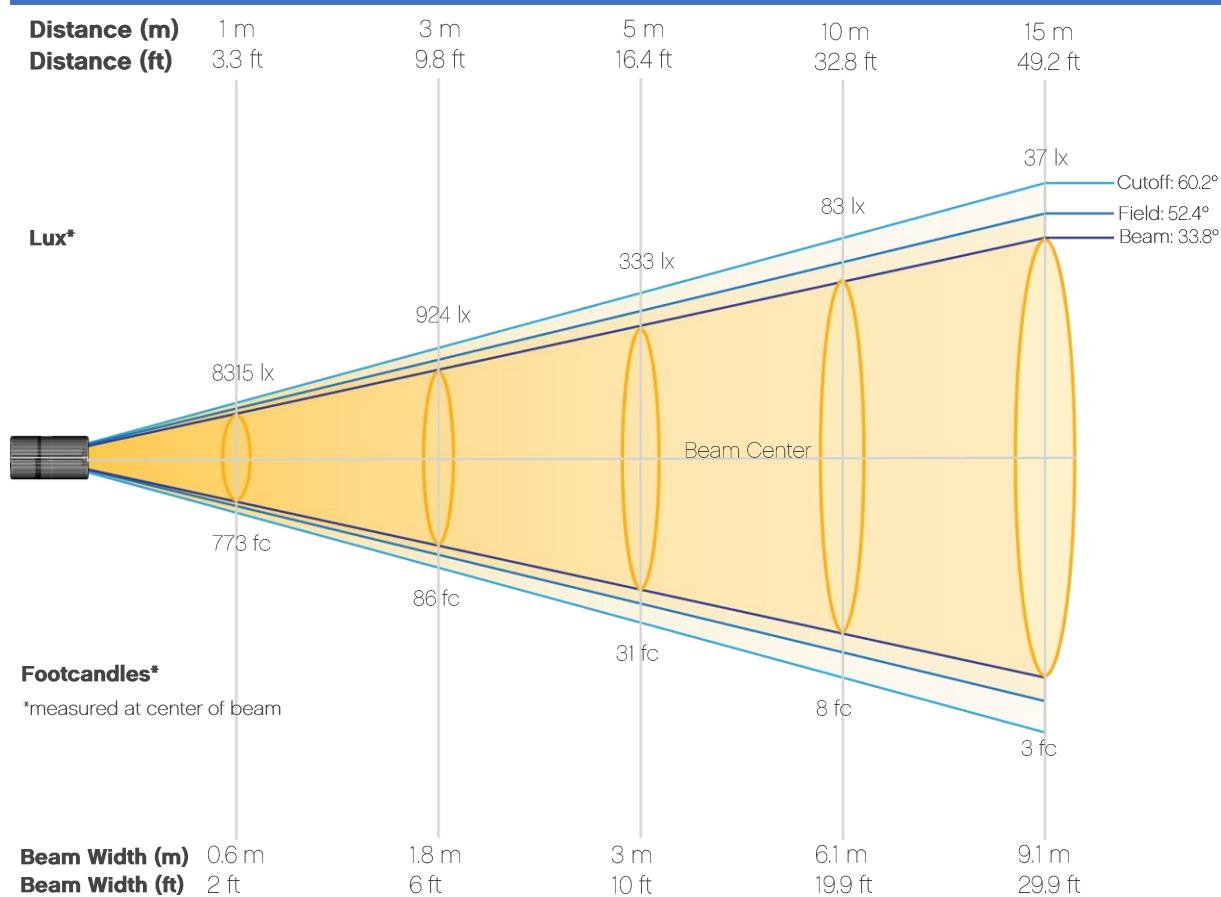
Overall Measurement



Photometric Report

Ovation F-415VW: 50% Zoom, Full Power

Beam Details

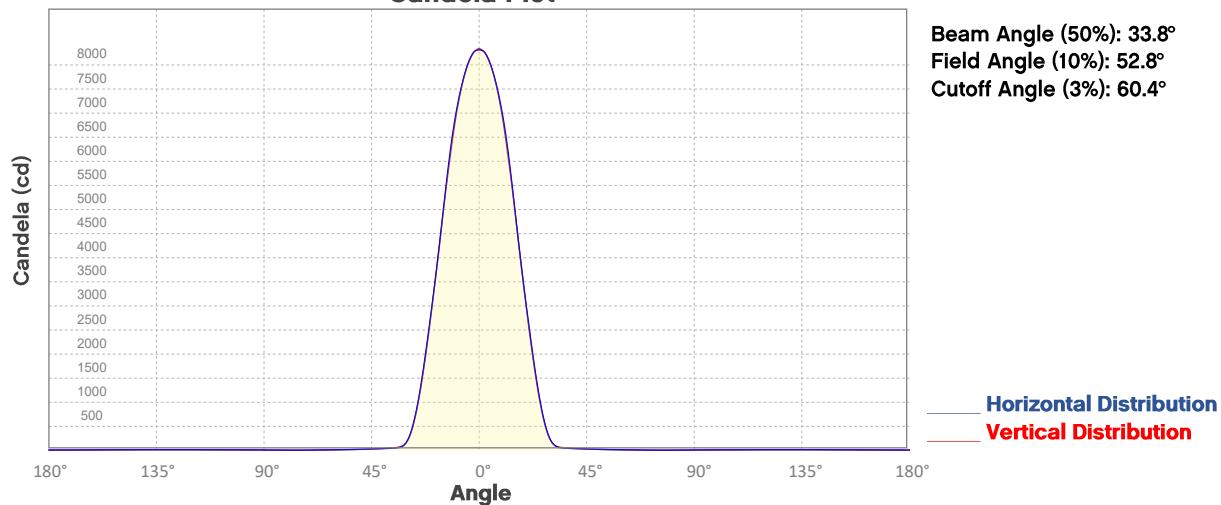


Beam Illuminances from 1-20m (3.3-65.6ft)

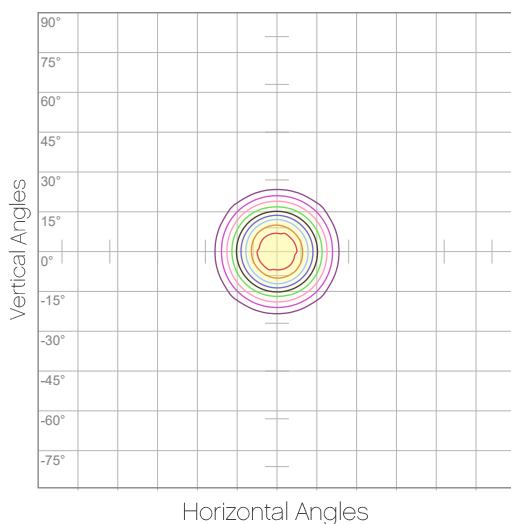
| Distance | 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lux | 8315 | 2079 | 924 | 520 | 333 | 231 | 170 | 130 | 103 | 83 |
| Distance | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
| Lux | 69 | 58 | 49 | 42 | 37 | 32 | 29 | 26 | 23 | 21 |
| Distance | 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft | 26.2ft | 29.5ft | 32.8ft |
| FC | 773 | 193 | 86 | 48 | 31 | 21 | 16 | 12 | 10 | 8 |
| Distance | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| FC | 6 | 5 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 |

Photometric Report

Ovation F-415VW: 50% Zoom, Full Power
Candela Plot



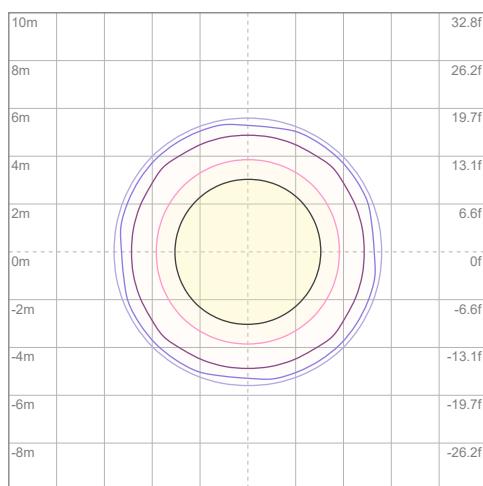
Polar Diagrams



iso-candela Diagram

| | |
|-----|---------|
| 10% | 832 cd |
| 20% | 1663 cd |
| 30% | 2495 cd |
| 40% | 3326 cd |
| 50% | 4158 cd |
| 60% | 4989 cd |
| 70% | 5821 cd |
| 80% | 6652 cd |
| 90% | 7484 cd |

Conditions:
Number of c-planes: 8
Candela at center: 8315 cd



iso-illuminance Diagram

| | |
|-----|---------|
| 3% | 2.49 lx |
| 5% | 4.16 lx |
| 10% | 8.32 lx |
| 30% | 24.9 lx |
| 50% | 41.6 lx |

Conditions:
Number of c-planes: 8
Lux at center: 83.2 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 F-415VW: Full Spot, Full Power

Report Summary

Output

Total Lumens: 1995 lm
Peak Intensity: 19469 cd
Illuminance @ 5m: 776 lux
Fixture Efficacy: 15 lm/W

Optical

Horizontal Beam Angle (50%): 17.1°
Vertical Beam Angle (50%): 16.8°
Horizontal Field Angle (10%): 30.1°
Vertical Field Angle (10%): 29.4°
Horizontal Cutoff Angle (3%): 36.5°
Vertical Cutoff Angle (3%): 35.9°

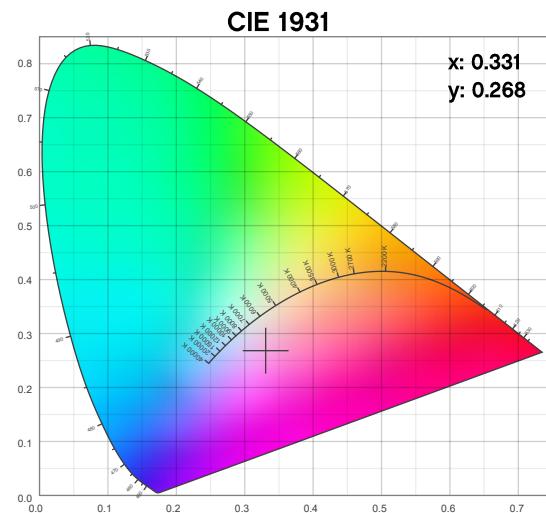
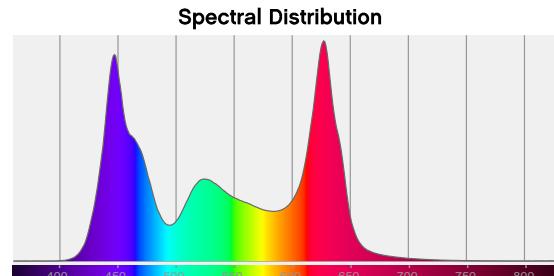
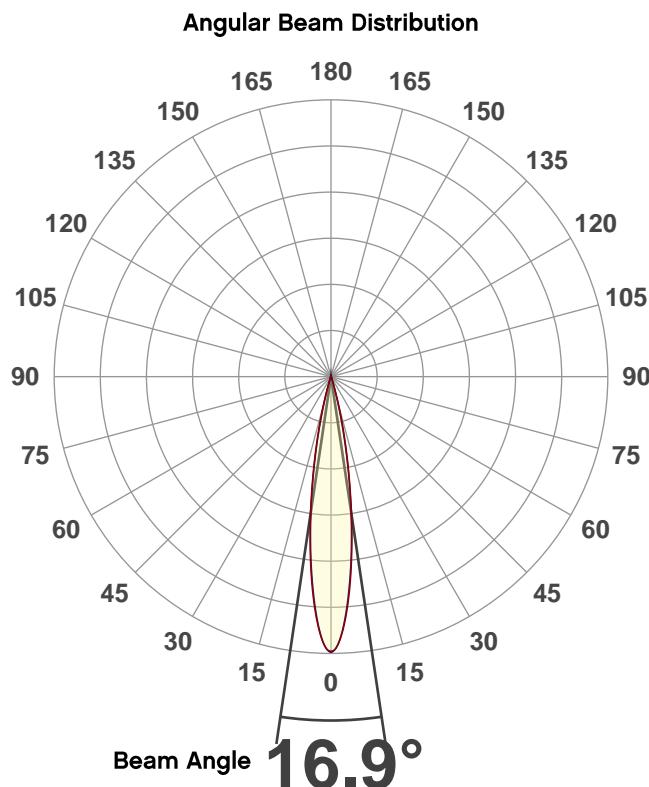
Conditions

AC Supply: 117 V, 60 Hz
Power: 130.11 W
Current: 1.12 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 LabSpon Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/16/2019 to LM-63-2002 Standards.

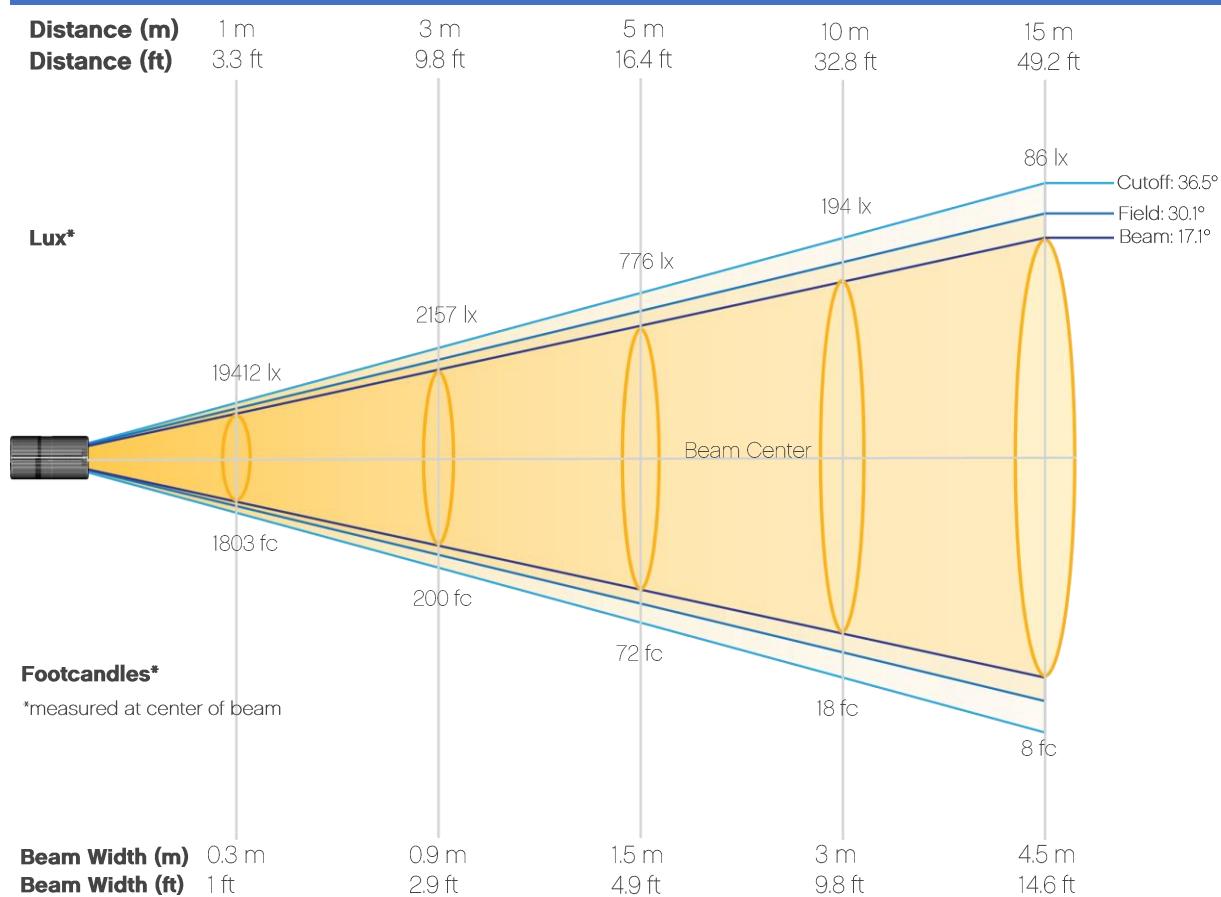
Overall Measurement



Photometric Report

Ovation F-415VW: Full Spot, Full Power

Beam Details

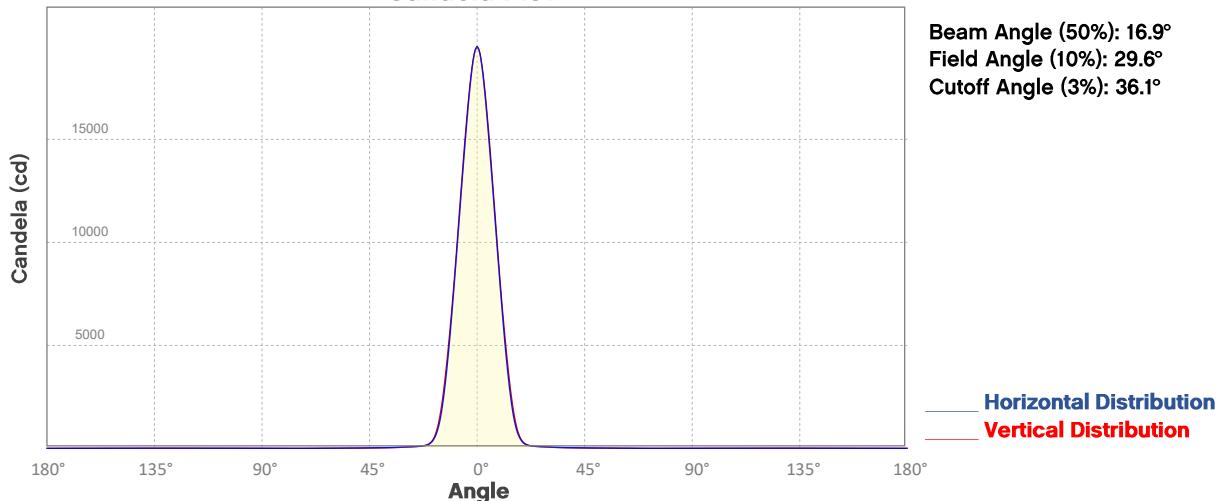


Beam Illuminances from 1-20m (3.3-65.6ft)

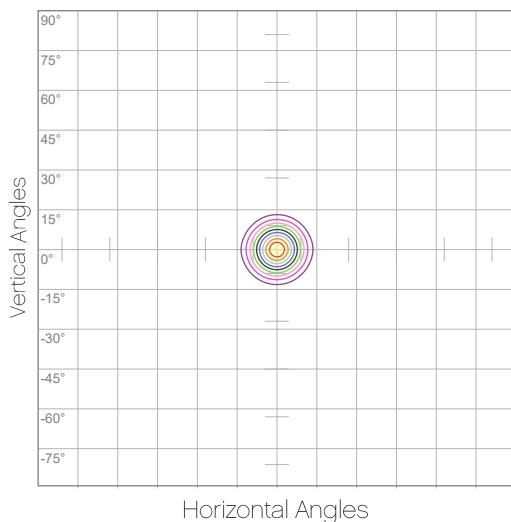
| Distance | 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lux | 19412 | 4853 | 2157 | 1213 | 776 | 539 | 396 | 303 | 240 | 194 |
| Distance | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
| Lux | 160 | 135 | 115 | 99 | 86 | 76 | 67 | 60 | 54 | 49 |
| Distance | 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft | 26.2ft | 29.5ft | 32.8ft |
| FC | 1803 | 451 | 200 | 113 | 72 | 50 | 37 | 28 | 22 | 18 |
| Distance | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| FC | 15 | 13 | 11 | 9 | 8 | 7 | 6 | 6 | 5 | 5 |

Photometric Report

Ovation F-415VW: Full Spot, Full Power
Candela Plot



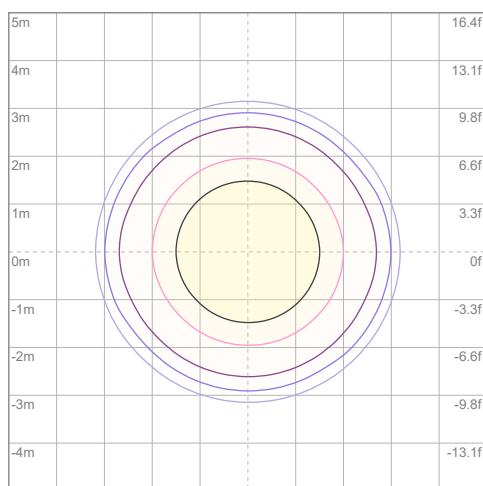
Polar Diagrams



iso-candela Diagram

| | |
|-----|----------|
| 10% | 1941 cd |
| 20% | 3882 cd |
| 30% | 5824 cd |
| 40% | 7765 cd |
| 50% | 9706 cd |
| 60% | 11647 cd |
| 70% | 13588 cd |
| 80% | 15530 cd |
| 90% | 17471 cd |

Conditions:
Number of c-planes: 8
Candela at center: 19412 cd



iso-illuminance Diagram

| | |
|-----|---------|
| 3% | 5.82 lx |
| 5% | 9.71 lx |
| 10% | 19.4 lx |
| 30% | 58.2 lx |
| 50% | 97.1 lx |

Conditions:
Number of c-planes: 8
Lux at center: 194 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 F-415VW: 3200K

Report Summary

Measurements

Total Lumens: 3506 lm

Peak Intensity: 10351 cd

Fixture Efficacy: 26 lm/W

Correlated Color Temperature: 3287K

Δu_v : -0.0004

CRI: 86.1 CRI R9 Value: 67.2

CQS: 90.2

TLCI: 83

TM-30-18 Rf: 89.8

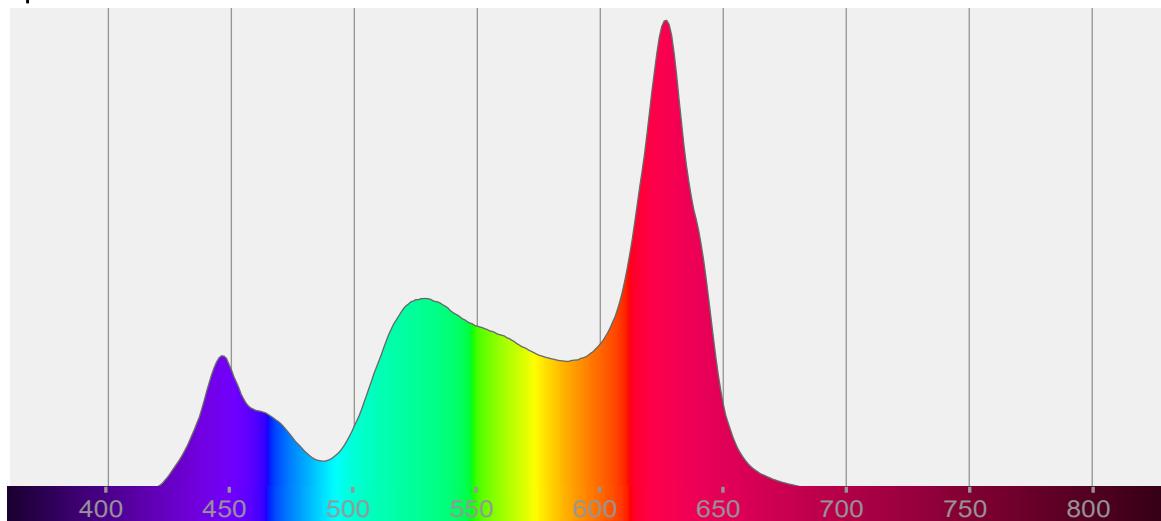
TM-30-18 Rg: 109.3

1st Dominant Wavelength: 627 nm

2nd Dominant Wavelength: 529 nm



Spectral Distribution



Tested Color

3287 K

CIE 1931 Coordinates:
X: 0.418 Y: 0.396

Color Temperature

3287 K

Light Quality

CRI: 86.1

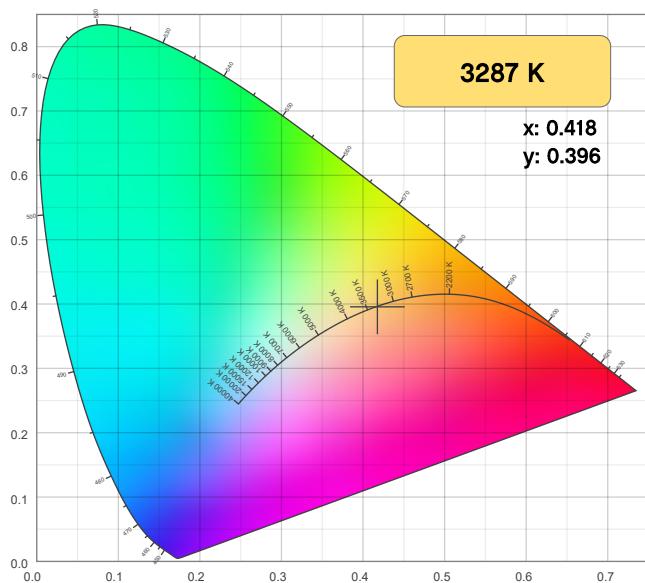
Notes:

Chromaticity Report

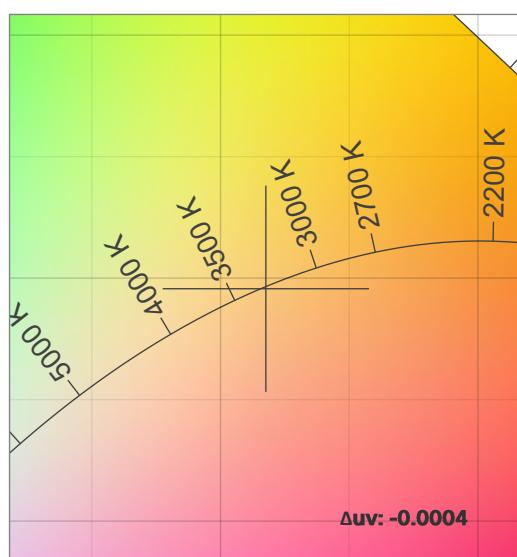
Ovation F-415VW: 3200K

Chromaticity

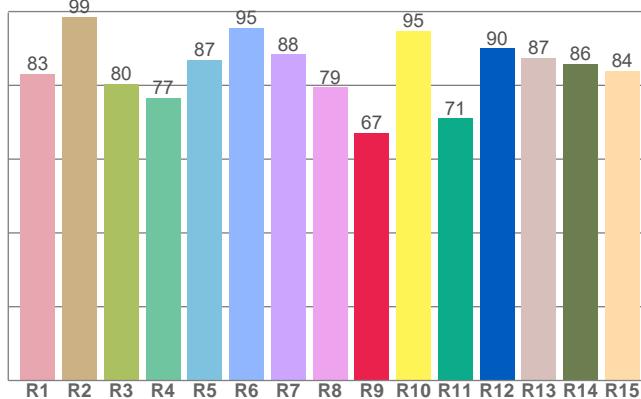
CIE 1931



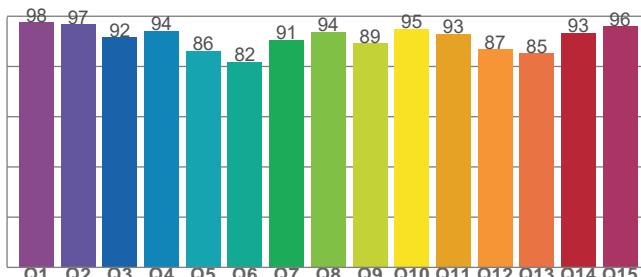
CIE 1931 - Zoom



CRI: 86.1 (R1-R8)



CQS: 90.2



Color Parameters

| Color Temperature | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 |
|-------------------|---------------------------|---------------------------|
| 3287 K | x 0.418 | y 0.396 |

| Color Deviation from Black Body Curve | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 |
|---------------------------------------|---------------------------|---------------------------|
| Δuv | y 0.396 | u 0.242 |

| Color Rendering Index | Red Component | Color Quality Scale |
|-----------------------|------------------|---------------------|
| CRI 86.1 | CRI - R9 67.2 | CQS 90.2 |

| Television Lighting Consistency Index | Color Fidelity | Color Gamut |
|---------------------------------------|-----------------------|----------------------|
| TLCI 83 | TM-30-18 - Rf 89.8 | TM-30-18 Rg 109.3 |

Chromaticity Report

Ovation F-415VW: 3200K

TM-30-18 Details

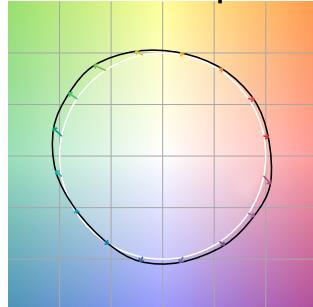
Rf 89.8

Fidelity Index
(Rg)

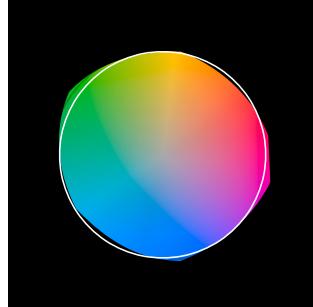
Rg 109.3

Gamut Index (Rg)

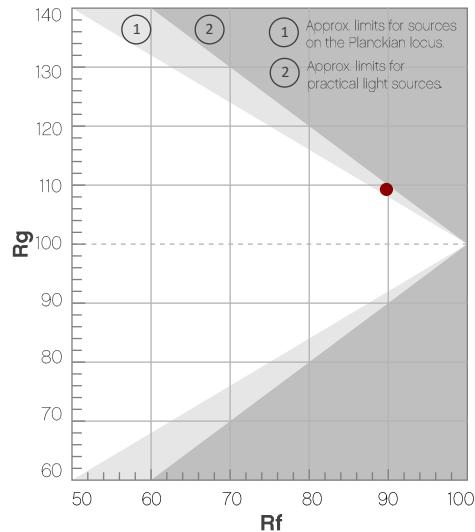
Color Vector Graphic



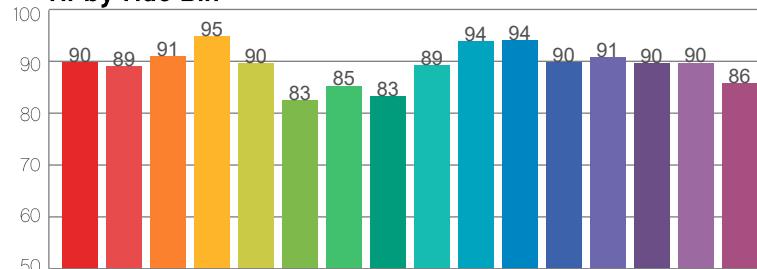
Color Distortion Graphic



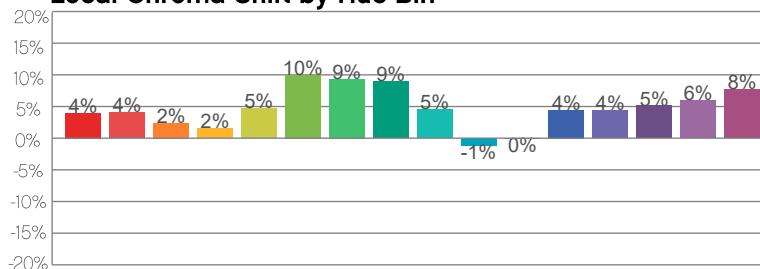
| Hue Bin | R _f | Chroma Shift | Hue Shift |
|---------|----------------|--------------|-----------|
| 1 | 90 | 4% | -2% |
| 2 | 89 | 4% | -4% |
| 3 | 91 | 2% | -1% |
| 4 | 95 | 2% | 2% |
| 5 | 90 | 5% | 6% |
| 6 | 83 | 10% | 6% |
| 7 | 85 | 9% | 0% |
| 8 | 83 | 9% | -6% |
| 9 | 89 | 5% | -6% |
| 10 | 94 | -1% | -3% |
| 11 | 94 | 0% | 3% |
| 12 | 90 | 4% | -2% |
| 13 | 91 | 4% | -3% |
| 14 | 90 | 5% | 1% |
| 15 | 90 | 6% | 1% |
| 16 | 86 | 8% | -6% |



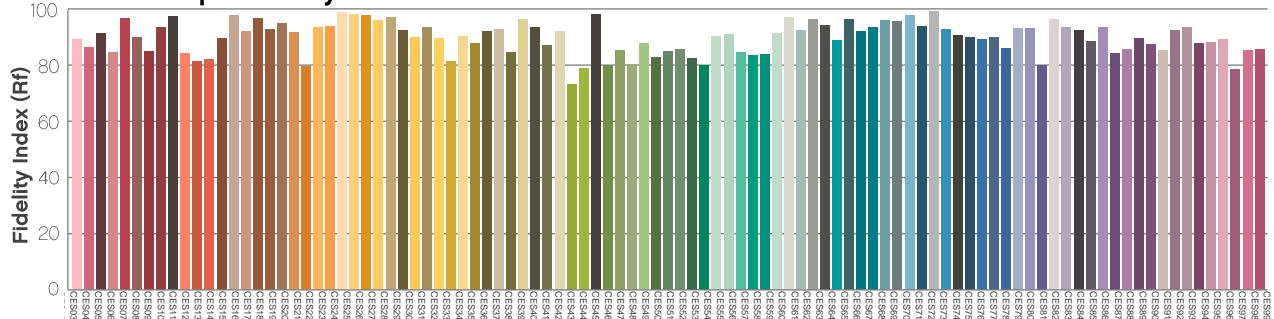
Rf by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chauvet Professional – www.chauvetprofessional.com

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

Chromaticity Report

Ovation F-415VW: 5600K

Report Summary

Measurements

Total Lumens: 2993 lm

Peak Intensity: 8778 cd

Fixture Efficacy: 24 lm/W

Correlated Color Temperature: 5584K

Δu_v : -0.0095

CRI: 89.4 CRI R9 Value: 72.5

CQS: 90.3

TLCI: 90

TM-30-18 Rf: 88.8

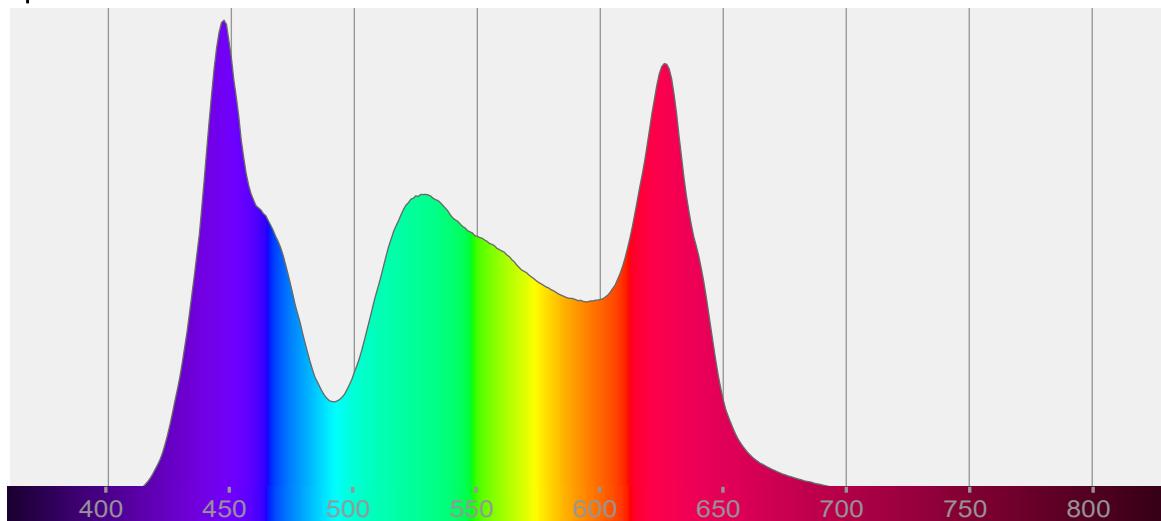
TM-30-18 Rg: 107.4

1st Dominant Wavelength: 447 nm

2nd Dominant Wavelength: 626 nm



Spectral Distribution



Tested Color

5584 K

CIE 1931 Coordinates:

X: 0.331 Y: 0.328

Color Temperature

5584 K

Light Quality

CRI: 89.4

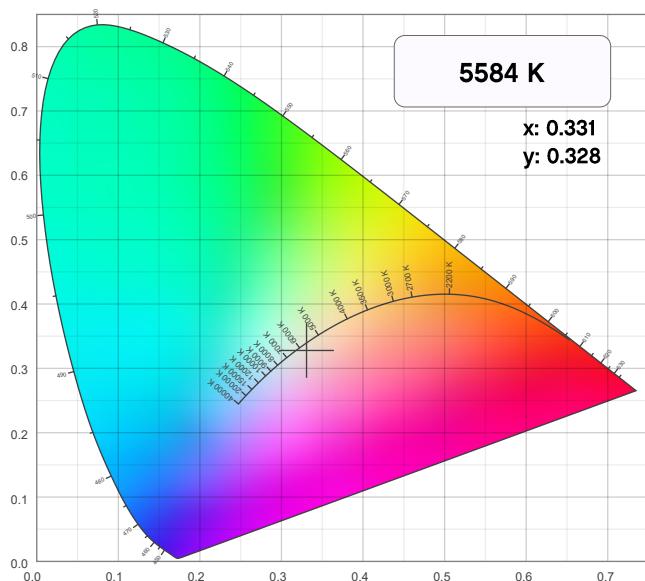
Notes:

Chromaticity Report

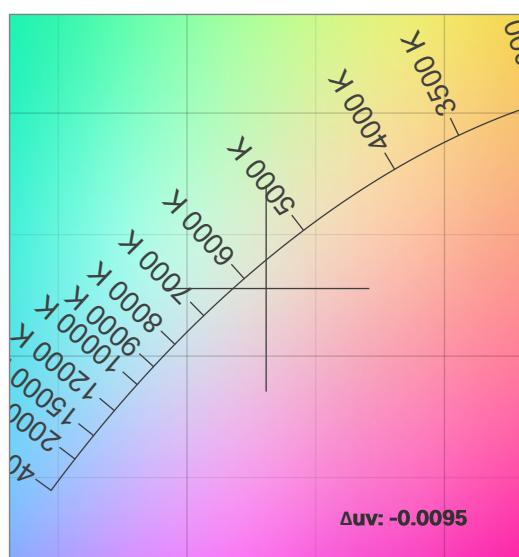
Ovation F-415VW: 5600K

Chromaticity

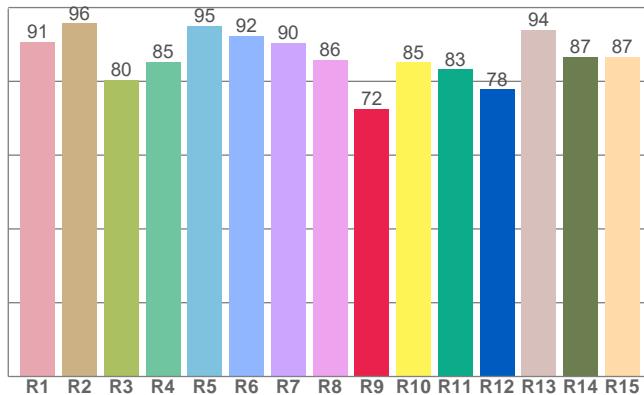
CIE 1931



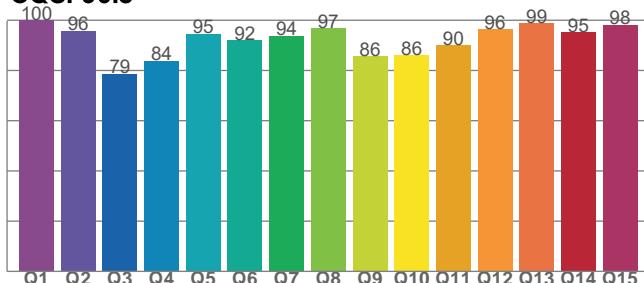
CIE 1931 - Zoom



CRI: 89.4 (R1-R8)



CQS: 90.3



Color Parameters

| Color Temperature | Color Coordinate CIE 1931 | Color Coordinate CIE 1931 |
|-------------------|---------------------------|---------------------------|
| CCT | x | y |
| 5584 K | 0.331 | 0.328 |

| Color Deviation from Black Body Curve | Color Coordinate CIE 1964 | Color Coordinate CIE 1964 |
|---------------------------------------|---------------------------|---------------------------|
| Δuv | u | u |
| -0.0095 | 0.328 | 0.211 |

| Color Rendering Index | Red Component | Color Quality Scale |
|-----------------------|---------------|---------------------|
| CRI | CRI - R9 | CQS |
| 89.4 | 72.5 | 90.3 |

| Television Lighting Consistency Index | Color Fidelity | Color Gamut |
|---------------------------------------|----------------|-------------|
| TLCI | TM-30-18 - Rf | TM-30-18 Rg |
| 90 | 88.8 | 107.4 |

Chromaticity Report

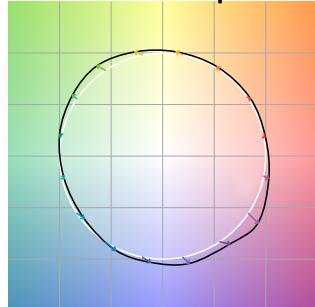
Ovation F-415VW: 5600K

TM-30-18 Details

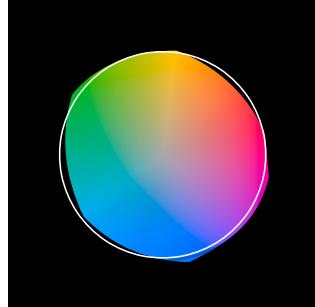
Rf 88.8
Fidelity Index
(R_f)

Rg 107.4
Gamut Index (R_g)

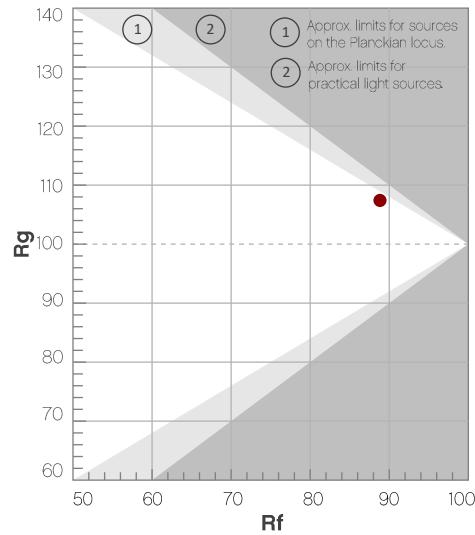
Color Vector Graphic



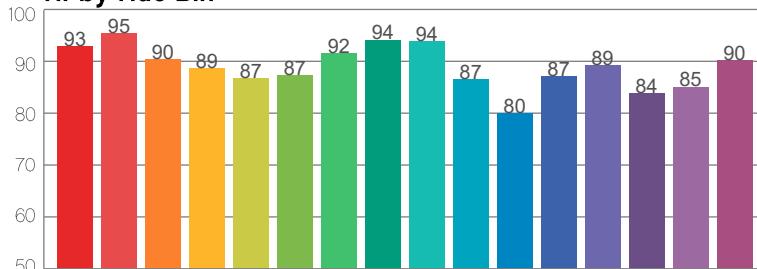
Color Distortion Graphic



| Hue Bin | R _f | Chroma Shift | Hue Shift |
|---------|----------------|--------------|-----------|
| 1 | 93 | 1% | -1% |
| 2 | 95 | 2% | 0% |
| 3 | 90 | 1% | 4% |
| 4 | 89 | 2% | 7% |
| 5 | 87 | 4% | 7% |
| 6 | 87 | 8% | 4% |
| 7 | 92 | 6% | -1% |
| 8 | 94 | 2% | -1% |
| 9 | 94 | -2% | 3% |
| 10 | 87 | -3% | 8% |
| 11 | 80 | 1% | 12% |
| 12 | 87 | 3% | 8% |
| 13 | 89 | 7% | 5% |
| 14 | 84 | 7% | 7% |
| 15 | 85 | 13% | -3% |
| 16 | 90 | 5% | -1% |



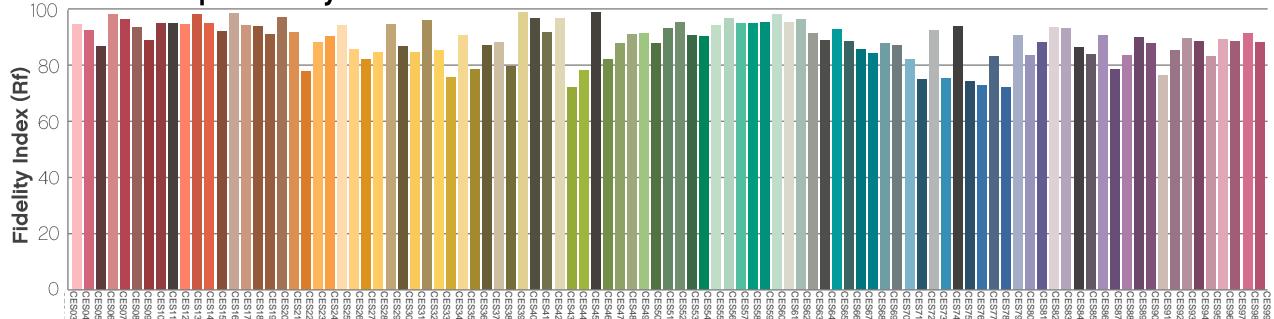
R_f by Hue Bin



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

| General Information | Technical Support |
|--|--|
| Chauvet World Headquarters | |
| 5200 NW 108 th Ave. Sunrise, FL 33351 Voice: (954) 577-4455 Fax: (954) 929-5560 Toll Free: (800) 762-1084 | Voice: (844) 393-7575 Fax: (954) 756-8015 Email: chauvetcs@chauvetlighting.com Website: www.chauvetprofessional.com |
| Chauvet Europe Ltd | |
| Unit 1C Brookhill Road Industrial Estate Pinxton, Nottingham, UK NG16 6NT Voice: +44 (0) 1773 511115 Fax: +44 (0) 1773 511110 | Email: UKtech@chauvetlighting.eu Website: www.chauvetprofessional.eu |
| Chauvet Europe BVBA | |
| Stokstraat 18 9770 Kruishoutem, Belgium Voice: +32 (9) 388 93 97 | Email: BNLtech@chauvetlighting.eu Website: www.chauvetprofessional.eu |
| Chauvet France | |
| 3, Rue Ampère 91380 Chilly-Mazarin, France Voice: +33 1 78 85 33 59 | Email: FRtech@chauvetlighting.fr Website: www.chauvetprofessional.eu |
| Chauvet Germany | |
| Bruno-Bürgel-Str. 11 28759 Bremen, Germany Voice: +49 421 62 60 20 | Email: DEtech@chauvetlighting.de Website: www.chauvetprofessional.eu |
| 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 |

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