

Light efficiency:



Light quality:



Color temperature:



Output: 1181 lm

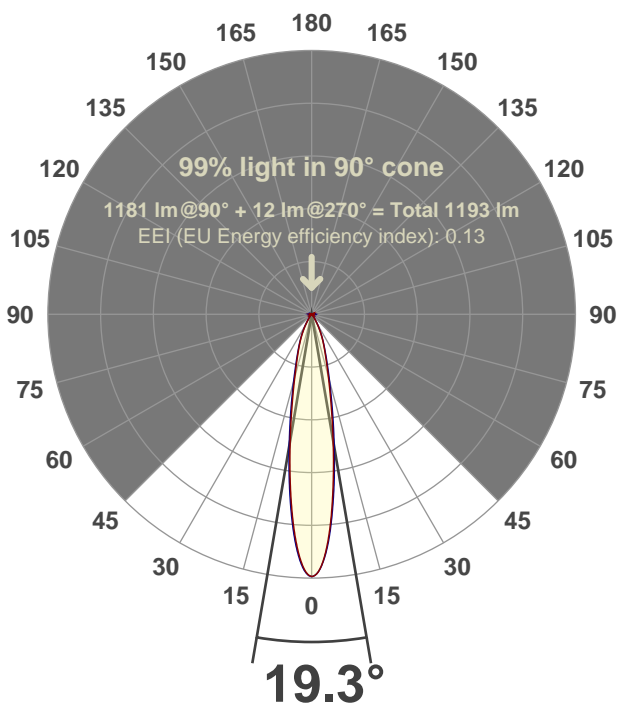
Peak: 6091 cd

Power: 14.6 W

PF: 0.99



Beam angle



Test number:

GRO-CZ14-SP-RD-91A

Luminaire Model:

GRO-CZ14-SP-RD-91A

Date and time:

6/14/2017 4:41:29 PM

LUM: 1181

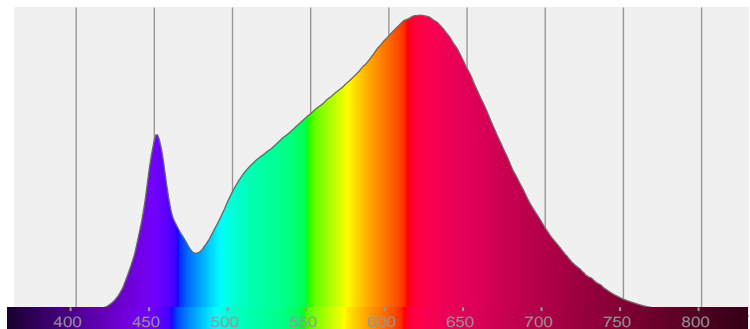
CIE 1931

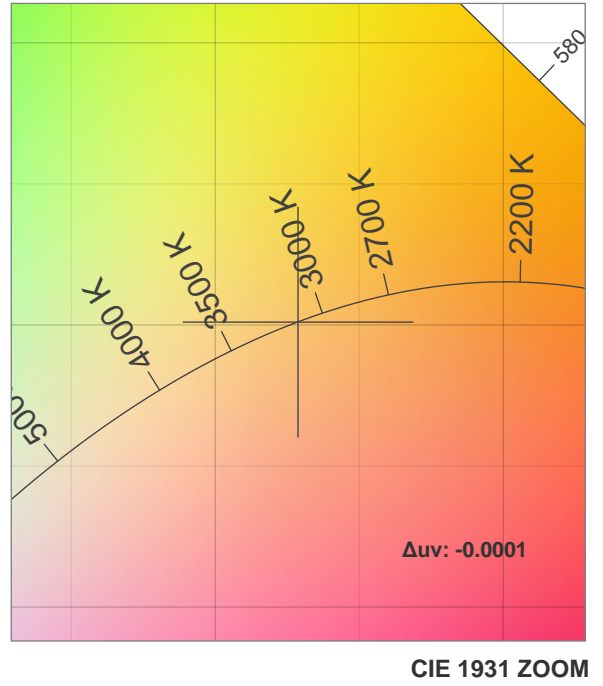
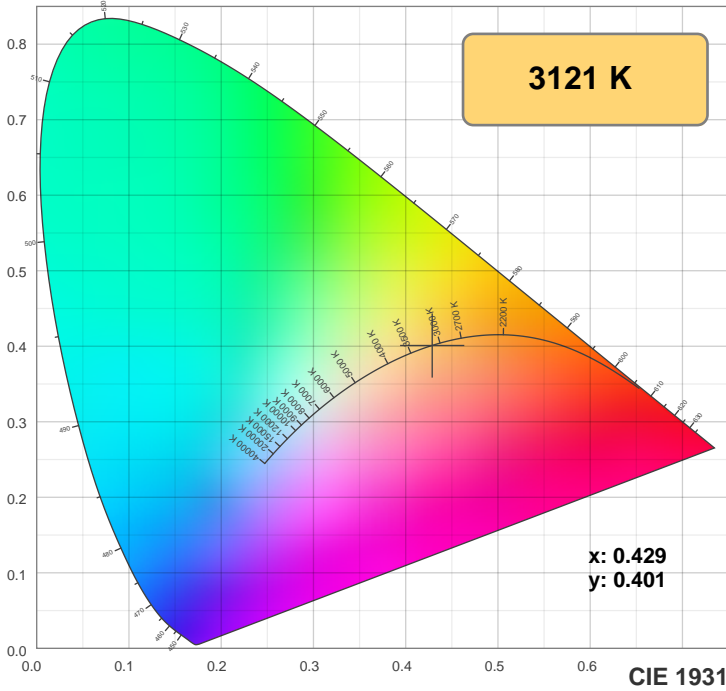
x: 0.429

y: 0.401

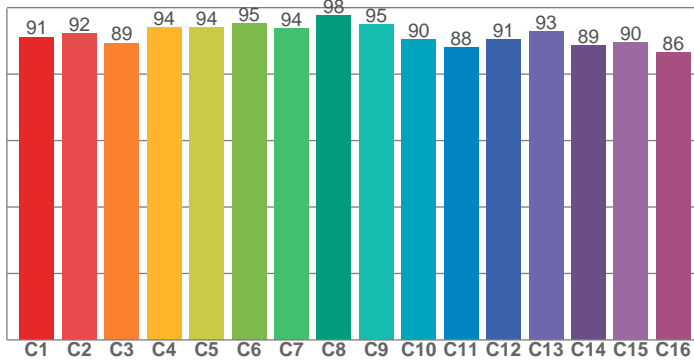


Spectra

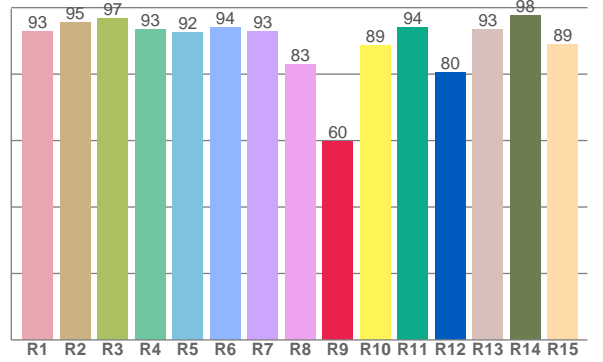




TM30: 91.8



CRI: 92.6 (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
92.8	95.4	96.8	93.4	92.4	94.2	92.9	82.9	59.6	88.6	94.2	80.4	93.4	97.6	88.8

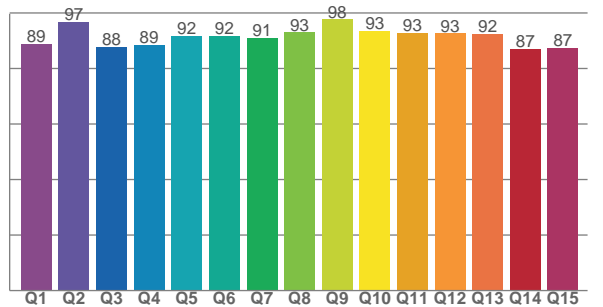
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.1	92.3	89.3	94.0	94.0	95.1	93.8	97.7	94.9	90.3	88.0	90.5	92.8	88.5	89.5	86.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.0	96.9	87.9	88.6	91.7	91.6	91.1	93.0	97.7	93.4	92.9	92.6	92.5	86.9	87.5

CQS: 90.9



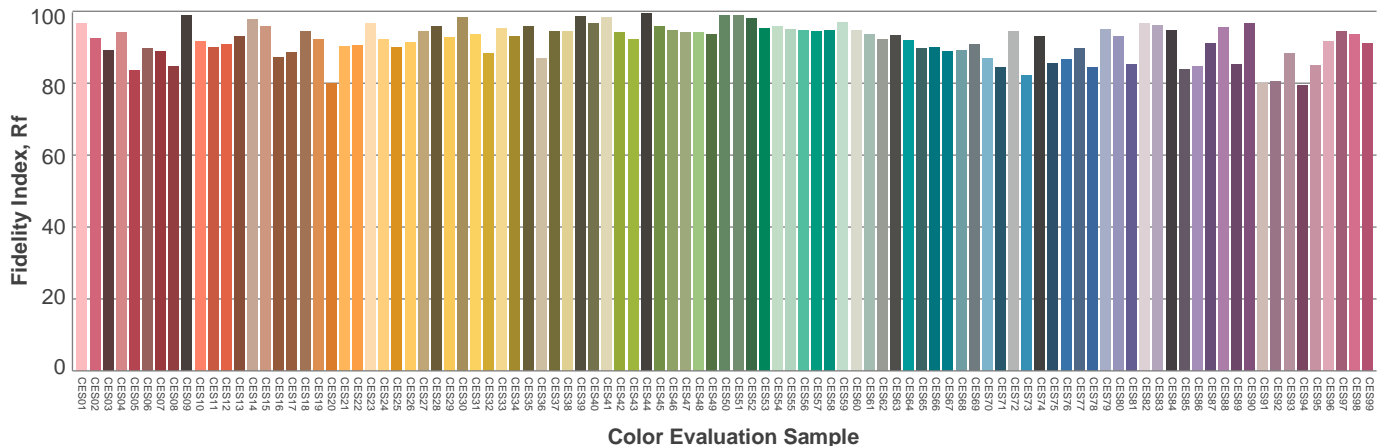
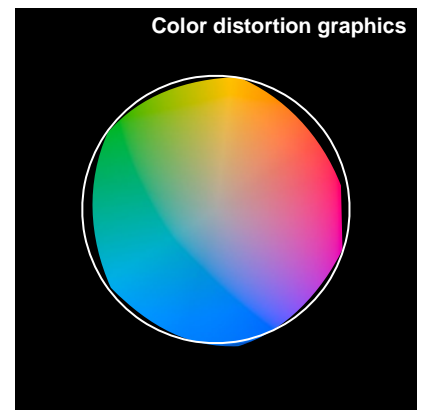
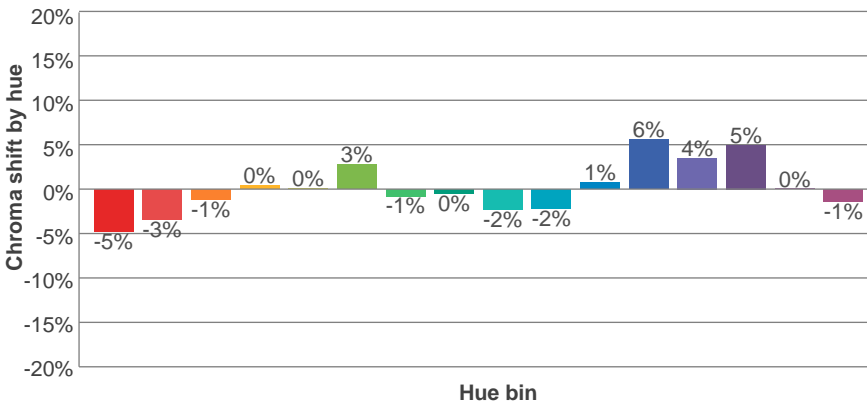
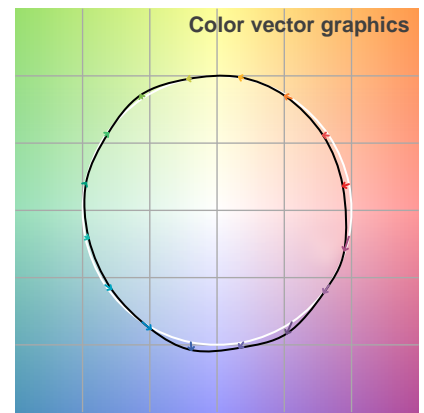
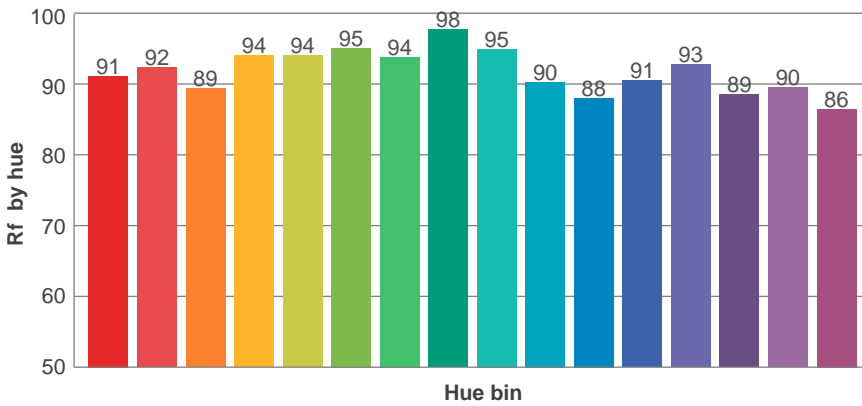
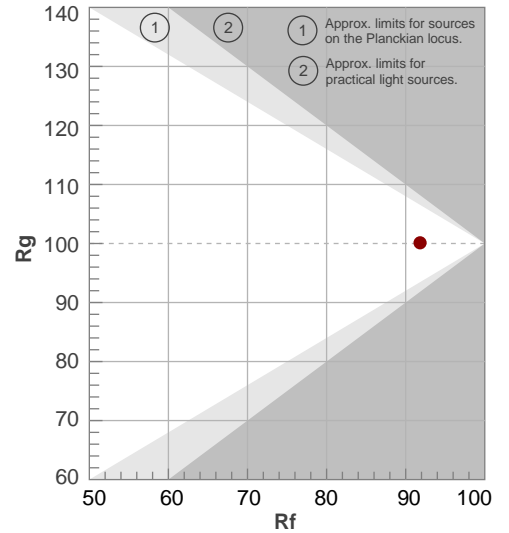
Color parameters

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
3121 K	92.6	59.6	91.8	100.1	90.9	0.429	0.401	0.247	0.346	-0.0001

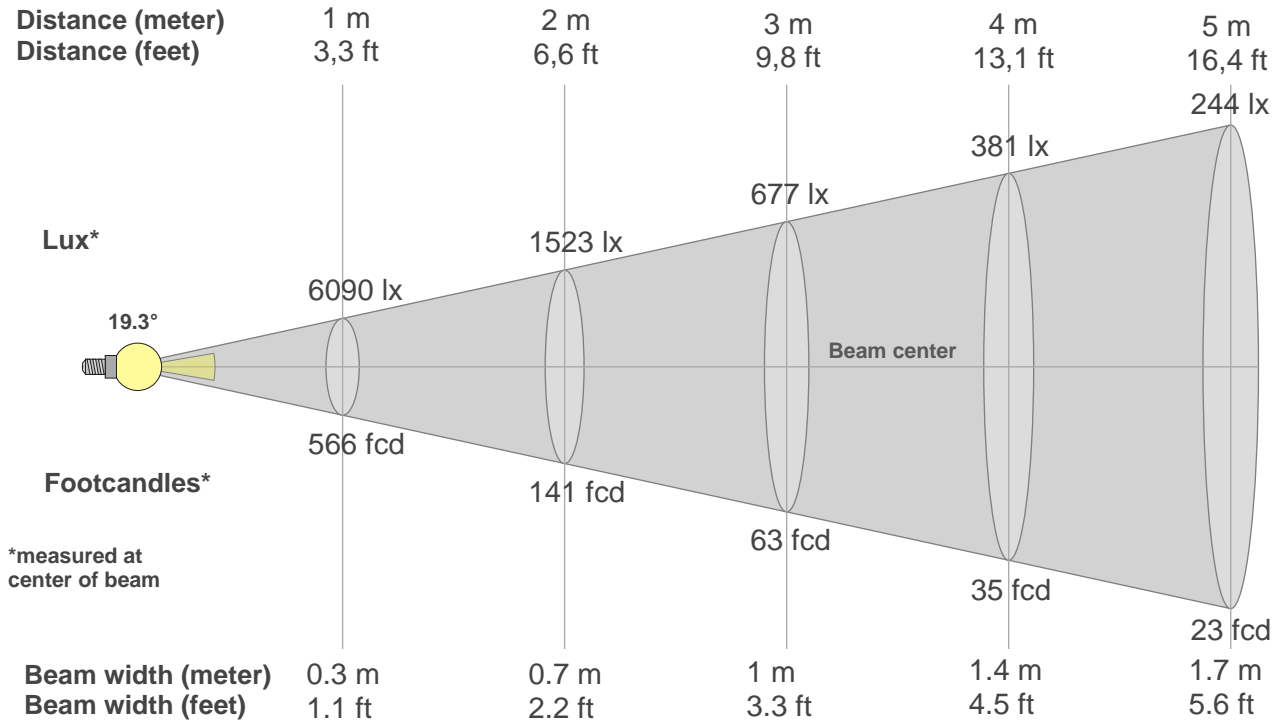
Rf 91.8
Fidelity index Rf

Rg 100.1
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
6090lx	1523lx	677lx	381lx	244lx	169lx	124lx	95lx	75lx	61lx	50lx	42lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
565.8fcd	141.4fcd	62.9fcd	35.4fcd	22.6fcd	15.7fcd	11.5fcd	8.8fcd	7fcd	5.7fcd	4.7fcd	3.9fcd	3.3fcd	2.9fcd	2.5fcd	2.2fcd	2fcd	1.7fcd	1.6fcd	1.4fcd

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°
6090	5893	5323	4516	3642	2844	2195	1694	1337	1071	881	728	595	472	362	263	181	120	77	50
100%	97%	87%	74%	60%	47%	36%	28%	22%	18%	14%	12%	10%	8%	6%	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°
6090	5898	5367	4600	3775	2989	2335	1811	1418	1133	914	748	605	476	362	265	189	131	89	60
100%	97%	88%	76%	62%	49%	38%	30%	23%	19%	15%	12%	10%	8%	6%	4%	3%	2%	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°
6090	5856	5269	4472	3630	2852	2200	1714	1346	1094	903	748	615	491	374	270	186	121	77	48
100%	96%	87%	73%	60%	47%	36%	28%	22%	18%	15%	12%	10%	8%	6%	4%	3%	2%	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°
6090	5889	5340	4579	3757	2985	2339	1826	1439	1154	941	776	636	506	390	289	202	138	93	62
100%	97%	88%	75%	62%	49%	38%	30%	24%	19%	15%	13%	10%	8%	6%	5%	3%	2%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19.3°	48.1°	66.3°	99.7%	99.0%

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