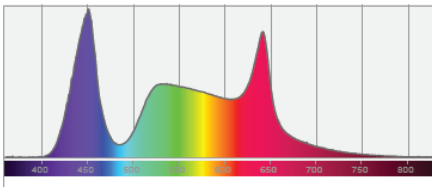
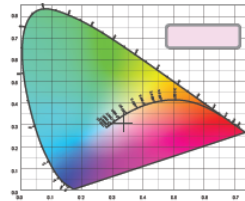


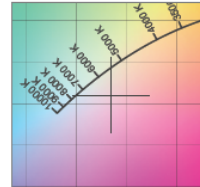
Spectral distribution



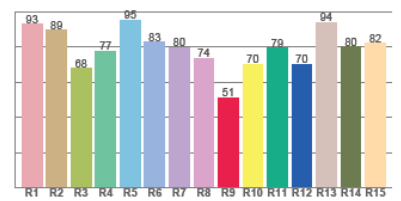
Color coordinates



Zoom color point



CRI R values



# Photometric Test Report

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

Light Efficiency:



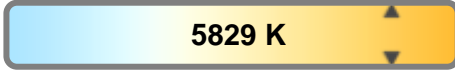
Output: 6949 lm

Light Quality:



Peak: 83429 cd

Color Temperature:

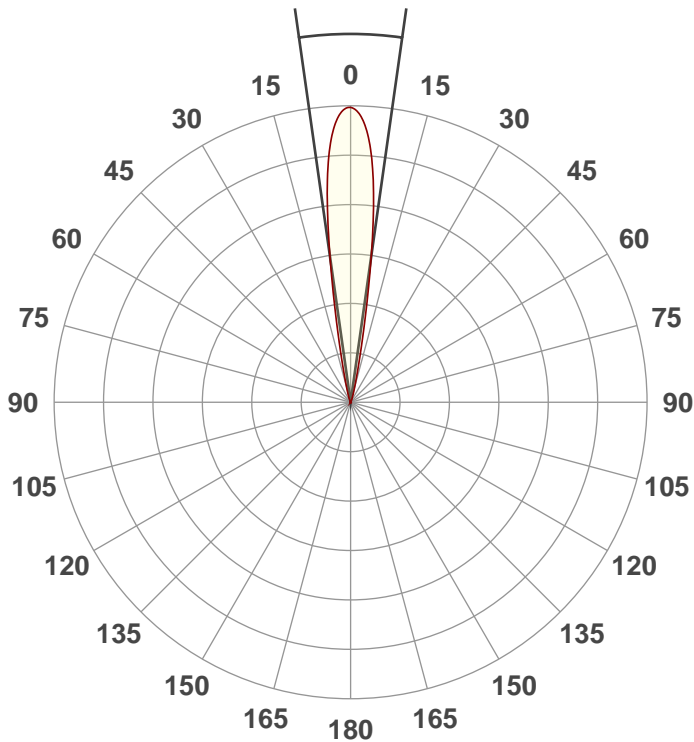


Power: 171.3 W

PF: 1.0

Beam Angle

**16.1°**



Product Name:  
**KL Fresnel 6 CW**

Test:  
**Zoom In**

Date:  
**6/12/2018**

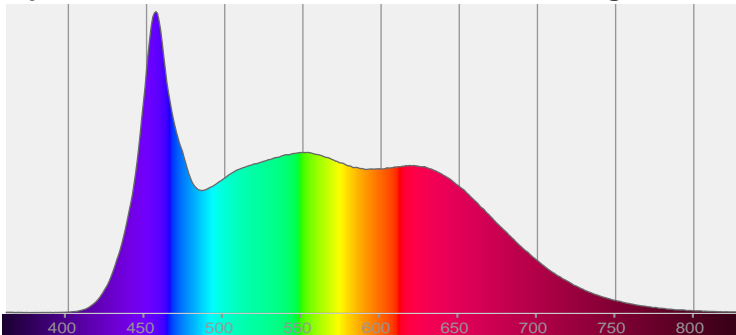
Note:



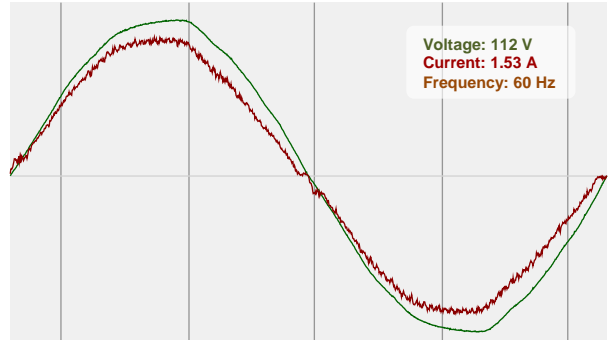
CIE 1931  
x: 0.326  
y: 0.334

Spectra

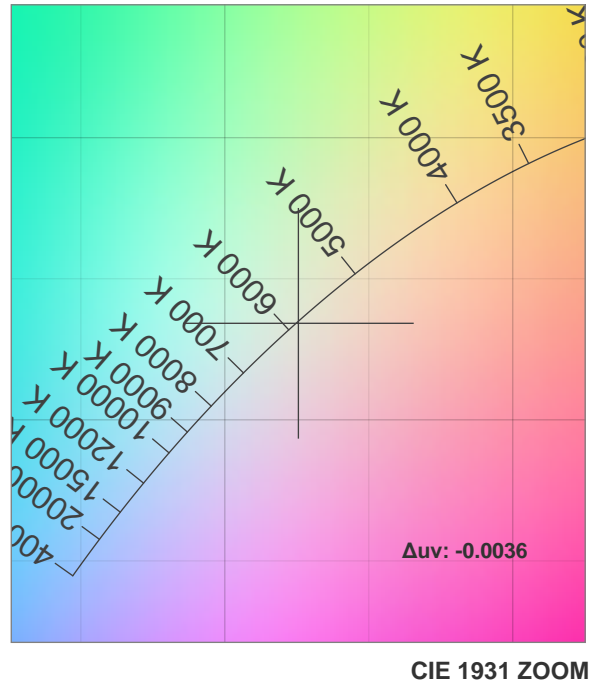
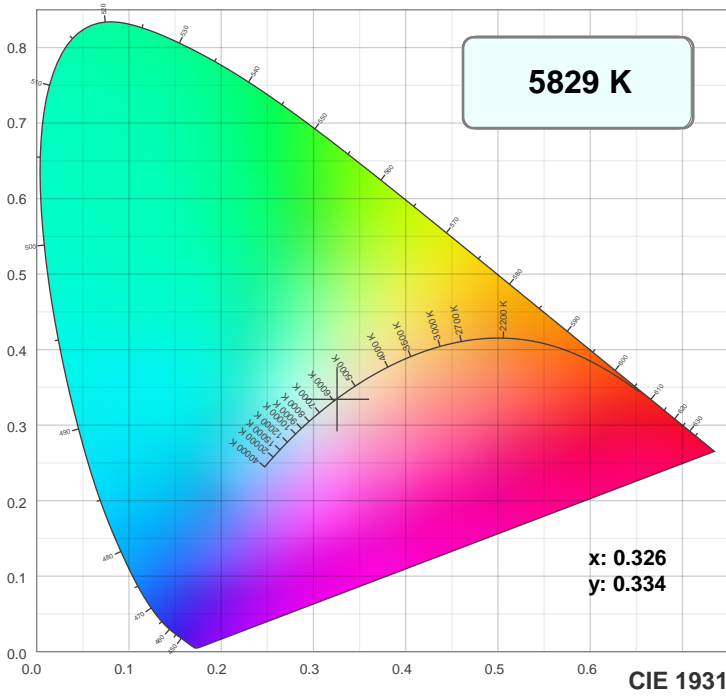
Dominant Wavelength: 589nm



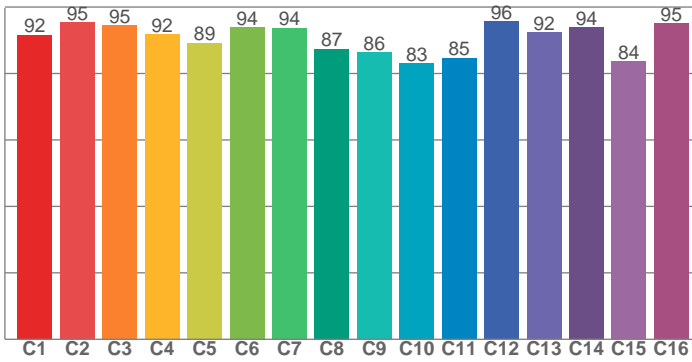
Power



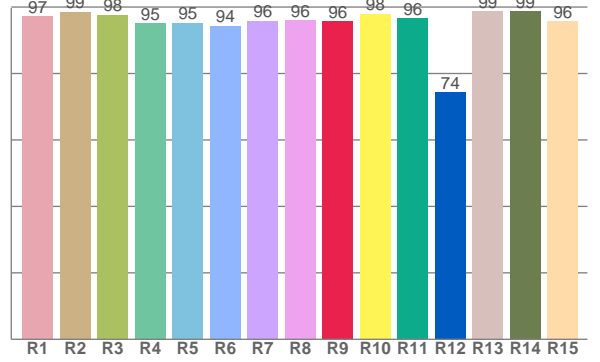
# Color Details



## TM30: 90.5



## CRI: 96.3 (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
97.2	98.5	97.7	95.2	95.3	94.4	95.9	95.9	95.6	98.0	96.5	74.4	98.8	98.7	95.6

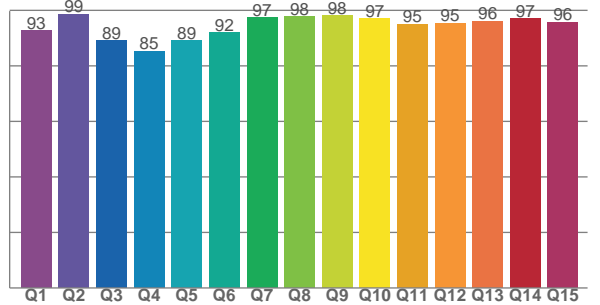
### TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.6	95.4	94.5	91.8	89.2	93.9	93.7	87.4	86.3	83.1	84.7	95.6	92.4	93.9	83.6	95.0

### CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.7	98.6	89.0	85.4	89.0	91.9	97.3	97.7	98.0	97.0	95.0	95.3	96.1	97.0	95.7

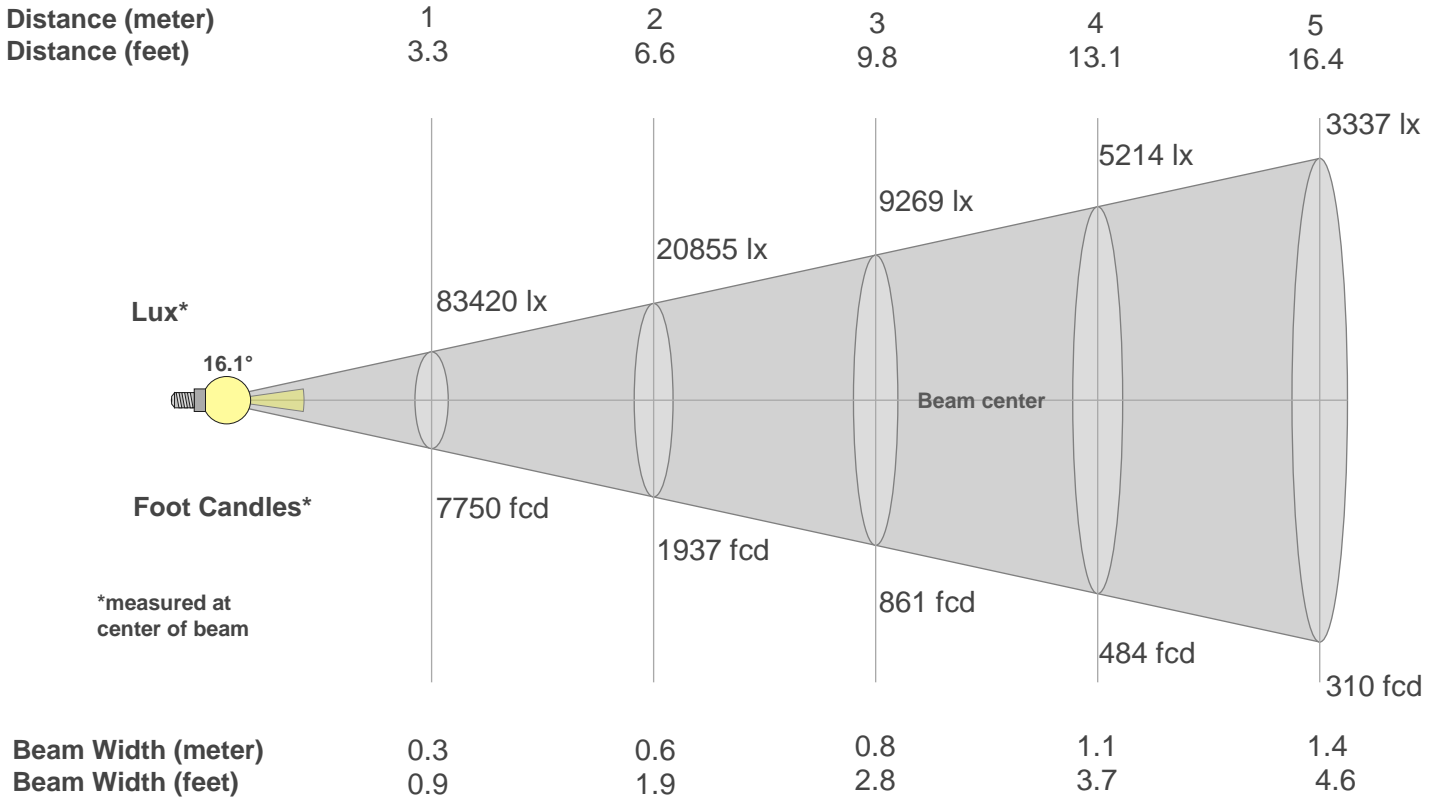
## CQS: 93.2



## 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	$\Delta uv$
5829 K	96.3	95.6	90.5	98.7	93.2	0.326	0.334	0.205	0.315	-0.0036

# 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	83420	20855	9269	5214	3337	2317	1702	1303	1030	834	689	579	494	426	371	326	289	257	231	209
fcd	7749.9	1937.5	861.1	484.4	310	215.3	158.2	121.1	95.7	77.5	64	53.8	45.9	39.5	34.4	30.3	26.8	23.9	21.5	19.4

## Intensities in 0° C-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
83.4K	83.1K	81.8K	79.4K	75.6K	70.3K	62.9K	53.2K	42.3K	31.7K	22.7K	15.9K	11.1K	7.9K	5.8K	4.4K	3.4K	2.7K	2.2K	1.7K
100%	100%	98%	95%	91%	84%	75%	64%	51%	38%	27%	19%	13%	9%	7%	5%	4%	3%	3%	2%

## Intensities in 90° C-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
83.4K	83.1K	81.8K	79.4K	75.6K	70.3K	62.9K	53.2K	42.3K	31.7K	22.7K	15.9K	11.1K	7.9K	5.8K	4.4K	3.4K	2.7K	2.2K	1.7K
100%	100%	98%	95%	91%	84%	75%	64%	51%	38%	27%	19%	13%	9%	7%	5%	4%	3%	3%	2%

## Intensities in 180° C-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
83.4K	82.8K	81.1K	78.3K	74.3K	68.8K	61.6K	52.6K	42.3K	31.8K	22.8K	16.0K	11.2K	8.0K	5.9K	4.4K	3.5K	2.8K	2.2K	1.7K
100%	99%	97%	94%	89%	82%	74%	63%	51%	38%	27%	19%	13%	10%	7%	5%	4%	3%	3%	2%

## Intensities in 270° C-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
83.4K	82.8K	81.1K	78.3K	74.3K	68.8K	61.6K	52.6K	42.3K	31.8K	22.8K	16.0K	11.2K	8.0K	5.9K	4.4K	3.5K	2.8K	2.2K	1.7K
100%	99%	97%	94%	89%	82%	74%	63%	51%	38%	27%	19%	13%	10%	7%	5%	4%	3%	3%	2%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
16.1°	25.7°	36.4°	100.0%	99.8%

Light Efficiency:



Output: 8386 lm

Light Quality:



Peak: 21103 cd

Color Temperature:

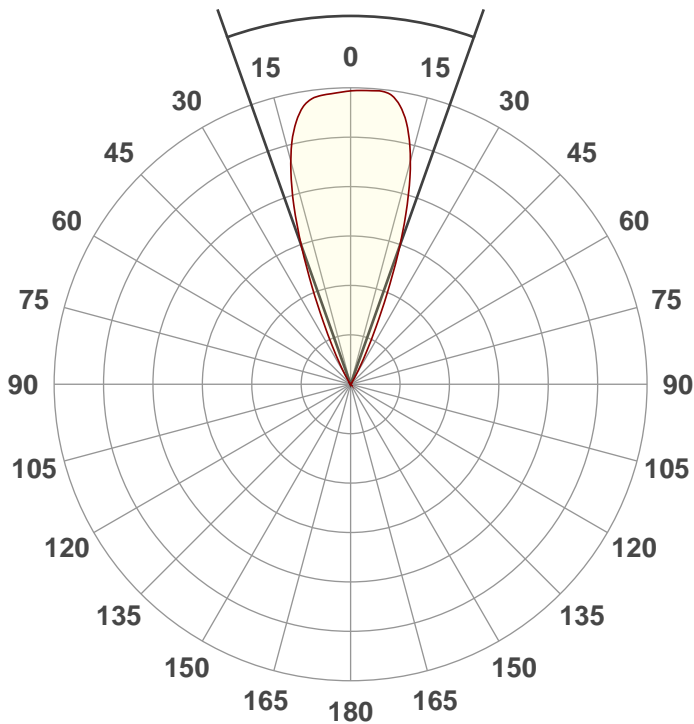


Power: 171 W

PF: 1.0

Beam Angle

**39.1°**



Product Name:  
**KL Fresnel 6 CW**

Test:  
**Zoom Out**

Date:  
**6/12/2018**

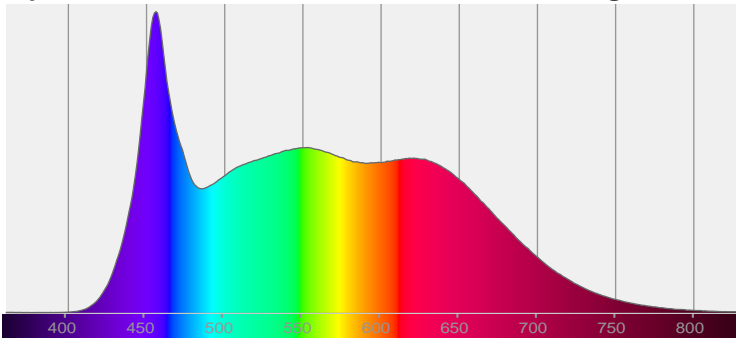
Note:



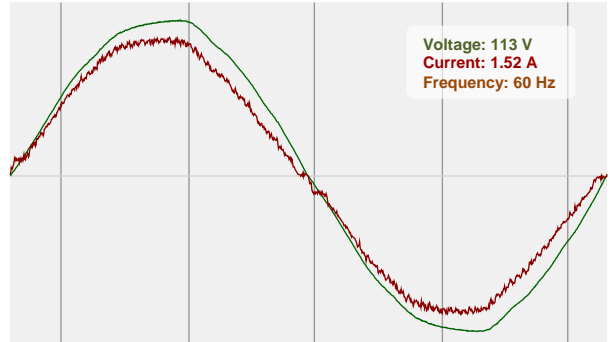
CIE 1931  
x: 0.329  
y: 0.337

Spectra

Dominant Wavelength: 586nm

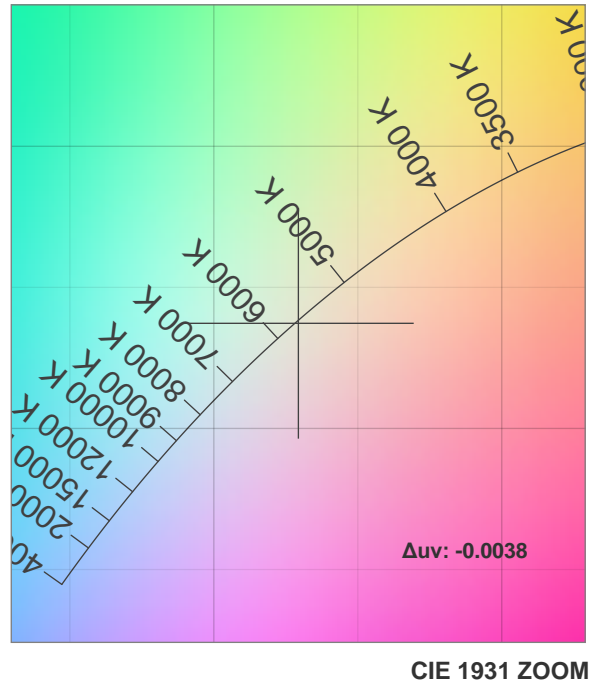
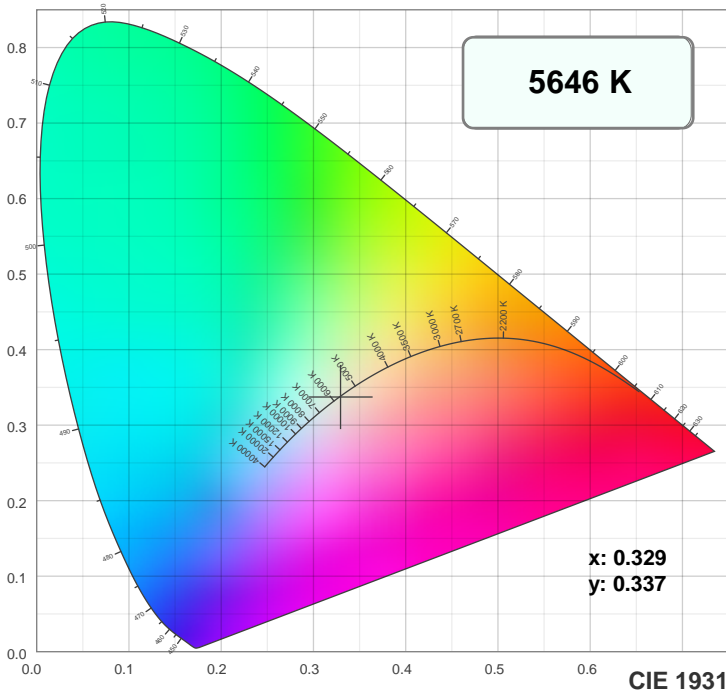


Power

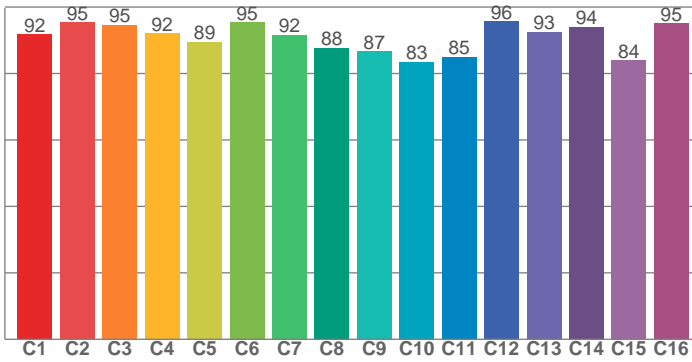


Voltage: 113 V  
Current: 1.52 A  
Frequency: 60 Hz

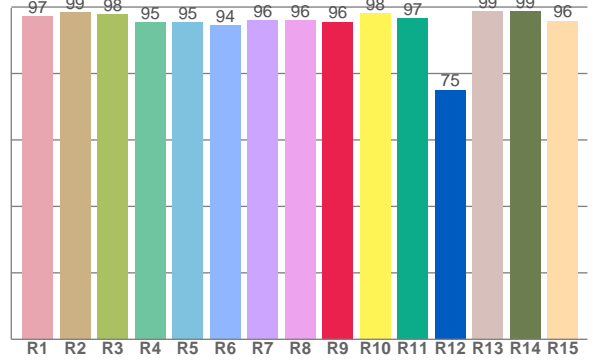
# Color Details



**TM30: 90.6**



**CRI: 96.4 (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
97.3	98.5	97.7	95.5	95.4	94.5	95.9	96.0	95.5	98.0	96.6	75.1	98.7	98.7	95.9

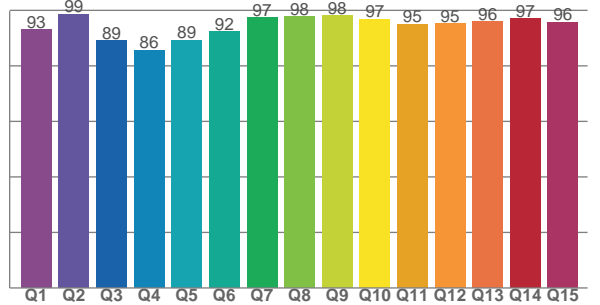
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.7	95.4	94.6	92.0	89.5	95.4	91.7	87.7	86.6	83.5	85.0	95.6	92.5	94.0	83.9	95.1

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.0	98.7	89.1	85.6	89.3	92.2	97.4	97.7	98.0	96.9	95.0	95.3	96.0	97.0	95.8

**CQS: 93.3**



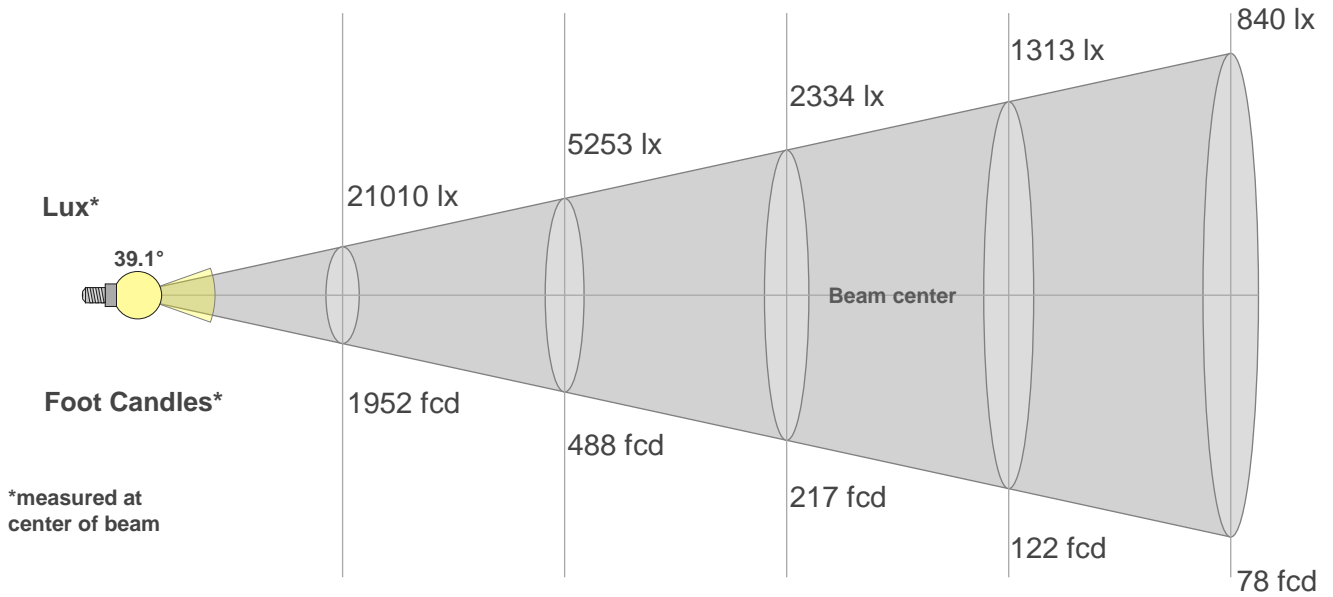
## Color Parameters

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
5646 K	96.4	95.5	90.6	98.7	93.3	0.329	0.337	0.206	0.317	-0.0038

# Beam Details

Distance (meter)  
Distance (feet)

1 2 3 4 5  
3.3 6.6 9.8 13.1 16.4



Beam Width (meter)  
Beam Width (feet)

0.7 1.4 2.1 2.8 3.6  
2.3 4.7 7 9.3 11.6

## 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	21010	5253	2334	1313	840	584	429	328	259	210	174	146	124	107	93	82	73	65	58	53
fcd	1951.9	488	216.9	122	78.1	54.2	39.8	30.5	24.1	19.5	16.1	13.6	11.5	10	8.7	7.6	6.8	6	5.4	4.9

## Intensities in 0° C-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
21.0K	20.9K	20.8K	20.8K	20.6K	20.0K	19.0K	17.5K	15.4K	12.9K	9.9K	7.0K	4.5K	2.8K	1.6K	0.9K	0.5K	0.3K	0.1K	0.1K
100%	100%	99%	99%	98%	95%	90%	83%	73%	61%	47%	33%	22%	13%	8%	4%	2%	1%	1%	0%

## Intensities in 90° C-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
21.0K	20.9K	20.8K	20.8K	20.6K	20.0K	19.0K	17.5K	15.4K	12.9K	9.9K	7.0K	4.5K	2.8K	1.6K	0.9K	0.5K	0.3K	0.1K	0.1K
100%	100%	99%	99%	98%	95%	90%	83%	73%	61%	47%	33%	22%	13%	8%	4%	2%	1%	1%	0%

## Intensities in 180° C-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
21.0K	21.1K	21.1K	21.1K	20.9K	20.3K	19.2K	17.5K	15.4K	12.8K	9.9K	6.9K	4.4K	2.7K	1.5K	0.8K	0.4K	0.2K	0.1K	0.1K
100%	100%	100%	100%	100%	97%	91%	84%	73%	61%	47%	33%	21%	13%	7%	4%	2%	1%	1%	0%

## Intensities in 270° C-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
21.0K	21.1K	21.1K	21.1K	20.9K	20.3K	19.2K	17.5K	15.4K	12.8K	9.9K	6.9K	4.4K	2.7K	1.5K	0.8K	0.4K	0.2K	0.1K	0.1K
100%	100%	100%	100%	100%	97%	91%	84%	73%	61%	47%	33%	21%	13%	7%	4%	2%	1%	1%	0%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
39.1°	53.9°	63.1°	99.7%	99.4%