

PHOTOMETRICS REPORT
COLORADO 1-QUAD ZOOM



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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

COLORado 1 Quad Zoom: Full Flood, Full Power

Report Summary

Output

Total Lumens: 2662 lm
Peak Intensity: 6942 cd
Illuminance @ 5m: 278 lux
Fixture Efficacy: 26 lm/W

Optical

Horizontal Beam Angle (50%): 37.1°
Vertical Beam Angle (50%): 37.1°
Horizontal Field Angle (10%): 52.4°
Vertical Field Angle (10%): 52.4°
Horizontal Cutoff Angle (3%): 70.9°
Vertical Cutoff Angle (3%): 72.1°

Conditions

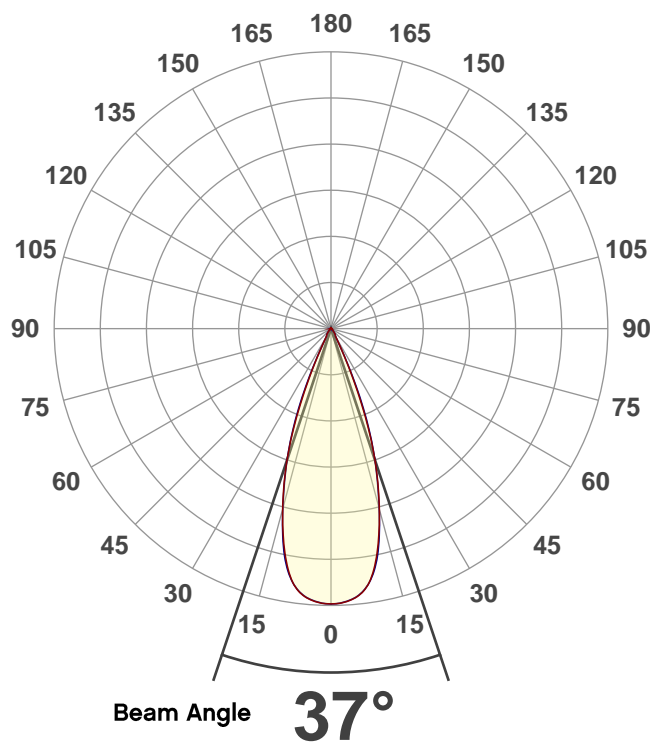
AC Supply: 120 V, 60 Hz
Power: 104.96 W
Current: 0.877 A
Power Factor: 0.99



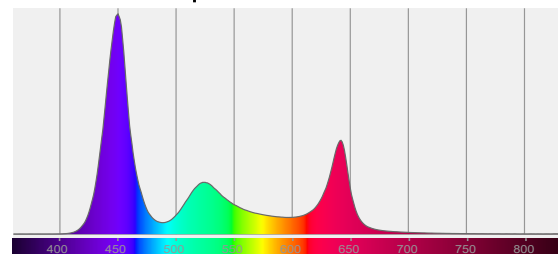
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/14/2020 to LM-63-2002 Standards.

Overall Measurement

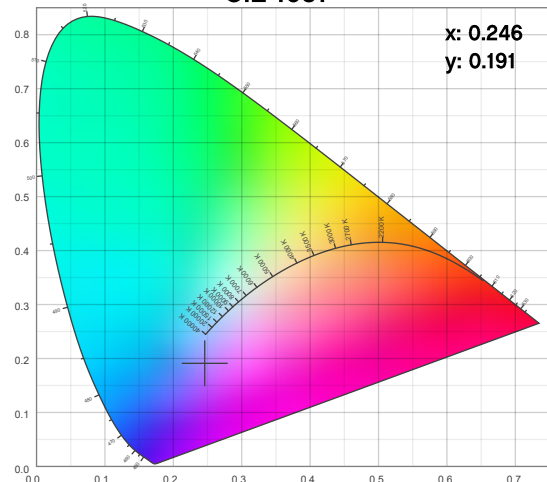
Angular Beam Distribution



Spectral Distribution



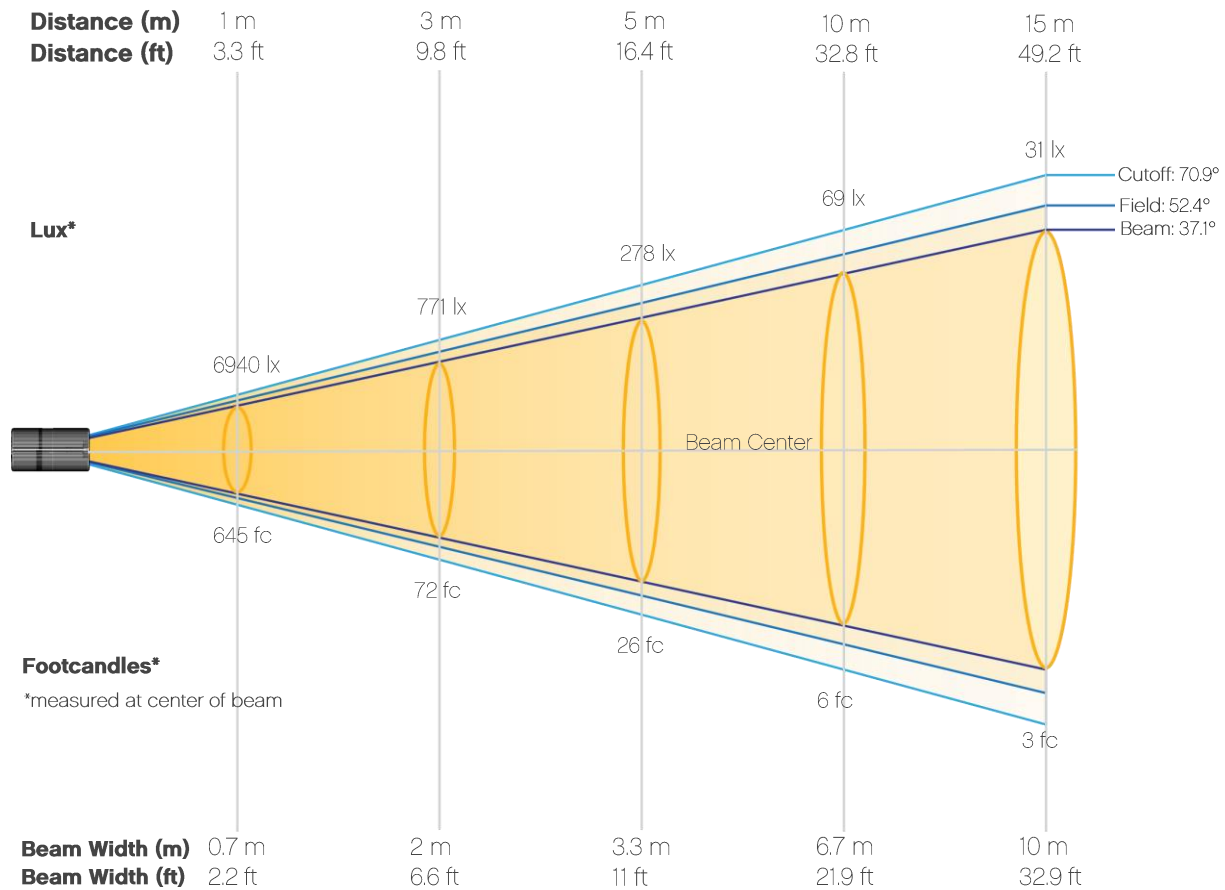
CIE 1931



Photometric Report

COLORado 1 Quad Zoom: Full Flood, Full Power

Beam Details

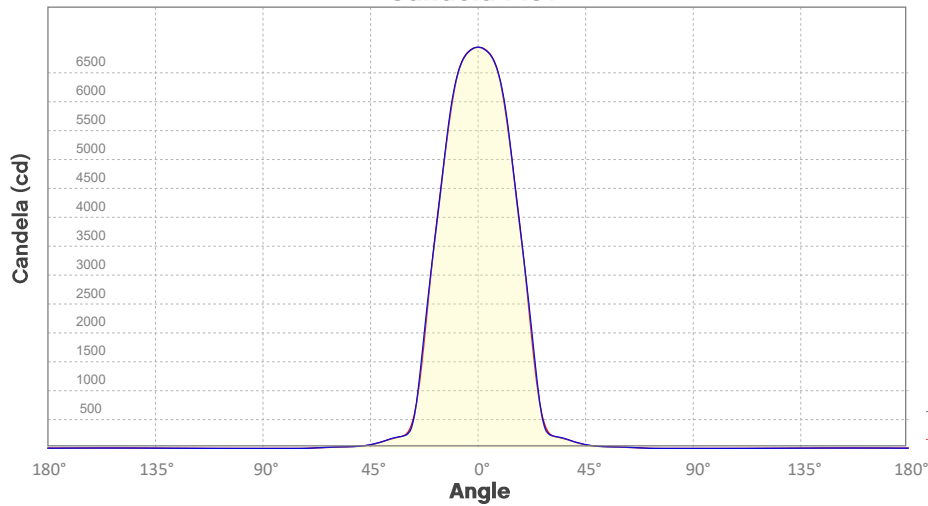


Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	6940	1735	771	434	278	193	142	108	86	69
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	57	48	41	35	31	27	24	21	19	17
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	645	161	72	40	26	18	13	10	8	6
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	5	4	4	3	3	3	2	2	2	2

Photometric Report

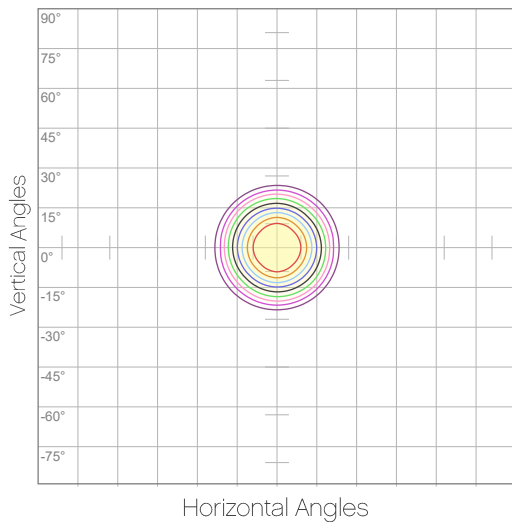
COLORado 1 Quad Zoom: Full Flood, Full Power
Candela Plot



Beam Angle (50%): 37°
Field Angle (10%): 52.5°
Cutoff Angle (3%): 71.9°

— Horizontal Distribution
— Vertical Distribution

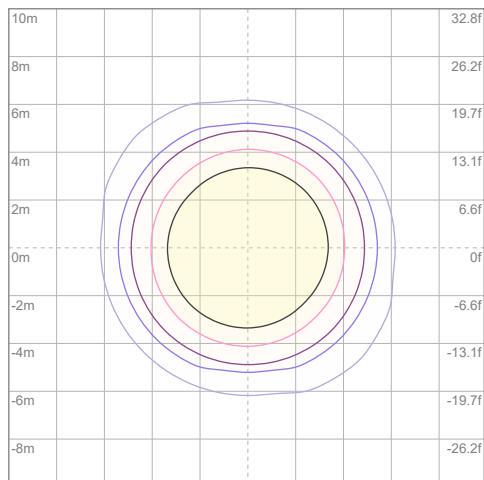
Polar Diagrams



iso-candela Diagram

10%	694 cd
20%	1388 cd
30%	2082 cd
40%	2776 cd
50%	3470 cd
60%	4164 cd
70%	4858 cd
80%	5552 cd
90%	6246 cd

Conditions:
Number of c-planes: 8
Candela at center: 6940 cd



iso-illuminance Diagram

3%	2.08 lx
5%	3.47 lx
10%	6.94 lx
30%	20.8 lx
50%	34.7 lx

Conditions:
Number of c-planes: 8
Lux at center: 69.4 lx

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

Mounting height: 10 meters / 33 feet

Photometric Report

COLORado 1 Quad Zoom: Full Spot, Full Power

Report Summary

Output

Total Lumens: 2354 lm
Peak Intensity: 76635 cd
Illuminance @ 5m: 2900 lux
Fixture Efficacy: 23 lm/W

Optical

Horizontal Beam Angle (50%): 9.6°
Vertical Beam Angle (50%): 9.3°
Horizontal Field Angle (10%): 15.8°
Vertical Field Angle (10%): 15.9°
Horizontal Cutoff Angle (3%): 19.6°
Vertical Cutoff Angle (3%): 19.6°

Conditions

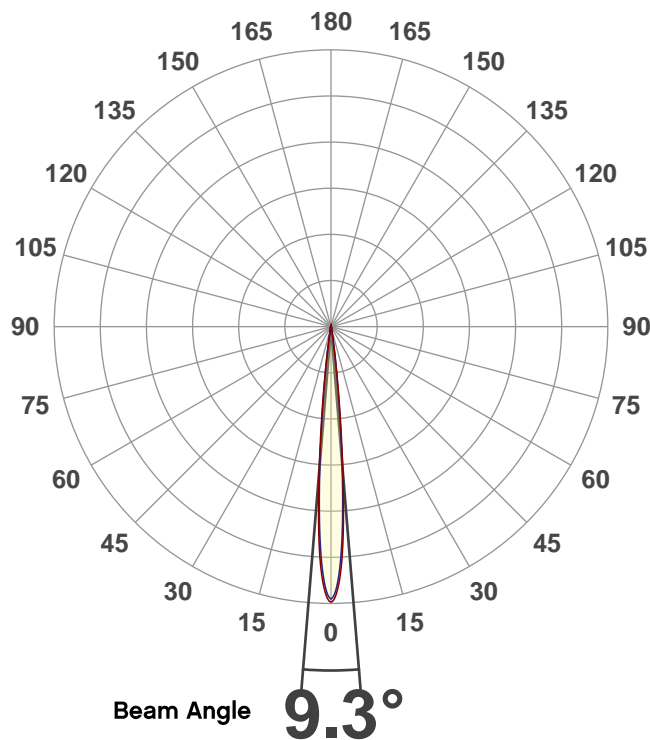
AC Supply: 120 V, 60 Hz
Power: 105.74 W
Current: 0.885 A
Power Factor: 0.99



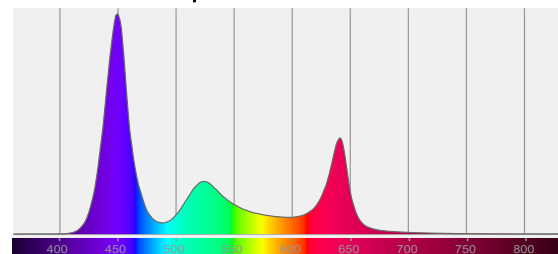
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Overall Measurement

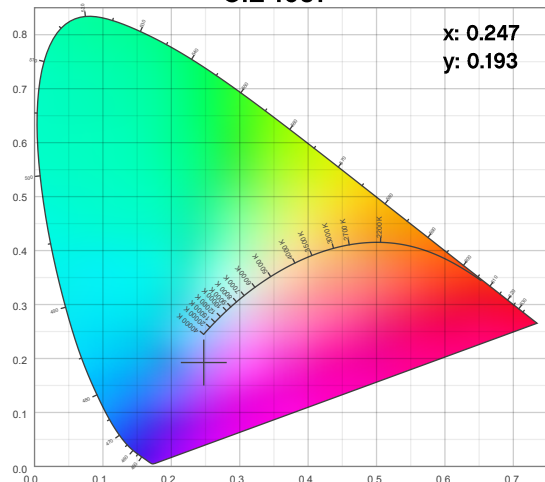
Angular Beam Distribution



Spectral Distribution



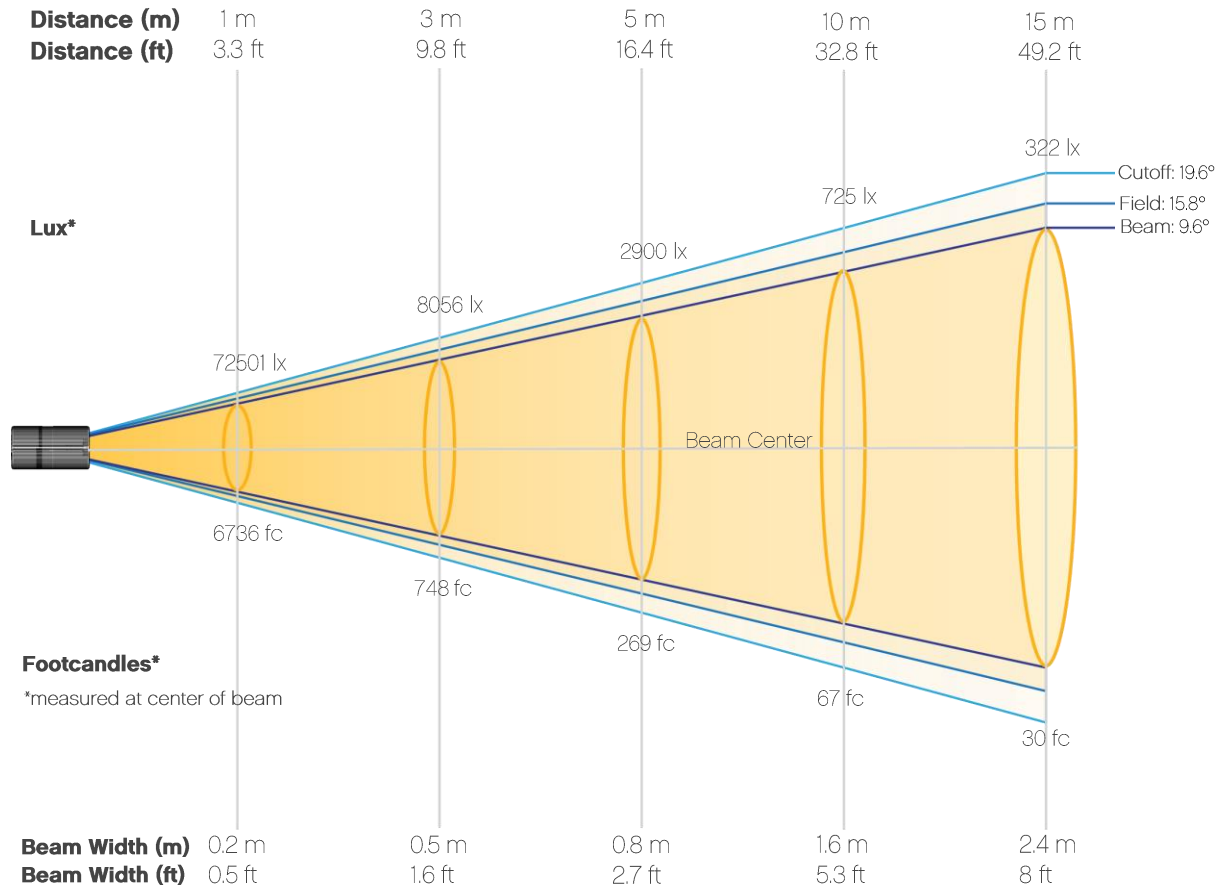
CIE 1931



Photometric Report

COLORado 1 Quad Zoom: Full Spot, Full Power

Beam Details

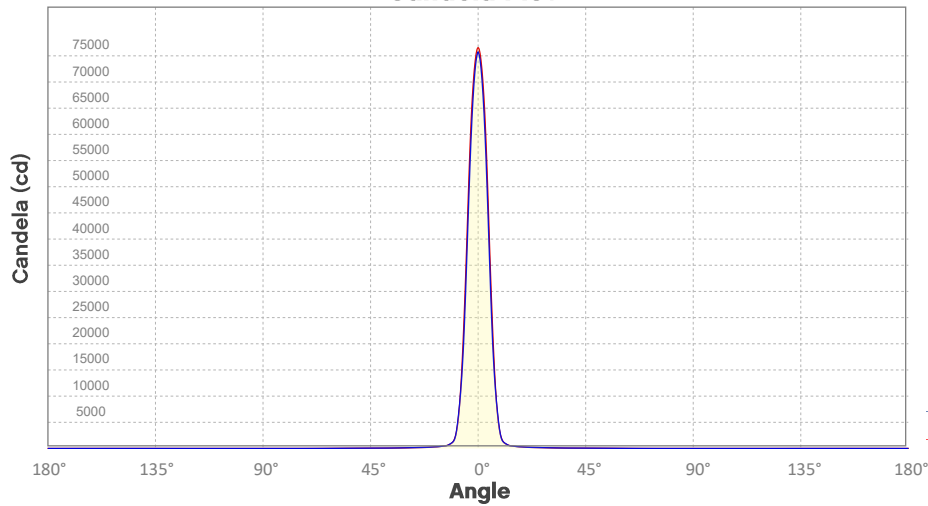


Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	72501	18125	8056	4531	2900	2014	1480	1133	895	725
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	599	503	429	370	322	283	251	224	201	181
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	6736	1684	748	421	269	187	137	105	83	67
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	56	47	40	34	30	26	23	21	19	17

Photometric Report

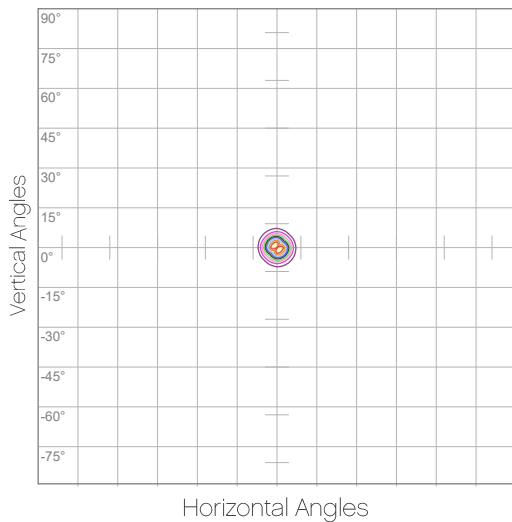
COLORado 1 Quad Zoom: Full Spot, Full Power
Candela Plot



Beam Angle (50%): 9.3°
Field Angle (10%): 15.7°
Cutoff Angle (3%): 19.7°

— Horizontal Distribution
— Vertical Distribution

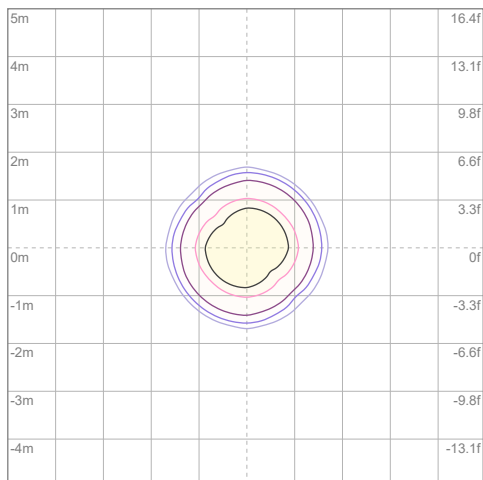
Polar Diagrams



iso-candela Diagram

10%	7250 cd
20%	14500 cd
30%	21750 cd
40%	29000 cd
50%	36251 cd
60%	43501 cd
70%	50751 cd
80%	58001 cd
90%	65251 cd

Conditions:
Number of c-planes: 8
Candela at center: 72501 cd



iso-illuminance Diagram

3%	21.8 lx
5%	36.3 lx
10%	72.5 lx
30%	218 lx
50%	363 lx

Conditions:
Number of c-planes: 8
Lux at center: 725 lx

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

Mounting height: 10 meters / 33 feet

Photometric Report

COLORado 1 Quad Zoom: 50% Zoom, Full Power

Report Summary

Output

Total Lumens: 2650 lm
Peak Intensity: 21846 cd
Illuminance @ 5m: 872 lux
Fixture Efficacy: 26 lm/W

Optical

Horizontal Beam Angle (50%): 19.1°
Vertical Beam Angle (50%): 19.6°
Horizontal Field Angle (10%): 31°
Vertical Field Angle (10%): 31.2°
Horizontal Cutoff Angle (3%): 37.4°
Vertical Cutoff Angle (3%): 37.4°

Conditions

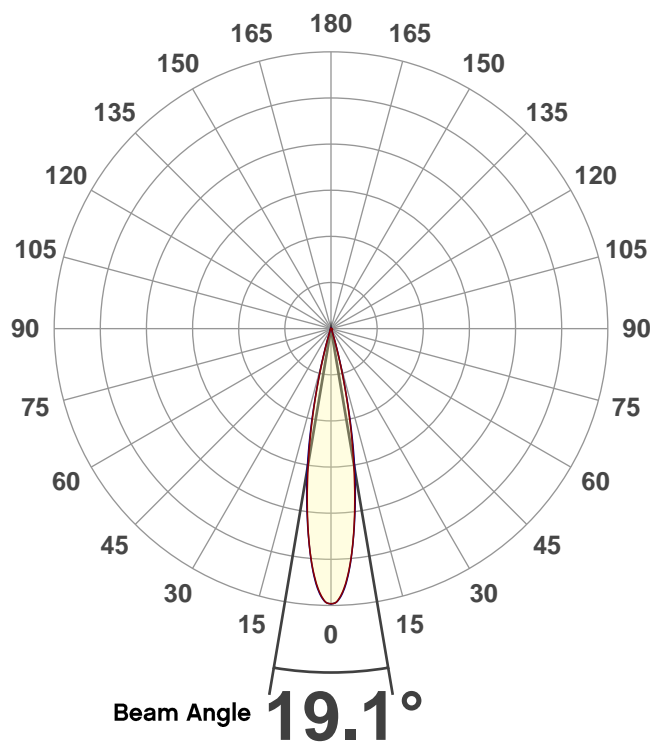
AC Supply: 119 V, 60.1 Hz
Power: 104.5 W
Current: 0.875 A
Power Factor: 0.99



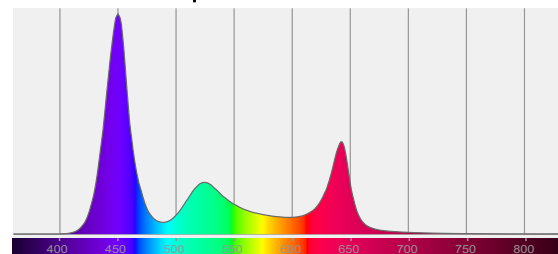
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Overall Measurement

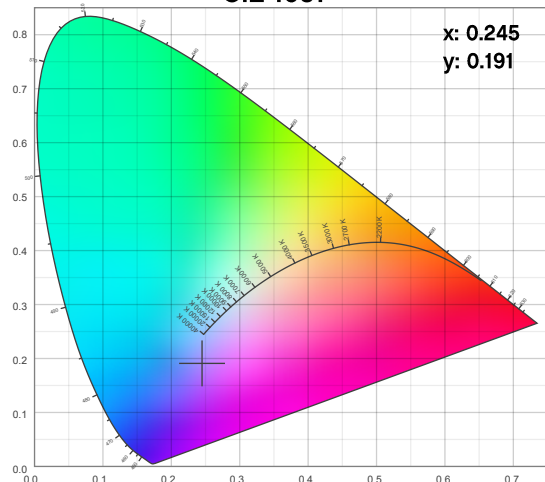
Angular Beam Distribution



Spectral Distribution



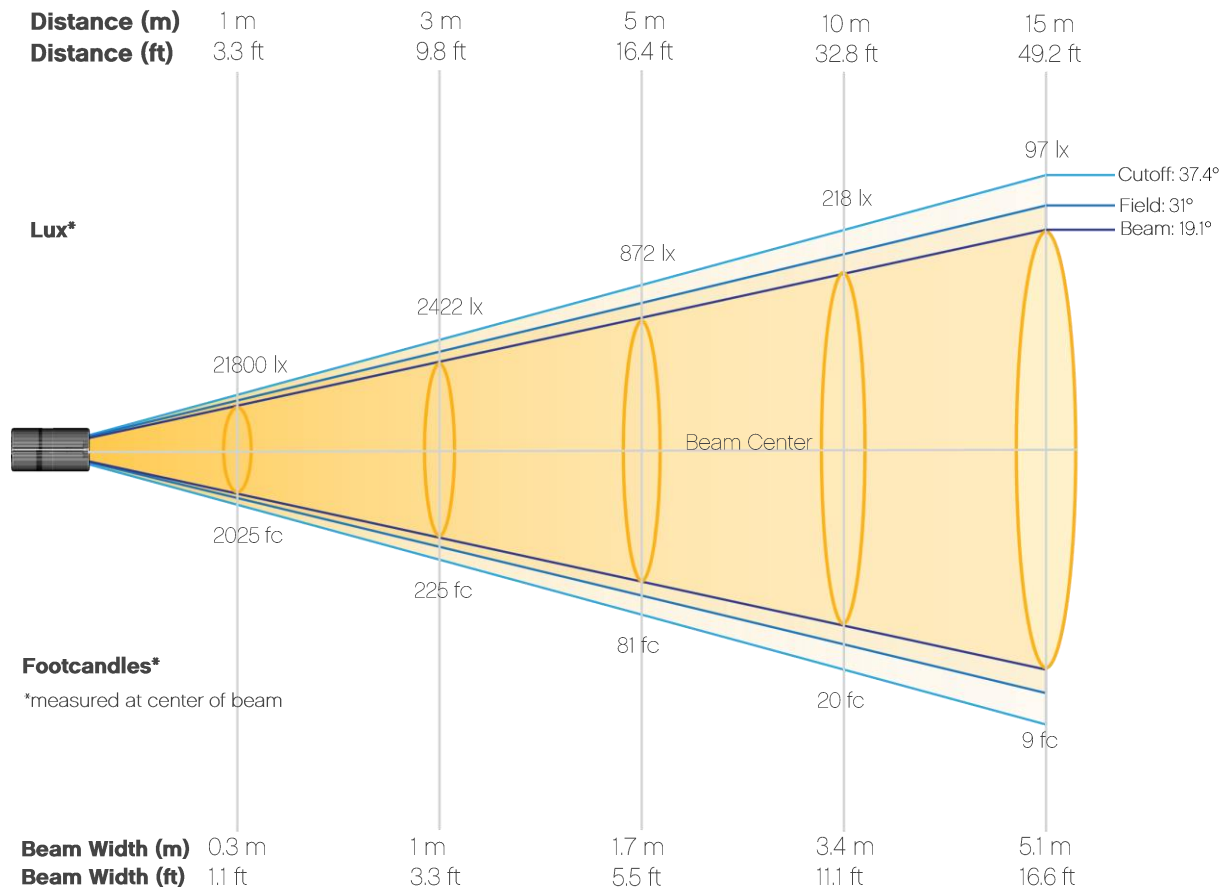
CIE 1931



Photometric Report

COLORado 1 Quad Zoom: 50% Zoom, Full Power

Beam Details

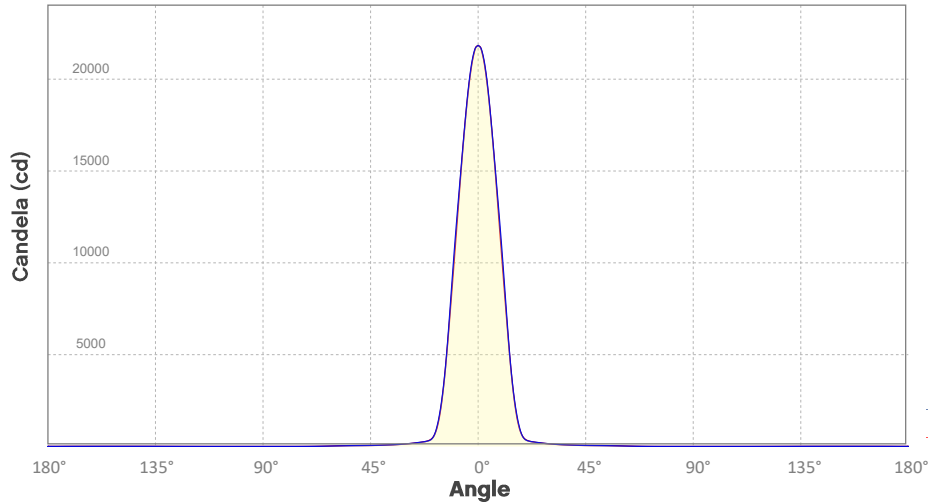


Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	21800	5450	2422	1362	872	606	445	341	269	218
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	180	151	129	111	97	85	75	67	60	54
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	2025	506	225	127	81	56	41	32	25	20
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	17	14	12	10	9	8	7	6	6	5

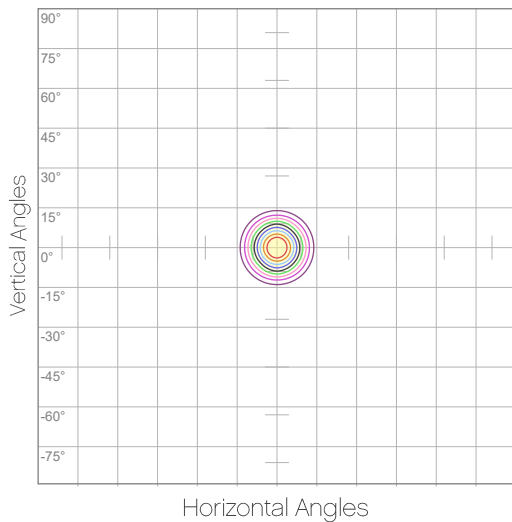
Photometric Report

COLORado 1 Quad Zoom: 50% Zoom, Full Power
Candela Plot



Beam Angle (50%): 19.1°
Field Angle (10%): 31.2°
Cutoff Angle (3%): 37.3°

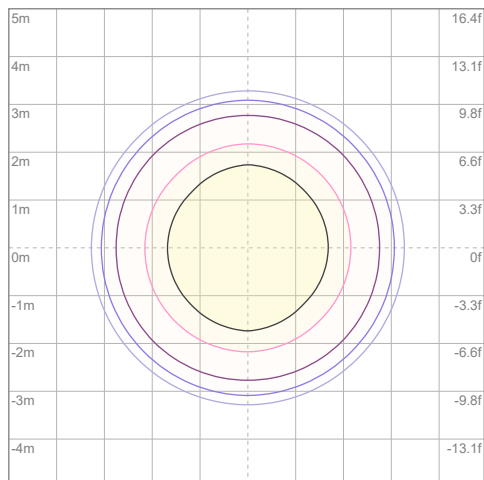
Polar Diagrams



iso-candela Diagram

10%	2180 cd
20%	4360 cd
30%	6540 cd
40%	8720 cd
50%	10900 cd
60%	13080 cd
70%	15260 cd
80%	17440 cd
90%	19620 cd

Conditions:
Number of c-planes: 8
Candela at center: 21800 cd



iso-illuminance Diagram

3%	6.54 lx
5%	10.9 lx
10%	21.8 lx
30%	65.4 lx
50%	109 lx

Conditions:
Number of c-planes: 8
Lux at center: 218 lx

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

Mounting height: 10 meters / 33 feet

Contact Us

General Information	Technical Support
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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.