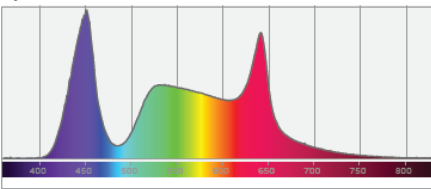
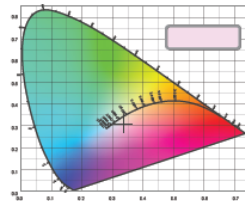


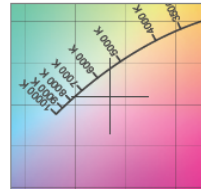
Spectral distribution



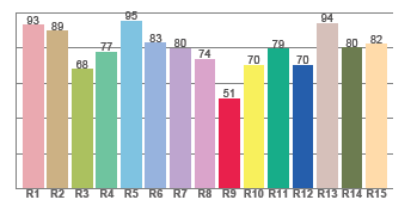
Color coordinates



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.adj.com for the latest revision/update of this report.

Par Z120 RGBW



Light Efficiency:

17 Lumen/Watt

Dominant Wavelength:

457 nm

Output:

1593 lm

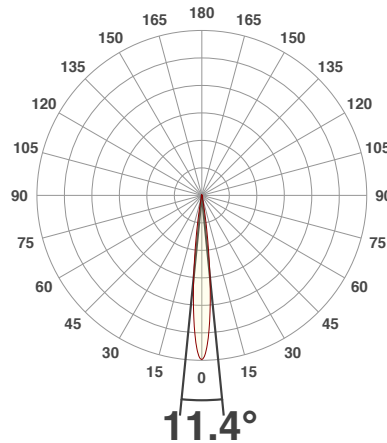
Power:

93.0 W

Peak:

39726 cd

Beam Angle



Test:

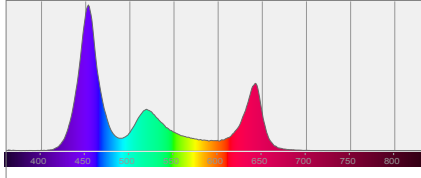
11.5deg Full On

Date:

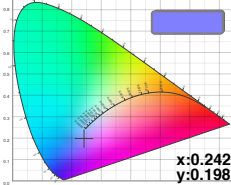
8/16/2018

Note:

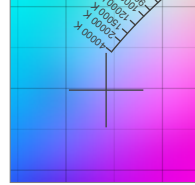
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

3

9.8

5

16.4

7

22.9

10

32.8

Lux*

11.4°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.2

0.7

0.6

1.9

1

3.3

1.4

4.6

2

6.5

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
11.4°	19.3°	23.2°	100.0%	99.9%

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	39661	9915	4407	2479	1586	1102	809	620	490	397	328	275	235	202	176	155	137	122	110	99
fcd	3684.7	921.2	409.4	230.3	147.4	102.4	75.2	57.6	45.5	36.8	30.5	25.6	21.8	18.8	16.4	14.4	12.7	11.4	10.2	9.2

Par Z120 RGBW



Light Efficiency:

18 Lumen/Watt

Dominant Wavelength:

440 nm

Output:

1714 lm

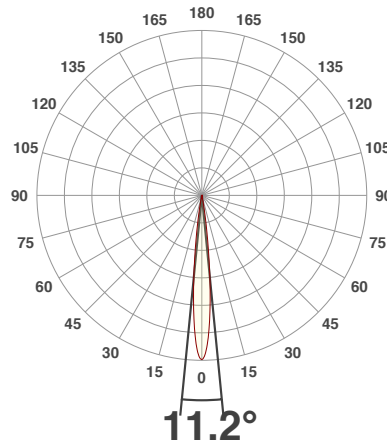
Power:

95.2 W

Peak:

43816 cd

Beam Angle



Test:

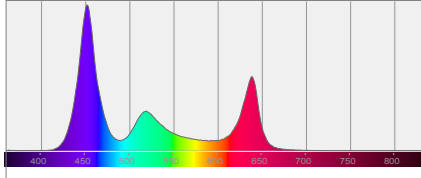
11.5deg Full On

Date:

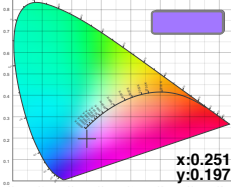
8/16/2018

Note:

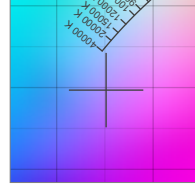
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

3

9.8

5

16.4

7

22.9

10

32.8

Lux*

11.2°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.2

0.6

0.6

1.9

1

3.2

1.4

4.5

2

6.4

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
11.2°	19.1°	23.1°	100.0%	100.0%

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	43729	10932	4859	2733	1749	1215	892	683	540	437	361	304	259	223	194	171	151	135	121	109
fcd	4062.5	1015.6	451.4	253.9	162.5	112.8	82.9	63.5	50.2	40.6	33.6	28.2	24	20.7	18.1	15.9	14.1	12.5	11.3	10.2

Par Z120 RGBW



Light Efficiency:

15 Lumen/Watt

Dominant Wavelength:

626 nm

Output:

447 lm

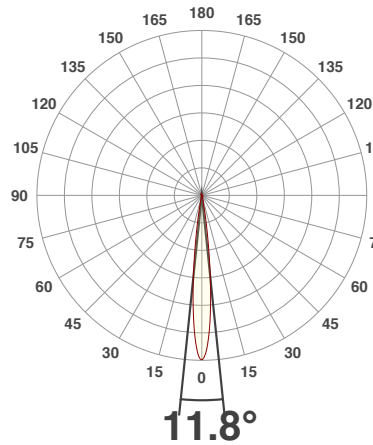
Power:

29.1 W

Peak:

10113 cd

Beam Angle



Test:

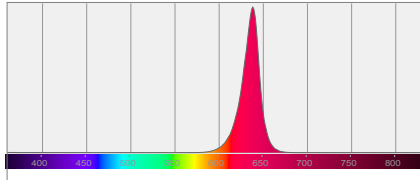
11.5deg Red

Date:

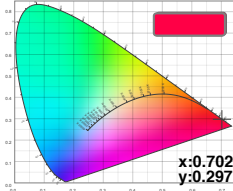
8/16/2018

Note:

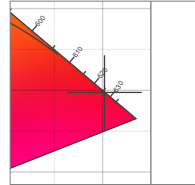
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

3

9.8

5

16.4

7

22.9

10

32.8

Lux*

11.8°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.2

0.7

0.6

2

1

3.4

1.4

4.7

2.1

6.8

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
11.8°	20.2°	25°	99.8%	99.8%

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	10107	2527	1123	632	404	281	206	158	125	101	84	70	60	52	45	39	35	31	28	25
fcd	939	234.7	104.3	58.7	37.6	26.1	19.2	14.7	11.6	9.4	7.8	6.5	5.6	4.8	4.2	3.7	3.2	2.9	2.6	2.3

Par Z120 RGBW



Light Efficiency:

43 Lumen/Watt

Dominant Wavelength:

523 nm

Output:

930 lm

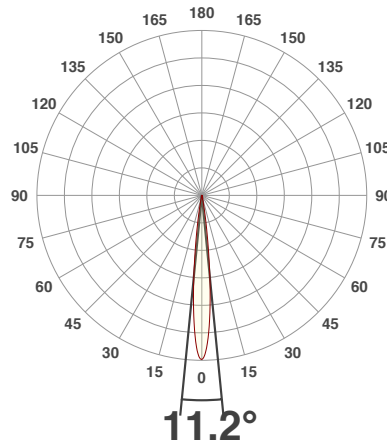
Power:

21.6 W

Peak:

22790 cd

Beam Angle



Test:

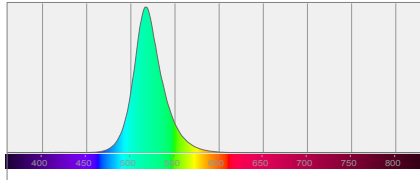
11.5deg Green

Date:

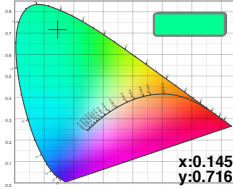
8/16/2018

Note:

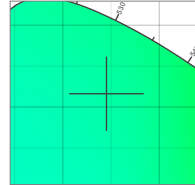
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

3

9.8

5

16.4

7

22.9

10

32.8

Lux*

11.2°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.2

0.6

0.6

1.9

1

3.2

1.4

4.5

2

6.4

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
11.2°	19.4°	24.4°	100.0%	100.0%

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	22781	5695	2531	1424	911	633	465	356	281	228	188	158	135	116	101	89	79	70	63	57
fcd	2116.4	529.1	235.2	132.3	84.7	58.8	43.2	33.1	26.1	21.2	17.5	14.7	12.5	10.8	9.4	8.3	7.3	6.5	5.9	5.3

Par Z120 RGBW



Light Efficiency:

6 Lumen/Watt

Dominant Wavelength:

456 nm

Output:

223 lm

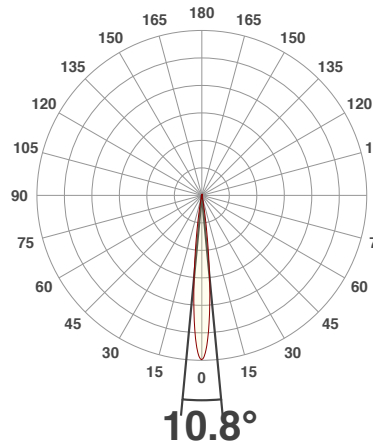
Power:

37.4 W

Peak:

5592 cd

Beam Angle



Test:

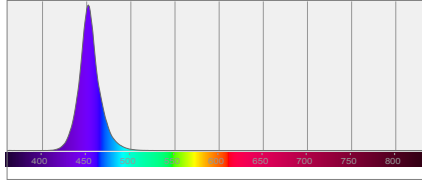
11.5deg Blue

Date:

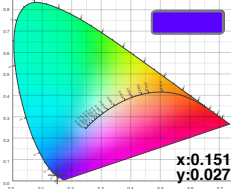
8/16/2018

Note:

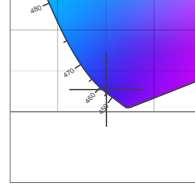
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

3

9.8

5

16.4

7

22.9

10

32.8

Lux*

10.8°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.2

0.6

0.6

1.9

0.9

3.1

1.3

4.3

1.9

6.2

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
10.8°	19°	24.1°	98.8%	98.5%

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	5575	1394	619	348	223	155	114	87	69	56	46	39	33	28	25	22	19	17	15	14
fcd	517.9	129.5	57.5	32.4	20.7	14.4	10.6	8.1	6.4	5.2	4.3	3.6	3.1	2.6	2.3	2	1.8	1.6	1.4	1.3

Par Z120 RGBW



Light Efficiency:

32 Lumen/Watt

Light Quality:

CRI: 71.0

Color Temperature:

6446 K

Output: 1110 lm

Peak: 26439 cd

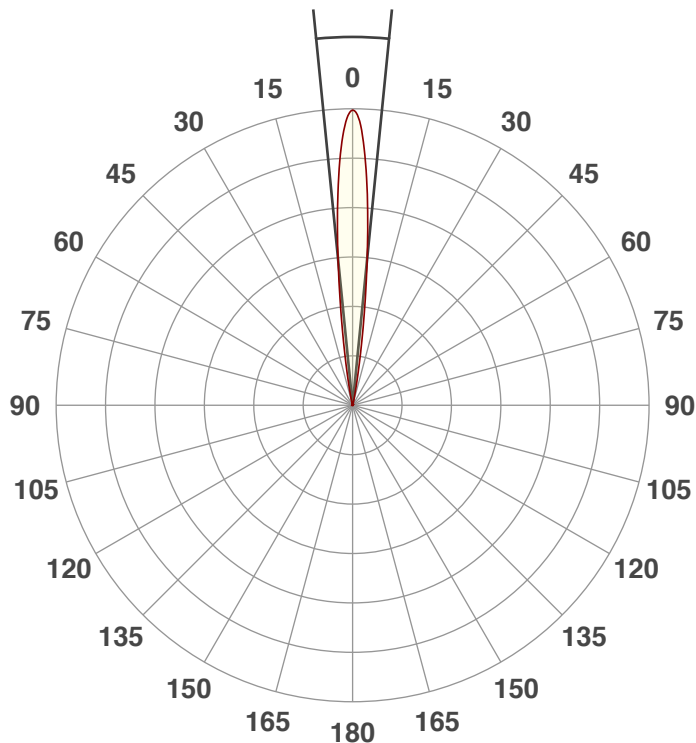
Power: 35.0 W

PF: 0.59



Beam Angle

11.4°



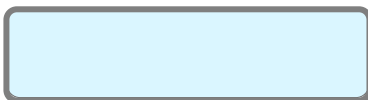
Test:

11.5deg White

Date:

8/16/2018

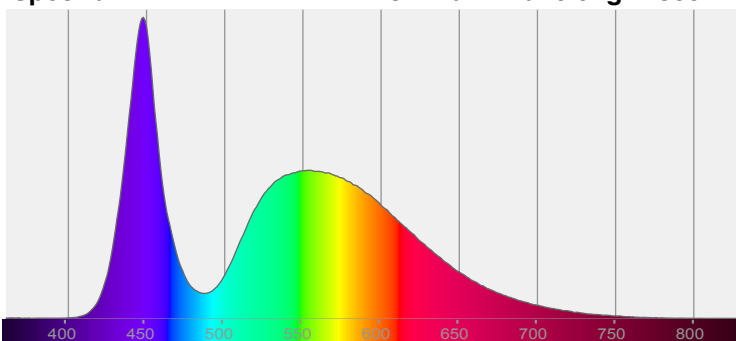
Note:



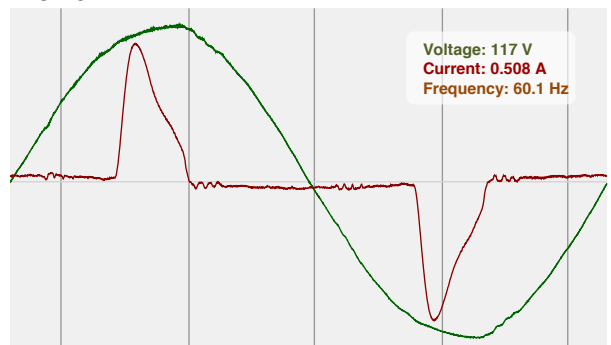
CIE 1931
x: 0.315
y: 0.322

Spectra

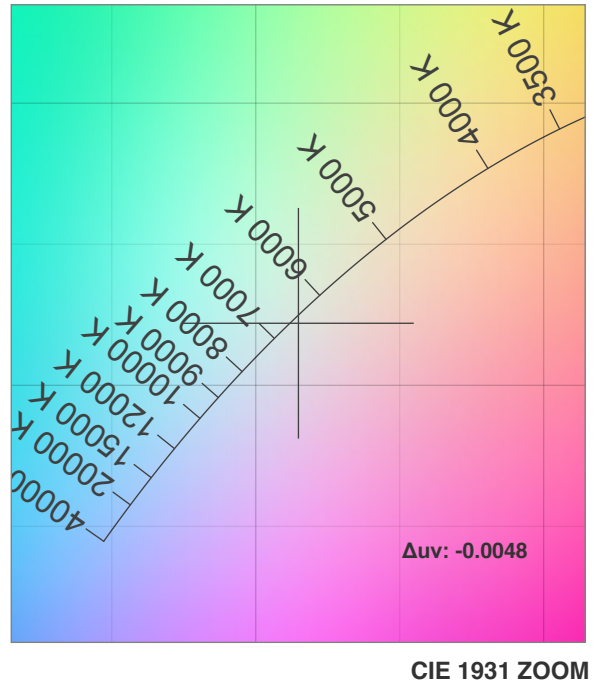
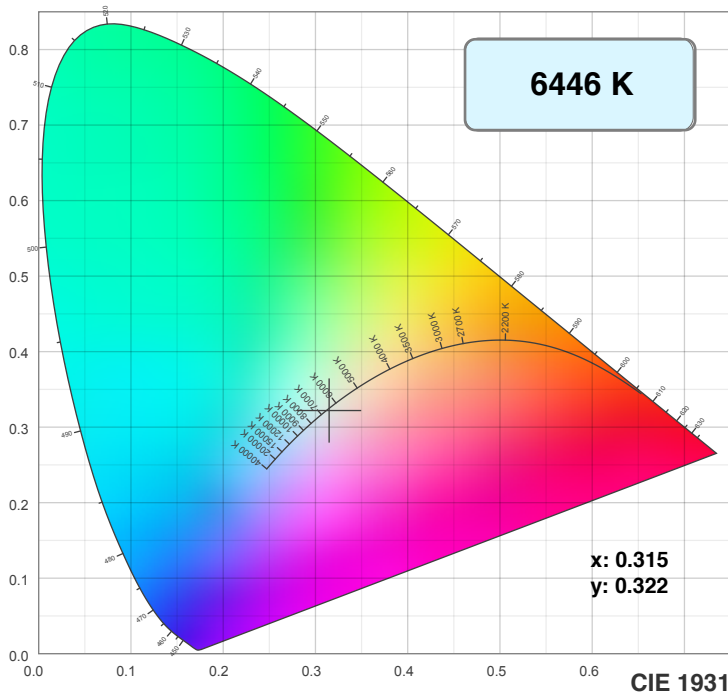
Dominant Wavelength: 360nm



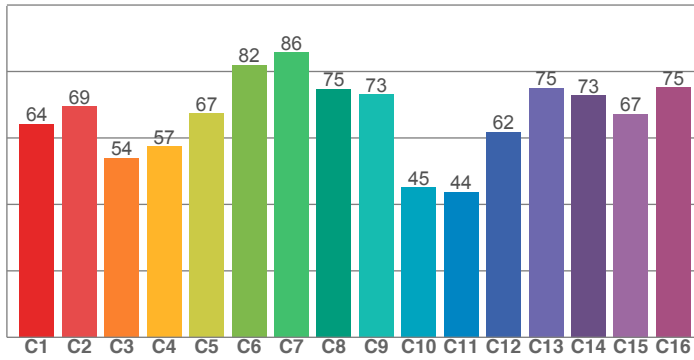
Power



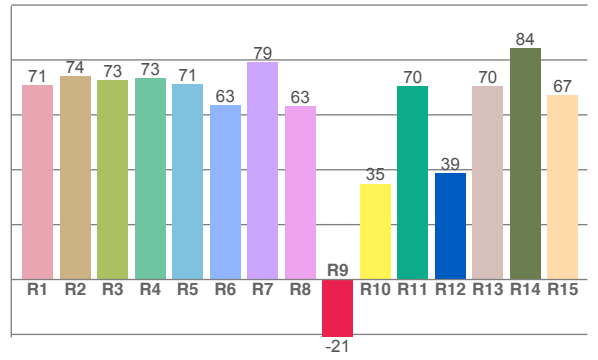
Color Details



TM30: 66.1



CRI: 71.0 (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
70.8	74.0	72.7	73.4	71.2	63.5	79.3	63.2	-21.0	34.9	70.4	38.7	70.5	84.2	67.2

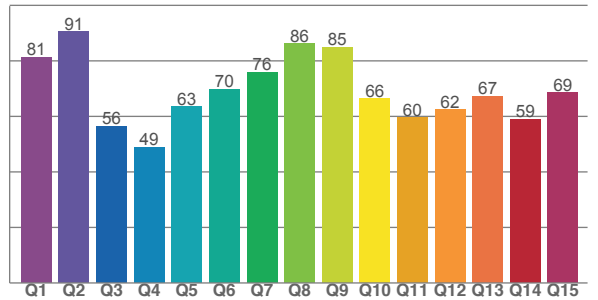
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64.2	69.5	54.0	57.5	67.4	82.0	85.7	74.7	73.2	45.2	43.7	61.9	75.1	72.8	67.3	75.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.4	90.6	56.5	48.9	63.4	69.8	75.9	86.2	85.0	66.4	59.6	62.4	67.3	58.9	68.6

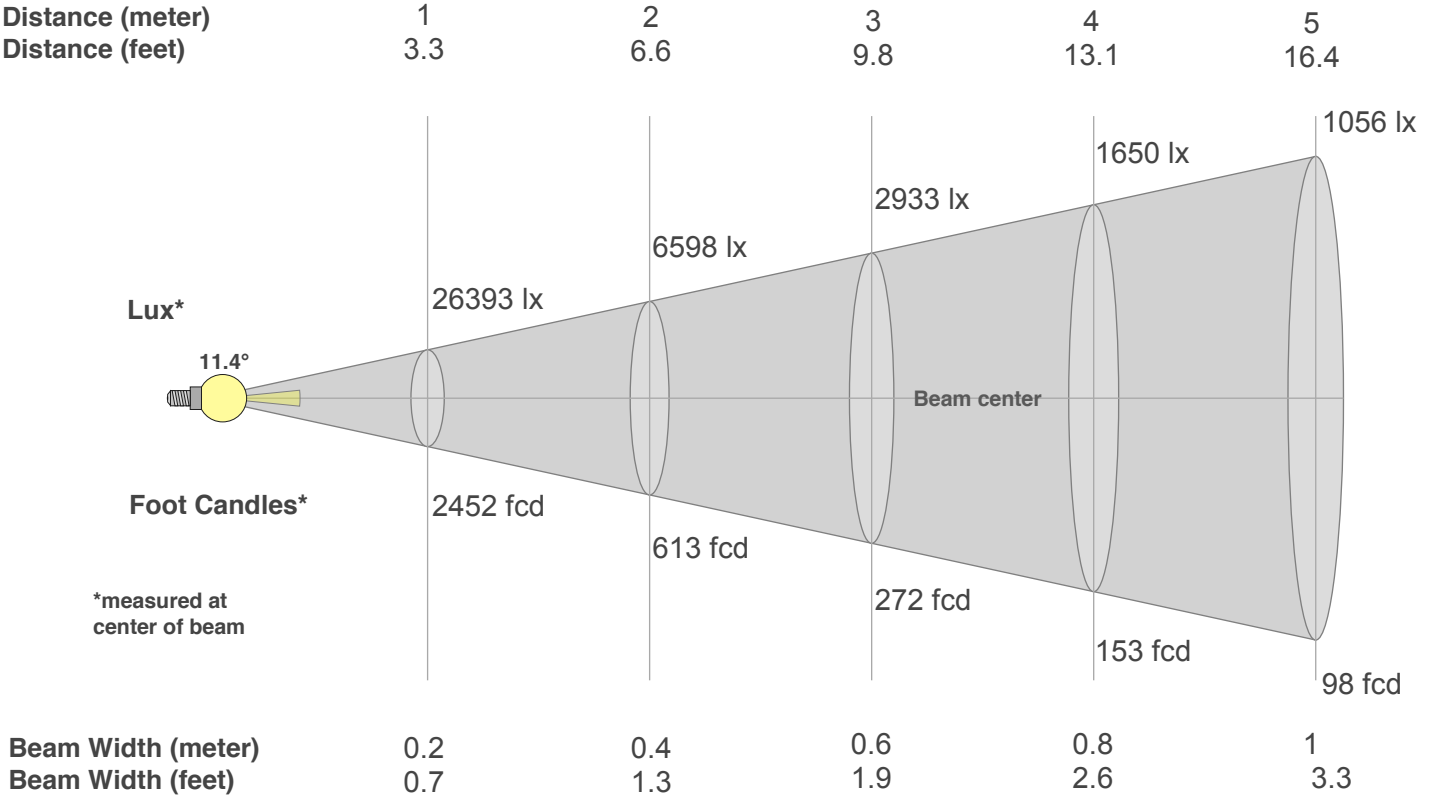
CQS: 67.2



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	Δuv
6446 K	71.0	-21.0	66.1	94.6	67.2	0.315	0.322	0.202	0.310	-0.0048

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	26393	6598	2933	1650	1056	733	539	412	326	264	218	183	156	135	117	103	91	81	73	66
fcd	2452	613	272.4	153.2	98.1	68.1	50	38.3	30.3	24.5	20.3	17	14.5	12.5	10.9	9.6	8.5	7.6	6.8	6.1

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°
26.4K	25.8K	24.3K	22.0K	18.9K	15.6K	12.1K	8.9K	6.1K	4.0K	2.5K	1.5K	0.9K	0.5K	0.2K	0.1K	0.1K	0.1K	0.0K	0.0K
100%	98%	92%	83%	72%	59%	46%	34%	23%	15%	9%	6%	3%	2%	1%	0%	0%	0%	0%	0%

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°
26.4K	25.8K	24.3K	22.0K	18.9K	15.6K	12.1K	8.9K	6.1K	4.0K	2.5K	1.5K	0.9K	0.5K	0.2K	0.1K	0.1K	0.1K	0.0K	0.0K
100%	98%	92%	83%	72%	59%	46%	34%	23%	15%	9%	6%	3%	2%	1%	0%	0%	0%	0%	0%

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°
26.4K	25.9K	24.4K	21.9K	18.9K	15.5K	12.2K	9.0K	6.3K	4.1K	2.5K	1.4K	0.8K	0.4K	0.2K	0.1K	0.0K	0.0K	0.0K	0.0K
100%	98%	92%	83%	72%	59%	46%	34%	24%	15%	9%	5%	3%	2%	1%	0%	0%	0%	0%	0%

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°	
26.4K	25.9K	24.4K	21.9K	18.9K	15.5K	12.2K	9.0K	6.3K	4.1K	2.5K	1.4K	0.8K	0.4K	0.2K	0.1K	0.0K	0.0K	0.0K	0.0K	
100%	98%	92%	83%	72%	59%	46%	34%	24%	15%	9%	5%	3%	2%	1%	0%	0%	0%	0%	0%	

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
11.4°	19.8°	24.8°	100.0%	99.9%