

PHOTOMETRICS REPORT

STRIKE P38



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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

Strike P38: Standard Optics, Full Power, w/Red Shift

Report Summary

Output

Total Lumens: 2297 lm
Peak Intensity: 7307 cd
Illuminance @ 5m: 292 lux
Fixture Efficacy: 38 lm/W

Optical

Horizontal Beam Angle (50%): 29.1°
Vertical Beam Angle (50%): 28.8°
Horizontal Field Angle (10%): 53.9°
Vertical Field Angle (10%): 53°
Horizontal Cutoff Angle (3%): 67.4°
Vertical Cutoff Angle (3%): 66.5°

Conditions

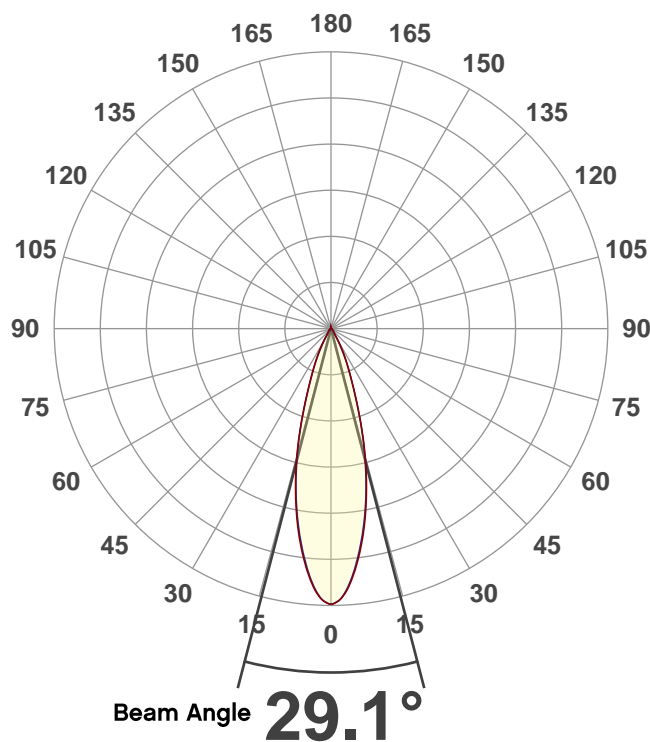
AC Supply: 119 V, 60 Hz
Power: 60.03 W
Current: 0.506 A
Power Factor: 1.0



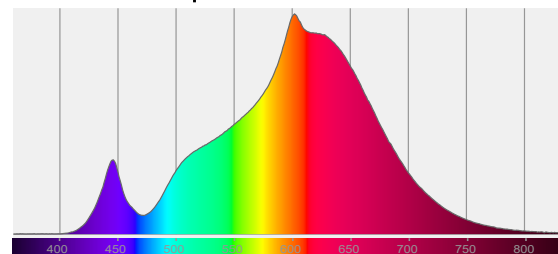
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/19/2019 to LM-63-2002 Standards.

Overall Measurement

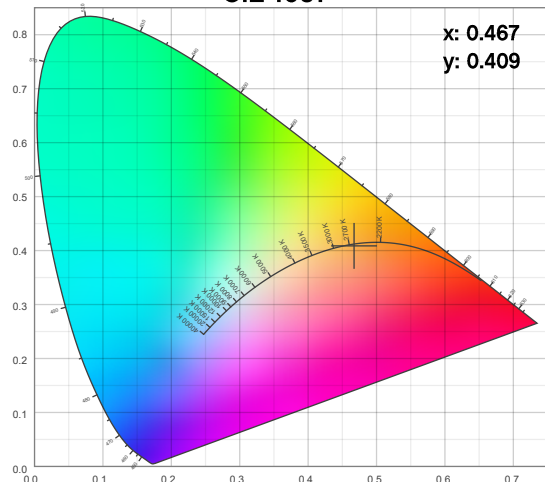
Angular Beam Distribution



Spectral Distribution



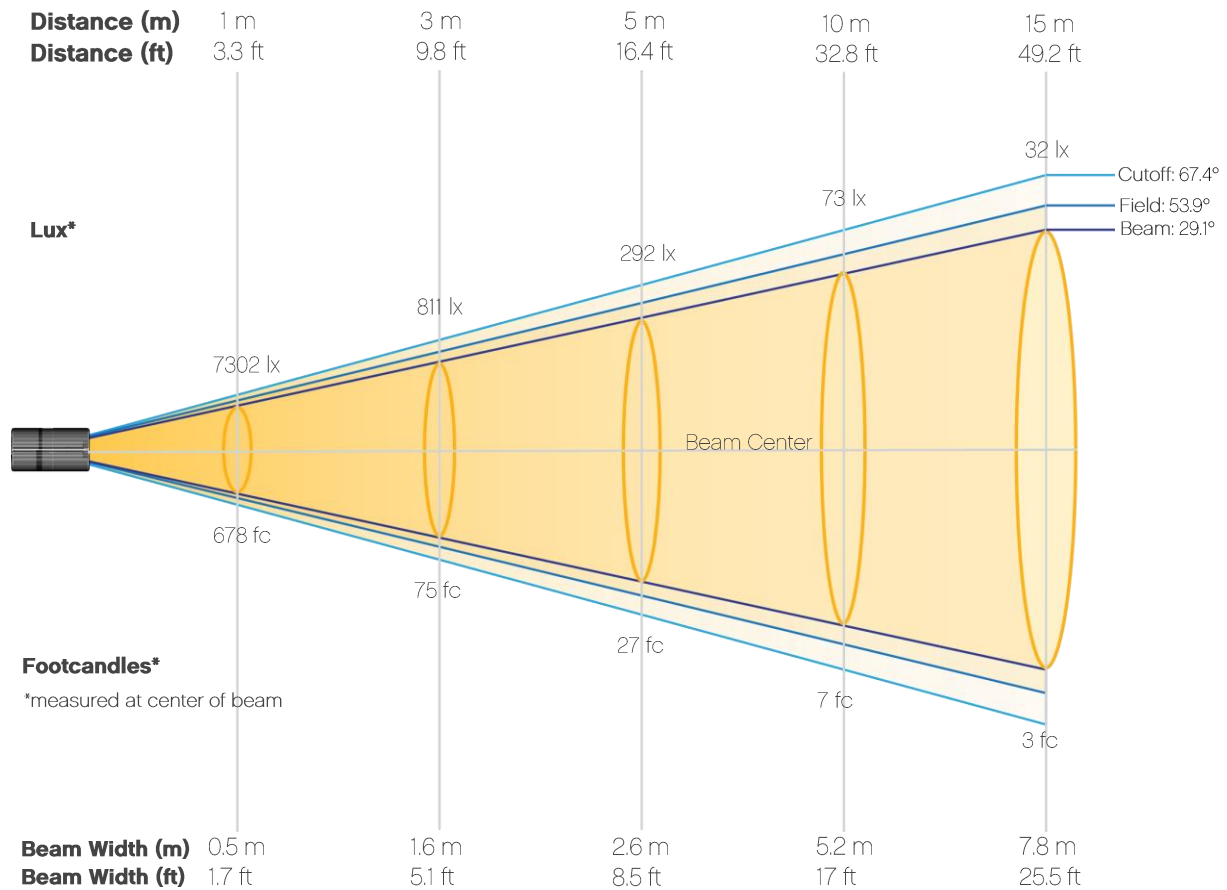
CIE 1931



Photometric Report

Strike P38: Standard Optics, Full Power, w/Red Shift

Beam Details



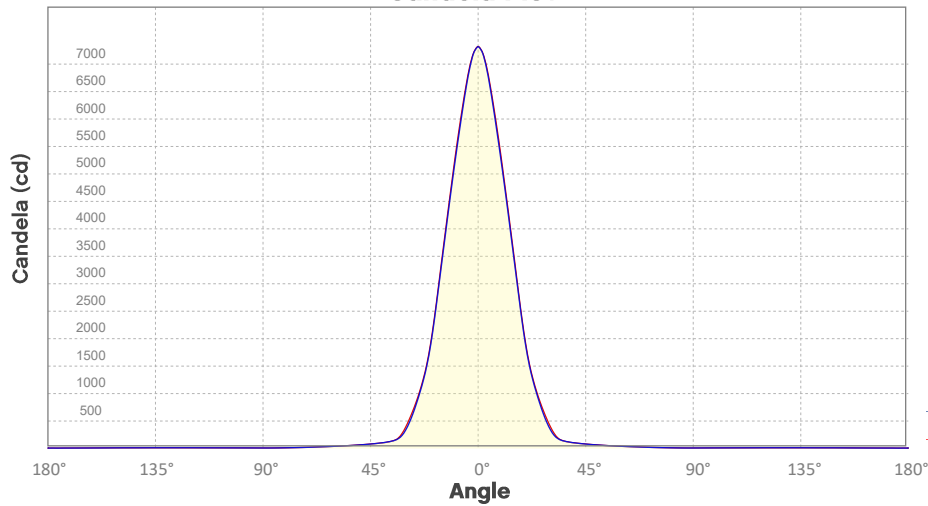
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	7302	1825	811	456	292	203	149	114	90	73
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	60	51	43	37	32	29	25	23	20	18
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	678	170	75	42	27	19	14	11	8	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	3	3	3	2	2	2	2

Photometric Report

Strike P38: Standard Optics, Full Power, w/Red Shift

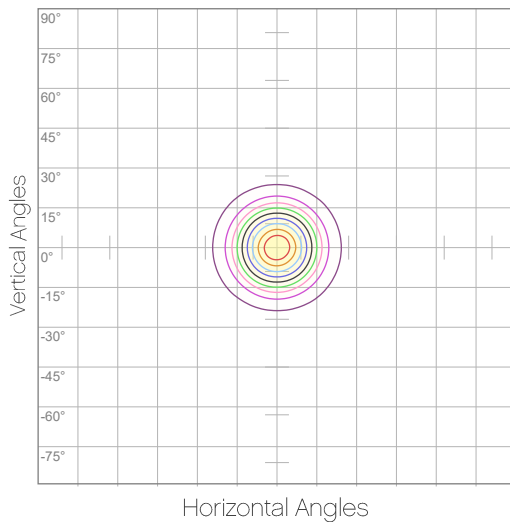
Candela Plot



Beam Angle (50%): 29.1°
Field Angle (10%): 53.6°
Cutoff Angle (3%): 66.7°

— Horizontal Distribution
— Vertical Distribution

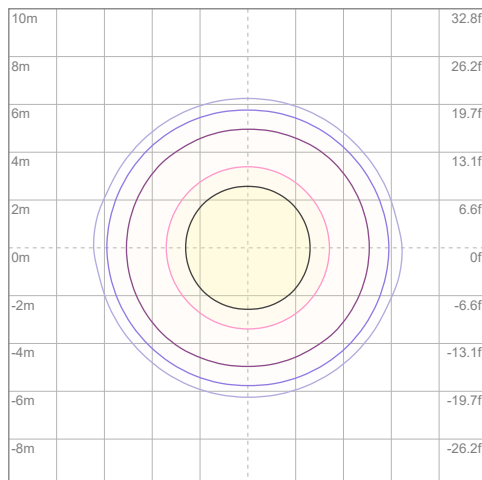
Polar Diagrams



iso-candela Diagram

10%	730 cd
20%	1460 cd
30%	2191 cd
40%	2921 cd
50%	3651 cd
60%	4381 cd
70%	5111 cd
80%	5841 cd
90%	6572 cd

Conditions:
Number of c-planes: 8
Candela at center: 7302 cd



iso-illuminance Diagram

3%	2.19 lx
5%	3.65 lx
10%	7.30 lx
30%	21.9 lx
50%	36.5 lx

Conditions:
Number of c-planes: 8
Lux at center: 73.0 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

Mounting height: 10 meters / 33 feet

Photometric Report

Strike P38: Standard Optics, Full Power, w/o Red Shift

Report Summary

Output

Total Lumens: 2243 lm
Peak Intensity: 7184 cd
Illuminance @ 5m: 287 lux
Fixture Efficacy: 42 lm/W

Optical

Horizontal Beam Angle (50%): 28.9°
Vertical Beam Angle (50%): 28.6°
Horizontal Field Angle (10%): 53.6°
Vertical Field Angle (10%): 52.8°
Horizontal Cutoff Angle (3%): 67.1°
Vertical Cutoff Angle (3%): 66.2°

Conditions

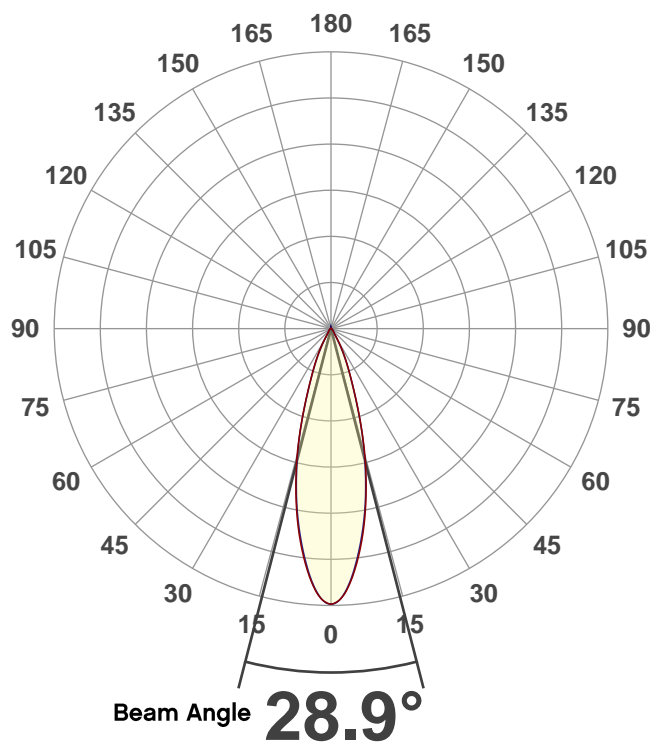
AC Supply: 119 V, 60 Hz
Power: 53.13 W
Current: 0.447 A
Power Factor: 1.0



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 9/19/2019 to LM-63-2002 Standards.

Overall Measurement

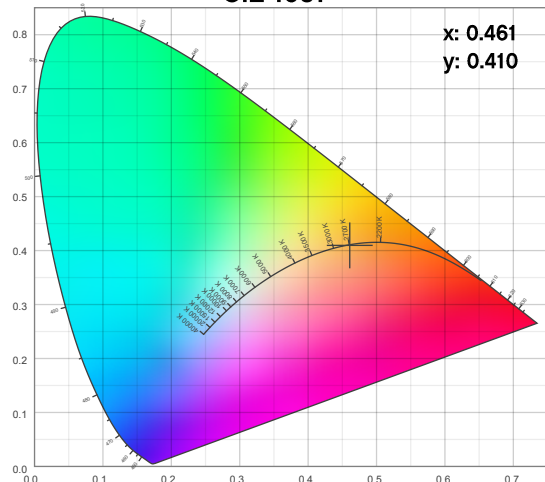
Angular Beam Distribution



Spectral Distribution



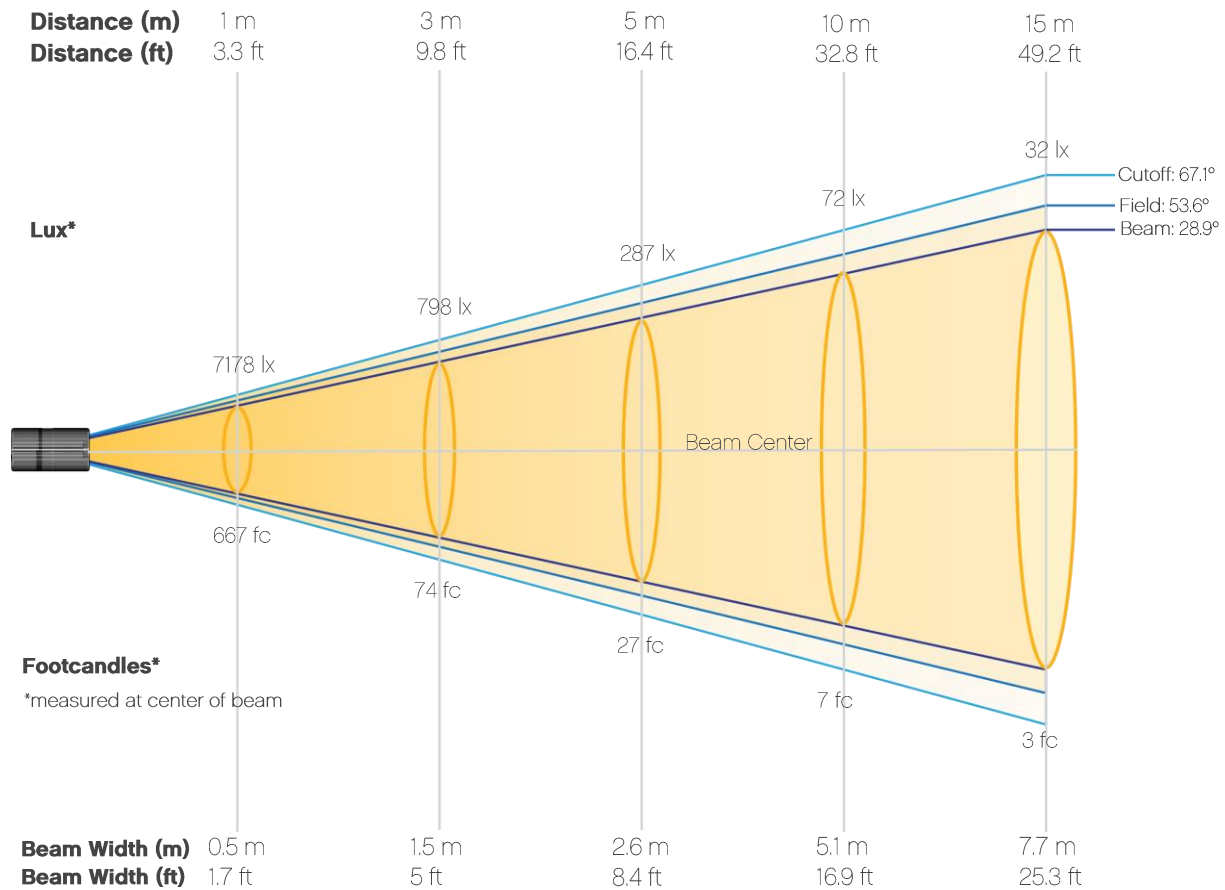
CIE 1931



Photometric Report

Strike P38: Standard Optics, Full Power, w/o Red Shift

Beam Details



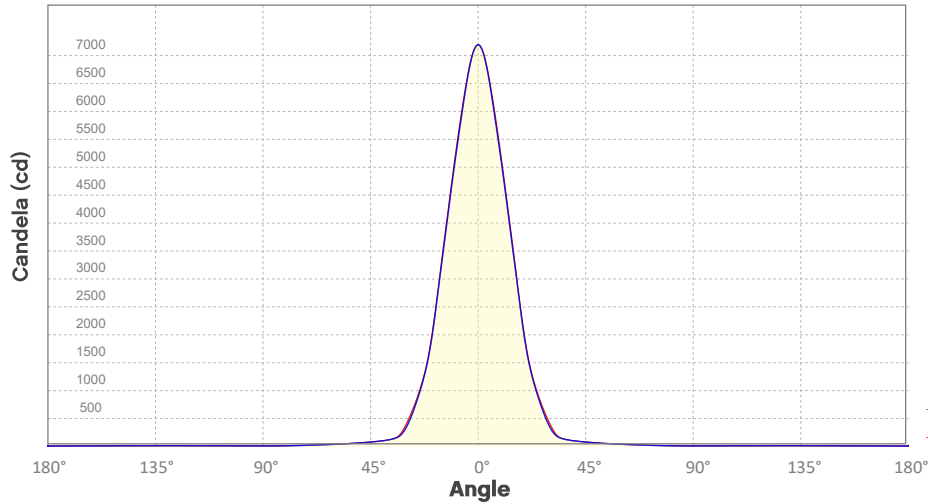
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	7178	1795	798	449	287	199	146	112	89	72
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	59	50	42	37	32	28	25	22	20	18
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	667	167	74	42	27	19	14	10	8	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	3	3	3	2	2	2	2

Photometric Report

Strike P38: Standard Optics, Full Power, w/o Red Shift

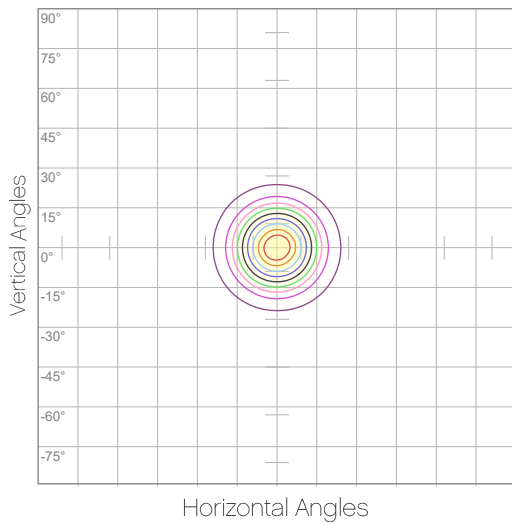
Candela Plot



Beam Angle (50%): 28.9°
Field Angle (10%): 53.4°
Cutoff Angle (3%): 66.6°

— Horizontal Distribution
— Vertical Distribution

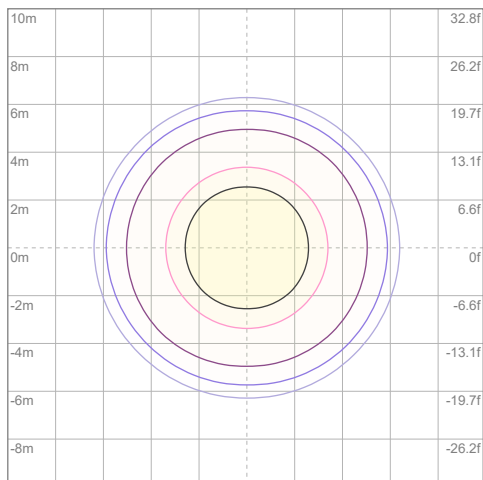
Polar Diagrams



iso-candela Diagram

10%	718 cd
20%	1436 cd
30%	2154 cd
40%	2871 cd
50%	3589 cd
60%	4307 cd
70%	5025 cd
80%	5743 cd
90%	6461 cd

Conditions:
Number of c-planes: 8
Candela at center: 7178 cd



iso-illuminance Diagram

3%	2.15 lx
5%	3.59 lx
10%	7.18 lx
30%	21.5 lx
50%	35.9 lx

Conditions:
Number of c-planes: 8
Lux at center: 71.8 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

Mounting height: 10 meters / 33 feet

Chromaticity Report

Strike P38: Full Power, w/Red Shift

Report Summary

Measurements

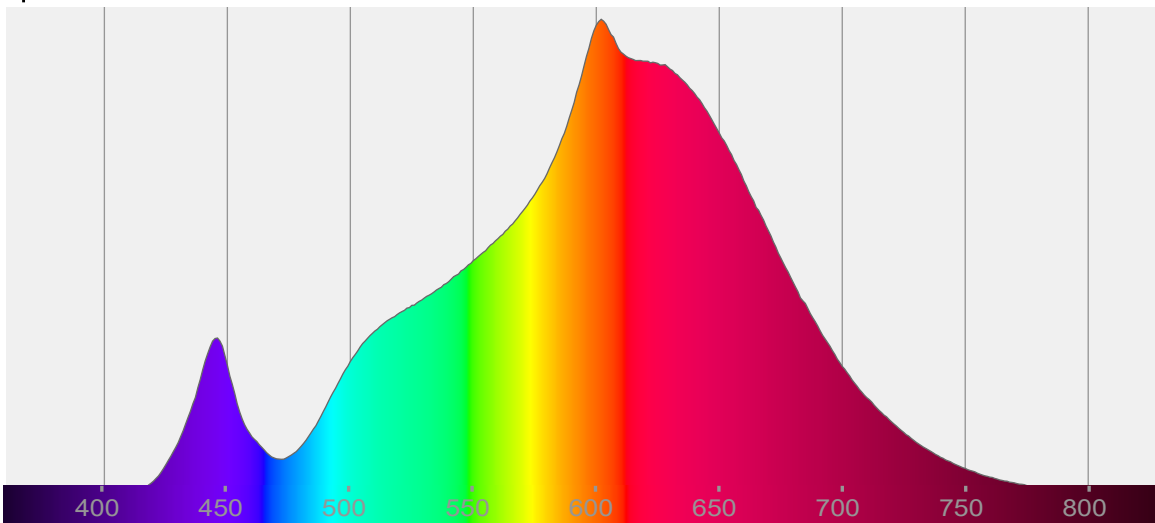
Total Lumens: 2297 lm
Peak Intensity: 7307 cd
Fixture Efficacy: 38 lm/W

Correlated Color Temperature: 2590K
 Δuv : -0.0012

CRI: 89.8 CRI R9 Value: 37.7
CQS: 85.8
TLCI: 82
TM-30-18 Rf: 87.6
TM-30-18 Rg: 101.8
1st Dominant Wavelength: 602 nm
2nd Dominant Wavelength: 446 nm



Spectral Distribution



Tested Color

2590 K
CIE 1931 Coordinates:
X: 0.467 Y: 0.409

Color Temperature

2590 K

Light Quality

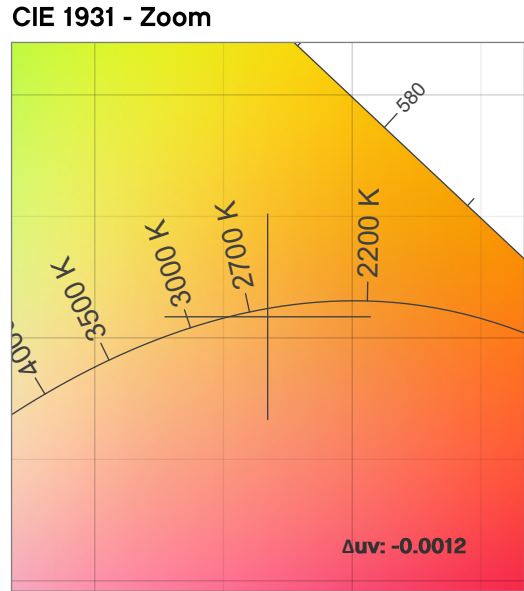
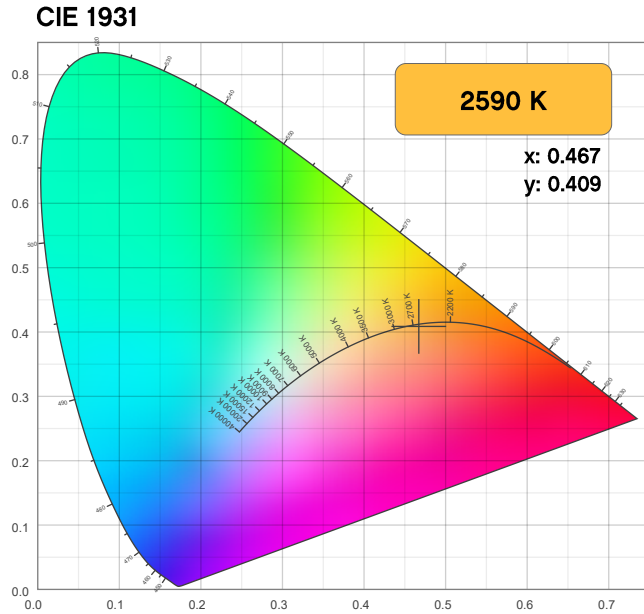
CRI: 89.8

Notes:

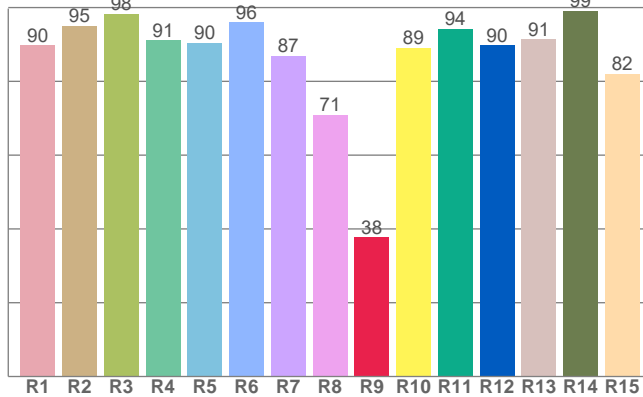
Chromaticity Report

Strike P38: Full Power, w/Red Shift

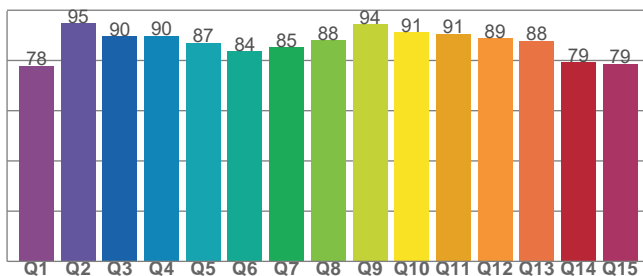
Chromaticity



CRI: 89.8 (R1-R8)



CQS: 85.8



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
2590 K	0.467	0.409

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0012	0.409	0.268

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
89.8	37.7	85.8

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
82	87.6	101.8

Chromaticity Report

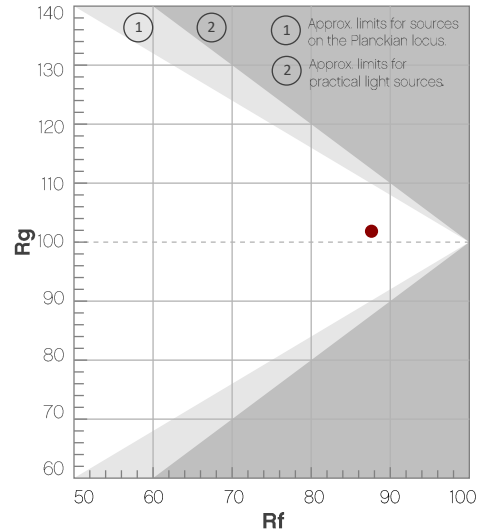
Strike P38: Full Power, w/Red Shift

TM-30-18 Details

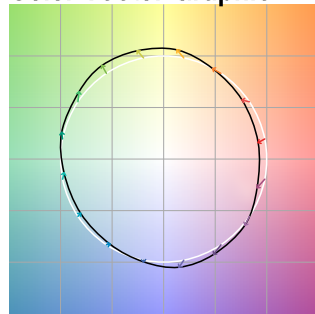
Rf 87.6
Fidelity Index (R_f)

Rg 101.8
Gamut Index (R_g)

Hue Bin	R _f	Chroma Shift	Hue Shift
1	86	-7%	-2%
2	87	-5%	5%
3	83	-1%	9%
4	86	6%	8%
5	90	8%	5%
6	88	9%	-1%
7	85	5%	-9%
8	90	2%	-6%
9	89	-3%	-6%
10	93	-4%	-1%
11	91	-2%	3%
12	88	2%	0%
13	89	6%	-6%
14	86	4%	-11%
15	85	1%	-10%
16	86	-6%	-10%



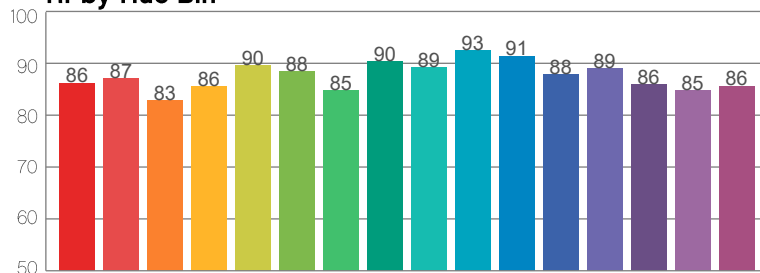
Color Vector Graphic



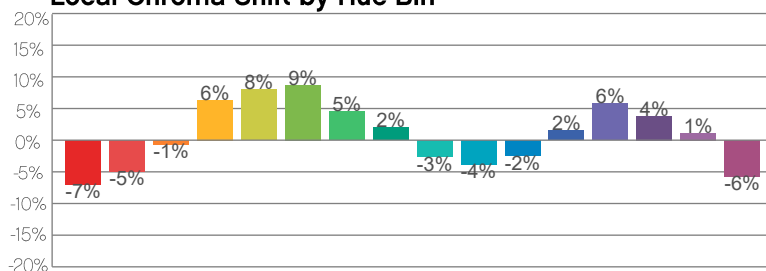
Color Distortion Graphic



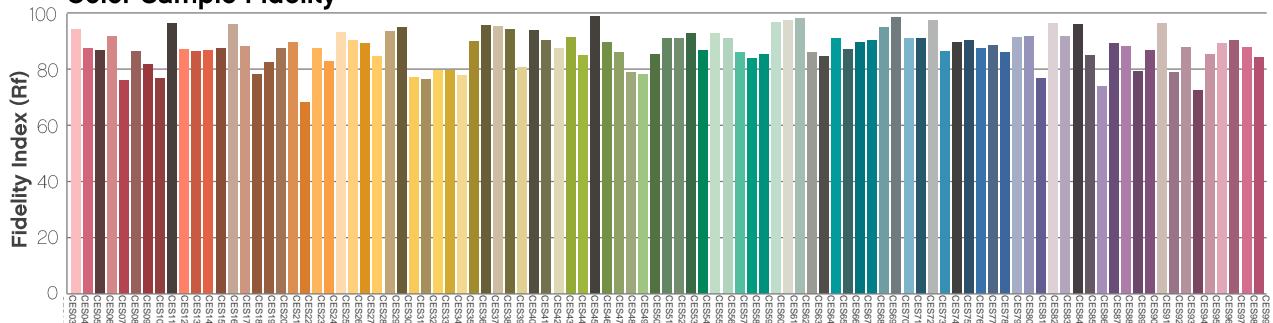
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Chromaticity Report

Strike P38: Full Power, w/o Red Shift

Report Summary

Measurements

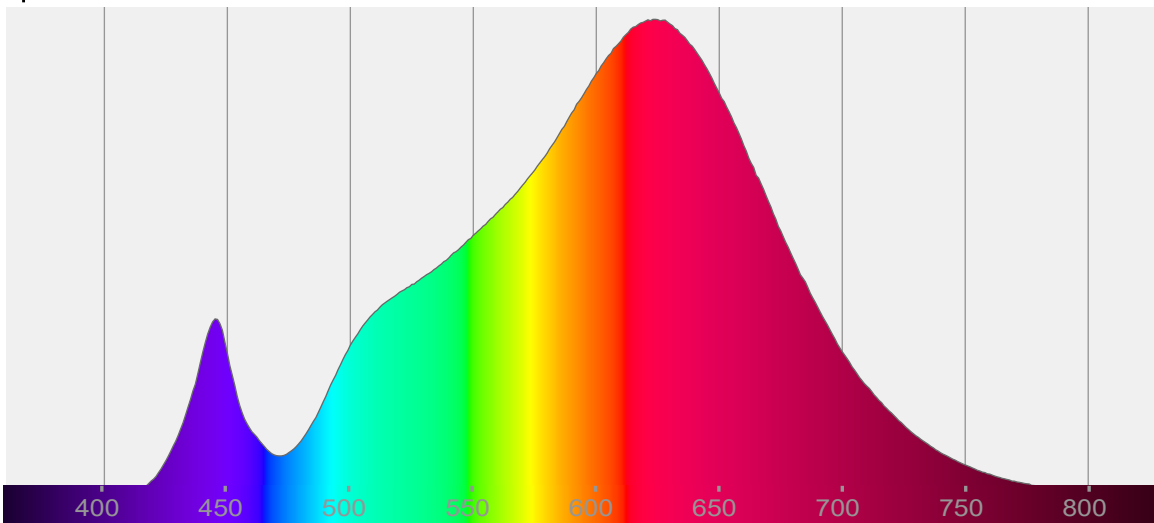
Total Lumens: 2243 lm
Peak Intensity: 7184 cd
Fixture Efficacy: 42 lm/W

Correlated Color Temperature: 2682K
 Δuv : -0.0005

CRI: 92.3 CRI R9 Value: 57.6
CQS: 88.5
TLCI: 82
TM-30-18 Rf: 89.4
TM-30-18 Rg: 102.7
1st Dominant Wavelength: 624 nm
2nd Dominant Wavelength: 445 nm



Spectral Distribution



Tested Color

2682 K
CIE 1931 Coordinates:
X: 0.461 Y: 0.410

Color Temperature

2682 K

Light Quality

CRI: 92.3

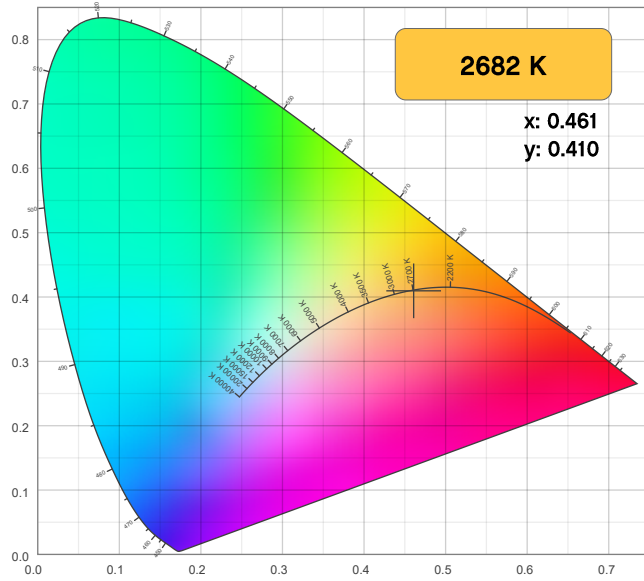
Notes:

Chromaticity Report

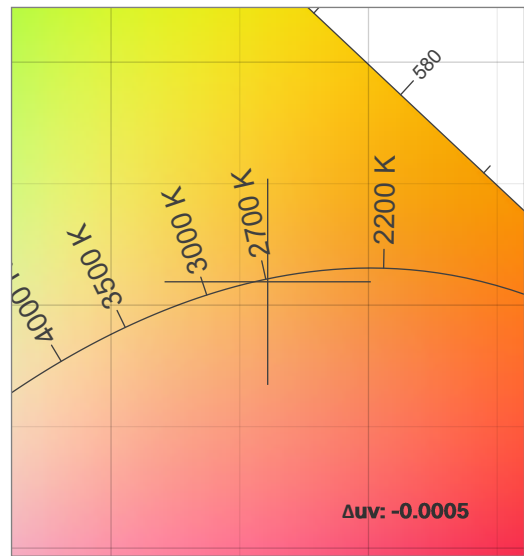
Strike P38: Full Power, w/o Red Shift

Chromaticity

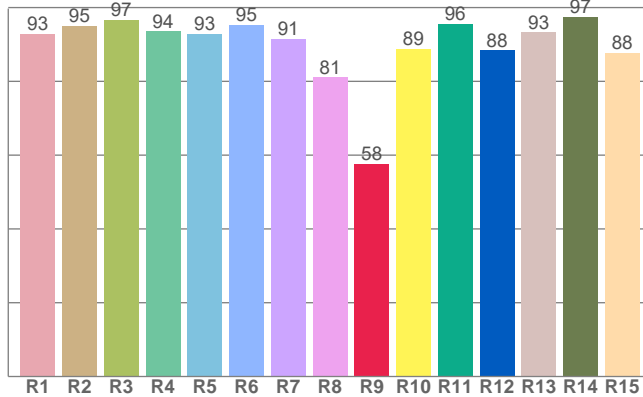
CIE 1931



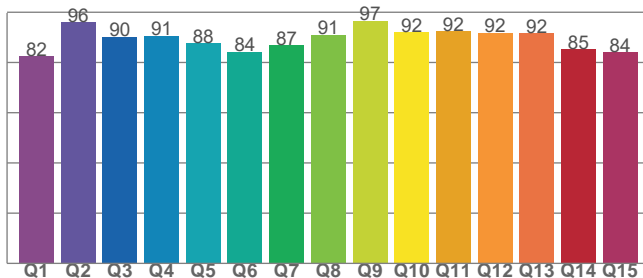
CIE 1931 - Zoom



CRI: 92.3 (R1-R8)



CQS: 88.5



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
2682 K	0.461	0.410

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0005	0.410	0.264

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
92.3	57.6	88.5

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
82	89.4	102.7

Chromaticity Report

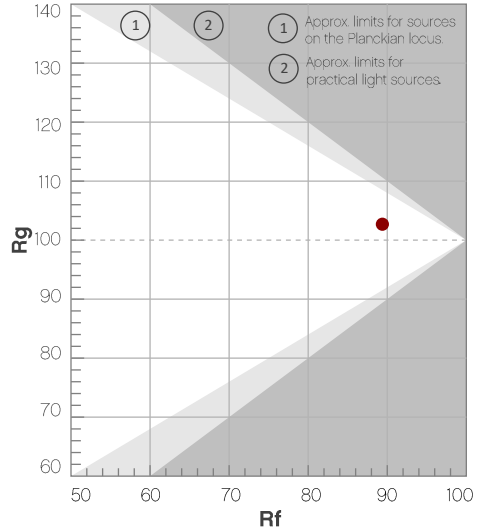
Strike P38: Full Power, w/o Red Shift

TM-30-18 Details

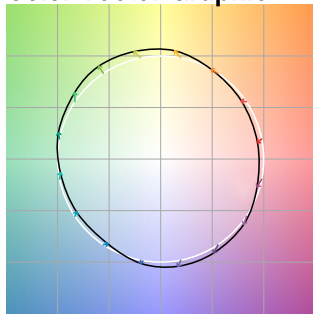
Rf 89.4
Fidelity Index (R_f)

Rg 102.7
Gamut Index (R_g)

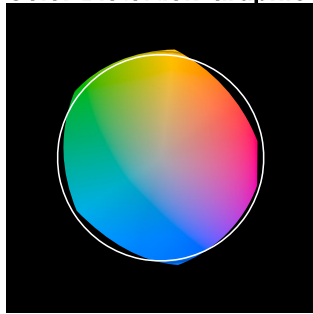
Hue Bin	R _f	Chroma Shift	Hue Shift
1	90	-5%	-3%
2	91	-4%	4%
3	86	0%	7%
4	87	6%	7%
5	90	7%	5%
6	89	8%	0%
7	86	5%	-7%
8	91	2%	-6%
9	89	-2%	-6%
10	92	-4%	-3%
11	92	-3%	3%
12	90	3%	1%
13	91	5%	-4%
14	89	4%	-8%
15	87	2%	-8%
16	89	-3%	-8%



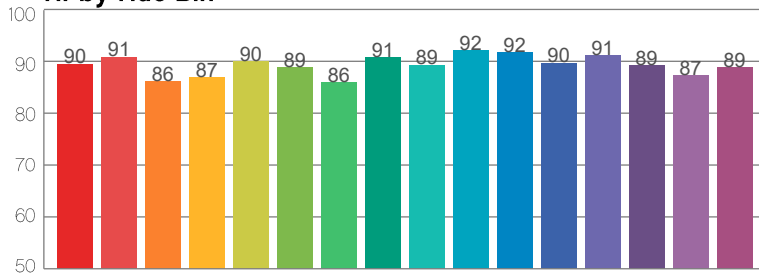
Color Vector Graphic



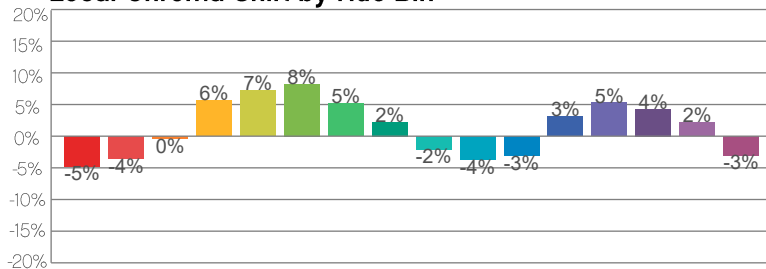
Color Distortion Graphic



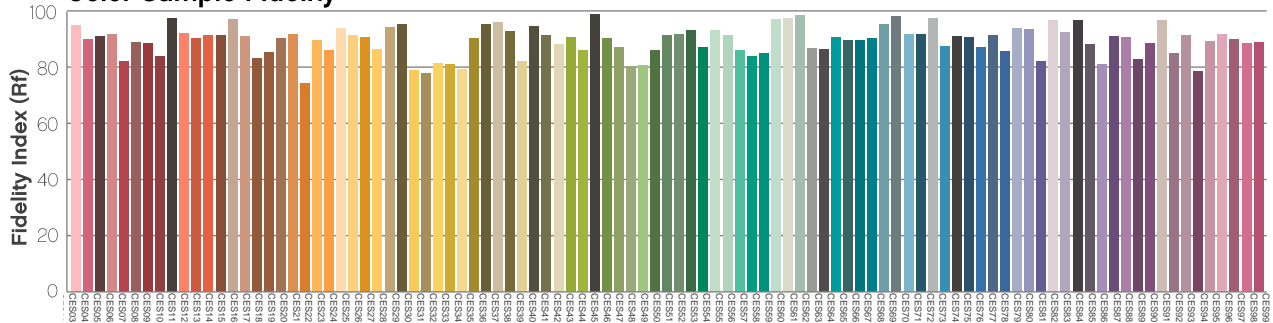
R_f by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



Contact Us

General Information	Technical Support
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Stokstraat 18 9770 Kruishoutem, Belgium Voice: +32 (9) 388 93 97	Email: BNLtech@chauvetlighting.eu Website: www.chauvetprofessional.eu
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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.

