

Light efficiency:

37 Lumen/Watt

Light quality:

CRI: 83.5

Color temperature:

2891 K

Output: 1310 lm

Peak: 12150 cd

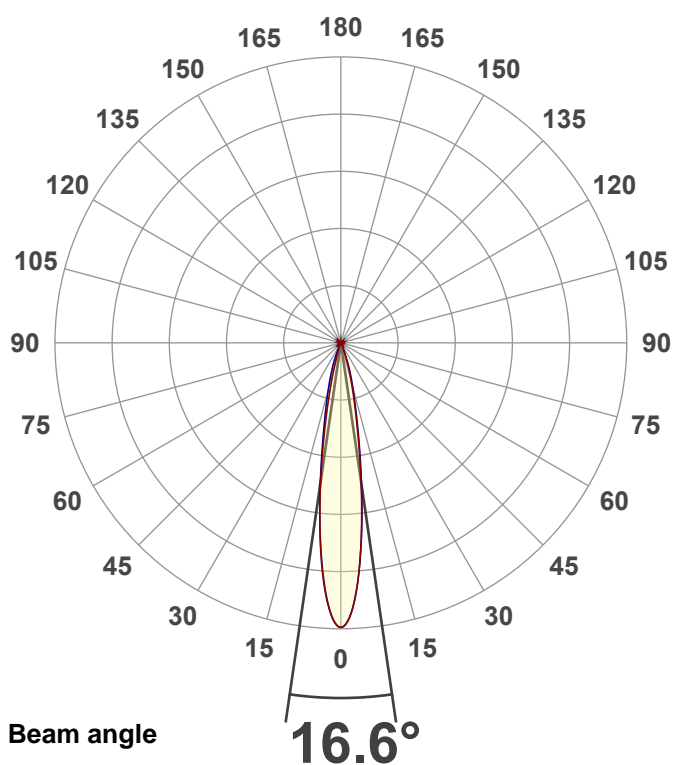
Power: 35.7 W

PF: 0.98



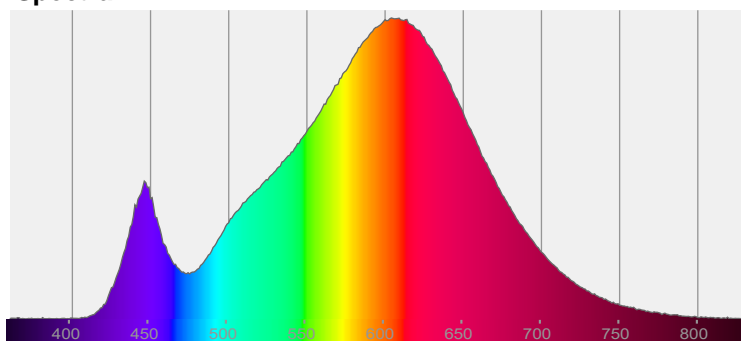
NU4-RAPH-XTM09-20LM-30K-83-15D-NL-WH

Date and time:  
1/4/2022 11:41:25 AM

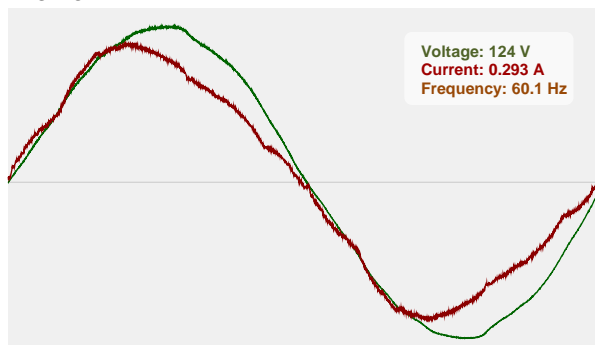


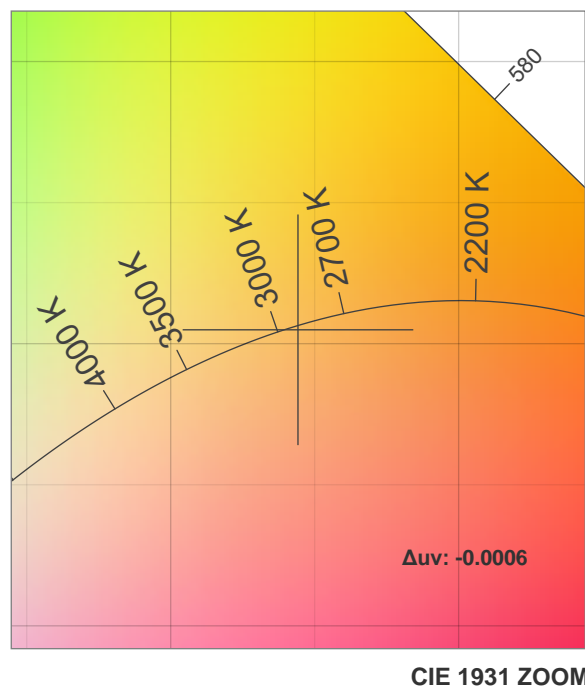
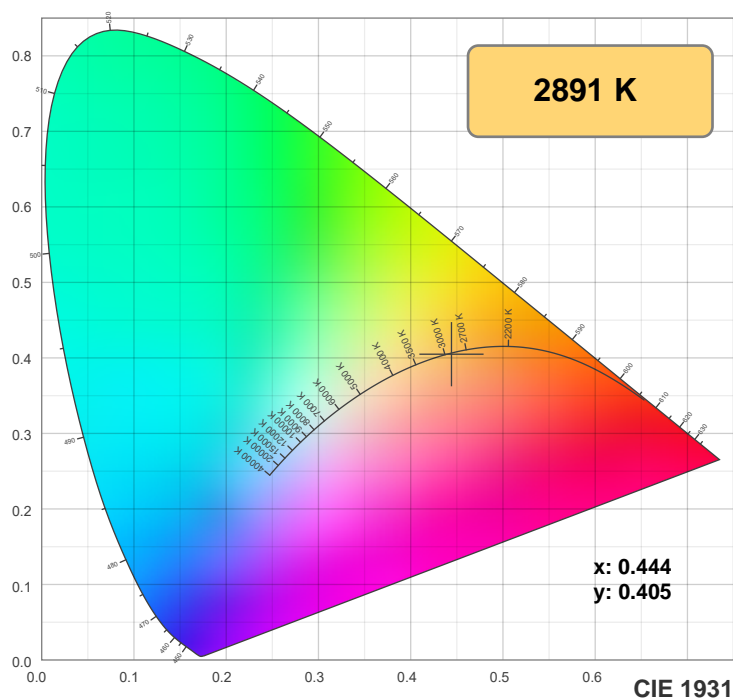
CIE 1931  
x: 0.444  
y: 0.405

Spectra

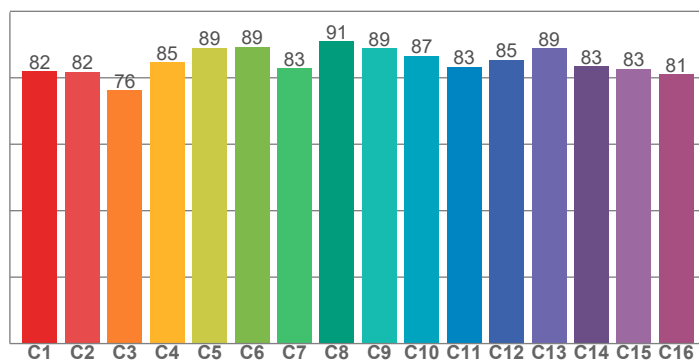


Power

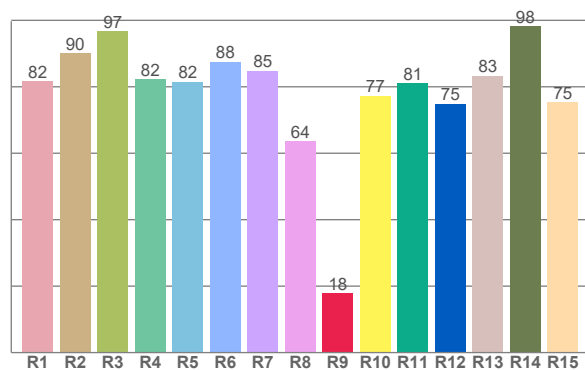




TM30: 84.7



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
81.6	90.0	96.8	82.2	81.6	87.5	84.8	63.7	17.9	77.3	81.1	74.9	83.3	98.2	75.3

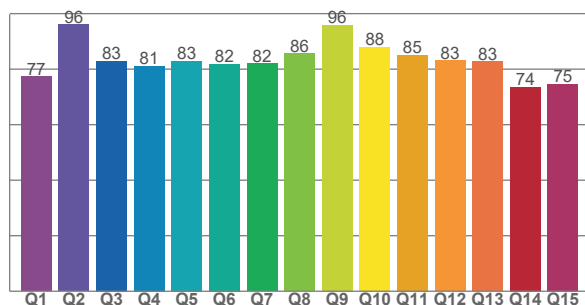
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
82.0	81.8	76.3	84.7	89.0	89.4	82.8	90.9	88.8	86.6	83.2	85.3	88.9	83.4	82.7	81.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.3	96.1	83.0	81.2	82.9	81.8	82.1	85.6	95.9	88.0	85.0	83.0	82.8	73.7	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	$\Delta uv$
2891 K	83.5	17.9	84.7	98.5	82.3	0.444	0.405	0.255	0.349	-0.0006

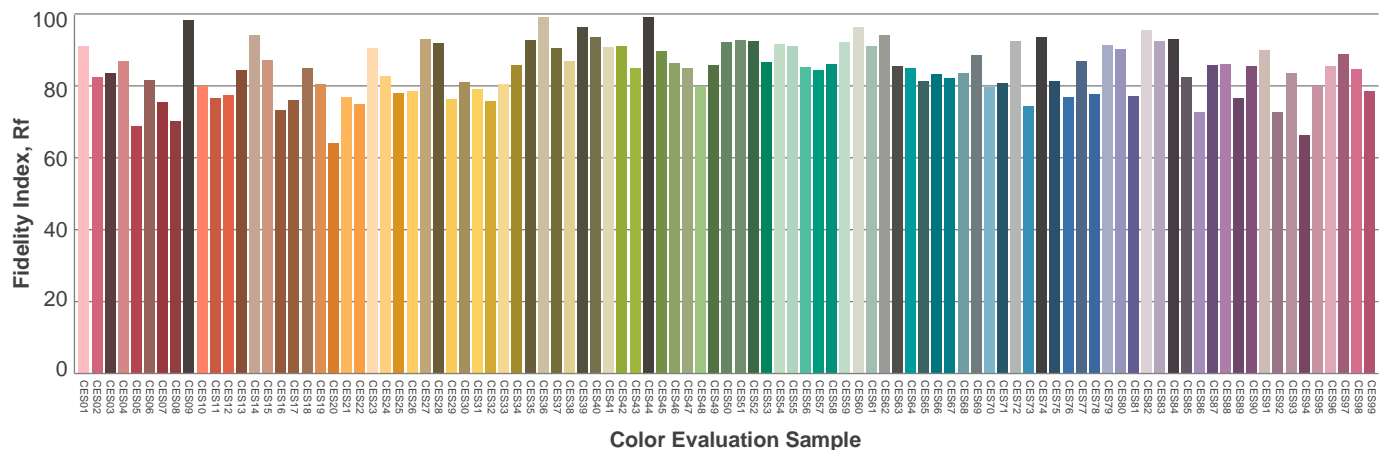
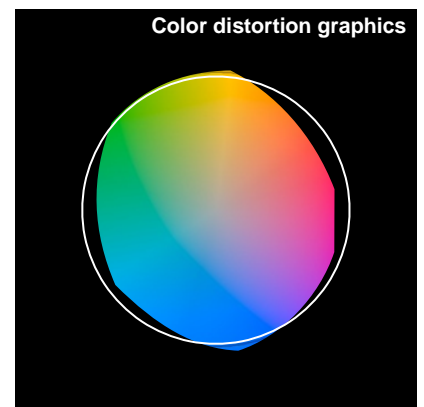
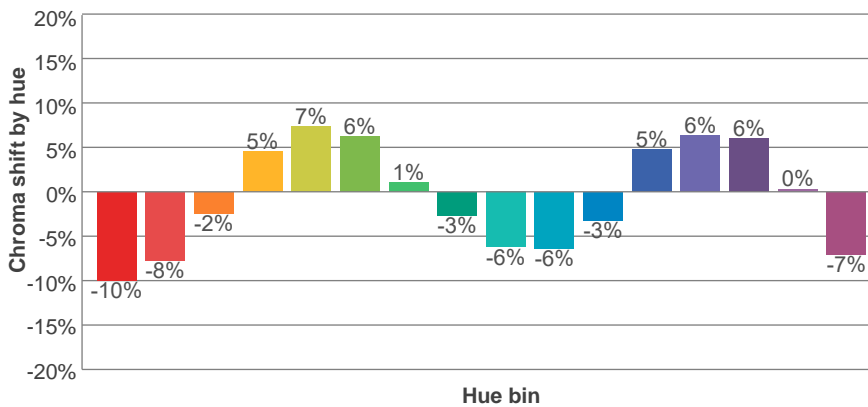
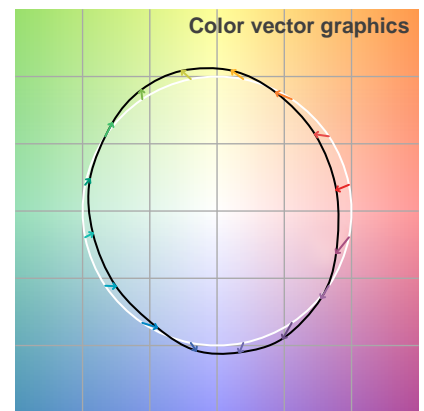
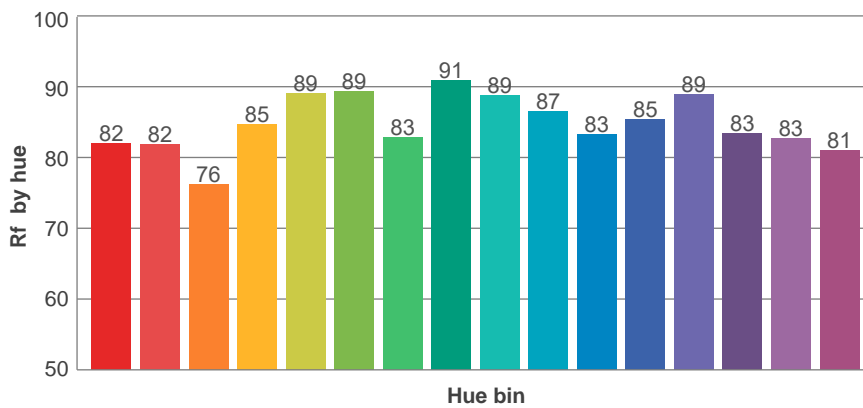
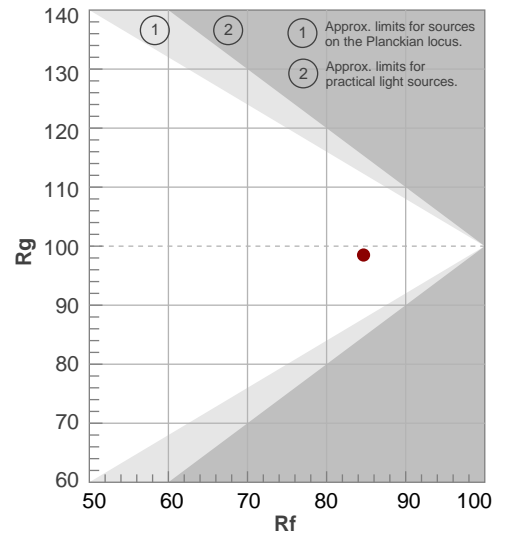
**Rf 84.7**

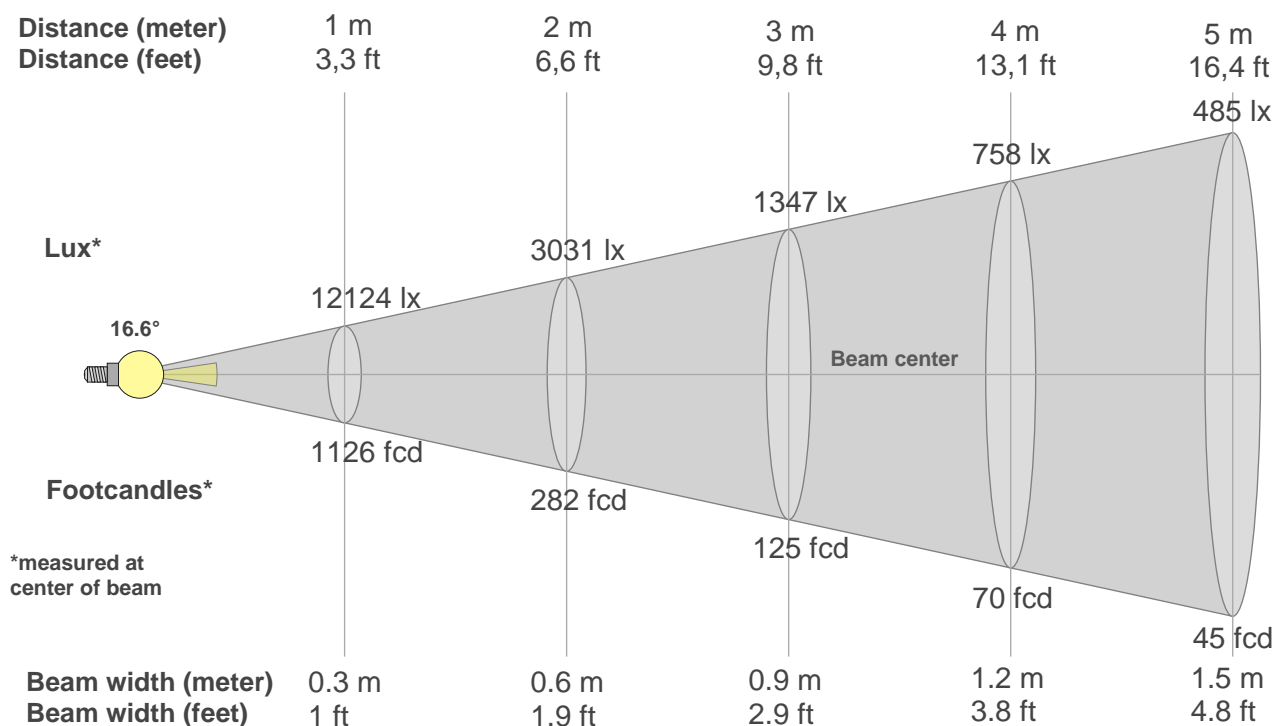
Fidelity index Rf

**Rg 98.5**

Gamut 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	5%	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%	-13%





#### 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
12124lx	3031lx	1347lx	758lx	485lx	337lx	247lx	189lx	150lx	121lx	100lx	84lx	72lx	62lx	54lx	47lx	42lx	37lx	34lx	30lx
1126.3fcd	281.6fcd	125.1fcd	70.4fcd	45.1fcd	31.3fcd	23fcd	17.6fcd	13.9fcd	11.3fcd	9.3fcd	7.8fcd	6.7fcd	5.7fcd	5fcd	4.4fcd	3.9fcd	3.5fcd	3.1fcd	2.8fcd

#### 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°
12.1K	12.0K	11.6K	11.0K	10.3K	9.3K	8.3K	7.3K	6.3K	5.3K	4.4K	3.7K	3.0K	2.5K	2.1K	1.7K	1.4K	1.1K	0.9K	0.7K
100%	99%	96%	91%	85%	77%	69%	60%	52%	44%	36%	30%	25%	21%	17%	14%	12%	9%	7%	5%

#### 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°
12.1K	12.0K	11.6K	11.0K	10.2K	9.4K	8.4K	7.4K	6.4K	5.5K	4.6K	3.9K	3.2K	2.7K	2.3K	1.9K	1.7K	1.4K	1.1K	0.9K
100%	99%	96%	91%	84%	77%	69%	61%	53%	45%	38%	32%	27%	22%	19%	16%	14%	12%	9%	7%

#### 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°
12.1K	12.0K	11.6K	11.1K	10.3K	9.4K	8.4K	7.4K	6.3K	5.2K	4.3K	3.4K	2.7K	2.0K	1.5K	1.0K	0.7K	0.5K	0.4K	0.3K
100%	99%	96%	91%	85%	78%	70%	61%	52%	43%	35%	28%	22%	17%	12%	9%	6%	4%	3%	2%

#### 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°
12.1K	12.0K	11.6K	11.0K	10.2K	9.3K	8.4K	7.4K	6.4K	5.4K	4.6K	3.9K	3.3K	2.8K	2.4K	2.1K	1.8K	1.5K	1.3K	1.1K
100%	99%	96%	91%	84%	77%	69%	61%	53%	45%	38%	32%	27%	23%	20%	17%	15%	13%	11%	9%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
16.6°	33.7°	42.7°	99.8%	99.6%