

Light efficiency:

49 Lumen/Watt

Light quality:

CRI: 95.4

Color temperature:

3114 K

Output: 1198 lm

Peak: 3604 cd

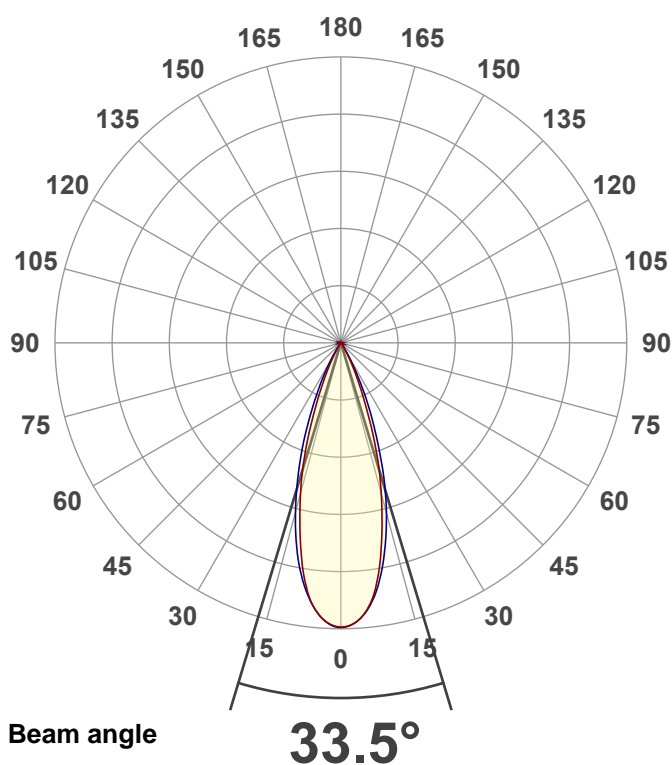
Power: 24.5 W

PF: 0.98



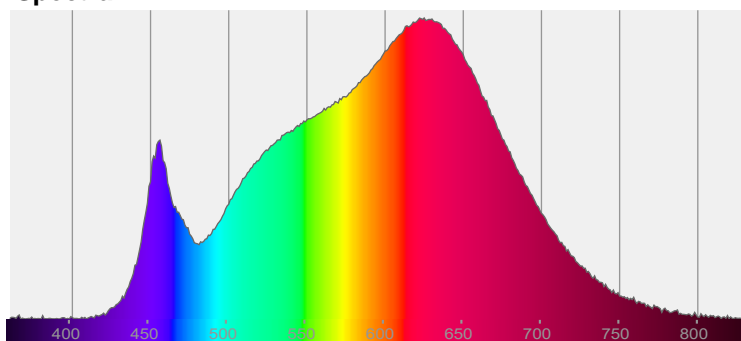
NU4-RAPH-WD-20LM-3018-97-35D-SBL-WH

Date and time:  
12/21/2021 3:54:59 PM

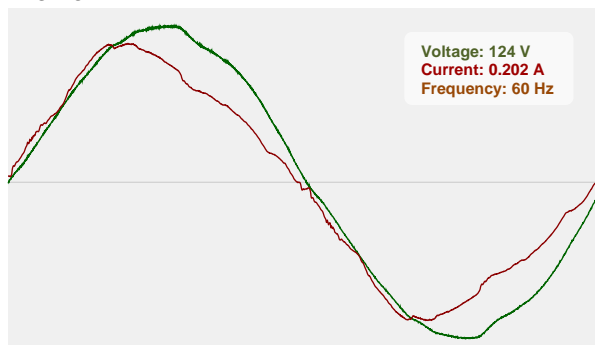


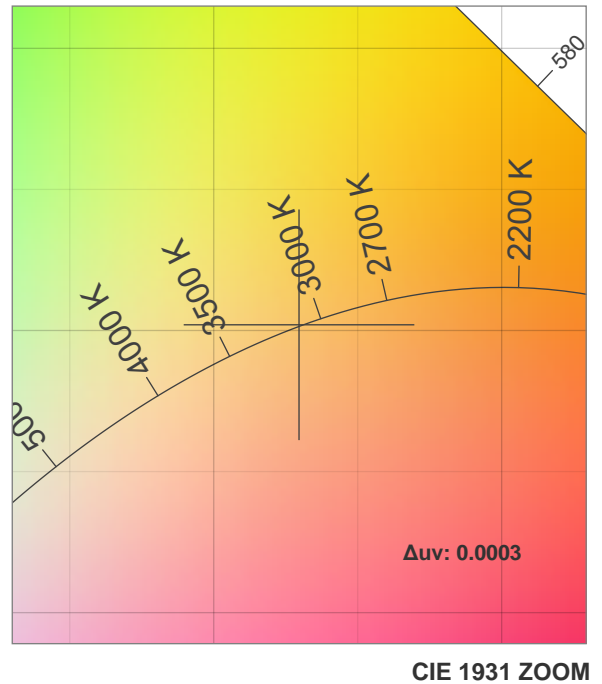
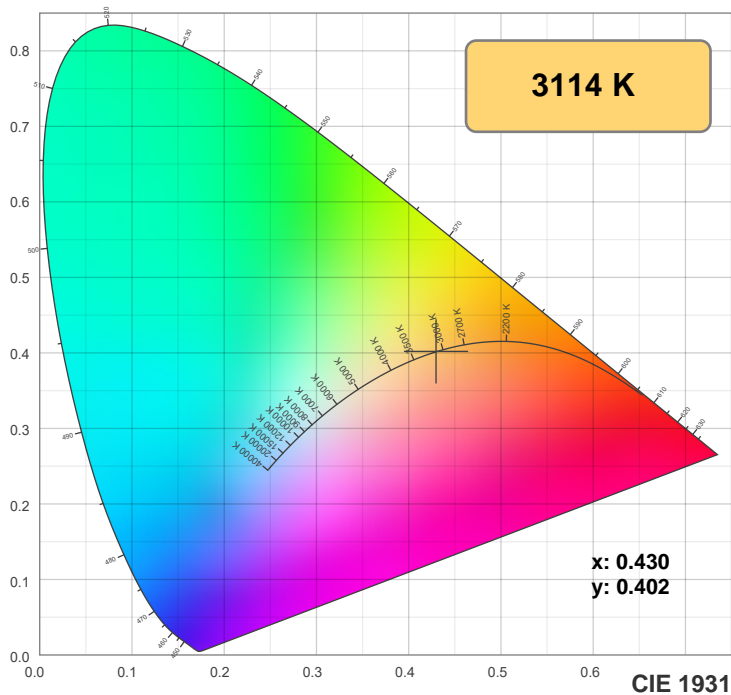
CIE 1931  
x: 0.430  
y: 0.402

Spectra

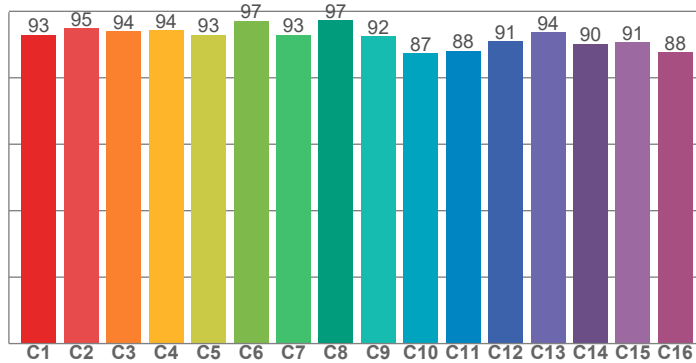


Power

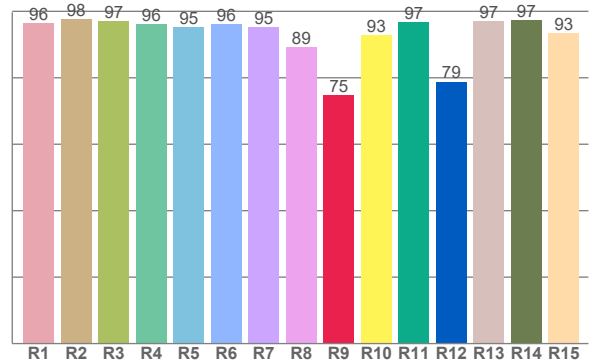




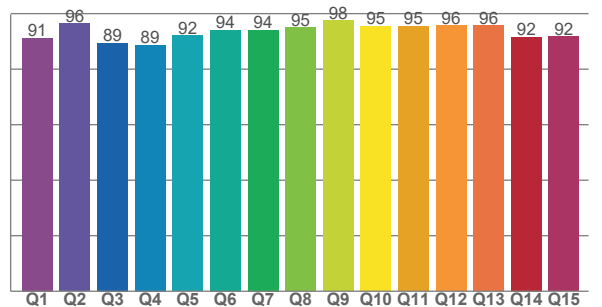
TM30: 92.4



CRI: 95.4 (R1-R8)



CQS: 93.0



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	97.7	97.0	96.1	95.3	96.2	95.3	89.3	74.7	92.7	96.7	78.8	97.0	97.4	93.5

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
92.9	94.9	94.0	94.3	92.9	97.1	92.9	97.3	92.4	87.3	88.1	90.9	93.7	90.2	90.6	87.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91.2	96.4	89.4	88.7	92.0	94.1	94.1	95.0	97.5	95.4	95.4	95.7	95.7	91.7	91.7

## 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
3114 K	95.4	74.7	92.4	99.2	93.0	0.430	0.402	0.247	0.346	0.0003

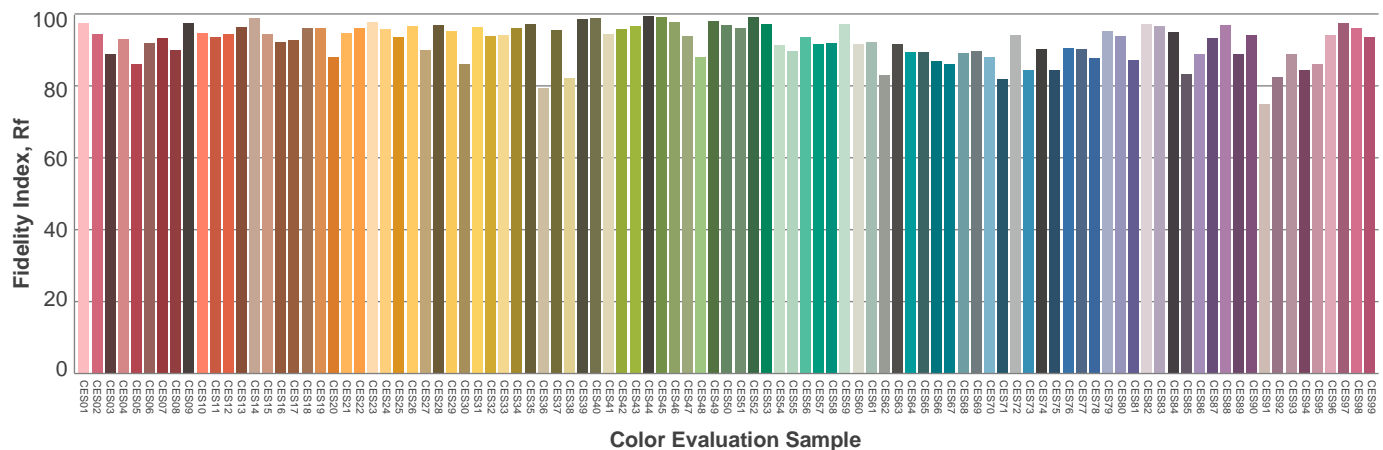
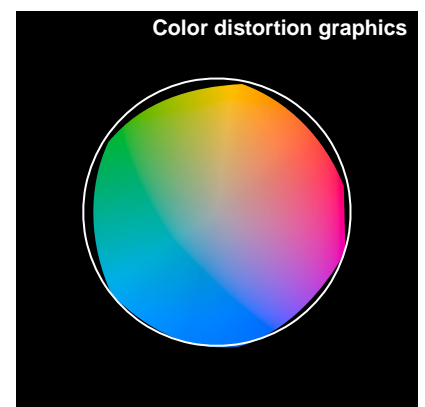
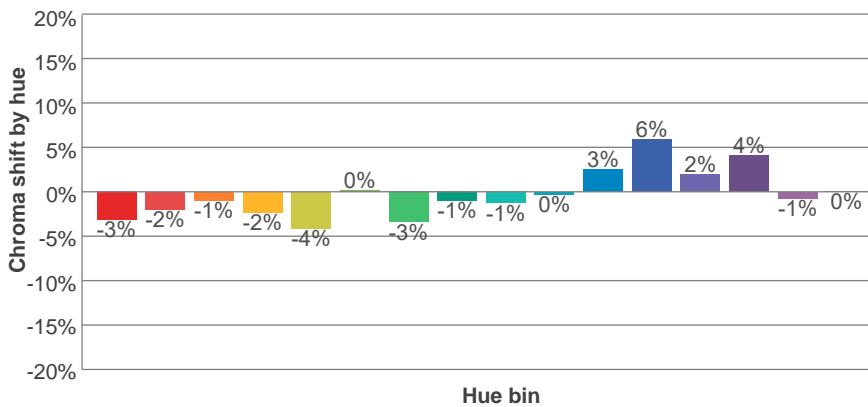
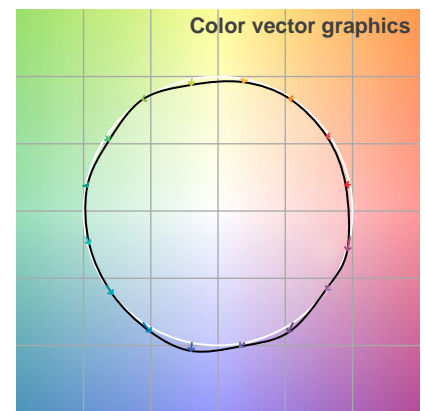
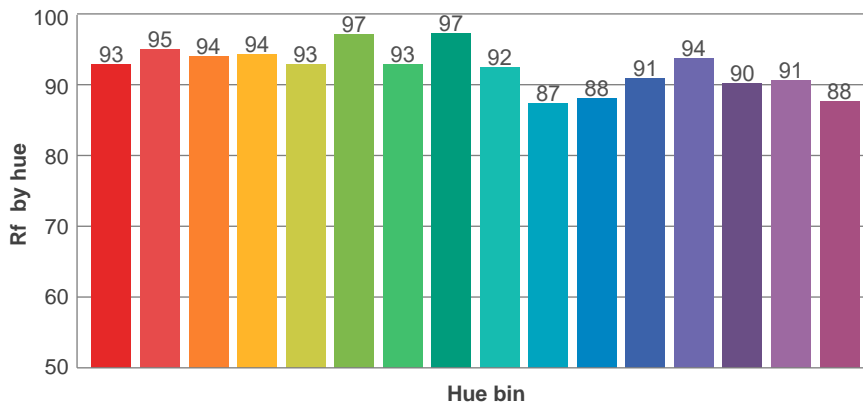
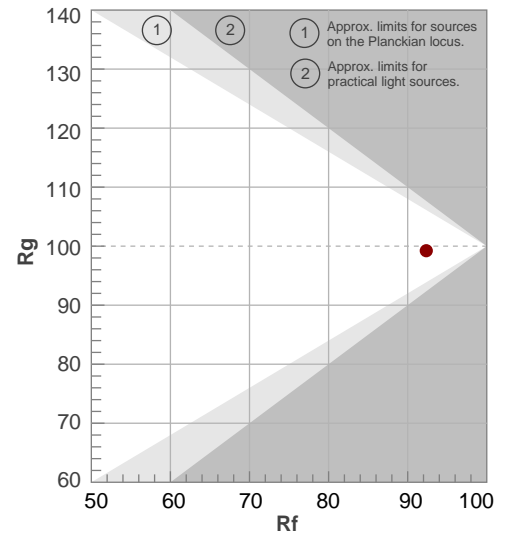
**Rf 92.4**

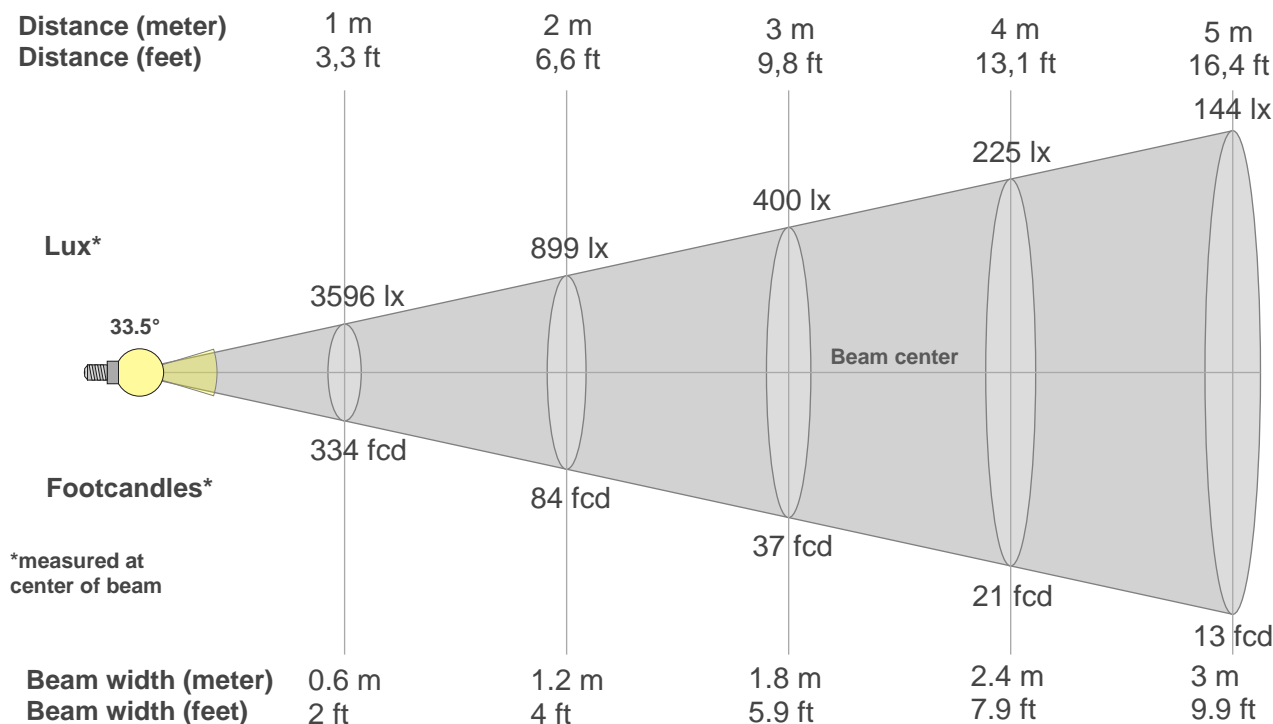
Fidelity index Rf

**Rg 99.2**

Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	93	-3%	1%
2	95	-2%	1%
3	94	-1%	2%
4	94	-2%	0%
5	93	-4%	1%
6	97	0%	1%
7	93	-3%	2%
8	97	-1%	1%
9	92	-1%	5%
10	87	0%	8%
11	88	3%	8%
12	91	6%	1%
13	94	2%	-4%
14	90	4%	-7%
15	91	-1%	-4%
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
3596lx	899lx	400lx	225lx	144lx	100lx	73lx	56lx	44lx	36lx	30lx	25lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx
334.1fcd	83.5fcd	37.1fcd	20.9fcd	13.4fcd	9.3fcd	6.8fcd	5.2fcd	4.1fcd	3.3fcd	2.8fcd	2.3fcd	2fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd

#### 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°
3596	3570	3490	3349	3135	2842	2495	2148	1811	1466	1117	800	563	387	247	140	67	27	14	11
100%	99%	97%	93%	87%	79%	69%	60%	50%	41%	31%	22%	16%	11%	7%	4%	2%	1%	0%	0%

#### 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°
3596	3570	3495	3371	3189	2948	2674	2380	2070	1740	1391	1093	826	580	373	227	130	71	37	20
100%	99%	97%	94%	89%	82%	74%	66%	58%	48%	39%	30%	23%	16%	10%	6%	4%	2%	1%	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°
3596	3569	3485	3340	3119	2826	2484	2140	1811	1465	1123	815	570	383	244	137	65	26	14	9
100%	99%	97%	93%	87%	79%	69%	59%	50%	41%	31%	23%	16%	11%	7%	4%	2%	1%	0%	0%

#### 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°
3596	3570	3488	3351	3164	2937	2672	2376	2063	1744	1436	1132	857	625	436	267	161	92	50	27
100%	99%	97%	93%	88%	82%	74%	66%	57%	49%	40%	31%	24%	17%	12%	7%	4%	3%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
33.5°	54.7°	64.9°	99.7%	99.5%