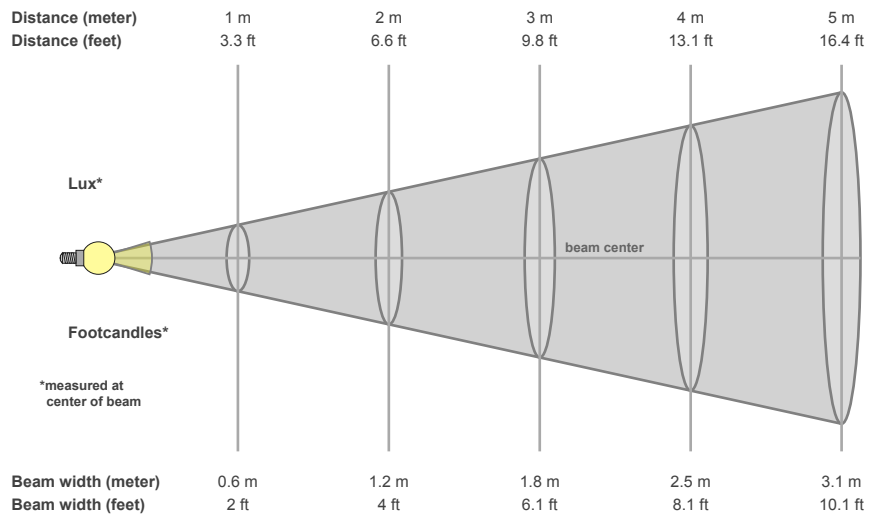
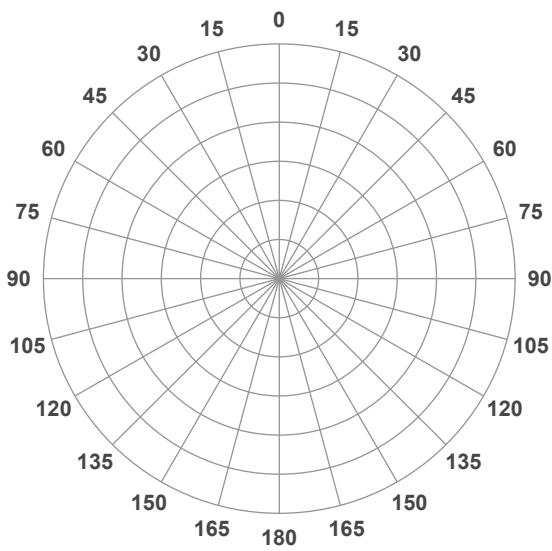
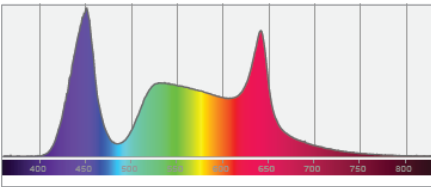
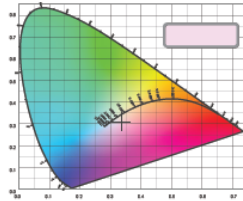




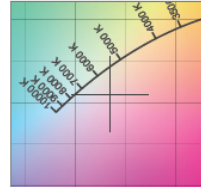
Spectral distribution



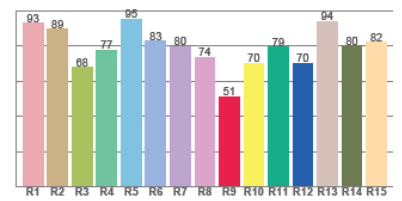
Color coordinates



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:

35 Lumen/Watt

Light Quality:

CRI: 67.0

Color Temperature:

15245 K

Output: 2235 lm

Peak: 10448 cd

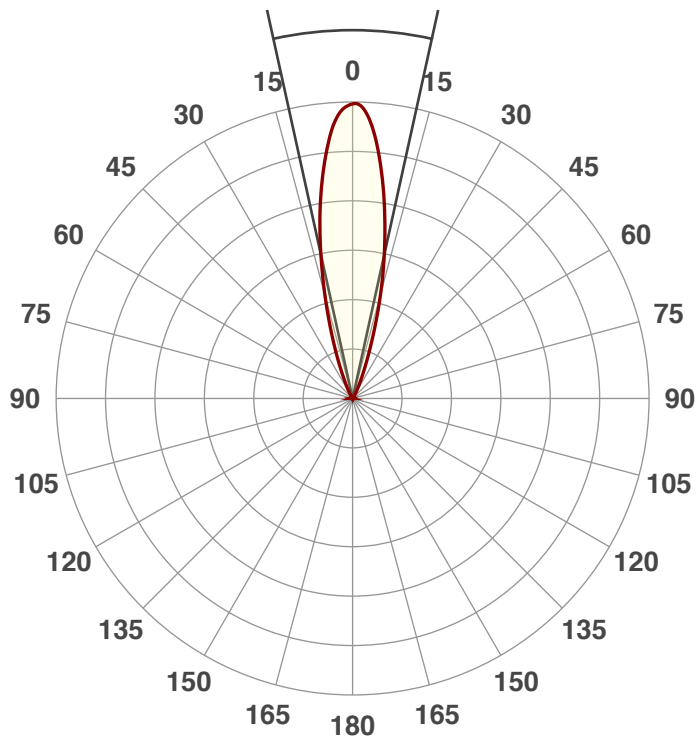
Power: 64.5 W

PF: 0.62



Beam Angle

24.8°



Product Name:

UB 12H

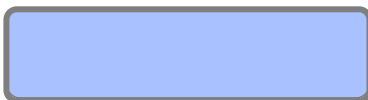
Test:

Full On

Date:

4/19/2018

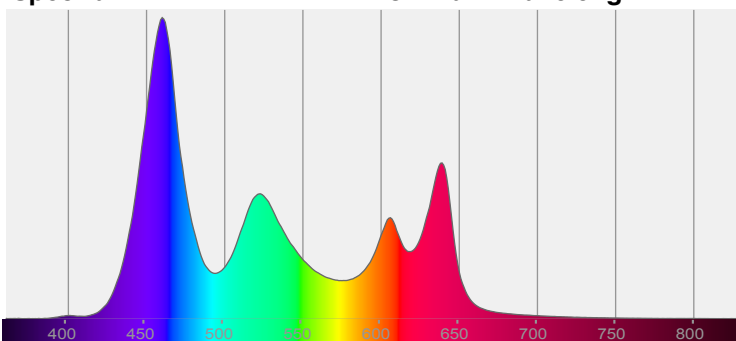
Note:



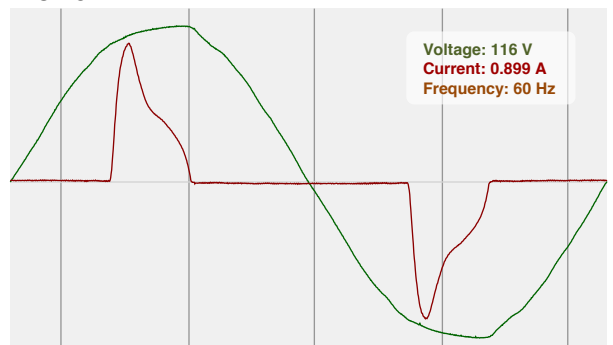
CIE 1931
x: 0.275
y: 0.252

Spectra

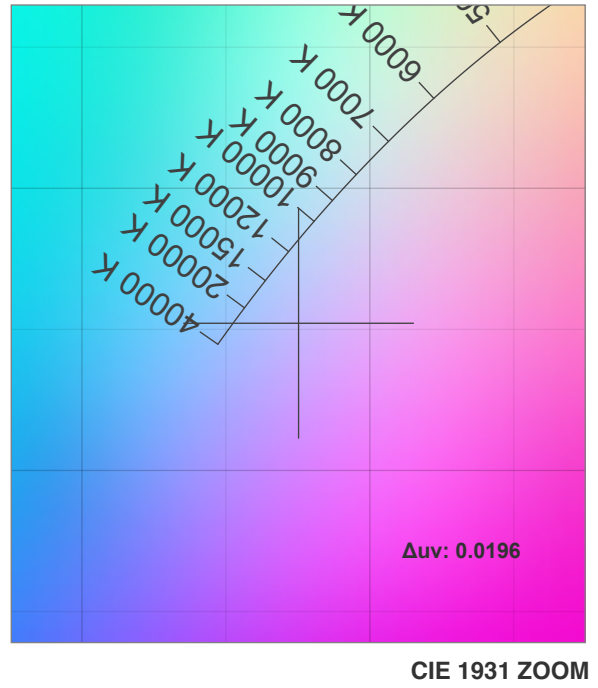
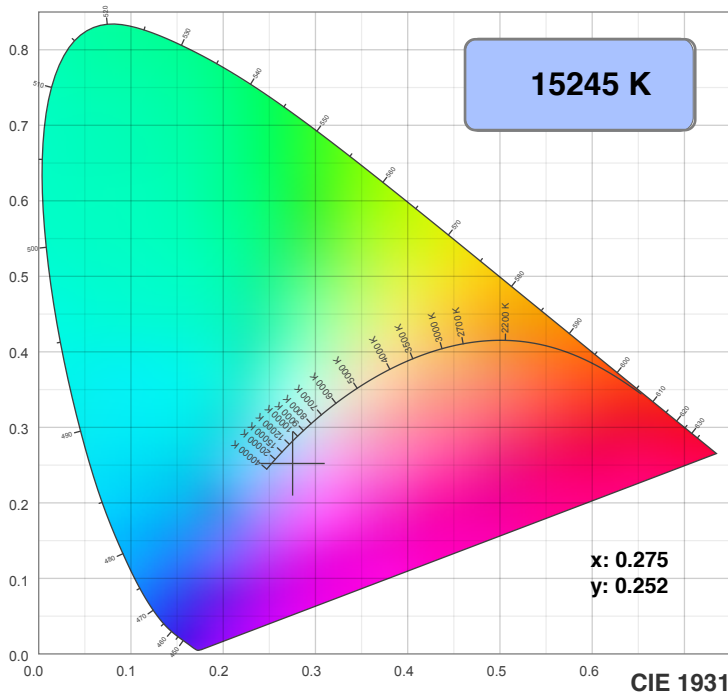
Dominant Wavelength: 447nm



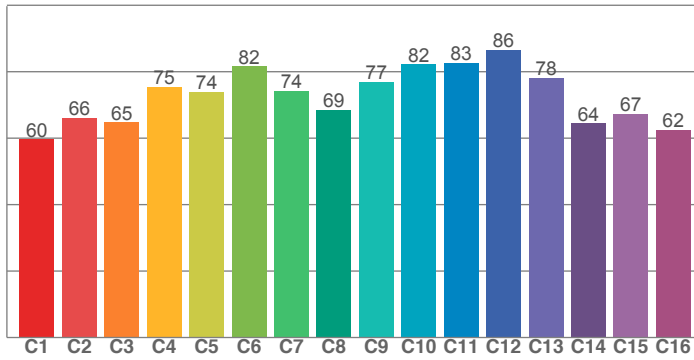
Power



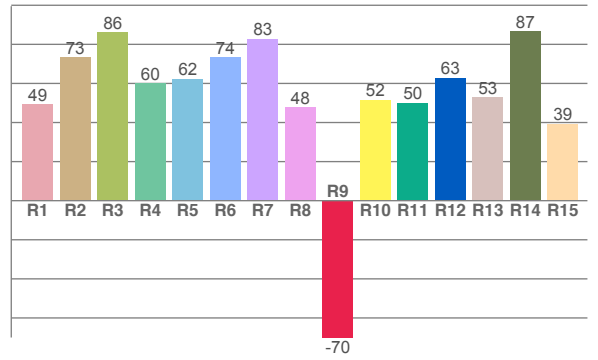
Color Details



TM30: 73.3



CRI: 67.0 (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
49.4	73.5	86.2	60.3	62.4	73.5	82.8	47.6	-70.0	51.6	50.1	62.9	53.0	86.8	39.4

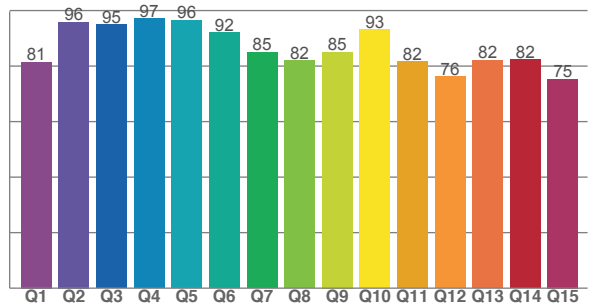
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
59.7	66.2	64.8	75.4	74.0	81.6	74.3	68.6	77.0	82.2	82.6	86.5	78.2	64.4	67.3	62.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.4	95.8	94.9	97.1	96.5	92.1	84.9	81.9	85.0	93.2	81.6	76.1	82.1	82.3	75.3

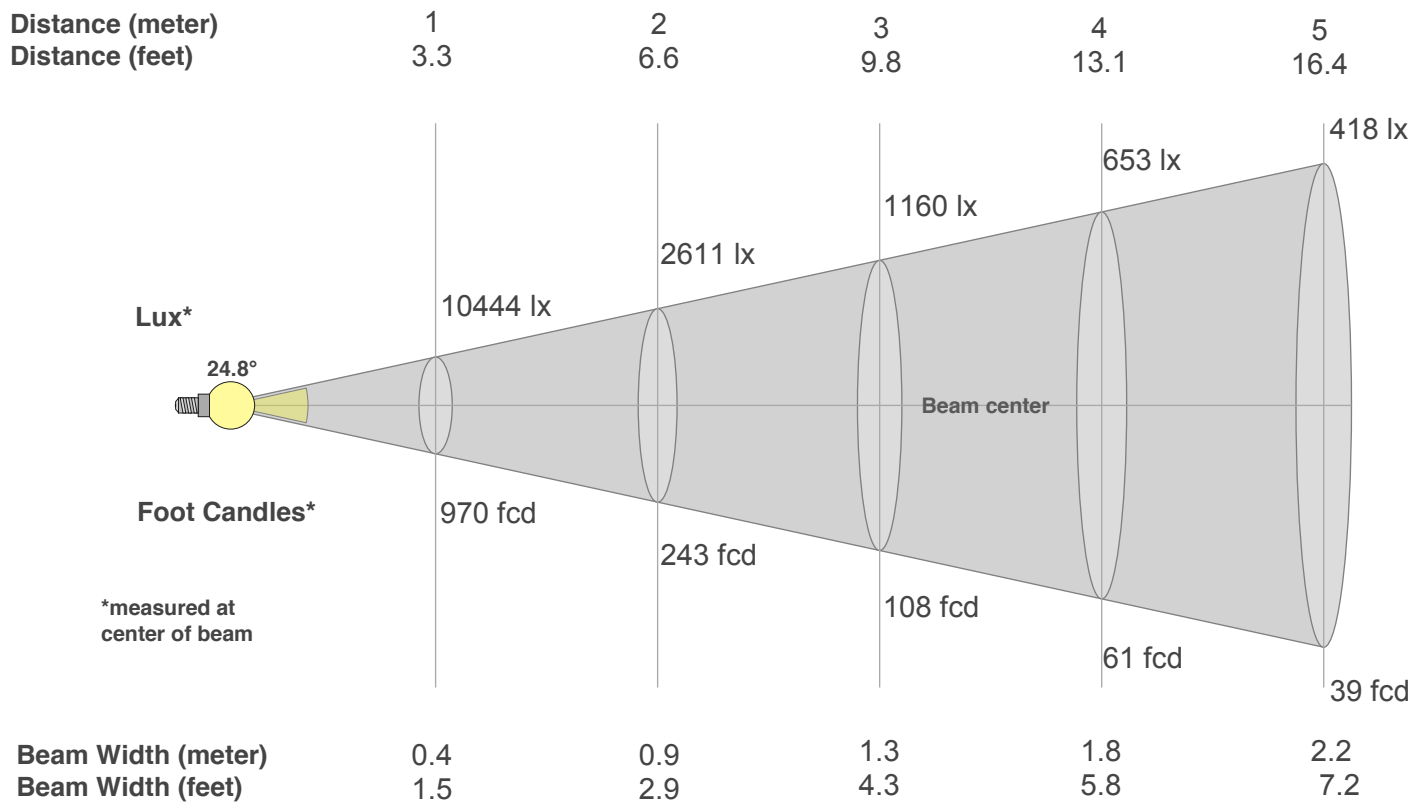
CQS: 84.8



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
15245 K	67.0	-70.0	73.3	108.1	84.8	0.275	0.252	0.201	0.276	0.0196

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	10444	2611	1160	653	418	290	213	163	129	104	86	73	62	53	46	41	36	32	29	26
fcd	970.3	242.6	107.8	60.6	38.8	27	19.8	15.2	12	9.7	8	6.7	5.7	5	4.3	3.8	3.4	3	2.7	2.4

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°
10.4K	10.2K	9.7K	8.8K	7.8K	6.7K	5.5K	4.3K	3.3K	2.4K	1.7K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	98%	93%	84%	74%	64%	52%	41%	31%	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°
10.4K	10.2K	9.7K	8.8K	7.8K	6.7K	5.5K	4.3K	3.3K	2.4K	1.7K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	98%	93%	84%	74%	64%	52%	41%	31%	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°
10.4K	10.3K	9.7K	8.8K	7.7K	6.6K	5.5K	4.4K	3.3K	2.4K	1.6K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	99%	93%	84%	74%	63%	52%	42%	32%	23%	15%	10%	7%	4%	3%	2%	1%	1%	1%	0%

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°
10.4K	10.3K	9.7K	8.8K	7.7K	6.6K	5.5K	4.4K	3.3K	2.4K	1.6K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	99%	93%	84%	74%	63%	52%	42%	32%	23%	15%	10%	7%	4%	3%	2%	1%	1%	1%	0%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
24.8°	44.5°	57.3°	99.0%	98.2%



Light Efficiency:

34 Lumen/Watt

Light Quality:

CRI: 67.8

Color Temperature:

16000 K

Output: 2009 lm

Peak: 9435 cd

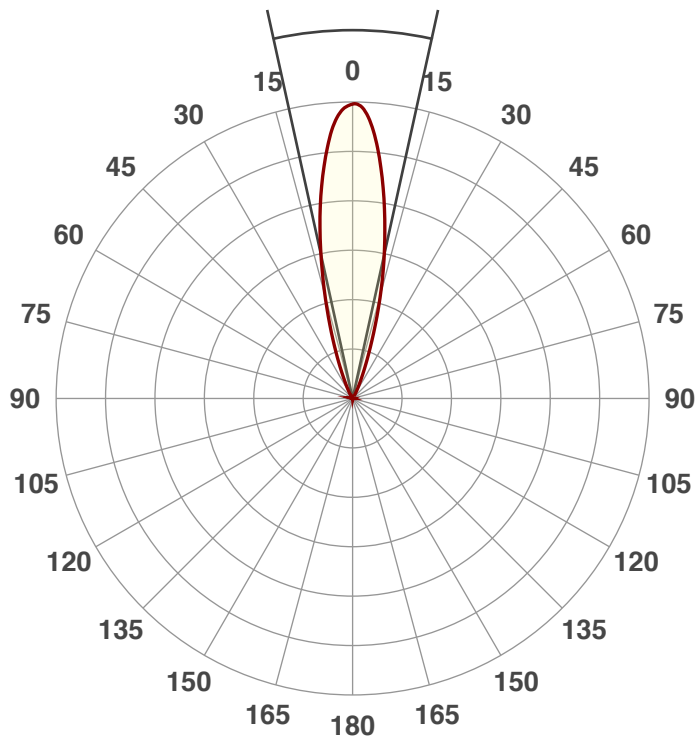
Power: 58.8 W

PF: 0.6



Beam Angle

24.8°



Product Name:

UB 12H

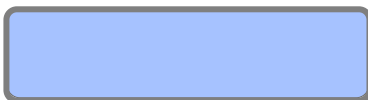
Test:

Full On No UV

Date:

4/19/2018

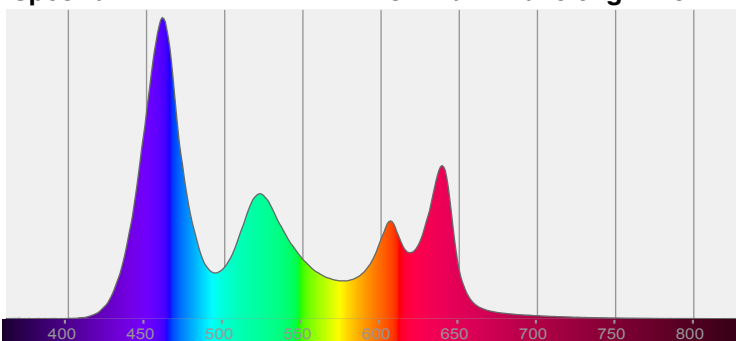
Note:



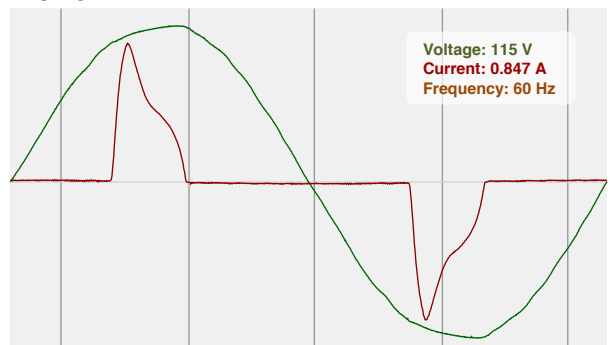
CIE 1931
x: 0.273
y: 0.252

Spectra

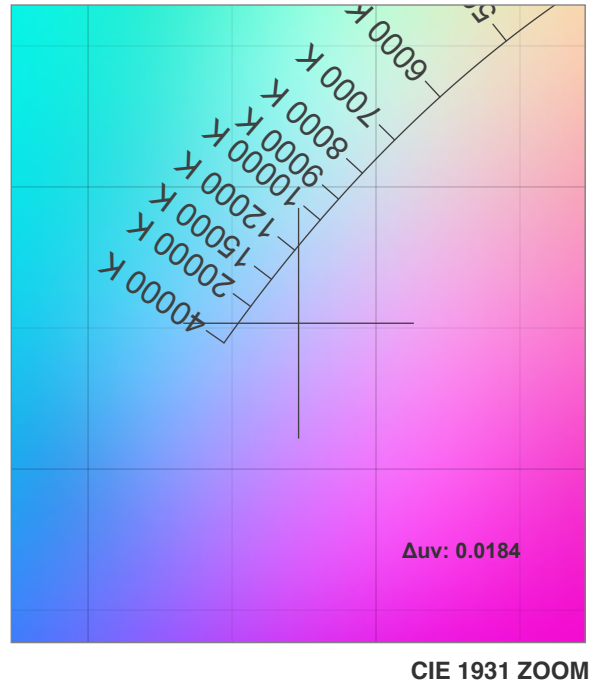
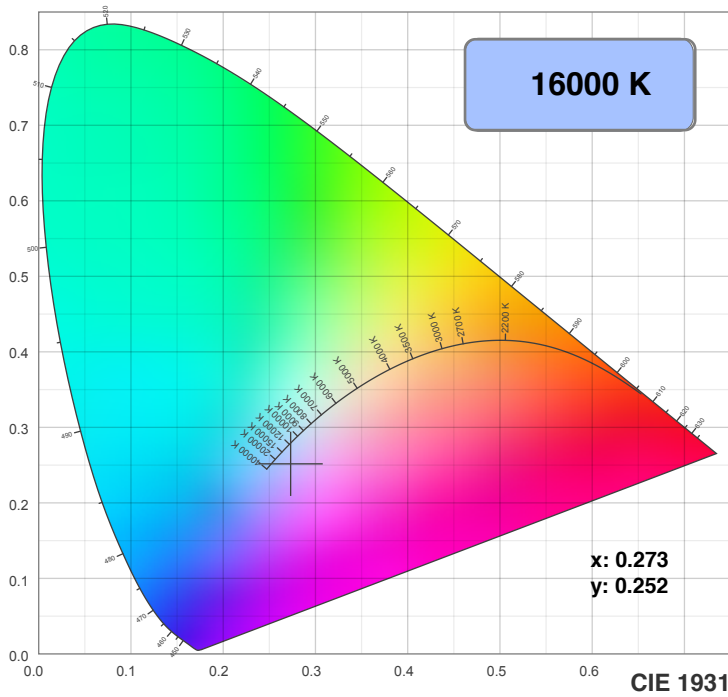
Dominant Wavelength: 452nm



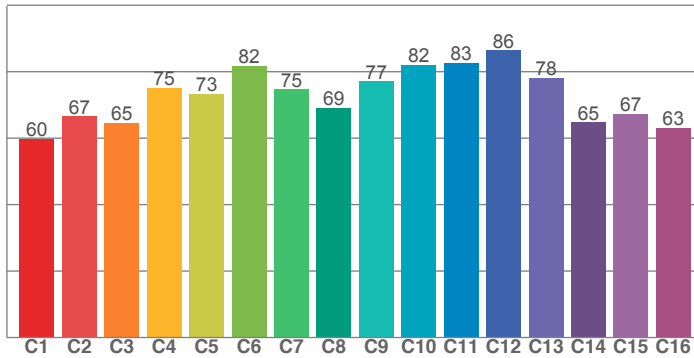
Power



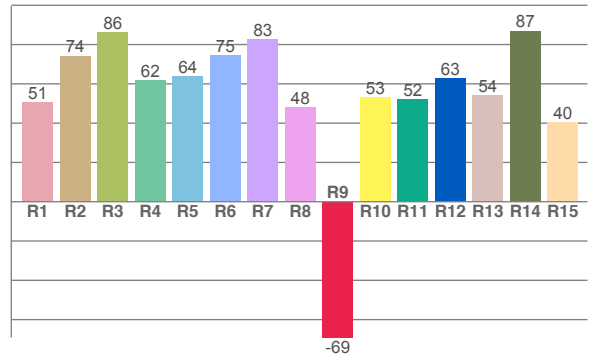
Color Details



TM30: 73.4



CRI: 67.8 (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
50.8	74.3	86.3	61.8	63.7	74.7	82.7	48.3	-69.1	53.1	52.2	63.0	54.2	87.0	40.4

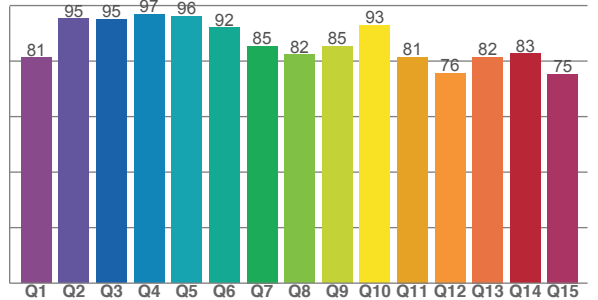
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
59.7	66.5	64.6	75.2	73.4	81.9	74.7	69.0	77.1	82.2	82.7	86.4	78.2	64.8	67.4	63.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.3	95.3	95.1	96.9	96.1	92.0	85.4	82.4	85.3	92.9	81.4	75.7	81.5	82.7	75.4

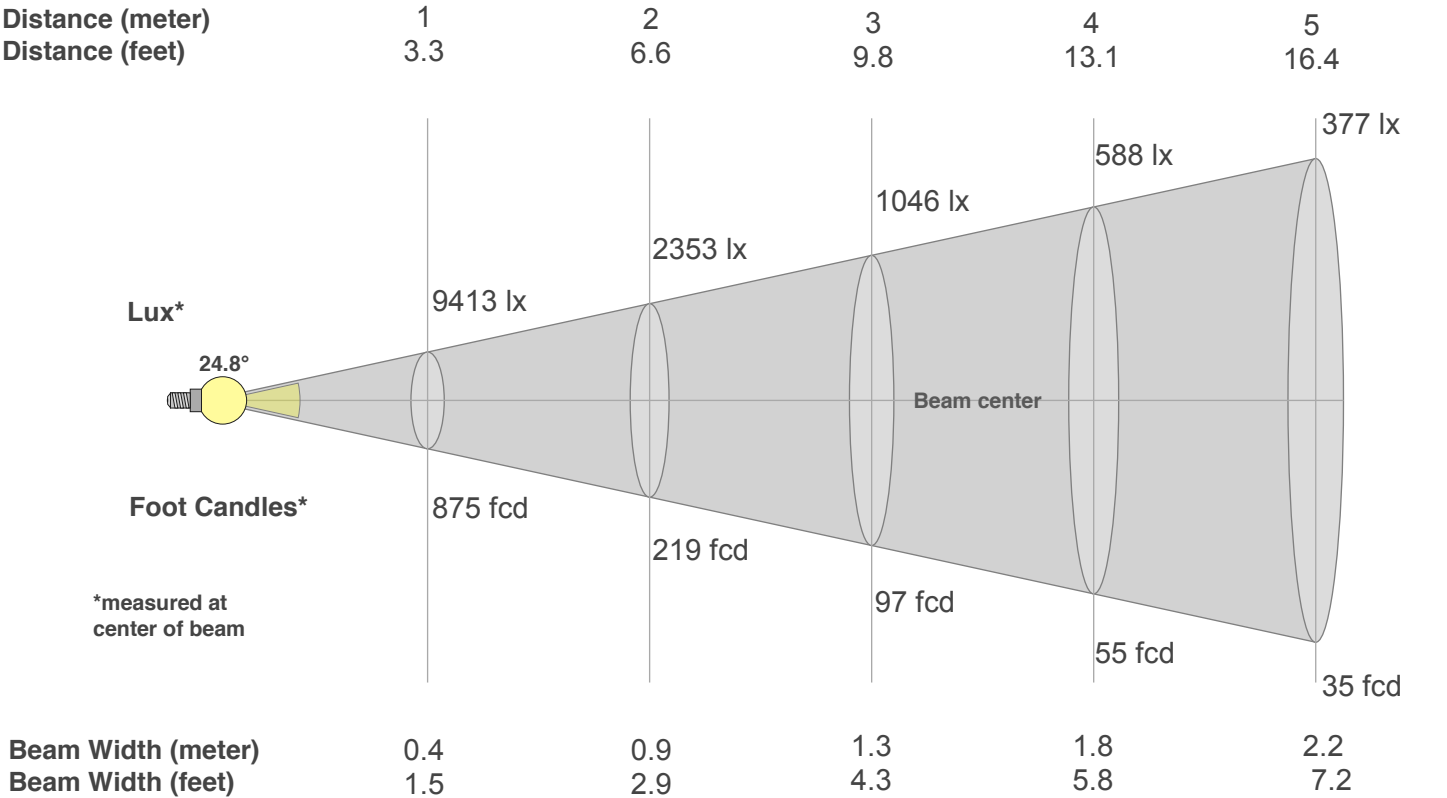
CQS: 84.8



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
16000 K	67.8	-69.1	73.4	107.6	84.8	0.273	0.252	0.200	0.276	0.0184

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	9413	2353	1046	588	377	261	192	147	116	94	78	65	56	48	42	37	33	29	26	24
fcd	874.5	218.6	97.2	54.7	35	24.3	17.8	13.7	10.8	8.7	7.2	6.1	5.2	4.5	3.9	3.4	3	2.7	2.4	2.2

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°
9413	9251	8755	7955	7013	5998	4931	3901	2956	2160	1505	1012	660	426	277	178	119	81	62	48
100%	98%	93%	85%	74%	64%	52%	41%	31%	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°
9413	9251	8755	7955	7013	5998	4931	3901	2956	2160	1505	1012	660	426	277	178	119	81	62	48
100%	98%	93%	85%	74%	64%	52%	41%	31%	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°	
9413	9300	8745	7916	6940	5918	4913	3940	2981	2128	1459	977	648	419	268	169	108	73	59	45	
100%	99%	93%	84%	74%	63%	52%	42%	32%	23%	15%	10%	7%	4%	3%	2%	1%	1%	1%	0%	

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°
9413	9300	8745	7916	6940	5918	4913	3940	2981	2128	1459	977	648	419	268	169	108	73	59	45
100%	99%	93%	84%	74%	63%	52%	42%	32%	23%	15%	10%	7%	4%	3%	2%	1%	1%	1%	0%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
24.8°	44.5°	57.2°	99.1%	98.4%



Light Efficiency:

50 Lumen/Watt

Light Quality:

CRI: 89.2

Color Temperature:

4505 K

Output: 2239 lm

Peak: 10312 cd

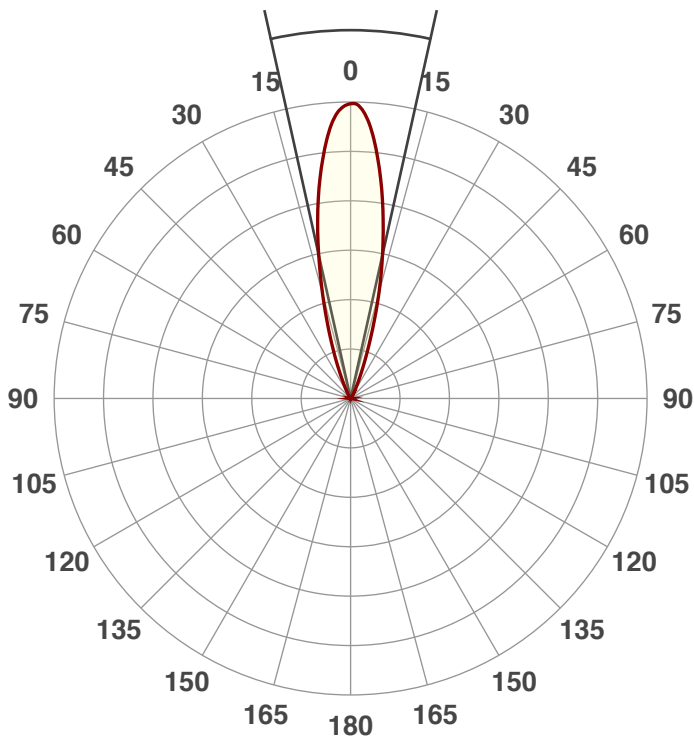
Power: 44.9 W

PF: 0.64



Beam Angle

25°



Product Name:

UB 12H

Test:

CRI Value

Date:

4/19/2018

Note:

R @ 110

G @ 255

B @ 0

W @ 255

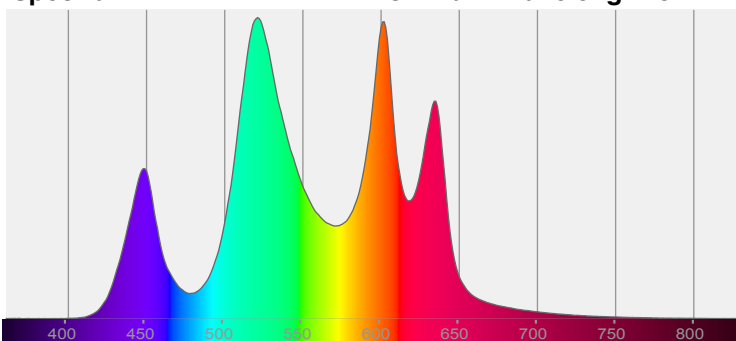
A @ 255



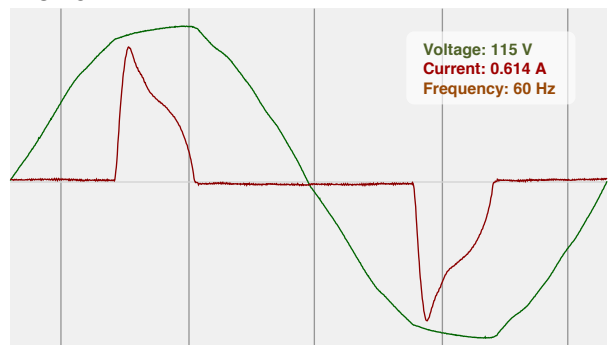
CIE 1931
x: 0.372
y: 0.426

Spectra

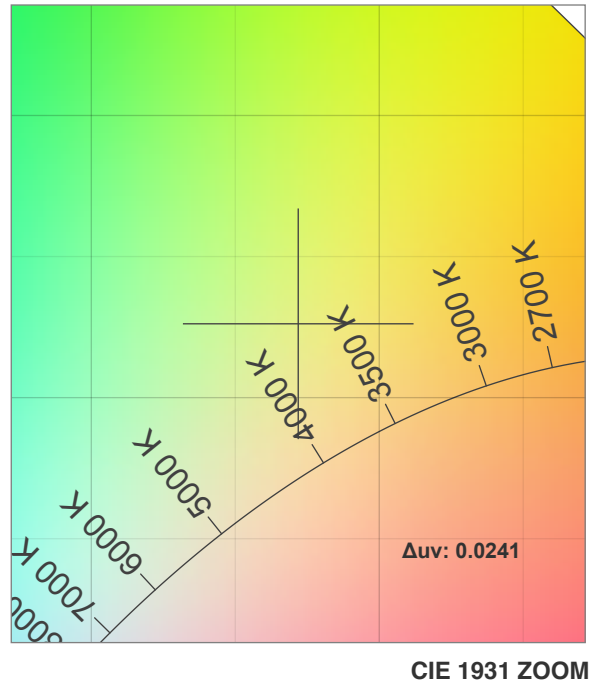
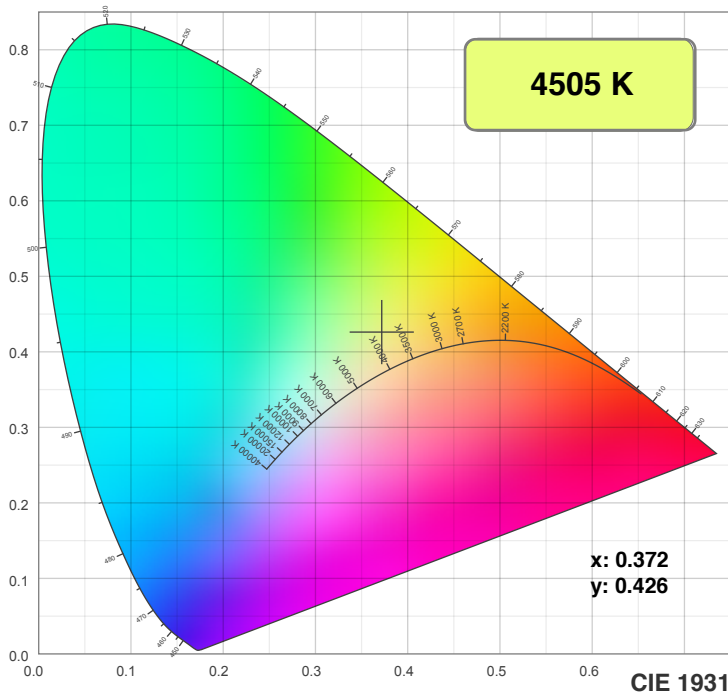
Dominant Wavelength: 571nm



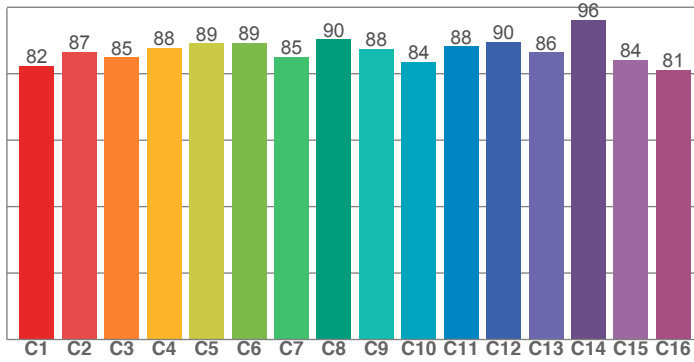
Power



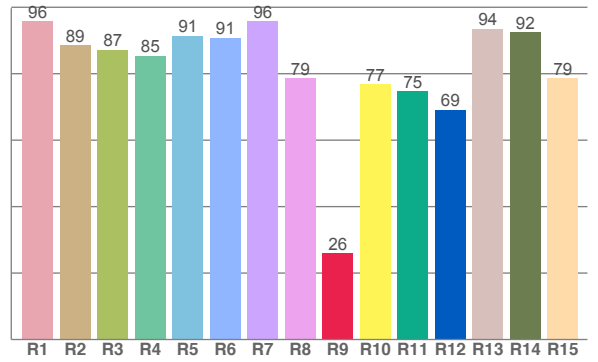
Color Details



TM30: 86.6



CRI: 89.2 (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
95.8	88.6	87.2	85.4	91.4	90.8	95.8	78.6	26.0	76.9	74.7	69.2	93.5	92.4	78.7

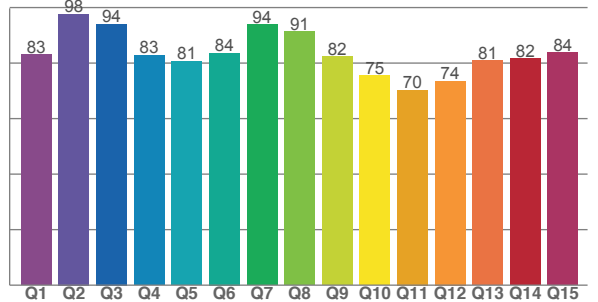
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
82.3	86.6	84.9	87.8	89.2	89.4	85.2	90.3	87.5	83.5	88.2	89.6	86.5	96.2	84.2	81.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.1	97.6	94.1	82.8	80.6	83.6	93.9	91.3	82.3	75.5	70.3	73.6	80.9	81.7	83.7

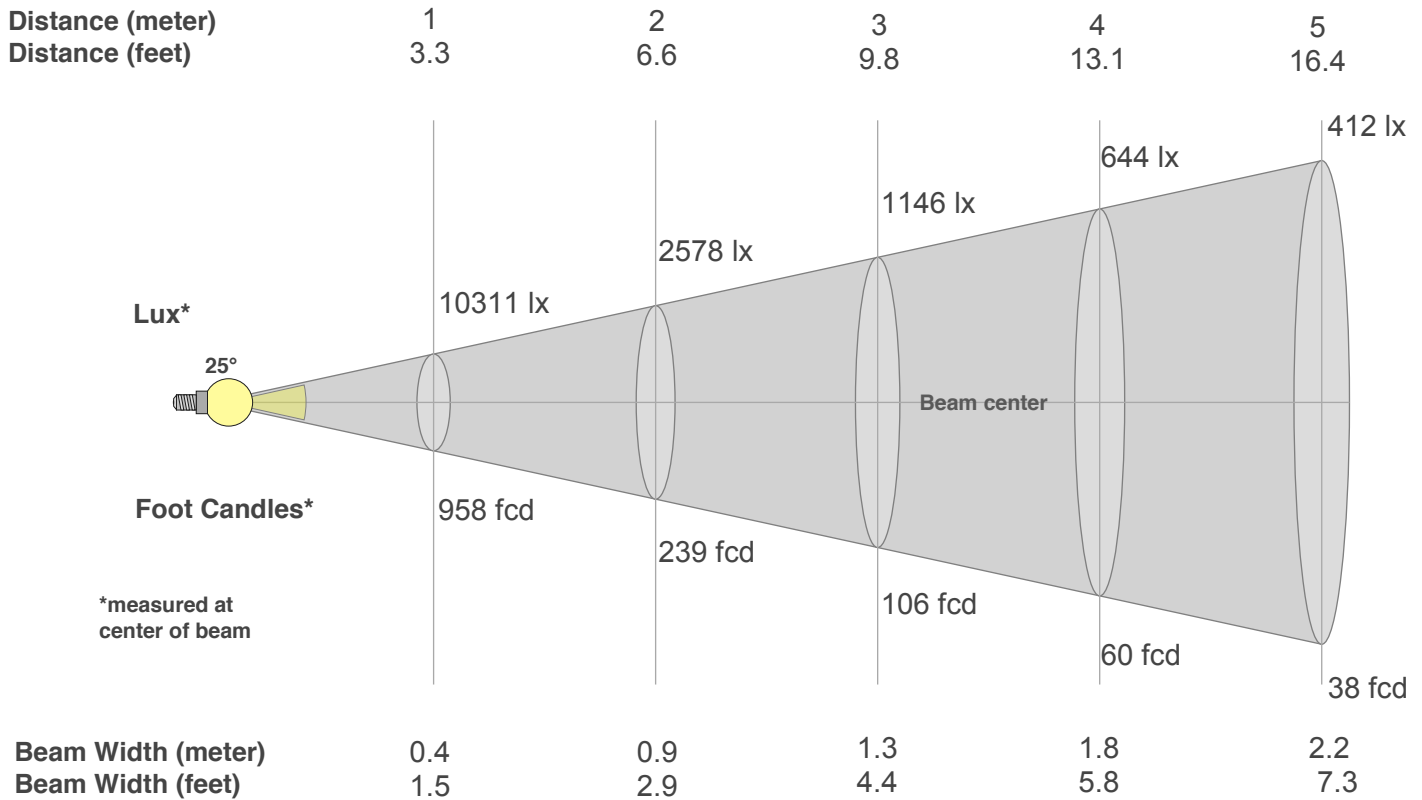
CQS: 82.0



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
4505 K	89.2	26.0	86.6	98.7	82.0	0.372	0.426	0.202	0.347	0.0241

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	10311	2578	1146	644	412	286	210	161	127	103	85	72	61	53	46	40	36	32	29	26
fcd	957.9	239.5	106.4	59.9	38.3	26.6	19.5	15	11.8	9.6	7.9	6.7	5.7	4.9	4.3	3.7	3.3	3	2.7	2.4

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°
10.3K	10.1K	9.6K	8.7K	7.7K	6.6K	5.5K	4.3K	3.3K	2.4K	1.7K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	98%	93%	85%	75%	64%	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°
10.3K	10.1K	9.6K	8.7K	7.7K	6.6K	5.5K	4.3K	3.3K	2.4K	1.7K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	98%	93%	85%	75%	64%	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°
10.3K	10.2K	9.6K	8.7K	7.6K	6.5K	5.4K	4.4K	3.3K	2.4K	1.6K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	99%	93%	84%	74%	63%	53%	42%	32%	23%	16%	10%	7%	4%	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°
10.3K	10.2K	9.6K	8.7K	7.6K	6.5K	5.4K	4.4K	3.3K	2.4K	1.6K	1.1K	0.7K	0.5K	0.3K	0.2K	0.1K	0.1K	0.1K	0.1K
100%	99%	93%	84%	74%	63%	53%	42%	32%	23%	16%	10%	7%	4%	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
25°	44.7°	57.4°	98.6%	97.8%



Light Efficiency:

29 Lumen/Watt

Dominant Wavelength:

622nm

Output:

349lm

Power:

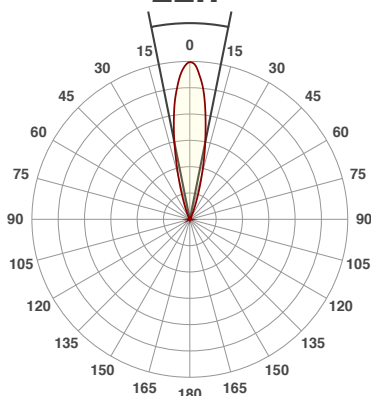
12.1W

Peak:

1936cd

Beam Angle

22.7°



Product Name:

UB 12H

Test:

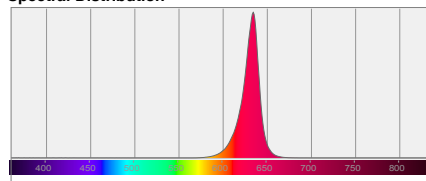
Red

Date:

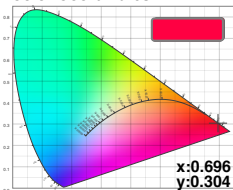
4/19/2018

Note:

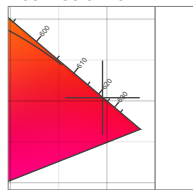
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

2

6.6

3

9.8

4

13.1

5

16.4

Lux*

22.7°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
22.7°	40.8°	52.9°	98.8%	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	1936	484	215	121	77	54	40	30	24	19	16	13	11	10	9	8	7	6	5	5
fcd	179.9	45	20	11.2	7.2	5	3.7	2.8	2.2	1.8	1.5	1.2	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.4



Light Efficiency:

56 Lumen/Watt

Dominant Wavelength:

527nm

Output:

915lm

Power:

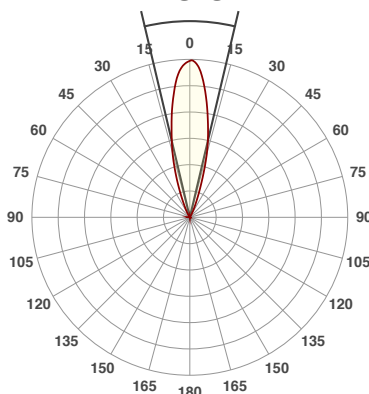
16.4W

Peak:

3843cd

Beam Angle

26.6°



Product Name:

UB 12H

Test:

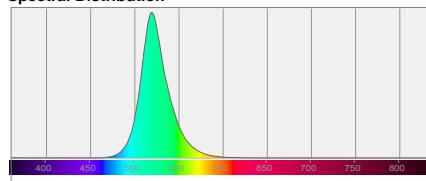
Green

Date:

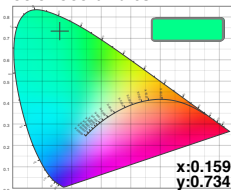
4/19/2018

Note:

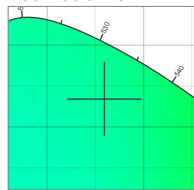
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

Distance (feet)

1 3.3 2 6.6 3 9.8 4 13.1 5 16.4

Lux*

26.6°

Foot Candles*

*measured at center of beam

Beam Width (meter)

Beam Width (feet)

0.5 0.9 1.4 1.9 2.4 1.6 3.1 4.6 6.2 7.7

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
26.6°	46.7°	59.5°	98.8%	98.1%

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	3826	956	425	239	153	106	78	60	47	38	32	27	23	20	17	15	13	12	11	10
fcd	355.4	88.9	39.5	22.2	14.2	9.9	7.3	5.6	4.4	3.6	2.9	2.5	2.1	1.8	1.6	1.4	1.2	1.1	1	0.9



Light Efficiency:

12 Lumen/Watt

Dominant Wavelength:

463nm

Output:

192lm

Power:

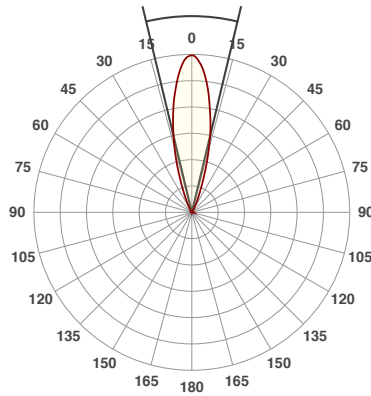
16.6W

Peak:

793cd

Beam Angle

26.9°



Product Name:

UB 12H

Test:

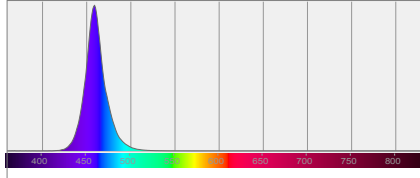
Blue

Date:

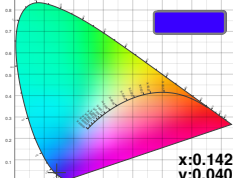
4/19/2018

Note:

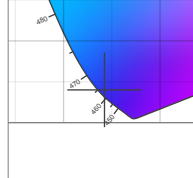
Spectral Distribution



Color Coordinates



Zoom Color Point



Distance (meter)

1

Distance (feet)

3.3

2

6.6

3

9.8

4

13.1

5

16.4

Lux*

26.9°

Foot Candles*

*measured at
center of beam

Beam Width (meter)

Beam Width (feet)

0.5

1.6

1

3.2

1.4

4.7

1.9

6.3

2.4

7.9

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
26.9°	47°	59.6°	98.2%	97.3%

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	792	198	88	50	32	22	16	12	10	8	7	6	5	4	4	3	3	2	2	2
fcd	73.6	18.4	8.2	4.6	2.9	2	1.5	1.2	0.9	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2



Light Efficiency:

42 Lumen/Watt

Light Quality:

CRI: -21.9

Color Temperature:

1443 K

Output: 552 lm

Peak: 2337 cd

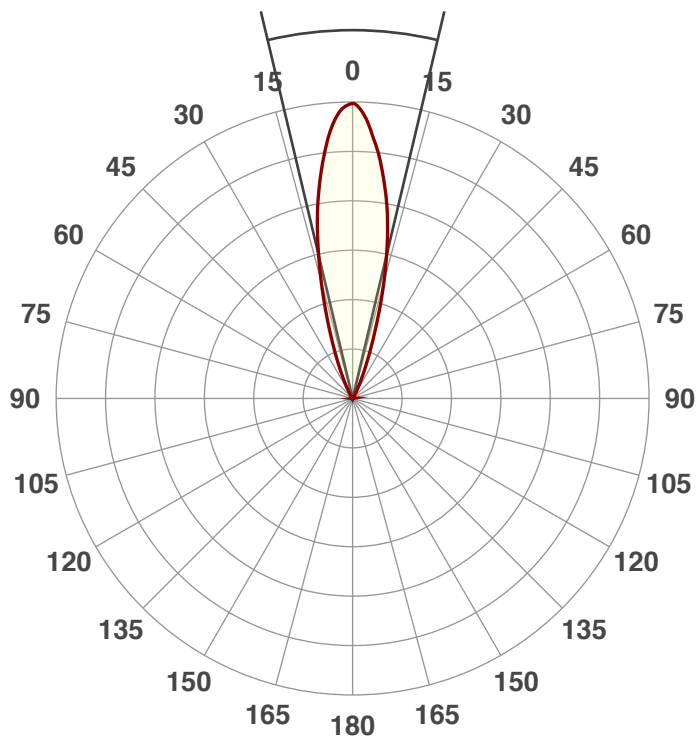
Power: 13.3 W

PF: 0.53



Beam Angle

26.7°



Product Name:

UB 12H

Test:

Amber

Date:

4/19/2018

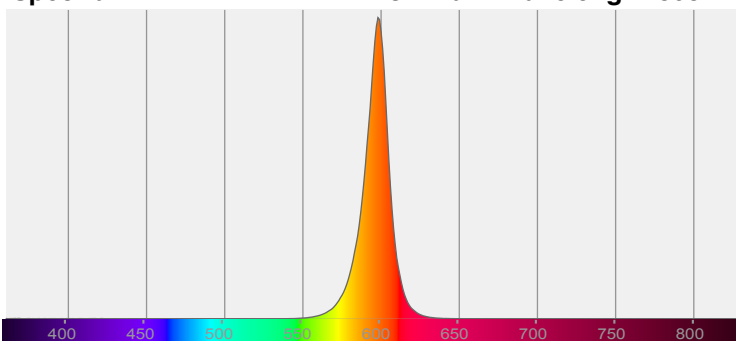
Note:



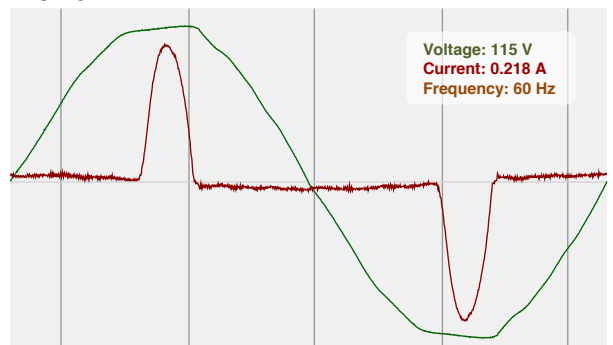
CIE 1931
x: 0.601
y: 0.398

Spectra

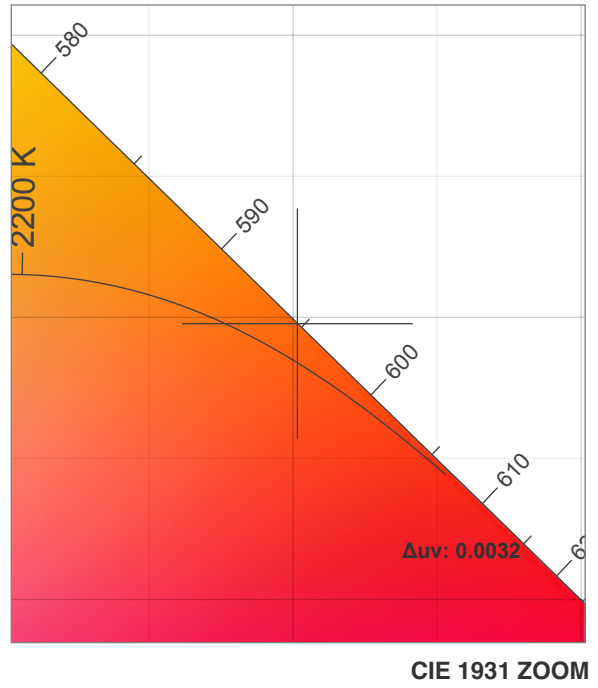
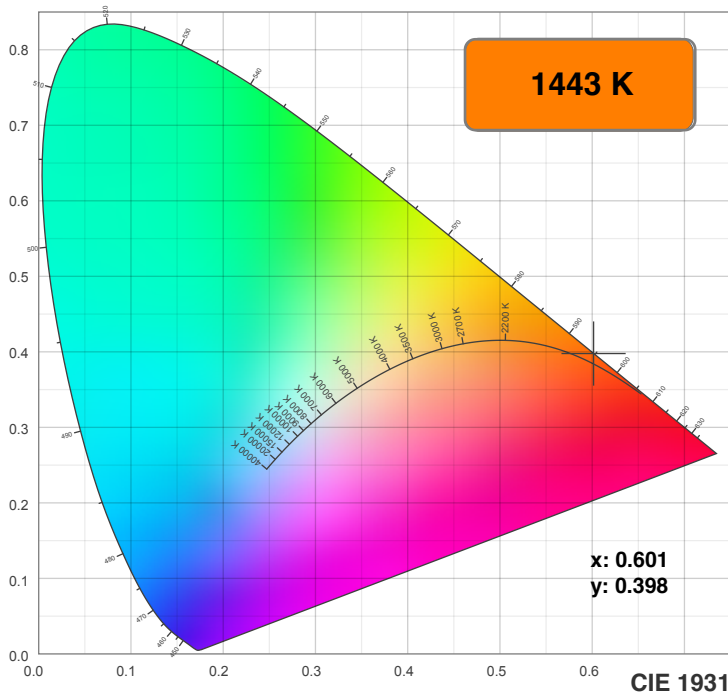
Dominant Wavelength: 595nm



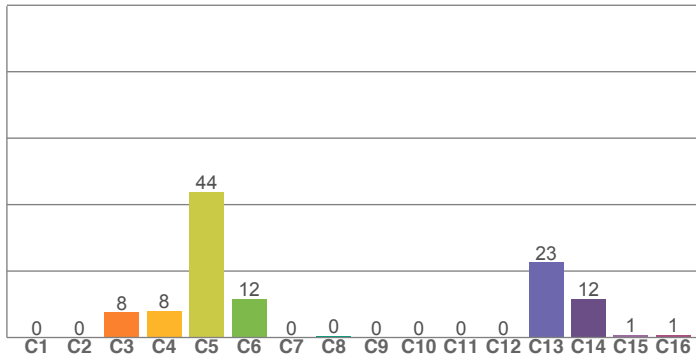
Power



Color Details



TM30: 0.5



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
-33.2	55.6	12.2	-69.7	-41.9	49.5	-11.3	-136.6	-381.0	36.4	-93.5	4.5	-12.4	43.4	-68.3

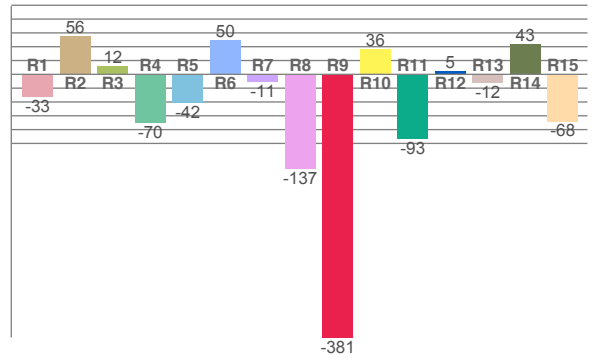
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0.0	0.0	7.5	7.9	43.8	11.7	0.1	0.5	0.1	0.0	0.1	0.0	22.6	11.6	0.7	0.8

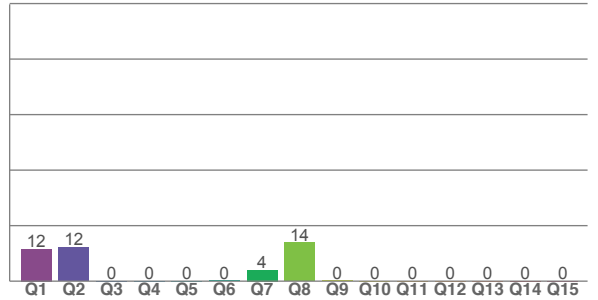
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
11.6	12.2	0.0	0.0	0.1	0.3	4.0	13.9	0.1	0.0	0.0	0.0	0.0	0.0	0.1

CRI: -21.9 (R1-R8)



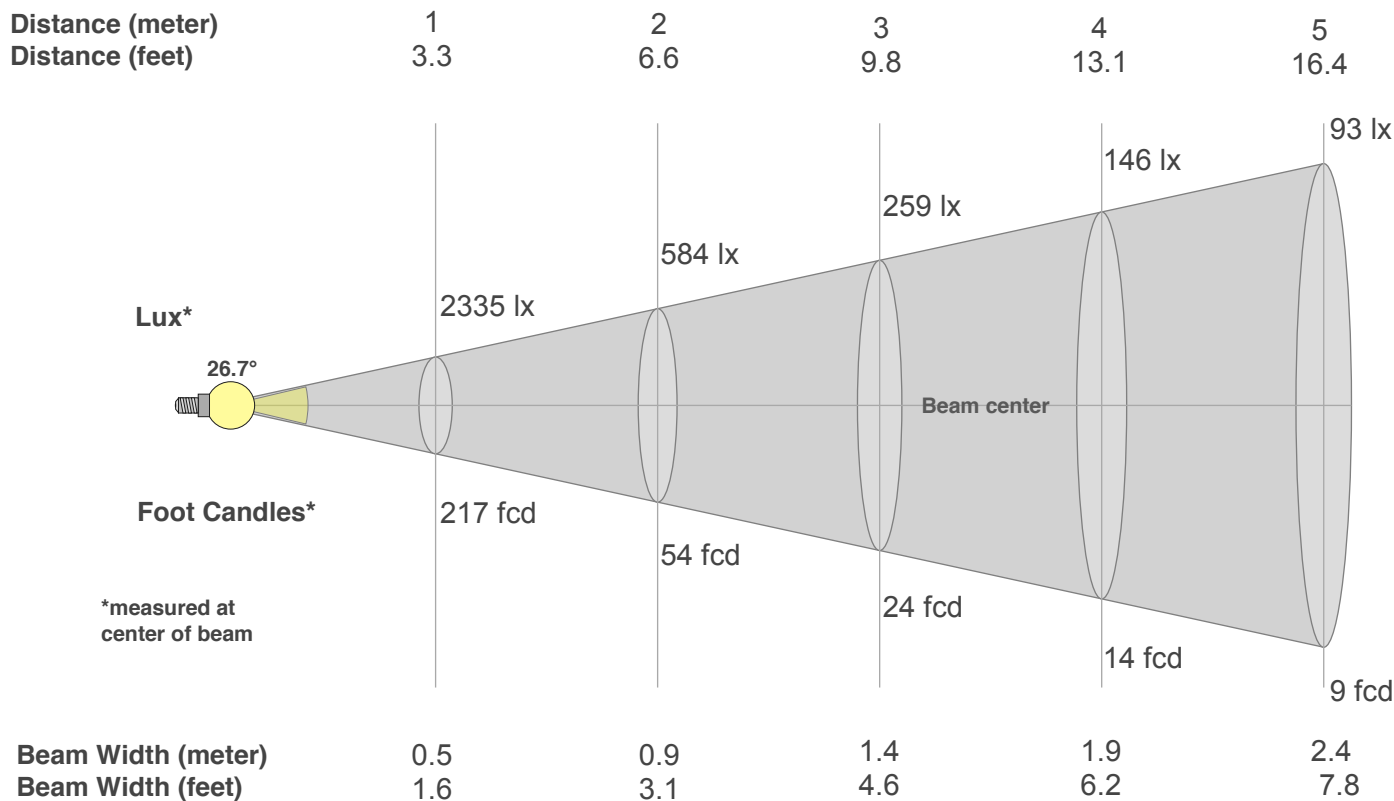
CQS: 0.0



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
1443 K	-21.9	-381.0	0.5	1.7	0.0	0.601	0.398	0.366	0.363	0.0032

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	2335	584	259	146	93	65	48	36	29	23	19	16	14	12	10	9	8	7	6	6
fcd	216.9	54.2	24.1	13.6	8.7	6	4.4	3.4	2.7	2.2	1.8	1.5	1.3	1.1	1	0.8	0.8	0.7	0.6	0.5

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°
2335	2298	2188	2011	1804	1582	1338	1087	845	632	455	320	218	144	94	60	40	27	20	15
100%	98%	94%	86%	77%	68%	57%	47%	36%	27%	20%	14%	9%	6%	4%	3%	2%	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°
2335	2298	2188	2011	1804	1582	1338	1087	845	632	455	320	218	144	94	60	40	27	20	15
100%	98%	94%	86%	77%	68%	57%	47%	36%	27%	20%	14%	9%	6%	4%	3%	2%	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°
2335	2268	2120	1956	1763	1562	1332	1086	840	606	421	282	181	114	71	47	31	21	17	13
100%	97%	91%	84%	75%	67%	57%	47%	36%	26%	18%	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°
2335	2268	2120	1956	1763	1562	1332	1086	840	606	421	282	181	114	71	47	31	21	17	13
100%	97%	91%	84%	75%	67%	57%	47%	36%	26%	18%	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
26.7°	46.5°	59.1°	98.7%	97.9%



Light Efficiency:

55 Lumen/Watt

Light Quality:

CRI: 72.0

Color Temperature:

6695 K

Output: 872 lm

Peak: 4435 cd

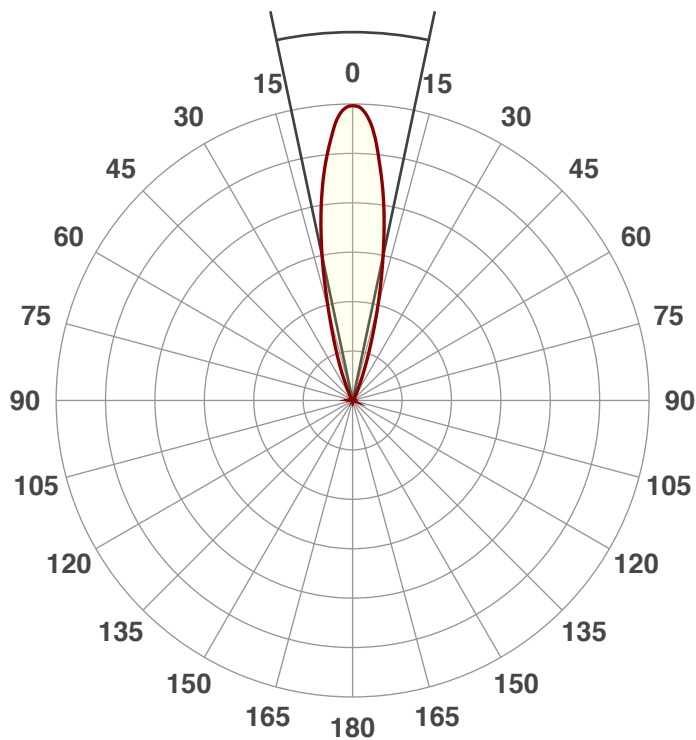
Power: 15.7 W

PF: 0.55



Beam Angle

23.9°



Product Name:

UB 12H

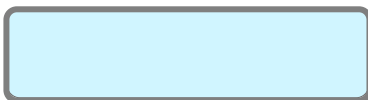
Test:

White

Date:

4/19/2018

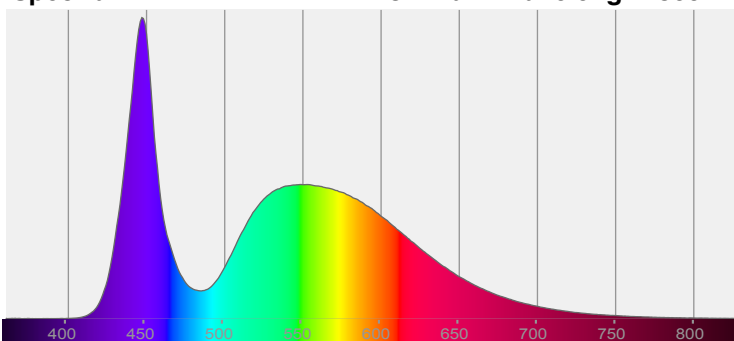
Note:



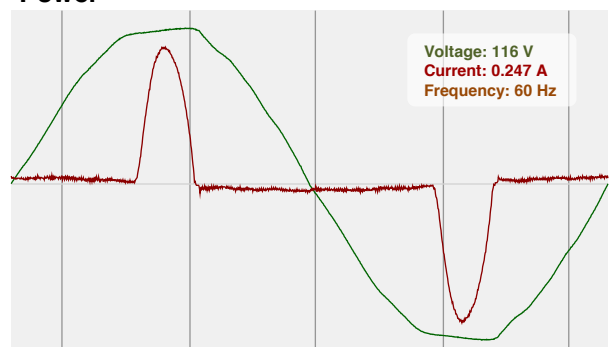
CIE 1931
x: 0.311
y: 0.322

Spectra

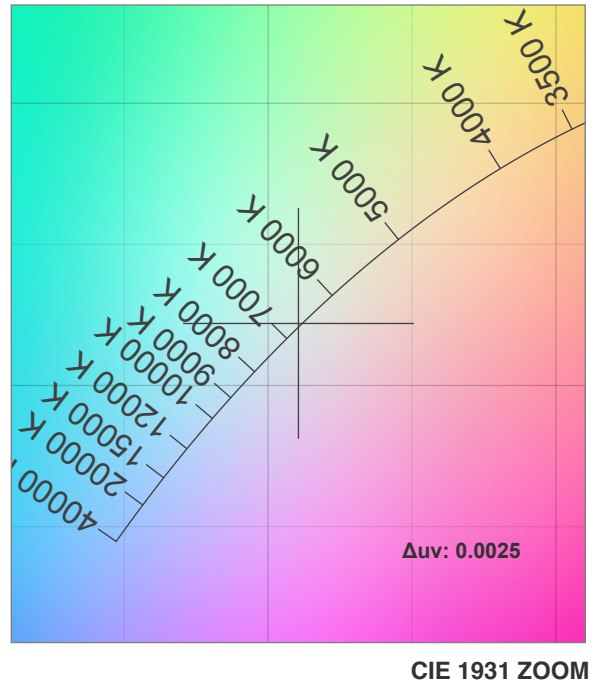
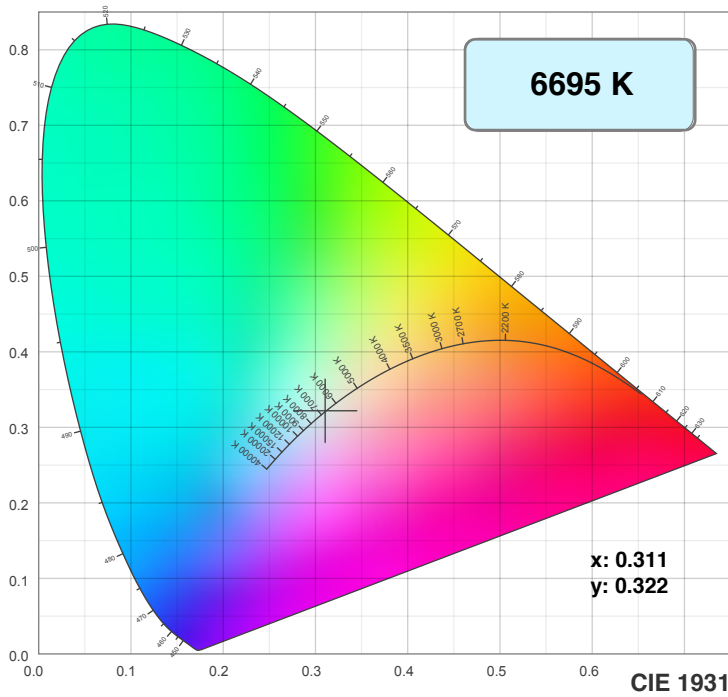
Dominant Wavelength: 360nm



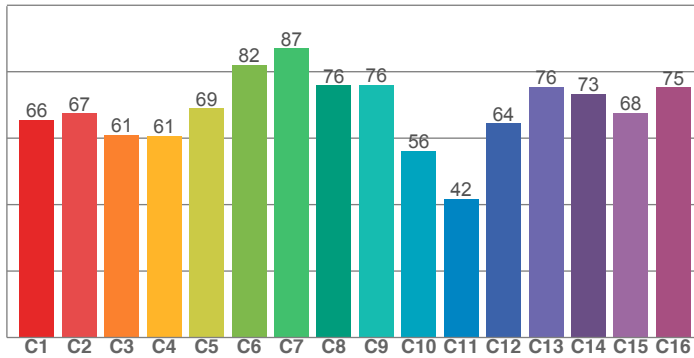
Power



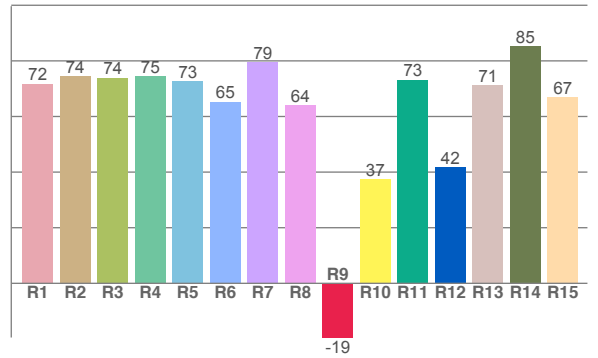
Color Details



TM30: 68.2



CRI: 72.0 (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
71.7	74.4	73.9	74.6	72.7	65.3	79.4	64.1	-19.5	37.3	73.2	41.8	71.3	85.2	67.0

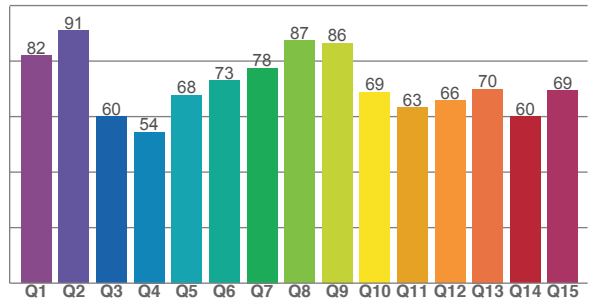
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
65.5	67.5	61.0	60.8	69.0	82.1	87.0	75.9	76.1	56.3	41.8	64.5	75.5	73.4	67.6	75.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.9	91.1	60.0	54.4	67.8	73.0	77.6	87.3	86.5	68.8	63.3	65.8	69.9	60.0	69.4

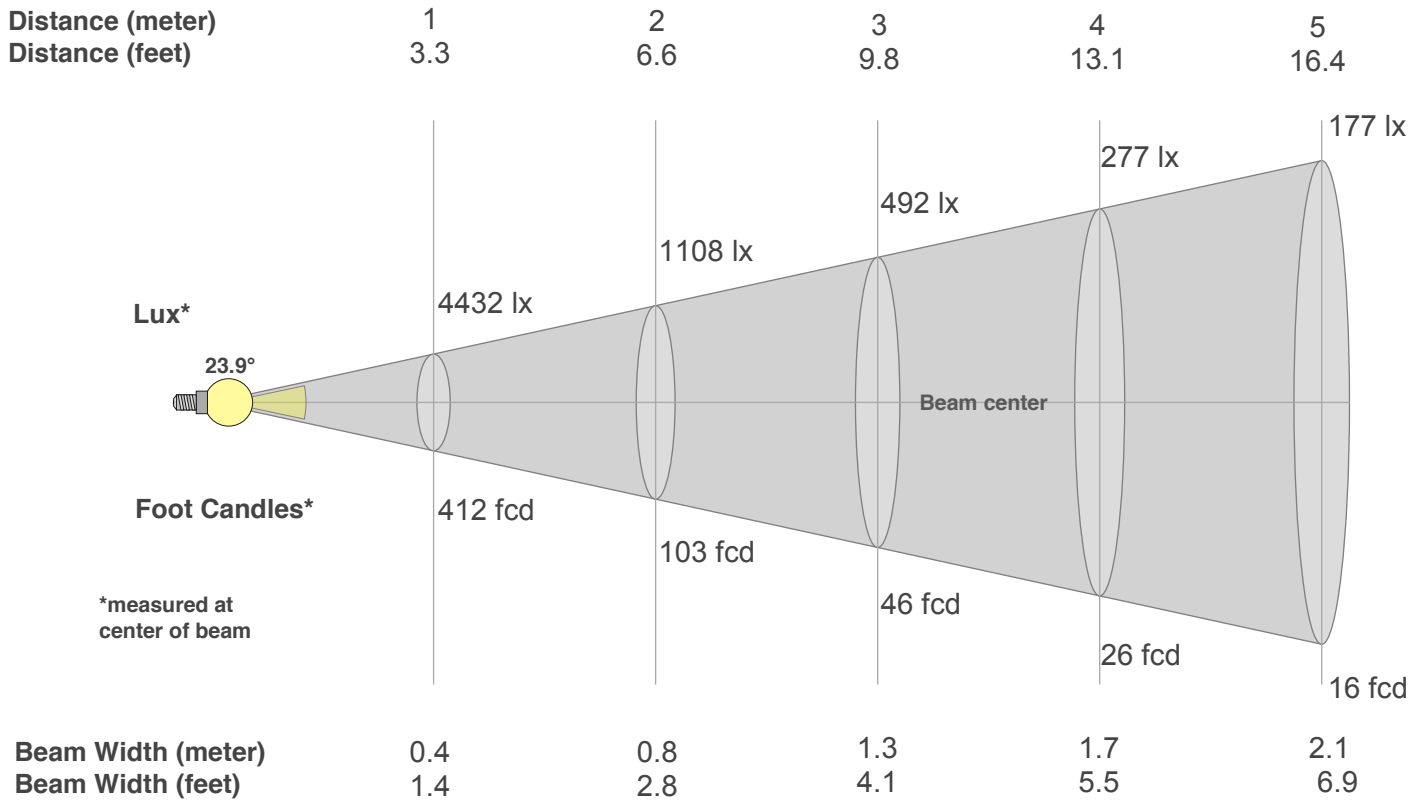
CQS: 69.9



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
6695 K	72.0	-19.5	68.2	95.7	69.9	0.311	0.322	0.199	0.309	0.0025

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	4432	1108	492	277	177	123	90	69	55	44	37	31	26	23	20	17	15	14	12	11
fcd	411.7	102.9	45.7	25.7	16.5	11.4	8.4	6.4	5.1	4.1	3.4	2.9	2.4	2.1	1.8	1.6	1.4	1.3	1.1	1

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°
4432	4361	4093	3699	3252	2745	2198	1645	1177	832	570	361	223	144	92	61	41	32	26	20
100%	98%	92%	83%	73%	62%	50%	37%	27%	19%	13%	8%	5%	3%	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°
4432	4361	4093	3699	3252	2745	2198	1645	1177	832	570	361	223	144	92	61	41	32	26	20
100%	98%	92%	83%	73%	62%	50%	37%	27%	19%	13%	8%	5%	3%	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°
4432	4367	4137	3707	3238	2732	2200	1706	1249	872	588	387	249	158	100	64	41	32	26	19
100%	99%	93%	84%	73%	62%	50%	38%	28%	20%	13%	9%	6%	4%	2%	1%	1%	1%	1%	0%

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°
4432	4367	4137	3707	3238	2732	2200	1706	1249	872	588	387	249	158	100	64	41	32	26	19
100%	99%	93%	84%	73%	62%	50%	38%	28%	20%	13%	9%	6%	4%	2%	1%	1%	1%	1%	0%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
23.9°	42.5°	54.7°	98.7%	97.9%

[illegible]