

Light efficiency:

85 Lumen/Watt

Output: 1550 lm

Light quality:

CRI: 72.8

Peak: 9738 cd

Color temperature:

5650 K

Power: 18.3 W

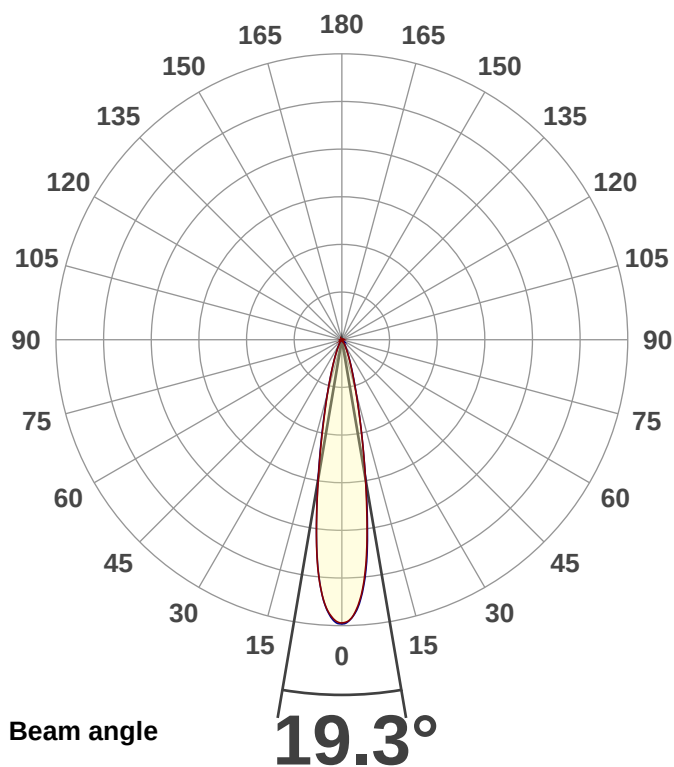
PF: 0.99

Product name:

WN-FL01-RD01

Date and time:

6/18/2019 8:31:18 AM

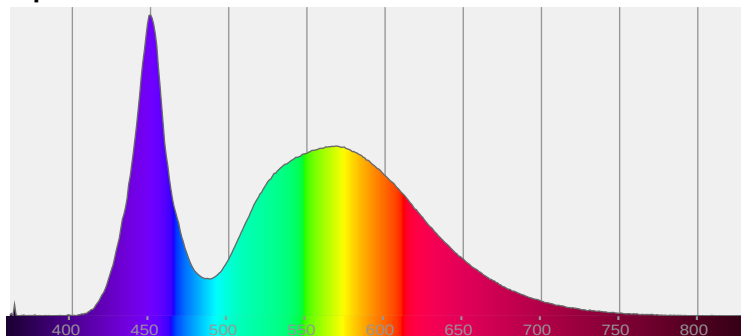


CIE 1931

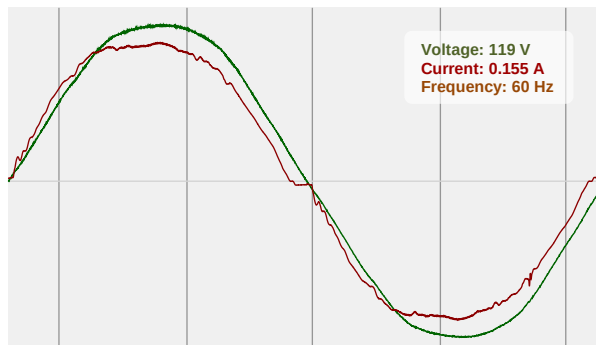
x: 0.329

y: 0.337

Spectra



Power



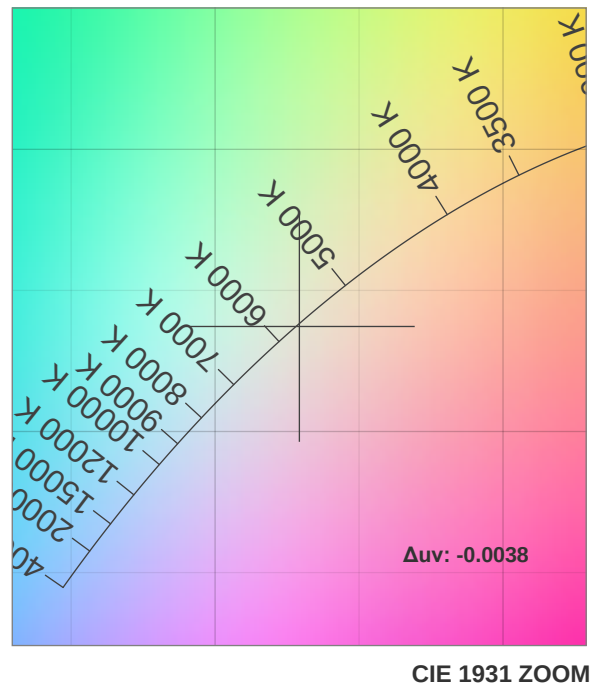
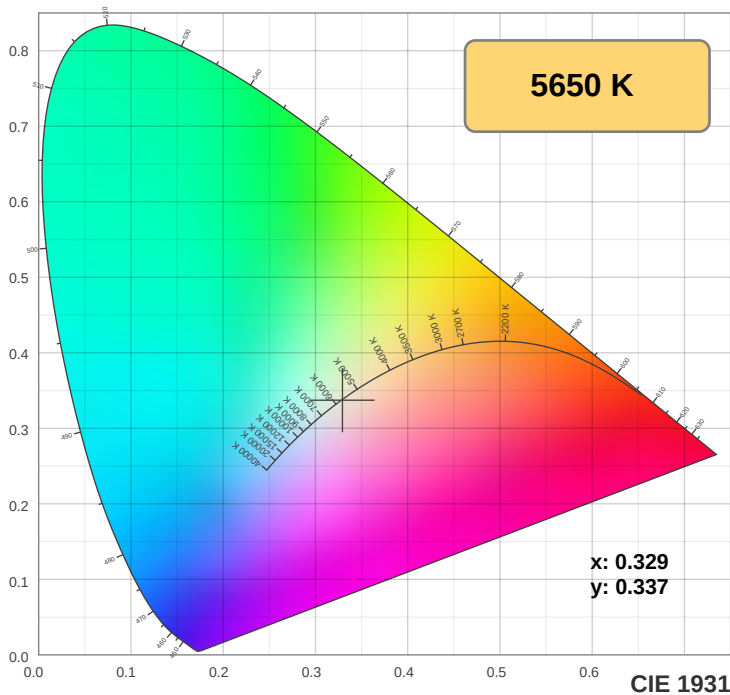
T 314.743.3067

F 314.972.6202

email: commercial-sales@superbrightleds.com

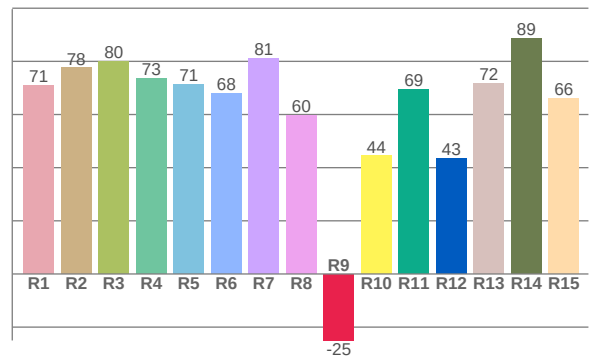
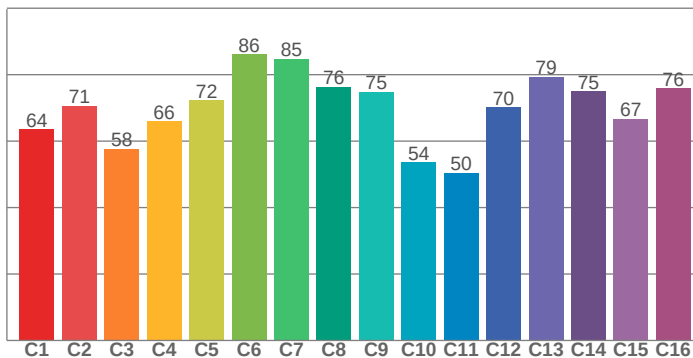
www.superbrightleds.com/

Color details



TM30: 69.5

CRI: 72.8 (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
70.8	77.5	80.1	73.4	71.3	67.9	81.3	59.7	-25.0	44.4	69.4	43.4	71.8	88.6	66.1

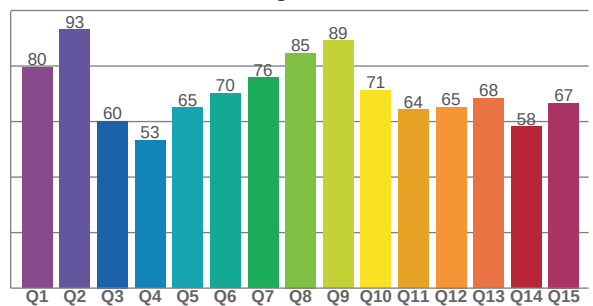
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
63.6	70.6	57.6	66.0	72.3	86.1	84.7	76.3	74.9	53.6	50.5	70.2	79.3	75.0	66.6	75.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.6	93.2	60.2	53.3	65.0	70.2	75.8	84.7	89.1	71.3	64.2	65.2	68.4	58.1	66.7

CQS: 69.0



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
5650 K	72.8	-25.0	69.5	94.0	69.0	0.329	0.337	0.206	0.317	-0.0038



TM30 details

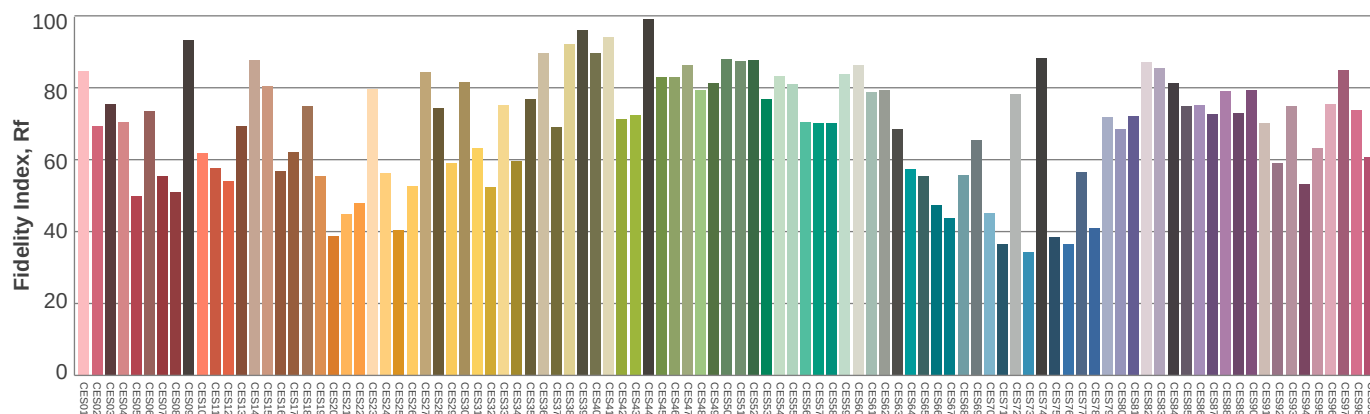
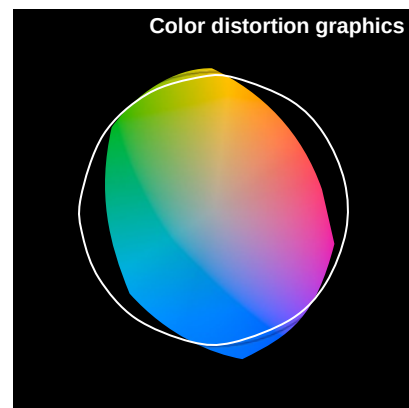
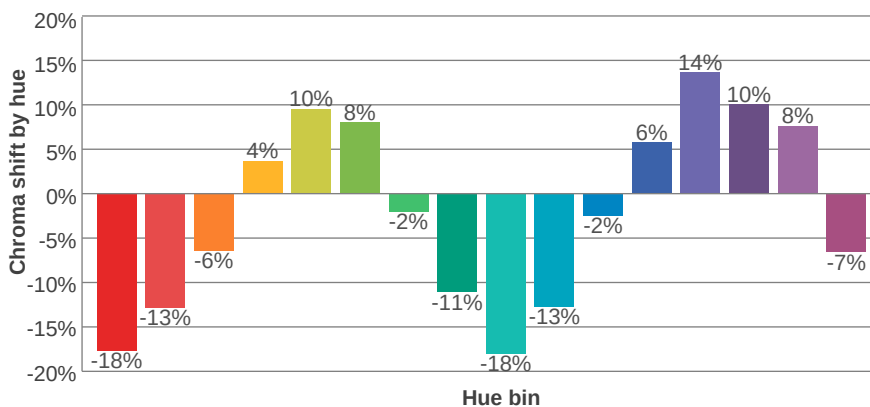
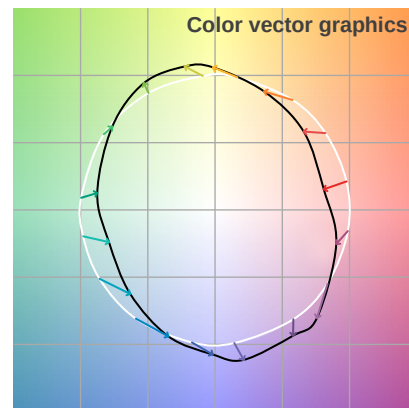
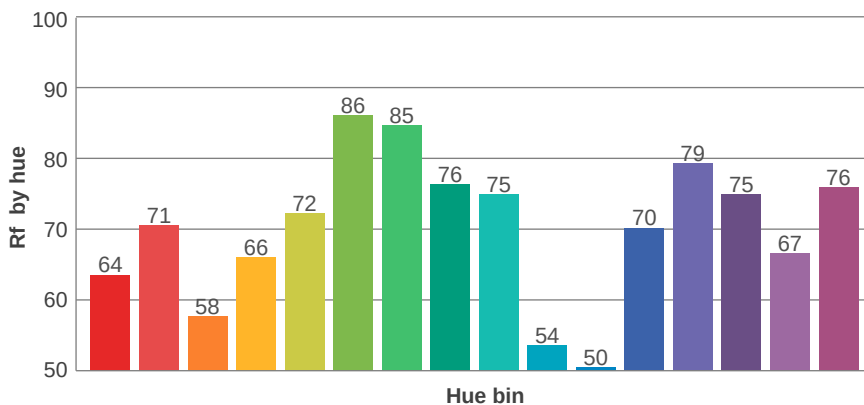
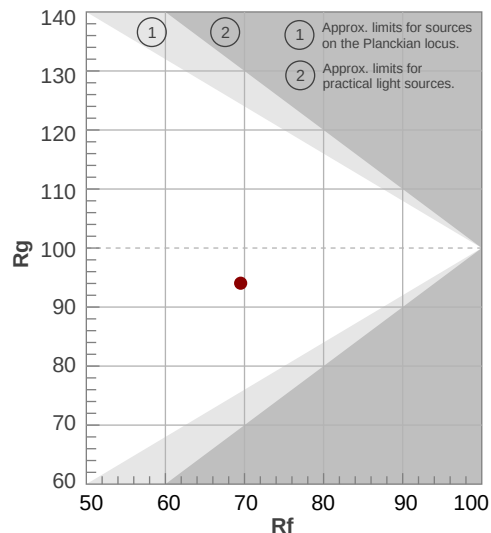
Rf 69.5

Fidelity index Rf

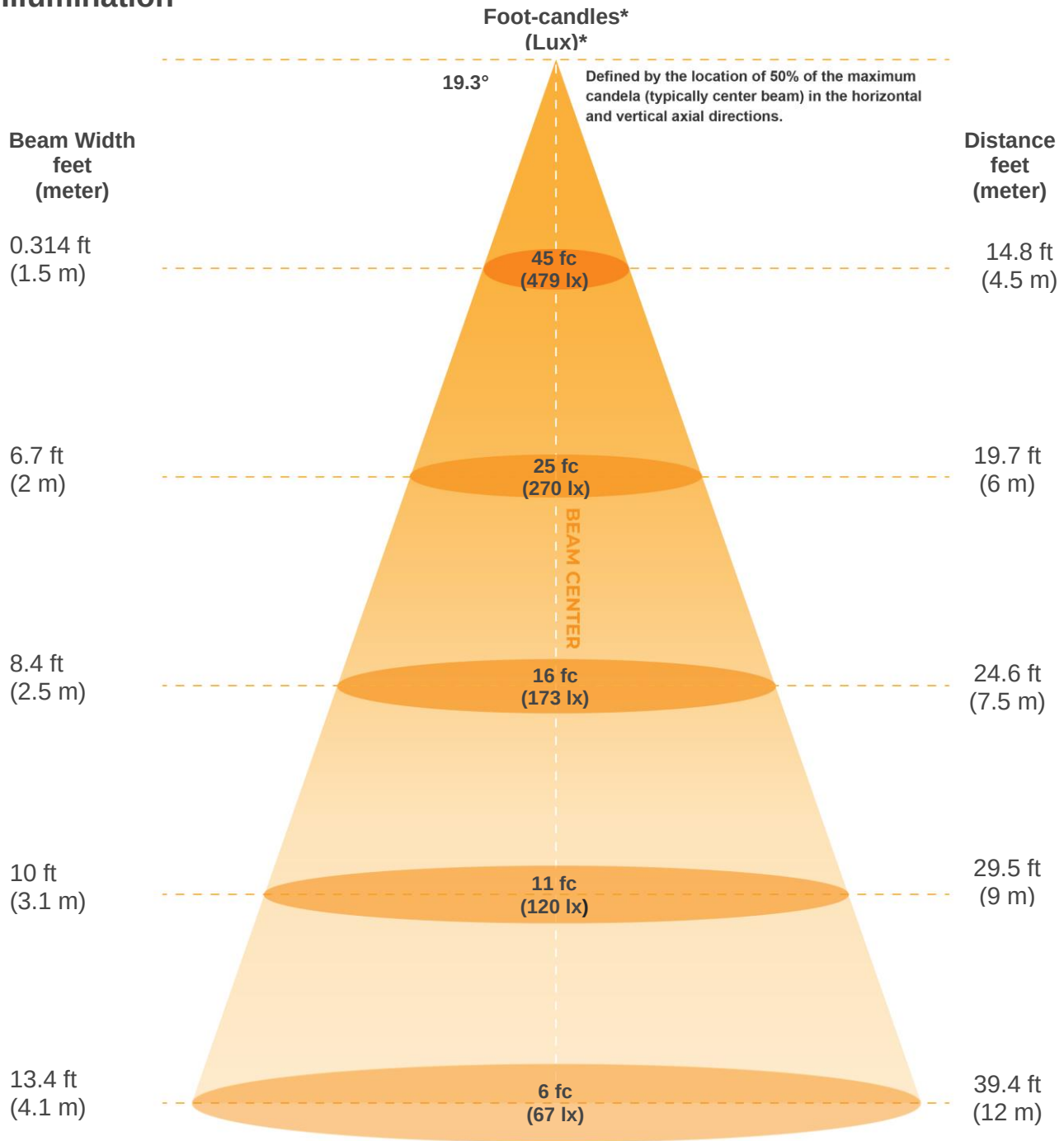
Rg 94.0

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	64	-18%	-2%
2	71	-13%	10%
3	58	-6%	21%
4	66	4%	19%
5	72	10%	12%
6	86	8%	-1%
7	85	-2%	-8%
8	76	-11%	-6%
9	75	-18%	8%
10	54	-13%	22%
11	50	-2%	27%
12	70	6%	17%
13	79	14%	4%
14	75	10%	-7%
15	67	8%	-25%
16	76	-7%	-11%



Illumination



Beam intensities from 1-20m

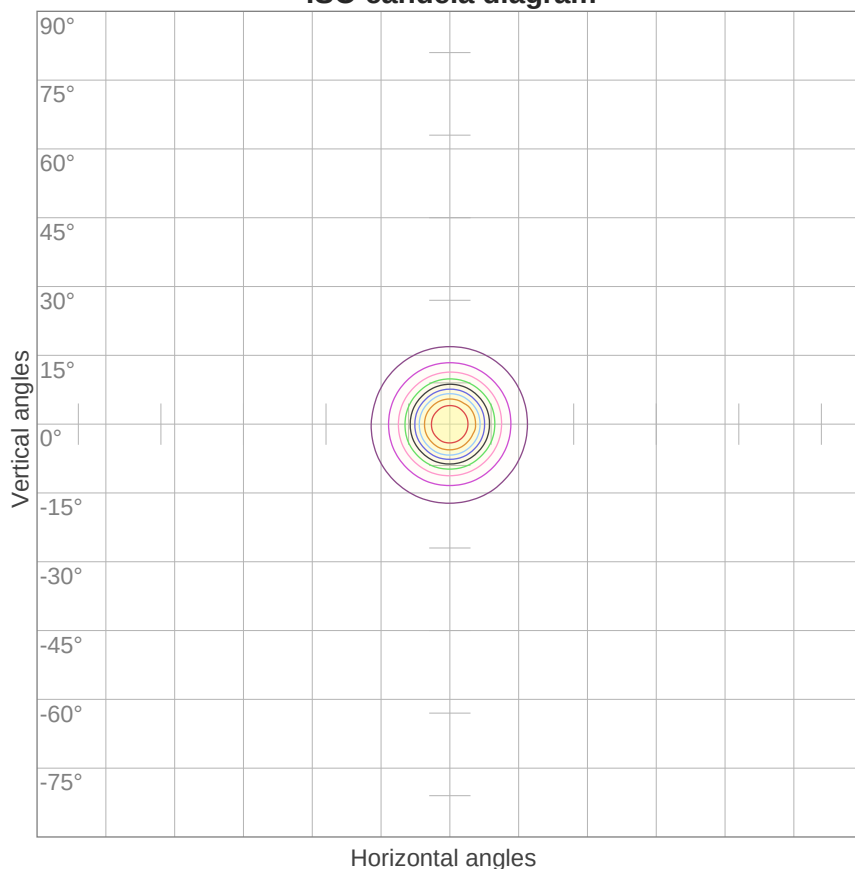
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
9708lx	2427lx	1079lx	607lx	388lx	270lx	198lx	152lx	120lx	97lx	80lx	67lx	57lx	50lx	43lx	38lx	34lx	30lx	27lx	24lx
901.9fc	225.5fc	100.2fc	56.4fcd	36.1fcd	25.1fcd	18.4fcd	14.1fcd	11.1fcd	9fcd	7.5fcd	6.3fcd	5.3fcd	4.6fcd	4fcd	3.5fcd	3.1fcd	2.8fcd	2.5fcd	2.3fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19.3°	38.1°	56.7°	99.6%	98.1%



ISO Diagrams

ISO candela diagram



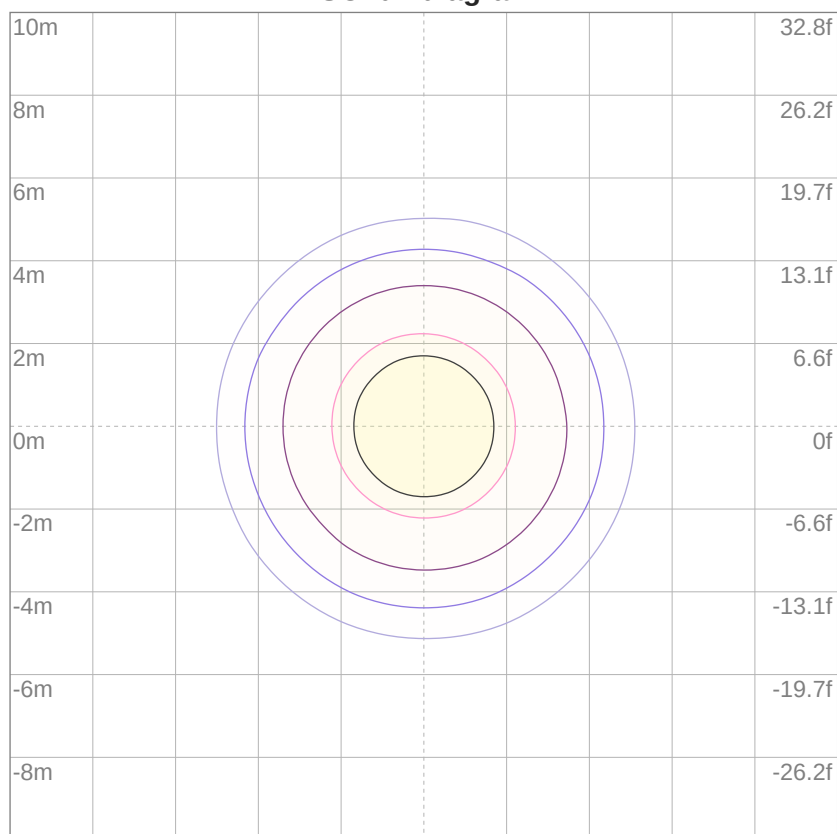
10%	971 cd
20%	1942 cd
30%	2912 cd
40%	3883 cd
50%	4854 cd
60%	5825 cd
70%	6796 cd
80%	7766 cd
90%	8737 cd

Conditions:

Number of c-planes: 16

Candela at center: 9708 cd

ISO lux diagram



3%	2.91 lx
5%	4.85 lx
10%	9.71 lx
30%	29.1 lx
50%	48.5 lx

Conditions:

Number of c-planes: 16

Lux at center: 97.1 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*



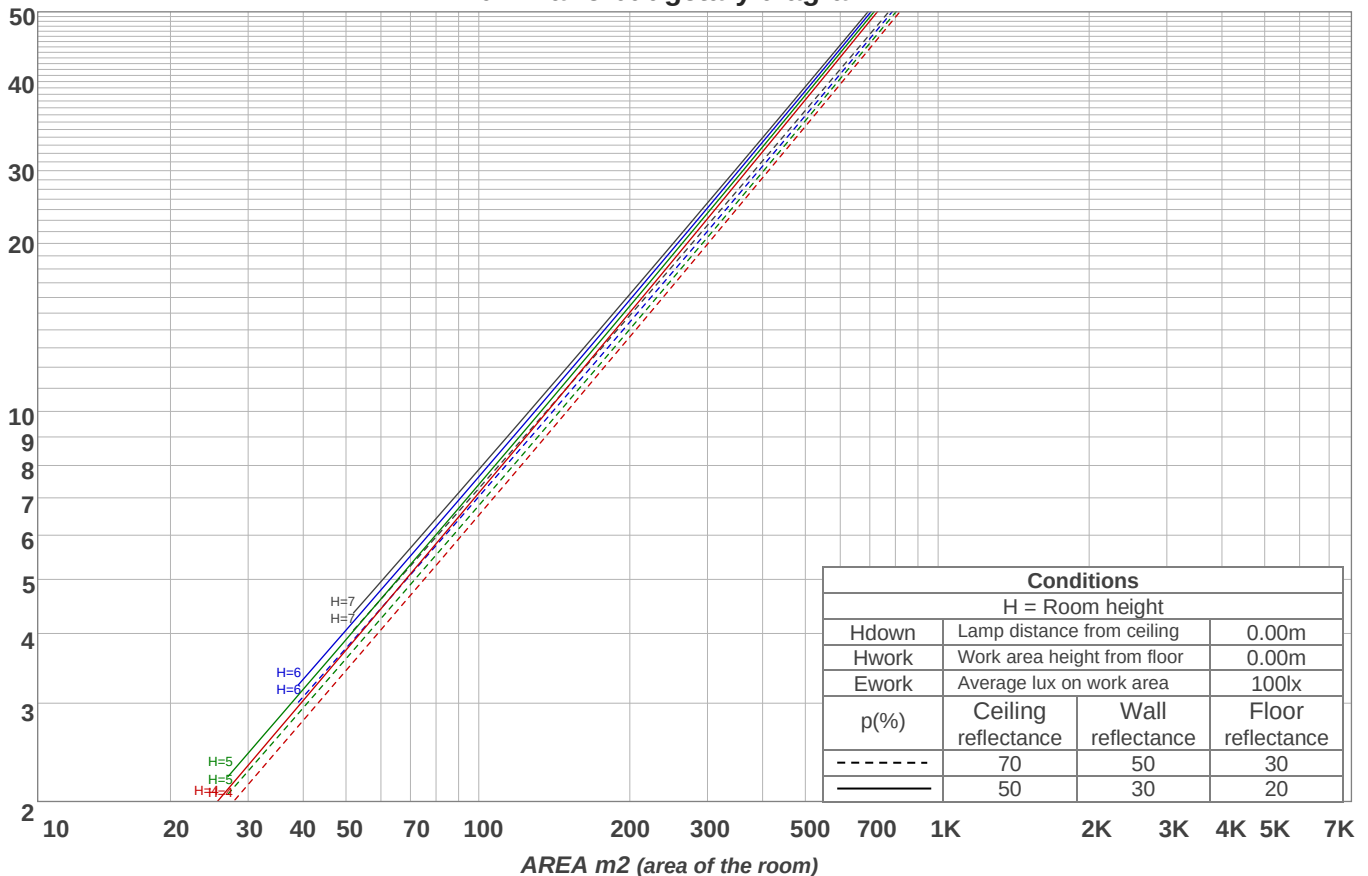
Light planning

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	113	111	109	108	107	105	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	90
4	105	99	96	93	103	98	95	92	96	93	91	94	92	90	93	91	89	88
5	102	96	92	89	100	95	91	89	93	90	88	92	89	87	91	88	86	85
6	99	93	89	86	98	92	88	86	91	87	85	90	87	84	88	86	84	83
7	96	90	86	83	95	89	86	83	88	85	83	87	84	82	86	84	82	81
8	94	88	84	81	93	87	83	81	86	83	80	85	82	80	84	82	80	79
9	92	85	81	79	91	85	81	79	84	81	78	83	80	78	83	80	78	77
10	89	83	79	77	89	83	79	77	82	79	76	81	78	76	81	78	76	75

LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
675 lm	559 lm	190 lm	75.1 lm	33.8 lm	9.72 lm	1.65 lm	0.928 lm	0.623 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.571 lm	0.605 lm	0.510 lm	0.469 lm	0.379 lm	0.401 lm	0.384 lm	0.280 lm	0.102 lm

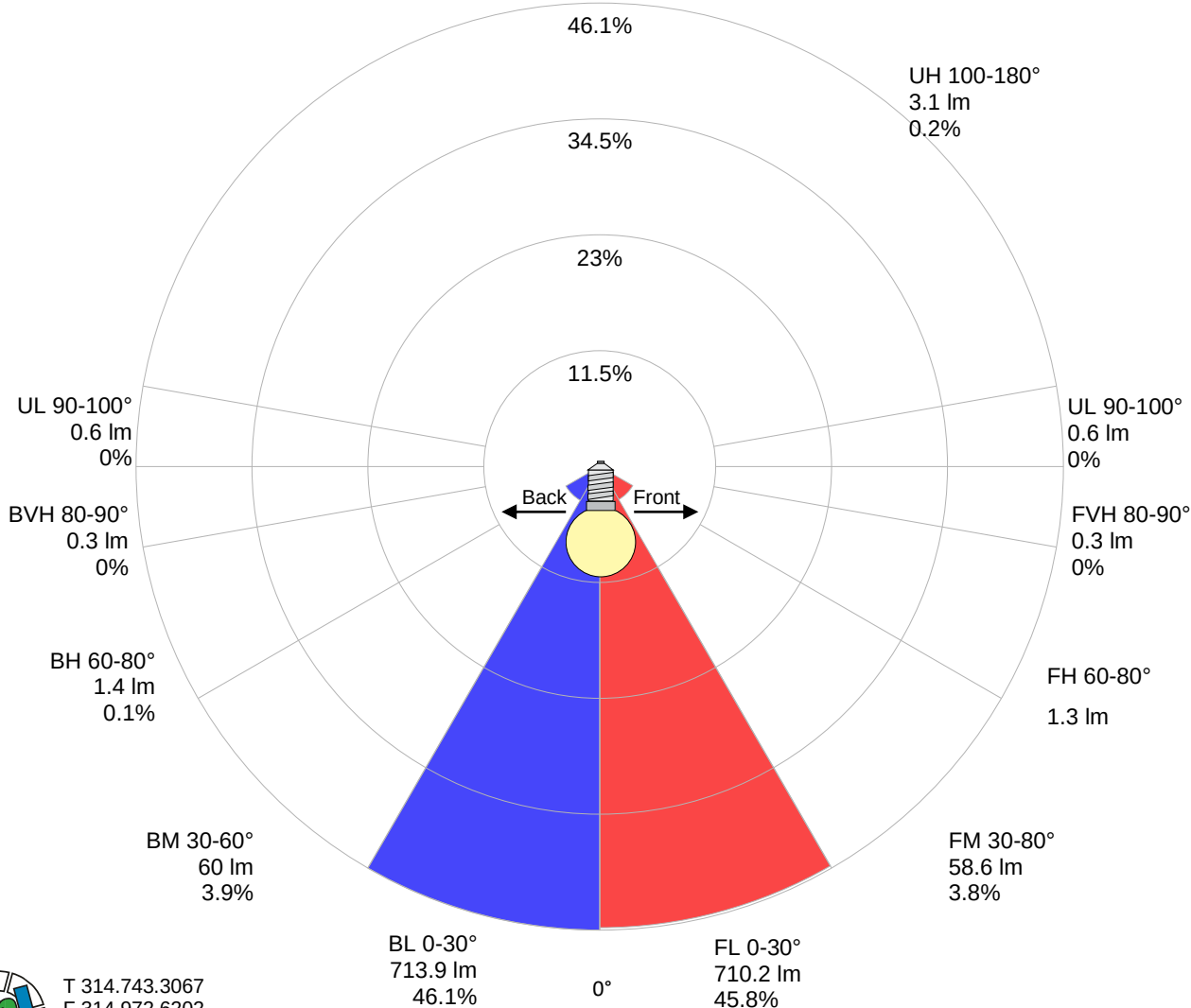


Road report

LCS table

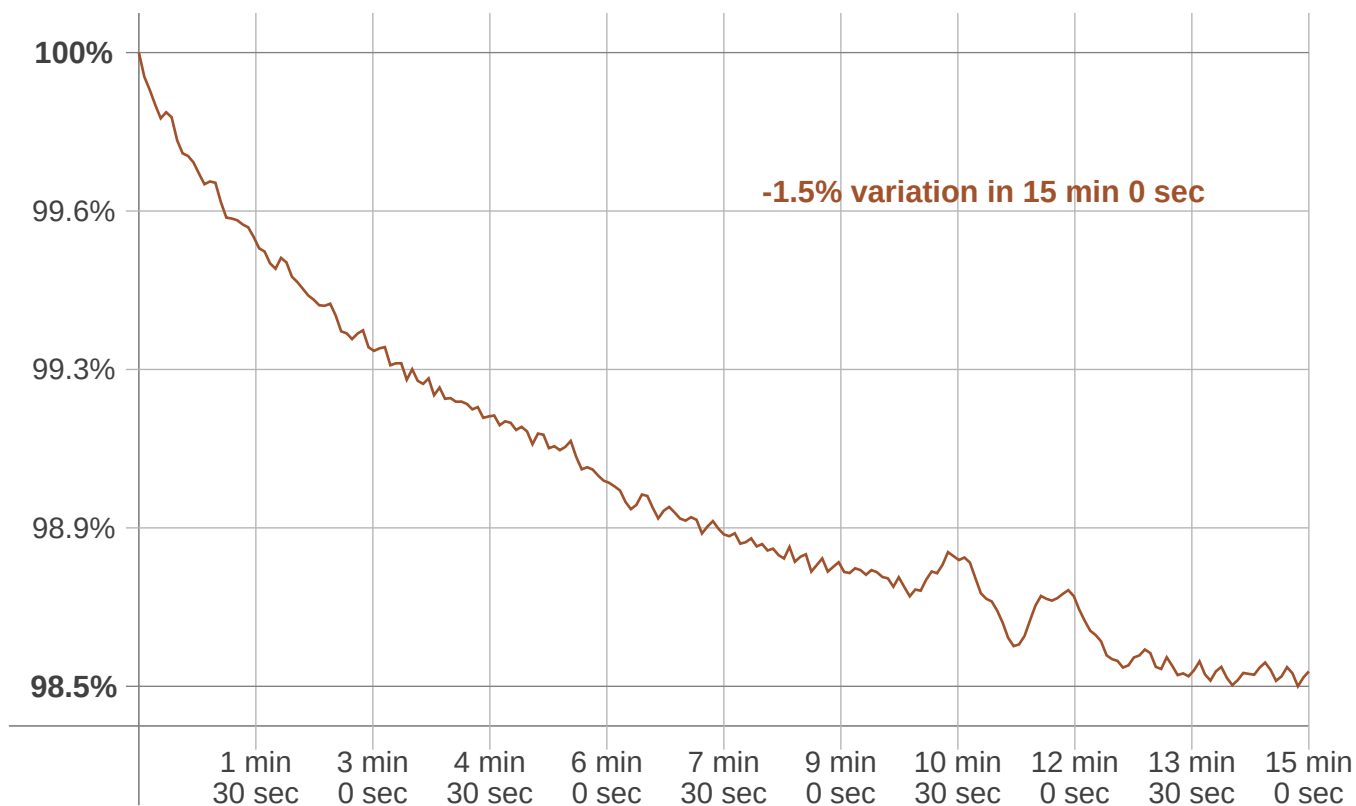
BUG rating:	B2 U1 G0	
Forward light	Lumens	Lumens %
Low(0-30):	710.2	45.8%
Medium(30-60):	58.6	3.8%
High(60-80):	1.3	0.1%
Very high(80-90):	0.3	0%
Back light		
Low(0-30):	713.9	46.1%
Medium(30-60):	60	3.9%
High(60-80):	1.4	0.1%
Very high(80-90):	0.3	0%
Uplight		
Low(90-100):	0.6	0%
High(100-180):	3.1	0.2%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	15 min 0 sec
Warmup variation	-1.5%

Warmup conditions

Stable period:	15 min
Stable change max:	2.0%
Minimum time:	15 min

Color temperature change

CCT start	CCT change	CCT end
5565 K	+85 K	5650 K

Output change

Output start	Output change	Output end
1567 lm	-18 lm	1550 lm

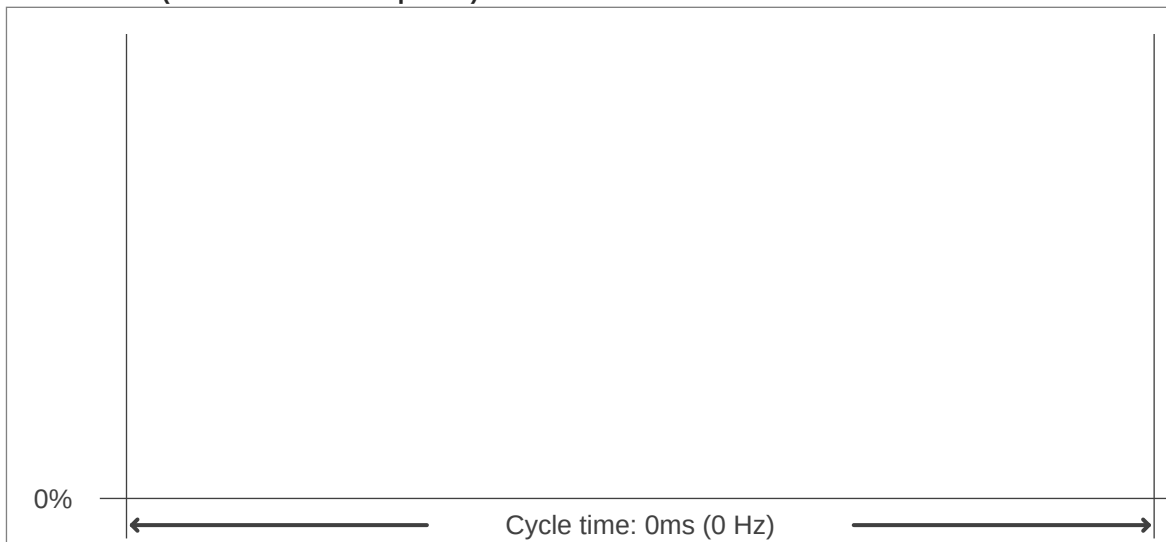


Flicker

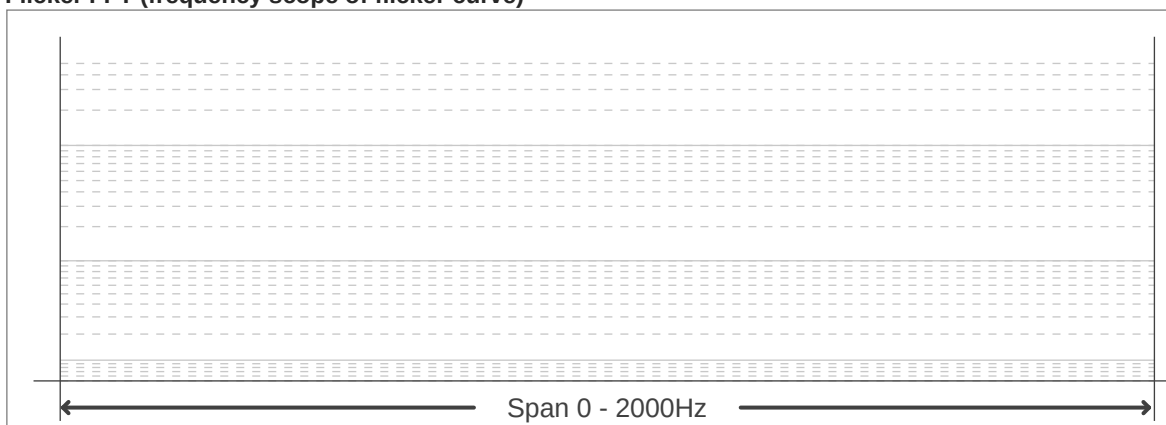
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	n/a Hz
Flicker index:	n/a
Flicker percentage:	n/a %
SVM: (Visual flicker)	n/a

Flicker conditions:

Sample rate:	0 samples/second
--------------	------------------

