

Light efficiency:

50 Lumen/Watt

Light quality:

CRI: 81.2

Color temperature:

3121 K

Output: 1490 lm

Peak: 19247 cd

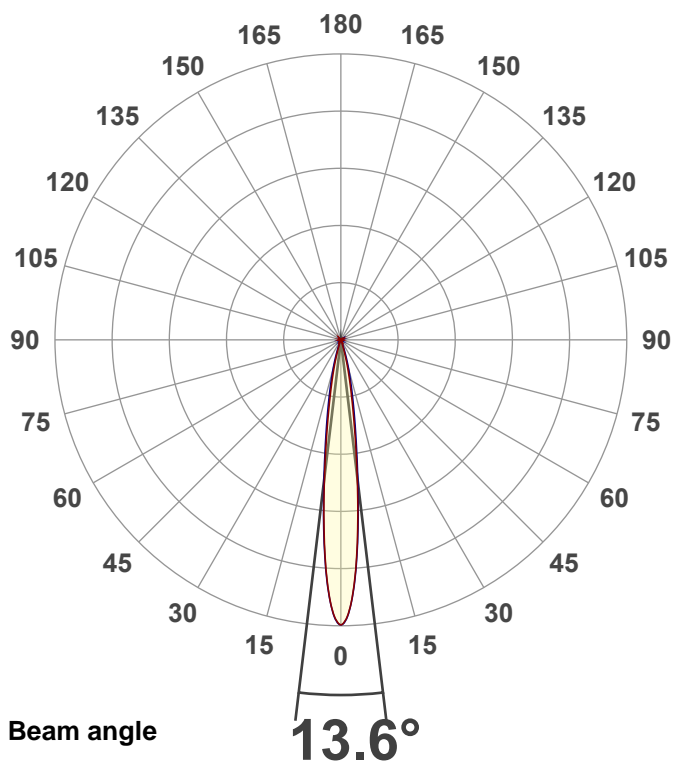
Power: 30.0 W

PF: 0.98



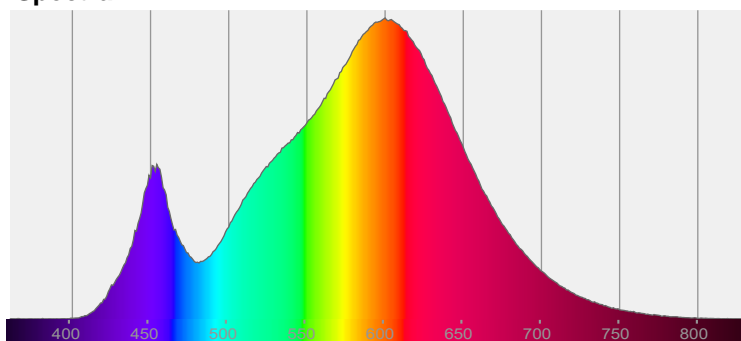
NU4-RAPH-SW-20LM-30K-80-15D-NL-WH

Date and time:
12/20/2021 10:03:00 AM

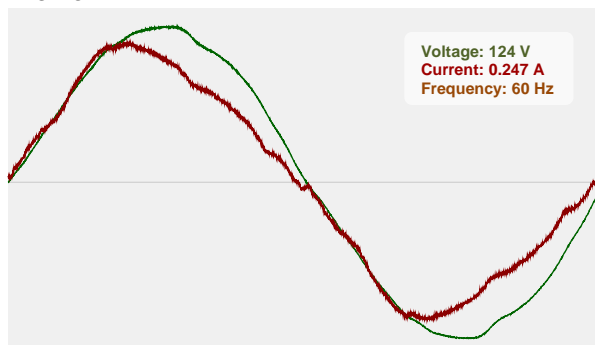


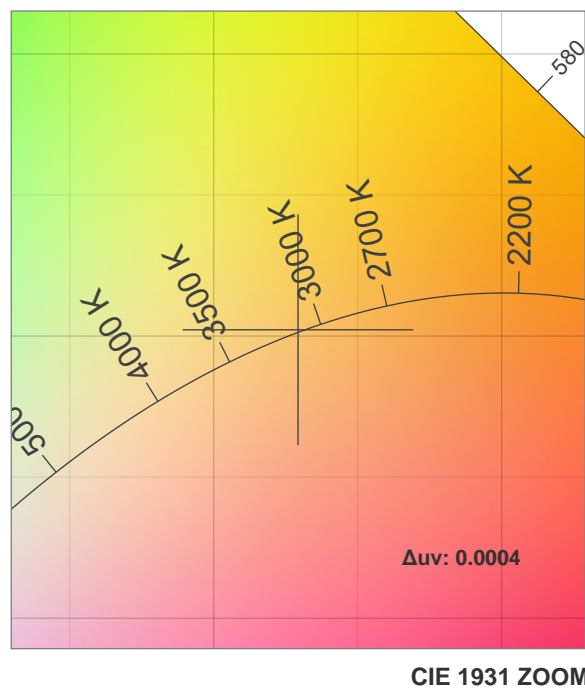
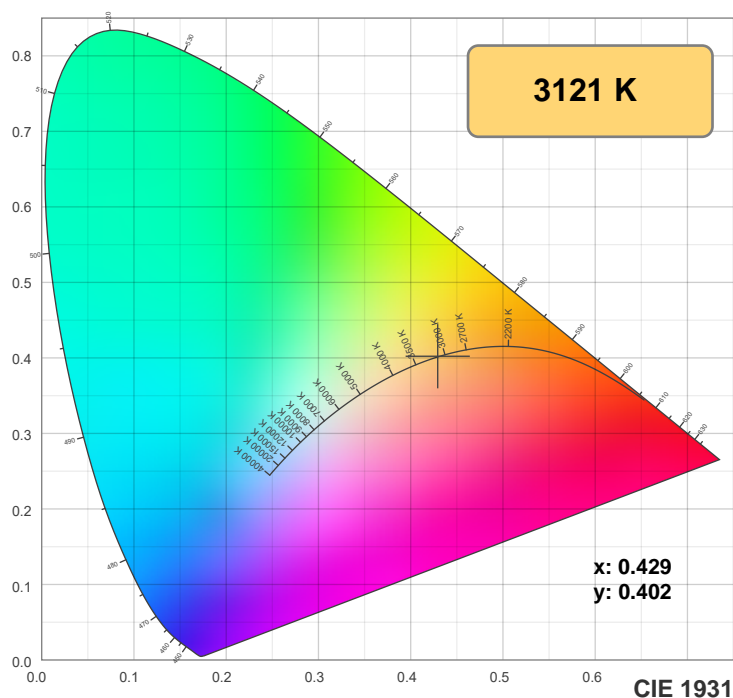
CIE 1931
x: 0.429
y: 0.402

Spectra

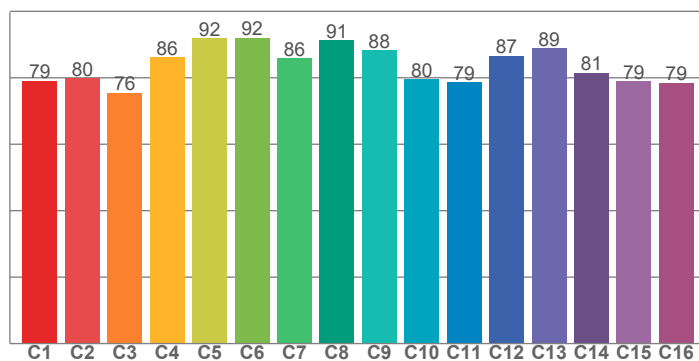


Power

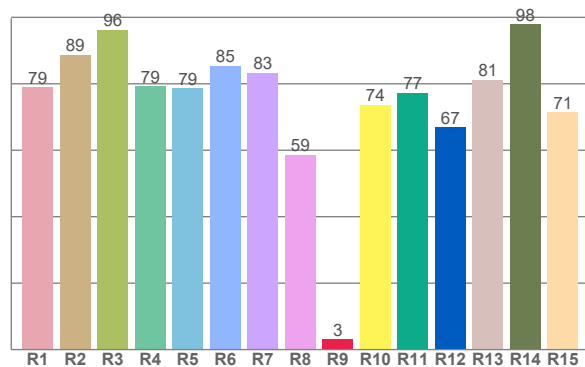




TM30: 83.7



CRI: 81.2 (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
79.0	88.8	96.2	79.2	78.7	85.4	83.4	58.7	3.1	73.7	77.3	67.0	81.2	98.0	71.4

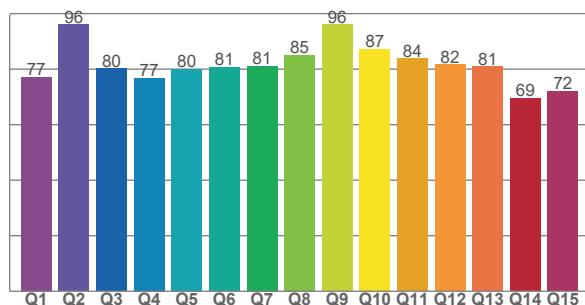
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.1	79.8	75.5	86.1	91.9	91.9	85.8	91.3	88.2	79.6	78.6	86.5	88.8	81.4	79.0	78.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.2	96.1	80.2	76.8	80.1	80.7	81.1	85.1	96.1	87.3	83.8	81.7	81.0	69.5	72.0

CQS: 80.5



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
3121 K	81.2	3.1	83.7	96.1	80.5	0.429	0.402	0.246	0.346	0.0004

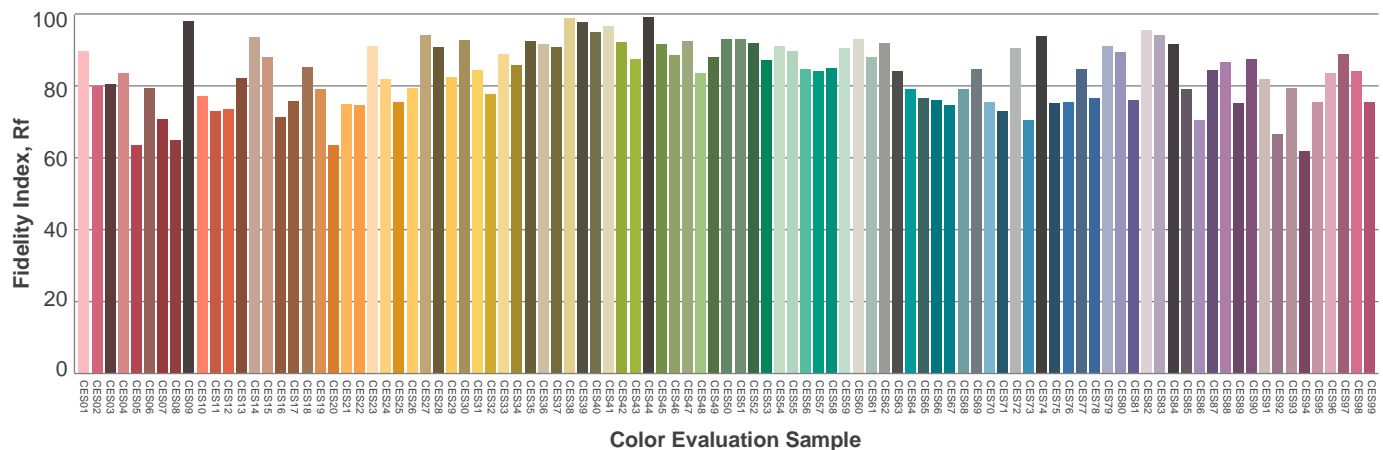
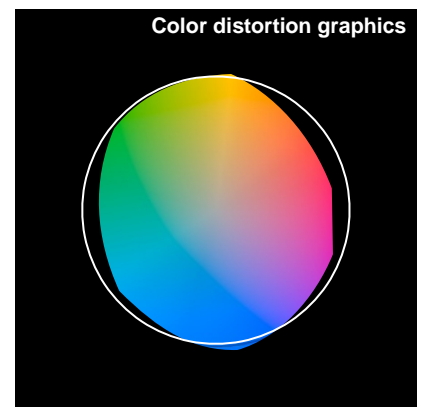
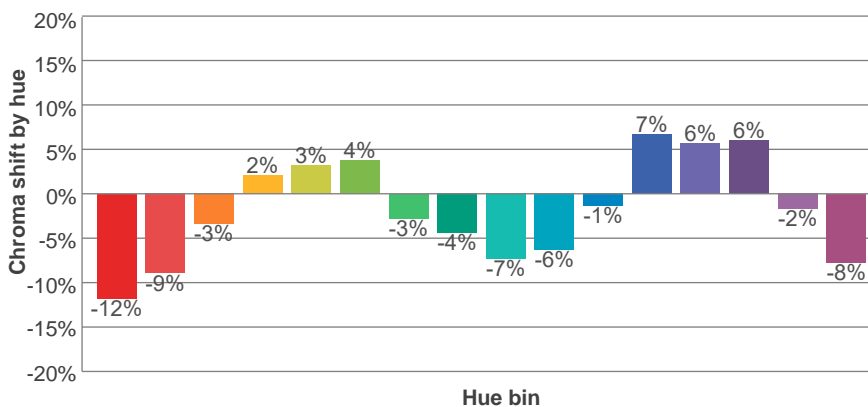
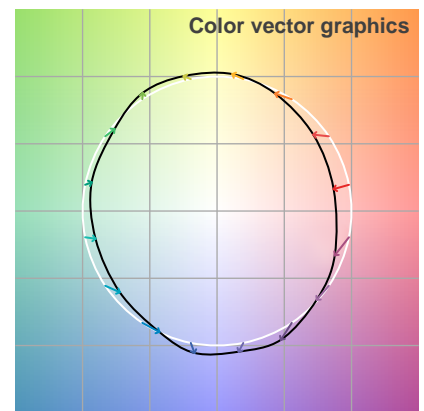
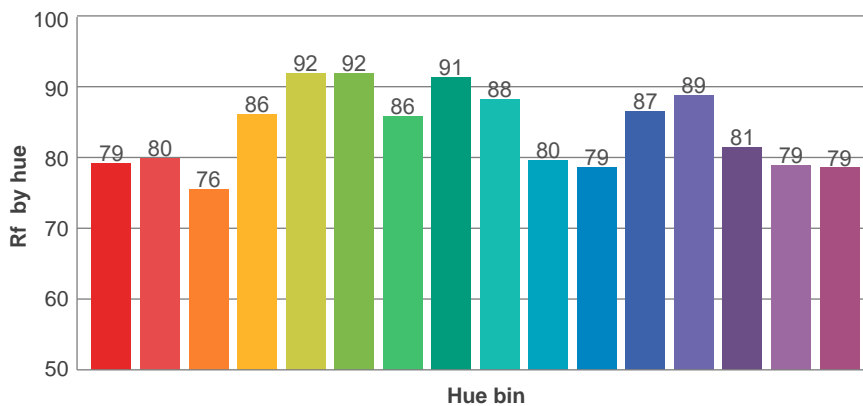
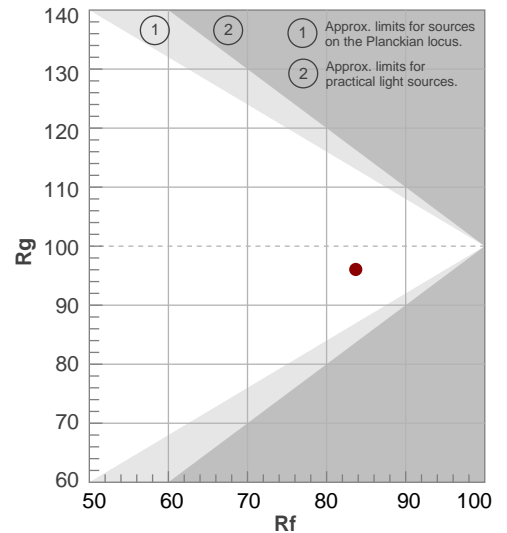
Rf 83.7

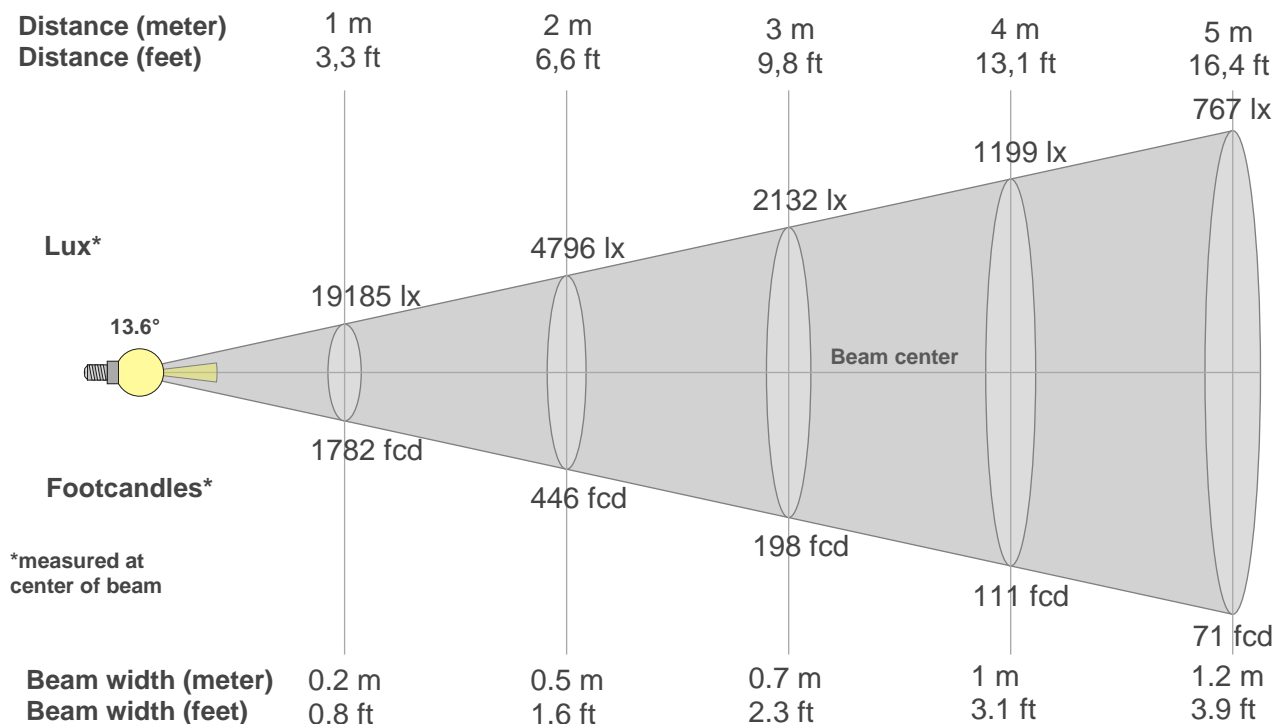
Fidelity index Rf

Rg 96.1

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	79	-12%	-1%
2	80	-9%	7%
3	76	-3%	13%
4	86	2%	9%
5	92	3%	5%
6	92	4%	-3%
7	86	-3%	-8%
8	91	-4%	-3%
9	88	-7%	3%
10	80	-6%	10%
11	79	-1%	14%
12	87	7%	4%
13	89	6%	-5%
14	81	6%	-14%
15	79	-2%	-14%
16	79	-8%	-15%





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
19185lx	4796lx	2132lx	1199lx	767lx	533lx	392lx	300lx	237lx	192lx	159lx	133lx	114lx	98lx	85lx	75lx	66lx	59lx	53lx	48lx
1782.3fcd	445.6fcd	198fcd	111.4fcd	71.3fcd	49.5fcd	36.4fcd	27.8fcd	22fcd	17.8fcd	14.7fcd	12.4fcd	10.5fcd	9.1fcd	7.9fcd	7fcd	6.2fcd	5.5fcd	4.9fcd	4.5fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
19.2K	18.9K	18.1K	16.7K	15.0K	13.0K	11.0K	9.0K	7.2K	5.8K	4.6K	3.7K	3.0K	2.3K	1.8K	1.3K	0.9K	0.6K	0.4K	0.3K
100%	99%	94%	87%	78%	68%	57%	47%	38%	30%	24%	19%	15%	12%	9%	7%	5%	3%	2%	1%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
19.2K	18.9K	18.1K	16.8K	15.1K	13.2K	11.2K	9.4K	7.7K	6.4K	5.3K	4.4K	3.7K	3.0K	2.5K	2.0K	1.6K	1.2K	0.9K	0.7K
100%	99%	94%	87%	79%	69%	59%	49%	40%	33%	28%	23%	19%	16%	13%	10%	8%	6%	5%	4%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
19.2K	18.9K	18.1K	16.7K	15.0K	13.0K	11.0K	9.0K	7.2K	5.8K	4.6K	3.7K	3.0K	2.3K	1.8K	1.3K	0.9K	0.6K	0.4K	0.3K
100%	99%	94%	87%	78%	68%	57%	47%	38%	30%	24%	19%	15%	12%	9%	7%	5%	3%	2%	1%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
19.2K	18.9K	18.1K	16.8K	15.1K	13.2K	11.2K	9.4K	7.7K	6.4K	5.3K	4.4K	3.7K	3.0K	2.5K	2.0K	1.6K	1.2K	0.9K	0.7K
100%	99%	94%	87%	79%	69%	59%	49%	40%	33%	28%	23%	19%	16%	13%	10%	8%	6%	5%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
13.6°	28.6°	37.9°	99.8%	99.7%