

Light efficiency:

135 Lumen/Watt

Output: 7508 lm

Light quality:

CRI: 82.7

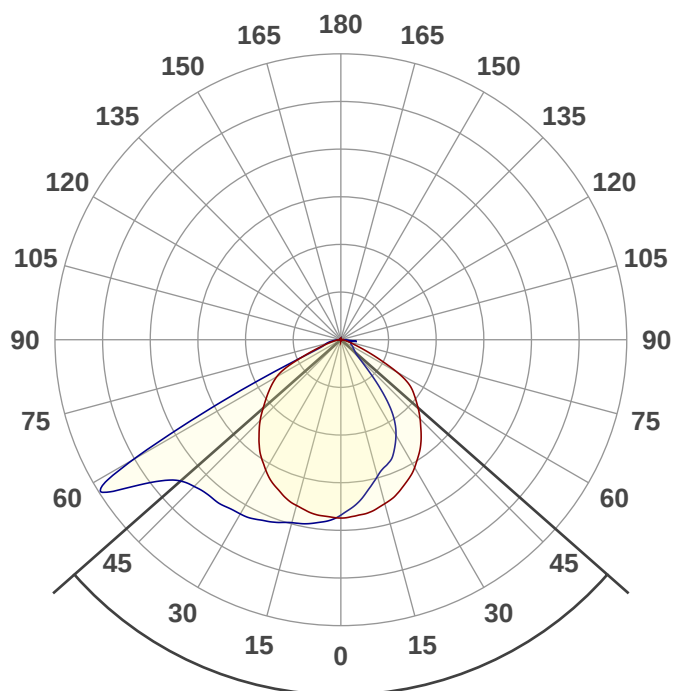
Peak: 4279 cd

Color temperature:

5174 K

Power: 55.8 W

PF: 1.0



Product name:

WPFC2-50K60-H

Date and time:

10/30/2019 2:34:37 PM

Beam angle

97.2°

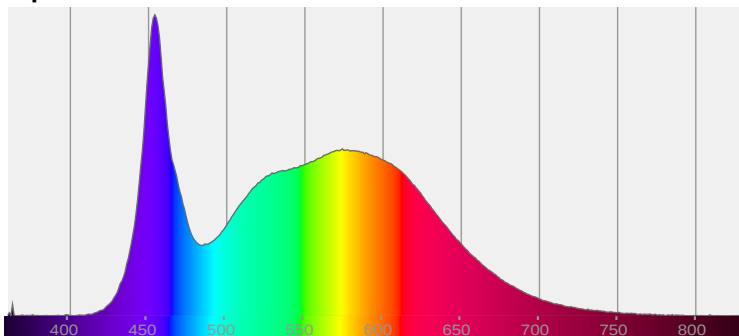


CIE 1931

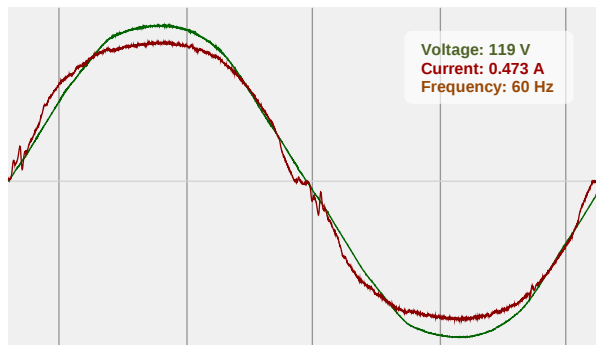
x: 0.341

y: 0.352

Spectra



Power



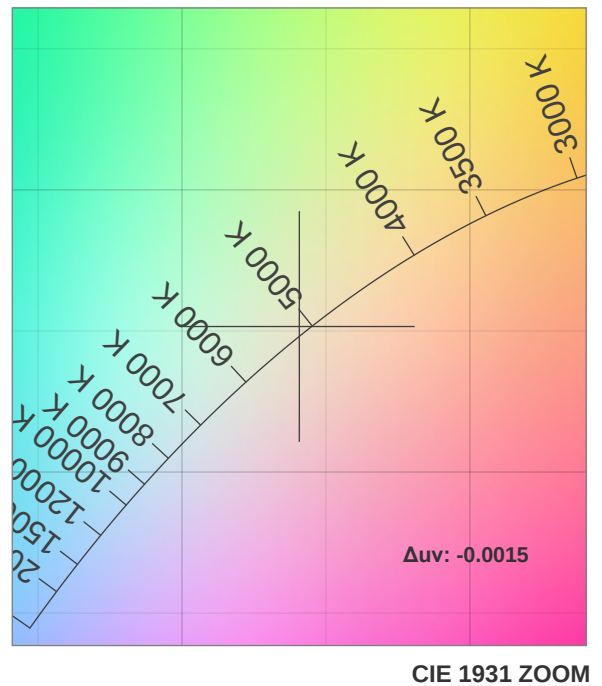
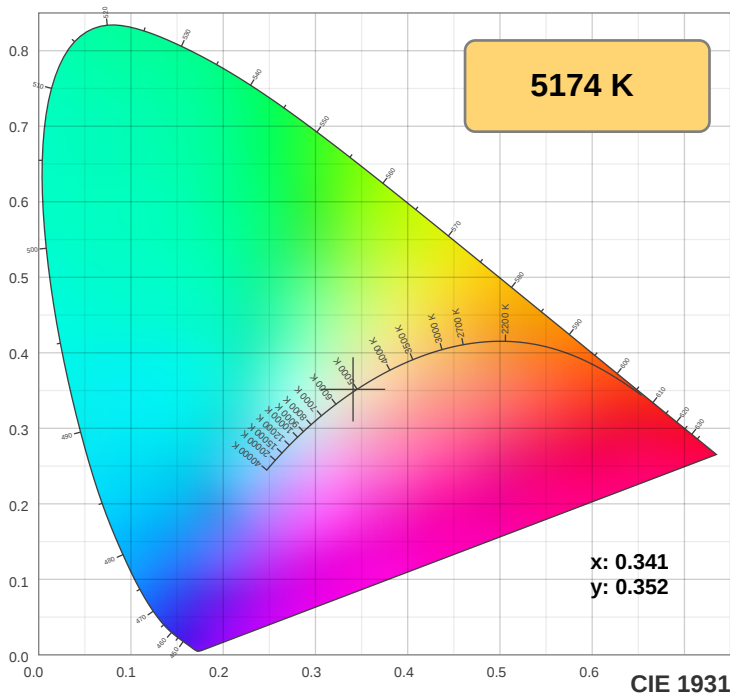
T 314.743.3067

F 314.972.6202

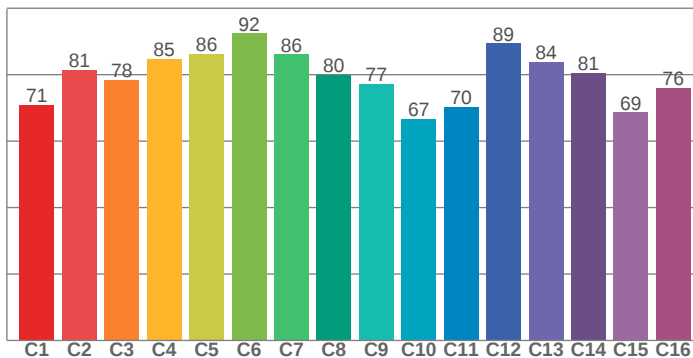
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

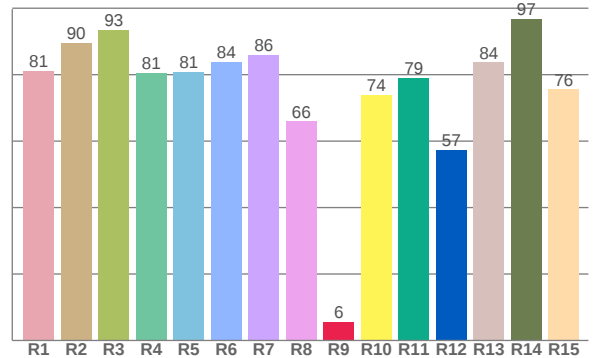
Color Specifications



TM30: 79.5



CRI: 82.7 (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
81.2	89.6	93.5	80.5	80.9	83.9	86.0	65.9	5.7	74.0	79.0	57.4	83.8	96.8	75.6

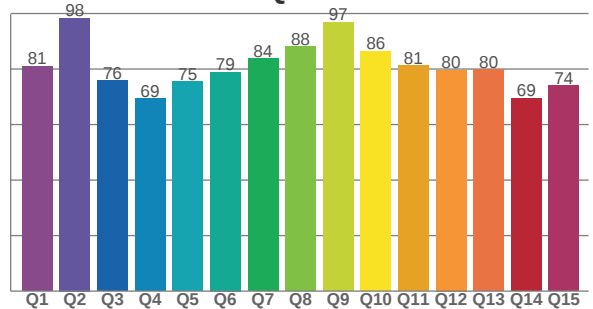
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
70.8	81.4	78.4	84.8	86.2	92.5	86.1	79.9	77.3	66.7	70.2	89.4	83.8	80.6	68.6	76.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.0	98.4	75.9	69.3	75.4	78.9	83.7	88.0	96.8	86.4	81.1	79.7	79.8	69.5	74.0

CQS: 79.5



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
5174 K	82.7	5.7	79.5	92.5	79.5	0.341	0.352	0.209	0.323	-0.0015



TM30 Report

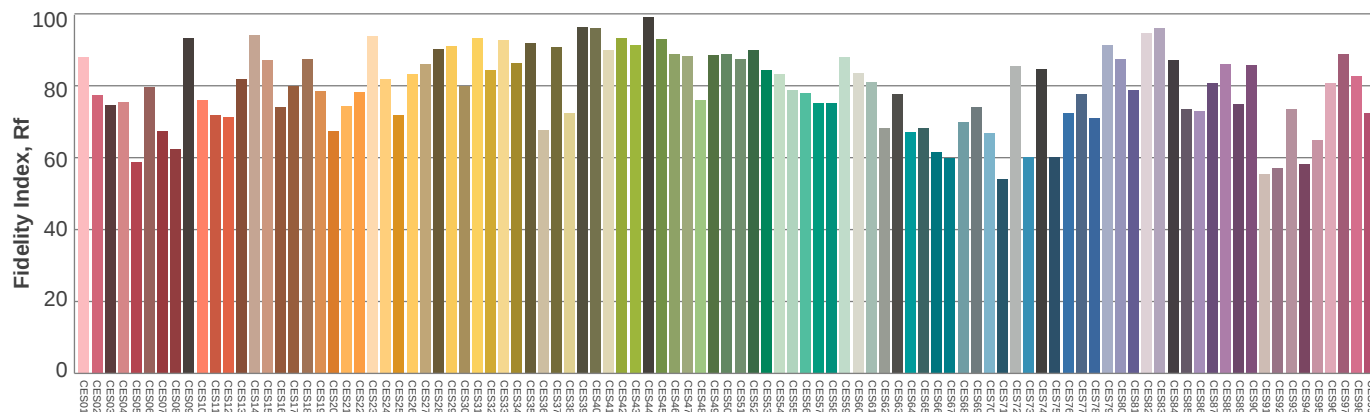
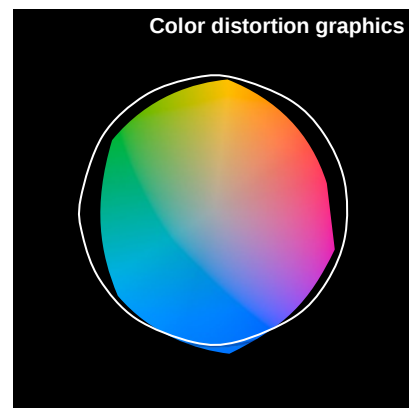
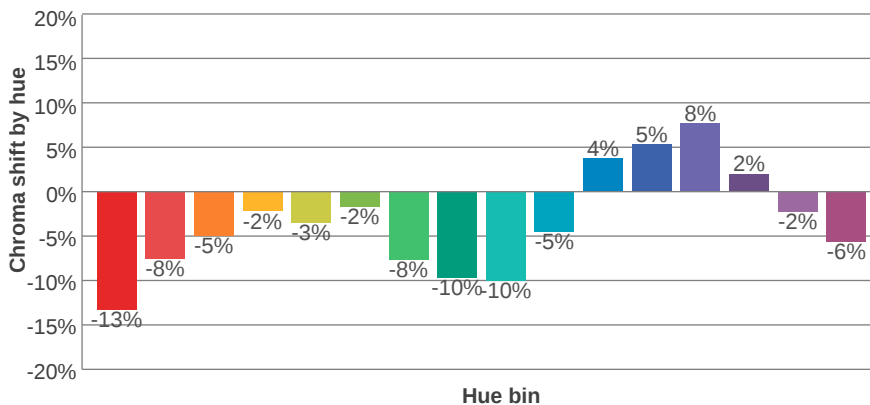
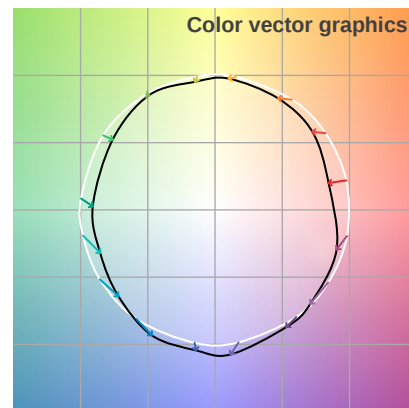
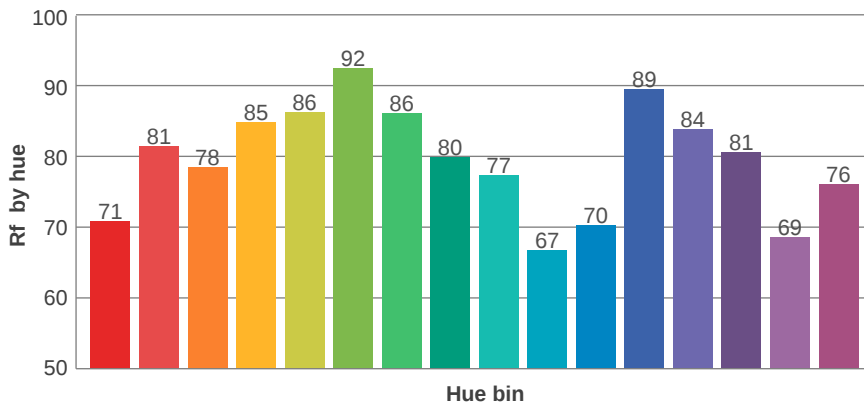
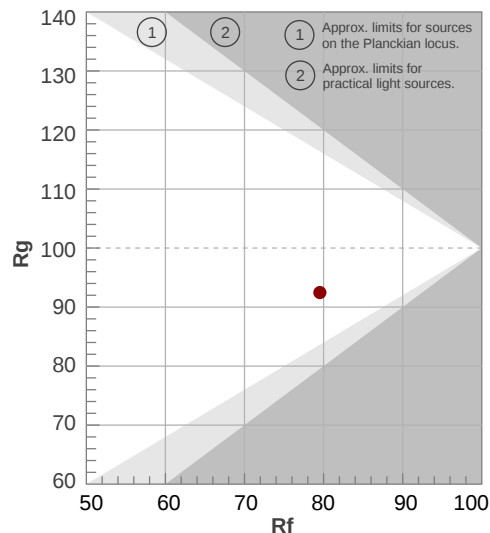
Rf 79.5

Fidelity index Rf

Rg 92.5

Gamut index Rg

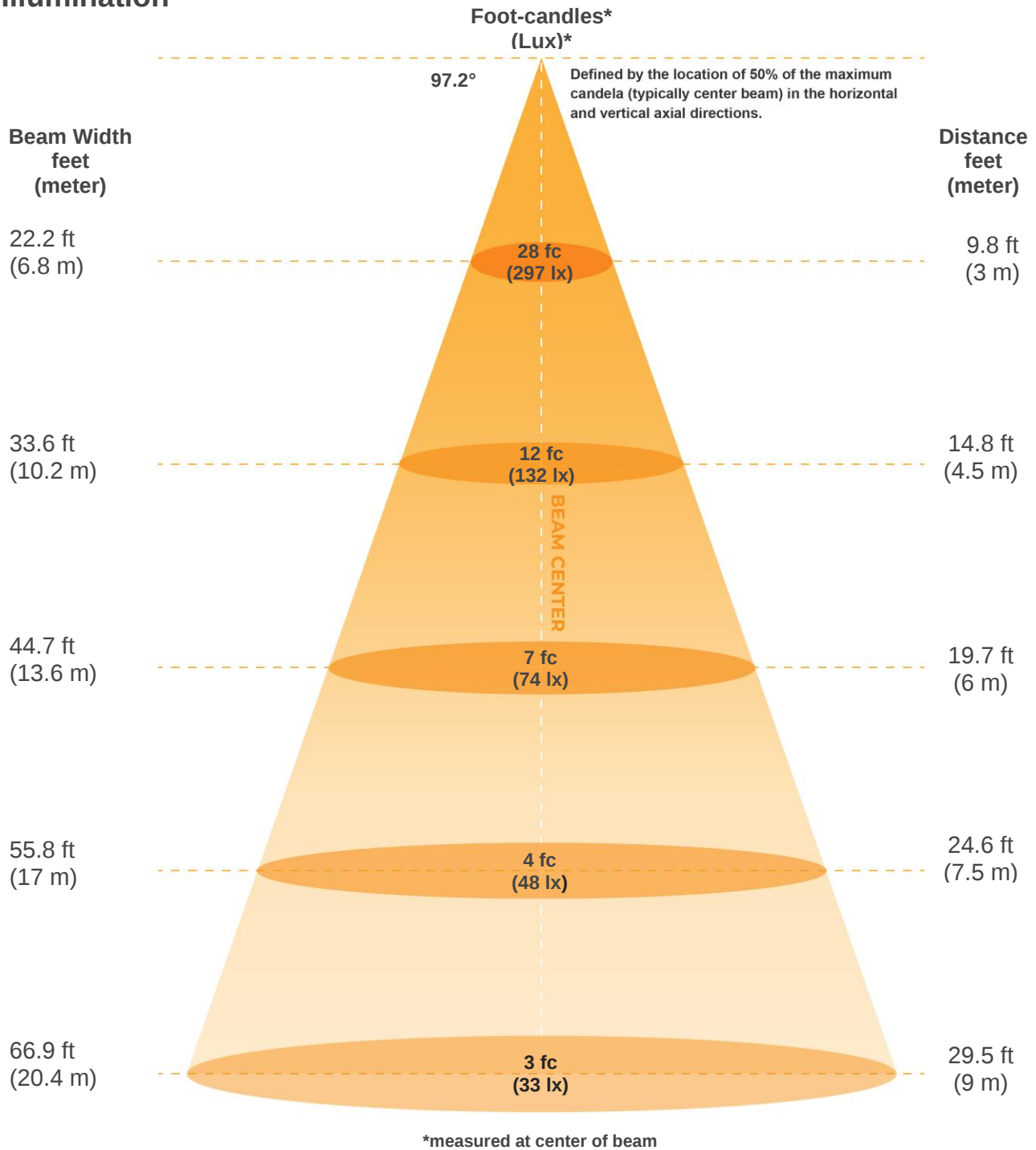
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	71	-13%	1%
2	81	-8%	6%
3	78	-5%	9%
4	85	-2%	5%
5	86	-3%	2%
6	92	-2%	-2%
7	86	-8%	-1%
8	80	-10%	4%
9	77	-10%	15%
10	67	-5%	18%
11	70	4%	16%
12	89	5%	2%
13	84	8%	-8%
14	81	2%	-10%
15	69	-2%	-21%
16	76	-6%	-11%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

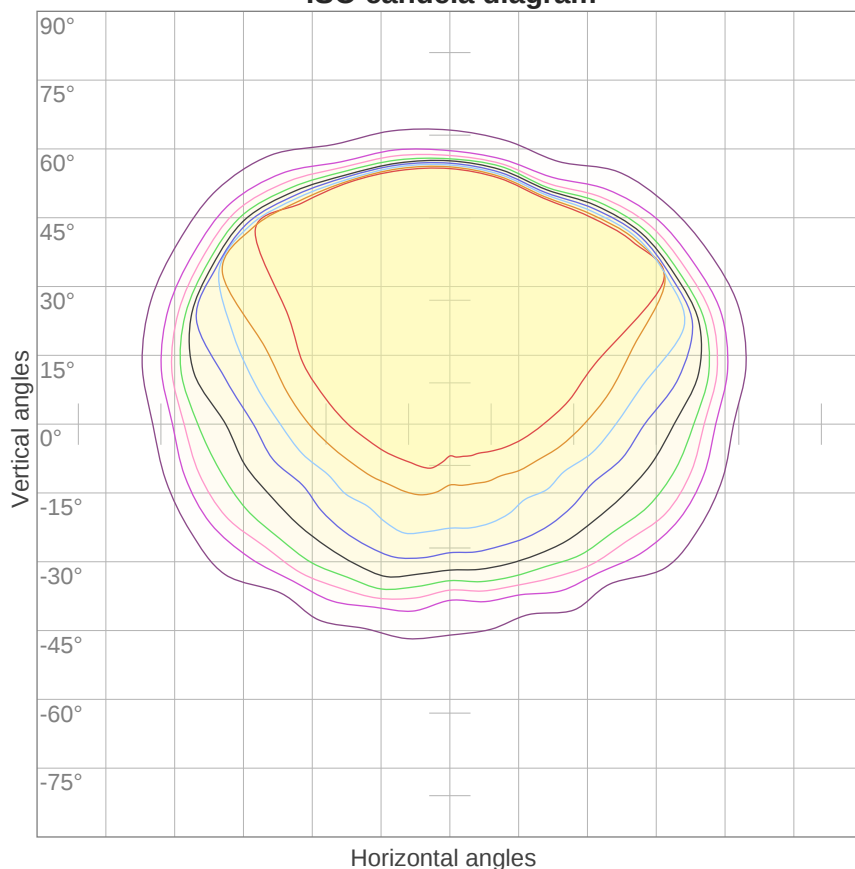
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
2675lx	669lx	297lx	167lx	107lx	74lx	55lx	42lx	33lx	27lx	22lx	19lx	16lx	14lx	12lx	10lx	9lx	8lx	7lx	7lx
248.5fc	62.1fcd	27.6fcd	15.5fcd	9.9fcd	6.9fcd	5.1fcd	3.9fcd	3.1fcd	2.5fcd	2.1fcd	1.7fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
97.2°	129.4°	164°	84.3%	55.1%



ISO Diagrams

ISO candela diagram



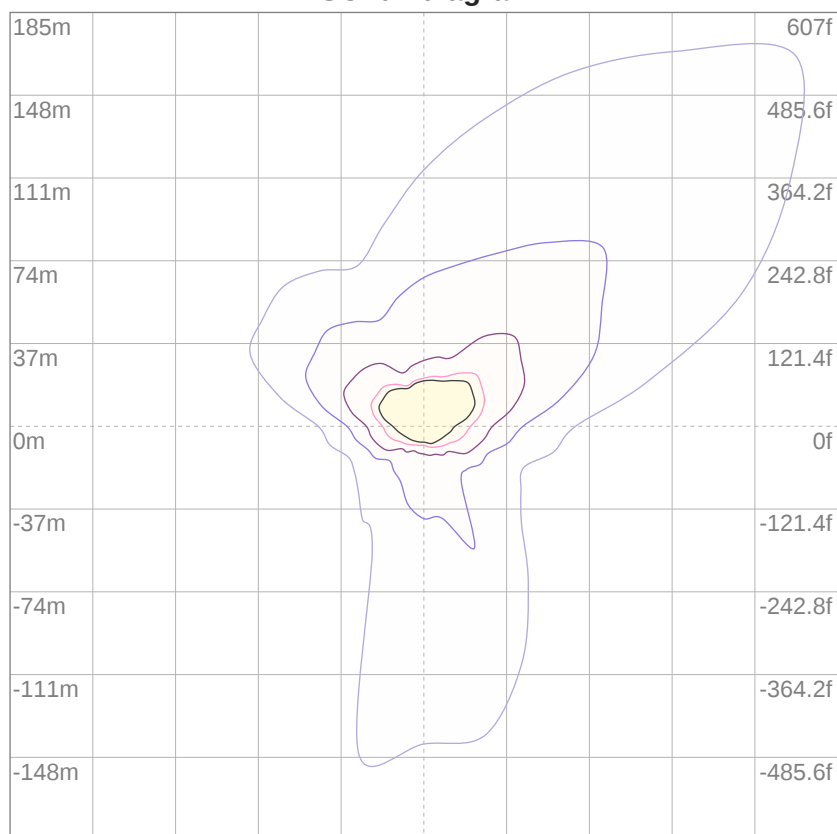
10%	268 cd
20%	535 cd
30%	803 cd
40%	1070 cd
50%	1338 cd
60%	1605 cd
70%	1873 cd
80%	2140 cd
90%	2408 cd

Conditions:

Number of c-planes: 16

Candela at center: 2675 cd

ISO lux diagram



3%	0.803 lx
5%	1.34 lx
10%	2.68 lx
30%	8.03 lx
50%	13.4 lx

Conditions:

Number of c-planes: 16

Lux at center: 26.8 lx

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



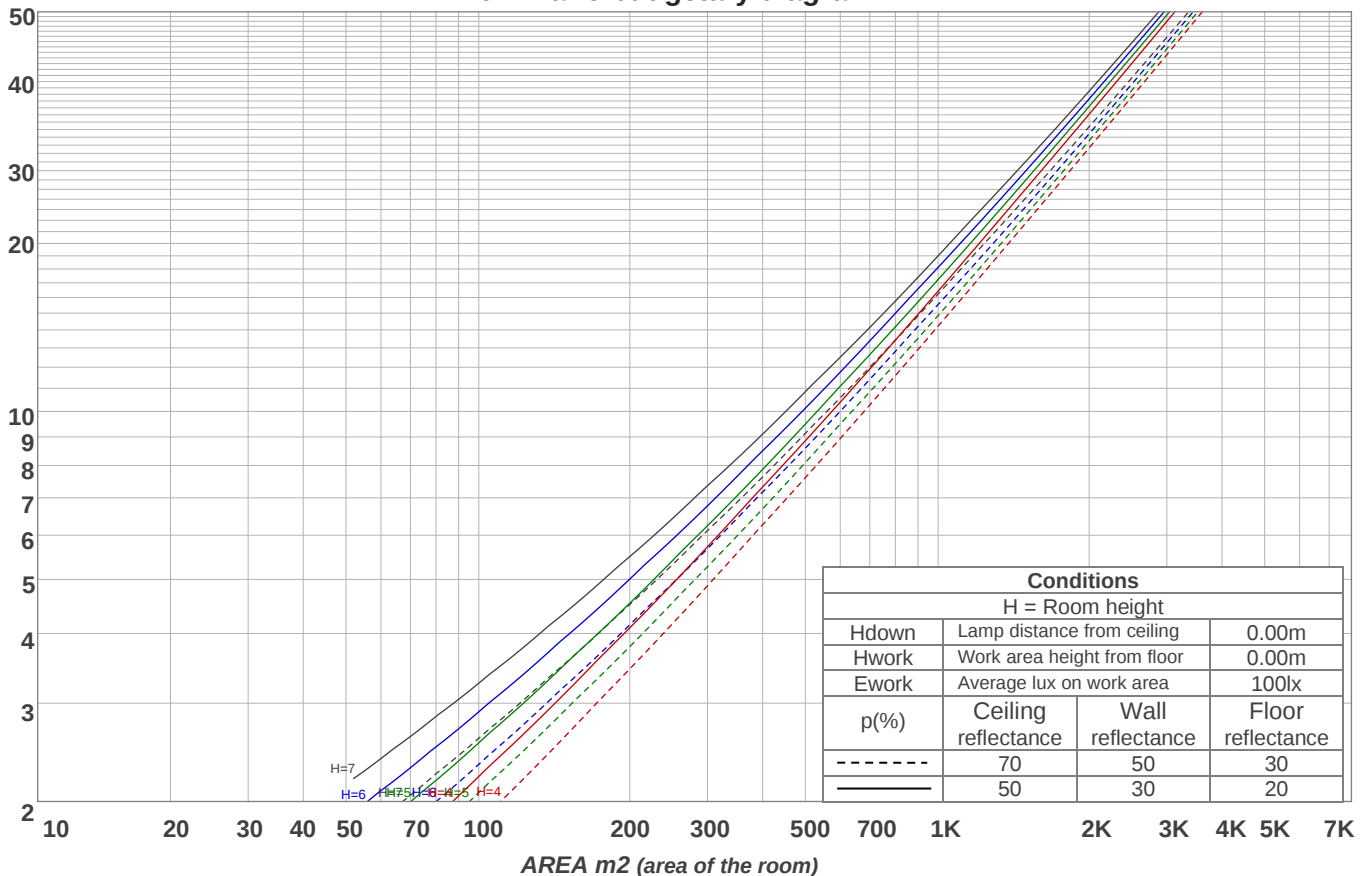
Light Planning

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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	85	79	87	82	78	84	79	76	81	77	74	72
3	91	81	73	67	89	80	72	67	77	70	65	74	69	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	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°
252 lm	719 lm	1104 lm	1354 lm	1416 lm	1484 lm	851 lm	233 lm	75.4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3.78 lm	1.84 lm	2.30 lm	2.44 lm	2.68 lm	2.39 lm	2.03 lm	1.30 lm	0.461 lm

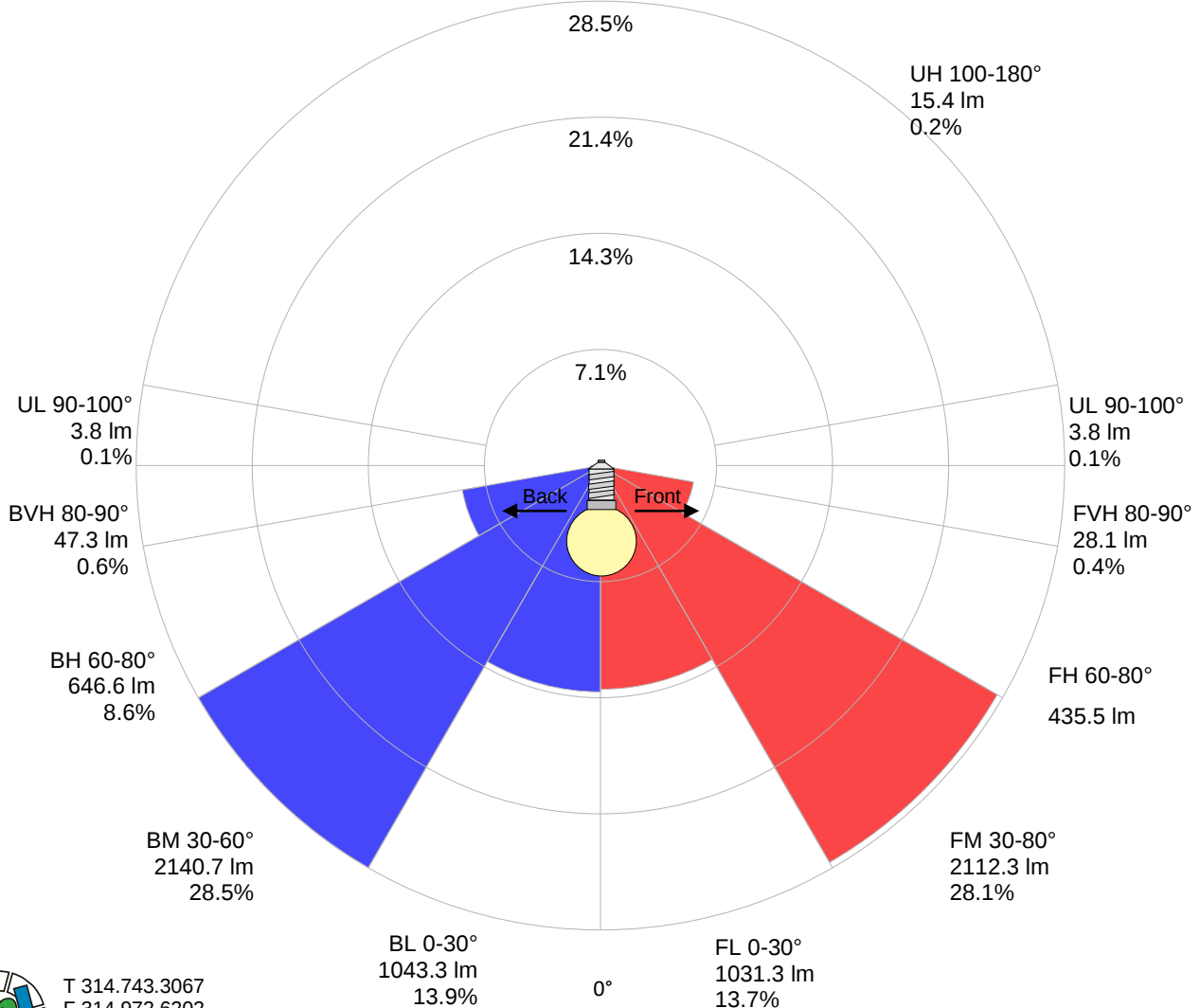


Road Report

LCS table

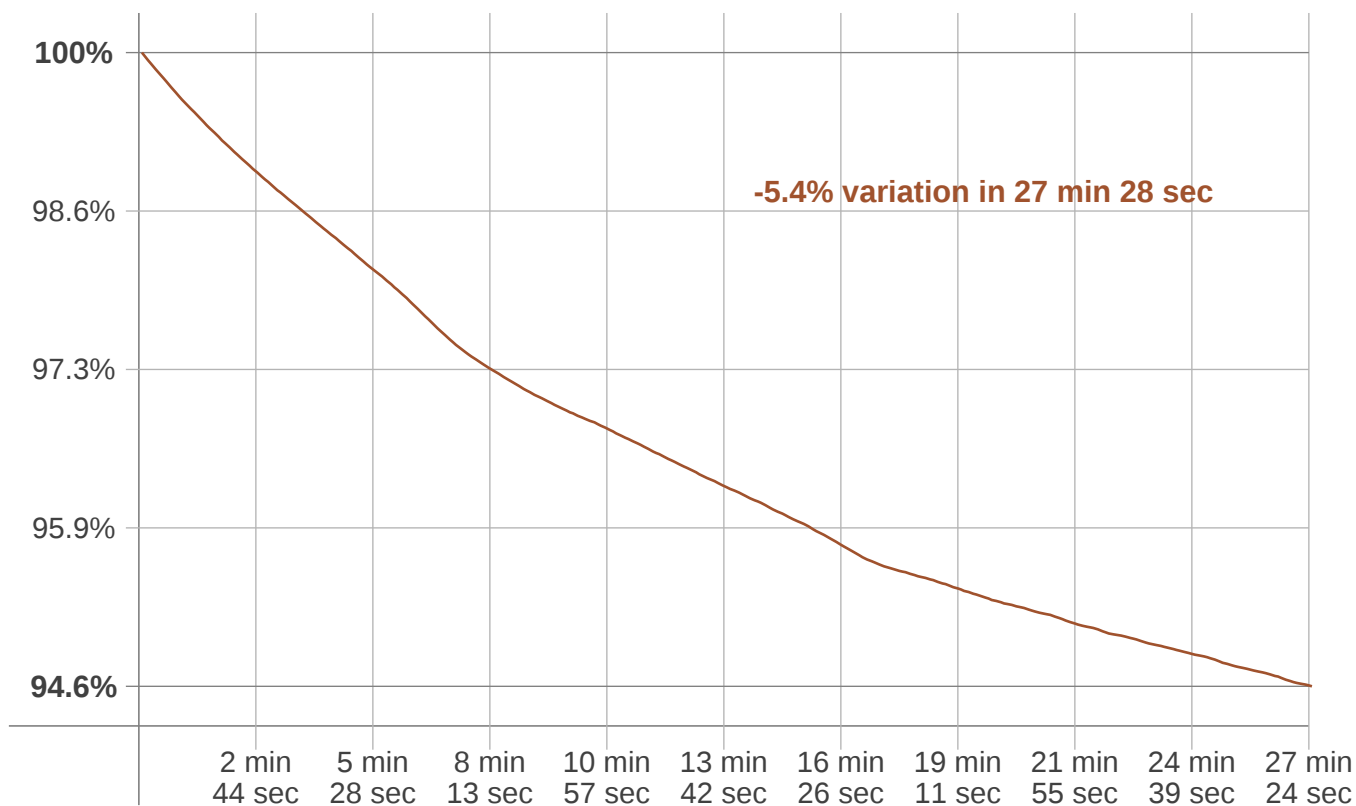
BUG rating:	B3 U2 G2	
Forward light	Lumens	Lumens %
Low(0-30):	1031.3	13.7%
Medium(30-60):	2112.3	28.1%
High(60-80):	435.5	5.8%
Very high(80-90):	28.1	0.4%
Back light		
Low(0-30):	1043.3	13.9%
Medium(30-60):	2140.7	28.5%
High(60-80):	646.6	8.6%
Very high(80-90):	47.3	0.6%
Uplight		
Low(90-100):	3.8	0.1%
High(100-180):	15.4	0.2%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	27 min 28 sec
Warmup variation	-5.4%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5104 K	+70 K	5174 K

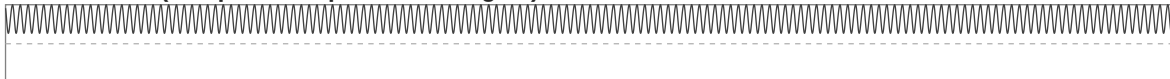
Output change

Output start	Output change	Output end
7927 lm	-419 lm	7508 lm

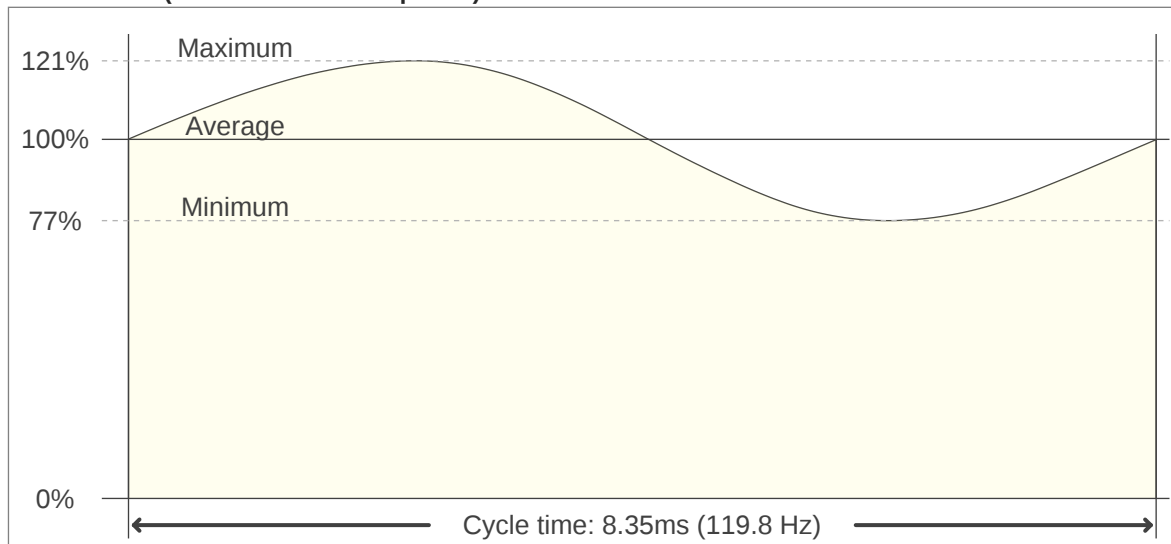


Flicker

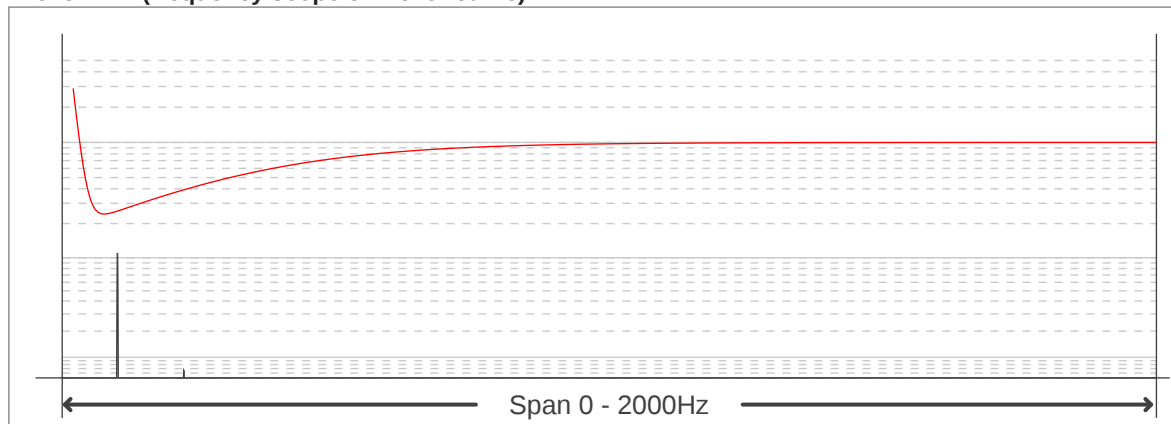
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.07
Flicker percentage:	22.4 %
SVM: (Visual flicker)	0.8

Flicker conditions:

Sample rate:	40000 samples/second
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