Light efficiency:

89 Lumen/Watt

Light quality:

CRI: 93.3

Color temperature:

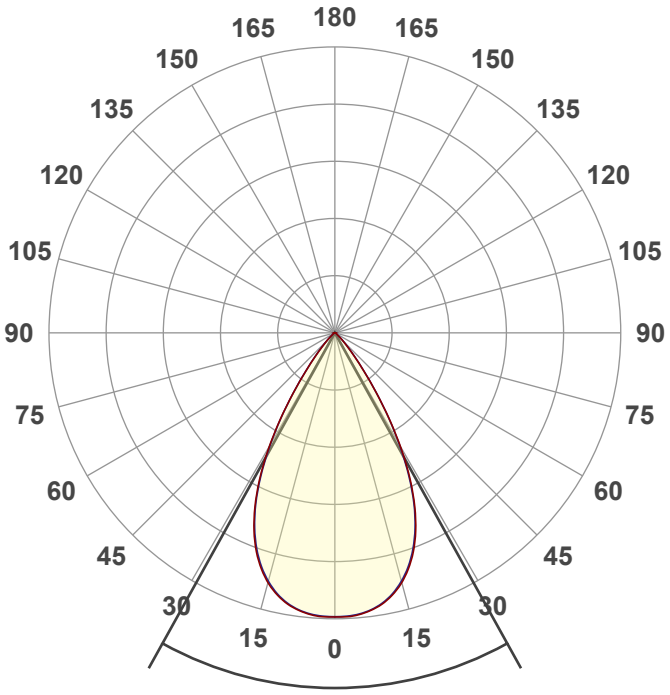
2963 K

Output: 1871 lm

Peak: 2199 cd

Power: 21.1 W

PF: 0.97



NUE4-RD-SW-20LM-30K-90-60D-CL-WH-WH

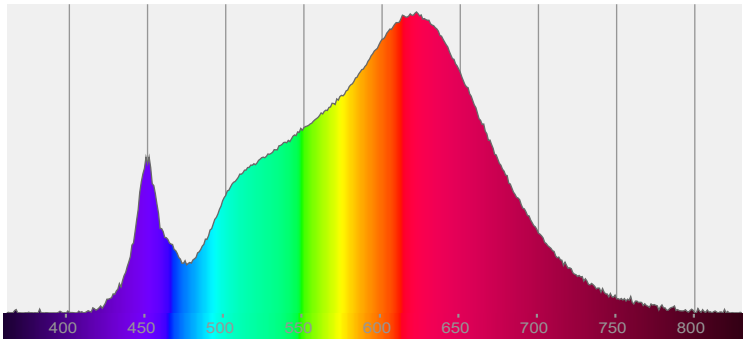
Date and time:

3/8/2023 9:30:47 AM

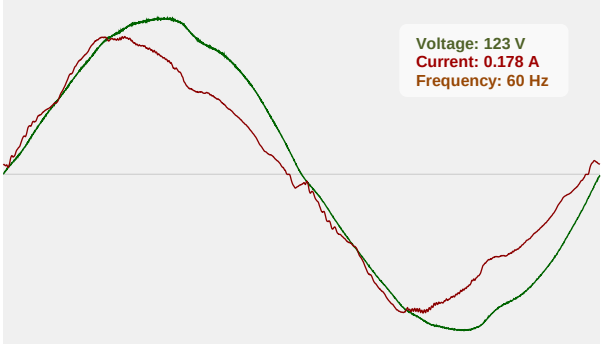
Beam angle **58.1°**

CIE 1931
x: 0.441
y: 0.408

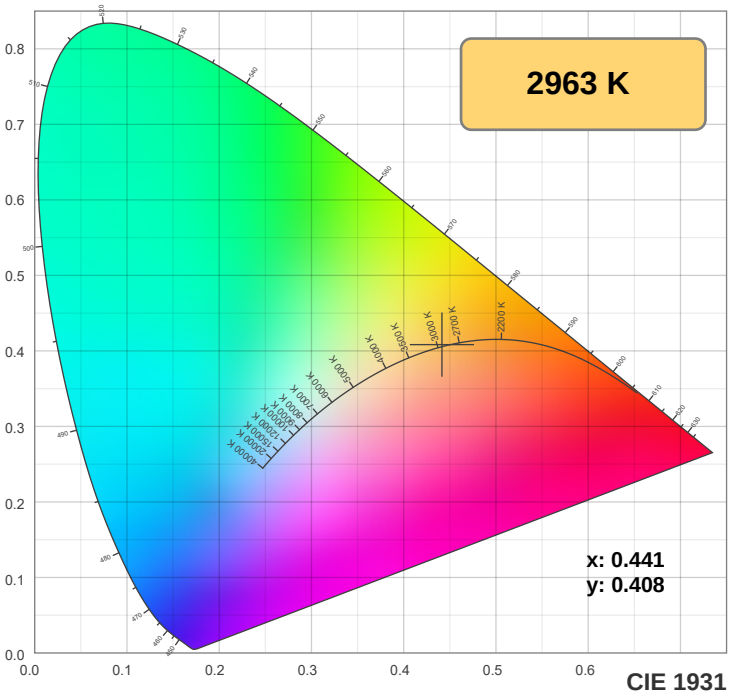
Spectra

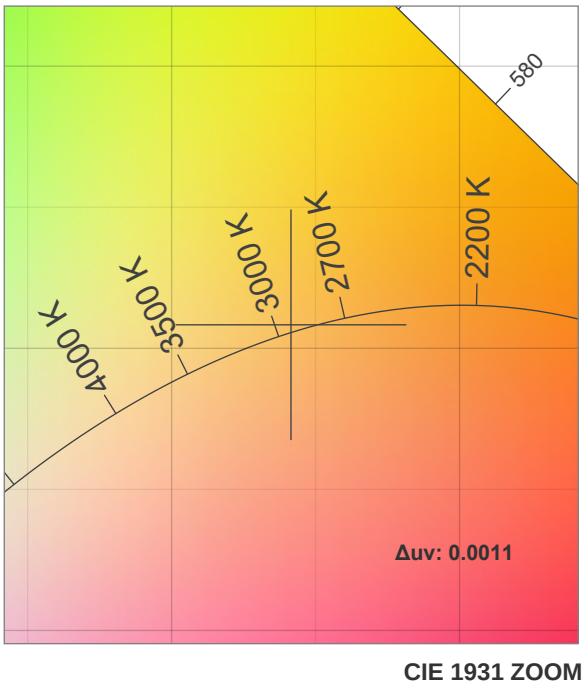


Power

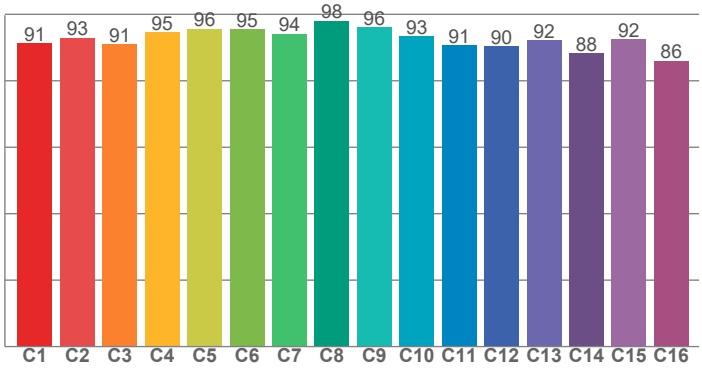


Color Details

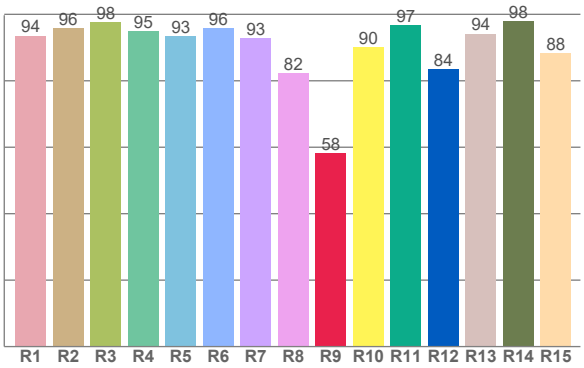




TM30: 92.6



CRI: 93.3 (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
93.5	95.9	97.6	94.9	93.4	95.7	92.8	82.2	58.2	90.1	96.6	83.5	94.1	98.0	88.4

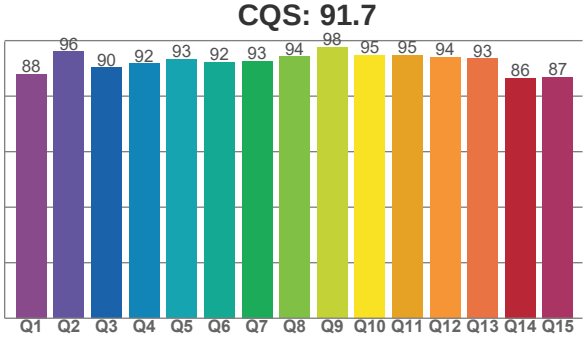
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.2	92.9	90.9	94.5	95.6	95.5	94.2	98.0	96.1	93.3	90.7	90.4	92.1	88.3	92.5	85.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.0	96.1	90.3	91.7	93.3	92.3	92.7	94.2	97.6	94.8	94.7	94.2	93.5	86.5	86.9

CQS: 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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2963 K	93.3	58.2	92.6	99.8	91.7	0.441	0.408	0.252	0.349	0.0011

alphabet bruck LEDRABRANDS

TM30 Details

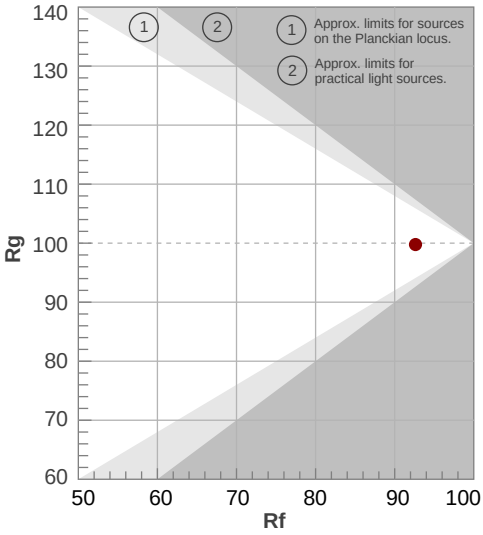
Rf 92.6

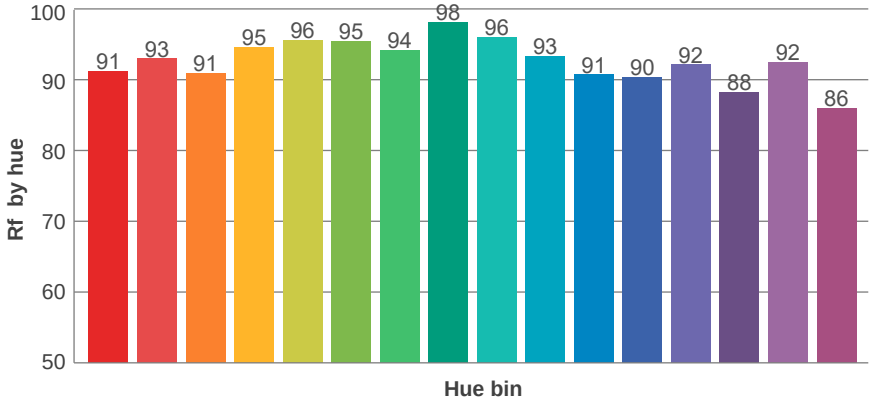
Fidelity index Rf

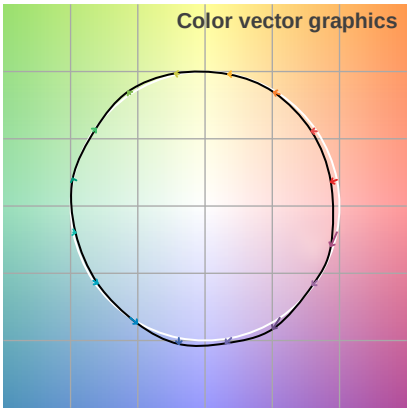
Rg 99.8

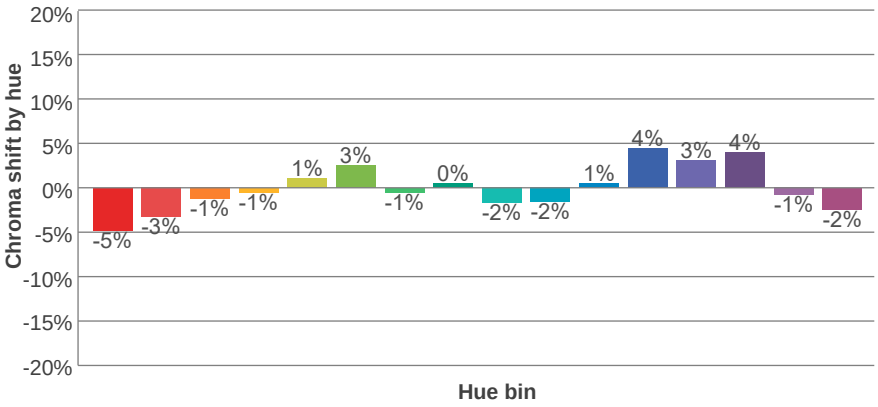
Gammut index Rg

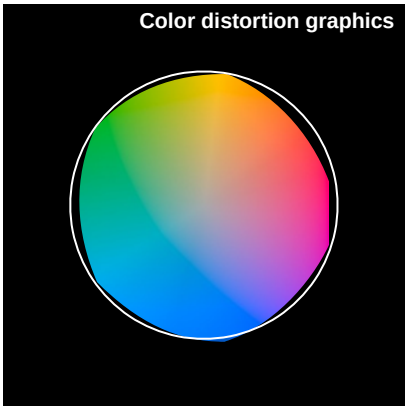
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	91	-5%	-1%
2	93	-3%	2%
3	91	-1%	5%
4	95	-1%	2%
5	96	1%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	96	-2%	1%
10	93	-2%	3%
11	91	1%	7%
12	90	4%	1%
13	92	3%	-5%
14	88	4%	-9%
15	92	-1%	-5%
16	86	-2%	-11%

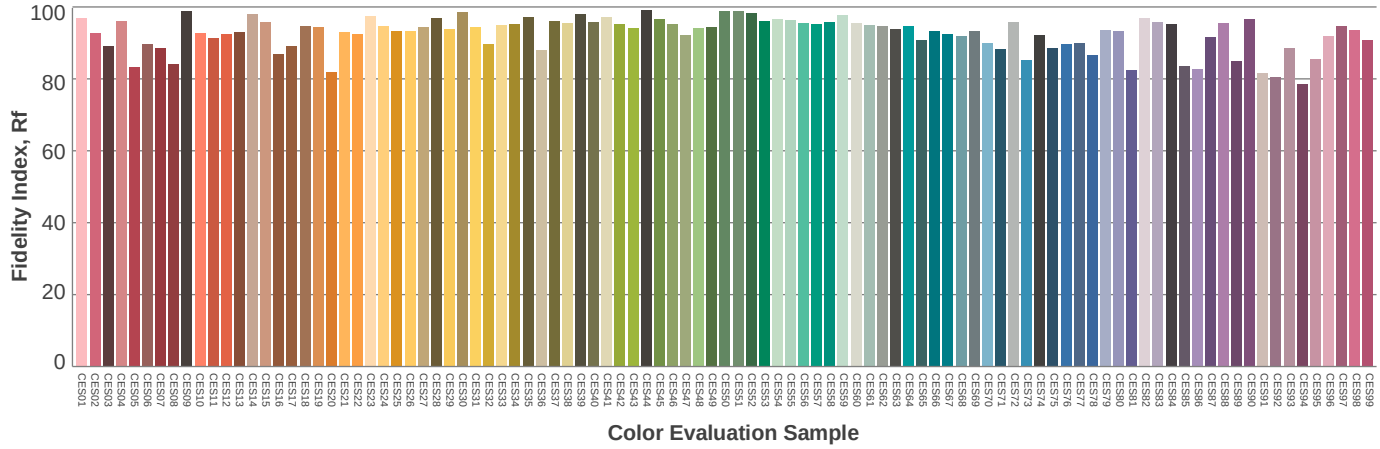




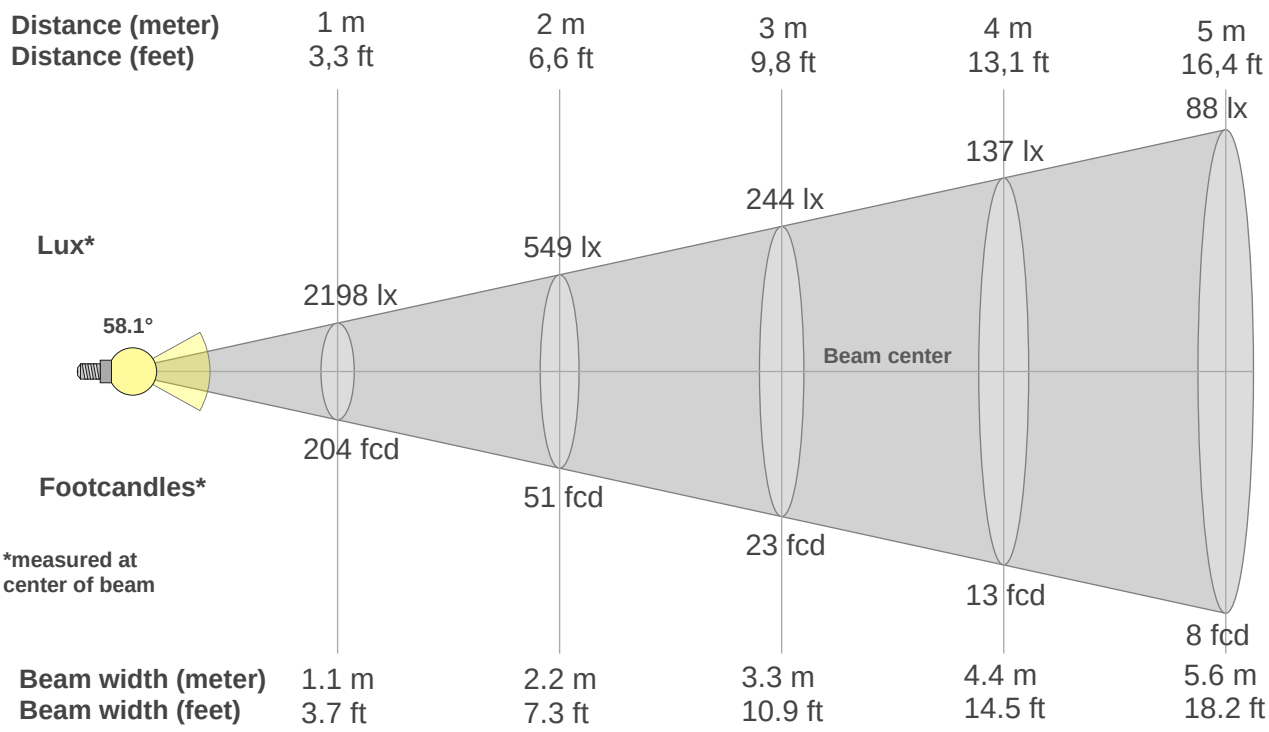








Beam Details



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
2198lx	549lx	244lx	137lx	88lx	61lx	45lx	34lx	27lx	22lx	18lx	15lx	13lx	11lx	10lx	9lx	8lx	7lx	6lx	5lx
204.2fc	51fcd	22.7fcd	12.8fcd	8.2fcd	5.7fcd	4.2fcd	3.2fcd	2.5fcd	2fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	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°
2198	2197	2190	2176	2155	2126	2083	2029	1960	1878	1782	1666	1528	1372	1199	1012	817	628	463	329
100%	100%	100%	99%	98%	97%	95%	92%	89%	85%	81%	76%	70%	62%	55%	46%	37%	29%	21%	15%

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°
2198	2192	2185	2172	2150	2120	2075	2017	1948	1866	1768	1651	1514	1357	1184	998	807	624	462	328
100%	100%	99%	99%	98%	96%	94%	92%	89%	85%	80%	75%	69%	62%	54%	45%	37%	28%	21%	15%

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°
2198	2197	2190	2176	2155	2126	2083	2029	1960	1878	1782	1666	1528	1372	1199	1012	817	628	463	329
100%	100%	100%	99%	98%	97%	95%	92%	89%	85%	81%	76%	70%	62%	55%	46%	37%	29%	21%	15%

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°
2198	2192	2185	2172	2150	2120	2075	2017	1948	1866	1768	1651	1514	1357	1184	998	807	624	462	328
100%	100%	99%	99%	98%	96%	94%	92%	89%	85%	80%	75%	69%	62%	54%	45%	37%	28%	21%	15%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
58.1°	80.6°	95.5°	99.1%	96.9%