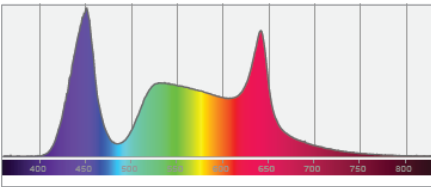
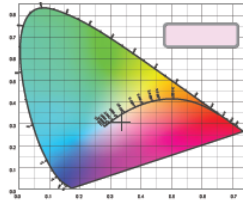


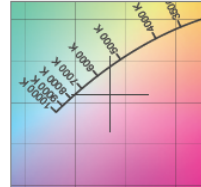
Spectral distribution



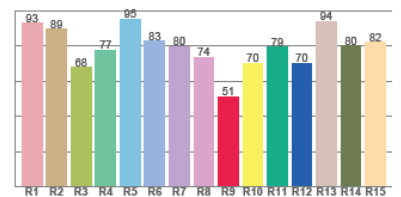
Color coordinates



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:

456 nm

Output:

1884 lm

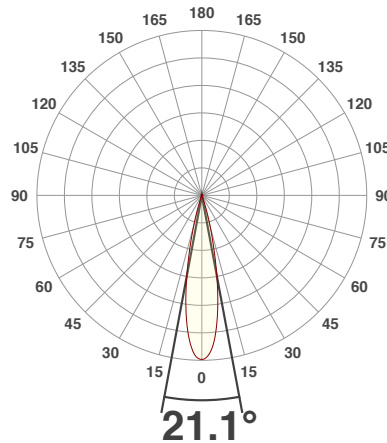
Power:

92.9 W

Peak:

14502 cd

Beam Angle



Test:

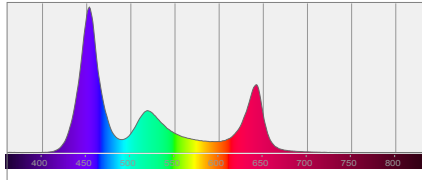
20.5deg Full On

Date:

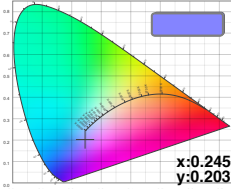
8/16/2018

Note:

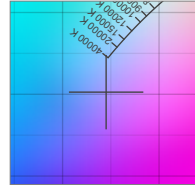
Spectral Distribution



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*

21.1°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.2

1.1

3.6

1.9

6.1

2.6

8.5

3.7

12.2

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
21.1°	34.1°	39.8°	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	14497	3624	1611	906	580	403	296	227	179	145	120	101	86	74	64	57	50	45	40	36
fcd	1346.8	336.7	149.6	84.2	53.9	37.4	27.5	21	16.6	13.5	11.1	9.4	8	6.9	6	5.3	4.7	4.2	3.7	3.4

Par Z120 RGBW



Light Efficiency:

21 Lumen/Watt

Dominant Wavelength:

445 nm

Output:

1946 lm

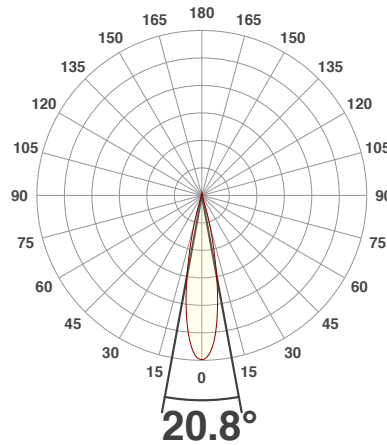
Power:

94.4 W

Peak:

15439 cd

Beam Angle



Test:

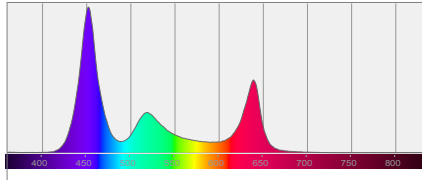
20.5deg Full On

Date:

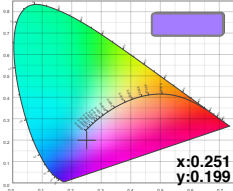
8/16/2018

Note:

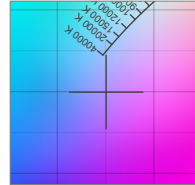
Spectral Distribution



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*

20.8°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.2

1.1

3.6

1.8

6

2.6

8.4

3.7

12.1

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
20.8°	33.7°	39°	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	15433	3858	1715	965	617	429	315	241	191	154	128	107	91	79	69	60	53	48	43	39
fcd	1433.8	358.4	159.3	89.6	57.4	39.8	29.3	22.4	17.7	14.3	11.8	10	8.5	7.3	6.4	5.6	5	4.4	4	3.6

Par Z120 RGBW



Light Efficiency:

18 Lumen/Watt

Dominant Wavelength:

626 nm

Output:

533 lm

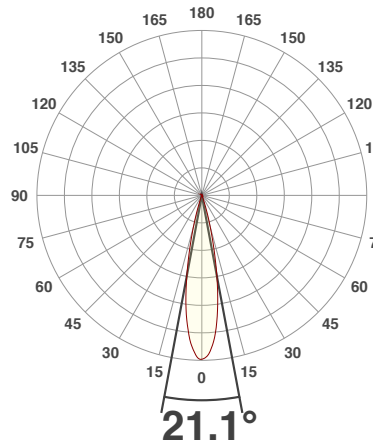
Power:

29.3 W

Peak:

4091 cd

Beam Angle



Test:

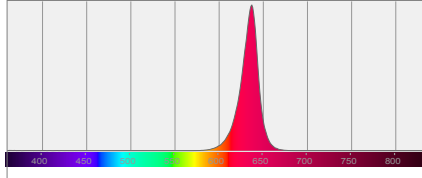
20.5deg Red

Date:

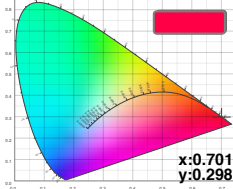
8/16/2018

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*

21.1°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.2

1.1

3.7

1.9

6.1

2.6

8.5

3.7

12.2

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
21.1°	34.2°	40°	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	4084	1021	454	255	163	113	83	64	50	41	34	28	24	21	18	16	14	13	11	10
fcd	379.4	94.9	42.2	23.7	15.2	10.5	7.7	5.9	4.7	3.8	3.1	2.6	2.2	1.9	1.7	1.5	1.3	1.2	1.1	0.9

Par Z120 RGBW



Light Efficiency:

59 Lumen/Watt

Dominant Wavelength:

523 nm

Output:

1036 lm

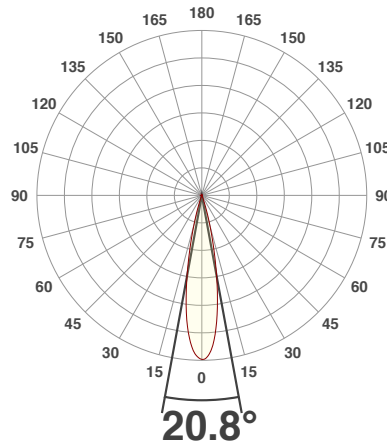
Power:

17.6 W

Peak:

8066 cd

Beam Angle



Test:

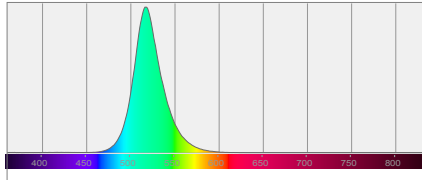
20.5deg Green

Date:

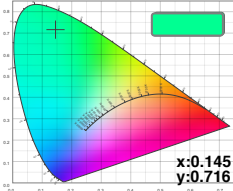
8/16/2018

Note:

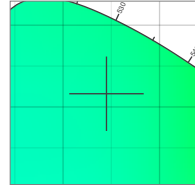
Spectral Distribution



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*

20.8°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.2

1.1

3.6

1.8

6

2.6

8.4

3.7

12

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
20.8°	34°	40.1°	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	8064	2016	896	504	323	224	165	126	100	81	67	56	48	41	36	32	28	25	22	20
fcd	749.2	187.3	83.2	46.8	30	20.8	15.3	11.7	9.2	7.5	6.2	5.2	4.4	3.8	3.3	2.9	2.6	2.3	2.1	1.9

Par Z120 RGBW



Light Efficiency:

7 Lumen/Watt

Dominant Wavelength:

456 nm

Output:

246 lm

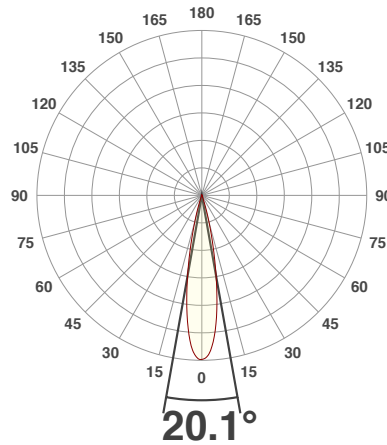
Power:

35.5 W

Peak:

1991 cd

Beam Angle



Test:

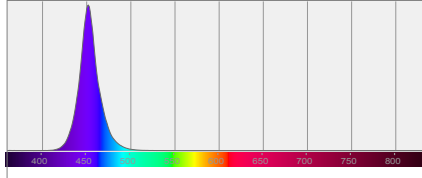
20.5deg Blue

Date:

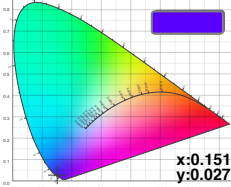
8/16/2018

Note:

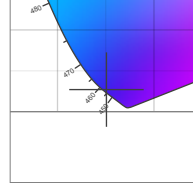
Spectral Distribution



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*

20.1°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.2

1.1

3.5

1.8

5.8

2.5

8.1

3.5

11.6

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
20.1°	33.3°	39.7°	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	1991	498	221	124	80	55	41	31	25	20	16	14	12	10	9	8	7	6	6	5
fcd	184.9	46.2	20.5	11.6	7.4	5.1	3.8	2.9	2.3	1.8	1.5	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.5

Par Z120 RGBW



Light Efficiency:

35 Lumen/Watt

Light Quality:

CRI: 70.7

Color Temperature:

6363 K

Output: 1234 lm

Peak: 9373 cd

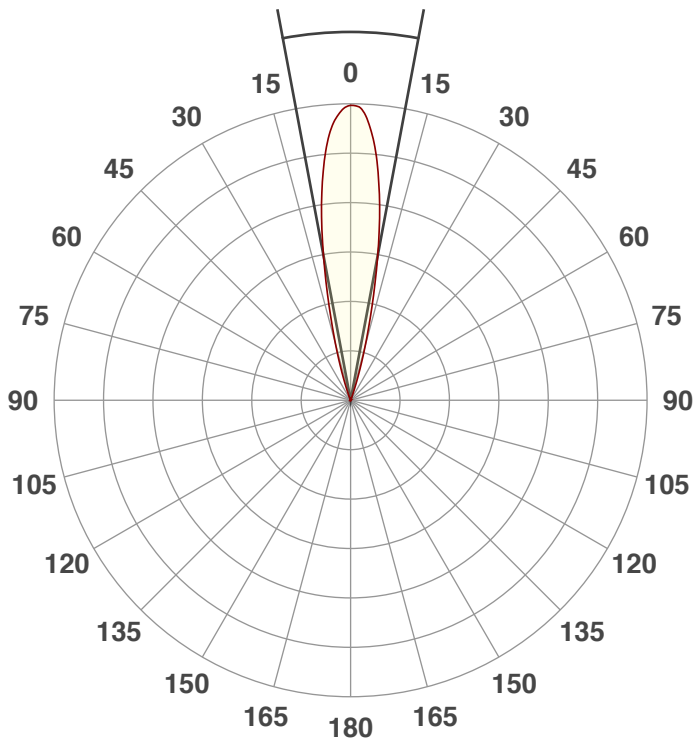
Power: 34.9 W

PF: 0.6



Beam Angle

21.2°



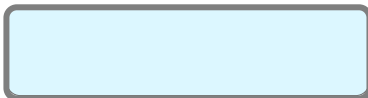
Test:

20.5deg White

Date:

8/16/2018

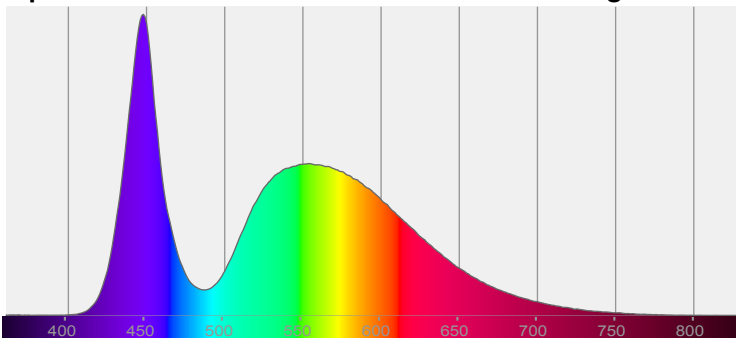
Note:



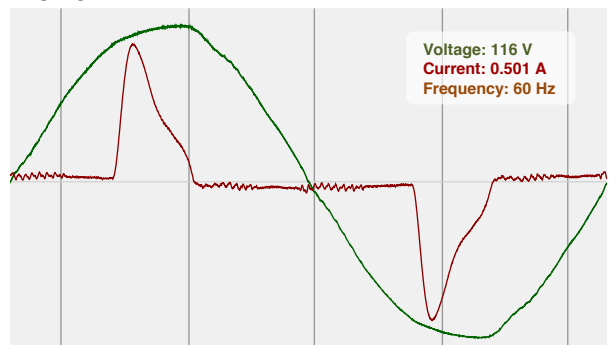
CIE 1931
x: 0.316
y: 0.325

Spectra

Dominant Wavelength: 829nm

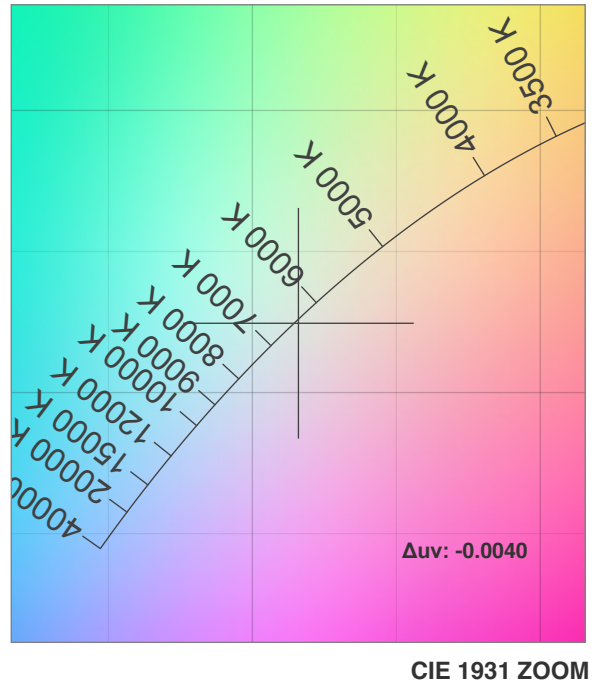
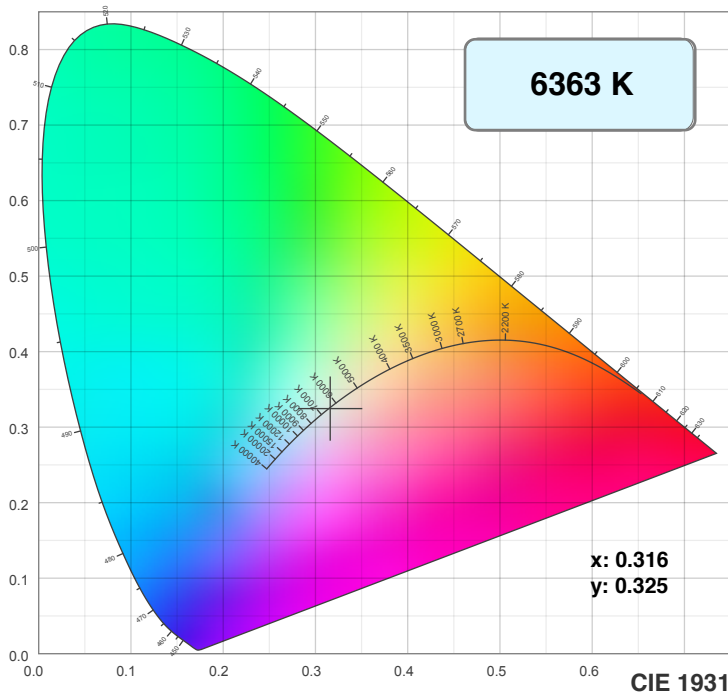


Power

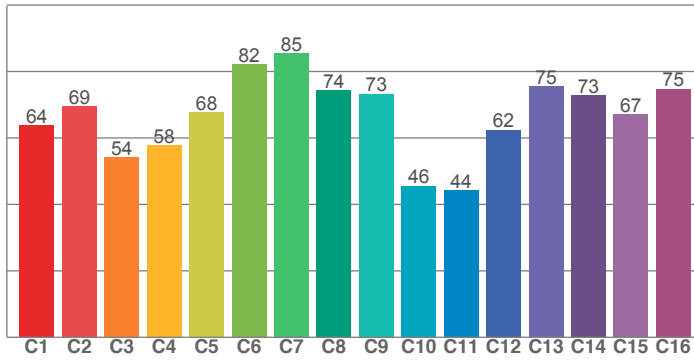


Voltage: 116 V
Current: 0.501 A
Frequency: 60 Hz

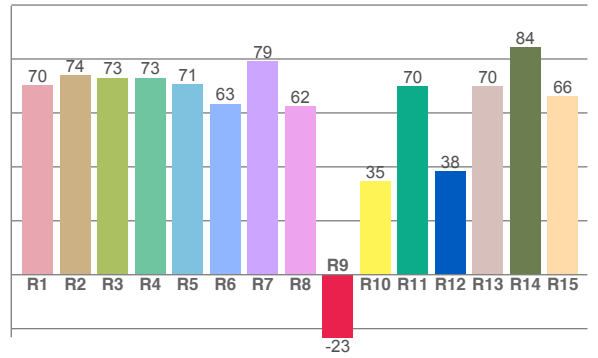
Color Details



TM30: 66.2



CRI: 70.7 (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
70.2	73.8	73.0	73.0	70.6	63.3	79.2	62.4	-23.2	34.7	69.8	38.5	70.0	84.5	66.3

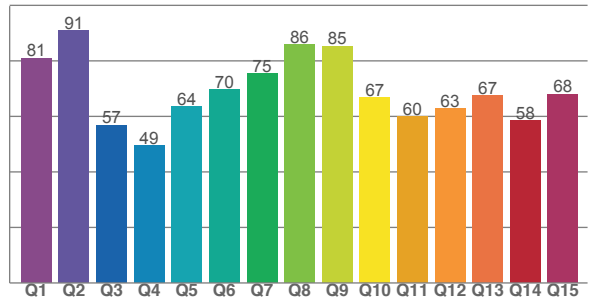
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.8	69.5	54.1	57.8	67.6	82.1	85.5	74.3	73.2	45.6	44.3	62.4	75.4	72.7	67.0	74.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.0	90.8	56.8	49.4	63.5	69.6	75.5	85.9	85.4	66.7	60.0	62.8	67.4	58.4	68.0

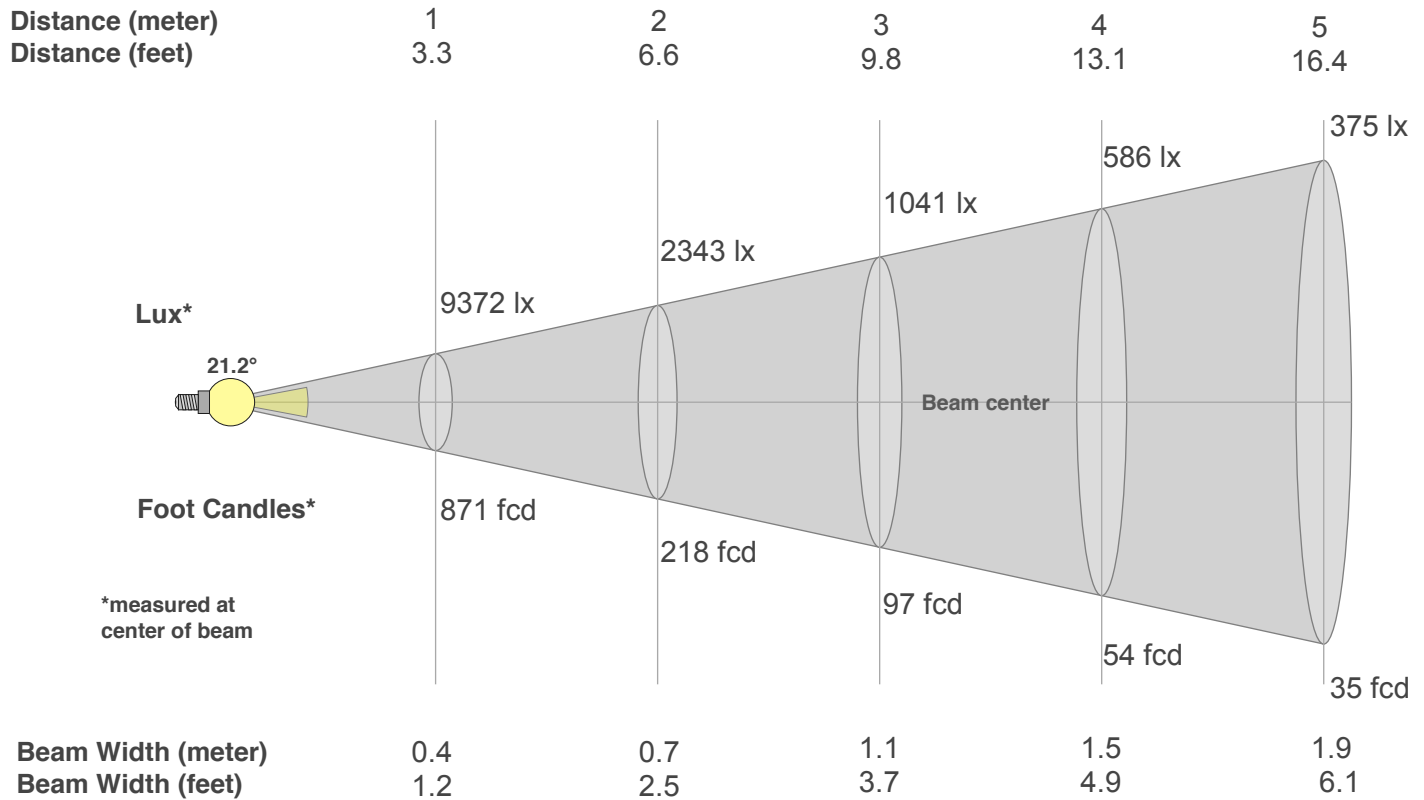
CQS: 67.3



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
6363 K	70.7	-23.2	66.2	94.4	67.3	0.316	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	9372	2343	1041	586	375	260	191	146	116	94	77	65	55	48	42	37	32	29	26	23
fcd	870.7	217.7	96.7	54.4	34.8	24.2	17.8	13.6	10.7	8.7	7.2	6	5.2	4.4	3.9	3.4	3	2.7	2.4	2.2

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°
9372	9314	9173	8966	8680	8290	7797	7220	6589	5907	5151	4390	3663	2982	2383	1870	1426	1037	709	460
100%	99%	98%	96%	93%	88%	83%	77%	70%	63%	55%	47%	39%	32%	25%	20%	15%	11%	8%	5%

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°
9372	9314	9173	8966	8680	8290	7797	7220	6589	5907	5151	4390	3663	2982	2383	1870	1426	1037	709	460
100%	99%	98%	96%	93%	88%	83%	77%	70%	63%	55%	47%	39%	32%	25%	20%	15%	11%	8%	5%

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°
9372	9361	9291	9075	8725	8310	7807	7211	6573	5886	5145	4392	3651	2968	2335	1807	1339	931	602	367
100%	100%	99%	97%	93%	89%	83%	77%	70%	63%	55%	47%	39%	32%	25%	19%	14%	10%	6%	4%

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°
9372	9361	9291	9075	8725	8310	7807	7211	6573	5886	5145	4392	3651	2968	2335	1807	1339	931	602	367
100%	100%	99%	97%	93%	89%	83%	77%	70%	63%	55%	47%	39%	32%	25%	19%	14%	10%	6%	4%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
21.2°	34.3°	40.3°	100.0%	100.0%