

Light efficiency:

86 Lumen/Watt

Light quality:

CRI: 81.7

Color temperature:

2963 K

Output: 1690 lm

Peak: 7508 cd

Power: 19.7 W

PF: 0.99



Beam angle

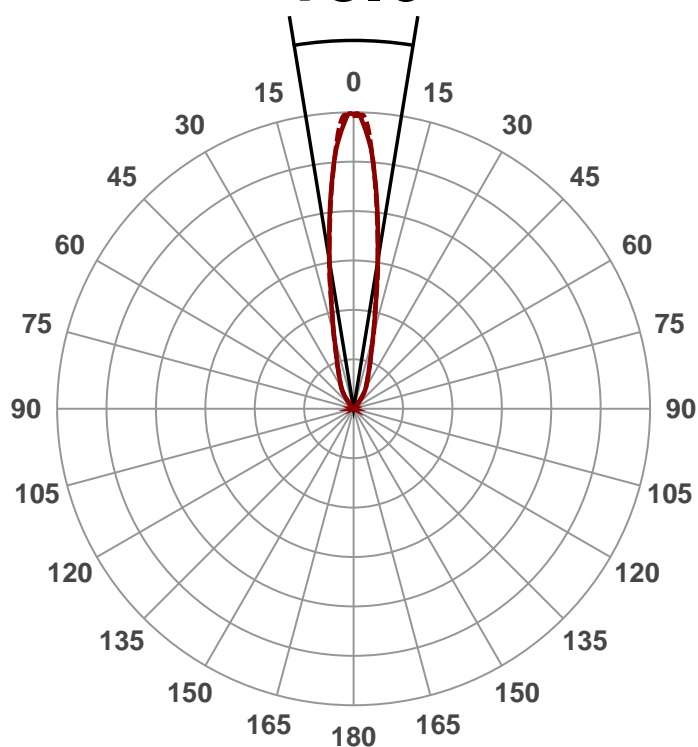
18.6°

Product name:

731-3-XTM19-20LM-30K-83-SA20

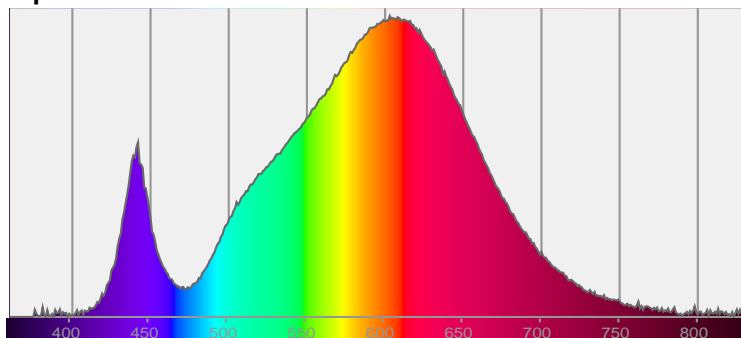
Date and time:

11/29/2016 10:27:12 AM

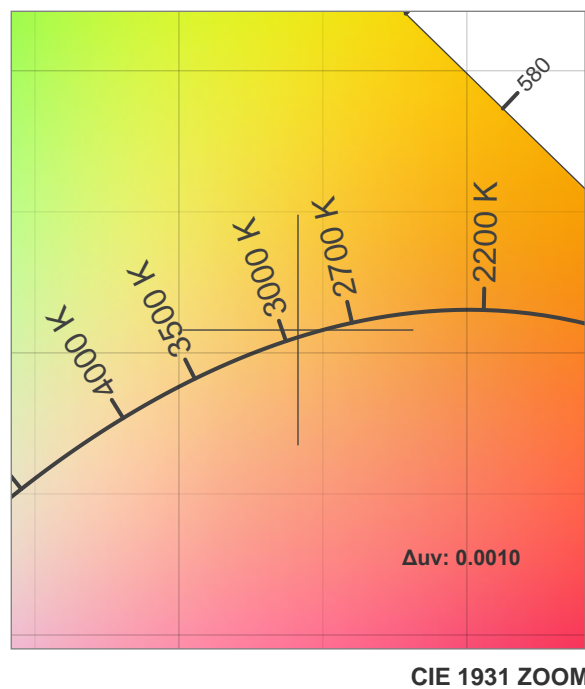
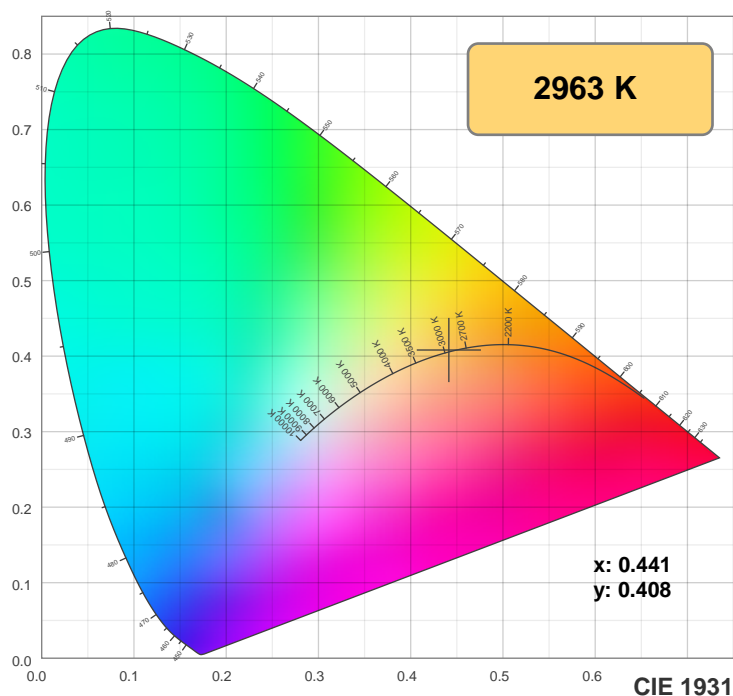


CIE 1931  
x: 0.441  
y: 0.408

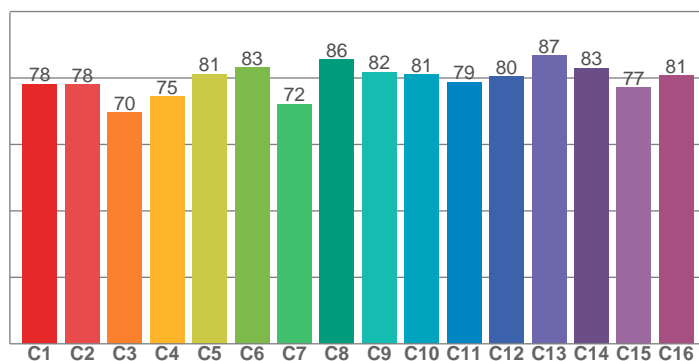
Spectra



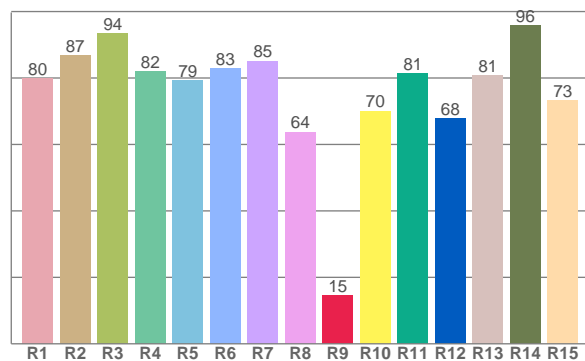
## Color details



**TM30: 79.3**



**CRI: 81.7 (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
79.9	86.8	93.5	82.0	79.4	83.0	85.2	63.8	14.5	70.1	81.3	67.8	80.8	96.0	73.2

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
78.1	78.1	69.7	74.5	81.3	83.2	72.1	85.5	81.8	81.1	78.8	80.5	86.7	83.0	77.1	80.7

## 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
2963 K	81.7	14.5	79.3	99.7	0.441	0.408	0.252	0.349	0.0010

## TM30 details

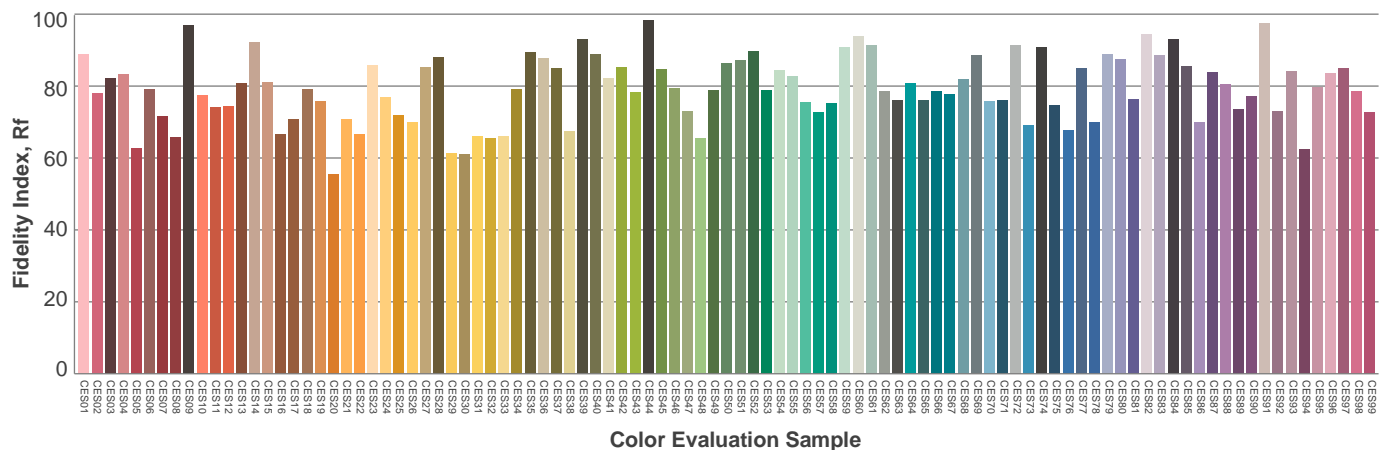
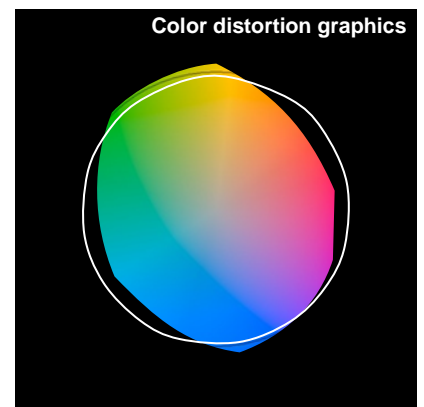
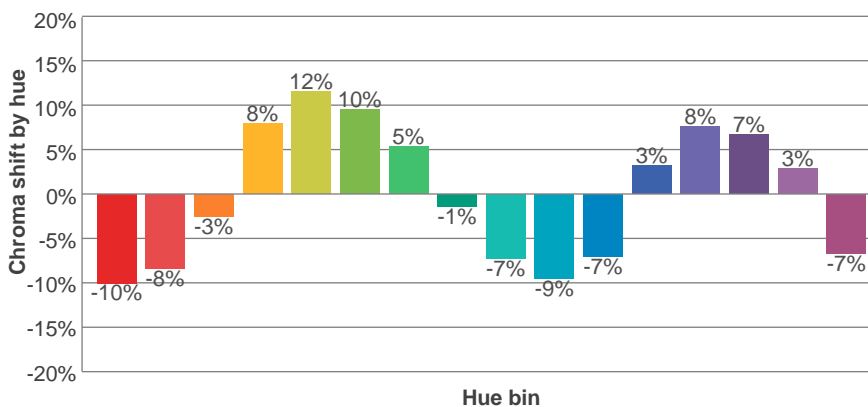
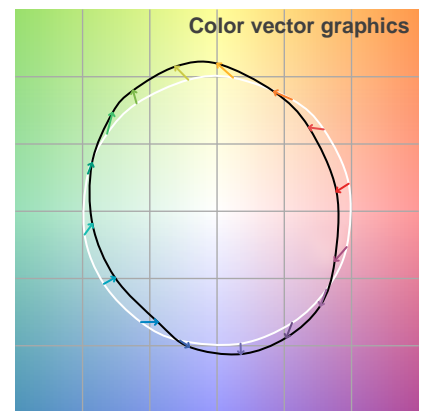
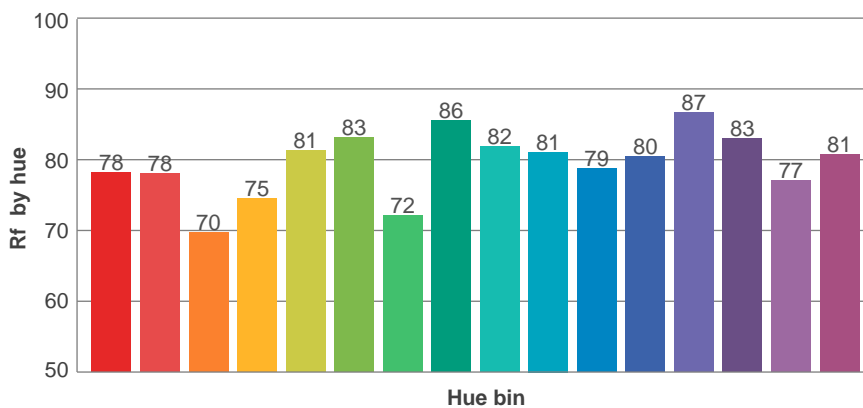
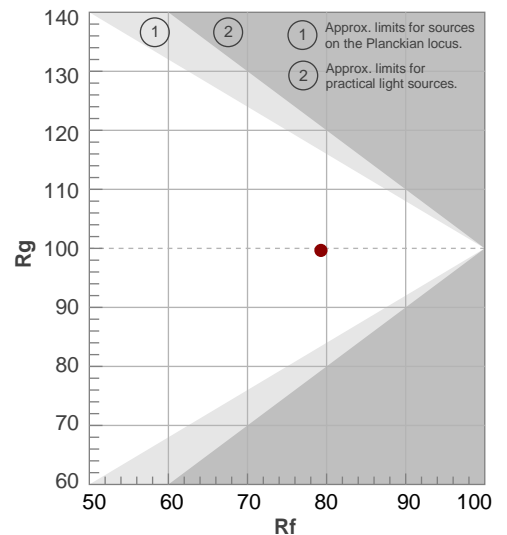
**Rf 79.3**

Fidelity index Rf

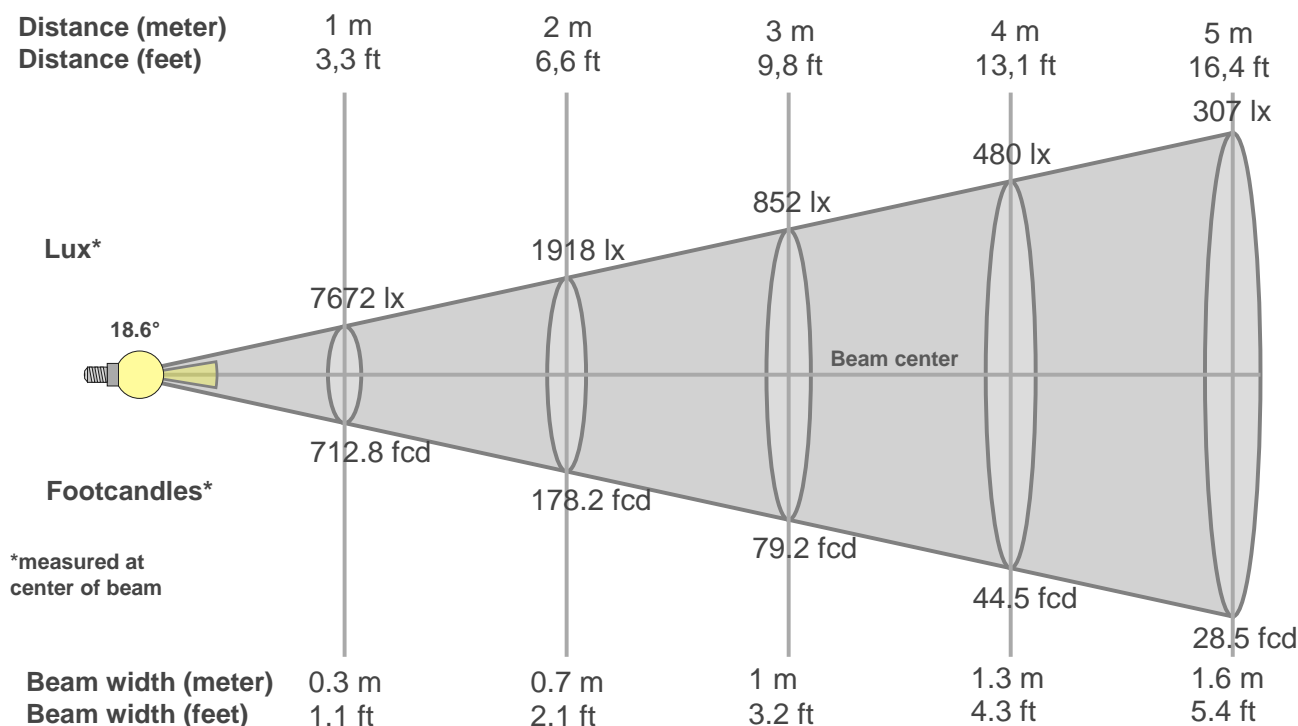
**Rg 99.7**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	78	-10%	-4%
2	78	-8%	7%
3	70	-3%	14%
4	75	8%	13%
5	81	12%	8%
6	83	10%	-3%
7	72	5%	-15%
8	86	-1%	-8%
9	82	-7%	-7%
10	81	-9%	1%
11	79	-7%	10%
12	80	3%	8%
13	87	8%	-1%
14	83	7%	-10%
15	77	3%	-12%
16	81	-7%	-12%



## 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
7672lx	1918lx	852lx	480lx	307lx	213lx	157lx	120lx	95lx	77lx	63lx	53lx	45lx	39lx	34lx	30lx	27lx	24lx	21lx	19lx
712.8fcd	178.2fcd	79.2fcd	44.5fcd	28.5fcd	19.8fcd	14.5fcd	11.1fcd	8.8fcd	7.1fcd	5.9fcd	4.9fcd	4.2fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.2fcd	2fcd	1.8fcd

### 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°
7672	7405	6706	5651	4544	3568	2787	2182	1753	1463	1235	1058	916	806	719	638	550	451	343	237
100%	97%	87%	74%	59%	47%	36%	28%	23%	19%	16%	14%	12%	11%	9%	8%	7%	6%	4%	3%

### 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°
7672	7672	6768	5625	4544	3640	2751	2235	1798	1459	1254	1056	930	815	719	641	559	452	342	240
100%	100%	88%	73%	59%	47%	36%	29%	23%	19%	16%	14%	12%	11%	9%	8%	7%	6%	4%	3%

### 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°
7672	7405	6706	5651	4544	3568	2787	2182	1753	1463	1235	1058	916	806	719	638	550	451	343	237
100%	97%	87%	74%	59%	47%	36%	28%	23%	19%	16%	14%	12%	11%	9%	8%	7%	6%	4%	3%

### 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°
7672	7672	6768	5625	4544	3640	2751	2235	1798	1459	1254	1056	930	815	719	641	559	452	342	240
100%	100%	88%	73%	59%	47%	36%	29%	23%	19%	16%	14%	12%	11%	9%	8%	7%	6%	4%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
18.6°	53.2°	77.6°	99.4%	99.0%