

Light efficiency:

143 Lumen/Watt

Output: 6832 lm

Light quality:

CRI: 73.3

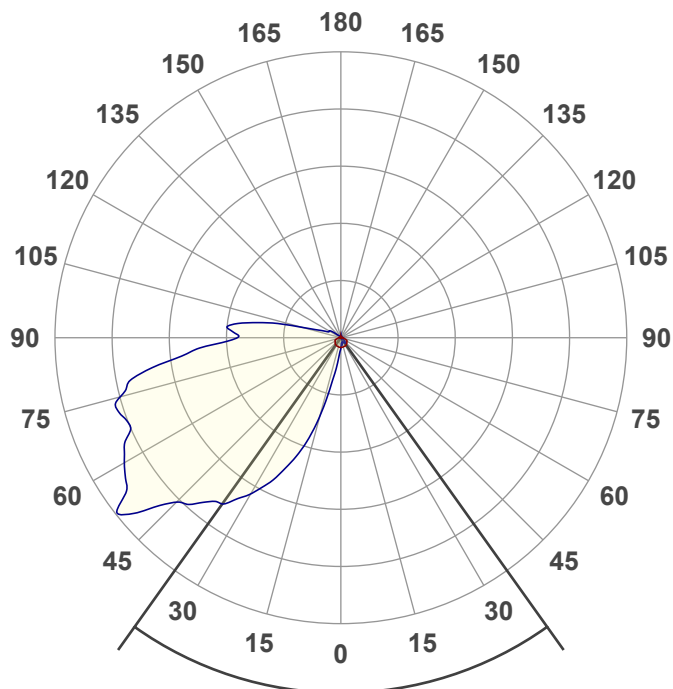
Peak: 4287 cd

Color temperature:

3930 K

Power: 47.8 W

PF: 0.99



Product name:

WPGL2-SW3B50-HPC (50 W)

Date and time:

8/3/2022 1:24:52 PM

Beam angle

71°

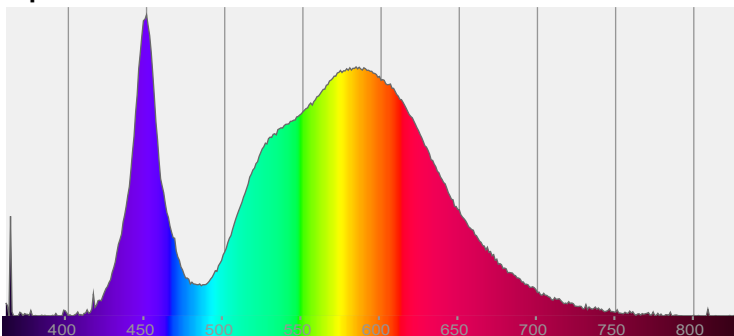


CIE 1931

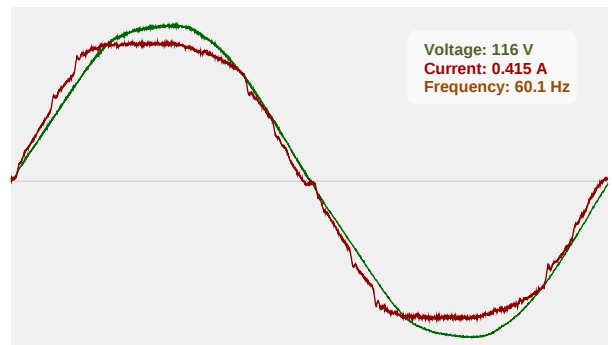
x: 0.384

y: 0.379

Spectra



Power



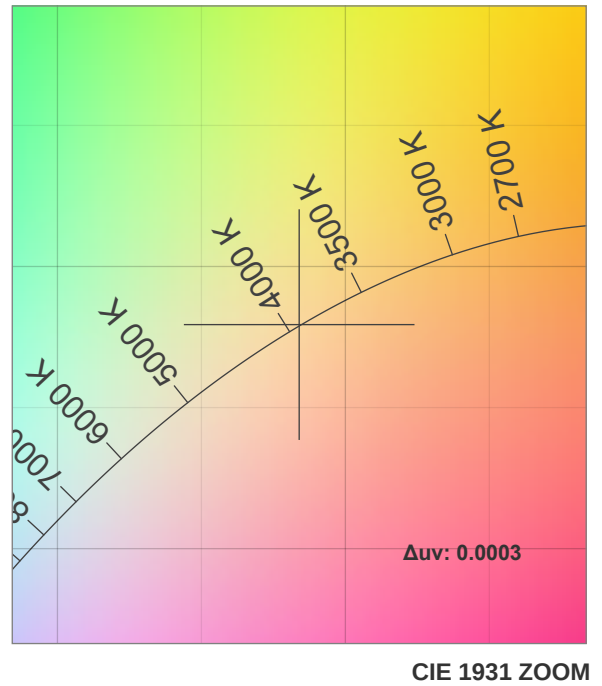
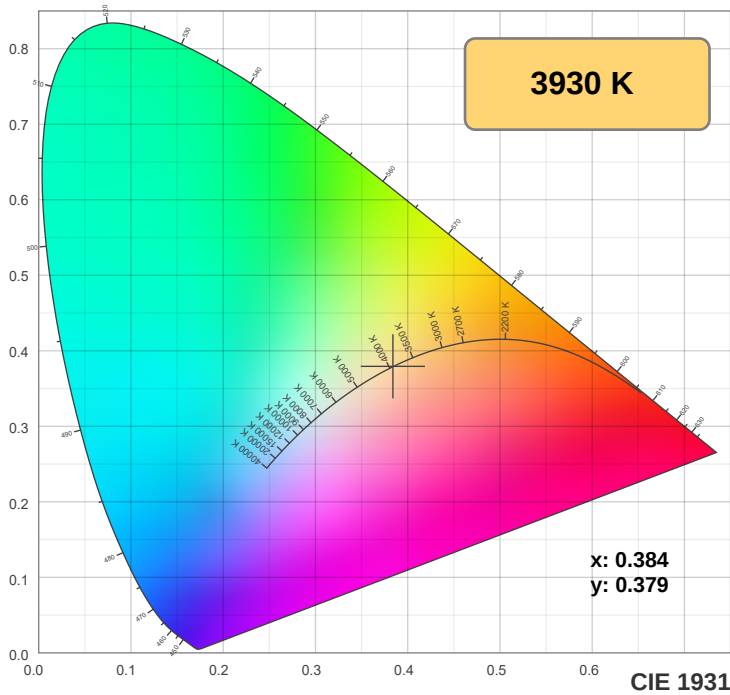
T 314.743.3067

F 314.972.6202

email: commercial-sales@superbrightleds.com

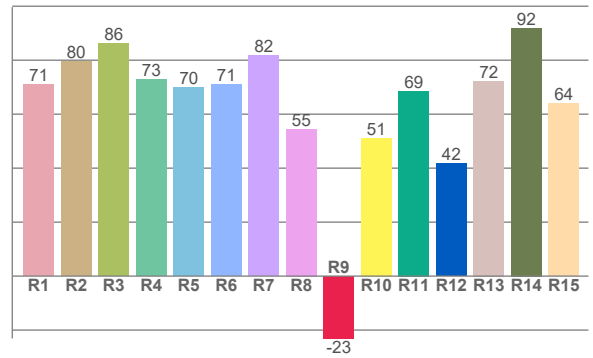
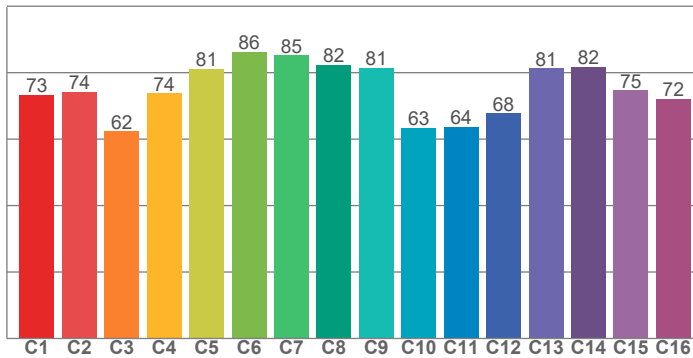
www.superbrightleds.com/

Color Specifications



TM30: 74.8

CRI: 73.3 (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
70.9	79.7	86.1	72.8	69.9	70.9	81.7	54.5	-23.1	51.2	68.5	41.8	72.3	91.9	64.0

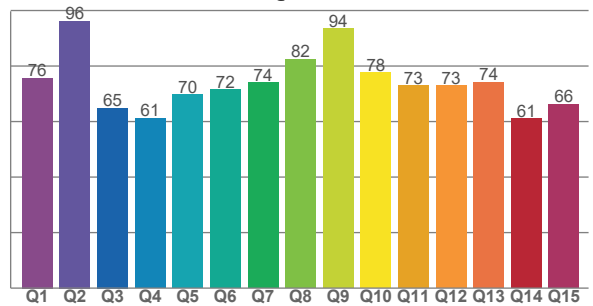
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
73.3	74.2	62.3	73.7	81.2	86.2	85.2	82.3	81.4	63.4	63.7	67.8	81.3	81.8	74.7	72.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
75.7	96.2	64.9	61.2	69.7	71.6	74.1	82.4	93.5	77.6	73.0	72.9	74.2	61.0	66.3

CQS: 72.4



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
3930 K	73.3	-23.1	74.8	95.1	72.4	0.384	0.379	0.226	0.336	0.0003



TM30 Report

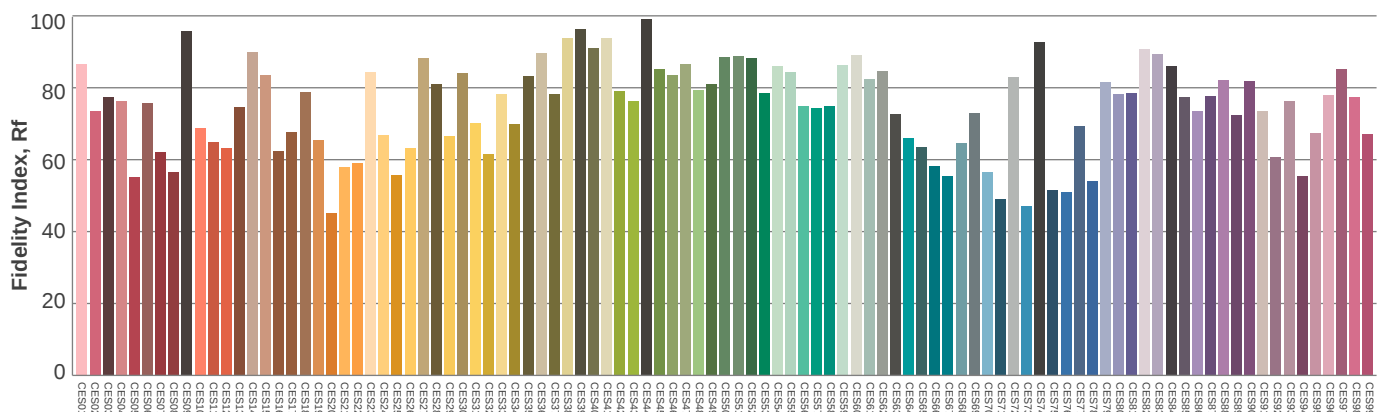
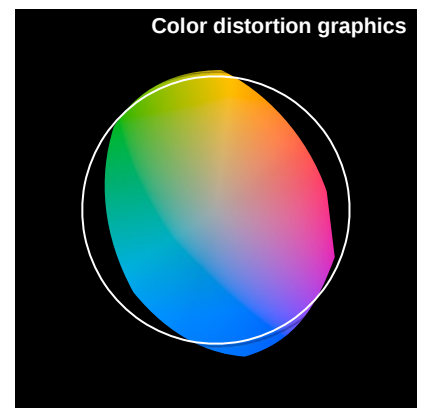
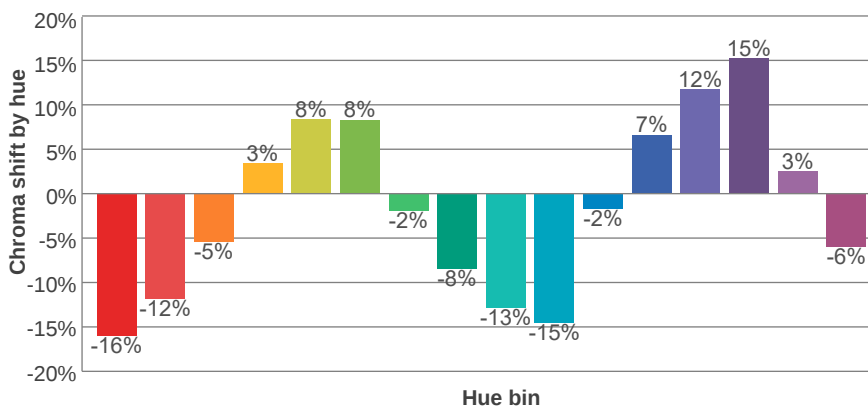
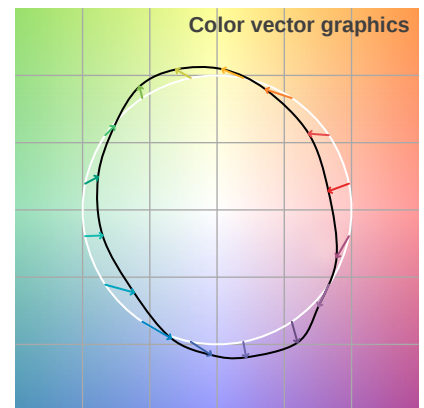
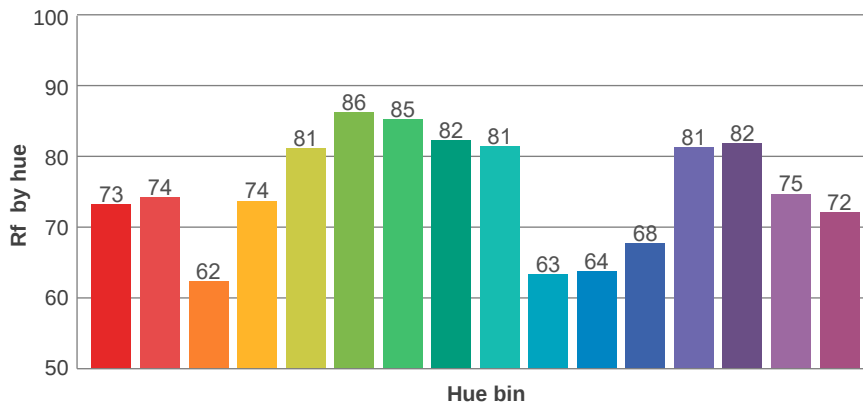
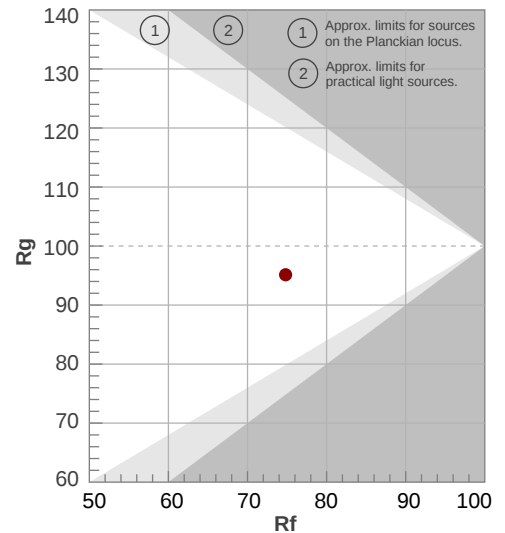
Rf 74.8

Fidelity index Rf

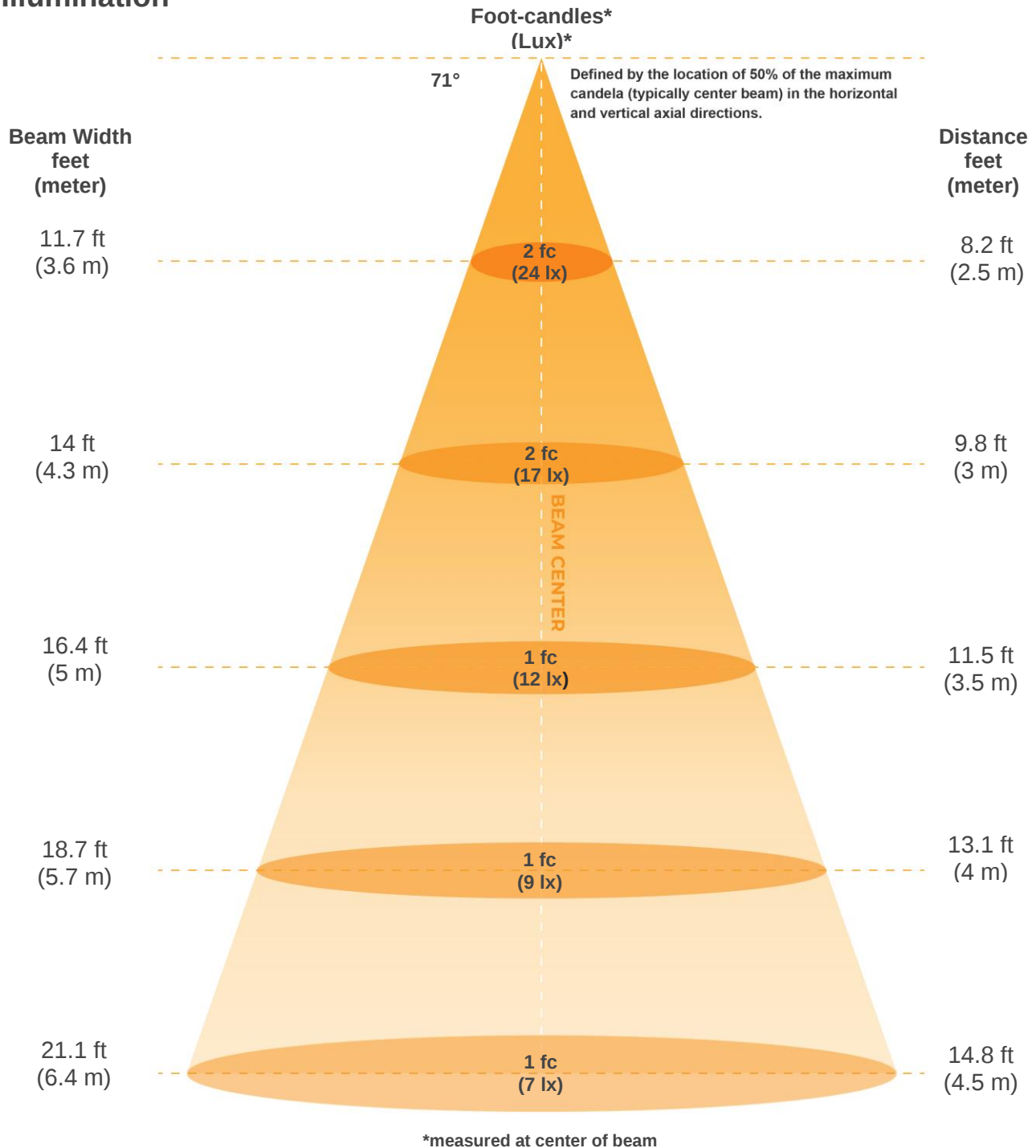
Rg 95.1

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	73	-16%	-3%
2	74	-12%	9%
3	62	-5%	20%
4	74	3%	17%
5	81	8%	10%
6	86	8%	-3%
7	85	-2%	-9%
8	82	-8%	-7%
9	81	-13%	2%
10	63	-15%	17%
11	64	-2%	25%
12	68	7%	17%
13	81	12%	0%
14	82	15%	-5%
15	75	3%	-18%
16	72	-6%	-17%



Illumination



Beam intensities from 1-20m

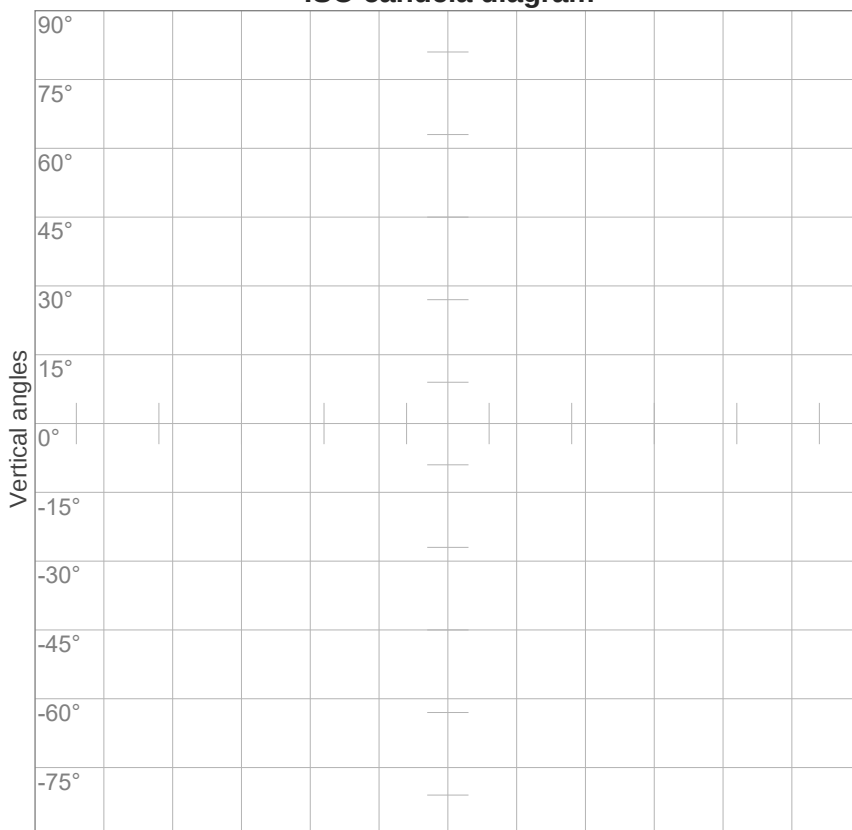
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
150lx	37lx	17lx	9lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx
13.9fcd	3.5fcd	1.5fcd	0.9fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
71°	116.1°	192.4°	44.7%	21.3%



ISO Diagrams

ISO candela diagram



10%	15 cd
20%	30 cd
30%	45 cd
40%	60 cd
50%	75 cd
60%	90 cd
70%	105 cd
80%	120 cd
90%	135 cd

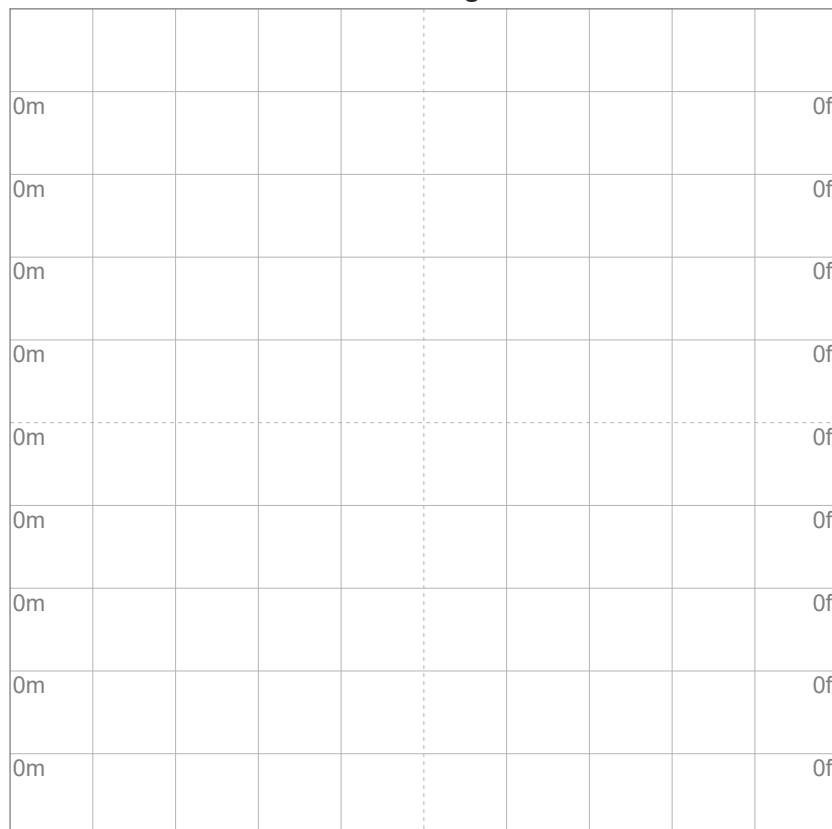
Conditions:

Number of c-planes: 16

Candela at center: 150 cd

Horizontal angles

ISO lux diagram



3%	44.9m lx
5%	74.8m lx
10%	0.150 lx
30%	0.449 lx
50%	0.748 lx

Conditions:

Number of c-planes: 16

Lux at center: 1.50 lx

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

Mounting height: 10 meters (33 feet) **UGR**



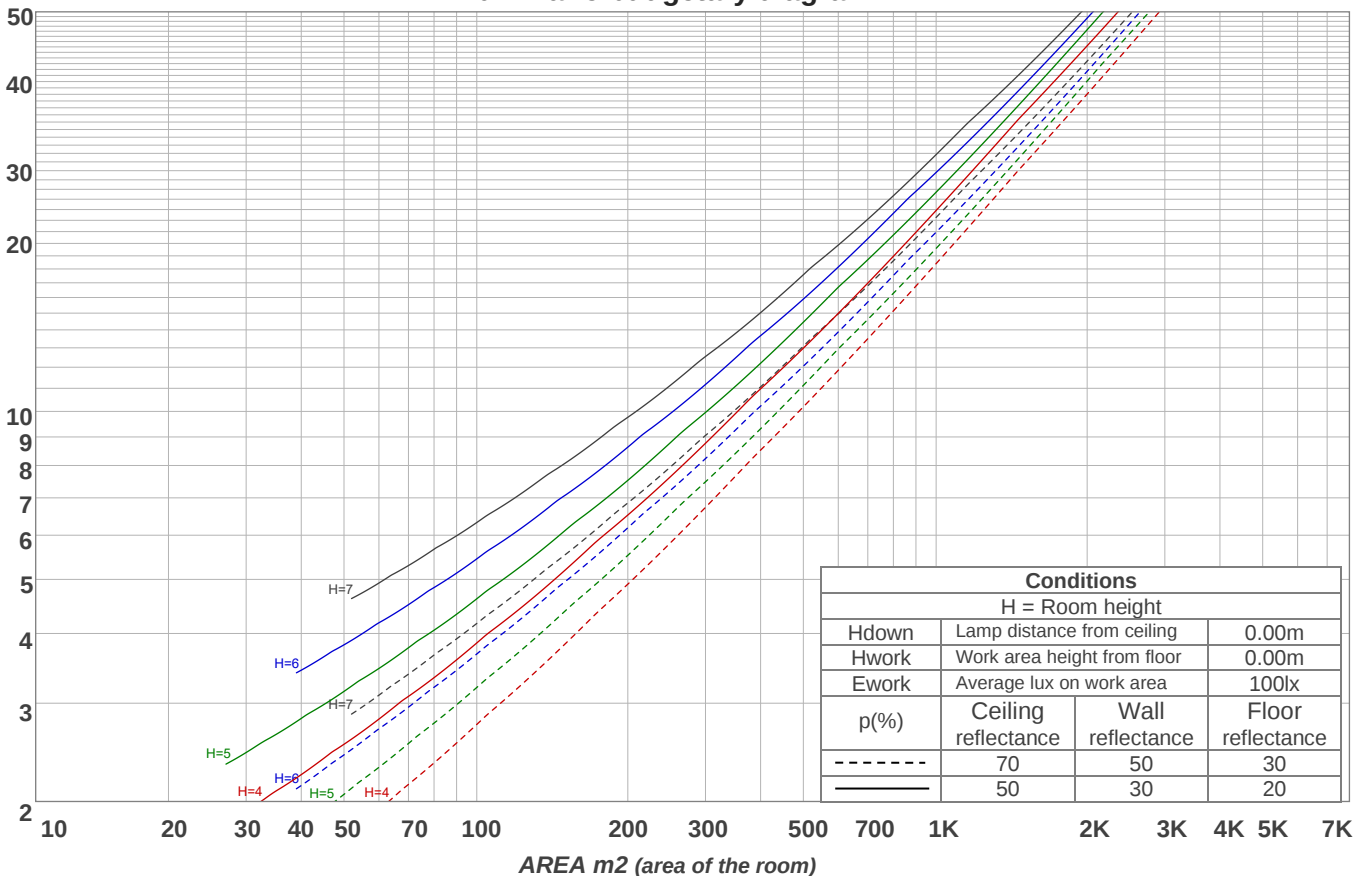
Light Planning

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	87
1	100	92	86	80	95	89	83	77	82	77	73	76	72	68	70	67	64	60
2	88	76	67	59	83	73	64	57	67	60	54	62	56	51	57	52	48	44
3	78	64	53	45	74	61	52	44	56	48	41	52	45	39	47	42	37	33
4	70	55	44	36	66	53	42	35	48	40	33	44	37	31	40	34	29	26
5	63	48	37	29	60	46	36	28	42	33	26	38	31	25	35	29	23	21
6	58	42	31	24	55	40	30	23	37	28	22	34	26	21	31	24	19	17
7	53	37	27	20	50	36	26	19	33	24	18	30	23	17	28	21	16	14
8	49	33	24	17	46	32	23	16	29	21	16	27	20	15	25	19	14	11
9	45	30	21	15	43	29	20	14	27	19	13	25	18	13	23	16	12	10
10	42	27	18	13	40	26	18	12	24	17	12	23	16	11	21	15	10	8

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°
16.7 lm	108 lm	326 lm	599 lm	885 lm	1117 lm	1110 lm	1069 lm	748 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
519 lm	192 lm	81.6 lm	38.5 lm	12.8 lm	5.86 lm	2.35 lm	1.35 lm	0.429 lm

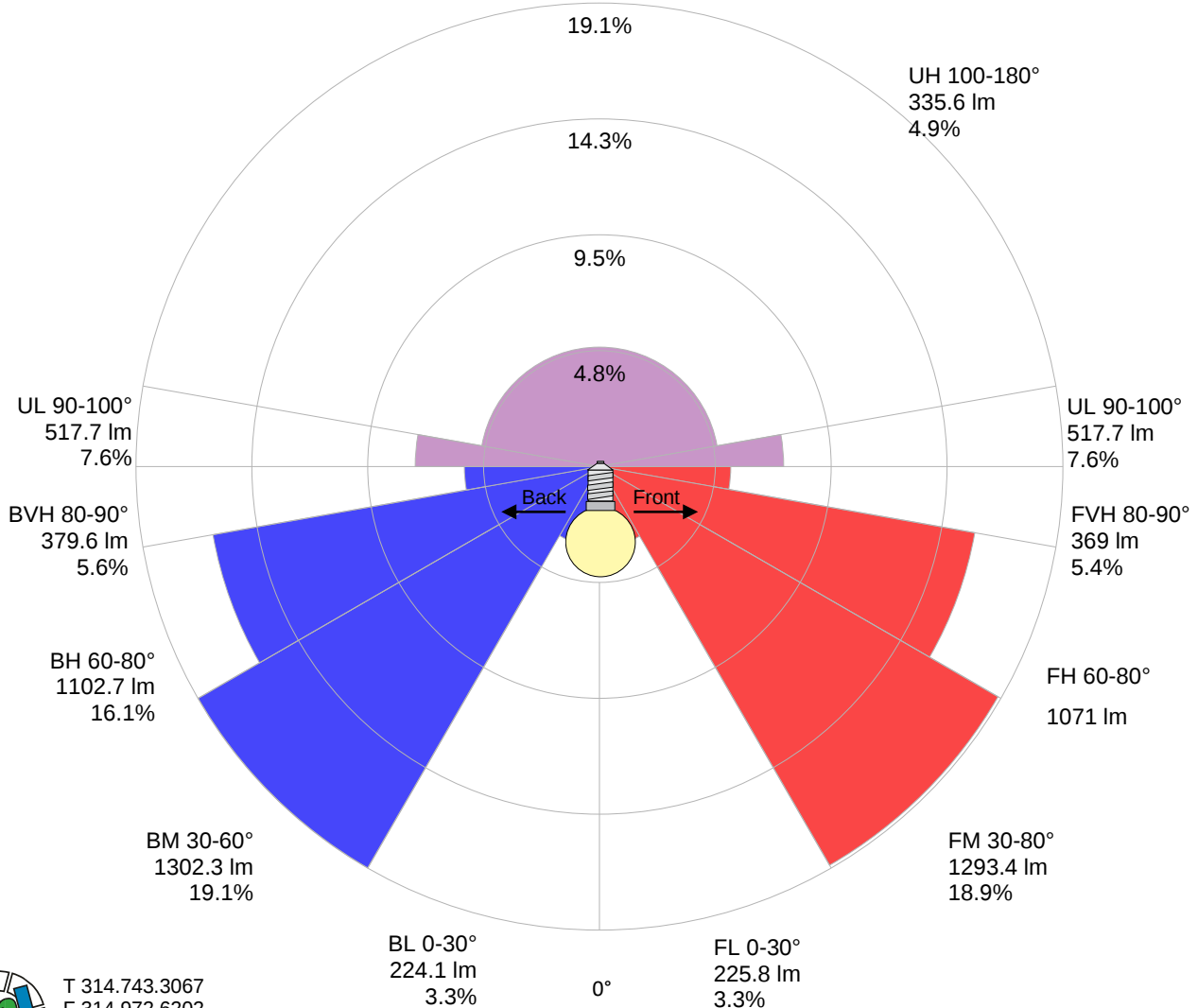


Road Report

LCS table

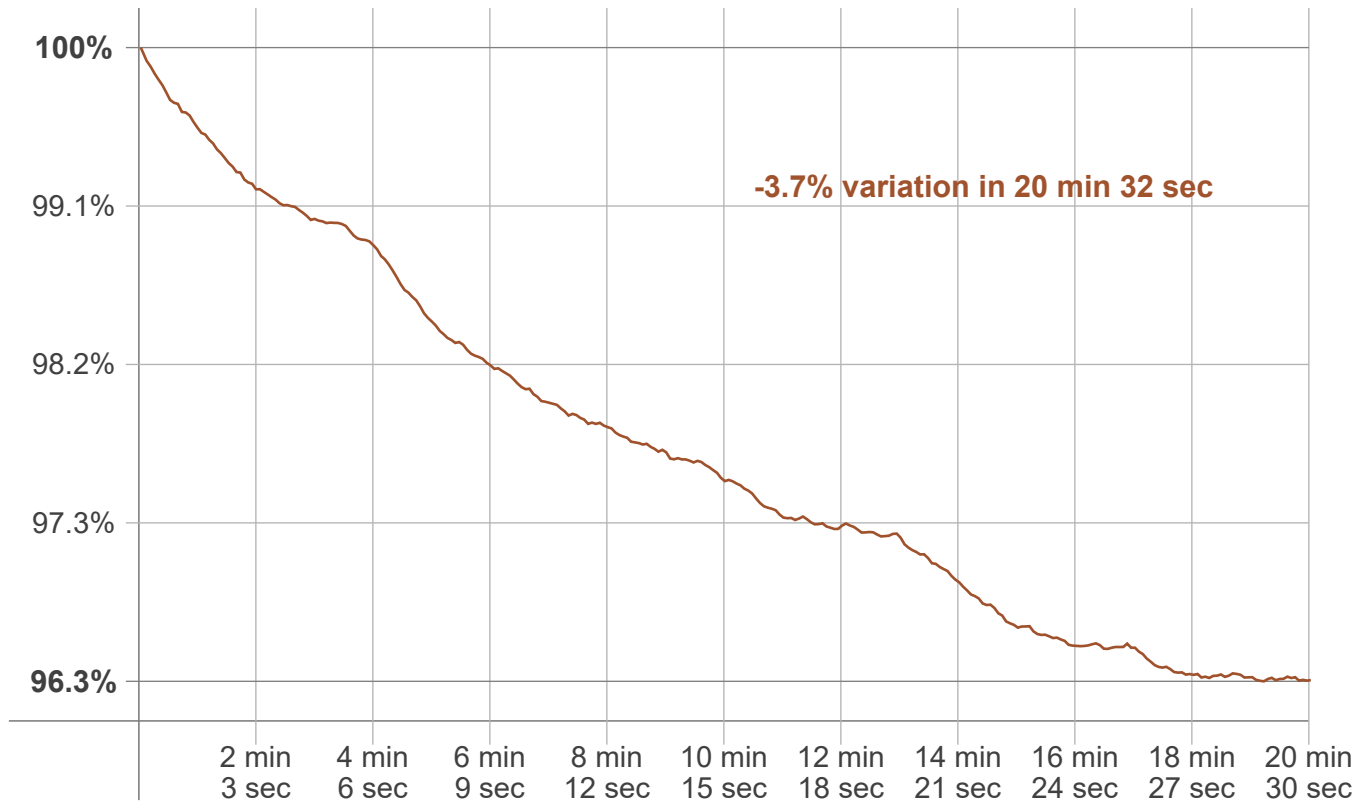
BUG rating:	B3 U4 G3	
Forward light	Lumens	Lumens %
Low(0-30):	225.8	3.3%
Medium(30-60):	1293.4	18.9%
High(60-80):	1071	15.7%
Very high(80-90):	369	5.4%
Back light		
Low(0-30):	224.1	3.3%
Medium(30-60):	1302.3	19.1%
High(60-80):	1102.7	16.1%
Very high(80-90):	379.6	5.6%
Uplight		
Low(90-100):	517.7	7.6%
High(100-180):	335.6	4.9%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 20 min 32 sec
Warmup variation	-3.7%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
3927 K	+3 K	3930 K

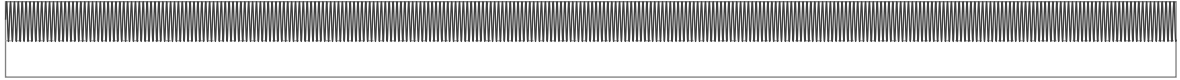
Output change

Output start	Output change	Output end
7072 lm	-241 lm	6832 lm

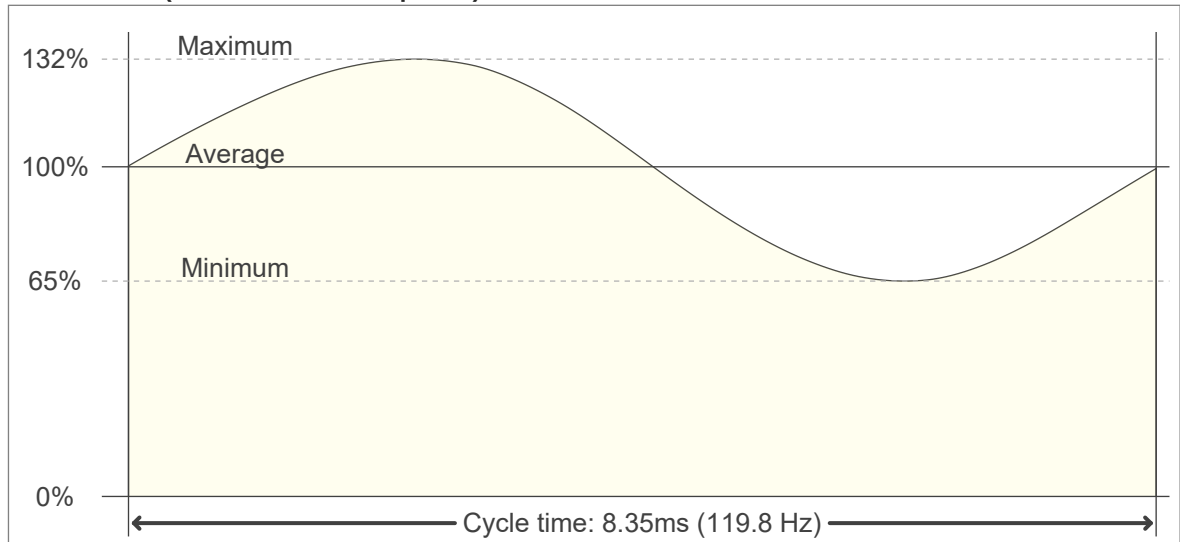


Flicker Specifications

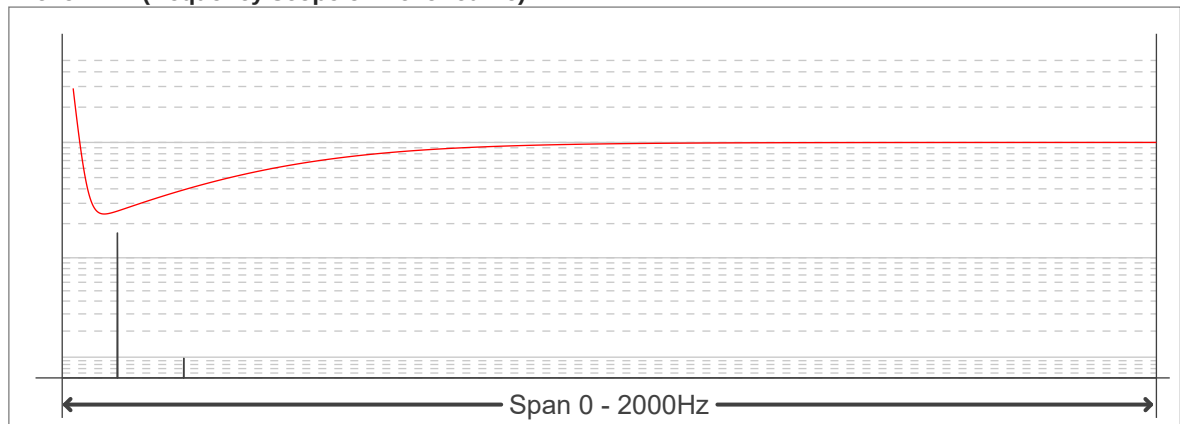
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.11
Flicker percentage:	34.12 %
SVM: (Visual flicker)	1.21

Flicker conditions:

Sample rate:	20000 samples/second
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