

Light efficiency:

81 Lumen/Watt

Light quality:

CRI: 82.8

Color temperature:

3014 K

Output: 11015 lm

Peak: 21239 cd

Power: 136 W

PF: 1.0

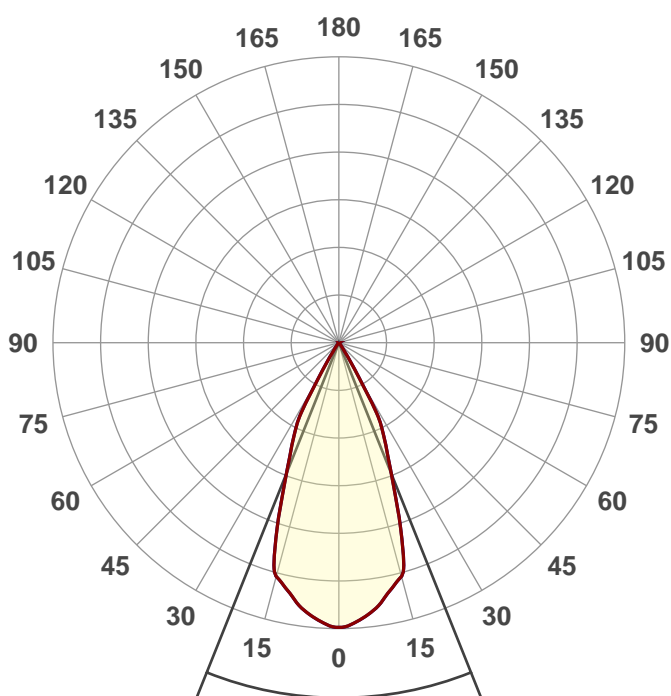


Product name:

680XK-9-CXB-110LM-30K-80-  
SA50-10V-MC-S-A16

Date and time:

5/25/2018 10:28:34 AM



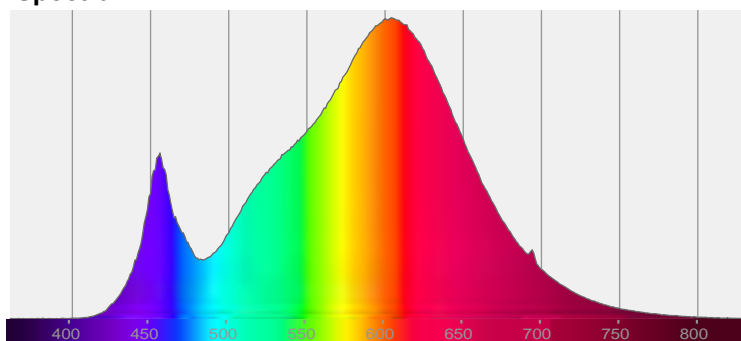
Beam angle

43.7°

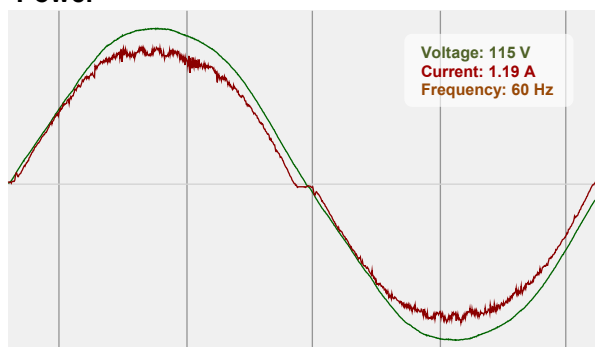


CIE 1931  
x: 0.436  
y: 0.404

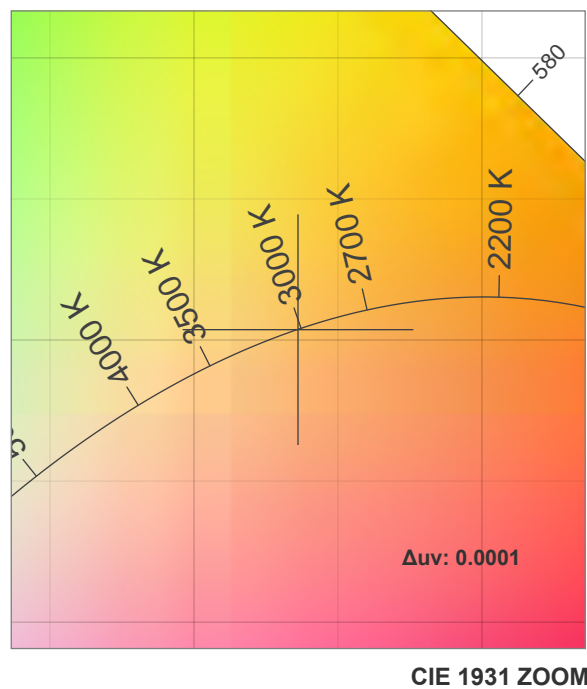
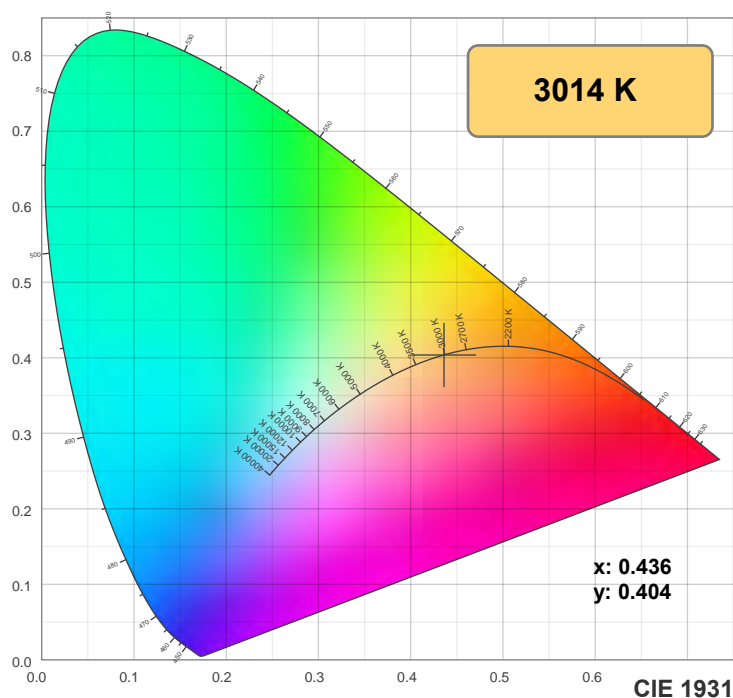
Spectra



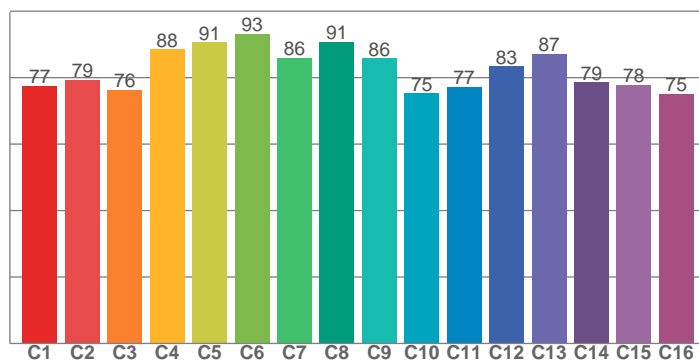
Power



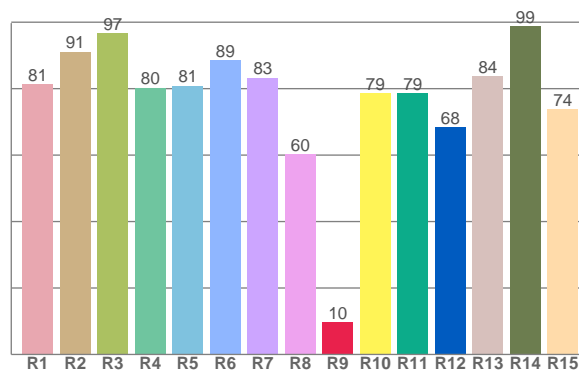
## Color details



TM30: 82.6



CRI: 82.8 (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
81.4	91.1	96.8	80.3	80.8	88.6	83.3	60.3	9.7	78.6	78.7	68.4	83.8	98.8	73.9

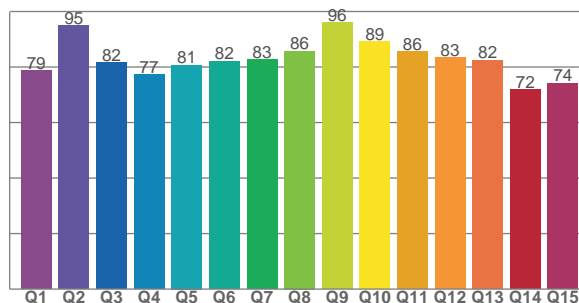
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77.5	79.3	76.4	88.5	90.7	93.1	86.0	90.7	85.8	75.3	77.3	83.3	87.1	78.6	77.8	75.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
78.6	95.0	81.6	77.3	80.7	82.1	82.7	85.7	95.9	89.1	85.6	83.4	82.5	71.9	74.2

CQS: 81.8



## 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
3014 K	82.8	9.7	82.6	95.2	81.8	0.436	0.404	0.250	0.347	0.0001

## TM30 details

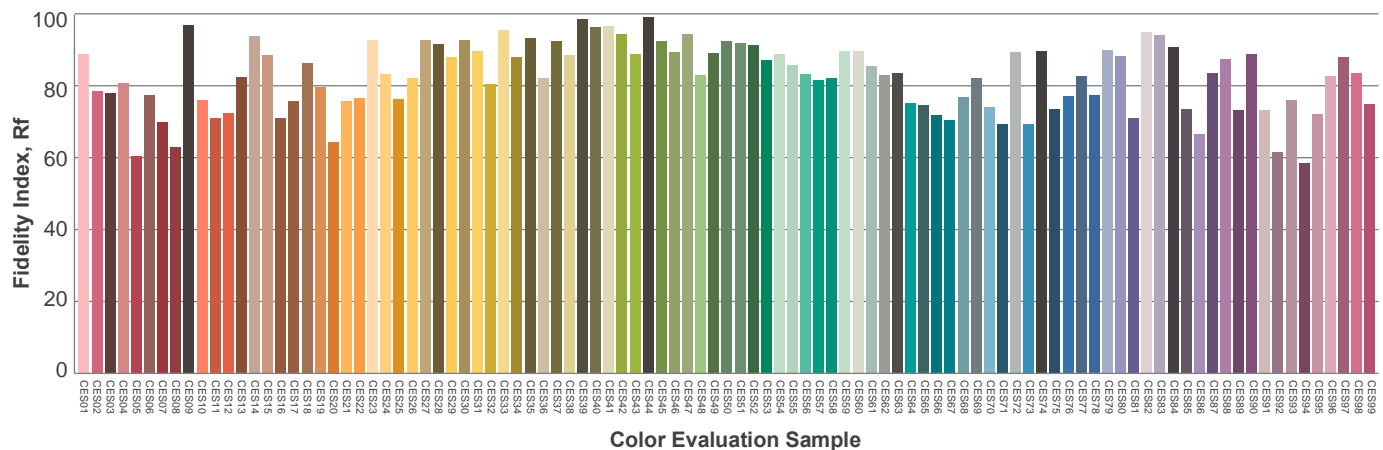
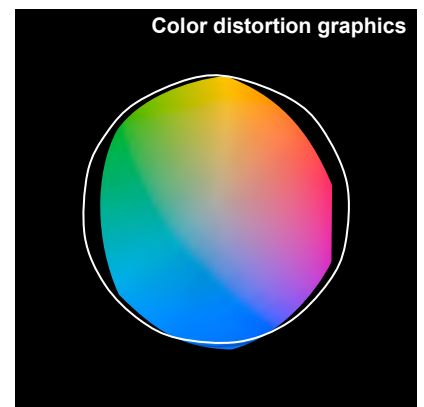
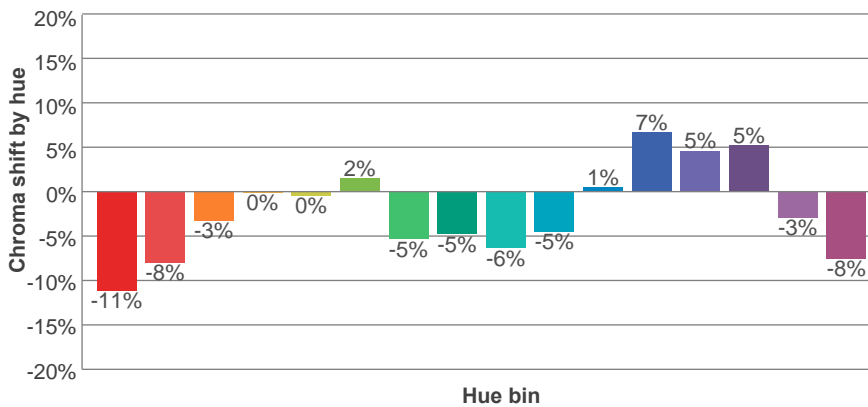
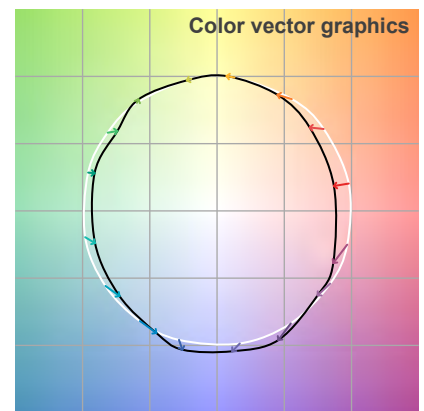
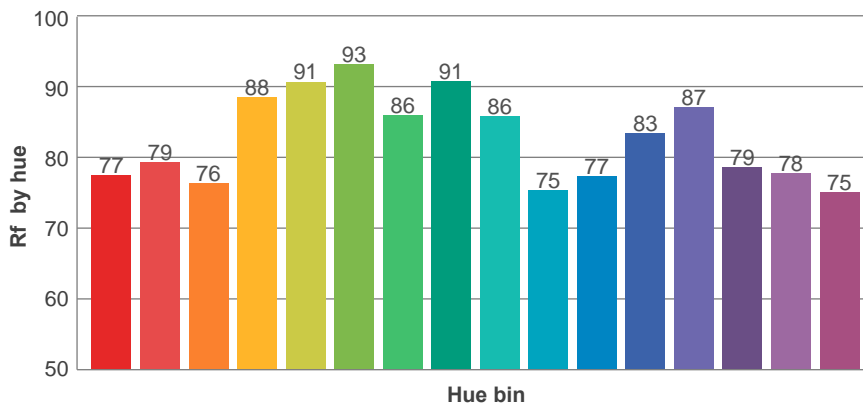
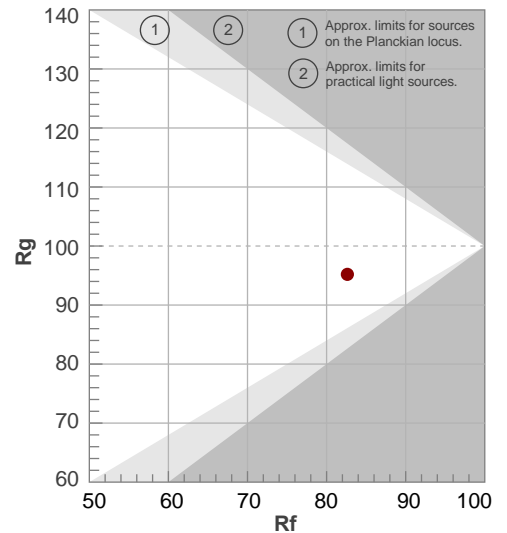
**Rf 82.6**

Fidelity index Rf

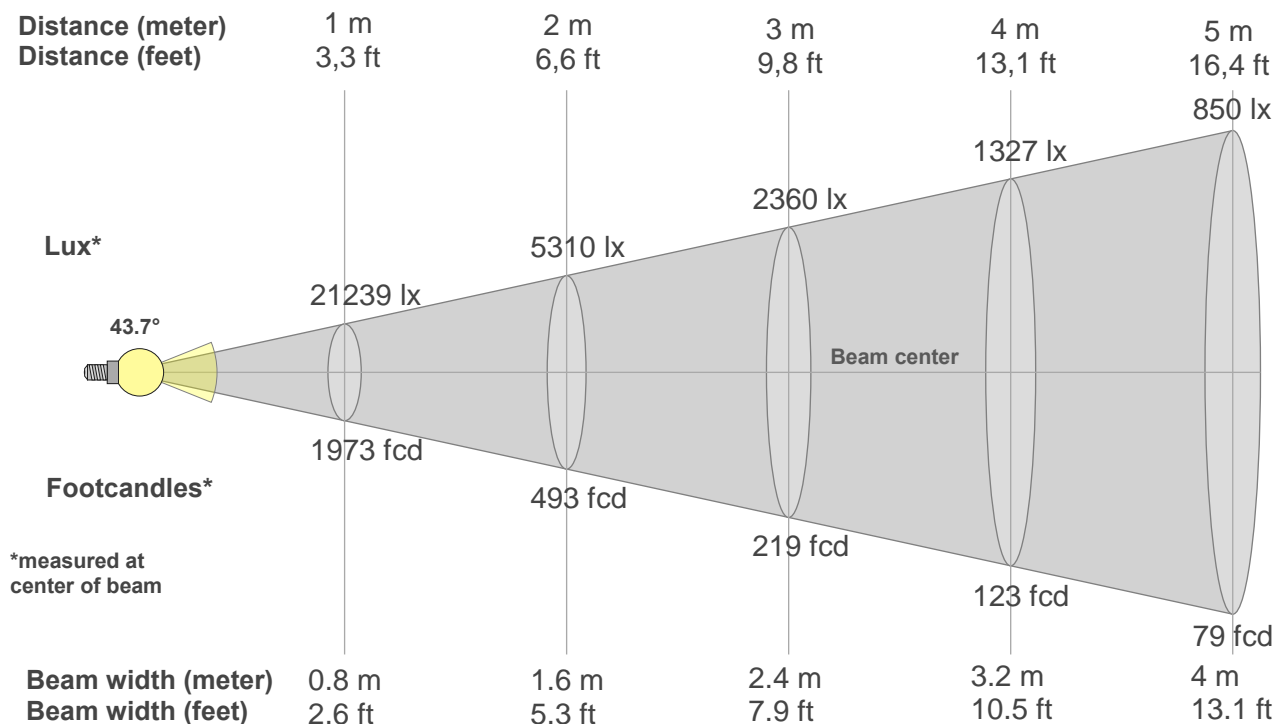
**Rg 95.2**

Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	77	-11%	0%
2	79	-8%	7%
3	76	-3%	11%
4	88	0%	6%
5	91	0%	4%
6	93	2%	-2%
7	86	-5%	-5%
8	91	-5%	-1%
9	86	-6%	6%
10	75	-5%	12%
11	77	1%	15%
12	83	7%	4%
13	87	5%	-7%
14	79	5%	-15%
15	78	-3%	-12%
16	75	-8%	-15%



## Beam details



### Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
21239lx	5310lx	2360lx	1327lx	850lx	590lx	433lx	332lx	262lx	212lx	176lx	147lx	126lx	108lx	94lx	83lx	73lx	66lx	59lx	53lx
1973.2fcd	493.3fcd	219.2fcd	123.3fcd	78.9fcd	54.8fcd	40.3fcd	30.8fcd	24.4fcd	19.7fcd	16.3fcd	13.7fcd	11.7fcd	10.1fcd	8.8fcd	7.7fcd	6.8fcd	6.1fcd	5.5fcd	4.9fcd

### 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°
21.2K	21.1K	20.8K	20.5K	20.0K	19.4K	18.8K	18.3K	17.6K	15.1K	12.6K	10.5K	8.8K	7.5K	6.1K	3.4K	1.5K	0.6K	0.3K	0.2K
100%	99%	98%	96%	94%	91%	89%	86%	83%	71%	59%	49%	42%	35%	29%	16%	7%	3%	2%	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°
21.2K	21.1K	20.8K	20.5K	20.0K	19.4K	18.8K	18.3K	17.6K	15.1K	12.6K	10.5K	8.8K	7.5K	6.1K	3.4K	1.5K	0.6K	0.3K	0.2K
100%	99%	98%	96%	94%	91%	89%	86%	83%	71%	59%	49%	42%	35%	29%	16%	7%	3%	2%	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°
21.2K	21.1K	20.8K	20.5K	20.0K	19.4K	18.8K	18.3K	17.6K	15.1K	12.6K	10.5K	8.8K	7.5K	6.1K	3.4K	1.5K	0.6K	0.3K	0.2K
100%	99%	98%	96%	94%	91%	89%	86%	83%	71%	59%	49%	42%	35%	29%	16%	7%	3%	2%	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°
21.2K	21.1K	20.8K	20.5K	20.0K	19.4K	18.8K	18.3K	17.6K	15.1K	12.6K	10.5K	8.8K	7.5K	6.1K	3.4K	1.5K	0.6K	0.3K	0.2K
100%	99%	98%	96%	94%	91%	89%	86%	83%	71%	59%	49%	42%	35%	29%	16%	7%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
43.7°	62.1°	69.2°	99.0%	98.6%