

PHOTOMETRICS REPORT

# COLORADO 2 SOLO



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## Testing Process

### Total Illuminance Measurements

Illuminance is measured using the Viso Systems LabSpion<sup>®</sup>, 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<sup>®</sup> 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<sup>®</sup> system every six months as recommended by Viso Systems.

# Photometric Report

COLORado 2 Solo: Full Flood, Full Power

## Report Summary

### Output

Total Lumens: 1729 lm  
Peak Intensity: 5921 cd  
Illuminance @ 5m: 236 lux  
Fixture Efficacy: 14 lm/W

### Optical

Horizontal Beam Angle (50%): 32.6°  
Vertical Beam Angle (50%): 32.6°  
Horizontal Field Angle (10%): 45.4°  
Vertical Field Angle (10%): 45°  
Horizontal Cutoff Angle (3%): 52°  
Vertical Cutoff Angle (3%): 52.3°

### Conditions

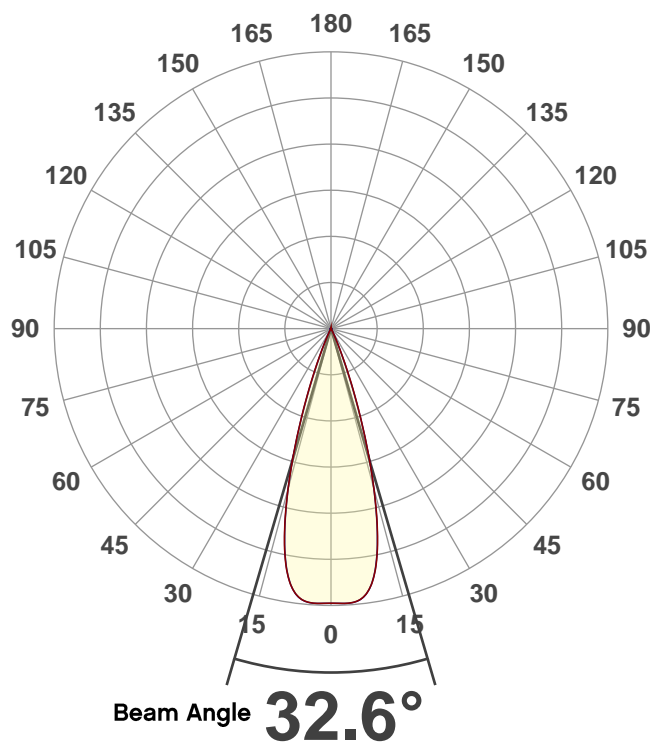
AC Supply: 117 V, 60 Hz  
Power: 122.56 W  
Current: 1.05 A  
Power Factor: 0.99



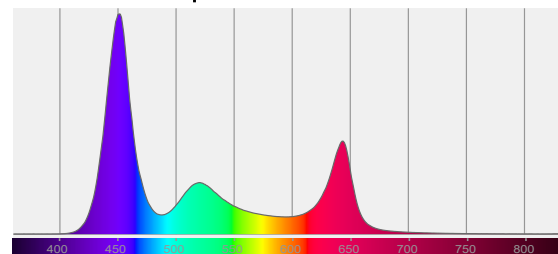
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 9/23/2019 to LM-63-2002 Standards.

## Overall Measurement

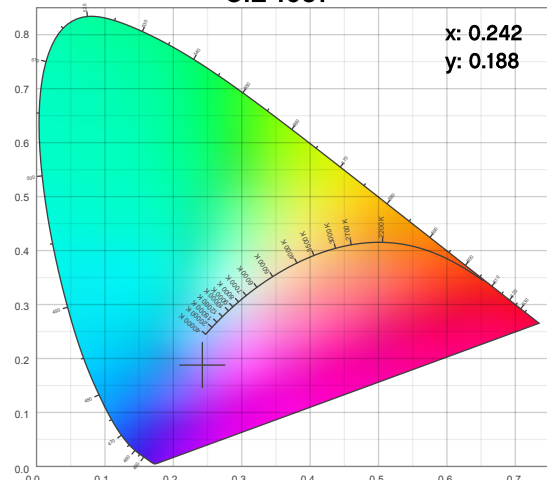
Angular Beam Distribution



Spectral Distribution



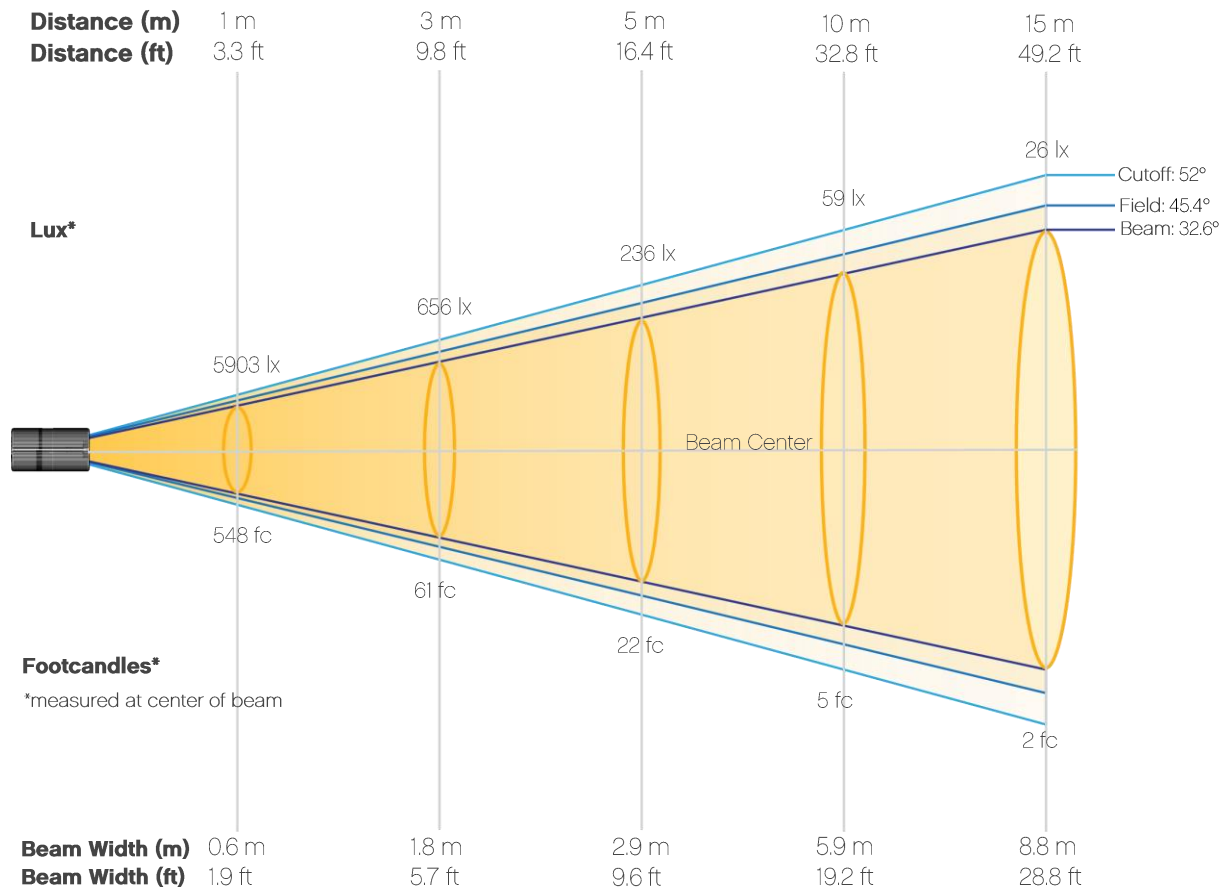
CIE 1931



# Photometric Report

COLORado 2 Solo: Full Flood, Full Power

## Beam Details

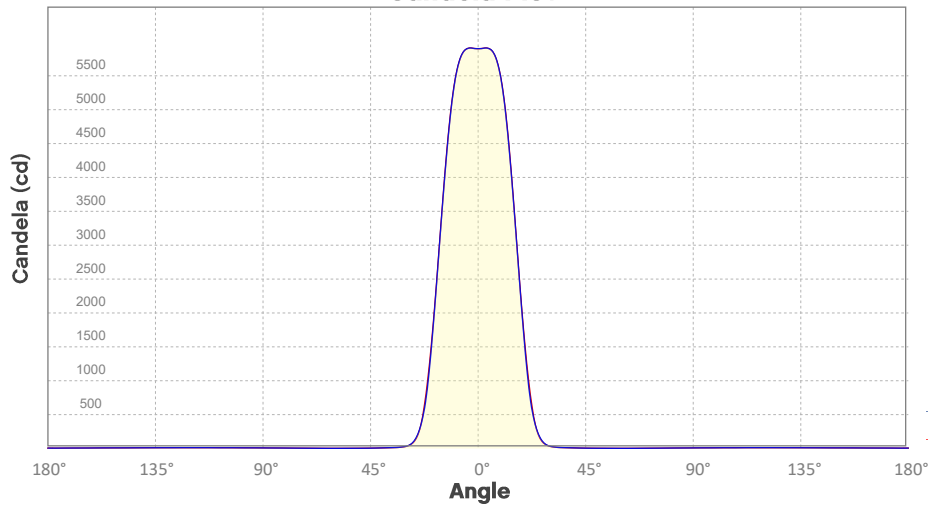


### Beam Illuminances from 1-20m (3.3-65.6ft)

<b>Distance</b>	<b>1m</b>	<b>2m</b>	<b>3m</b>	<b>4m</b>	<b>5m</b>	<b>6m</b>	<b>7m</b>	<b>8m</b>	<b>9m</b>	<b>10m</b>
Lux	5903	1476	656	369	236	164	120	92	73	59
<b>Distance</b>	<b>11m</b>	<b>12m</b>	<b>13m</b>	<b>14m</b>	<b>15m</b>	<b>16m</b>	<b>17m</b>	<b>18m</b>	<b>19m</b>	<b>20m</b>
Lux	49	41	35	30	26	23	20	18	16	15
<b>Distance</b>	<b>3.3ft</b>	<b>6.6ft</b>	<b>9.8ft</b>	<b>13.1ft</b>	<b>16.4ft</b>	<b>19.7ft</b>	<b>23ft</b>	<b>26.2ft</b>	<b>29.5ft</b>	<b>32.8ft</b>
FC	548	137	61	34	22	15	11	9	7	5
<b>Distance</b>	<b>36.1ft</b>	<b>39.4ft</b>	<b>42.7ft</b>	<b>45.9ft</b>	<b>49.2ft</b>	<b>52.5ft</b>	<b>55.8ft</b>	<b>59.1ft</b>	<b>62.3ft</b>	<b>65.6ft</b>
FC	5	4	3	3	2	2	2	2	2	1

# Photometric Report

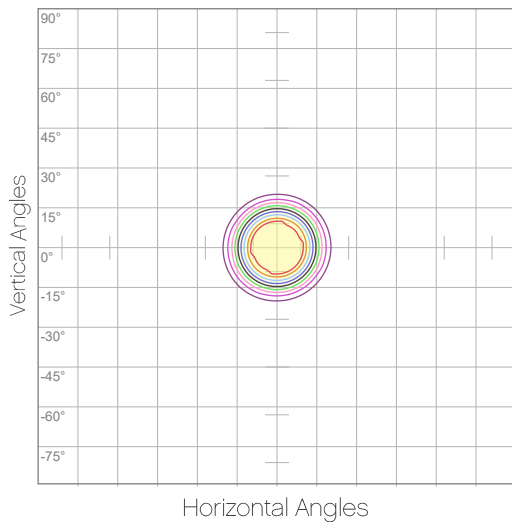
COLORado 2 Solo: Full Flood, Full Power  
Candela Plot



Beam Angle (50%): 32.6°  
Field Angle (10%): 45.3°  
Cutoff Angle (3%): 52.1°

— Horizontal Distribution  
— Vertical Distribution

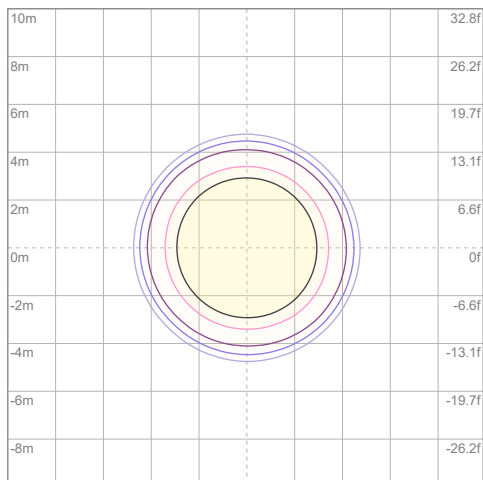
## Polar Diagrams



### iso-candela Diagram

10%	590 cd
20%	1181 cd
30%	1771 cd
40%	2361 cd
50%	2951 cd
60%	3542 cd
70%	4132 cd
80%	4722 cd
90%	5312 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 5903 cd



### iso-illuminance Diagram

3%	1.77 lx
5%	2.95 lx
10%	5.90 lx
30%	17.7 lx
50%	29.5 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 59.0 lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

COLORado 2 Solo: Full Spot, Full Power

## Report Summary

### Output

Total Lumens: 1599 lm  
Peak Intensity: 201414 cd  
Illuminance @ 5m: 8049 lux  
Fixture Efficacy: 13 lm/W

### Optical

Horizontal Beam Angle (50%): 4.9°  
Vertical Beam Angle (50%): 4.8°  
Horizontal Field Angle (10%): 7.3°  
Vertical Field Angle (10%): 7.2°  
Horizontal Cutoff Angle (3%): 8.8°  
Vertical Cutoff Angle (3%): 8.6°

### Conditions

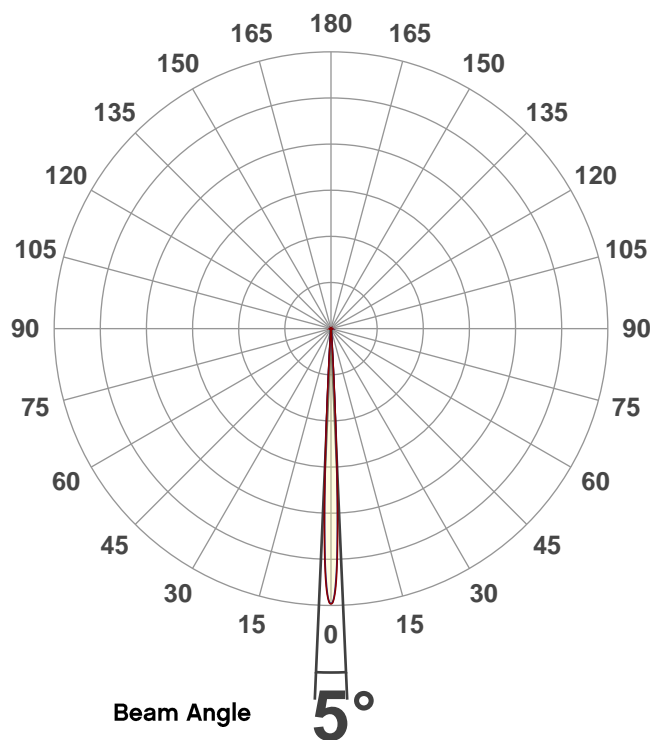
AC Supply: 117 V, 60 Hz  
Power: 125.05 W  
Current: 1.07 A  
Power Factor: 0.99



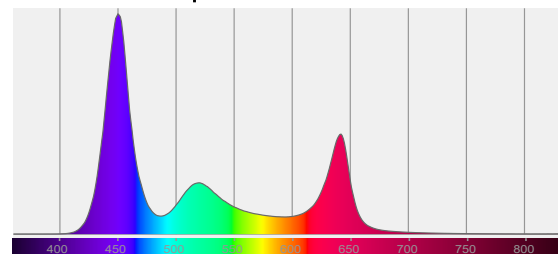
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## Overall Measurement

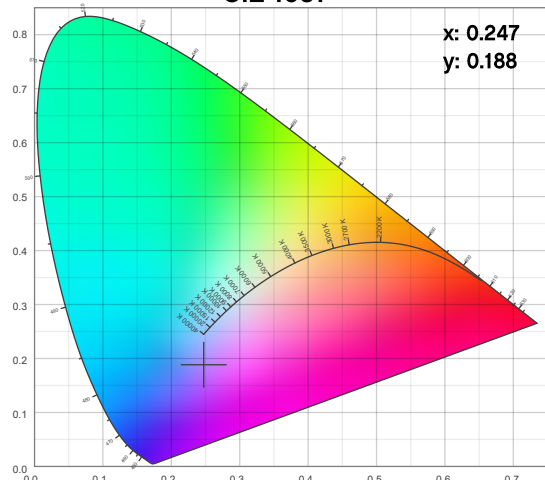
Angular Beam Distribution



Spectral Distribution



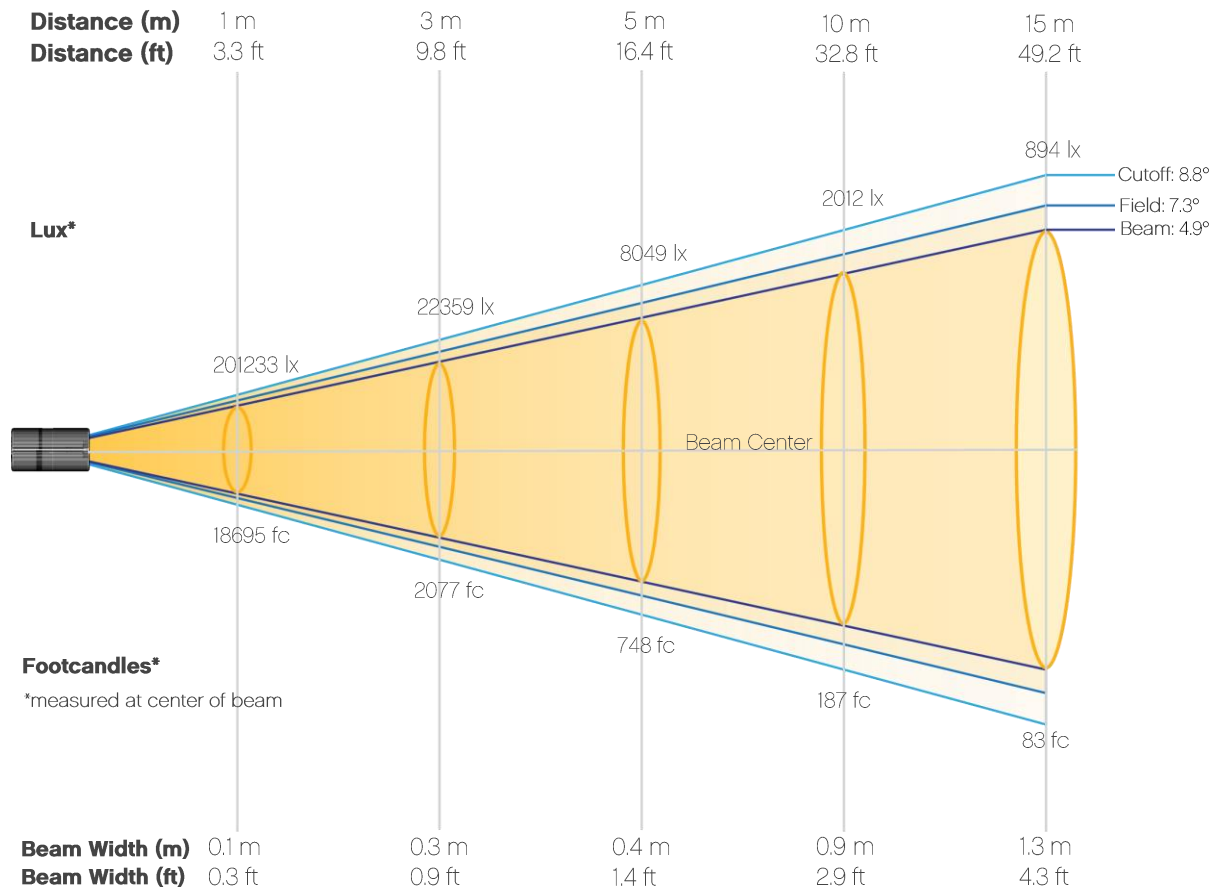
CIE 1931



# Photometric Report

COLORado 2 Solo: Full Spot, Full Power

## Beam Details



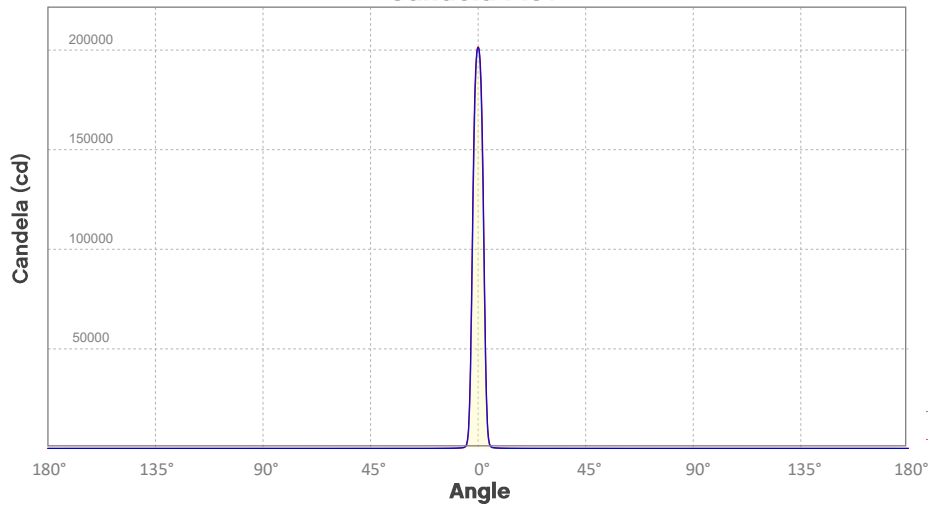
### Beam Illuminances from 1-20m (3.3-65.6ft)

<b>Distance</b>	<b>1m</b>	<b>2m</b>	<b>3m</b>	<b>4m</b>	<b>5m</b>	<b>6m</b>	<b>7m</b>	<b>8m</b>	<b>9m</b>	<b>10m</b>
Lux	201233	50308	22359	12577	8049	5590	4107	3144	2484	2012
<b>Distance</b>	<b>11m</b>	<b>12m</b>	<b>13m</b>	<b>14m</b>	<b>15m</b>	<b>16m</b>	<b>17m</b>	<b>18m</b>	<b>19m</b>	<b>20m</b>
Lux	1663	1397	1191	1027	894	786	696	621	557	503
<b>Distance</b>	<b>3.3ft</b>	<b>6.6ft</b>	<b>9.8ft</b>	<b>13.1ft</b>	<b>16.4ft</b>	<b>19.7ft</b>	<b>23ft</b>	<b>26.2ft</b>	<b>29.5ft</b>	<b>32.8ft</b>
FC	18695	4674	2077	1168	748	519	382	292	231	187
<b>Distance</b>	<b>36.1ft</b>	<b>39.4ft</b>	<b>42.7ft</b>	<b>45.9ft</b>	<b>49.2ft</b>	<b>52.5ft</b>	<b>55.8ft</b>	<b>59.1ft</b>	<b>62.3ft</b>	<b>65.6ft</b>
FC	155	130	111	95	83	73	65	58	52	47



# Photometric Report

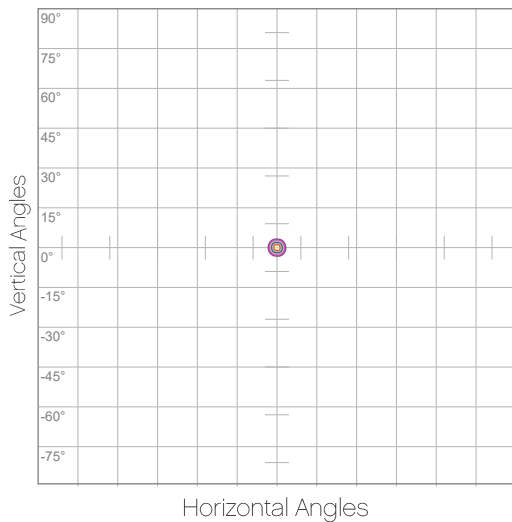
COLORado 2 Solo: Full Spot, Full Power  
Candela Plot



Beam Angle (50%): 5°  
Field Angle (10%): 7.4°  
Cutoff Angle (3%): 8.8°

— Horizontal Distribution  
— Vertical Distribution

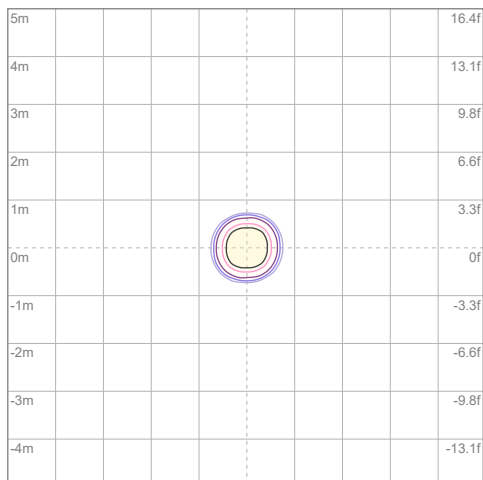
## Polar Diagrams



### iso-candela Diagram

10%	20123 cd
20%	40247 cd
30%	60370 cd
40%	80493 cd
50%	100617 cd
60%	120740 cd
70%	140863 cd
80%	160987 cd
90%	181110 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 201233 cd



### iso-illuminance Diagram

3%	60.4 lx
5%	101 lx
10%	201 lx
30%	604 lx
50%	1006 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 2012 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 2 Solo: 50% Zoom, Full Power

## Report Summary

### Output

Total Lumens: 1808 lm  
Peak Intensity: 24420 cd  
Illuminance @ 5m: 977 lux  
Fixture Efficacy: 15 lm/W

### Optical

Horizontal Beam Angle (50%): 15.7°  
Vertical Beam Angle (50%): 15.6°  
Horizontal Field Angle (10%): 24°  
Vertical Field Angle (10%): 23.8°  
Horizontal Cutoff Angle (3%): 28.1°  
Vertical Cutoff Angle (3%): 28.1°

### Conditions

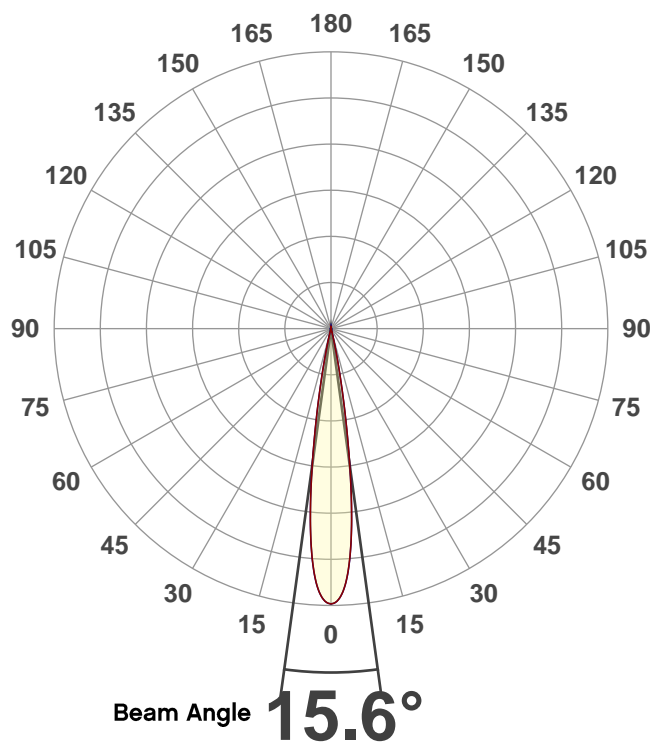
AC Supply: 117 V, 60 Hz  
Power: 123.9 W  
Current: 1.06 A  
Power Factor: 0.99



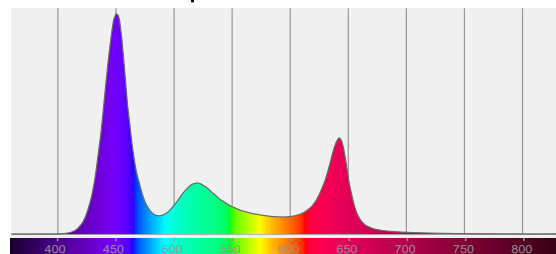
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## Overall Measurement

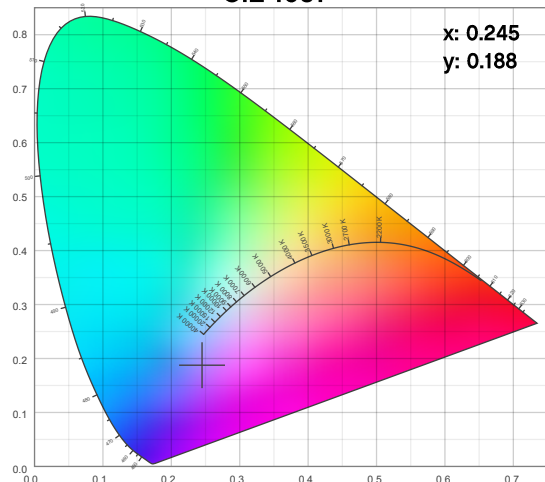
Angular Beam Distribution



Spectral Distribution



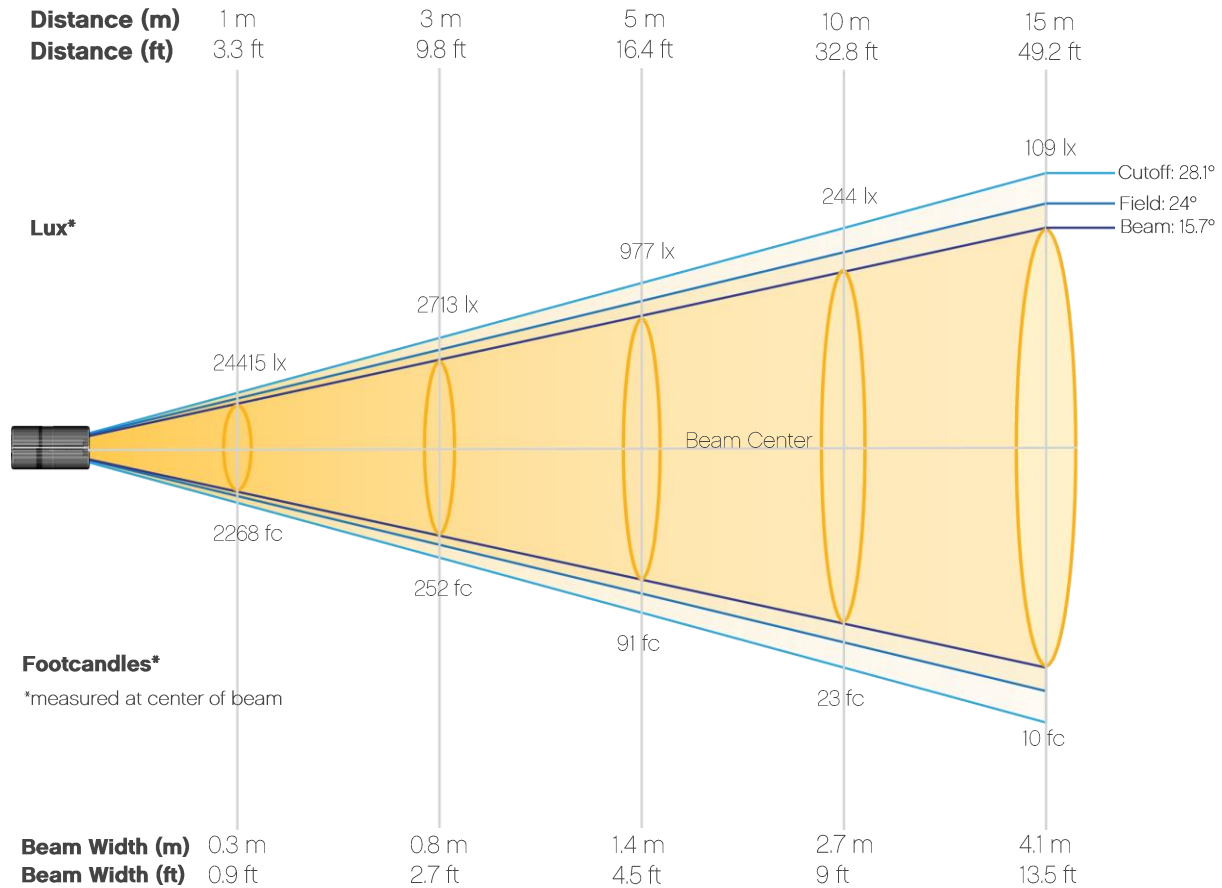
CIE 1931



# Photometric Report

COLORado 2 Solo: 50% Zoom, Full Power

## Beam Details



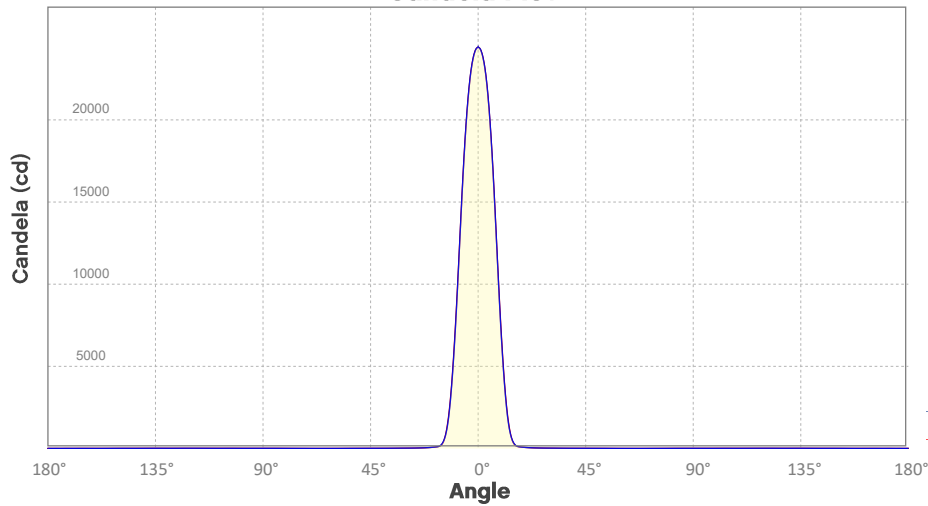
### Beam Illuminances from 1-20m (3.3-65.6ft)

<b>Distance</b>	<b>1m</b>	<b>2m</b>	<b>3m</b>	<b>4m</b>	<b>5m</b>	<b>6m</b>	<b>7m</b>	<b>8m</b>	<b>9m</b>	<b>10m</b>
Lux	24415	6104	2713	1526	977	678	498	381	301	244
<b>Distance</b>	<b>11m</b>	<b>12m</b>	<b>13m</b>	<b>14m</b>	<b>15m</b>	<b>16m</b>	<b>17m</b>	<b>18m</b>	<b>19m</b>	<b>20m</b>
Lux	202	170	144	125	109	95	84	75	68	61
<b>Distance</b>	<b>3.3ft</b>	<b>6.6ft</b>	<b>9.8ft</b>	<b>13.1ft</b>	<b>16.4ft</b>	<b>19.7ft</b>	<b>23ft</b>	<b>26.2ft</b>	<b>29.5ft</b>	<b>32.8ft</b>
FC	2268	567	252	142	91	63	46	35	28	23
<b>Distance</b>	<b>36.1ft</b>	<b>39.4ft</b>	<b>42.7ft</b>	<b>45.9ft</b>	<b>49.2ft</b>	<b>52.5ft</b>	<b>55.8ft</b>	<b>59.1ft</b>	<b>62.3ft</b>	<b>65.6ft</b>
FC	19	16	13	12	10	9	8	7	6	6

# Photometric Report

COLORado 2 Solo: 50% Zoom, Full Power

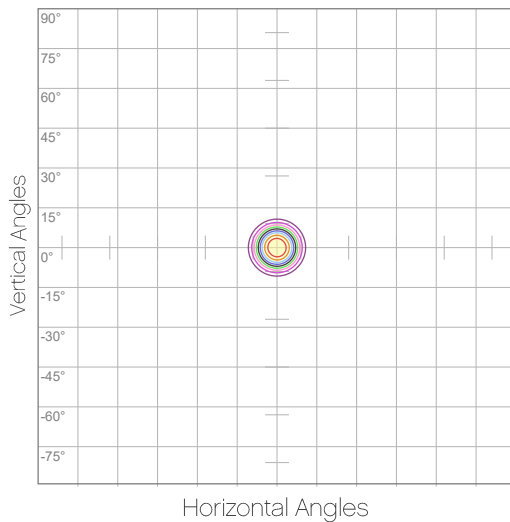
## Candela Plot



Beam Angle (50%): 15.6°  
Field Angle (10%): 23.9°  
Cutoff Angle (3%): 28°

— Horizontal Distribution  
— Vertical Distribution

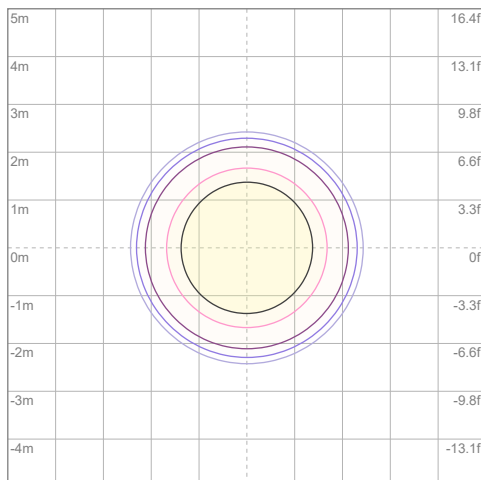
## Polar Diagrams



### iso-candela Diagram

10%	2442 cd
20%	4883 cd
30%	7325 cd
40%	9766 cd
50%	12208 cd
60%	14649 cd
70%	17091 cd
80%	19532 cd
90%	21974 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 24415 cd



### iso-illuminance Diagram

3%	7.32 lx
5%	12.2 lx
10%	24.4 lx
30%	73.2 lx
50%	122 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 244 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
<b>Chauvet World Headquarters</b>	
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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.