

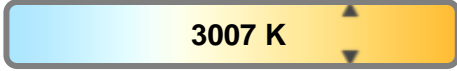
Light efficiency:



Light quality:



Color temperature:

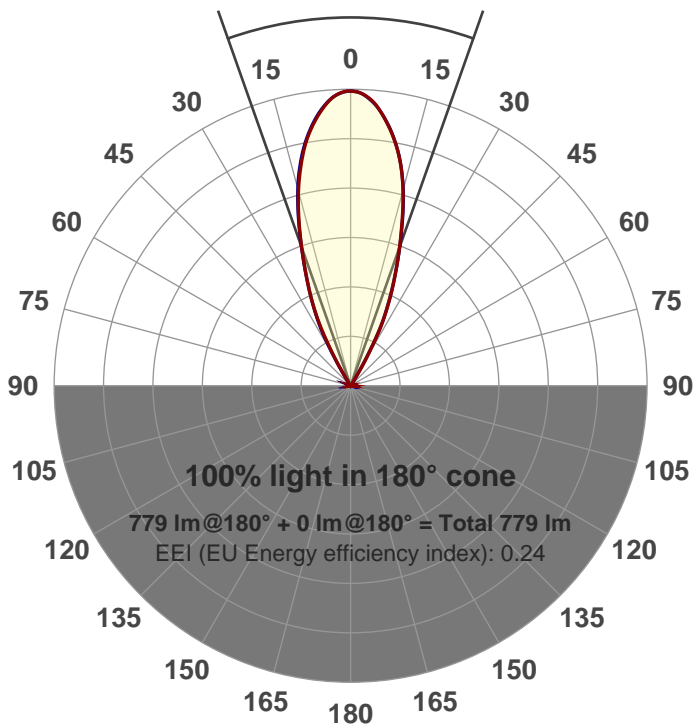


Output: 779 lm  
Peak: 1830 cd  
Power: 15.0 W  
PF: 0.98



Beam angle

38.9°



Product name:  
**GRO-AD-FL-SQ**  
Item number:  
**GRO-AD-FL-SQ**  
Date and time:  
**5/4/2017 4:02:07 PM**  
Description:

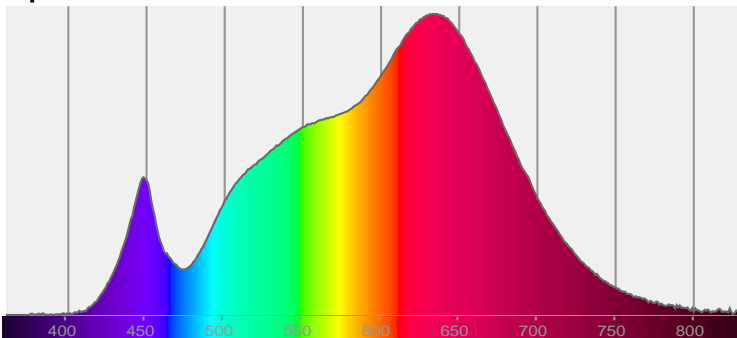
LUM: 779

PPF: 13.2

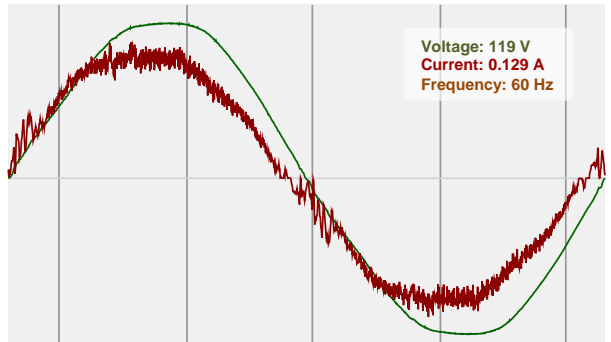


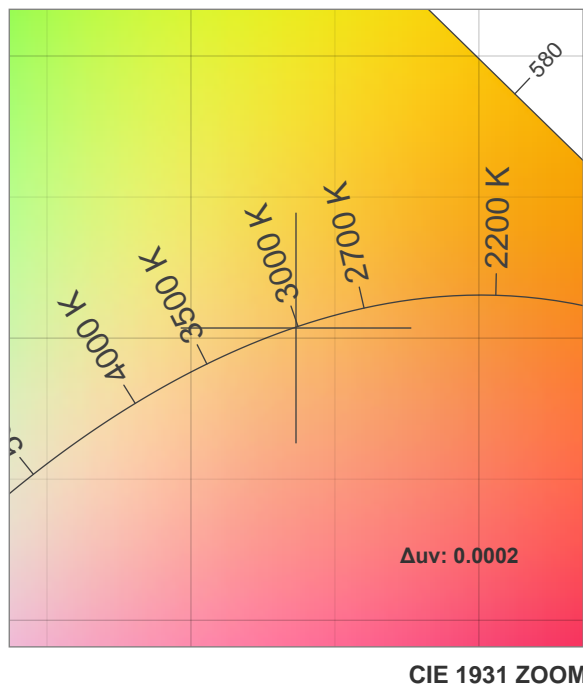
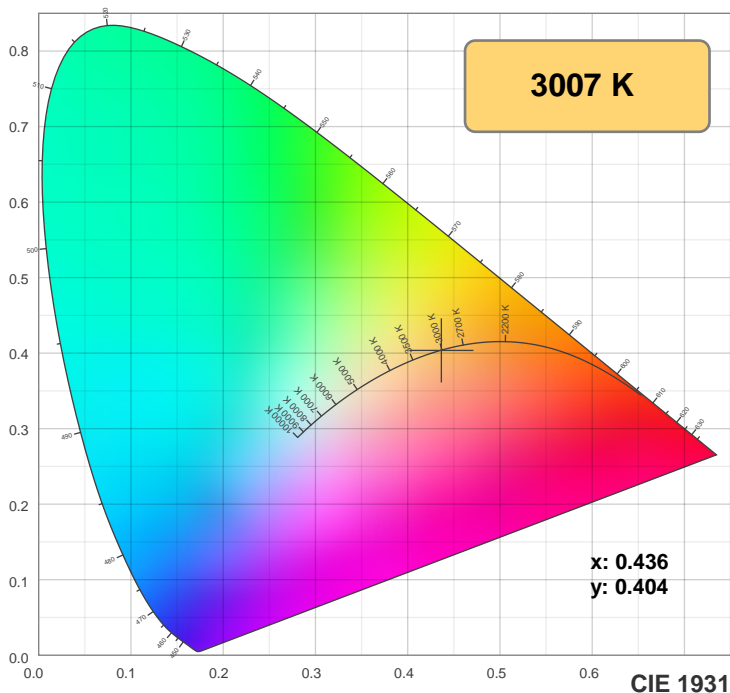
CIE 1931  
x: 0.436  
y: 0.404

Spectra

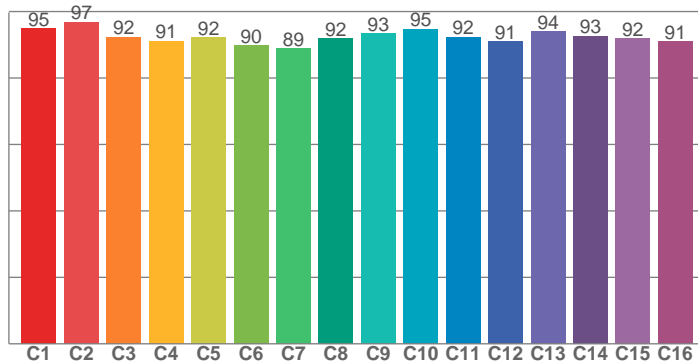


Power

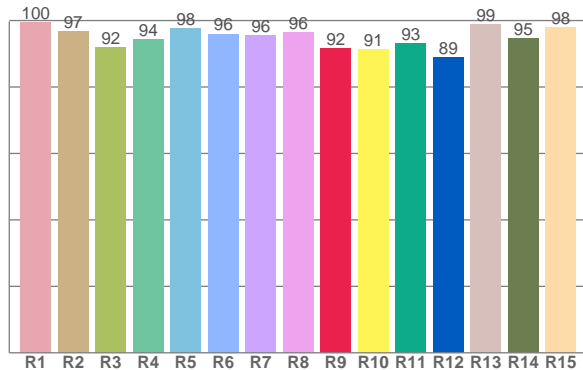




**TM30: 92.7**



**CRI: 96.1 (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
99.5	96.9	92.0	94.2	97.8	96.0	95.6	96.4	91.7	91.4	93.2	88.9	98.8	94.6	97.9

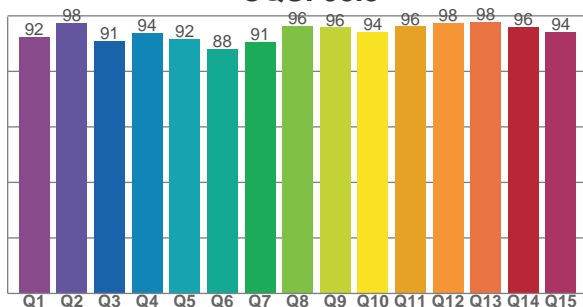
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.9	96.9	92.4	91.1	92.2	89.8	88.8	91.9	93.4	94.7	92.4	90.9	94.0	92.7	91.9	90.9

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.5	97.5	91.0	93.9	91.6	87.9	90.6	96.3	95.8	94.2	96.2	97.5	97.8	96.0	94.3

**CQS: 93.3**



## Color parameters

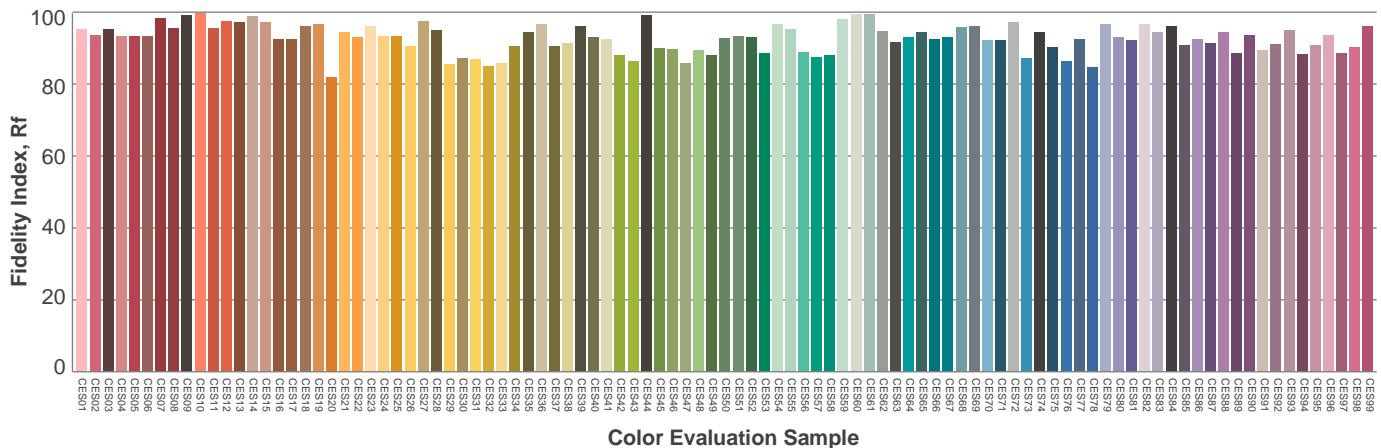
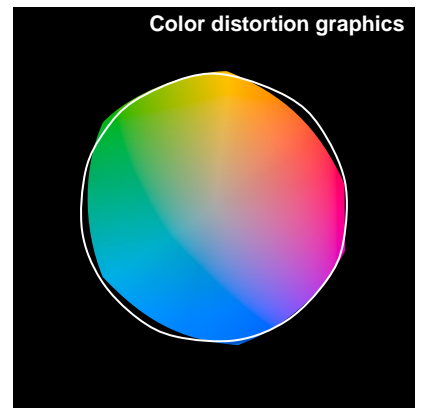
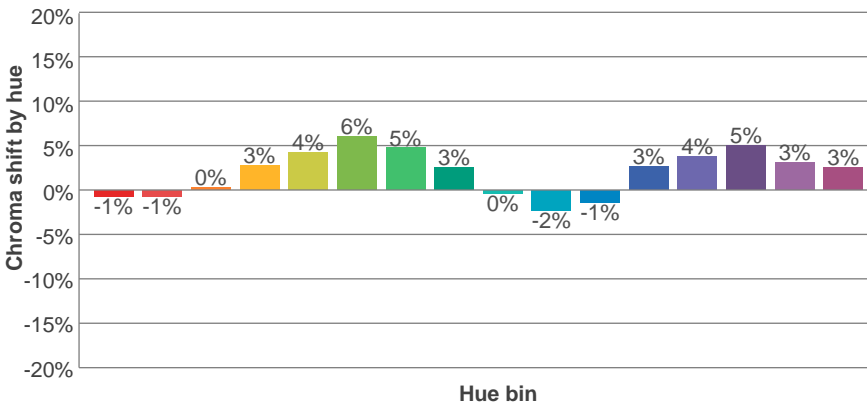
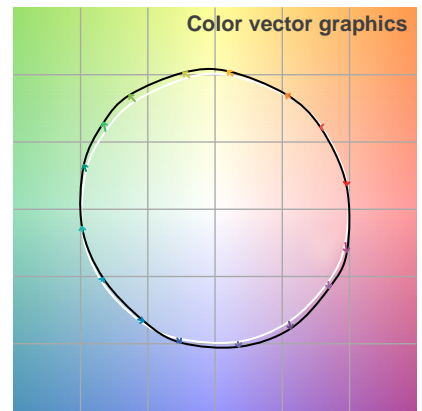
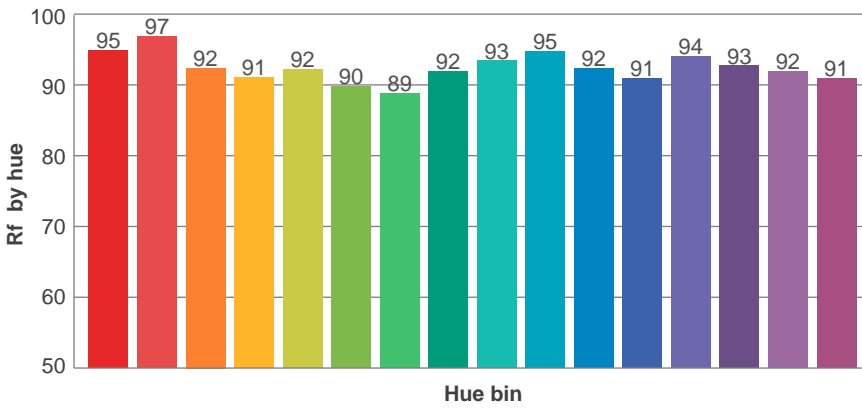
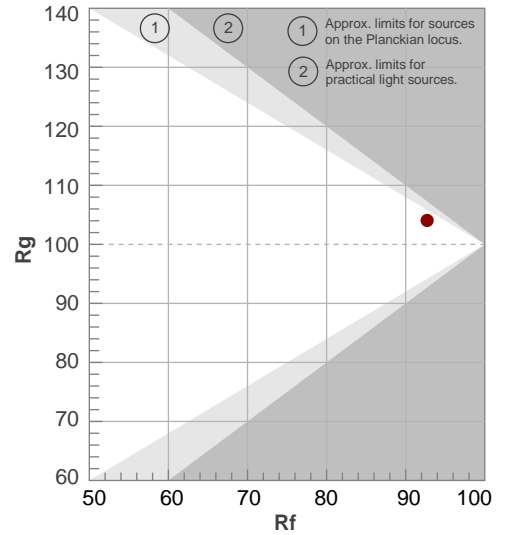
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3007 K	96.1	91.7	92.7	104.1	93.3	0.436	0.404	0.250	0.347	0.0002

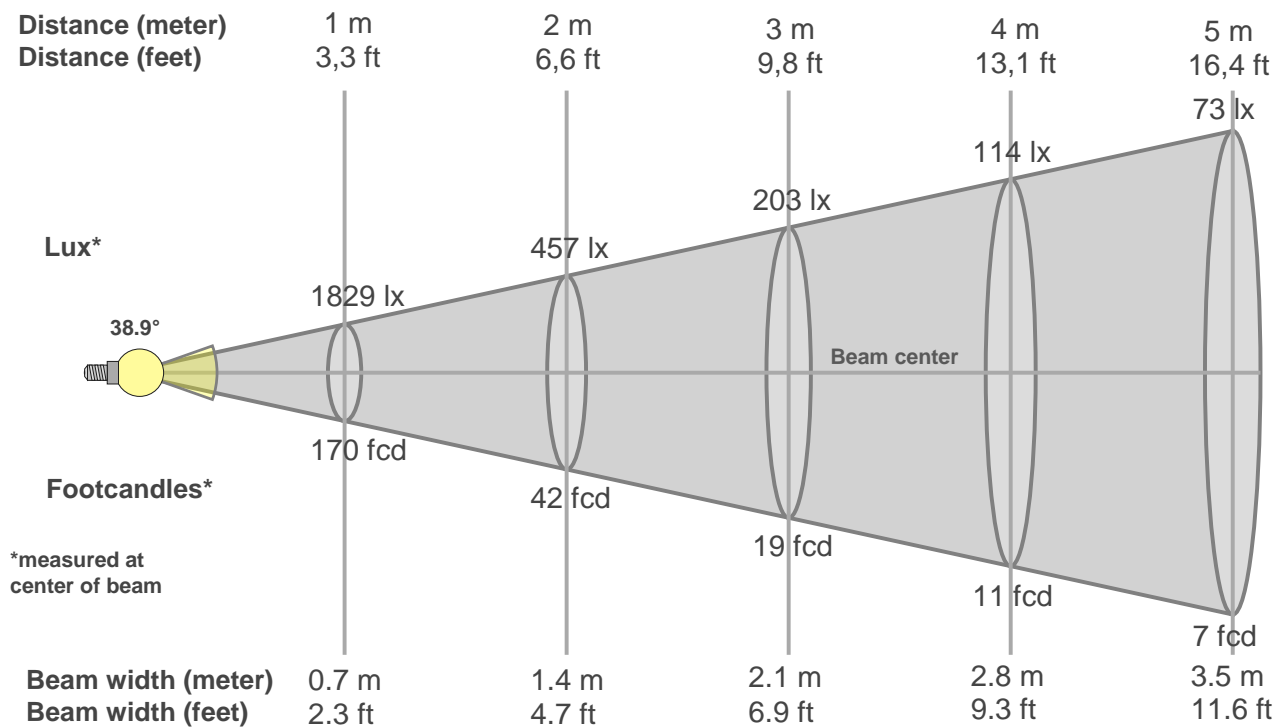
# TM30 details

**Rf 92.7**  
Fidelity index Rf

**Rg 104.1**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-2%
2	97	-1%	1%
3	92	0%	3%
4	91	3%	4%
5	92	4%	4%
6	90	6%	1%
7	89	5%	-4%
8	92	3%	-4%
9	93	0%	-4%
10	95	-2%	-1%
11	92	-1%	4%
12	91	3%	3%
13	94	4%	0%
14	93	5%	-2%
15	92	3%	-3%
16	91	3%	-6%





### 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
1829lx	457lx	203lx	114lx	73lx	51lx	37lx	29lx	23lx	18lx	15lx	13lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	5lx
170fcd	42.5fcd	18.9fcd	10.6fcd	6.8fcd	4.7fcd	3.5fcd	2.7fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd

### 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°
1829	1819	1782	1721	1645	1556	1445	1319	1178	1026	873	736	610	480	323	176	52	27	21	18
100%	99%	97%	94%	90%	85%	79%	72%	64%	56%	48%	40%	33%	26%	18%	10%	3%	1%	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°
1829	1818	1784	1726	1652	1563	1459	1336	1190	1032	875	732	607	489	363	184	49	27	21	18
100%	99%	98%	94%	90%	85%	80%	73%	65%	56%	48%	40%	33%	27%	20%	10%	3%	1%	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°
1829	1818	1783	1721	1642	1554	1452	1328	1181	1021	875	737	608	484	335	188	55	27	21	18
100%	99%	97%	94%	90%	85%	79%	73%	65%	56%	48%	40%	33%	26%	18%	10%	3%	1%	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°
1829	1818	1778	1721	1645	1556	1453	1330	1187	1029	876	731	601	473	321	141	40	25	21	17
100%	99%	97%	94%	90%	85%	79%	73%	65%	56%	48%	40%	33%	26%	18%	8%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
38.9°	59.7°	64.2°	1.0%	1.0%



