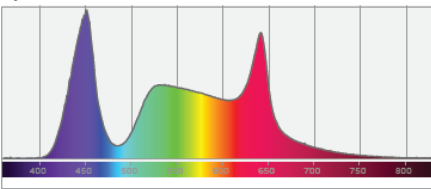
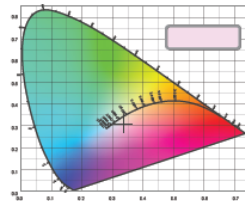


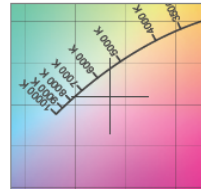
Spectral distribution



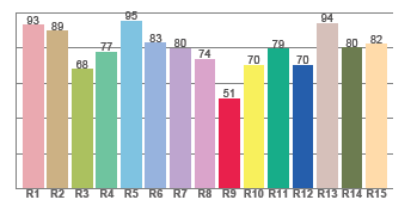
Color coordinates



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:

1868 lm

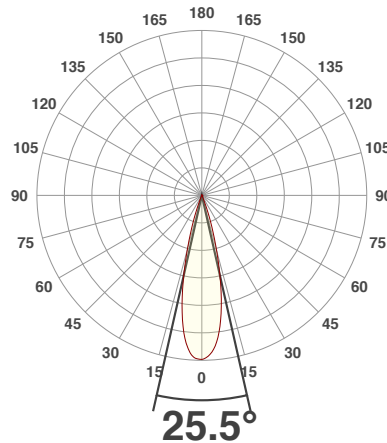
Power:

93.0 W

Peak:

10253 cd

Beam Angle



Test:

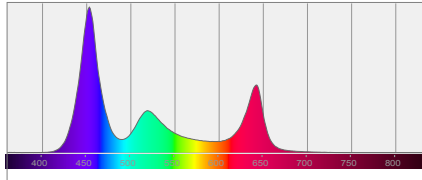
25deg Full On

Date:

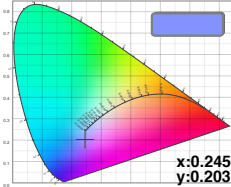
8/17/2018

Note:

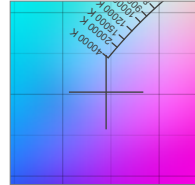
Spectral Distribution



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*

25.5°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.5

1.5

1.4

4.4

2.3

7.4

3.2

10.3

4.5

14.8

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25.5°	39.8°	45.6°	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	10251	2563	1139	641	410	285	209	160	127	103	85	71	61	52	46	40	35	32	28	26
fcd	952.3	238.1	105.8	59.5	38.1	26.5	19.4	14.9	11.8	9.5	7.9	6.6	5.6	4.9	4.2	3.7	3.3	2.9	2.6	2.4

Par Z120 RGBW



Light Efficiency:

21 Lumen/Watt

Dominant Wavelength:

438 nm

Output:

1990 lm

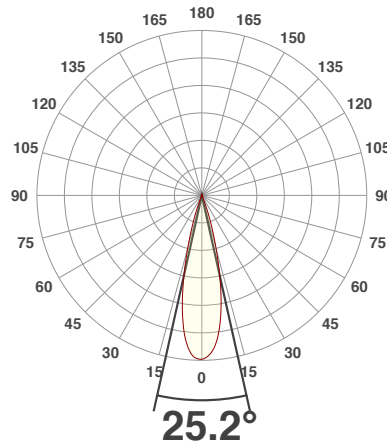
Power:

94.0 W

Peak:

11170 cd

Beam Angle



Test:

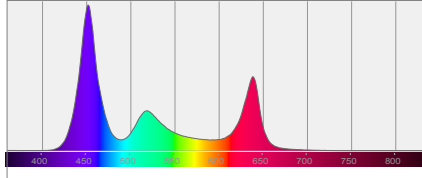
25deg Full On

Date:

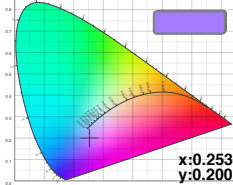
8/17/2018

Note:

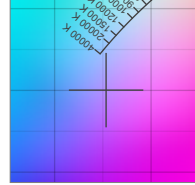
Spectral Distribution



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*

25.2°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.5

1.3

4.4

2.2

7.3

3.1

10.2

4.5

14.6

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25.2°	39.4°	45.1°	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	11161	2790	1240	698	446	310	228	174	138	112	92	78	66	57	50	44	39	34	31	28
fcd	1036.8	259.2	115.2	64.8	41.5	28.8	21.2	16.2	12.8	10.4	8.6	7.2	6.1	5.3	4.6	4.1	3.6	3.2	2.9	2.6

Par Z120 RGBW



Light Efficiency:

17 Lumen/Watt

Dominant Wavelength:

626 nm

Output:

505 lm

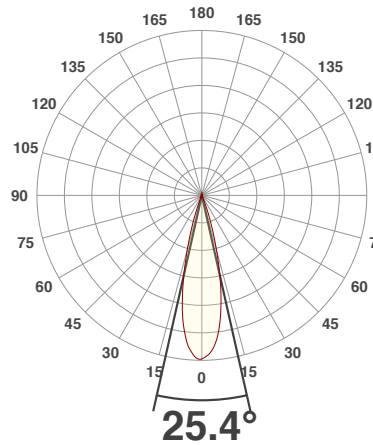
Power:

29.1 W

Peak:

2784 cd

Beam Angle



Test:

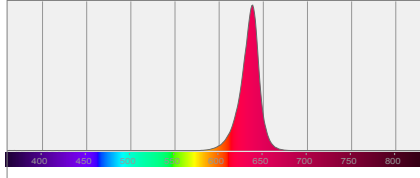
25deg Red

Date:

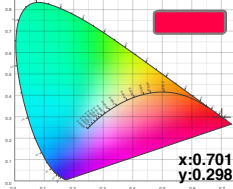
8/17/2018

Note:

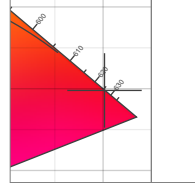
Spectral Distribution



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*

25.4°

2772 lx

308 lx

111 lx

173 lx

111 lx

Foot Candles*

258 fcd

29 fcd

10 fcd

5 fcd

3 fcd

*measured at
center of beam

Beam Width (meter)

0.5

1.4

2.3

3.2

4.5

Beam Width (feet)

1.5

4.4

7.4

10.3

14.8

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25.4°	39.8°	46°	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	2772	693	308	173	111	77	57	43	34	28	23	19	16	14	12	11	10	9	8	7
fcd	257.6	64.4	28.6	16.1	10.3	7.2	5.3	4	3.2	2.6	2.1	1.8	1.5	1.3	1.1	1	0.9	0.8	0.7	0.6

Par Z120 RGBW



Light Efficiency:

27 Lumen/Watt

Dominant Wavelength:

523 nm

Output:

1028 lm

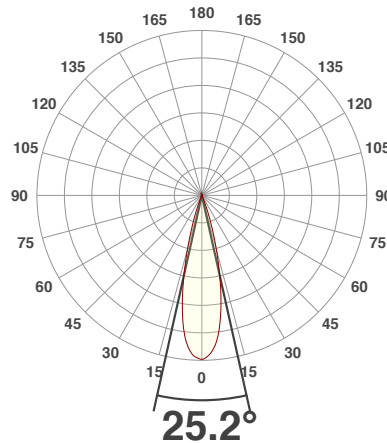
Power:

38.7 W

Peak:

5669 cd

Beam Angle



Test:

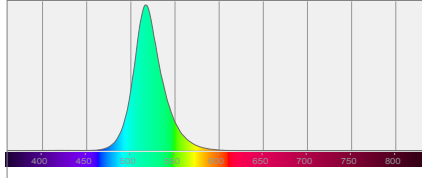
25deg Green

Date:

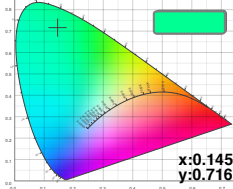
8/17/2018

Note:

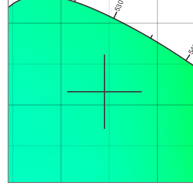
Spectral Distribution



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*

25.2°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.5

1.3

4.4

2.2

7.3

3.1

10.2

4.5

14.7

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25.2°	39.7°	46.2°	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	5664	1416	629	354	227	157	116	88	70	57	47	39	34	29	25	22	20	17	16	14
fcd	526.2	131.5	58.5	32.9	21	14.6	10.7	8.2	6.5	5.3	4.3	3.7	3.1	2.7	2.3	2.1	1.8	1.6	1.5	1.3

Par Z120 RGBW



Light Efficiency:

17 Lumen/Watt

Dominant Wavelength:

456 nm

Output:

244 lm

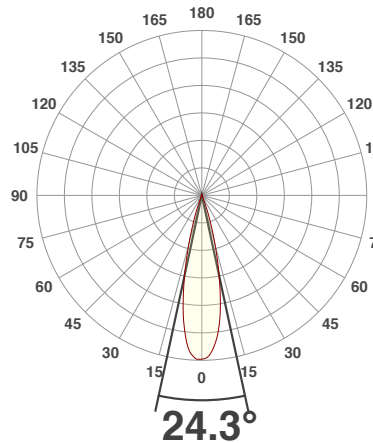
Power:

14.5 W

Peak:

1400 cd

Beam Angle



Test:

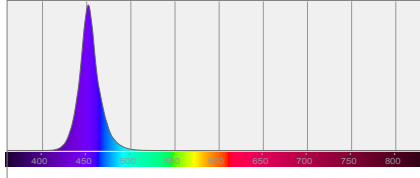
25deg Blue

Date:

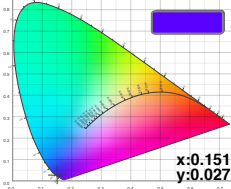
8/17/2018

Note:

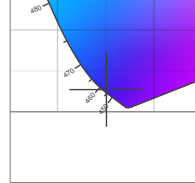
Spectral Distribution



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*

24.3°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.4

1.4

1.3

4.2

2.2

7.1

3

9.9

4.3

14.1

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
24.3°	39°	45.5°	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	1399	350	155	87	56	39	29	22	17	14	12	10	8	7	6	5	5	4	4	3
fcd	129.9	32.5	14.4	8.1	5.2	3.6	2.7	2	1.6	1.3	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.3

Par Z120 RGBW



Light Efficiency:

35 Lumen/Watt

Light Quality:

CRI: 70.7

Color Temperature:

6375 K

Output: 1219 lm

Peak: 6629 cd

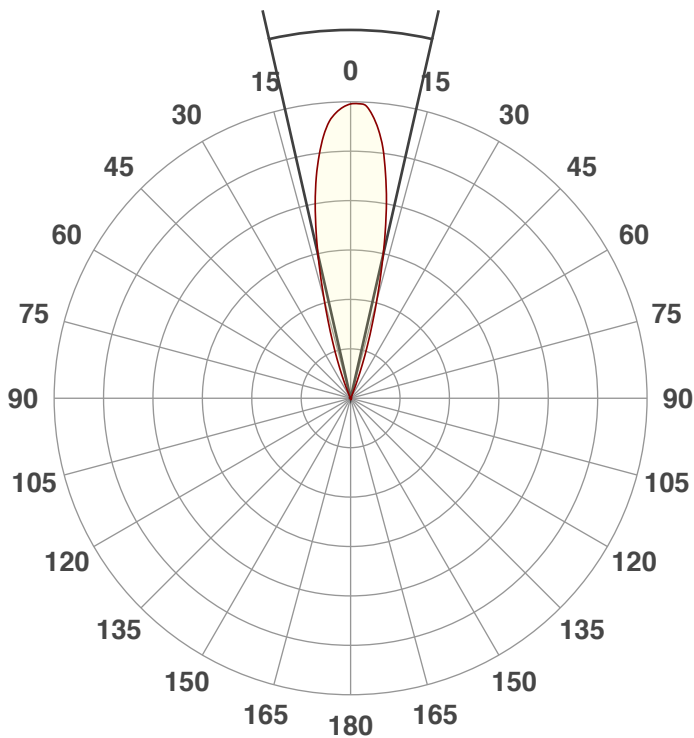
Power: 34.8 W

PF: 0.6



Beam Angle

25.6°



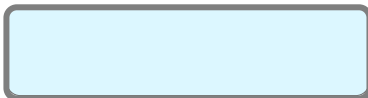
Test:

25deg White

Date:

8/17/2018

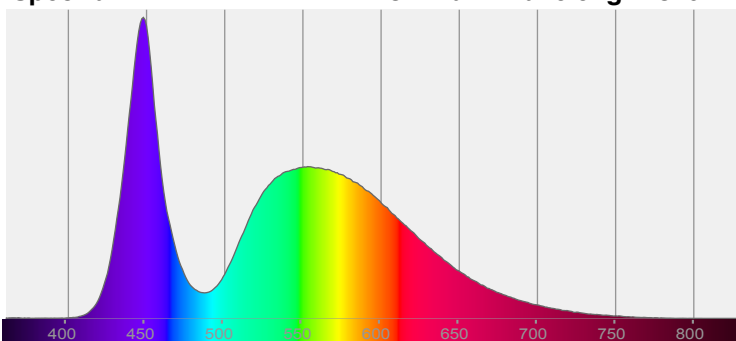
Note:



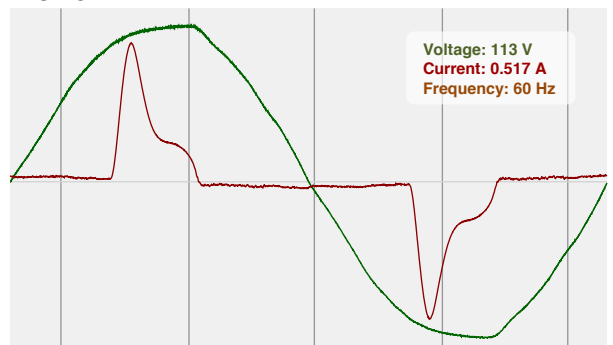
CIE 1931
x: 0.316
y: 0.324

Spectra

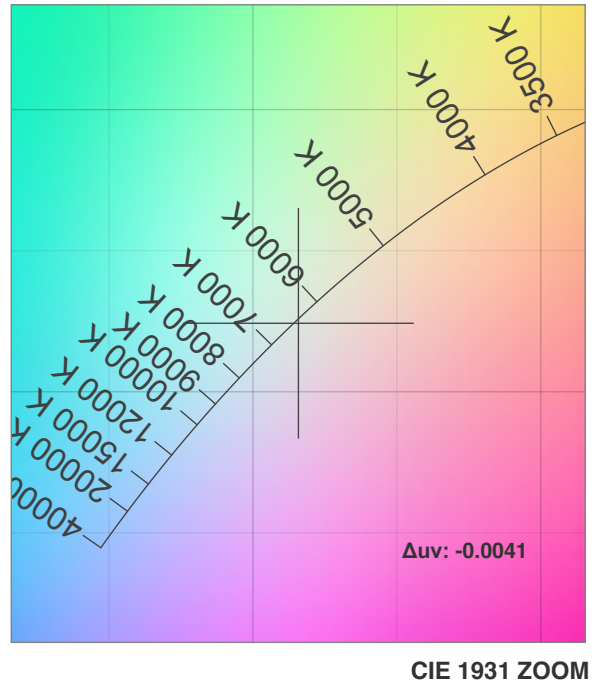
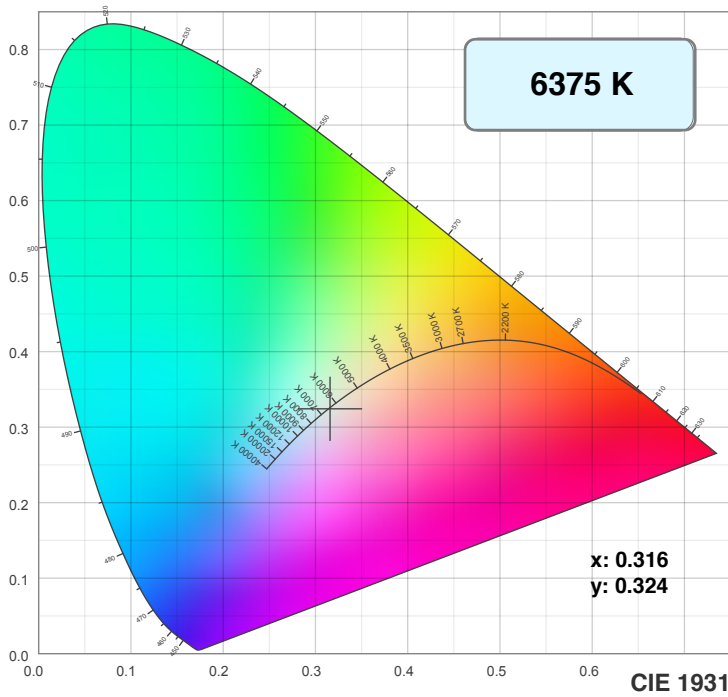
Dominant Wavelength: 829nm



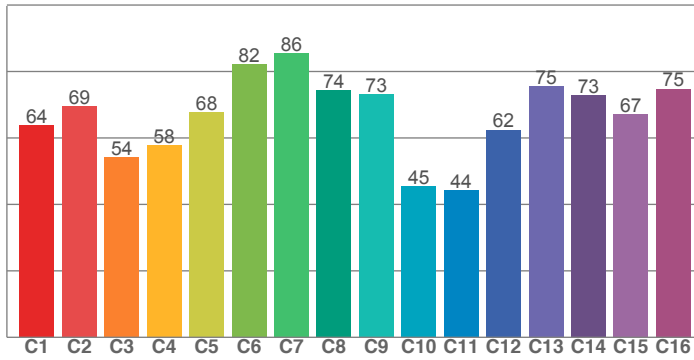
Power



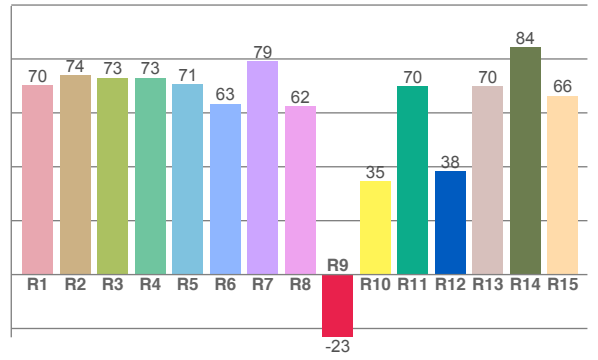
Color Details



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	-23.3	34.7	69.8	38.5	70.0	84.5	66.3

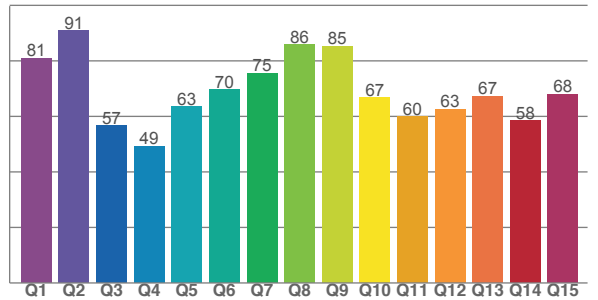
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.7	69.4	54.1	57.8	67.7	82.1	85.5	74.3	73.1	45.4	44.2	62.4	75.4	72.8	67.0	74.8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.0	90.8	56.7	49.3	63.4	69.5	75.5	85.9	85.3	66.7	59.9	62.7	67.3	58.4	68.0

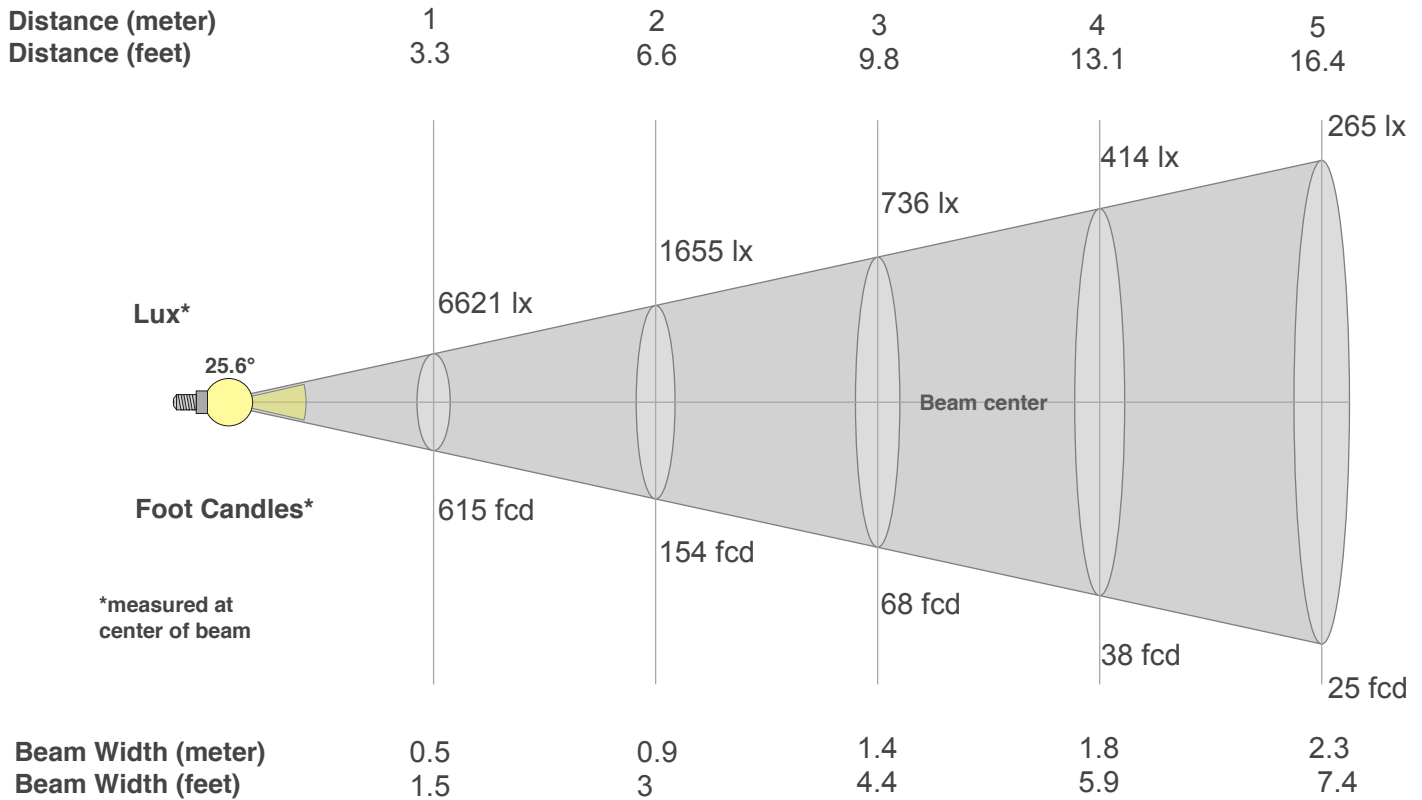
CQS: 67.2



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
6375 K	70.7	-23.3	66.2	94.4	67.2	0.316	0.324	0.202	0.311	-0.0041

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	6621	1655	736	414	265	184	135	103	82	66	55	46	39	34	29	26	23	20	18	17
fcd	615.1	153.8	68.3	38.4	24.6	17.1	12.6	9.6	7.6	6.2	5.1	4.3	3.6	3.1	2.7	2.4	2.1	1.9	1.7	1.5

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°
6621	6574	6508	6422	6297	6121	5901	5618	5305	4965	4571	4138	3685	3216	2747	2299	1903	1552	1231	946
100%	99%	98%	97%	95%	92%	89%	85%	80%	75%	69%	63%	56%	49%	41%	35%	29%	23%	19%	14%

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°
6621	6574	6508	6422	6297	6121	5901	5618	5305	4965	4571	4138	3685	3216	2747	2299	1903	1552	1231	946
100%	99%	98%	97%	95%	92%	89%	85%	80%	75%	69%	63%	56%	49%	41%	35%	29%	23%	19%	14%

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°
6621	6626	6617	6589	6445	6265	6051	5775	5432	5045	4633	4179	3701	3211	2735	2277	1853	1489	1153	845
100%	100%	100%	100%	97%	95%	91%	87%	82%	76%	70%	63%	56%	49%	41%	34%	28%	22%	17%	13%

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°
6621	6626	6617	6589	6445	6265	6051	5775	5432	5045	4633	4179	3701	3211	2735	2277	1853	1489	1153	845
100%	100%	100%	100%	97%	95%	91%	87%	82%	76%	70%	63%	56%	49%	41%	34%	28%	22%	17%	13%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25.6°	39.9°	46°	100.0%	100.0%