

PHOTOMETRICS REPORT  
COLORADO 2-QUAD ZOOM



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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 Quad Zoom: Full Flood, Full Power

## Report Summary

### Output

Total Lumens: 4238 lm  
Peak Intensity: 15220 cd  
Illuminance @ 5m: 608 lux  
Fixture Efficacy: 20 lm/W

### Optical

Horizontal Beam Angle (50%): 30.1°  
Vertical Beam Angle (50%): 29.8°  
Horizontal Field Angle (10%): 45°  
Vertical Field Angle (10%): 44°  
Horizontal Cutoff Angle (3%): 61.3°  
Vertical Cutoff Angle (3%): 61.5°

### Conditions

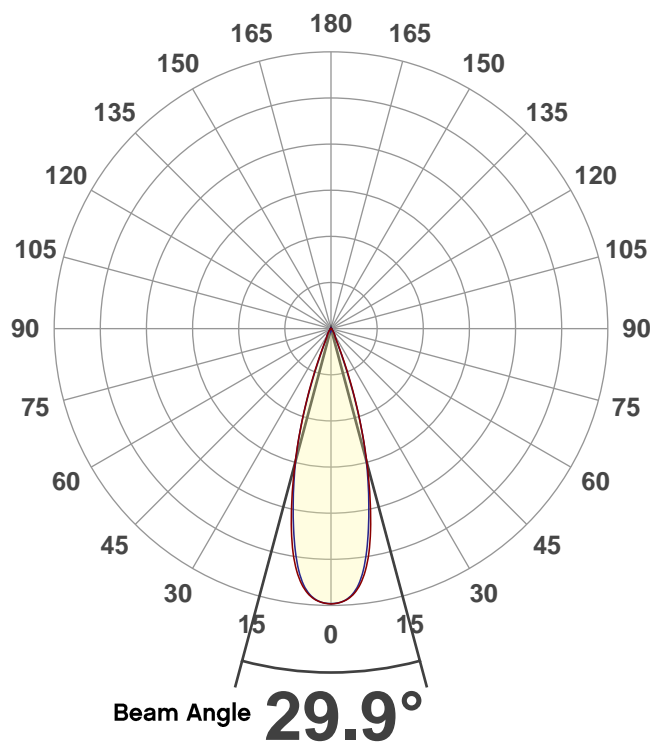
AC Supply: 119 V, 60.1 Hz  
Power: 216.54 W  
Current: 1.82 A  
Power Factor: 0.99



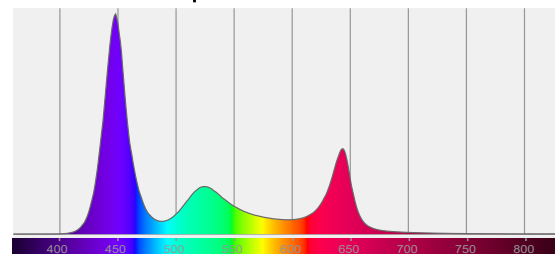
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/17/2020 to LM-63-2002 Standards.

## Overall Measurement

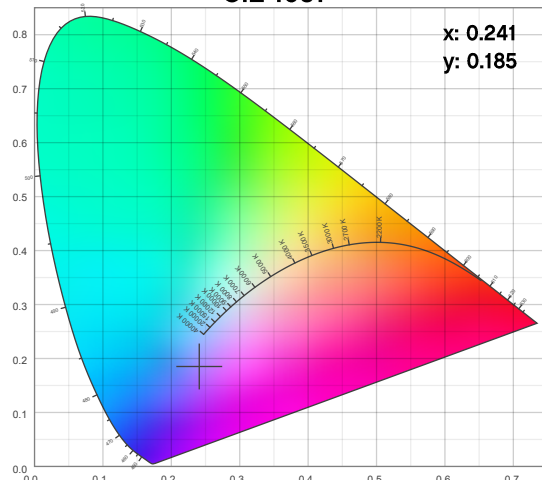
Angular Beam Distribution



Spectral Distribution



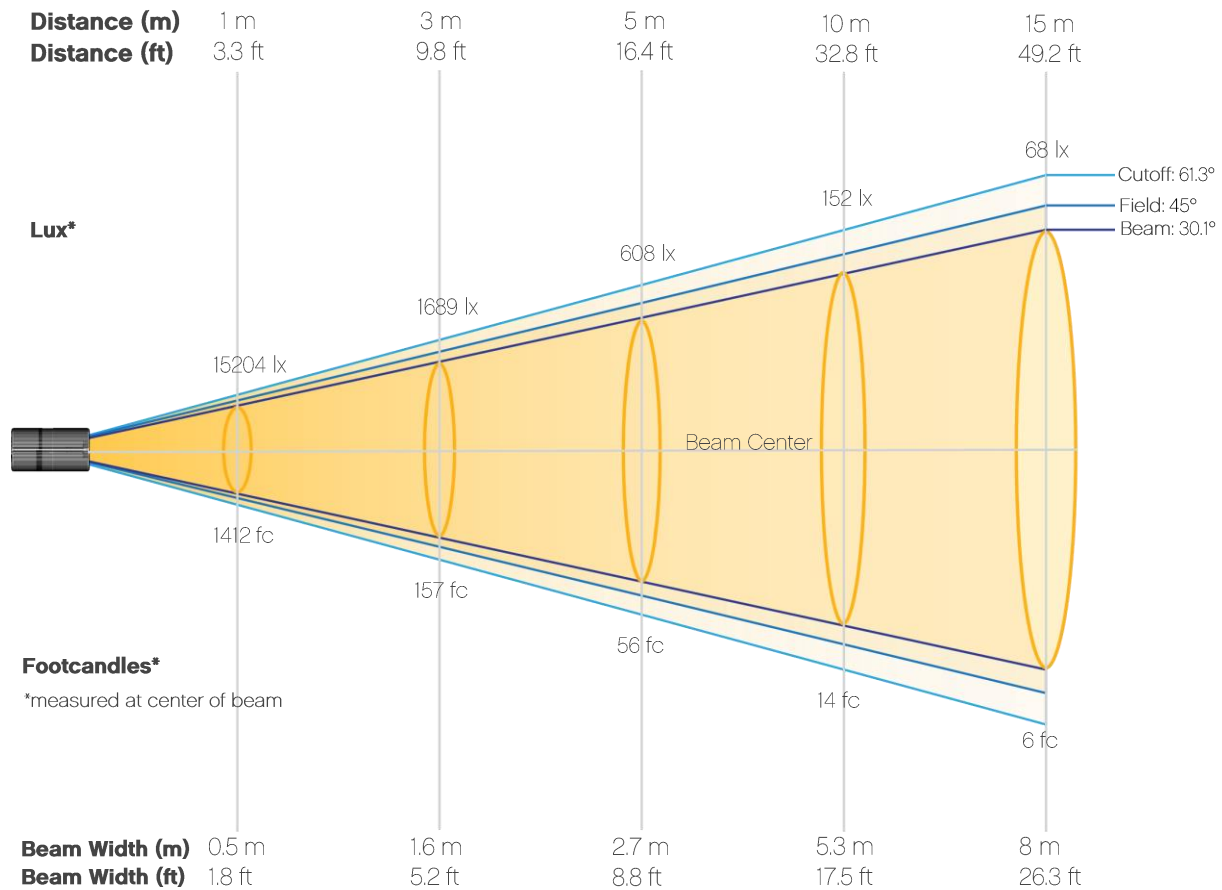
CIE 1931



# Photometric Report

COLORado 2 Quad Zoom: Full Flood, Full Power

## Beam Details

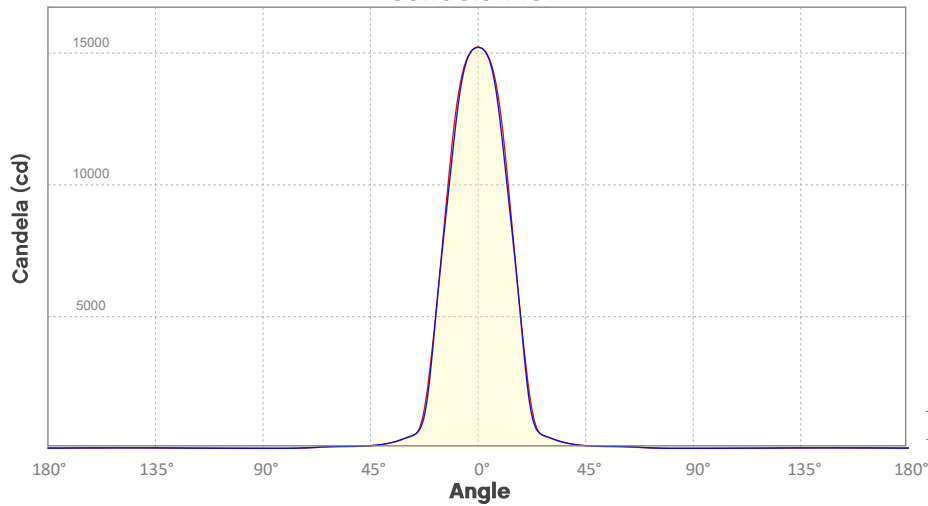


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	15204	3801	1689	950	608	422	310	238	188	152
<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	126	106	90	78	68	59	53	47	42	38
<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	1412	353	157	88	56	39	29	22	17	14
<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	12	10	8	7	6	6	5	4	4	4

# Photometric Report

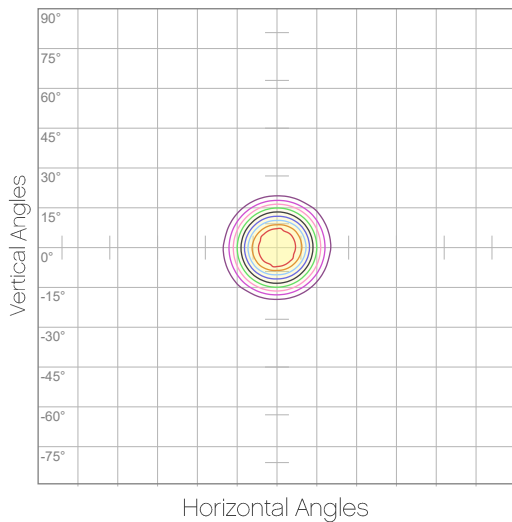
COLORado 2 Quad Zoom: Full Flood, Full Power  
Candela Plot



Beam Angle (50%): 29.9°  
Field Angle (10%): 44.6°  
Cutoff Angle (3%): 61.2°

— Horizontal Distribution  
— Vertical Distribution

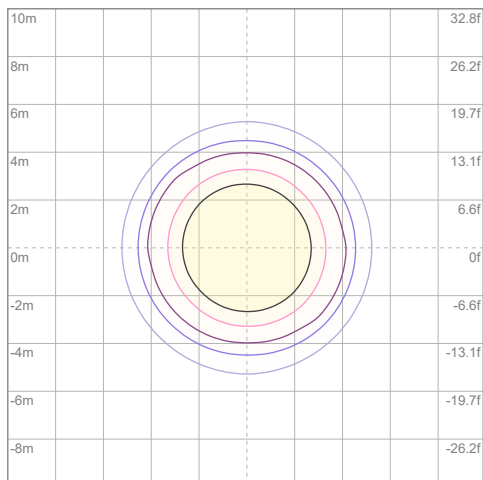
## Polar Diagrams



### iso-candela Diagram

10%	1520 cd
20%	3041 cd
30%	4561 cd
40%	6082 cd
50%	7602 cd
60%	9122 cd
70%	10643 cd
80%	12163 cd
90%	13684 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 15204 cd



### iso-illuminance Diagram

3%	4.56 lx
5%	7.60 lx
10%	15.2 lx
30%	45.6 lx
50%	76.0 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 152 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 Quad Zoom: Full Spot, Full Power

## Report Summary

### Output

Total Lumens: 4738 lm  
Peak Intensity: 133080 cd  
Illuminance @ 5m: 5315 lux  
Fixture Efficacy: 22 lm/W

### Optical

Horizontal Beam Angle (50%): 7.5°  
Vertical Beam Angle (50%): 8.2°  
Horizontal Field Angle (10%): 14.8°  
Vertical Field Angle (10%): 16°  
Horizontal Cutoff Angle (3%): 20.5°  
Vertical Cutoff Angle (3%): 26.5°

### Conditions

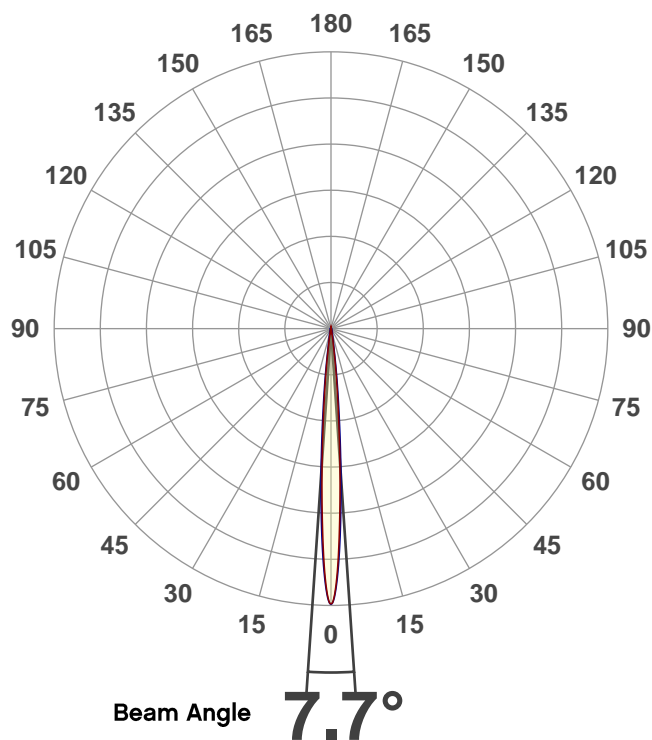
AC Supply: 120 V, 60 Hz  
Power: 219.94 W  
Current: 1.83 A  
Power Factor: 0.99



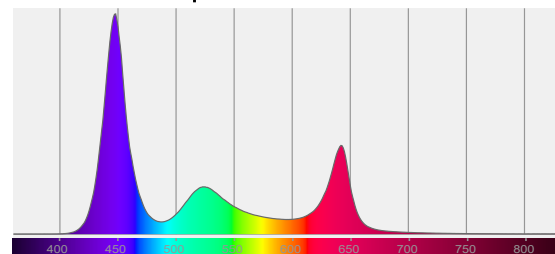
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 2/17/2020 to LM-63-2002 Standards.

## Overall Measurement

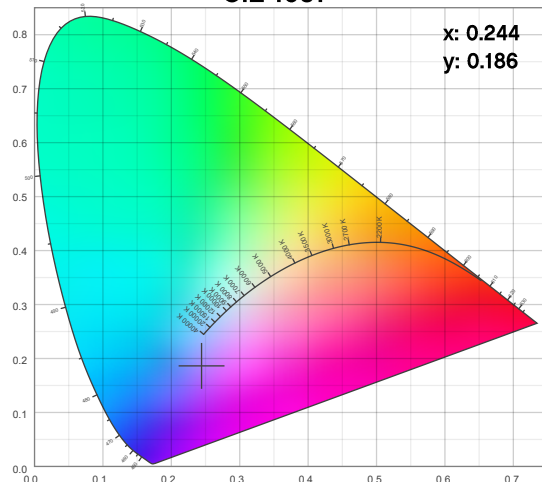
Angular Beam Distribution



Spectral Distribution



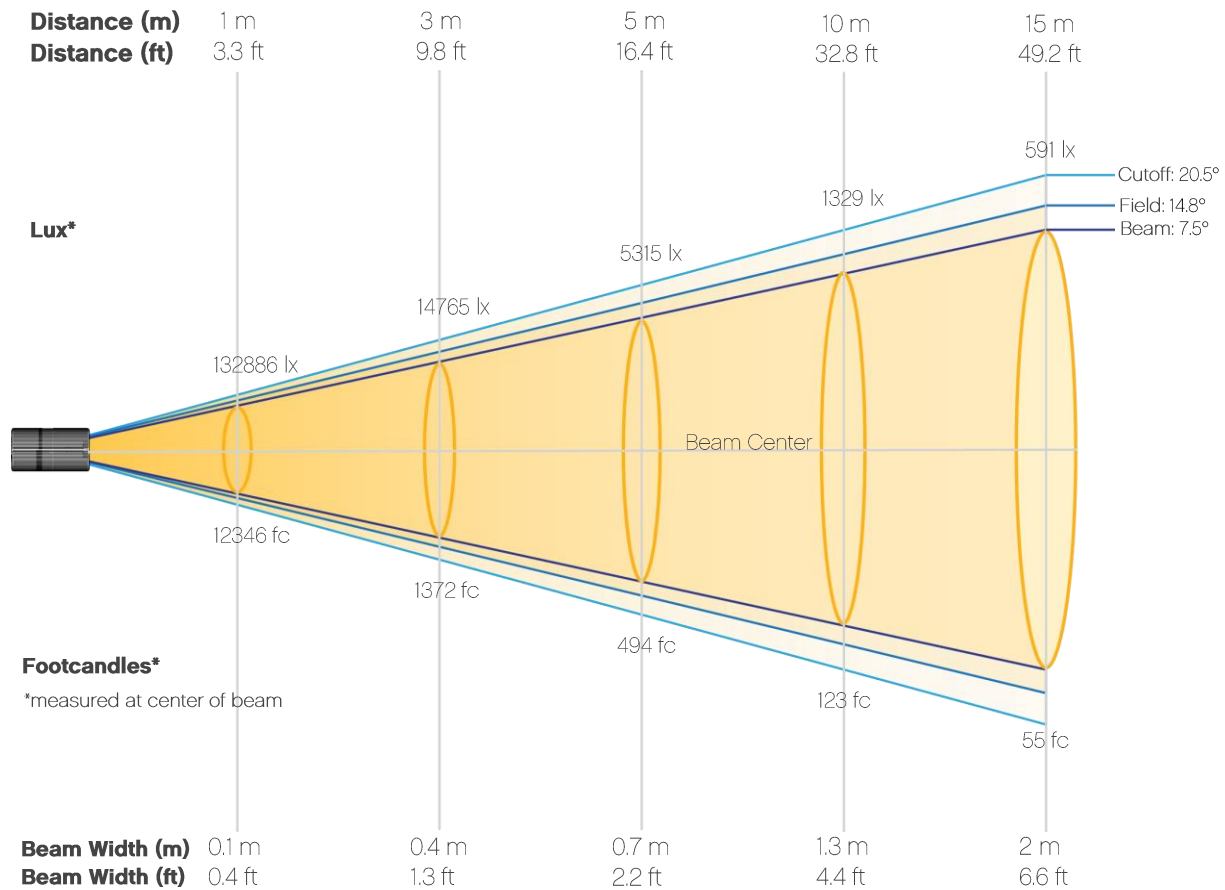
CIE 1931



# Photometric Report

COLORado 2 Quad Zoom: Full Spot, Full Power

## Beam Details



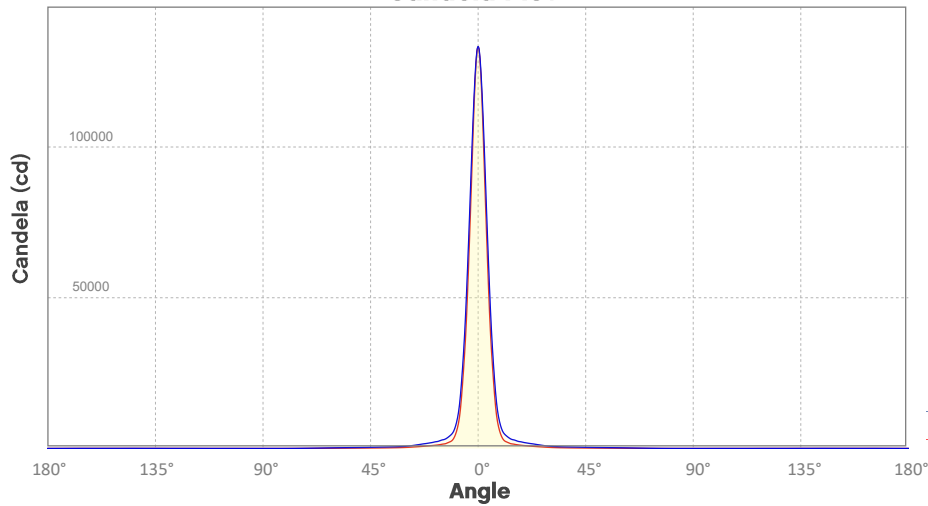
### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	132886	33221	14765	8305	5315	3691	2712	2076	1641	1329
<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	1098	923	786	678	591	519	460	410	368	332
<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	12346	3086	1372	772	494	343	252	193	152	123
<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	102	86	73	63	55	48	43	38	34	31



# Photometric Report

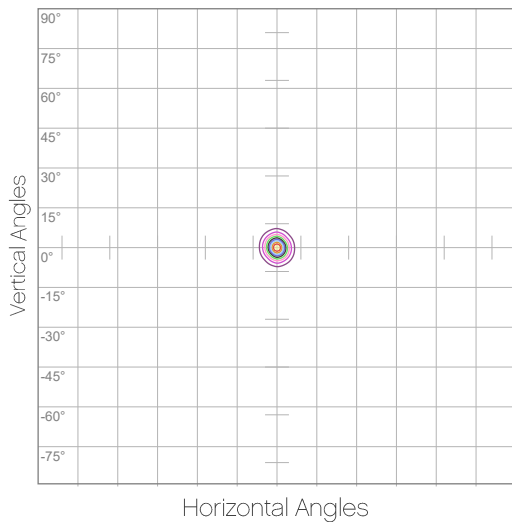
COLORado 2 Quad Zoom: Full Spot, Full Power  
Candela Plot



Beam Angle (50%): 7.7°  
Field Angle (10%): 15.2°  
Cutoff Angle (3%): 22.7°

— Horizontal Distribution  
— Vertical Distribution

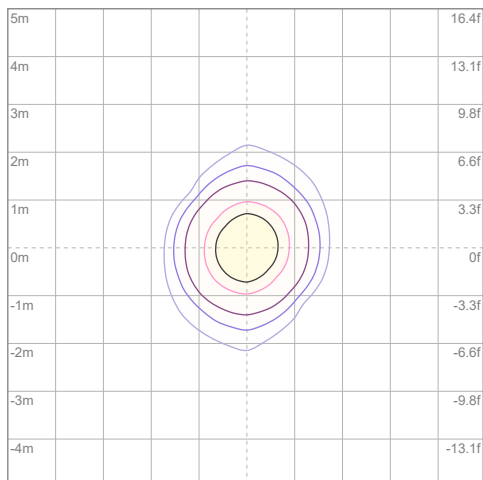
## Polar Diagrams



### iso-candela Diagram

10%	13289 cd
20%	26577 cd
30%	39866 cd
40%	53154 cd
50%	66443 cd
60%	79732 cd
70%	93020 cd
80%	106309 cd
90%	119597 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 132886 cd



### iso-illuminance Diagram

3%	39.9 lx
5%	66.4 lx
10%	133 lx
30%	399 lx
50%	664 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 1329 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 Quad Zoom: 50% Zoom, Full Power

## Report Summary

### Output

Total Lumens: 4005 lm  
Peak Intensity: 43568 cd  
Illuminance @ 5m: 1742 lux  
Fixture Efficacy: 19 lm/W

### Optical

Horizontal Beam Angle (50%): 15.7°  
Vertical Beam Angle (50%): 15.5°  
Horizontal Field Angle (10%): 26.1°  
Vertical Field Angle (10%): 25.7°  
Horizontal Cutoff Angle (3%): 33.8°  
Vertical Cutoff Angle (3%): 34.7°

### Conditions

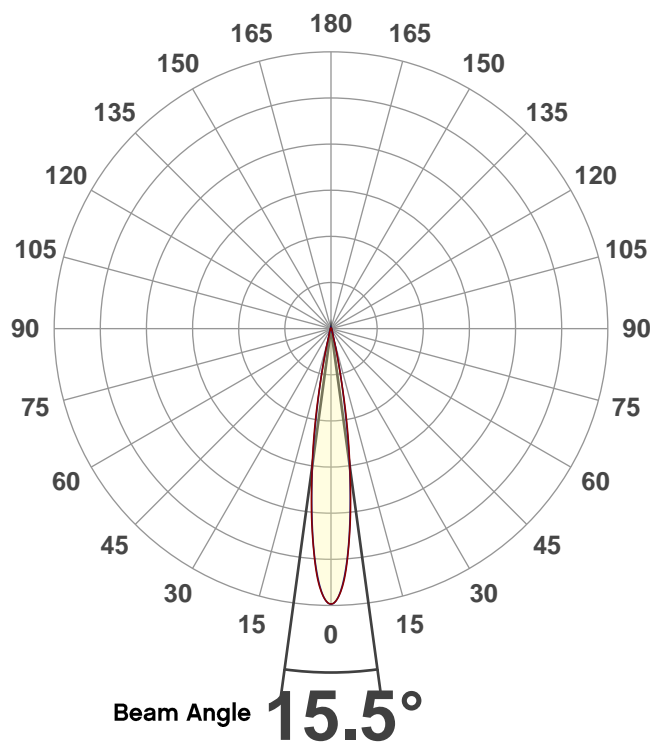
AC Supply: 119 V, 60 Hz  
Power: 215.14 W  
Current: 1.81 A  
Power Factor: 0.99



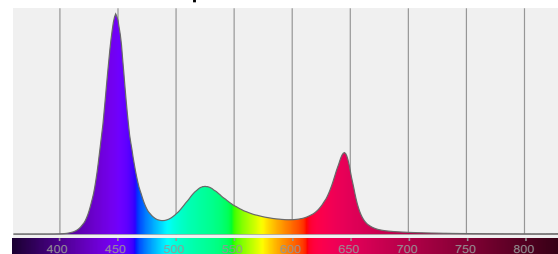
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## Overall Measurement

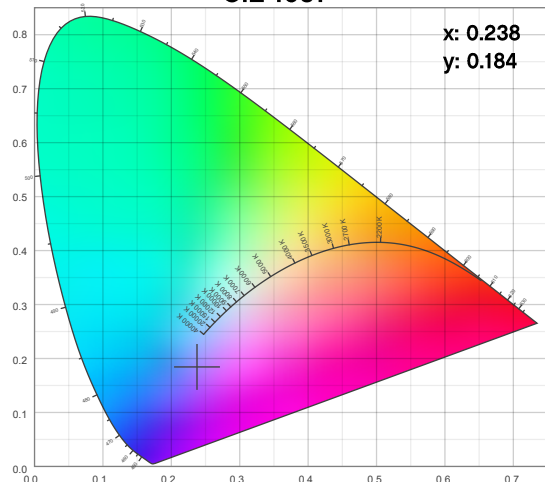
Angular Beam Distribution



Spectral Distribution



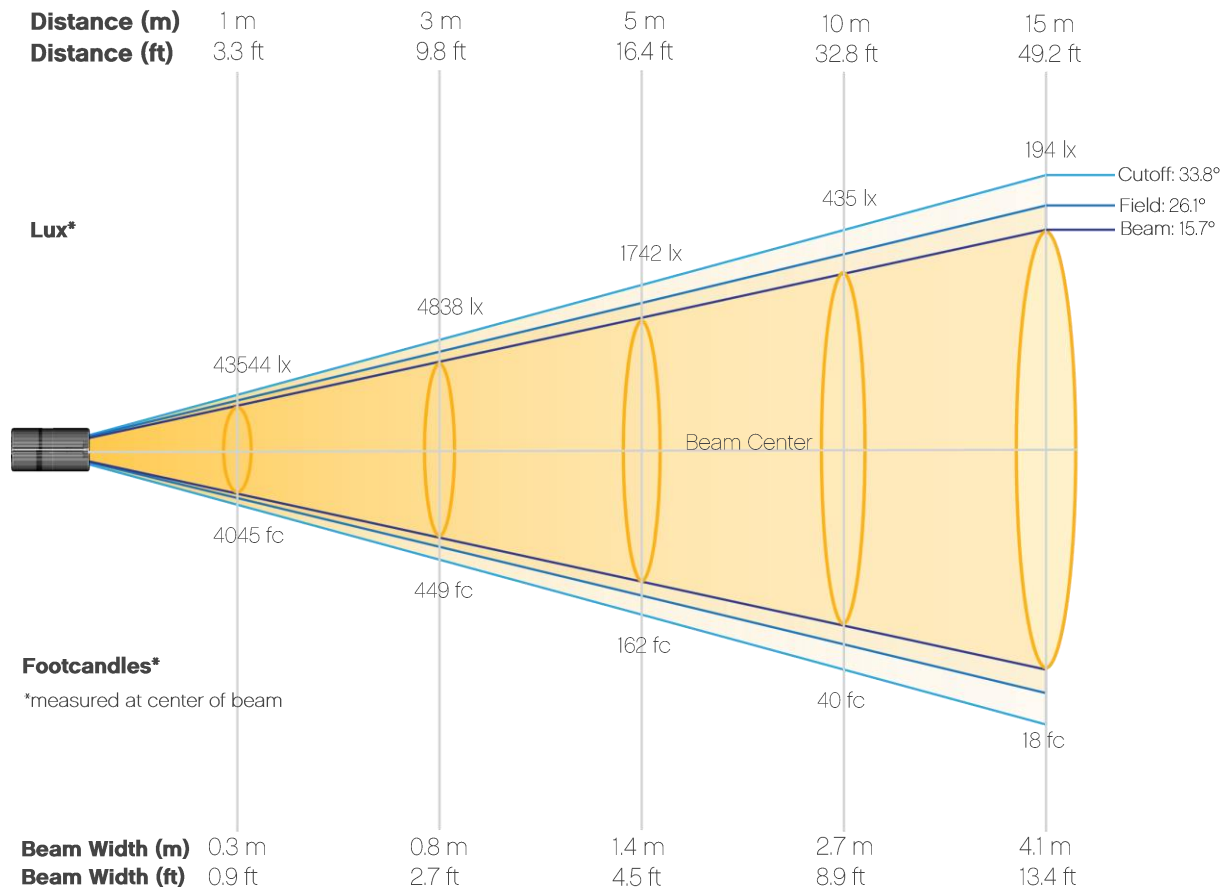
CIE 1931



# Photometric Report

COLORado 2 Quad Zoom: 50% Zoom, Full Power

## Beam Details

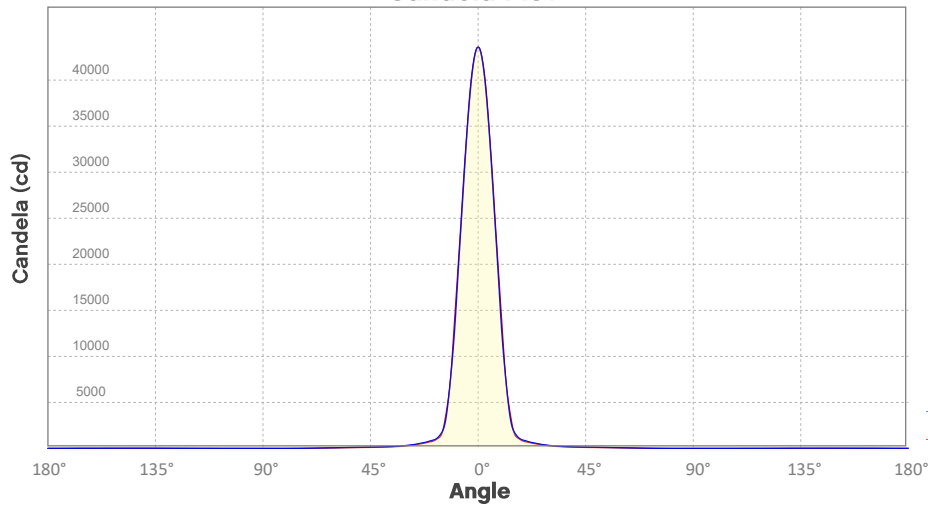


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	43544	10886	4838	2722	1742	1210	889	680	538	435
<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	360	302	258	222	194	170	151	134	121	109
<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	4045	1011	449	253	162	112	83	63	50	40
<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	33	28	24	21	18	16	14	12	11	10

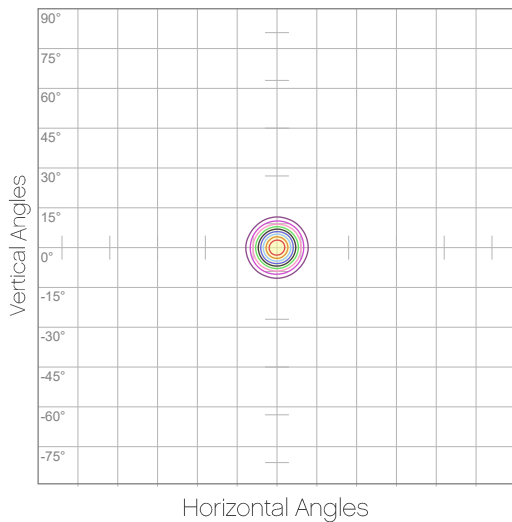
# Photometric Report

COLORado 2 Quad Zoom: 50% Zoom, Full Power  
Candela Plot



Beam Angle (50%): 15.5°  
Field Angle (10%): 25.8°  
Cutoff Angle (3%): 33.8°

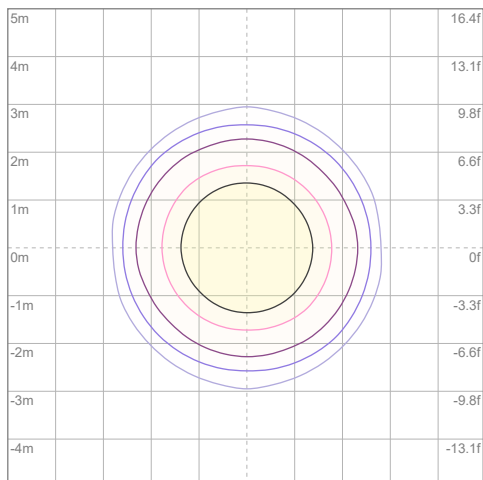
## Polar Diagrams



### iso-candela Diagram

10%	4354 cd
20%	8709 cd
30%	13063 cd
40%	17418 cd
50%	21772 cd
60%	26127 cd
70%	30481 cd
80%	34835 cd
90%	39190 cd

Conditions:  
Number of c-planes: 8  
Candela at center: 43544 cd



### iso-illuminance Diagram

3%	131 lx
5%	218 lx
10%	435 lx
30%	131 lx
50%	218 lx

Conditions:  
Number of c-planes: 8  
Lux at center: 435 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.