

# **ARTISTE PICASSO™**

## Photometric Test Report

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## **D O C U M E N T   V E R S I O N**

**Due to additional product enhancements, an updated version of this document may be available online. Please check [www.elationlighting.com](http://www.elationlighting.com) for the latest revision/update of this report.**

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Zoom In	4
Zoom 50%	9
Zoom Out	14
Zoom 50% High CRI	19
Zoom 50% CTO	24
Zoom 50% Minus Green	29

Color Temperature:



Total Lumen Output:  
21194 lm

Light Quality:

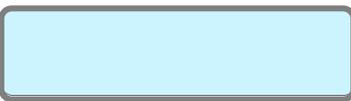


Peak:  
1128539 cd

Light Efficiency:



Power: 793 W



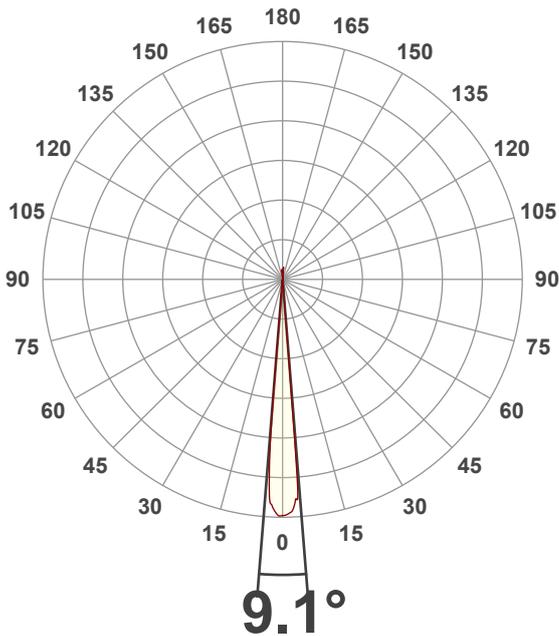
CIE 1931  
x: 0.308  
y: 0.320

Test: Zoom In

Date: 4/27/2018

Voltage: 116 V  
Current: 6.82 A  
Frequency: 60 Hz

Beam Angle



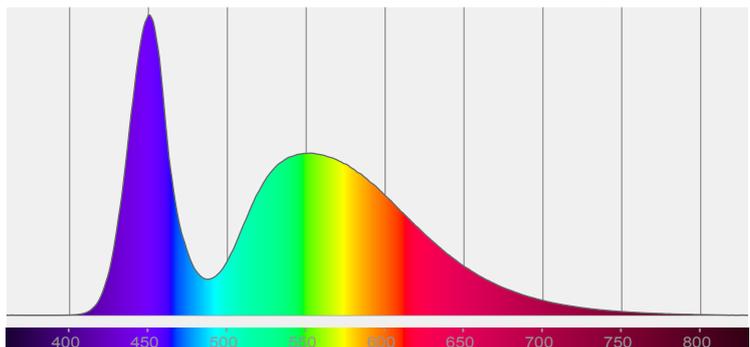
CRI: 72.7  
CQS: 68.9  
TM30: 69.0

Note:

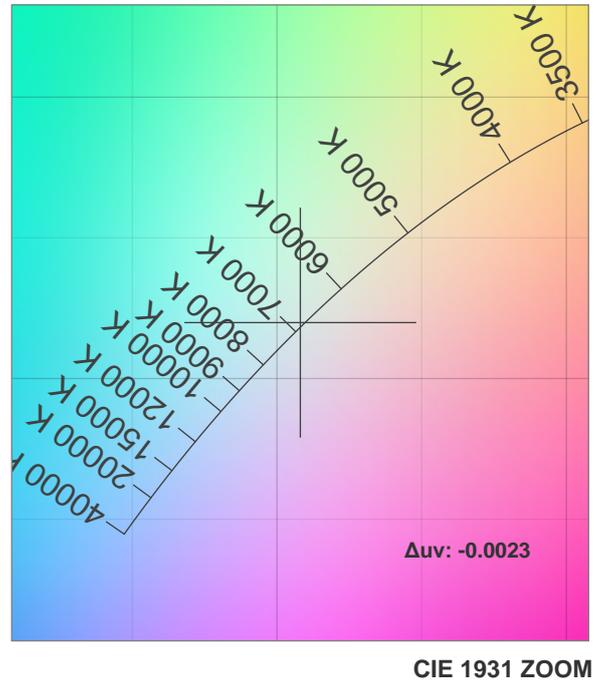
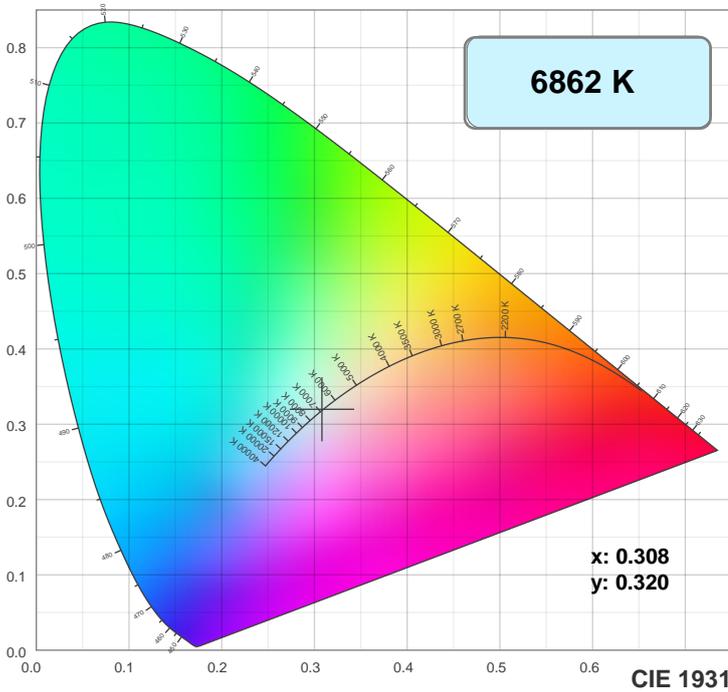
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
9.1°	10°	10.6°

Spectra

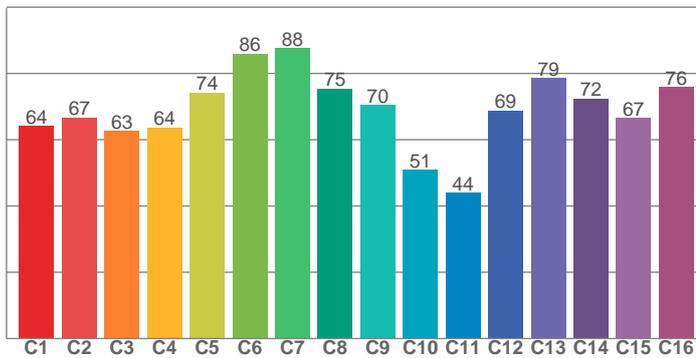
Dominant Wavelength: 451nm



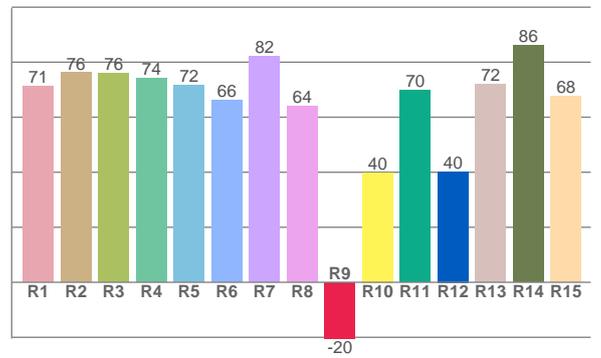
## Color Details



**TM30: 69.0**



**CRI: 72.7 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
71.3	76.2	75.9	74.0	71.6	66.2	82.2	64.0	-20.4	39.9	69.9	40.3	71.8	86.2	67.7

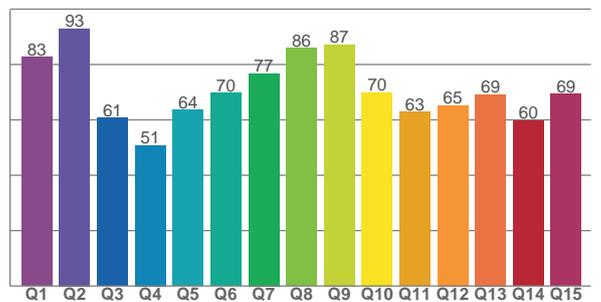
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64.1	66.7	62.6	63.7	74.2	85.9	87.6	75.4	70.4	50.9	44.0	68.7	78.6	72.4	66.6	75.8

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.7	92.9	60.7	50.9	63.5	69.7	76.8	86.0	87.2	70.0	62.9	65.2	69.2	59.7	69.3

**CQS: 68.9**



## Color Parameters

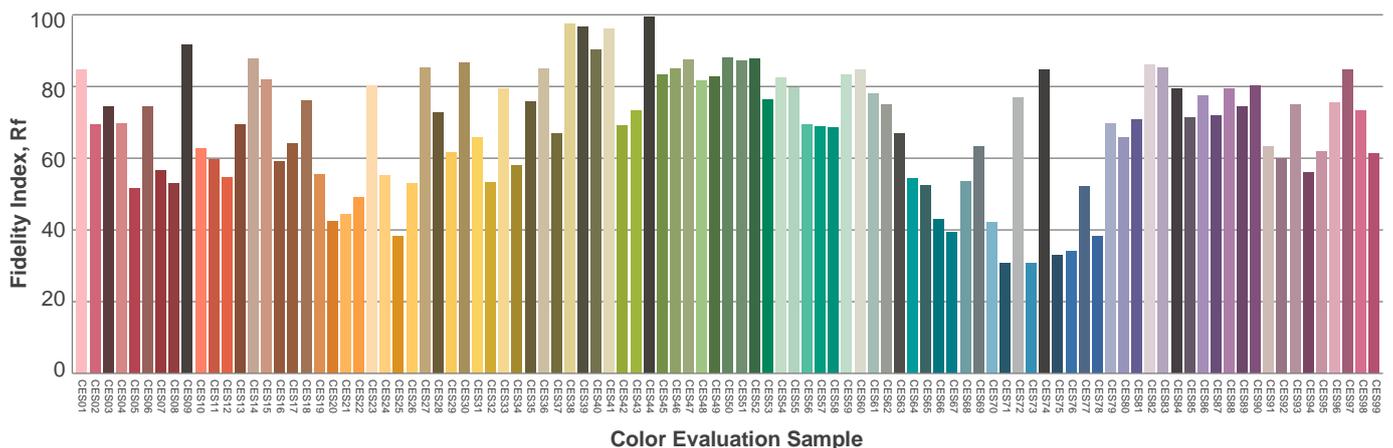
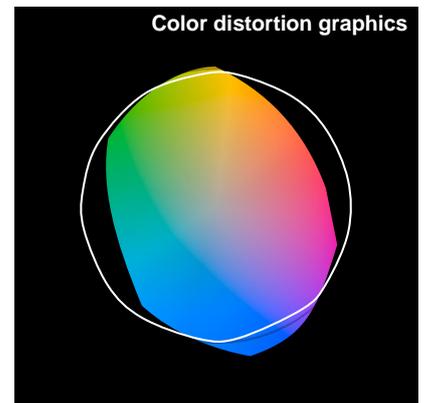
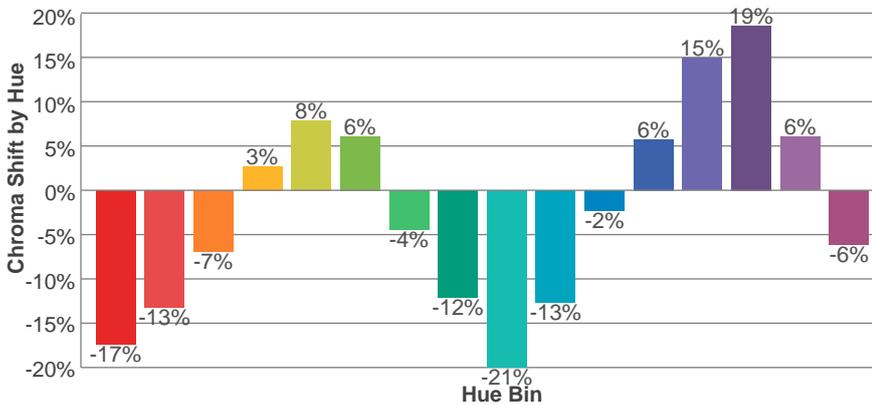
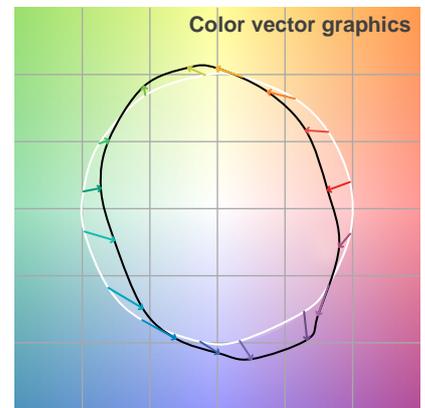
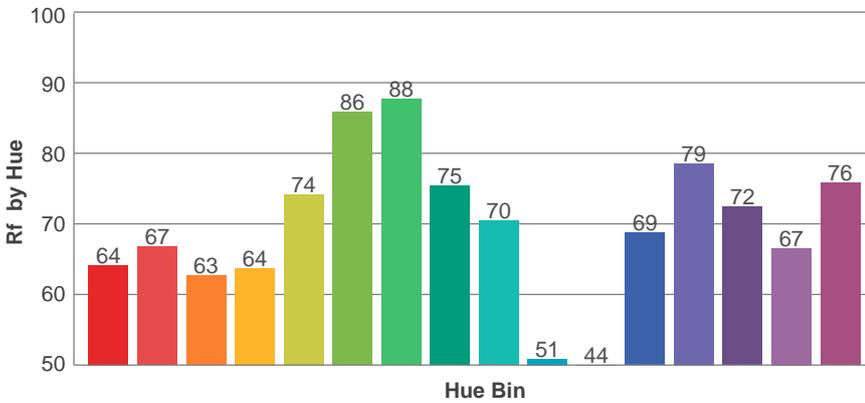
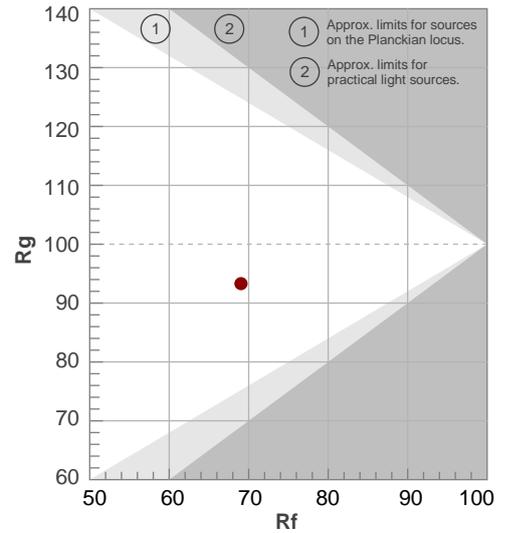
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
6862 K	72.7	-20.4	69.0	93.3	68.9	0.308	0.320	0.198	0.308	-0.0023

## TM30 Details

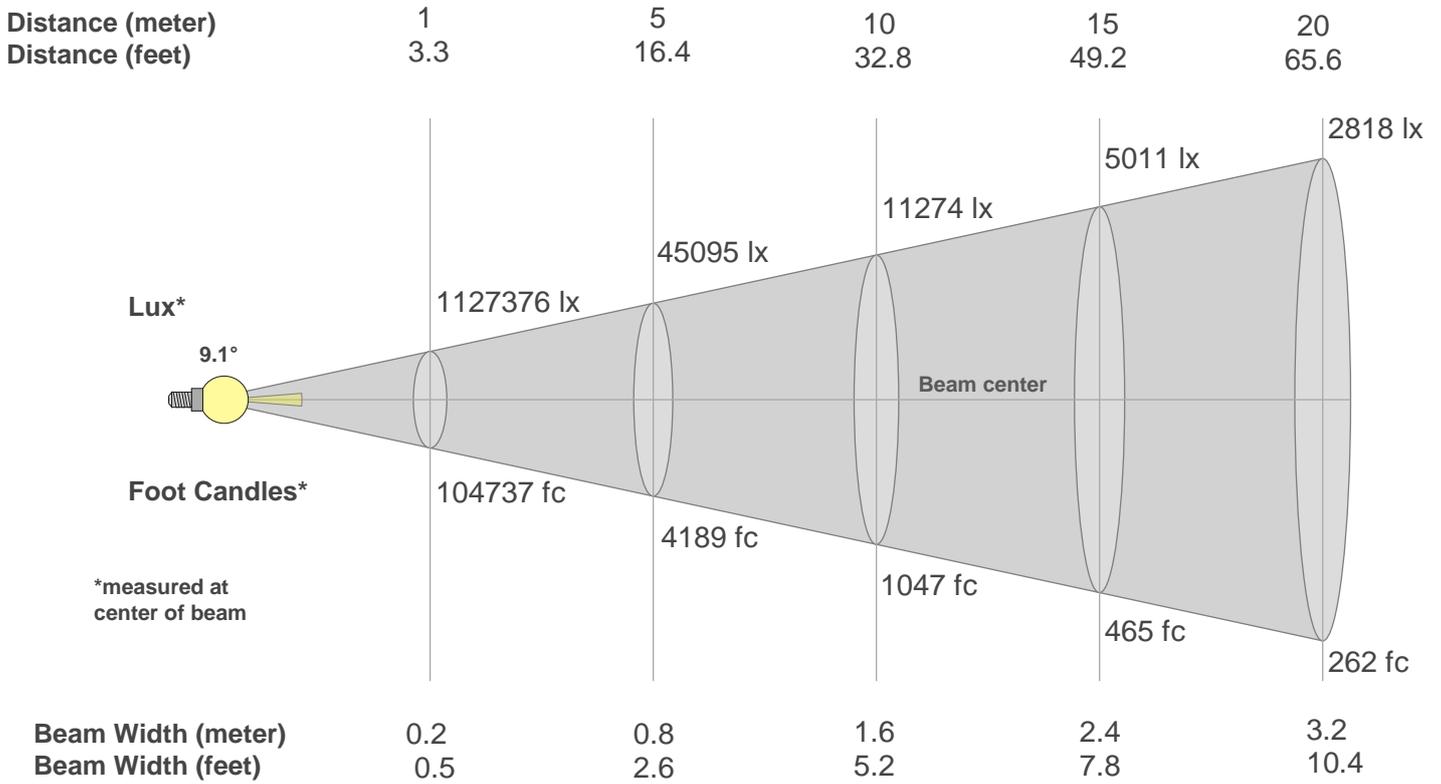
**Rf 69.0**  
Fidelity Index Rf

**Rg 93.3**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	64	-17%	-3%
2	67	-13%	10%
3	63	-7%	20%
4	64	3%	20%
5	74	8%	11%
6	86	6%	-3%
7	88	-4%	-6%
8	75	-12%	-5%
9	70	-21%	11%
10	51	-13%	27%
11	44	-2%	28%
12	69	6%	15%
13	79	15%	6%
14	72	19%	-10%
15	67	6%	-23%
16	76	-6%	-11%



## Beam Details



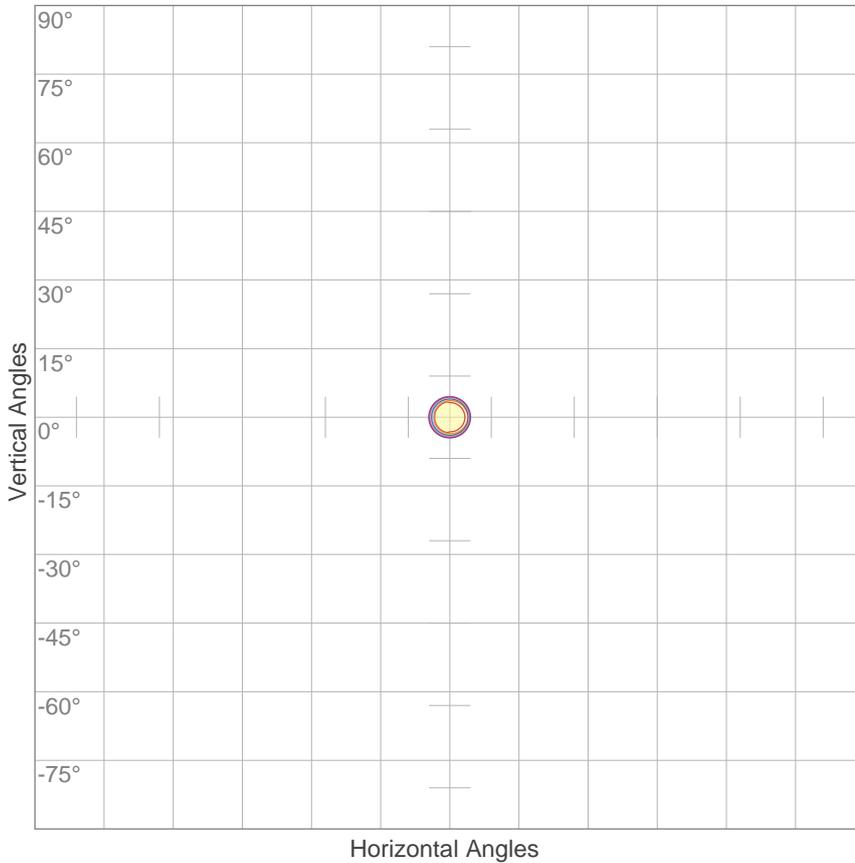
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	1127376	281844	125264	70461	45095	31316	23008	17615	13918	11274	9317	7829	6671	5752	5011	4404	3901	3480	3123	2818
fc	104736.6	26184.2	11637.4	6546	4189.5	2909.4	2137.5	1636.5	1293	1047.4	865.6	727.3	619.7	534.4	465.5	409.1	362.4	323.3	290.1	261.8

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
9.1°	10°	10.6°	100.0%	100.0%

## ISO Diagrams

### ISO Candela Diagram



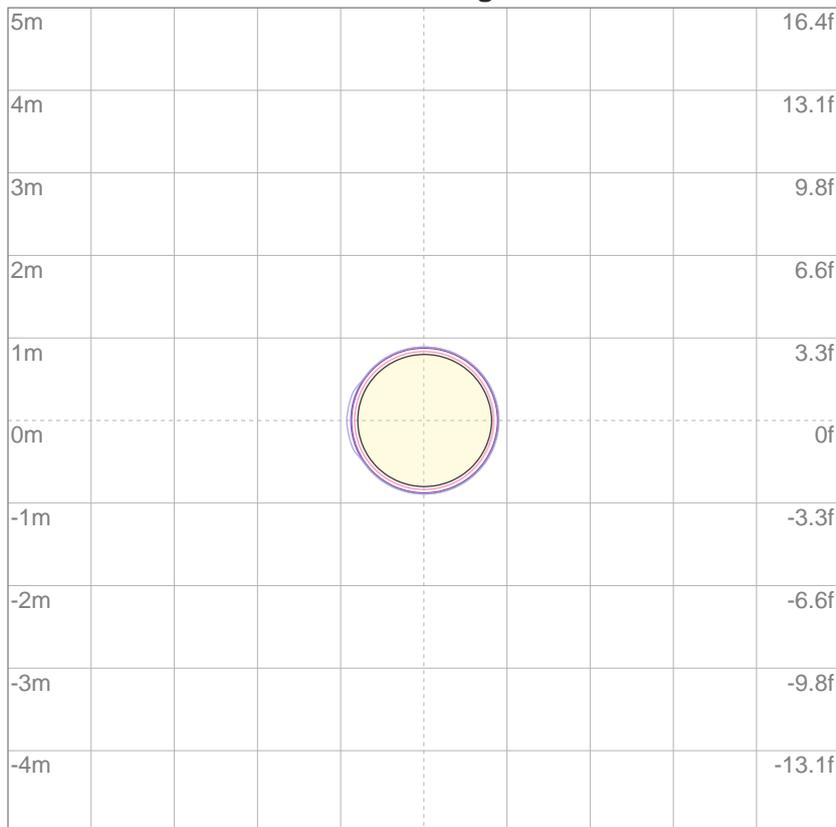
10%	112738 cd
20%	225475 cd
30%	338213 cd
40%	450950 cd
50%	563688 cd
60%	676425 cd
70%	789163 cd
80%	901901 cd
90%	1014638 cd

Conditions:

Number of c-planes: 2

Candela at center: 1127376 cd

### ISO Lux Diagram



Mounting Height: 10 meters (33 feet)

3%	338 lx
5%	564 lx
10%	1127 lx
30%	3382 lx
50%	5637 lx

Conditions:

Number of c-planes: 2

Lux at center: 11.3K lx

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

Color Temperature:



Total Lumen Output:  
20417 lm

Light Quality:



Peak:  
236451 cd

Light Efficiency:



Power: 804 W



CIE 1931  
x: 0.308  
y: 0.321

Test: Zoom 50%

Date: 5/8/2018

Voltage: 117 V

Current: 6.87 A

Frequency: 60 Hz

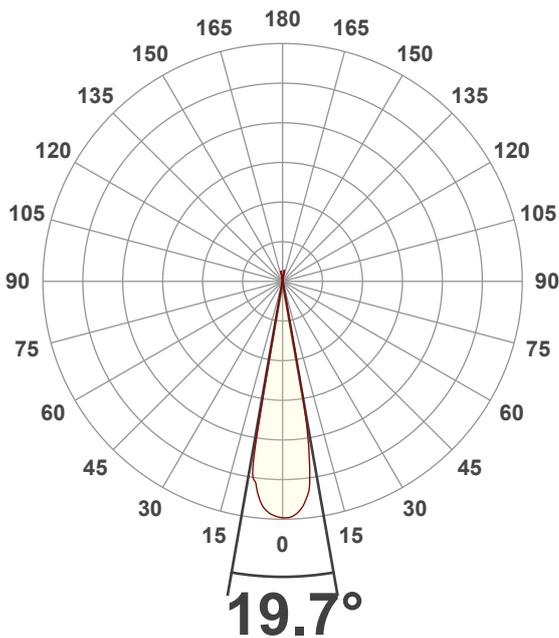
CRI: 72.5

CQS: 68.9

TM30: 69.0

Note:

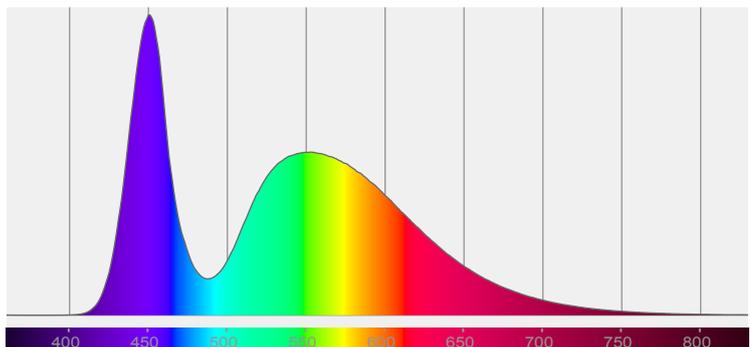
Beam Angle



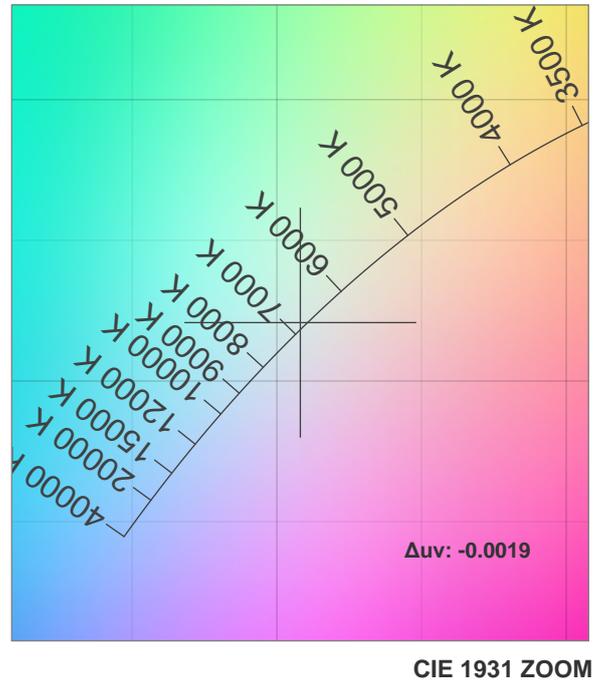
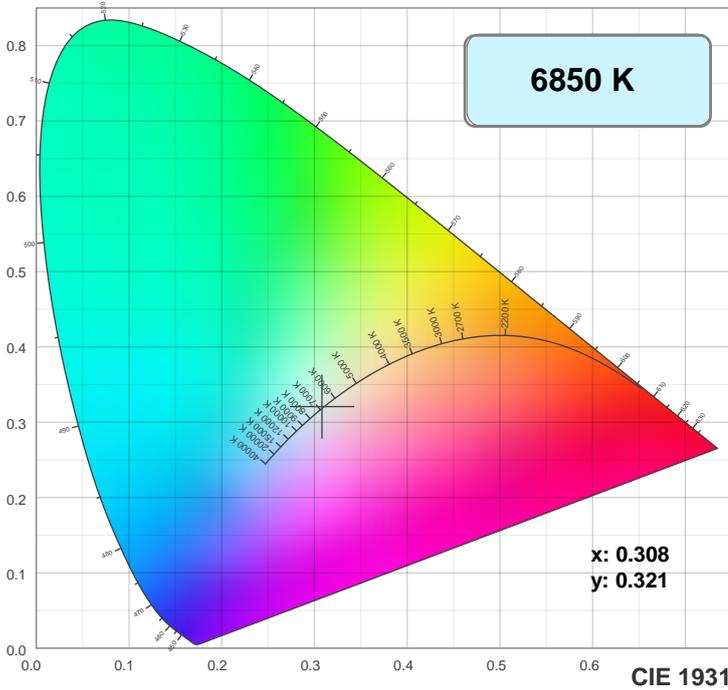
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
19.7°	22.1°	22.6°

Spectra

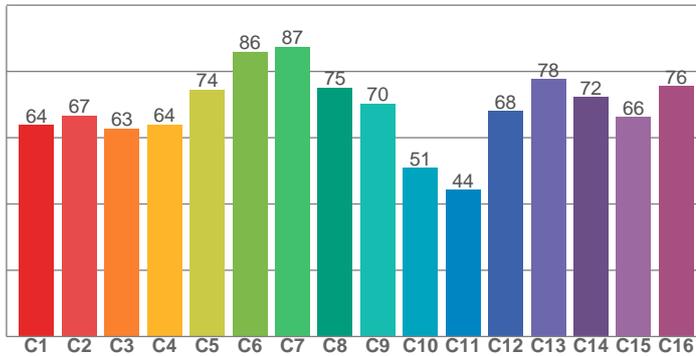
Dominant Wavelength: 459nm



## Color Details



**TM30: 69.0**



**CRI: 72.5 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
70.9	76.1	76.1	73.7	71.3	66.1	82.2	63.6	-21.8	39.8	69.4	40.0	71.5	86.3	67.2

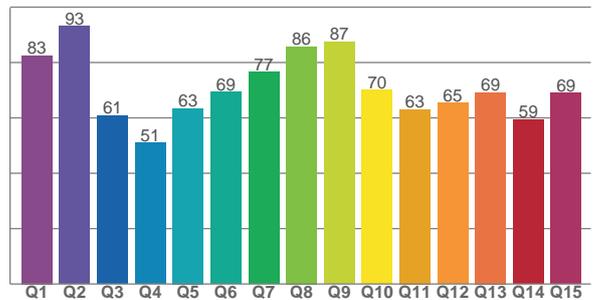
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.8	66.7	62.7	64.0	74.5	86.0	87.4	75.1	70.3	50.9	44.3	68.0	77.6	72.2	66.3	75.5

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.5	93.1	60.8	50.9	63.4	69.4	76.5	85.8	87.5	70.1	63.0	65.4	69.2	59.4	69.0

**CQS: 68.9**



## Color Parameters

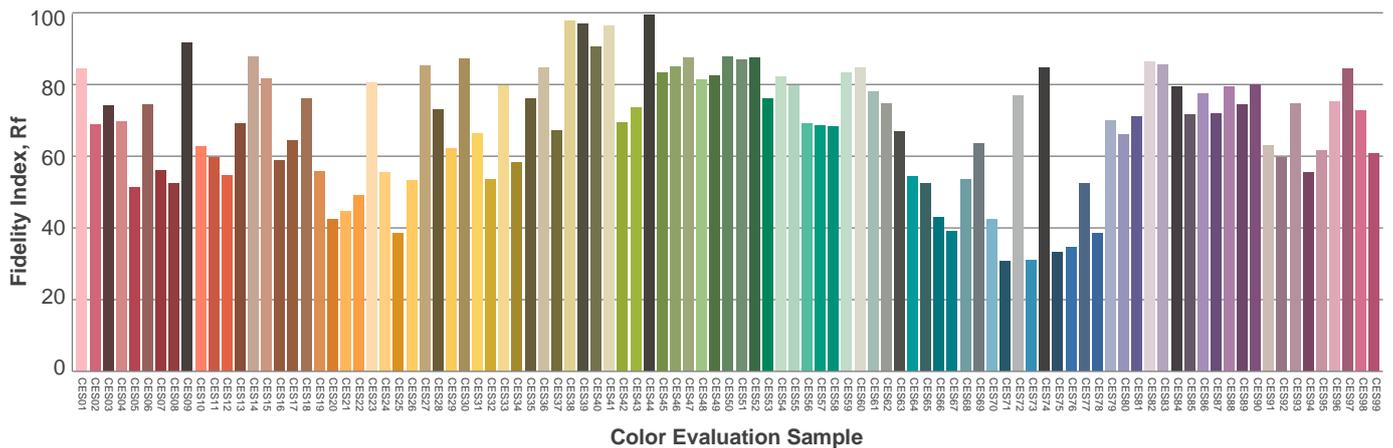
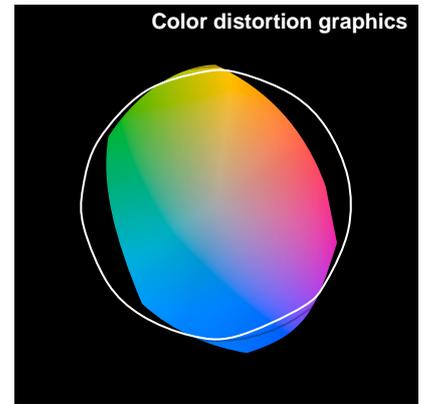
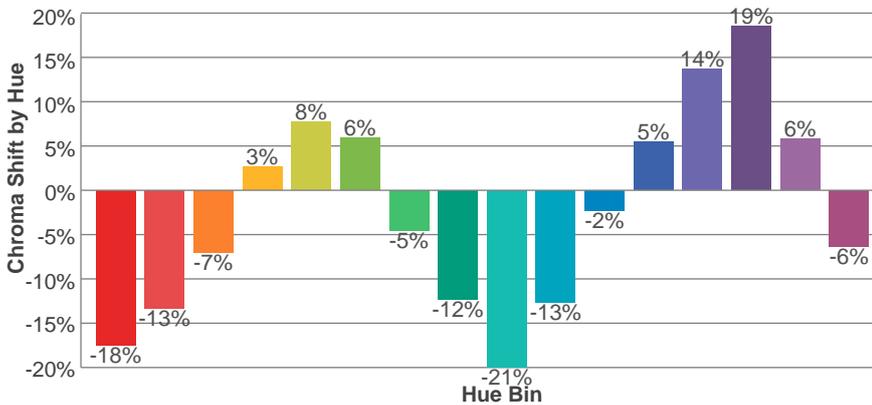
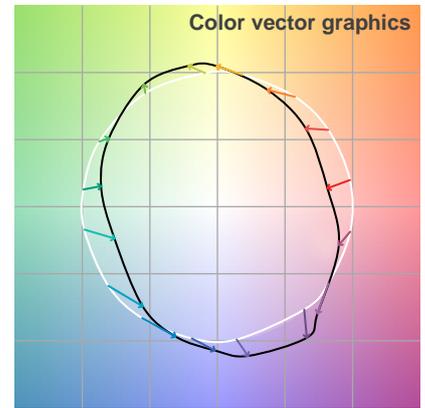
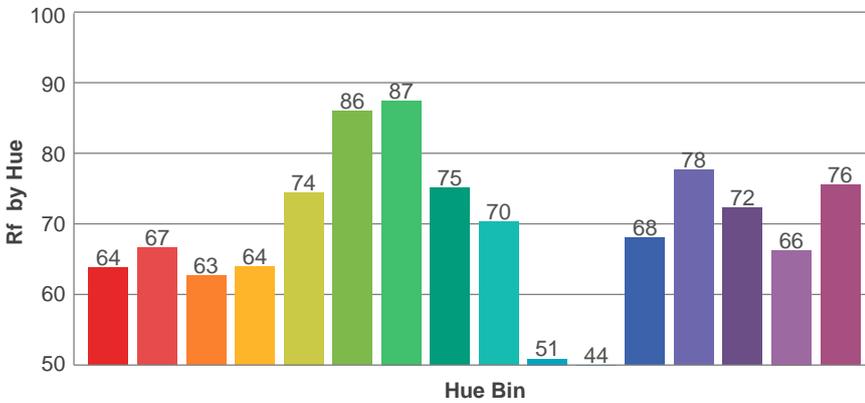
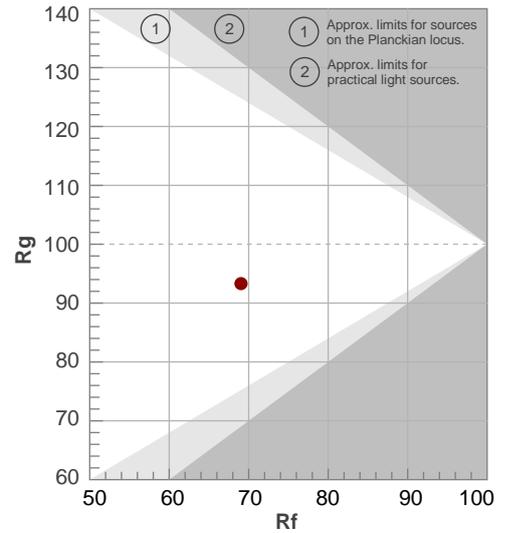
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
6850 K	72.5	-21.8	69.0	93.3	68.9	0.308	0.321	0.198	0.309	-0.0019

## TM30 Details

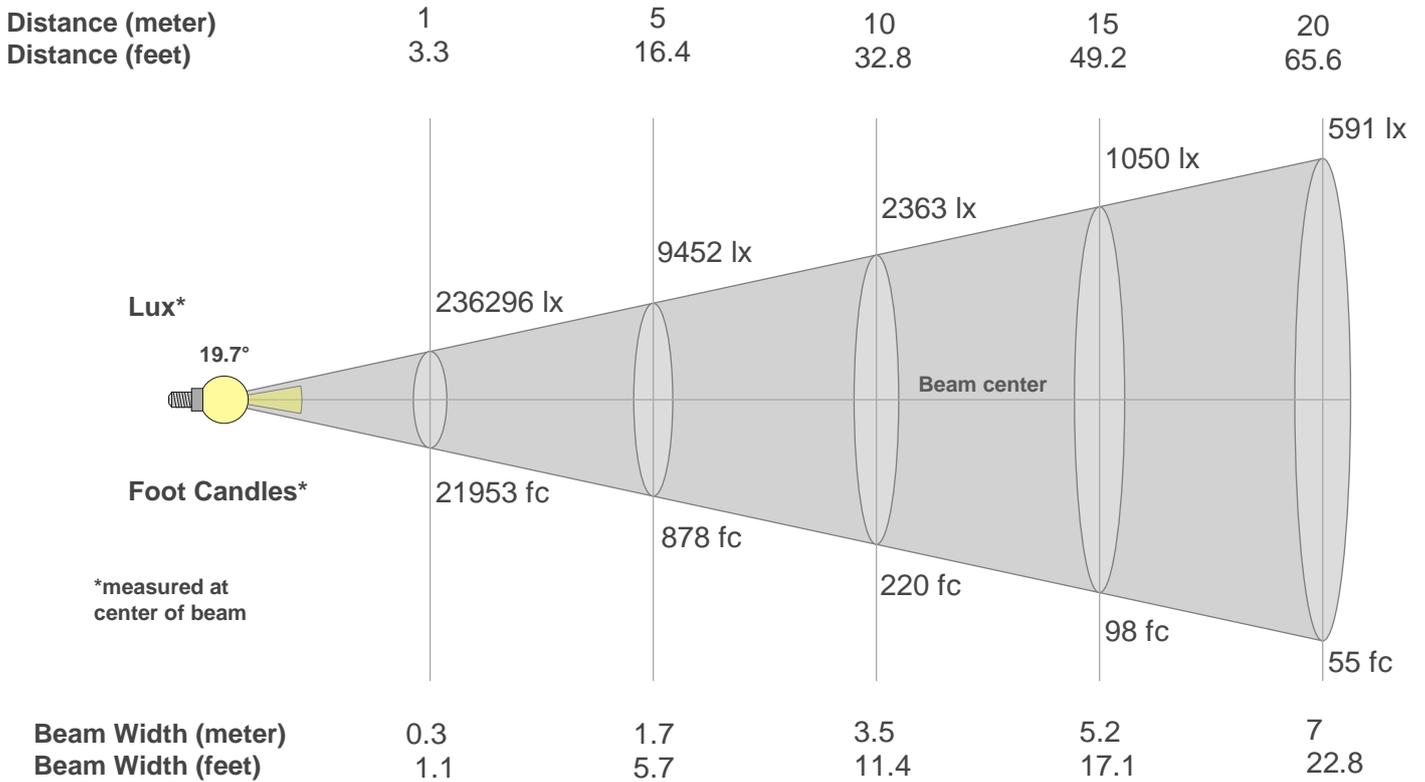
**Rf 69.0**  
Fidelity Index Rf

**Rg 93.3**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	64	-18%	-3%
2	67	-13%	10%
3	63	-7%	20%
4	64	3%	20%
5	74	8%	11%
6	86	6%	-3%
7	87	-5%	-6%
8	75	-12%	-5%
9	70	-21%	11%
10	51	-13%	27%
11	44	-2%	28%
12	68	5%	18%
13	78	14%	6%
14	72	19%	-10%
15	66	6%	-23%
16	76	-6%	-11%



## Beam Details



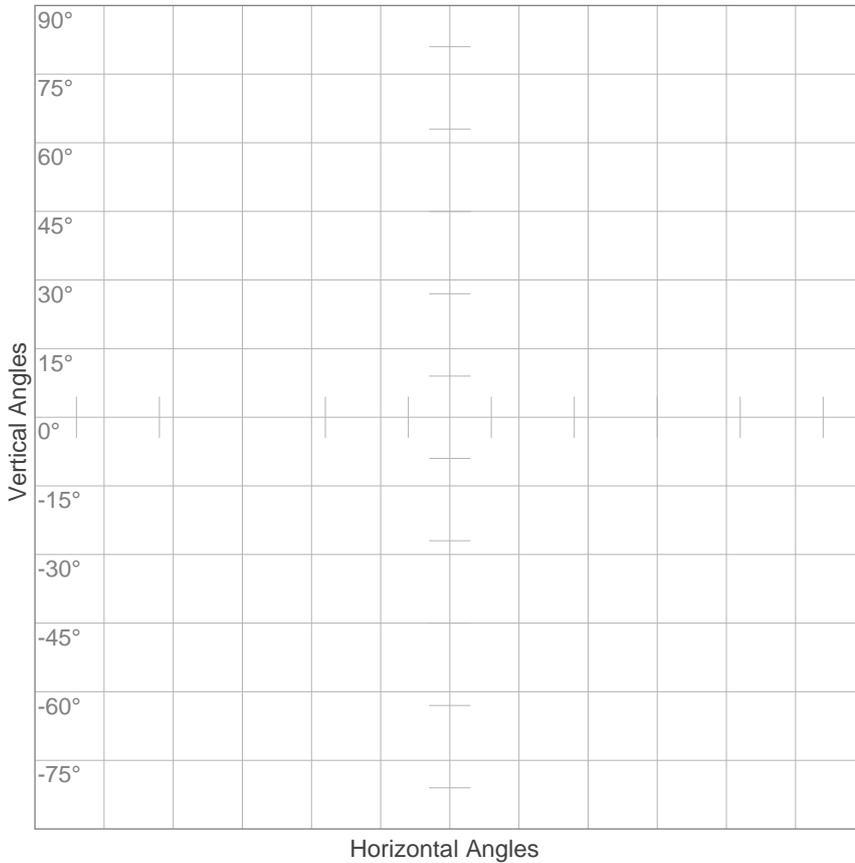
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	236296	59074	26255	14769	9452	6564	4822	3692	2917	2363	1953	1641	1398	1206	1050	923	818	729	655	591
fc	21952.6	5488.2	2439.2	1372	878.1	609.8	448	343	271	219.5	181.4	152.4	129.9	112	97.6	85.8	76	67.8	60.8	54.9

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
19.7°	22.1°	22.6°	99.6%	99.6%

## ISO Diagrams

### ISO Candela Diagram



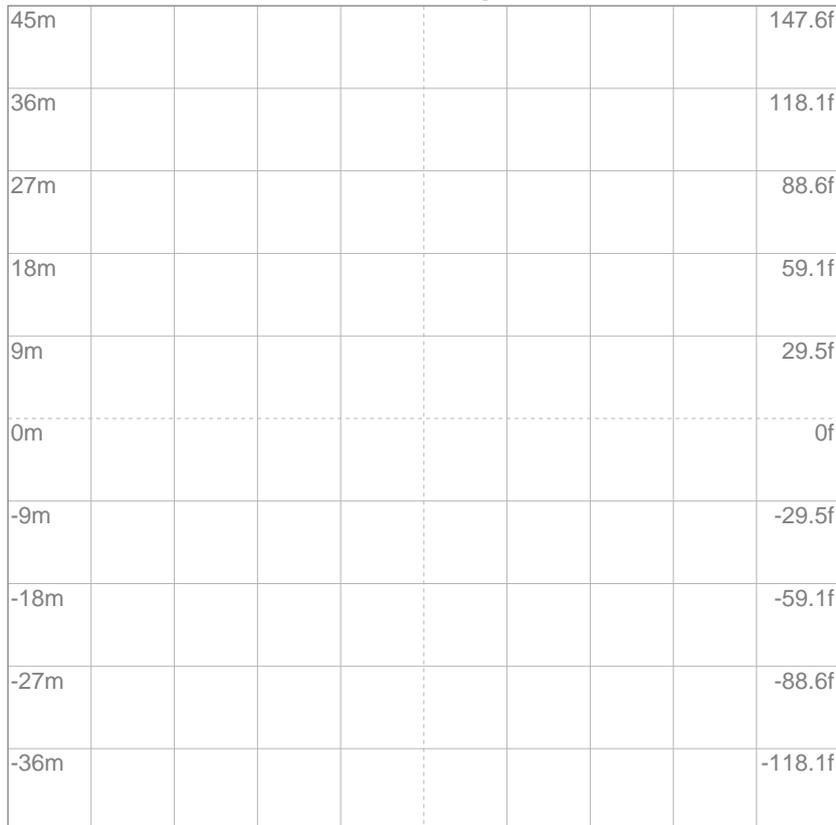
- 10% 23630 cd
- 20% 47259 cd
- 30% 70889 cd
- 40% 94518 cd
- 50% 118148 cd
- 60% 141778 cd
- 70% 165407 cd
- 80% 189037 cd
- 90% 212667 cd

Conditions:

Number of c-planes: 2

Candela at center: 236296 cd

### ISO Lux Diagram



Mounting Height: 10 meters (33 feet)

- 3% 70.9 lx
- 5% 118 lx
- 10% 236 lx
- 30% 709 lx
- 50% 1181 lx

Conditions:

Number of c-planes: 2

Lux at center: 2363 lx

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

Color Temperature:



Total Lumen Output:  
22466 lm

Light Quality:



Peak:  
42784 cd

Light Efficiency:



Power: 797 W



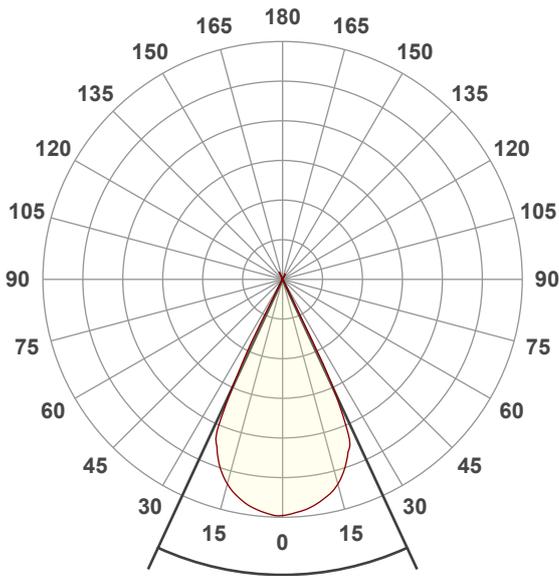
CIE 1931  
x: 0.307  
y: 0.320

Test: Zoom Out

Date: 4/27/2018

Voltage: 116 V  
Current: 6.85 A  
Frequency: 60 Hz

Beam Angle



49.4°

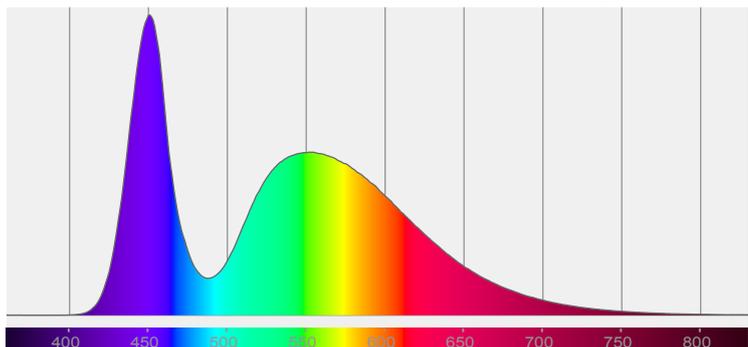
CRI: 72.6  
CQS: 68.9  
TM30: 69.1

Note:

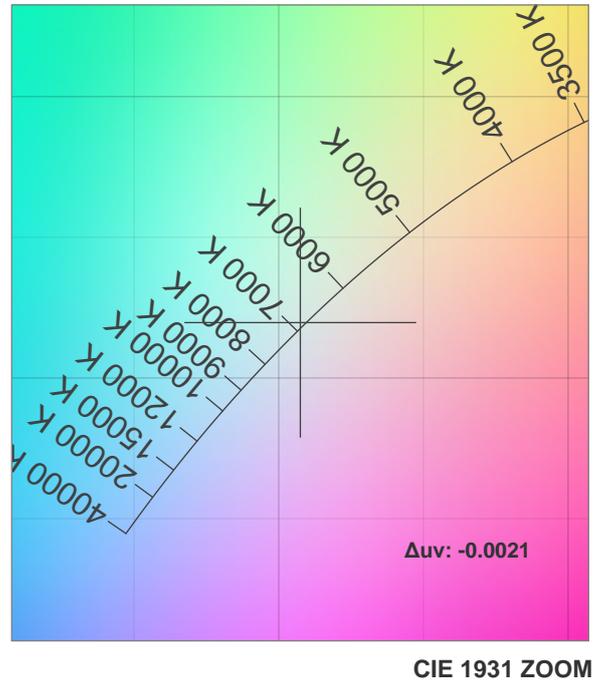
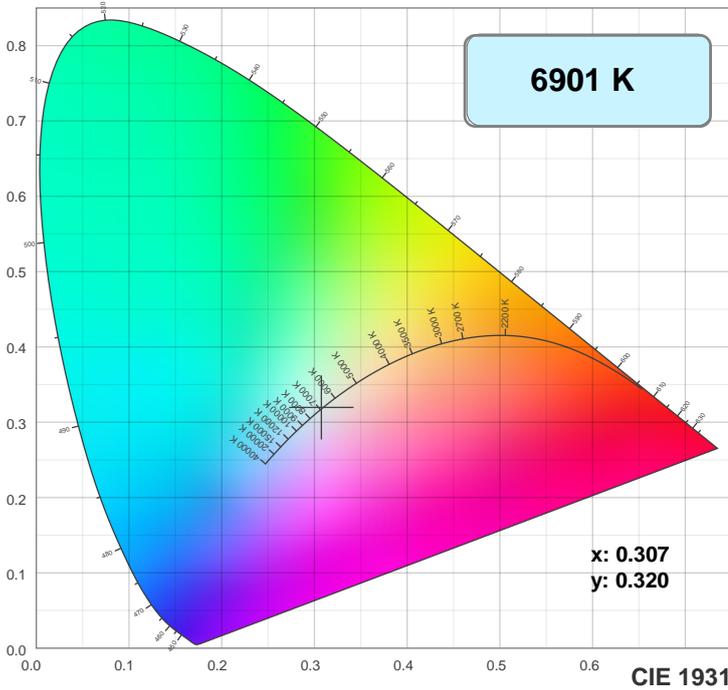
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
49.4°	54.7°	55.7°

Spectra

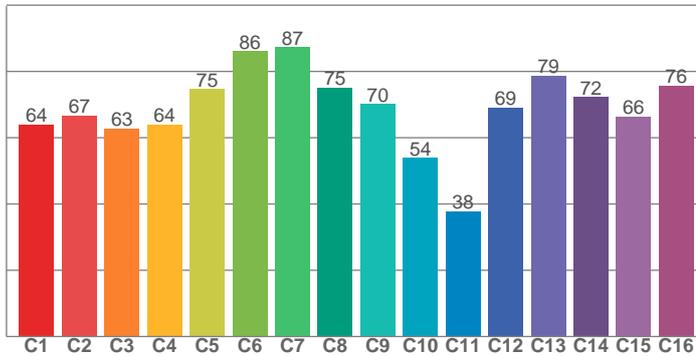
Dominant Wavelength: 460nm



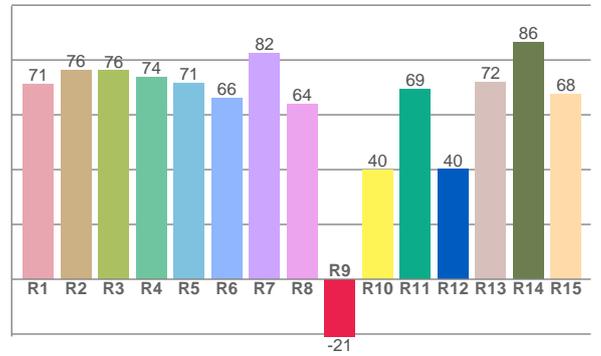
## Color Details



**TM30: 69.1**



**CRI: 72.6 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
71.1	76.2	76.1	73.8	71.4	66.1	82.3	63.9	-20.9	39.9	69.4	40.1	71.7	86.3	67.6

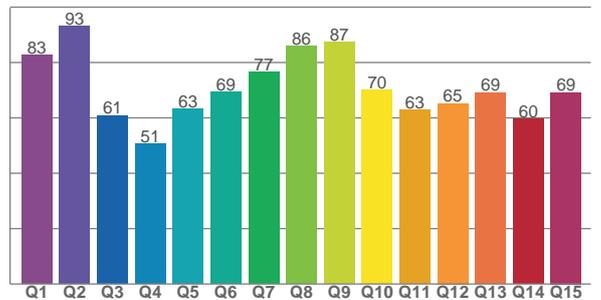
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.9	66.7	62.8	64.0	74.6	86.1	87.3	75.1	70.1	53.9	37.9	69.1	78.7	72.2	66.4	75.7

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.7	93.1	60.8	50.6	63.2	69.3	76.6	85.8	87.4	70.1	62.9	65.2	69.1	59.6	69.2

**CQS: 68.9**



## Color Parameters

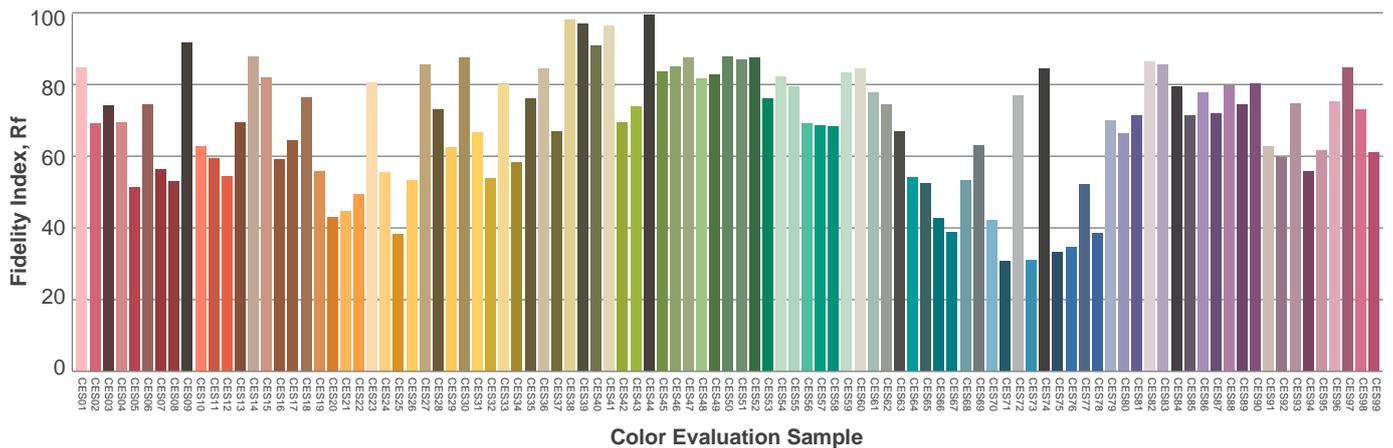
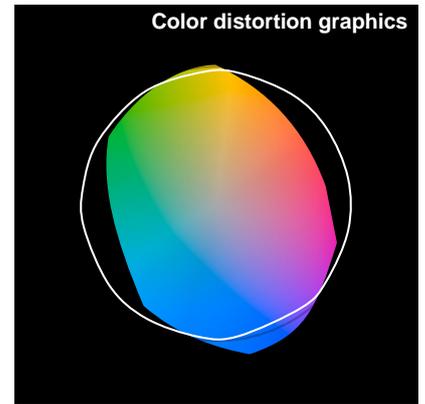
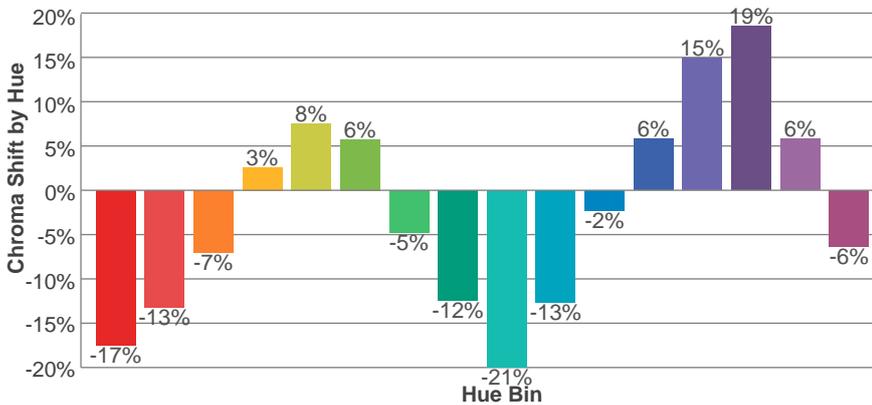
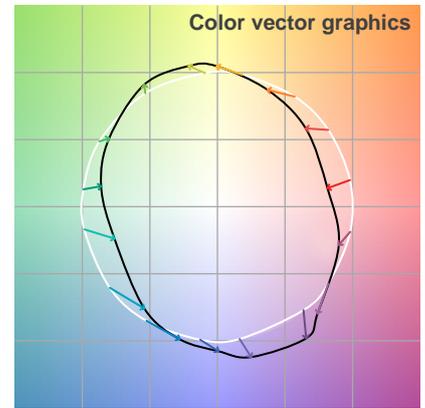
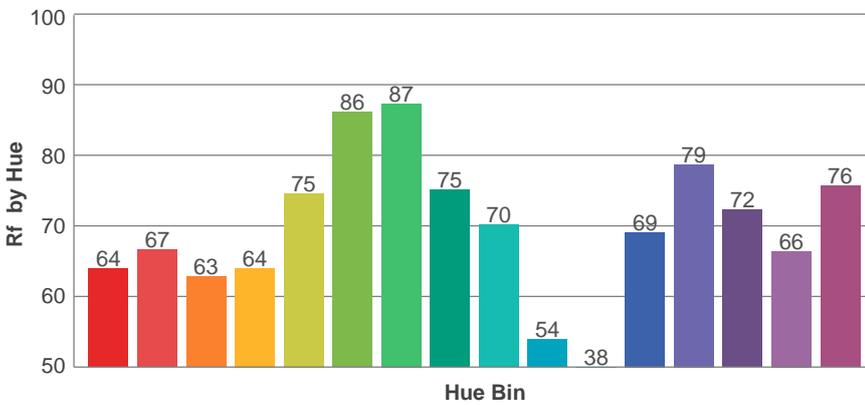
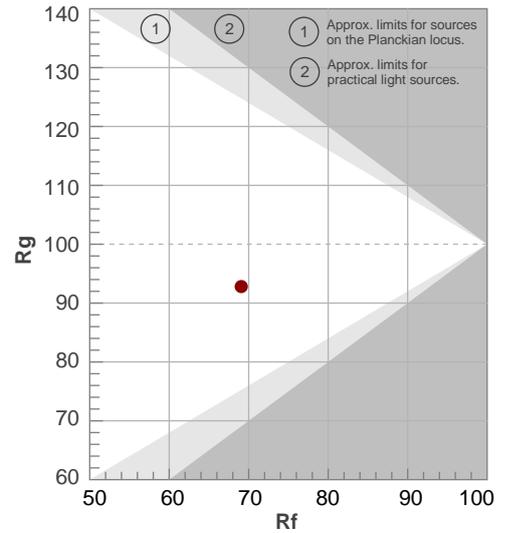
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
6901 K	72.6	-20.9	69.1	92.8	68.9	0.307	0.320	0.198	0.308	-0.0021

## TM30 Details

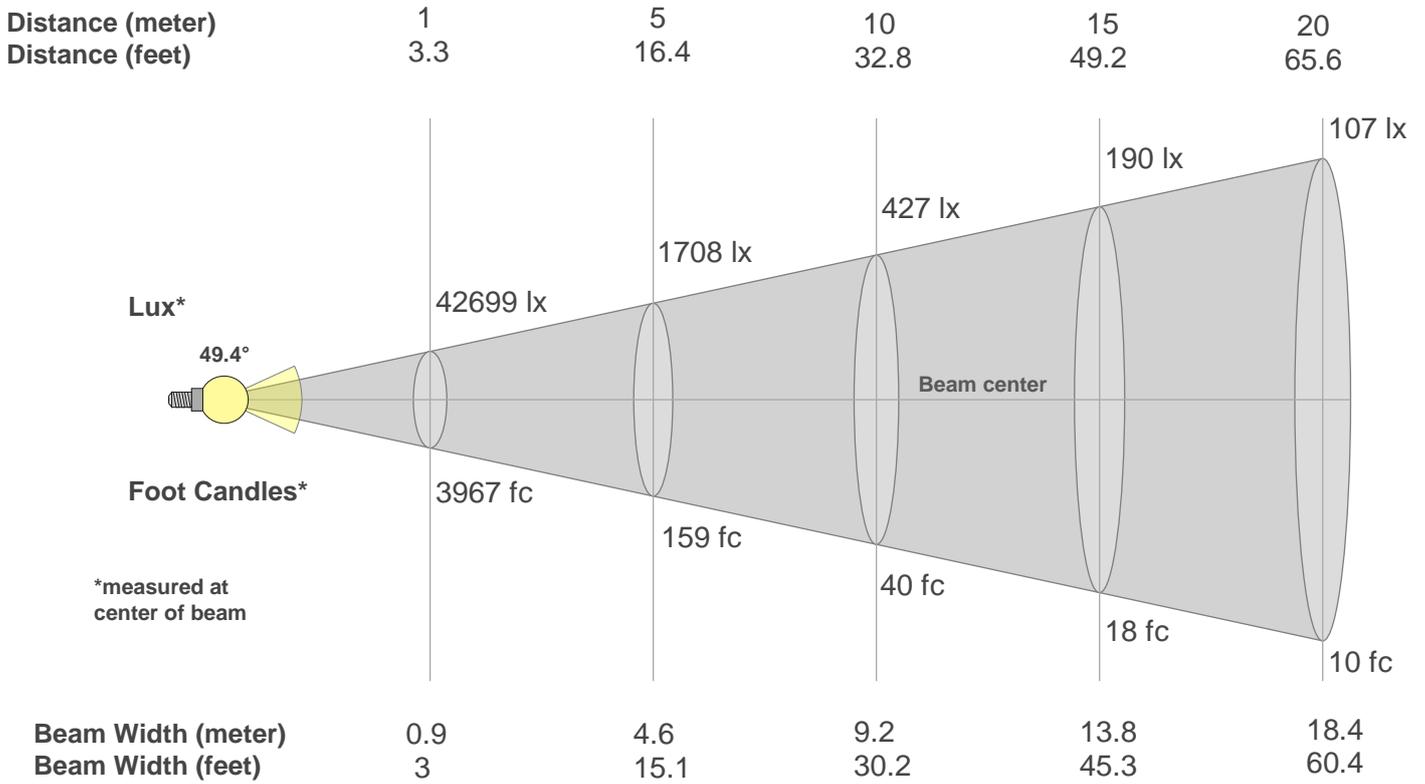
**Rf 69.1**  
Fidelity Index Rf

**Rg 92.8**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	64	-17%	-3%
2	67	-13%	10%
3	63	-7%	19%
4	64	3%	20%
5	75	8%	11%
6	86	6%	-3%
7	87	-5%	-6%
8	75	-12%	-5%
9	70	-21%	11%
10	54	-13%	27%
11	38	-2%	28%
12	69	6%	15%
13	79	15%	6%
14	72	19%	-10%
15	66	6%	-23%
16	76	-6%	-11%



## Beam Details



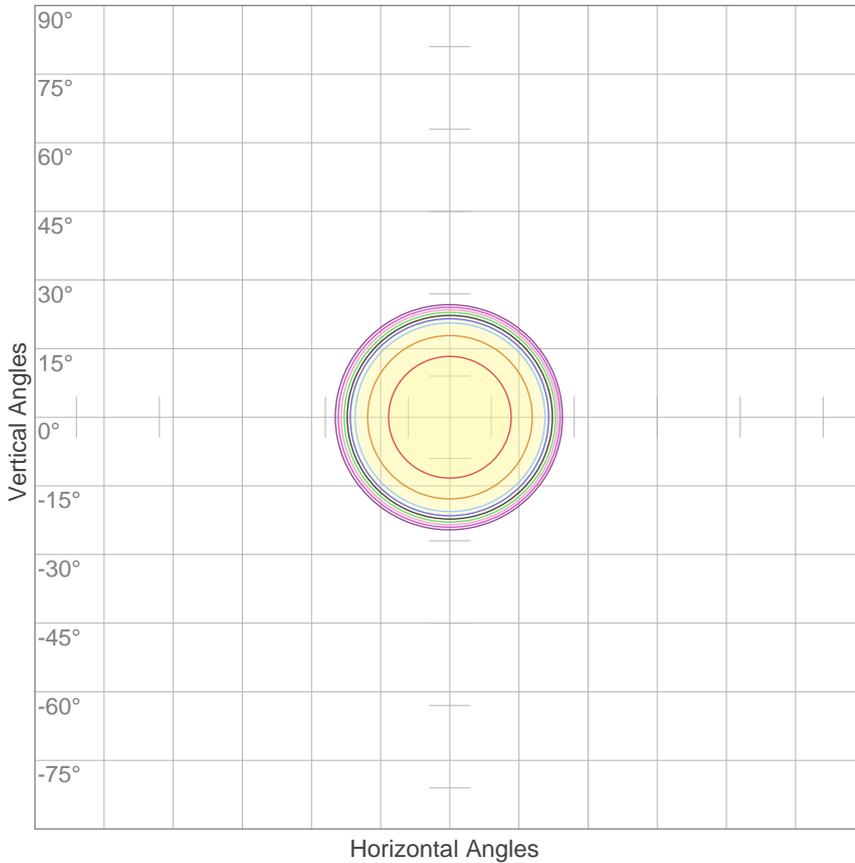
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	42699	10675	4744	2669	1708	1186	871	667	527	427	353	297	253	218	190	167	148	132	118	107
fc	3966.8	991.7	440.8	247.9	158.7	110.2	81	62	49	39.7	32.8	27.5	23.5	20.2	17.6	15.5	13.7	12.2	11	9.9

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
49.4°	54.7°	55.7°	98.8%	98.8%

## ISO Diagrams

### ISO Candela Diagram



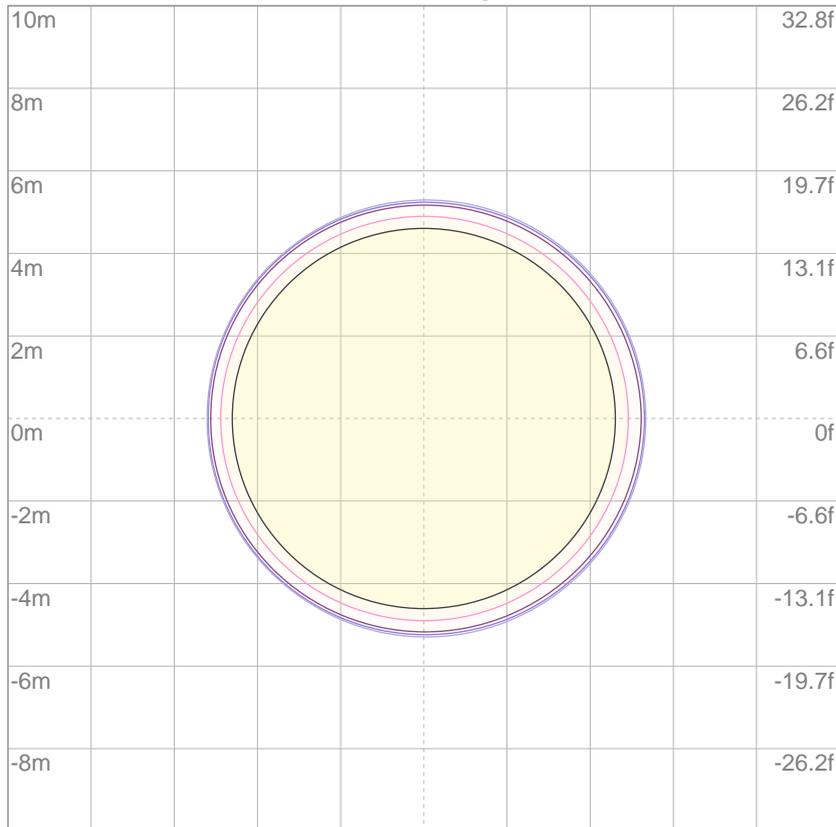
10%	4270 cd
20%	8540 cd
30%	12810 cd
40%	17080 cd
50%	21349 cd
60%	25619 cd
70%	29889 cd
80%	34159 cd
90%	38429 cd

Conditions:

Number of c-planes: 2

Candela at center: 42699 cd

### ISO Lux Diagram



3%	12.8 lx
5%	21.3 lx
10%	42.7 lx
30%	128 lx
50%	213 lx

Conditions:

Number of c-planes: 2

Lux at center: 427 lx

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

Color Temperature:



Total Lumen Output:  
15019 lm

Light Quality:



Peak:  
174321 cd

Light Efficiency:



Power: 805 W



CIE 1931  
x: 0.318  
y: 0.297

Test: Zoom 50% High CRI

Date: 5/8/2018

Voltage: 117 V

Current: 6.88 A

Frequency: 60 Hz

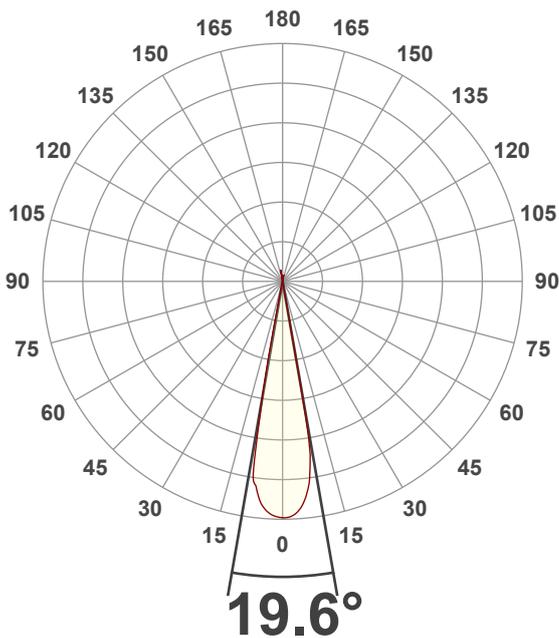
CRI: 86.5

CQS: 75.9

TM30: 77.3

Note:

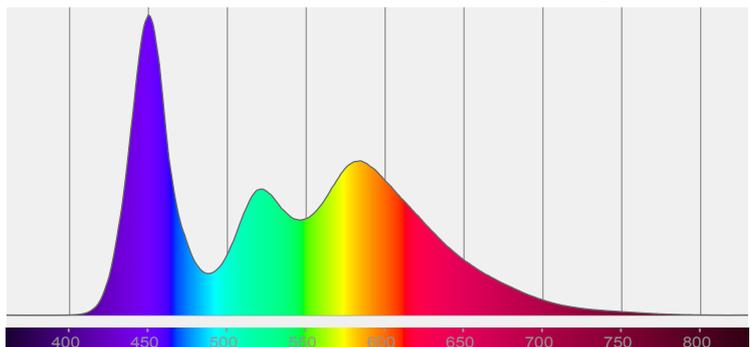
Beam Angle



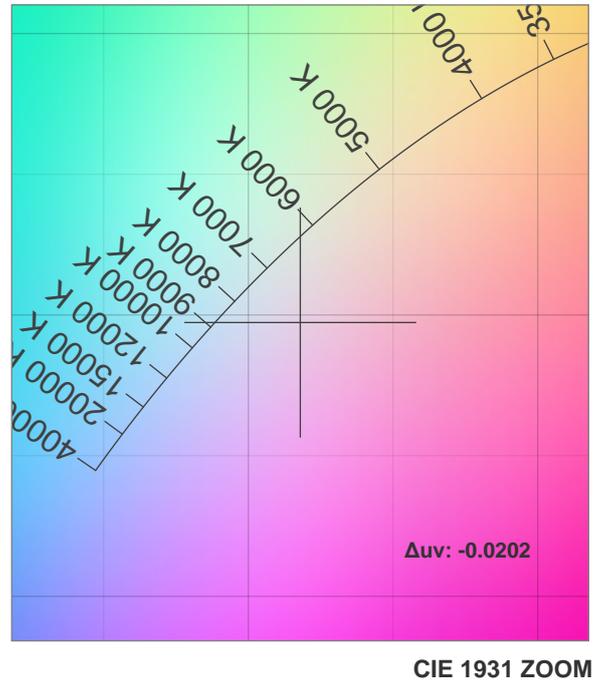
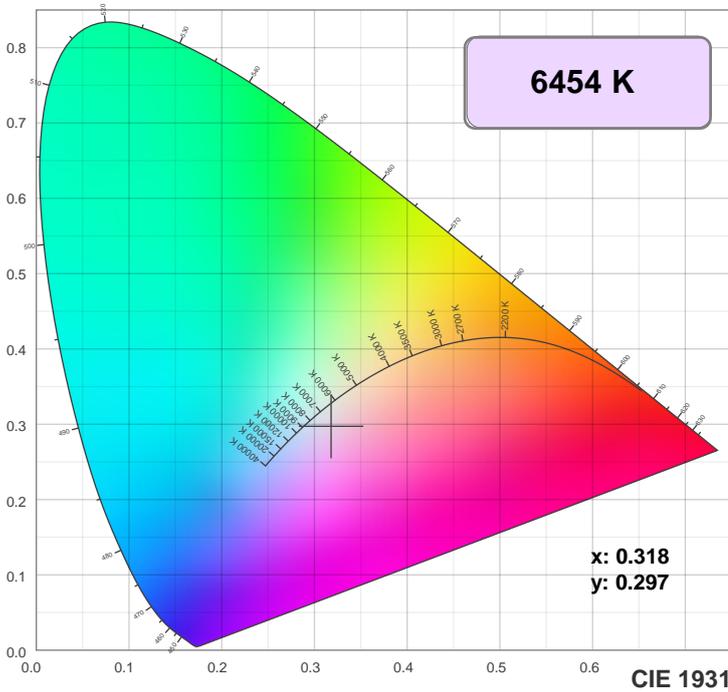
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
19.6°	22.2°	22.7°

Spectra

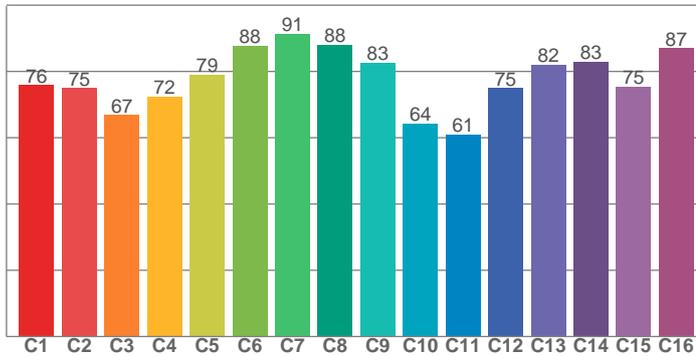
Dominant Wavelength: 360nm



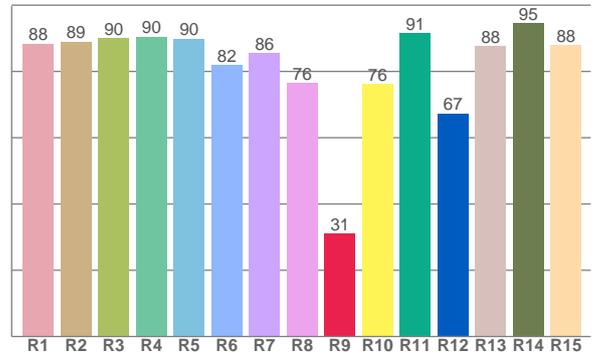
## Color Details



**TM30: 77.3**



**CRI: 86.5 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
88.4	89.0	90.0	90.5	89.9	82.0	85.6	76.4	31.0	76.3	91.5	67.3	87.6	94.5	87.8

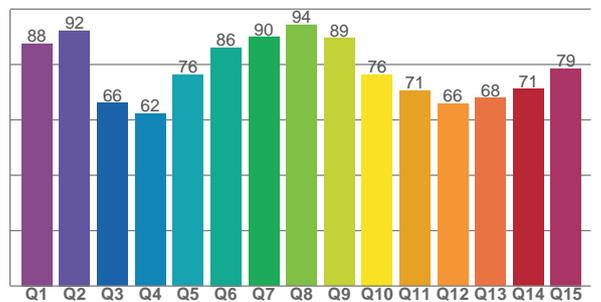
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
75.9	74.9	66.9	72.5	79.0	87.8	91.4	88.1	82.6	64.3	61.0	75.0	82.1	83.0	75.4	87.0

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.6	92.3	66.0	62.3	76.4	86.1	89.9	94.3	89.5	76.4	70.6	65.8	67.9	71.1	78.5

**CQS: 75.9**



## Color Parameters

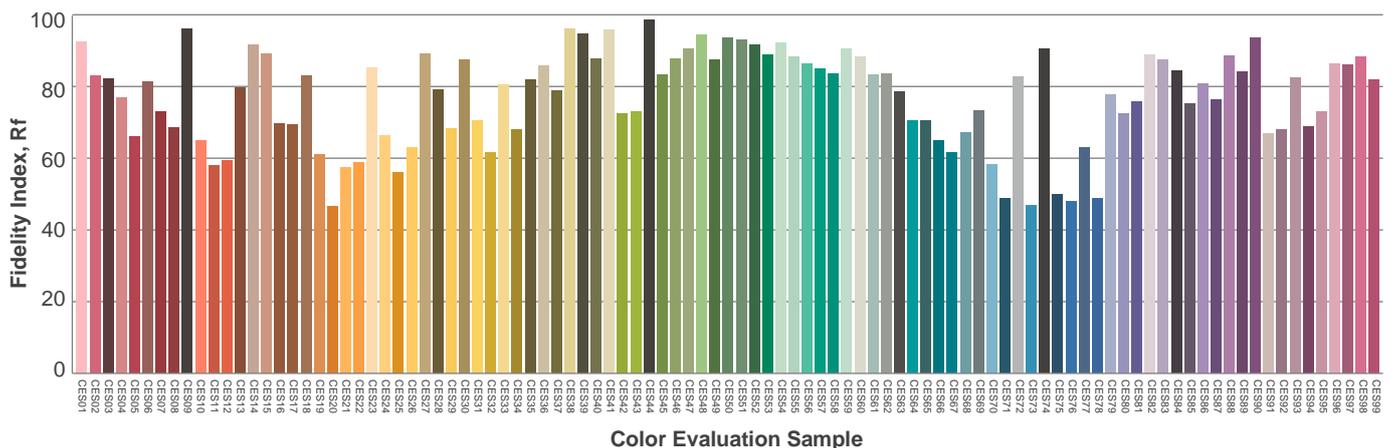
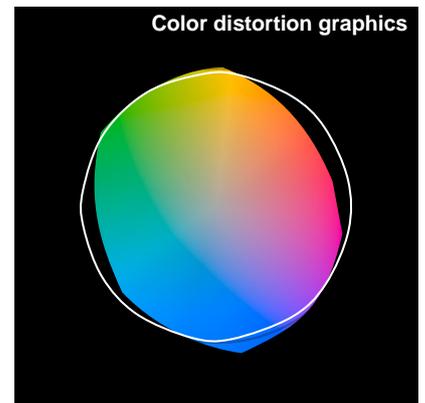
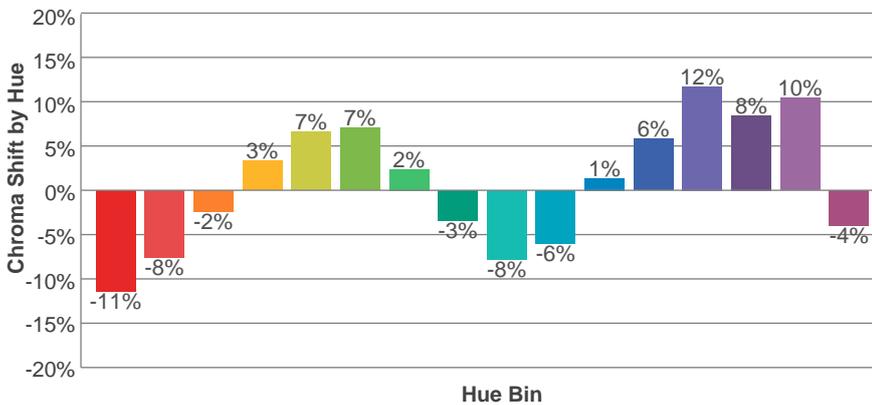
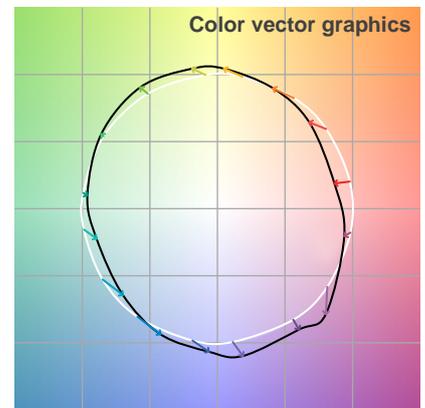
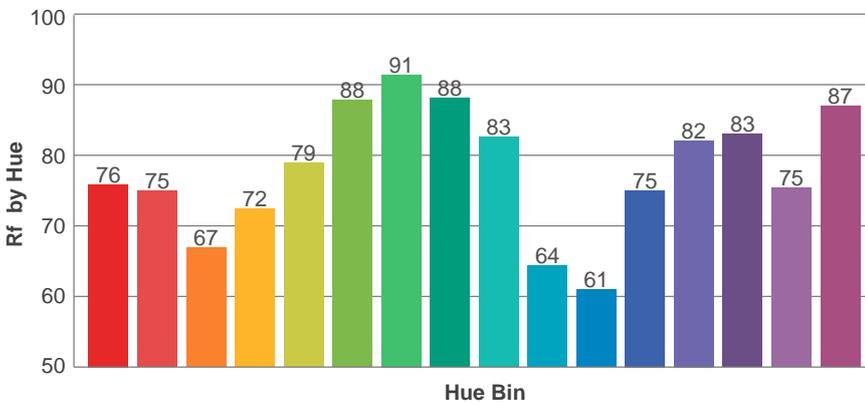
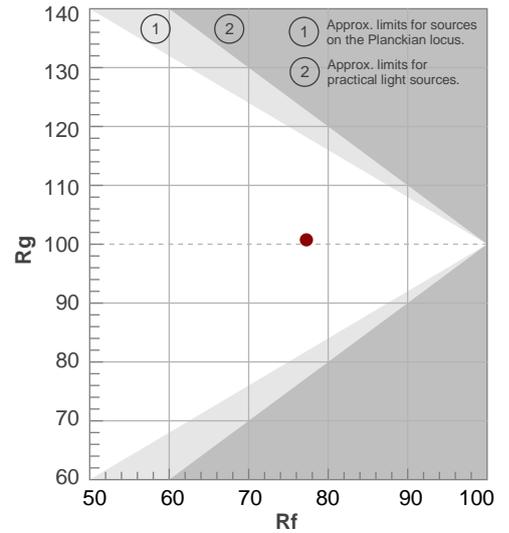
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6454 K	86.5	31.0	77.3	100.7	75.9	0.318	0.297	0.214	0.301	-0.0202

## TM30 Details

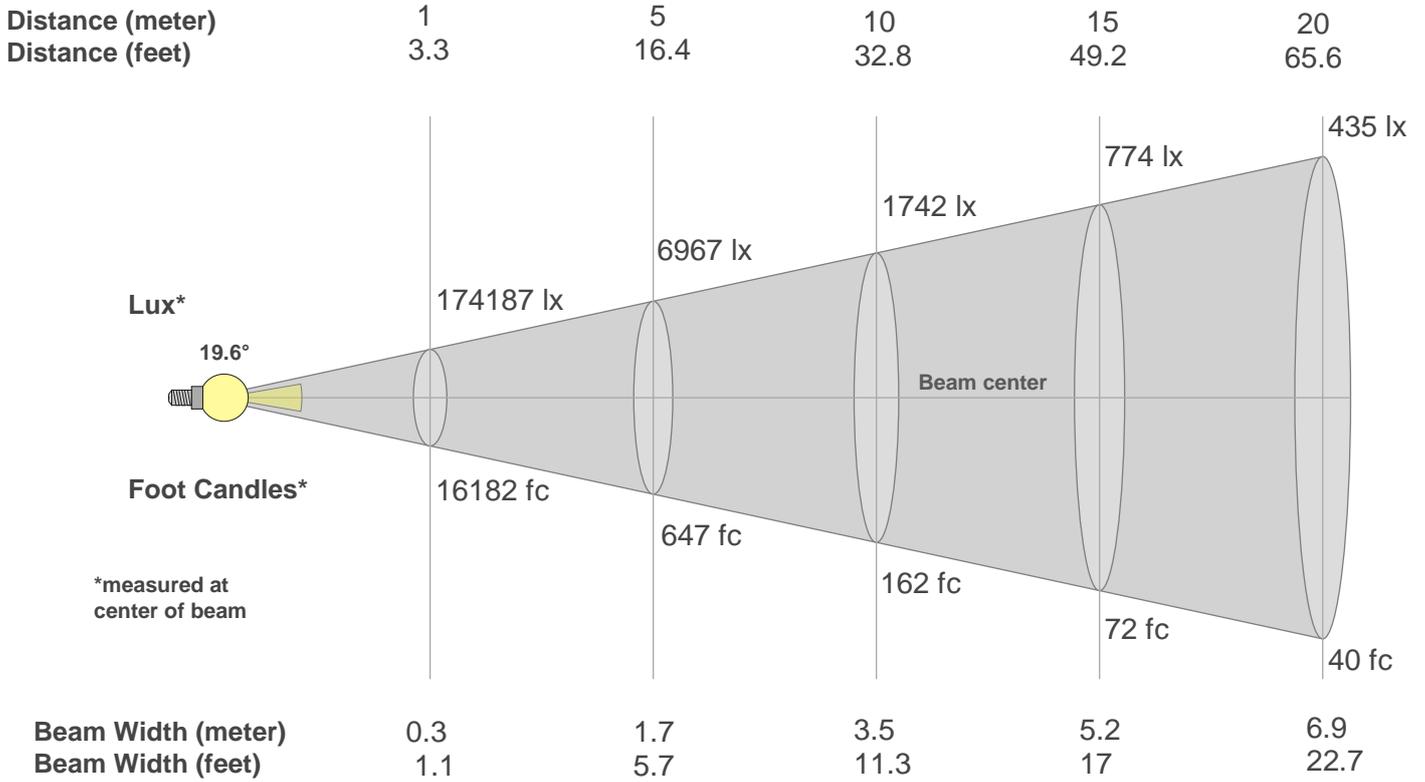
**Rf 77.3**  
Fidelity Index Rf

**Rg 100.7**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	76	-11%	1%
2	75	-8%	11%
3	67	-2%	17%
4	72	3%	15%
5	79	7%	9%
6	88	7%	2%
7	91	2%	0%
8	88	-3%	1%
9	83	-8%	9%
10	64	-6%	18%
11	61	1%	21%
12	75	6%	14%
13	82	12%	5%
14	83	8%	0%
15	75	10%	-18%
16	87	-4%	-3%



## Beam Details



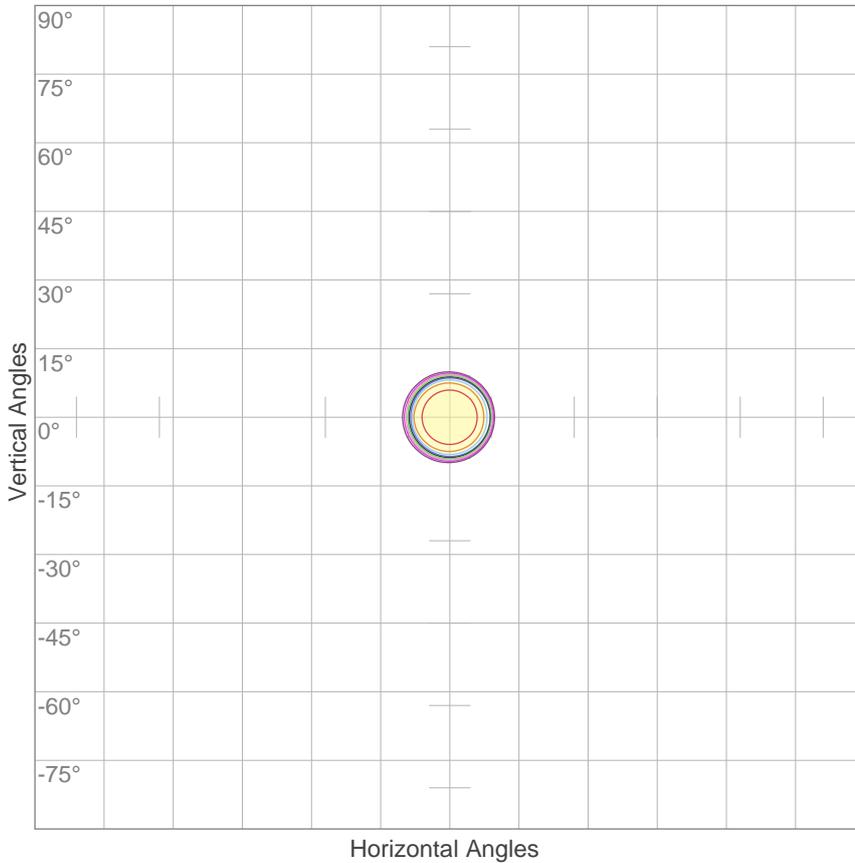
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	174187	43547	19354	10887	6967	4839	3555	2722	2150	1742	1440	1210	1031	889	774	680	603	538	483	435
fc	16182.5	4045.6	1798.1	1011.4	647.3	449.5	330.3	252.9	199.8	161.8	133.7	112.4	95.8	82.6	71.9	63.2	56	49.9	44.8	40.5

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
19.6°	22.2°	22.7°	99.7%	99.7%

## ISO Diagrams

### ISO Candela Diagram



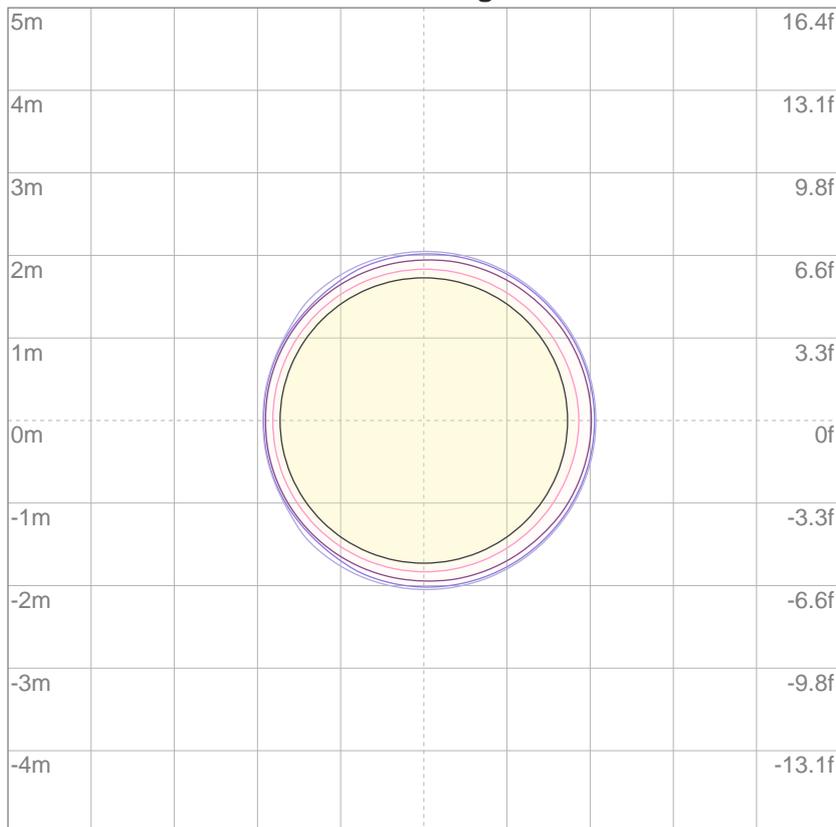
10%	17419 cd
20%	34837 cd
30%	52256 cd
40%	69675 cd
50%	87093 cd
60%	104512 cd
70%	121931 cd
80%	139349 cd
90%	156768 cd

Conditions:

Number of c-planes: 2

Candela at center: 174187 cd

### ISO Lux Diagram



3%	52.3 lx
5%	87.1 lx
10%	174 lx
30%	523 lx
50%	871 lx

Conditions:

Number of c-planes: 2

Lux at center: 1742 lx

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

Color Temperature:



Total Lumen Output:  
7042 lm

Light Quality:



Peak:  
80516 cd

Light Efficiency:



Power: 804 W



CIE 1931  
x: 0.445  
y: 0.414

Test: Zoom 50% CTO

Date: 5/8/2018

Voltage: 117 V

Current: 6.87 A

Frequency: 60 Hz

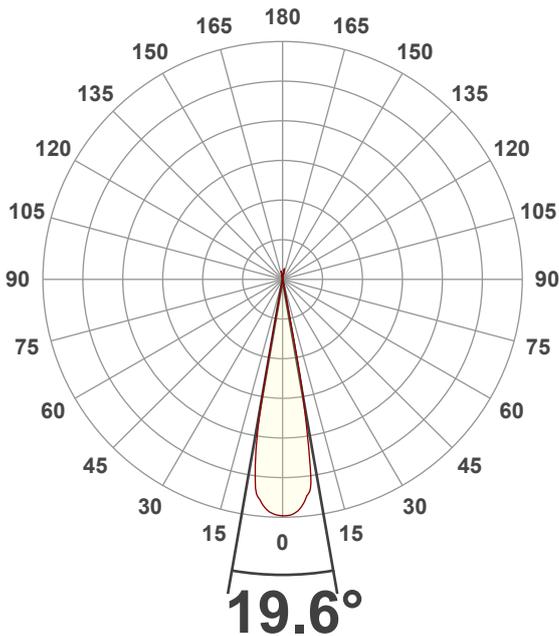
CRI: 69.6

CQS: 69.7

TM30: 69.7

Note:

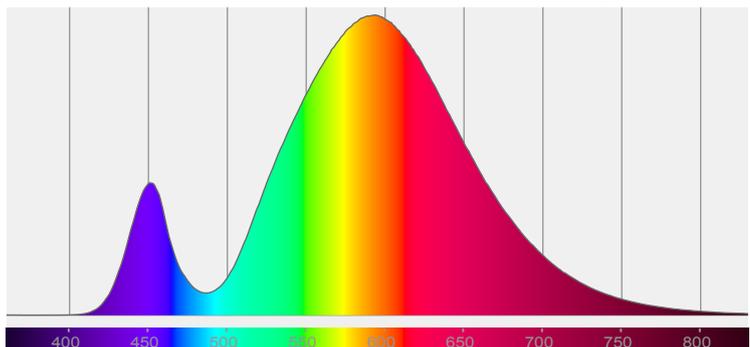
Beam Angle



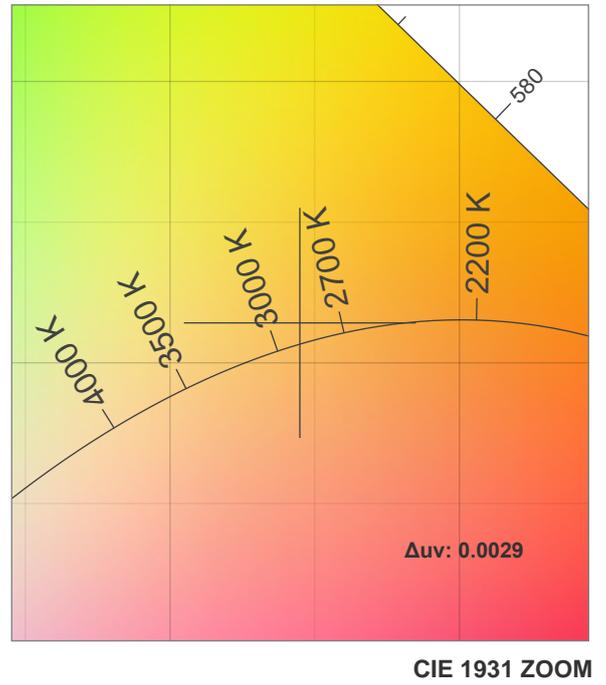
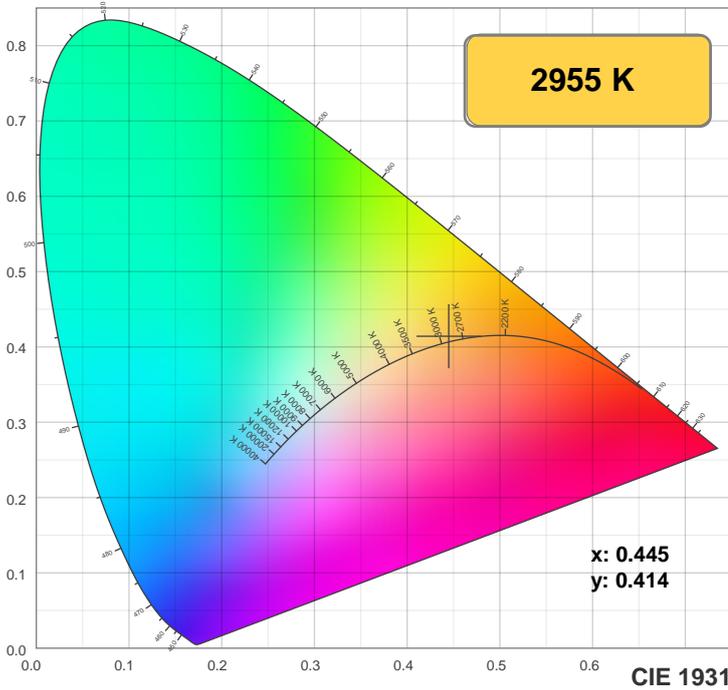
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
19.6°	22.7°	23.3°

Spectra

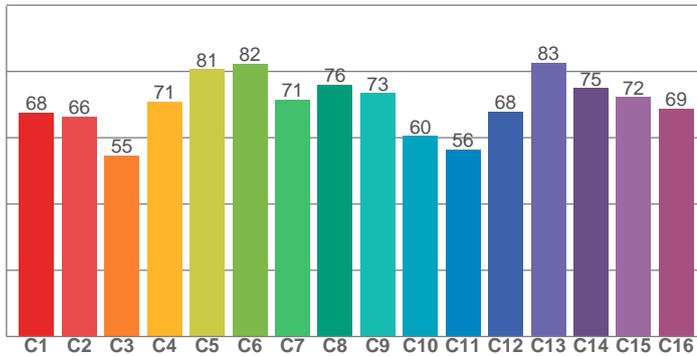
Dominant Wavelength: 583nm



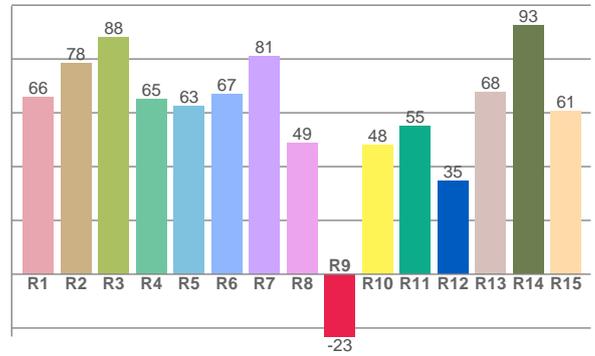
## Color Details



**TM30: 69.7**



**CRI: 69.6 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
65.9	78.4	87.9	65.1	62.6	66.8	81.0	48.9	-23.2	48.1	55.2	34.6	67.5	92.6	60.5

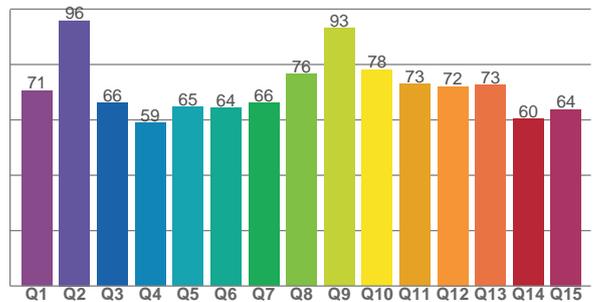
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
67.7	66.4	54.6	70.9	80.7	82.3	71.4	76.0	73.5	60.5	56.4	67.8	82.7	75.0	72.3	68.9

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
70.6	95.9	66.1	58.9	64.7	64.3	66.1	76.5	93.1	78.2	72.9	72.0	72.6	60.3	63.8

**CQS: 69.7**



## Color Parameters

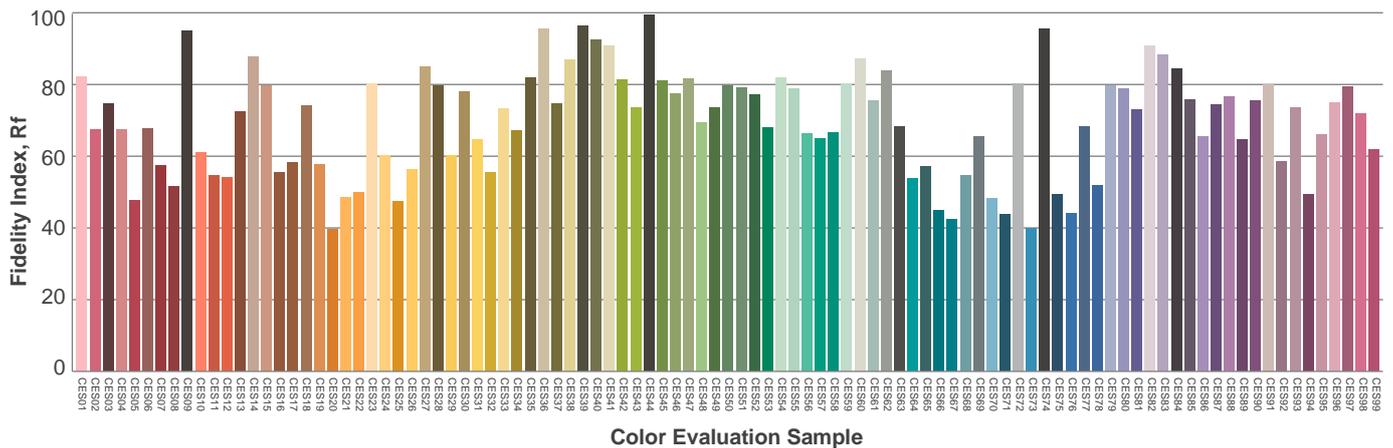
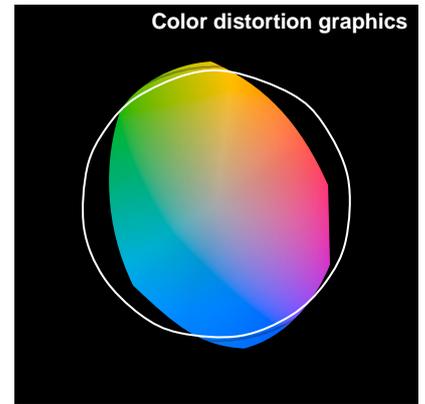
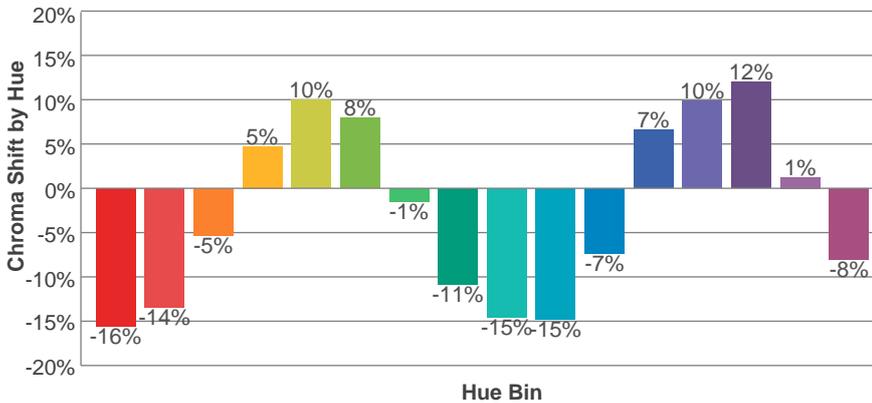
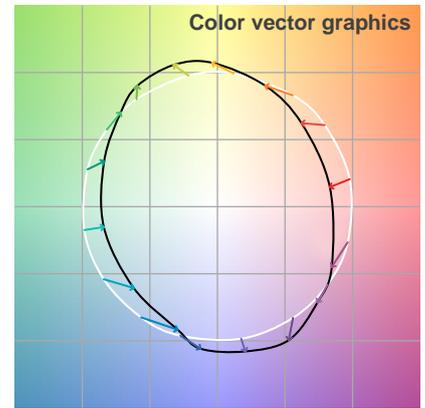
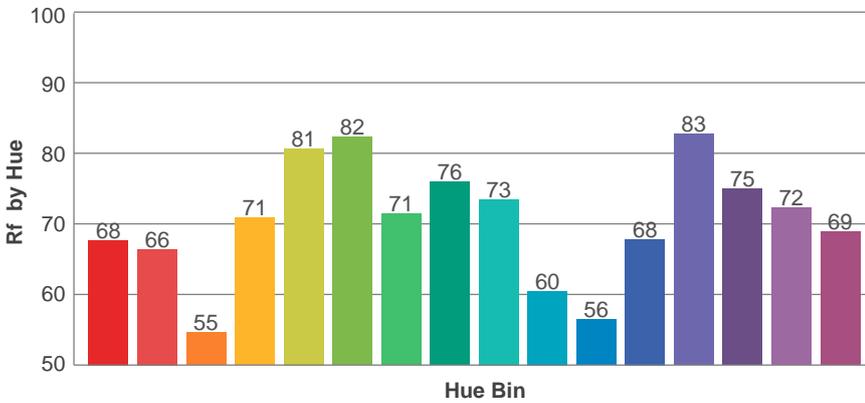
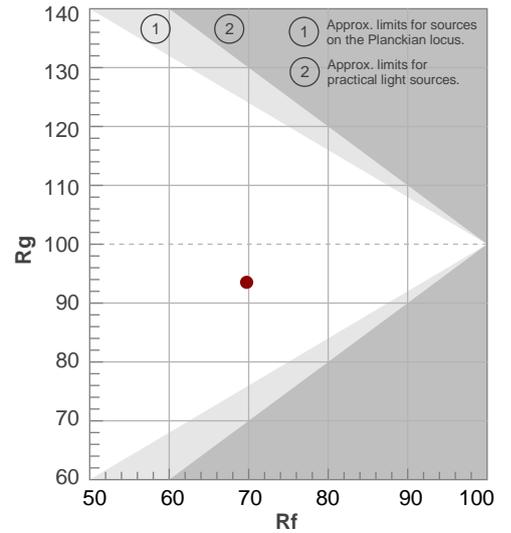
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
2955 K	69.6	-23.2	69.7	93.5	69.7	0.445	0.414	0.251	0.351	0.0029

## TM30 Details

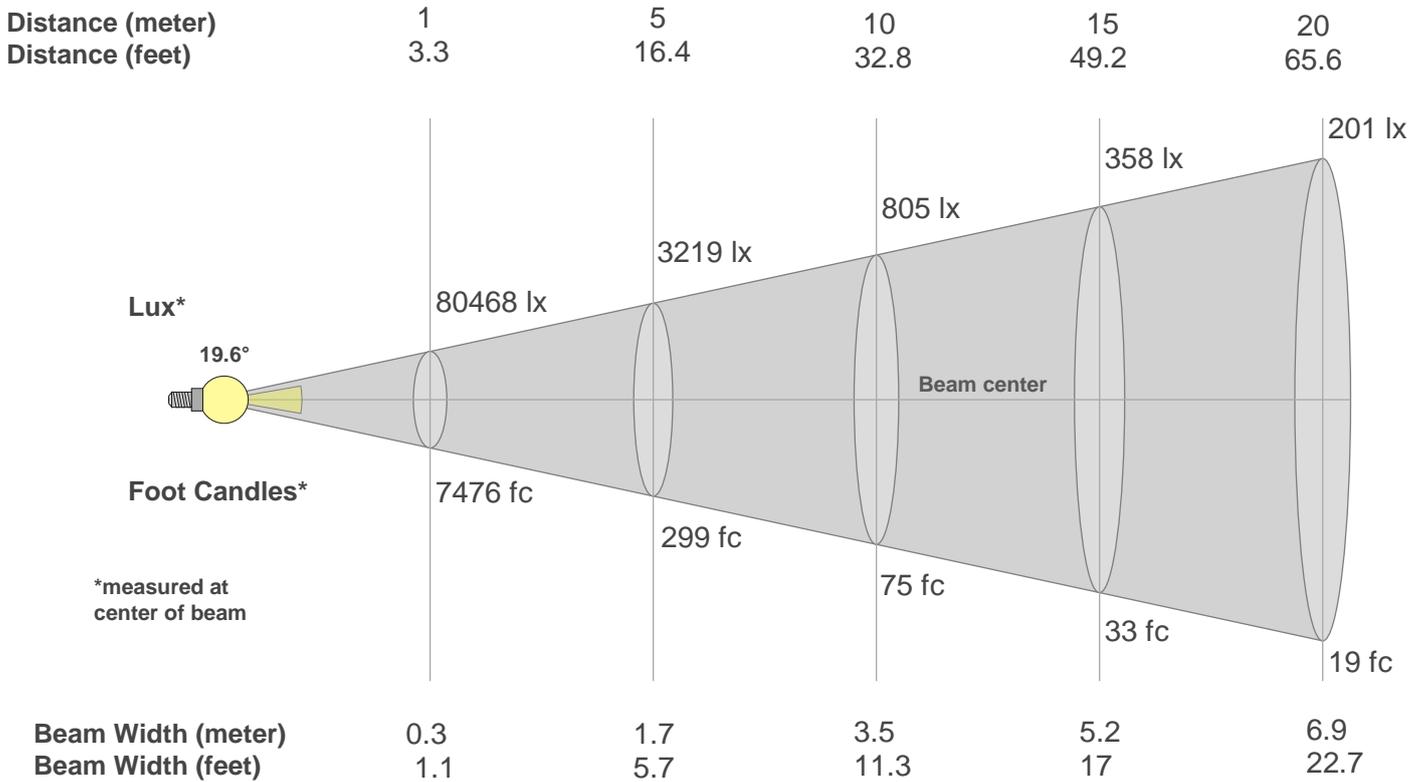
**Rf 69.7**  
Fidelity Index Rf

**Rg 93.5**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	68	-16%	-3%
2	66	-14%	11%
3	55	-5%	21%
4	71	5%	17%
5	81	10%	9%
6	82	8%	-6%
7	71	-1%	-16%
8	76	-11%	-8%
9	73	-15%	1%
10	60	-15%	18%
11	56	-7%	28%
12	68	7%	17%
13	83	10%	1%
14	75	12%	-12%
15	72	1%	-15%
16	69	-8%	-20%



## Beam Details



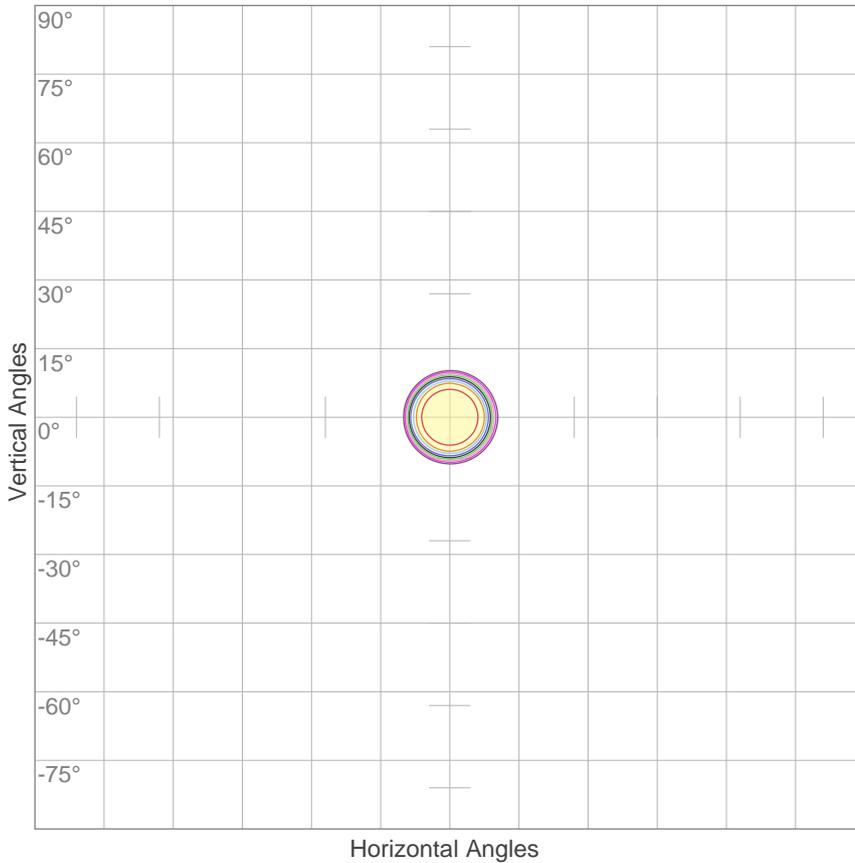
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	80468	20117	8941	5029	3219	2235	1642	1257	993	805	665	559	476	411	358	314	278	248	223	201
fc	7475.7	1868.9	830.6	467.2	299	207.7	152.6	116.8	92.3	74.8	61.8	51.9	44.2	38.1	33.2	29.2	25.9	23.1	20.7	18.7

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
19.6°	22.7°	23.3°	99.5%	99.5%

## ISO Diagrams

### ISO Candela Diagram



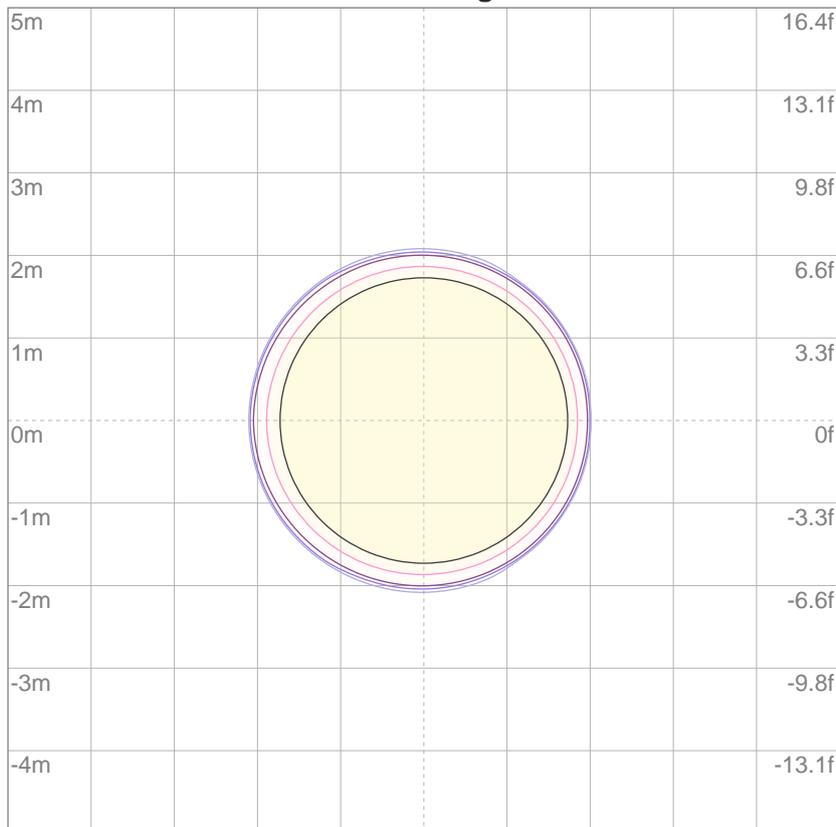
10%	8047 cd
20%	16094 cd
30%	24140 cd
40%	32187 cd
50%	40234 cd
60%	48281 cd
70%	56327 cd
80%	64374 cd
90%	72421 cd

Conditions:

Number of c-planes: 2

Candela at center: 80468 cd

### ISO Lux Diagram



3%	24.1 lx
5%	40.2 lx
10%	80.5 lx
30%	241 lx
50%	402 lx

Conditions:

Number of c-planes: 2

Lux at center: 805 lx

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

Mounting Height: 10 meters (33 feet)

Color Temperature:



Total Lumen Output:  
14853 lm

Light Quality:

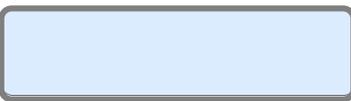


Peak:  
172014 cd

Light Efficiency:



Power: 804 W



CIE 1931  
x: 0.312  
y: 0.309

Test: Zoom 50% Minus Green

Date: 5/8/2018

Voltage: 117 V

Current: 6.87 A

Frequency: 60 Hz

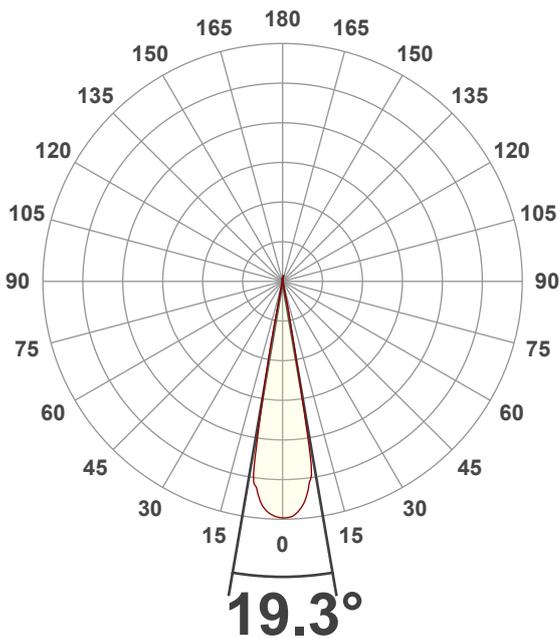
CRI: 79.2

CQS: 72.0

TM30: 72.3

Note:

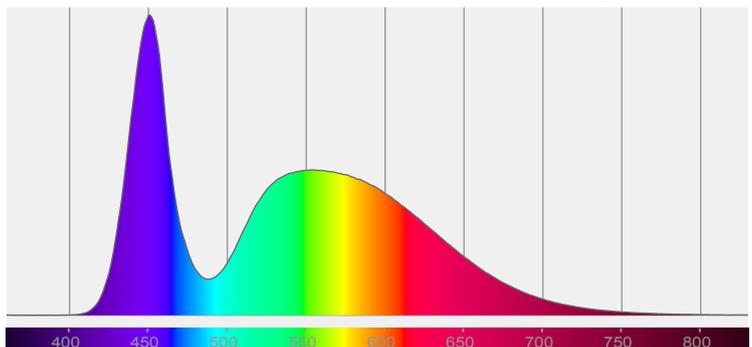
Beam Angle



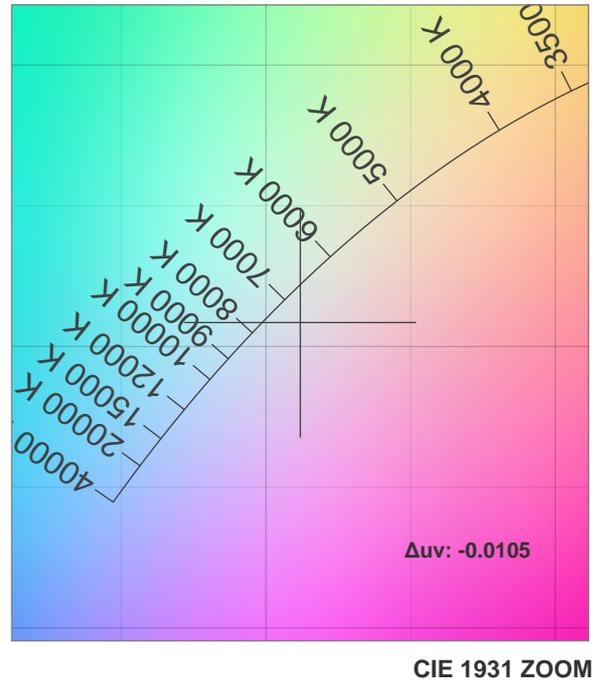
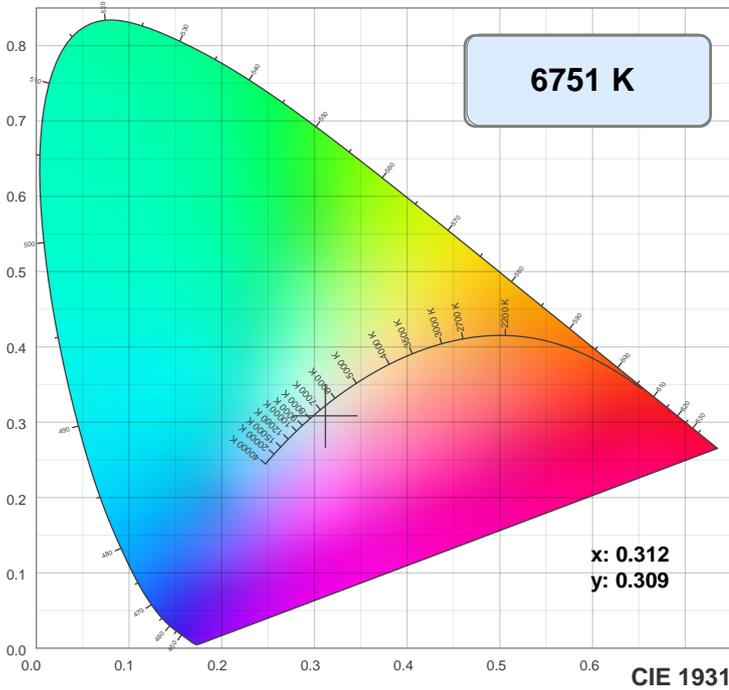
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
19.3°	22.7°	23.7°

Spectra

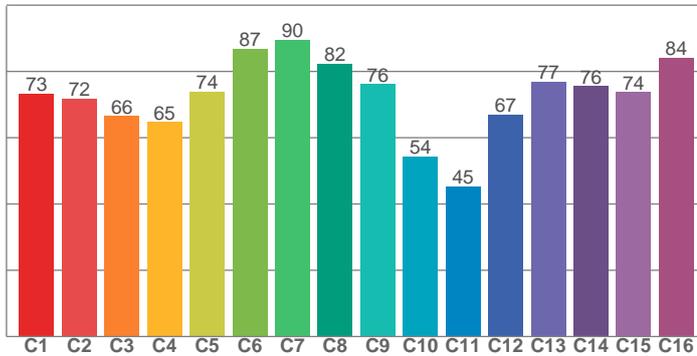
Dominant Wavelength: 360nm



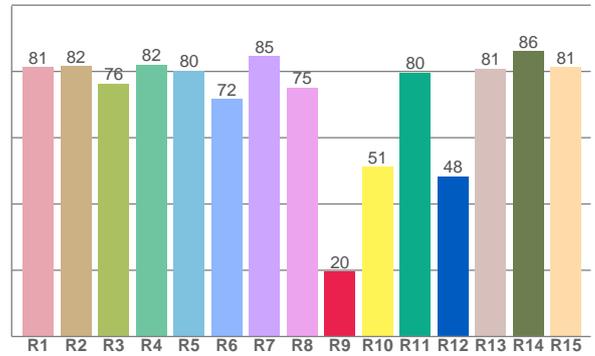
## Color Details



**TM30: 72.3**



**CRI: 79.2 (R1-R8)**



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.4	81.6	76.3	82.1	80.3	71.7	84.7	75.2	19.7	51.2	79.7	48.4	80.8	86.1	81.3

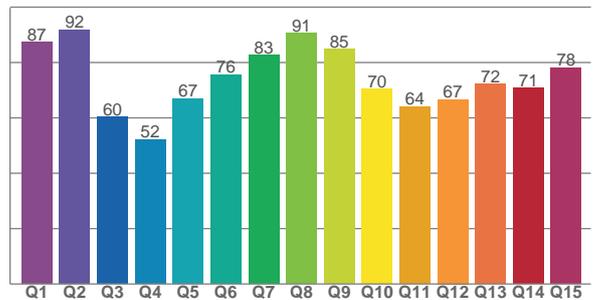
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
73.3	71.9	66.5	64.7	73.9	86.8	89.5	82.4	76.2	54.3	45.4	66.9	76.9	75.6	73.8	84.1

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.3	91.8	60.3	52.2	67.0	75.6	82.7	90.6	84.8	70.4	64.0	66.7	72.2	70.8	78.1

**CQS: 72.0**



## Color Parameters

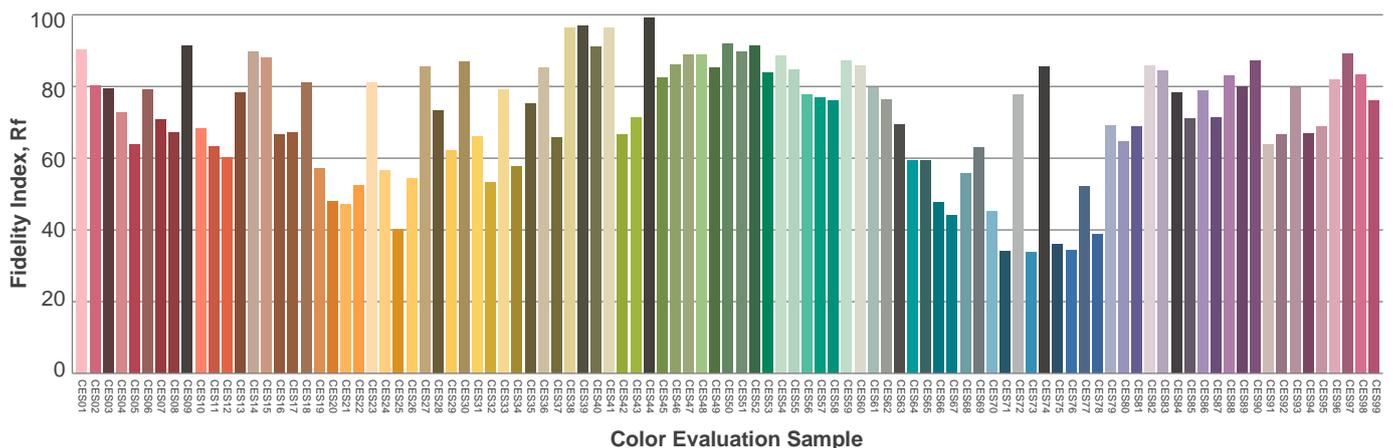
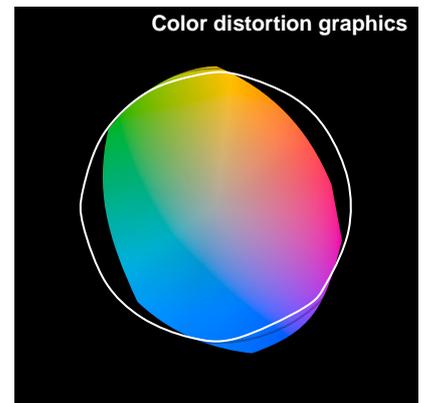
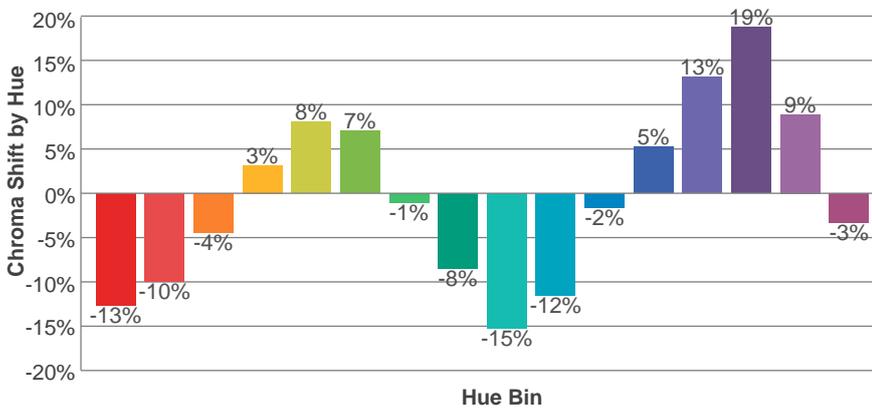
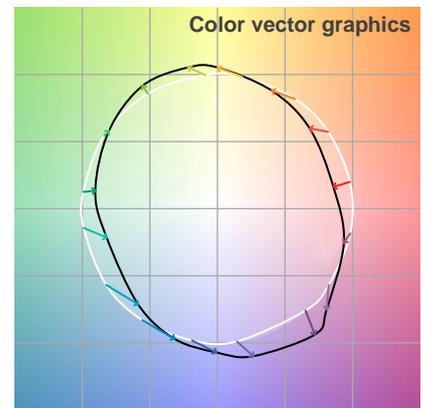
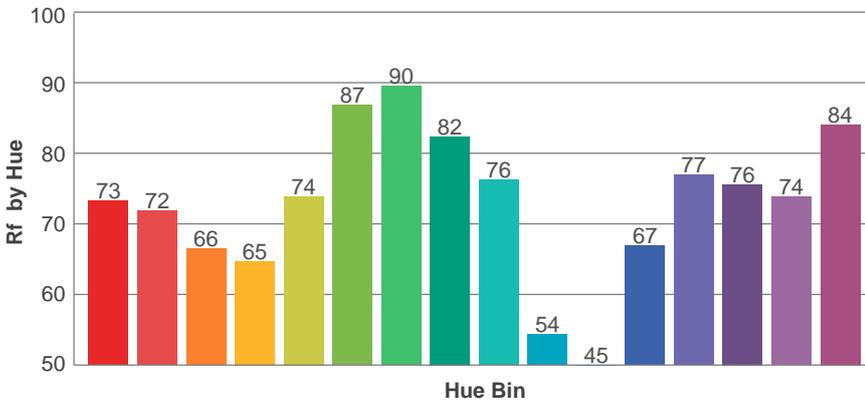
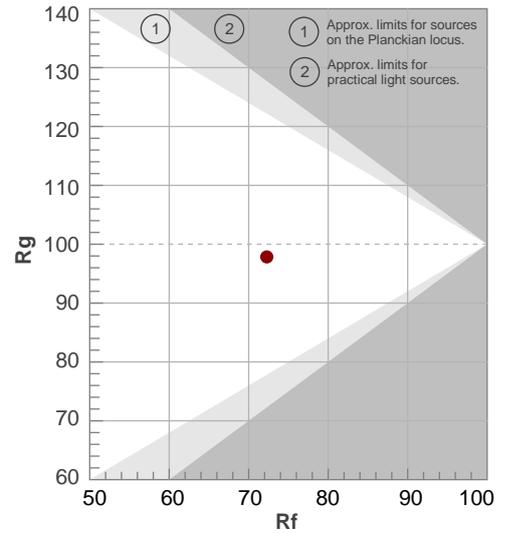
Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate	Color Coordinate	Color Deviation from Black Body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
6751 K	79.2	19.7	72.3	97.8	72.0	0.312	0.309	0.205	0.305	-0.0105

## TM30 Details

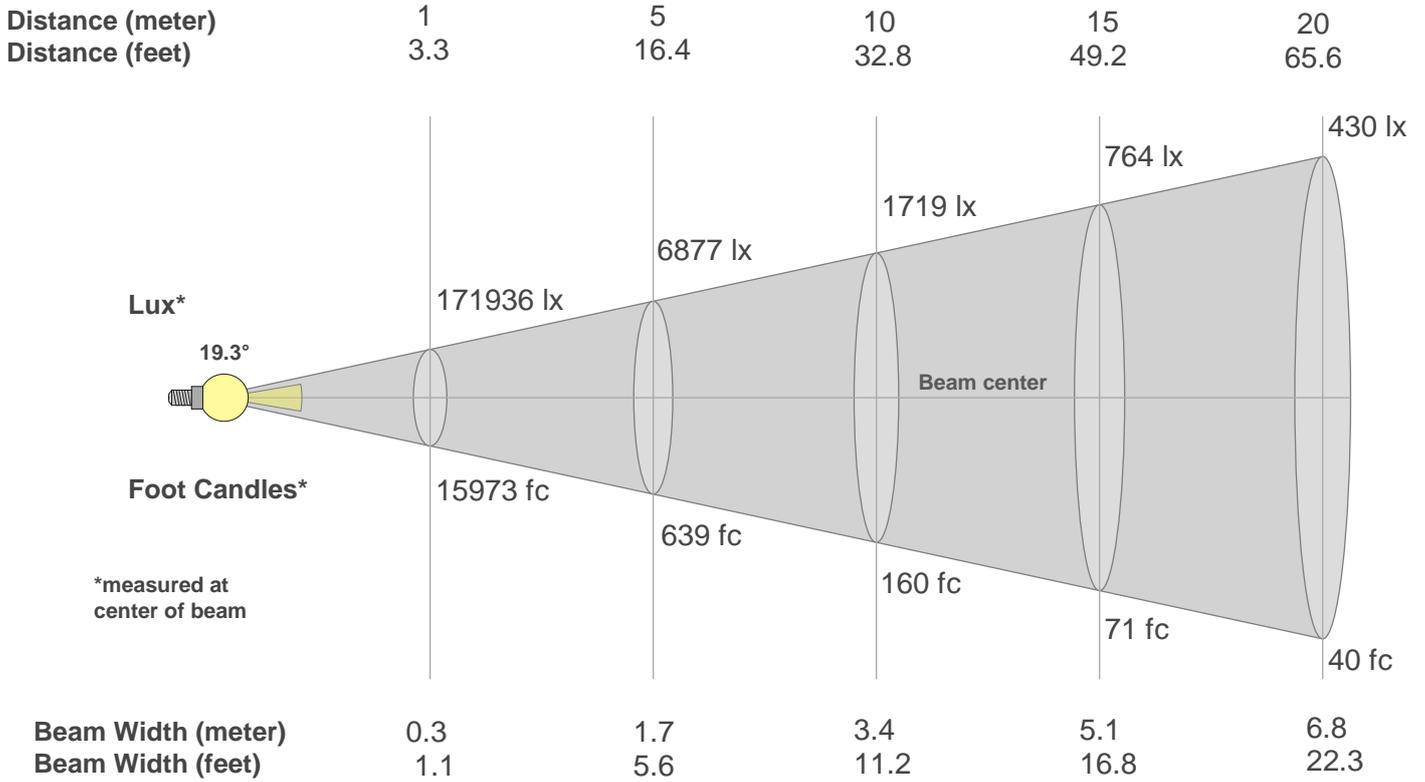
**Rf 72.3**  
Fidelity Index Rf

**Rg 97.8**  
Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	73	-13%	-1%
2	72	-10%	10%
3	66	-4%	18%
4	65	3%	19%
5	74	8%	11%
6	87	7%	0%
7	90	-1%	-5%
8	82	-8%	-3%
9	76	-15%	10%
10	54	-12%	25%
11	45	-2%	27%
12	67	5%	19%
13	77	13%	10%
14	76	19%	-4%
15	74	9%	-16%
16	84	-3%	-8%



## Beam Details



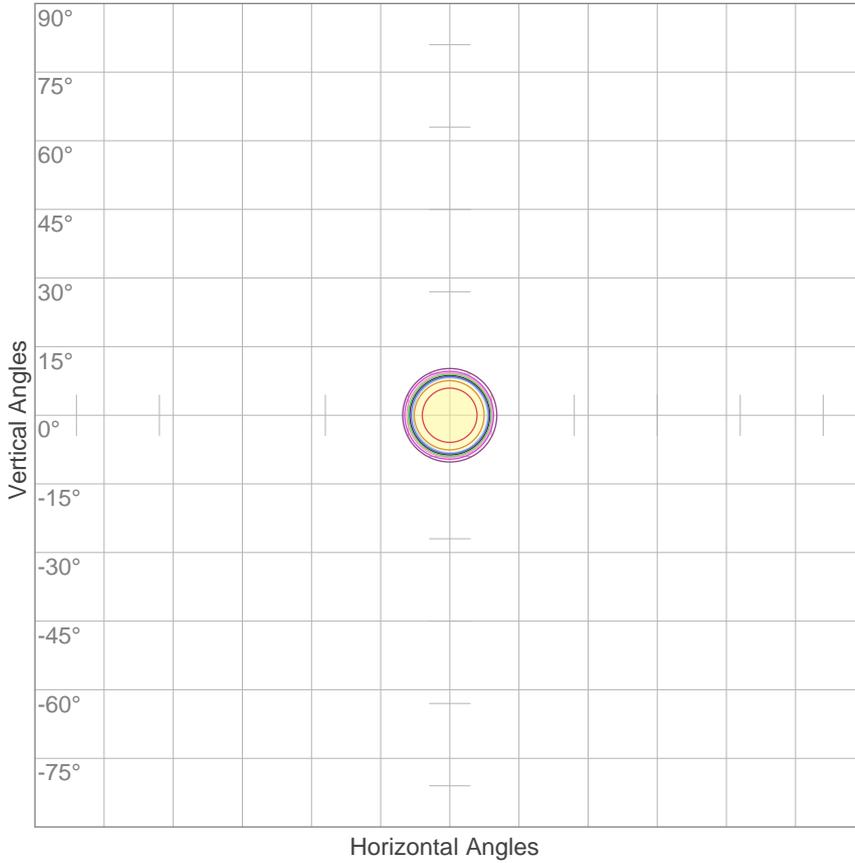
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	171936	42984	19104	10746	6877	4776	3509	2687	2123	1719	1421	1194	1017	877	764	672	595	531	476	430
fc	15973.4	3993.3	1774.8	998.3	638.9	443.7	326	249.6	197.2	159.7	132	110.9	94.5	81.5	71	62.4	55.3	49.3	44.2	39.9

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
19.3°	22.7°	23.7°	99.6%	99.6%

## ISO Diagrams

### ISO Candela Diagram



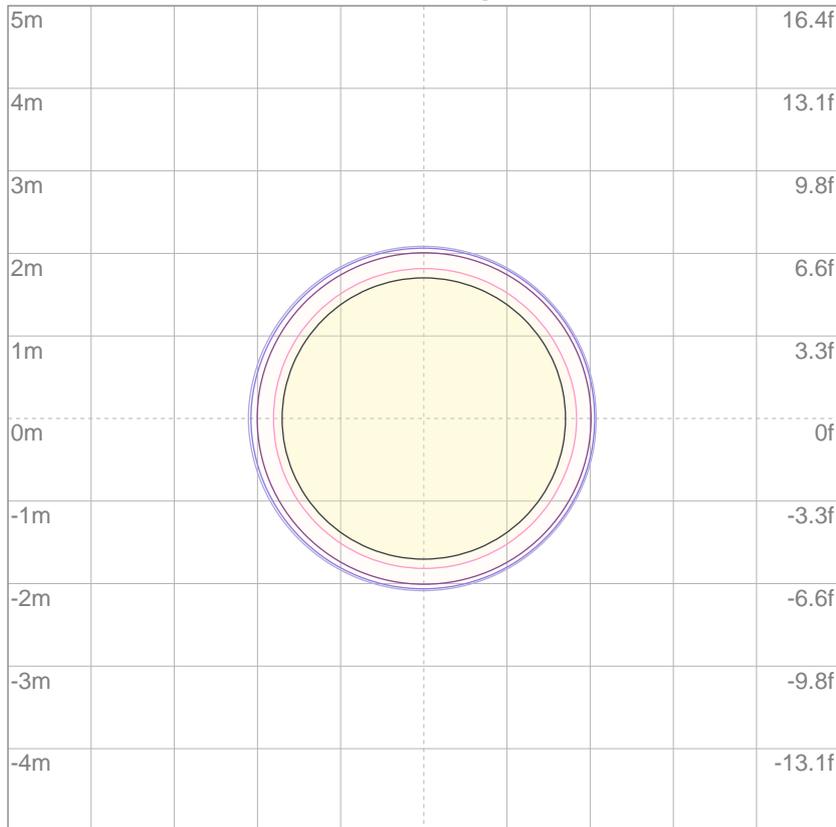
10%	17194 cd
20%	34387 cd
30%	51581 cd
40%	68774 cd
50%	85968 cd
60%	103162 cd
70%	120355 cd
80%	137549 cd
90%	154742 cd

Conditions:

Number of c-planes: 2

Candela at center: 171936 cd

### ISO Lux Diagram



3%	51.6 lx
5%	86.0 lx
10%	172 lx
30%	516 lx
50%	860 lx

Conditions:

Number of c-planes: 2

Lux at center: 1719 lx

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

Mounting Height: 10 meters (33 feet)