

Light efficiency:

36 Lumen/Watt

Light quality:

CRI: 95.4

Color temperature:

2978 K

Output: 670 lm

Peak: 2017 cd

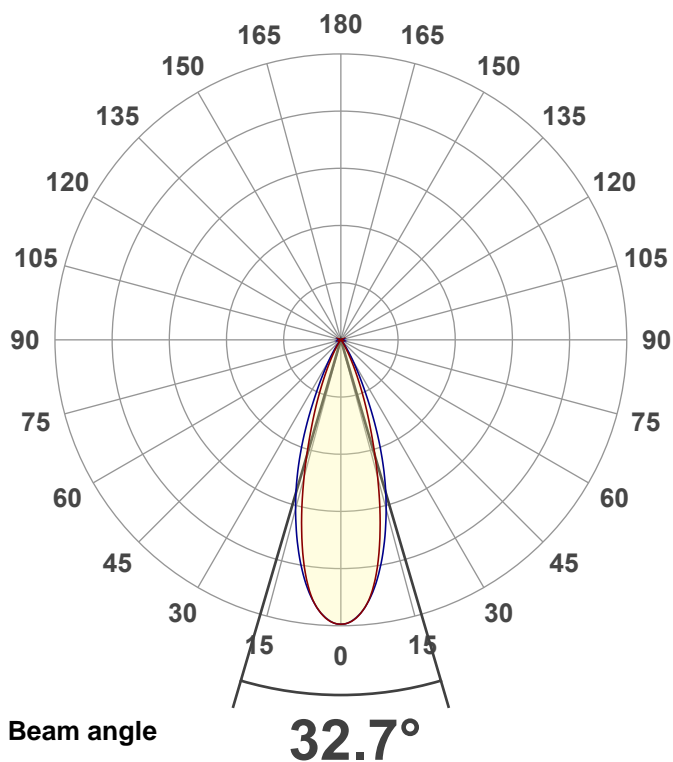
Power: 18.6 W

PF: 0.97



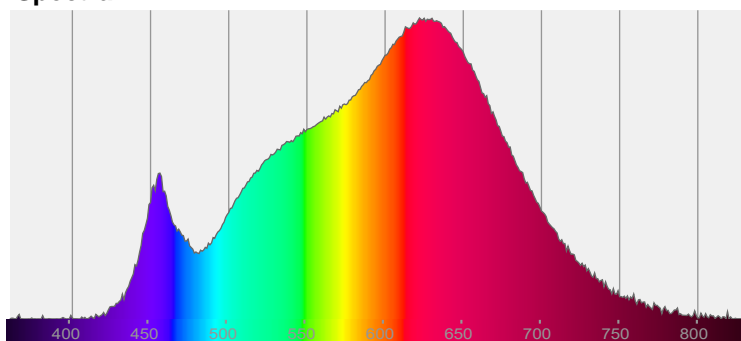
NU4-RAPH-WD-15LM-3018-97-15D-DL-WH

Date and time:  
12/22/2021 10:20:55 AM

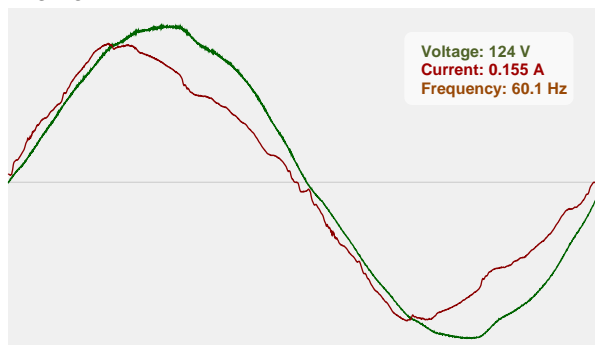


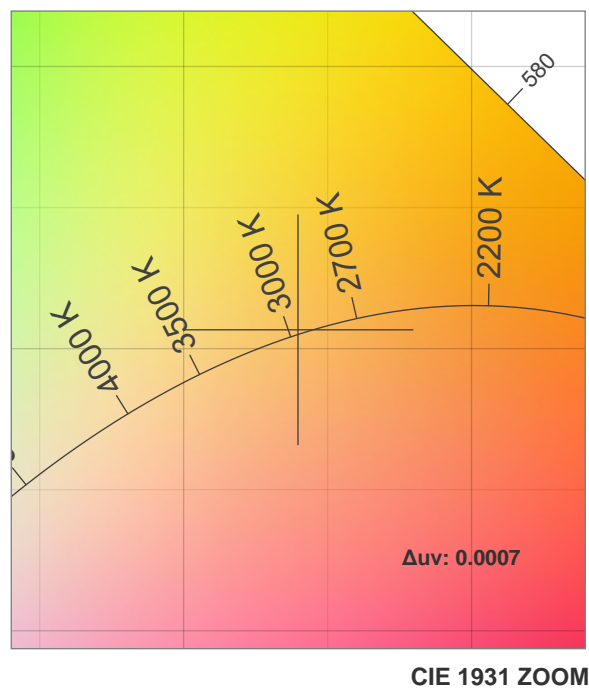
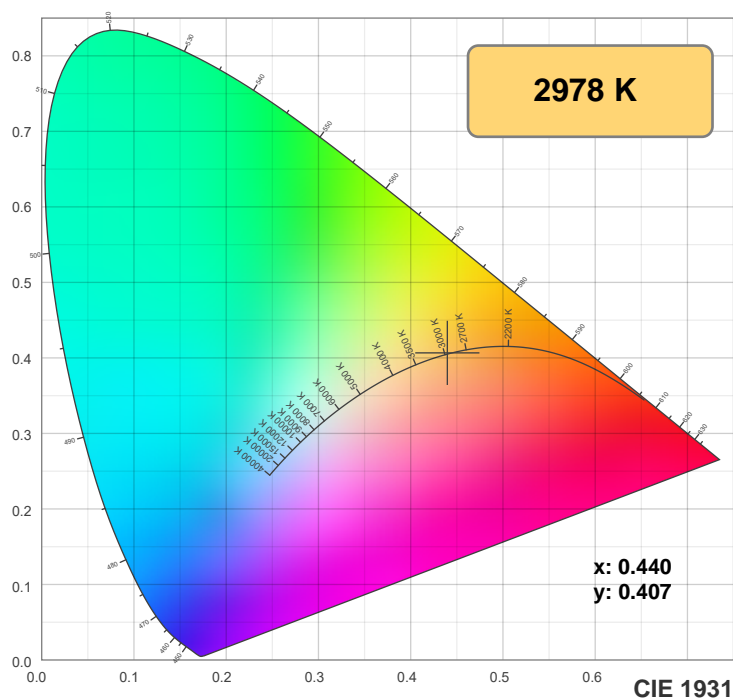
CIE 1931  
x: 0.440  
y: 0.407

Spectra

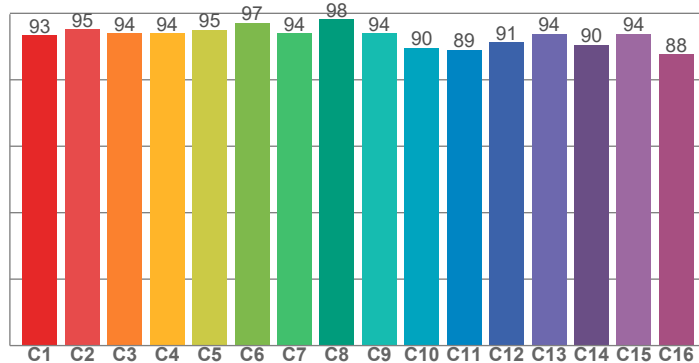


Power

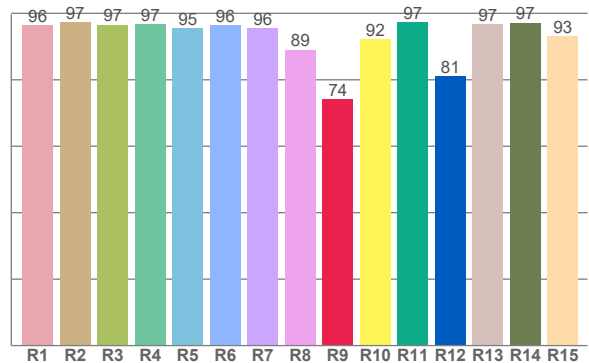




TM30: 93.0



CRI: 95.4 (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
96.4	97.4	96.6	96.6	95.4	96.4	95.5	89.1	74.1	92.2	97.3	81.0	96.8	97.1	93.2

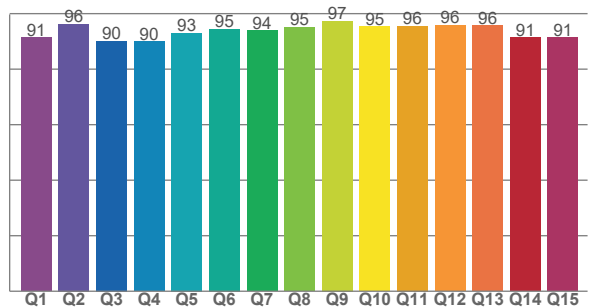
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.3	95.2	94.0	94.0	95.0	97.1	94.0	98.2	94.0	89.6	89.0	91.2	93.8	90.5	93.9	87.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.4	96.3	90.1	89.9	93.1	94.5	93.8	95.1	97.3	95.3	95.5	95.8	95.8	91.3	91.4

CQS: 93.2



## 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	$\Delta uv$
2978 K	95.4	74.1	93.0	99.3	93.2	0.440	0.407	0.251	0.349	0.0007

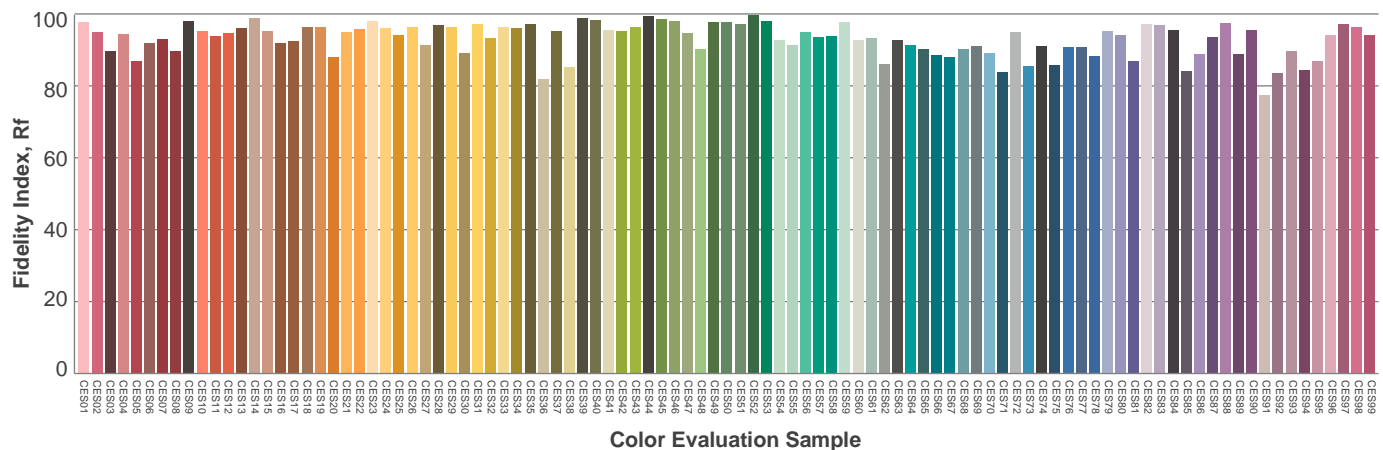
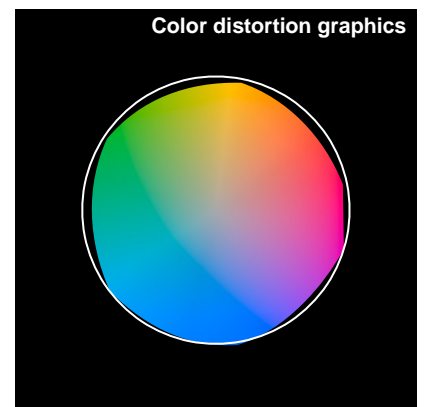
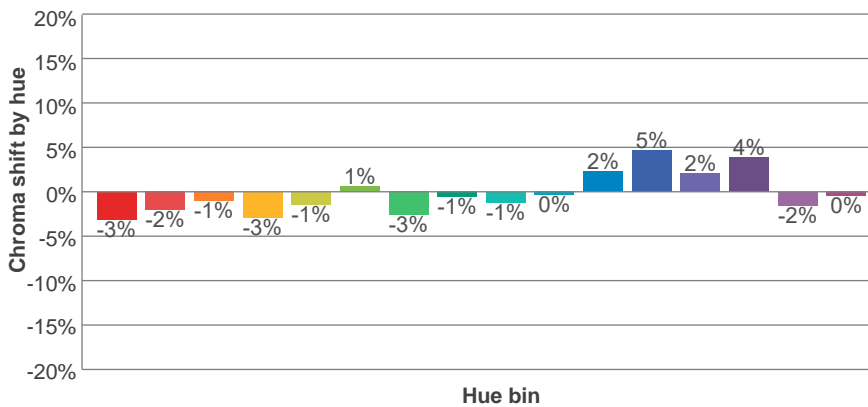
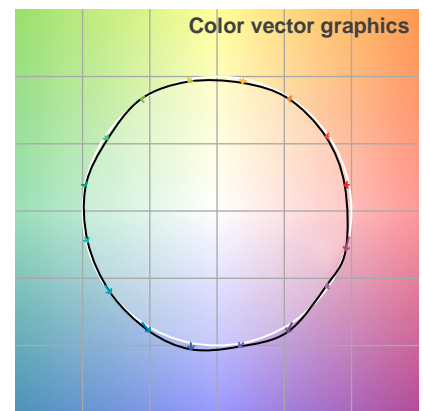
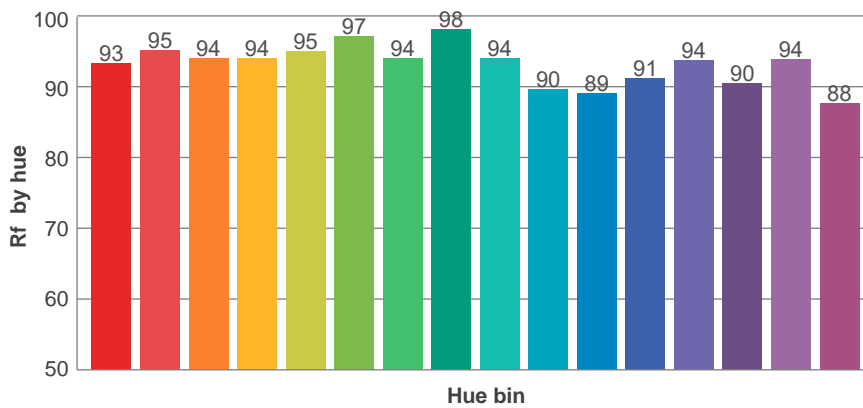
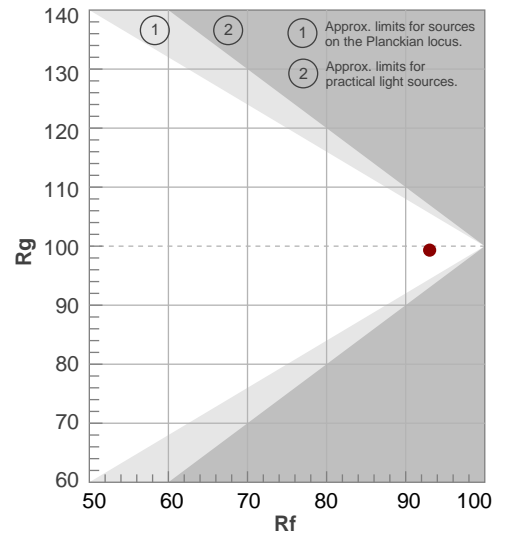
**Rf 93.0**

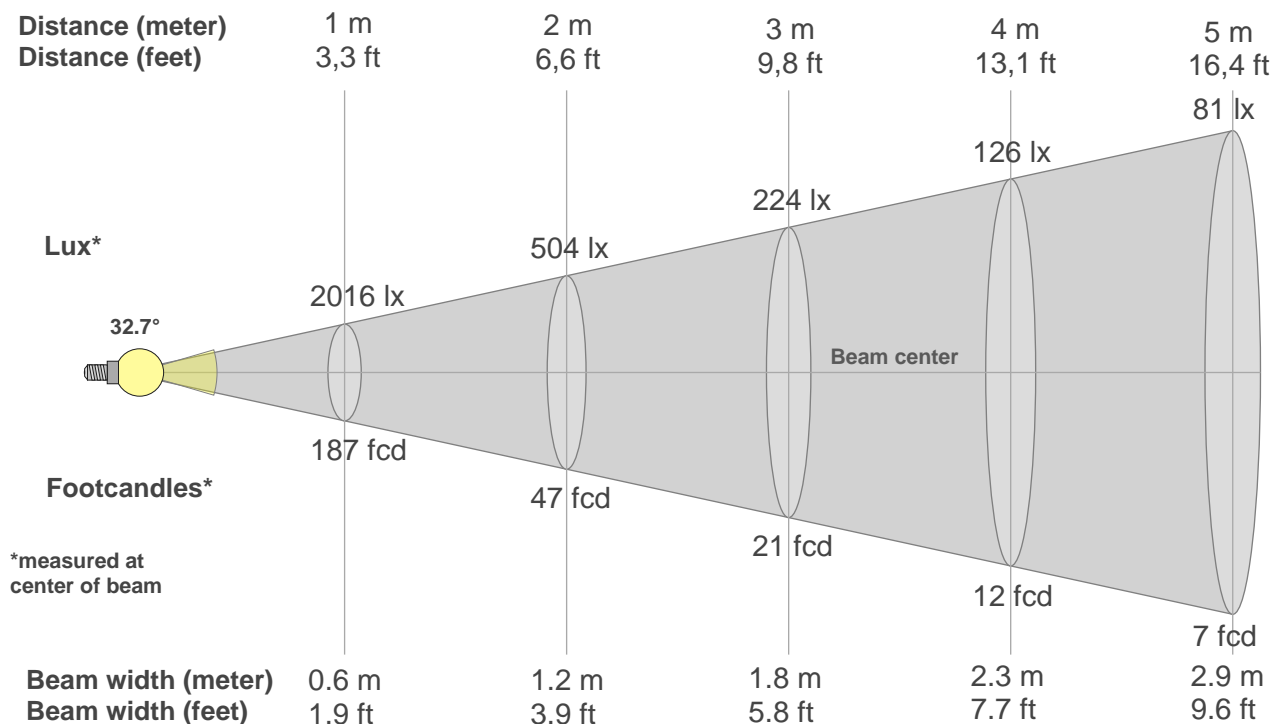
Fidelity index Rf

**Rg 99.3**

Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	-3%	0%
2	95	-2%	1%
3	94	-1%	3%
4	94	-3%	0%
5	95	-1%	2%
6	97	1%	1%
7	94	-3%	1%
8	98	-1%	1%
9	94	-1%	4%
10	90	0%	7%
11	89	2%	8%
12	91	5%	1%
13	94	2%	-4%
14	90	4%	-6%
15	94	-2%	-2%
16	88	0%	-10%





#### 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
2016lx	504lx	224lx	126lx	81lx	56lx	41lx	31lx	25lx	20lx	17lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	6lx	5lx
187.3fcd	46.8fcd	20.8fcd	11.7fcd	7.5fcd	5.2fcd	3.8fcd	2.9fcd	2.3fcd	1.9fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.5fcd

#### 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°
2016	1999	1948	1861	1726	1547	1339	1118	901	705	542	401	286	197	130	84	54	34	22	13
100%	99%	97%	92%	86%	77%	66%	55%	45%	35%	27%	20%	14%	10%	6%	4%	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°
2016	1997	1946	1864	1756	1624	1477	1320	1159	993	819	645	481	350	247	173	116	75	48	29
100%	99%	97%	92%	87%	81%	73%	65%	58%	49%	41%	32%	24%	17%	12%	9%	6%	4%	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°
2016	1999	1948	1861	1726	1547	1339	1118	901	705	542	401	286	197	130	84	54	34	22	13
100%	99%	97%	92%	86%	77%	66%	55%	45%	35%	27%	20%	14%	10%	6%	4%	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°
2016	1997	1946	1864	1756	1624	1477	1320	1159	993	819	645	481	350	247	173	116	75	48	29
100%	99%	97%	92%	87%	81%	73%	65%	58%	49%	41%	32%	24%	17%	12%	9%	6%	4%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32.7°	55°	68°	99.3%	99.0%