

Light efficiency:

125 Lumen/Watt

Output: 7455 lm

Light quality:

CRI: 81.5

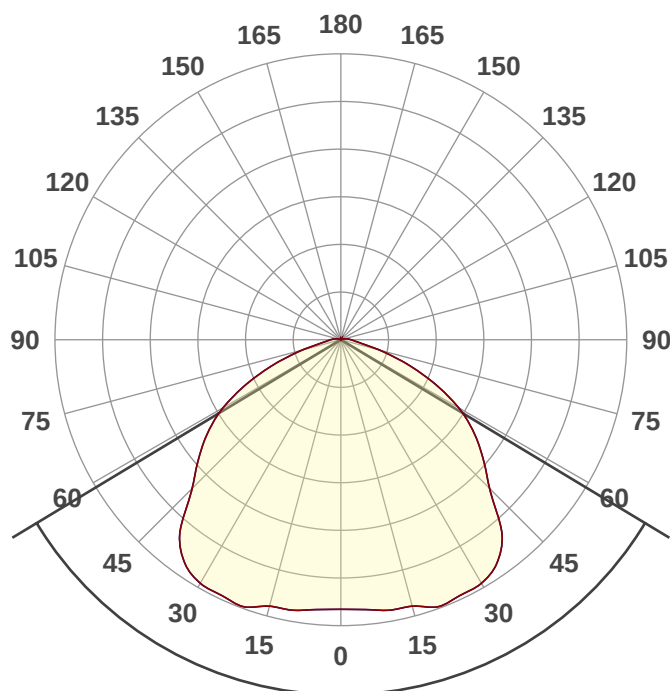
Peak: 2382 cd

Color temperature:

5028 K

Power: 59.8 W

PF: 0.98



Product name:

EPLS-50K60WG-PBGN

Date and time:

6/10/2019 2:07:13 PM

Beam angle

117.8°

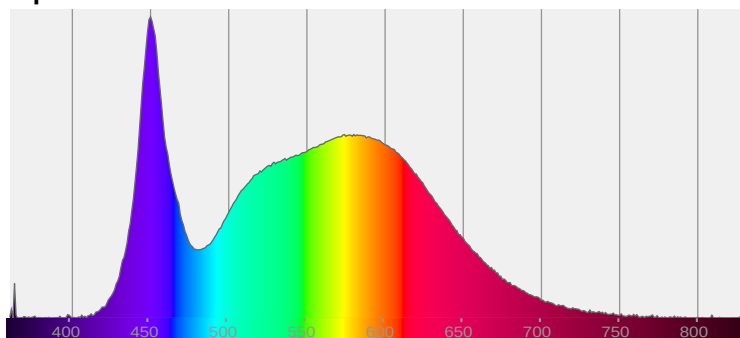


CIE 1931

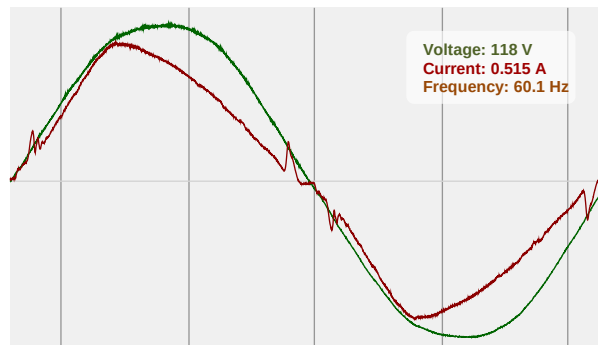
x: 0.345

y: 0.355

Spectra



Power



Voltage: 118 V
Current: 0.515 A
Frequency: 60.1 Hz



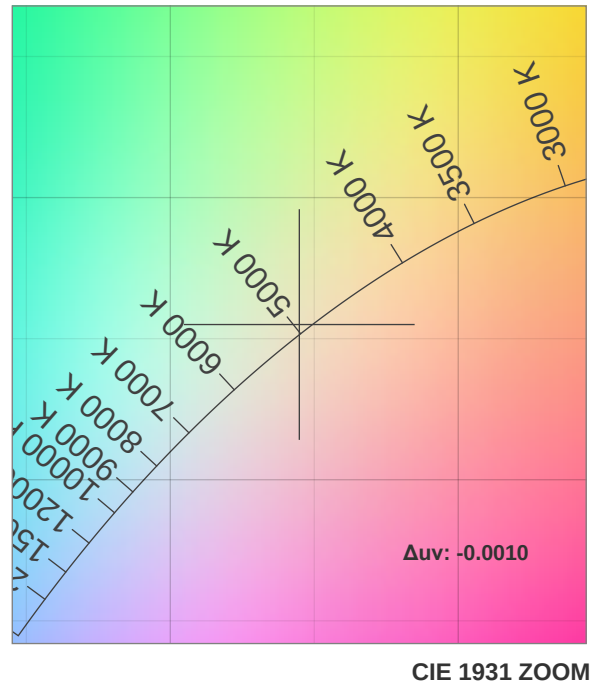
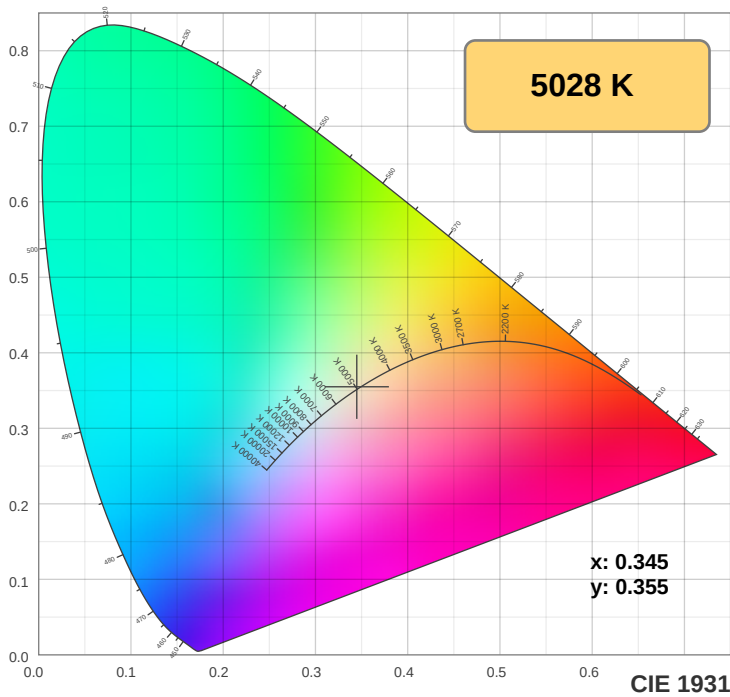
T 314.743.3067

F 314.972.6202

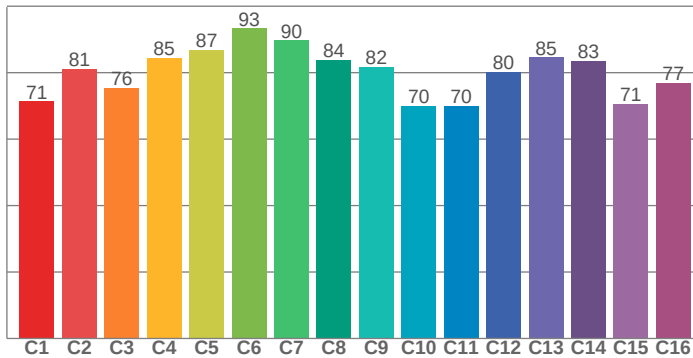
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

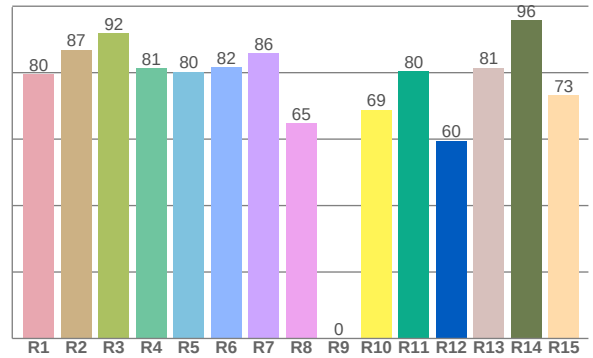
Color Specifications



TM30: 80.3



CRI: 81.5 (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
79.5	87.0	91.9	81.4	80.2	81.7	85.8	64.8	0.1	68.9	80.5	59.6	81.4	95.7	73.2

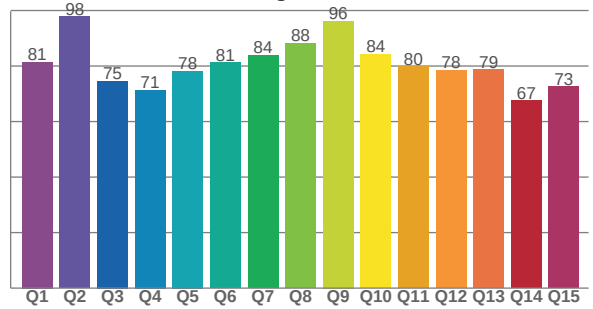
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
71.4	81.1	75.5	84.5	86.8	93.3	89.7	83.8	81.8	70.1	70.0	80.2	84.6	83.5	70.7	76.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.5	97.8	74.6	71.3	78.2	81.2	83.9	88.2	96.3	84.2	79.8	78.5	78.7	67.5	72.7

CQS: 79.3



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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5028 K	81.5	0.1	80.3	94.3	79.3	0.345	0.355	0.210	0.324	-0.0010



TM30 Report

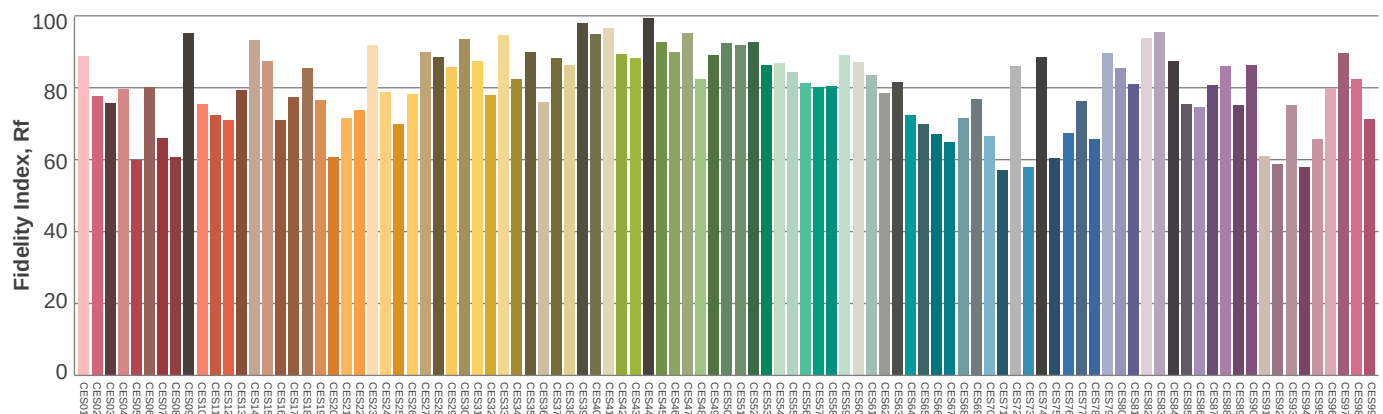
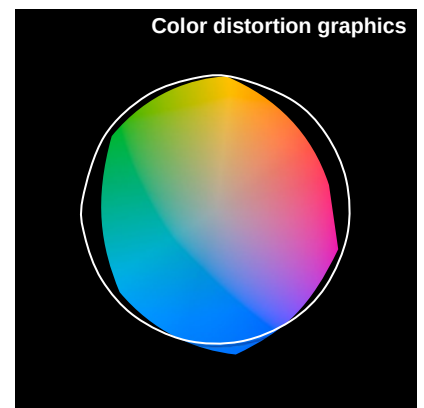
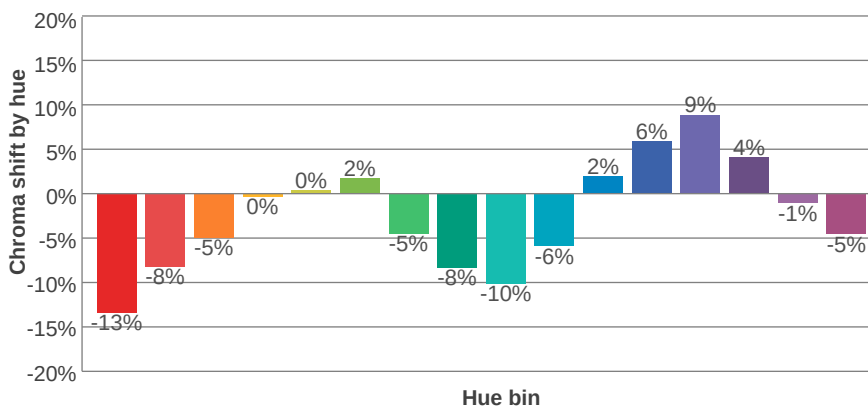
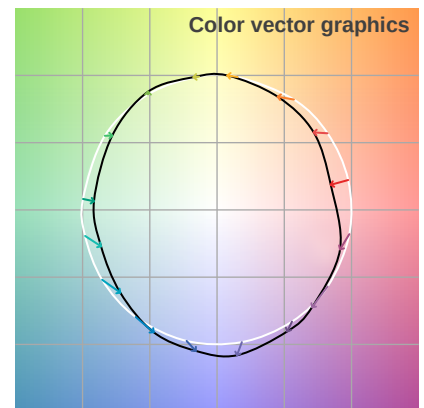
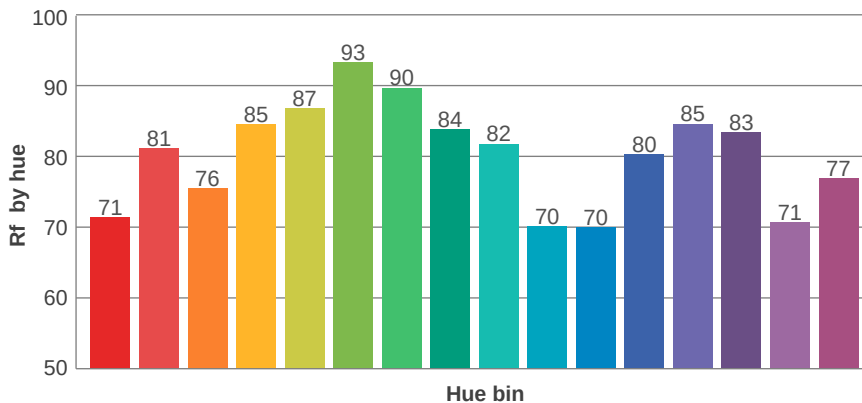
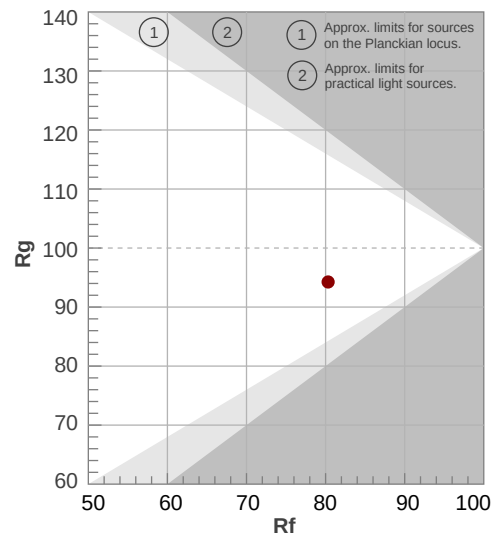
Rf 80.3

Fidelity index Rf

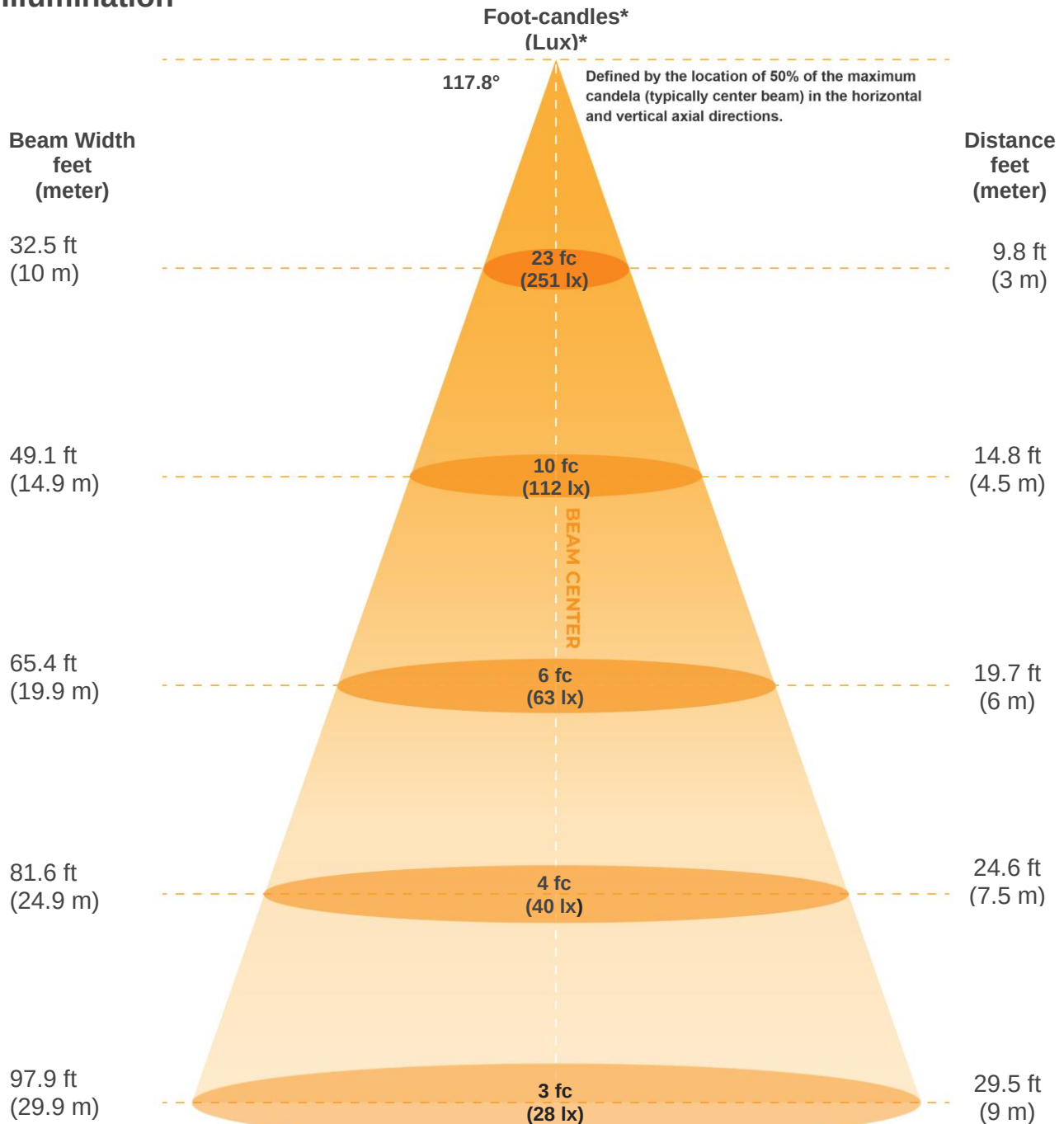
Rg 94.3

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	71	-13%	-1%
2	81	-8%	6%
3	76	-5%	11%
4	85	0%	8%
5	87	0%	4%
6	93	2%	-1%
7	90	-5%	-3%
8	84	-8%	0%
9	82	-10%	10%
10	70	-6%	15%
11	70	2%	17%
12	80	6%	8%
13	85	9%	-5%
14	83	4%	-7%
15	71	-1%	-19%
16	77	-5%	-12%



Illumination



Beam intensities from 1-20m

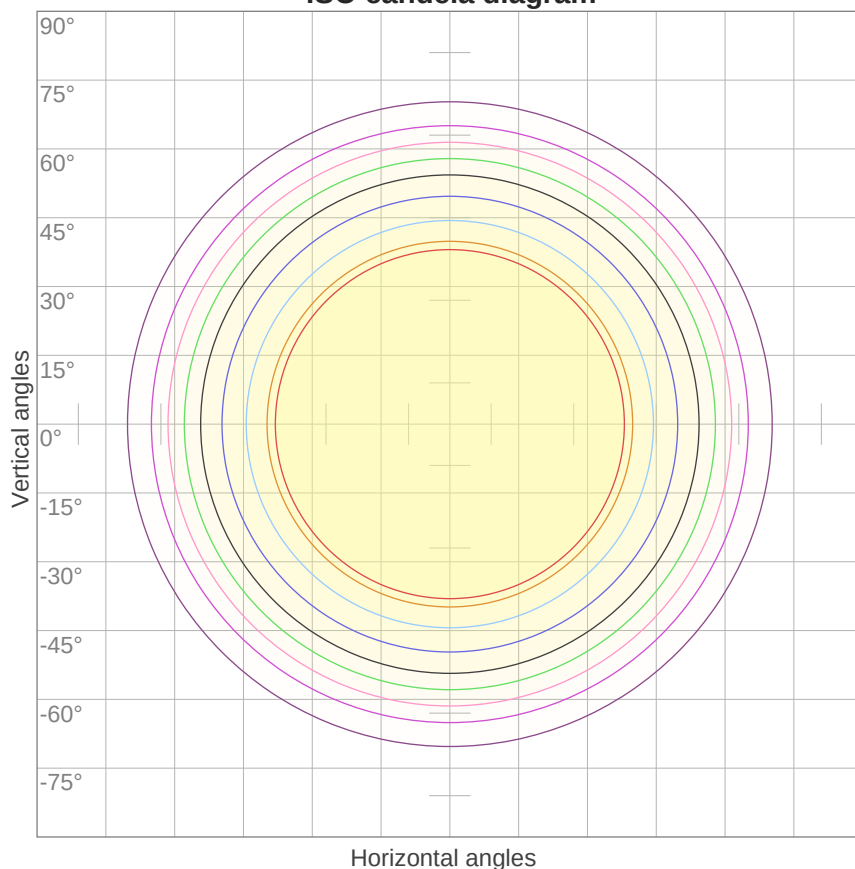
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
2260lx	565lx	251lx	141lx	90lx	63lx	46lx	35lx	28lx	23lx	19lx	16lx	13lx	12lx	10lx	9lx	8lx	7lx	6lx	6lx
210fcd	52.5fcd	23.3fcd	13.1fcd	8.4fcd	5.8fcd	4.3fcd	3.3fcd	2.6fcd	2.1fcd	1.7fcd	1.5fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
117.8°	155.6°	191.3°	80.3%	55.0%



ISO Diagrams

ISO candela diagram



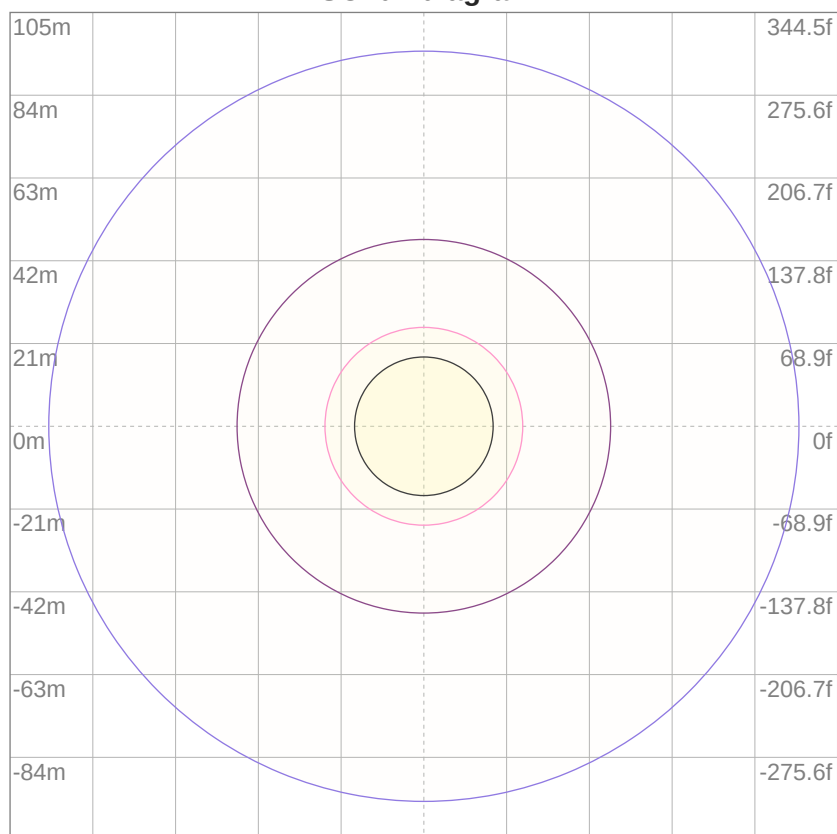
10%	226 cd
20%	452 cd
30%	678 cd
40%	904 cd
50%	1130 cd
60%	1356 cd
70%	1582 cd
80%	1808 cd
90%	2034 cd

Conditions:

Number of c-planes: 16

Candela at center: 2260 cd

ISO lux diagram



3%	0.678 lx
5%	1.13 lx
10%	2.26 lx
30%	6.78 lx
50%	11.3 lx

Conditions:

Number of c-planes: 16

Lux at center: 22.6 lx

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



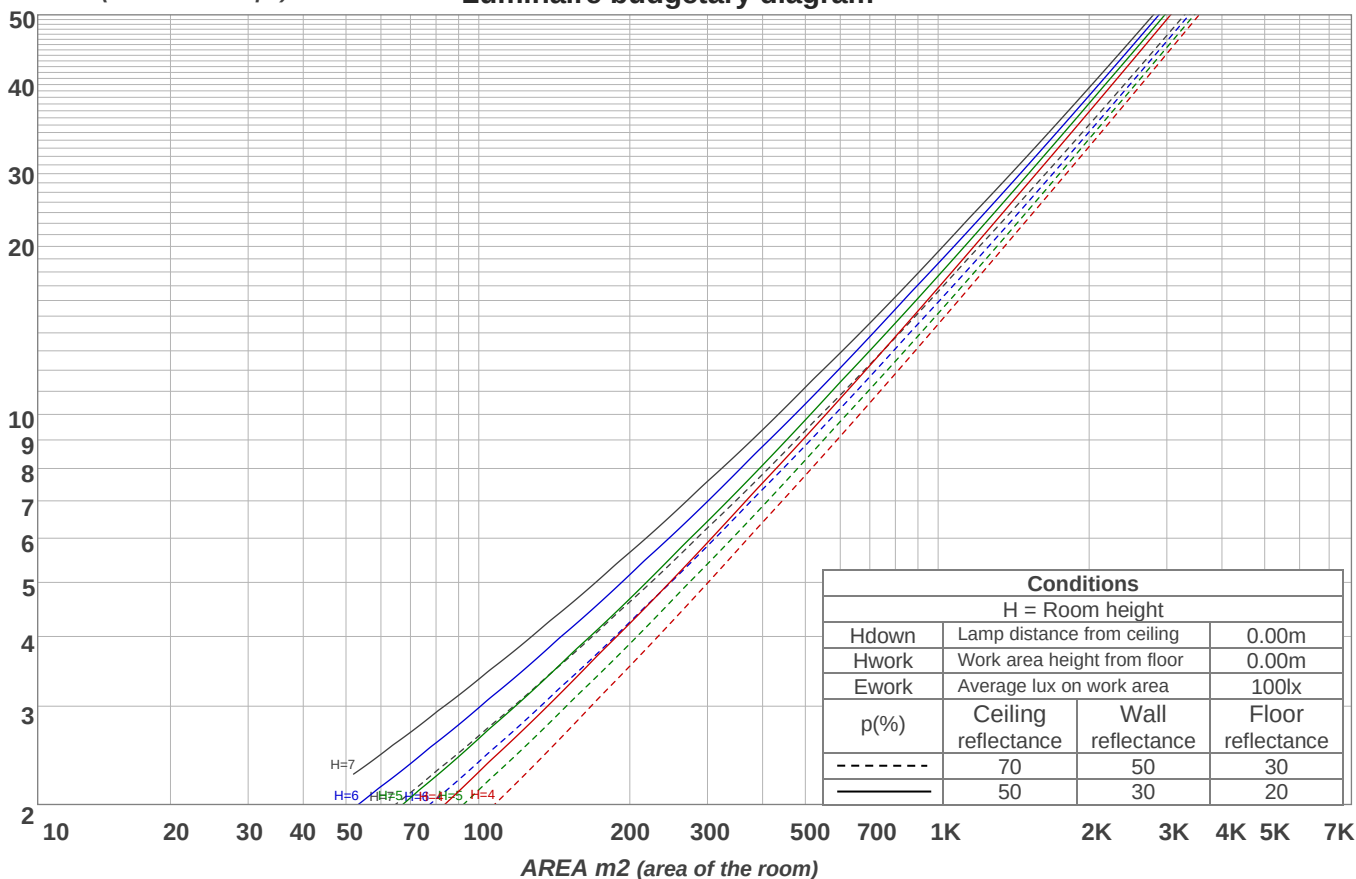
Light Planning

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	110	110	110	105	105	105	101	101	101	98
1	109	104	100	96	106	102	98	95	97	94	91	93	91	88	89	87	85	83
2	99	91	84	79	96	89	83	78	85	80	76	82	77	74	79	75	72	70
3	90	80	72	66	88	78	71	65	75	69	64	72	67	62	69	65	61	59
4	83	71	62	56	80	69	61	55	67	60	54	64	58	53	62	57	52	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	45	43
6	70	57	48	42	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	43	37	63	51	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	33	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	26
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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°
218 lm	661 lm	1095 lm	1414 lm	1383 lm	1214 lm	852 lm	372 lm	131 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
68.3 lm	27.9 lm	7.91 lm	2.90 lm	2.94 lm	2.46 lm	1.92 lm	1.37 lm	0.468 lm

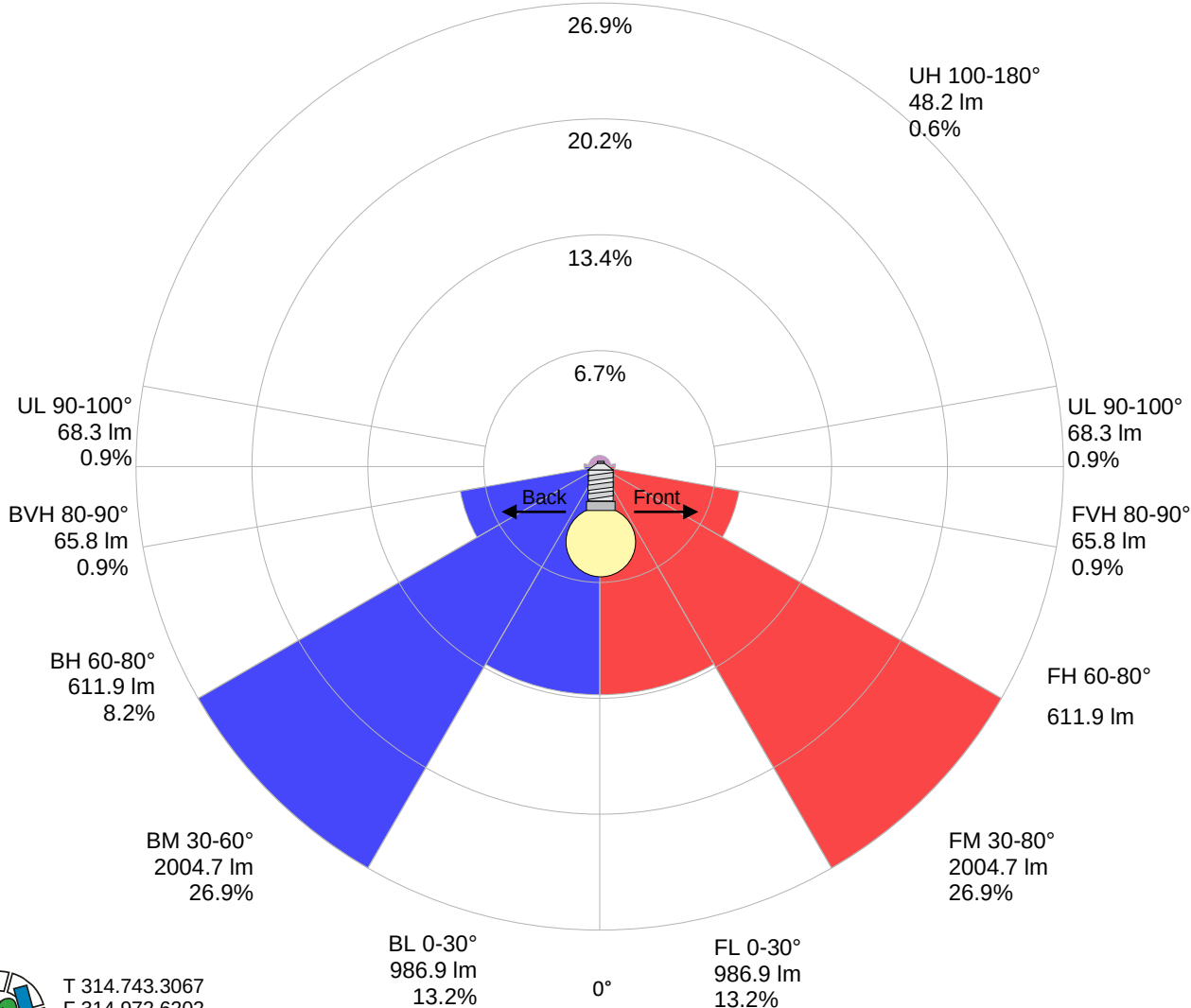


Road Report

LCS table

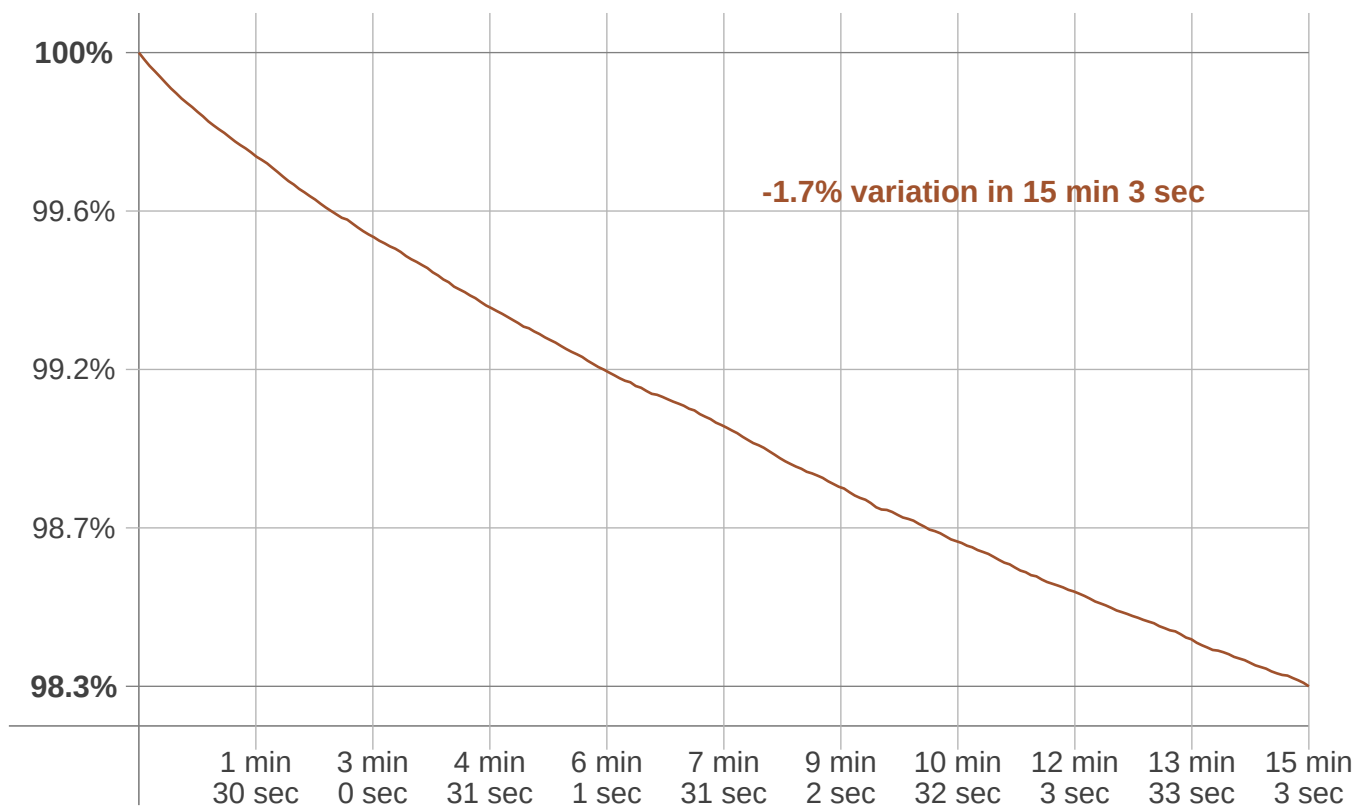
BUG rating:	B2 U3 G1	
Forward light	Lumens	Lumens %
Low(0-30):	986.9	13.2%
Medium(30-60):	2004.7	26.9%
High(60-80):	611.9	8.2%
Very high(80-90):	65.8	0.9%
Back light		
Low(0-30):	986.9	13.2%
Medium(30-60):	2004.7	26.9%
High(60-80):	611.9	8.2%
Very high(80-90):	65.8	0.9%
Uplight		
Low(90-100):	68.3	0.9%
High(100-180):	48.2	0.6%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	15 min 3 sec
Warmup variation	-1.7%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5000 K	+28 K	5028 K

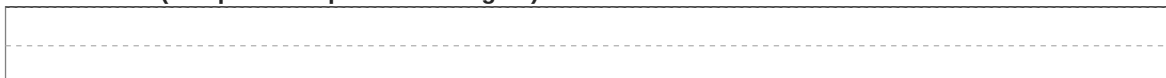
Output change

Output start	Output change	Output end
7579 lm	-123 lm	7455 lm

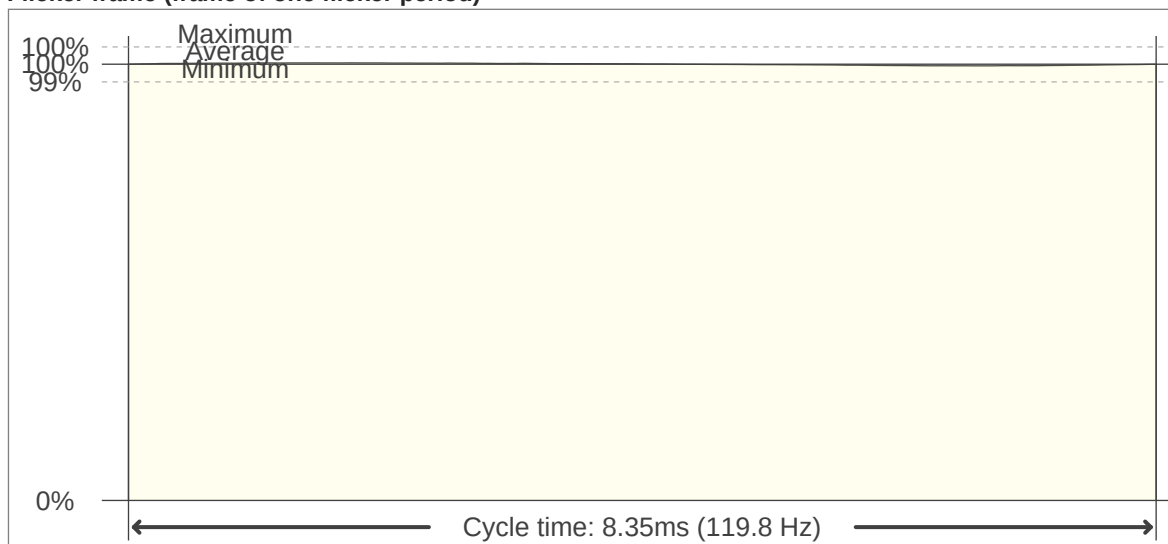


Flicker

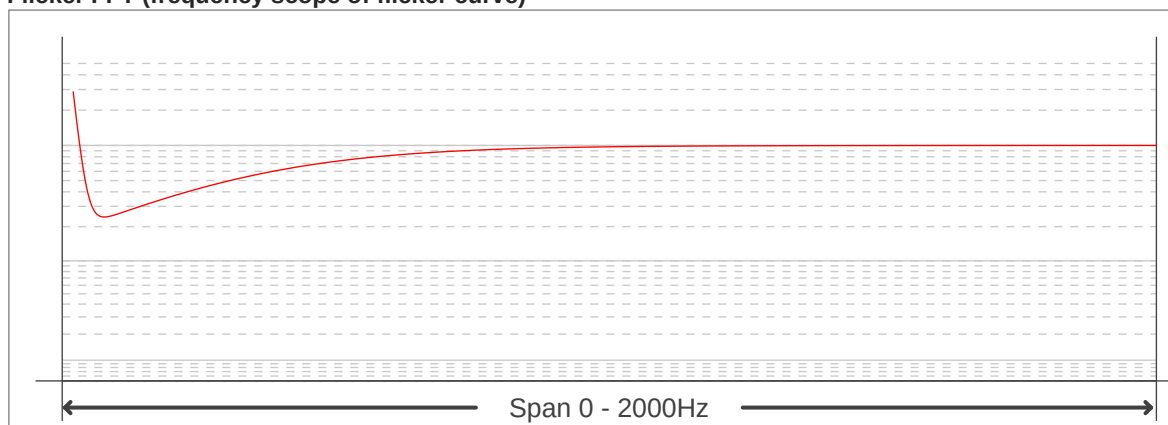
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0
Flicker percentage:	0.39 %
SVM: (Visual flicker)	0.01

Flicker conditions:

Sample rate:	40000 samples/second
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