PHOTOMETRICS REPORT

OVATION
ETD-40WW

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 ETD-40WW: Full Flood, Full Power

Report Summary

Output

Total Lumens: 948 lm
Peak Intensity: 7663 cd
Illuminance @ 5m: 306 lux
Fixture Efficacy: 40 lm/W

Optical

Horizontal Beam Angle (50%): 18.8°
Vertical Beam Angle (50%): 19°
Horizontal Field Angle (10%): 34.1°
Vertical Field Angle (10%): 34.3°
Horizontal Cutoff Angle (3%): 35.3°
Vertical Cutoff Angle (3%): 36.3°

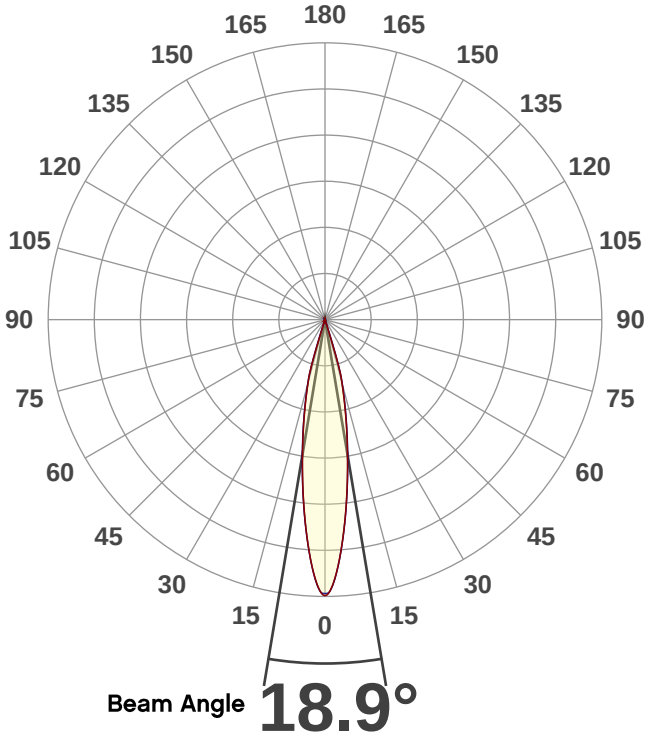
Conditions

AC Supply: 117 V, 60 Hz
Power: 27.83 W
Current: 0.237 A
Power Factor: 0.86

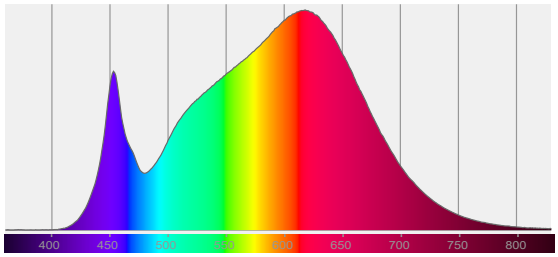
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/18/2019 to LM-63-2002 Standards.

Overall Measurement

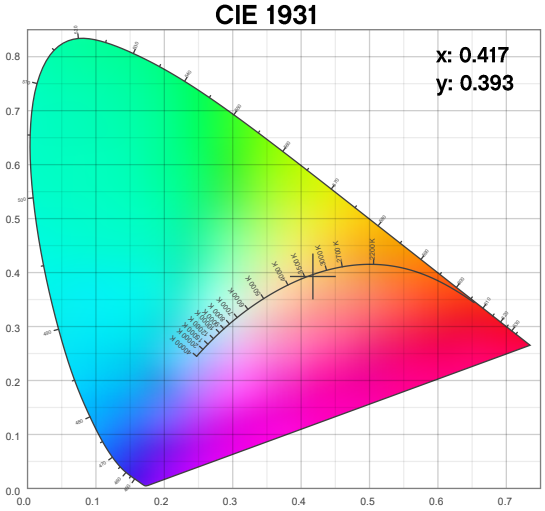
Angular Beam Distribution



Spectral Distribution



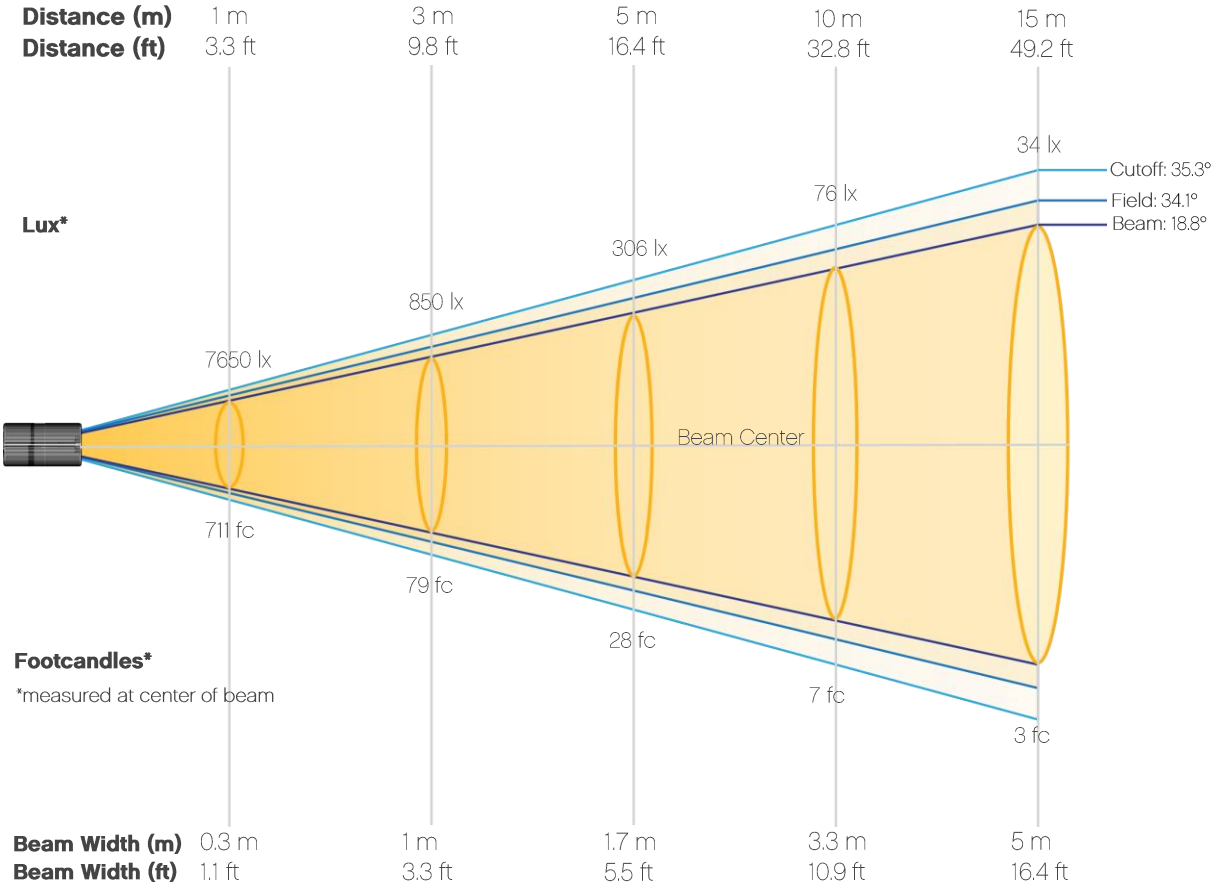
CIE 1931



Photometric Report

Ovation ETD-40WW: Full Flood, Full Power

Beam Details



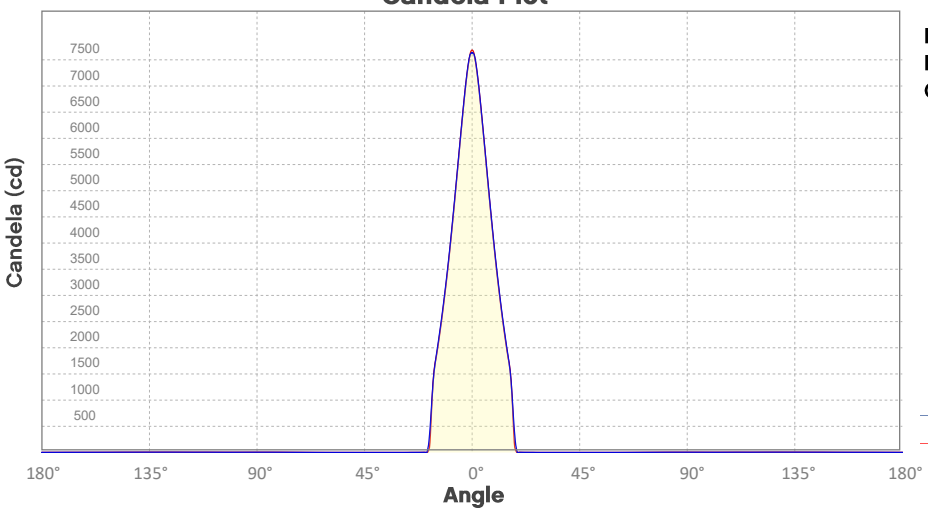
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	7650	1912	850	478	306	212	156	120	94	76
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	63	53	45	39	34	30	26	24	21	19
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	711	178	79	44	28	20	15	11	9	7
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	6	5	4	4	3	3	2	2	2	2

Photometric Report

Ovation ETD-40WW: Full Flood, Full Power

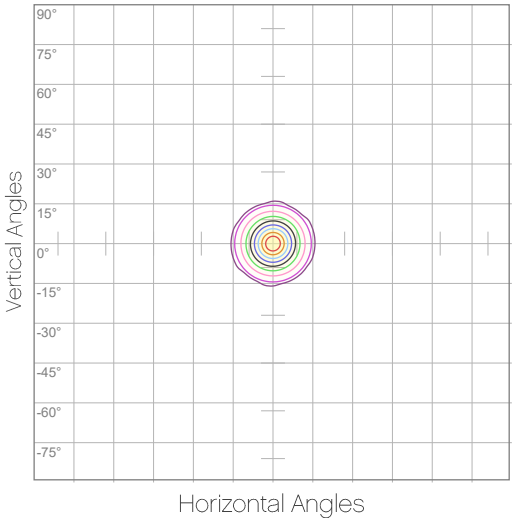
Candela Plot



Beam Angle (50%): 18.9°
Field Angle (10%): 34.3°
Cutoff Angle (3%): 35.9°

Horizontal Distribution
Vertical Distribution

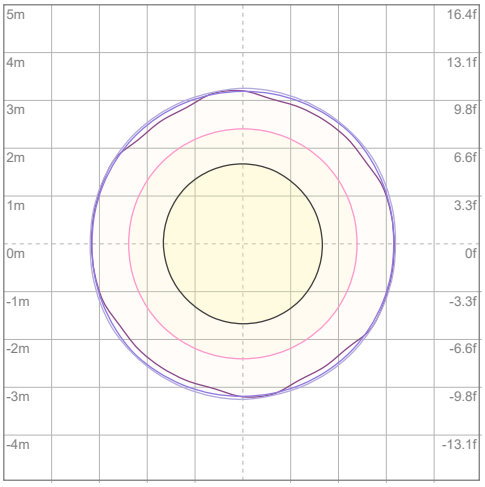
Polar Diagrams



iso-candela Diagram

10%	765 cd
20%	1530 cd
30%	2295 cd
40%	3060 cd
50%	3825 cd
60%	4590 cd
70%	5355 cd
80%	6120 cd
90%	6885 cd

Conditions:
Number of c-planes: 8
Candela at center: 7650 cd



iso-illuminance Diagram

3%	2.29 lx
5%	3.82 lx
10%	7.65 lx
30%	22.9 lx
50%	38.2 lx

Conditions:
Number of c-planes: 8
Lux at center: 76.5 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 ETD-40WW: Full Spot, Full Power

Report Summary

Output

Total Lumens: 1151 lm
Peak Intensity: 17203 cd
Illuminance @ 5m: 687 lux
Fixture Efficacy: 47 lm/W

Optical

Horizontal Beam Angle (50%): 16.7°
Vertical Beam Angle (50%): 17°
Horizontal Field Angle (10%): 20.8°
Vertical Field Angle (10%): 21°
Horizontal Cutoff Angle (3%): 21.1°
Vertical Cutoff Angle (3%): 21.8°

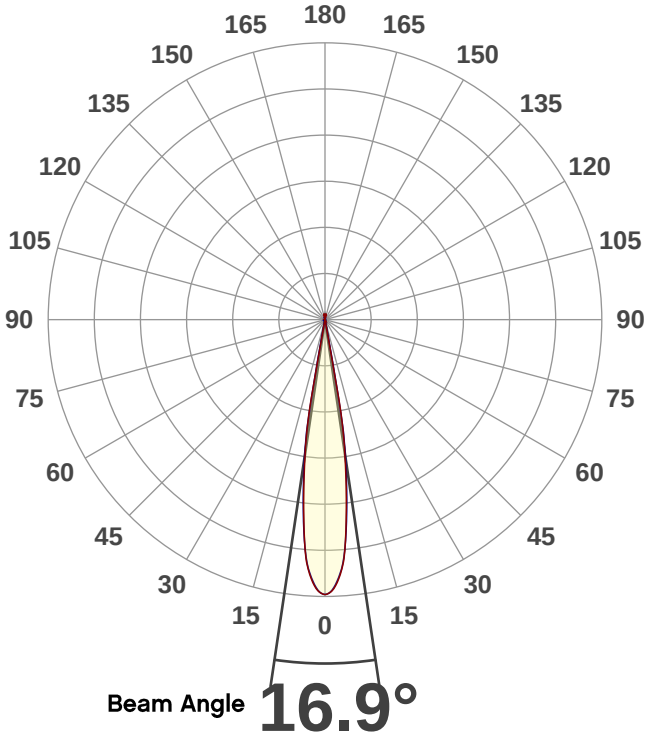
Conditions

AC Supply: 118 V, 60.1 Hz
Power: 27.63 W
Current: 0.234 A
Power Factor: 0.89

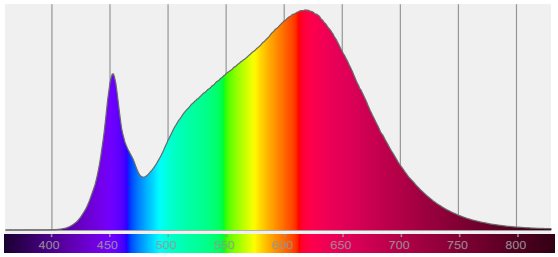
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 6/18/2019 to LM-63-2002 Standards.

Overall Measurement

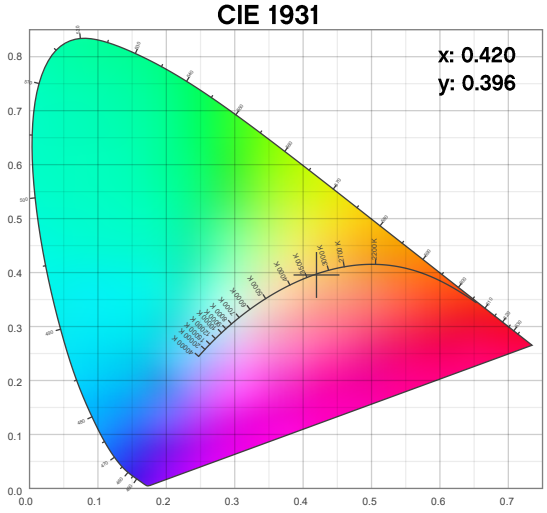
Angular Beam Distribution



Spectral Distribution



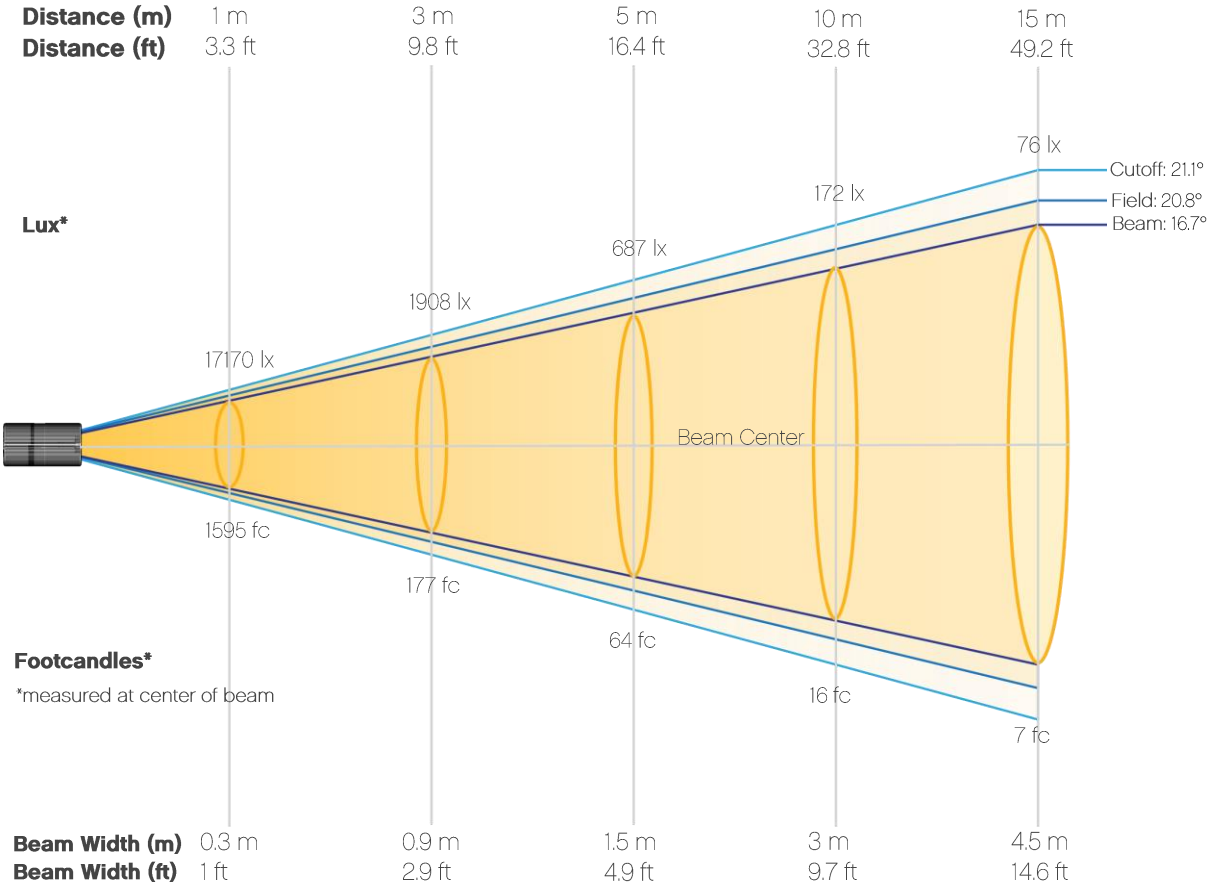
CIE 1931



Photometric Report

Ovation ETD-40WW: 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	17170	4293	1908	1073	687	477	350	268	212	172
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	142	119	102	88	76	67	59	53	48	43
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	1595	399	177	100	64	44	33	25	20	16
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	6	5	4	4

Photometric Report

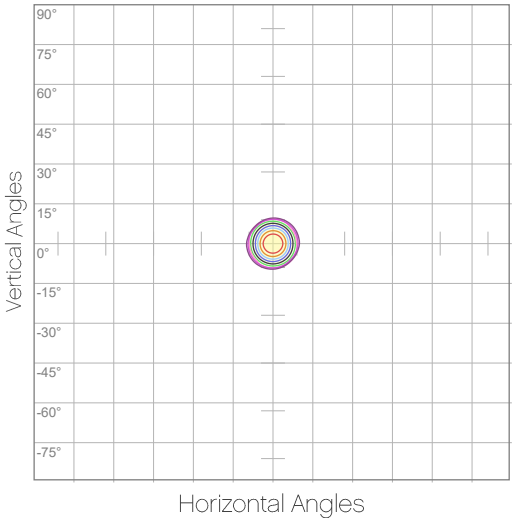
Ovation ETD-40WW: Full Spot, Full Power

Candela Plot

Beam Angle (50%): 16.9°
Field Angle (10%): 20.9°
Cutoff Angle (3%): 21.8°

Horizontal Distribution
Vertical Distribution

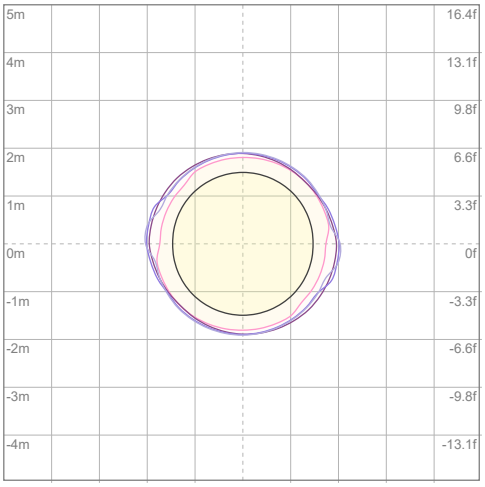
Polar Diagrams



iso-candela Diagram

10%	1717 cd
20%	3434 cd
30%	5151 cd
40%	6868 cd
50%	8585 cd
60%	10302 cd
70%	12019 cd
80%	13736 cd
90%	15453 cd

Conditions:
Number of c-planes: 8
Candela at center: 17170 cd



iso-illuminance Diagram

3%	5.15 lx
5%	8.59 lx
10%	17.2 lx
30%	51.5 lx
50%	85.9 lx

Conditions:
Number of c-planes: 8
Lux at center: 172 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 ETD-40WW: 50% Zoom, Full Power

Report Summary

Output

Total Lumens: 1038 lm
Peak Intensity: 12048 cd
Illuminance @ 5m: 480 lux
Fixture Efficacy: 43 lm/W

Optical

Horizontal Beam Angle (50%): 17.4°
Vertical Beam Angle (50%): 17.7°
Horizontal Field Angle (10%): 25.5°
Vertical Field Angle (10%): 25.6°
Horizontal Cutoff Angle (3%): 26.8°
Vertical Cutoff Angle (3%): 26.8°

Conditions

AC Supply: 118 V, 60 Hz
Power: 27.27 W
Current: 0.231 A
Power Factor: 0.88

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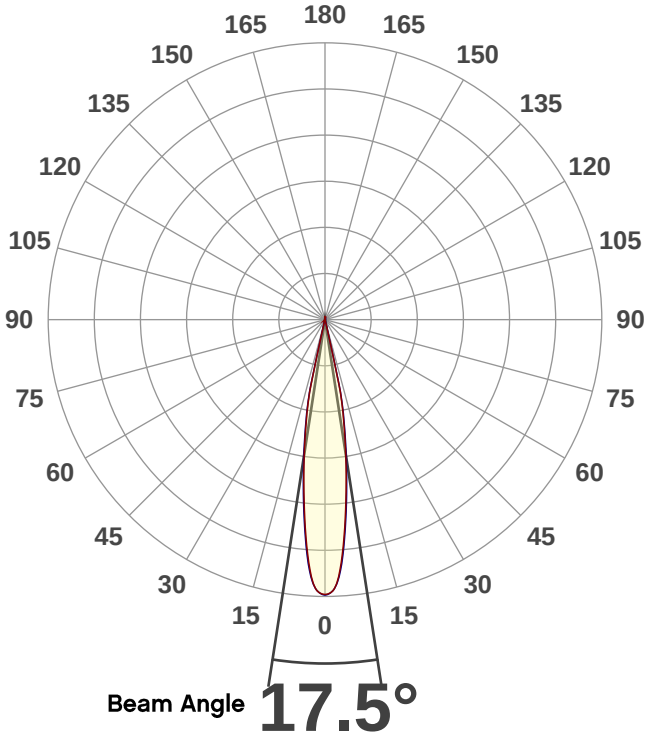
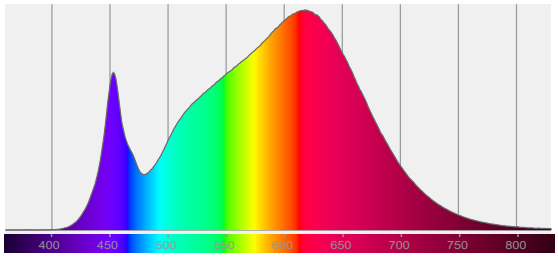
Overall Measurement

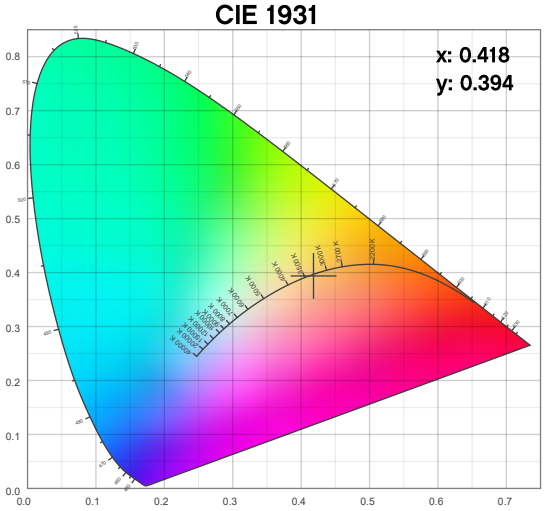
Angular Beam Distribution



Spectral Distribution



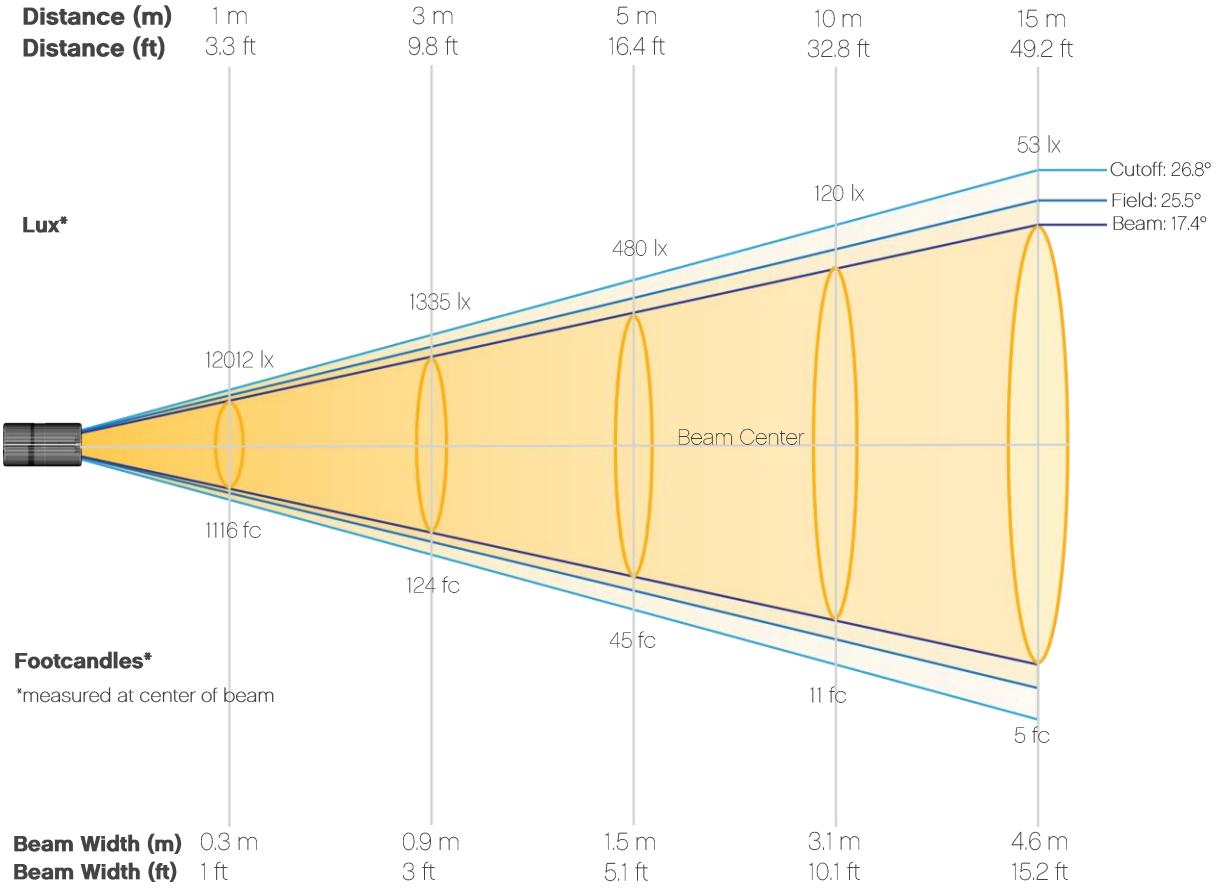
CIE 1931



Photometric Report

Ovation ETD-40WW: 50% Zoom, Full Power

Beam Details



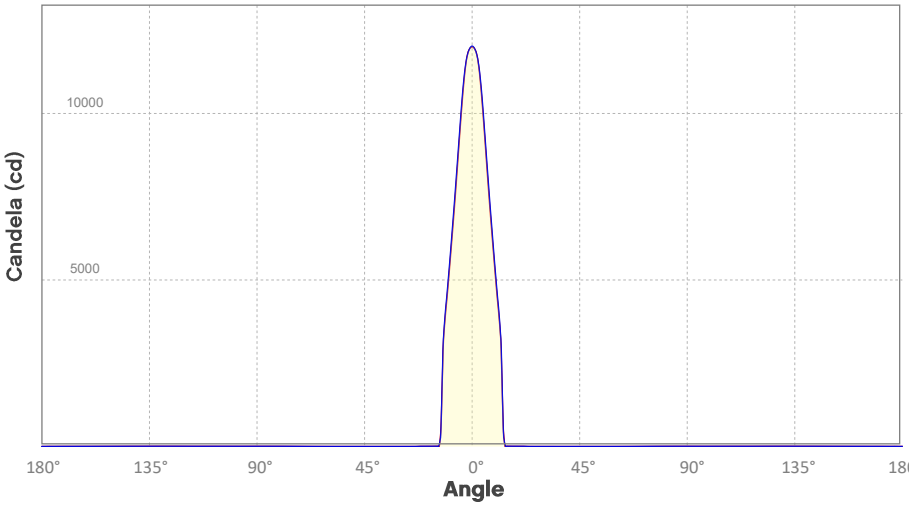
Beam Iluminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	12012	3003	1335	751	480	334	245	188	148	120
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	99	83	71	61	53	47	42	37	33	30
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	1116	279	124	70	45	31	23	17	14	11
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	9	8	7	6	5	4	4	3	3	3

Photometric Report

Ovation ETD-40WW: 50% Zoom, Full Power

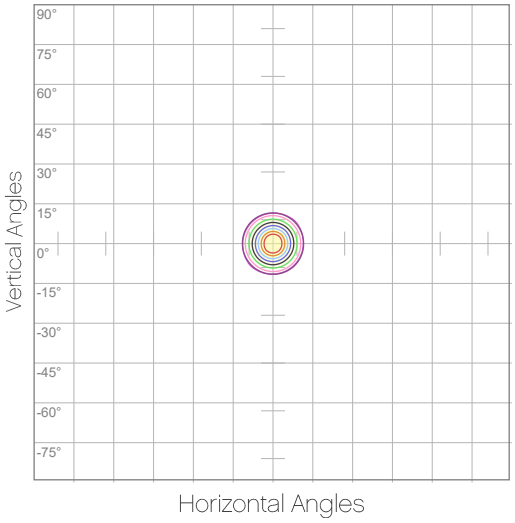
Candela Plot



Beam Angle (50%): 17.5°
Field Angle (10%): 25.6°
Cutoff Angle (3%): 26.8°

Horizontal Distribution
Vertical Distribution

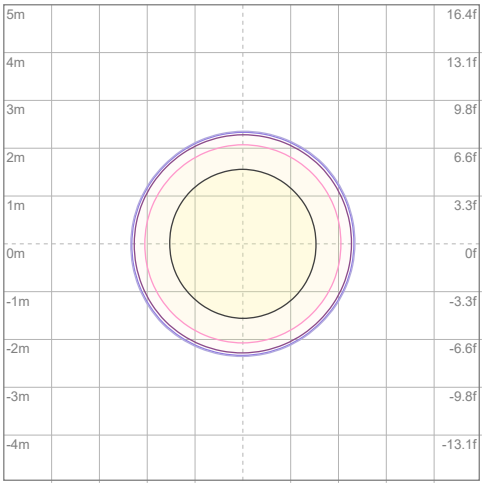
Polar Diagrams



iso-candela Diagram

10%	1201 cd
20%	2402 cd
30%	3604 cd
40%	4805 cd
50%	6006 cd
60%	7207 cd
70%	8409 cd
80%	9610 cd
90%	10811 cd

Conditions:
Number of c-planes: 8
Candela at center: 12012 cd



iso-illuminance Diagram

3%	3.60 lx
5%	6.01 lx
10%	12.0 lx
30%	36.0 lx
50%	60.1 lx

Conditions:
Number of c-planes: 8
Lux at center: 120 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 ETD-40WW: Full Power

Report Summary

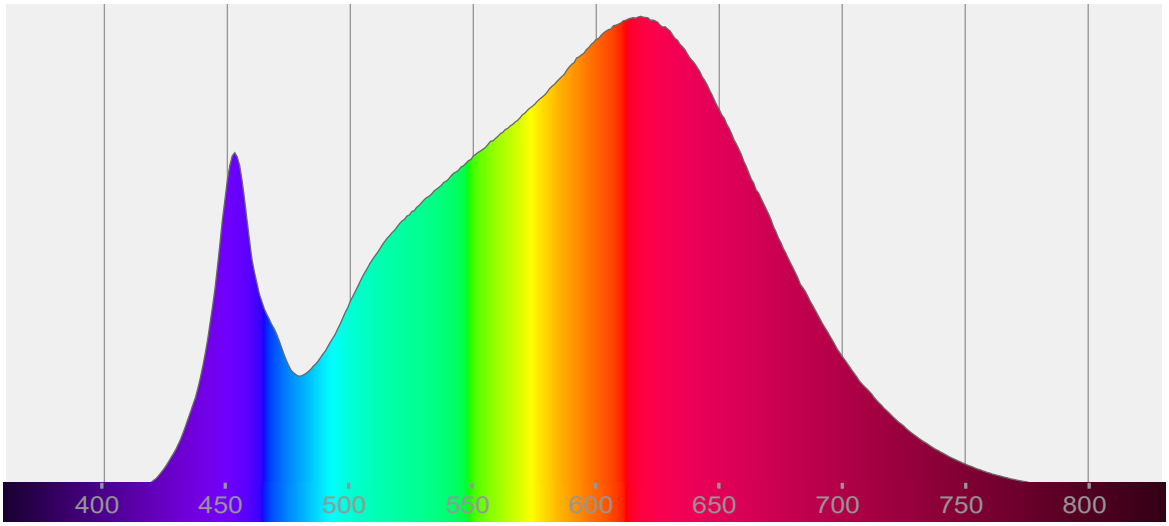
Measurements

Total Lumens: 1038 lm
Peak Intensity: 12048 cd
Fixture Efficacy: 43 lm/W

Correlated Color Temperature: 3262K
Δuv: -0.0013

CRI: 91.8 CRI R9 Value: 57.7
CQS: 89.7
TLCI: 90
TM-30-18 Rf: 90.5
TM-30-18 Rg: 99.8
1st Dominant Wavelength: 618 nM
2nd Dominant Wavelength: 453 nM

Spectral Distribution



Tested Color

3262 K
CIE 1931 Coordinates:
X: 0.418 Y: 0.394

Color Temperature

3262 K

Light Quality

CRI: 91.8

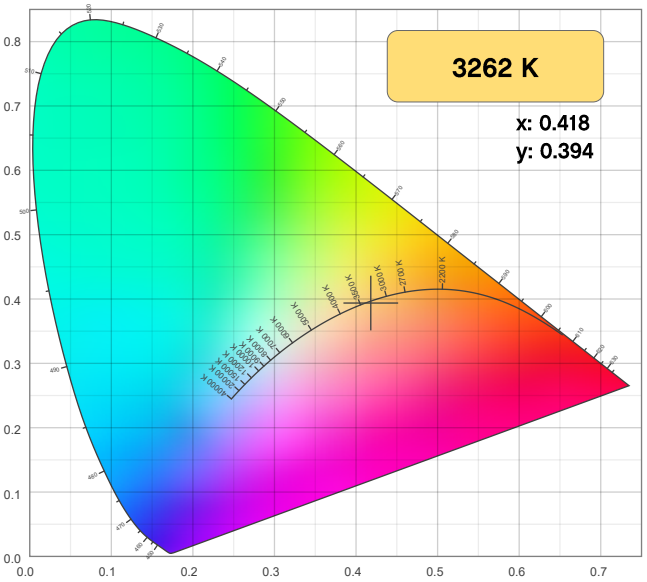
Notes:

Chromaticity Report

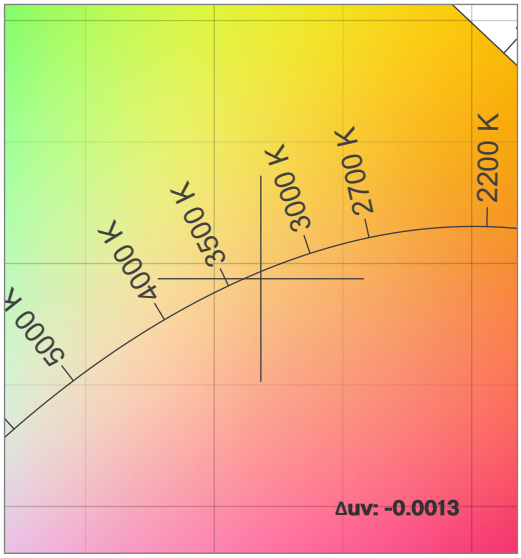
Ovation ETD-40WW: Full Power

Chromaticity

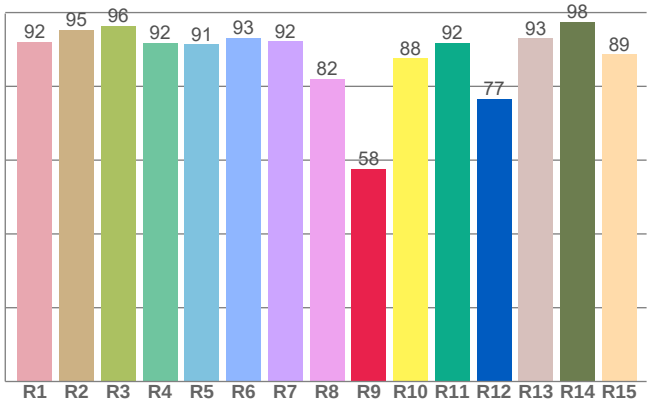
CIE 1931



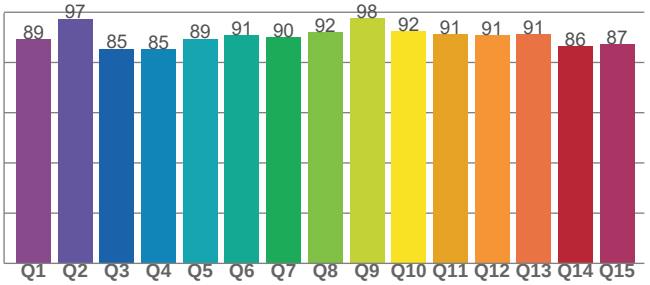
CIE 1931 - Zoom



CRI: 91.8 (R1-R8)



CQS: 89.7



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
3262 K	0.418	0.394

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0013	0.394	0.243

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
91.8	57.7	89.7

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
90	90.5	99.8

Chromaticity Report

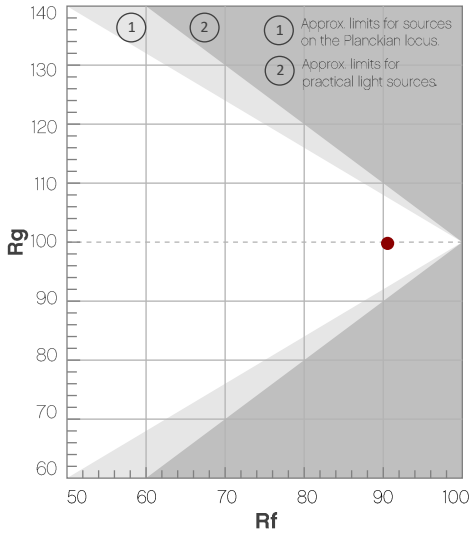
Ovation ETD-40WW: Full Power

TM-30-18 Details

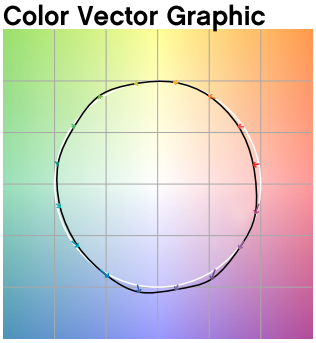
Rf 90.5
Fidelity Index (Rg)

Rg 99.8
Gamut Index (Rg)

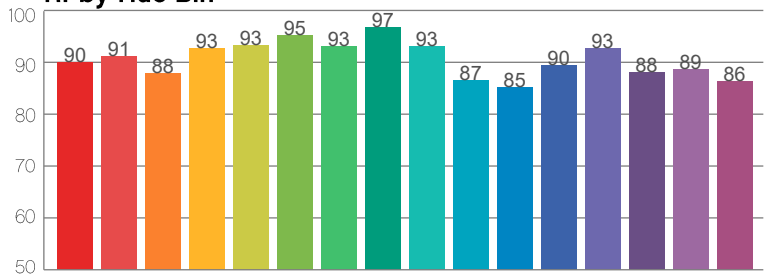
Hue Bin	R_f	Chroma Shift	Hue Shift
1	90	-5%	0%
2	91	-4%	3%
3	88	-1%	6%
4	93	0%	4%
5	93	0%	3%
6	95	3%	-1%
7	93	-2%	-2%
8	97	-1%	-1%
9	93	-3%	3%
10	87	-2%	8%
11	85	1%	10%
12	90	6%	3%
13	93	4%	-3%
14	88	6%	-8%
15	89	0%	-8%
16	86	-1%	-9%



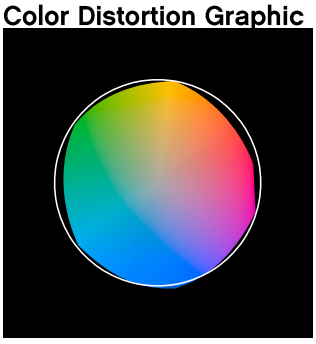
Color Vector Graphic



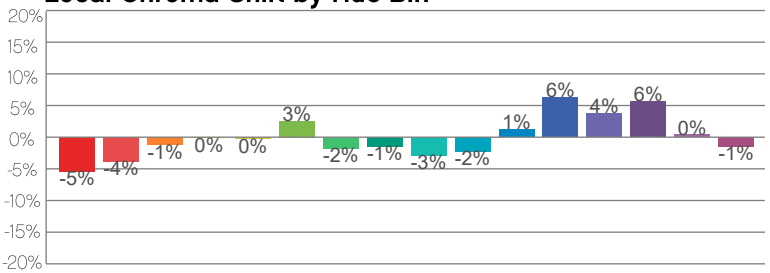
Rf by Hue Bin



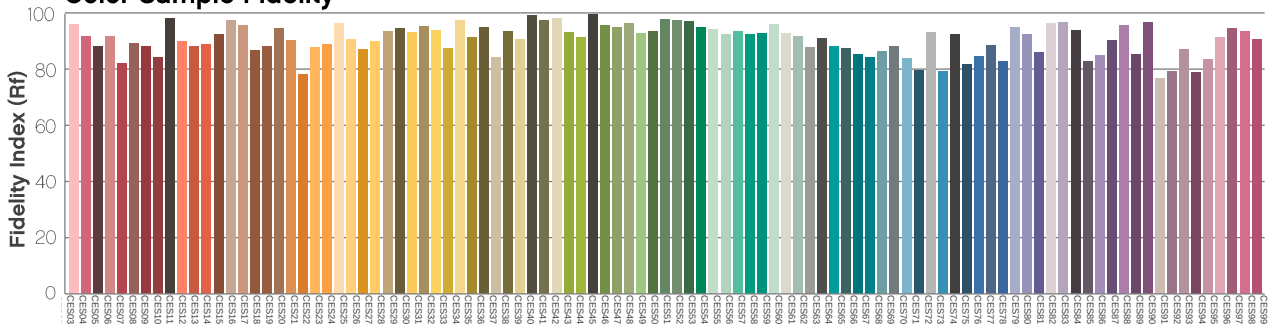
Color Distortion Graphic



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.