

**Light efficiency:**

**38 Lumen/Watt**

**Light quality:**

**CRI: 83.1**

**Color temperature:**

**2977 K**

**Output: 490 lm**

**Peak: 1139 cd**

**Power: 12.9 W**

**PF: 0.98**

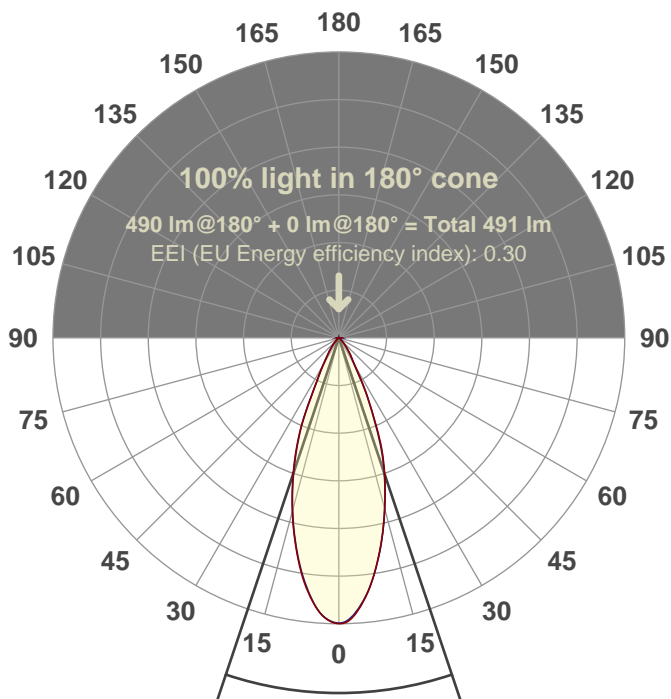


**Product name:**

**137420-XTM19-13LM-30K-83-DA40-120-ELV-MC-900300MC-900310**

**Date and time:**

**3/19/2018 9:47:42 AM**



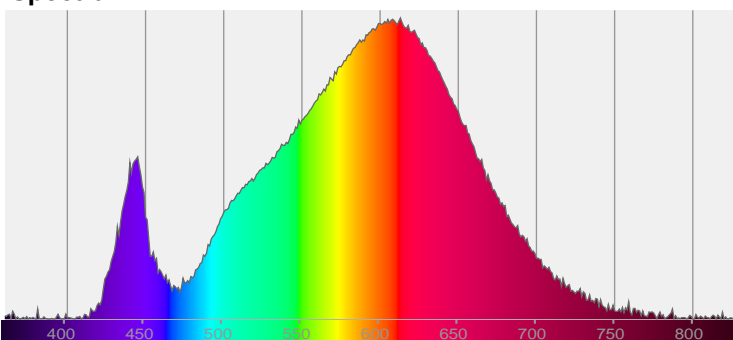
**Beam angle**

**37.1°**

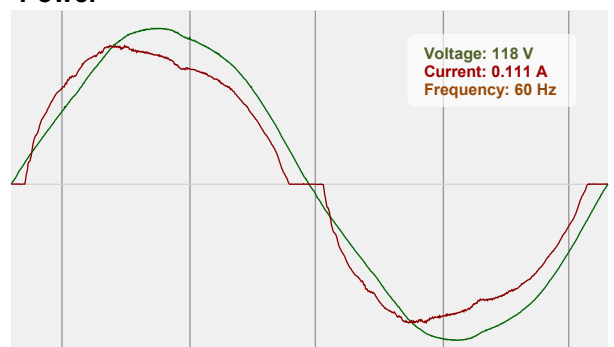


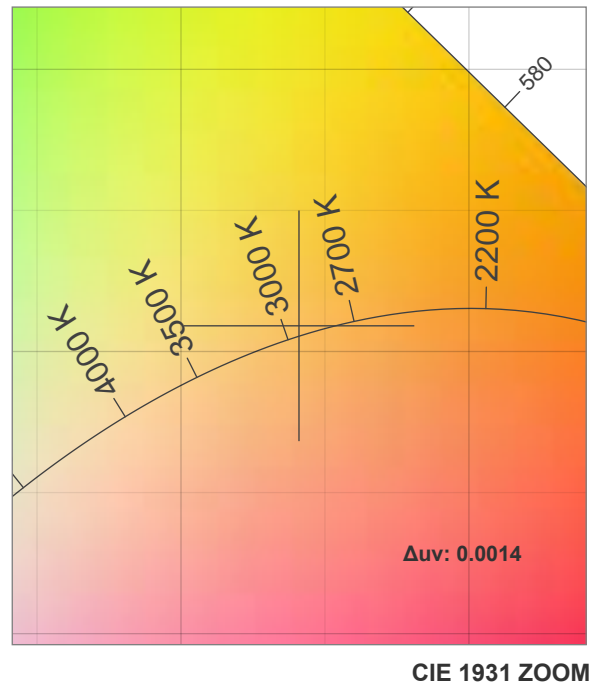
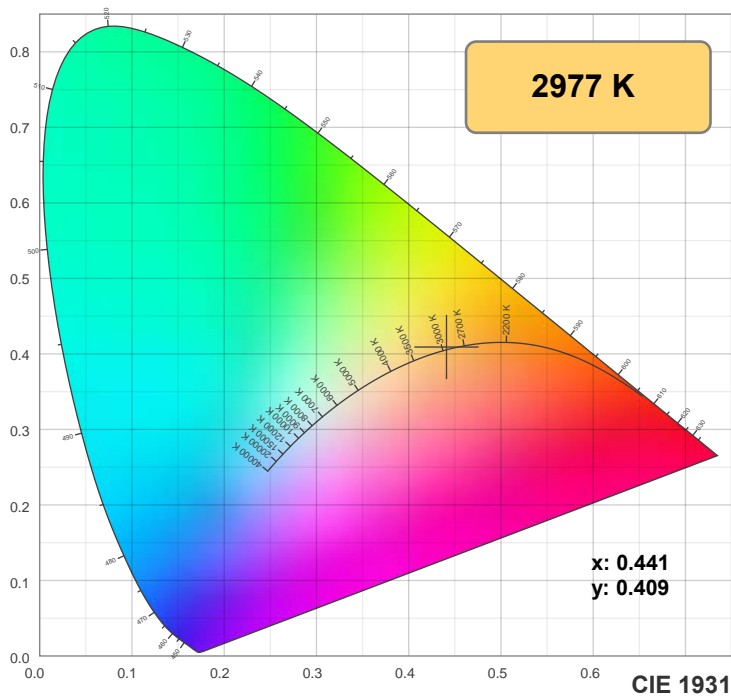
**CIE 1931**  
**x: 0.441**  
**y: 0.409**

**Spectra**

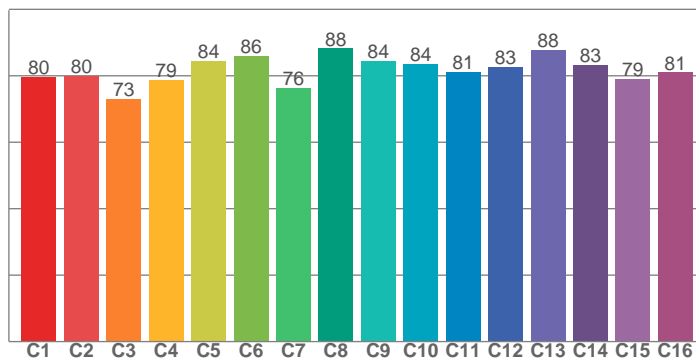


**Power**

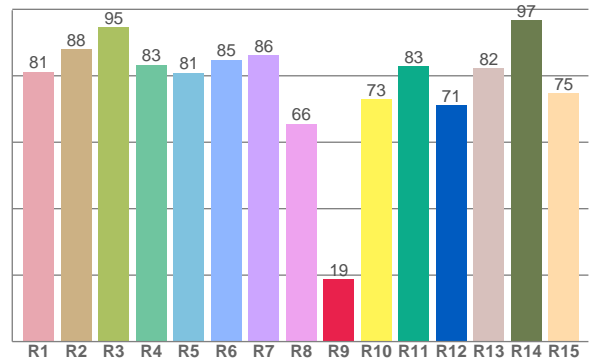




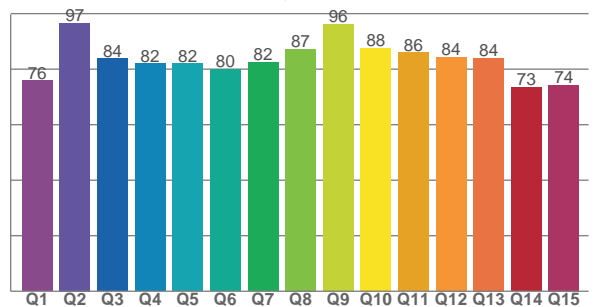
TM30: 81.7



CRI: 83.1 (R1-R8)



CQS: 82.4



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
81.3	88.0	94.7	83.4	81.0	84.8	86.1	65.5	18.8	73.0	82.8	71.1	82.2	96.7	74.7

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
79.6	80.0	73.1	78.7	84.4	86.1	76.3	88.3	84.5	83.6	81.2	82.7	87.8	83.3	79.2	81.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
75.9	96.7	83.8	82.0	82.0	79.9	82.5	87.2	96.3	87.6	85.9	84.4	84.0	73.5	74.3

## 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	$\Delta uv$
2977 K	83.1	18.8	81.7	99.2	82.4	0.441	0.409	0.251	0.349	0.0014

## TM30 Details

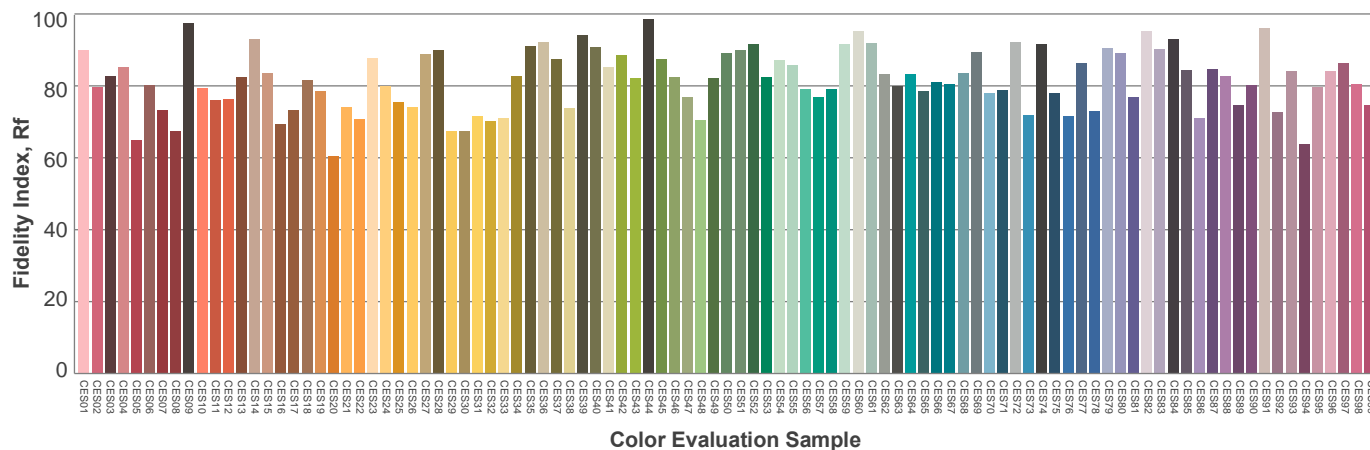
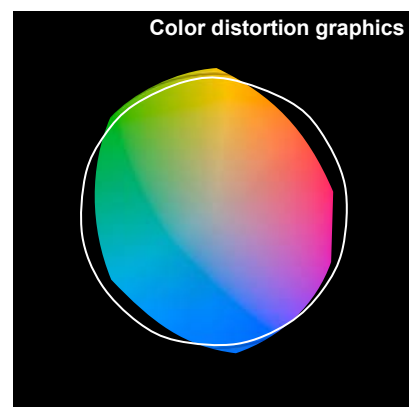
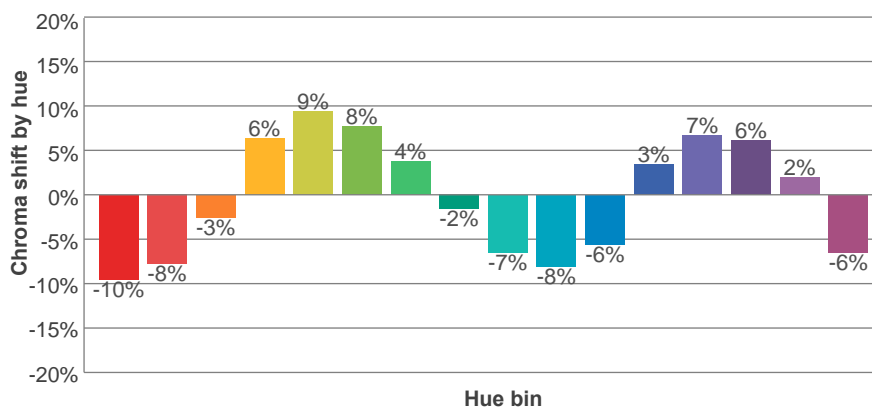
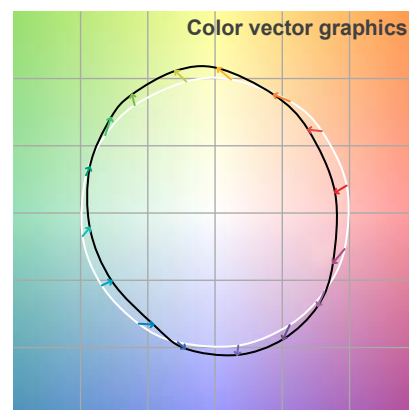
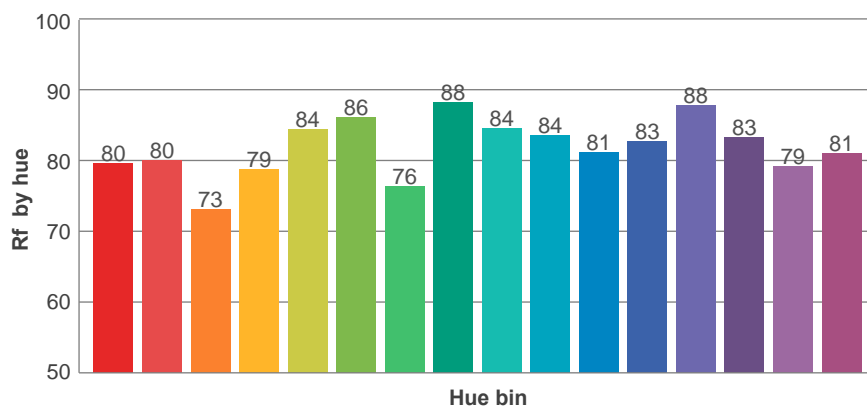
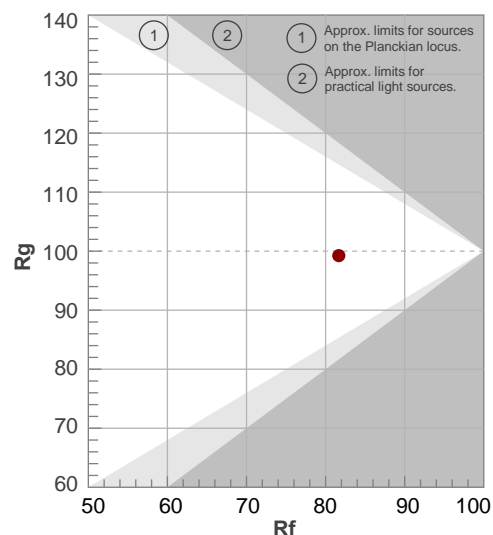
**Rf 81.7**

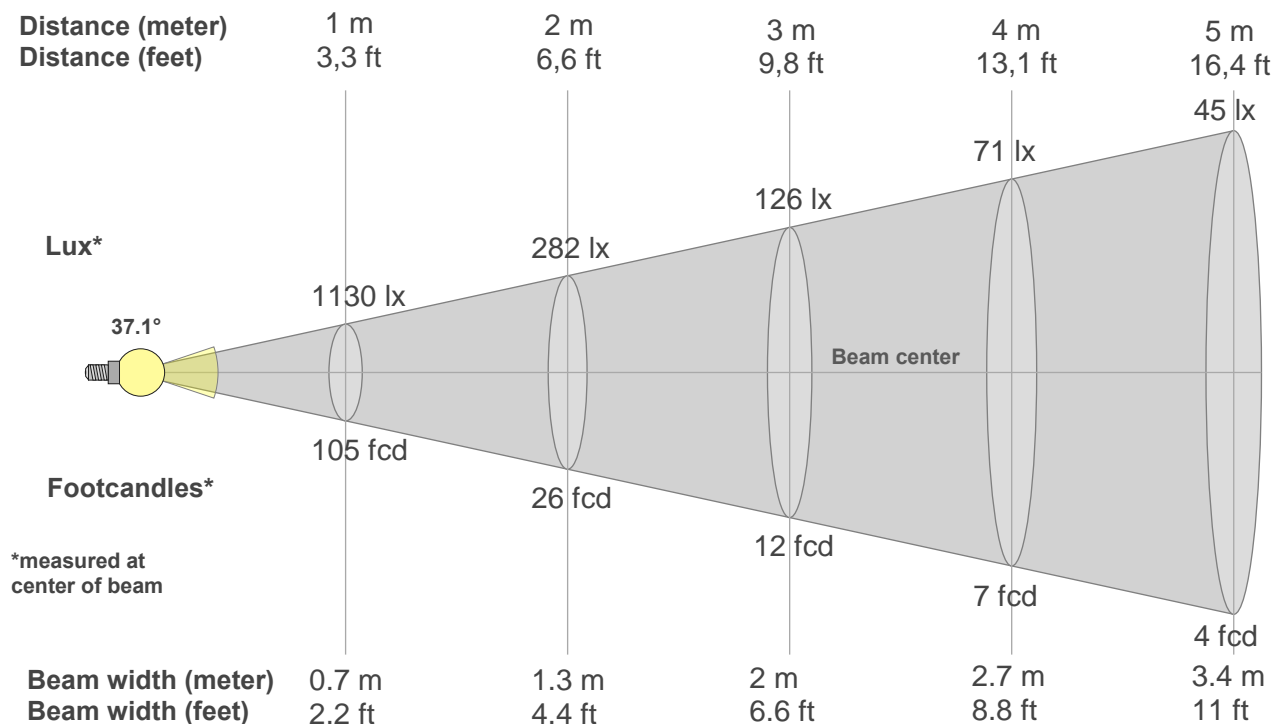
Fidelity index Rf

**Rg 99.2**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	80	-10%	-3%
2	80	-8%	7%
3	73	-3%	13%
4	79	6%	11%
5	84	9%	6%
6	86	8%	-3%
7	76	4%	-13%
8	88	-2%	-7%
9	84	-7%	-5%
10	84	-8%	1%
11	81	-6%	9%
12	83	3%	6%
13	88	7%	-2%
14	83	6%	-10%
15	79	2%	-11%
16	81	-6%	-12%





### 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
1130lx	282lx	126lx	71lx	45lx	31lx	23lx	18lx	14lx	11lx	9lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx
105fcd	26.2fcd	11.7fcd	6.6fcd	4.2fcd	2.9fcd	2.1fcd	1.6fcd	1.3fcd	1fcd	0.9fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd

### 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°
1130	1130	1083	1036	970	898	824	747	670	594	518	436	347	259	199	139	106	87	70	55
100%	100%	96%	92%	86%	79%	73%	66%	59%	53%	46%	39%	31%	23%	18%	12%	9%	8%	6%	5%

### 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°
1130	1120	1079	1037	968	900	826	747	669	590	511	425	336	255	191	126	101	81	63	49
100%	99%	95%	92%	86%	80%	73%	66%	59%	52%	45%	38%	30%	23%	17%	11%	9%	7%	6%	4%

### 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°
1130	1122	1095	1043	990	914	838	759	678	597	513	430	339	245	170	133	96	77	61	46
100%	99%	97%	92%	88%	81%	74%	67%	60%	53%	45%	38%	30%	22%	15%	12%	8%	7%	5%	4%

### 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°
1130	1118	1098	1040	982	910	833	755	673	591	507	423	337	249	164	132	100	78	62	47
100%	99%	97%	92%	87%	81%	74%	67%	60%	52%	45%	37%	30%	22%	15%	12%	9%	7%	6%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37.1°	62°	83°	99.3%	97.8%