

Light efficiency:



Light quality:



Color temperature:



Output: 1422 lm

Peak: 6491 cd

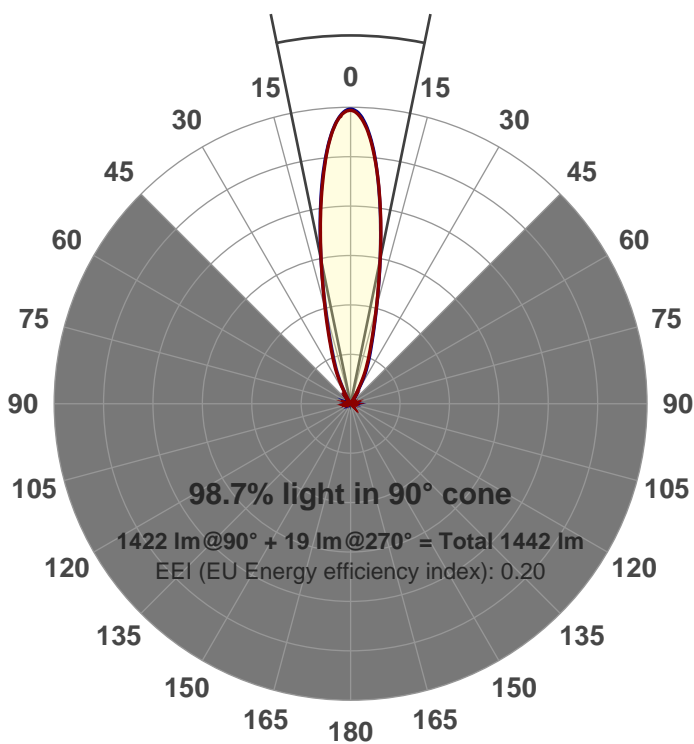
Power: 21.1 W

PF: 0.99



Beam angle

23.2°



Product name:

GR-CZ20-NF-RD

Item number:

GR-CZ20-NF-RD

Date and time:

6/14/2017 12:25:18 PM

Description:

500 mA V6

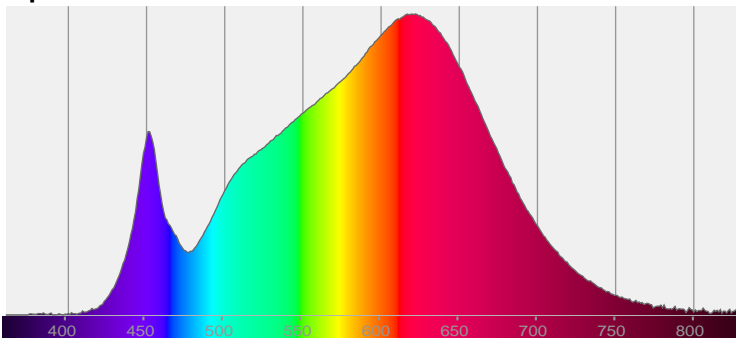
LUM: 1422

PPF: 24.0

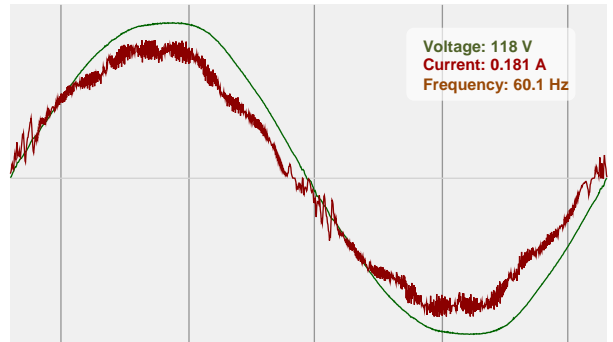


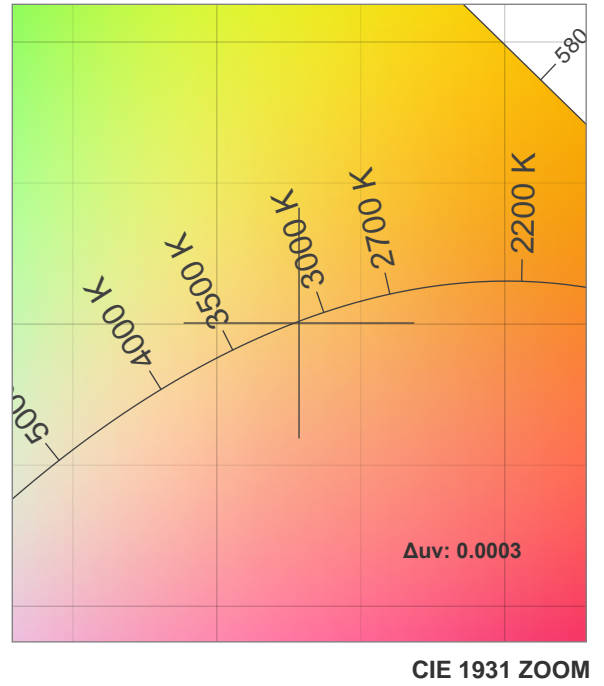
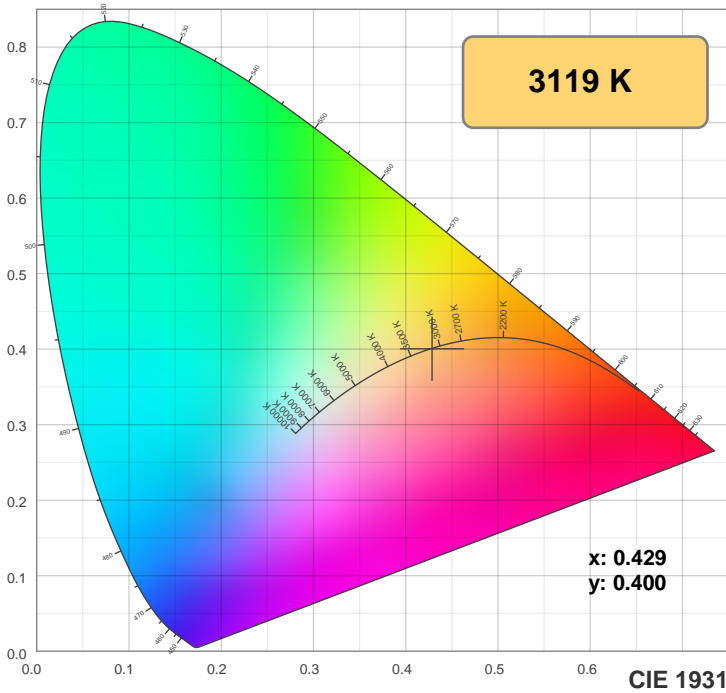
CIE 1931
x: 0.429
y: 0.400

Spectra

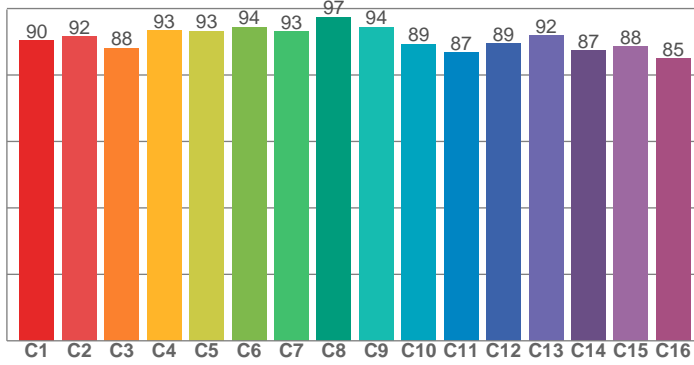


Power

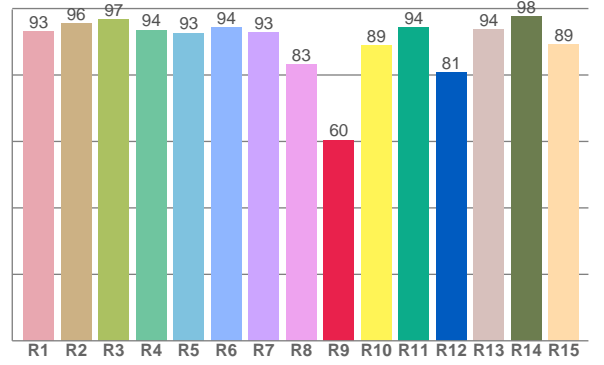




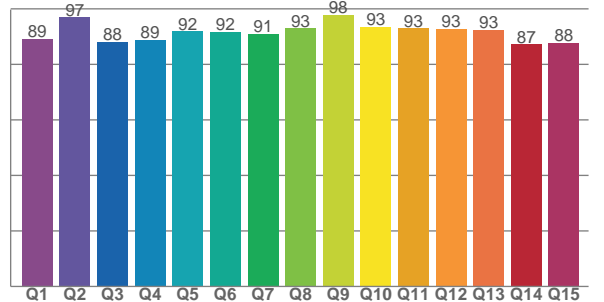
TM30: 90.9



CRI: 92.8 (R1-R8)



CQS: 91.0



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
93.0	95.6	96.9	93.6	92.7	94.4	92.9	83.2	60.5	89.0	94.4	80.9	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	91.5	88.1	93.3	93.3	94.4	93.2	97.4	94.5	89.4	86.7	89.4	91.9	87.3	88.5	85.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.1	96.9	87.9	88.7	91.8	91.7	91.0	93.0	97.7	93.5	93.0	92.6	92.5	87.2	87.7

Color parameters

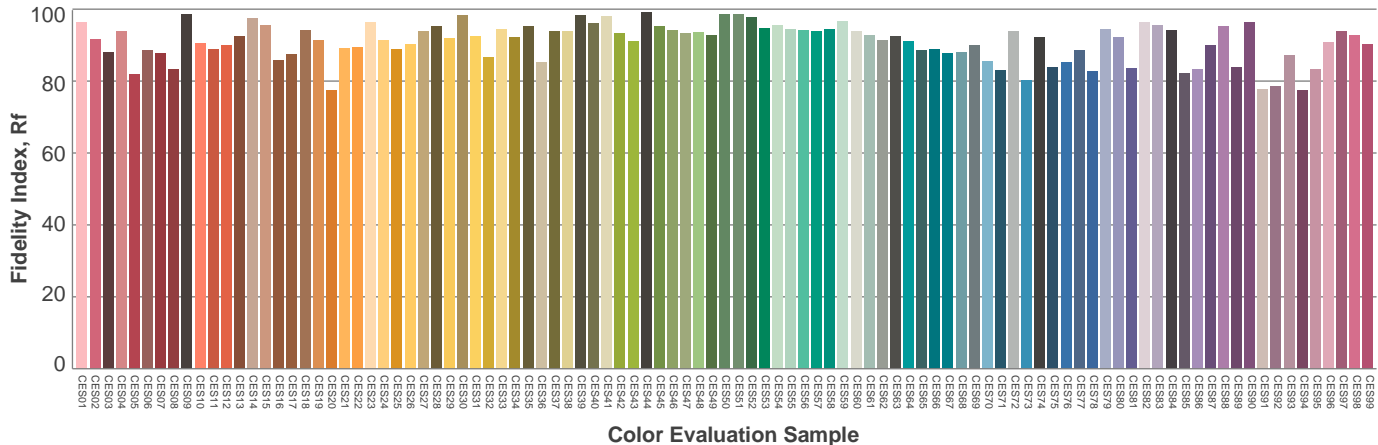
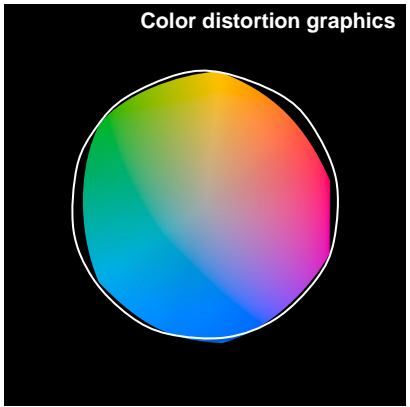
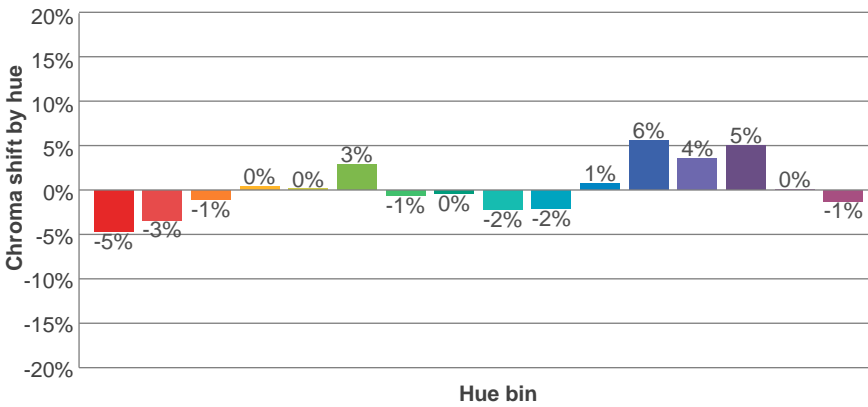
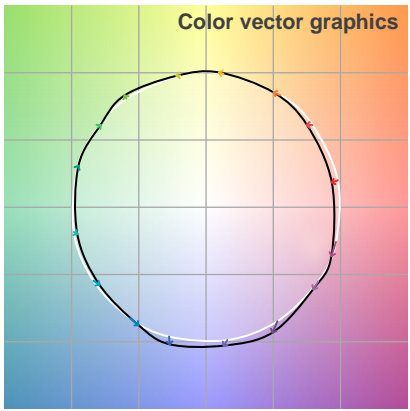
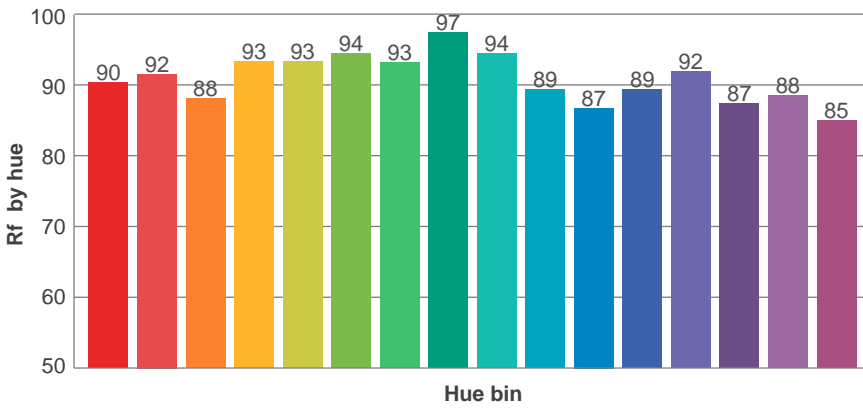
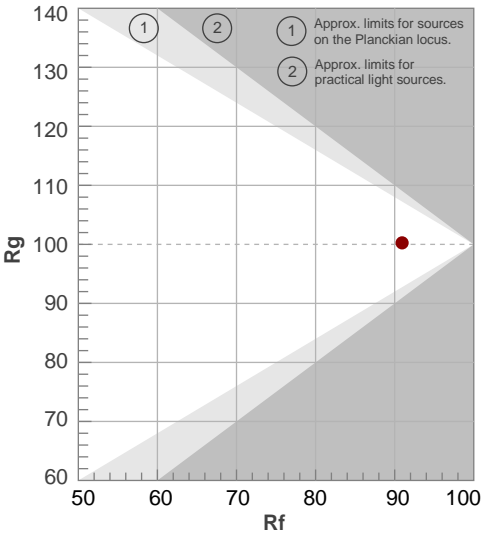
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3119 K	92.8	60.5	90.9	100.3	91.0	0.429	0.400	0.247	0.346	0.0003

TM30 details

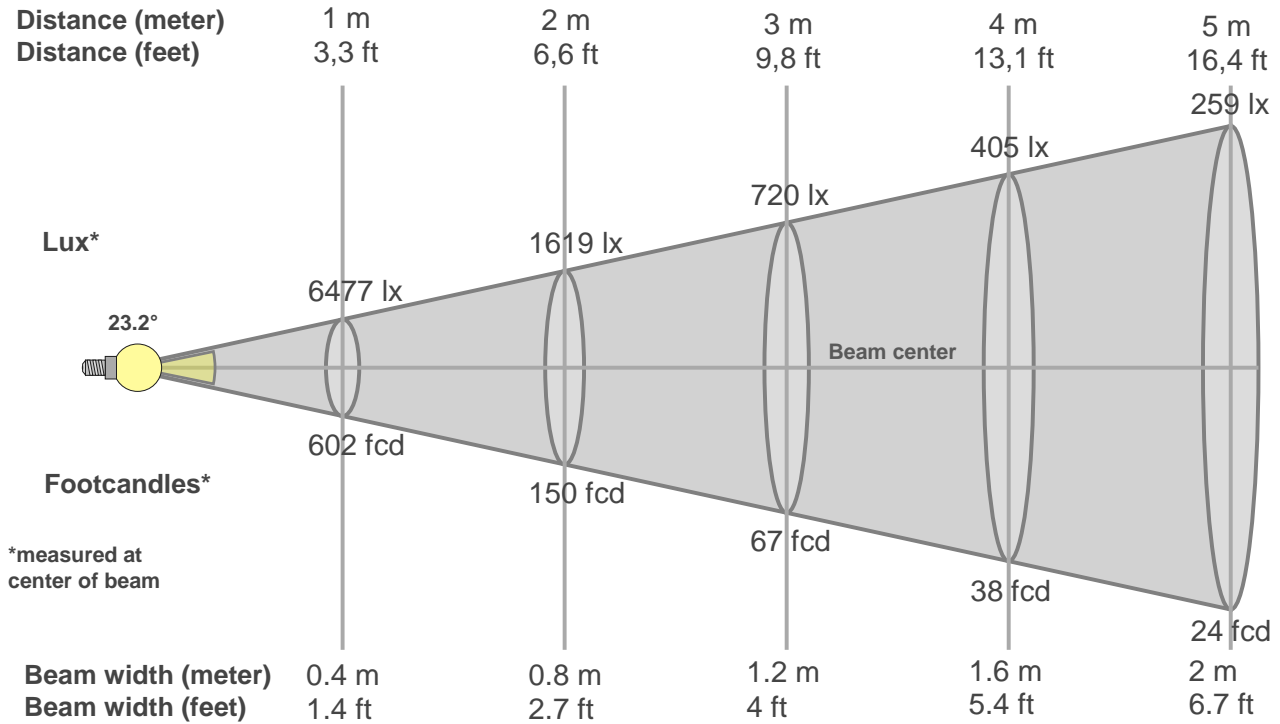
Rf 90.9
Fidelity index Rf

Rg 100.3
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	94	3%	0%
7	93	-1%	-3%
8	97	0%	-1%
9	94	-2%	2%
10	89	-2%	5%
11	87	1%	8%
12	89	6%	2%
13	92	4%	-3%
14	87	5%	-8%
15	88	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
6477lx	1619lx	720lx	405lx	259lx	180lx	132lx	101lx	80lx	65lx	54lx	45lx	38lx	33lx	29lx	25lx	22lx	20lx	18lx	16lx
601.8fcd	150.4fcd	66.9fcd	37.6fcd	24.1fcd	16.7fcd	12.3fcd	9.4fcd	7.4fcd	6fcd	5fcd	4.2fcd	3.6fcd	3.1fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd

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°
6477	6331	5965	5348	4612	3826	3084	2436	1931	1525	1219	977	772	537	307	131	54	45	38	31
100%	98%	92%	83%	71%	59%	48%	38%	30%	24%	19%	15%	12%	8%	5%	2%	1%	1%	1%	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°
6477	6356	5978	5390	4661	3863	3077	2393	1823	1424	1121	882	651	413	209	77	51	42	36	30
100%	98%	92%	83%	72%	60%	47%	37%	28%	22%	17%	14%	10%	6%	3%	1%	1%	1%	1%	0%

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°
6477	6308	5913	5311	4600	3839	3088	2466	1946	1549	1252	1017	806	572	340	152	57	44	37	31
100%	97%	91%	82%	71%	59%	48%	38%	30%	24%	19%	16%	12%	9%	5%	2%	1%	1%	1%	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°
6477	6353	5946	5330	4575	3811	3102	2479	1987	1610	1320	1101	900	701	465	251	93	47	39	32
100%	98%	92%	82%	71%	59%	48%	38%	31%	25%	20%	17%	14%	11%	7%	4%	1%	1%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.2°	50.5°	59.5°	1.0%	1.0%

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