

PHOTOMETRICS REPORT

# ROGUE

OUTCAST  
1 HYBRID



**CHAUVET**  
PROFESSIONAL

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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

Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power

## Report Summary

### Output

Total Lumens: 11353 lm  
Peak Intensity: 791216 cd  
Illuminance @ 5m: 31649 lux  
Fixture Efficacy: 22 lm/W

### Optical

Horizontal Beam Angle (50%): 5.2°  
Vertical Beam Angle (50%): 5.2°  
Horizontal Field Angle (10%): 12.6°  
Vertical Field Angle (10%): 12.6°  
Horizontal Cutoff Angle (3%): 15.3°  
Vertical Cutoff Angle (3%): 15.3°

### Conditions

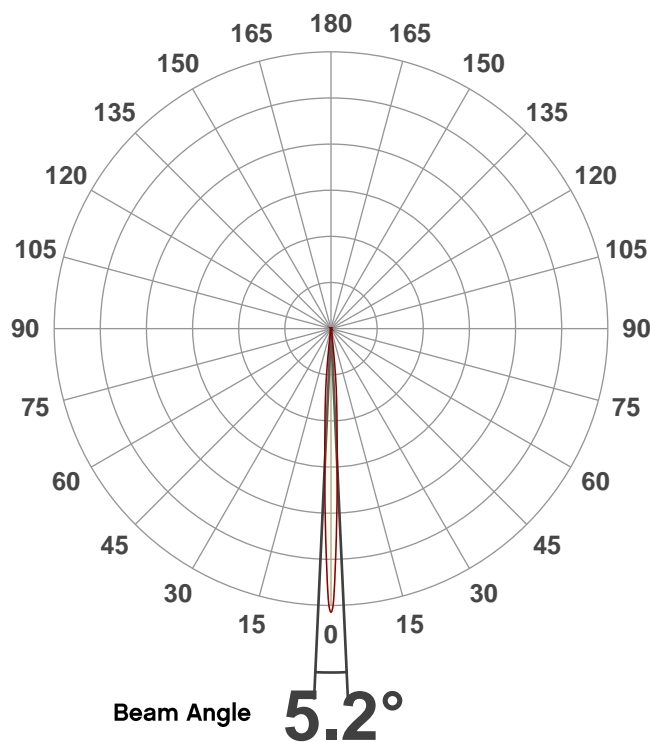
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



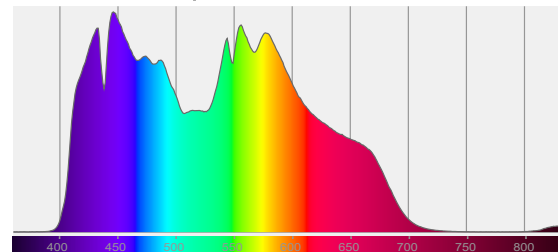
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 1/24/2020 to LM-63-2002 Standards.

## Overall Measurement

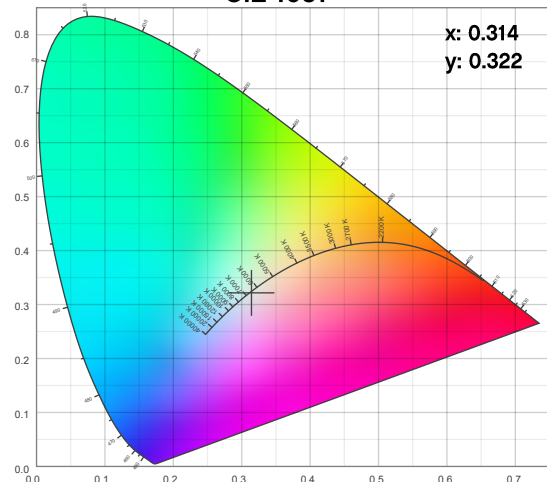
Angular Beam Distribution



Spectral Distribution



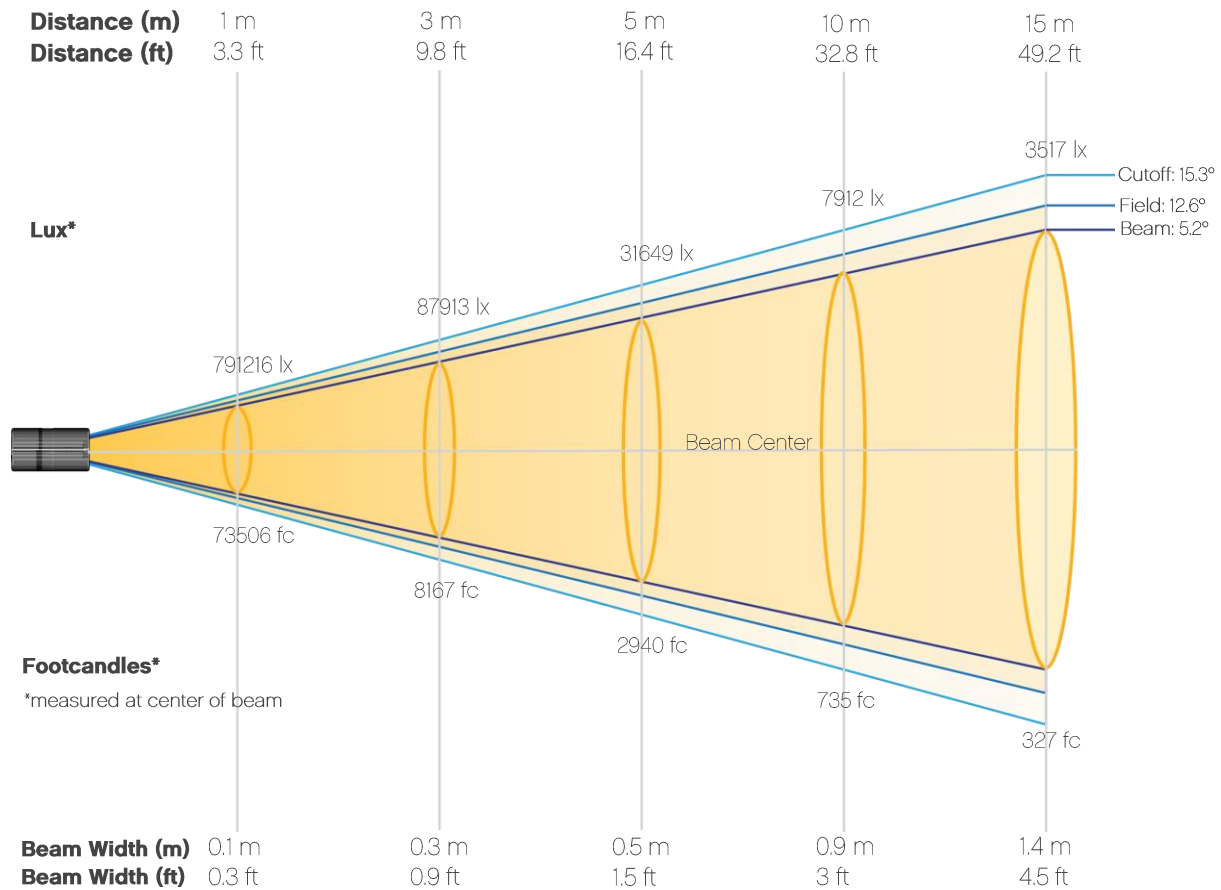
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power

## Beam Details

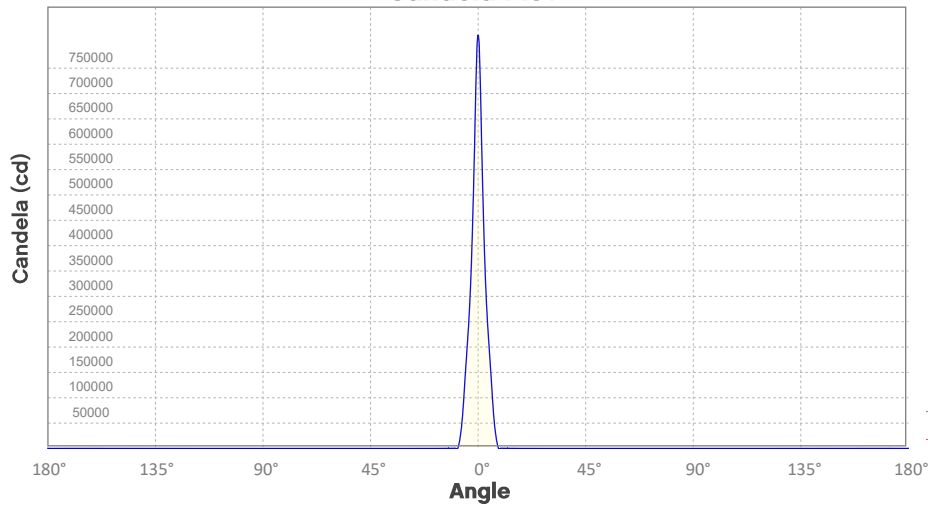


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	791216	197804	87913	49451	31649	21978	16147	12363	9768	7912
<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	6539	5495	4682	4037	3517	3091	2738	2442	2192	1978
<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	73506	18377	8167	4594	2940	2042	1500	1149	907	735
<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	607	510	435	375	327	287	254	227	204	184

# Photometric Report

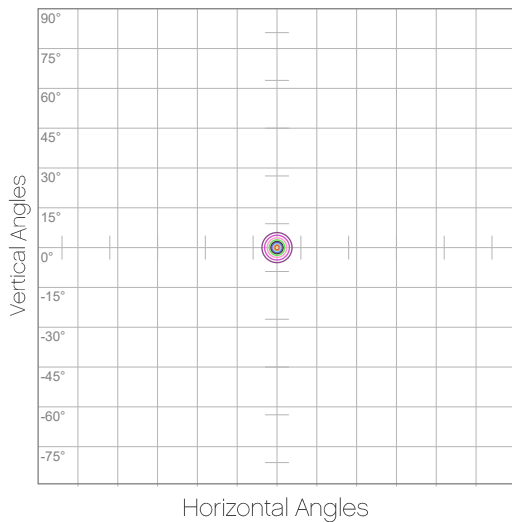
Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power  
Candela Plot



Beam Angle (50%): 5.2°  
Field Angle (10%): 12.6°  
Cutoff Angle (3%): 15.3°

— Horizontal Distribution  
— Vertical Distribution

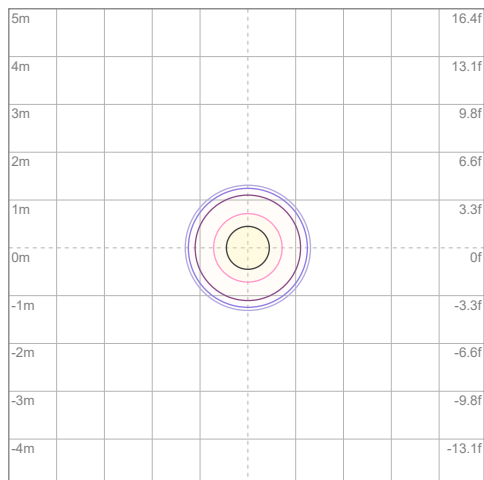
## Polar Diagrams



### iso-candela Diagram

10%	79122 cd
20%	158243 cd
30%	237365 cd
40%	316486 cd
50%	395608 cd
60%	474730 cd
70%	553851 cd
80%	632973 cd
90%	712094 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 791216 cd



### iso-illuminance Diagram

3%	237 lx
5%	396 lx
10%	791 lx
30%	2374 lx
50%	3956 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 7912 lx

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

Mounting height: 10 meters / 33 feet



# Photometric Report

Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power

## Report Summary

### Output

Total Lumens: 13752 lm  
Peak Intensity: 27702932 cd  
Illuminance @ 5m: 1108117 lux  
Fixture Efficacy: 27 lm/W

### Optical

Horizontal Beam Angle (50%): 1°  
Vertical Beam Angle (50%): 1°  
Horizontal Field Angle (10%): 1.8°  
Vertical Field Angle (10%): 1.8°  
Horizontal Cutoff Angle (3%): 2.1°  
Vertical Cutoff Angle (3%): 2.1°

### Conditions

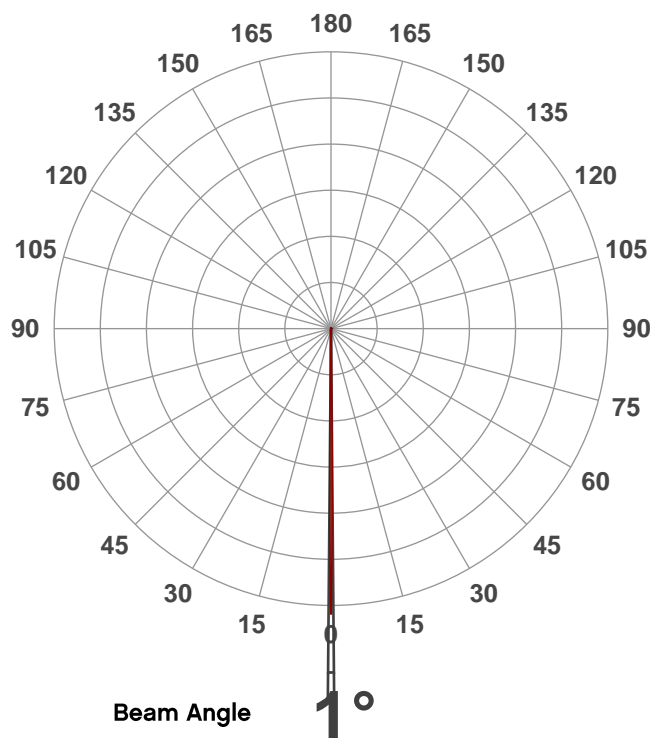
AC Supply: 120 V, 0 Hz  
Power: 516.5 W  
Current: 4.32 A  
Power Factor: 1.0



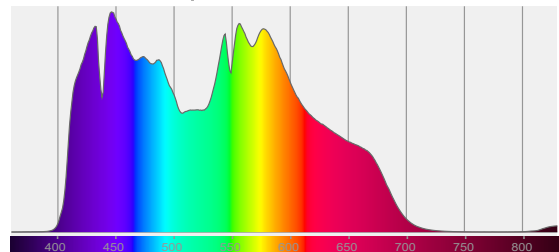
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 1/27/2020 to LM-63-2002 Standards.

## Overall Measurement

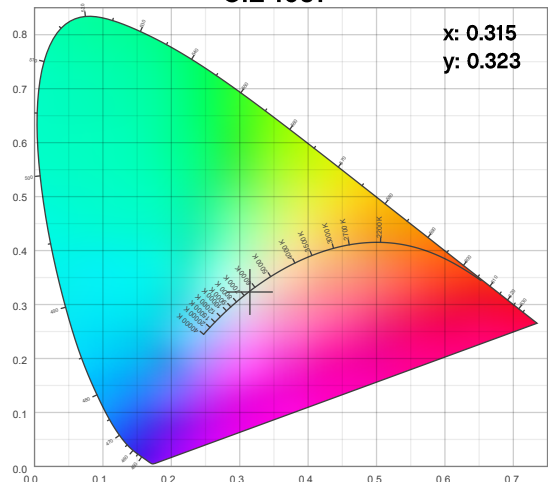
Angular Beam Distribution



Spectral Distribution



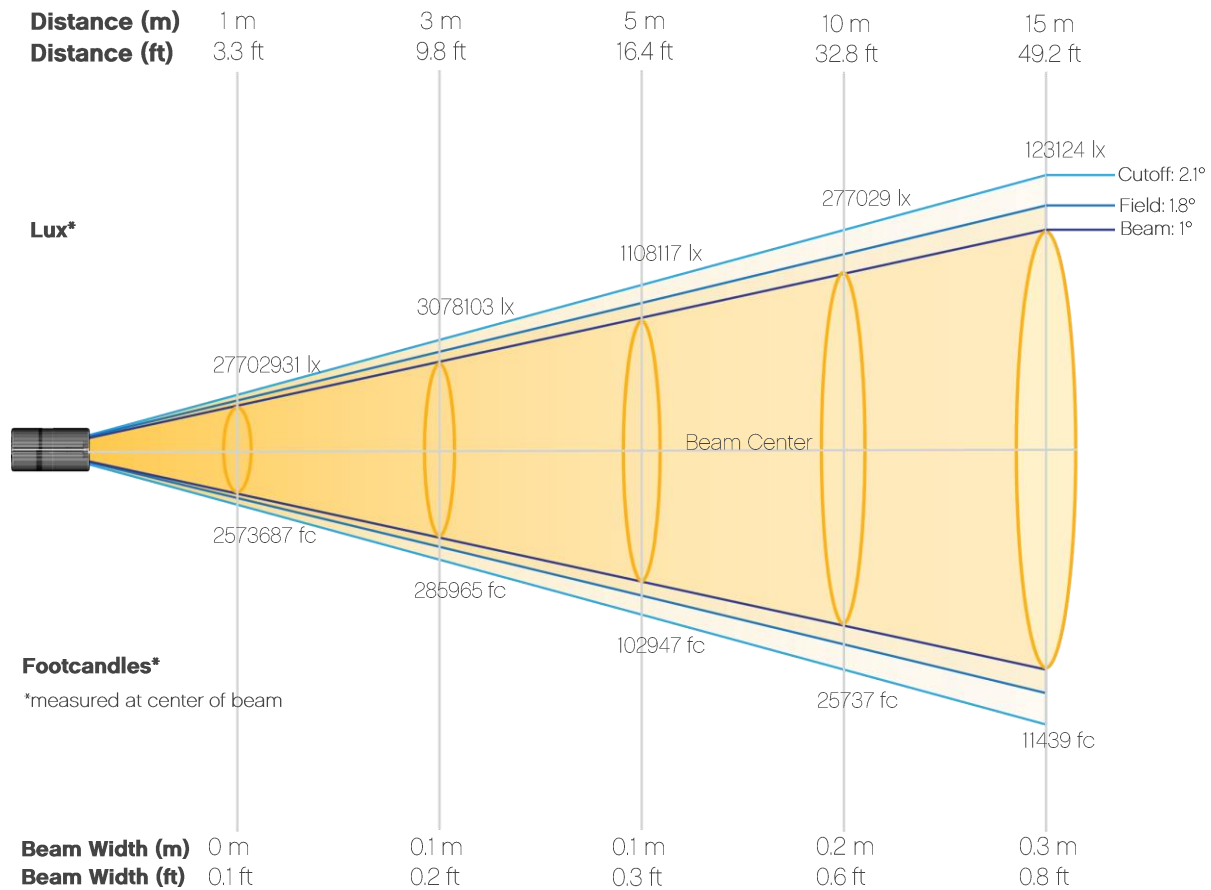
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power

## Beam Details

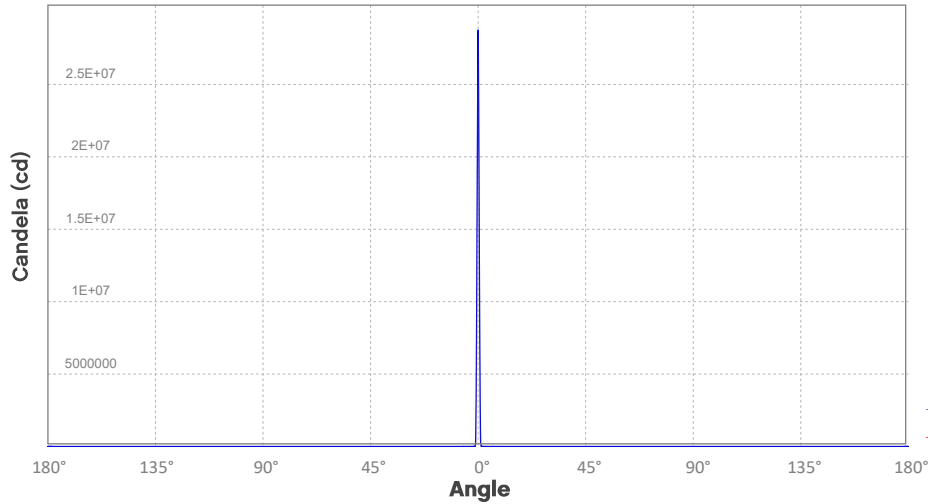


### Beam luminances from 1-20m (3.3-65.6ft)

<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	27702 931	6925733	3078103	1731433	1108117	769526	565366	432858	342011	277029
<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	22895 0	192381	163923	141341	123124	108215	95858	85503	76739	69257
<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	25736 87	643422	285965	160855	102947	71491	52524	40214	31774	25737
<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	21270	17873	15229	13131	11439	10053	8905	7943	7129	6434

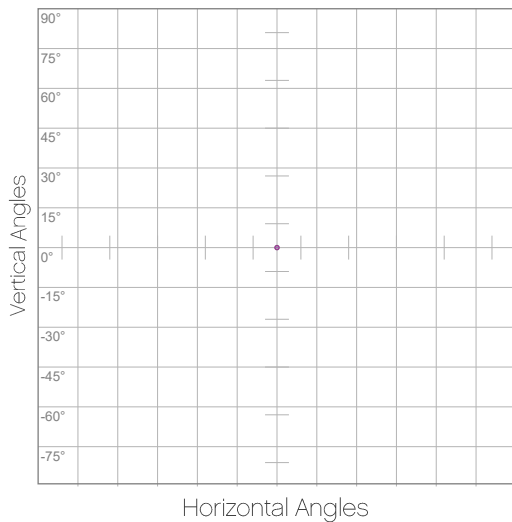
# Photometric Report

Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power  
Candela Plot



Beam Angle (50%): 1°  
Field Angle (10%): 1.8°  
Cutoff Angle (3%): 2.1°

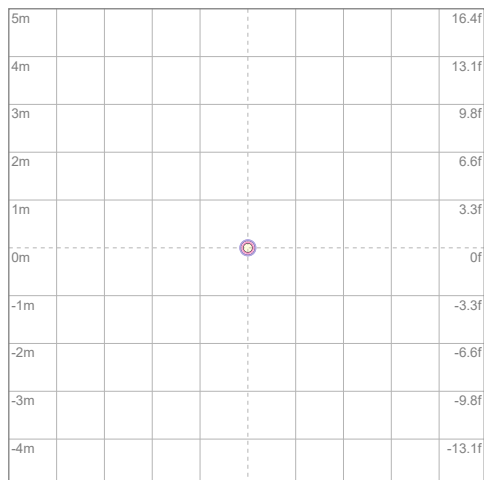
## Polar Diagrams



### iso-candela Diagram

10%	2770293 cd
20%	5540586 cd
30%	8310879 cd
40%	11081172 cd
50%	13851465 cd
60%	16621759 cd
70%	19392052 cd
80%	22162345 cd
90%	24932638 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 27702931 cd



### iso-illuminance Diagram

3%	8311 lx
5%	13.9K lx
10%	27.7K lx
30%	83.1K lx
50%	139K lx

Conditions:  
Number of c-planes: 2  
Lux at center: 277K lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power

## Report Summary

### Output

Total Lumens: 9263 lm  
Peak Intensity: 143549 cd  
Illuminance @ 5m: 5742 lux  
Fixture Efficacy: 18 lm/W

### Optical

Horizontal Beam Angle (50%): 12.4°  
Vertical Beam Angle (50%): 12.4°  
Horizontal Field Angle (10%): 24.3°  
Vertical Field Angle (10%): 24.3°  
Horizontal Cutoff Angle (3%): 29.1°  
Vertical Cutoff Angle (3%): 29.1°

### Conditions

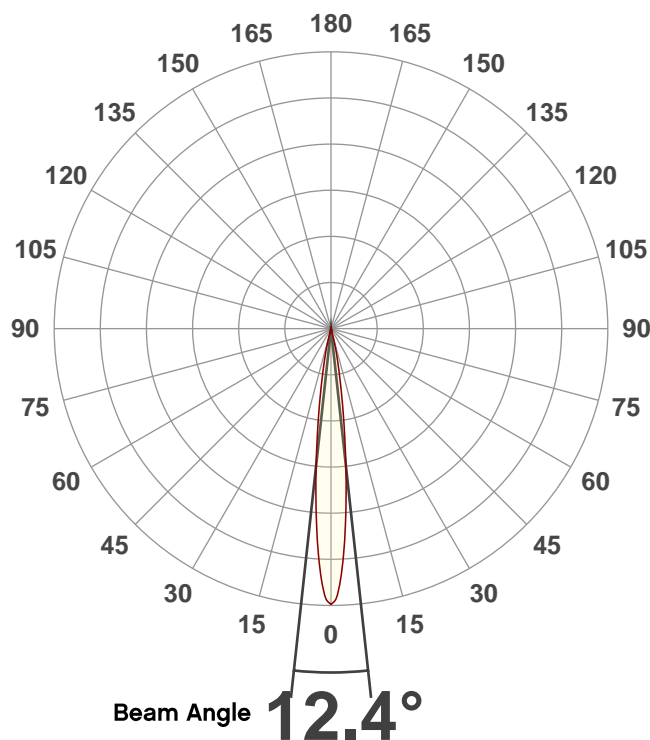
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



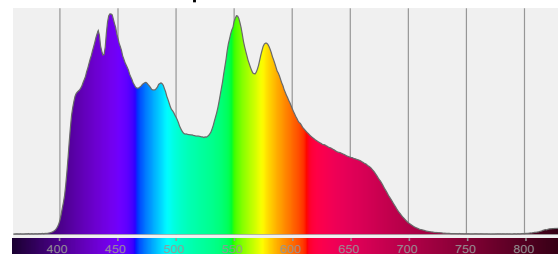
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## Overall Measurement

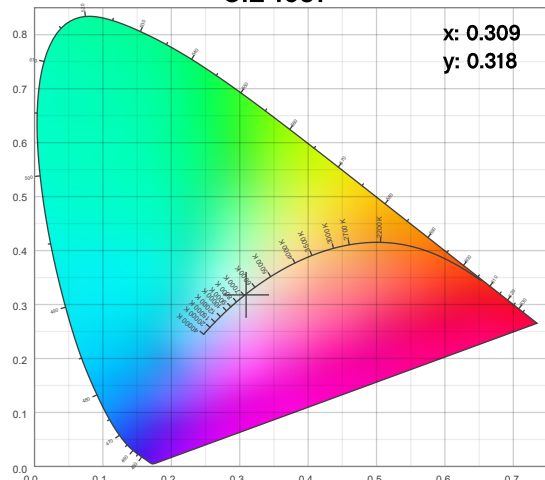
Angular Beam Distribution



Spectral Distribution



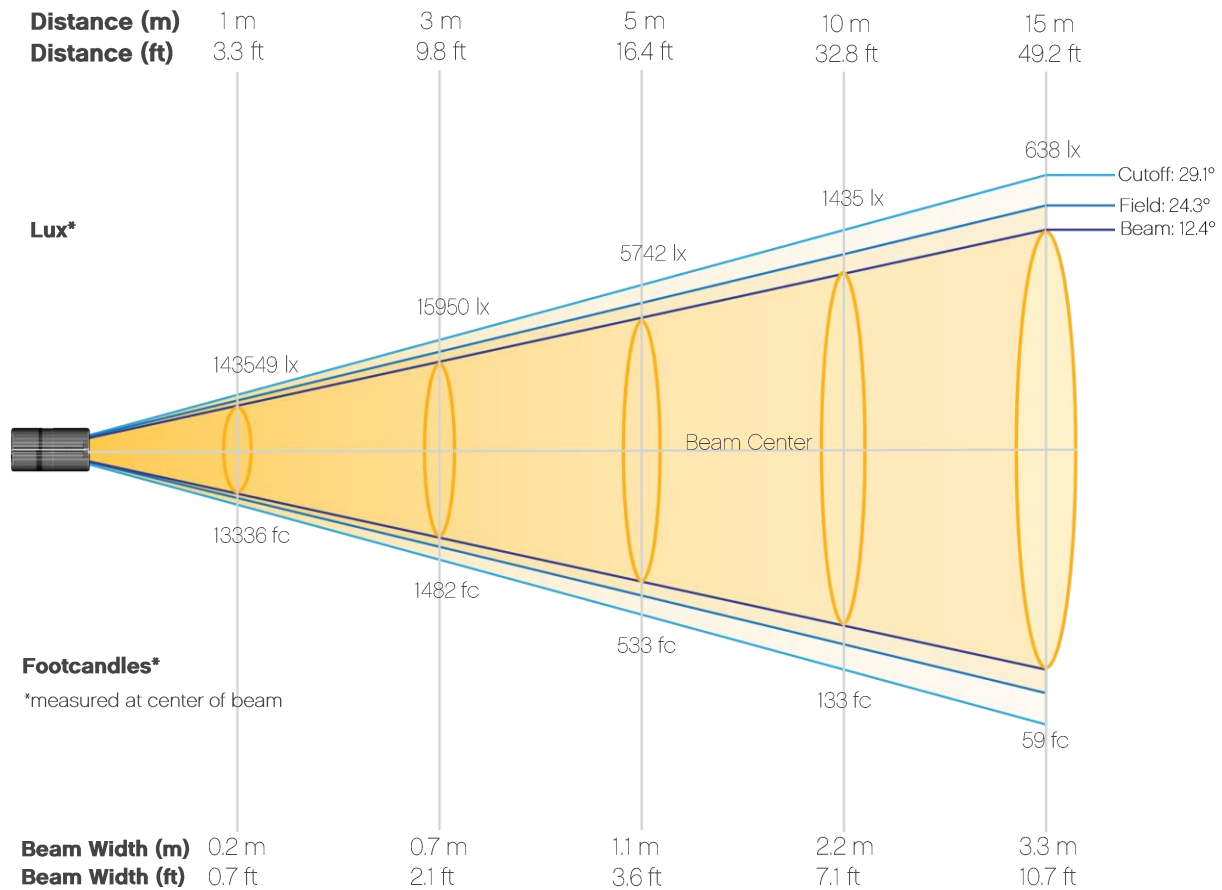
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power

## Beam Details

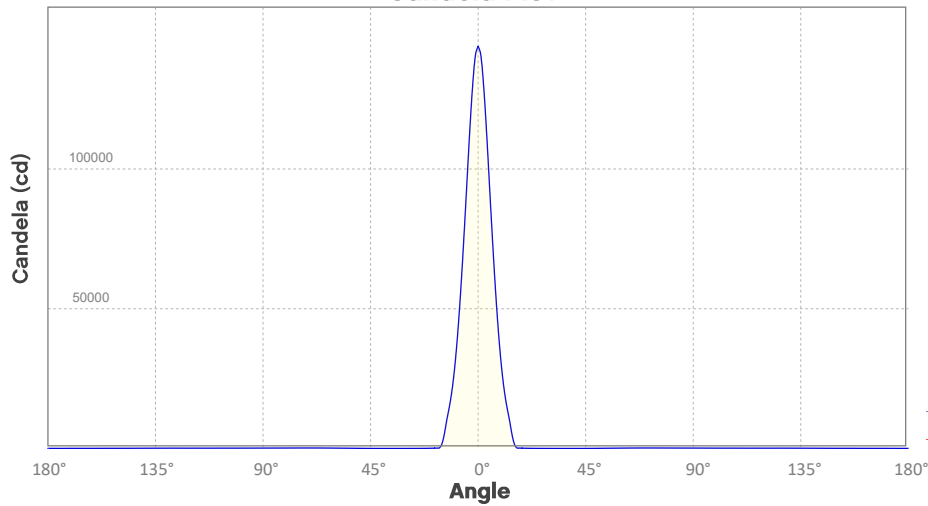


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	143549	35887	15950	8972	5742	3987	2930	2243	1772	1435
<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	1186	997	849	732	638	561	497	443	398	359
<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	13336	3334	1482	834	533	370	272	208	165	133
<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	110	93	79	68	59	52	46	41	37	33

# Photometric Report

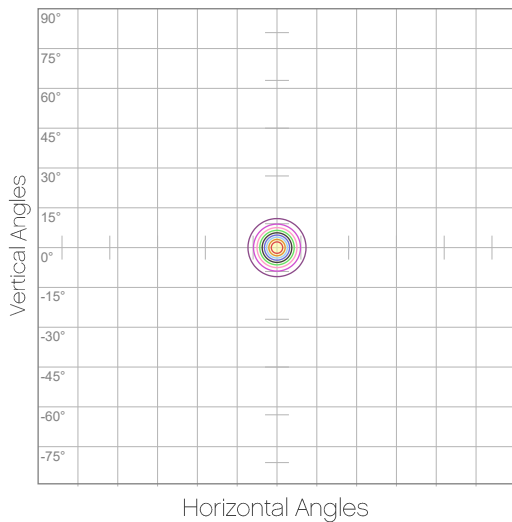
Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power  
Candela Plot



Beam Angle (50%): 12.4°  
Field Angle (10%): 24.3°  
Cutoff Angle (3%): 29.1°

— Horizontal Distribution  
— Vertical Distribution

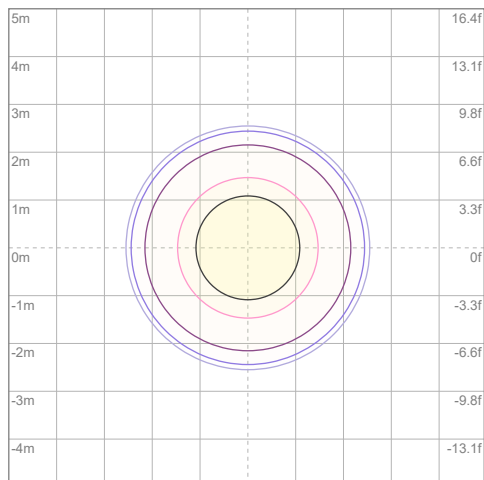
## Polar Diagrams



### iso-candela Diagram

10%	14355 cd
20%	28710 cd
30%	43065 cd
40%	57420 cd
50%	71775 cd
60%	86129 cd
70%	100484 cd
80%	114839 cd
90%	129194 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 143549 cd



### iso-illuminance Diagram

3%	43.1 lx
5%	71.8 lx
10%	144 lx
30%	431 lx
50%	718 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 1435 lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power

## Report Summary

### Output

Total Lumens: 10981 lm  
Peak Intensity: 5233155 cd  
Illuminance @ 5m: 209326 lux  
Fixture Efficacy: 21 lm/W

### Optical

Horizontal Beam Angle (50%): 2.2°  
Vertical Beam Angle (50%): 2.2°  
Horizontal Field Angle (10%): 4.3°  
Vertical Field Angle (10%): 4.3°  
Horizontal Cutoff Angle (3%): 5.2°  
Vertical Cutoff Angle (3%): 5.2°

### Conditions

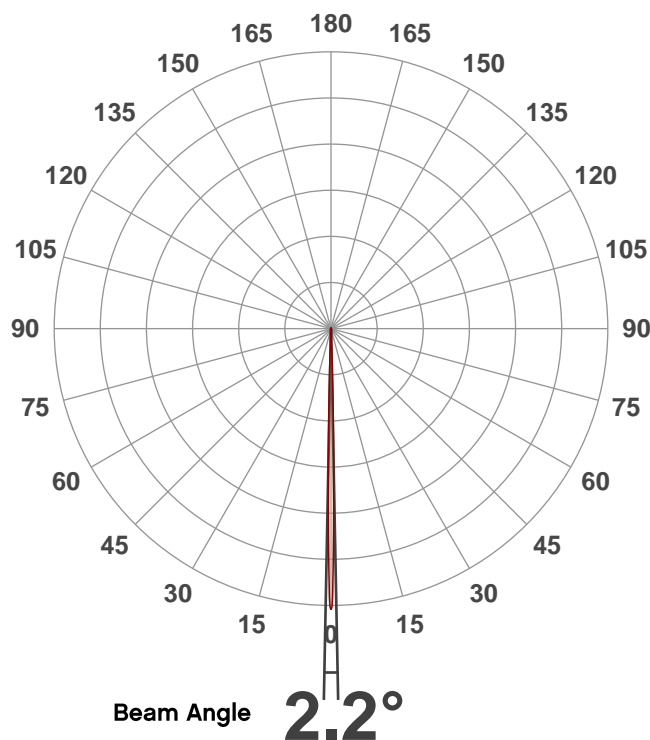
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



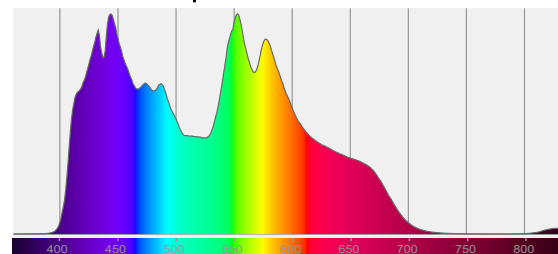
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 1/24/2020 to LM-63-2002 Standards.

## Overall Measurement

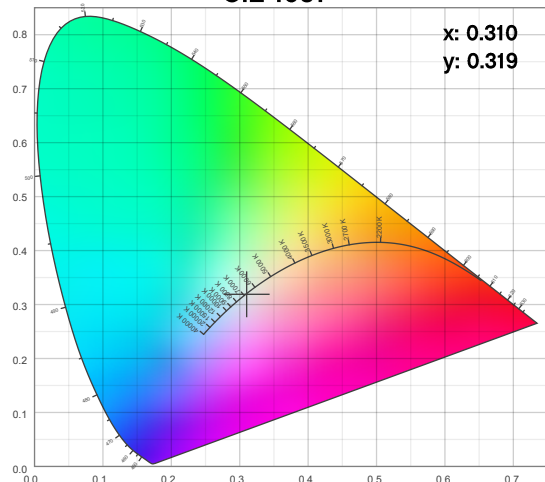
Angular Beam Distribution



Spectral Distribution



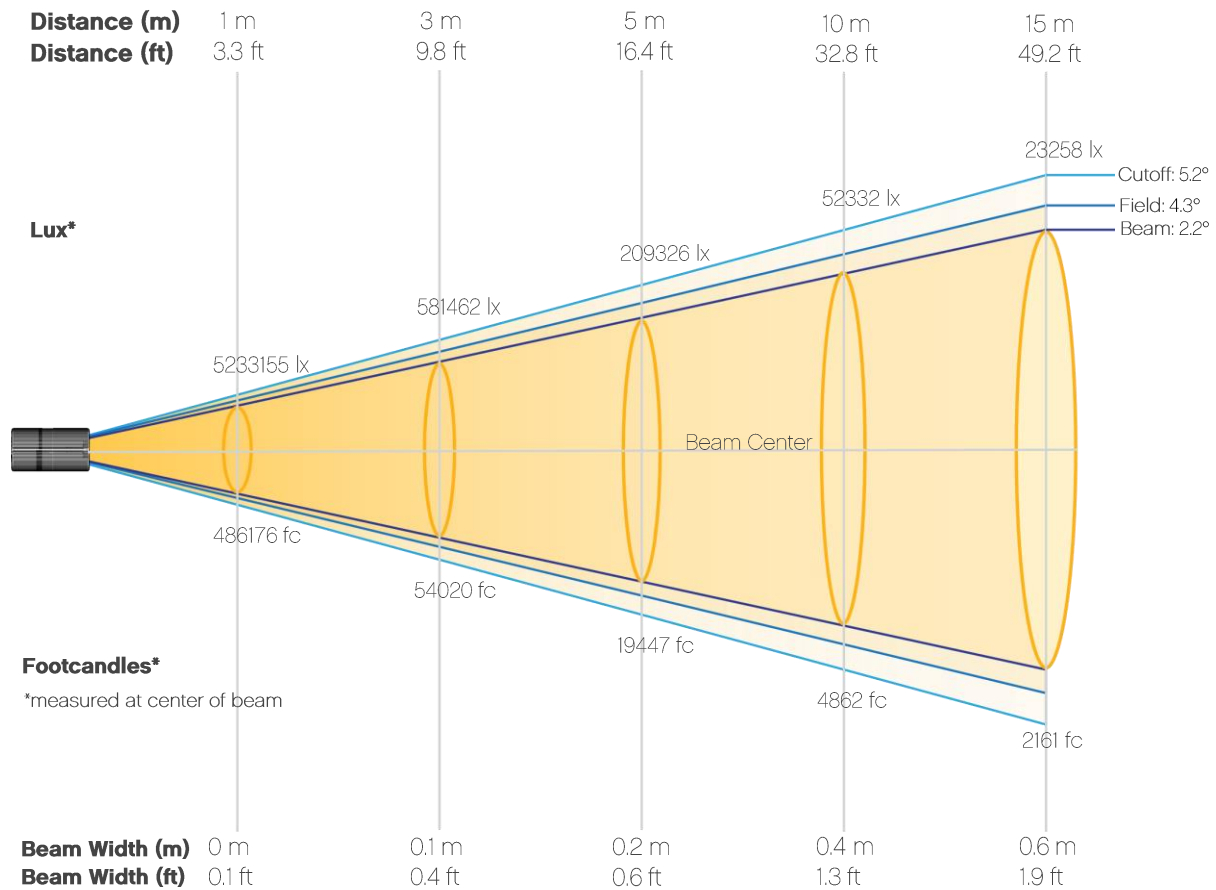
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power

## Beam Details



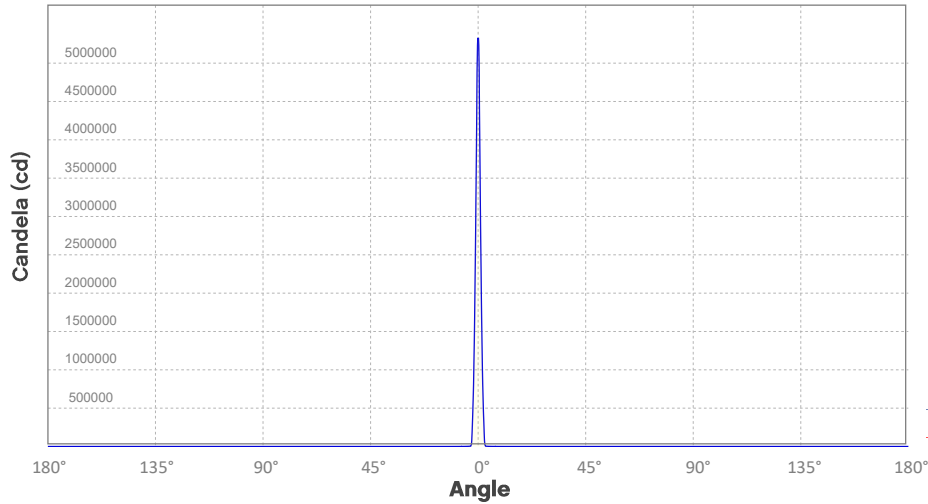
### Beam luminances from 1-20m (3.3-65.6ft)

<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	523315 5	1308289	581462	327072	209326	145365	106799	81768	64607	52332
<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	43249	36341	30965	26700	23258	20442	18108	16152	14496	13083
<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	486176	121544	54020	30386	19447	13505	9922	7597	6002	4862
<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	4018	3376	2877	2480	2161	1899	1682	1501	1347	1215



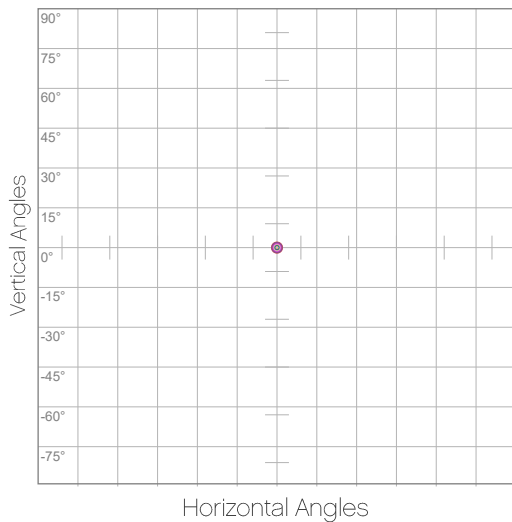
# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power  
Candela Plot



Beam Angle (50%): 2.2°  
Field Angle (10%): 4.3°  
Cutoff Angle (3%): 5.2°

## Polar Diagrams



### iso-candela Diagram

10%	523315 cd
20%	1046631 cd
30%	1569946 cd
40%	2093262 cd
50%	2616577 cd
60%	3139893 cd
70%	3663208 cd
80%	4186524 cd
90%	4709839 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 5233155 cd



### iso-illuminance Diagram

3%	1570 lx
5%	2617 lx
10%	5233 lx
30%	15.7K lx
50%	26.2K lx

Conditions:  
Number of c-planes: 2  
Lux at center: 52.3K lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power

## Report Summary

### Output

Total Lumens: 9637 lm  
Peak Intensity: 635069 cd  
Illuminance @ 5m: 25403 lux  
Fixture Efficacy: 19 lm/W

### Optical

Horizontal Beam Angle (50%): 6°  
Vertical Beam Angle (50%): 6°  
Horizontal Field Angle (10%): 11.8°  
Vertical Field Angle (10%): 11.8°  
Horizontal Cutoff Angle (3%): 14°  
Vertical Cutoff Angle (3%): 14°

### Conditions

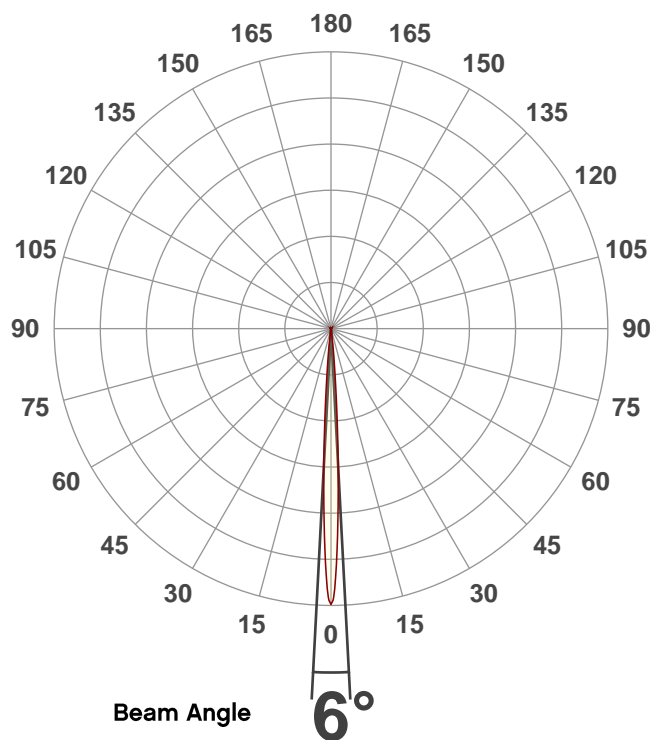
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



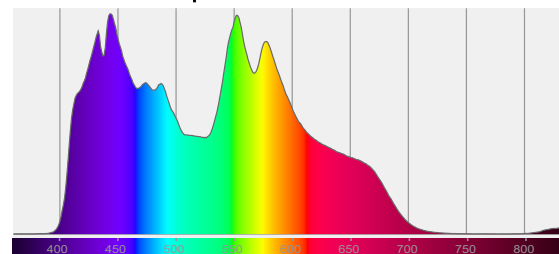
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 1/24/2020 to LM-63-2002 Standards.

## Overall Measurement

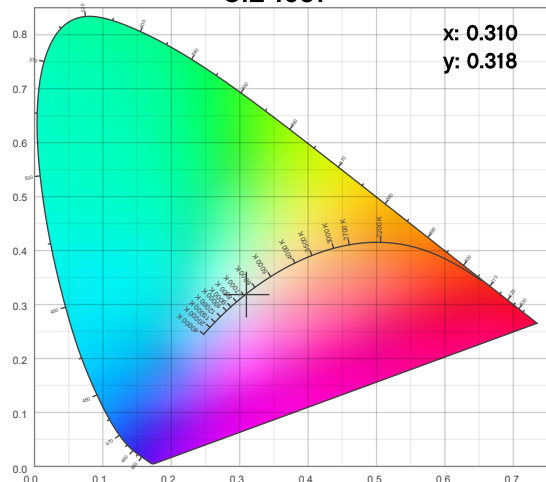
Angular Beam Distribution



Spectral Distribution



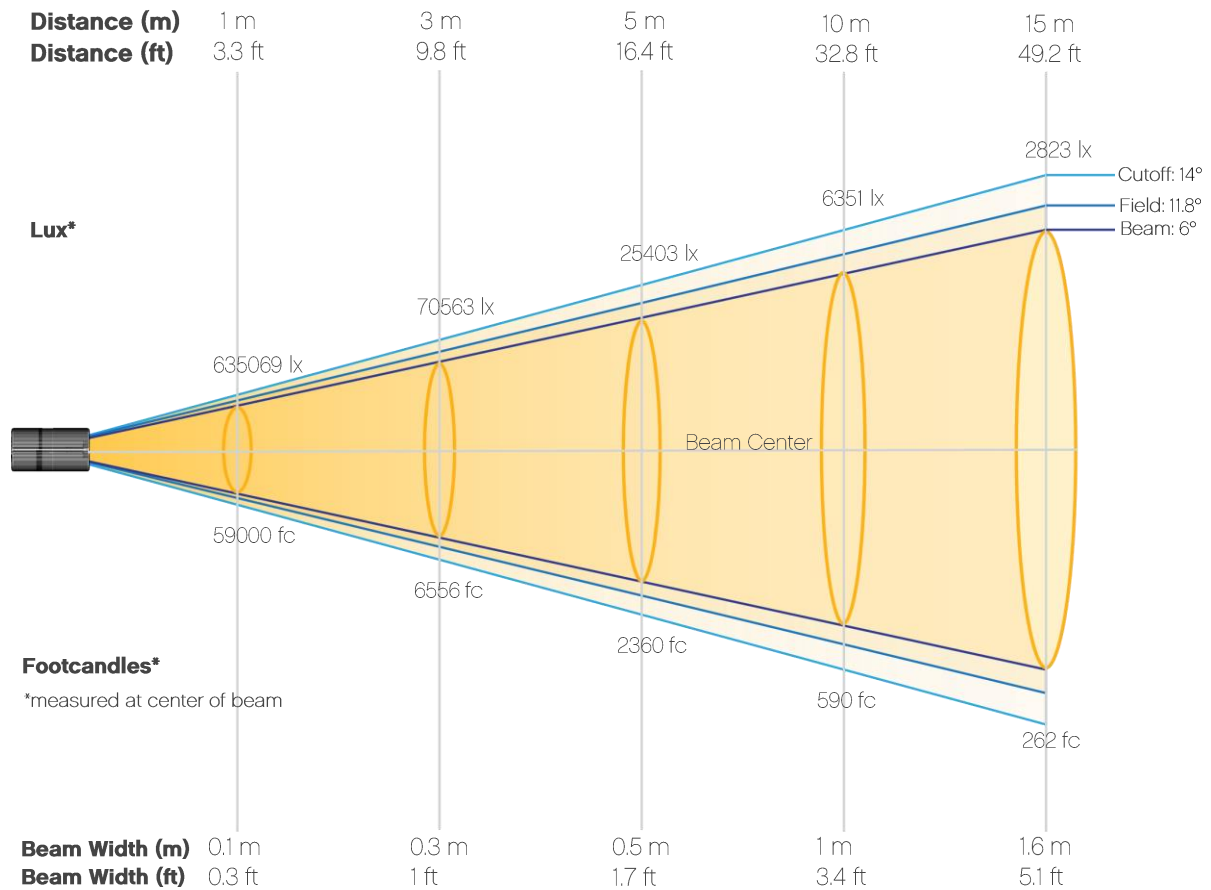
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power

## Beam Details

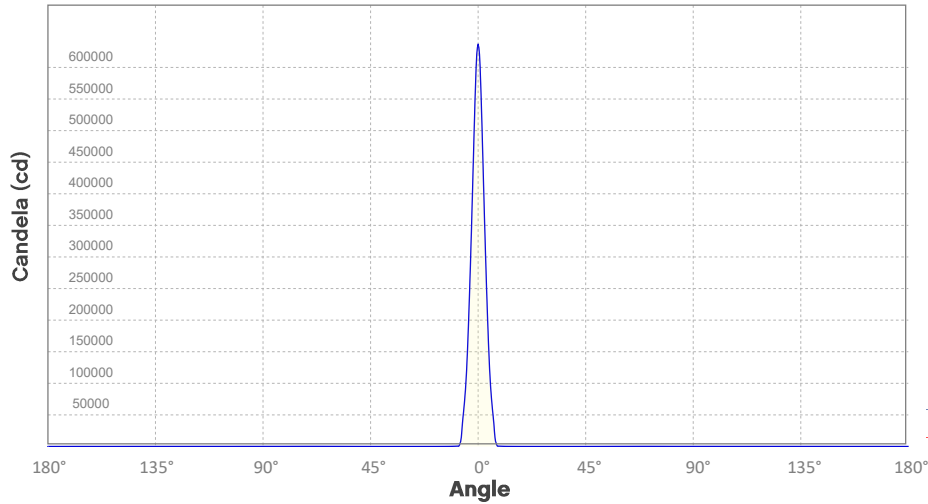


### Beam luminances from 1-20m (3.3-65.6ft)

<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	635069	158767	70563	39692	25403	17641	12961	9923	7840	6351
<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	5249	4410	3758	3240	2823	2481	2197	1960	1759	1588
<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	59000	14750	6556	3687	2360	1639	1204	922	728	590
<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	488	410	349	301	262	230	204	182	163	147

# Photometric Report

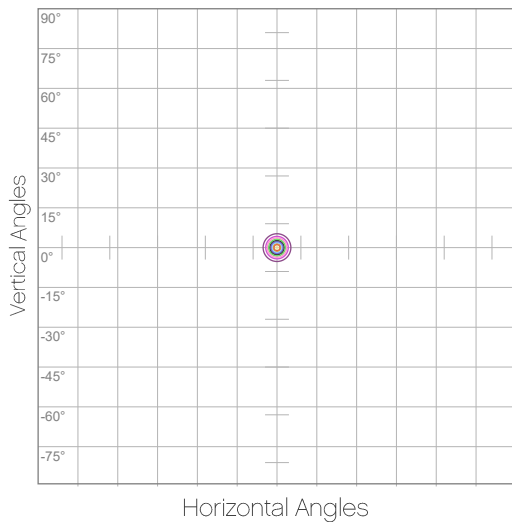
Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power  
Candela Plot



Beam Angle (50%): 6°  
Field Angle (10%): 11.8°  
Cutoff Angle (3%): 14°

— Horizontal Distribution  
— Vertical Distribution

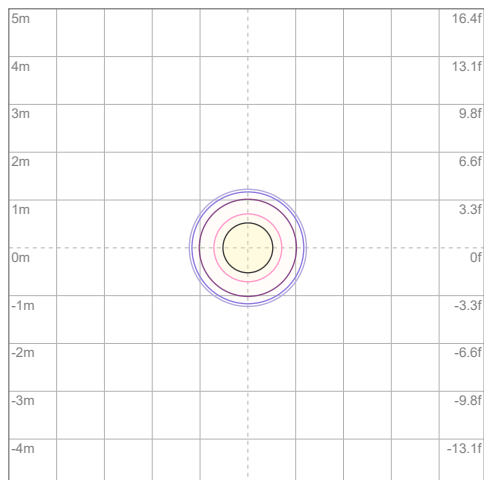
## Polar Diagrams



### iso-candela Diagram

10%	63507 cd
20%	127014 cd
30%	190521 cd
40%	254027 cd
50%	317534 cd
60%	381041 cd
70%	444548 cd
80%	508055 cd
90%	571562 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 635069 cd



### iso-illuminance Diagram

3%	191 lx
5%	318 lx
10%	635 lx
30%	1905 lx
50%	3175 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 6351 lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power

## Report Summary

### Output

Total Lumens: 3581 lm  
Peak Intensity: 39248 cd  
Illuminance @ 5m: 1570 lux  
Fixture Efficacy: 7 lm/W

### Optical

Horizontal Beam Angle (50%): 18°  
Vertical Beam Angle (50%): 18°  
Horizontal Field Angle (10%): 25.6°  
Vertical Field Angle (10%): 25.6°  
Horizontal Cutoff Angle (3%): 28.3°  
Vertical Cutoff Angle (3%): 28.3°

### Conditions

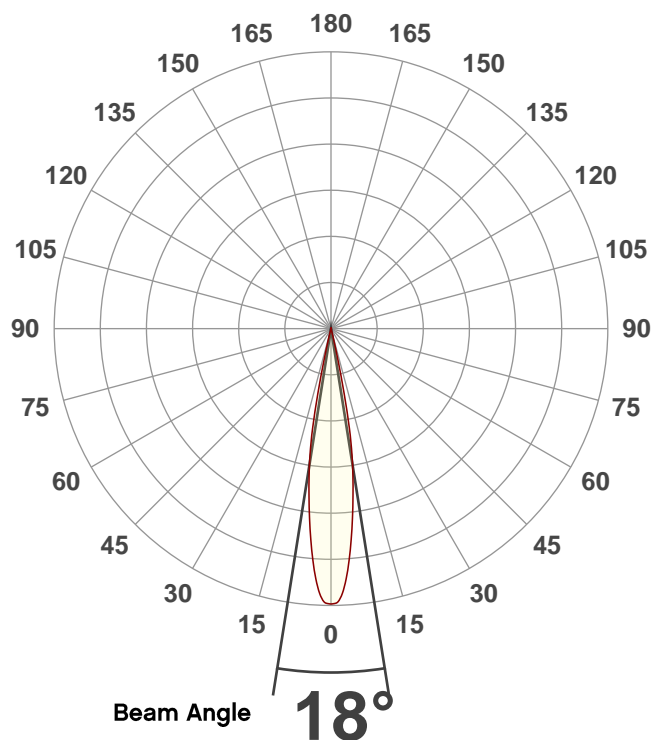
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



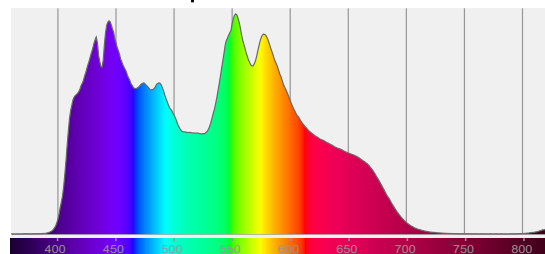
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## Overall Measurement

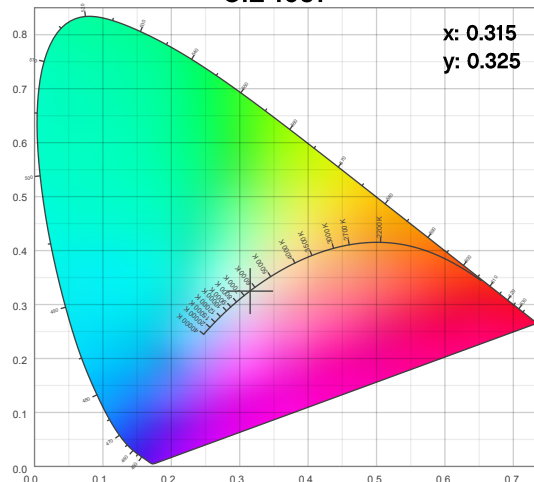
Angular Beam Distribution



Spectral Distribution



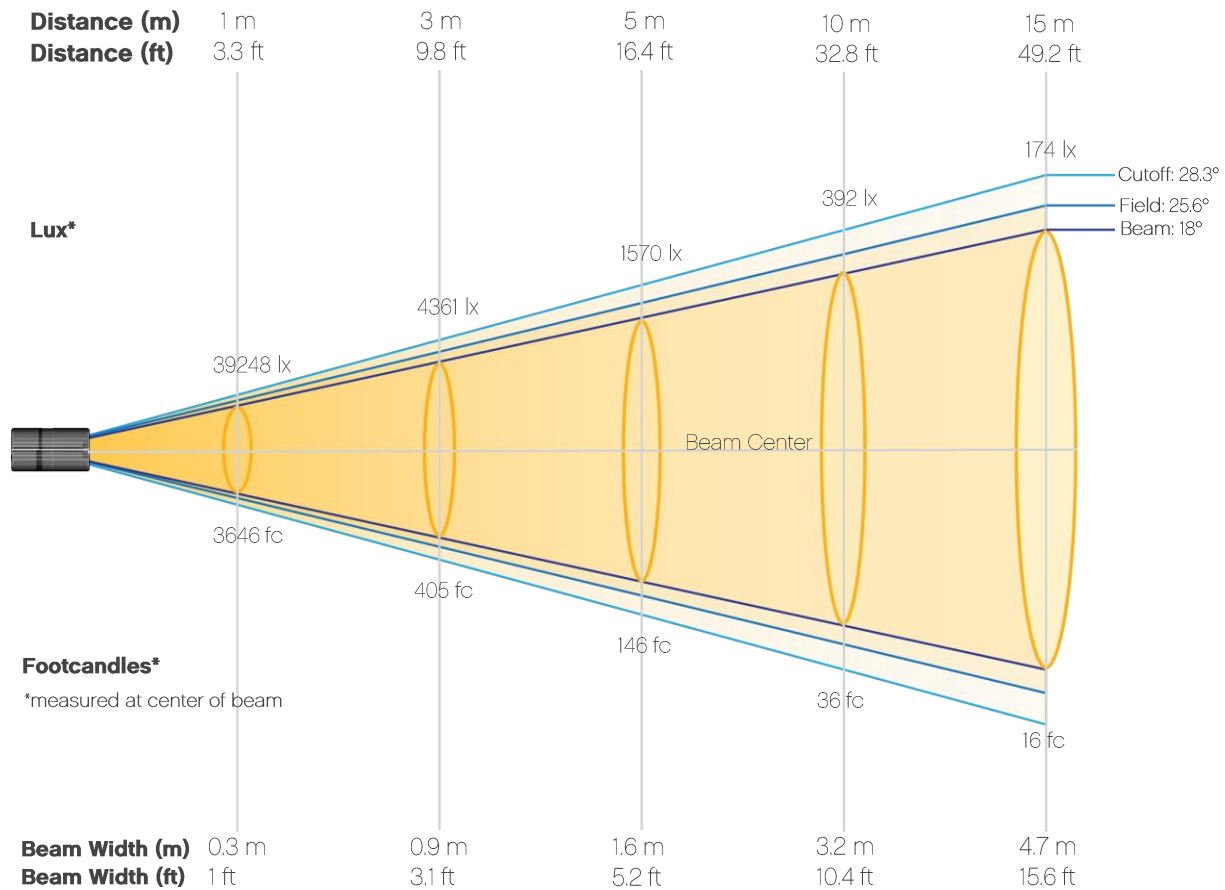
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power

## Beam Details

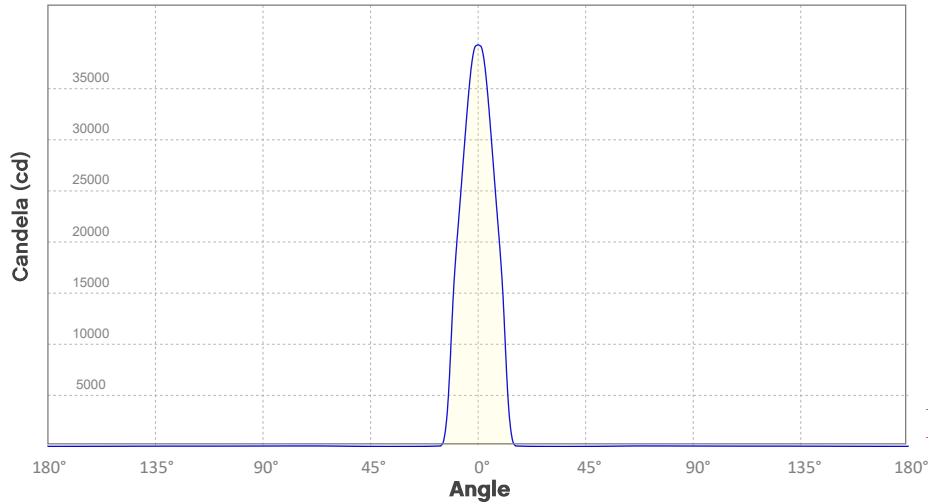


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	39248	9812	4361	2453	1570	1090	801	613	485	392
<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	324	273	232	200	174	153	136	121	109	98
<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	3646	912	405	228	146	101	74	57	45	36
<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	30	25	22	19	16	14	13	11	10	9

# Photometric Report

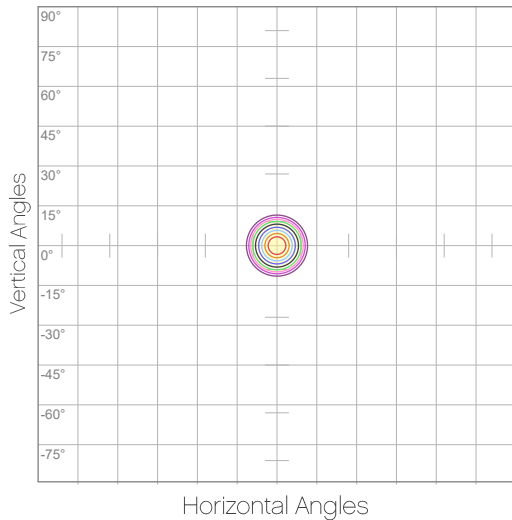
Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power  
Candela Plot



Beam Angle (50%): 18°  
Field Angle (10%): 25.6°  
Cutoff Angle (3%): 28.3°

— Horizontal Distribution  
— Vertical Distribution

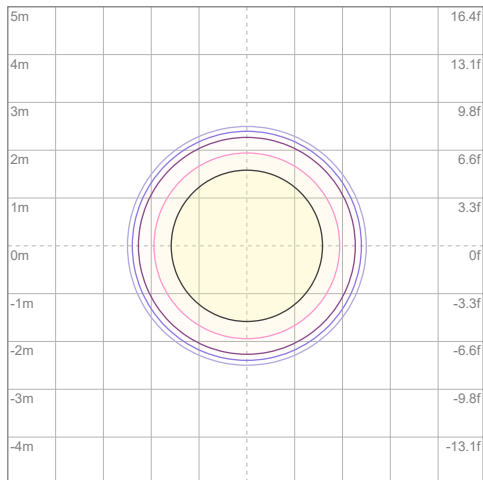
## Polar Diagrams



### iso-candela Diagram

10%	3925 cd
20%	7850 cd
30%	11774 cd
40%	15699 cd
50%	19624 cd
60%	23549 cd
70%	27474 cd
80%	31399 cd
90%	35323 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 39248 cd



### iso-illuminance Diagram

3%	11.8 lx
5%	19.6 lx
10%	39.2 lx
30%	118 lx
50%	196 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 392 lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power

## Report Summary

### Output

Total Lumens: 4550 lm  
Peak Intensity: 427950 cd  
Illuminance @ 5m: 17118 lux  
Fixture Efficacy: 9 lm/W

### Optical

Horizontal Beam Angle (50%): 4.9°  
Vertical Beam Angle (50%): 4.9°  
Horizontal Field Angle (10%): 9.3°  
Vertical Field Angle (10%): 9.3°  
Horizontal Cutoff Angle (3%): 12.4°  
Vertical Cutoff Angle (3%): 12.4°

### Conditions

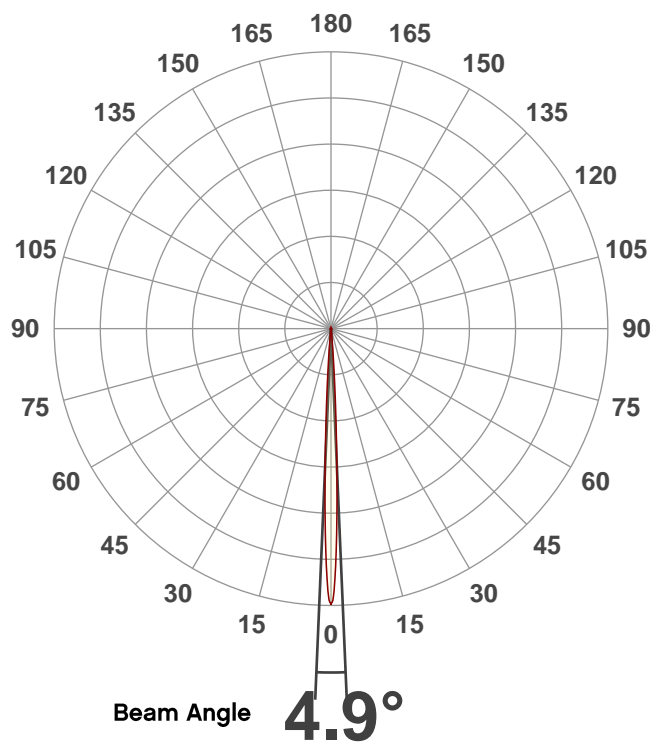
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



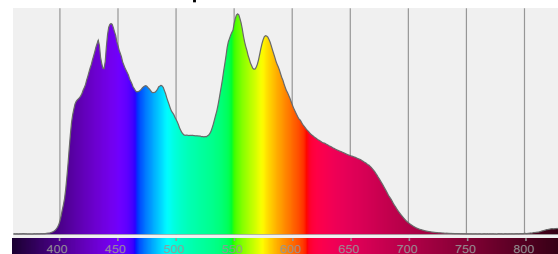
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## Overall Measurement

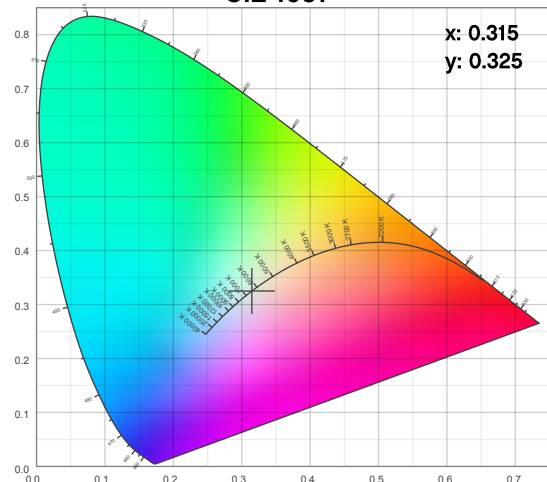
Angular Beam Distribution



Spectral Distribution



CIE 1931

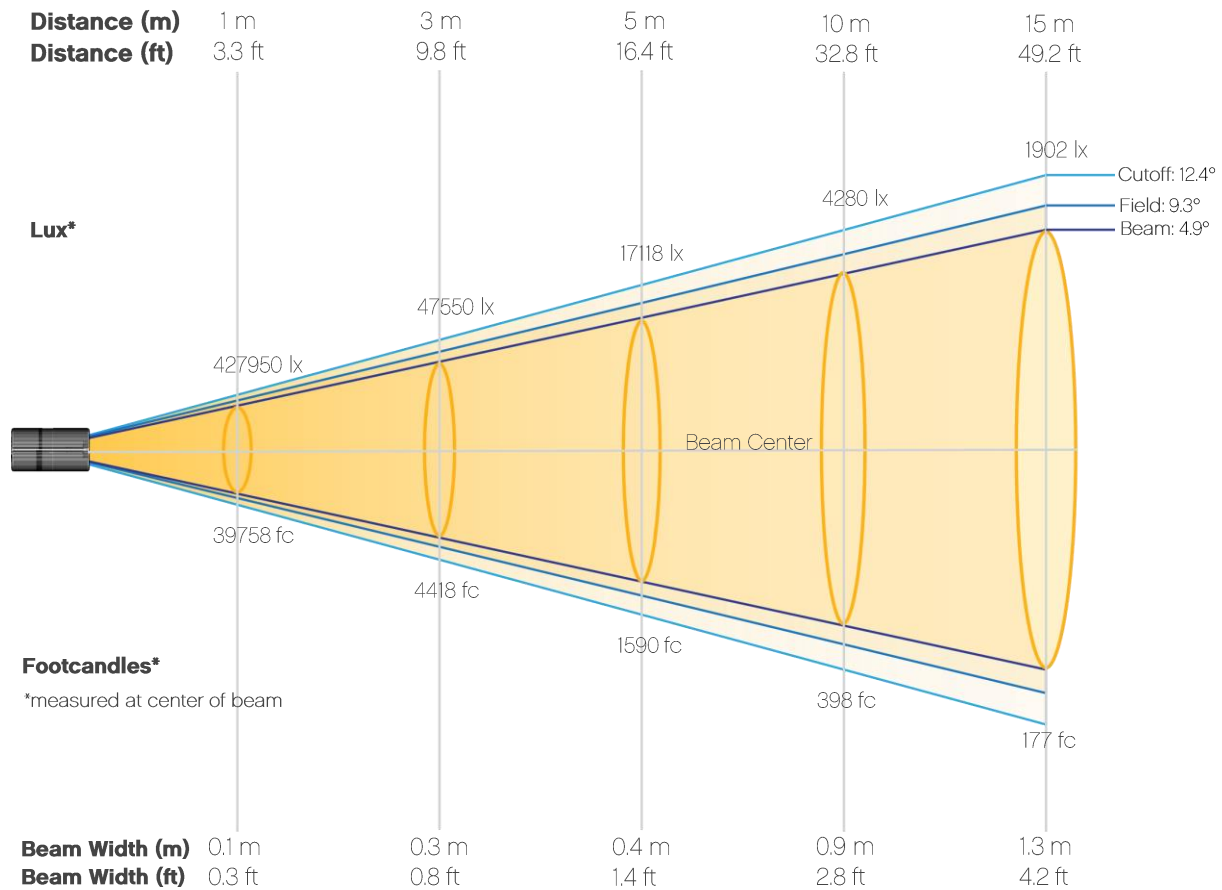




# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power

## Beam Details

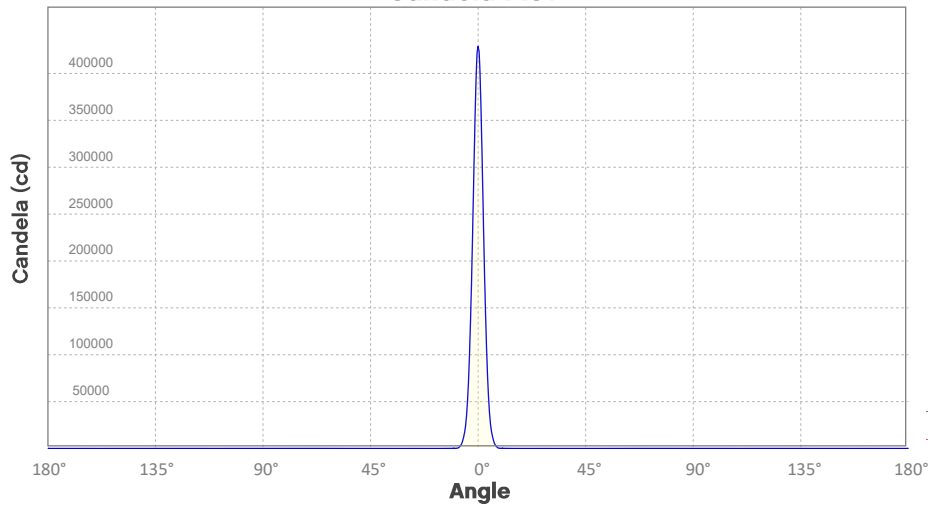


### Beam luminances from 1-20m (3.3-65.6ft)

<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	427950	106988	47550	26747	17118	11888	8734	6687	5283	4280
<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	3537	2972	2532	2183	1902	1672	1481	1321	1185	1070
<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	39758	9939	4418	2485	1590	1104	811	621	491	398
<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	329	276	235	203	177	155	138	123	110	99

# Photometric Report

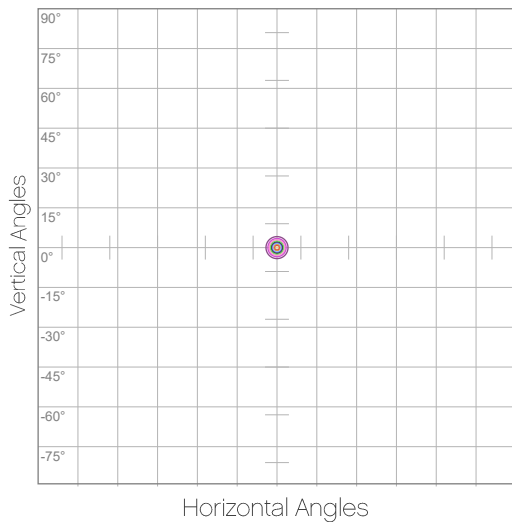
Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power  
Candela Plot



Beam Angle (50%): 4.9°  
Field Angle (10%): 9.3°  
Cutoff Angle (3%): 12.4°

— Horizontal Distribution  
— Vertical Distribution

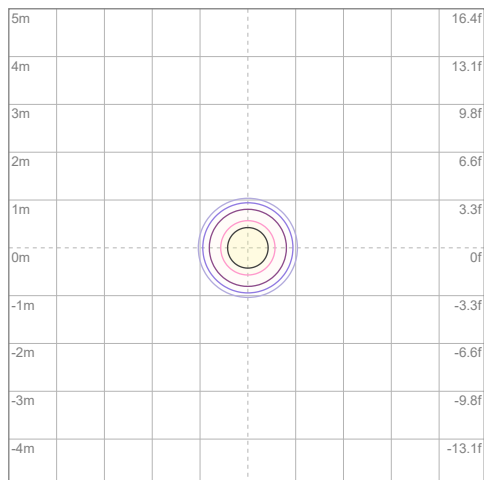
## Polar Diagrams



### iso-candela Diagram

10%	42795 cd
20%	85590 cd
30%	128385 cd
40%	171180 cd
50%	213975 cd
60%	256770 cd
70%	299565 cd
80%	342360 cd
90%	385155 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 427950 cd



### iso-illuminance Diagram

3%	128 lx
5%	214 lx
10%	428 lx
30%	1284 lx
50%	2140 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 4280 lx

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

Mounting height: 10 meters / 33 feet

# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power

## Report Summary

### Output

Total Lumens: 3652 lm  
Peak Intensity: 54683 cd  
Illuminance @ 5m: 2187 lux  
Fixture Efficacy: 7 lm/W

### Optical

Horizontal Beam Angle (50%): 15.1°  
Vertical Beam Angle (50%): 15.1°  
Horizontal Field Angle (10%): 22.1°  
Vertical Field Angle (10%): 22.1°  
Horizontal Cutoff Angle (3%): 24.9°  
Vertical Cutoff Angle (3%): 24.9°

### Conditions

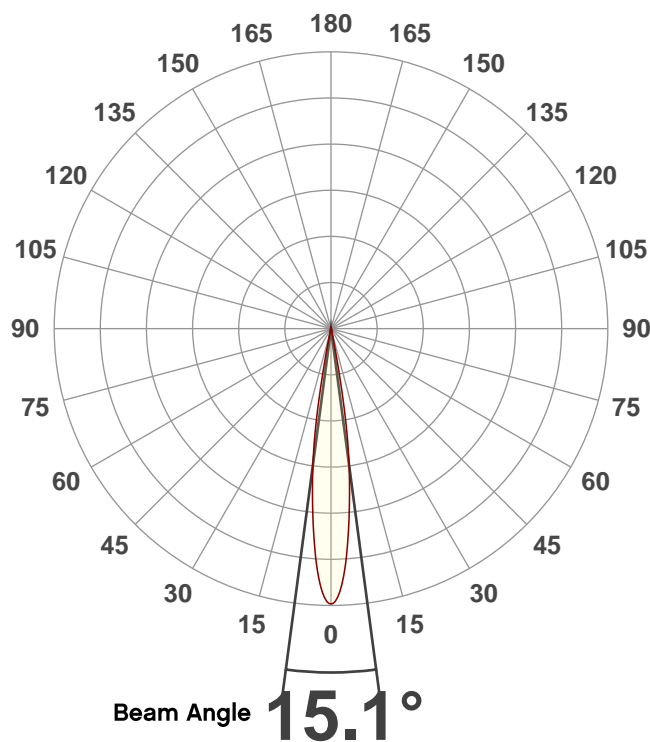
AC Supply: 120 V, 0 Hz  
Power: 518.4 W  
Current: 4.32 A  
Power Factor: 1.0



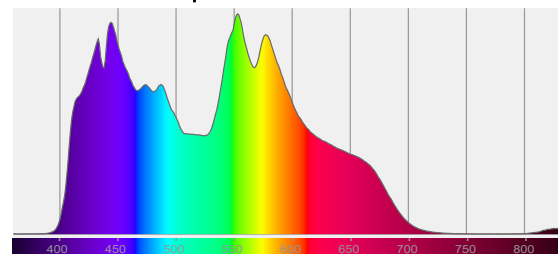
This data sheet conforms to American National Standard E1.9 – 2007 (R2017). All data was measured and calculated by a Viso Systems LabSpion Goniometer at the Chauvet PD Optics Laboratory in Sunrise, FL on 1/24/2020 to LM-63-2002 Standards.

## Overall Measurement

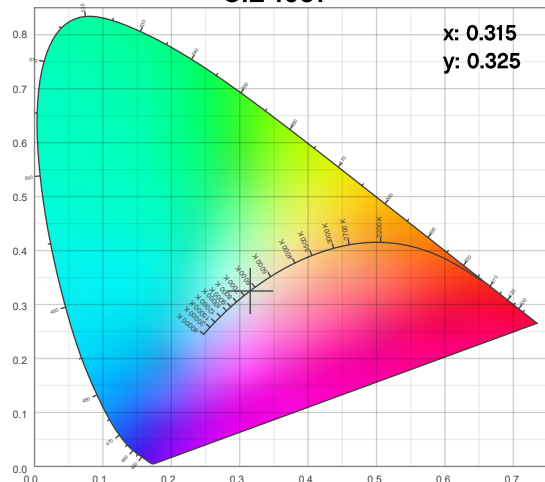
Angular Beam Distribution



Spectral Distribution



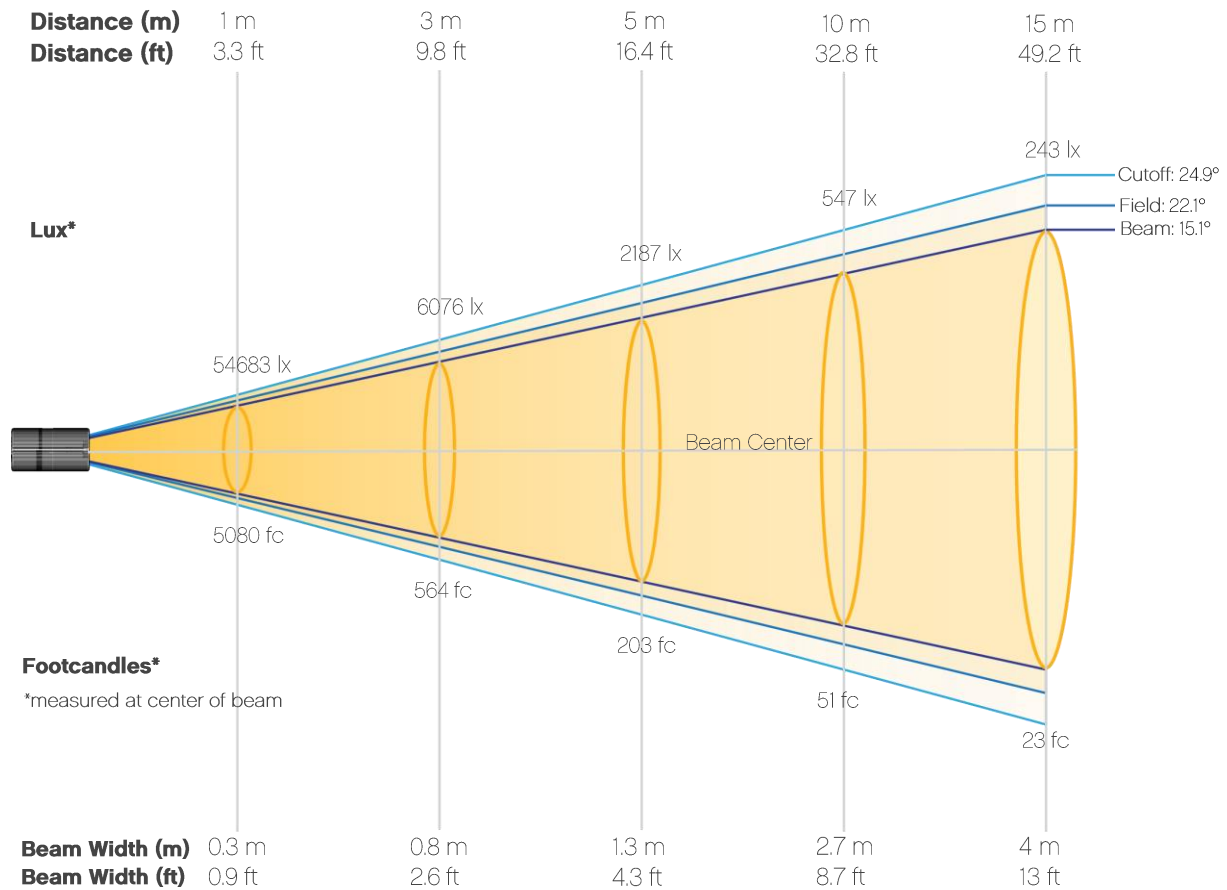
CIE 1931



# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power

## Beam Details

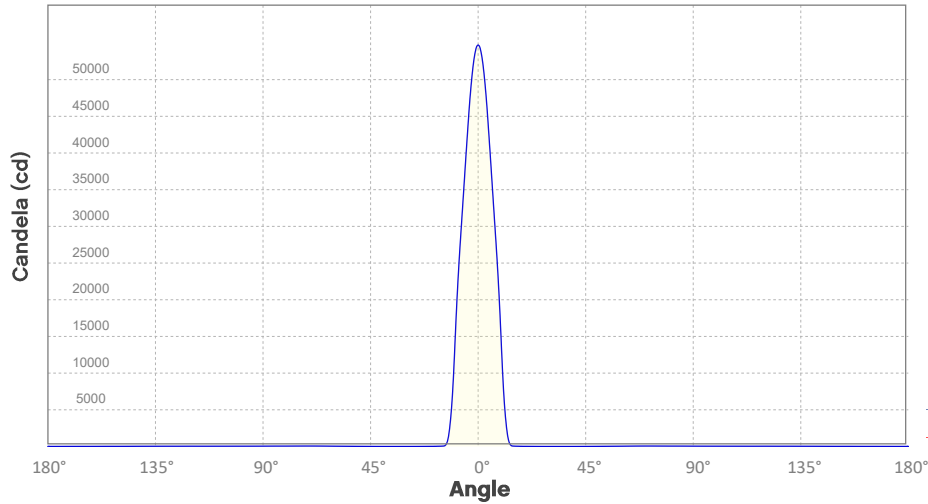


### Beam Illuminances from 1-20m (3.3-65.6ft)

<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	54683	13671	6076	3418	2187	1519	1116	854	675	547
<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	452	380	324	279	243	214	189	169	151	137
<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	5080	1270	564	318	203	141	104	79	63	51
<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	42	35	30	26	23	20	18	16	14	13

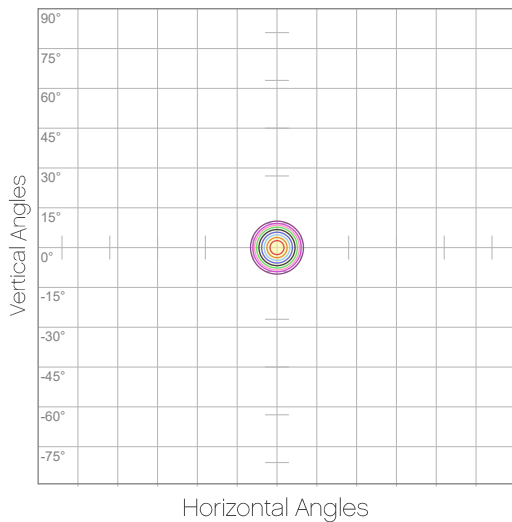
# Photometric Report

Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power  
Candela Plot



Beam Angle (50%): 15.1°  
Field Angle (10%): 22.1°  
Cutoff Angle (3%): 24.9°

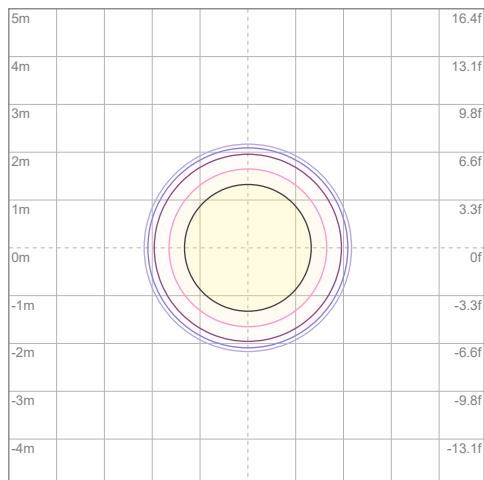
## Polar Diagrams



### iso-candela Diagram

10%	5468 cd
20%	10937 cd
30%	16405 cd
40%	21873 cd
50%	27342 cd
60%	32810 cd
70%	38278 cd
80%	43746 cd
90%	49215 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 54683 cd



### iso-illuminance Diagram

3%	16.4 lx
5%	27.3 lx
10%	54.7 lx
30%	164 lx
50%	273 lx

Conditions:  
Number of c-planes: 2  
Lux at center: 547 lx

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

Mounting height: 10 meters / 33 feet

# Chromaticity Report

Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power

## Report Summary

### Measurements

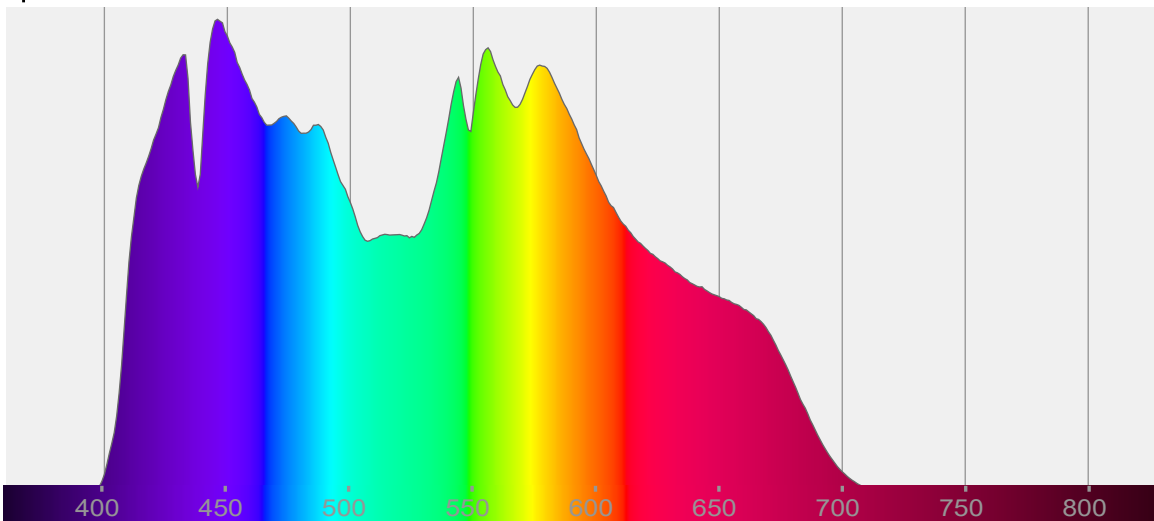
Total Lumens: 11353 lm  
Peak Intensity: 791216 cd  
Fixture Efficacy: 22 lm/W

Correlated Color Temperature: 6483K  
 $\Delta uv$ : -0.0046

CRI: 83.9      CRI R9 Value: 19.1  
CQS: 79.9  
TLCI: 66  
TM-30-18 Rf: 83.7  
TM-30-18 Rg: 94.2  
1<sup>st</sup> Dominant Wavelength: 446 nm  
2<sup>nd</sup> Dominant Wavelength: 556 nm



### Spectral Distribution



#### Tested Color

6483 K

CIE 1931 Coordinates:  
X: 0.314    Y: 0.322

#### Color Temperature

6483 K

#### Light Quality

CRI: 83.9

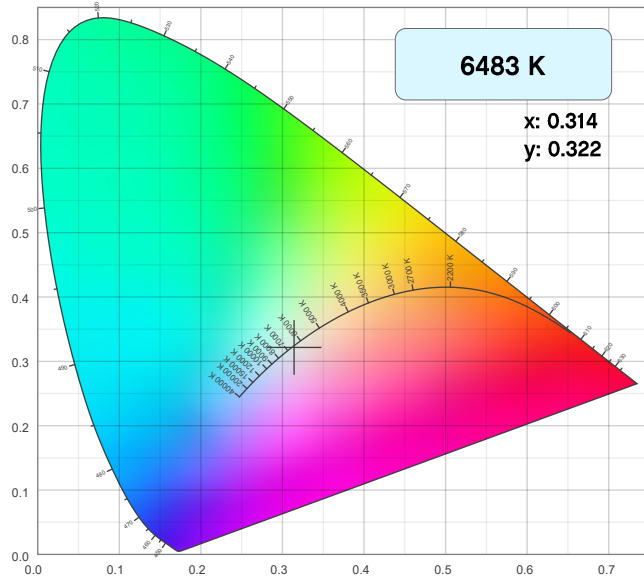
#### Notes:

# Chromaticity Report

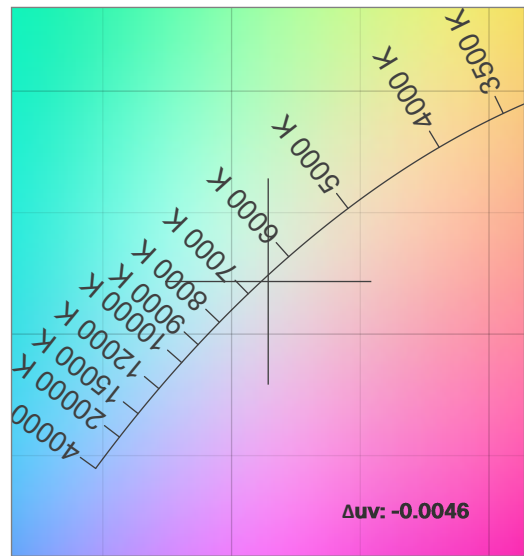
Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power

## Chromaticity

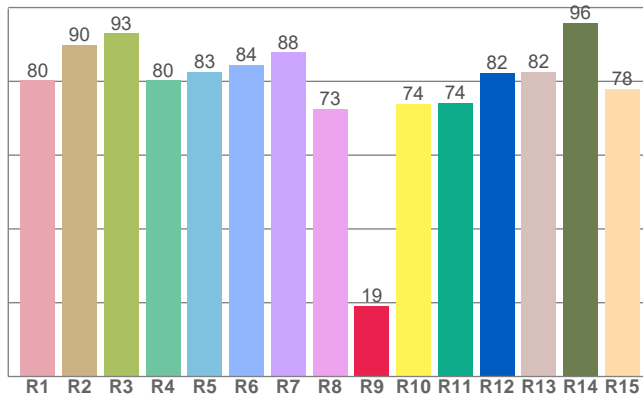
CIE 1931



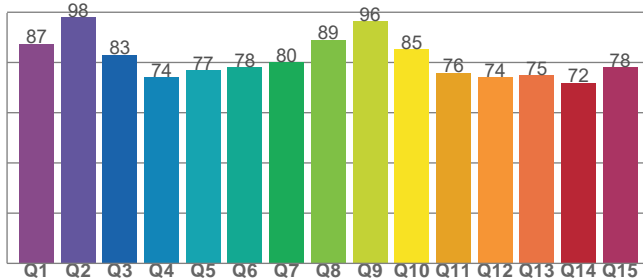
CIE 1931 - Zoom



CRI: 83.9 (R1-R8)



CQS: 79.9



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6483 K	0.314	0.322

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
$\Delta uv$	y	u
-0.0046	0.322	0.202

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
83.9	19.1	79.9

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
66	83.7	94.2

# Chromaticity Report

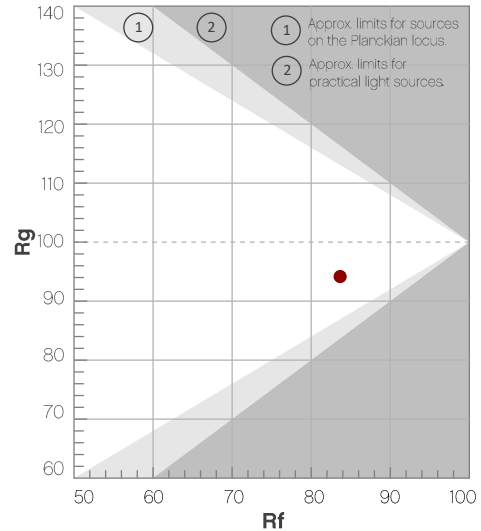
Rogue Outcast 1 Hybrid : Beam Mode - Wide, Full Power

## TM-30-18 Details

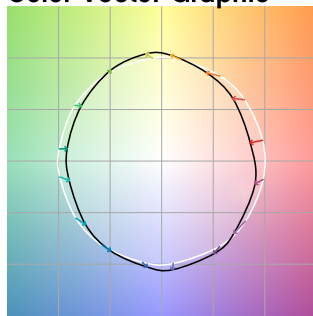
**Rf 83.7**  
Fidelity Index (R<sub>f</sub>)

**Rg 94.2**  
Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	76	-12%	0%
2	80	-9%	7%
3	74	-5%	13%
4	81	2%	10%
5	87	6%	5%
6	94	1%	-3%
7	88	-5%	-3%
8	85	-7%	-2%
9	88	-8%	5%
10	81	-4%	10%
11	80	0%	10%
12	89	4%	5%
13	90	6%	-2%
14	84	3%	-8%
15	81	-3%	-16%
16	83	-7%	-6%



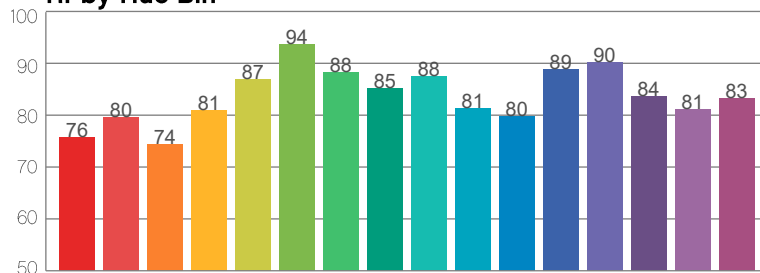
Color Vector Graphic



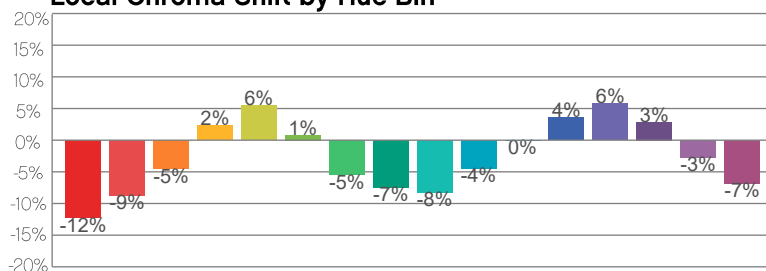
Color Distortion Graphic



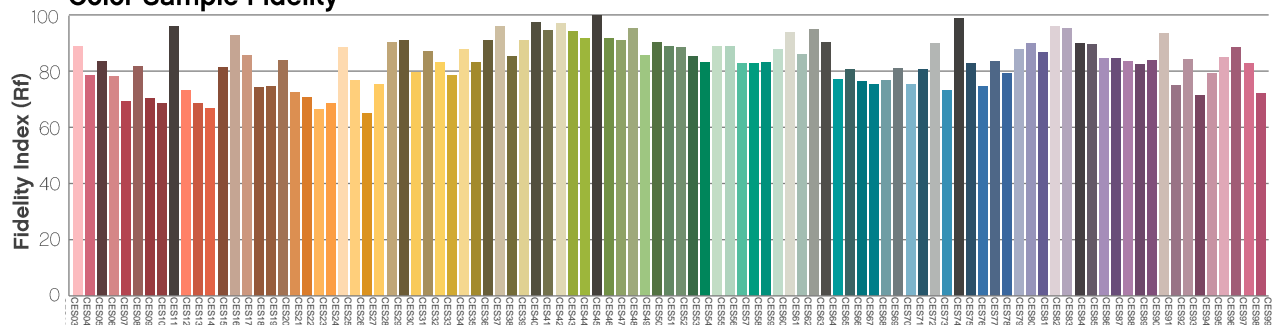
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity





# Chromaticity Report

Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power

## Report Summary

### Measurements

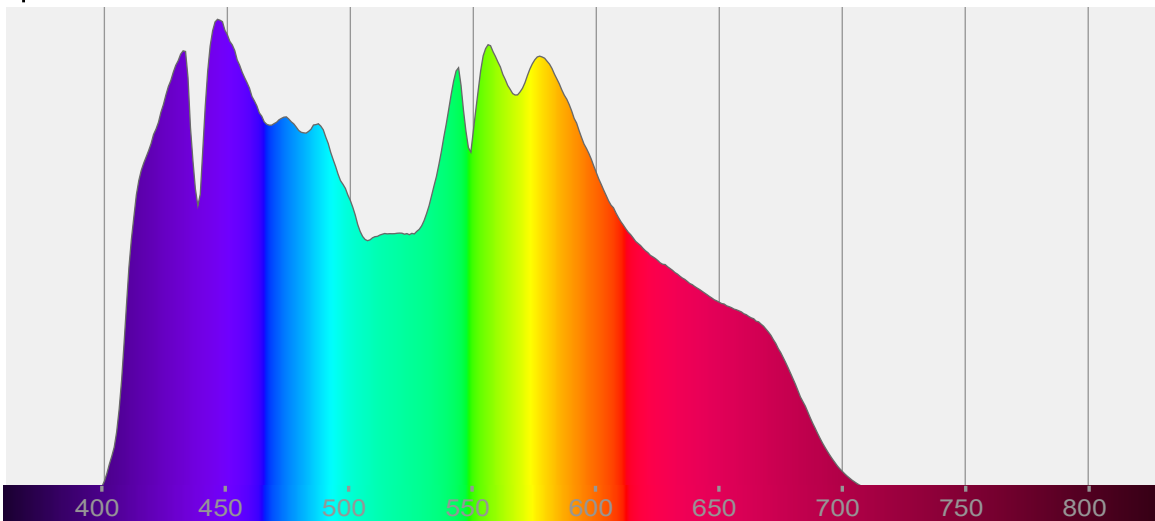
Total Lumens: 13752 lm  
Peak Intensity: 27702932 cd  
Fixture Efficacy: 27 lm/W

Correlated Color Temperature: 6436K  
 $\Delta uv$ : -0.0041

CRI: 83.0      CRI R9 Value: 13.2  
CQS: 79.1  
TLCI: 64  
TM-30-18 Rf: 83.0  
TM-30-18 Rg: 93.6  
1<sup>st</sup> Dominant Wavelength: 446 nm  
2<sup>nd</sup> Dominant Wavelength: 556 nm



### Spectral Distribution



### Tested Color

6436 K

CIE 1931 Coordinates:  
X: 0.315    Y: 0.323

### Color Temperature

6436 K

### Light Quality

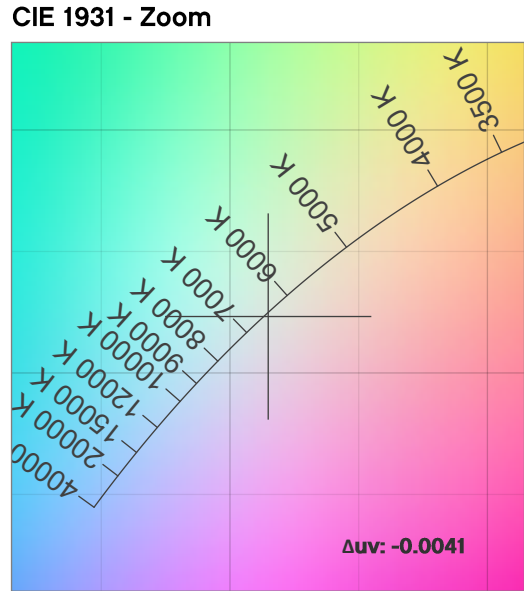
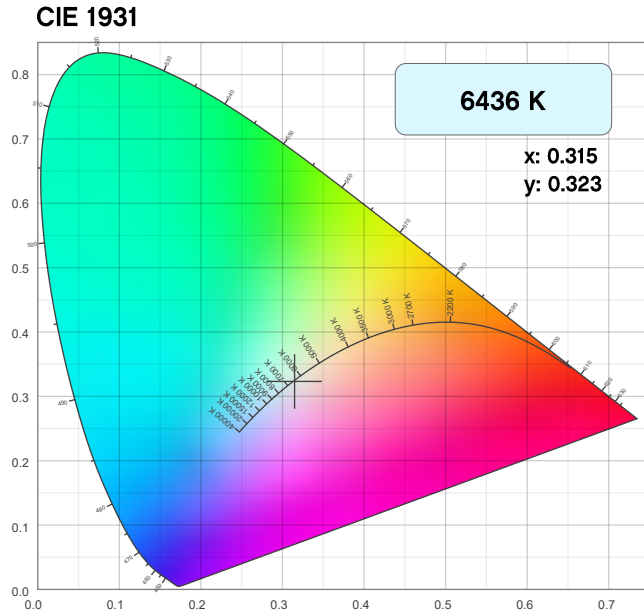
CRI: 83.0

### Notes:

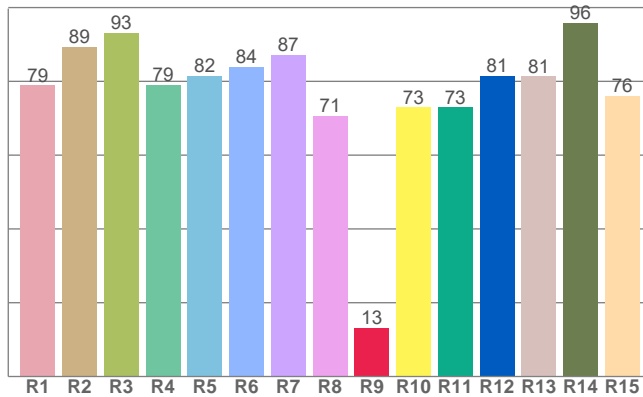
# Chromaticity Report

Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power

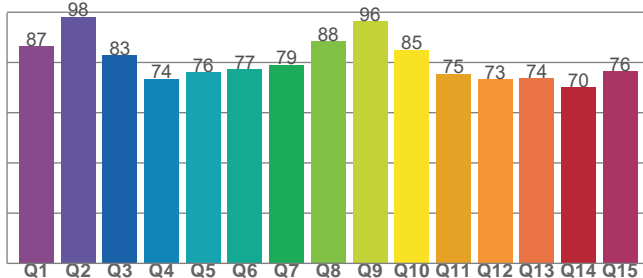
## Chromaticity



**CRI: 83.0 (R1-R8)**



**CQS: 79.1**



**Color Parameters**

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6436 K	0.315	0.323

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0041	0.323	0.202

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
83.0	13.2	79.1

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
64	83.0	93.6

# Chromaticity Report

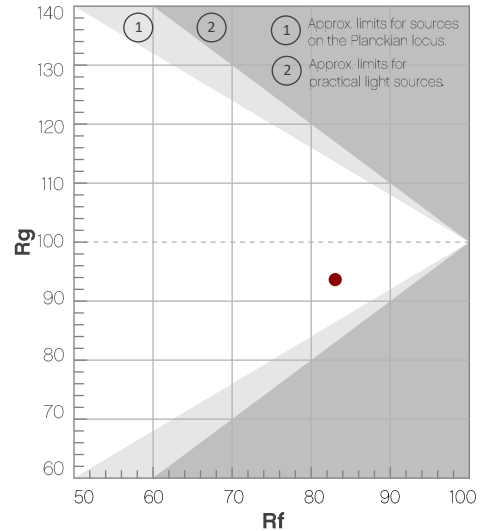
Rogue Outcast 1 Hybrid : Beam Mode - Narrow, Full Power

## TM-30-18 Details

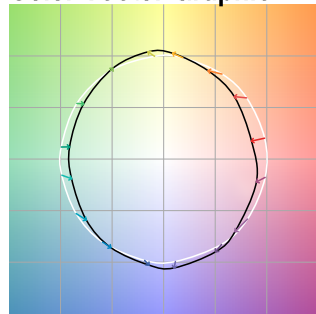
**Rf 83.0**  
Fidelity Index (R<sub>f</sub>)

**Rg 93.6**  
Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	74	-13%	0%
2	79	-9%	8%
3	74	-5%	13%
4	81	2%	10%
5	87	6%	5%
6	93	1%	-3%
7	88	-6%	-3%
8	84	-8%	-2%
9	87	-9%	5%
10	78	-5%	11%
11	82	0%	10%
12	89	4%	5%
13	90	6%	-2%
14	82	3%	-9%
15	80	-3%	-17%
16	82	-7%	-6%



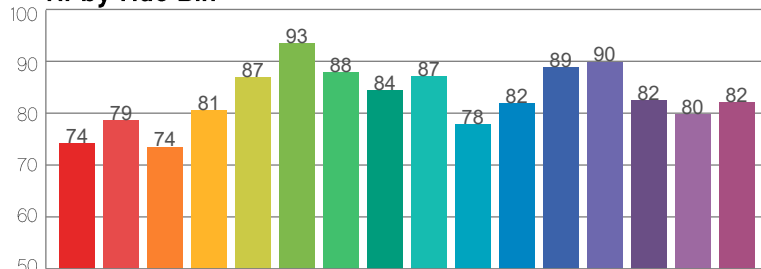
Color Vector Graphic



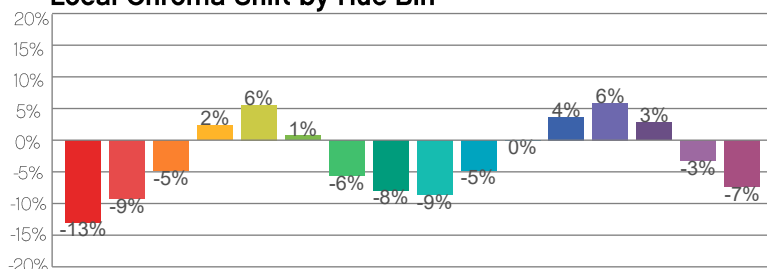
Color Distortion Graphic



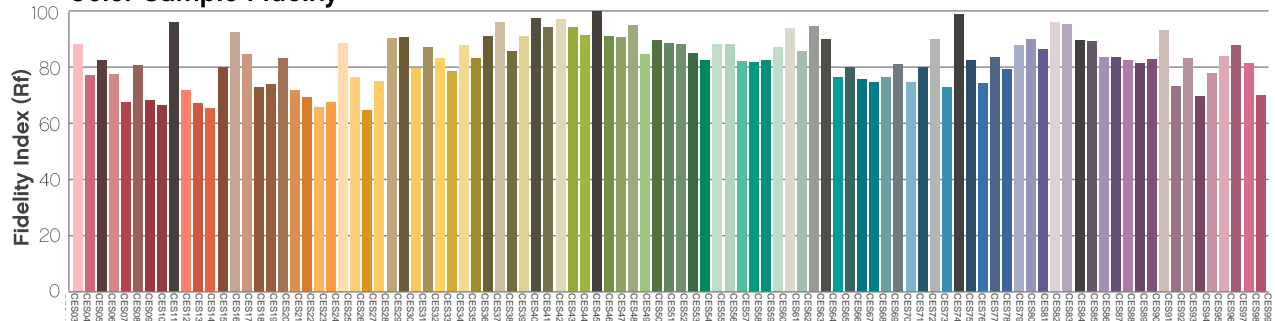
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power

## Report Summary

### Measurements

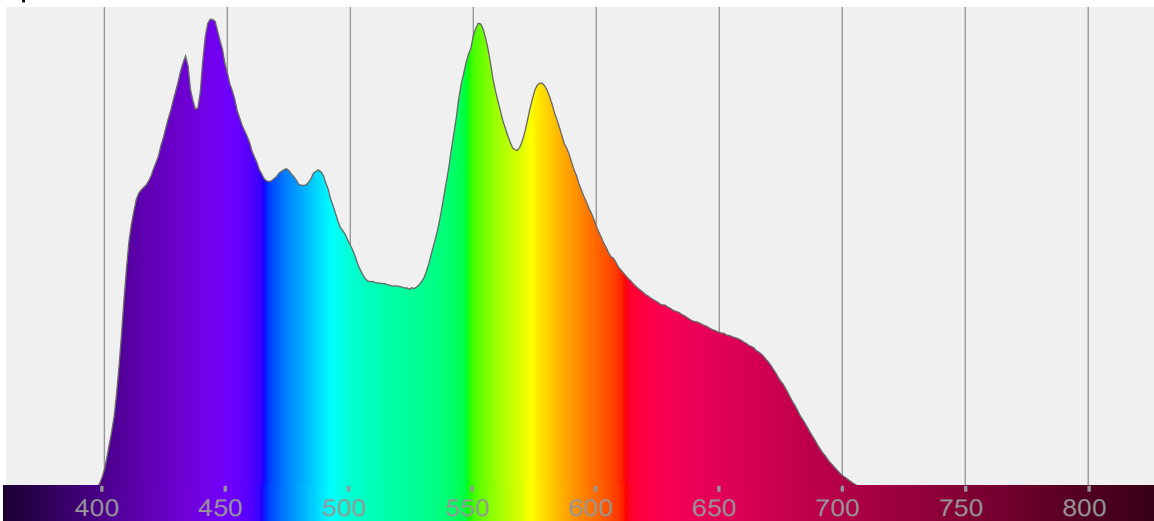
Total Lumens: 9263 lm  
Peak Intensity: 143549 cd  
Fixture Efficacy: 18 lm/W

Correlated Color Temperature: 6810K  
 $\Delta uv$ : -0.0041

CRI: 78.4      CRI R9 Value: -0.3  
CQS: 74.2  
TLCI: 52  
TM-30-18 Rf: 78.1  
TM-30-18 Rg: 92.7  
1<sup>st</sup> Dominant Wavelength: 443 nm  
2<sup>nd</sup> Dominant Wavelength: 552 nm



### Spectral Distribution



### Tested Color

**6810 K**

CIE 1931 Coordinates:  
X: 0.309    Y: 0.318

### Color Temperature

6810 K

### Light Quality

CRI: 78.4

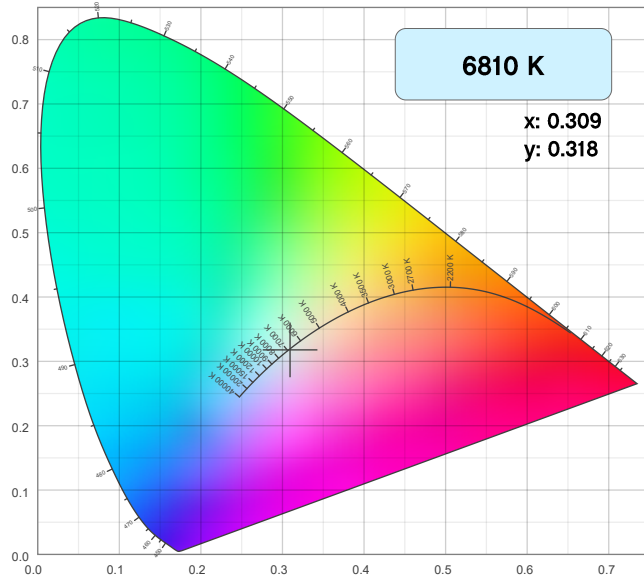
### Notes:

# Chromaticity Report

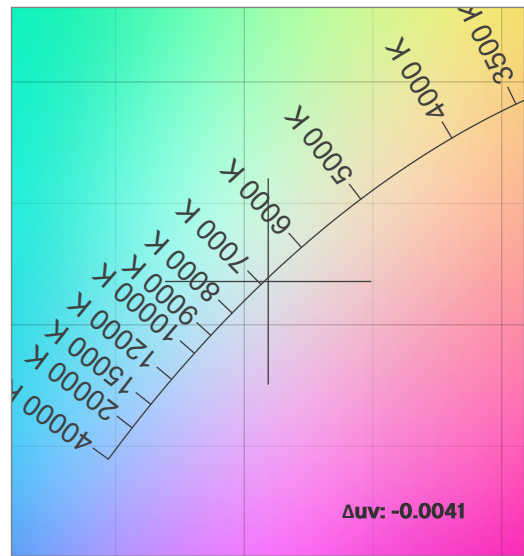
Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power

## Chromaticity

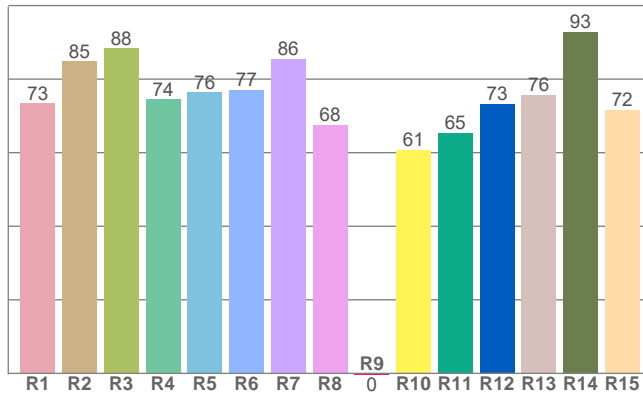
CIE 1931



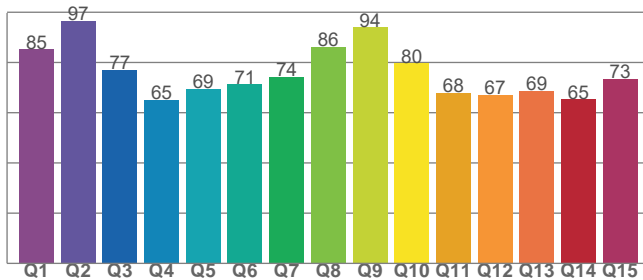
CIE 1931 - Zoom



CRI: 78.4 (R1-R8)



CQS: 74.2



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6810 K	0.309	0.318

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0041	0.318	0.200

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
78.4	-0.3	74.2

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
52	78.1	92.7

# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - Wide, Full Power

## TM-30-18 Details

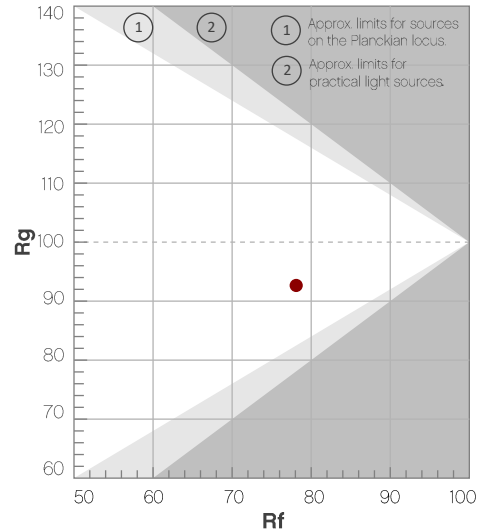
**Rf 78.1**

Fidelity Index  
(R<sub>f</sub>)

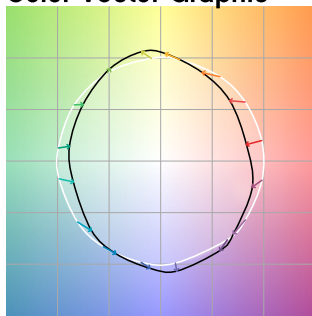
**Rg 92.7**

Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	70	-15%	-1%
2	70	-12%	9%
3	69	-6%	16%
4	73	3%	15%
5	81	8%	8%
6	91	2%	-4%
7	84	-7%	-5%
8	79	-10%	-4%
9	82	-13%	6%
10	73	-7%	14%
11	71	-1%	14%
12	82	4%	9%
13	87	8%	0%
14	84	5%	-12%
15	75	-2%	-18%
16	79	-8%	-8%



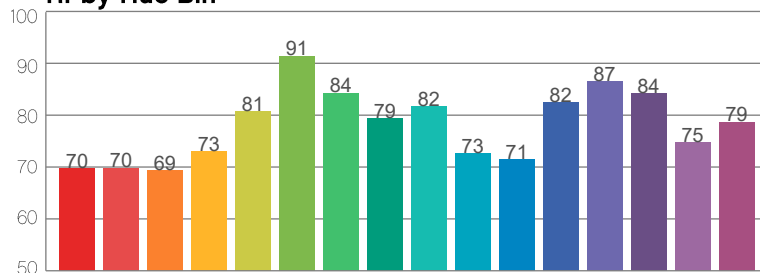
Color Vector Graphic



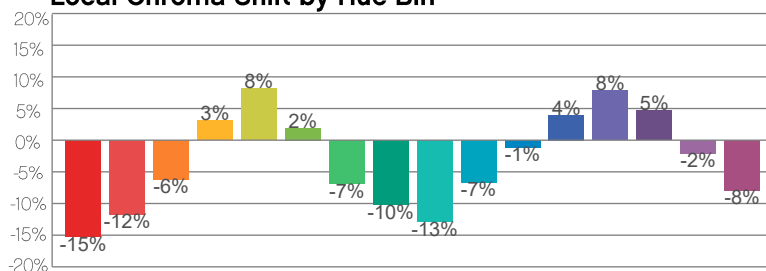
Color Distortion Graphic



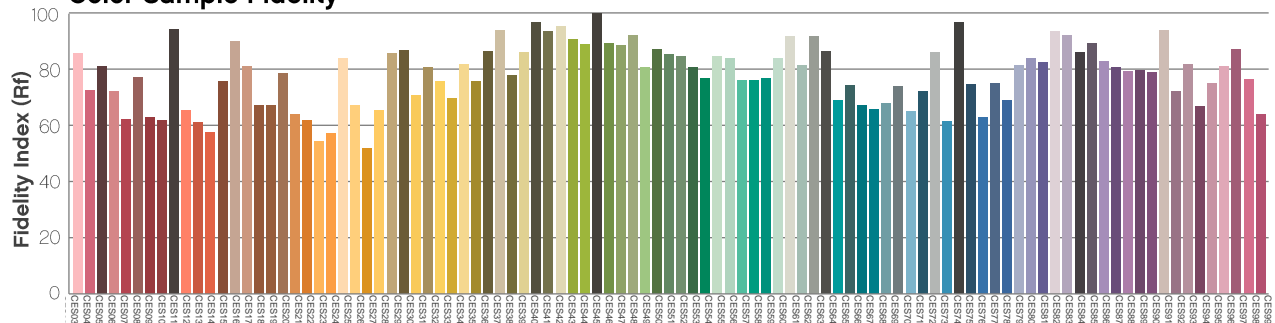
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power

## Report Summary

### Measurements

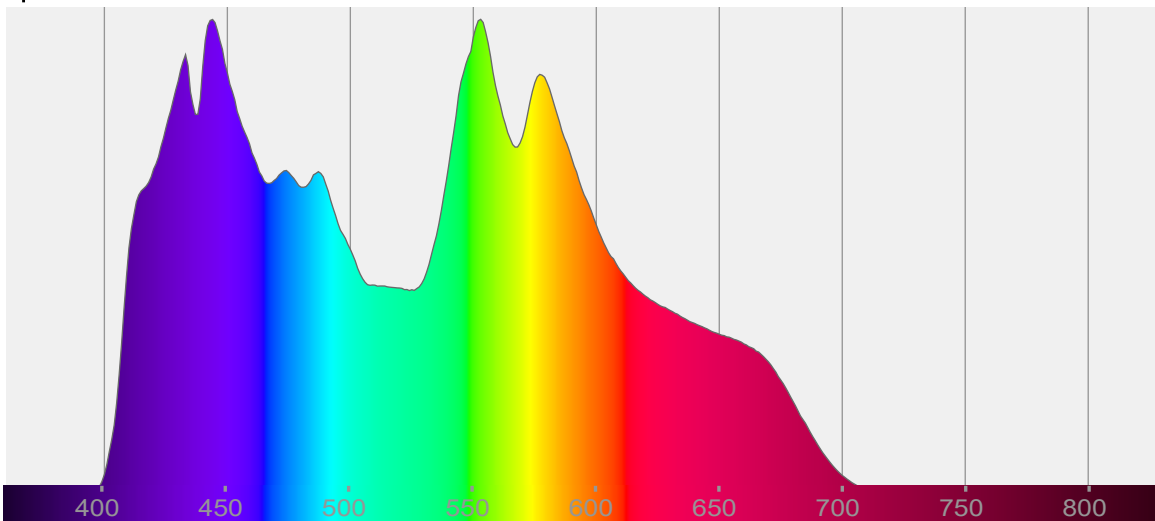
Total Lumens: 10981 lm  
Peak Intensity: 5233155 cd  
Fixture Efficacy: 21 lm/W

Correlated Color Temperature: 6748K  
 $\Delta uv$ : -0.0039

CRI: 77.6      CRI R9 Value: -5.0  
CQS: 73.3  
TLCI: 50  
TM-30-18 Rf: 77.3  
TM-30-18 Rg: 92.2  
1<sup>st</sup> Dominant Wavelength: 553 nm  
2<sup>nd</sup> Dominant Wavelength: 444 nm



### Spectral Distribution



#### Tested Color

6748 K

CIE 1931 Coordinates:  
X: 0.310    Y: 0.319

#### Color Temperature

6748 K

#### Light Quality

CRI: 77.6

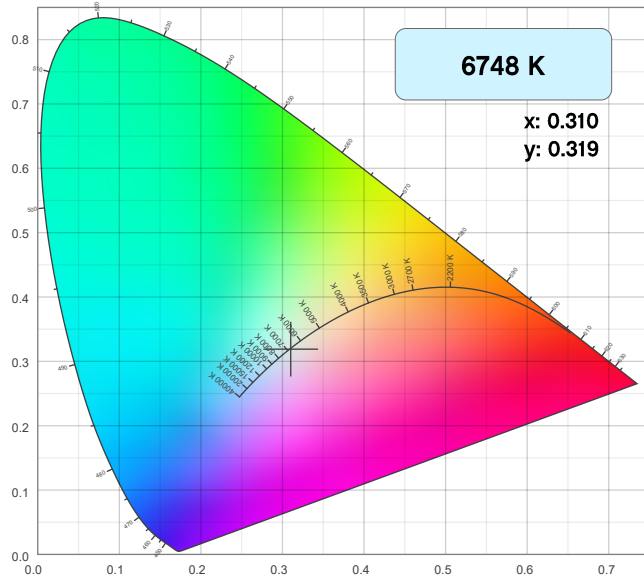
#### Notes:

# Chromaticity Report

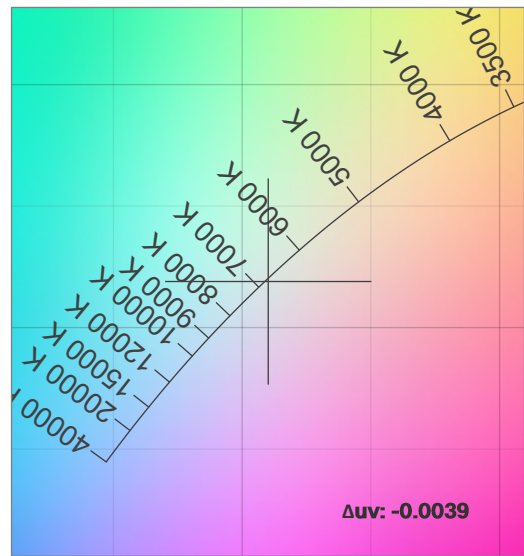
Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power

## Chromaticity

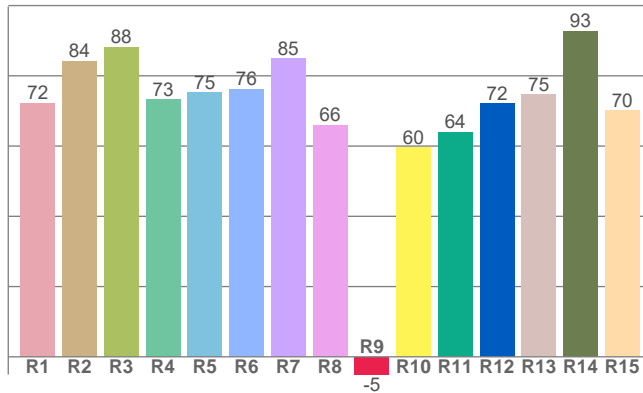
CIE 1931



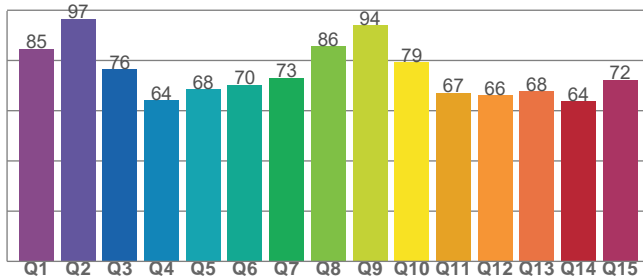
CIE 1931 - Zoom



CRI: 77.6 (R1-R8)



CQS: 73.3



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6748 K	0.310	0.319

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
$\Delta uv$	y	u
-0.0039	0.319	0.200

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
77.6	-5.0	73.3

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
50	77.3	92.2



# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - Narrow, Full Power

## TM-30-18 Details

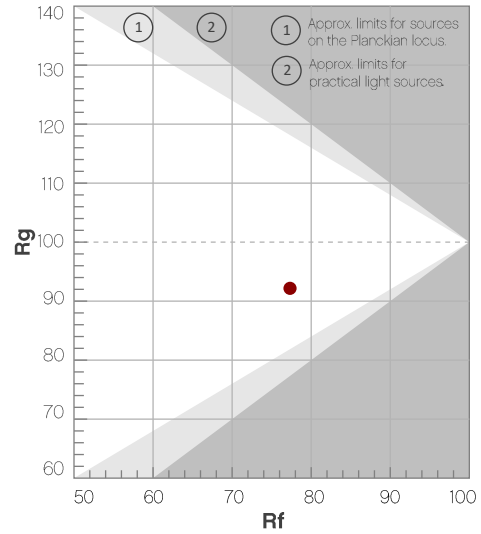
**Rf 77.3**

Fidelity Index  
(R<sub>f</sub>)

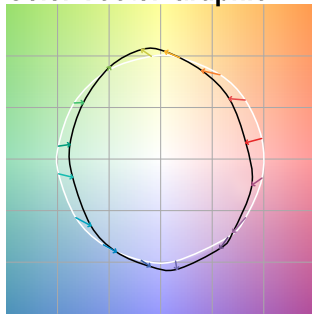
**Rg 92.2**

Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	69	-16%	-1%
2	69	-12%	10%
3	68	-6%	17%
4	72	3%	15%
5	80	8%	8%
6	91	2%	-4%
7	84	-7%	-5%
8	78	-11%	-4%
9	82	-13%	6%
10	72	-8%	15%
11	71	-1%	14%
12	82	4%	9%
13	86	8%	0%
14	84	5%	-12%
15	74	-2%	-19%
16	78	-8%	-9%



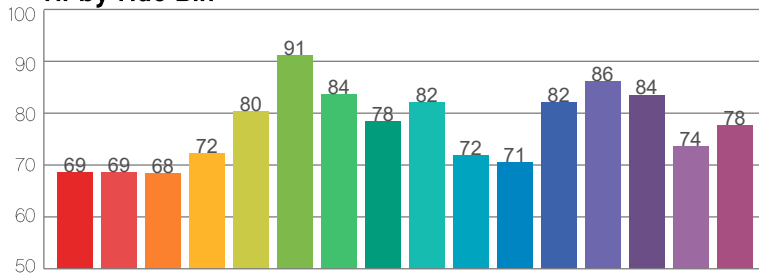
Color Vector Graphic



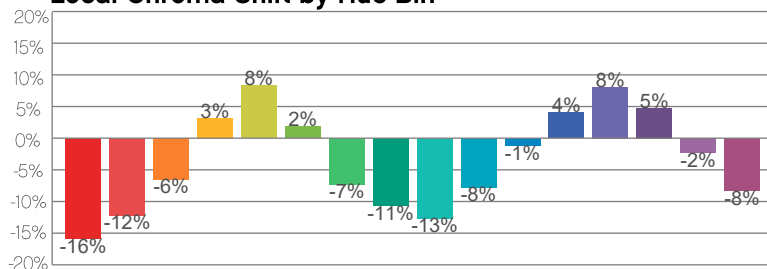
Color Distortion Graphic



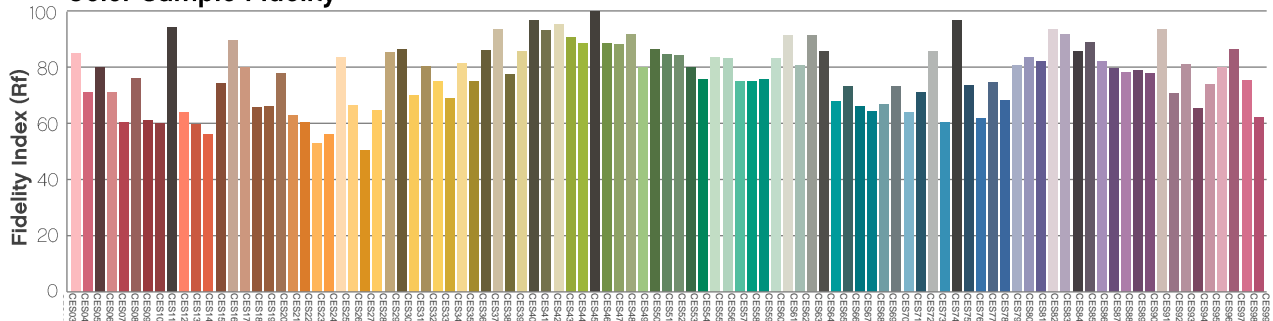
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power

## Report Summary

### Measurements

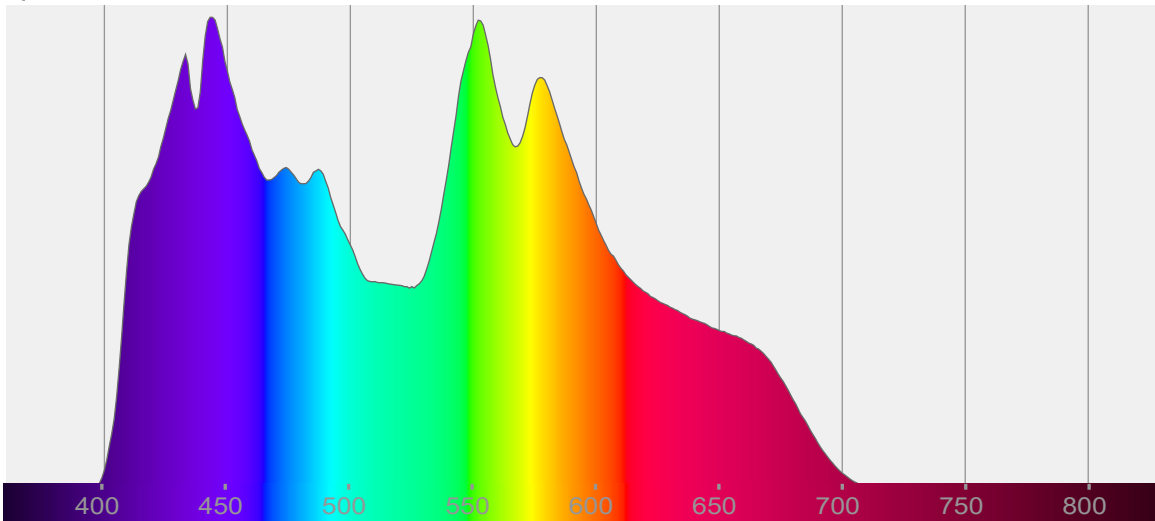
Total Lumens: 9637 lm  
Peak Intensity: 635069 cd  
Fixture Efficacy: 19 lm/W

Correlated Color Temperature: 6776K  
 $\Delta uv$ : -0.0040

CRI: 78.1      CRI R9 Value: -1.8  
CQS: 73.9  
TLCI: 52  
TM-30-18 Rf: 77.8  
TM-30-18 Rg: 92.5  
1<sup>st</sup> Dominant Wavelength: 443 nm  
2<sup>nd</sup> Dominant Wavelength: 552 nm



### Spectral Distribution



#### Tested Color

**6776 K**

CIE 1931 Coordinates:  
X: 0.310    Y: 0.318

#### Color Temperature

6776 K

#### Light Quality

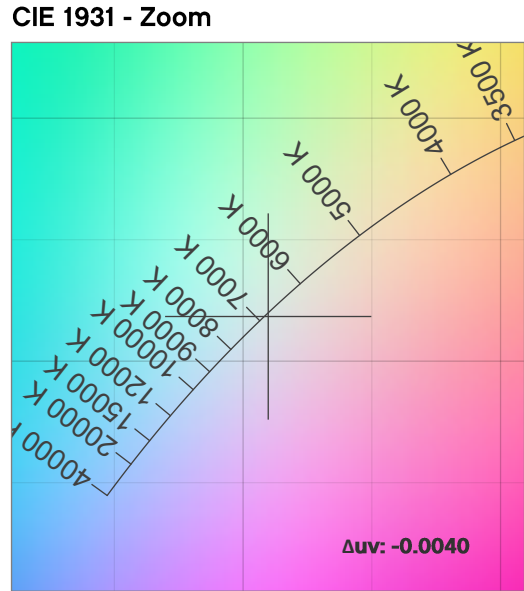
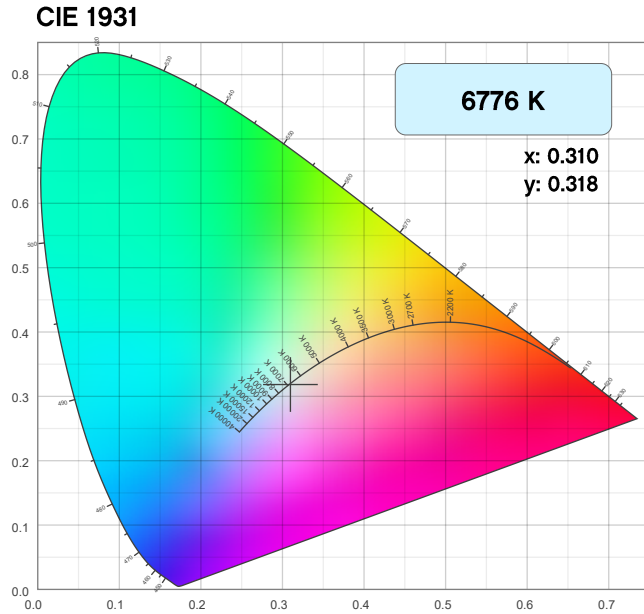
CRI: 78.1

#### Notes:

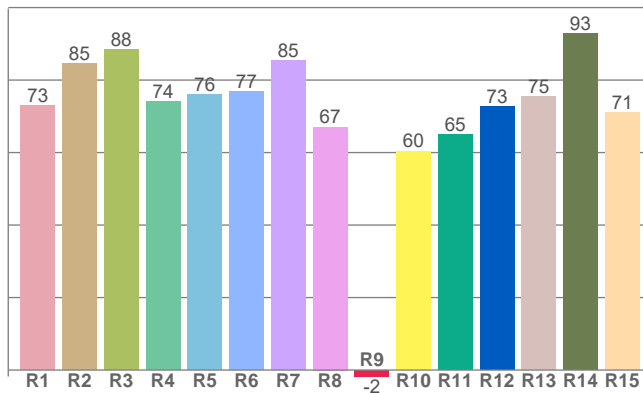
# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power

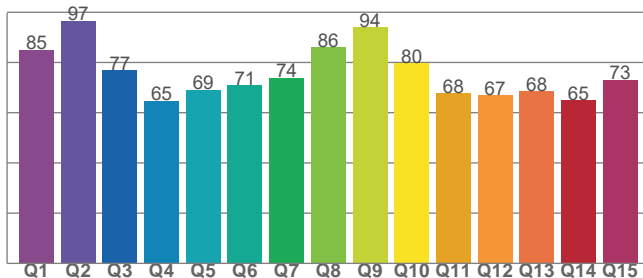
## Chromaticity



**CRI: 78.1 (R1-R8)**



**CQS: 73.9**



### Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6776 K	0.310	0.318

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0040	0.318	0.200

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
78.1	-1.8	73.9

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
52	77.8	92.5

# Chromaticity Report

Rogue Outcast 1 Hybrid : Spot Mode - 50% Zoom, Full Power

## TM-30-18 Details

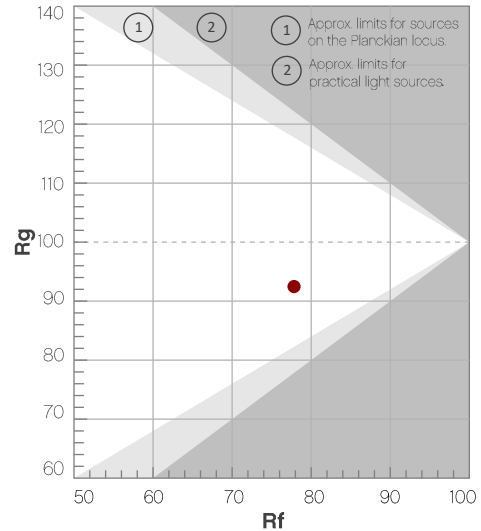
**Rf 77.8**

Fidelity Index  
(R<sub>f</sub>)

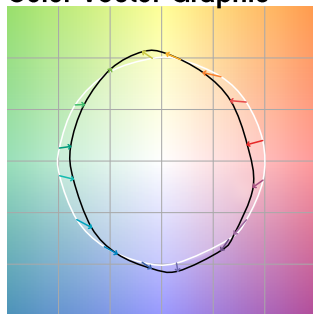
**Rg 92.5**

Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	69	-15%	-1%
2	69	-12%	9%
3	69	-6%	16%
4	73	3%	15%
5	81	8%	8%
6	91	2%	-4%
7	84	-7%	-5%
8	79	-10%	-4%
9	83	-12%	6%
10	72	-8%	14%
11	71	-1%	14%
12	82	4%	9%
13	86	8%	0%
14	84	5%	-12%
15	74	-2%	-18%
16	78	-8%	-8%



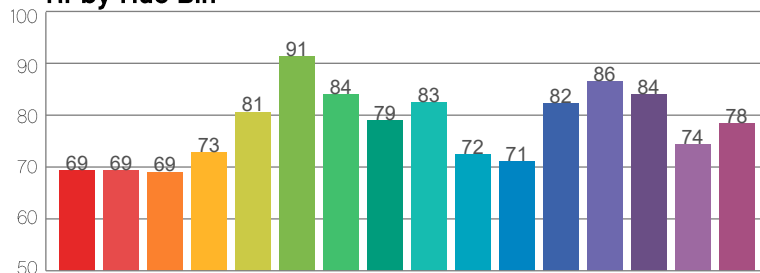
Color Vector Graphic



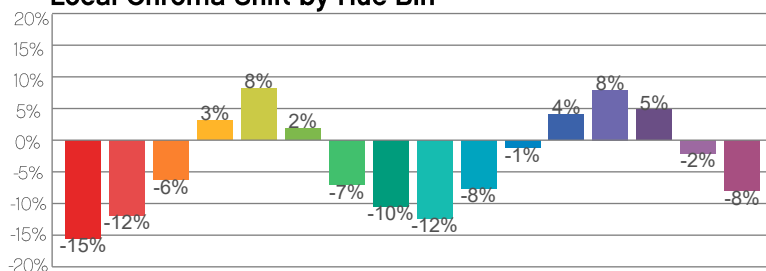
Color Distortion Graphic



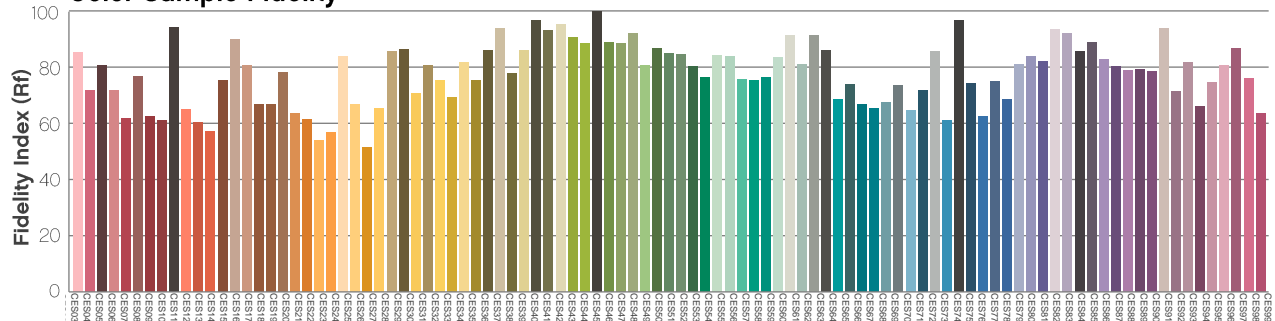
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power

## Report Summary

### Measurements

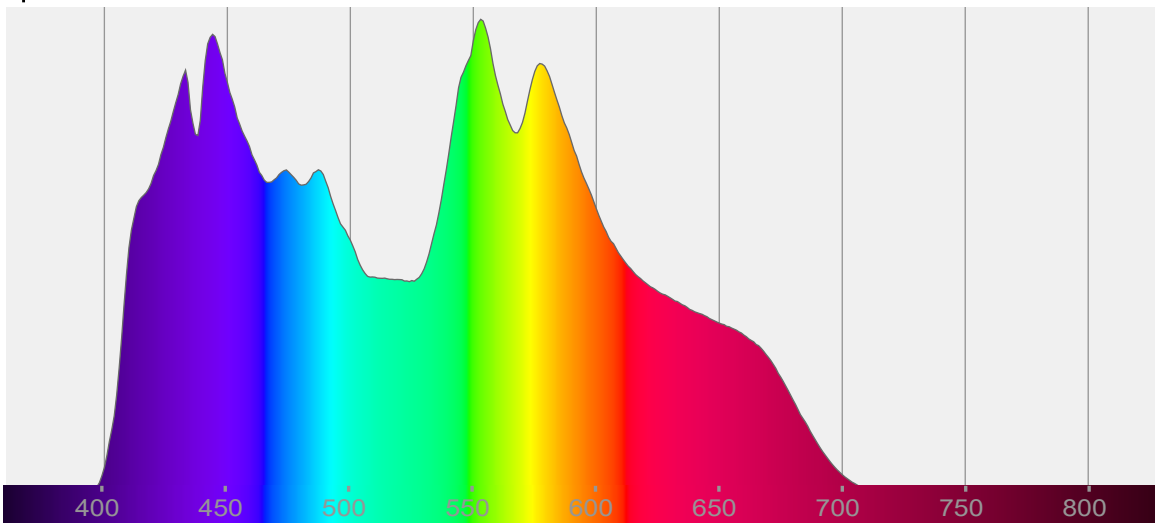
Total Lumens: 3581 lm  
Peak Intensity: 39248 cd  
Fixture Efficacy: 7 lm/W

Correlated Color Temperature: 6404K  
 $\Delta uv$ : -0.0035

CRI: 78.0      CRI R9 Value: -4.4  
CQS: 74.1  
TLCI: 52  
TM-30-18 Rf: 78.1  
TM-30-18 Rg: 92.0  
1<sup>st</sup> Dominant Wavelength: 553 nm  
2<sup>nd</sup> Dominant Wavelength: 444 nm



### Spectral Distribution



#### Tested Color

**6404 K**

CIE 1931 Coordinates:  
X: 0.315    Y: 0.325

#### Color Temperature

6404 K

#### Light Quality

CRI: 78.0

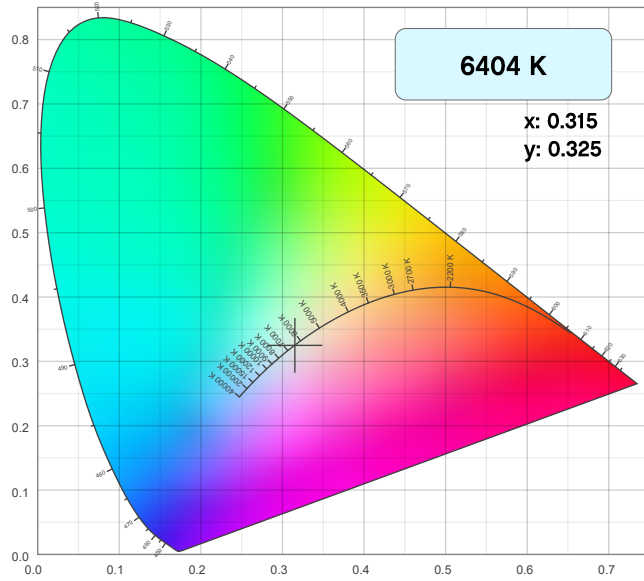
#### Notes:

# Chromaticity Report

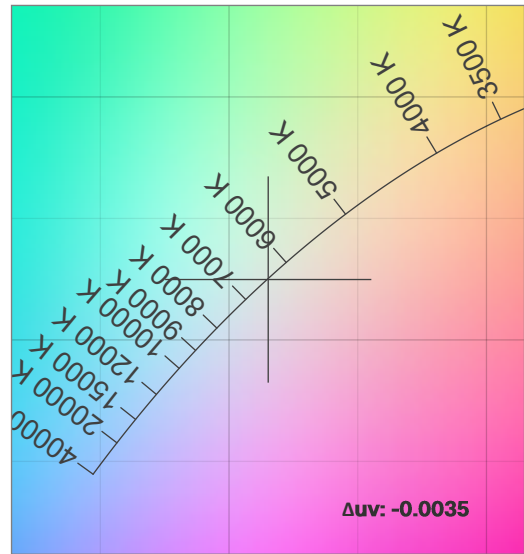
Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power

## Chromaticity

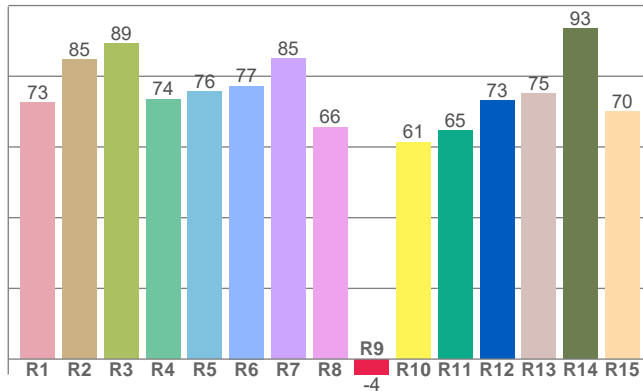
CIE 1931



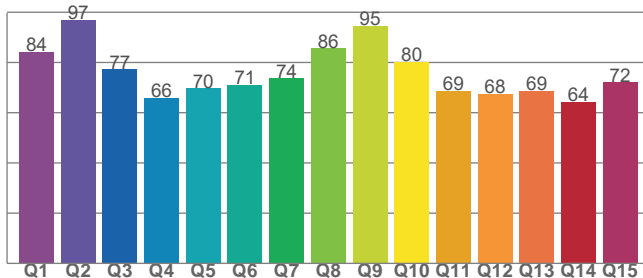
CIE 1931 - Zoom



CRI: 78.0 (R1-R8)



CQS: 74.1



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6404 K	0.315	0.325

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0035	0.325	0.201

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
78.0	-4.4	74.1

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
52	78.1	92.0

# Chromaticity Report

Rogue Outcast 1 Hybrid : Wash Mode - Wide, Full Power

## TM-30-18 Details

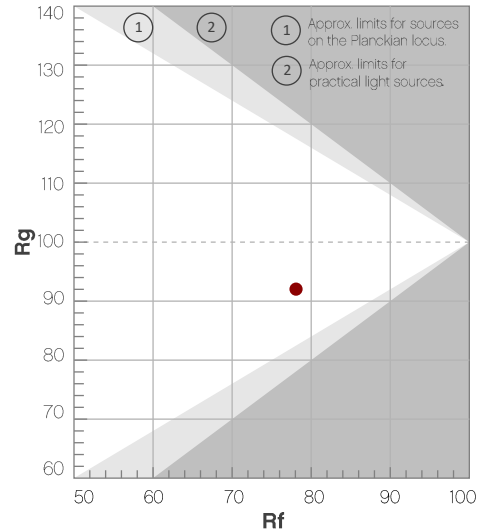
**Rf 78.1**

Fidelity Index  
(R<sub>f</sub>)

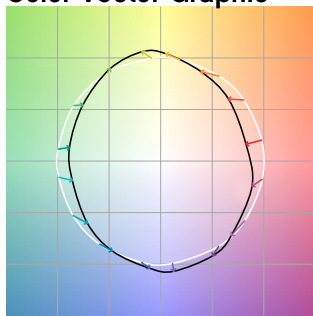
**Rg 92.0**

Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	69	-16%	-1%
2	74	-12%	9%
3	66	-6%	17%
4	74	3%	14%
5	81	8%	8%
6	91	2%	-4%
7	84	-7%	-5%
8	79	-10%	-4%
9	83	-12%	5%
10	71	-7%	14%
11	75	-1%	14%
12	83	4%	9%
13	88	8%	0%
14	79	4%	-10%
15	77	-3%	-19%
16	78	-8%	-8%



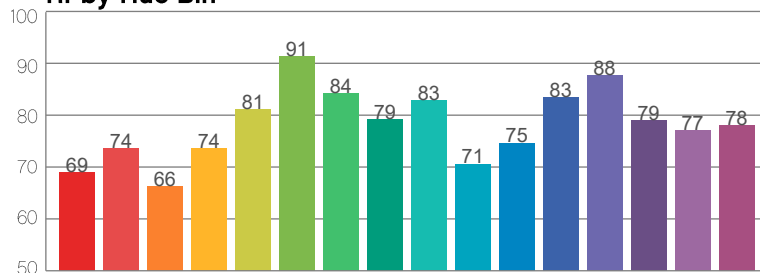
Color Vector Graphic



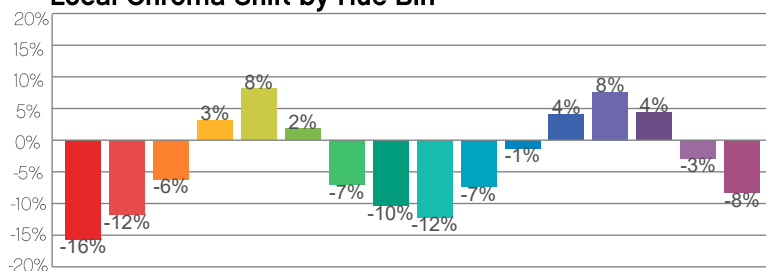
Color Distortion Graphic



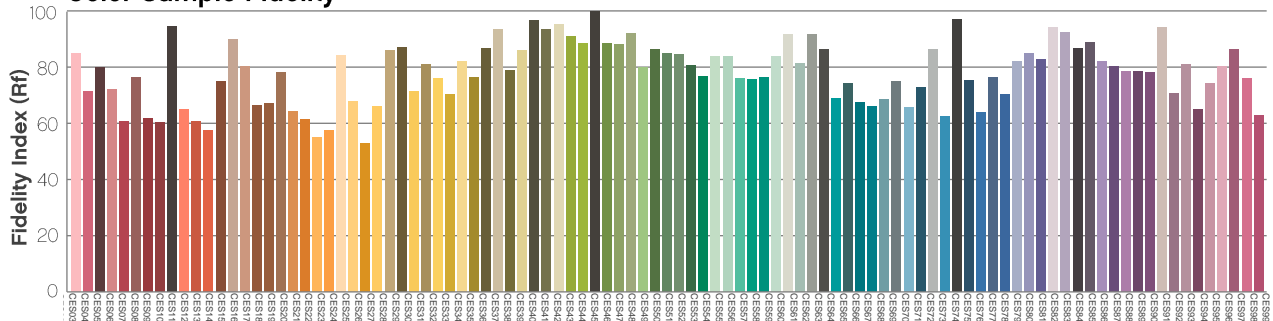
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power

## Report Summary

### Measurements

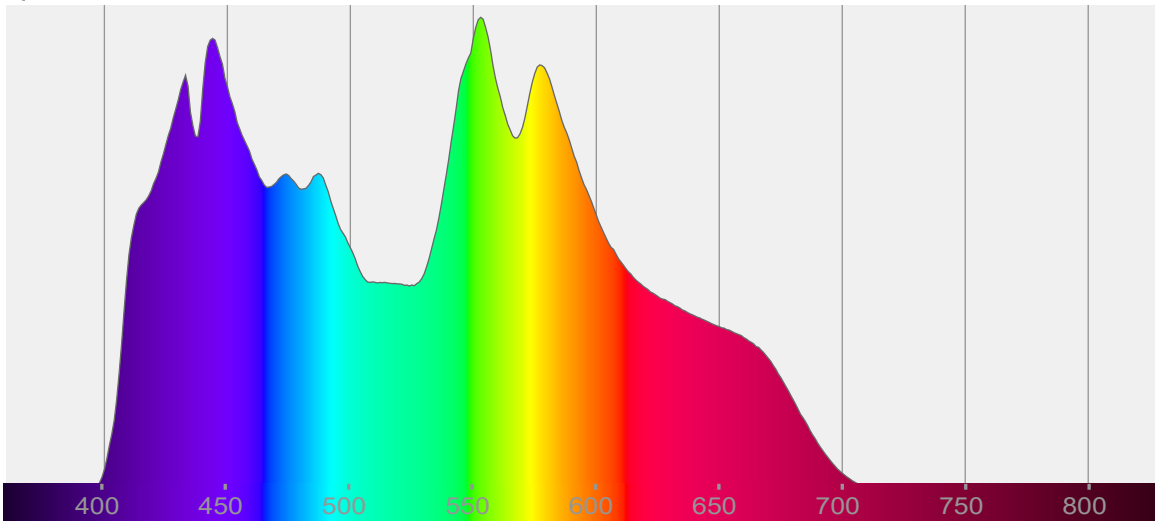
Total Lumens: 4550 lm  
Peak Intensity: 427950 cd  
Fixture Efficacy: 9 lm/W

Correlated Color Temperature: 6427K  
 $\Delta uv$ : -0.0031

CRI: 77.2      CRI R9 Value: -7.7  
CQS: 73.3  
TLCI: 51  
TM-30-18 Rf: 77.4  
TM-30-18 Rg: 91.6  
1<sup>st</sup> Dominant Wavelength: 553 nm  
2<sup>nd</sup> Dominant Wavelength: 444 nm



### Spectral Distribution



#### Tested Color

6427 K

CIE 1931 Coordinates:  
X: 0.315    Y: 0.325

#### Color Temperature

6427 K

#### Light Quality

CRI: 77.2

#### Notes:

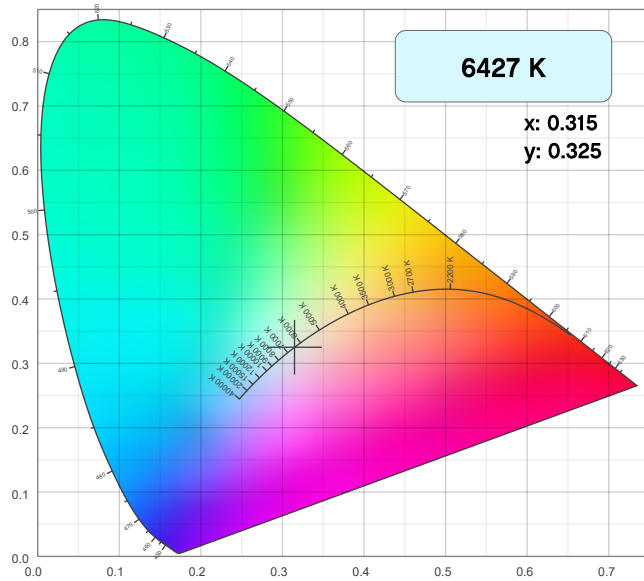


# Chromaticity Report

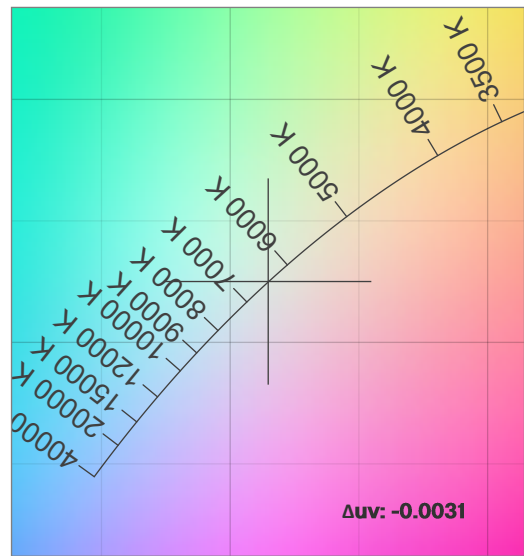
Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power

## Chromaticity

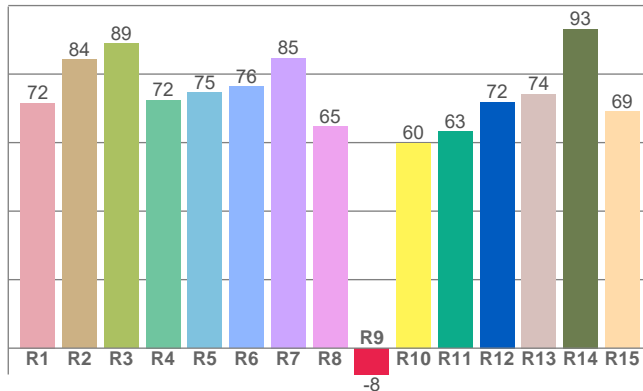
CIE 1931



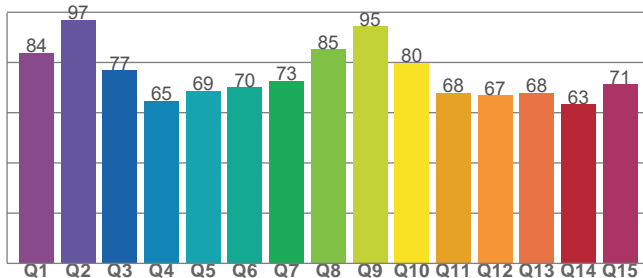
CIE 1931 - Zoom



CRI: 77.2 (R1-R8)



CQS: 73.3



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6427 K	0.315	0.325

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
$\Delta_{uv}$	y	u
-0.0031	0.325	0.201

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
77.2	-7.7	73.3

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
51	77.4	91.6

# Chromaticity Report

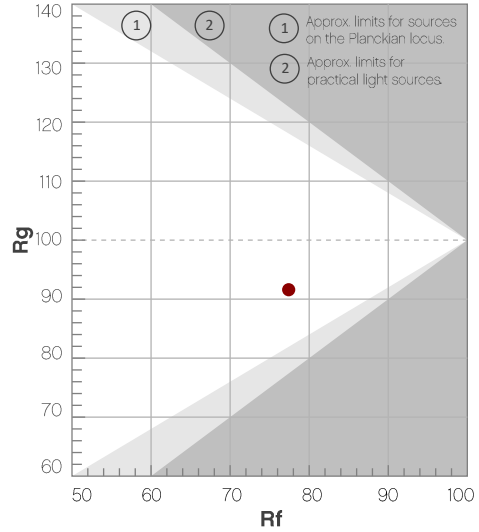
Rogue Outcast 1 Hybrid : Wash Mode - Narrow, Full Power

## TM-30-18 Details

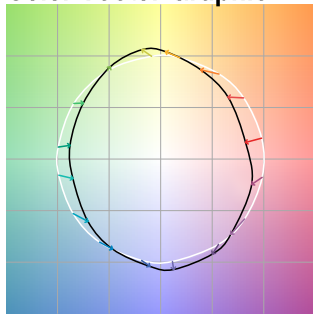
**Rf 77.4**  
Fidelity Index (R<sub>f</sub>)

**Rg 91.6**  
Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	68	-16%	-1%
2	73	-12%	9%
3	65	-6%	17%
4	73	3%	15%
5	81	8%	8%
6	91	2%	-4%
7	83	-7%	-5%
8	78	-11%	-4%
9	82	-13%	6%
10	69	-8%	14%
11	74	-1%	14%
12	83	4%	9%
13	87	8%	0%
14	78	4%	-10%
15	76	-3%	-20%
16	77	-9%	-9%



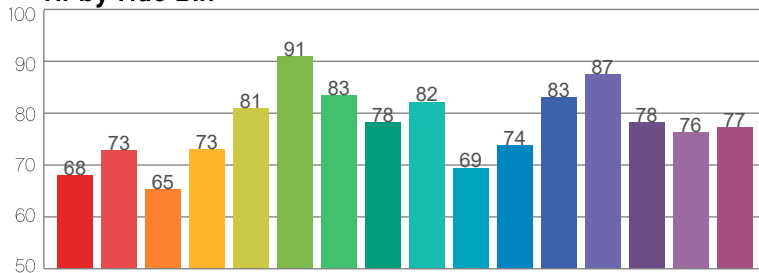
Color Vector Graphic



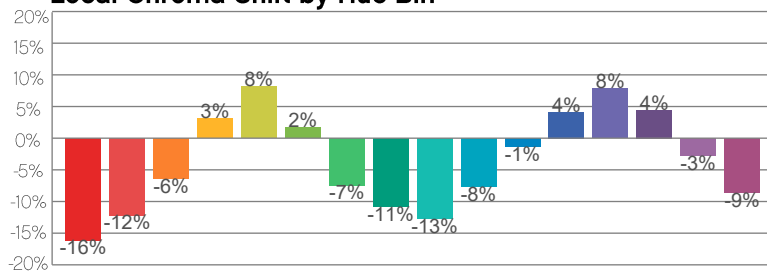
Color Distortion Graphic



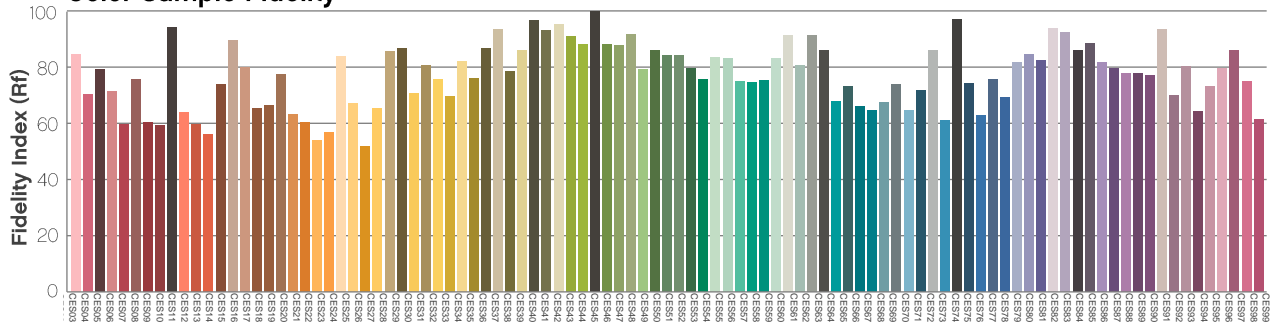
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



# Chromaticity Report

Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power

## Report Summary

### Measurements

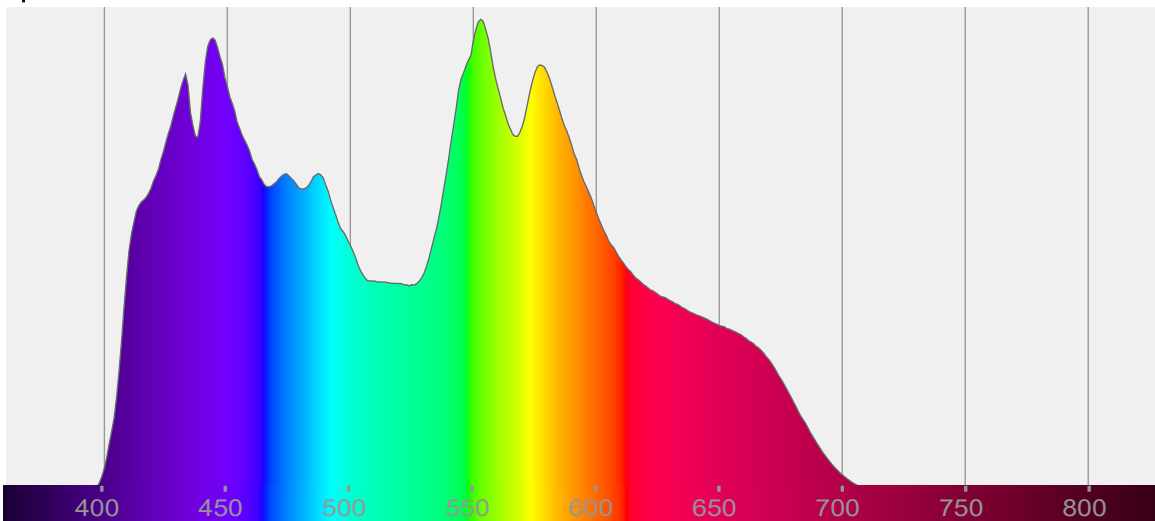
Total Lumens: 3652 lm  
Peak Intensity: 54683 cd  
Fixture Efficacy: 7 lm/W

Correlated Color Temperature: 6396K  
 $\Delta uv$ : -0.0034

CRI: 77.6      CRI R9 Value: -5.8  
CQS: 73.7  
TLCI: 51  
TM-30-18 Rf: 77.7  
TM-30-18 Rg: 91.9  
1<sup>st</sup> Dominant Wavelength: 553 nm  
2<sup>nd</sup> Dominant Wavelength: 444 nm



### Spectral Distribution



#### Tested Color

**6396 K**

CIE 1931 Coordinates:  
X: 0.315    Y: 0.325

#### Color Temperature

6396 K

#### Light Quality

CRI: 77.6

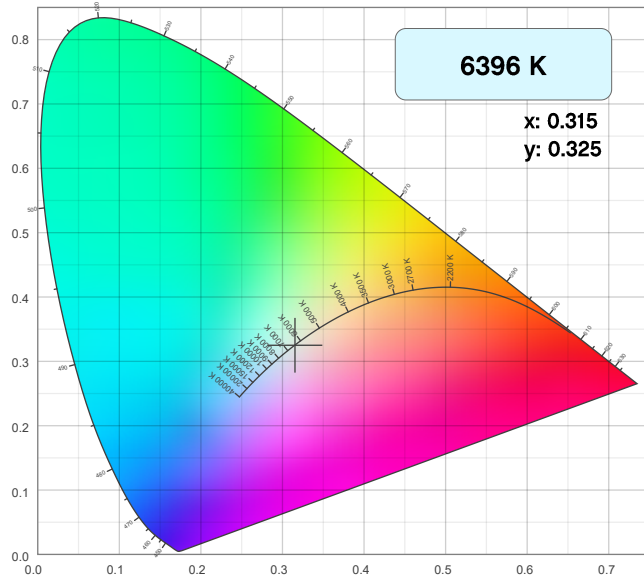
#### Notes:

# Chromaticity Report

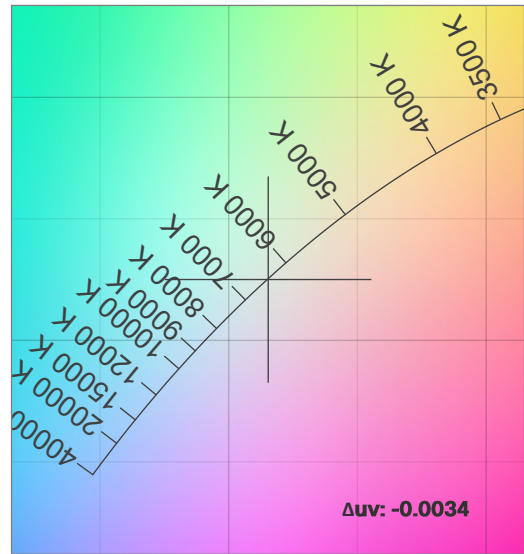
Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power

## Chromaticity

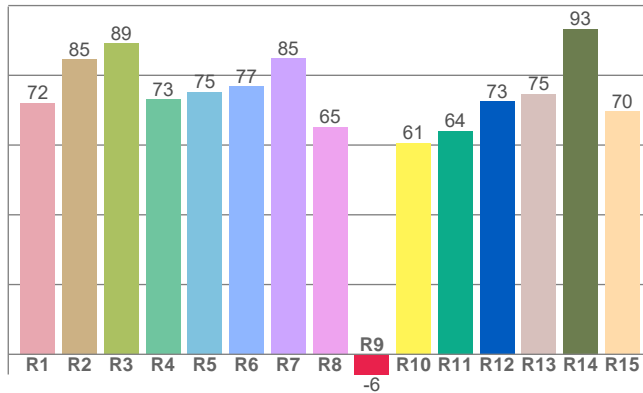
CIE 1931



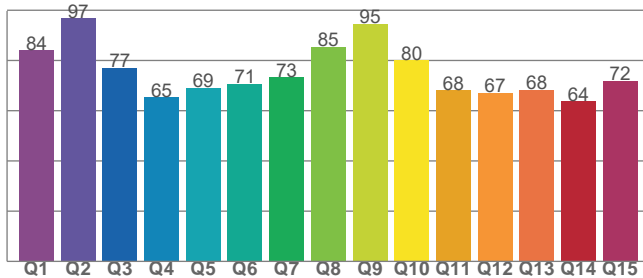
CIE 1931 - Zoom



CRI: 77.6 (R1-R8)



CQS: 73.7



Color Parameters

Color Temperature	Color Coordinate CIE 1931	Color Coordinate CIE 1931
CCT	x	y
6396 K	0.315	0.325

Color Deviation from Black Body Curve	Color Coordinate CIE 1964	Color Coordinate CIE 1964
Δuv	y	u
-0.0034	0.325	0.201

Color Rendering Index	Red Component	Color Quality Scale
CRI	CRI - R9	CQS
77.6	-5.8	73.7

Television Lighting Consistency Index	Color Fidelity	Color Gamut
TLCI	TM-30-18 - Rf	TM-30-18 Rg
51	77.7	91.9

# Chromaticity Report

Rogue Outcast 1 Hybrid : Wash Mode - 50% Zoom, Full Power

## TM-30-18 Details

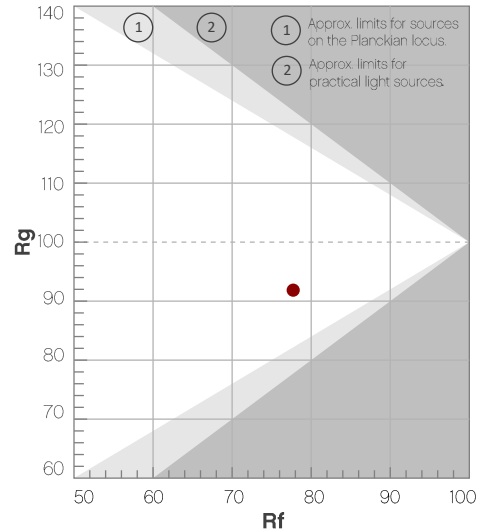
**Rf 77.7**

Fidelity Index  
(R<sub>f</sub>)

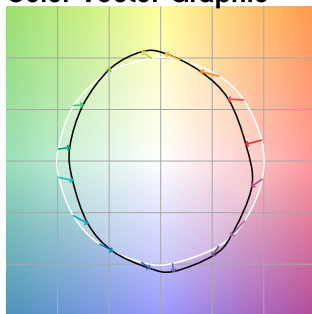
**Rg 91.9**

Gamut Index (R<sub>g</sub>)

Hue Bin	R <sub>f</sub>	Chroma Shift	Hue Shift
1	69	-16%	-1%
2	73	-12%	9%
3	66	-6%	17%
4	73	3%	15%
5	81	8%	8%
6	91	2%	-4%
7	84	-7%	-5%
8	79	-11%	-4%
9	83	-12%	6%
10	70	-8%	14%
11	74	-1%	14%
12	83	4%	9%
13	88	8%	0%
14	79	4%	-10%
15	77	-3%	-19%
16	78	-8%	-8%



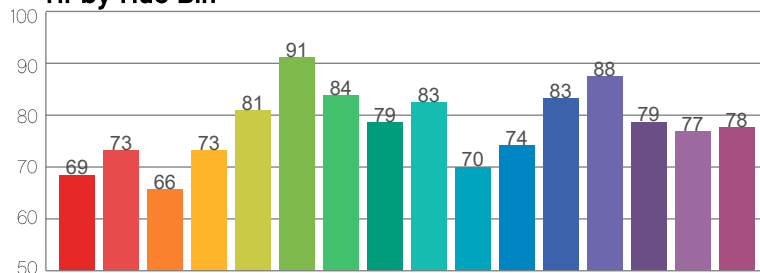
Color Vector Graphic



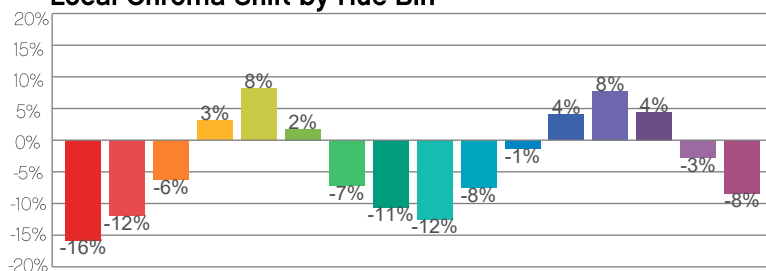
Color Distortion Graphic



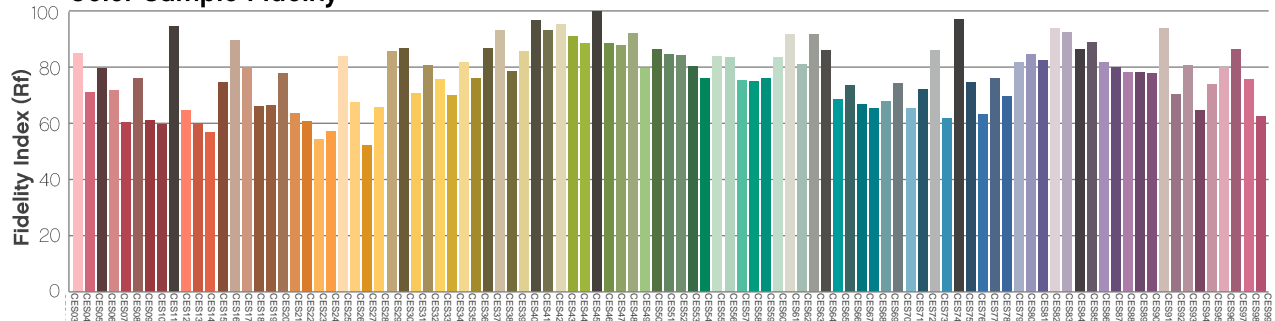
R<sub>f</sub> by Hue Bin



Local Chroma Shift by Hue Bin



Color Sample Fidelity



## Contact Us

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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.