

Light efficiency:

**43 Lumen/Watt**

Light quality:

**CRI: 83.4**

Color temperature:

**2958 K**

**Output: 839 lm**

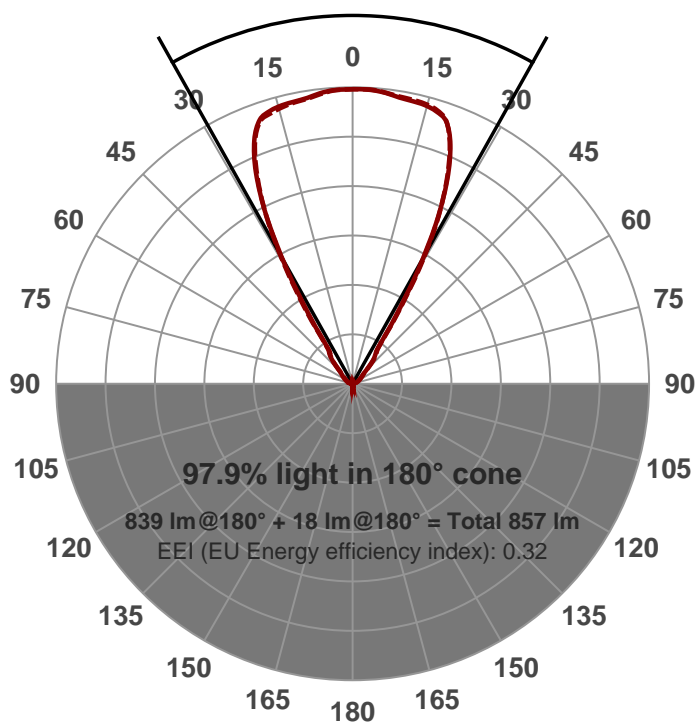
**Peak: 879 cd**

**Power: 19.4 W**

**PF: 0.99**

Beam angle

**58.5°**



Product name:

**680-3-XTM19-20LM-30K-83-bl**

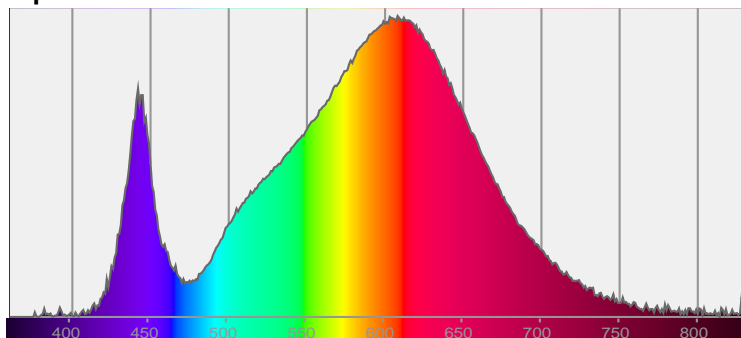
Date and time:

**9/26/2016 2:50:28 PM**

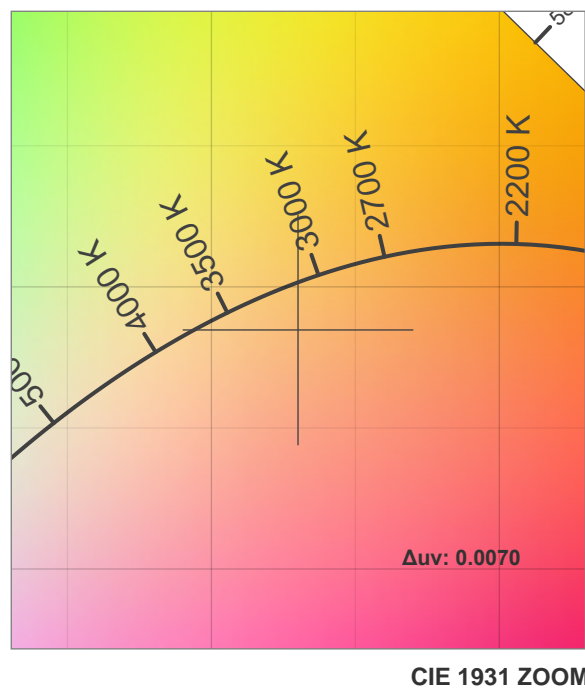
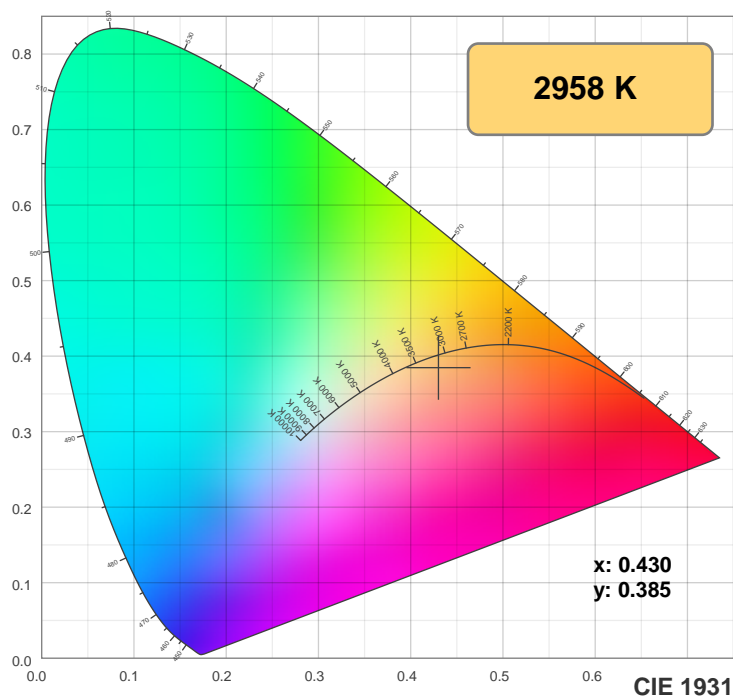


CIE 1931  
x: 0.430  
y: 0.385

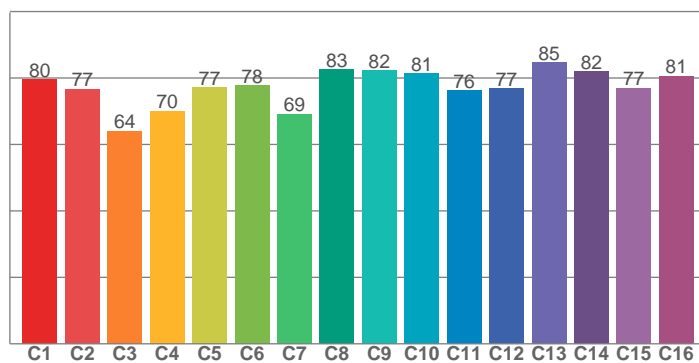
Spectra



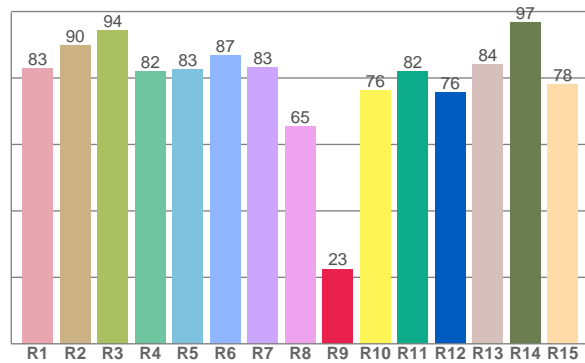
## Color Details



**TM30: 77.2**



**CRI: 83.4 (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
82.9	89.8	94.4	82.1	82.7	86.8	83.3	65.4	22.6	76.3	81.9	75.6	84.2	96.6	78.0

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
79.6	76.7	64.1	70.1	77.1	77.8	69.1	82.6	82.2	81.4	76.3	76.8	84.6	82.0	77.0	80.6

## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	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	x	y	u	v	Δuv
2958 K	83.4	22.6	77.2	102.9	0.430	0.385	0.255	0.342	0.0070

## TM30 Details

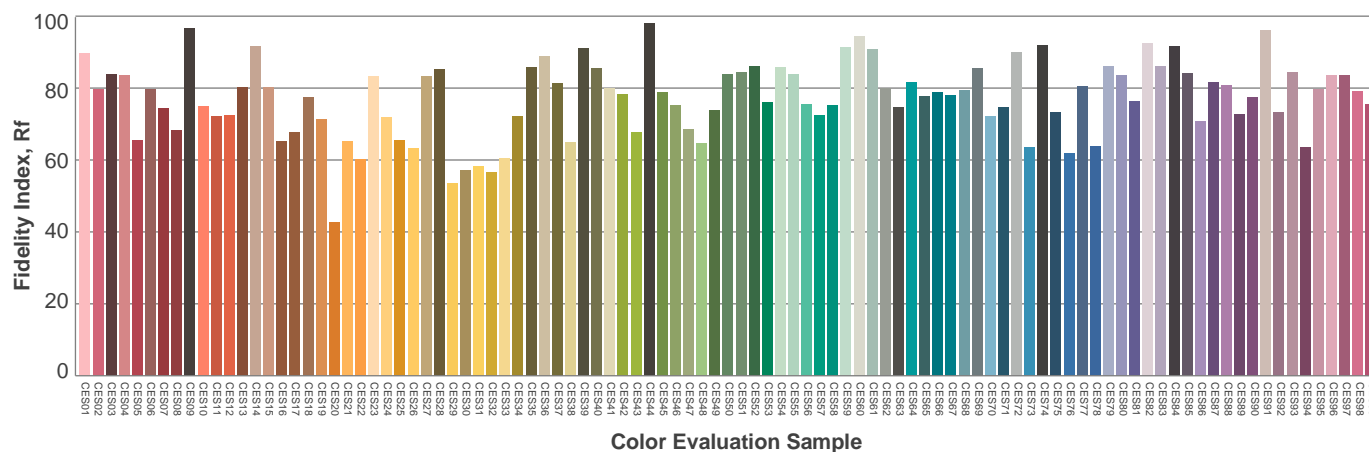
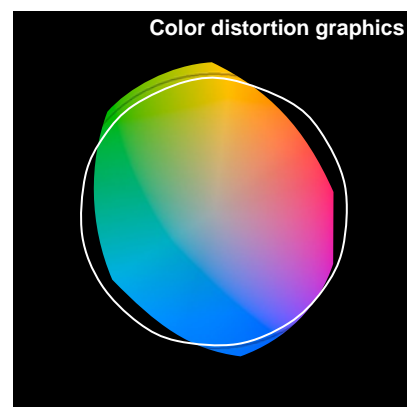
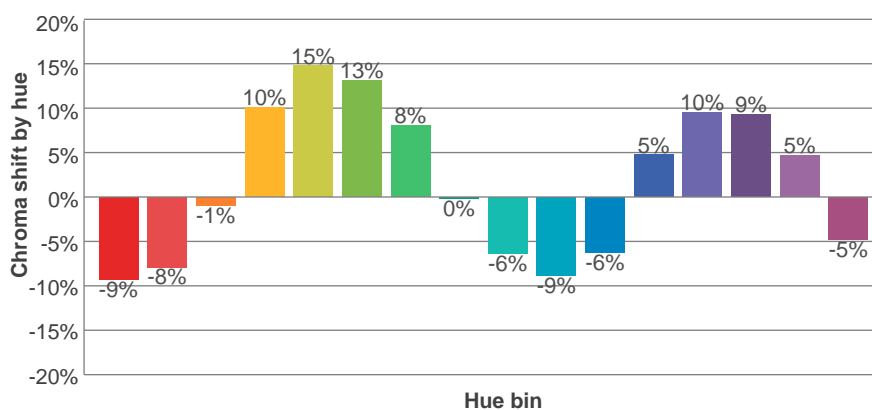
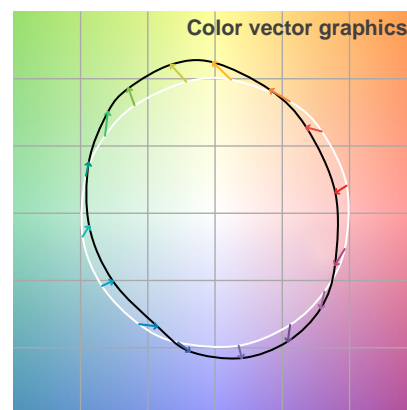
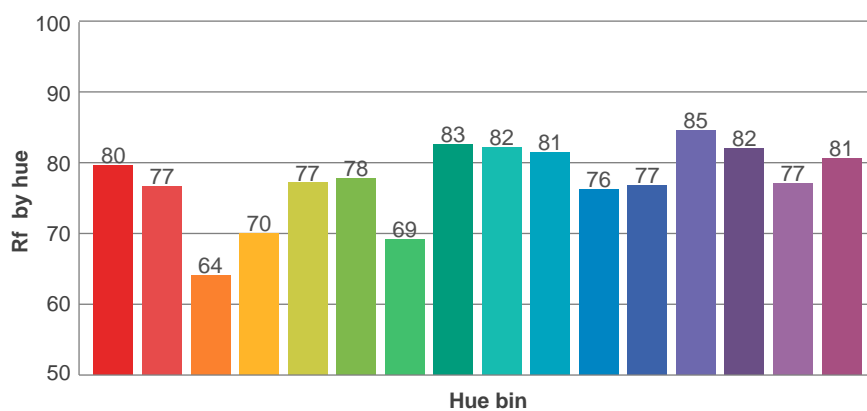
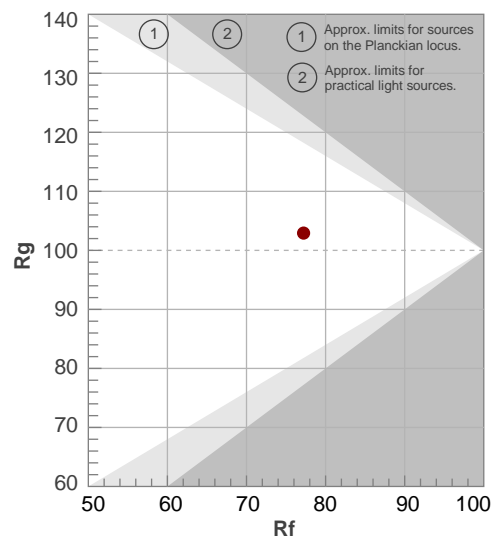
**Rf 77.2**

Fidelity index Rf

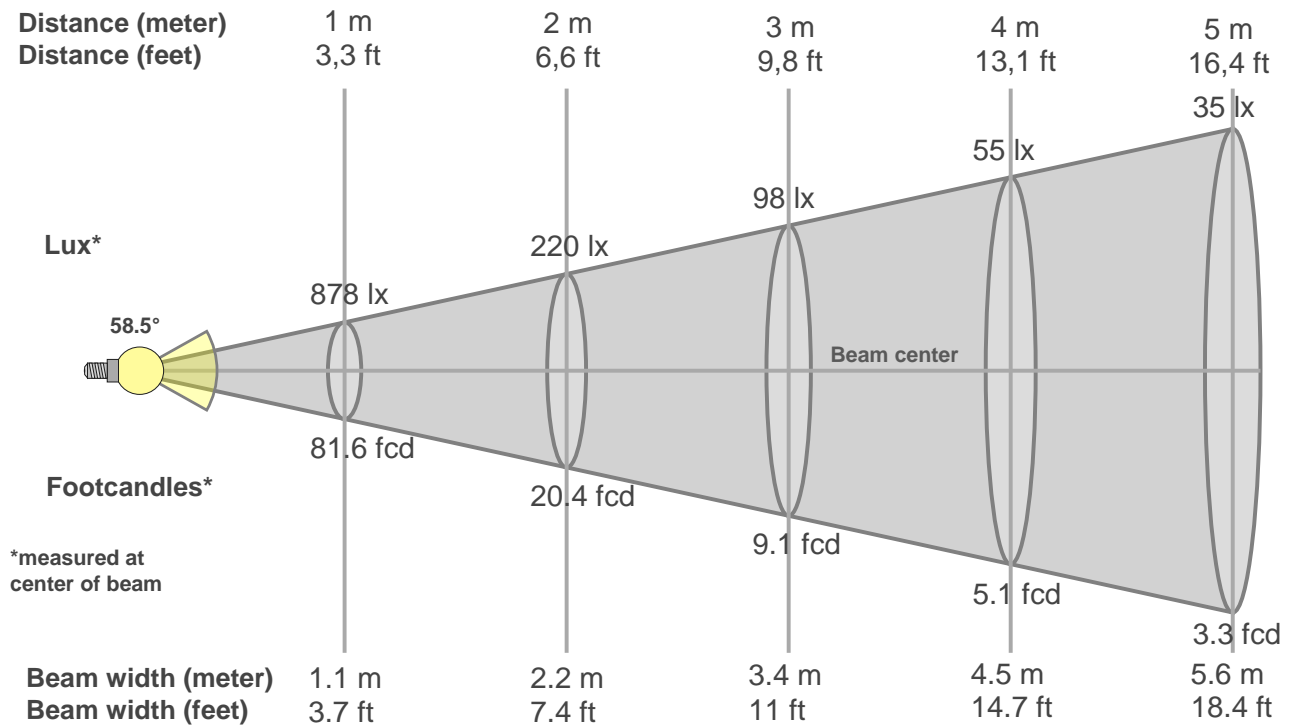
**Rg 102.9**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	80	-9%	-4%
2	77	-8%	9%
3	64	-1%	17%
4	70	10%	16%
5	77	15%	9%
6	78	13%	-3%
7	69	8%	-16%
8	83	0%	-10%
9	82	-6%	-7%
10	81	-9%	1%
11	76	-6%	12%
12	77	5%	10%
13	85	10%	1%
14	82	9%	-8%
15	77	5%	-12%
16	81	-5%	-13%



## 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
878lx	220lx	98lx	55lx	35lx	24lx	18lx	14lx	11lx	9lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx
81.6fcd	20.4fcd	9.1fcd	5.1fcd	3.3fcd	2.3fcd	1.7fcd	1.3fcd	1fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd

### 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°
878	878	877	873	866	862	859	857	852	843	822	782	713	622	512	386	264	170	121	111
100%	100%	100%	99%	99%	98%	98%	98%	97%	96%	94%	89%	81%	71%	58%	44%	30%	19%	14%	13%

### 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°
878	877	876	870	864	859	856	851	845	837	818	777	705	619	517	401	285	182	123	107
100%	100%	100%	99%	98%	98%	97%	97%	96%	95%	93%	88%	80%	70%	59%	46%	32%	21%	14%	12%

### 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°
878	878	877	874	868	864	861	859	853	843	822	776	704	614	509	388	273	182	126	110
100%	100%	100%	99%	99%	98%	98%	98%	97%	96%	94%	88%	80%	70%	58%	44%	31%	21%	14%	13%

### 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°
878	879	878	875	871	867	866	863	858	846	823	772	700	614	516	402	285	191	132	115
100%	100%	100%	100%	99%	99%	99%	98%	98%	96%	94%	88%	80%	70%	59%	46%	32%	22%	15%	13%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
58.5°	83°	124.2°	93.9%	88.4%