

Light efficiency:

**68 Lumen/Watt**

Light quality:

**CRI: 98.1**

Color temperature:

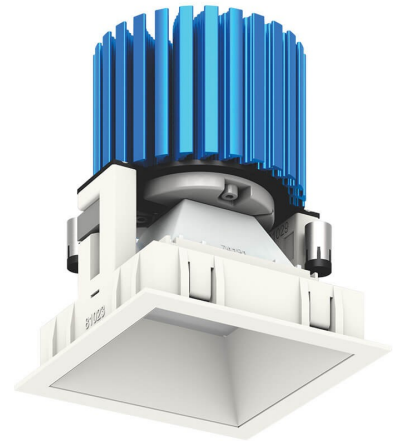
**3009 K**

**Output: 860 lm**

**Peak: 527 cd**

**Power: 12.7 W**

**PF: 0.96**

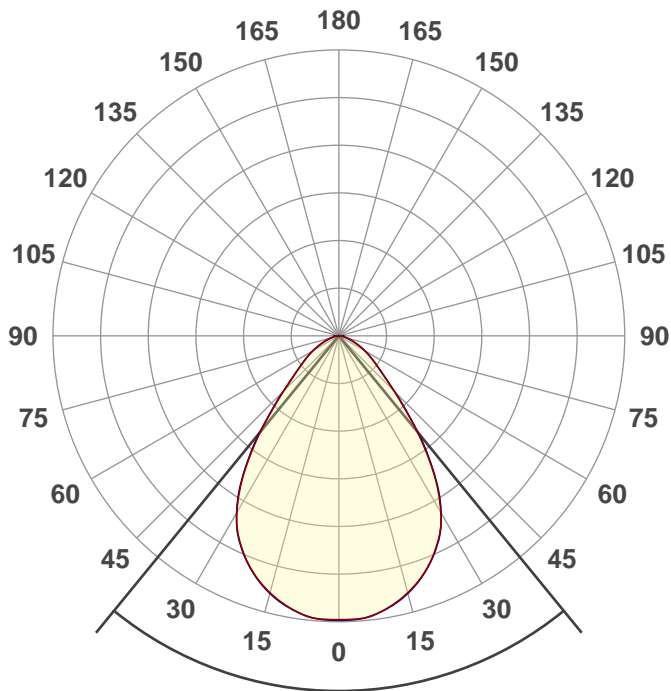


Product name:

**NU3-QD-SUN-10LM-30K-97-HE80-120-DIM10-RET-WH-WH**

Date and time:

**12/21/2018 8:49:18 AM**



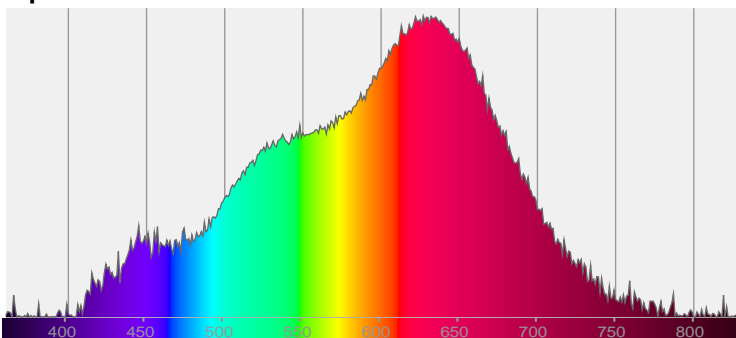
Beam angle

**78.6°**

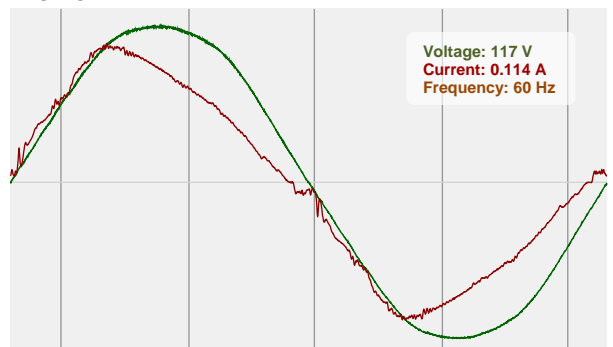


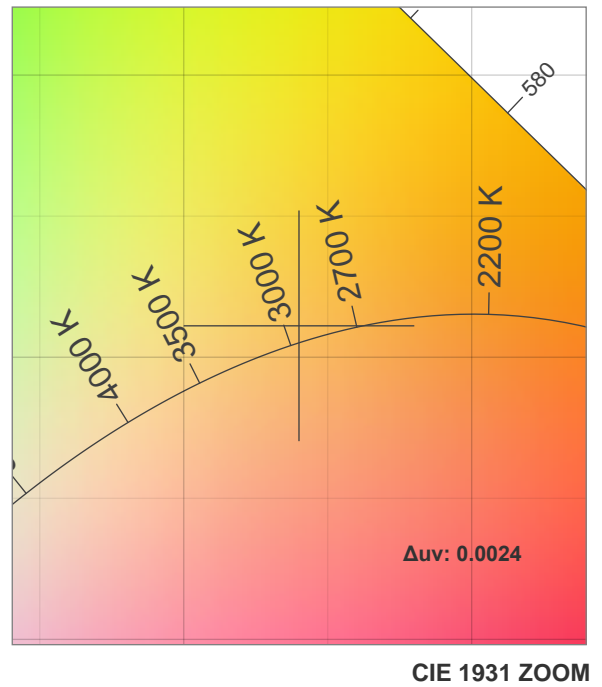
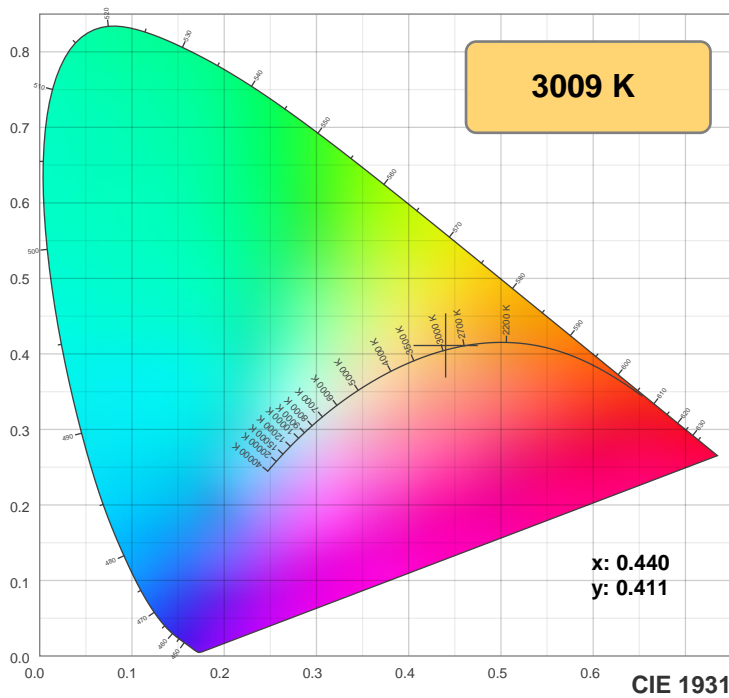
CIE 1931  
x: 0.440  
y: 0.411

Spectra

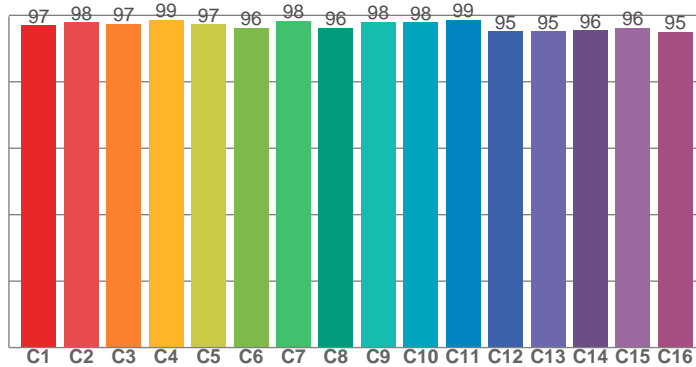


Power

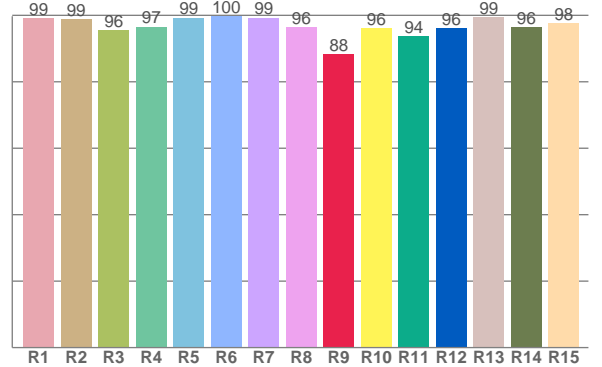




TM30: 97.1



CRI: 98.1 (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
99.1	98.9	95.5	96.6	99.2	99.6	99.2	96.4	88.3	96.1	93.8	96.1	99.4	96.5	97.5

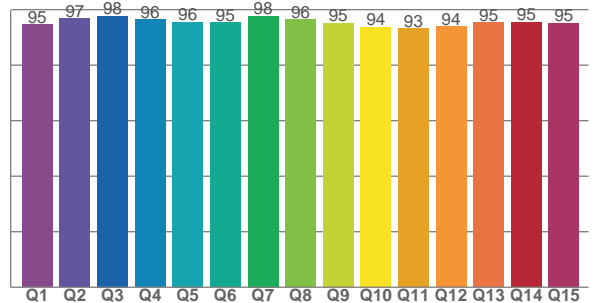
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
97.0	97.8	97.4	98.6	97.3	96.2	98.3	96.3	98.0	97.9	98.7	95.2	95.2	95.5	96.3	95.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94.6	96.8	97.7	96.5	95.6	95.4	97.7	96.4	95.2	93.7	93.1	94.0	95.4	95.4	95.2

CQS: 95.2



## 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	$\Delta uv$
3009 K	98.1	88.3	97.1	100.2	95.2	0.440	0.411	0.250	0.350	0.0024

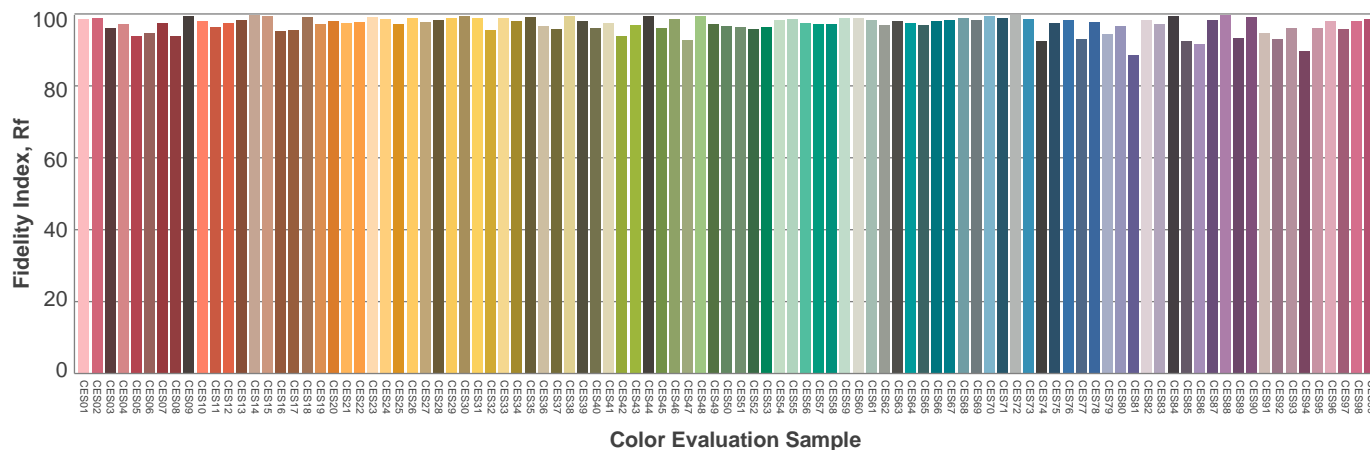
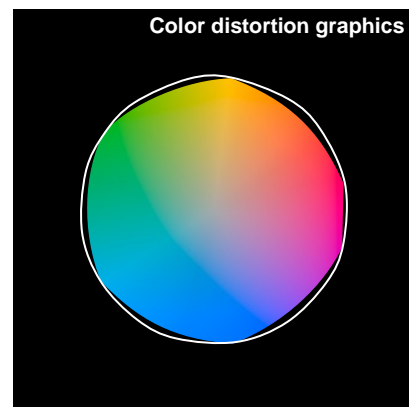
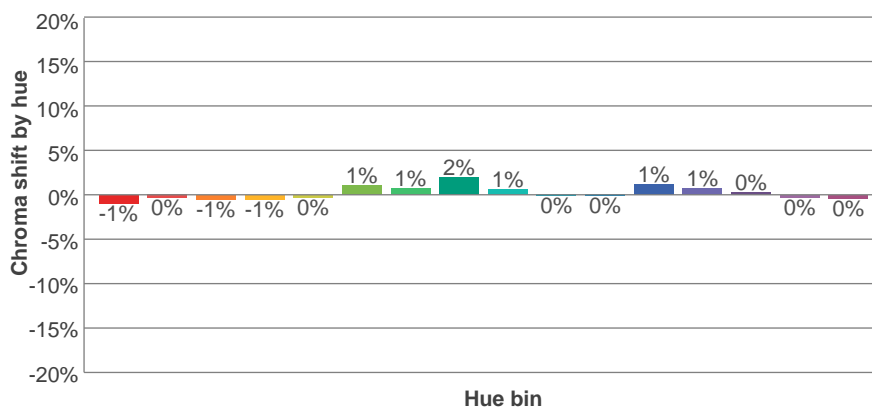
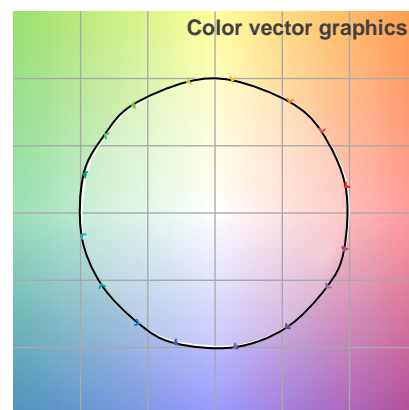
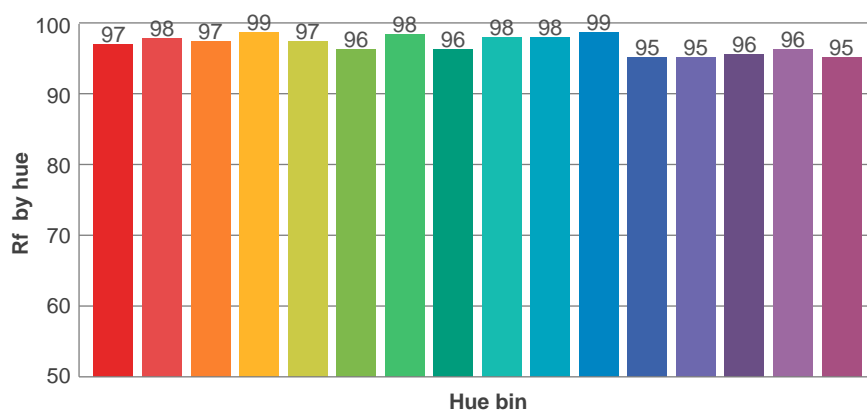
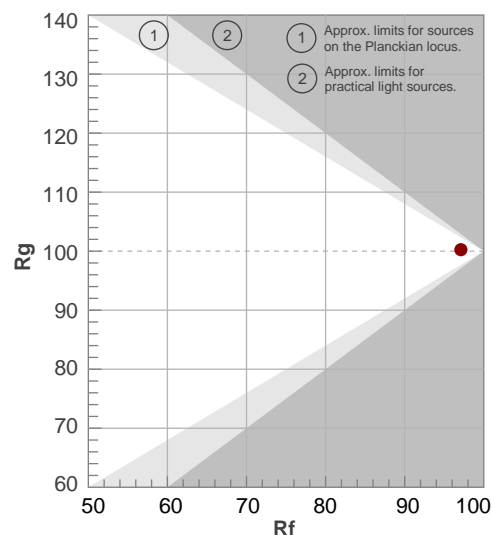
**Rf 97.1**

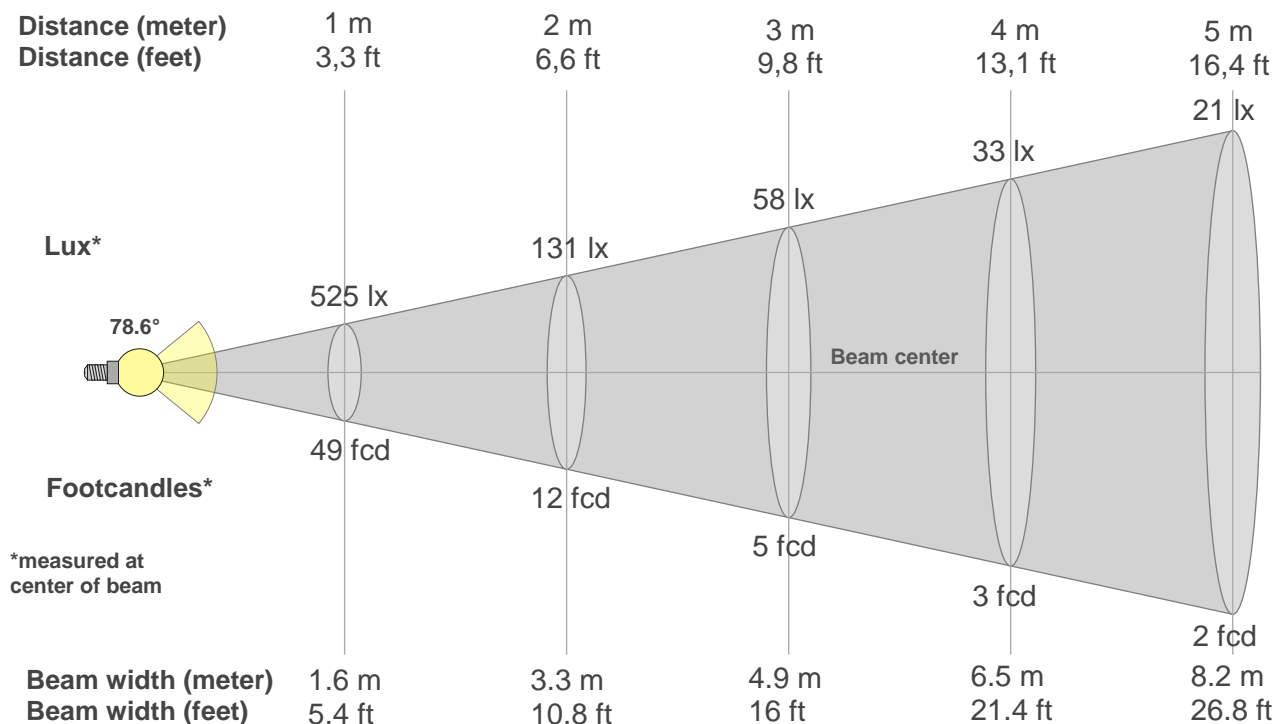
Fidelity index Rf

**Rg 100.2**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	97	-1%	-1%
2	98	0%	0%
3	97	-1%	0%
4	99	-1%	0%
5	97	0%	2%
6	96	1%	2%
7	98	1%	0%
8	96	2%	0%
9	98	1%	-1%
10	98	0%	0%
11	99	0%	0%
12	95	1%	-2%
13	95	1%	-3%
14	96	0%	-3%
15	96	0%	-2%
16	95	0%	-3%





**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
525lx	131lx	58lx	33lx	21lx	15lx	11lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx
48.8fcd	12.2fcd	5.4fcd	3.1fcd	2fcd	1.4fcd	1fcd	0.8fcd	0.6fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd

**Intensities in 0° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
525	523	511	491	464	427	375	302	218	147	102	75	56	39	25	15	8	4	1	0
100%	100%	97%	93%	88%	81%	71%	57%	42%	28%	19%	14%	11%	7%	5%	3%	2%	1%	0%	0%

**Intensities in 90° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
525	522	511	492	464	427	376	304	221	149	103	76	56	39	25	15	9	4	1	1
100%	99%	97%	94%	88%	81%	72%	58%	42%	28%	20%	14%	11%	7%	5%	3%	2%	1%	0%	0%

**Intensities in 180° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
525	523	511	491	464	427	375	302	218	147	102	75	56	39	25	15	8	4	1	0
100%	100%	97%	93%	88%	81%	71%	57%	42%	28%	19%	14%	11%	7%	5%	3%	2%	1%	0%	0%

**Intensities in 270° c-plane**

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
525	522	511	492	464	427	376	304	221	149	103	76	56	39	25	15	9	4	1	1
100%	99%	97%	94%	88%	81%	72%	58%	42%	28%	20%	14%	11%	7%	5%	3%	2%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
78.6°	122.9°	152.8°	92.7%	77.2%