

Light efficiency:

124 Lumen/Watt

Output: 9993 lm

Light quality:

CRI: 84.9

Peak: 3886 cd

Color temperature:

5230 K

Power: 80.7 W

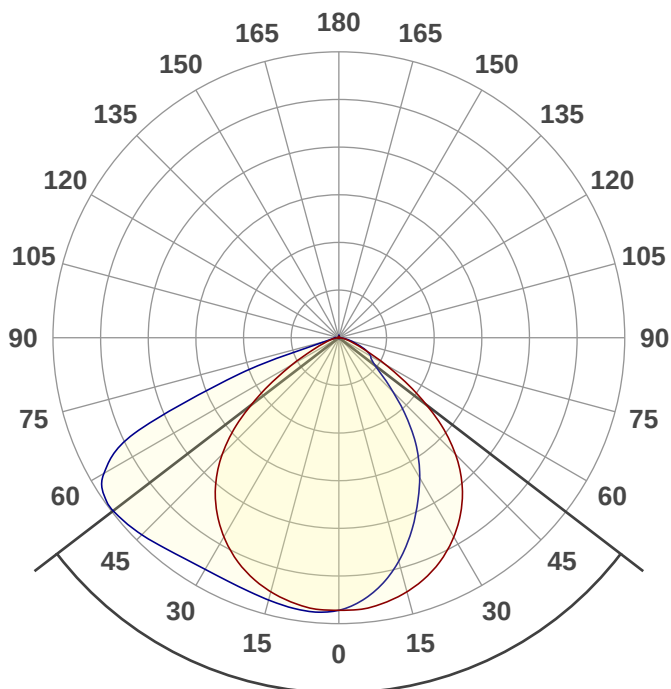
PF: 0.99

Product name:

WPF CCT-SW3B80-ST3-BRP

Date and time:

5/14/2021 9:11:16 AM



Beam angle

105°

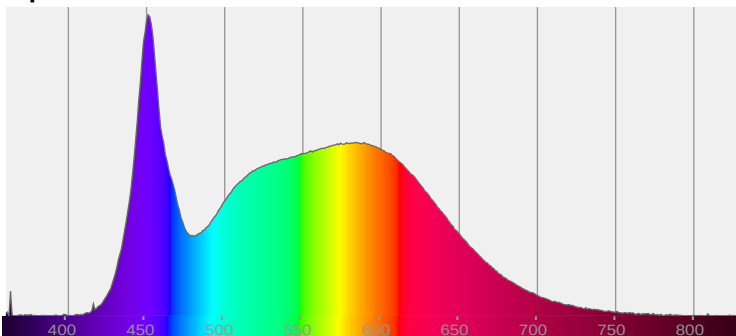


CIE 1931

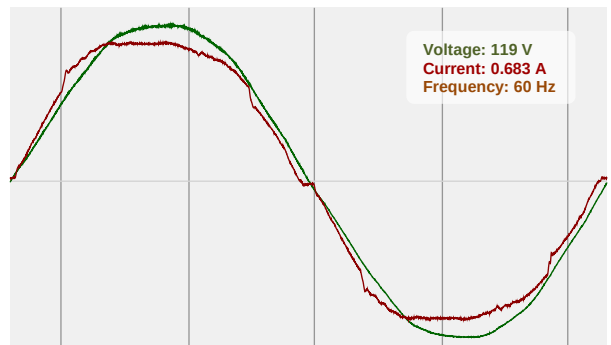
x: 0.339

y: 0.351

Spectra



Power



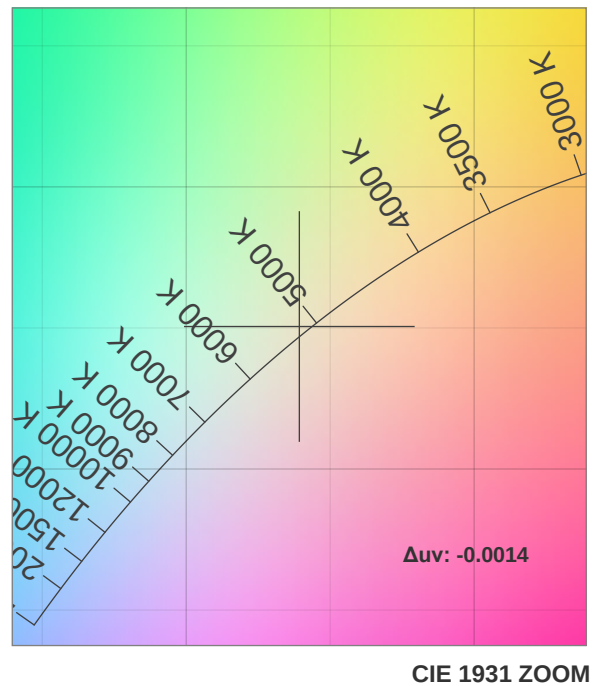
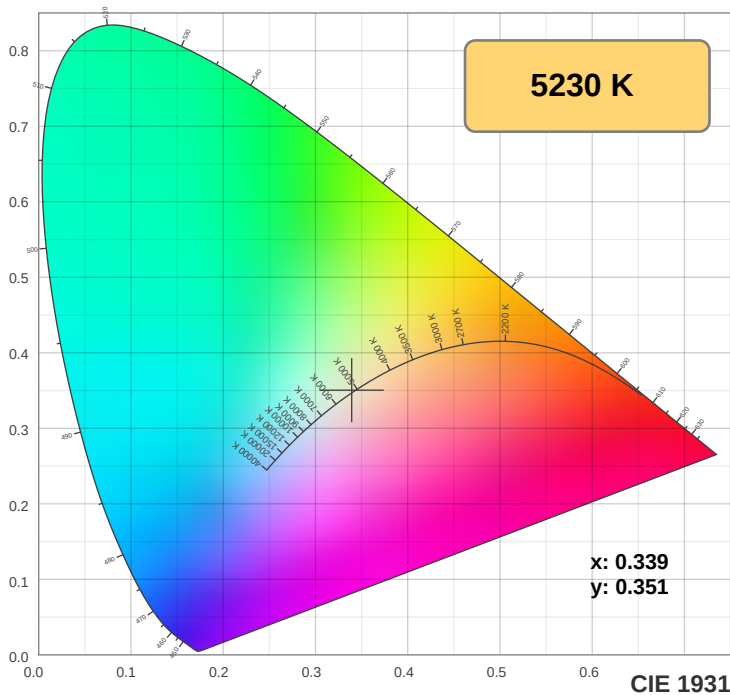
T 314.743.3067

F 314.972.6202

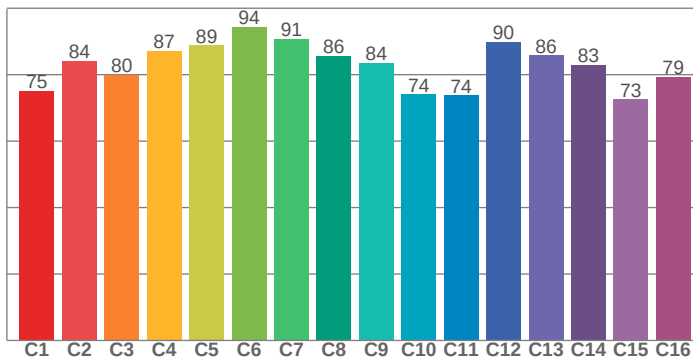
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

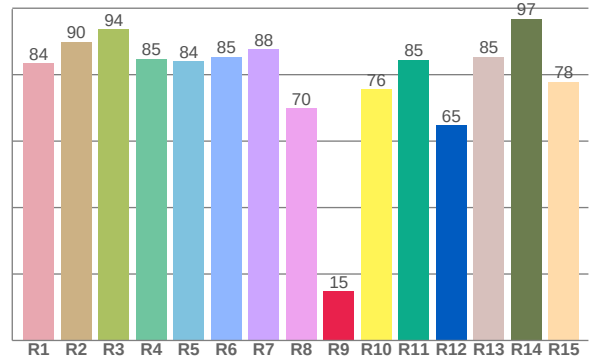
Color Specifications



TM30: 83.0



CRI: 84.9 (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
83.5	89.9	93.7	84.8	84.1	85.4	87.7	69.9	14.9	75.6	84.5	64.7	85.4	96.8	77.9

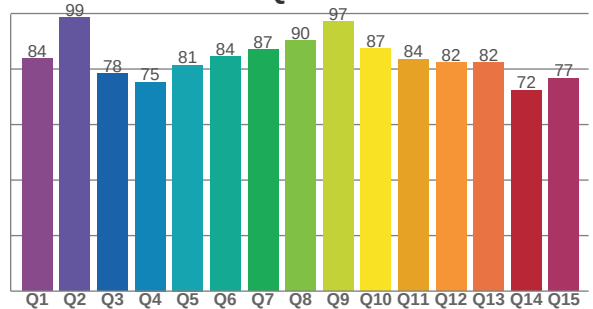
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
75.0	84.2	80.0	87.2	88.8	94.4	90.8	85.7	83.6	74.1	73.8	90.0	85.8	83.0	72.5	79.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.8	98.5	78.4	75.3	81.4	84.4	87.1	90.2	97.2	87.4	83.5	82.3	82.3	72.4	76.7

CQS: 82.6



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
5230 K	84.9	14.9	83.0	95.0	82.6	0.339	0.351	0.208	0.322	-0.0014



TM30 Report

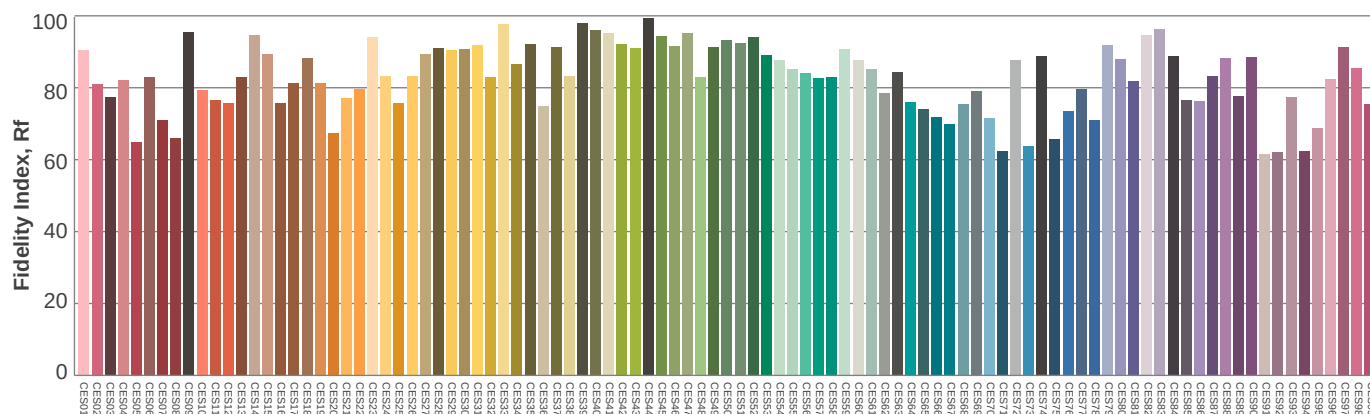
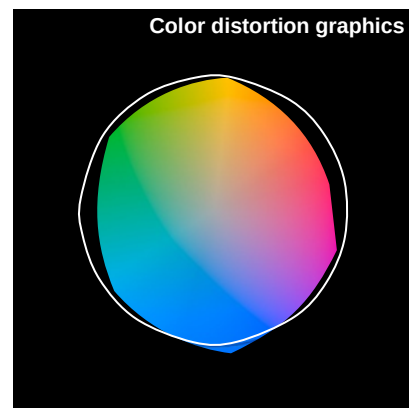
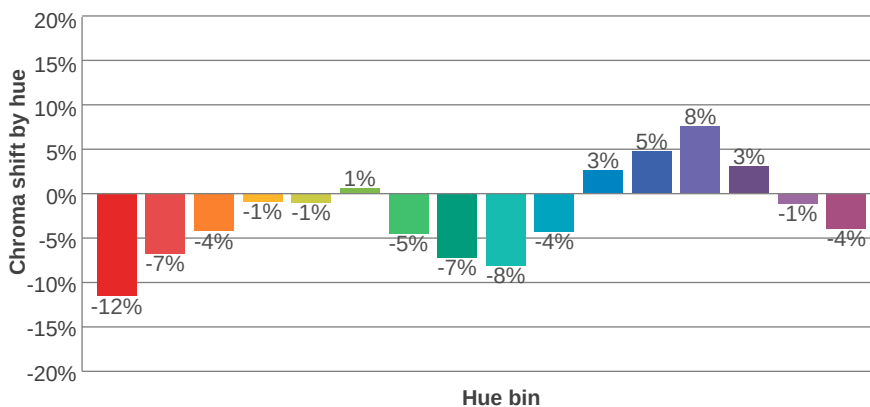
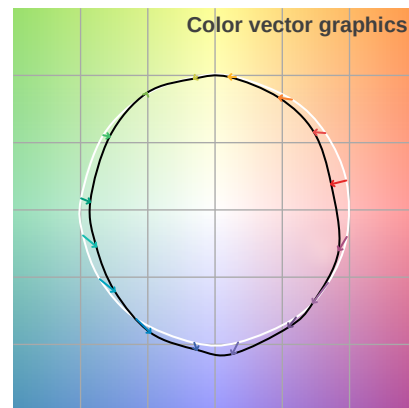
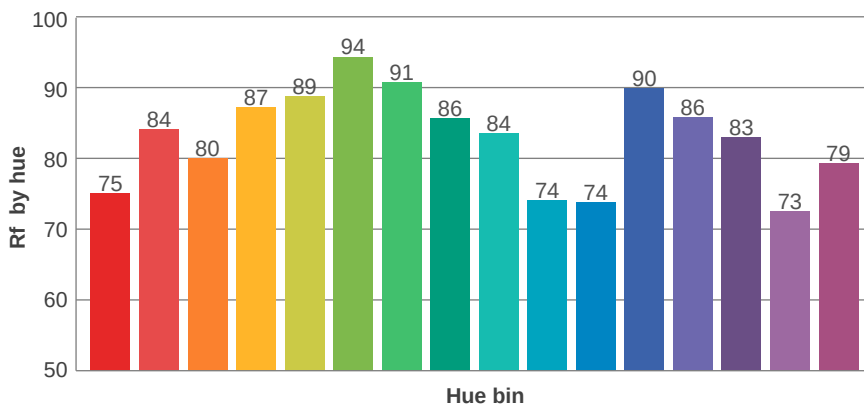
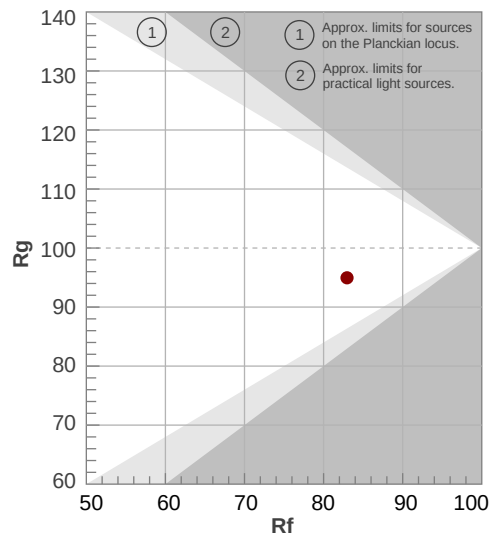
Rf 83.0

Fidelity index Rf

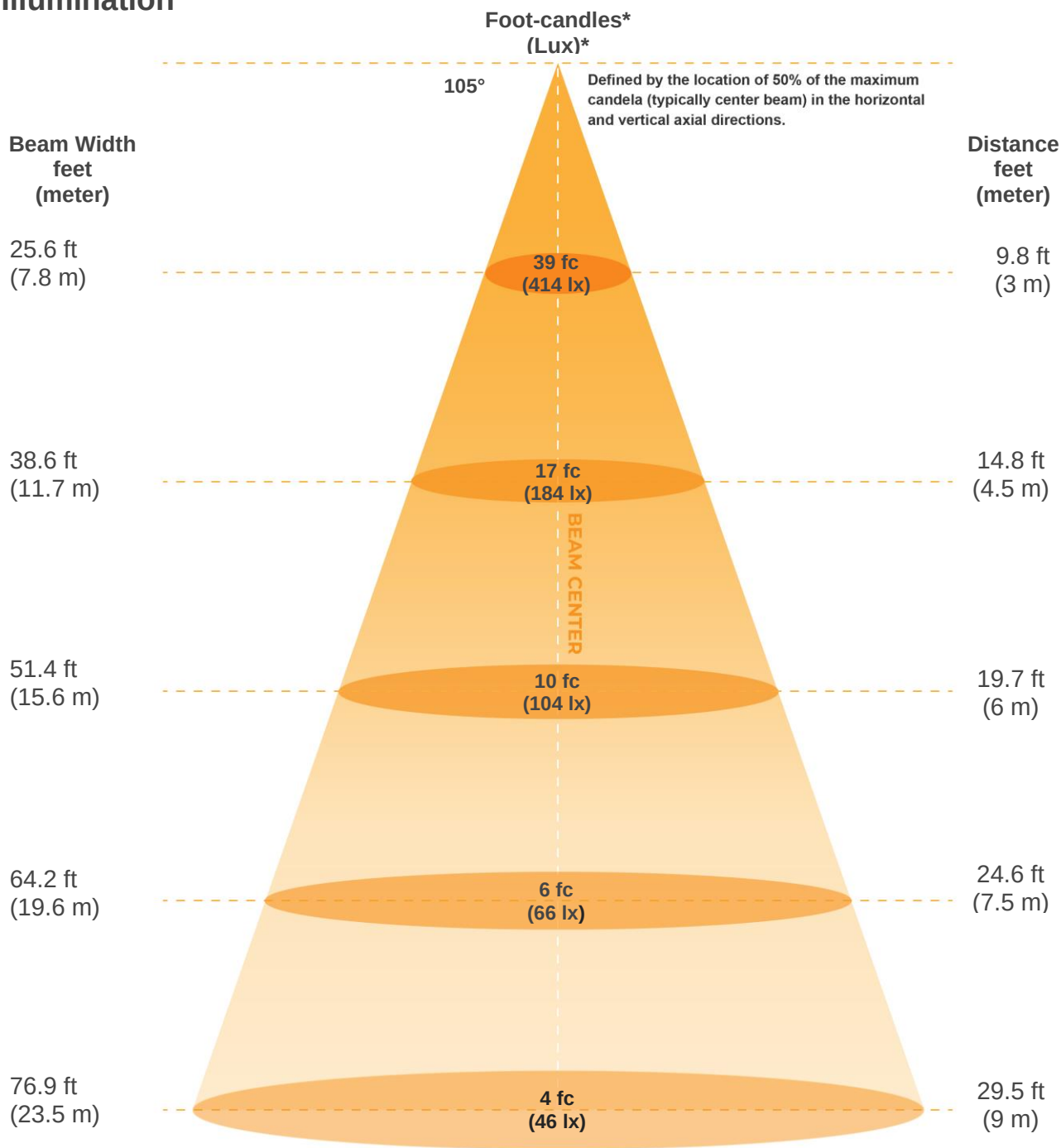
Rg 95.0

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	75	-12%	-1%
2	84	-7%	5%
3	80	-4%	9%
4	87	-1%	5%
5	89	-1%	3%
6	94	1%	-1%
7	91	-5%	-2%
8	86	-7%	1%
9	84	-8%	10%
10	74	-4%	14%
11	74	3%	14%
12	90	5%	3%
13	86	8%	-6%
14	83	3%	-8%
15	73	-1%	-18%
16	79	-4%	-11%



Illumination



*measured at center of beam

Beam intensities from 1-20m

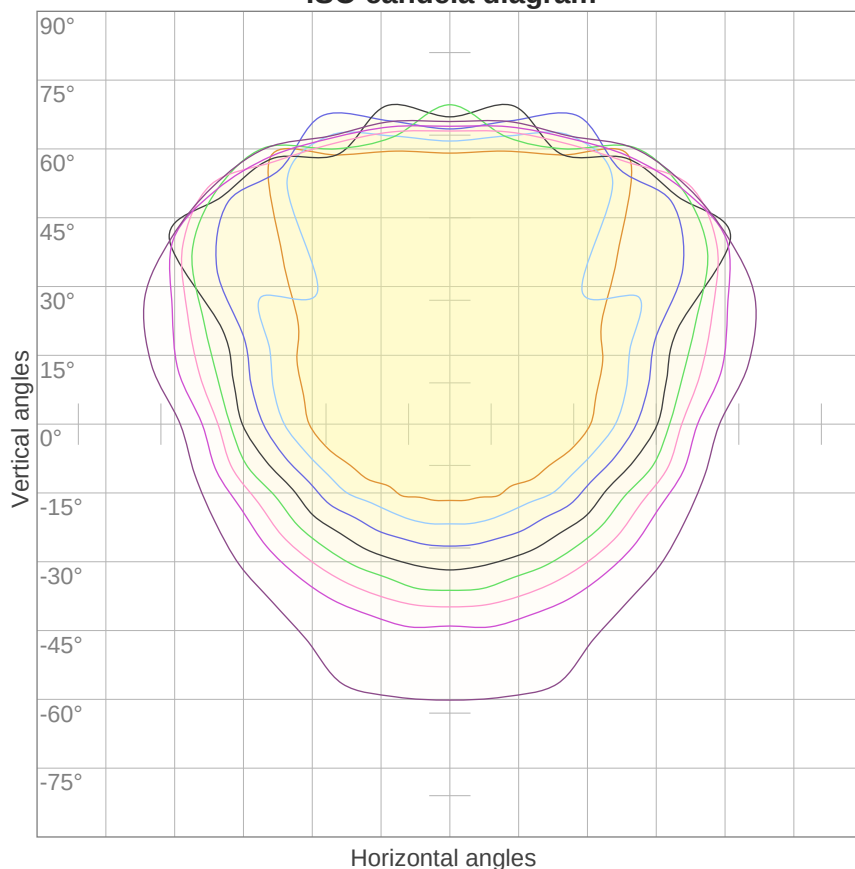
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
3730lx	933lx	414lx	233lx	149lx	104lx	76lx	58lx	46lx	37lx	31lx	26lx	22lx	19lx	17lx	15lx	13lx	12lx	10lx	9lx
346.5fc	86.6fcd	38.5fcd	21.7fcd	13.9fcd	9.6fcd	7.1fcd	5.4fcd	4.3fcd	3.5fcd	2.9fcd	2.4fcd	2.1fcd	1.8fcd	1.5fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
105°	140.9°	162.5°	79.0%	54.2%



ISO Diagrams

ISO candela diagram



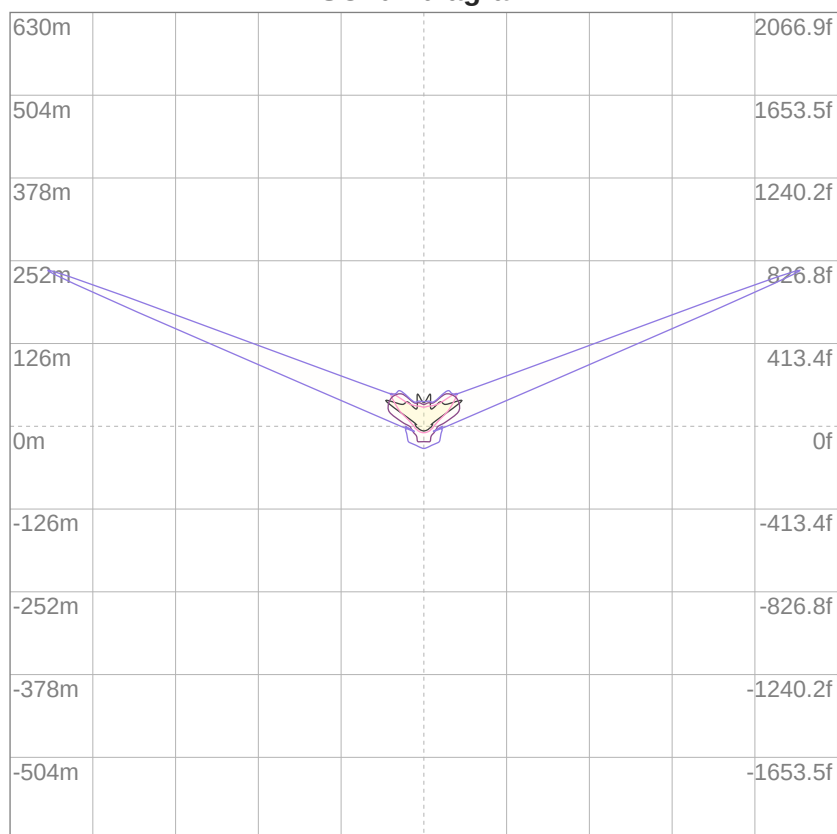
10%	373 cd
20%	746 cd
30%	1119 cd
40%	1492 cd
50%	1865 cd
60%	2238 cd
70%	2611 cd
80%	2984 cd
90%	3357 cd

Conditions:

Number of c-planes: 16

Candela at center: 3730 cd

ISO lux diagram



3%	1.12 lx
5%	1.87 lx
10%	3.73 lx
30%	11.2 lx
50%	18.7 lx

Conditions:

Number of c-planes: 16

Lux at center: 37.3 lx

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



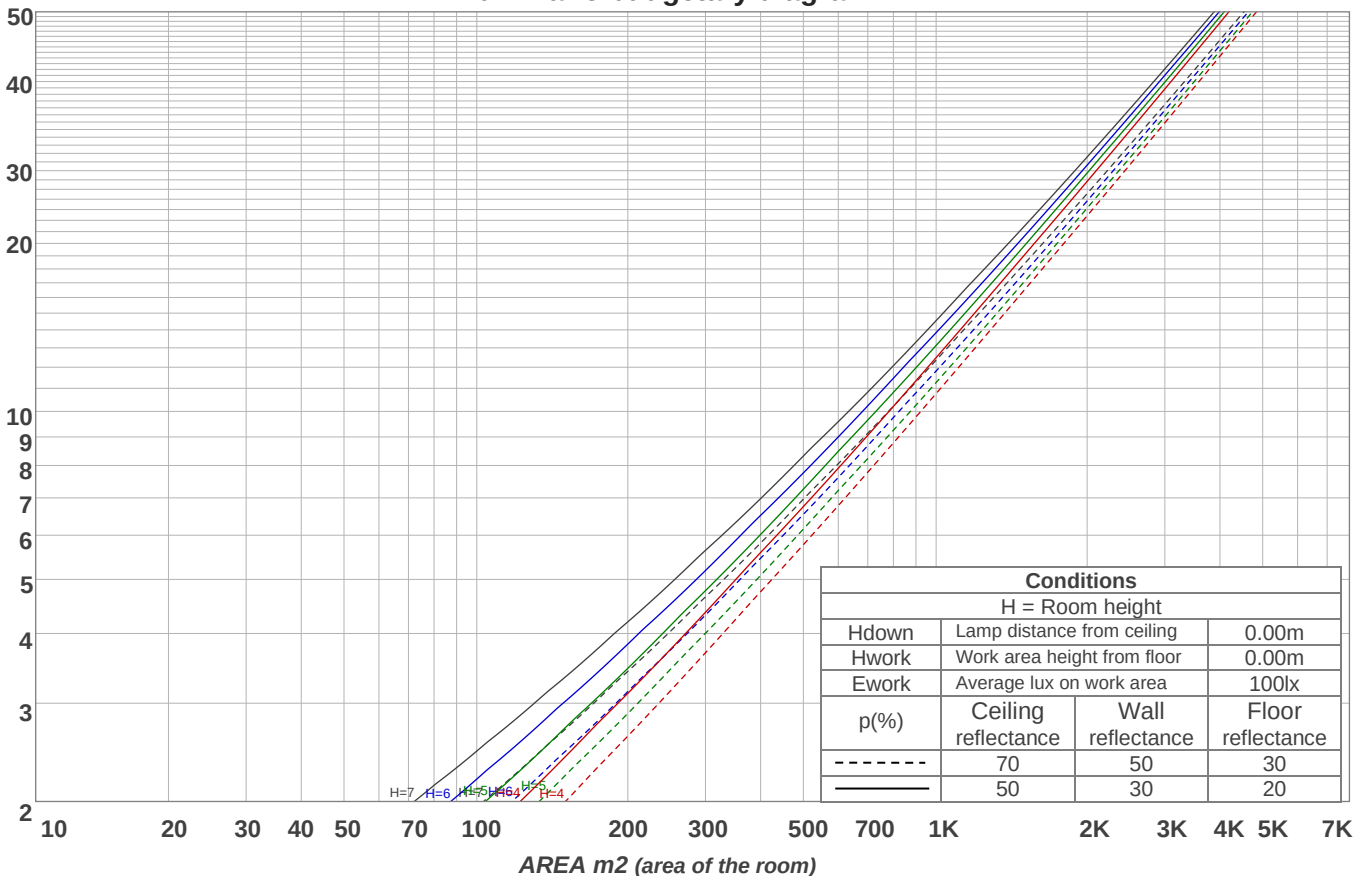
Light Planning

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	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	36	31	26	25

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°
351 lm	988 lm	1462 lm	1726 lm	1756 lm	1614 lm	1348 lm	605 lm	94.1 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4.88 lm	5.68 lm	6.80 lm	7.40 lm	7.45 lm	6.86 lm	5.58 lm	3.63 lm	1.29 lm

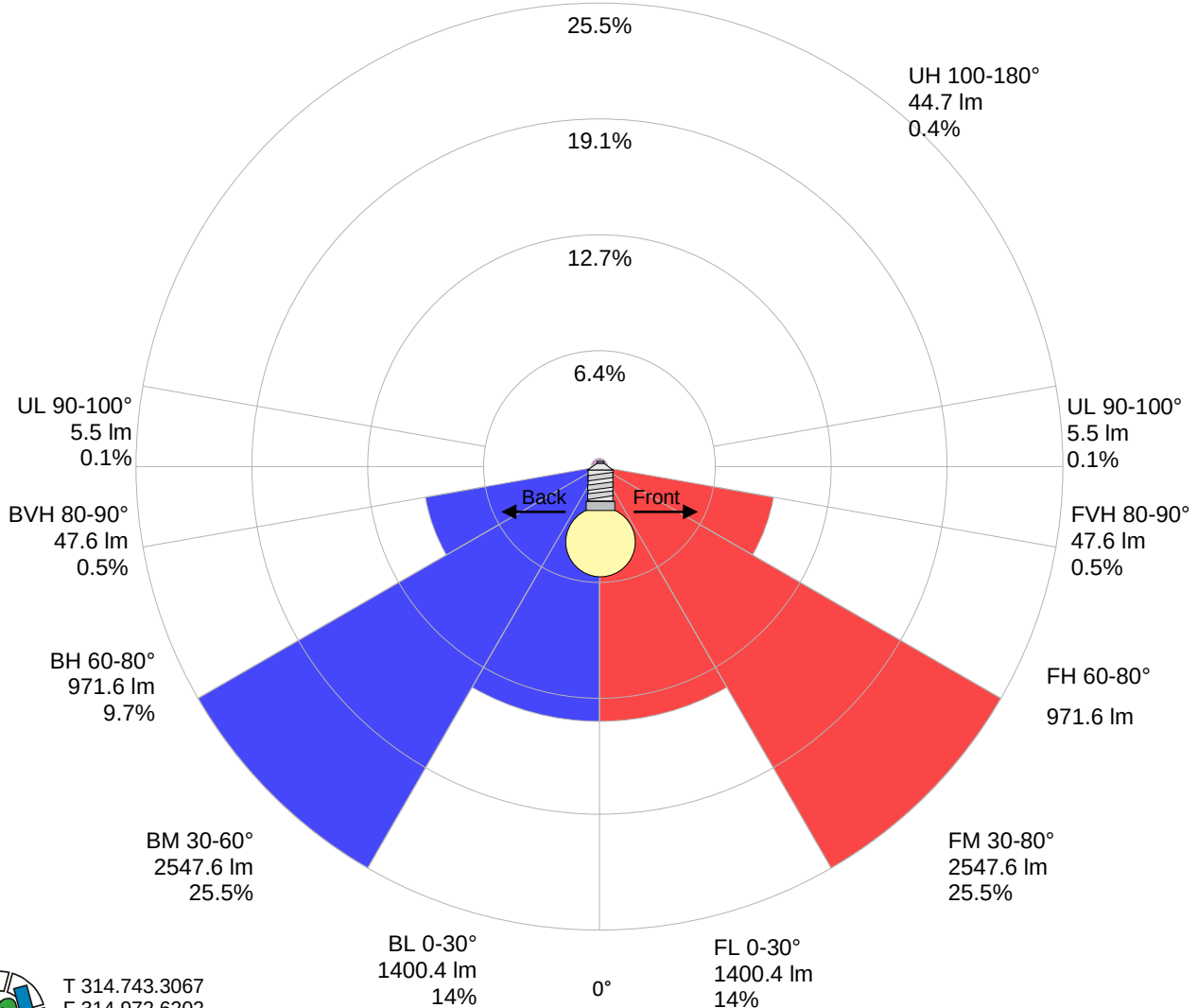


Road Report

LCS table

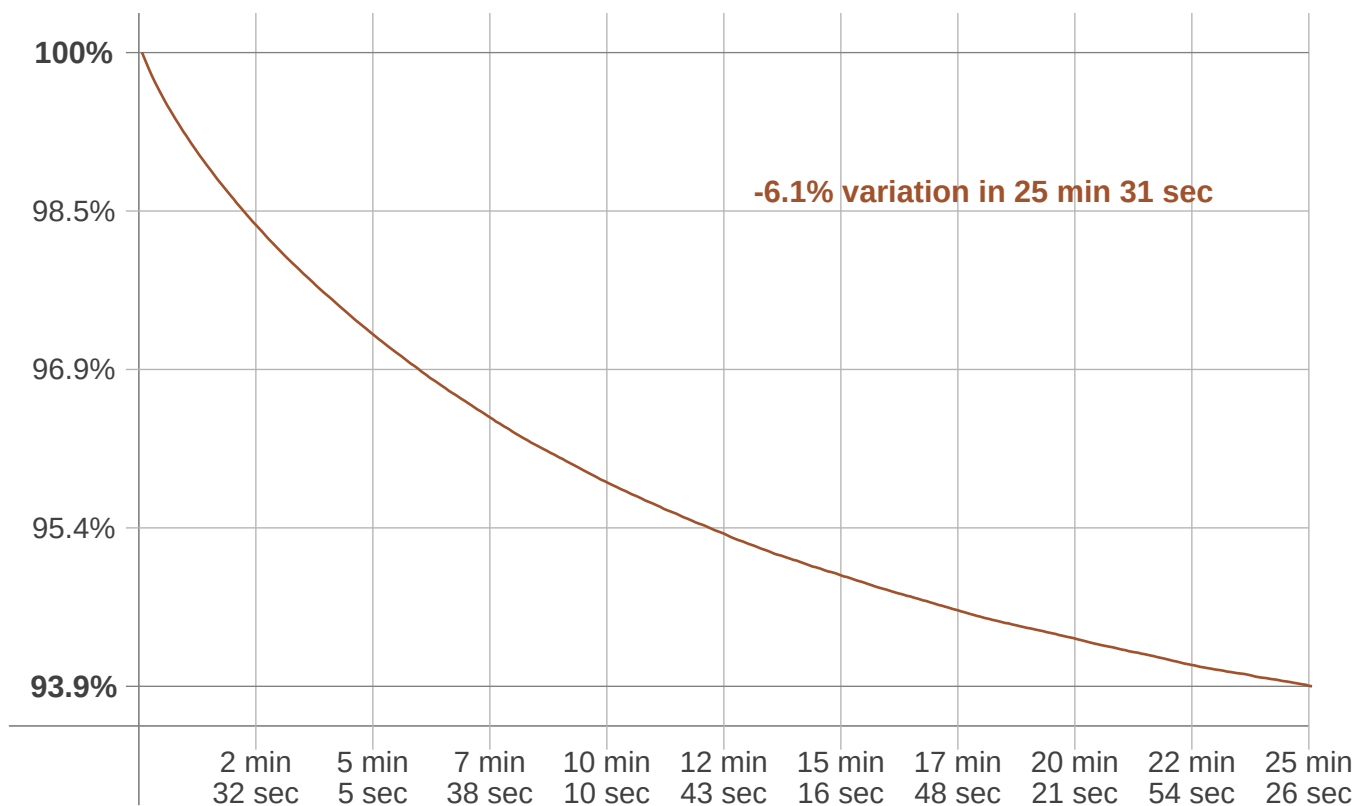
BUG rating:	B3 U2 G2	
Forward light	Lumens	Lumens %
Low(0-30):	1400.4	14%
Medium(30-60):	2547.6	25.5%
High(60-80):	971.6	9.7%
Very high(80-90):	47.6	0.5%
Back light		
Low(0-30):	1400.4	14%
Medium(30-60):	2547.6	25.5%
High(60-80):	971.6	9.7%
Very high(80-90):	47.6	0.5%
Uplight		
Low(90-100):	5.5	0.1%
High(100-180):	44.7	0.4%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	25 min 31 sec
Warmup variation	-6.2%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5085 K	+145 K	5230 K

Output change

Output start	Output change	Output end
10622 lm	-628 lm	9993 lm

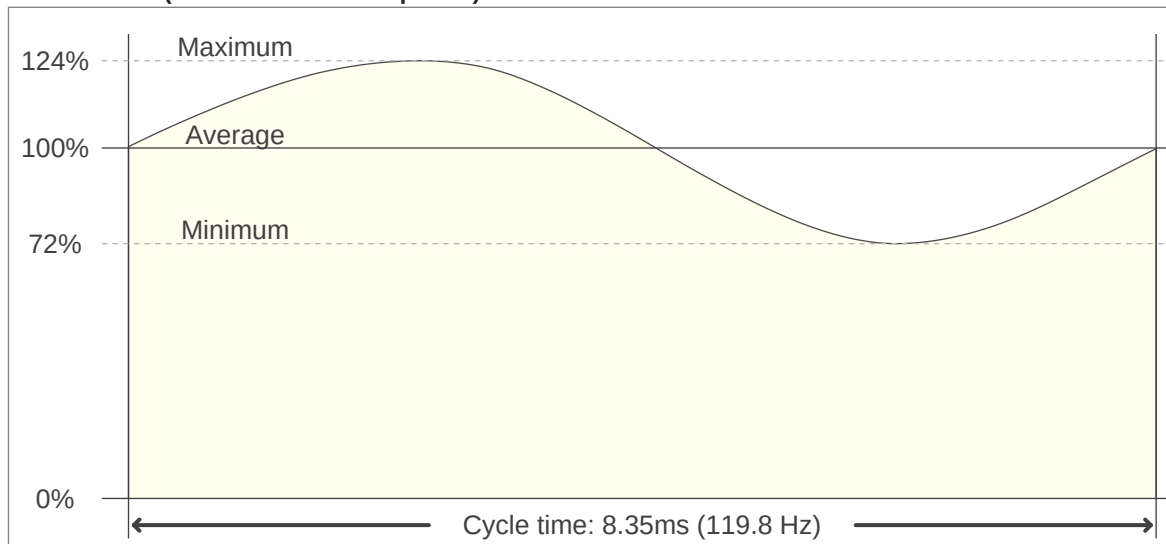


Flicker

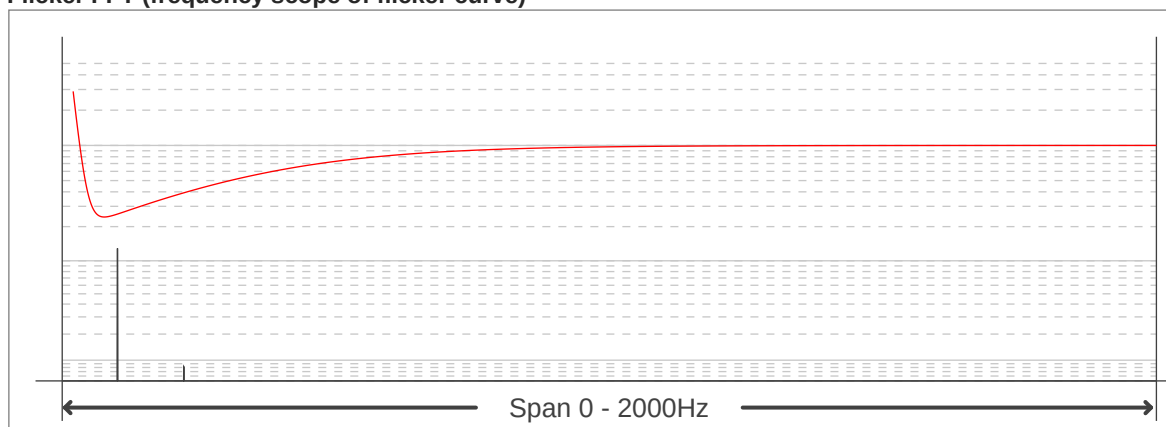
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.08
Flicker percentage:	26.49 %
SVM: (Visual flicker)	0.93

Flicker conditions:

Sample rate:	20000 samples/second
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