

Light efficiency:



Light quality:



Color temperature:

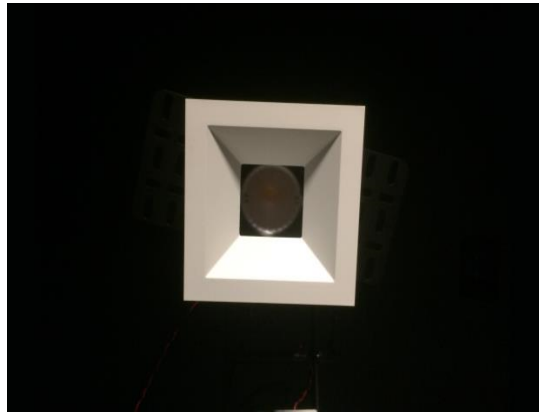


Output: 642 lm

Peak: 2618 cd

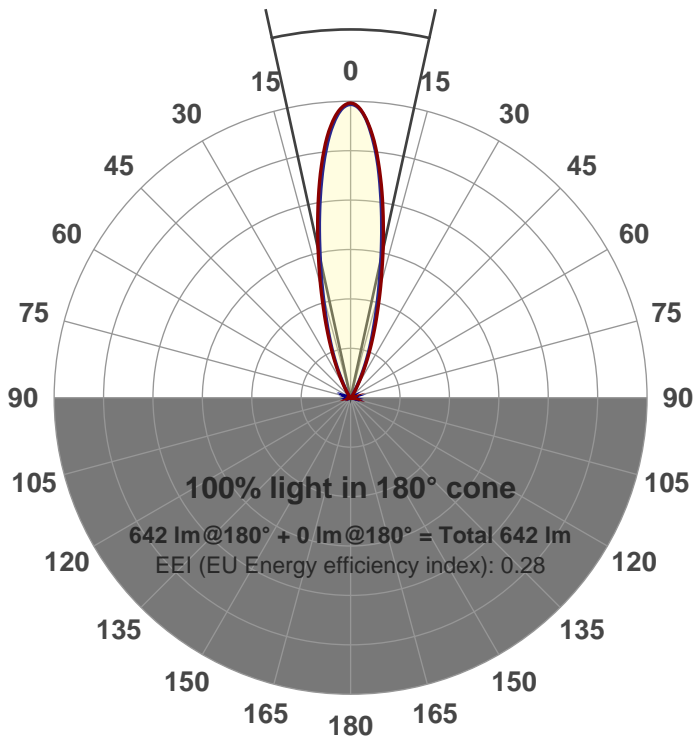
Power: 15.0 W

PF: 0.98



Beam angle

24.7°



Product name:

**GR-AD-NF-SQ-91A**

Item number:

**GR-AD-NF-SQ-91A**

Date and time:

**5/4/2017 3:55:25 PM**

Description:

**LUM: 642**

**PPF: 10.9**

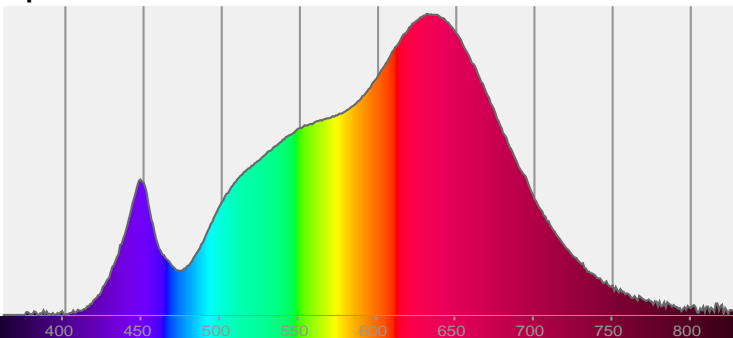


CIE 1931

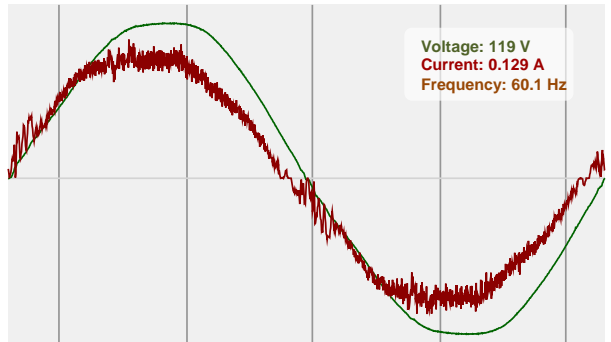
x: 0.438

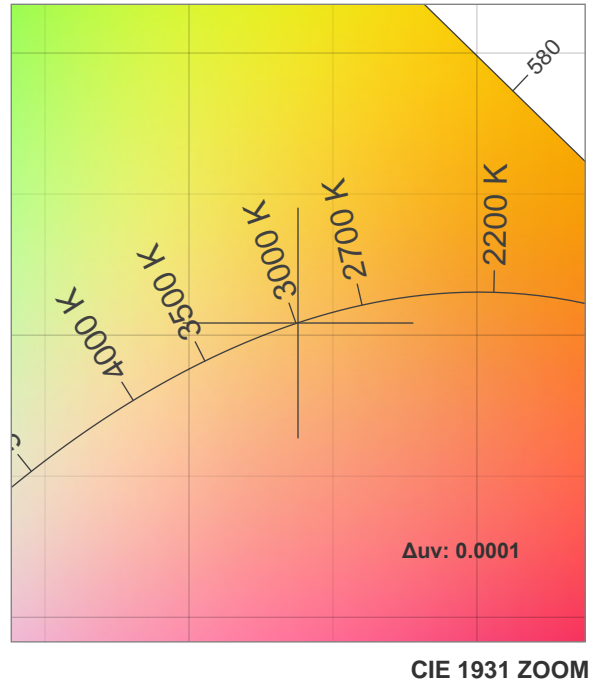
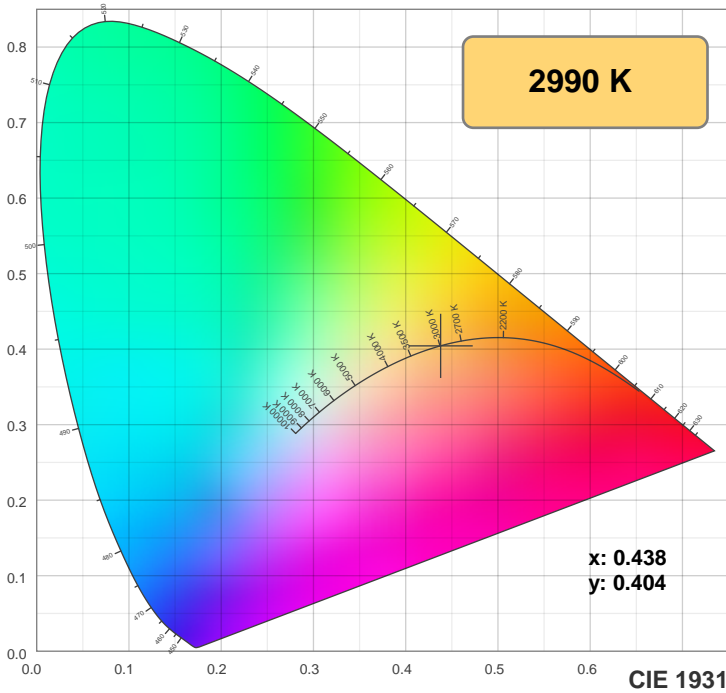
y: 0.404

Spectra

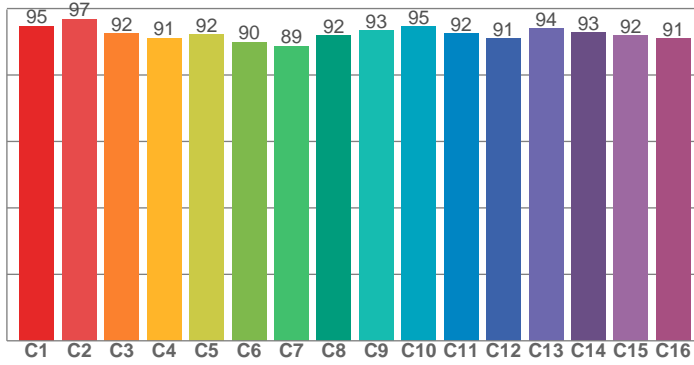


Power

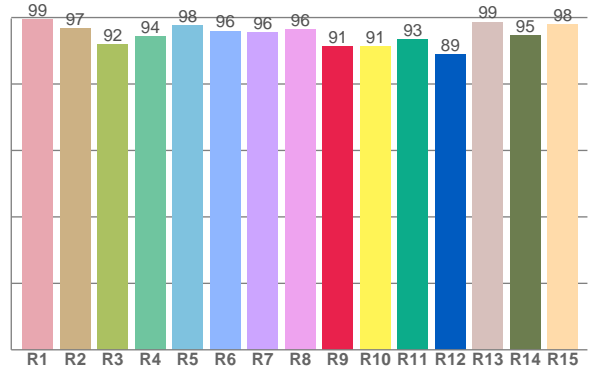




**TM30: 92.7**



**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
99.5	96.8	92.0	94.3	97.7	96.0	95.6	96.4	91.3	91.3	93.3	88.9	98.7	94.6	97.8

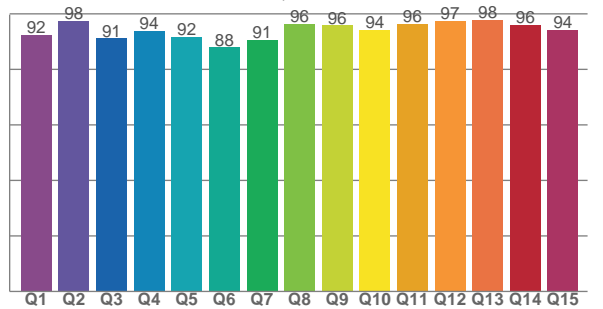
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.8	96.9	92.4	91.1	92.2	89.9	88.8	91.9	93.3	94.7	92.4	91.0	94.0	92.7	91.9	91.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.3	97.5	91.1	93.9	91.5	87.9	90.7	96.3	95.8	94.2	96.2	97.5	97.8	95.9	94.2

**CQS: 93.3**



## Color parameters

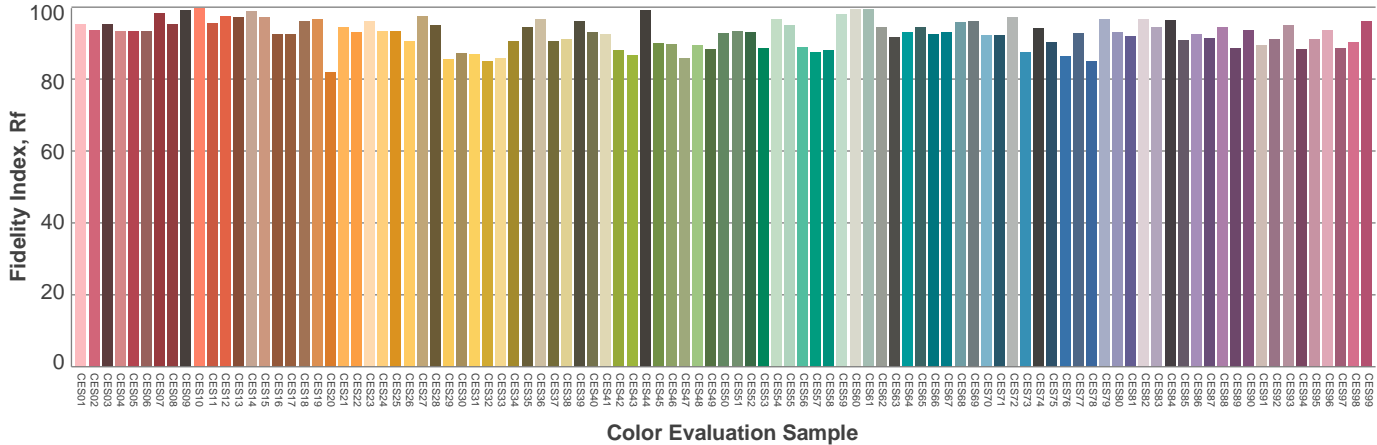
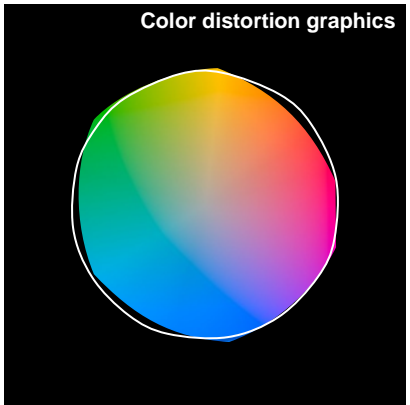
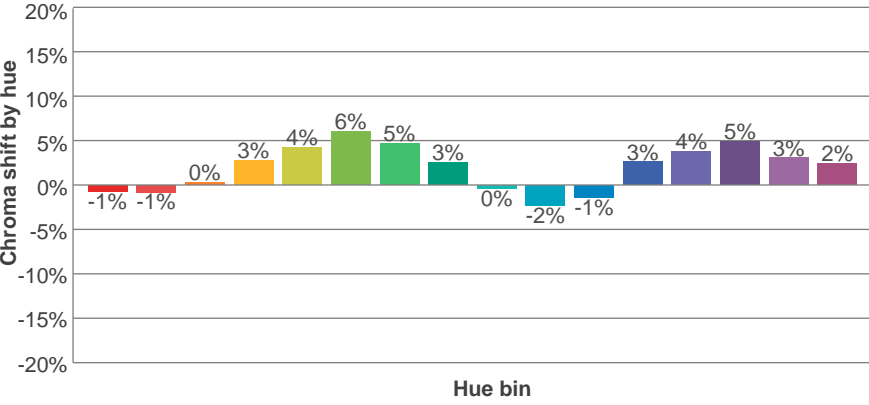
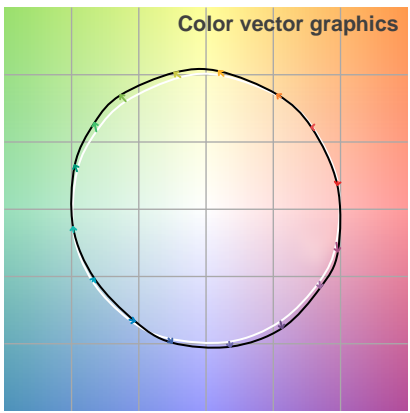
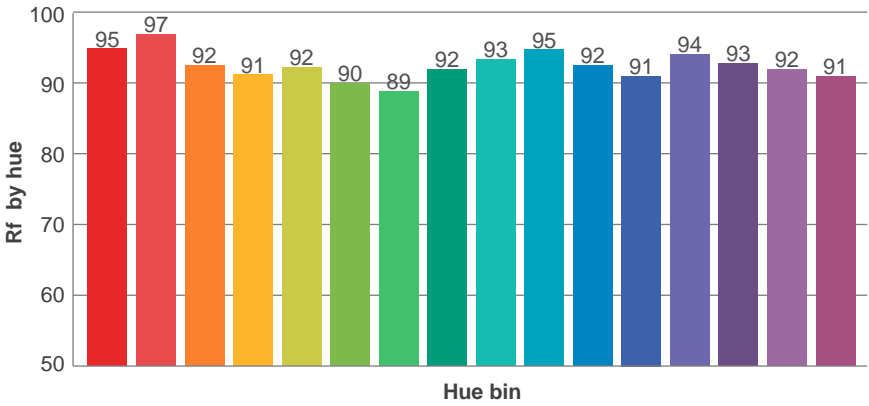
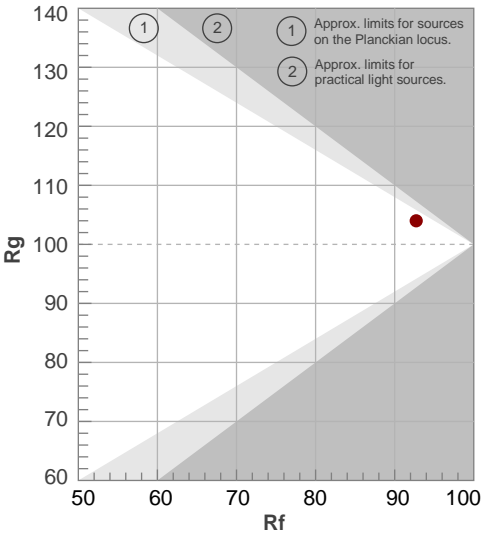
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
<b>CCT</b>	<b>CRI</b>	<b>CRI R9</b>	<b>TM30 Rf</b>	<b>TM30 Rg</b>	<b>CQS</b>	<b>x</b>	<b>y</b>	<b>u</b>	<b>v</b>	<b>Δuv</b>
<b>2990 K</b>	<b>96.0</b>	<b>91.3</b>	<b>92.7</b>	<b>104.0</b>	<b>93.3</b>	<b>0.438</b>	<b>0.404</b>	<b>0.251</b>	<b>0.348</b>	<b>0.0001</b>

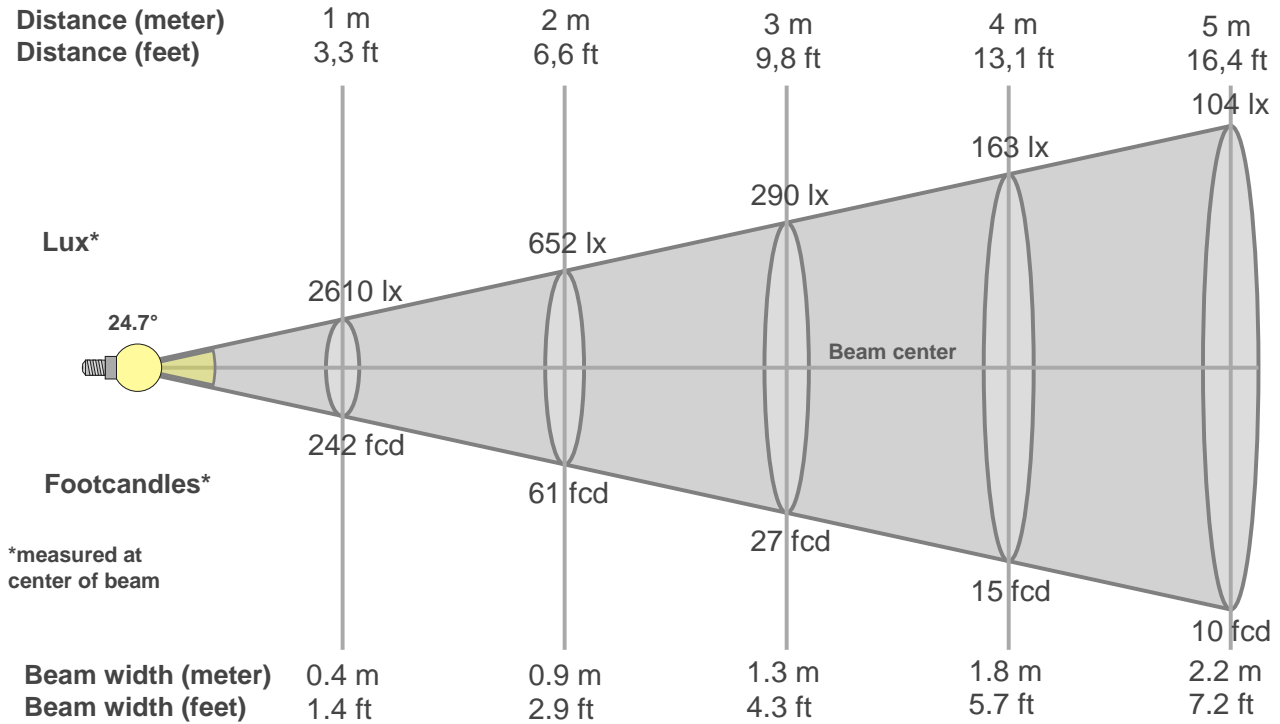
# TM30 details

**Rf 92.7**  
Fidelity index Rf

**Rg 104.0**  
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	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
2610lx	652lx	290lx	163lx	104lx	72lx	53lx	41lx	32lx	26lx	22lx	18lx	15lx	13lx	12lx	10lx	9lx	8lx	7lx	7lx
242.5fcd	60.6fcd	26.9fcd	15.2fcd	9.7fcd	6.7fcd	4.9fcd	3.8fcd	3fcd	2.4fcd	2fcd	1.7fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.7fcd	0.6fcd

### 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°
2610	2568	2435	2227	1964	1676	1397	1144	919	732	573	439	326	234	162	108	74	51	37	26
100%	98%	93%	85%	75%	64%	54%	44%	35%	28%	22%	17%	12%	9%	6%	4%	3%	2%	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°
2610	2551	2397	2166	1887	1594	1306	1056	838	662	516	390	279	188	120	78	53	37	27	21
100%	98%	92%	83%	72%	61%	50%	40%	32%	25%	20%	15%	11%	7%	5%	3%	2%	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°
2610	2561	2412	2199	1938	1662	1395	1147	932	746	589	457	343	247	171	115	79	56	39	28
100%	98%	92%	84%	74%	64%	53%	44%	36%	29%	23%	18%	13%	9%	7%	4%	3%	2%	2%	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°
2610	2553	2398	2170	1885	1588	1306	1053	841	665	526	401	292	200	128	81	51	36	27	22
100%	98%	92%	83%	72%	61%	50%	40%	32%	25%	20%	15%	11%	8%	5%	3%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24.7°	50°	63.8°	1.0%	1.0%



