

Light efficiency:



Light quality:



Color temperature:



Output: 1275 lm

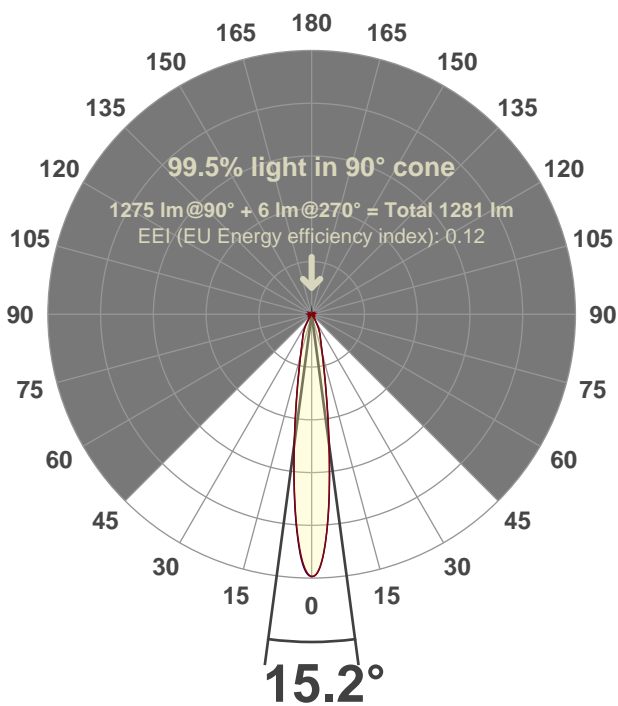
Peak: 9235 cd

Power: 14.6 W

PF: 0.99



Beam angle



Test number:

GRO-CZ14-SP-RD

Luminaire Model:

GRO-CZ14-SP-RD

Date and time:

6/14/2017 4:32:19 PM

LUM: 1275

CIE 1931

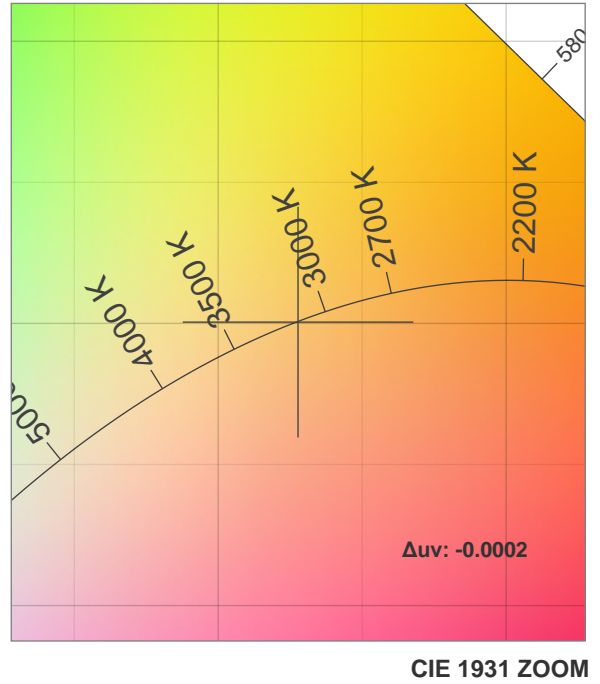
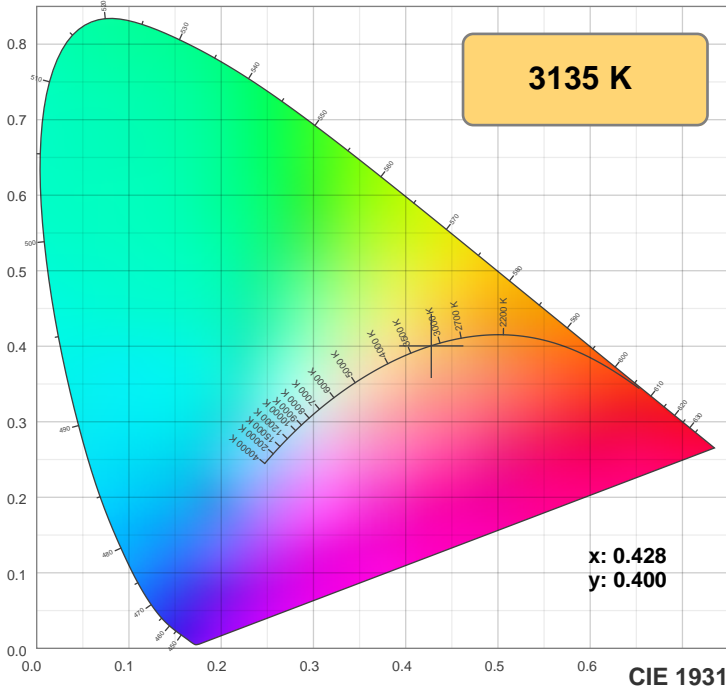
x: 0.428

y: 0.400

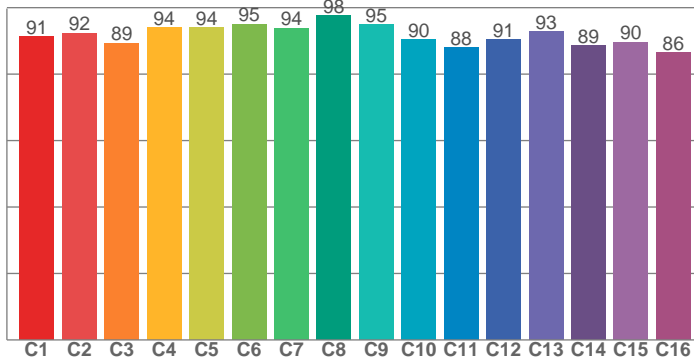


Spectra

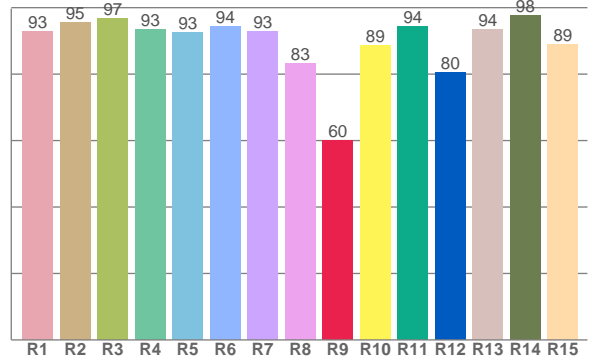




TM30: 91.8



CRI: 92.7 (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
92.9	95.5	96.8	93.5	92.5	94.2	92.9	83.1	60.1	88.7	94.3	80.4	93.6	97.6	89.0

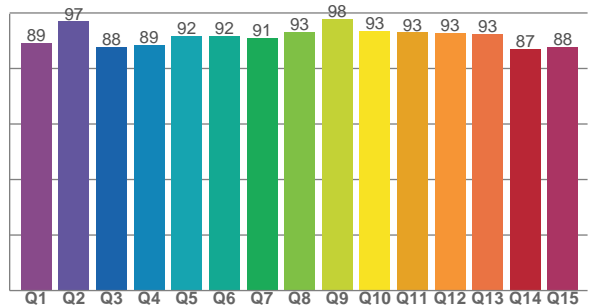
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.2	92.4	89.4	94.0	94.0	95.1	93.8	97.7	95.0	90.3	88.0	90.5	92.8	88.6	89.6	86.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.1	96.9	87.9	88.6	91.7	91.7	91.1	93.0	97.7	93.5	93.0	92.7	92.5	87.1	87.6

CQS: 91.0



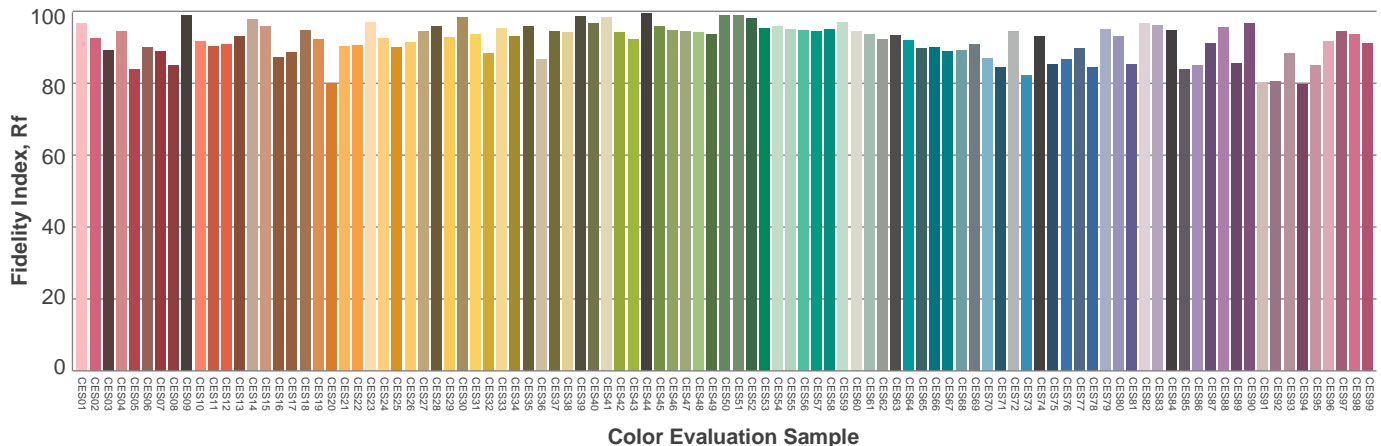
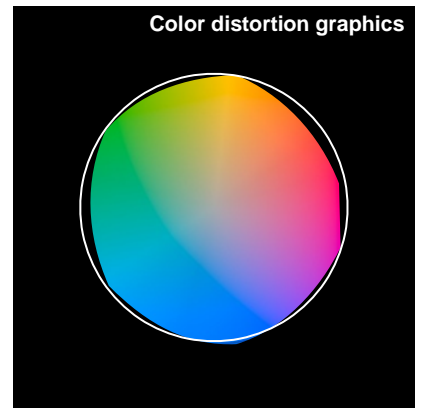
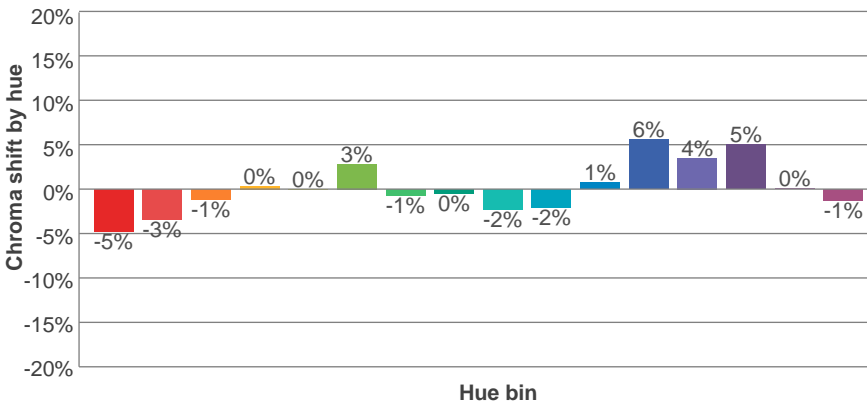
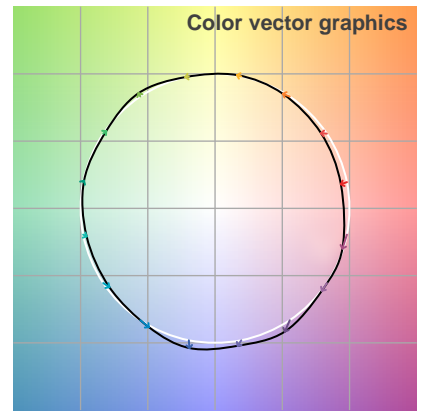
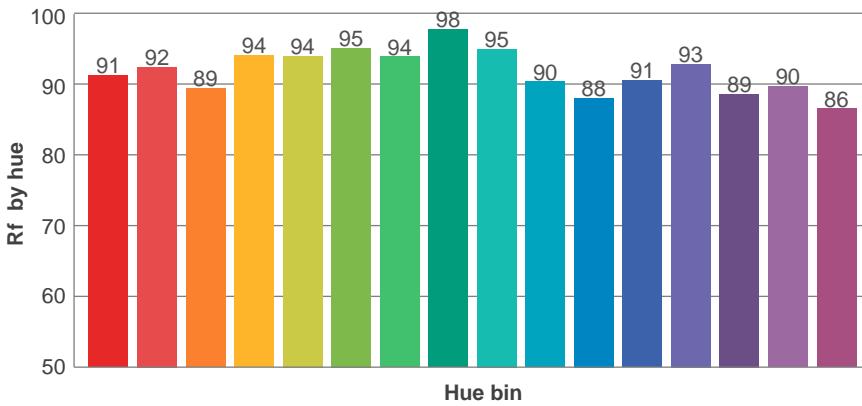
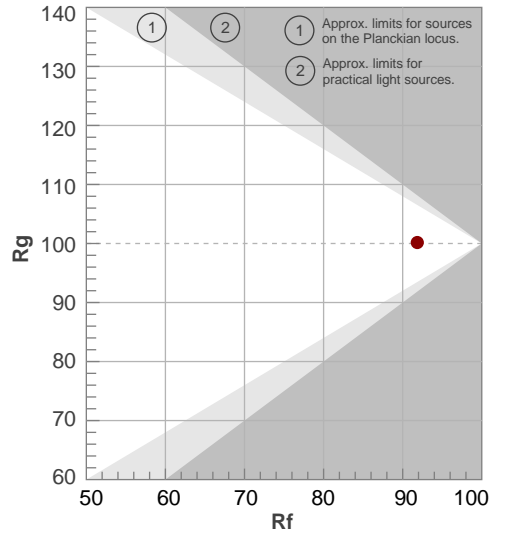
Color parameters

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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3135 K	92.7	60.1	91.8	100.2	91.0	0.428	0.400	0.246	0.346	-0.0002

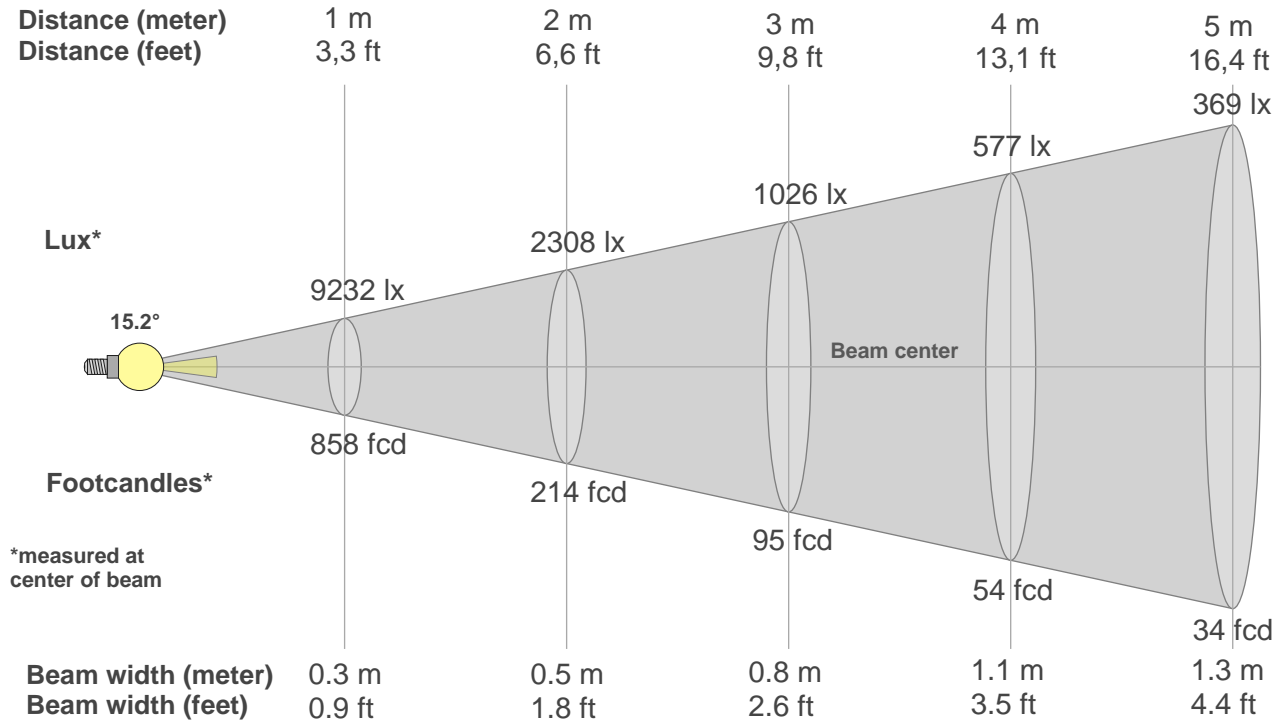
Rf 91.8
Fidelity index Rf

Rg 100.2
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-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	90	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	4%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	86	-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
9232lx	2308lx	1026lx	577lx	369lx	256lx	188lx	144lx	114lx	92lx	76lx	64lx	55lx	47lx	41lx	36lx	32lx	28lx	26lx	23lx
857.7fcd	214.4fcd	95.3fcd	53.6fcd	34.3fcd	23.8fcd	17.5fcd	13.4fcd	10.6fcd	8.6fcd	7.1fcd	6fcd	5.1fcd	4.4fcd	3.8fcd	3.4fcd	3fcd	2.6fcd	2.4fcd	2.1fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9232	9166	8878	8348	7662	6870	6002	5133	4341	3657	3069	2595	2216	1906	1658	1465	1305	1174	1068	980
100%	99%	96%	90%	83%	74%	65%	56%	47%	40%	33%	28%	24%	21%	18%	16%	14%	13%	12%	11%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9232	9153	8851	8341	7648	6843	5959	5102	4303	3602	3018	2545	2168	1862	1628	1437	1282	1157	1061	970
100%	99%	96%	90%	83%	74%	65%	55%	47%	39%	33%	28%	23%	20%	18%	16%	14%	13%	11%	11%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9232	9102	8764	8209	7519	6726	5904	5107	4346	3678	3117	2647	2262	1955	1707	1505	1337	1206	1097	1007
100%	99%	95%	89%	81%	73%	64%	55%	47%	40%	34%	29%	24%	21%	18%	16%	14%	13%	12%	11%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9232	9141	8826	8290	7578	6790	5916	5075	4308	3634	3073	2614	2246	1941	1703	1509	1347	1216	1110	1024
100%	99%	96%	90%	82%	74%	64%	55%	47%	39%	33%	28%	24%	21%	18%	16%	15%	13%	12%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.2°	39.9°	61.6°	99.7%	99.5%

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