

Light efficiency:



Light quality:



Color temperature:

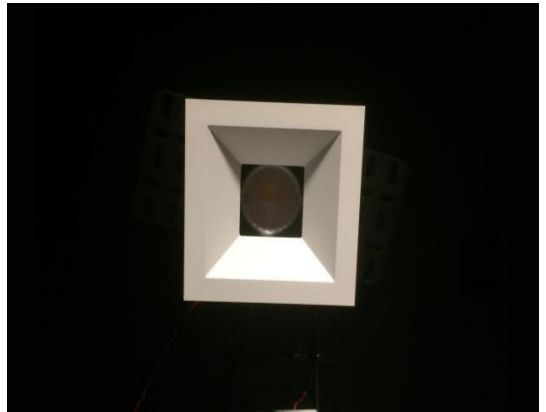


Output: 1290 lm

Peak: 3892 cd

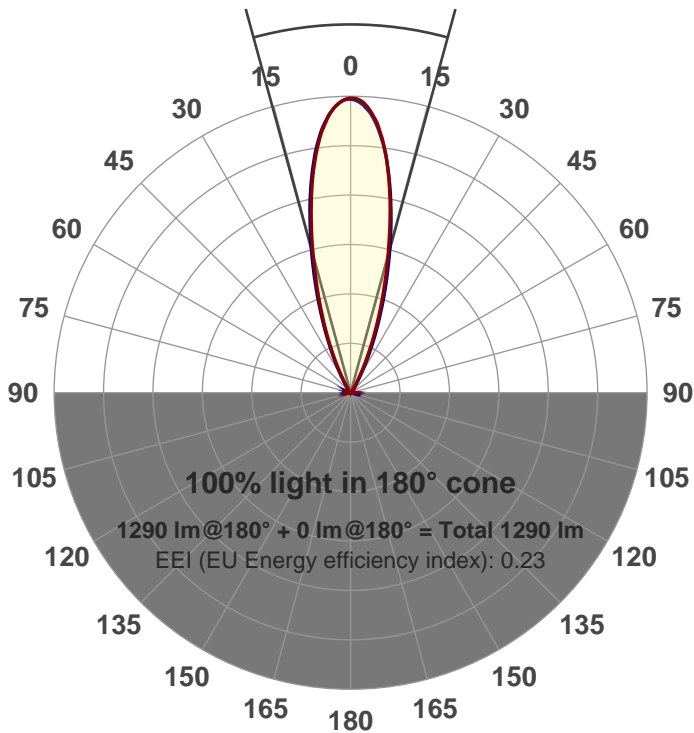
Power: 21.2 W

PF: 0.99



Beam angle

30.6°



Product name:

GR-CZ20-FL-SQ-91A

Item number:

GR-CZ20-FL-SQ-91A

Date and time:

3/8/2017 3:59:32 PM

Description:

LUM: 1290

PPF: 20.8

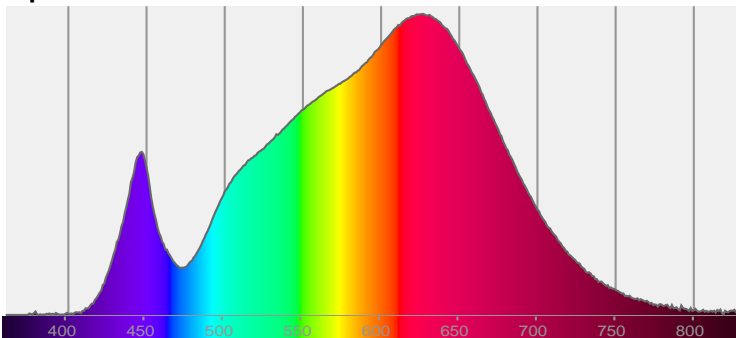


CIE 1931

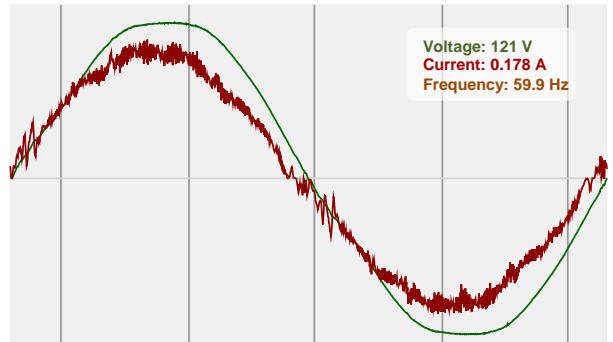
x: 0.430

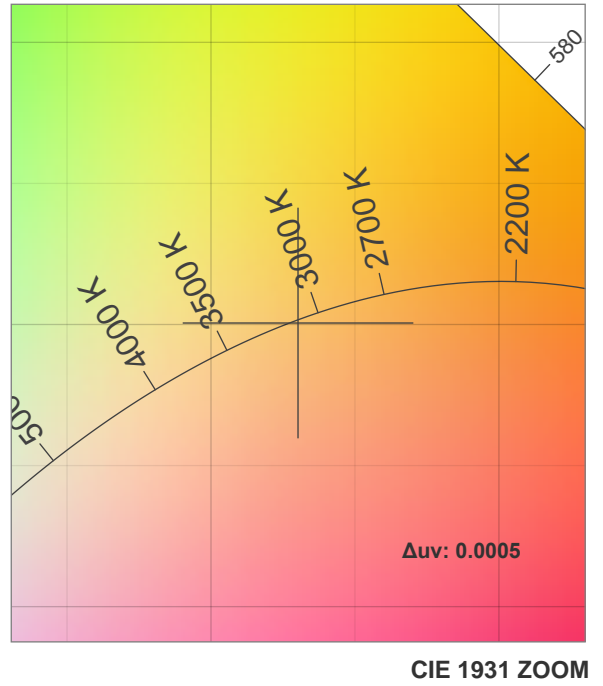
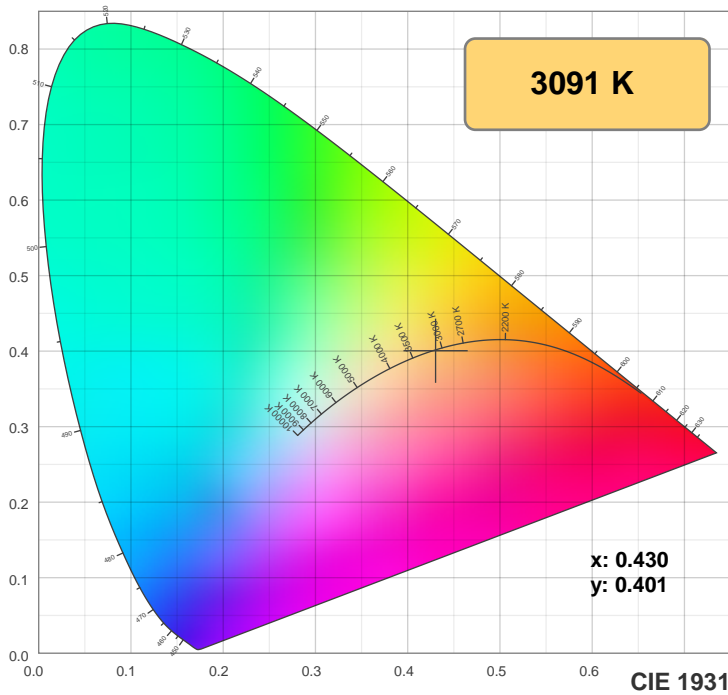
y: 0.401

Spectra



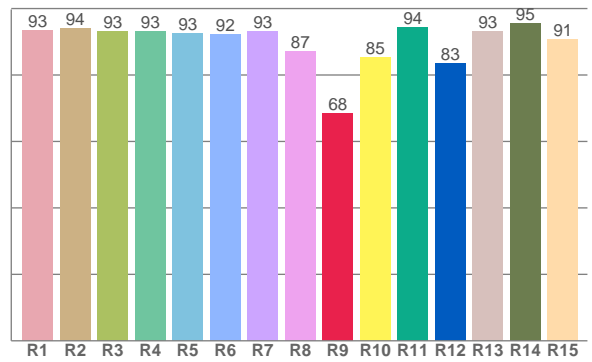
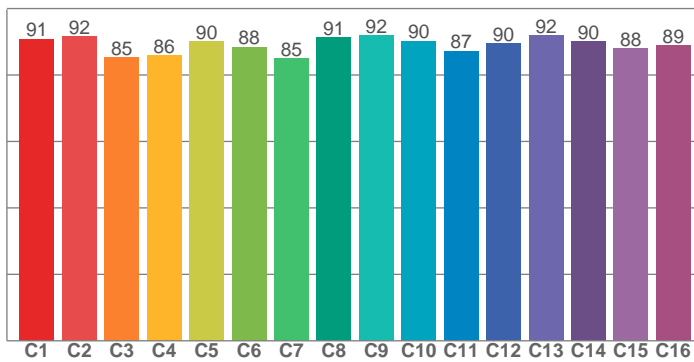
Power





TM30: 89.2

CRI: 92.3 (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
93.4	93.9	93.1	93.1	92.6	92.1	93.2	87.1	68.5	85.2	94.2	83.5	93.2	95.5	90.7

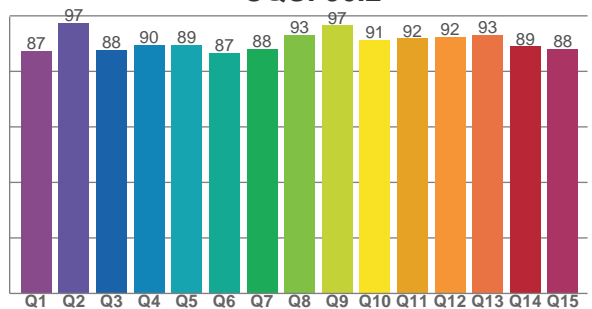
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90.8	91.7	85.3	85.8	90.0	88.4	84.9	91.3	92.0	90.3	87.2	89.5	91.8	90.0	87.9	88.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87.3	97.3	87.8	89.5	89.5	86.5	88.0	93.0	96.5	91.4	91.9	92.5	93.2	89.0	88.2

CQS: 90.2



Color parameters

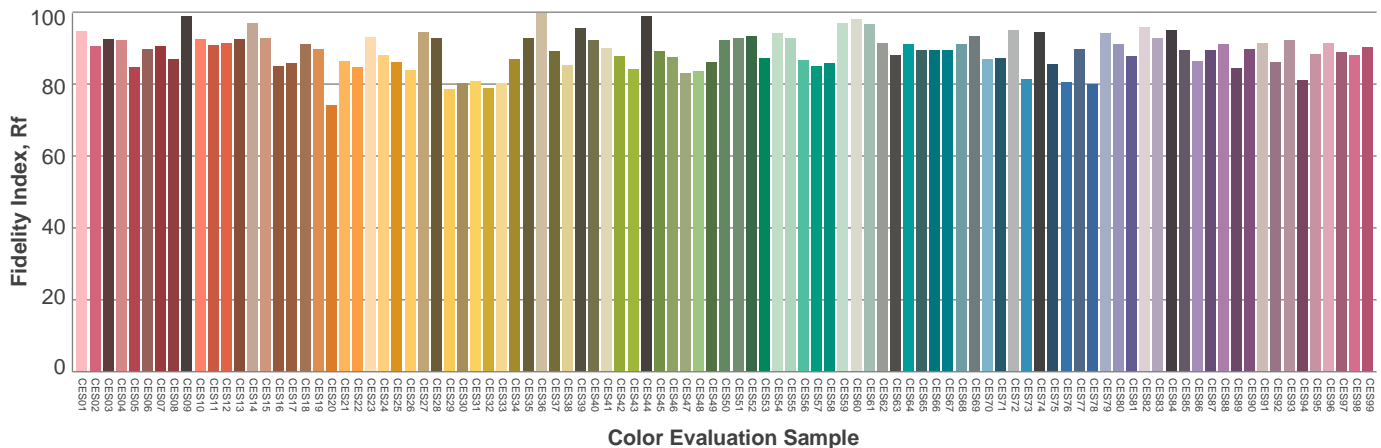
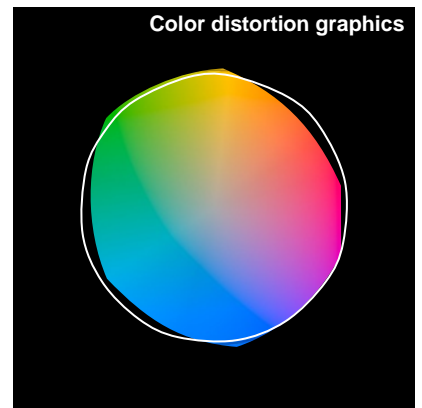
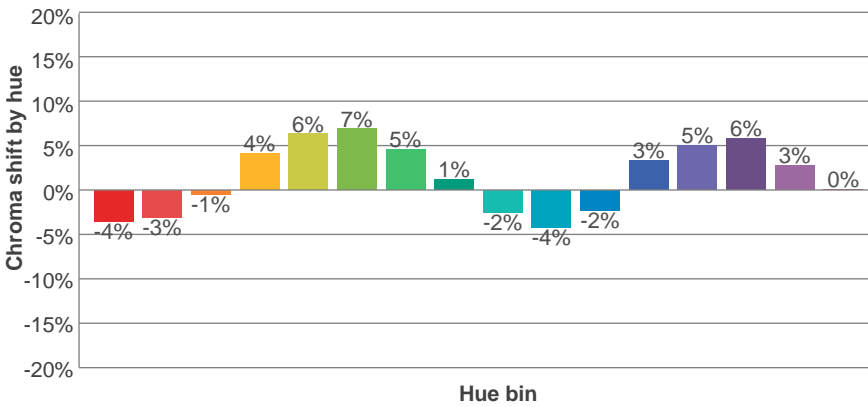
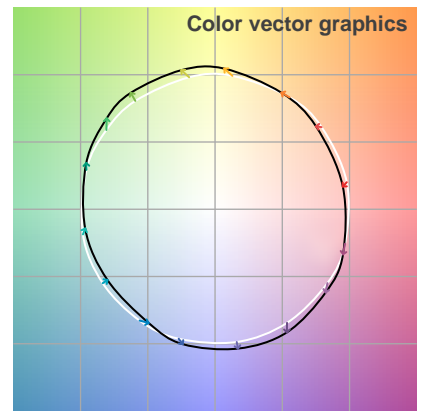
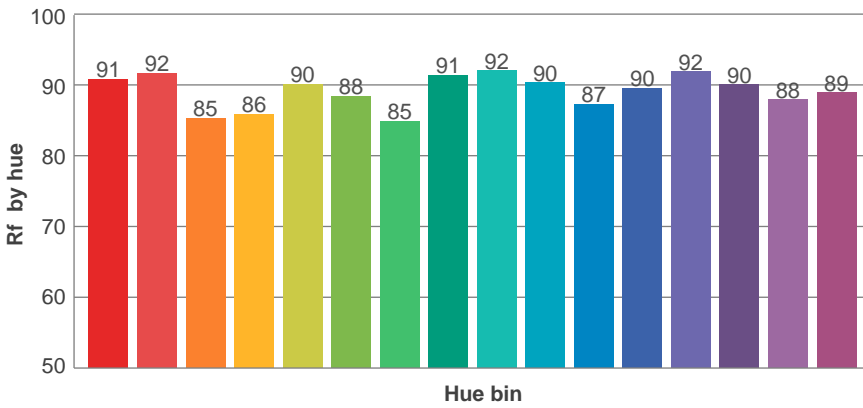
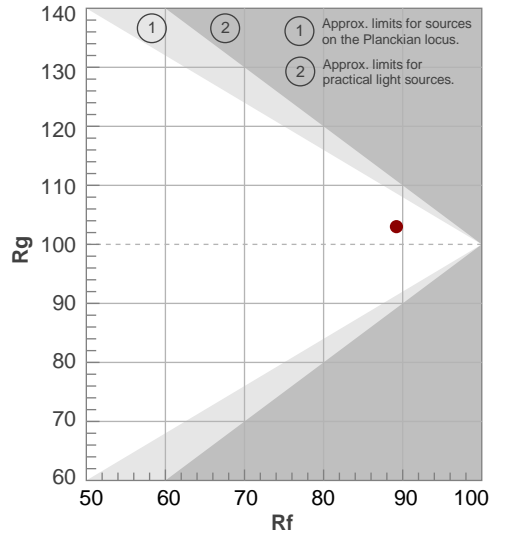
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3091 K	92.3	68.5	89.2	103.0	90.2	0.430	0.401	0.248	0.346	0.0005

TM30 details

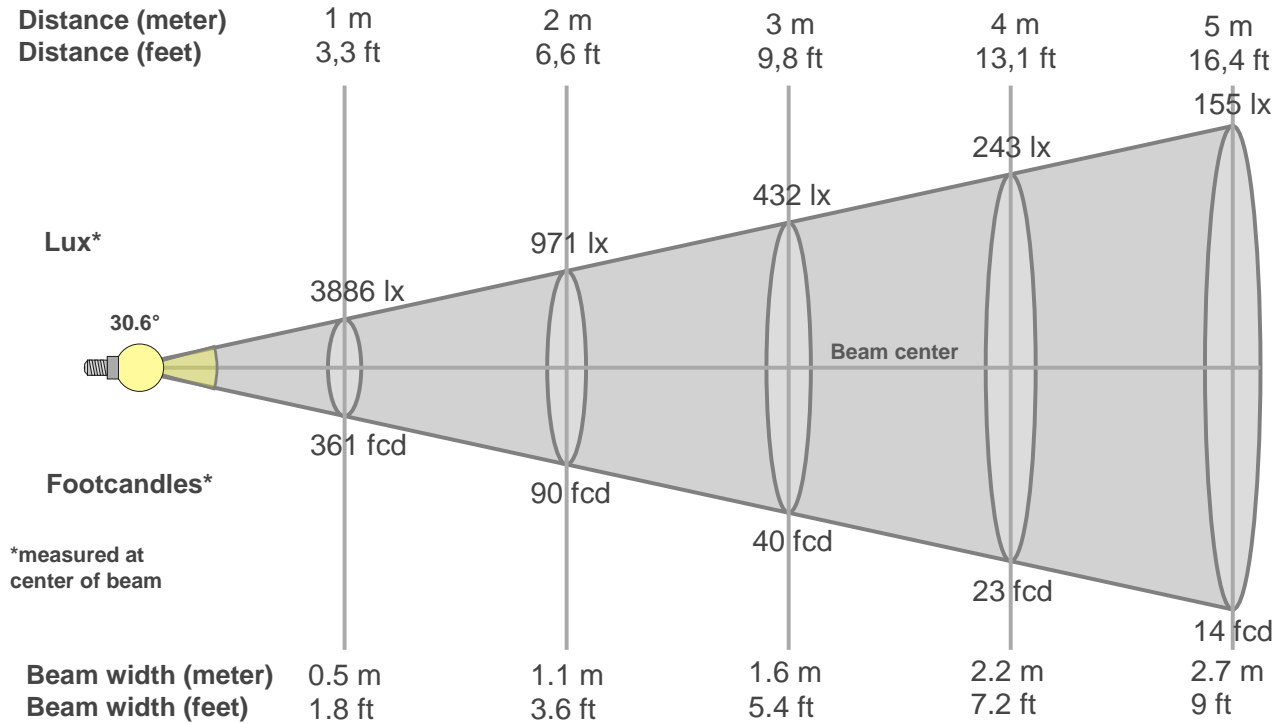
Rf 89.2
Fidelity index Rf

Rg 103.0
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-3%
2	92	-3%	3%
3	85	-1%	7%
4	86	4%	7%
5	90	6%	5%
6	88	7%	0%
7	85	5%	-7%
8	91	1%	-5%
9	92	-2%	-4%
10	90	-4%	0%
11	87	-2%	7%
12	90	3%	4%
13	92	5%	0%
14	90	6%	-4%
15	88	3%	-6%
16	89	0%	-8%



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
3886lx	971lx	432lx	243lx	155lx	108lx	79lx	61lx	48lx	39lx	32lx	27lx	23lx	20lx	17lx	15lx	13lx	12lx	11lx	10lx
361fcd	90.3fcd	40.1fcd	22.6fcd	14.4fcd	10fcd	7.4fcd	5.6fcd	4.5fcd	3.6fcd	3fcd	2.5fcd	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°
3886	3841	3715	3501	3220	2882	2499	2116	1737	1403	1101	840	610	419	271	170	108	73	55	44
100%	99%	96%	90%	83%	74%	64%	54%	45%	36%	28%	22%	16%	11%	7%	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°
3886	3841	3718	3525	3259	2934	2577	2196	1837	1496	1187	919	684	492	335	225	152	107	75	56
100%	99%	96%	91%	84%	75%	66%	57%	47%	39%	31%	24%	18%	13%	9%	6%	4%	3%	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°
3886	3861	3733	3530	3241	2896	2510	2111	1748	1405	1102	835	607	418	271	175	116	80	59	46
100%	99%	96%	91%	83%	75%	65%	54%	45%	36%	28%	21%	16%	11%	7%	5%	3%	2%	2%	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°
3886	3827	3703	3500	3234	2908	2553	2193	1838	1509	1207	943	711	520	358	242	166	115	80	57
100%	98%	95%	90%	83%	75%	66%	56%	47%	39%	31%	24%	18%	13%	9%	6%	4%	3%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30.6°	56.9°	71.3°	1.0%	1.0%

