

Light efficiency:



Light quality:



Color temperature:

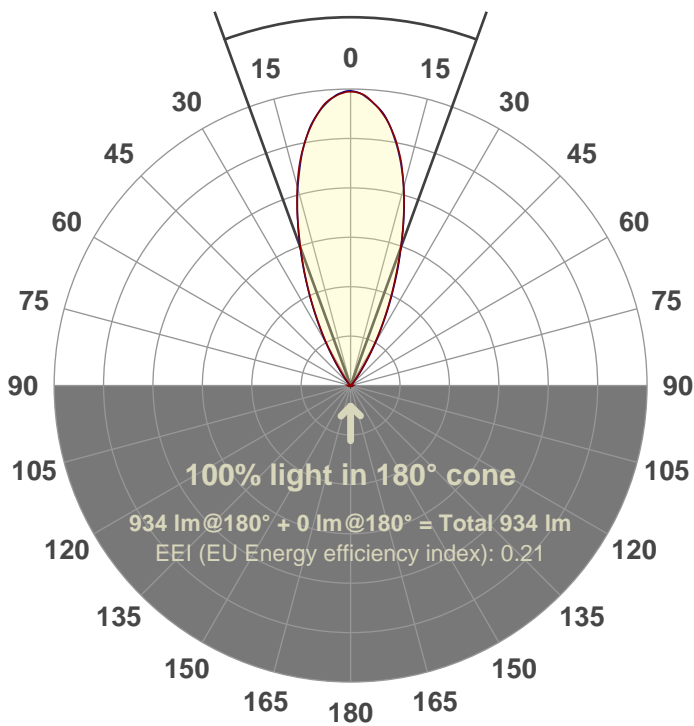


Output: 934 lm
Peak: 1976 cd
Power: 14.9 W
PF: 0.98



Beam angle

40°



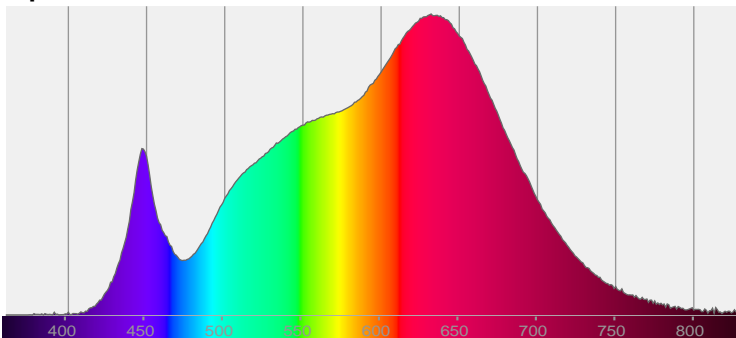
Test number:
GRO-AD-FL-RD-91A
 Luminaire Model:
GRO-AD-FL-RD-91A
 Date and time:
8/10/2017 12:14:45 PM
 Description:
350mA AD

LUM: 934
PPF: 17.4

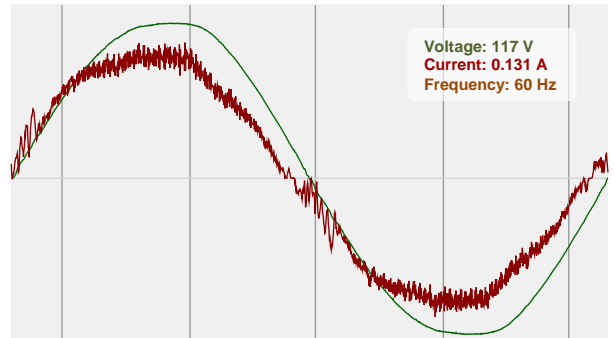


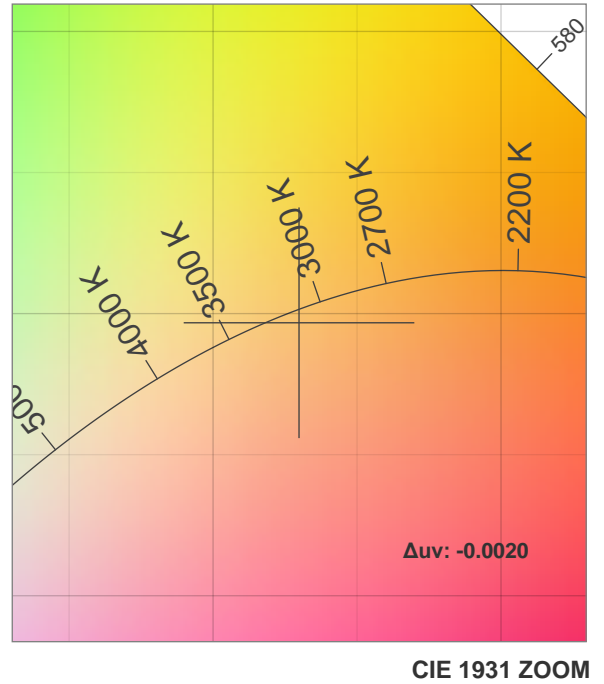
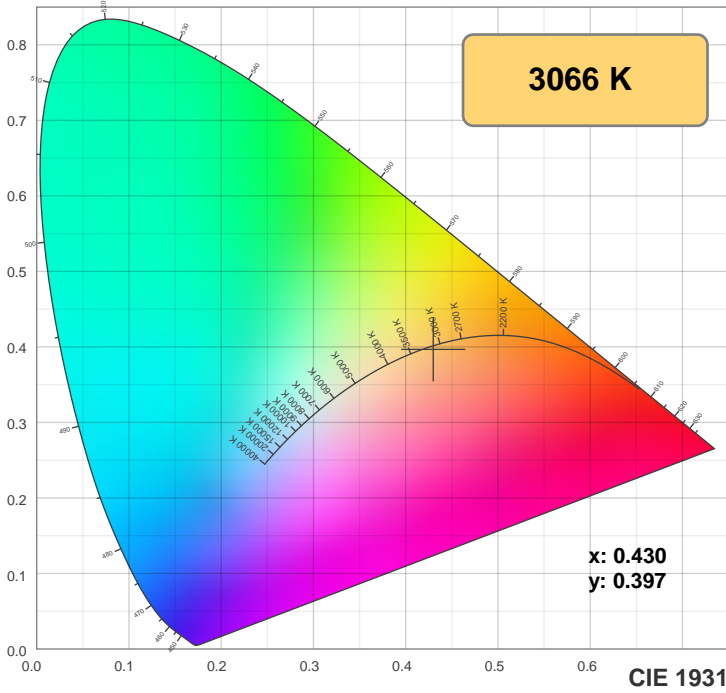
CIE 1931
 x: 0.430
 y: 0.397

Spectra

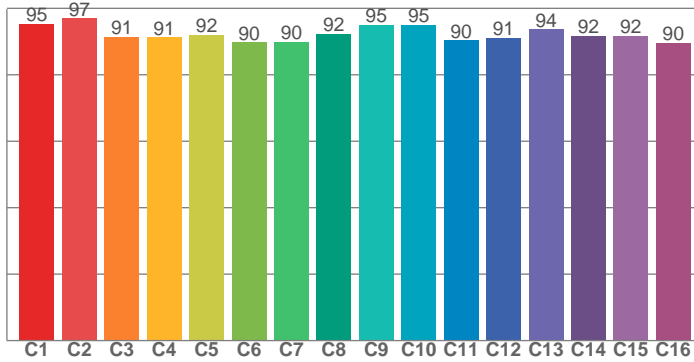


Power

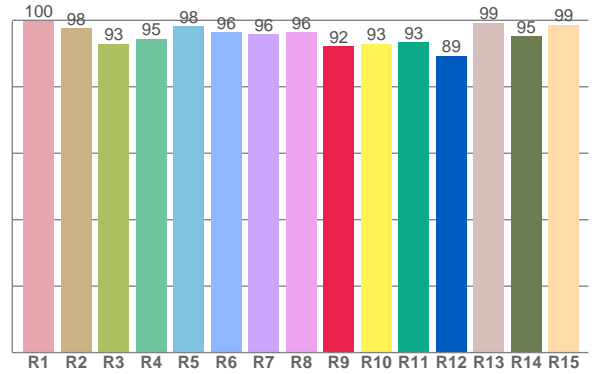




TM30: 92.6



CRI: 96.5 (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
99.9	97.6	93.0	94.5	98.3	96.5	95.8	96.5	92.1	92.9	93.4	89.3	99.3	95.1	98.6

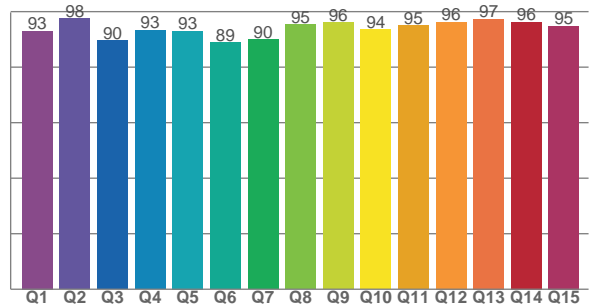
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.3	97.0	91.4	91.2	92.1	89.8	90.0	92.4	95.1	95.0	90.4	91.2	93.7	91.8	91.7	89.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.1	97.5	89.5	93.3	93.0	88.8	89.9	95.3	96.0	93.6	94.9	96.3	97.4	96.2	94.9

CQS: 93.2



Color parameters

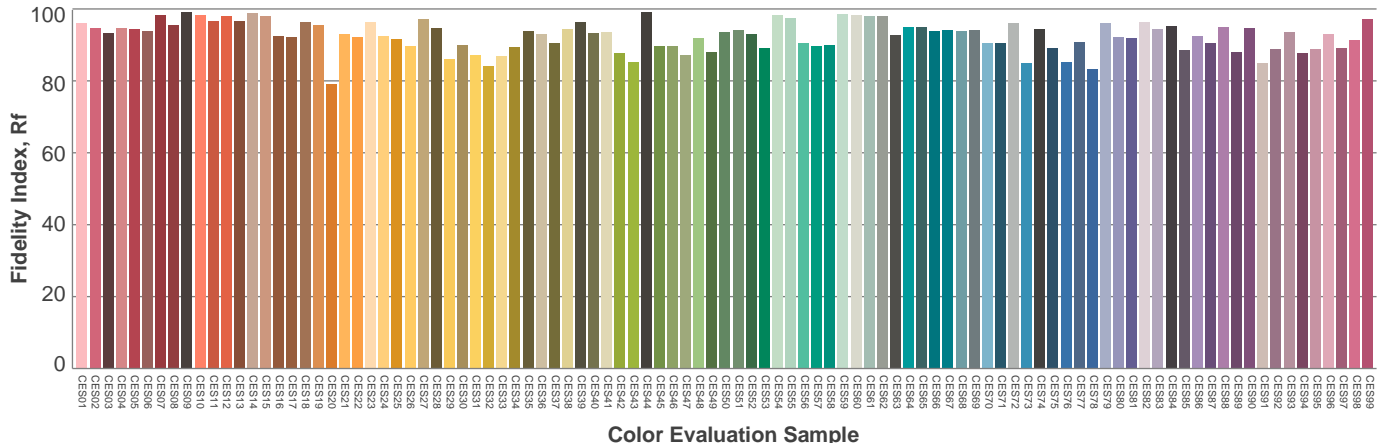
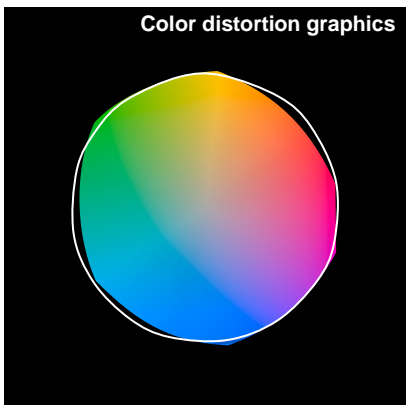
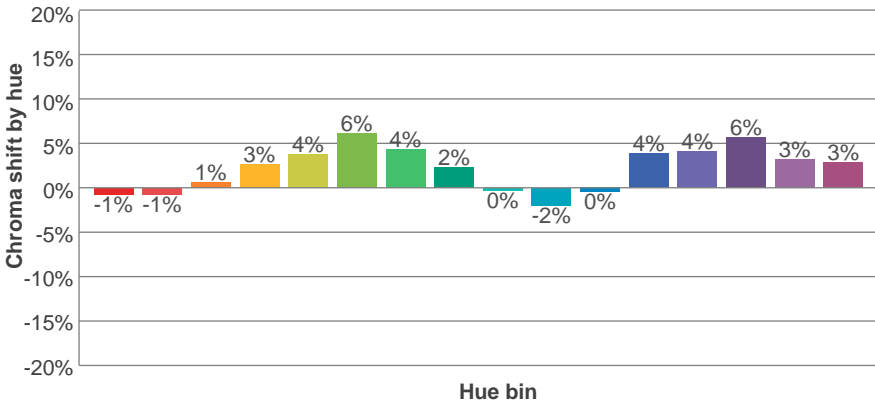
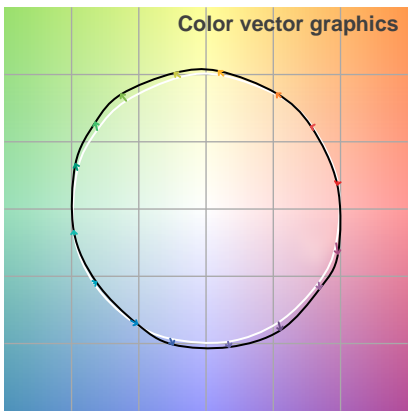
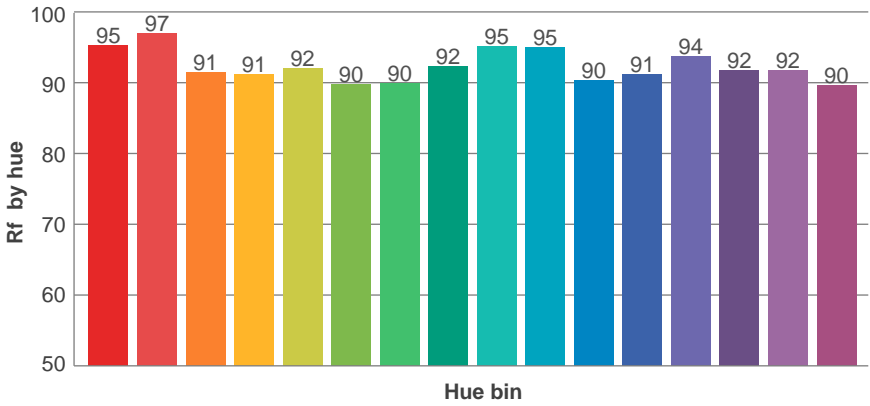
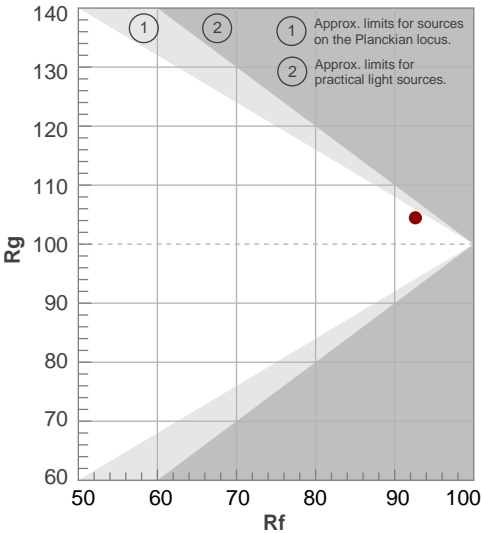
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3066 K	96.5	92.1	92.6	104.5	93.2	0.430	0.397	0.249	0.345	-0.0020

TM30 details

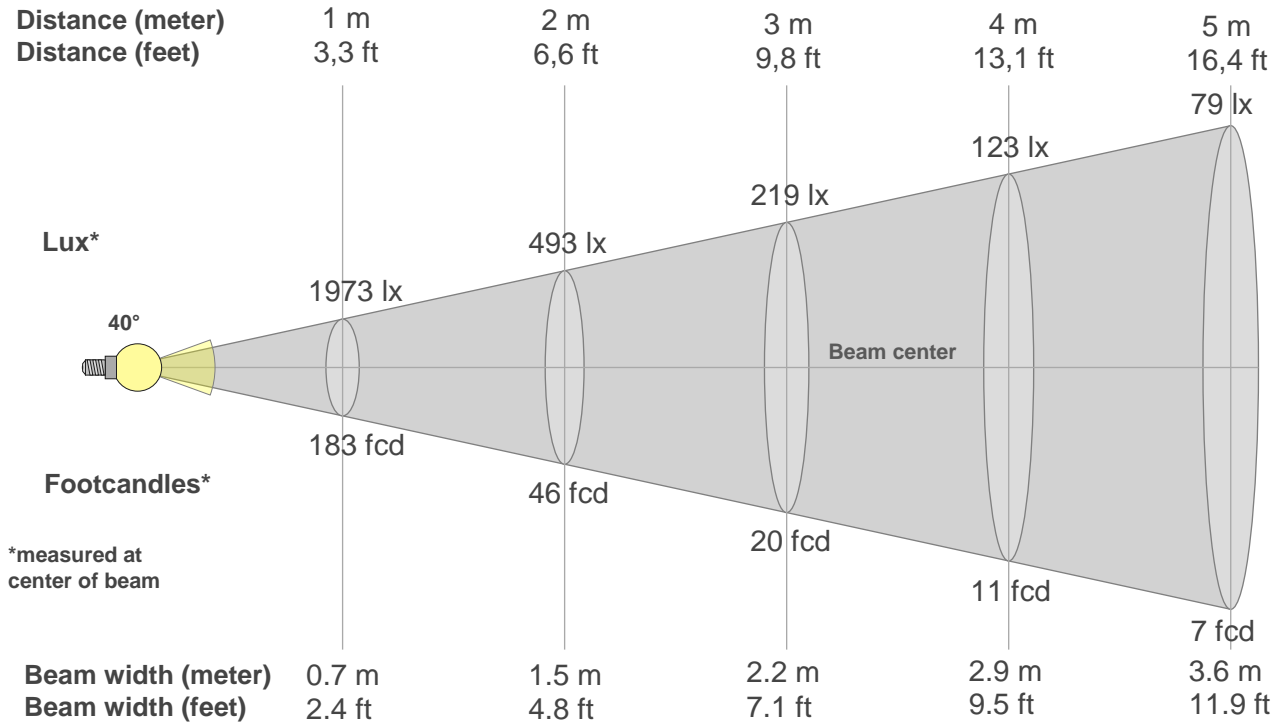
Rf 92.6
Fidelity index Rf

Rg 104.5
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-2%
2	97	-1%	1%
3	91	1%	4%
4	91	3%	4%
5	92	4%	4%
6	90	6%	1%
7	90	4%	-4%
8	92	2%	-4%
9	95	0%	-2%
10	95	-2%	0%
11	90	0%	5%
12	91	4%	3%
13	94	4%	0%
14	92	6%	-2%
15	92	3%	-4%
16	90	3%	-7%



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
1973lx	493lx	219lx	123lx	79lx	55lx	40lx	31lx	24lx	20lx	16lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx
183.3fcd	45.8fcd	20.4fcd	11.5fcd	7.3fcd	5.1fcd	3.7fcd	2.9fcd	2.3fcd	1.8fcd	1.5fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.5fcd

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°
1973	1958	1927	1871	1791	1696	1585	1453	1303	1143	984	832	688	548	423	311	211	131	78	47
100%	99%	98%	95%	91%	86%	80%	74%	66%	58%	50%	42%	35%	28%	21%	16%	11%	7%	4%	2%

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°
1973	1962	1923	1867	1794	1695	1577	1438	1295	1144	989	839	694	559	437	327	230	154	101	66
100%	99%	97%	95%	91%	86%	80%	73%	66%	58%	50%	43%	35%	28%	22%	17%	12%	8%	5%	3%

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°
1973	1959	1919	1861	1788	1695	1583	1448	1300	1142	984	826	686	551	429	315	215	137	82	50
100%	99%	97%	94%	91%	86%	80%	73%	66%	58%	50%	42%	35%	28%	22%	16%	11%	7%	4%	3%

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°
1973	1959	1916	1864	1790	1687	1573	1444	1300	1147	989	842	698	565	441	333	238	160	104	69
100%	99%	97%	94%	91%	86%	80%	73%	66%	58%	50%	43%	35%	29%	22%	17%	12%	8%	5%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40°	65.2°	77.5°	99.5%	98.9%

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