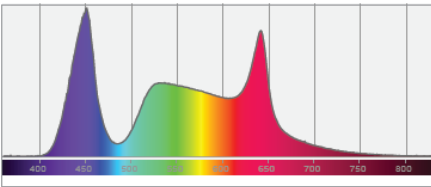
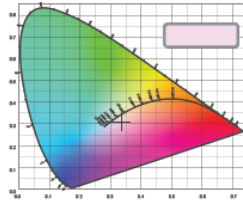


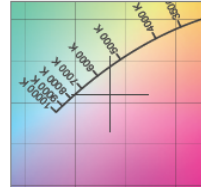
Spectral distribution



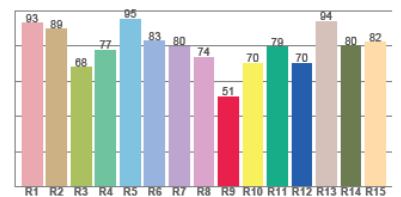
Color coordinates



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:

20 Lumen/Watt

Dominant Wavelength:

457 nm

Output:

1859 lm

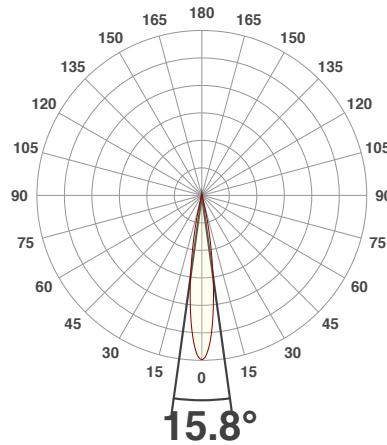
Power:

92.7 W

Peak:

24111 cd

Beam Angle



Test:

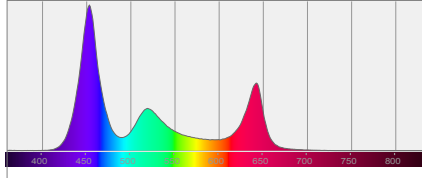
16deg Full On

Date:

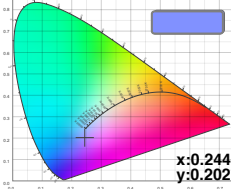
8/16/2018

Note:

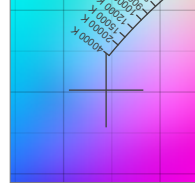
Spectral Distribution



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*

15.8°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.3

0.9

0.8

2.7

1.4

4.5

1.9

6.3

2.8

9.1

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
15.8°	26.8°	31.9°	99.9%	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	24099	6025	2678	1506	964	669	492	377	298	241	199	167	143	123	107	94	83	74	67	60
fcd	2238.9	559.7	248.8	139.9	89.6	62.2	45.7	35	27.6	22.4	18.5	15.5	13.2	11.4	10	8.7	7.7	6.9	6.2	5.6

Par Z120 RGBW



Light Efficiency:

20 Lumen/Watt

Dominant Wavelength:

455 nm

Output:

1883 lm

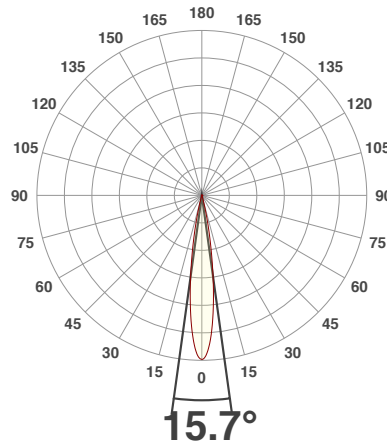
Power:

93.1 W

Peak:

24568 cd

Beam Angle



Test:

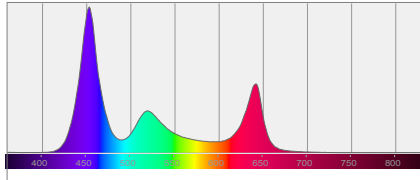
16deg Full On

Date:

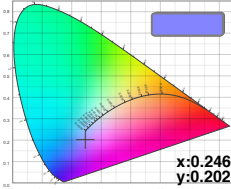
8/16/2018

Note:

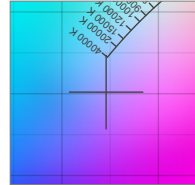
Spectral Distribution



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*

15.7°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.3

0.9

0.8

2.7

1.4

4.5

1.9

6.3

2.8

9.1

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
15.7°	26.7°	31.8°	99.9%	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	24544	6136	2727	1534	982	682	501	383	303	245	203	170	145	125	109	96	85	76	68	61
fcd	2280.2	570	253.4	142.5	91.2	63.3	46.5	35.6	28.2	22.8	18.8	15.8	13.5	11.6	10.1	8.9	7.9	7	6.3	5.7

Par Z120 RGBW



Light Efficiency:

17 Lumen/Watt

Dominant Wavelength:

626 nm

Output:

479 lm

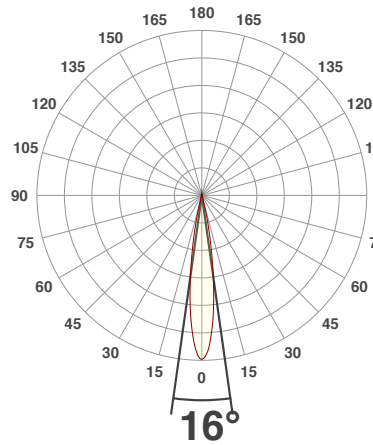
Power:

29.0 W

Peak:

6025 cd

Beam Angle



Test:

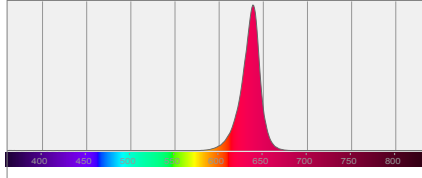
16deg Red

Date:

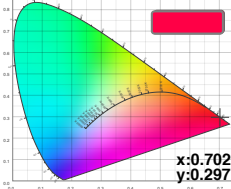
8/16/2018

Note:

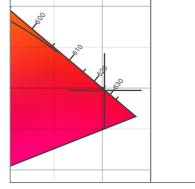
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

3

5

7

10

Distance (feet)

3.3

9.8

16.4

22.9

32.8

Lux*

16°

6021 lx

669 lx

241 lx

376 lx

241 lx

Foot Candles*

559 fcd

62 fcd

22 fcd

11 fcd

6 fcd

*measured at
center of beam

Beam Width (meter)

0.3

0.8

1.4

2

2.8

Beam Width (feet)

0.9

2.8

4.6

6.4

9.2

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
16°	27.2°	32.4°	99.9%	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	6021	1505	669	376	241	167	123	94	74	60	50	42	36	31	27	24	21	19	17	15
fcd	559.3	139.8	62.1	35	22.4	15.5	11.4	8.7	6.9	5.6	4.6	3.9	3.3	2.9	2.5	2.2	1.9	1.7	1.5	1.4

Par Z120 RGBW



Light Efficiency:

66 Lumen/Watt

Dominant Wavelength:

523 nm

Output:

1035 lm

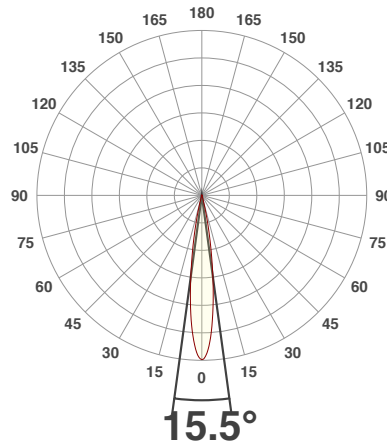
Power:

15.6 W

Peak:

13669 cd

Beam Angle



Test:

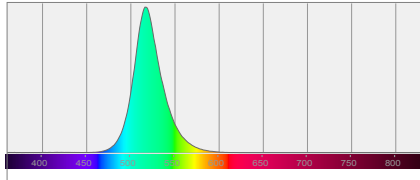
16deg Green

Date:

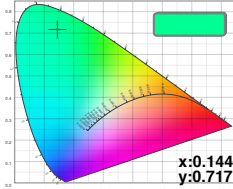
8/16/2018

Note:

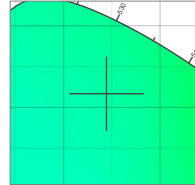
Spectral Distribution



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*

15.5°

13662 lx

1518 lx

546 lx

854 lx

546 lx

Foot Candles*

1269 fcd

141 fcd

51 fcd

26 fcd

13 fcd

*measured at
center of beam

Beam Width (meter)

0.3

Beam Width (feet)

0.9

0.8

2.7

1.4

4.4

1.9

6.2

2.7

8.9

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
15.5°	26.6°	32.2°	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	13662	3415	1518	854	546	379	279	213	169	137	113	95	81	70	61	53	47	42	38	34
fcd	1269.2	317.3	141	79.3	50.8	35.3	25.9	19.8	15.7	12.7	10.5	8.8	7.5	6.5	5.6	5	4.4	3.9	3.5	3.2

Par Z120 RGBW



Light Efficiency:

4 Lumen/Watt

Dominant Wavelength:

456 nm

Output:

245 lm

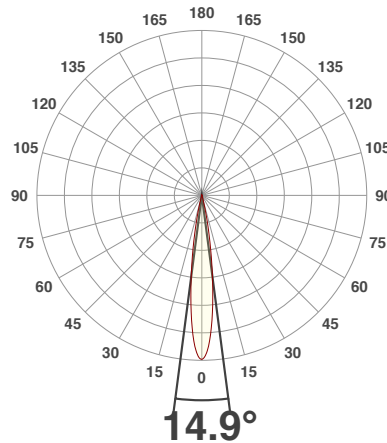
Power:

56.4 W

Peak:

3349 cd

Beam Angle



Test:

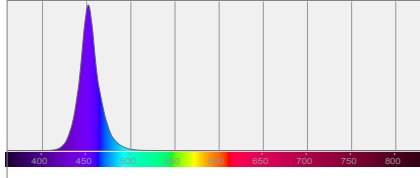
16deg Blue

Date:

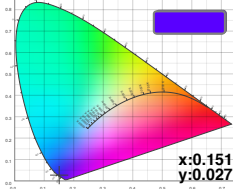
8/16/2018

Note:

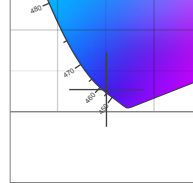
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

3

5

7

10

Distance (feet)

3.3

9.8

16.4

22.9

32.8

Lux*

14.9°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.3

0.9

0.8

2.6

1.3

4.3

1.8

6

2.6

8.6

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
14.9°	26°	31.8°	99.0%	98.9%

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	3348	837	372	209	134	93	68	52	41	33	28	23	20	17	15	13	12	10	9	8
fcd	311	77.8	34.6	19.4	12.4	8.6	6.3	4.9	3.8	3.1	2.6	2.2	1.8	1.6	1.4	1.2	1.1	1	0.9	0.8

Par Z120 RGBW



Light Efficiency:

35 Lumen/Watt

Light Quality:

CRI: 70.3

Color Temperature:

6318 K

Output: 1259 lm

Peak: 16367 cd

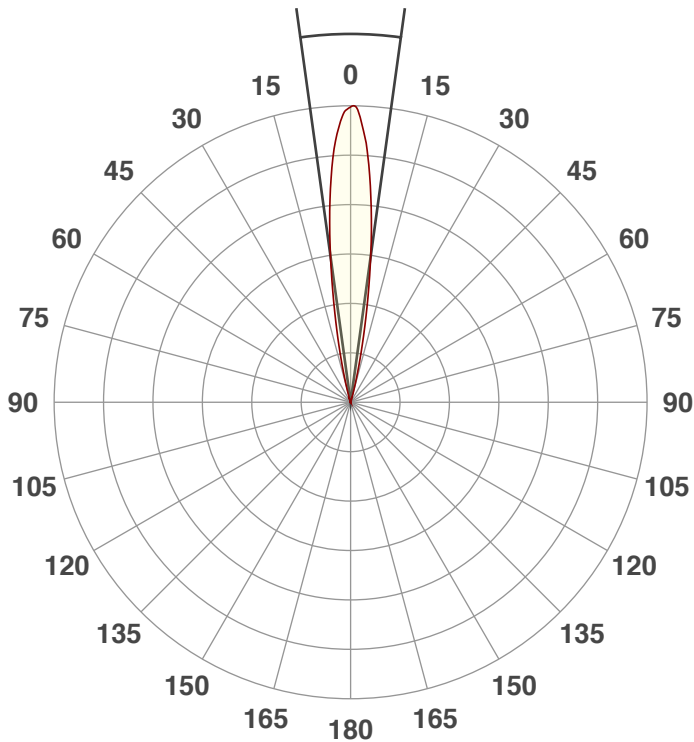
Power: 35.5 W

PF: 0.63



Beam Angle

15.7°



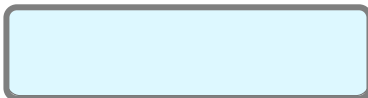
Test:

16deg White

Date:

8/16/2018

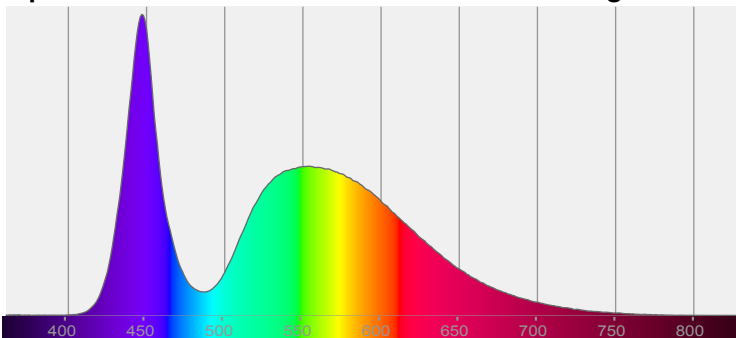
Note:



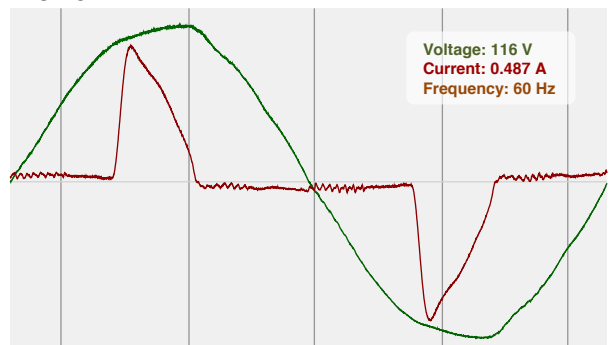
CIE 1931
x: 0.317
y: 0.325

Spectra

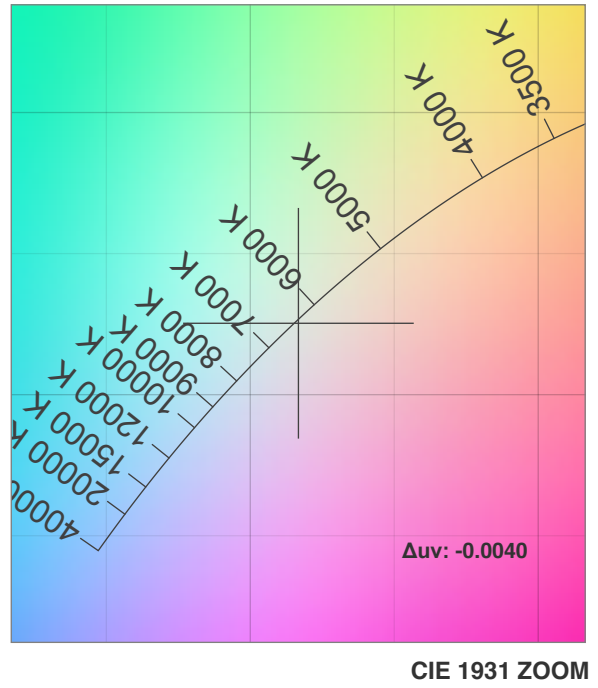
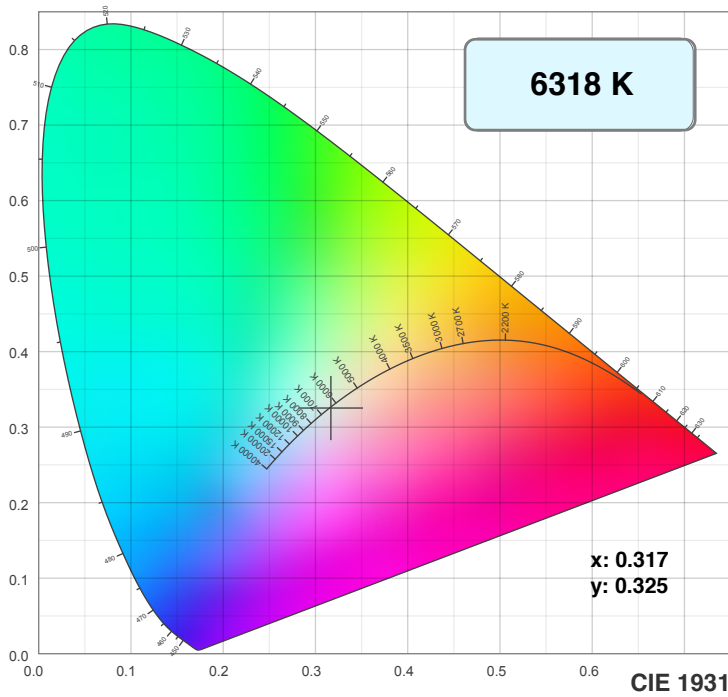
Dominant Wavelength: 829nm



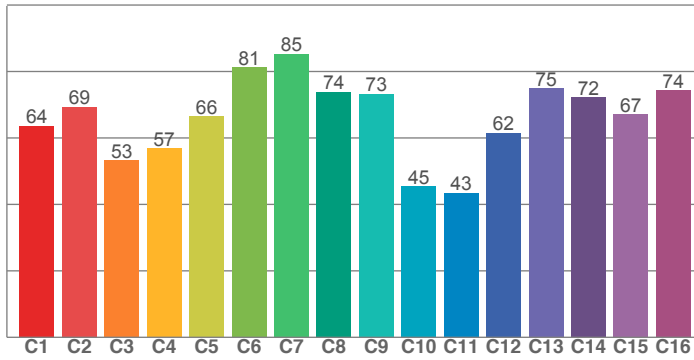
Power



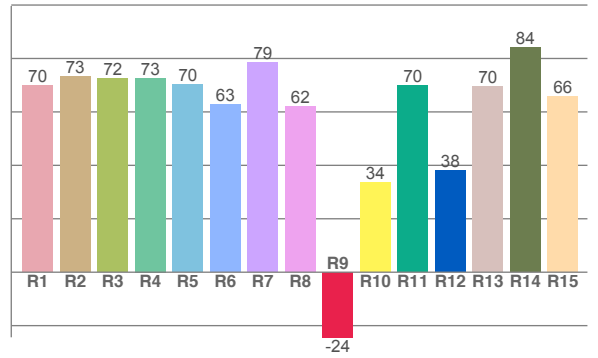
Color Details



TM30: 65.6



CRI: 70.3 (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
69.9	73.2	72.4	72.7	70.4	62.8	78.6	62.0	-24.4	33.6	69.8	38.0	69.5	84.1	65.8

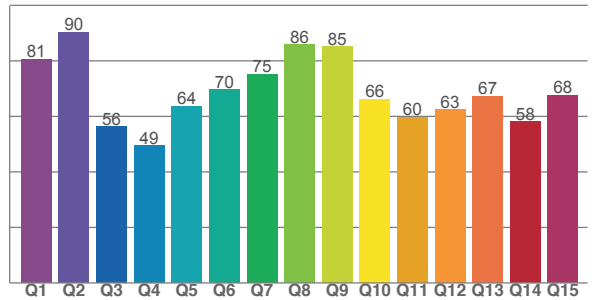
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.6	69.3	53.2	56.8	66.5	81.1	85.3	73.9	73.2	45.4	43.5	61.5	74.9	72.2	67.1	74.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80.7	90.4	56.3	49.4	63.7	69.6	75.2	85.9	85.1	66.2	59.7	62.5	67.2	58.0	67.7

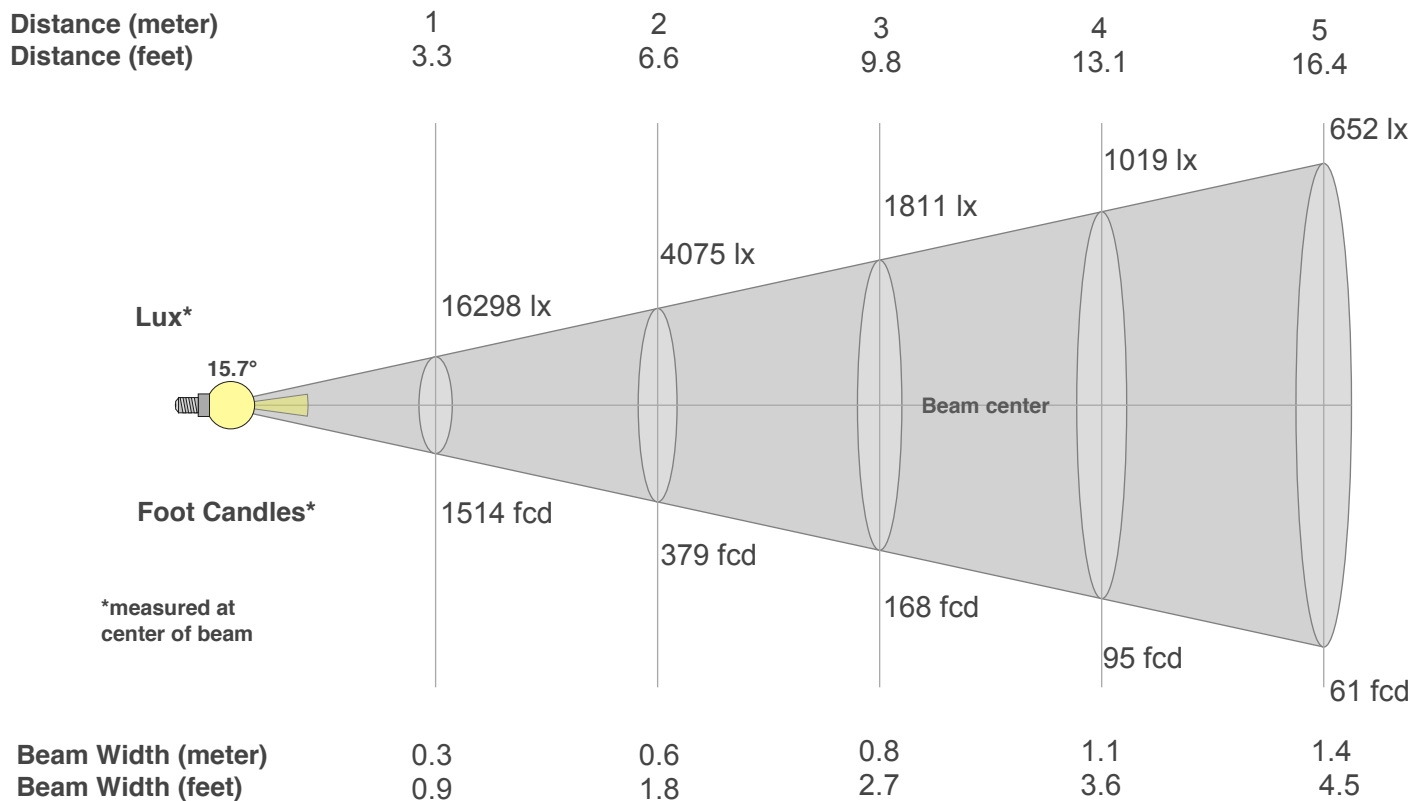
CQS: 67.1



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
6318 K	70.3	-24.4	65.6	94.6	67.1	0.317	0.325	0.202	0.311	-0.0040

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	16298	4075	1811	1019	652	453	333	255	201	163	135	113	96	83	72	64	56	50	45	41
fcd	1514.2	378.5	168.2	94.6	60.6	42.1	30.9	23.7	18.7	15.1	12.5	10.5	9	7.7	6.7	5.9	5.2	4.7	4.2	3.8

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°
16.3K	16.2K	15.6K	14.8K	13.8K	12.5K	11.0K	9.5K	7.9K	6.4K	5.1K	3.9K	2.9K	2.0K	1.3K	0.8K	0.5K	0.3K	0.2K	0.1K
100%	99%	96%	91%	84%	76%	68%	58%	49%	39%	31%	24%	18%	12%	8%	5%	3%	2%	1%	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°
16.3K	16.2K	15.6K	14.8K	13.8K	12.5K	11.0K	9.5K	7.9K	6.4K	5.1K	3.9K	2.9K	2.0K	1.3K	0.8K	0.5K	0.3K	0.2K	0.1K
100%	99%	96%	91%	84%	76%	68%	58%	49%	39%	31%	24%	18%	12%	8%	5%	3%	2%	1%	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°
16.3K	16.4K	15.7K	14.8K	13.7K	12.4K	10.9K	9.5K	7.9K	6.5K	5.1K	3.8K	2.8K	1.9K	1.2K	0.7K	0.4K	0.2K	0.1K	0.1K
100%	100%	96%	91%	84%	76%	67%	58%	49%	40%	31%	23%	17%	11%	7%	4%	2%	1%	1%	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°
16.3K	16.4K	15.7K	14.8K	13.7K	12.4K	10.9K	9.5K	7.9K	6.5K	5.1K	3.8K	2.8K	1.9K	1.2K	0.7K	0.4K	0.2K	0.1K	0.1K
100%	100%	96%	91%	84%	76%	67%	58%	49%	40%	31%	23%	17%	11%	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
15.7°	26.8°	32.3°	100.0%	99.9%