

PHOTOMETRICS REPORT

Ovation

B-565FC



Table of Contents

1. Testing Process	1
2. Photometric Reports	2
Wall Wash Filter, Full Power	2
Report Summary	2
Overall Measurement	2
Beam Details	3
Polar Diagrams	4
Standard Optics, Full Power	5
Report Summary	5
Overall Measurement	5
Beam Details	6
Polar Diagrams	7
3. Chromaticity Reports	8
3200K	8
Report Summary	8
Chromaticity	9
TM-30-18 Details	10
5600K	11
Report Summary	11
Chromaticity	12
TM-30-18 Details	13
4. Contact Us	14

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 B-565FC: Wall Wash Filter, Full Power

Report Summary

Output

Total Lumens: 5385 lm
Peak Intensity: 11426 cd
Illuminance @ 5m: 456 lux
Fixture Efficacy: 45 lm/W

Optical

Horizontal Beam Angle (50%): 40.6°
Vertical Beam Angle (50%): 23.8°
Horizontal Field Angle (10%): 84.9°
Vertical Field Angle (10%): 46°
Horizontal Cutoff Angle (3%): 171.9°
Vertical Cutoff Angle (3%): 71.6°

Conditions

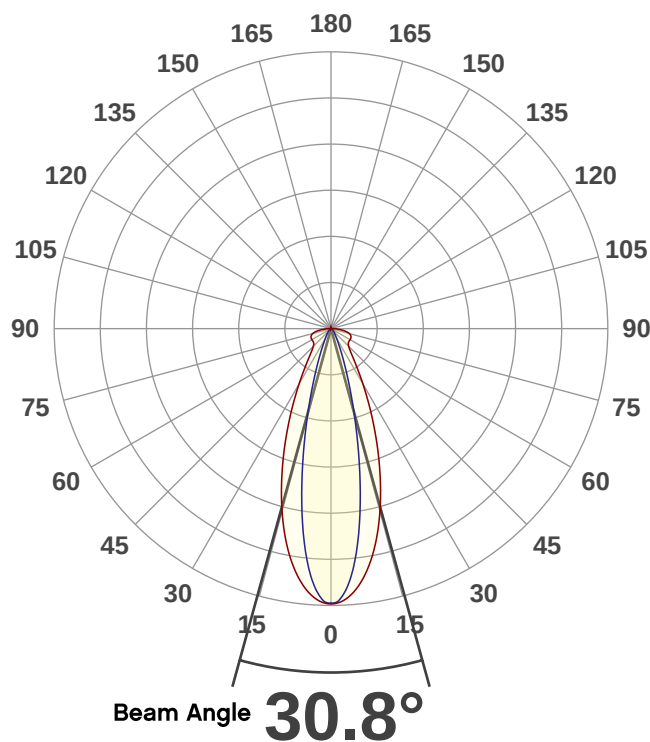
AC Supply: 118 V, 60 Hz
Power: 121.36 W
Current: 1.03 A
Power Factor: 1.0



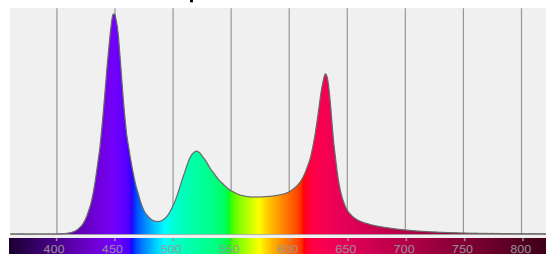
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/20/2019 to LM-63-2002 Standards.

Overall Measurement

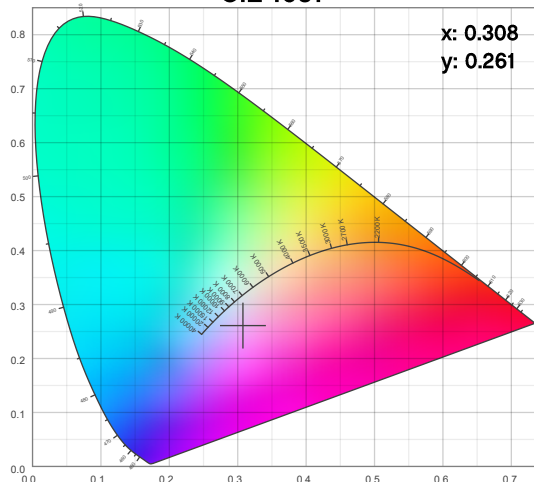
Angular Beam Distribution



Spectral Distribution



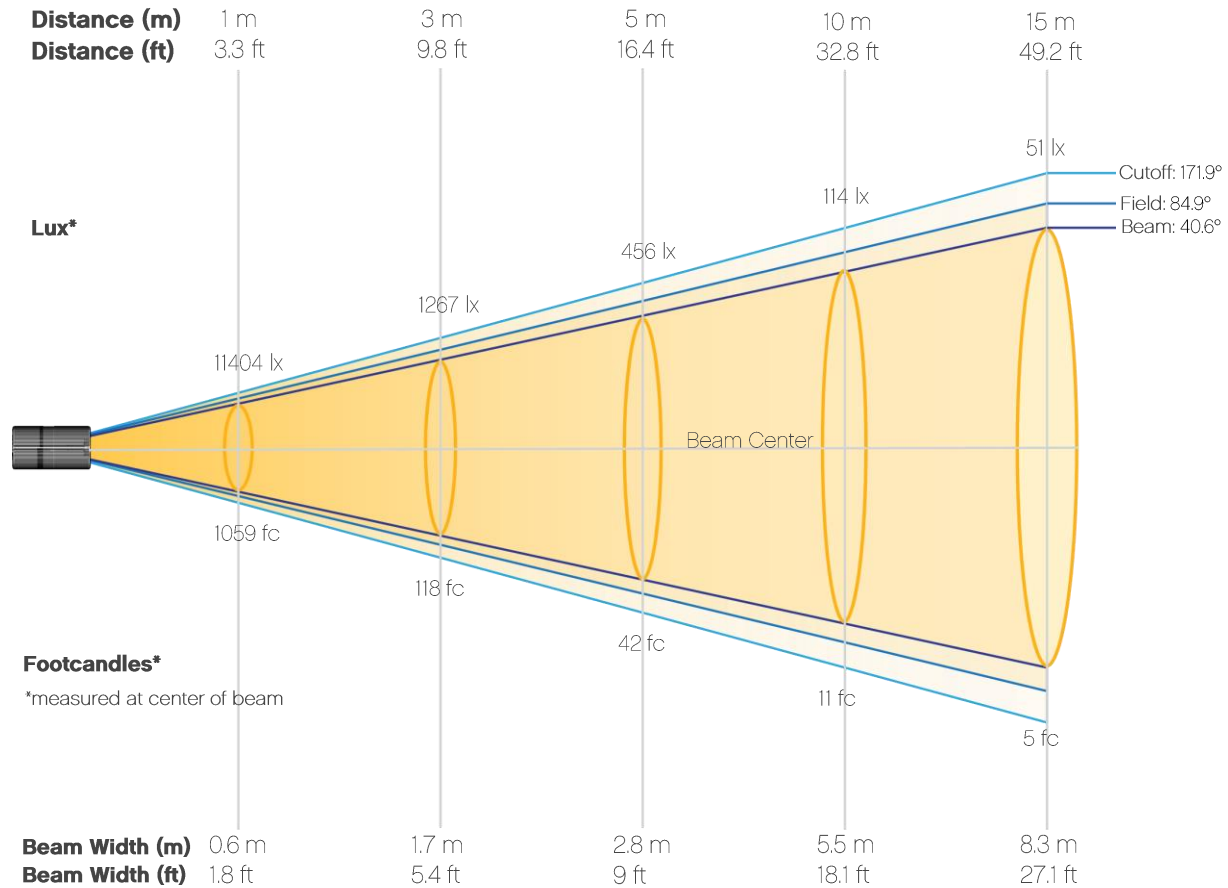
CIE 1931



Photometric Report

Ovation B-565FC: Wall Wash Filter, Full Power

Beam Details



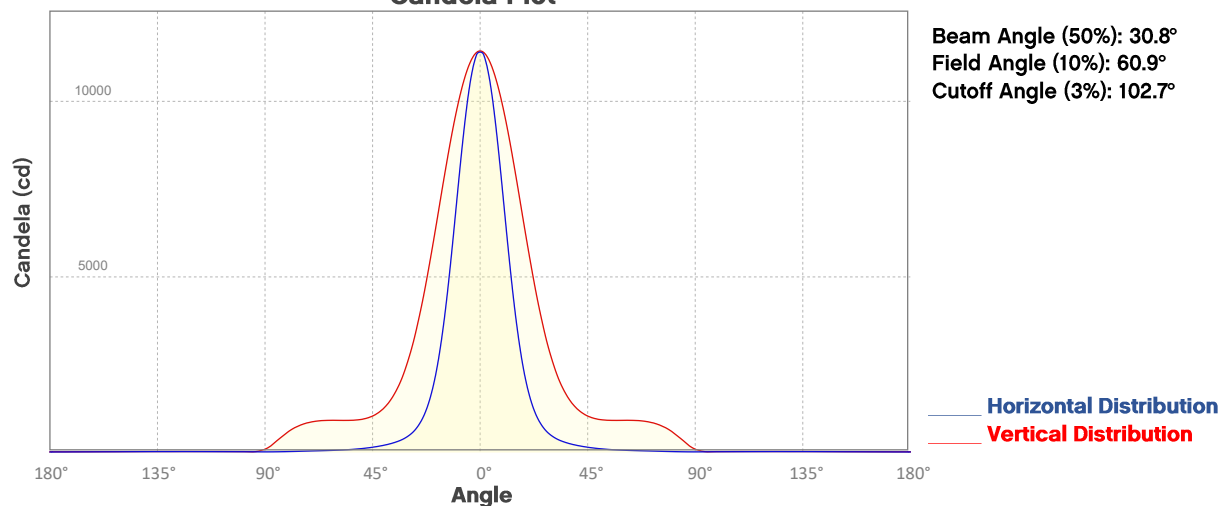
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	11404	2851	1267	713	456	317	233	178	141	114
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	94	79	67	58	51	45	39	35	32	29
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	1059	265	118	66	42	29	22	17	13	11
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	9	7	6	5	5	4	4	3	3	3

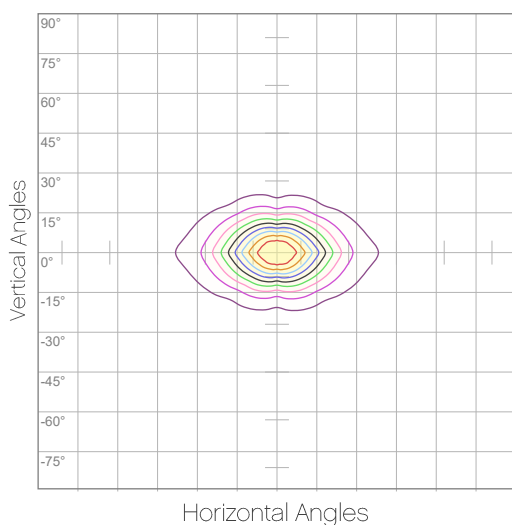
Photometric Report

Ovation B-565FC: Wall Wash Filter, Full Power

Candela Plot



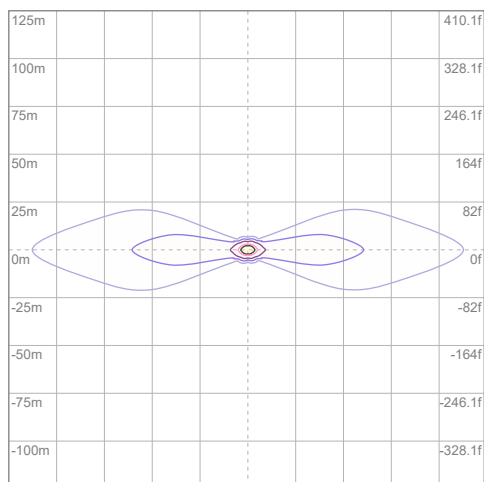
Polar Diagrams



iso-candela Diagram

10%	1140 cd
20%	2281 cd
30%	3421 cd
40%	4562 cd
50%	5702 cd
60%	6842 cd
70%	7983 cd
80%	9123 cd
90%	10264 cd

Conditions:
 Number of c-planes: 8
 Candela at center: 11404 cd



iso-illuminance Diagram

3%	3.42 lx
5%	5.70 lx
10%	11.4 lx
30%	34.2 lx
50%	57.0 lx

Conditions:
 Number of c-planes: 8
 Lux at center: 114 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 B-565FC: Standard Optics, Full Power

Report Summary

Output

Total Lumens: 6523 lm
Peak Intensity: 32092 cd
Illuminance @ 5m: 1283 lux
Fixture Efficacy: 55 lm/W

Optical

Horizontal Beam Angle (50%): 23.8°
Vertical Beam Angle (50%): 23.6°
Horizontal Field Angle (10%): 40.6°
Vertical Field Angle (10%): 40°
Horizontal Cutoff Angle (3%): 54.9°
Vertical Cutoff Angle (3%): 54.1°

Conditions

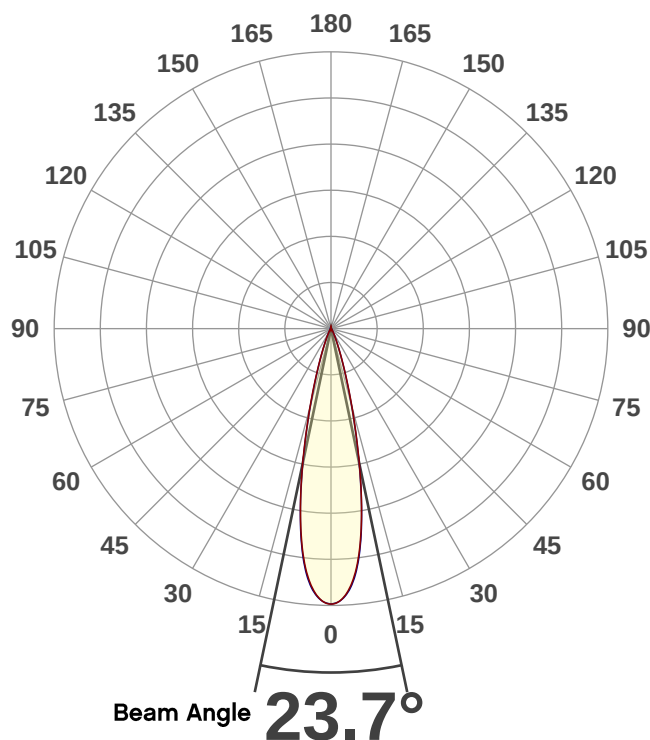
AC Supply: 118 V, 60.1 Hz
Power: 119.33 W
Current: 1.02 A
Power Factor: 1.0



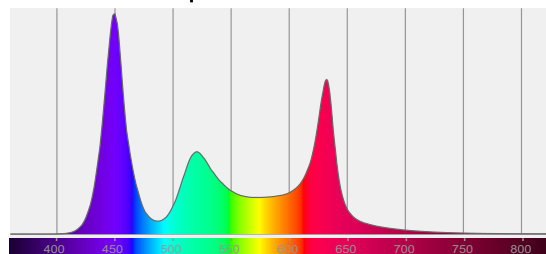
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/20/2019 to LM-63-2002 Standards.

Overall Measurement

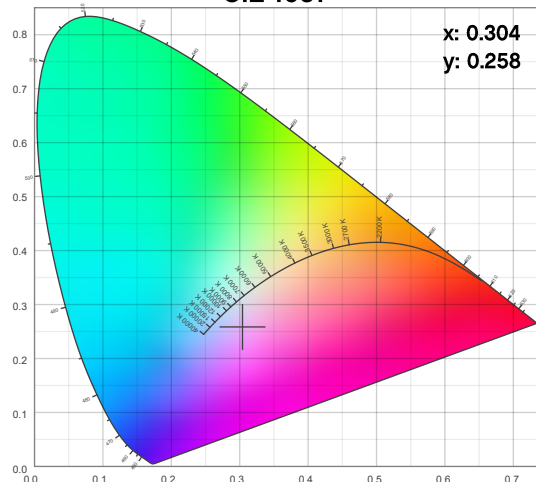
Angular Beam Distribution



Spectral Distribution



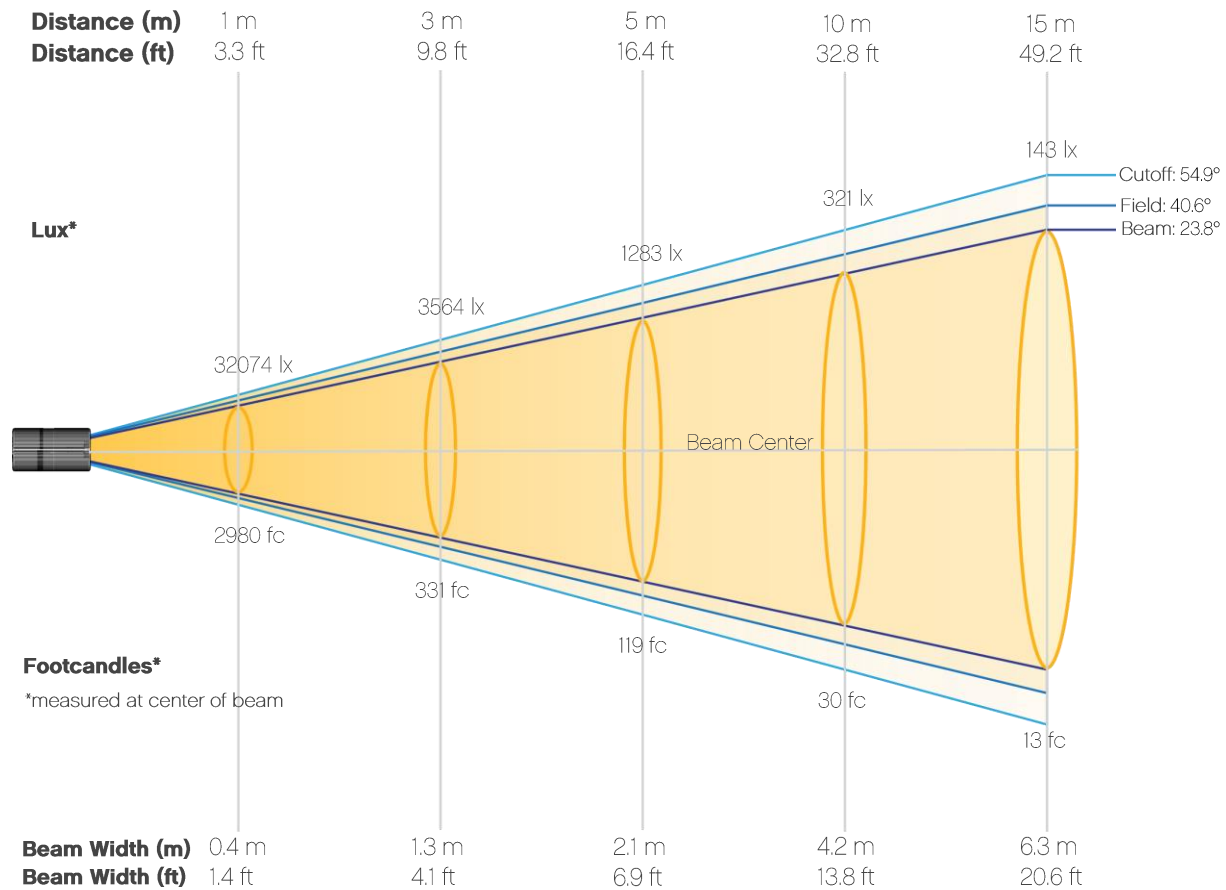
CIE 1931



Photometric Report

Ovation B-565FC: Standard Optics, Full Power

Beam Details



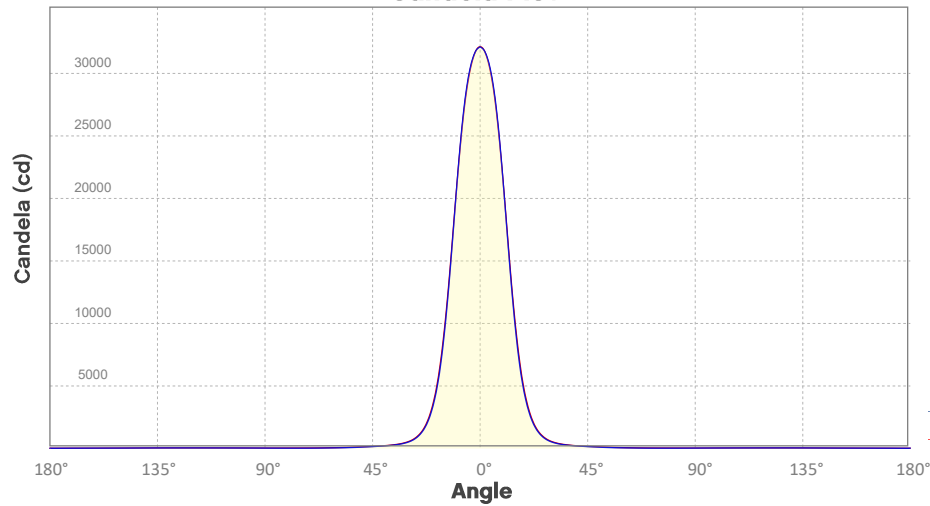
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	32074	8018	3564	2005	1283	891	655	501	396	321
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	265	223	190	164	143	125	111	99	89	80
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	2980	745	331	186	119	83	61	47	37	30
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	25	21	18	15	13	12	10	9	8	7

Photometric Report

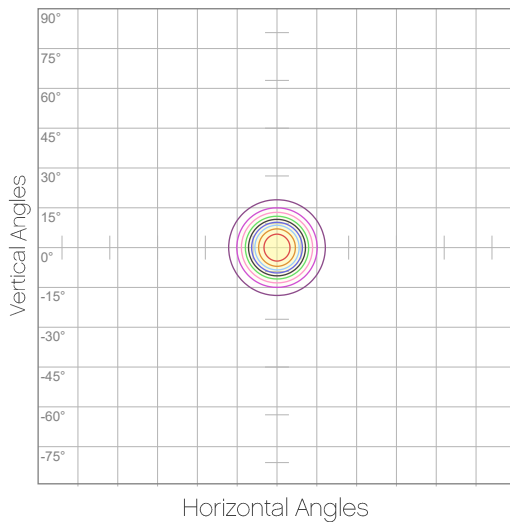
Ovation B-565FC: Standard Optics, Full Power

Candela Plot



Beam Angle (50%): 23.7°
Field Angle (10%): 40.3°
Cutoff Angle (3%): 54.6°

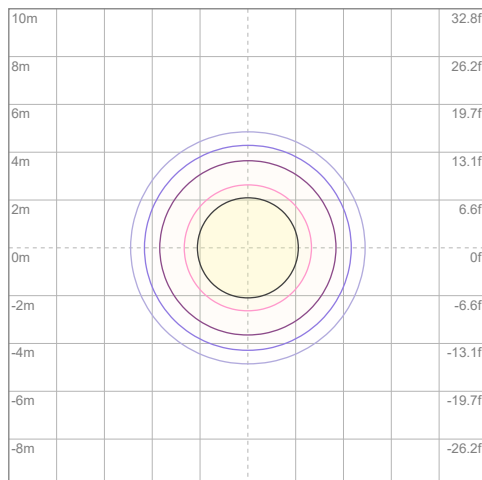
Polar Diagrams



iso-candela Diagram

10%	3207 cd
20%	6415 cd
30%	9622 cd
40%	12829 cd
50%	16037 cd
60%	19244 cd
70%	22452 cd
80%	25659 cd
90%	28866 cd

Conditions:
Number of c-planes: 8
Candela at center: 32074 cd



iso-illuminance Diagram

3%	9.62 lx
5%	16.0 lx
10%	32.1 lx
30%	96.2 lx
50%	160 lx

Conditions:
Number of c-planes: 8
Lux at center: 321 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 B-565FC: 3200K

Report Summary

Measurements

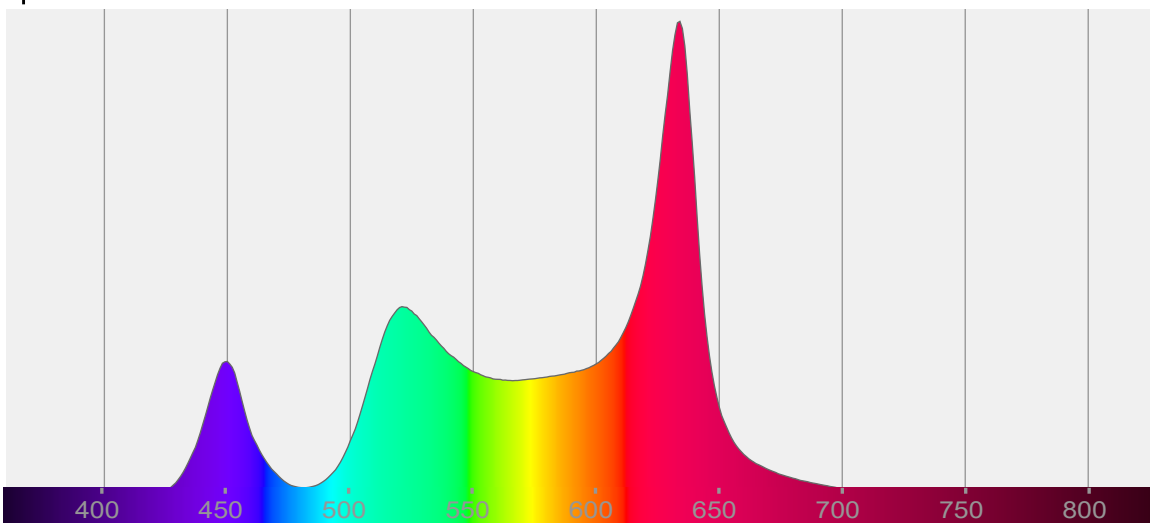
Total Lumens: 4694 lm
Peak Intensity: 23903 cd
Fixture Efficacy: 59 lm/W

Correlated Color Temperature: 3211K
 Δuv : 0.0020

CRI: 82.2 CRI R9 Value: 46.6
CQS: 86.4
TLCI: 66
TM-30-18 Rf: 87.0
TM-30-18 Rg: 111.9
1st Dominant Wavelength: 634 nm
2nd Dominant Wavelength: 521 nm



Spectral Distribution



Tested Color

3211 K

CIE 1931 Coordinates:

X: 0.425 Y: 0.405

Color Temperature

3211 K

Light Quality

CRI: 82.2

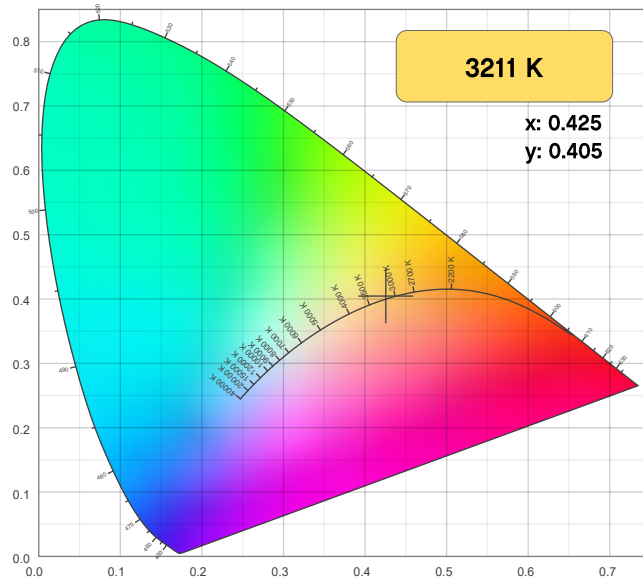
Notes:

Chromaticity Report

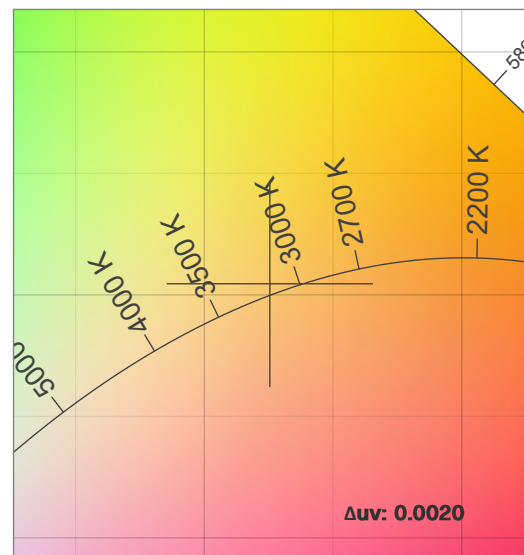
Ovation B-565FC: 3200K

Chromaticity

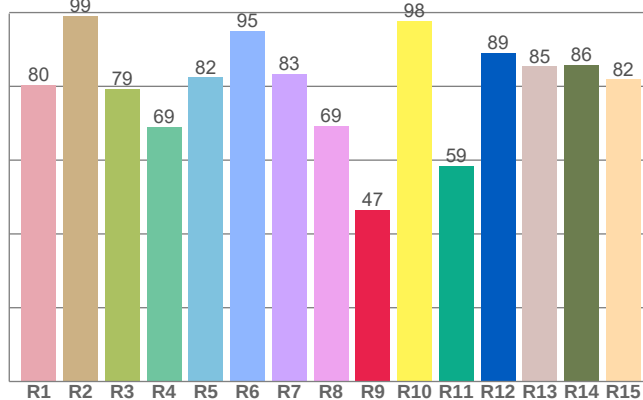
CIE 1931



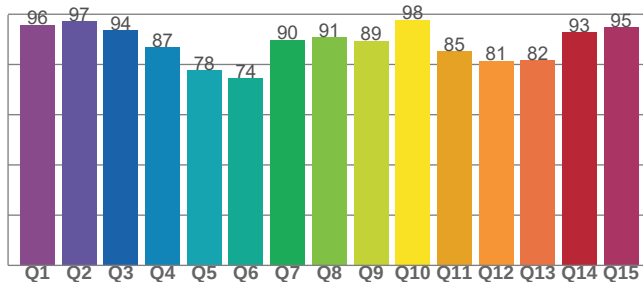
CIE 1931 - Zoom



CRI: 82.2 (R1-R8)



CQS: 86.4



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3211 K	0.425	0.405

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
0.0020	0.405	0.243

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
82.2	46.6	86.4

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
66	87.0	111.9

Chromaticity Report

Ovation B-565FC: 3200K

TM-30-18 Details

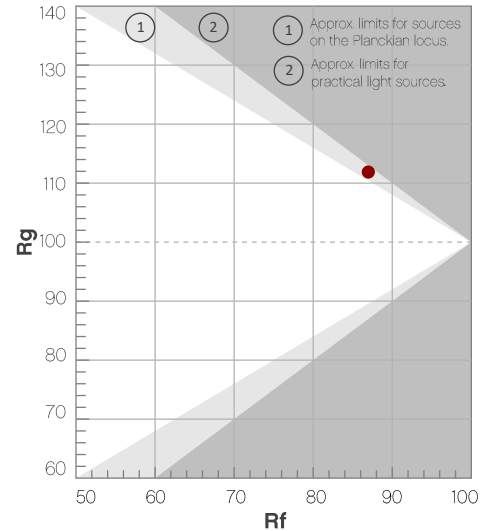
Rf 87.0

Fidelity Index
(R_f)

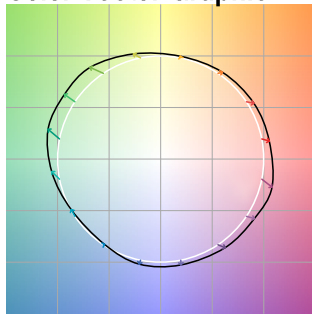
Rg 111.9

Gamut Index (R_g)

Hue Bin	R _f	Chroma Shift	Hue Shift
1	85	7%	-3%
2	86	5%	-5%
3	87	3%	-3%
4	93	2%	1%
5	88	5%	6%
6	79	12%	8%
7	80	12%	0%
8	77	13%	-7%
9	84	6%	-9%
10	87	-1%	-7%
11	93	-1%	1%
12	91	4%	-1%
13	92	5%	-1%
14	90	6%	4%
15	87	8%	3%
16	85	11%	-6%



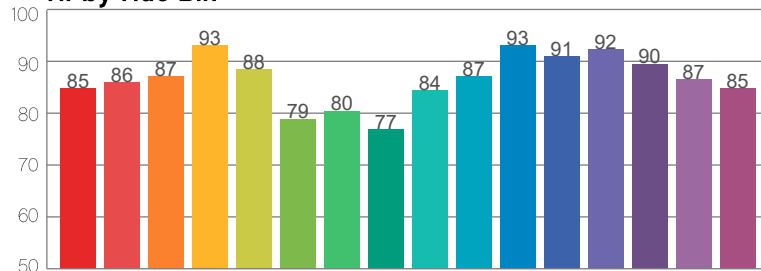
Color Vector Graphic



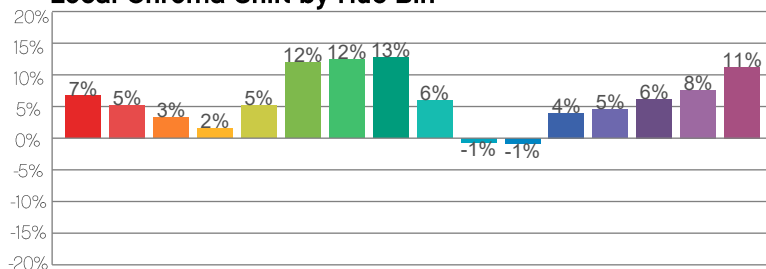
Color Distortion Graphic



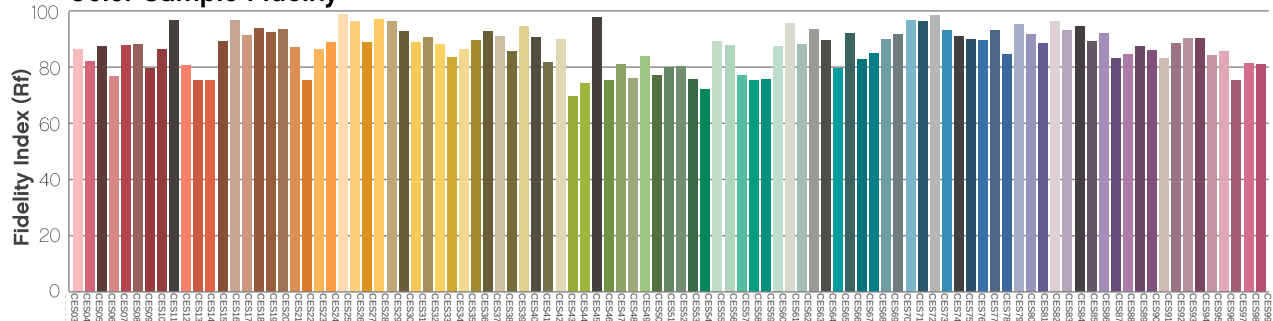
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chromaticity Report

Ovation B-565FC: 5600K

Report Summary

Measurements

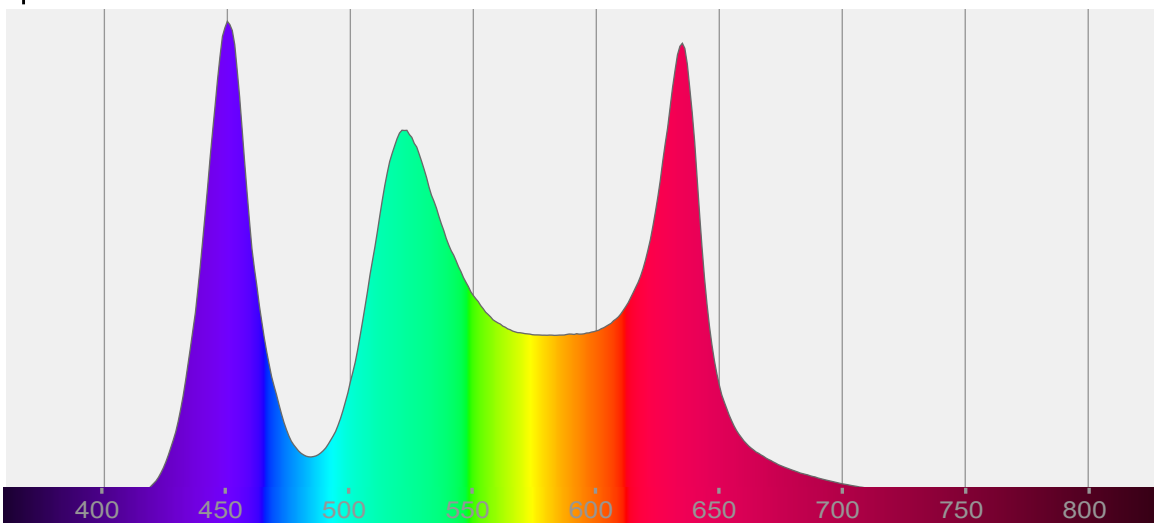
Total Lumens: 5417 lm
Peak Intensity: 26938 cd
Fixture Efficacy: 58 lm/W

Correlated Color Temperature: 5593K
 Δuv : -0.0004

CRI: 82.6 CRI R9 Value: 41.2
CQS: 89.1
TLCI: 78
TM-30-18 Rf: 85.8
TM-30-18 Rg: 111.7
1st Dominant Wavelength: 450 nm
2nd Dominant Wavelength: 635 nm



Spectral Distribution



Tested Color

5593 K

CIE 1931 Coordinates:
X: 0.330 Y: 0.345

Color Temperature

5593 K

Light Quality

CRI: 82.6

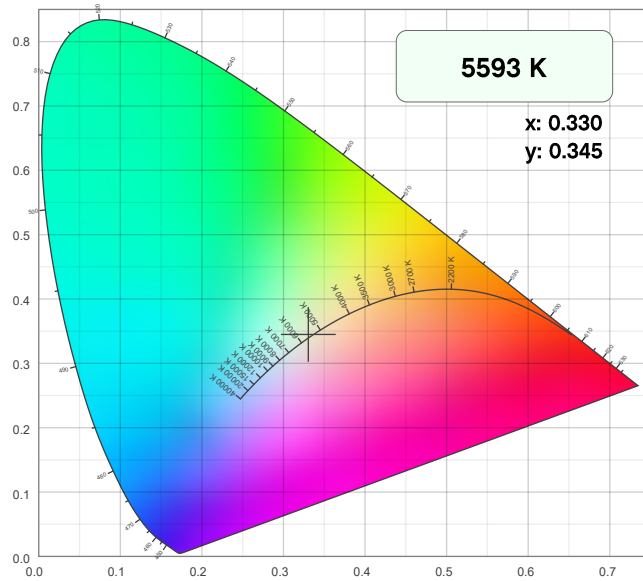
Notes:

Chromaticity Report

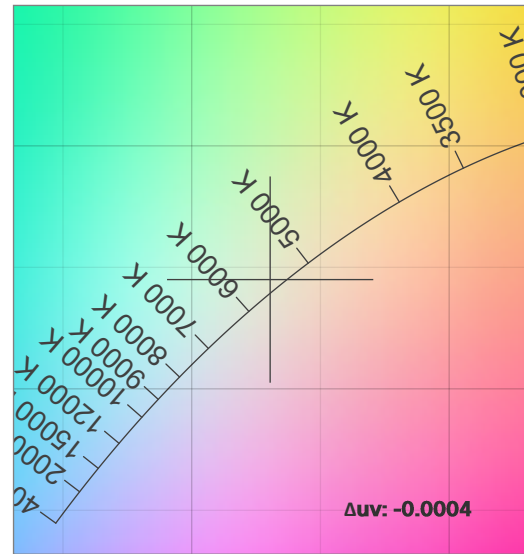
Ovation B-565FC: 5600K

Chromaticity

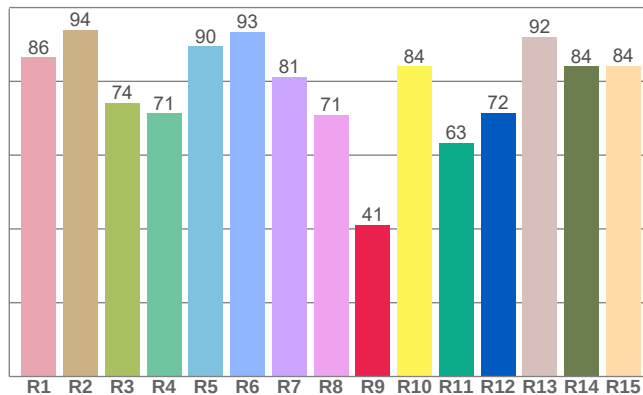
CIE 1931



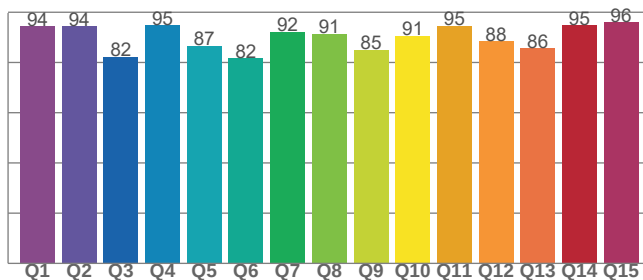
CIE 1931 - Zoom



CRI: 82.6 (R1-R8)



CQS: 89.1



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
5593 K	0.330	0.345

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δ_{uv}	y	u
-0.0004	0.345	0.204

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
82.6	41.2	89.1

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
78	85.8	111.7

Chromaticity Report

Ovation B-565FC: 5600K

TM-30-18 Details

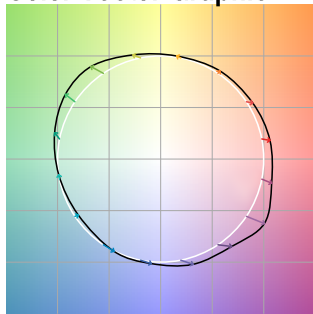
Rf 85.8

Fidelity Index
(R_f)

Rg 111.7

Gamut Index (R_g)

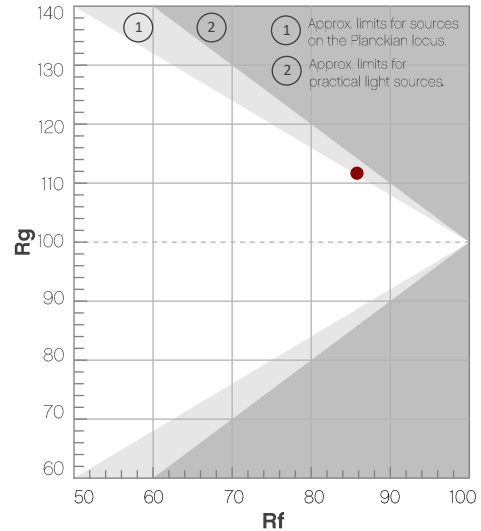
Color Vector Graphic



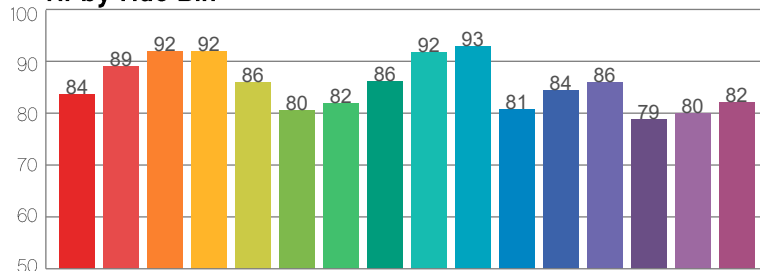
Color Distortion Graphic



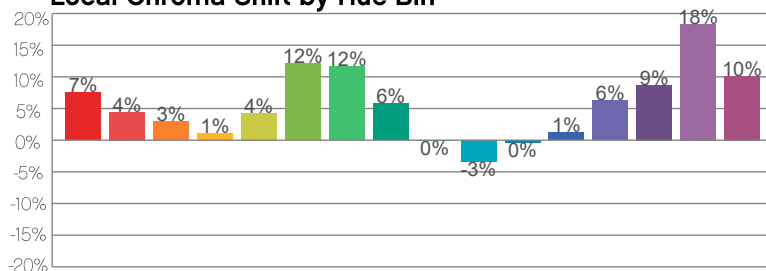
Hue Bin	R _f	Chroma Shift	Hue Shift
1	84	7%	-3%
2	89	4%	-4%
3	92	3%	0%
4	92	1%	4%
5	86	4%	7%
6	80	12%	6%
7	82	12%	-1%
8	86	6%	-5%
9	92	0%	-4%
10	93	-3%	1%
11	81	0%	12%
12	84	1%	11%
13	86	6%	11%
14	79	9%	10%
15	80	18%	4%
16	82	10%	-2%



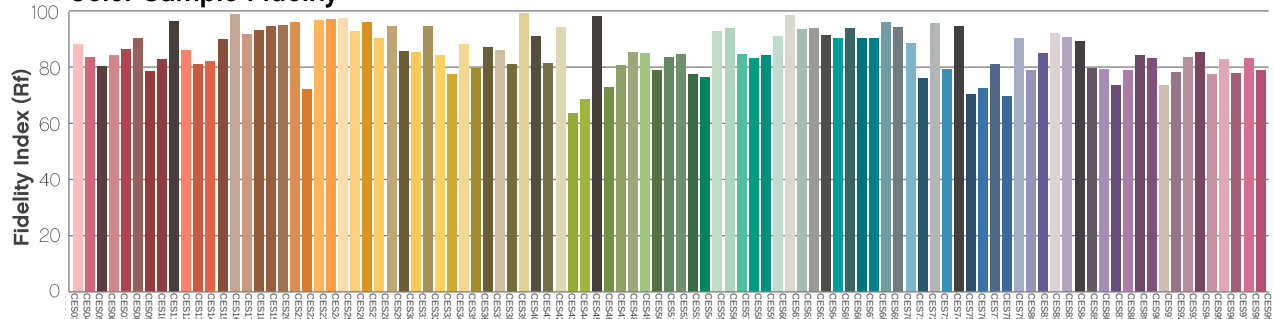
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Contact Us

General Information	Technical Support
Chauvet World Headquarters	
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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

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.

