PHOTOMETRICS REPORT

ROGUE OUTCAST 2 BEAM

CHAUVET PROFESSIONAL

Table of Contents

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.

Photometrics & Chromaticity Reports

Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power

Report Summary

Measurements

Fixture Output: 29130 lm
Fixture Peak: 46092336 cd
Fixture Efficacy: 72 lm/W
Intensity @ 5m: 1843693 lux
Color Temperature: 7353 K
CRI: 75.5 CRI R9 Value: -16.7
CQS: 70.9
TLCI: 46
TM-30 Rf: 77.3
TM-30 Rg: 91.5
Beam Angle (50%): 0.8°
Field Angle (10%): 1.6°
Cutoff Angle (3%): 2°

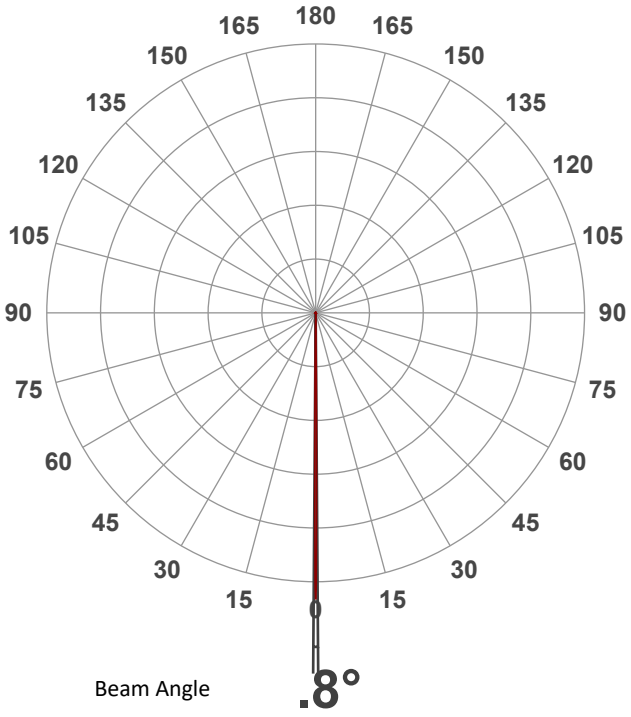
Conditions

AC Supply: 117 V, 60.1 Hz
Power: 406.68 W
Current: 3.48 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 LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/28/2022 to LM-63-2002 Standards.

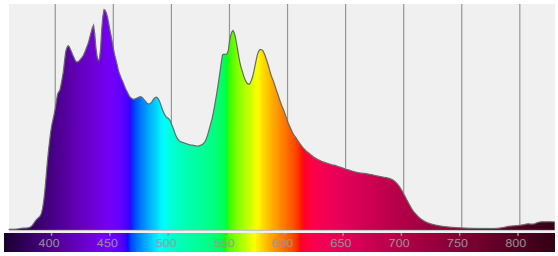
Overall Measurement

Angular Beam Distribution



Beam Angle .8°

Spectral Distribution



Tested Color (CIE 1931):
X: 0.303
Y: 0.310

Light Quality

CRI: 75.5

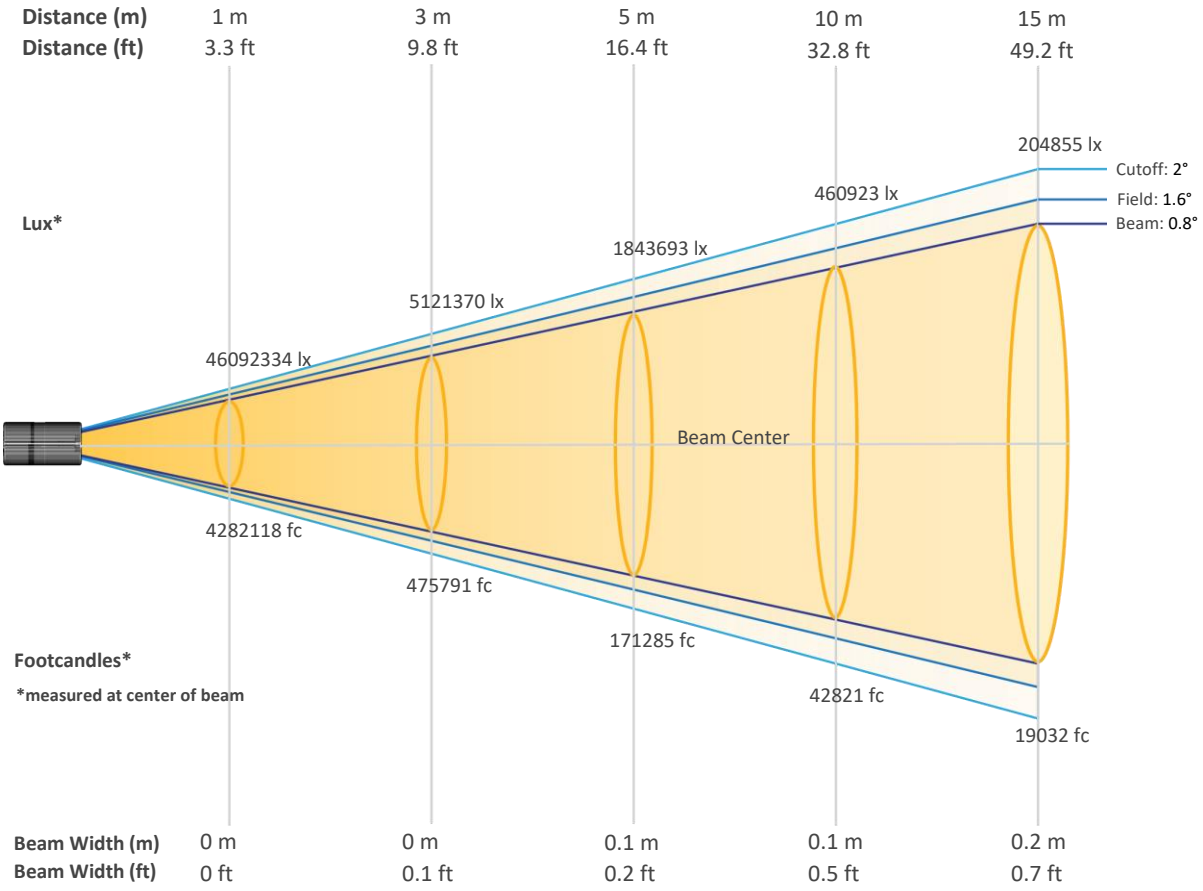
Color Temperature

7353 K

Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power

Beam Details

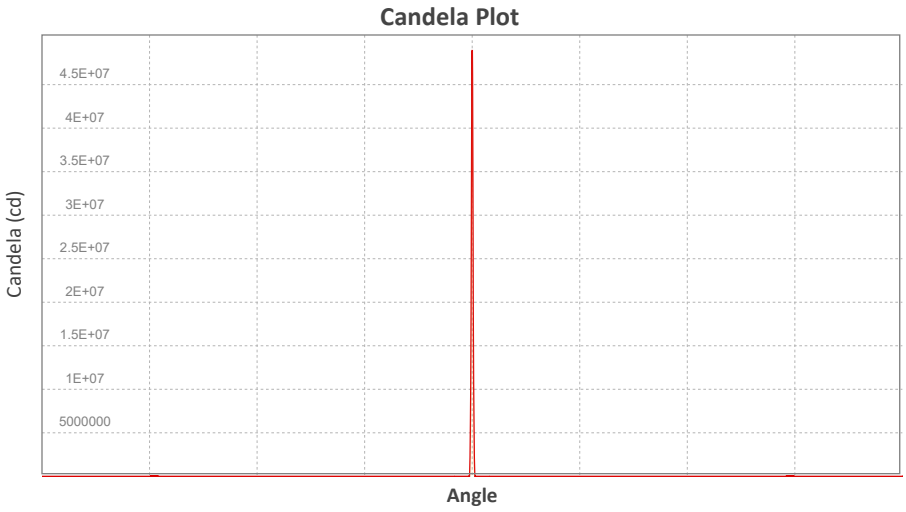


Beam Intensities from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	46092334	11523084	5121370	2880771	1843693	1280343	940660	720193	569041	460923
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	380928	320086	272736	235165	204855	180048	159489	142260	127680	115231
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	4282118	1070530	475791	267632	171285	118948	87390	66908	52866	42821
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	35389	29737	25338	21848	19032	16727	14817	13216	11862	10705

Photometric & Chromaticity Report

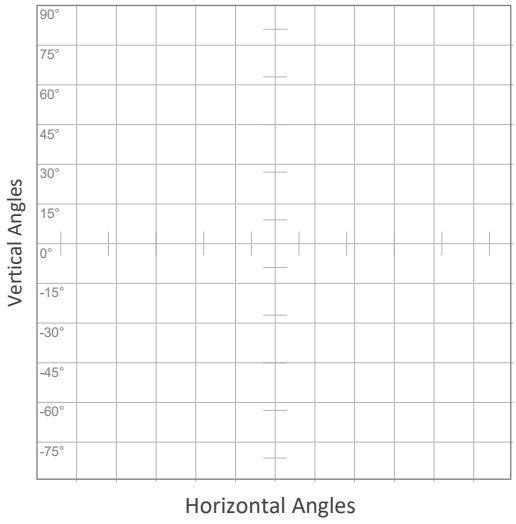
Rogue Outcast 2 Beam: Beam - Full Power



Beam Angle (50%): 0.8°
Field Angle (10%): 1.6°
Cutoff Angle (3%): 2°

Vertical Distribution
Horizontal Distribution

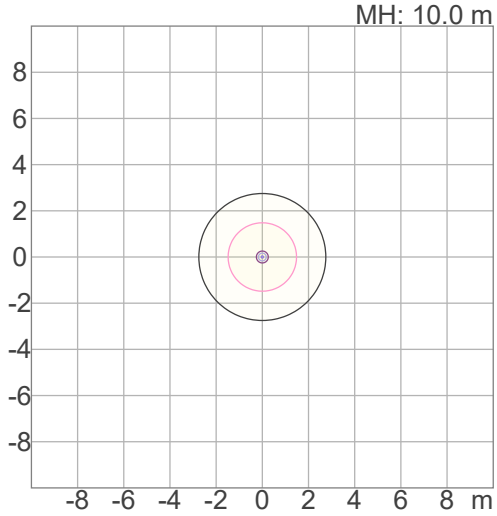
ISO Diagrams



ISO Candela Diagram

10%	4609233 cd
20%	9218467 cd
30%	13827700 cd
40%	18436934 cd
50%	23046167 cd
60%	27655401 cd
70%	32264634 cd
80%	36873867 cd
90%	41483101 cd

Conditions:
Number of c-planes: 2
Candela at center: 46092334 cd



ISO Lux Diagram

3%	13.8K lx
5%	23.0K lx
10%	46.1K lx
30%	138K lx
50%	230K lx

Conditions:
Number of c-planes: 2
Candela at center: 461K lx

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

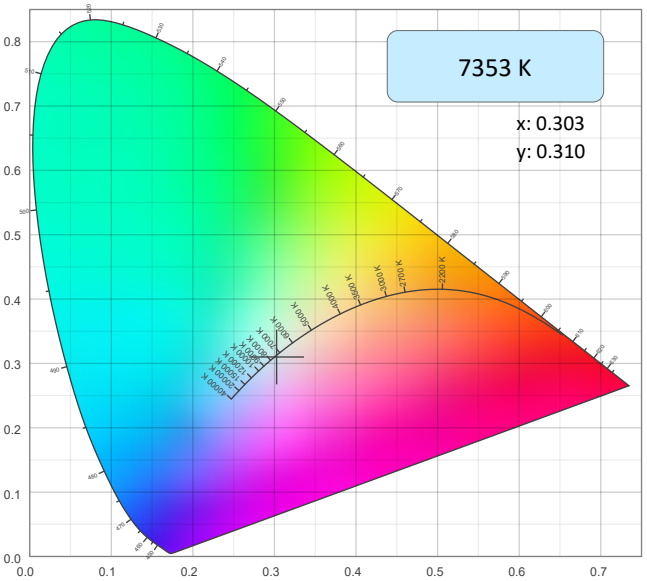
Mounting height: 10 meters / 33 feet

Photometric & Chromaticity Report

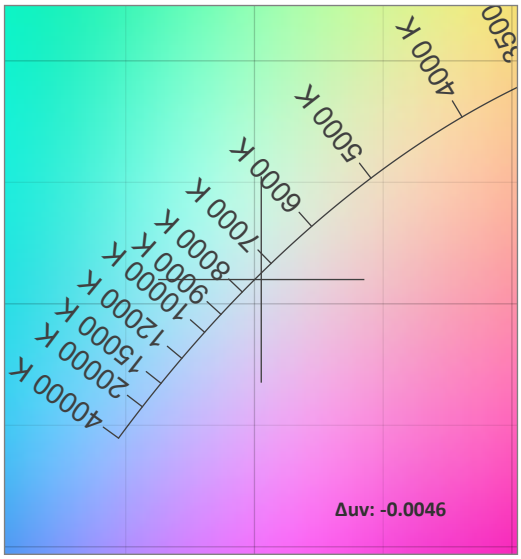
Rogue Outcast 2 Beam: Beam - Full Power

Chromaticity

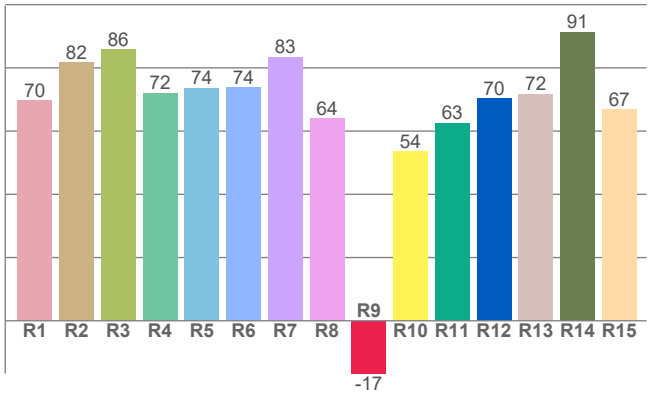
CIE 1931



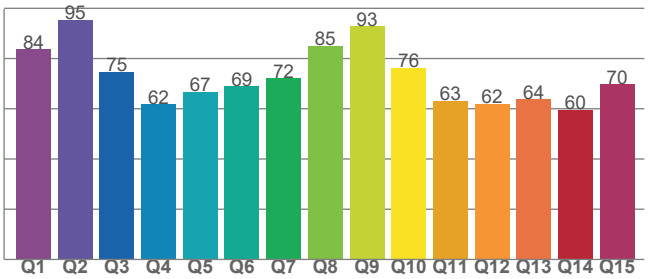
CIE 1931 - Zoom



CRI: 75.5 (R1-R8)



CQS: 70.9



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
7353 K	0.303	0.310

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0046	0.310	0.198

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
75.5	-16.7	70.9

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM30 - Rf	TM30 Rg
46	77.3	91.5

Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power

TM-30 Details

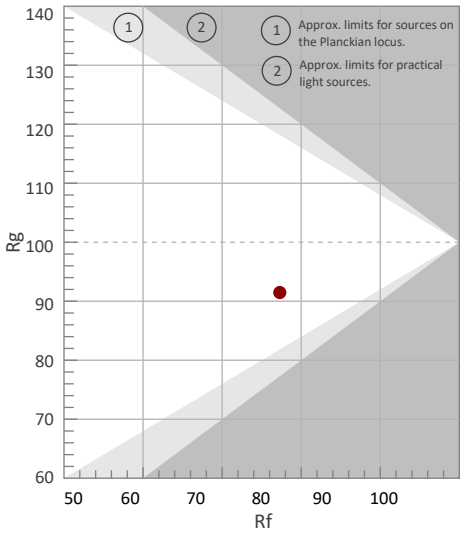
Rf 77.3

Fidelity Index (Rg)

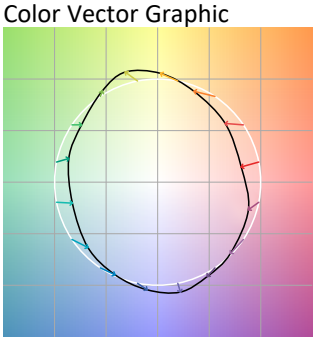
Rg 91.5

Gammut Index (Rg)

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	69	-18%	-1%
2	68	-14%	11%
3	68	-7%	20%
4	71	4%	18%
5	77	11%	10%
6	91	3%	-4%
7	85	-8%	-5%
8	79	-11%	-6%
9	82	-15%	4%
10	75	-9%	15%
11	67	-2%	15%
12	80	4%	10%
13	87	9%	1%
14	84	3%	-11%
15	77	-3%	-18%
16	78	-8%	-9%

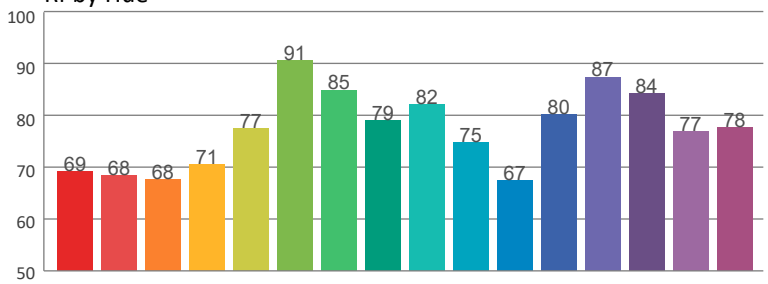


Color Vector Graphic

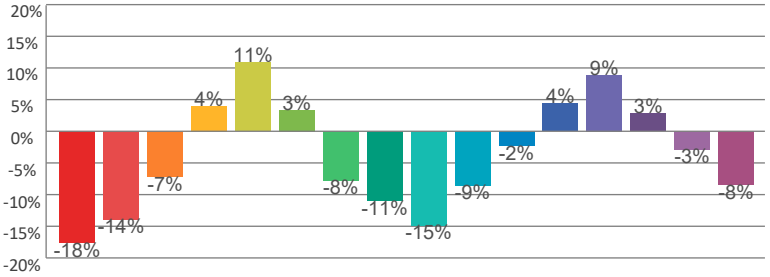


Color Distortion Graphic

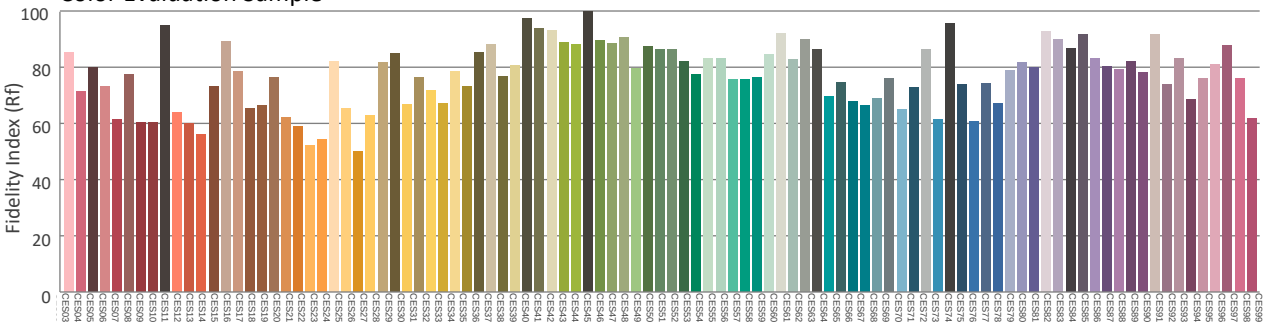
Rf by Hue



Local Chroma Shift by Hue



Color Evaluation Sample



Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power - Stable

Report Summary

Measurements

Fixture Output: 91231 lm
Fixture Peak: 47118520 cd
Fixture Efficacy: 228 lm/W
Intensity @ 5m: 1884741 lux
Color Temperature: 7184 K
CRI: 77.1 CRI R9 Value: -8.5
CQS: 72.8
TLCI: 51
TM-30 Rf: 78.9
TM-30 Rg: 92.2
Beam Angle (50%): 0.8°
Field Angle (10%): 1.7°
Cutoff Angle (3%): 2.1°

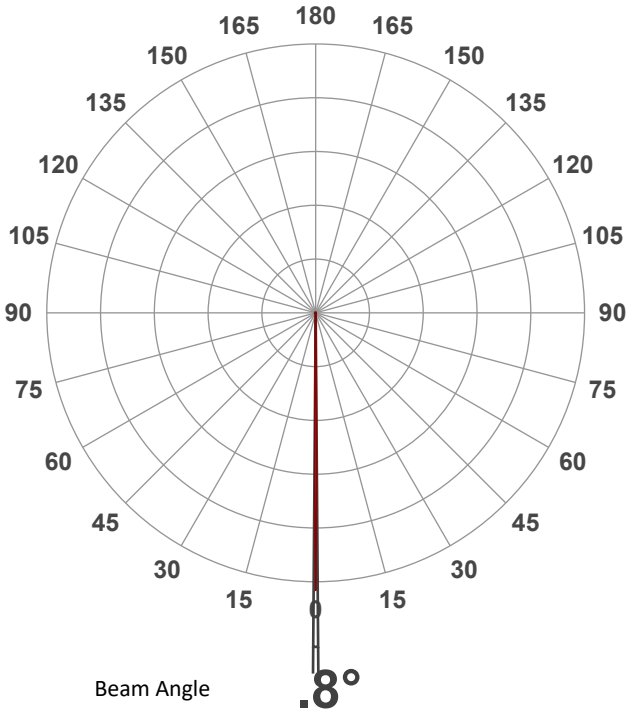
Conditions

AC Supply: 117 V, 60 Hz
Power: 403.67 W
Current: 3.45 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 LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/28/2022 to LM-63-2002 Standards.

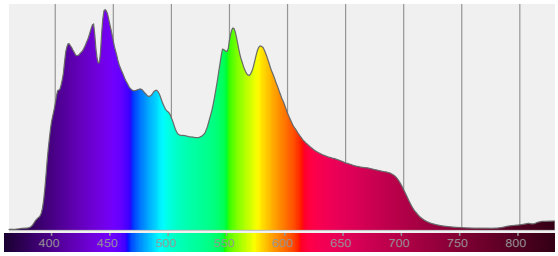
Overall Measurement

Angular Beam Distribution



Beam Angle

Spectral Distribution



Tested Color (CIE 1931):
X: 0.305
Y: 0.312

Light Quality

CRI: 77.1

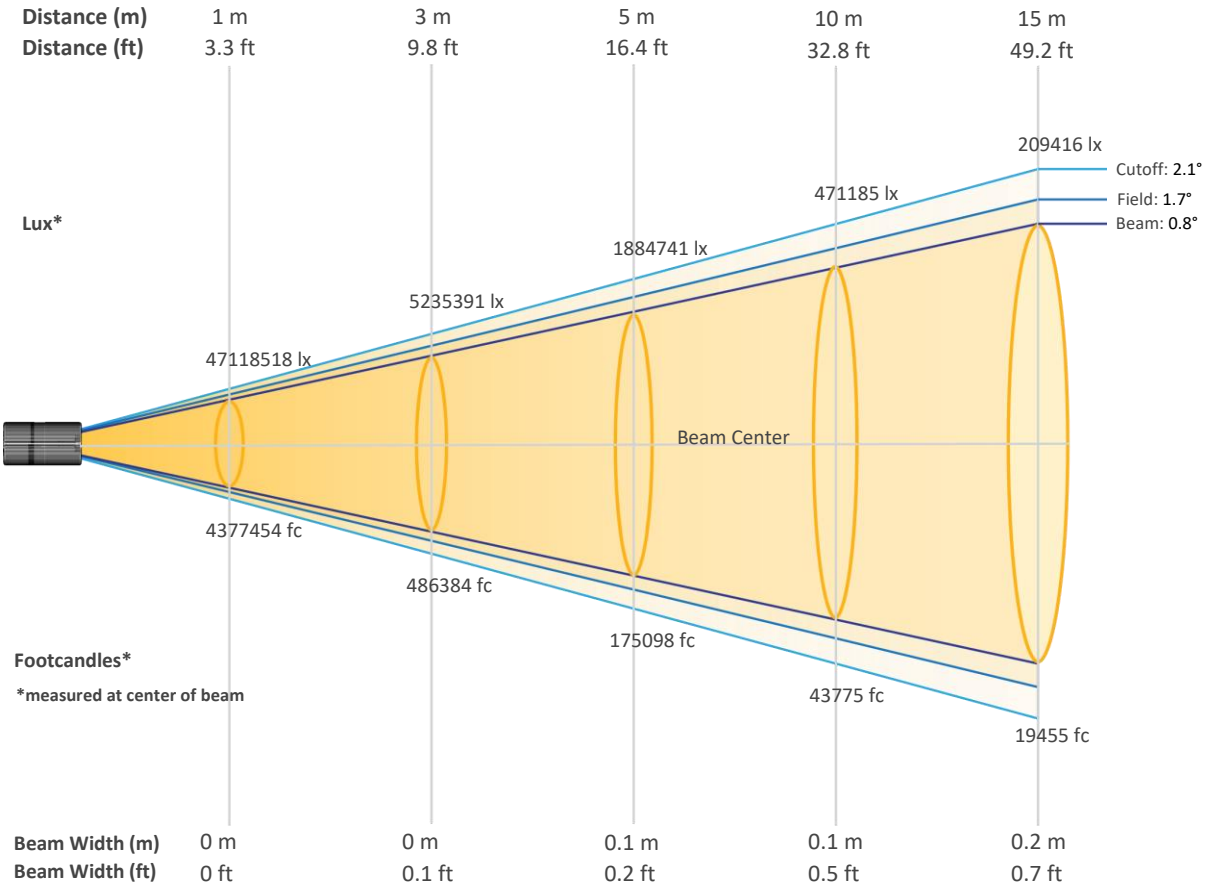
Color Temperature

7184 K

Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power - Stable

Beam Details

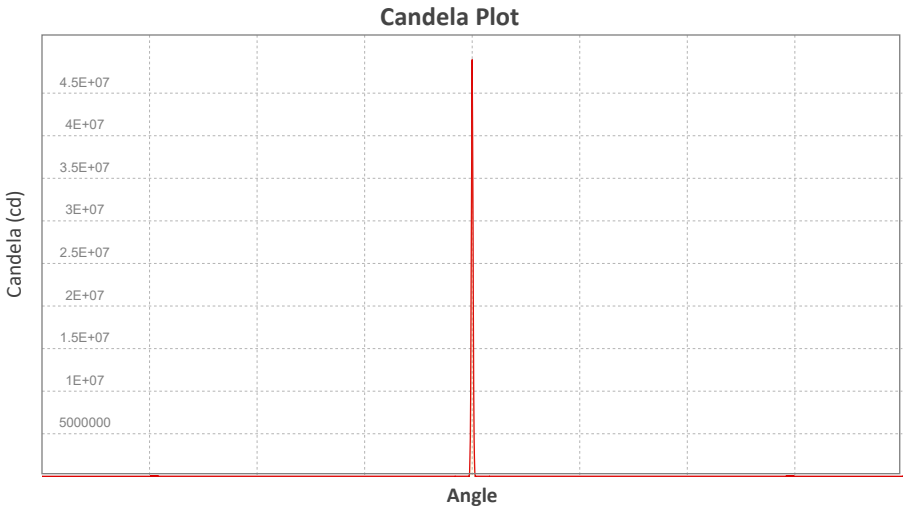


Beam Intensities from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	47118518	11779630	5235391	2944907	1884741	1308848	961602	736227	581710	471185
Distance	**11m**	**12m**	**13m**	**14m**	**15m**	**16m**	**17m**	**18m**	**19m**	**20m**
Lux	389409	327212	278808	240401	209416	184057	163040	145428	130522	117796
Distance	**3.3ft**	**6.6ft**	**9.8ft**	**13.1ft**	**16.4ft**	**19.7ft**	**23ft**	**26.2ft**	**29.5ft**	**32.8ft**
FC	4377454	1094363	486384	273591	175098	121596	89336	68398	54043	43775
Distance	**36.1ft**	**39.4ft**	**42.7ft**	**45.9ft**	**49.2ft**	**52.5ft**	**55.8ft**	**59.1ft**	**62.3ft**	**65.6ft**
FC	36177	30399	25902	22334	19455	17099	15147	13511	12126	10944

Photometric & Chromaticity Report

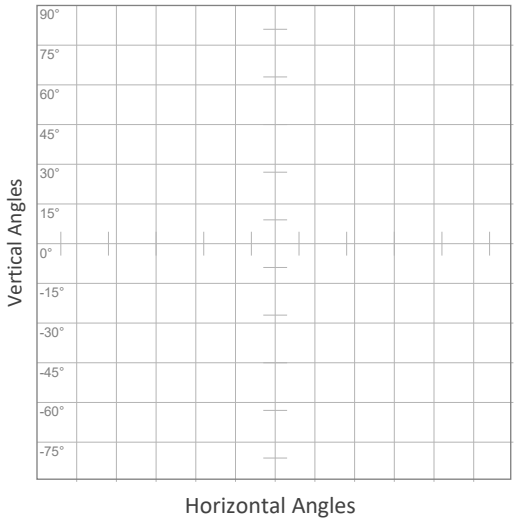
Rogue Outcast 2 Beam: Beam - Full Power - Stable



Beam Angle (50%): 0.8°
Field Angle (10%): 1.7°
Cutoff Angle (3%): 2.1°

Vertical Distribution
Horizontal Distribution

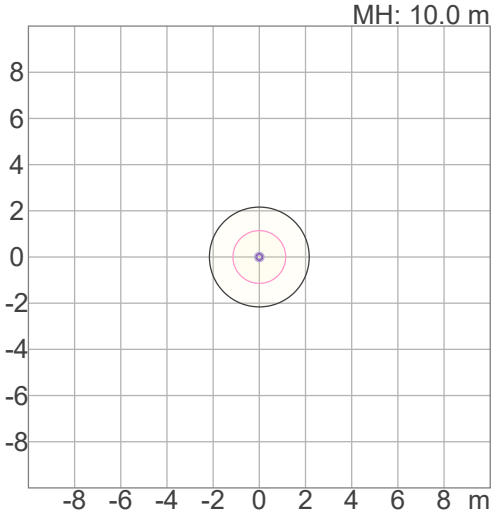
ISO Diagrams



ISO Candela Diagram

10%	4711852 cd
20%	9423704 cd
30%	14135555 cd
40%	18847407 cd
50%	23559259 cd
60%	28271111 cd
70%	32982963 cd
80%	37694815 cd
90%	42406666 cd

Conditions:
Number of c-planes: 2
Candela at center: 47118518 cd



ISO Lux Diagram

3%	14.1K lx
5%	23.6K lx
10%	47.1K lx
30%	141K lx
50%	236K lx

Conditions:
Number of c-planes: 2
Candela at center: 471K lx

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

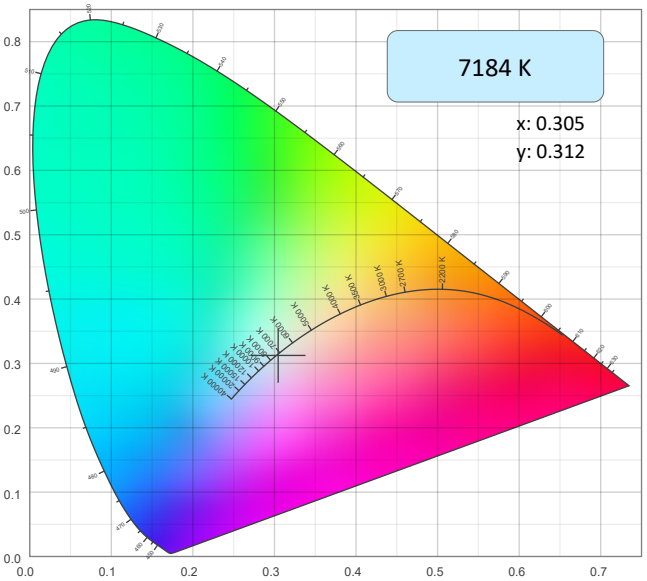
Mounting height: 10 meters / 33 feet

Photometric & Chromaticity Report

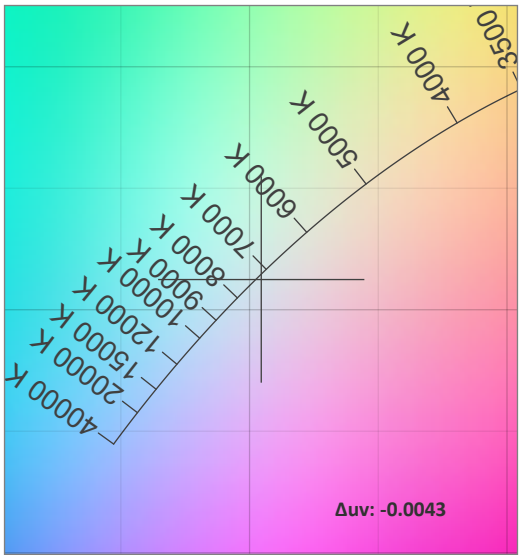
Rogue Outcast 2 Beam: Beam - Full Power - Stable

Chromaticity

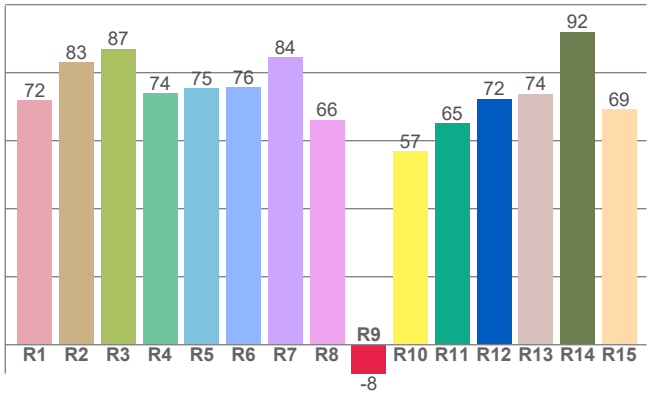
CIE 1931



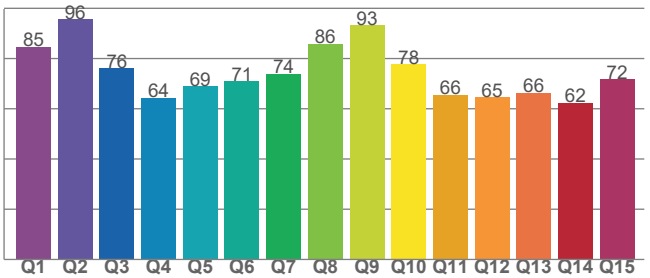
CIE 1931 - Zoom



CRI: 77.1 (R1-R8)



CQS: 72.8



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
7184 K	0.305	0.312

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0043	0.312	0.198

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
77.1	-8.5	72.8

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM30 - Rf	TM30 Rg
51	78.9	92.2

Photometric & Chromaticity Report

Rogue Outcast 2 Beam: Beam - Full Power - Stable

TM-30 Details

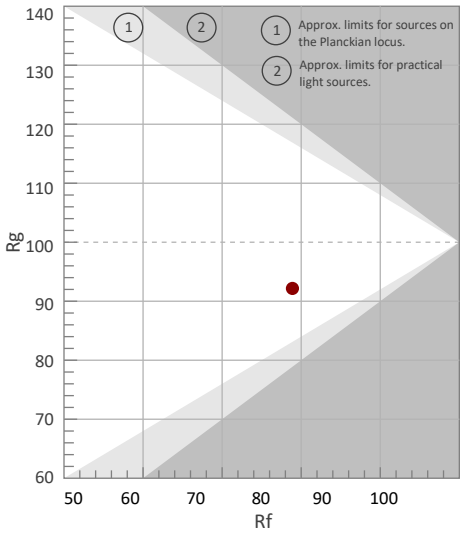
Rf 78.9

Fidelity Index (Rg)

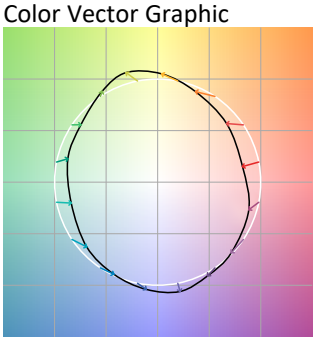
Rg 92.2

Gammut Index (Rg)

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	71	-16%	-1%
2	71	-13%	10%
3	70	-7%	18%
4	72	4%	17%
5	79	10%	9%
6	91	3%	-4%
7	86	-7%	-5%
8	81	-10%	-5%
9	83	-14%	4%
10	77	-8%	14%
11	70	-2%	14%
12	82	4%	9%
13	88	8%	1%
14	85	2%	-10%
15	78	-3%	-17%
16	80	-8%	-9%

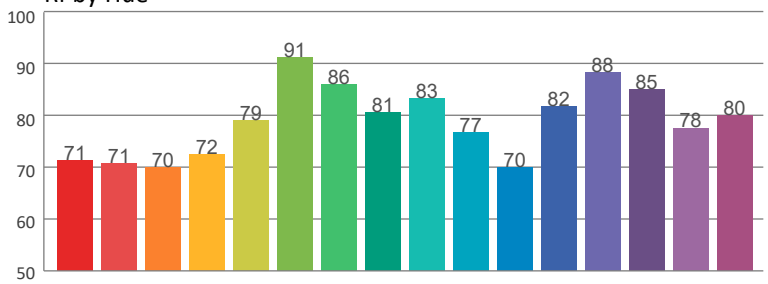


Color Vector Graphic

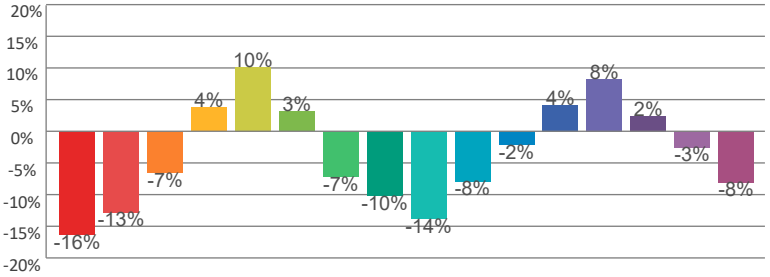


Color Distortion Graphic

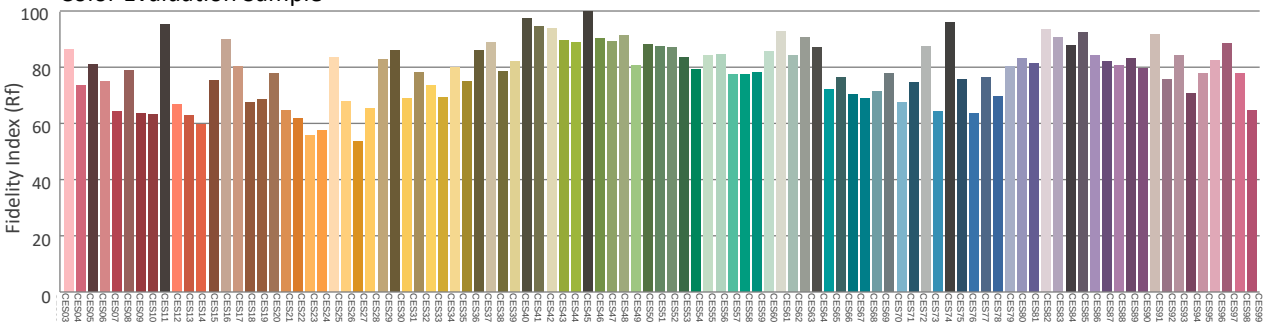
Rf by Hue



Local Chroma Shift by Hue



Color Evaluation Sample



Contact Us

General Information	Technical Support
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Chauvet U.K.	
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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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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

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.