

Light efficiency:

37 Lumen/Watt

Light quality:

CRI: 83.5

Color temperature:

2886 K

Output: 1308 lm

Peak: 4117 cd

Power: 35.5 W

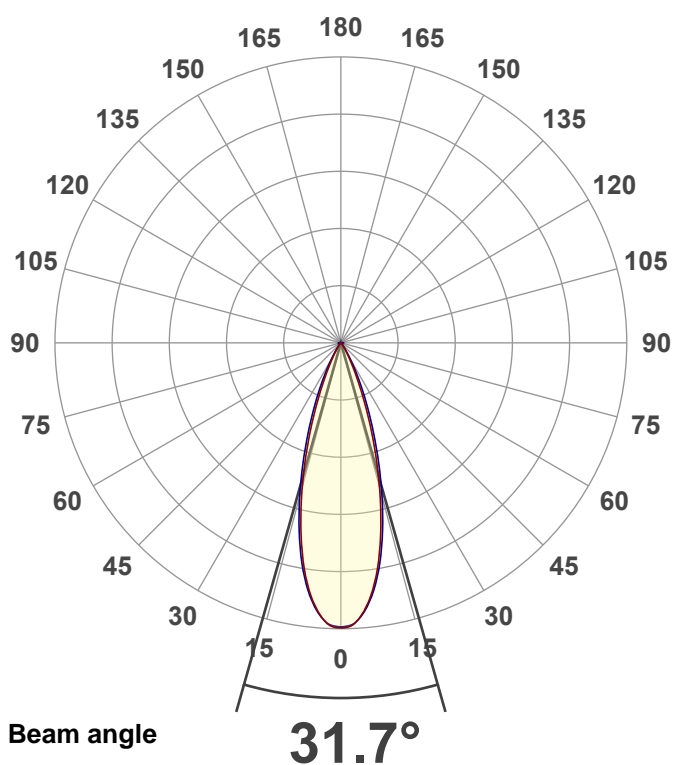
PF: 0.98



NU4-RAPH-XTM09-20LM-30K-83-30D-HET-WH

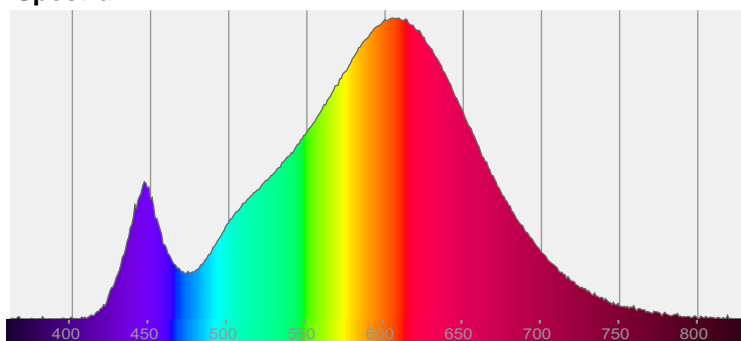
Date and time:

1/4/2022 2:42:29 PM

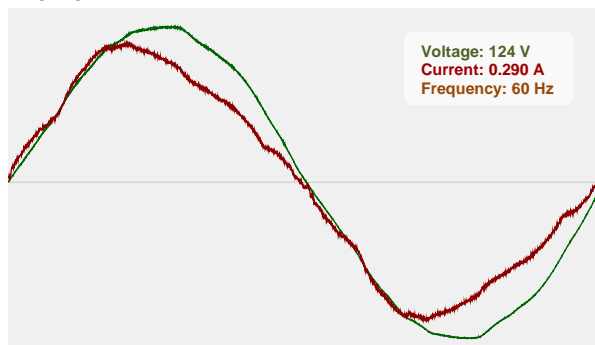


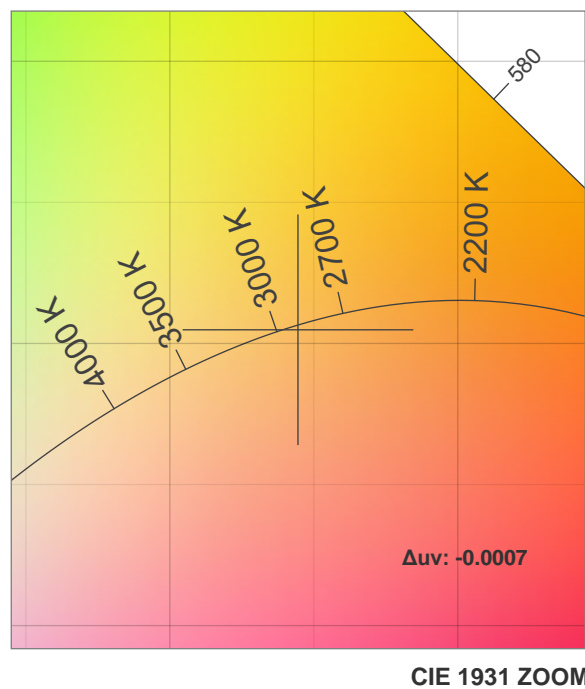
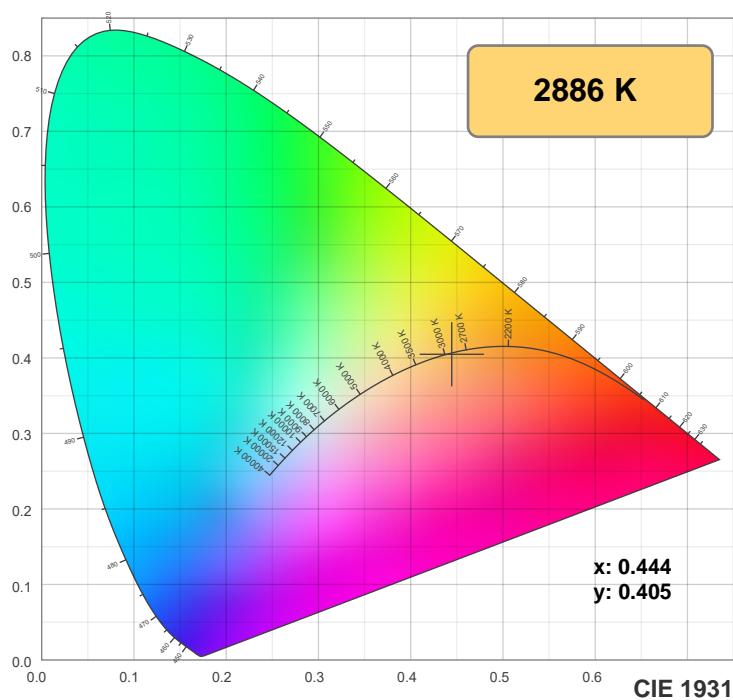
CIE 1931  
x: 0.444  
y: 0.405

Spectra

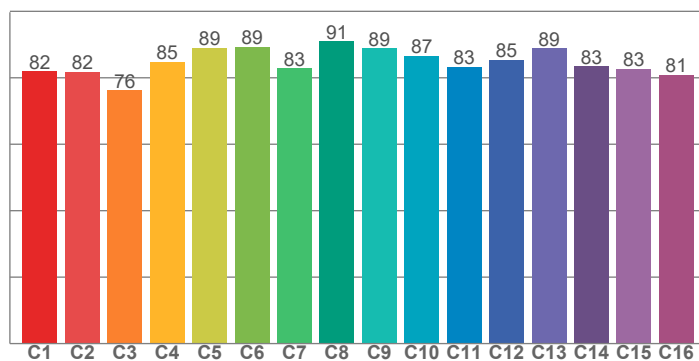


Power

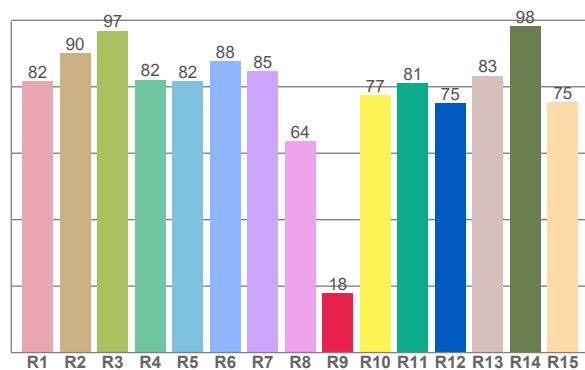




TM30: 84.7



CRI: 83.5 (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
81.7	90.1	96.8	82.1	81.6	87.6	84.8	63.6	17.8	77.5	81.1	75.0	83.3	98.2	75.3

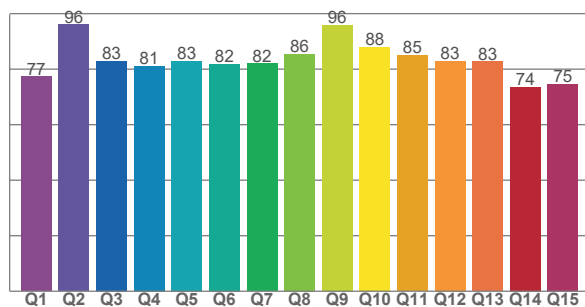
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81.9	81.8	76.2	84.7	89.1	89.4	82.9	90.9	88.8	86.6	83.2	85.3	88.8	83.4	82.7	80.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.3	96.1	83.0	81.1	82.9	81.9	82.0	85.5	95.8	88.0	85.0	83.0	82.7	73.6	74.7

CQS: 82.3



## 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	$\Delta uv$
2886 K	83.5	17.8	84.7	98.5	82.3	0.444	0.405	0.255	0.349	-0.0007

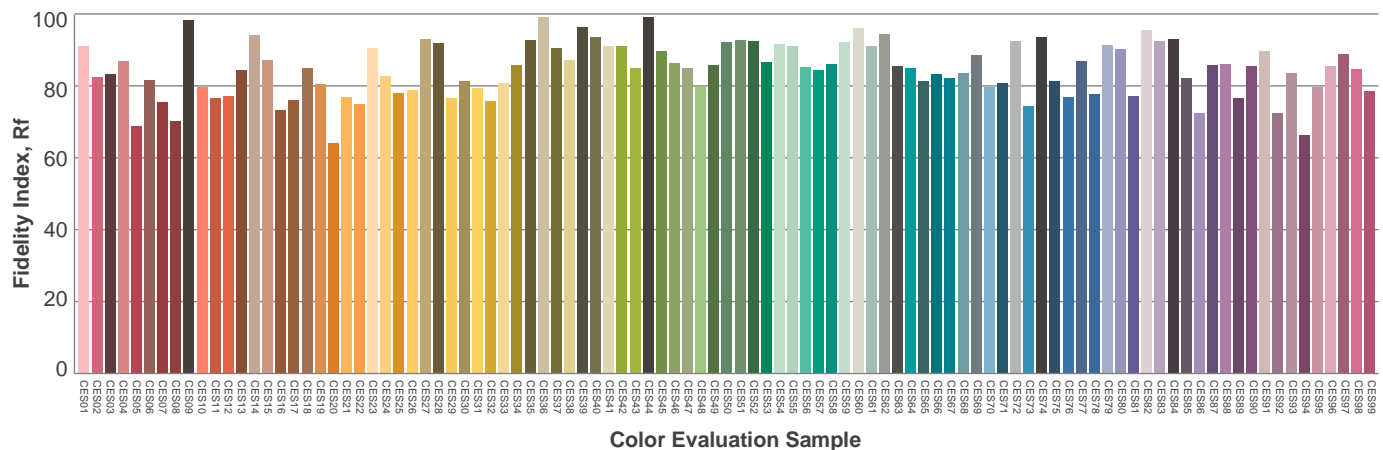
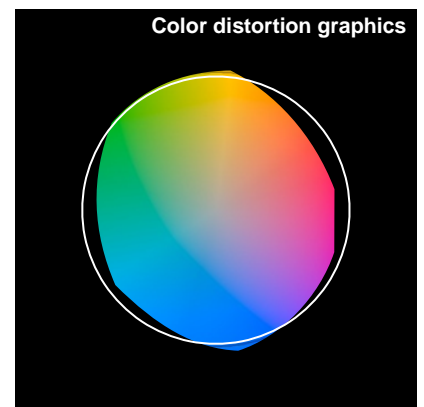
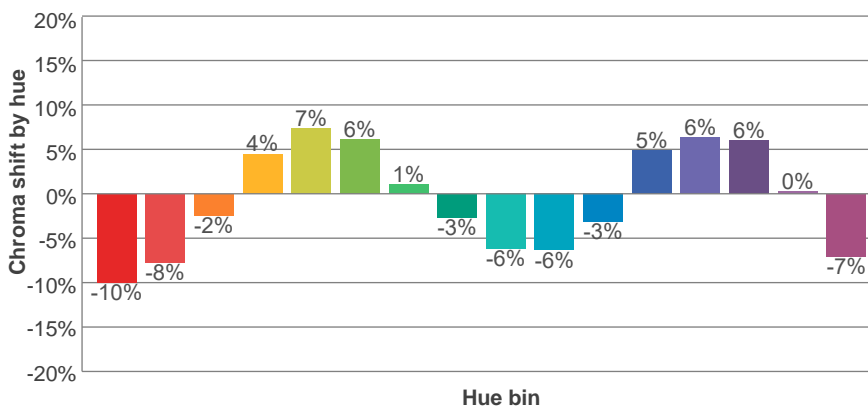
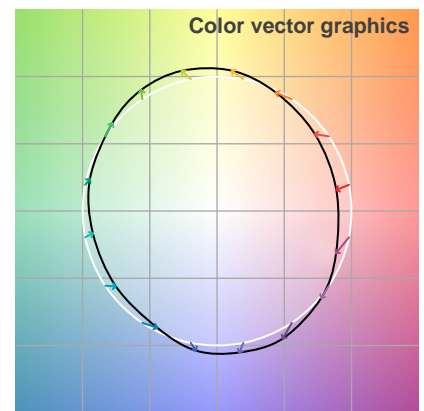
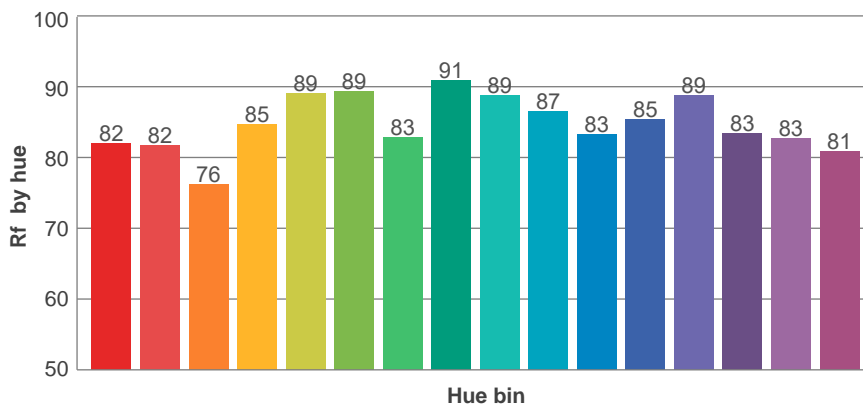
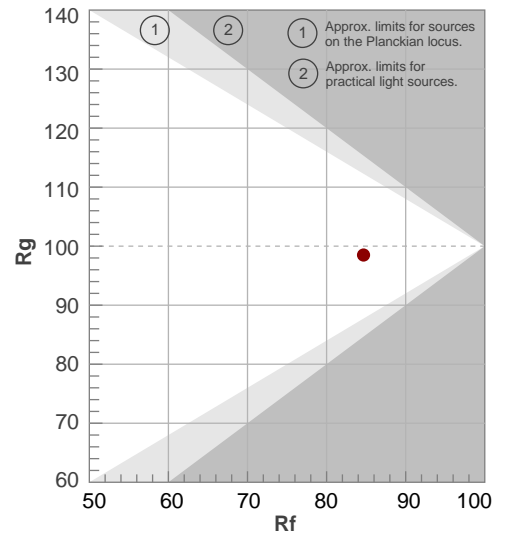
**Rf 84.7**

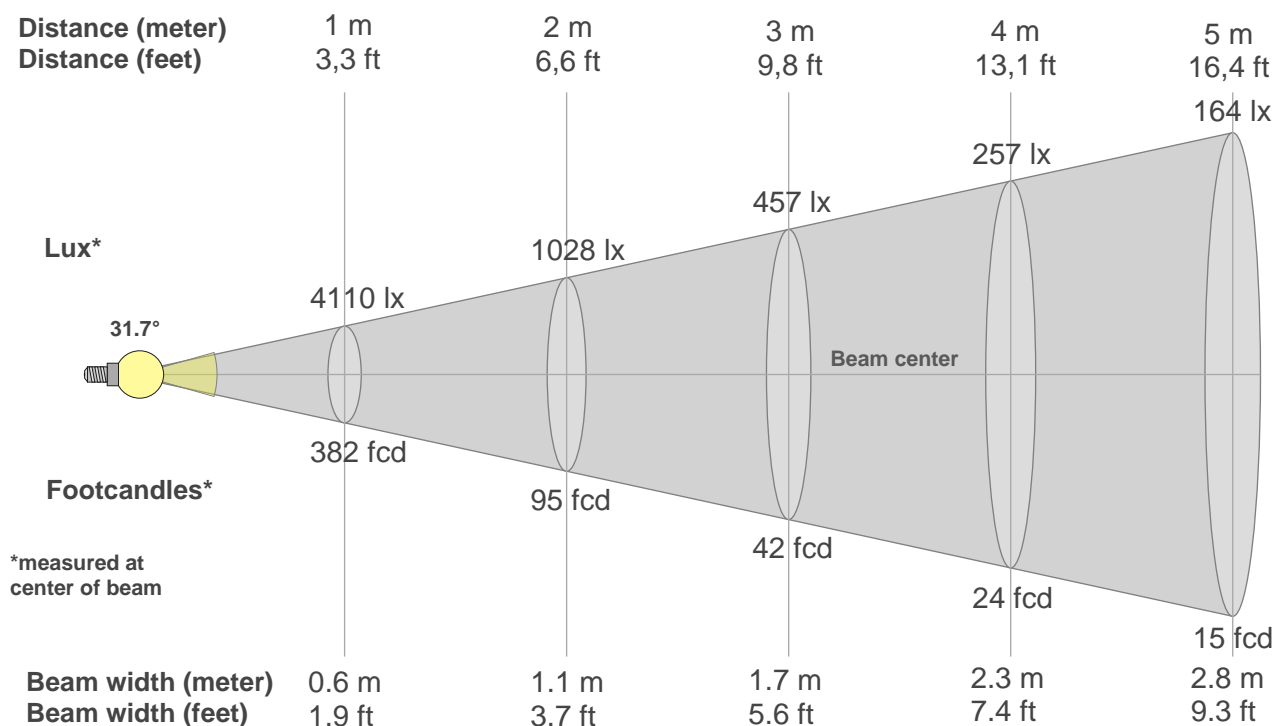
Fidelity index Rf

**Rg 98.5**

Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	82	-10%	-2%
2	82	-8%	7%
3	76	-2%	12%
4	85	4%	10%
5	89	7%	5%
6	89	6%	-3%
7	83	1%	-11%
8	91	-3%	-5%
9	89	-6%	-2%
10	87	-6%	5%
11	83	-3%	11%
12	85	5%	5%
13	89	6%	-4%
14	83	6%	-12%
15	83	0%	-11%
16	81	-7%	-14%





#### 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
4110lx	1028lx	457lx	257lx	164lx	114lx	84lx	64lx	51lx	41lx	34lx	29lx	24lx	21lx	18lx	16lx	14lx	13lx	11lx	10lx
381.8fcd	95.5fcd	42.4fcd	23.9fcd	15.3fcd	10.6fcd	7.8fcd	6fcd	4.7fcd	3.8fcd	3.2fcd	2.7fcd	2.3fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1.1fcd	1fcd

#### 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°
4110	4072	3949	3745	3474	3142	2760	2353	1943	1553	1195	878	615	429	292	193	124	77	47	28
100%	99%	96%	91%	85%	76%	67%	57%	47%	38%	29%	21%	15%	10%	7%	5%	3%	2%	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°
4110	4056	3949	3770	3526	3223	2862	2483	2098	1722	1373	1074	819	601	422	283	187	123	80	51
100%	99%	96%	92%	86%	78%	70%	60%	51%	42%	33%	26%	20%	15%	10%	7%	5%	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°
4110	4072	3949	3745	3474	3142	2760	2353	1943	1553	1195	878	615	429	292	193	124	77	47	28
100%	99%	96%	91%	85%	76%	67%	57%	47%	38%	29%	21%	15%	10%	7%	5%	3%	2%	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°
4110	4056	3949	3770	3526	3223	2862	2483	2098	1722	1373	1074	819	601	422	283	187	123	80	51
100%	99%	96%	92%	86%	78%	70%	60%	51%	42%	33%	26%	20%	15%	10%	7%	5%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31.7°	54.4°	67.6°	99.6%	99.4%