

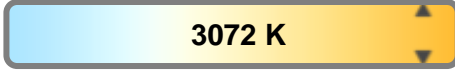
Light efficiency:



Light quality:



Color temperature:

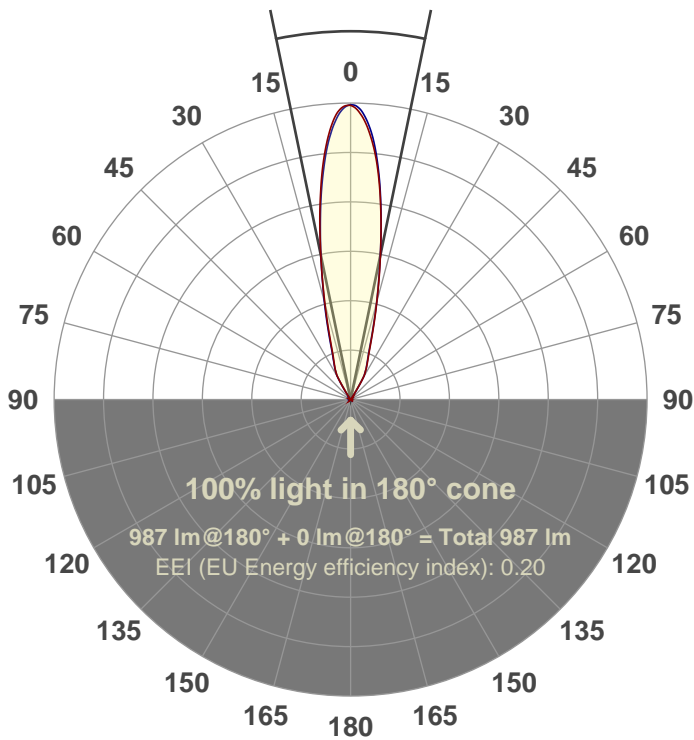


Output: 987 lm
Peak: 4074 cd
Power: 15.0 W
PF: 0.98



Beam angle

23.3°



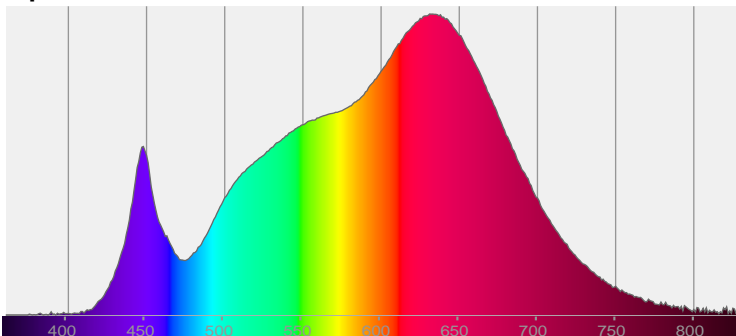
Test number:
GRO-AD-NF-RD
Luminaire Model:
GRO-AD-NF-RD
Date and time:
8/10/2017 1:02:12 PM
Description:

LUM: 987
PPF: 18.5

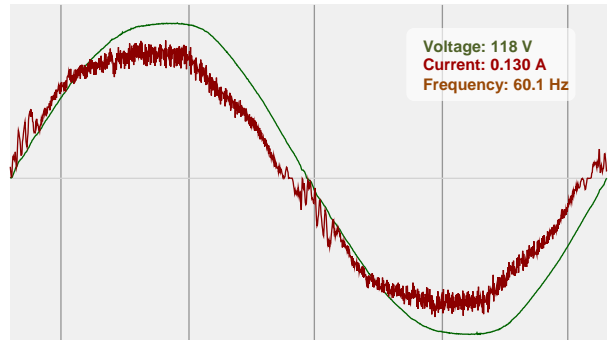


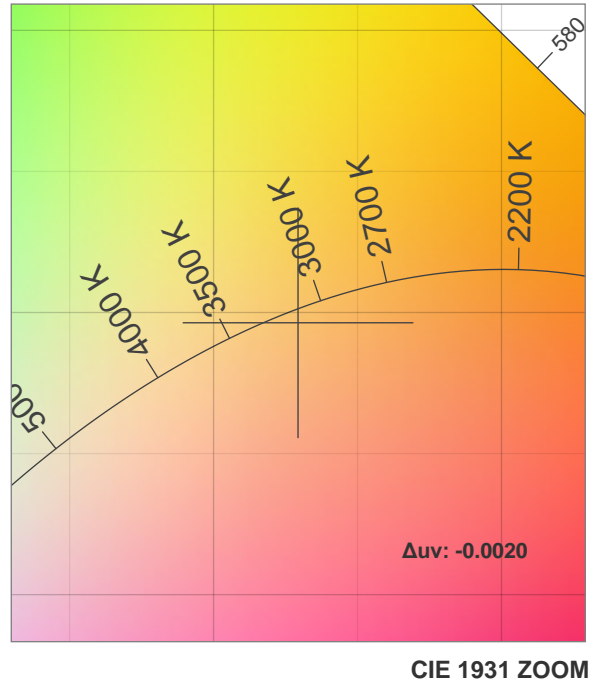
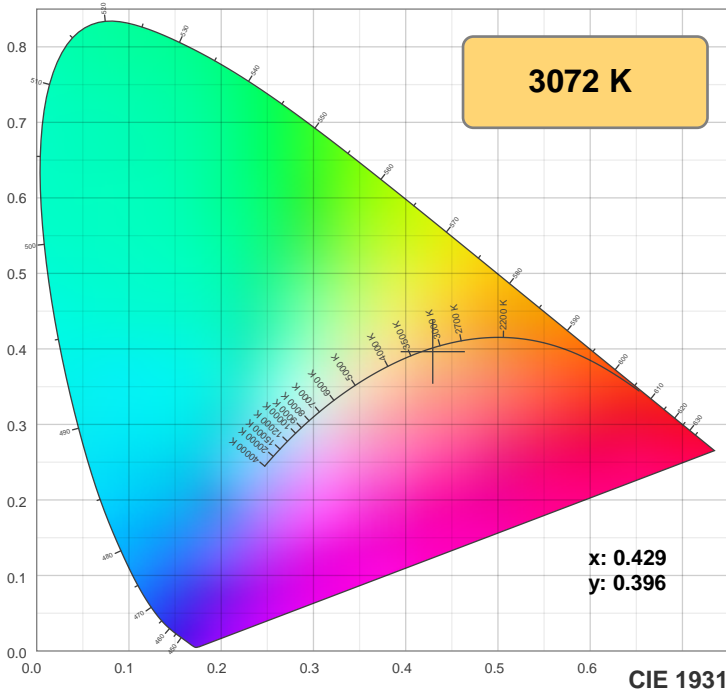
CIE 1931
x: 0.429
y: 0.396

Spectra

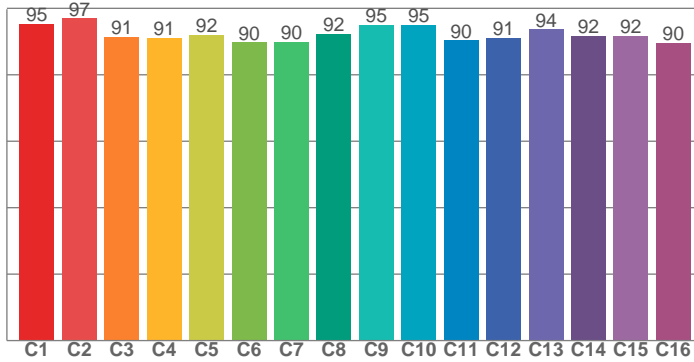


Power

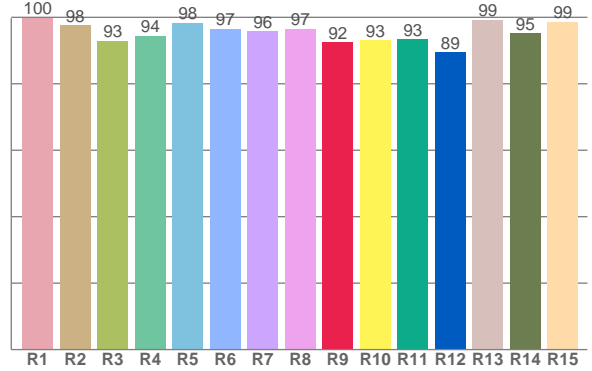




TM30: 92.6



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	94.4	98.3	96.5	95.8	96.5	92.4	93.0	93.3	89.5	99.3	95.1	98.7

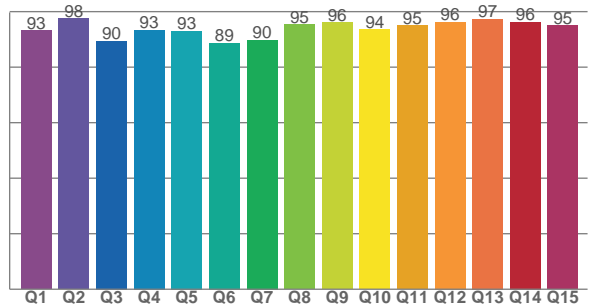
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.3	97.0	91.4	91.2	92.1	89.7	89.9	92.3	95.1	95.0	90.4	91.1	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	96.3	94.9

CQS: 93.2



Color parameters

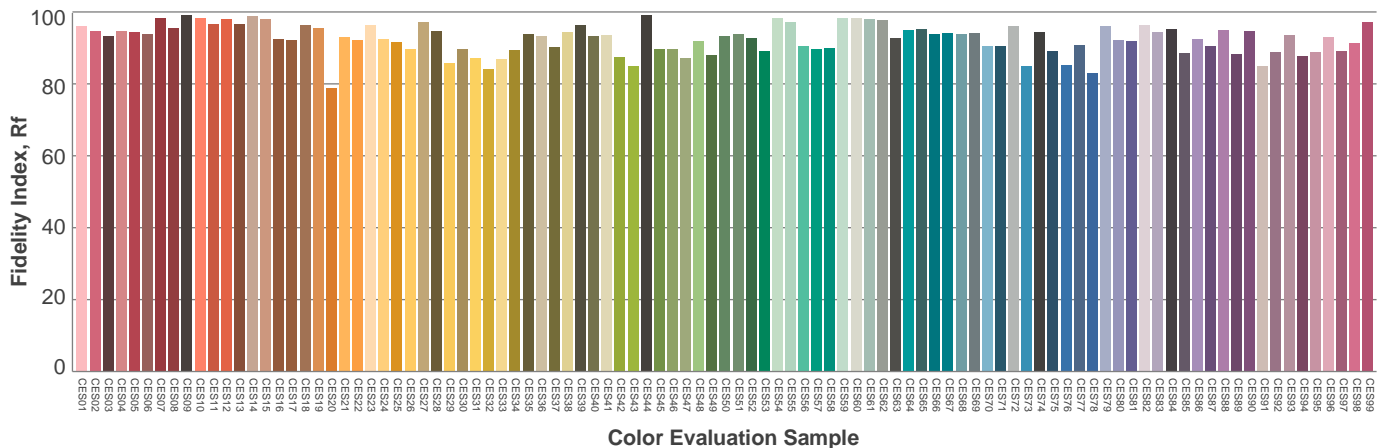
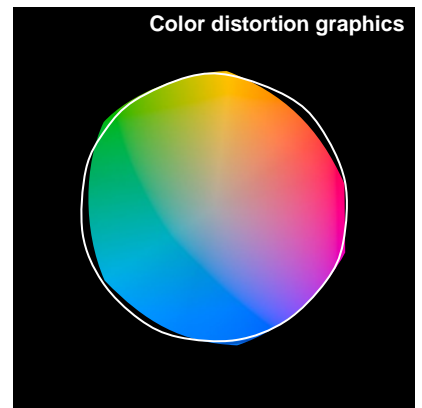
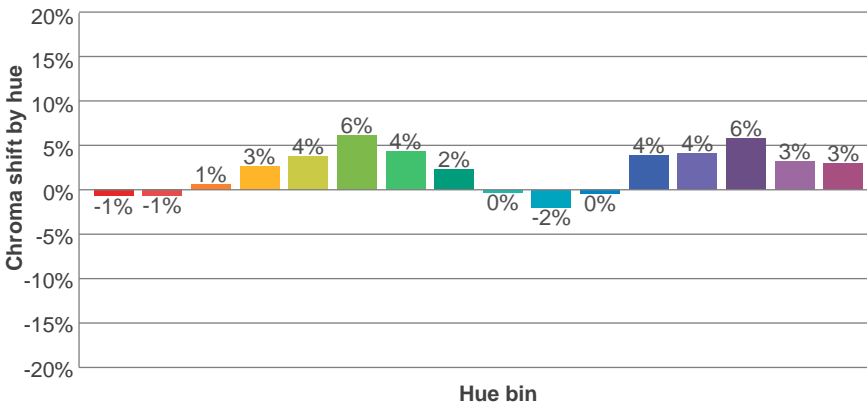
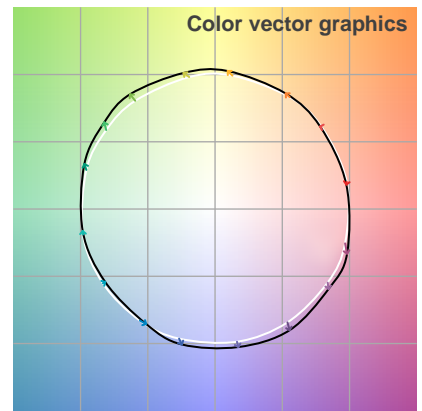
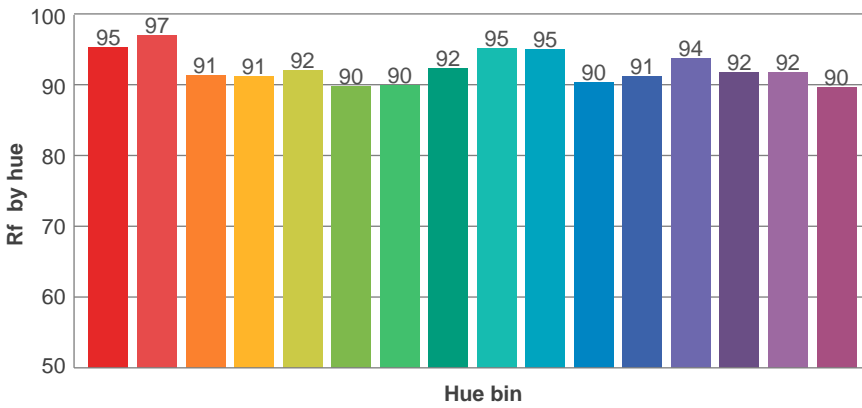
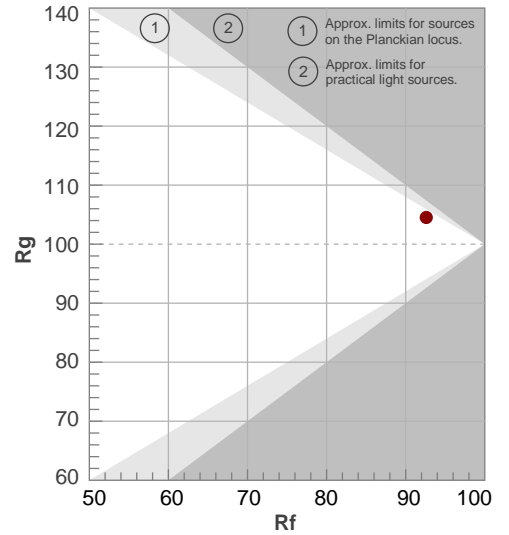
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3072 K	96.5	92.4	92.6	104.5	93.2	0.429	0.396	0.249	0.345	-0.0020

TM30 details

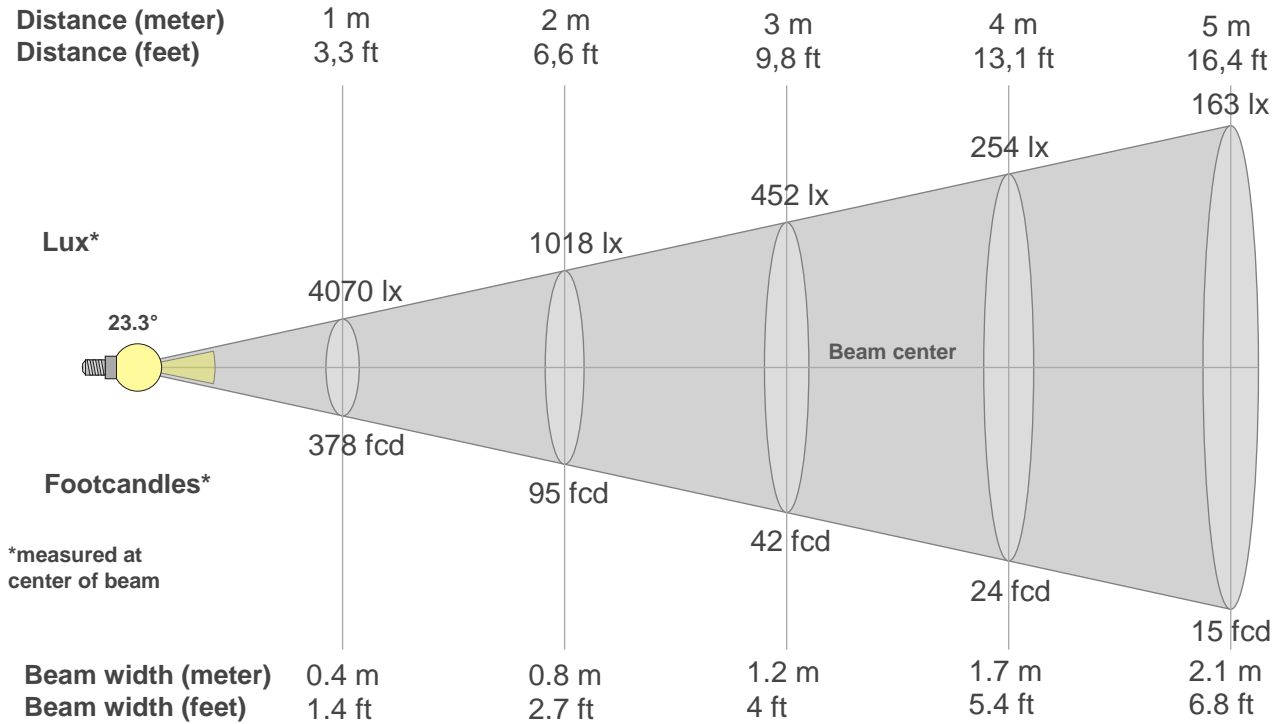
Rf 92.6
Fidelity index Rf

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%	-3%
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
4070lx	1018lx	452lx	254lx	163lx	113lx	83lx	64lx	50lx	41lx	34lx	28lx	24lx	21lx	18lx	16lx	14lx	13lx	11lx	10lx
378.1fc	94.5fcd	42fcd	23.6fcd	15.1fcd	10.5fcd	7.7fcd	5.9fcd	4.7fcd	3.8fcd	3.1fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	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°
4070	4021	3796	3425	2954	2451	1963	1548	1214	954	768	642	561	496	434	349	169	26	6	6
100%	99%	93%	84%	73%	60%	48%	38%	30%	23%	19%	16%	14%	12%	11%	9%	4%	1%	0%	0%

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°
4070	3982	3731	3357	2901	2410	1957	1568	1254	993	798	662	574	505	433	353	180	40	6	4
100%	98%	92%	82%	71%	59%	48%	39%	31%	24%	20%	16%	14%	12%	11%	9%	4%	1%	0%	0%

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°
4070	3949	3703	3356	2909	2424	1968	1574	1252	995	802	667	578	506	433	353	169	24	6	5
100%	97%	91%	82%	71%	60%	48%	39%	31%	24%	20%	16%	14%	12%	11%	9%	4%	1%	0%	0%

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°
4070	4008	3773	3404	2935	2428	1953	1559	1232	969	774	647	562	495	423	329	161	25	7	6
100%	98%	93%	84%	72%	60%	48%	38%	30%	24%	19%	16%	14%	12%	10%	8%	4%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.3°	57.5°	65.8°	99.7%	99.5%

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