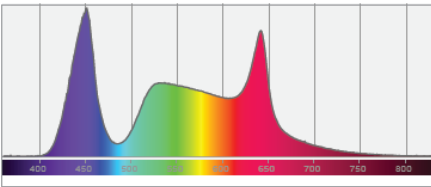
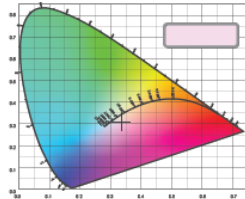


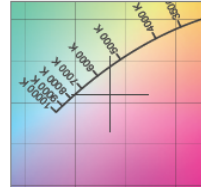
Spectral distribution



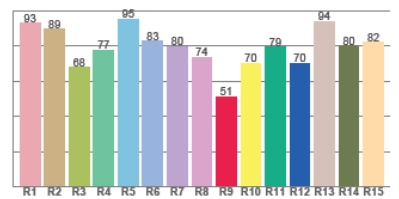
Color coordinates



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.



Light Efficiency:



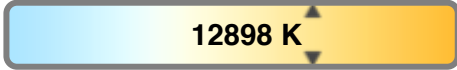
Output: 1768 lm

Light Quality:



Peak: 8053 cd

Color Temperature:



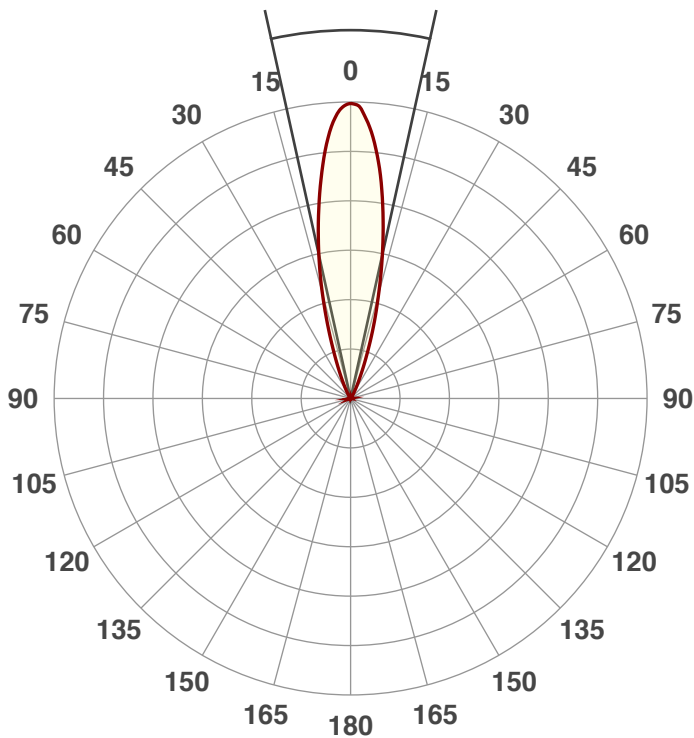
Power: 56.2 W

PF: 0.66



Beam Angle

24.9°



Product Name:

UB 9H

Test:

Full On

Date:

4/19/2018

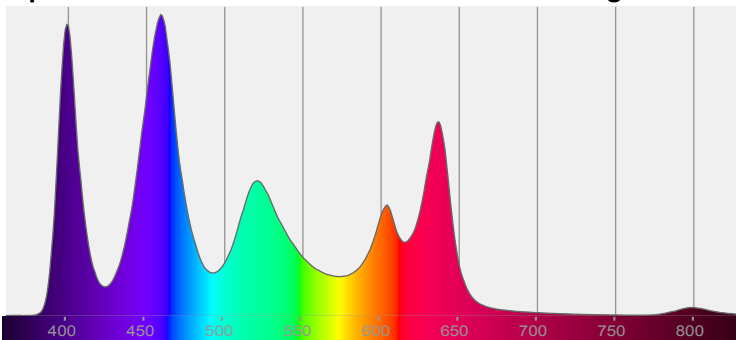
Note:



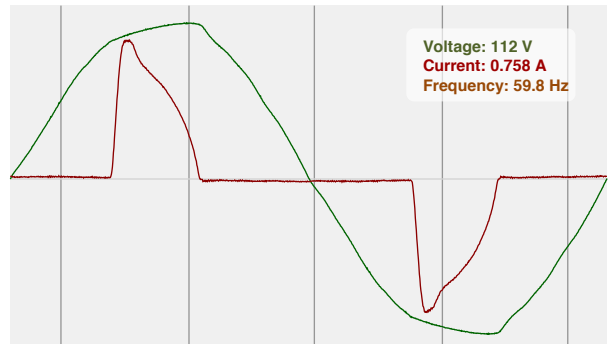
CIE 1931
x: 0.285
y: 0.251

Spectra

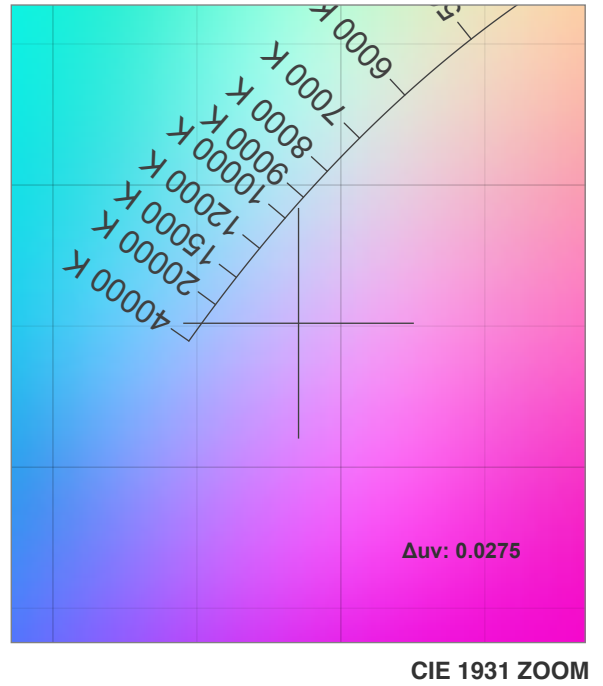
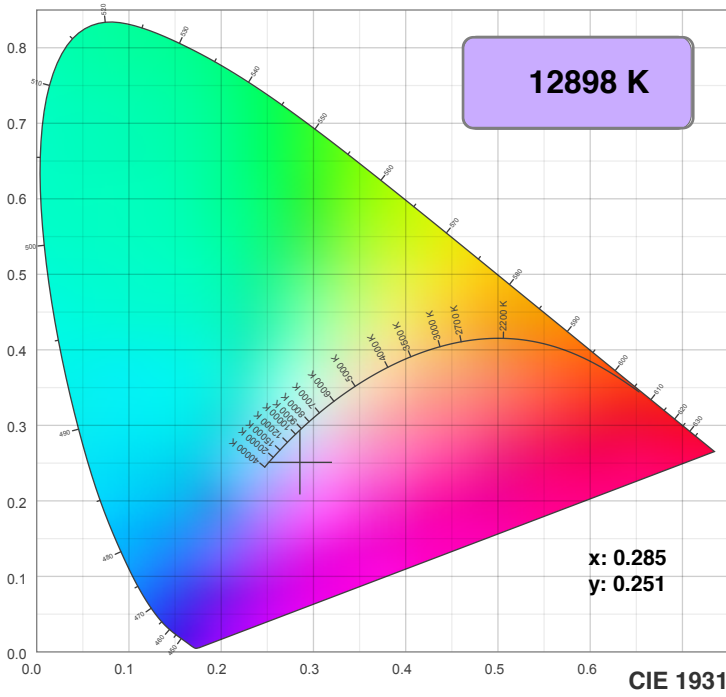
Dominant Wavelength: 360nm



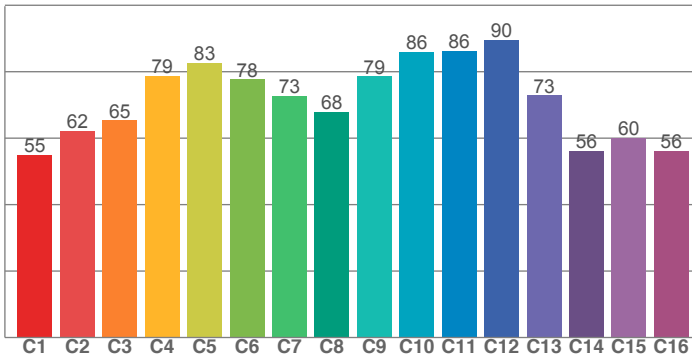
Power



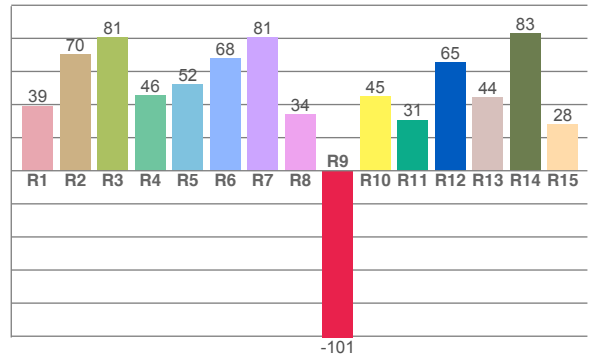
Color Details



TM30: 73.0



CRI: 58.8 (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
39.2	70.3	80.6	45.6	52.2	68.0	80.7	34.0	-100.8	44.9	30.7	65.4	44.5	83.1	28.3

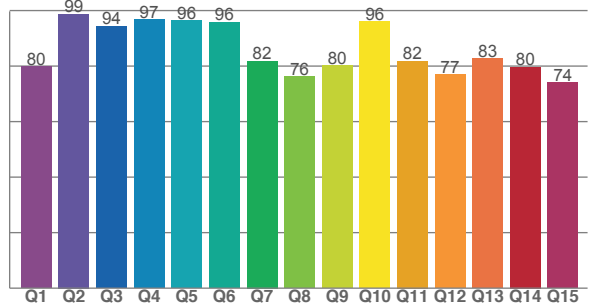
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
55.0	62.3	65.3	78.8	82.7	77.7	72.7	68.0	78.6	85.9	86.2	89.5	72.9	56.1	60.1	56.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.9	98.8	94.4	96.7	96.4	95.8	81.9	76.2	80.2	96.0	81.9	76.9	82.7	79.7	74.0

CQS: 83.6



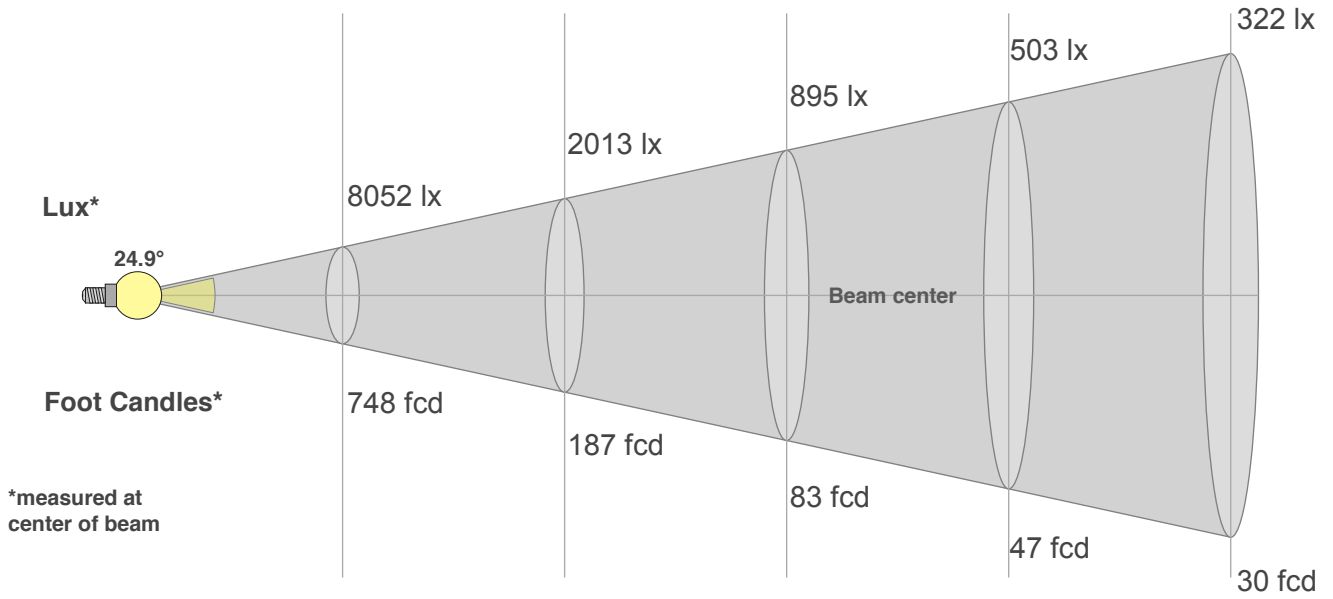
Color Parameters

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
12898 K	58.8	-100.8	73.0	114.1	83.6	0.285	0.251	0.210	0.277	0.0275

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)

0.4 0.9 1.3 1.8 2.2
1.5 2.9 4.3 5.8 7.2

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	8052	2013	895	503	322	224	164	126	99	81	67	56	48	41	36	31	28	25	22	20
fcd	748.1	187	83.1	46.8	29.9	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

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°
8052	7906	7461	6752	5912	5054	4214	3398	2586	1880	1313	901	613	404	262	174	120	83	65	48
100%	98%	93%	84%	73%	63%	52%	42%	32%	23%	16%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
8052	7906	7461	6752	5912	5054	4214	3398	2586	1880	1313	901	613	404	262	174	120	83	65	48
100%	98%	93%	84%	73%	63%	52%	42%	32%	23%	16%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
8052	7924	7438	6774	5984	5102	4222	3371	2597	1941	1363	929	615	407	268	175	115	77	59	47
100%	98%	92%	84%	74%	63%	52%	42%	32%	24%	17%	12%	8%	5%	3%	2%	1%	1%	1%	1%

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°
8052	7924	7438	6774	5984	5102	4222	3371	2597	1941	1363	929	615	407	268	175	115	77	59	47
100%	98%	92%	84%	74%	63%	52%	42%	32%	24%	17%	12%	8%	5%	3%	2%	1%	1%	1%	1%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
24.9°	45.3°	58.6°	98.8%	98.0%



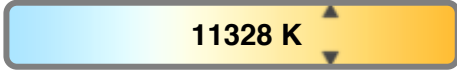
Light Efficiency:



Light Quality:



Color Temperature:



Output: 1755 lm

Peak: 8006 cd

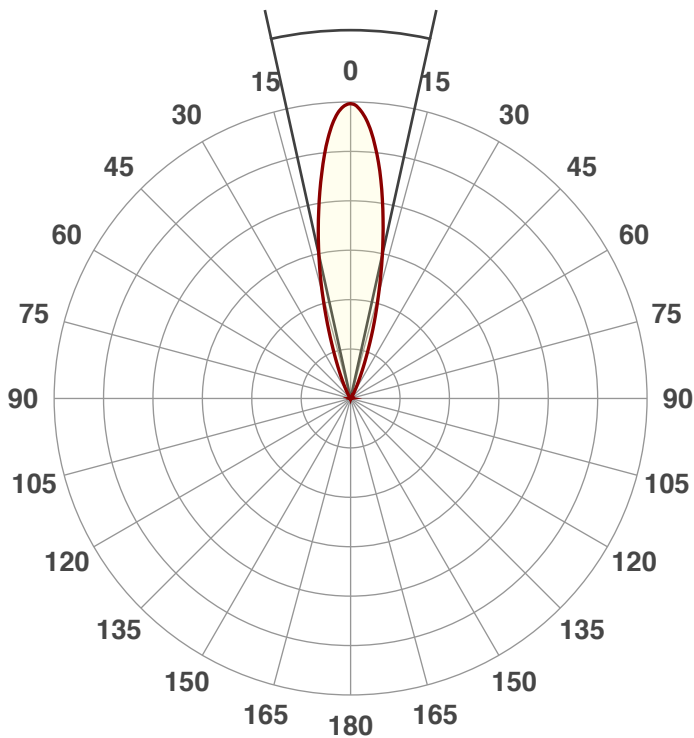
Power: 45.0 W

PF: 0.65



Beam Angle

24.9°



Product Name:

UB 9H

Test:

Full On No UV

Date:

4/19/2018

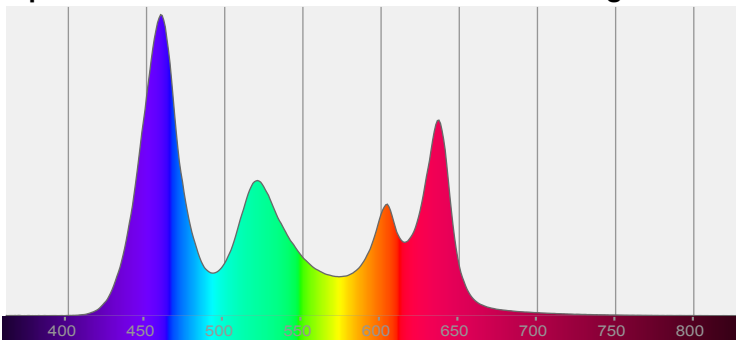
Note:



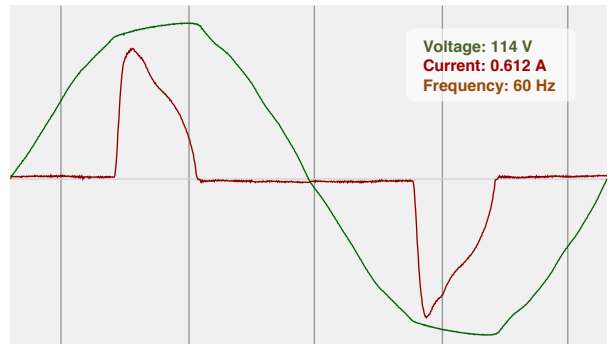
CIE 1931
x: 0.289
y: 0.258

Spectra

Dominant Wavelength: 360nm

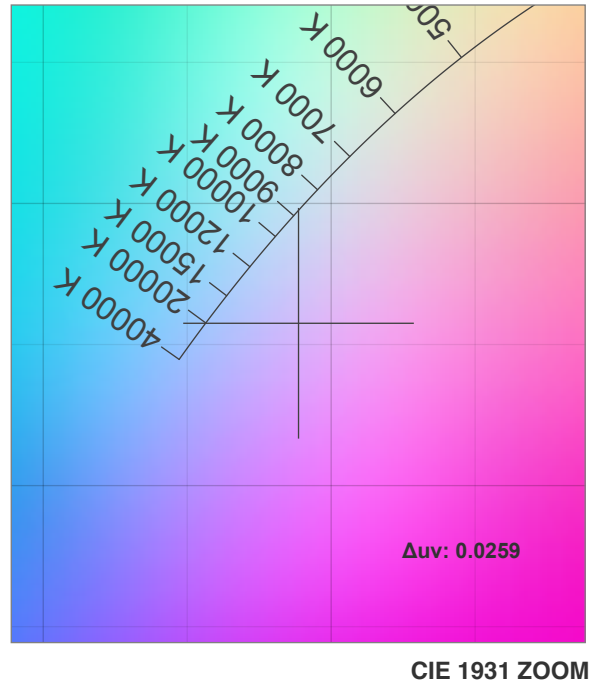
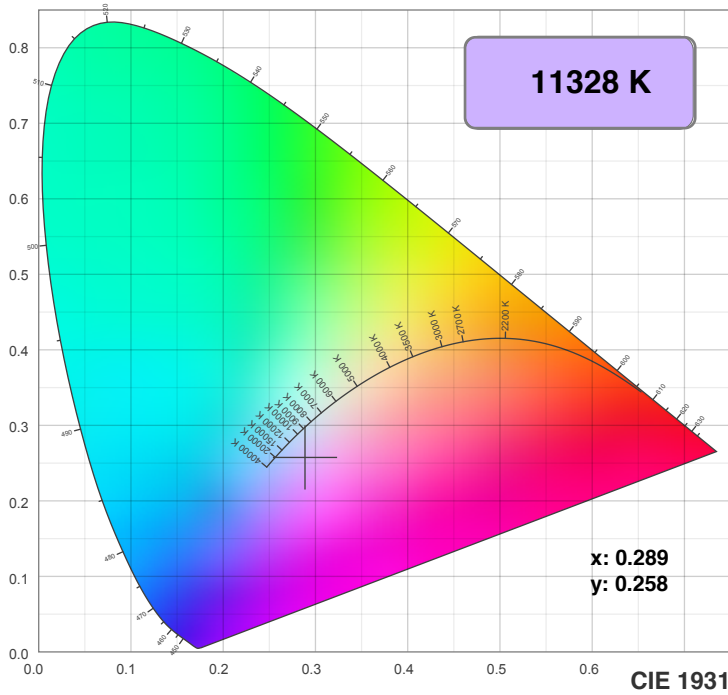


Power

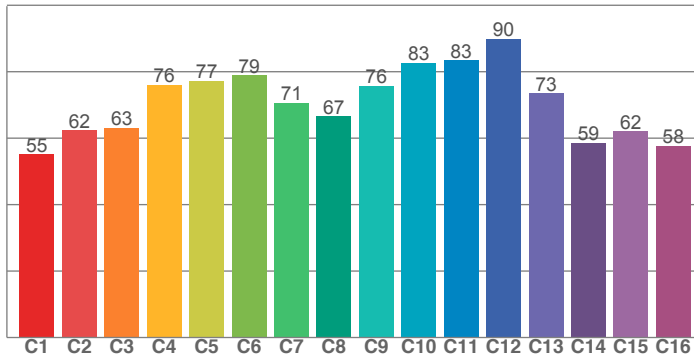


Voltage: 114 V
Current: 0.612 A
Frequency: 60 Hz

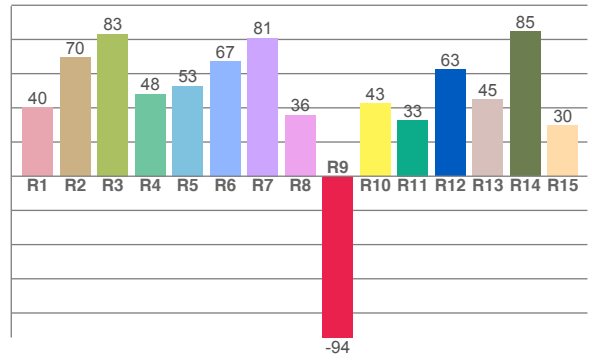
Color Details



TM30: 71.8



CRI: 59.8 (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
40.1	69.6	83.3	48.2	52.9	67.3	80.9	35.9	-94.4	42.6	32.8	62.5	44.7	84.6	29.7

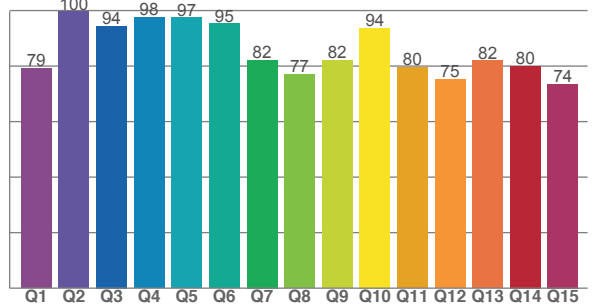
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
55.2	62.3	63.0	76.0	77.3	78.9	70.5	66.5	75.7	82.8	83.4	90.0	73.5	58.5	62.0	57.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.2	99.6	94.4	97.6	97.4	95.2	82.2	77.0	82.1	93.7	79.5	75.3	82.0	80.0	73.5

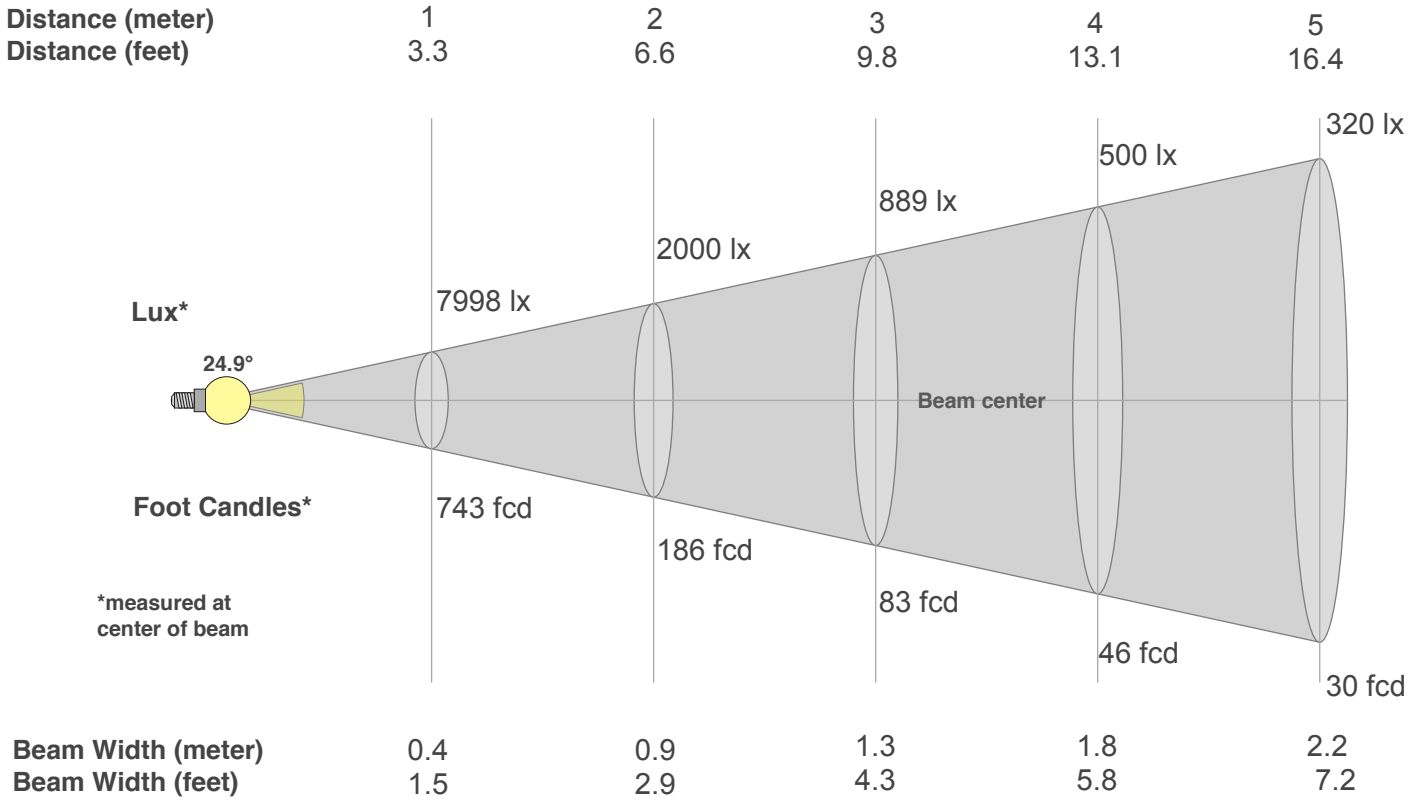
CQS: 83.4



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
11328 K	59.8	-94.4	71.8	112.3	83.4	0.289	0.258	0.209	0.280	0.0259

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	7998	2000	889	500	320	222	163	125	99	80	66	56	47	41	36	31	28	25	22	20
fcd	743.1	185.8	82.6	46.4	29.7	20.6	15.2	11.6	9.2	7.4	6.1	5.2	4.4	3.8	3.3	2.9	2.6	2.3	2.1	1.9

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°
7998	7848	7407	6707	5875	5022	4187	3376	2575	1871	1307	899	611	402	262	173	119	83	62	46
100%	98%	93%	84%	73%	63%	52%	42%	32%	23%	16%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
7998	7848	7407	6707	5875	5022	4187	3376	2575	1871	1307	899	611	402	262	173	119	83	62	46
100%	98%	93%	84%	73%	63%	52%	42%	32%	23%	16%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
7998	7826	7381	6724	5941	5065	4195	3348	2579	1927	1357	923	612	406	267	174	114	77	58	45
100%	98%	92%	84%	74%	63%	52%	42%	32%	24%	17%	12%	8%	5%	3%	2%	1%	1%	1%	1%

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°
7998	7826	7381	6724	5941	5065	4195	3348	2579	1927	1357	923	612	406	267	174	114	77	58	45
100%	98%	92%	84%	74%	63%	52%	42%	32%	24%	17%	12%	8%	5%	3%	2%	1%	1%	1%	1%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
24.9°	45.3°	58.6°	98.8%	98.1%



Light Efficiency:



Light Quality:



Color Temperature:



Output: 1604 lm

Peak: 7271 cd

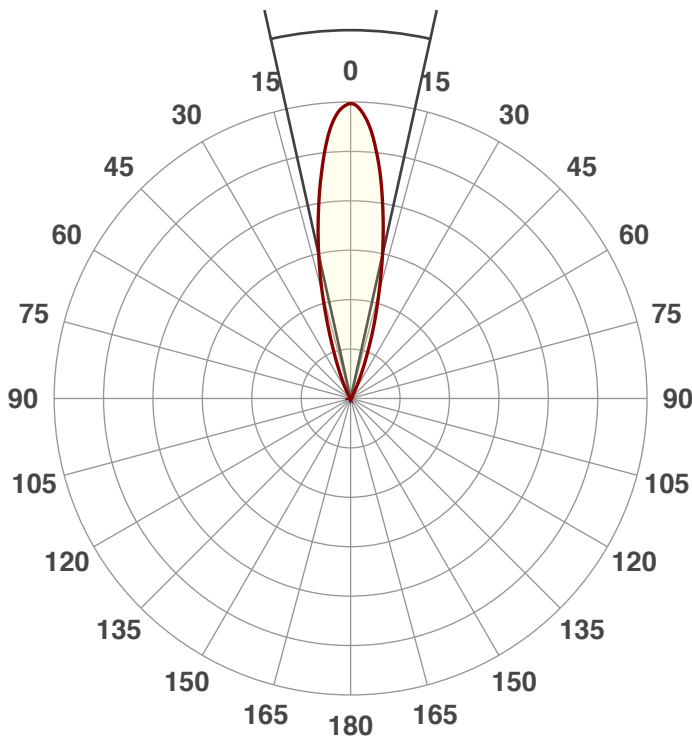
Power: 29.8 W

PF: 0.62



Beam Angle

25°



Product Name:

UB 9H

Test:

CRI Value

Date:

4/20/2018

Note:

R @ 90

G @ 219

B @ 0

W @ 255

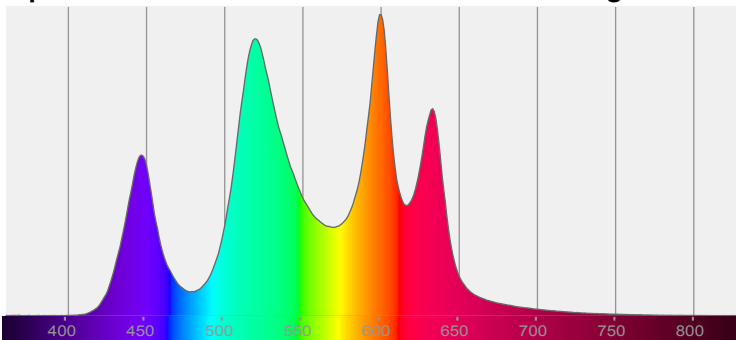
A @ 255



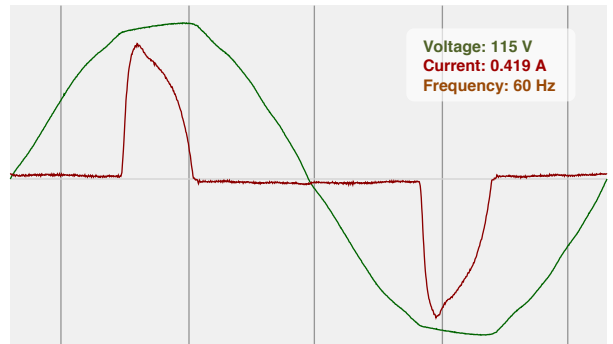
CIE 1931
x: 0.372
y: 0.411

Spectra

Dominant Wavelength: 573nm

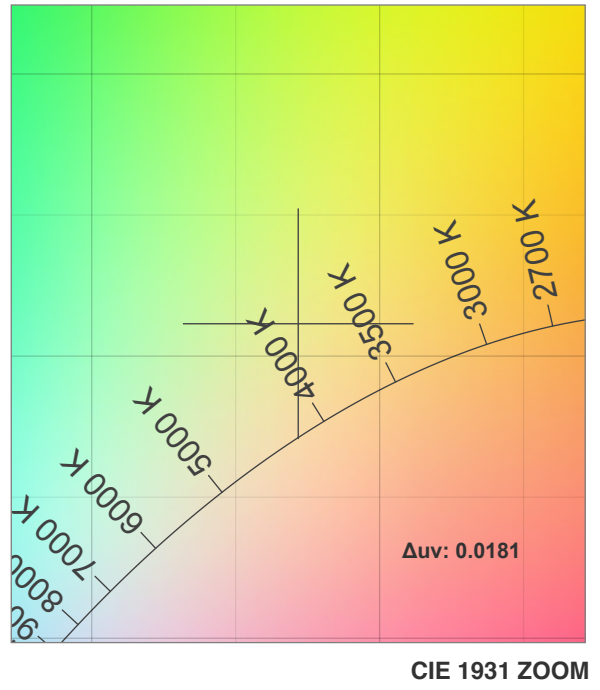
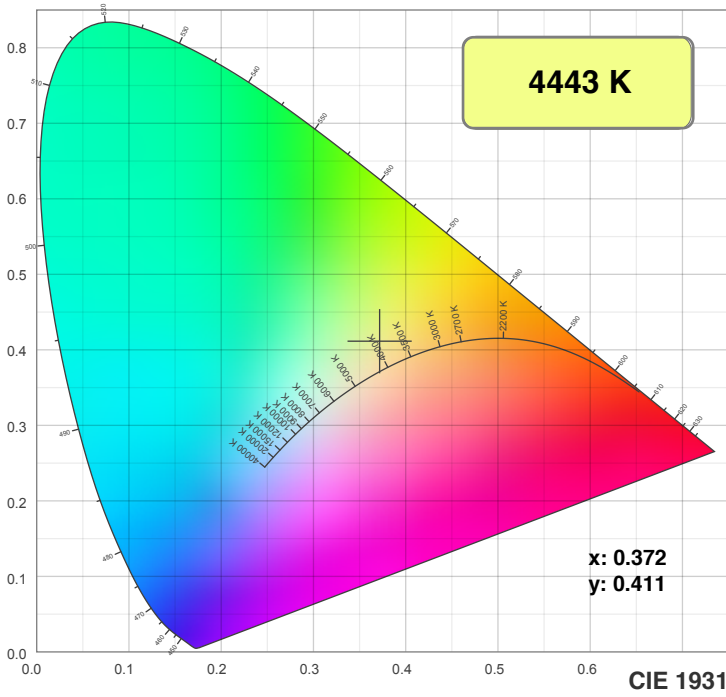


Power

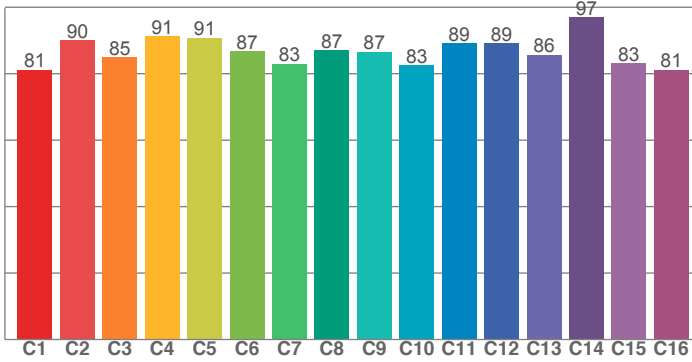


Voltage: 115 V
Current: 0.419 A
Frequency: 60 Hz

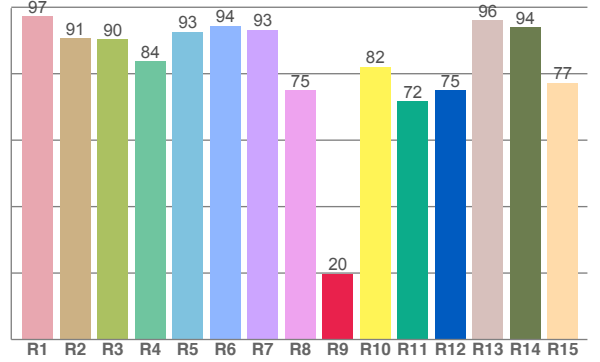
Color Details



TM30: 86.6



CRI: 89.7 (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
97.2	90.7	90.3	83.8	92.6	94.4	93.2	75.0	19.9	82.2	71.7	75.1	96.1	94.1	77.3

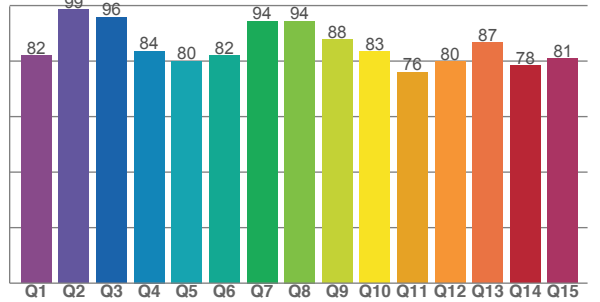
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81.2	90.0	84.9	91.2	90.8	86.7	83.0	87.0	86.5	82.5	89.1	89.1	85.7	97.0	83.2	81.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.0	98.5	95.8	83.6	80.1	82.1	94.4	94.4	87.8	83.5	76.0	79.8	86.7	78.4	80.8

CQS: 84.1



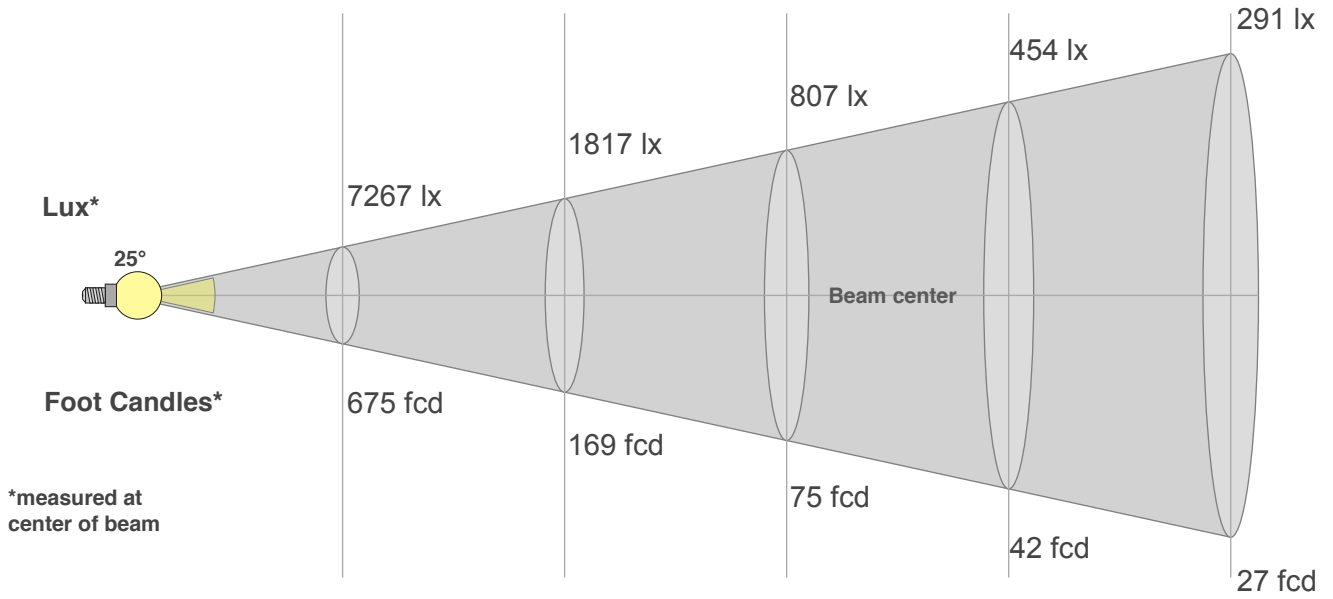
Color Parameters

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
4443 K	89.7	19.9	86.6	100.7	84.1	0.372	0.411	0.207	0.343	0.0181

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)

0.4 0.9 1.3 1.8 2.2
1.5 2.9 4.3 5.8 7.3

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	7267	1817	807	454	291	202	148	114	90	73	60	50	43	37	32	28	25	22	20	18
fcd	675.1	168.8	75	42.2	27	18.8	13.8	10.5	8.3	6.8	5.6	4.7	4	3.4	3	2.6	2.3	2.1	1.9	1.7

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°
7267	7134	6754	6120	5367	4588	3826	3077	2332	1685	1172	798	539	353	229	150	105	72	56	42
100%	98%	93%	84%	74%	63%	53%	42%	32%	23%	16%	11%	7%	5%	3%	2%	1%	1%	1%	1%

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°
7267	7134	6754	6120	5367	4588	3826	3077	2332	1685	1172	798	539	353	229	150	105	72	56	42
100%	98%	93%	84%	74%	63%	53%	42%	32%	23%	16%	11%	7%	5%	3%	2%	1%	1%	1%	1%

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°
7267	7115	6719	6111	5397	4606	3828	3070	2379	1796	1272	879	586	391	260	170	110	73	54	42
100%	98%	92%	84%	74%	63%	53%	42%	33%	25%	18%	12%	8%	5%	4%	2%	2%	1%	1%	1%

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°
7267	7115	6719	6111	5397	4606	3828	3070	2379	1796	1272	879	586	391	260	170	110	73	54	42
100%	98%	92%	84%	74%	63%	53%	42%	33%	25%	18%	12%	8%	5%	4%	2%	2%	1%	1%	1%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
25°	45.4°	58.8°	98.9%	98.1%



Light Efficiency:

35 Lumen/Watt

Dominant Wavelength:

622nm

Output:

307lm

Power:

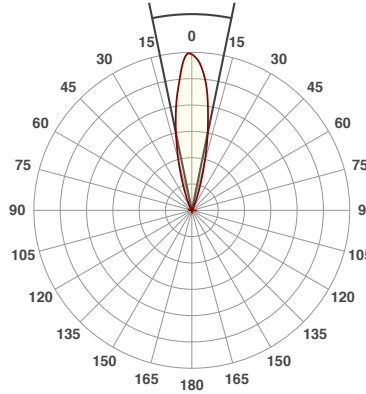
8.7W

Peak:

1585cd

Beam Angle

23.3°



Product Name:

UB 9H

Test:

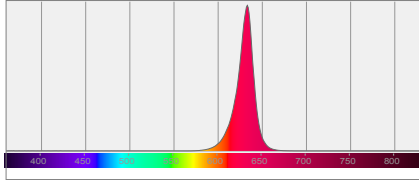
Red

Date:

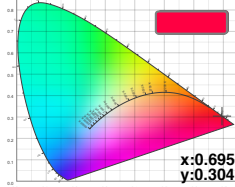
4/19/2018

Note:

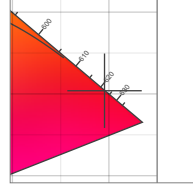
Spectral Distribution



Color Coordinates

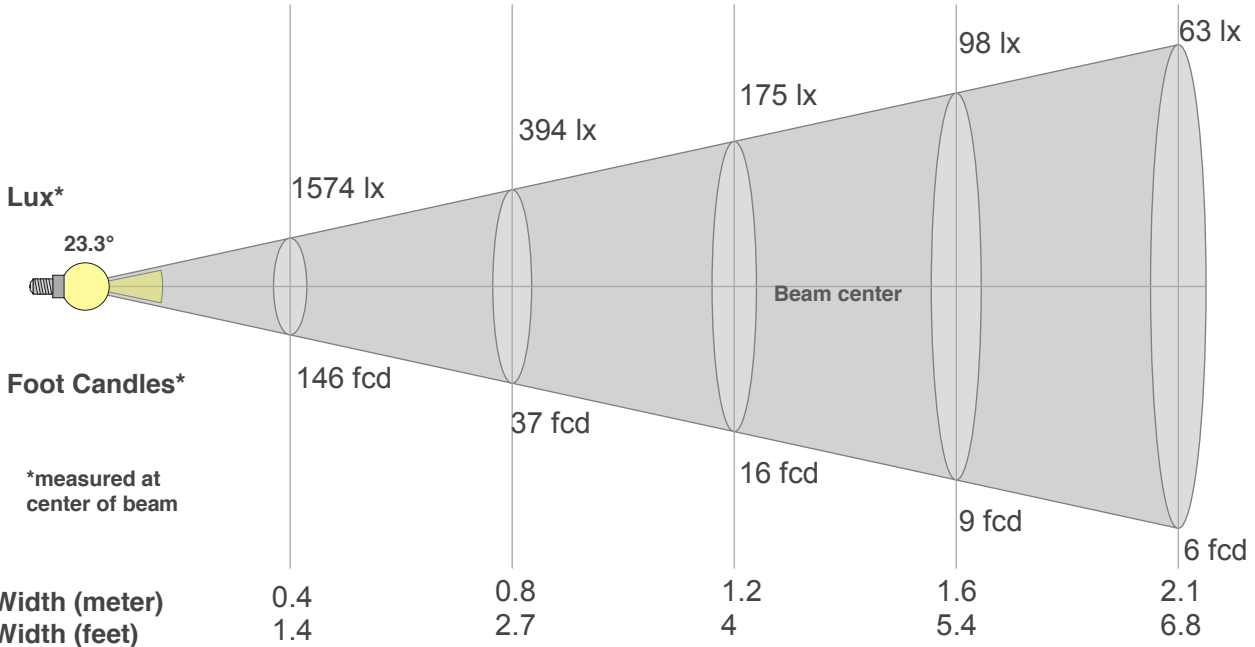


Zoom Color Point



Distance (meter)
Distance (feet)

1 2 3 4 5
3.3 6.6 9.8 13.1 16.4



*measured at center of beam

Beam Width (meter)
Beam Width (feet)

0.4 0.8 1.2 1.6 2.1
1.4 2.7 4 5.4 6.8

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
23.3°	42.8°	54.8°	98.9%	98.2%

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	1574	394	175	98	63	44	32	25	19	16	13	11	9	8	7	6	5	5	4	4
fcd	146.3	36.6	16.3	9.1	5.9	4.1	3	2.3	1.8	1.5	1.2	1	0.9	0.7	0.7	0.6	0.5	0.5	0.4	0.4



Light Efficiency:

60 Lumen/Watt

Dominant Wavelength:

525nm

Output:

698lm

Power:

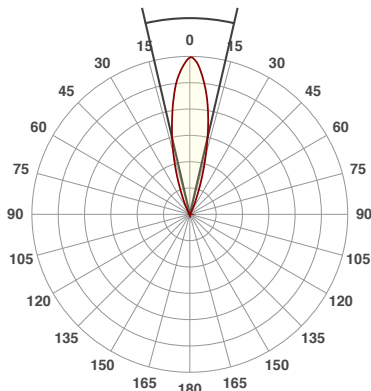
11.6W

Peak:

2979cd

Beam Angle

26.1°



Product Name:

UB 9H

Test:

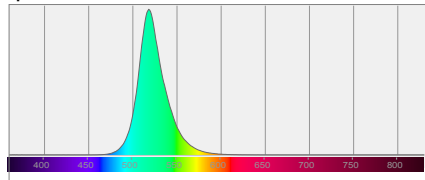
Green

Date:

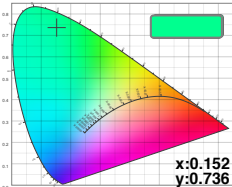
4/20/2018

Note:

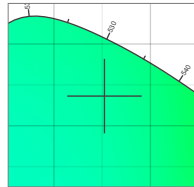
Spectral Distribution



Color Coordinates



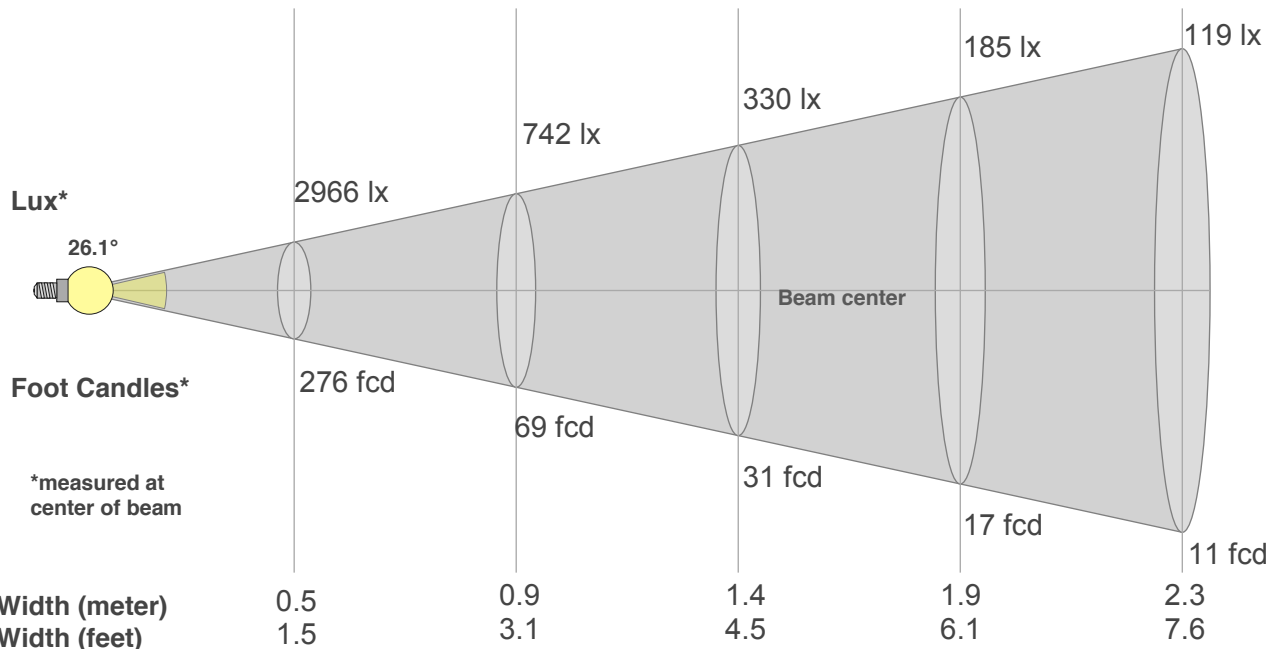
Zoom Color Point



Distance (meter)

Distance (feet)

1 3.3 2 6.6 3 9.8 4 13.1 5 16.4



Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
26.1°	46.4°	60°	98.5%	97.7%

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	2966	742	330	185	119	82	61	46	37	30	25	21	18	15	13	12	10	9	8	7
fcd	275.6	68.9	30.6	17.2	11	7.7	5.6	4.3	3.4	2.8	2.3	1.9	1.6	1.4	1.2	1.1	1	0.9	0.8	0.7



Light Efficiency:

11 Lumen/Watt

Dominant Wavelength:

462nm

Output:

130lm

Power:

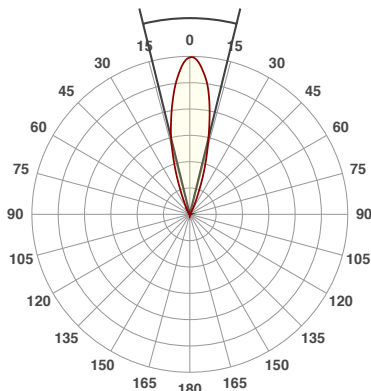
11.8W

Peak:

509cd

Beam Angle

27.6°



Product Name:

UB 9H

Test:

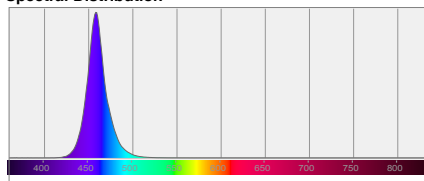
Blue

Date:

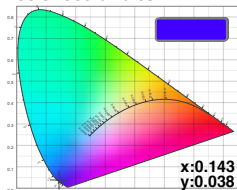
4/20/2018

Note:

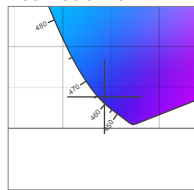
Spectral Distribution



Color Coordinates

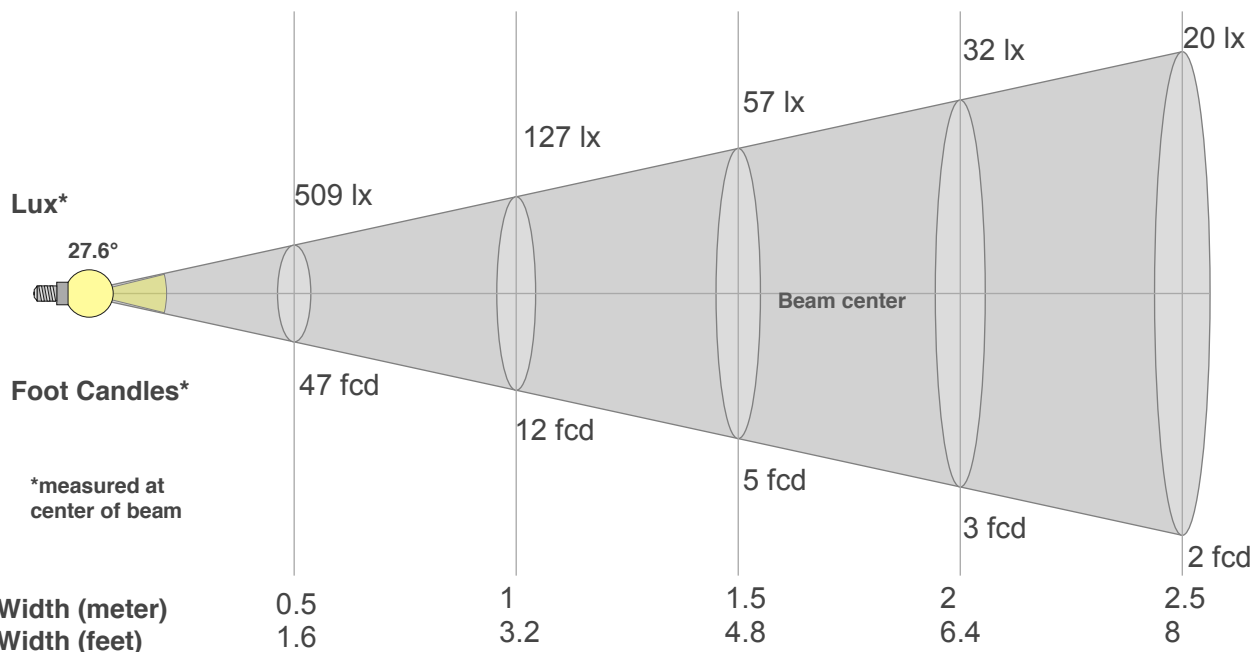


Zoom Color Point



Distance (meter)
Distance (feet)

1 3.3 2 6.6 3 9.8 4 13.1 5 16.4



Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
27.6°	47.8°	61.7°	98.2%	97.2%

Beam Intensities from 1-20m

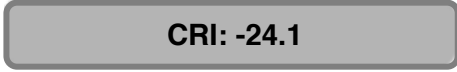
m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	509	127	57	32	20	14	10	8	6	5	4	4	3	3	2	2	2	2	1	1
fcd	47.3	11.8	5.3	3	1.9	1.3	1	0.7	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1



Light Efficiency:



Light Quality:



Color Temperature:



Output: 388 lm

Peak: 1617 cd

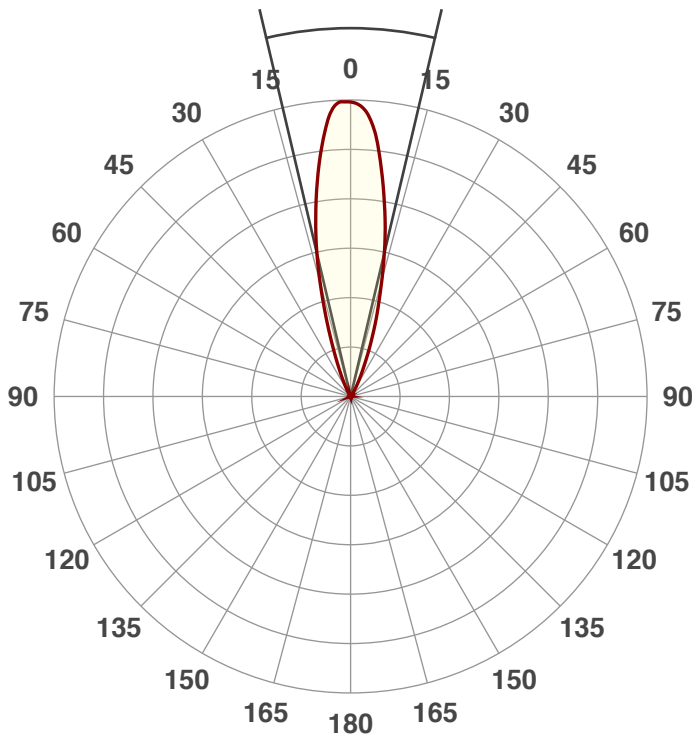
Power: 9.2 W

PF: 0.45



Beam Angle

26.5°



Product Name:

UB 9H

Test:

Amber

Date:

4/20/2018

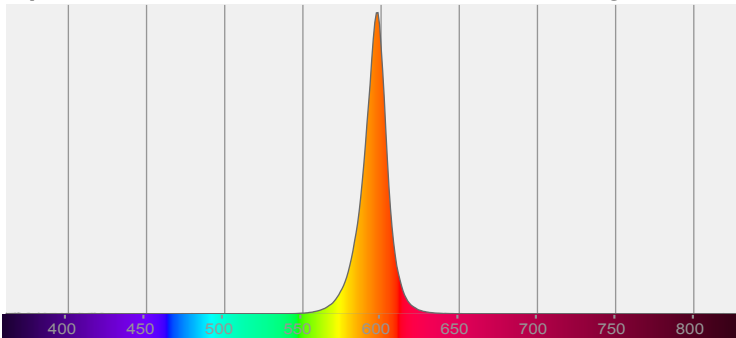
Note:



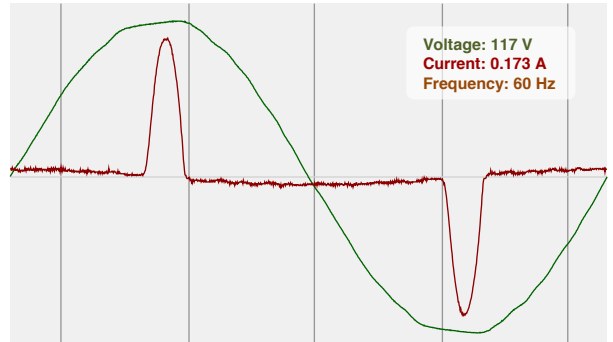
CIE 1931
x: 0.597
y: 0.402

Spectra

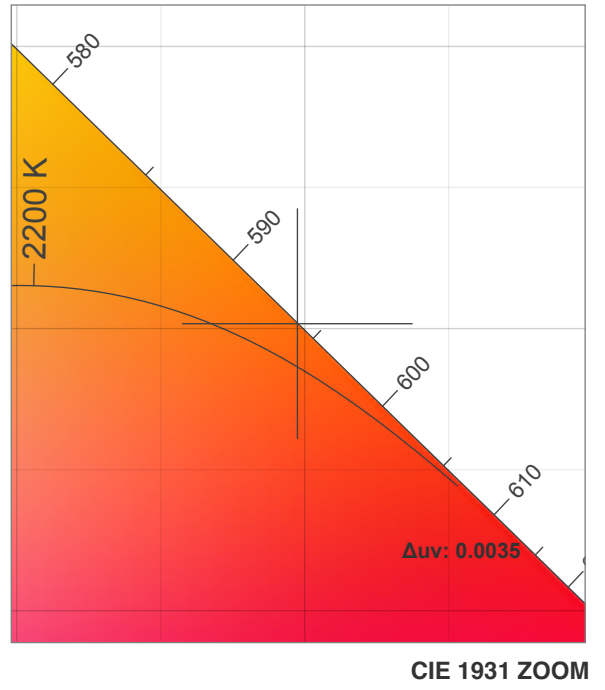
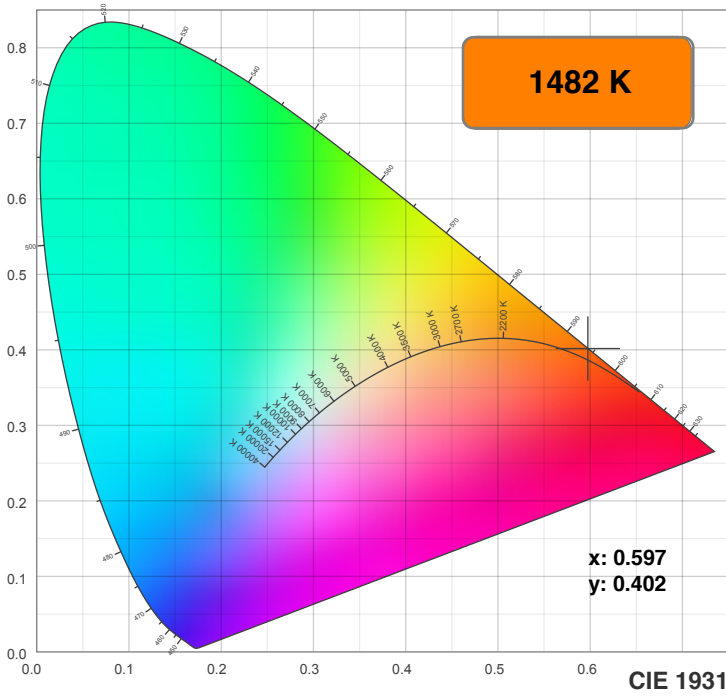
Dominant Wavelength: 594nm



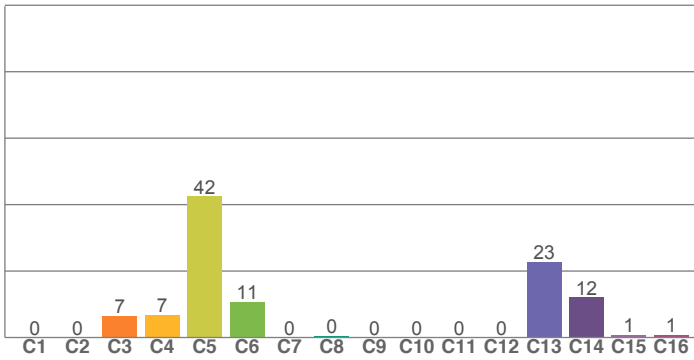
Power



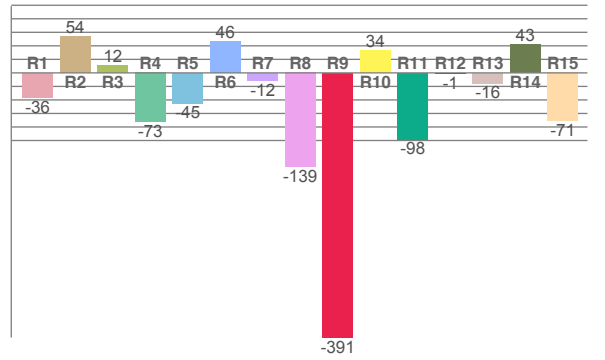
Color Details



TM30: 0.4



CRI: -24.1 (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
-36.5	53.8	11.7	-72.6	-44.7	46.2	-11.8	-139.2	-391.3	33.7	-98.0	-1.0	-15.5	42.6	-71.1

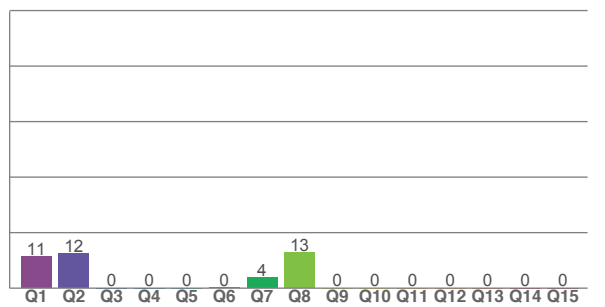
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0.0	0.0	6.6	6.8	42.5	10.6	0.0	0.4	0.1	0.0	0.1	0.0	22.8	12.1	0.9	0.8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
11.4	12.5	0.0	0.0	0.1	0.3	3.8	12.8	0.1	0.0	0.0	0.0	0.0	0.0	0.1

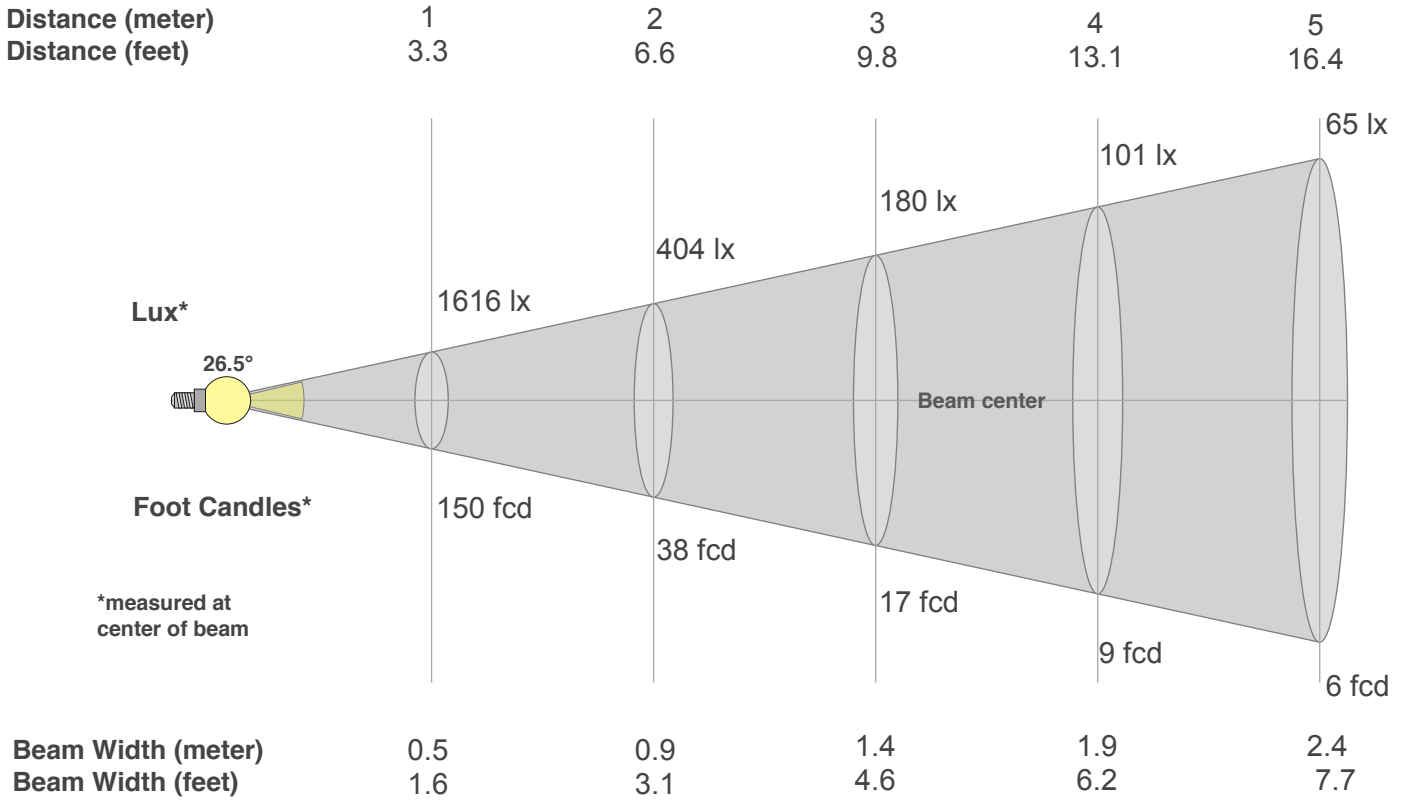
CQS: 0.0



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
1482 K	-24.1	-391.3	0.4	2.1	0.0	0.597	0.402	0.361	0.364	0.0035

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	1616	404	180	101	65	45	33	25	20	16	13	11	10	8	7	6	6	5	4	4
fcd	150.1	37.5	16.7	9.4	6	4.2	3.1	2.3	1.9	1.5	1.2	1	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4

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°
1616	1616	1560	1425	1263	1091	917	739	557	399	273	183	123	79	50	32	22	15	11	9
100%	100%	97%	88%	78%	67%	57%	46%	34%	25%	17%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
1616	1616	1560	1425	1263	1091	917	739	557	399	273	183	123	79	50	32	22	15	11	9
100%	100%	97%	88%	78%	67%	57%	46%	34%	25%	17%	11%	8%	5%	3%	2%	1%	1%	1%	1%

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°
1616	1594	1526	1400	1235	1070	911	745	589	462	346	252	177	126	88	59	38	24	15	11
100%	99%	94%	87%	76%	66%	56%	46%	36%	29%	21%	16%	11%	8%	5%	4%	2%	1%	1%	1%

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°
1616	1594	1526	1400	1235	1070	911	745	589	462	346	252	177	126	88	59	38	24	15	11
100%	99%	94%	87%	76%	66%	56%	46%	36%	29%	21%	16%	11%	8%	5%	4%	2%	1%	1%	1%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
26.5°	47.2°	60.7°	99.0%	98.3%



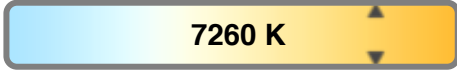
Light Efficiency:



Light Quality:



Color Temperature:



Output: 643 lm

Peak: 3138 cd

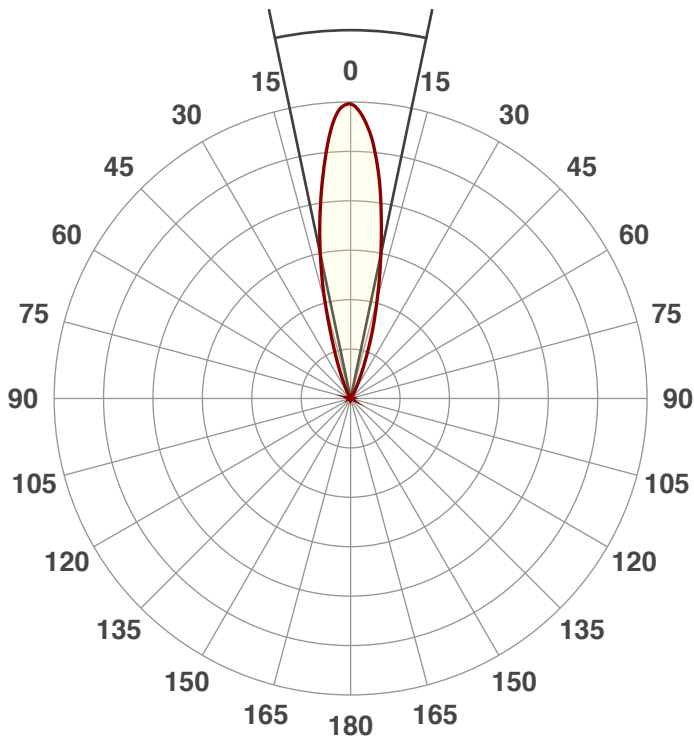
Power: 11.2 W

PF: 0.47



Beam Angle

23.7°



Product Name:

UB 9H

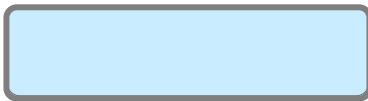
Test:

White

Date:

4/20/2018

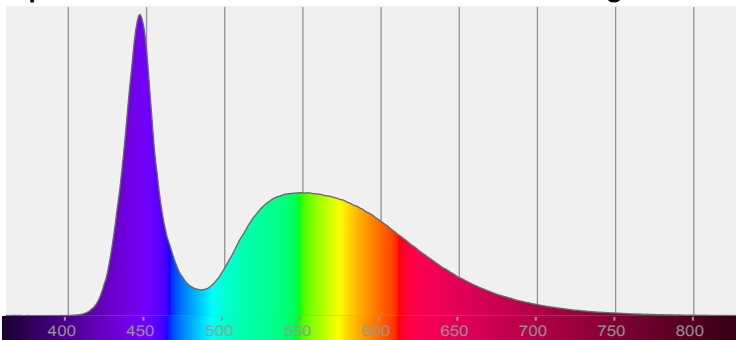
Note:



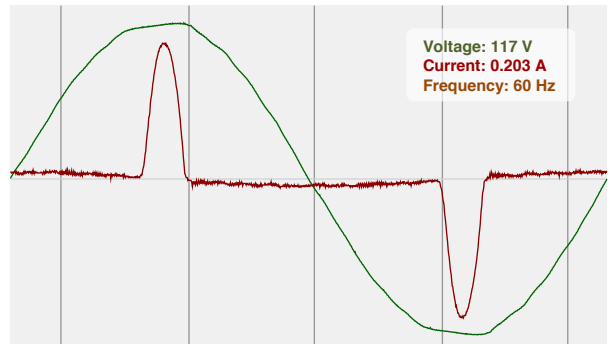
CIE 1931
x: 0.304
y: 0.309

Spectra

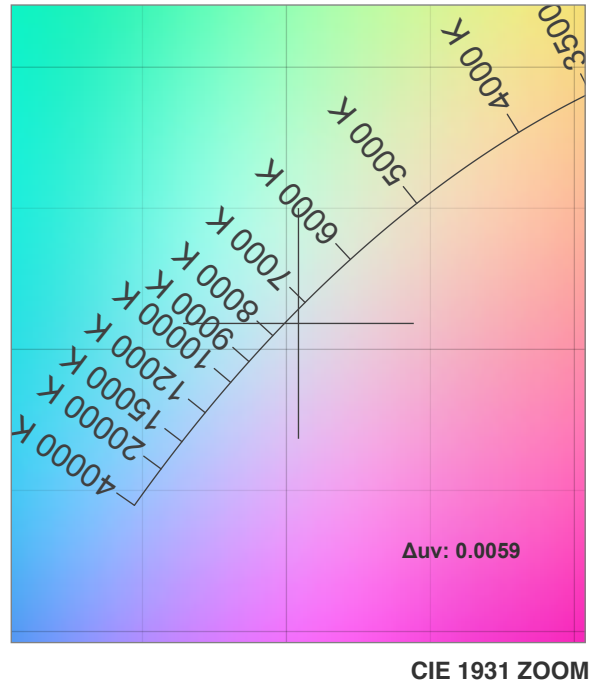
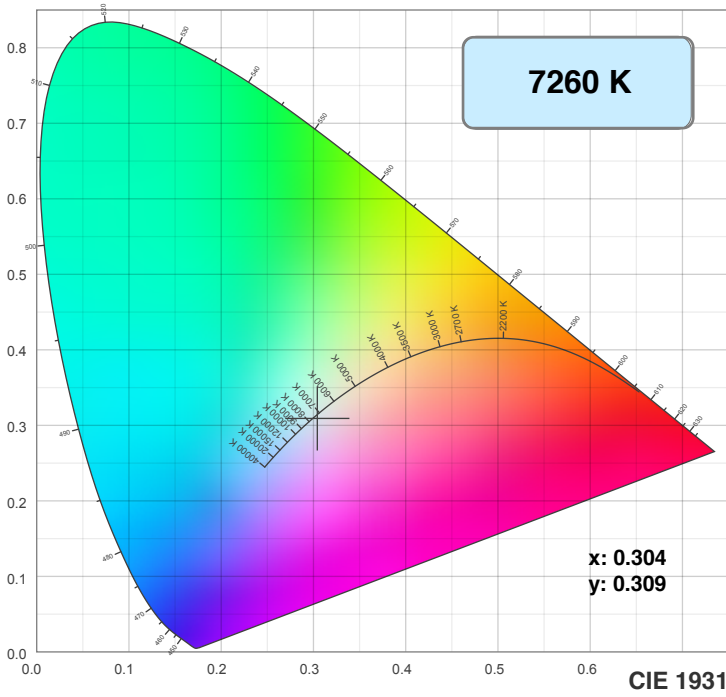
Dominant Wavelength: 403nm



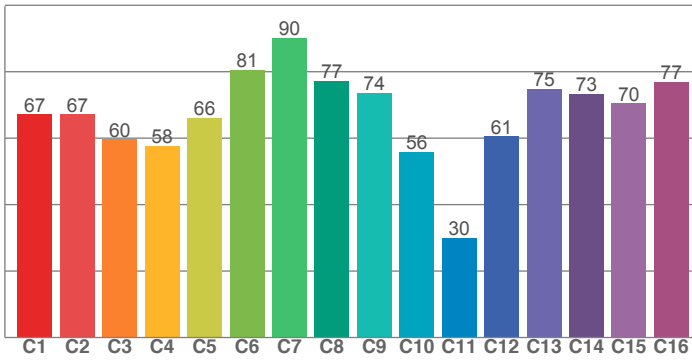
Power



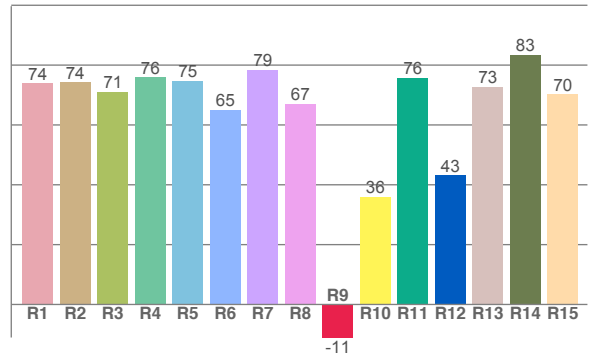
Color Details



TM30: 67.2



CRI: 72.6 (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
74.0	74.3	71.1	75.9	74.8	65.0	78.5	67.1	-11.0	36.1	75.8	43.2	72.8	83.5	70.2

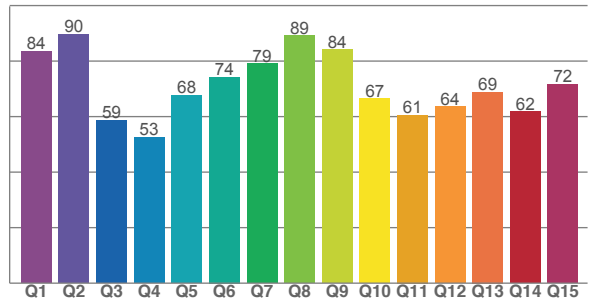
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
67.2	67.2	59.6	57.7	66.1	80.5	90.2	77.3	73.6	55.8	30.0	60.5	74.9	73.3	70.5	76.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.5	89.7	58.7	52.6	67.7	74.2	79.0	89.2	84.2	66.6	60.6	63.6	68.8	61.9	71.6

CQS: 69.4



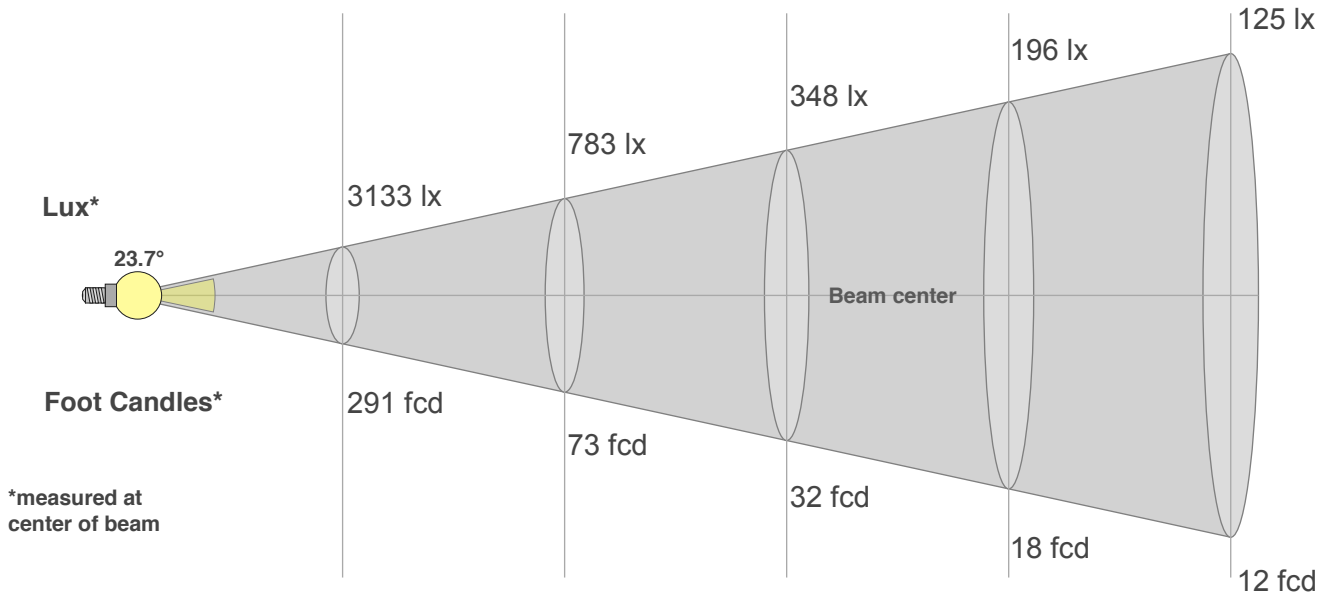
Color Parameters

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
7260 K	72.6	-11.0	67.2	96.5	69.4	0.304	0.309	0.199	0.304	0.0059

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)

0.4 0.8 1.3 1.7 2.1
1.4 2.8 4.1 5.5 6.9

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	3133	783	348	196	125	87	64	49	39	31	26	22	19	16	14	12	11	10	9	8
fcd	291	72.8	32.3	18.2	11.6	8.1	5.9	4.5	3.6	2.9	2.4	2	1.7	1.5	1.3	1.1	1	0.9	0.8	0.7

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°
3133	3090	2894	2577	2233	1890	1544	1208	867	603	412	273	177	113	72	46	31	23	17	13
100%	99%	92%	82%	71%	60%	49%	39%	28%	19%	13%	9%	6%	4%	2%	1%	1%	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°
3133	3090	2894	2577	2233	1890	1544	1208	867	603	412	273	177	113	72	46	31	23	17	13
100%	99%	92%	82%	71%	60%	49%	39%	28%	19%	13%	9%	6%	4%	2%	1%	1%	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°
3133	3039	2853	2583	2255	1888	1546	1241	969	743	533	374	252	167	110	73	46	31	23	18
100%	97%	91%	82%	72%	60%	49%	40%	31%	24%	17%	12%	8%	5%	4%	2%	1%	1%	1%	1%

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°
3133	3039	2853	2583	2255	1888	1546	1241	969	743	533	374	252	167	110	73	46	31	23	18
100%	97%	91%	82%	72%	60%	49%	40%	31%	24%	17%	12%	8%	5%	4%	2%	1%	1%	1%	1%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
23.7°	44.3°	57.2°	99.1%	98.4%

