

Light efficiency:



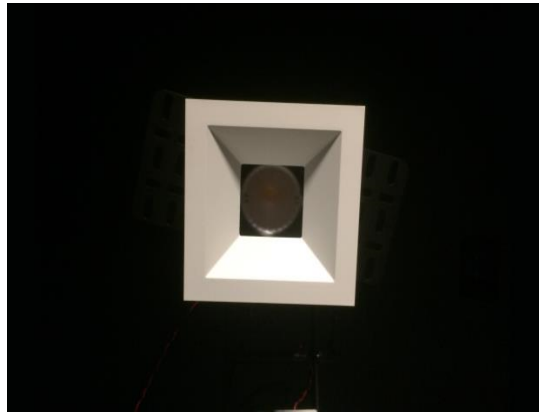
Light quality:



Color temperature:

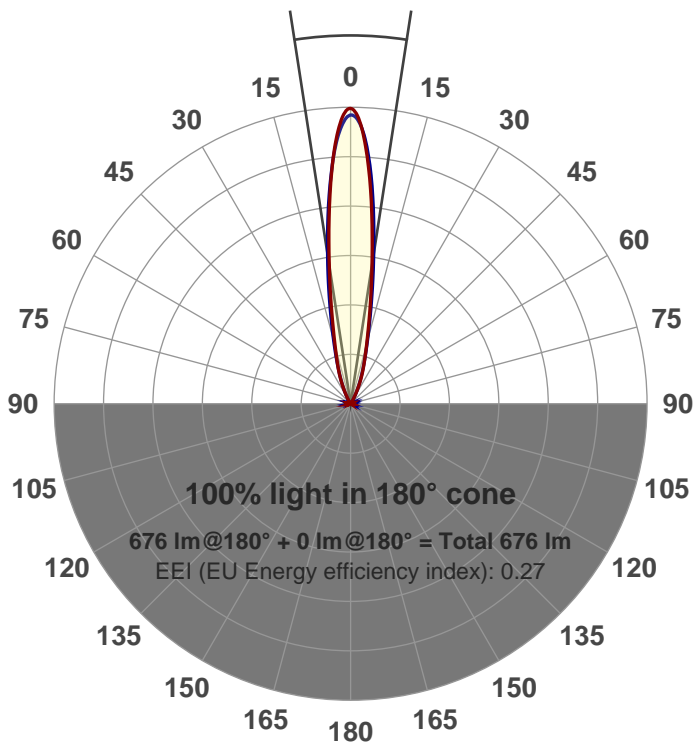


Output: 676 lm
Peak: 4319 cd
Power: 15.0 W
PF: 0.98



Beam angle

17.5°



Product name:
GR-AD-SP-SQ-91A
Item number:
GR-AD-SP-SQ-91A
Date and time:
5/4/2017 4:12:48 PM
Description:

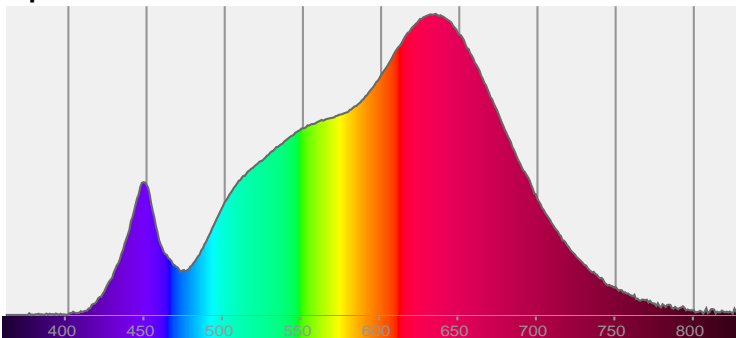
LUM: 676

PPF: 11.4

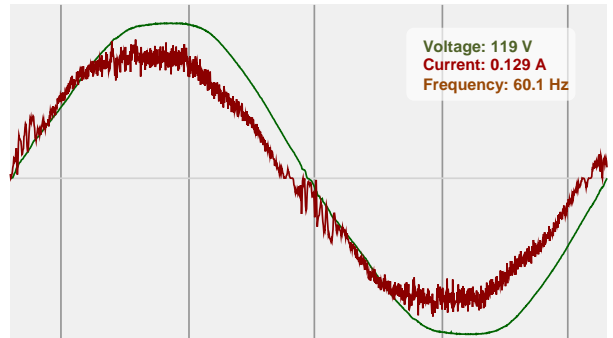


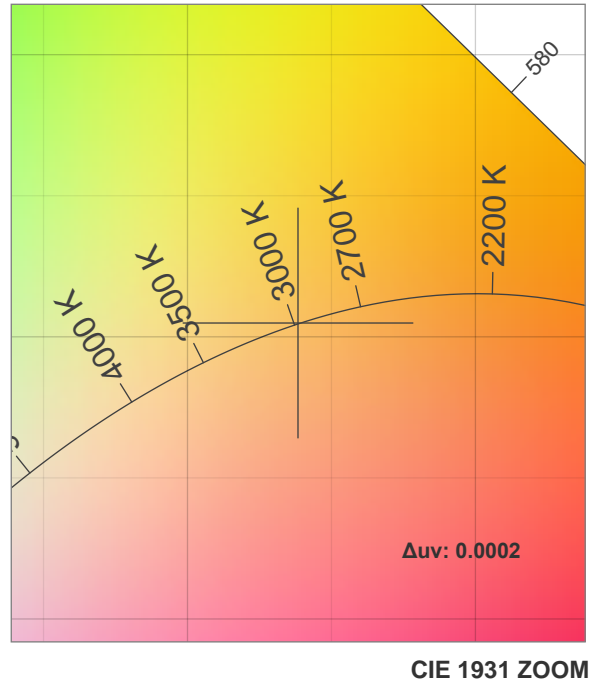
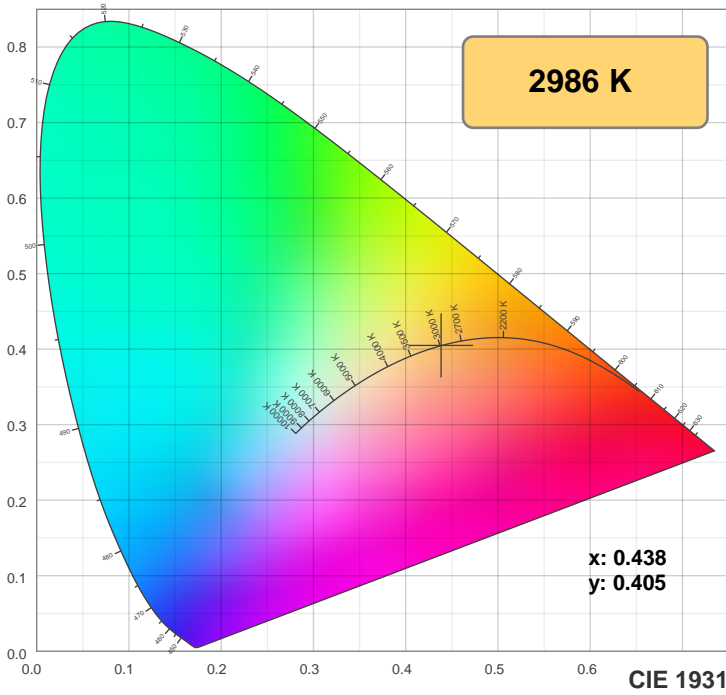
CIE 1931
x: 0.438
y: 0.405

Spectra

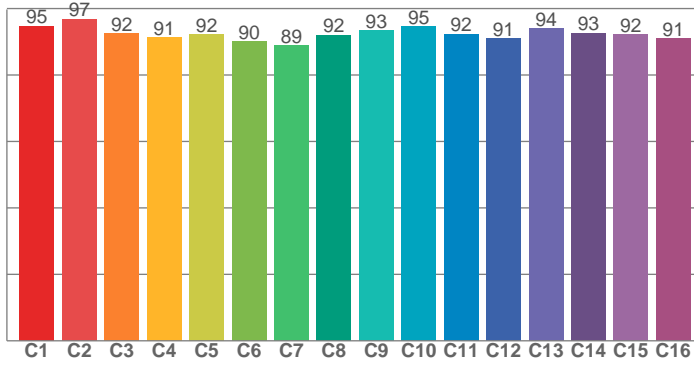


Power

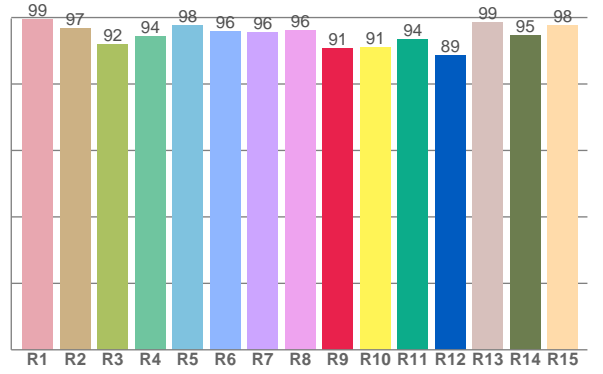




TM30: 92.7



CRI: 96.0 (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
99.3	96.7	92.0	94.4	97.6	95.9	95.7	96.3	90.7	91.1	93.5	88.6	98.5	94.6	97.6

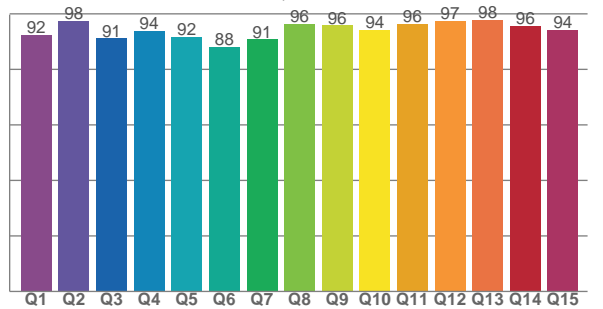
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.8	96.8	92.4	91.2	92.3	90.0	88.9	92.0	93.4	94.7	92.4	91.0	94.0	92.7	92.2	90.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.3	97.5	91.1	93.8	91.6	88.0	90.7	96.3	95.8	94.2	96.2	97.3	97.7	95.7	94.1

CQS: 93.3



Color parameters

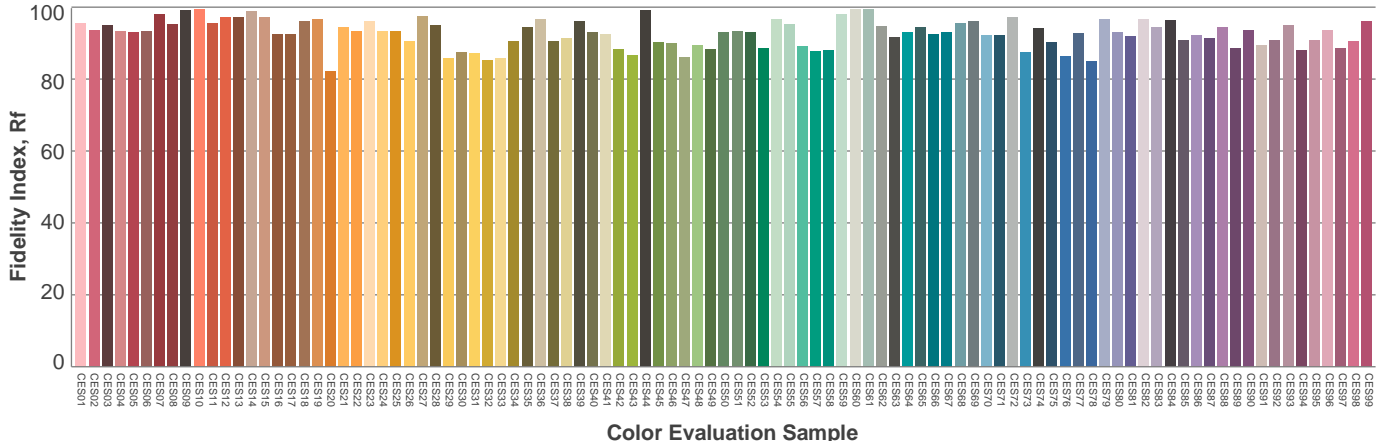
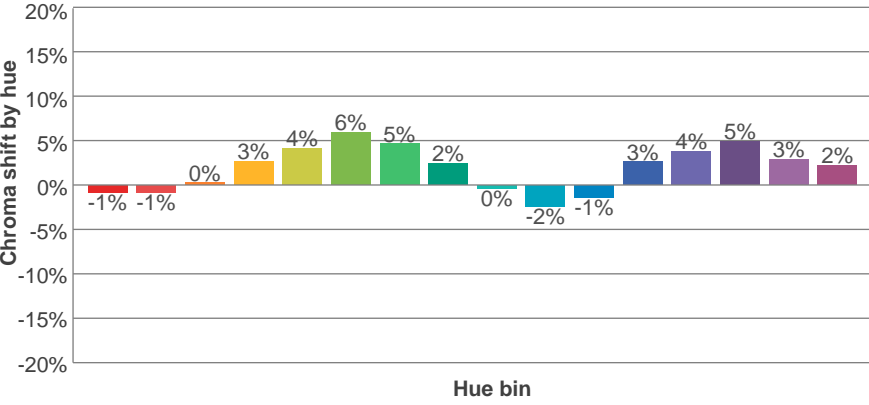
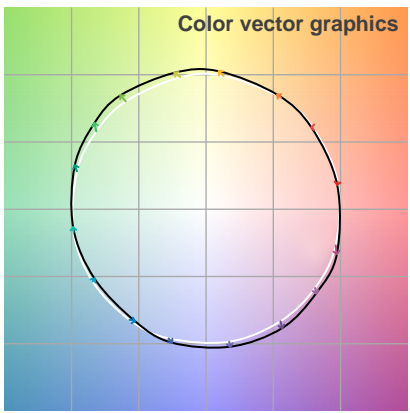
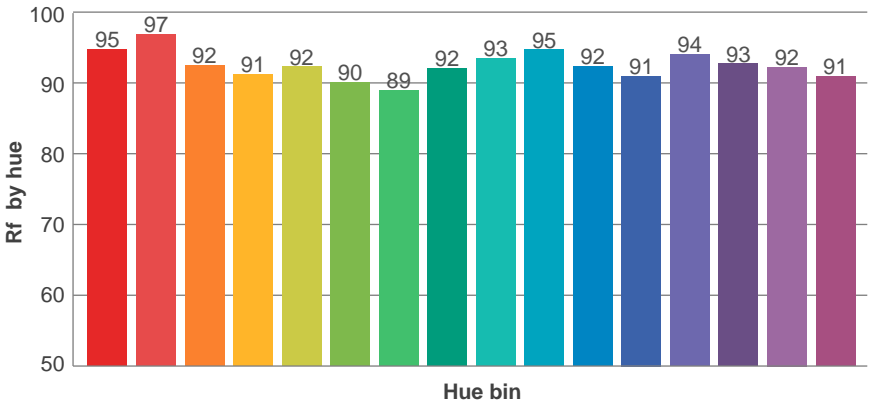
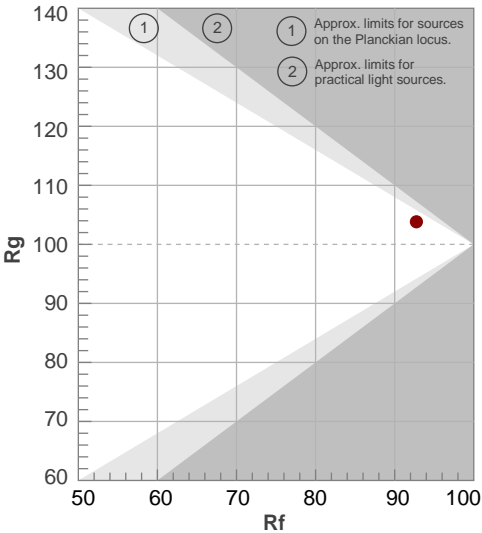
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2986 K	96.0	90.7	92.7	103.8	93.3	0.438	0.405	0.251	0.348	0.0002

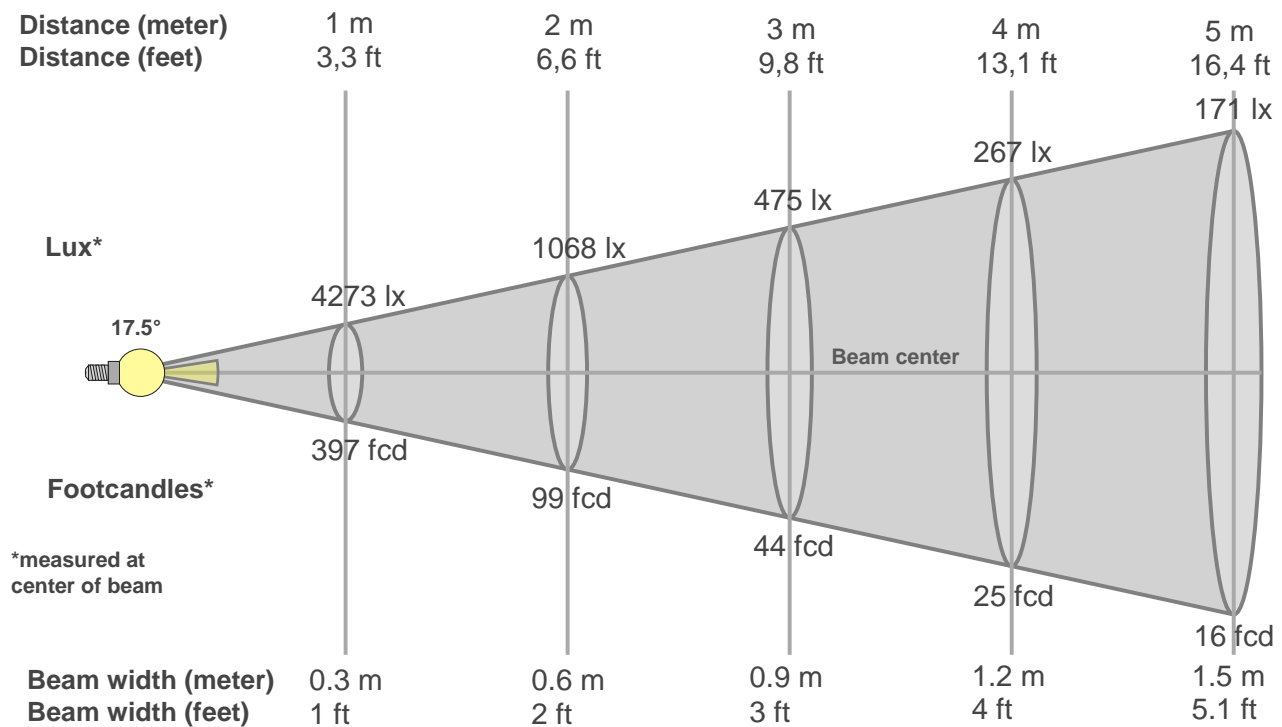
TM30 details

Rf 92.7
Fidelity index Rf

Rg 103.8
Gammut index Rg

Hue Bin	R _f	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	2%	-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	2%	-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
4273lx	1068lx	475lx	267lx	171lx	119lx	87lx	67lx	53lx	43lx	35lx	30lx	25lx	22lx	19lx	17lx	15lx	13lx	12lx	11lx
396.9fcd	99.2fcd	44.1fcd	24.8fcd	15.9fcd	11fcd	8.1fcd	6.2fcd	4.9fcd	4fcd	3.3fcd	2.8fcd	2.3fcd	2fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd

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°
4273	4132	3624	2952	2285	1733	1303	995	781	627	503	392	283	192	120	70	43	28	19	14
100%	97%	85%	69%	53%	41%	30%	23%	18%	15%	12%	9%	7%	4%	3%	2%	1%	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°
4273	4046	3615	3032	2429	1896	1446	1100	836	643	490	366	264	182	122	82	56	38	25	17
100%	95%	85%	71%	57%	44%	34%	26%	20%	15%	11%	9%	6%	4%	3%	2%	1%	1%	1%	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°
4273	4103	3578	2926	2279	1748	1341	1034	820	657	532	421	314	216	138	80	48	30	19	14
100%	96%	84%	68%	53%	41%	31%	24%	19%	15%	12%	10%	7%	5%	3%	2%	1%	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°
4273	4090	3672	3083	2447	1886	1431	1086	836	650	506	385	284	198	132	87	57	38	24	17
100%	96%	86%	72%	57%	44%	33%	25%	20%	15%	12%	9%	7%	5%	3%	2%	1%	1%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17.5°	42.7°	57.5°	1.0%	1.0%

