

Light efficiency:



Light quality:



Color temperature:



Output: 1449 lm

Peak: 3790 cd

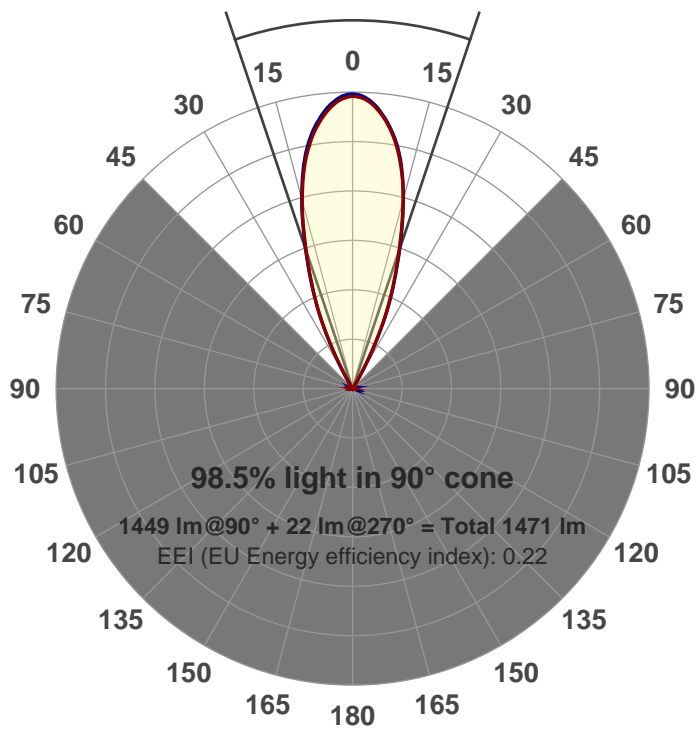
Power: 21.1 W

PF: 0.99



Beam angle

37.2°



Product name:
GR-CZ20-FL-RD

Item number:
GR-CZ20-FL-RD

Date and time:
6/14/2017 11:54:40 AM

Description:
500 mA V6

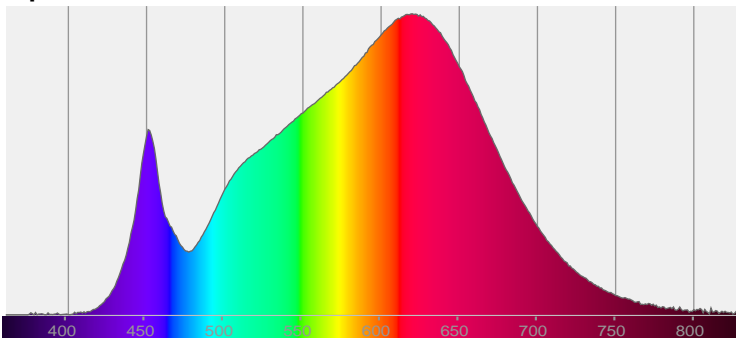
LUM: 1449

PPF: 24.3

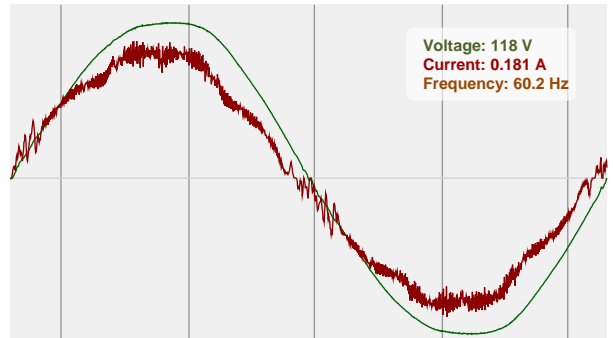


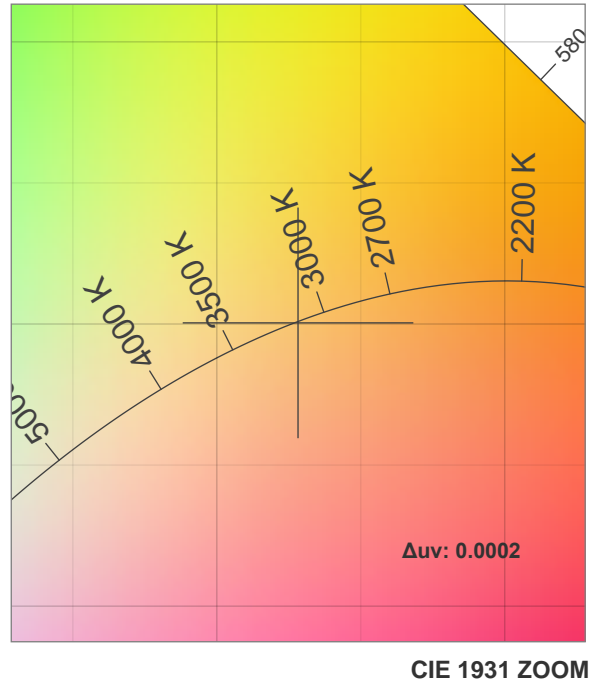
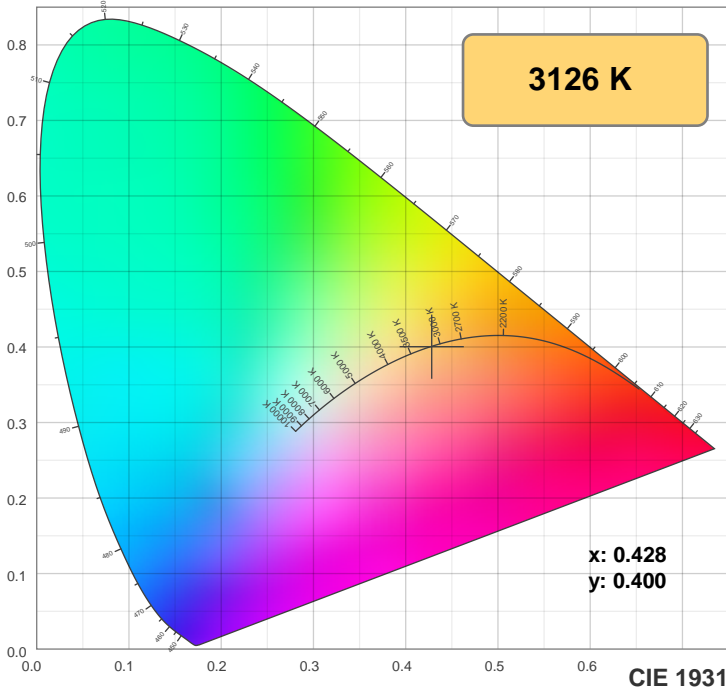
CIE 1931
x: 0.428
y: 0.400

Spectra

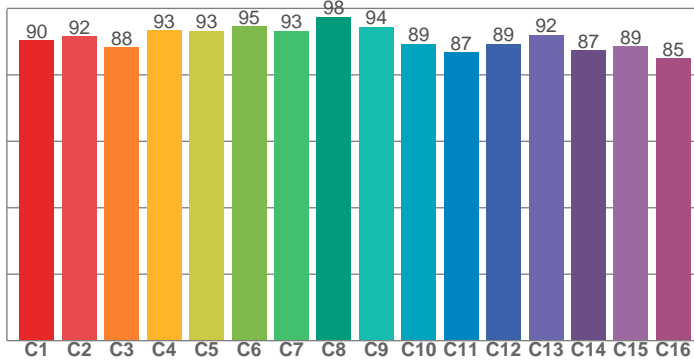


Power

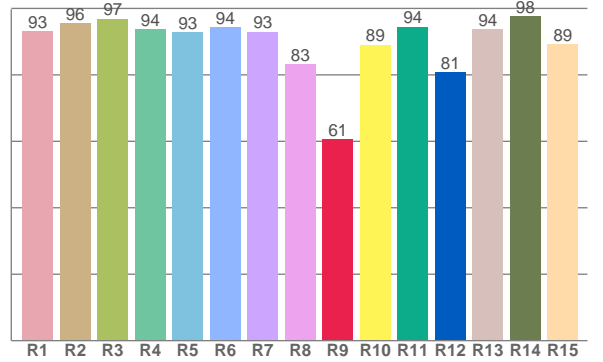




TM30: 90.9



CRI: 92.8 (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
93.1	95.6	96.9	93.6	92.7	94.4	92.9	83.2	60.5	89.0	94.5	80.7	93.7	97.7	89.2

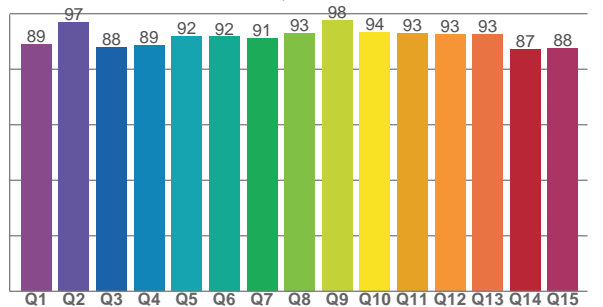
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90.3	91.6	88.2	93.4	93.3	94.5	93.2	97.5	94.4	89.2	86.7	89.4	92.0	87.3	88.5	85.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.2	96.9	87.9	88.7	91.8	91.8	91.1	93.0	97.7	93.5	93.0	92.7	92.6	87.2	87.7

CQS: 91.0



Color parameters

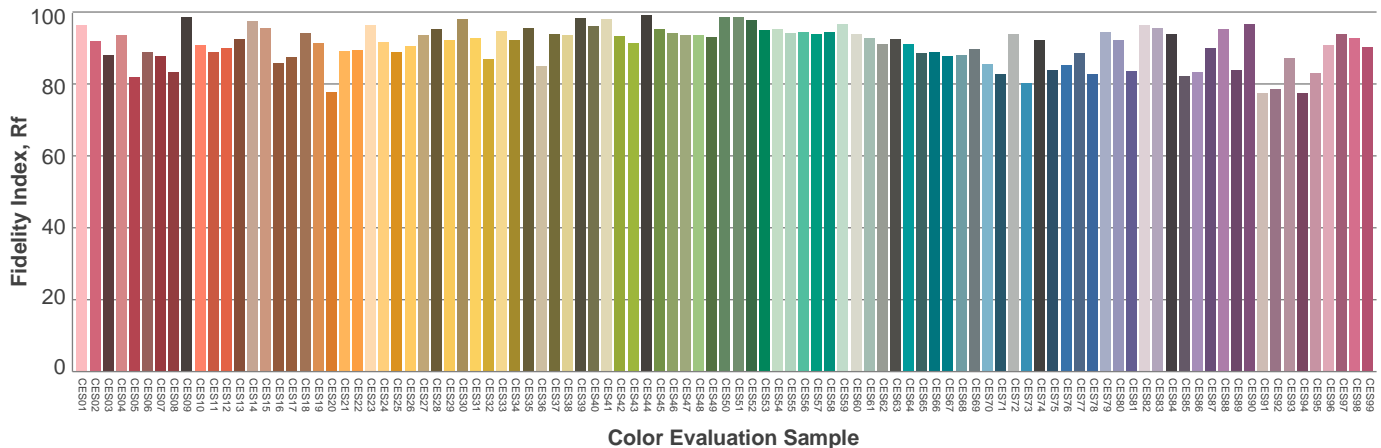
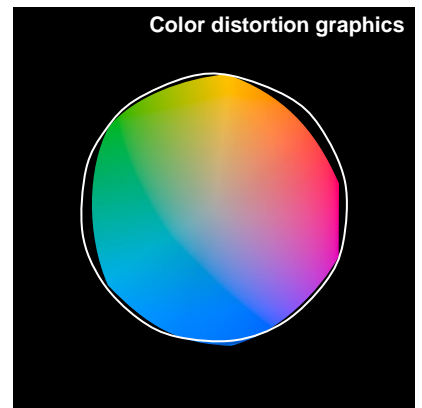
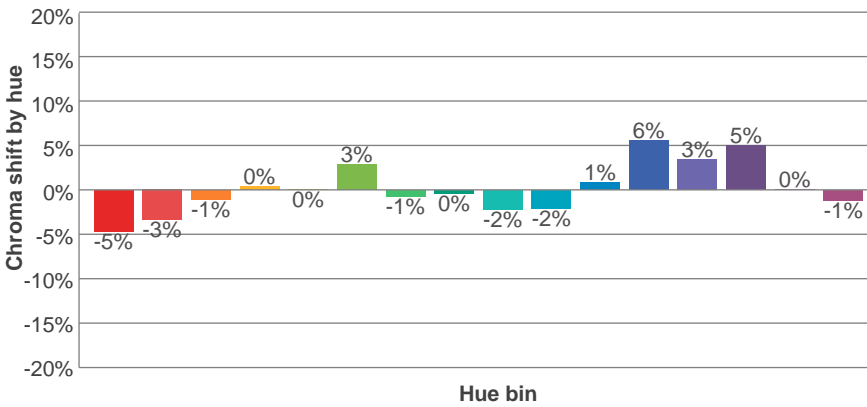
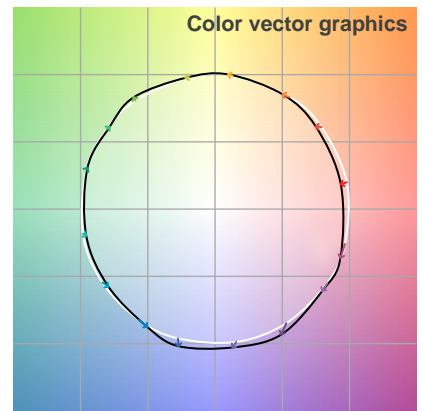
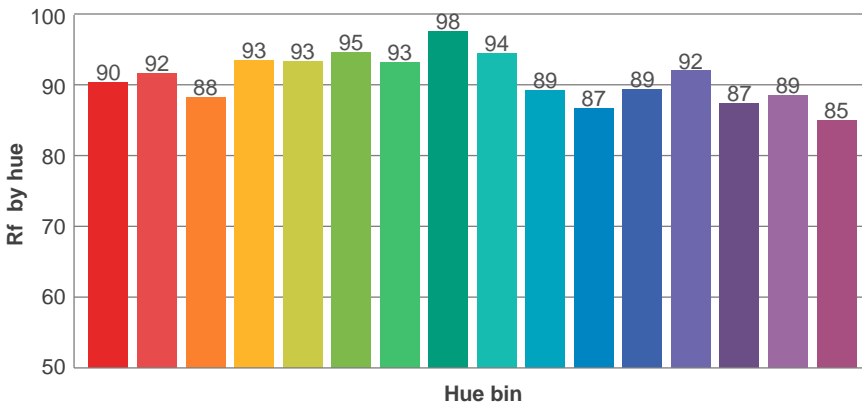
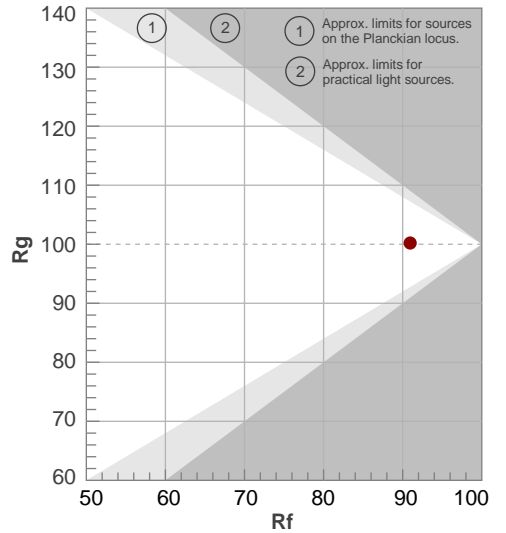
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3126 K	92.8	60.5	90.9	100.2	91.0	0.428	0.400	0.247	0.346	0.0002

TM30 details

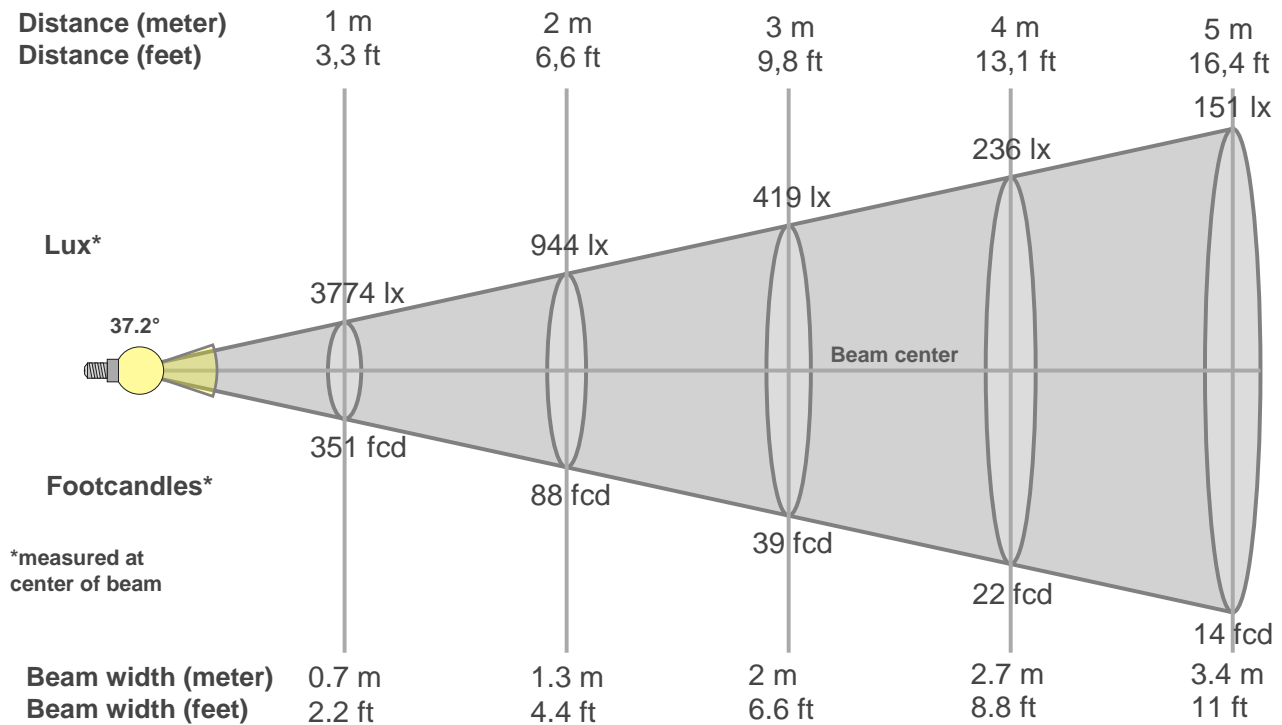
Rf 90.9
Fidelity index Rf

Rg 100.2
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	90	-5%	-1%
2	92	-3%	3%
3	88	-1%	5%
4	93	0%	3%
5	93	0%	3%
6	95	3%	0%
7	93	-1%	-3%
8	98	0%	-1%
9	94	-2%	2%
10	89	-2%	5%
11	87	1%	8%
12	89	6%	2%
13	92	3%	-3%
14	87	5%	-8%
15	89	0%	-7%
16	85	-1%	-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
3774lx	944lx	419lx	236lx	151lx	105lx	77lx	59lx	47lx	38lx	31lx	26lx	22lx	19lx	17lx	15lx	13lx	12lx	10lx	9lx
350.6fc	87.7fcd	39fcd	21.9fcd	14fcd	9.7fcd	7.2fcd	5.5fcd	4.3fcd	3.5fcd	2.9fcd	2.4fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd

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°
3774	3729	3651	3530	3379	3185	2950	2660	2337	1978	1647	1339	1038	710	406	172	67	49	41	36
100%	99%	97%	94%	90%	84%	78%	70%	62%	52%	44%	35%	28%	19%	11%	5%	2%	1%	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°
3774	3766	3688	3572	3421	3231	2990	2689	2360	2000	1667	1357	1058	732	422	188	71	50	43	38
100%	100%	98%	95%	91%	86%	79%	71%	63%	53%	44%	36%	28%	19%	11%	5%	2%	1%	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°
3774	3736	3664	3545	3392	3197	2957	2675	2333	1978	1648	1350	1055	736	432	189	71	50	42	37
100%	99%	97%	94%	90%	85%	78%	71%	62%	52%	44%	36%	28%	19%	11%	5%	2%	1%	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°
3774	3762	3685	3563	3408	3220	2982	2684	2350	1999	1668	1369	1069	737	426	185	70	49	42	37
100%	100%	98%	94%	90%	85%	79%	71%	62%	53%	44%	36%	28%	20%	11%	5%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37.2°	56.6°	62.5°	1.0%	1.0%

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