

PHOTOMETRICS REPORT

COLORADO M
SOLO



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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 M Solo: Full Flood, Full Power

Report Summary

Output

Total Lumens: 435 lm

Peak Intensity: 3078 cd

Illuminance @ 5m: 123 lux

Fixture Efficacy: 11 lm/W

Optical

Horizontal Beam Angle (50%): 24.6°

Vertical Beam Angle (50%): 24.4°

Horizontal Field Angle (10%): 29.6°

Vertical Field Angle (10%): 29.8°

Horizontal Cutoff Angle (3%): 31.9°

Vertical Cutoff Angle (3%): 32.1°

Conditions

AC Supply: 119 V, 60 Hz

Power: 39.73 W

Current: 0.334 A

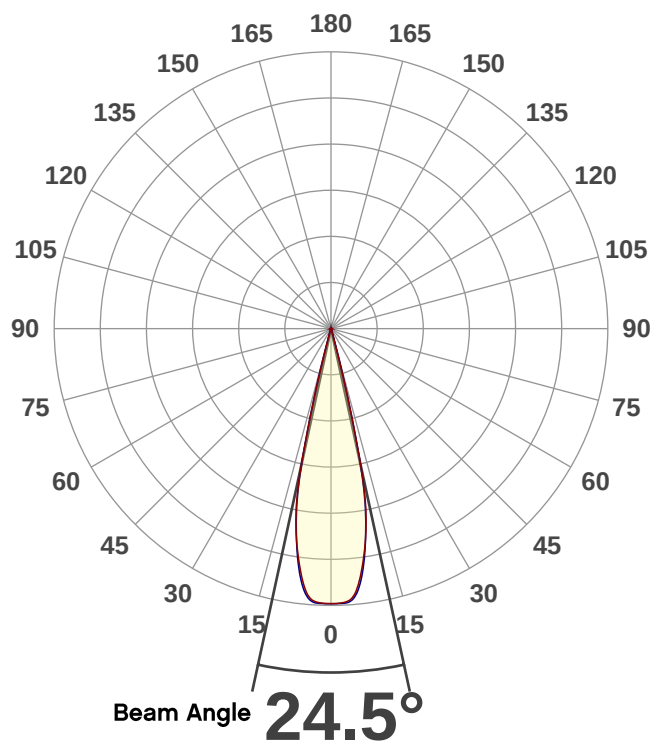
Power Factor: 1.0



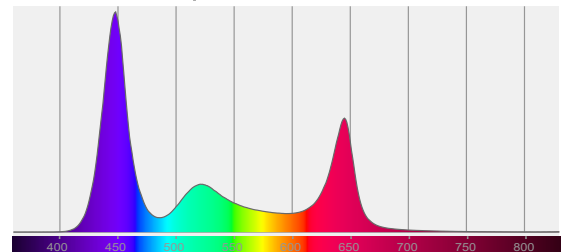
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/14/2020 to LM-63-2002 Standards.

Overall Measurement

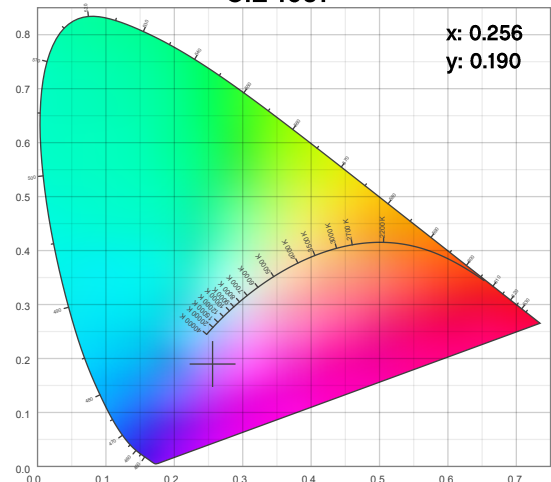
Angular Beam Distribution



Spectral Distribution



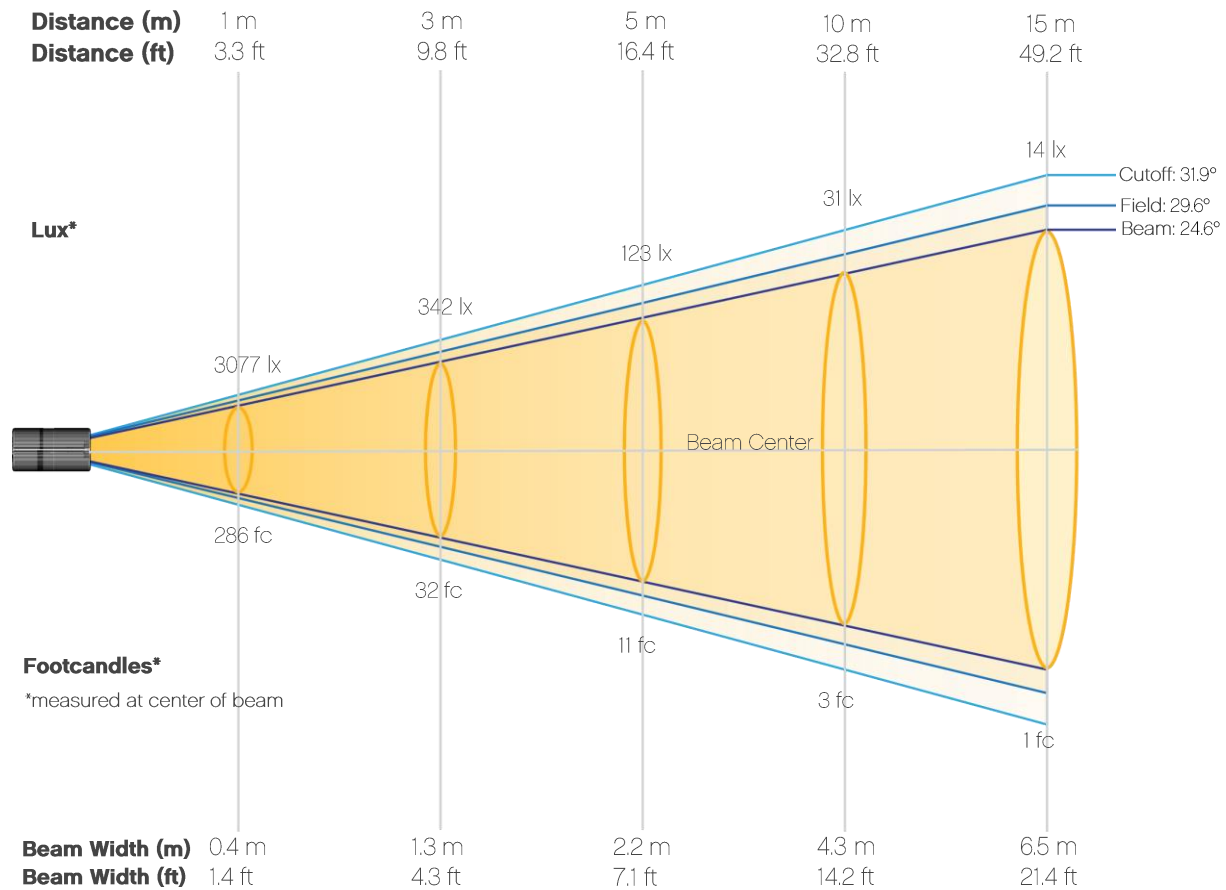
CIE 1931



Photometric Report

COLORado M Solo: Full Flood, Full Power

Beam Details



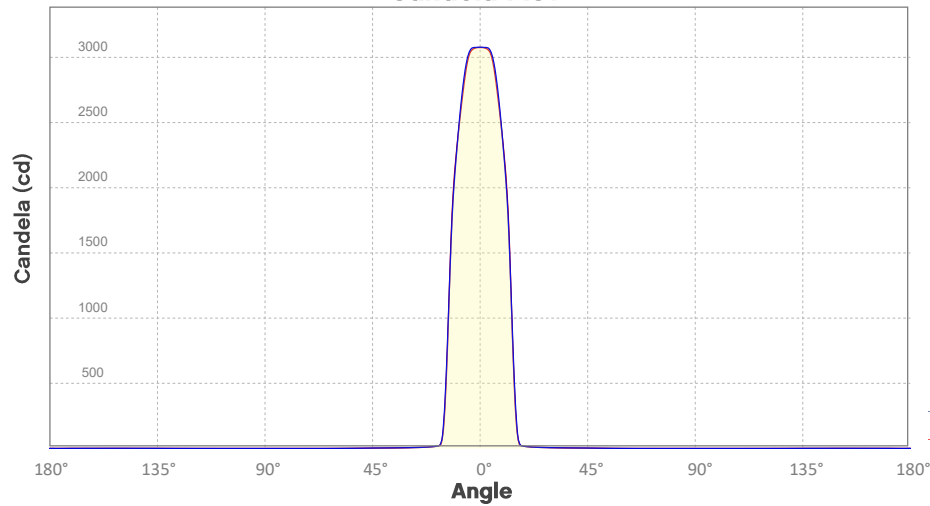
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	3077	769	342	192	123	85	63	48	38	31
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	25	21	18	16	14	12	11	9	9	8
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	286	71	32	18	11	8	6	4	4	3
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	2	2	2	1	1	1	1	1	1	1

Photometric Report

COLOrado M Solo: Full Flood, Full Power

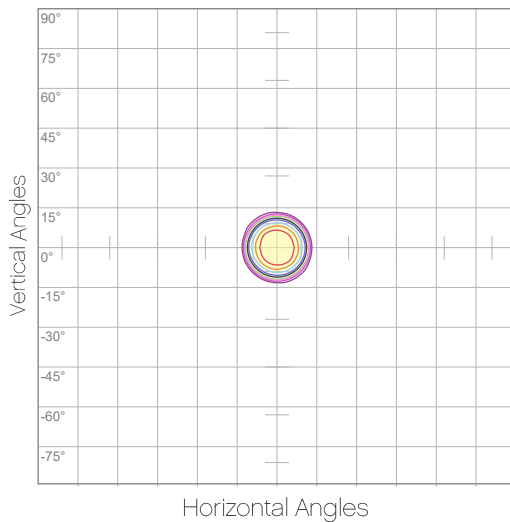
Candela Plot



Beam Angle (50%): 24.5°
Field Angle (10%): 29.7°
Cutoff Angle (3%): 32.1°

Horizontal Distribution
Vertical Distribution

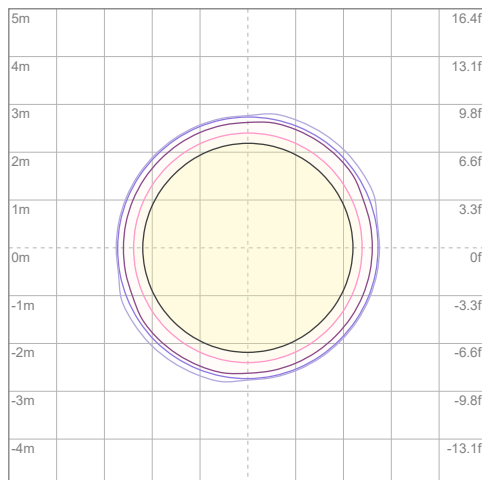
Polar Diagrams



iso-candela Diagram

10%	308 cd
20%	615 cd
30%	923 cd
40%	1231 cd
50%	1538 cd
60%	1846 cd
70%	2154 cd
80%	2461 cd
90%	2769 cd

Conditions:
Number of c-planes: 8
Candela at center: 3077 cd



iso-illuminance Diagram

3%	0.923 lx
5%	1.54 lx
10%	3.08 lx
30%	9.23 lx
50%	15.4 lx

Conditions:
Number of c-planes: 8
Lux at center: 30.8 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 M Solo: 50% Zoom, Full Power

Report Summary

Output

Total Lumens: 425 lm

Peak Intensity: 9314 cd

Illuminance @ 5m: 372 lux

Fixture Efficacy: 11 lm/W

Optical

Horizontal Beam Angle (50%): 12.8°

Vertical Beam Angle (50%): 13°

Horizontal Field Angle (10%): 17.5°

Vertical Field Angle (10%): 17.6°

Horizontal Cutoff Angle (3%): 19.3°

Vertical Cutoff Angle (3%): 19.3°



Conditions

AC Supply: 119 V, 60 Hz

Power: 39.93 W

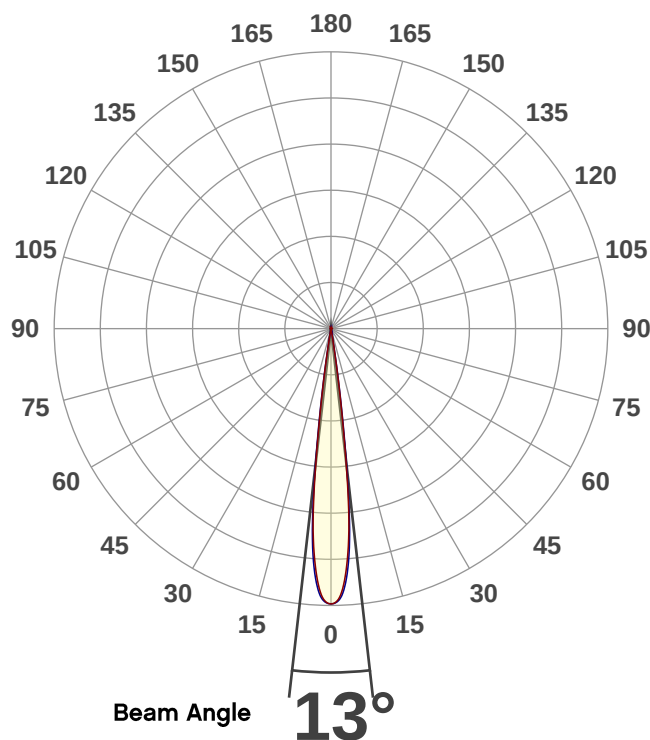
Current: 0.336 A

Power Factor: 1.0

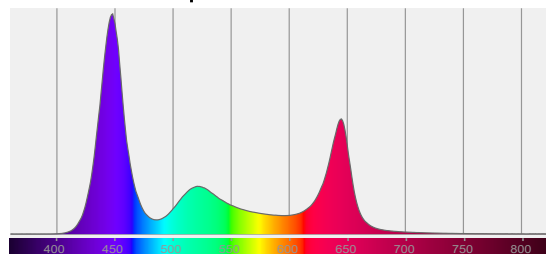
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/14/2020 to LM-63-2002 Standards.

Overall Measurement

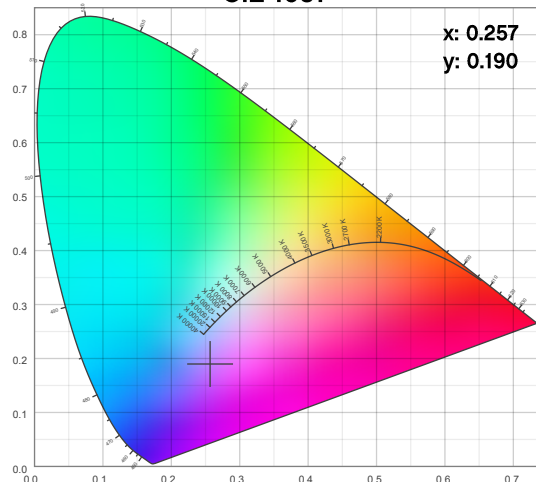
Angular Beam Distribution



Spectral Distribution



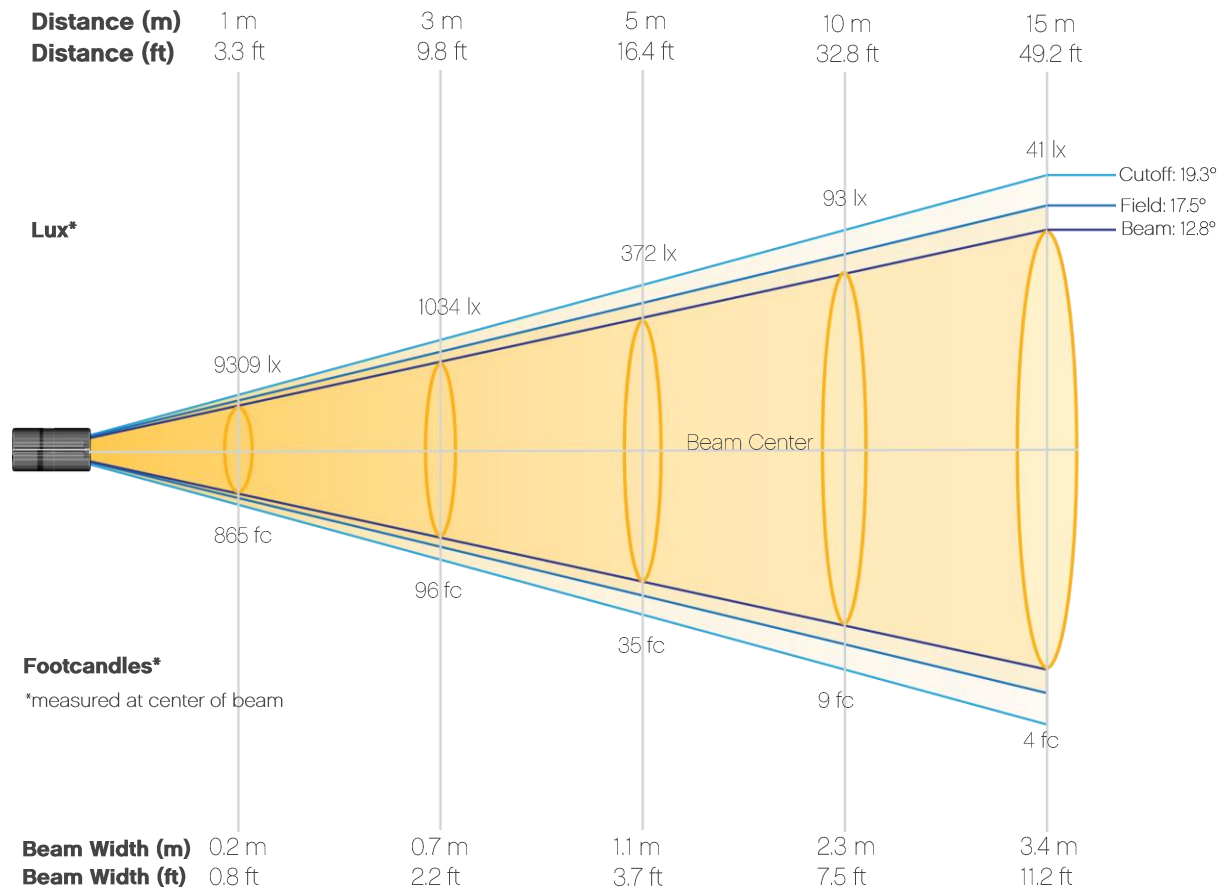
CIE 1931



Photometric Report

COLORado M Solo: 50% Zoom, Full Power

Beam Details



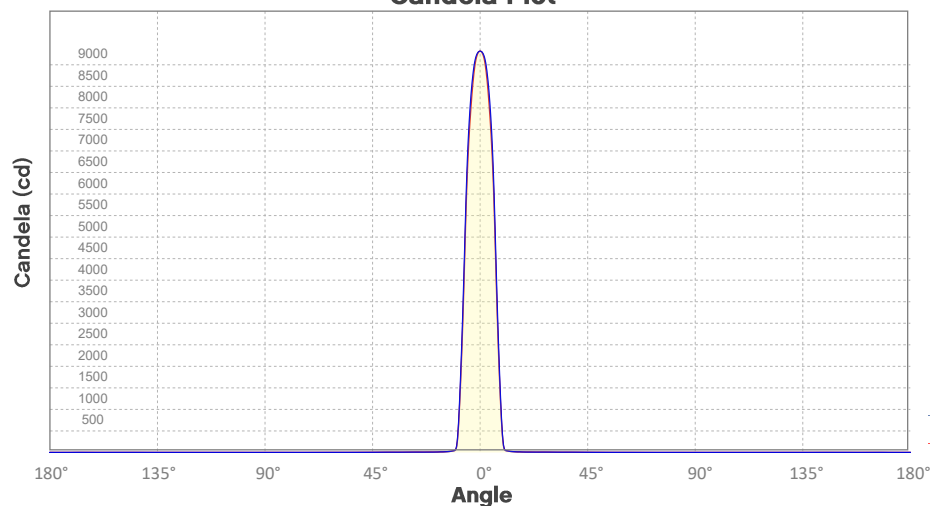
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	9309	2327	1034	582	372	259	190	145	115	93
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	77	65	55	47	41	36	32	29	26	23
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	865	216	96	54	35	24	18	14	11	9
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	7	6	5	4	4	3	3	3	2	2

Photometric Report

COLOrado M Solo: 50% Zoom, Full Power

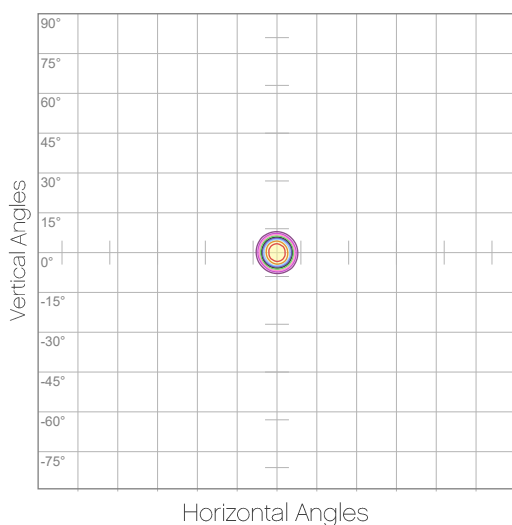
Candela Plot



Beam Angle (50%): 13°
Field Angle (10%): 17.6°
Cutoff Angle (3%): 19.4°

— Horizontal Distribution
— Vertical Distribution

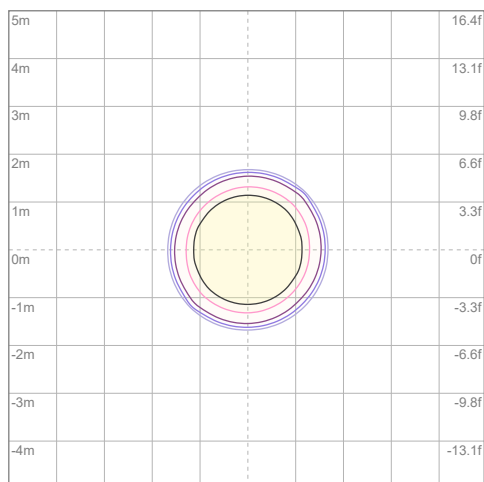
Polar Diagrams



iso-candela Diagram

10%	931 cd
20%	1862 cd
30%	2793 cd
40%	3724 cd
50%	4655 cd
60%	5585 cd
70%	6516 cd
80%	7447 cd
90%	8378 cd

Conditions:
Number of c-planes: 8
Candela at center: 9309 cd



iso-illuminance Diagram

3%	2.79 lx
5%	4.65 lx
10%	9.31 lx
30%	27.9 lx
50%	46.5 lx

Conditions:
Number of c-planes: 8
Lux at center: 93.1 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 M Solo: Full Spot, Full Power

Report Summary

Output

Total Lumens: 454 lm

Peak Intensity: 70599 cd

Illuminance @ 5m: 2815 lux

Fixture Efficacy: 11 lm/W

Optical

Horizontal Beam Angle (50%): 3.4°

Vertical Beam Angle (50%): 2.9°

Horizontal Field Angle (10%): 5.8°

Vertical Field Angle (10%): 5.1°

Horizontal Cutoff Angle (3%): 7°

Vertical Cutoff Angle (3%): 6.8°

Conditions

AC Supply: 121 V, 60 Hz

Power: 40.91 W

Current: 0.339 A

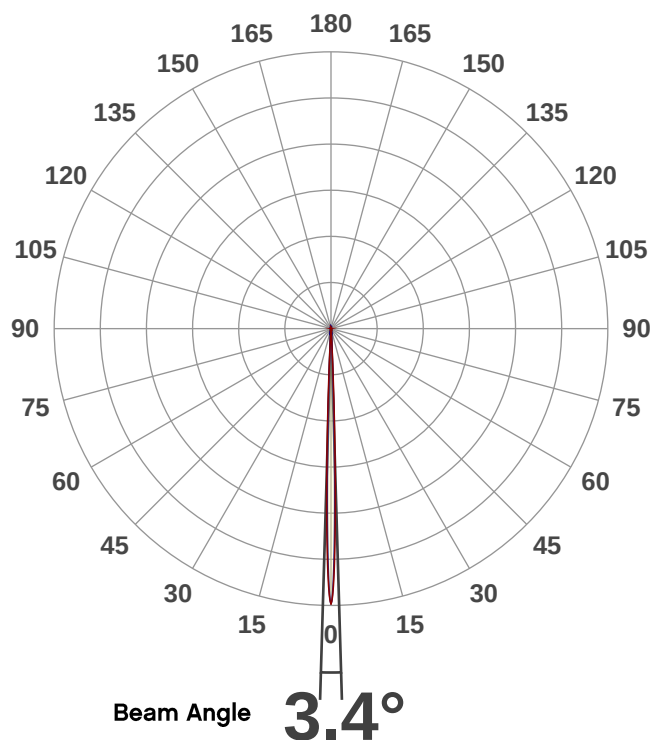
Power Factor: 1.0



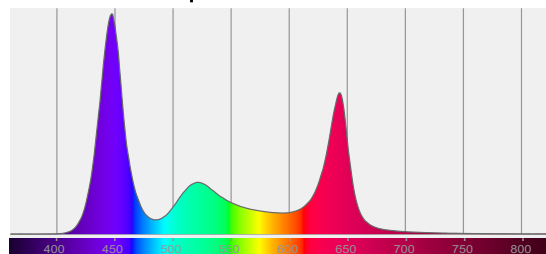
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Overall Measurement

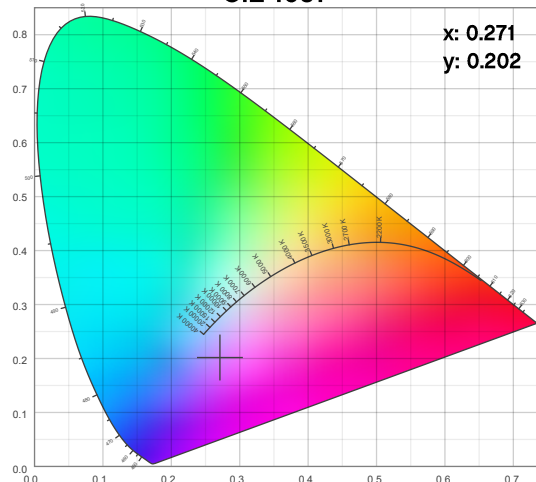
Angular Beam Distribution



Spectral Distribution



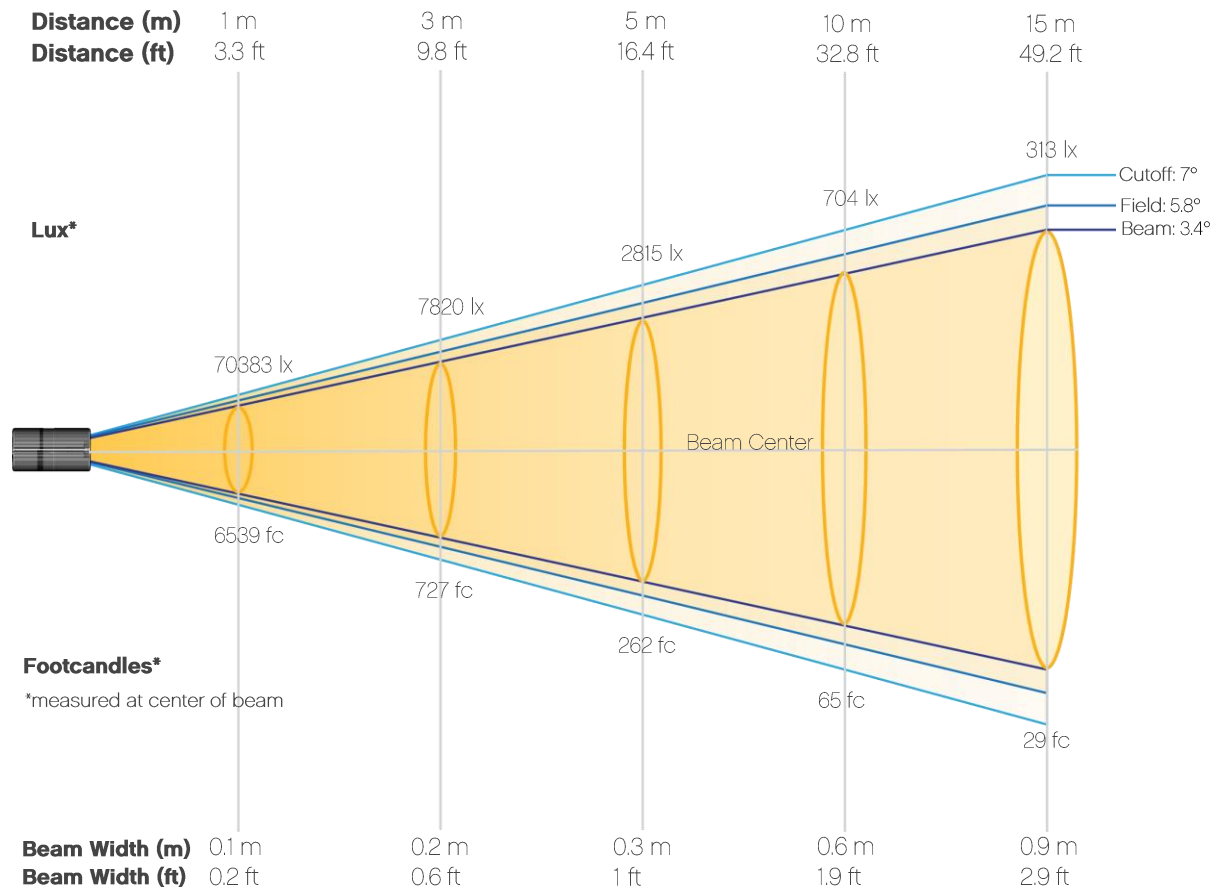
CIE 1931



Photometric Report

COLORado M Solo: Full Spot, Full Power

Beam Details



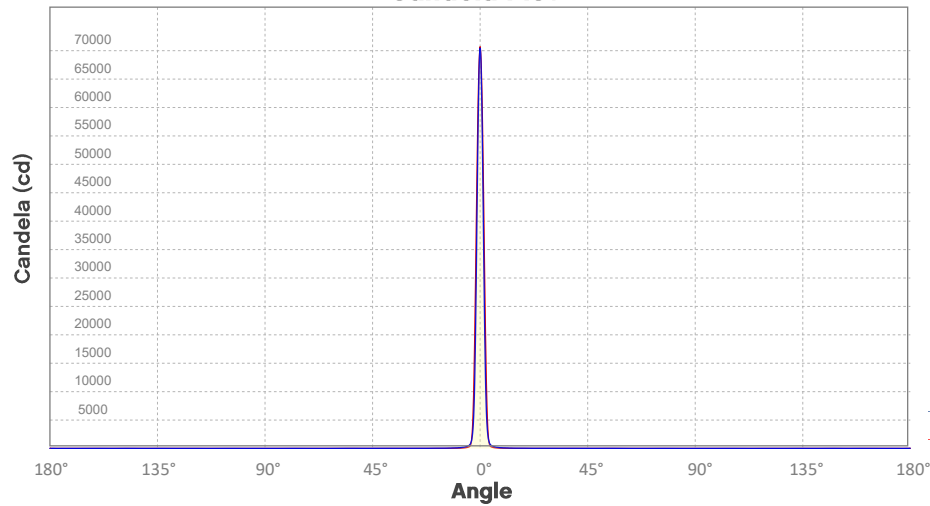
Beam Illuminances from 1-20m (3.3-65.6ft)

Distance	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
Lux	70383	17596	7820	4399	2815	1955	1436	1100	869	704
Distance	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
Lux	582	489	416	359	313	275	244	217	195	176
Distance	3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft
FC	6539	1635	727	409	262	182	133	102	81	65
Distance	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
FC	54	45	39	33	29	26	23	20	18	16

Photometric Report

COLOrado M Solo: Full Spot, Full Power

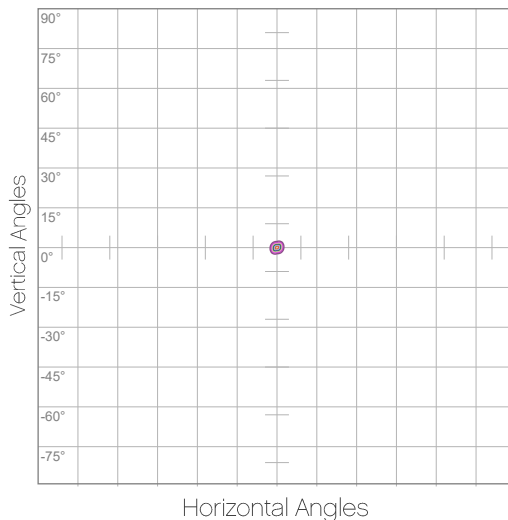
Candela Plot



Beam Angle (50%): 3.4°
Field Angle (10%): 5.7°
Cutoff Angle (3%): 7.1°

Horizontal Distribution
Vertical Distribution

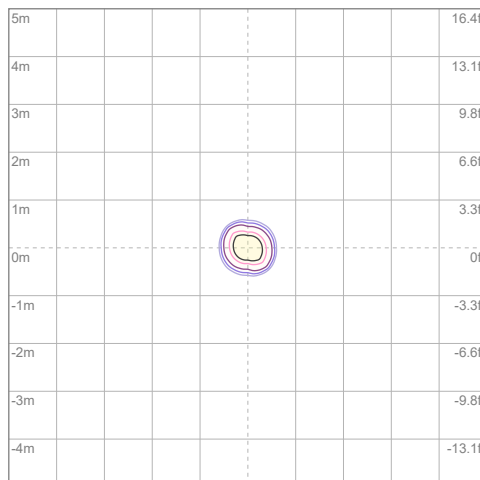
Polar Diagrams



iso-candela Diagram

10%	7038 cd
20%	14077 cd
30%	21115 cd
40%	28153 cd
50%	35192 cd
60%	42230 cd
70%	49268 cd
80%	56306 cd
90%	63345 cd

Conditions:
Number of c-planes: 8
Candela at center: 70383 cd



iso-illuminance Diagram

3%	21.1 lx
5%	35.2 lx
10%	70.4 lx
30%	211 lx
50%	352 lx

Conditions:
Number of c-planes: 8
Lux at center: 704 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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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.

