

Light efficiency:



Light quality:



Color temperature:



Output: 1190 lm

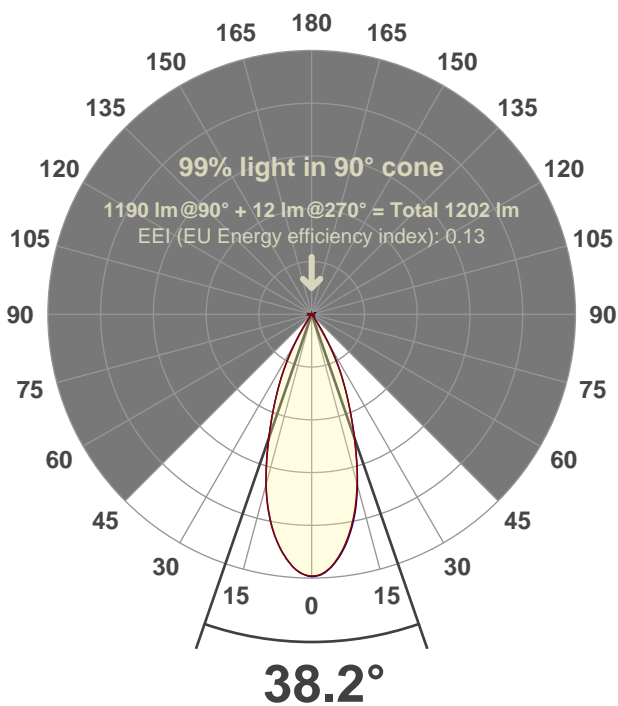
Peak: 2810 cd

Power: 14.7 W

PF: 0.99



Beam angle



Test number:

GRO-CZ14-FL-RD

Luminaire Model:

GRO-CZ14-FL-RD

Date and time:

6/14/2017 5:17:09 PM

LUM: 1190

CIE 1931

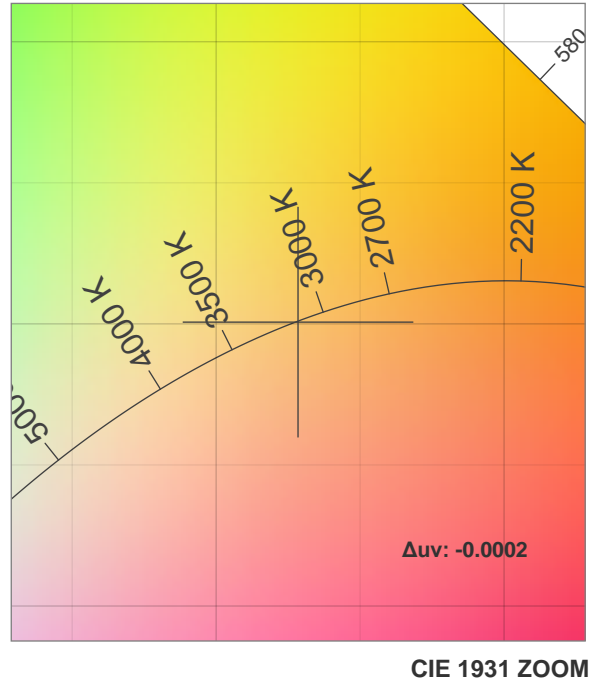
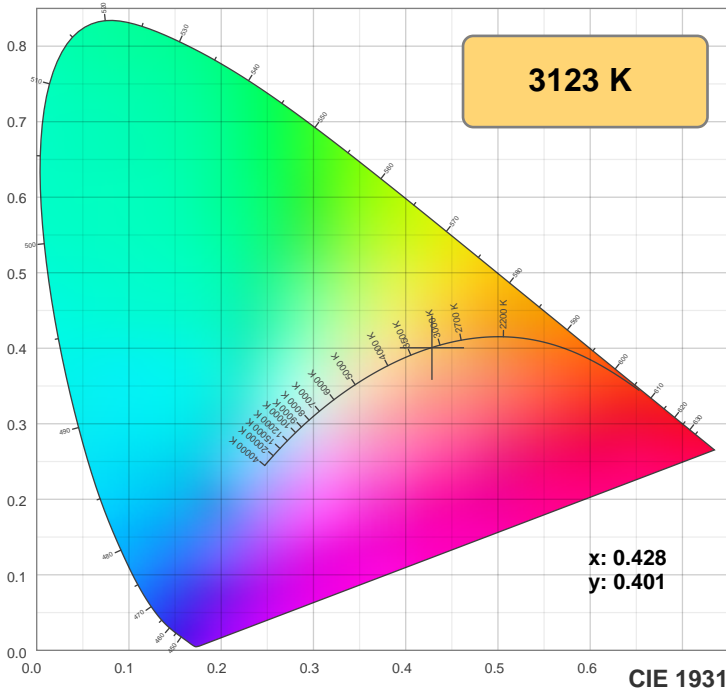
x: 0.428

y: 0.401

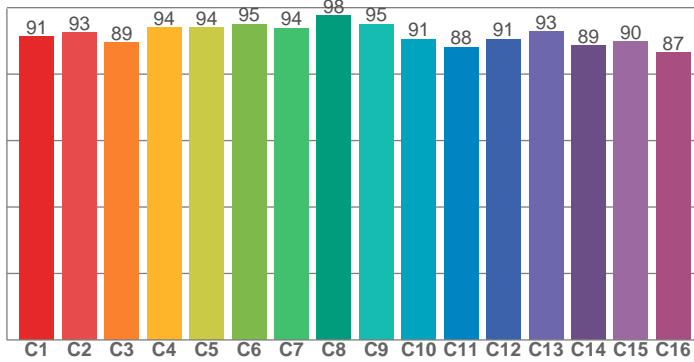


Spectra

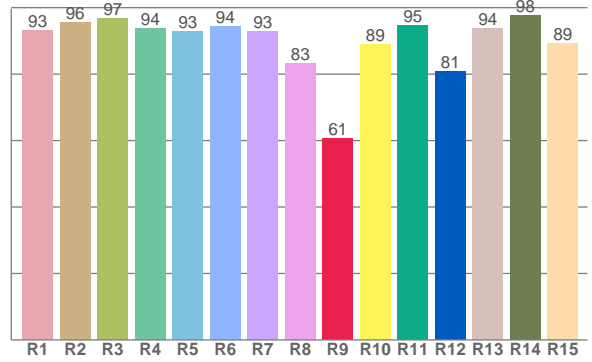




TM30: 91.9



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	96.8	93.7	92.7	94.3	93.0	83.3	60.7	89.0	94.5	80.7	93.7	97.6	89.2

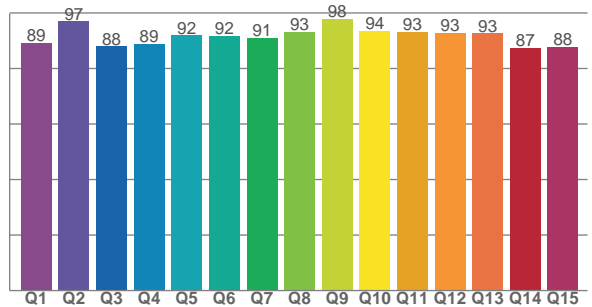
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.4	92.5	89.5	94.1	94.0	95.0	93.9	97.7	95.1	90.6	88.2	90.5	92.8	88.7	89.7	86.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.2	96.9	88.0	88.8	91.9	91.7	91.1	93.1	97.7	93.5	93.1	92.8	92.6	87.3	87.8

CQS: 91.1



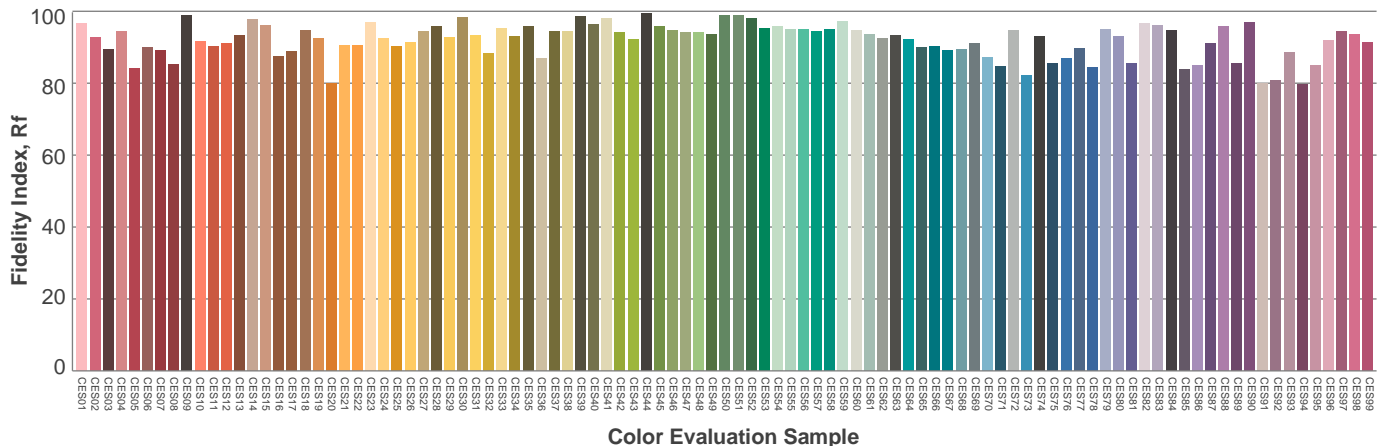
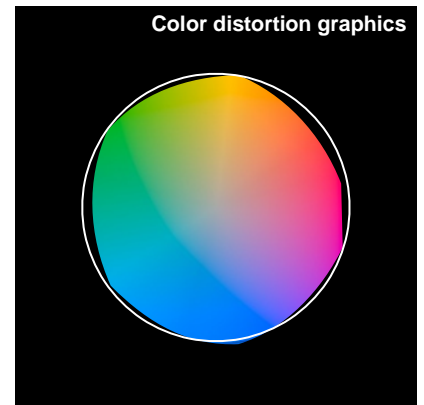
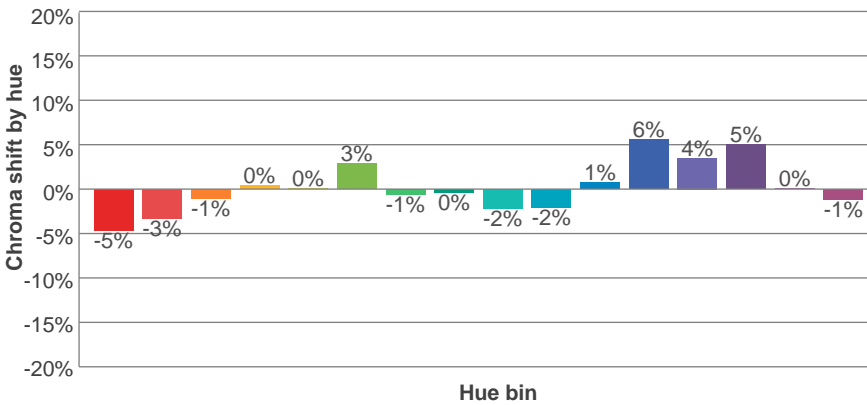
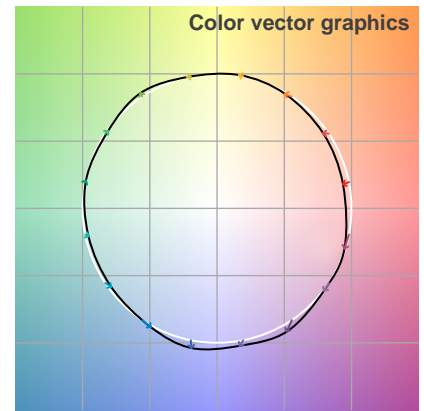
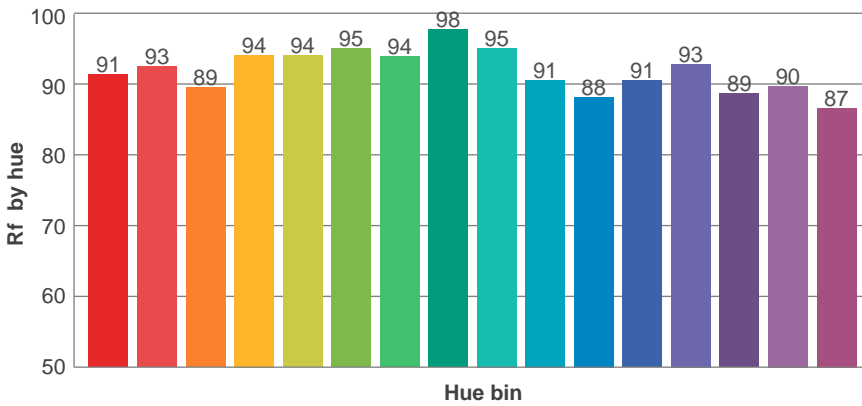
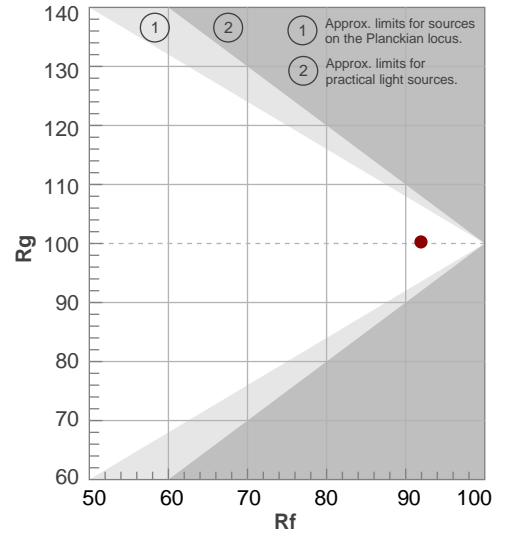
Color parameters

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
3123 K	92.8	60.7	91.9	100.3	91.1	0.428	0.401	0.247	0.346	-0.0002

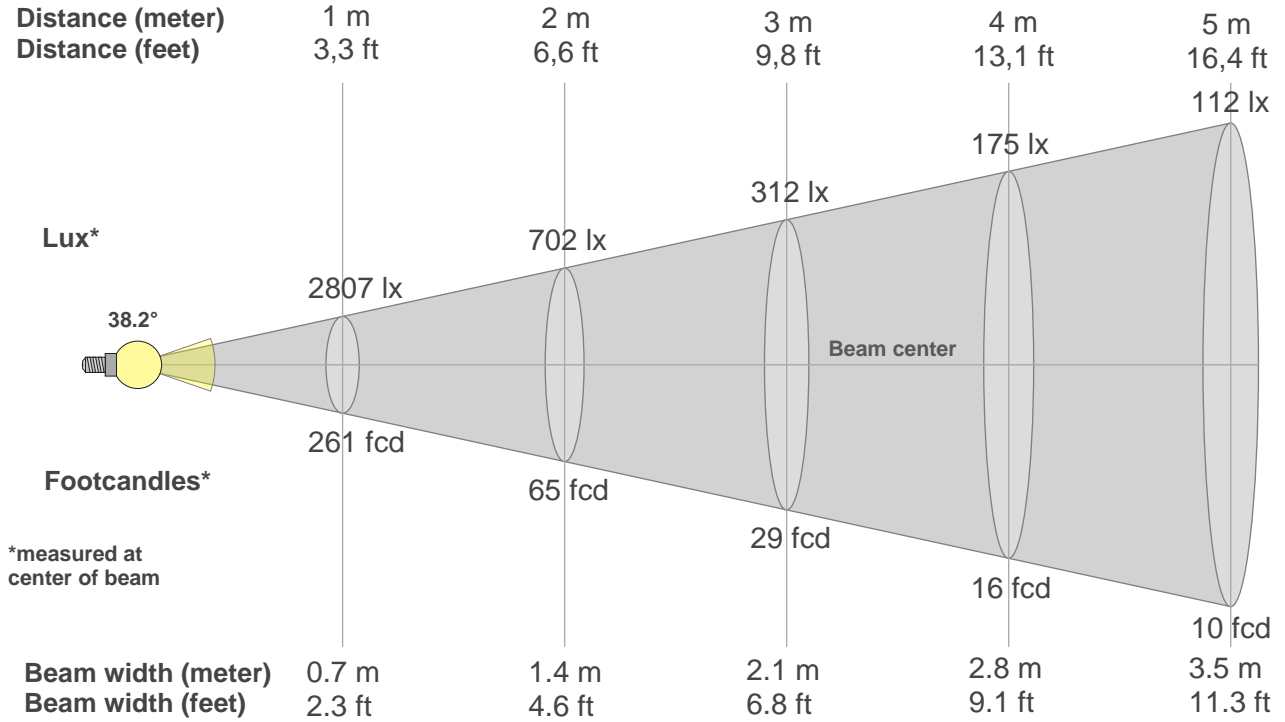
Rf 91.9
Fidelity index Rf

Rg 100.3
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	93	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	91	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	4%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-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
2807lx	702lx	312lx	175lx	112lx	78lx	57lx	44lx	35lx	28lx	23lx	19lx	17lx	14lx	12lx	11lx	10lx	9lx	8lx	7lx
260.8fcd	65.2fcd	29fcd	16.3fcd	10.4fcd	7.2fcd	5.3fcd	4.1fcd	3.2fcd	2.6fcd	2.2fcd	1.8fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.7fcd

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°
2807	2789	2730	2633	2510	2360	2188	1988	1768	1526	1299	1083	896	720	537	359	205	56	32	27
100%	99%	97%	94%	89%	84%	78%	71%	63%	54%	46%	39%	32%	26%	19%	13%	7%	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°
2807	2795	2735	2643	2524	2378	2208	2006	1776	1531	1301	1087	898	727	555	380	223	103	34	28
100%	100%	97%	94%	90%	85%	79%	71%	63%	55%	46%	39%	32%	26%	20%	14%	8%	4%	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°
2807	2783	2724	2634	2511	2366	2196	1998	1767	1529	1298	1087	896	724	545	367	211	84	34	28
100%	99%	97%	94%	89%	84%	78%	71%	63%	54%	46%	39%	32%	26%	19%	13%	8%	3%	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°
2807	2785	2722	2624	2505	2360	2187	1993	1770	1533	1303	1090	899	715	526	347	190	49	33	28
100%	99%	97%	93%	89%	84%	78%	71%	63%	55%	46%	39%	32%	25%	19%	12%	7%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
38.2°	62°	67.9°	99.8%	99.0%

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