

Light efficiency:

143 Lumen/Watt

Output: 5360 lm

Light quality:

CRI: 74.1

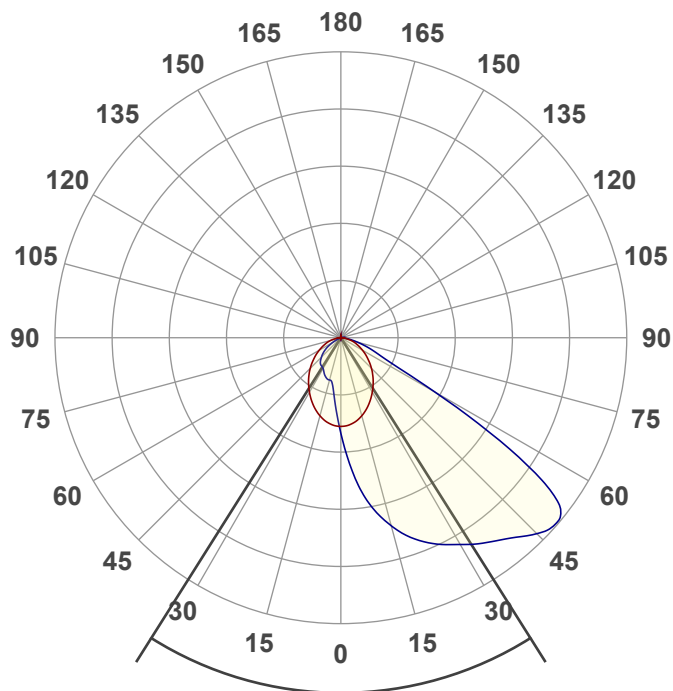
Peak: 3838 cd

Color temperature:

3846 K

Power: 37.4 W

PF: 1.0



Product name:

WFCCT-R1-SW3B40-LC

Date and time:

10/5/2021 2:29:22 PM

Beam angle

64.5°

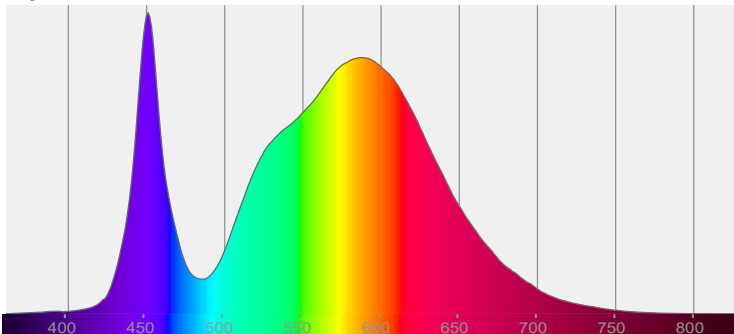


CIE 1931

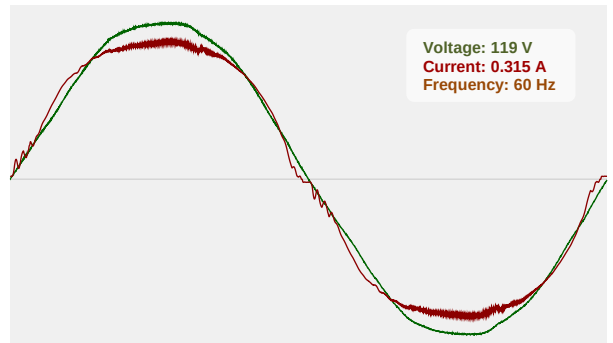
x: 0.386

y: 0.376

Spectra



Power



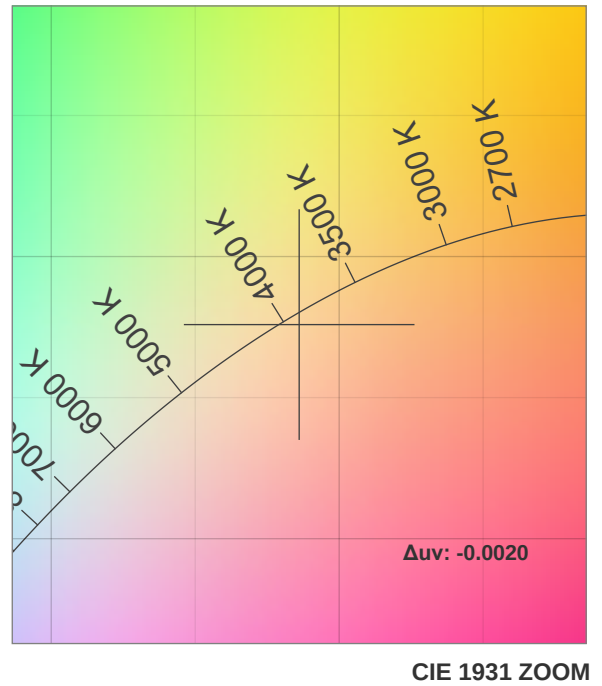
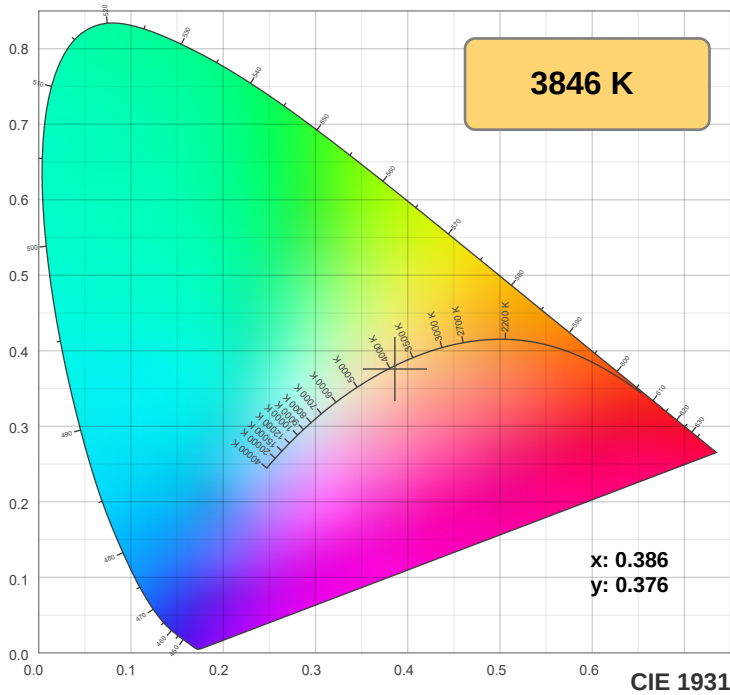
T 314.743.3067

F 314.972.6202

email: commercial-sales@superbrightleds.com

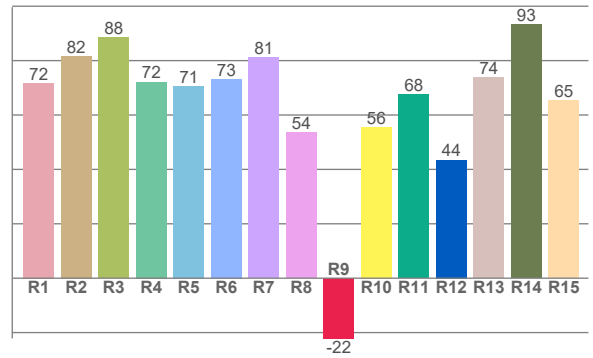
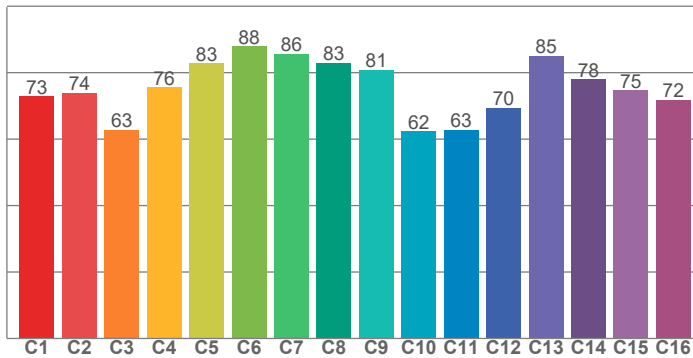
www.superbrightleds.com/

Color Specifications



TM30: 75.2

CRI: 74.1 (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
71.7	81.7	88.5	72.2	70.7	73.2	81.2	53.5	-22.2	55.6	67.6	43.5	73.7	93.3	65.2

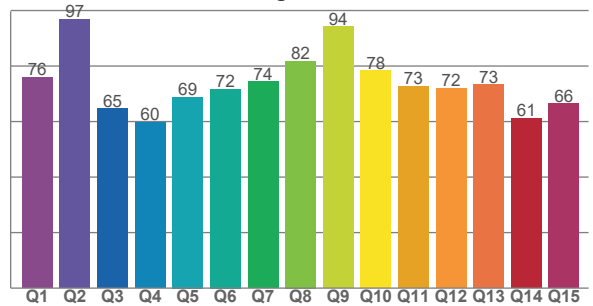
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
72.9	73.9	62.8	75.6	82.8	87.9	85.7	83.0	80.8	62.4	62.9	69.5	85.1	78.0	74.7	71.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76.0	96.8	64.6	59.7	68.8	71.7	74.3	81.8	94.2	78.3	72.7	72.0	73.3	61.2	66.5

CQS: 72.2



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
3846 K	74.1	-22.2	75.2	94.6	72.2	0.386	0.376	0.229	0.335	-0.0020



TM30 Report

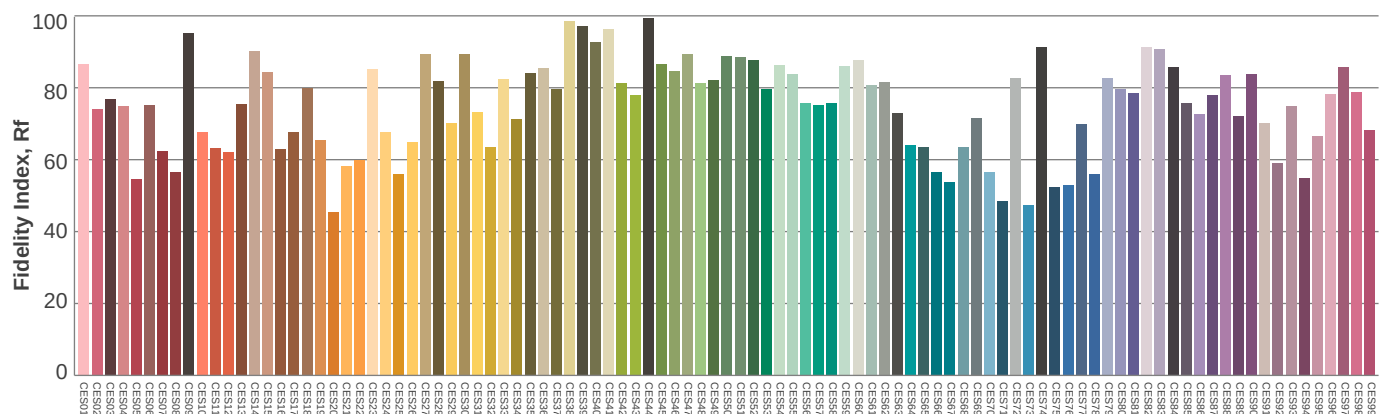
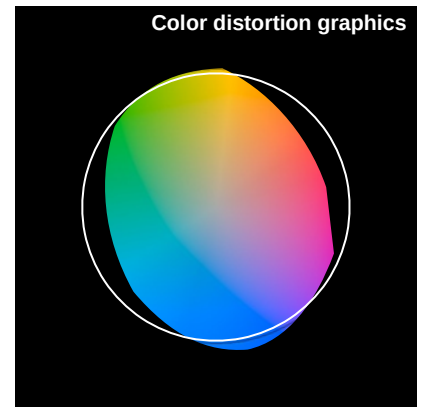
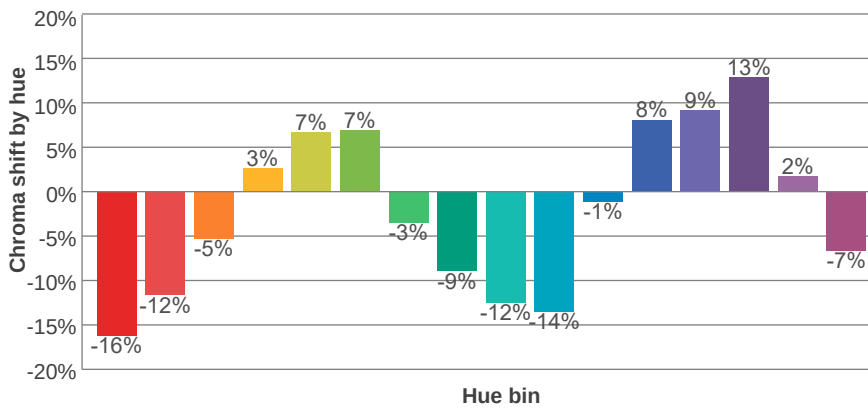
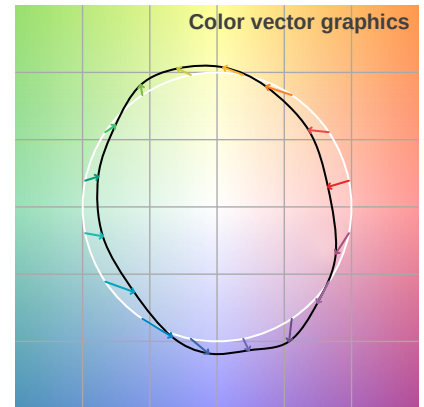
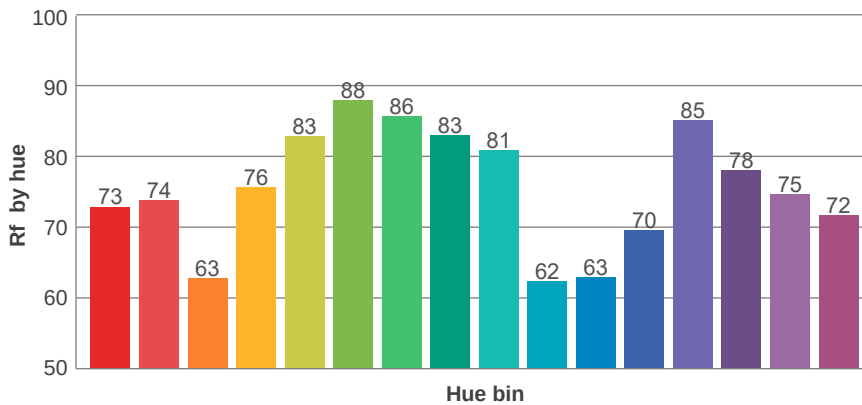
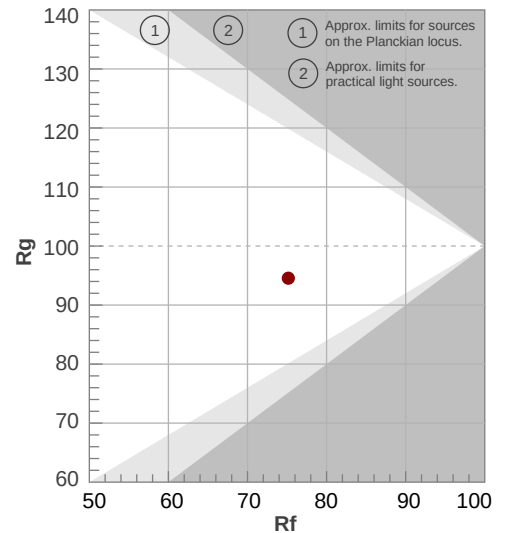
Rf 75.2

Fidelity index Rf

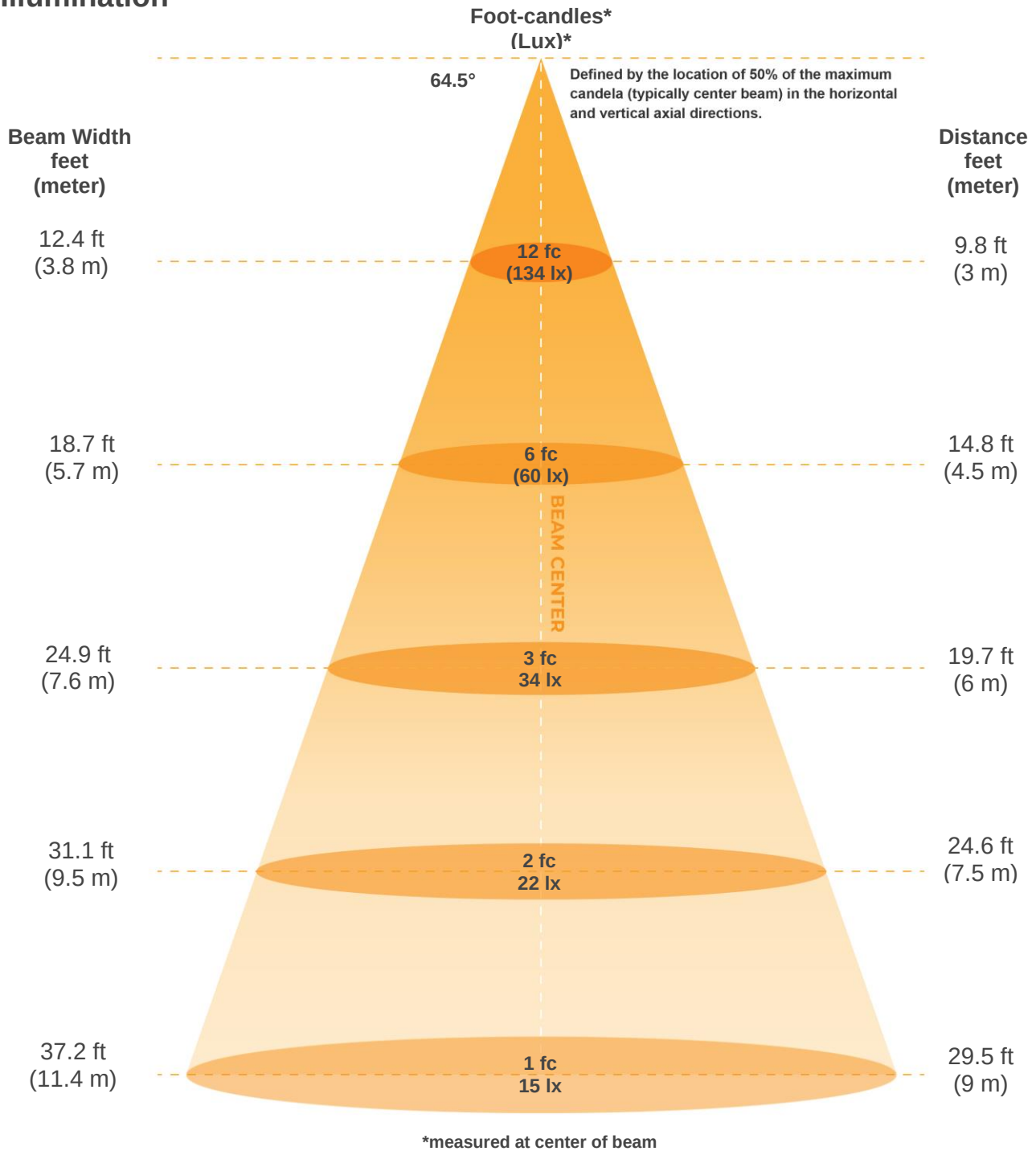
Rg 94.6

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	73	-16%	-2%
2	74	-12%	10%
3	63	-5%	19%
4	76	3%	16%
5	83	7%	9%
6	88	7%	-3%
7	86	-3%	-8%
8	83	-9%	-5%
9	81	-12%	5%
10	62	-14%	18%
11	63	-1%	26%
12	70	8%	15%
13	85	9%	2%
14	78	13%	-11%
15	75	2%	-18%
16	72	-7%	-17%



Illumination



Beam intensities from 1-20m

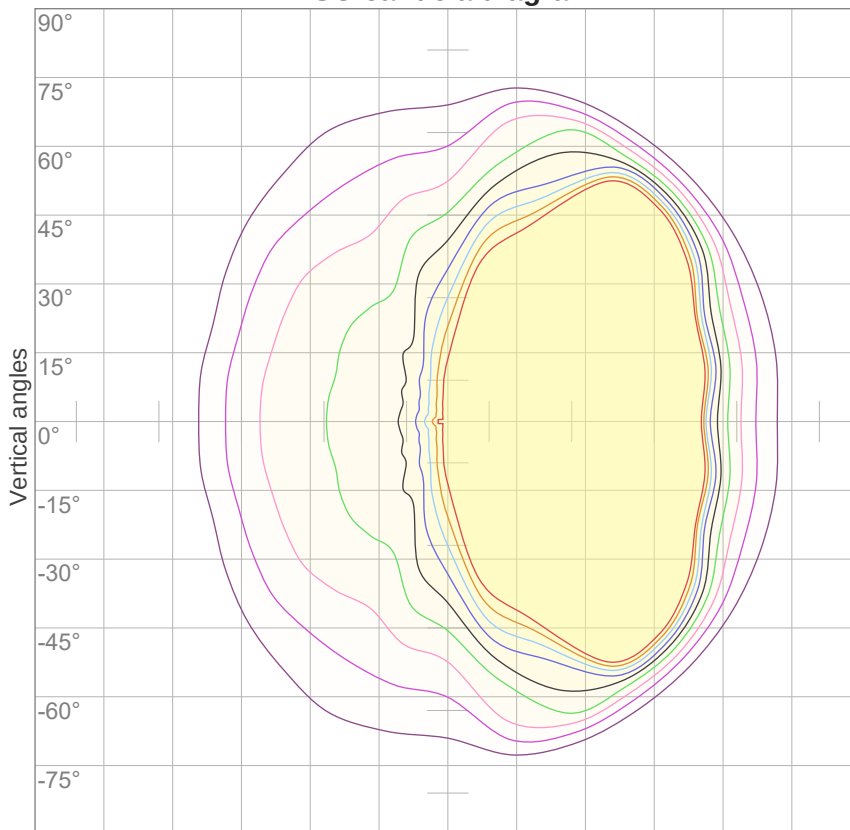
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1210lx	303lx	134lx	76lx	48lx	34lx	25lx	19lx	15lx	12lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
112.5fc	28.1fcd	12.5fcd	7fcd	4.5fcd	3.1fcd	2.3fcd	1.8fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
64.5°	134.7°	158°	80.4%	48.4%



ISO Diagrams

ISO candela diagram



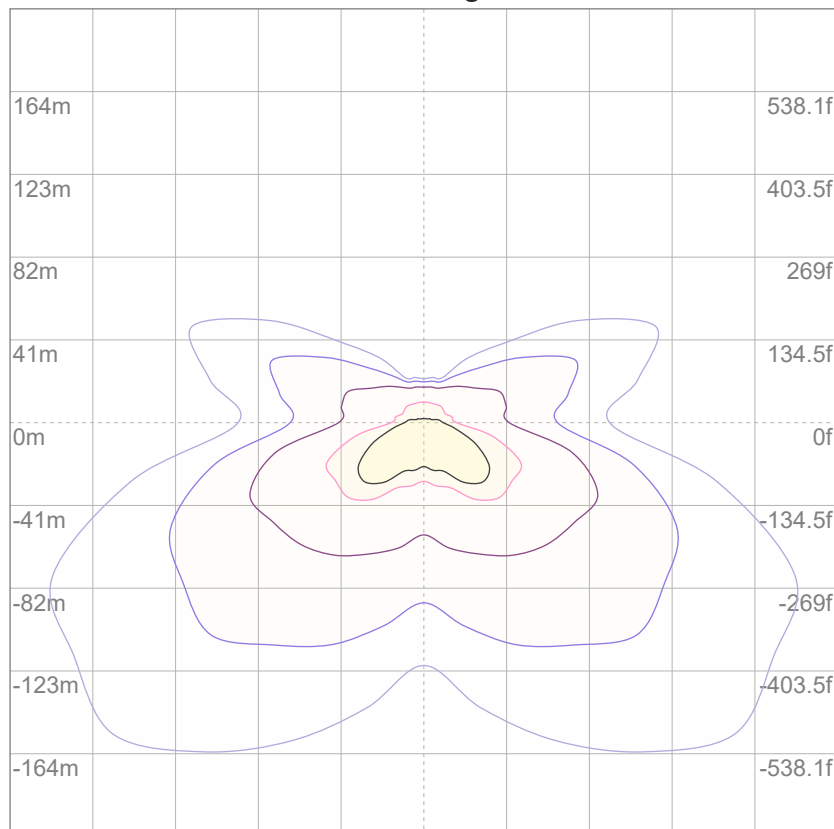
10%	121 cd
20%	242 cd
30%	363 cd
40%	484 cd
50%	605 cd
60%	726 cd
70%	847 cd
80%	968 cd
90%	1089 cd

Conditions:

Number of c-planes: 16

Candela at center: 1210 cd

ISO lux diagram



3%	0.363 lx
5%	0.605 lx
10%	1.21 lx
30%	3.63 lx
50%	6.05 lx

Conditions:

Number of c-planes: 16

Lux at center: 12.1 lx

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



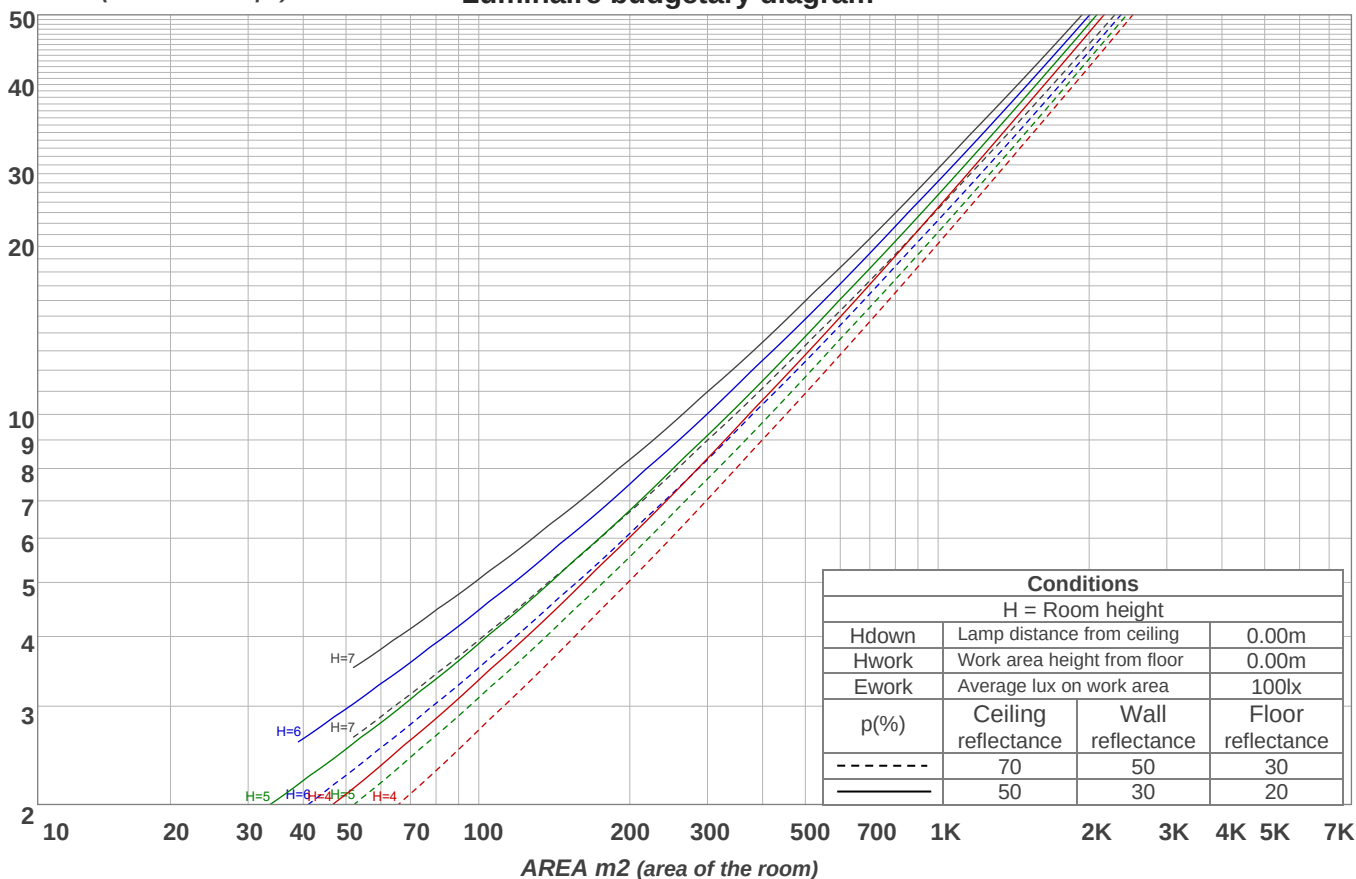
Light Planning

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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	46	39	33	45	38	33	43	37	32	30
8	58	44	35	29	57	43	35	29	42	34	29	41	34	29	39	33	28	26
9	54	40	32	26	53	40	31	26	38	31	26	37	30	25	36	30	25	23
10	51	37	29	23	49	36	28	23	35	28	23	34	28	23	33	27	23	21

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°
120 lm	388 lm	664 lm	898 lm	1089 lm	1149 lm	697 lm	283 lm	54.5 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2.12 lm	2.19 lm	2.40 lm	2.66 lm	2.60 lm	2.23 lm	1.78 lm	1.09 lm	0.373 lm

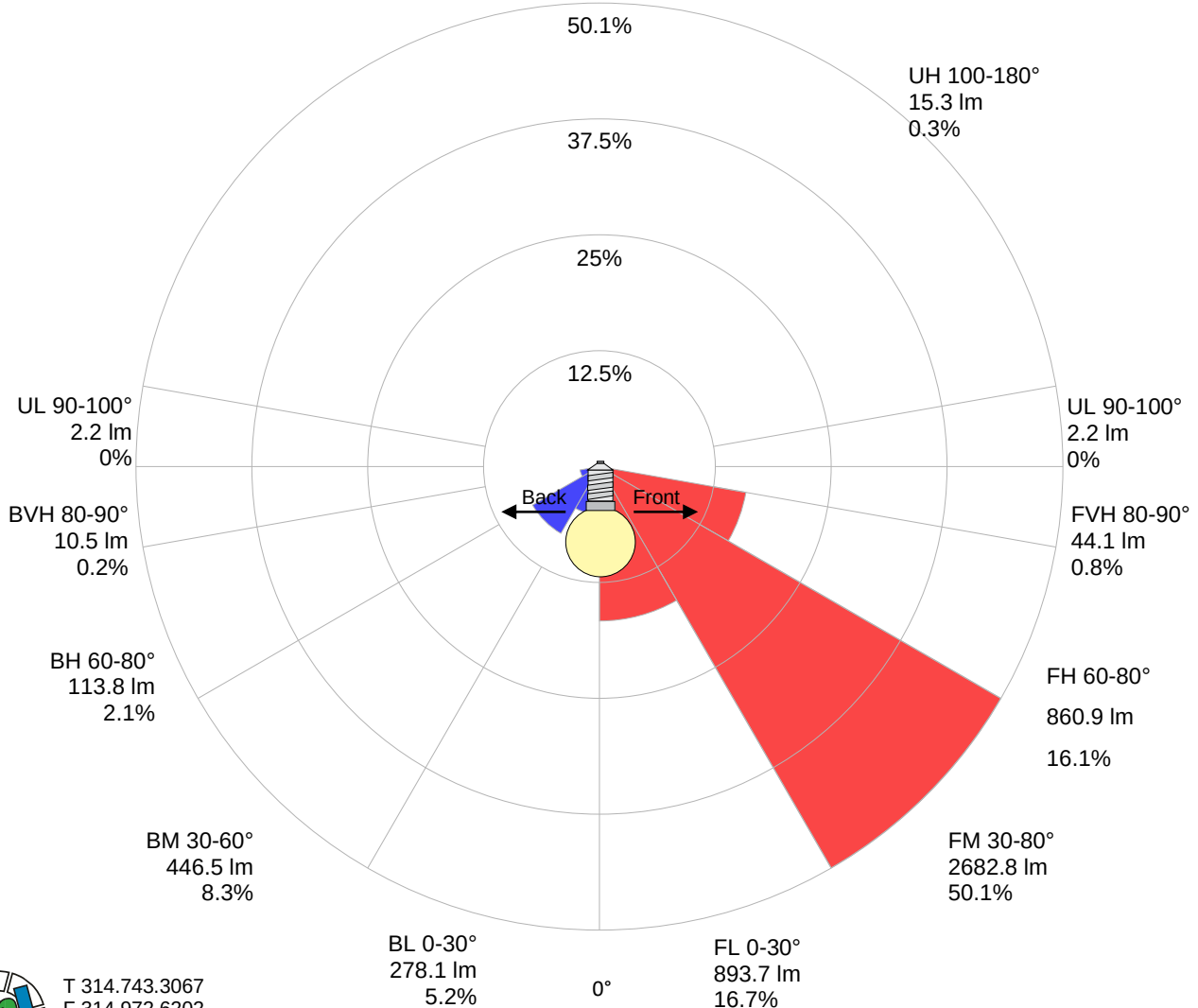


Road Report

LCS table

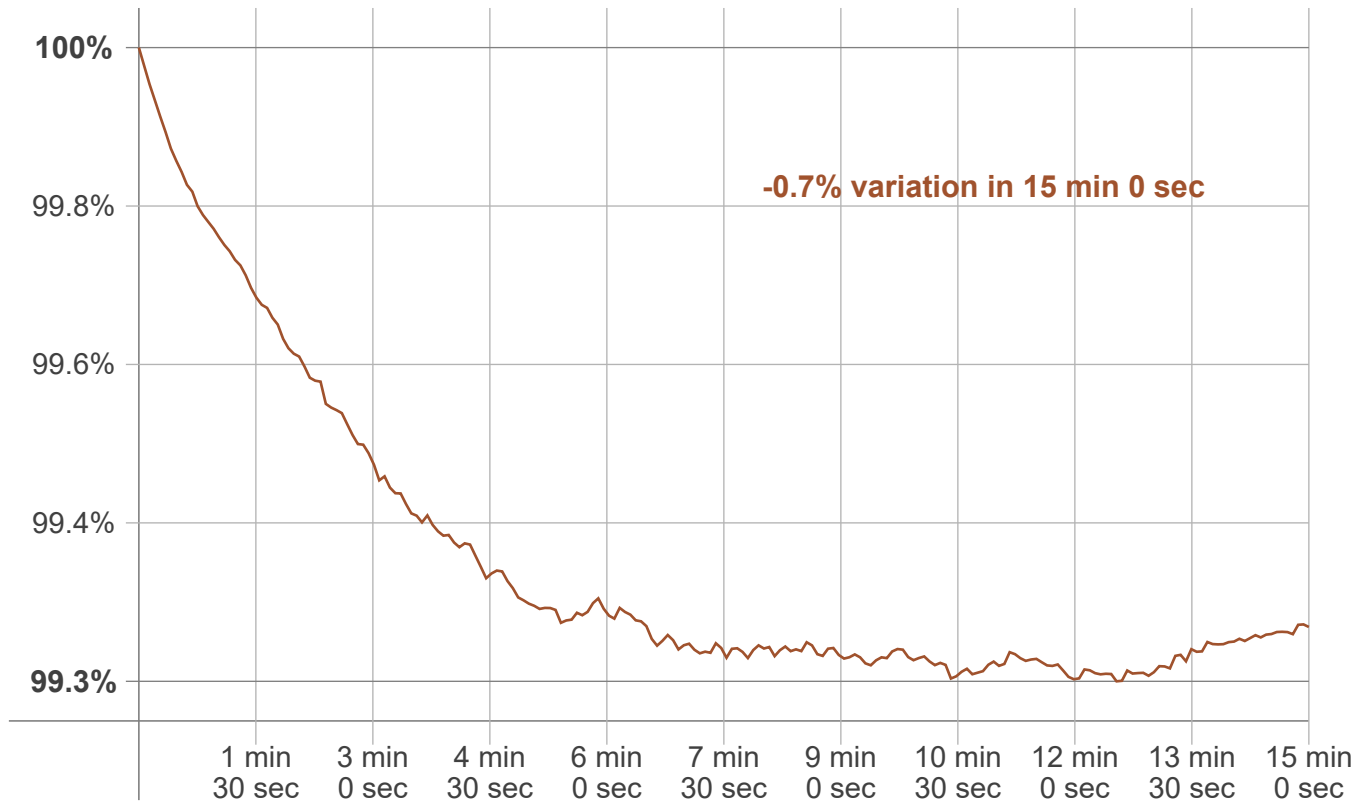
BUG rating:	B1 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	893.7	16.7%
Medium(30-60):	2682.8	50.1%
High(60-80):	860.9	16.1%
Very high(80-90):	44.1	0.8%
Back light		
Low(0-30):	278.1	5.2%
Medium(30-60):	446.5	8.3%
High(60-80):	113.8	2.1%
Very high(80-90):	10.5	0.2%
Uplight		
Low(90-100):	2.2	0%
High(100-180):	15.3	0.3%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 0 sec
Warmup variation	-0.7%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
3838 K	+8 K	3846 K

Output change

Output start	Output change	Output end
5391 lm	-32 lm	5360 lm

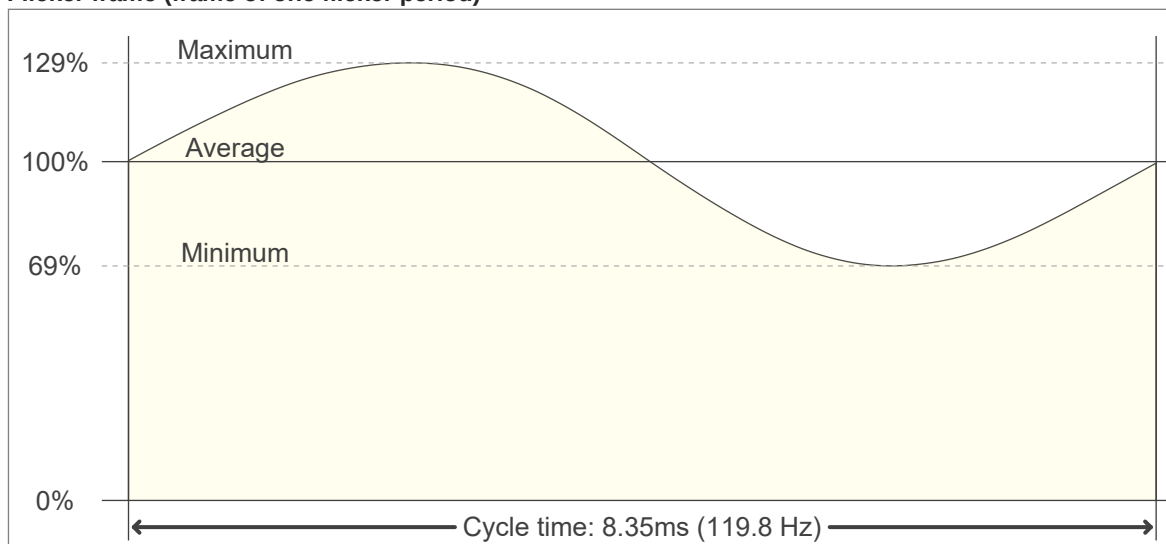


Flicker Specifications

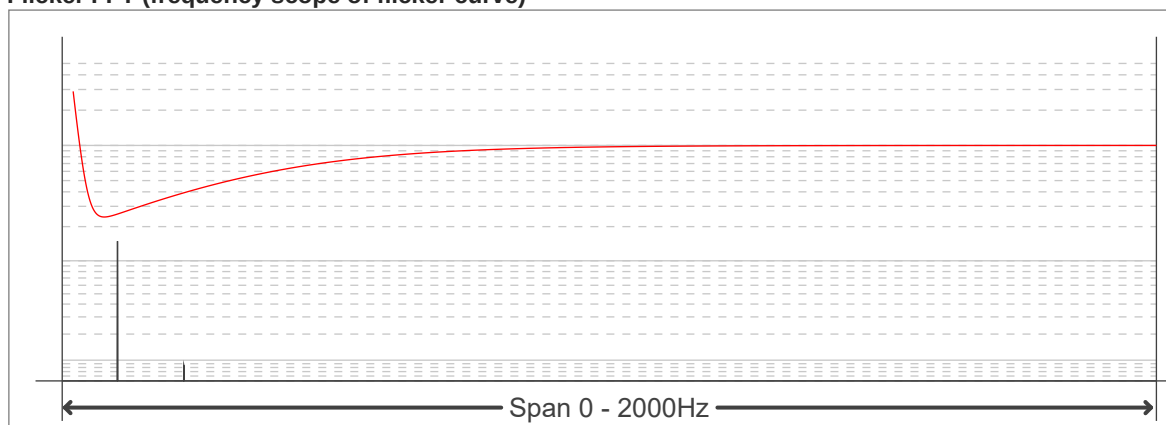
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.1
Flicker percentage:	30.42 %
SVM: (Visual flicker)	1.08

Flicker conditions:

Sample rate:	20000 samples/second
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