

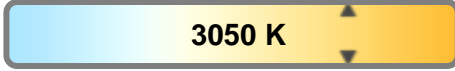
Light efficiency:



Light quality:



Color temperature:

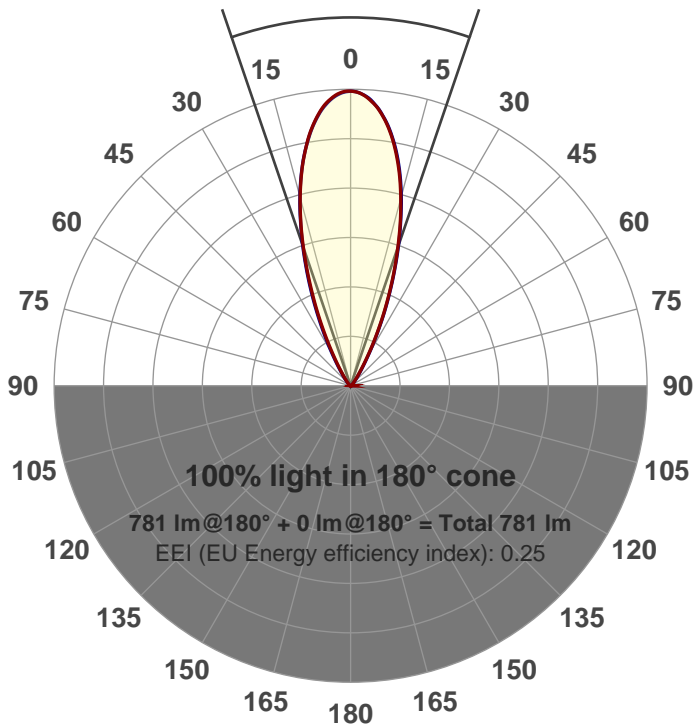


Output: 781 lm  
Peak: 1773 cd  
Power: 15.0 W  
PF: 0.98



Beam angle

37.7°



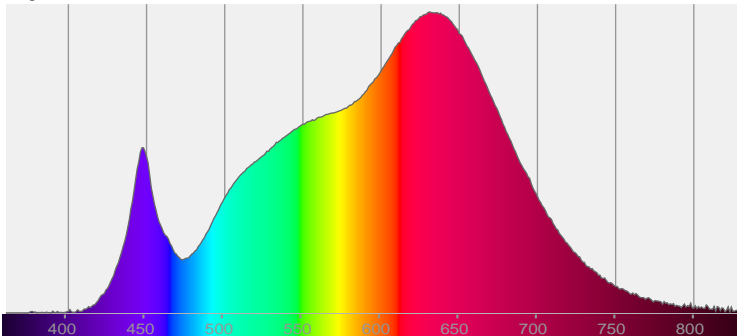
Product name:  
**GR-AD-FL-RD-91A**  
Item number:  
**GR-AD-FL-RD-91A**  
Date and time:  
**8/9/2017 4:40:41 PM**  
Description:

LUM: 781  
PPF: 14.6

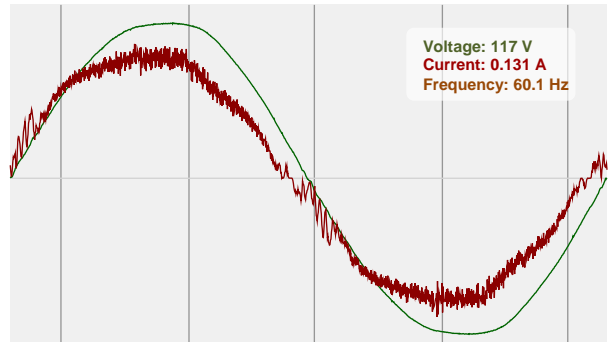


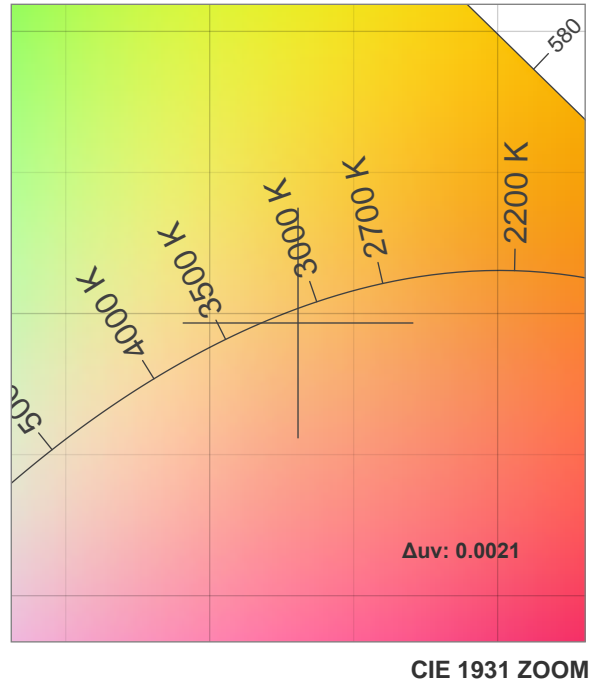
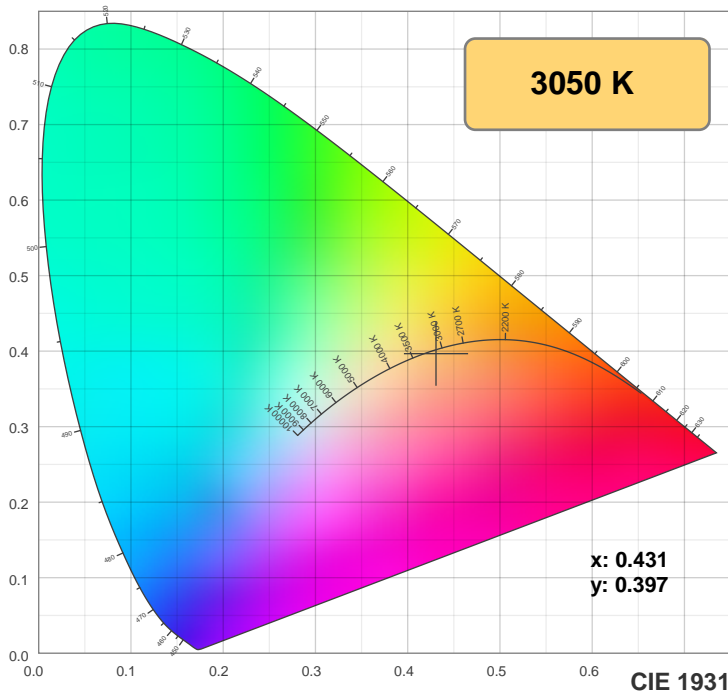
CIE 1931  
x: 0.431  
y: 0.397

Spectra

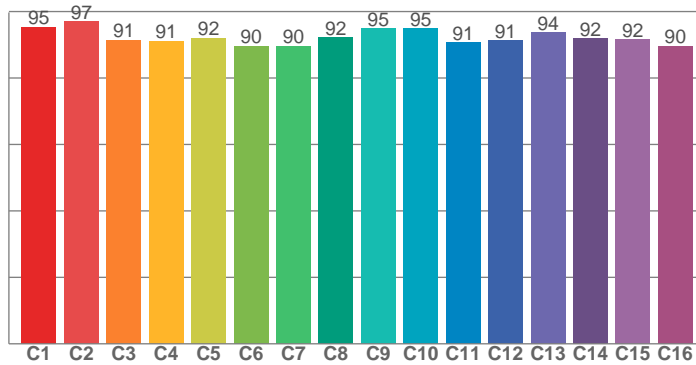


Power

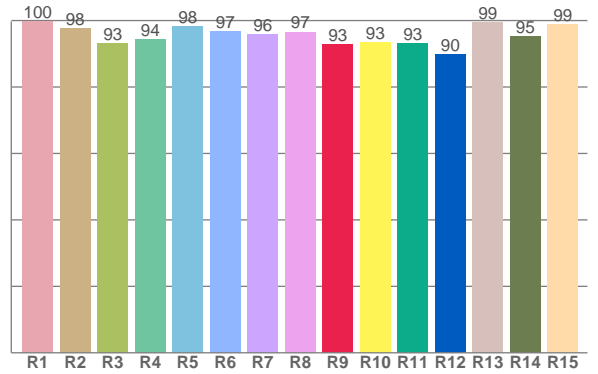




**TM30: 92.6**



**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
99.7	97.7	93.1	94.4	98.4	96.7	95.8	96.6	92.8	93.3	93.2	89.9	99.4	95.2	98.7

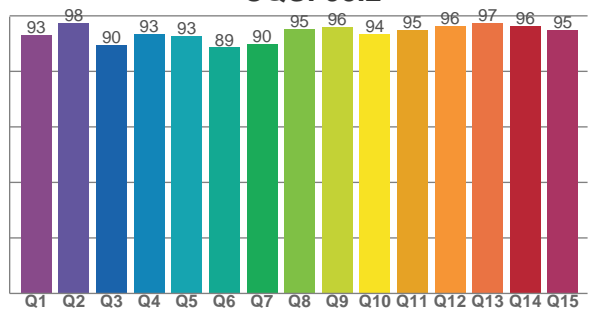
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95.3	97.0	91.4	91.1	92.0	89.6	89.7	92.1	95.0	95.0	90.6	91.2	93.7	91.8	91.7	89.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
93.1	97.5	89.6	93.5	92.9	88.6	89.8	95.3	96.1	93.6	95.0	96.3	97.4	96.4	94.9

**CQS: 93.2**



## Color parameters

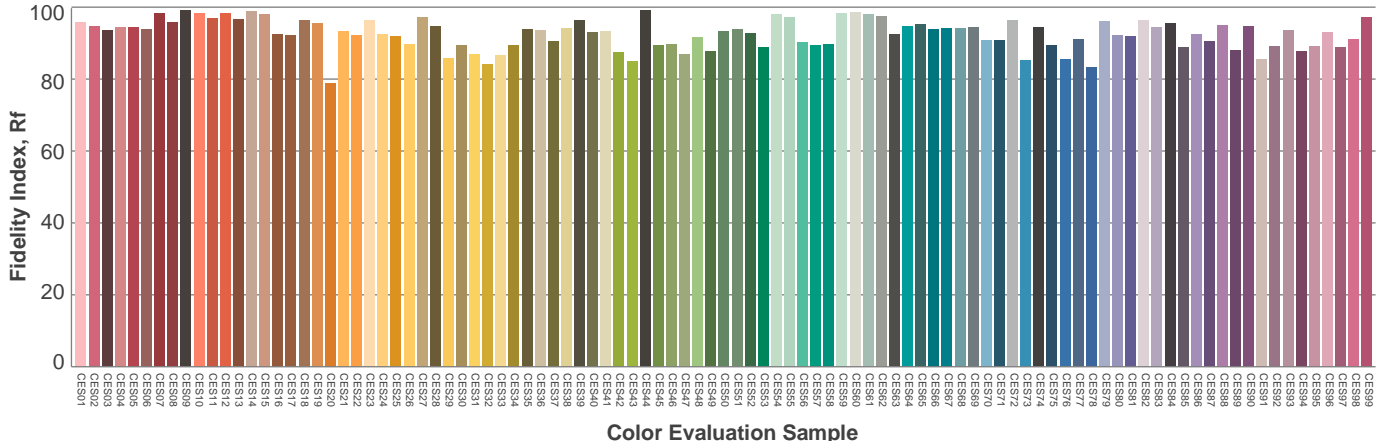
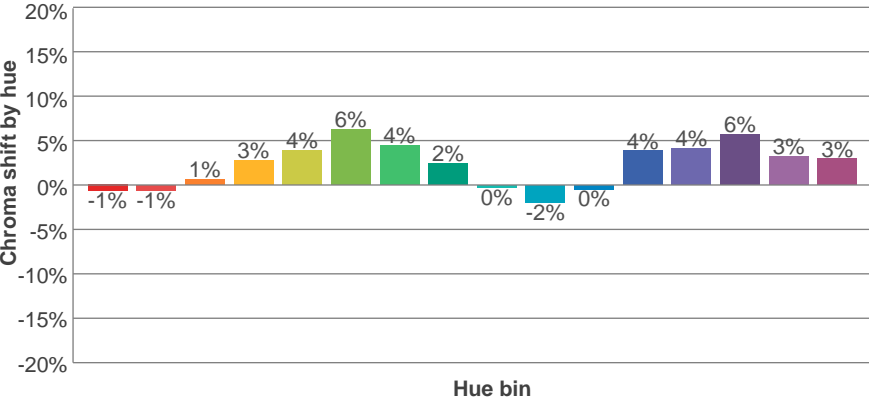
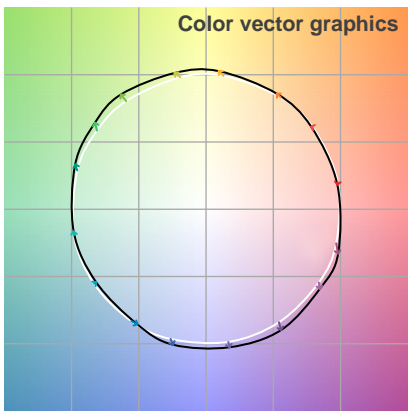
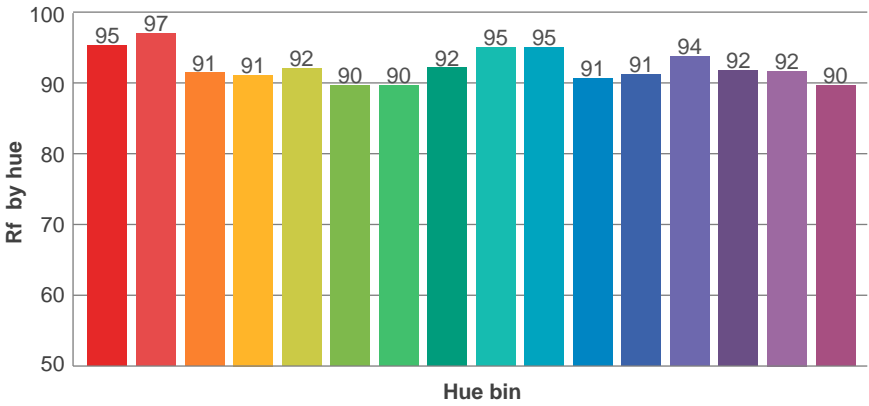
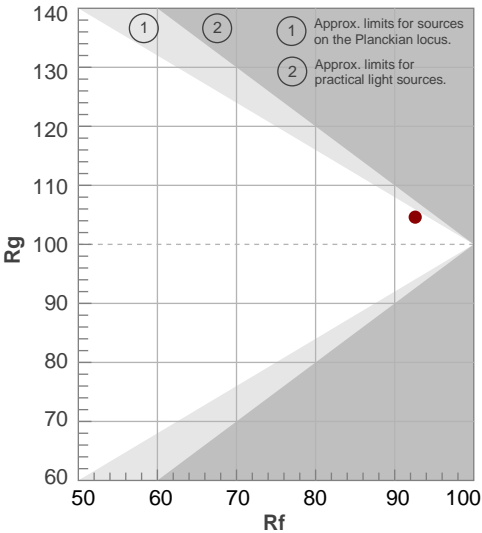
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3050 K	96.5	92.8	92.6	104.6	93.2	0.431	0.397	0.250	0.345	0.0021

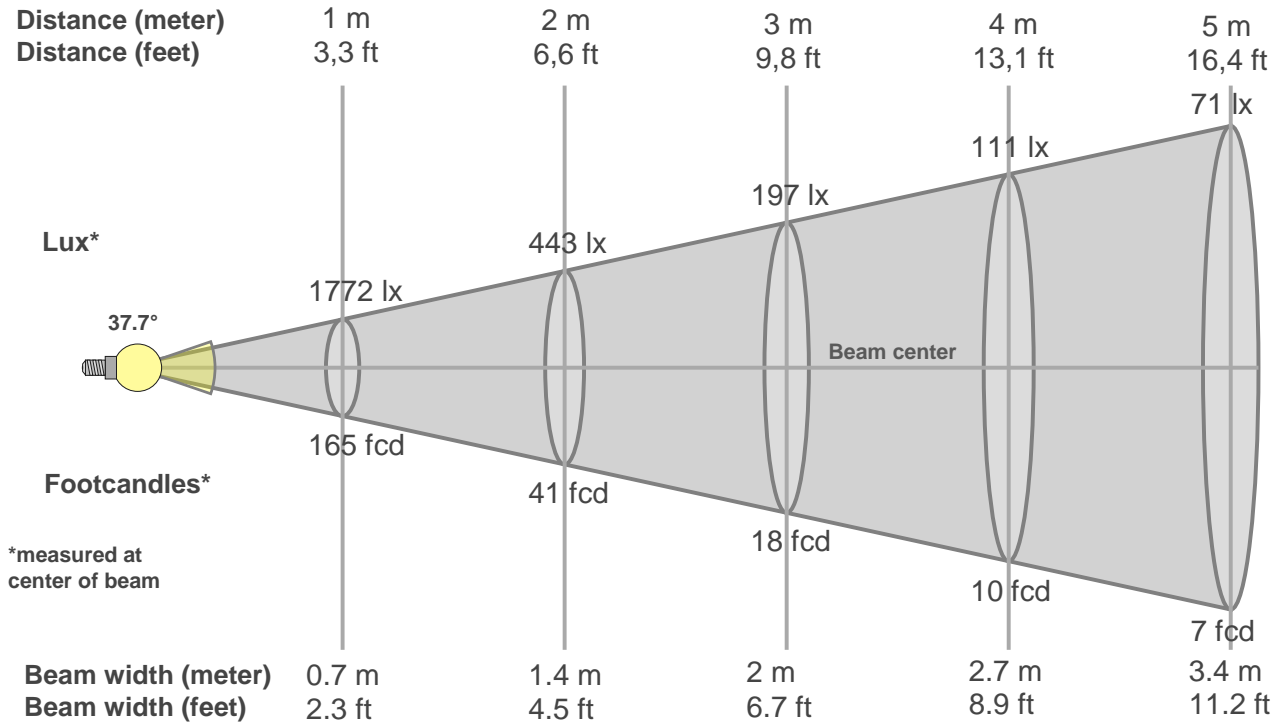
# TM30 details

**Rf 92.6**  
Fidelity index Rf

**Rg 104.6**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	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	91	0%	5%
12	91	4%	3%
13	94	4%	0%
14	92	6%	-2%
15	92	3%	-4%
16	90	3%	-7%





### 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
1772lx	443lx	197lx	111lx	71lx	49lx	36lx	28lx	22lx	18lx	15lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx
164.6fc	41.1fcd	18.3fcd	10.3fcd	6.6fcd	4.6fcd	3.4fcd	2.6fcd	2fcd	1.6fcd	1.4fcd	1.1fcd	1fcd	0.8fcd	0.7fcd	0.6fcd	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°
1772	1763	1729	1673	1593	1493	1376	1243	1099	947	791	640	502	377	272	191	135	95	70	52
100%	100%	98%	94%	90%	84%	78%	70%	62%	53%	45%	36%	28%	21%	15%	11%	8%	5%	4%	3%

### 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°
1772	1759	1725	1668	1589	1491	1377	1248	1105	955	805	661	527	407	302	219	156	112	82	62
100%	99%	97%	94%	90%	84%	78%	70%	62%	54%	45%	37%	30%	23%	17%	12%	9%	6%	5%	4%

### 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°
1772	1758	1720	1663	1584	1485	1369	1237	1094	945	795	652	517	394	289	203	140	98	70	52
100%	99%	97%	94%	89%	84%	77%	70%	62%	53%	45%	37%	29%	22%	16%	11%	8%	6%	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°
1772	1759	1725	1667	1588	1492	1378	1248	1104	955	805	661	527	404	299	215	153	110	80	60
100%	99%	97%	94%	90%	84%	78%	70%	62%	54%	45%	37%	30%	23%	17%	12%	9%	6%	5%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37.7°	61.8°	79.6°	1.0%	1.0%



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