

Light efficiency:

134 Lumen/Watt

Output: 20341 lm

Light quality:

CRI: 84.2

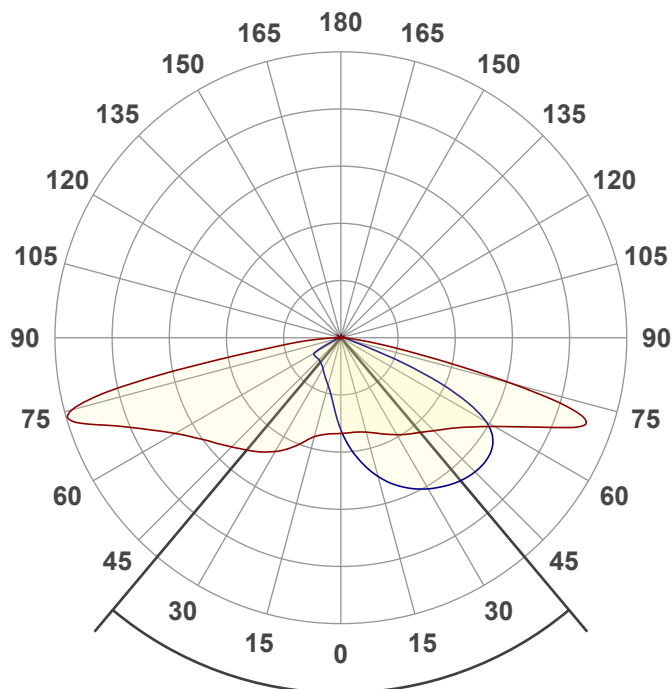
Peak: 10368 cd

Color temperature:

5073 K

Power: 152 W

PF: 1.0



Product name:

PLLD-S150K150-HP

Date and time:

7/1/2022 10:45:23 AM

Beam angle

79.9°

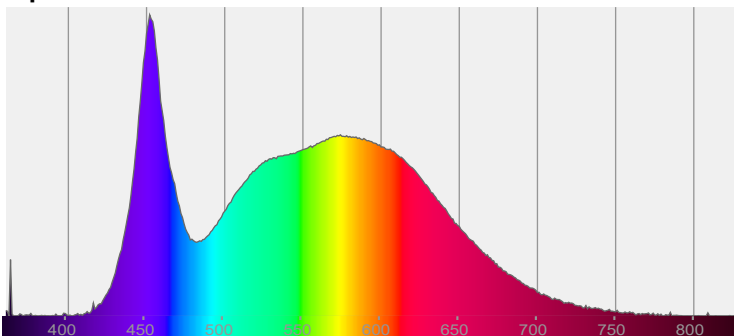


CIE 1931

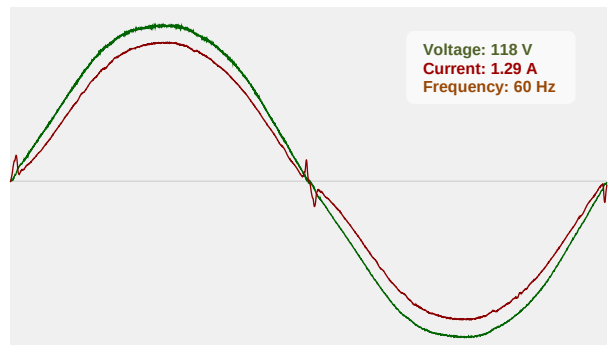
x: 0.343

y: 0.352

Spectra



Power



Voltage: 118 V
Current: 1.29 A
Frequency: 60 Hz



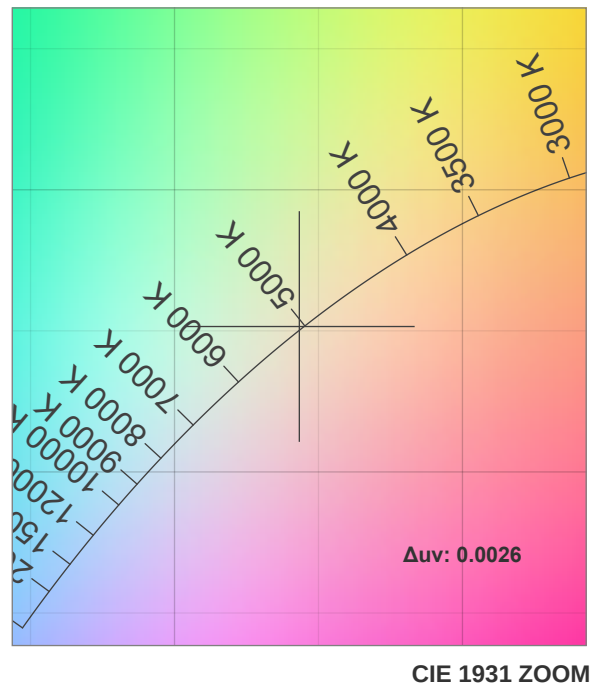
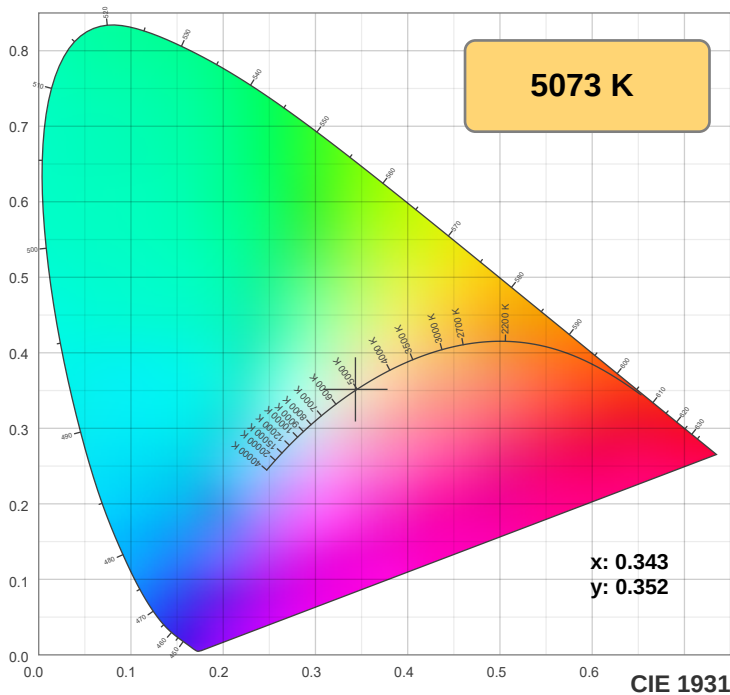
T 314.743.3067

F 314.972.6202

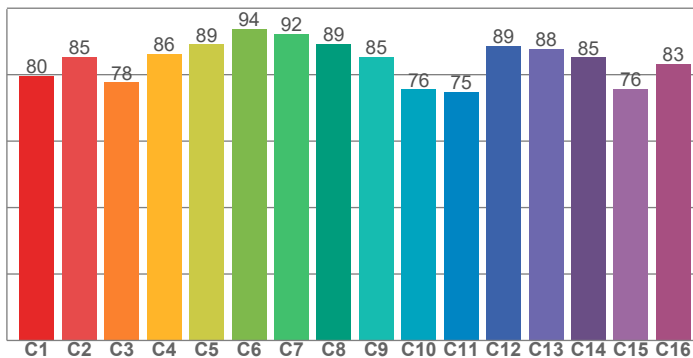
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

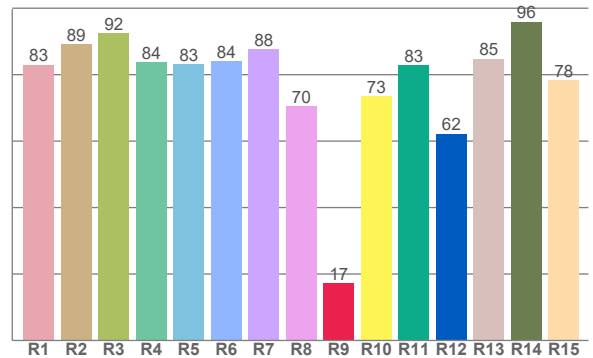
Color Specifications



TM30: 84.1



CRI: 84.2 (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
83.0	89.2	92.5	83.8	83.2	84.0	87.7	70.4	17.3	73.5	82.8	62.2	84.8	96.0	78.4

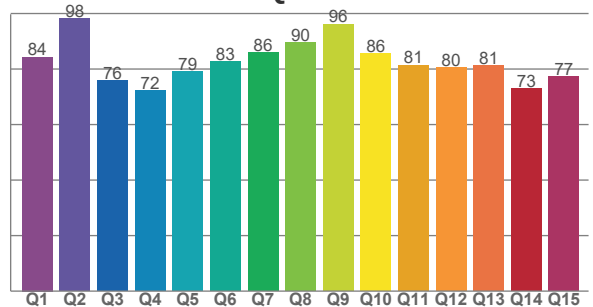
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.7	85.3	77.7	86.4	89.2	93.9	92.2	89.3	85.4	75.6	74.9	88.7	87.7	85.2	75.8	83.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84.4	98.2	75.9	72.2	79.1	82.6	85.8	89.5	96.1	85.5	81.4	80.5	81.2	73.0	77.2

CQS: 81.4



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
5073 K	84.2	17.3	84.1	96.4	81.4	0.343	0.352	0.210	0.323	0.0026



TM30 Report

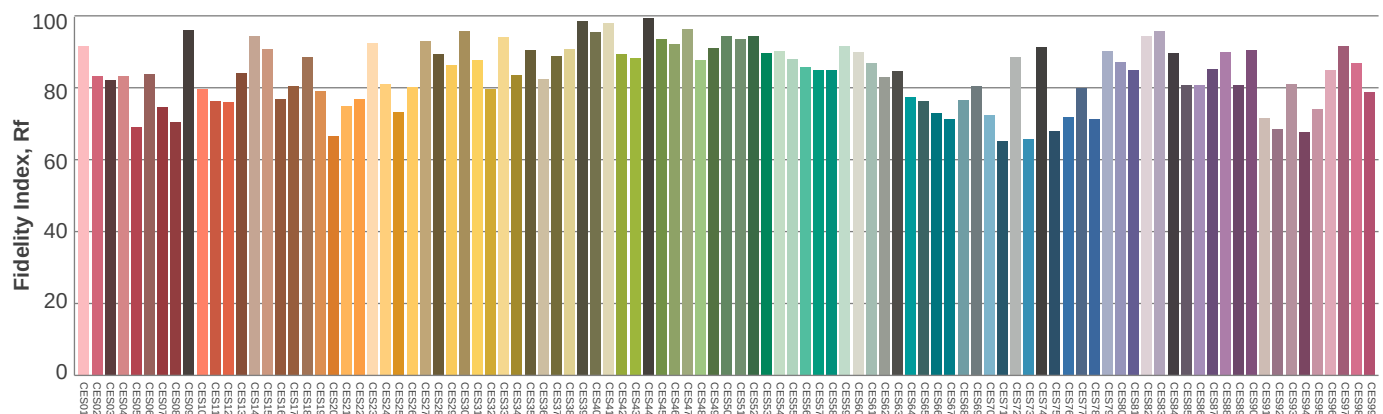
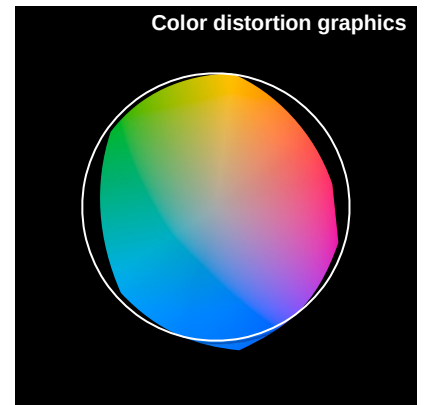
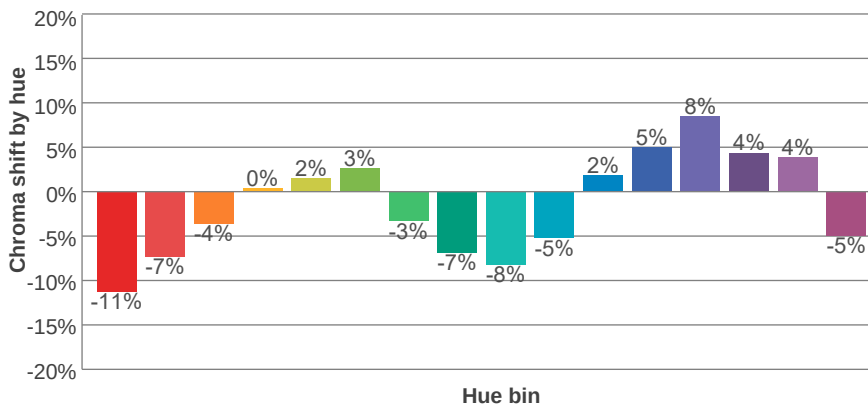
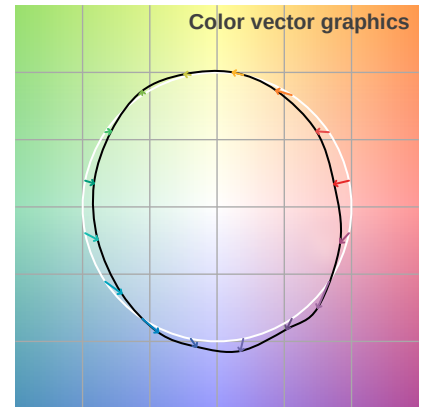
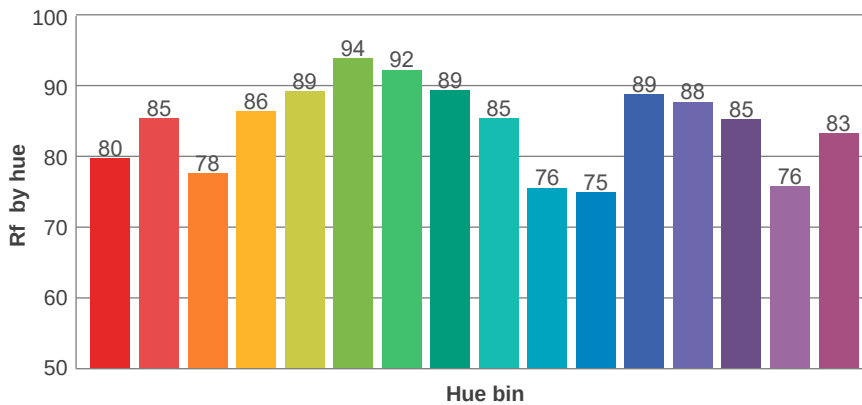
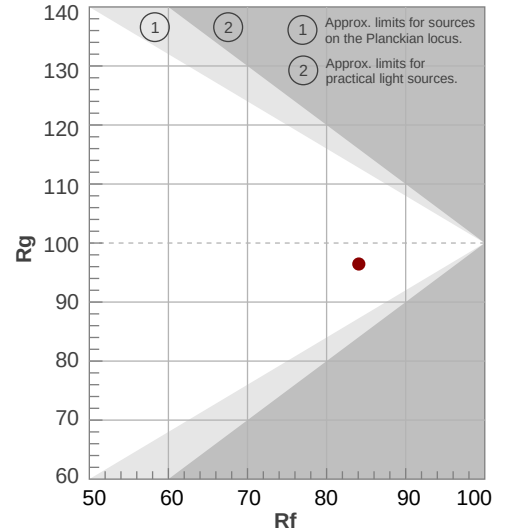
Rf 84.1

Fidelity index Rf

Rg 96.4

Gammut index Rg

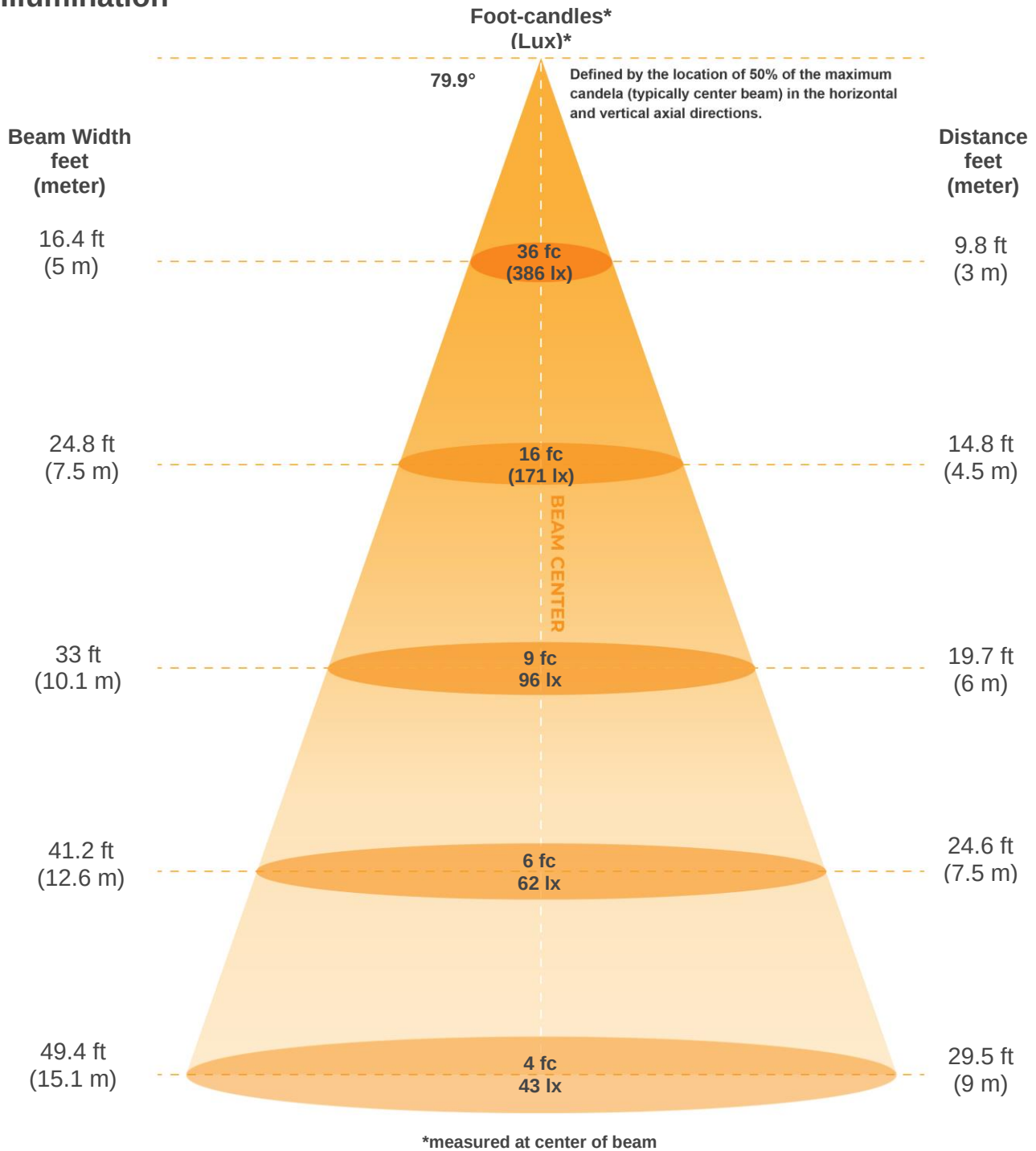
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	0%
2	85	-7%	6%
3	78	-4%	12%
4	86	0%	8%
5	89	2%	5%
6	94	3%	-1%
7	92	-3%	-3%
8	89	-7%	1%
9	85	-8%	7%
10	76	-5%	14%
11	75	2%	15%
12	89	5%	5%
13	88	8%	-4%
14	85	4%	-7%
15	76	4%	-21%
16	83	-5%	-8%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

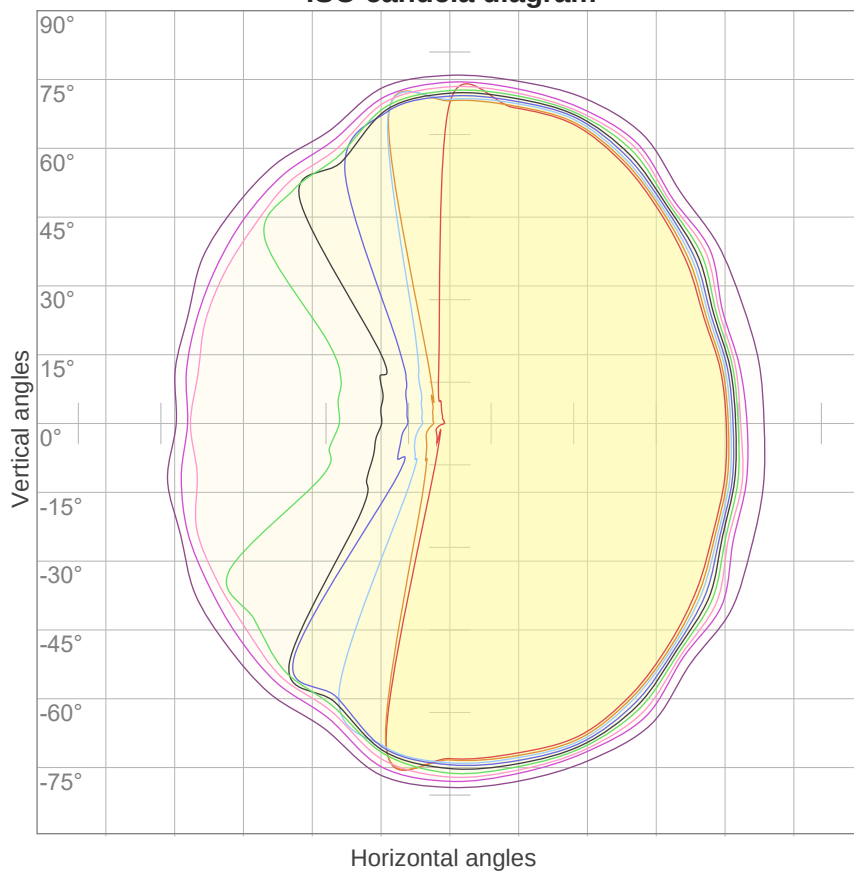
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
3470lx	868lx	386lx	217lx	139lx	96lx	71lx	54lx	43lx	35lx	29lx	24lx	21lx	18lx	15lx	14lx	12lx	11lx	10lx	9lx
322.4fc	80.6fcd	35.8fcd	20.2fcd	12.9fcd	9fcd	6.6fcd	5fcd	4fcd	3.2fcd	2.7fcd	2.2fcd	1.9fcd	1.6fcd	1.4fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79.9°	150.2°	163.7°	65.2%	36.1%



ISO Diagrams

ISO candela diagram



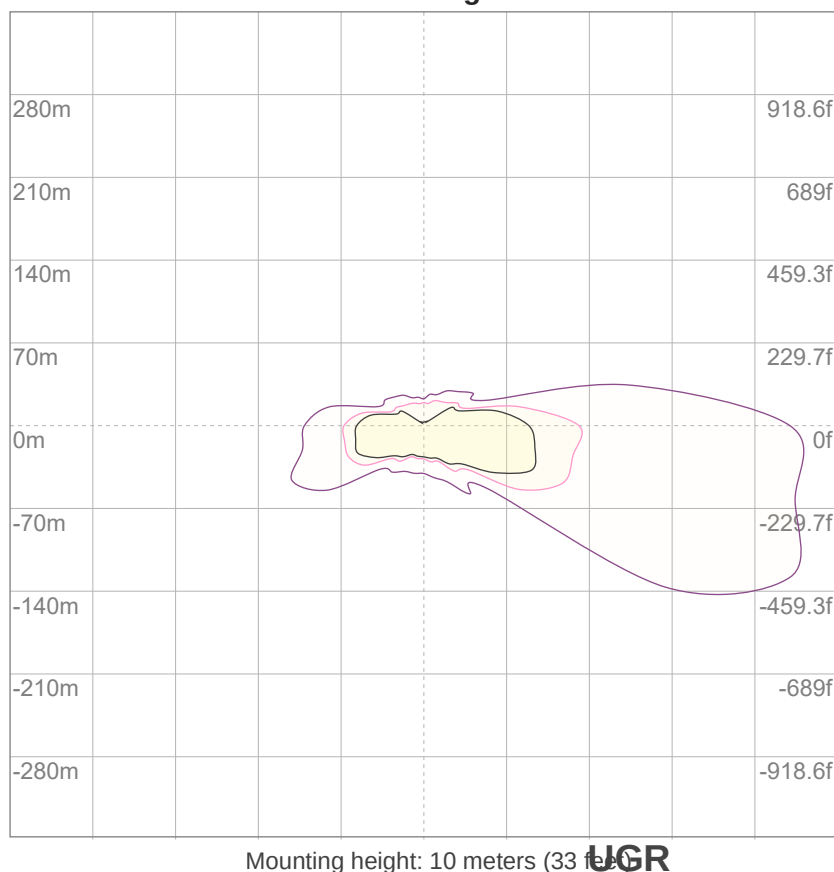
10%	347 cd
20%	694 cd
30%	1041 cd
40%	1388 cd
50%	1735 cd
60%	2082 cd
70%	2429 cd
80%	2776 cd
90%	3123 cd

Conditions:

Number of c-planes: 16

Candela at center: 3470 cd

ISO lux diagram



3%	1.04 lx
5%	1.74 lx
10%	3.47 lx
30%	10.4 lx
50%	17.4 lx

Conditions:

Number of c-planes: 16

Lux at center: 34.7 lx

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



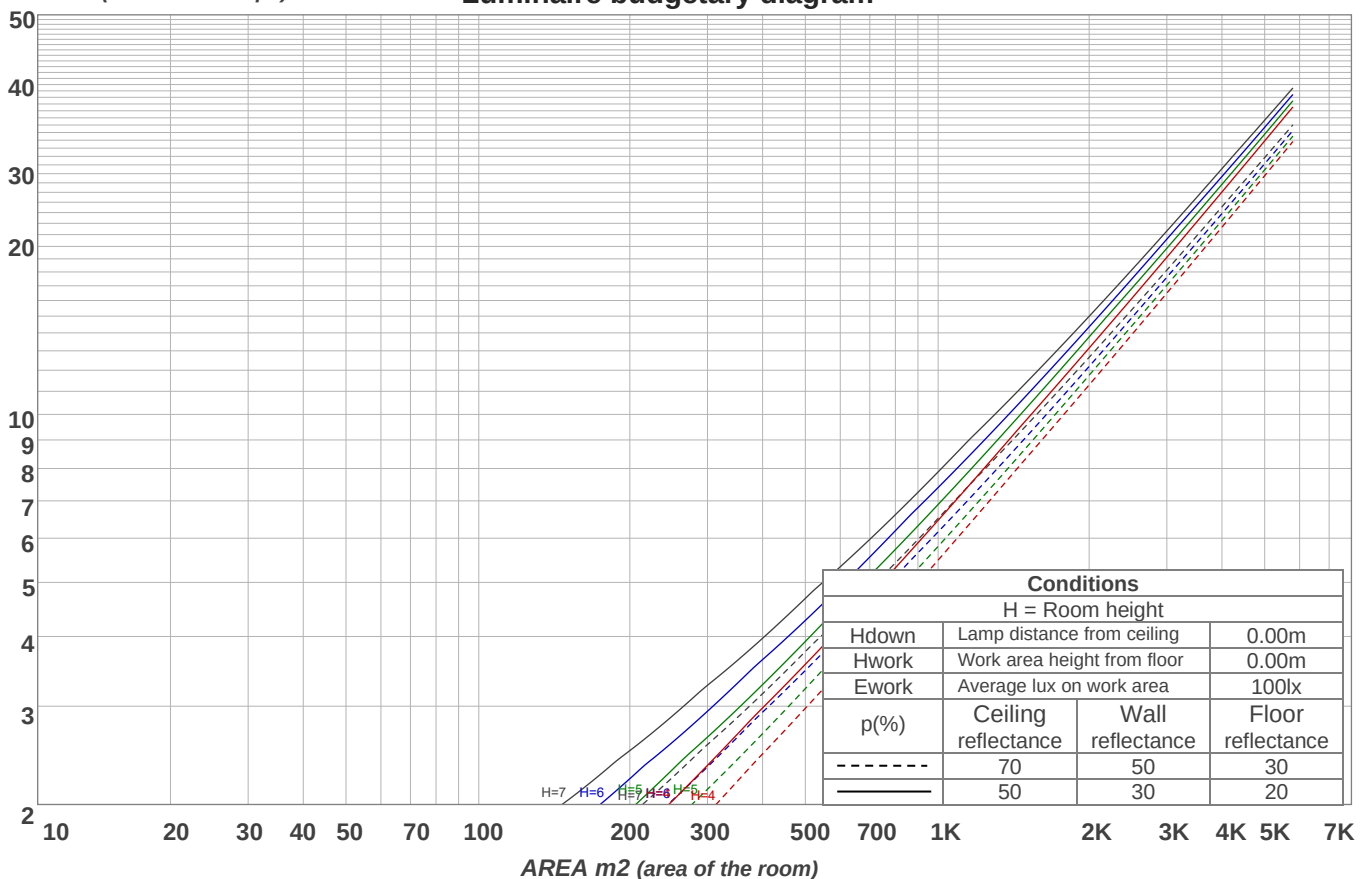
Light Planning

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	99
1	107	101	96	91	104	99	94	90	94	90	87	90	87	84	86	84	81	79
2	95	85	77	70	92	83	76	69	79	73	67	76	70	66	72	68	64	62
3	85	72	63	55	82	71	62	55	67	60	53	64	58	52	62	56	51	49
4	76	62	52	45	74	61	52	44	58	50	43	56	49	43	53	47	42	40
5	69	55	44	37	67	53	44	37	51	43	36	49	41	35	47	40	35	33
6	63	48	38	31	61	47	38	31	45	37	30	43	36	30	42	35	30	27
7	58	43	33	26	56	42	33	26	41	32	26	39	31	26	37	31	26	23
8	54	39	29	23	52	38	29	23	37	28	23	35	28	22	34	27	22	20
9	50	35	26	20	48	35	26	20	33	25	20	32	25	20	31	24	20	18
10	47	32	24	18	45	32	23	18	31	23	18	30	23	18	29	22	17	16

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°
331 lm	1023 lm	1791 lm	2590 lm	3396 lm	4125 lm	4162 lm	2456 lm	364 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
18.4 lm	13.9 lm	14.8 lm	15.0 lm	13.8 lm	11.6 lm	8.32 lm	5.04 lm	1.65 lm

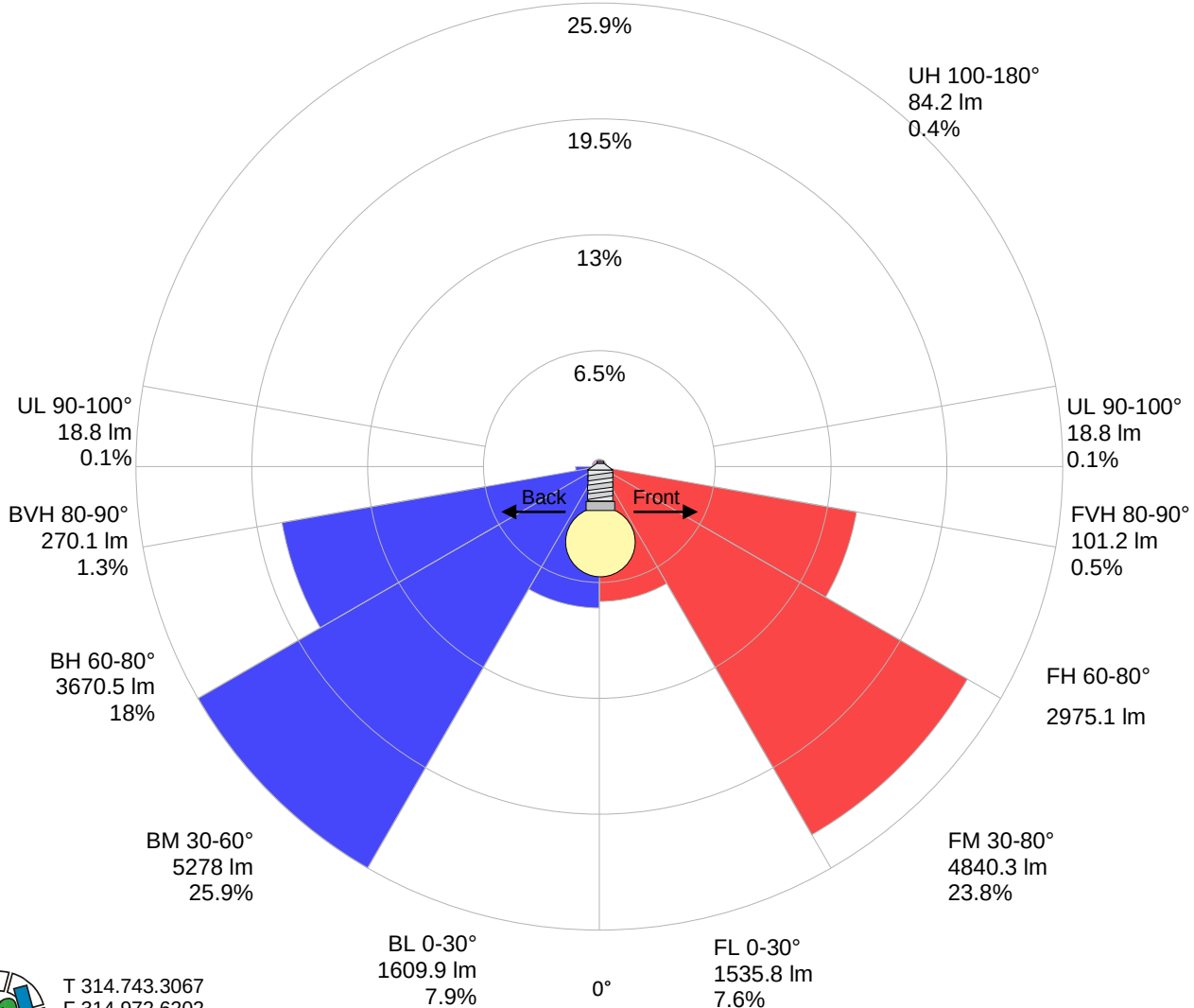


Road Report

LCS table

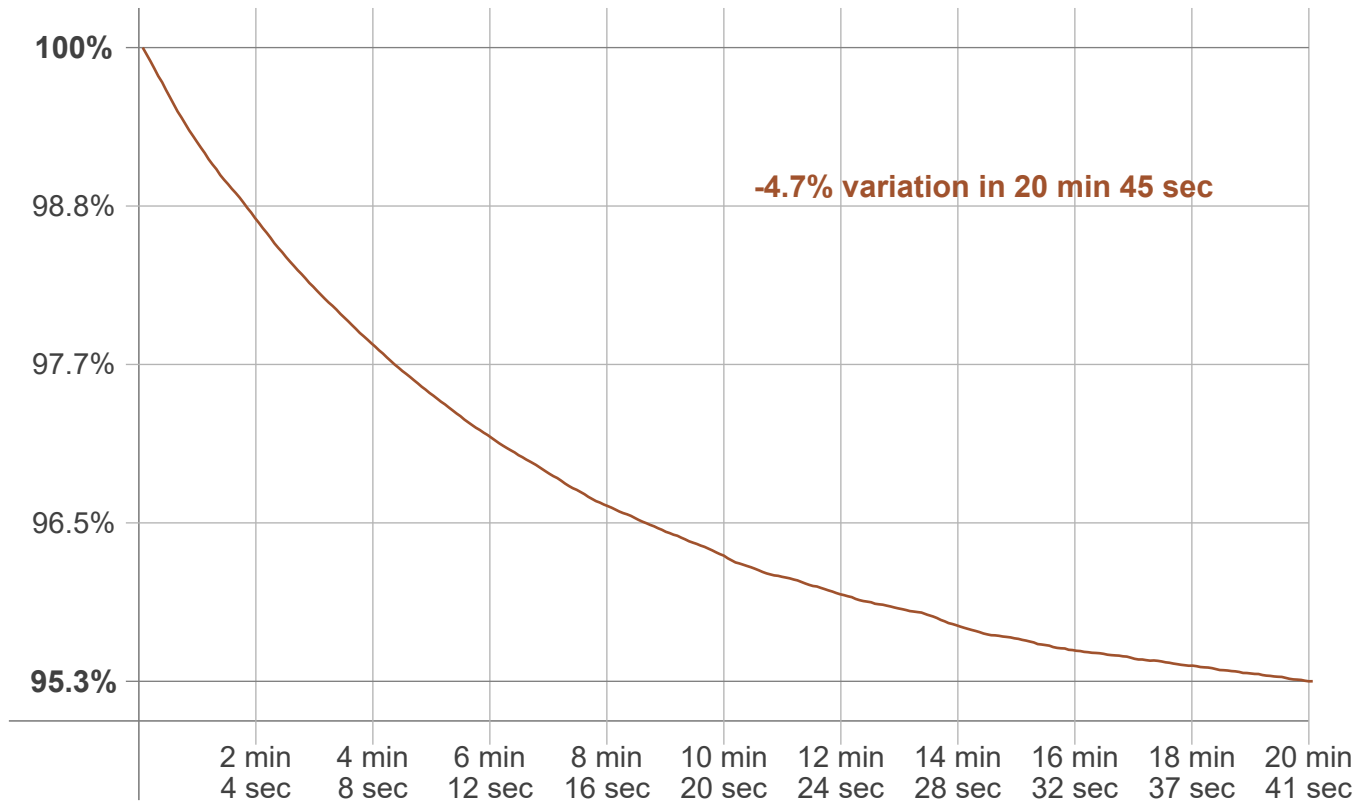
BUG rating:	B4 U3 G4	
Forward light	Lumens	Lumens %
Low(0-30):	1535.8	7.6%
Medium(30-60):	4840.3	23.8%
High(60-80):	2975.1	14.6%
Very high(80-90):	101.2	0.5%
Back light		
Low(0-30):	1609.9	7.9%
Medium(30-60):	5278	25.9%
High(60-80):	3670.5	18%
Very high(80-90):	270.1	1.3%
Uplight		
Low(90-100):	18.8	0.1%
High(100-180):	84.2	0.4%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 20 min 45 sec
Warmup variation	-4.7%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4967 K	+106 K	5073 K

Output change

Output start	Output change	Output end
21315 lm	-974 lm	20341 lm

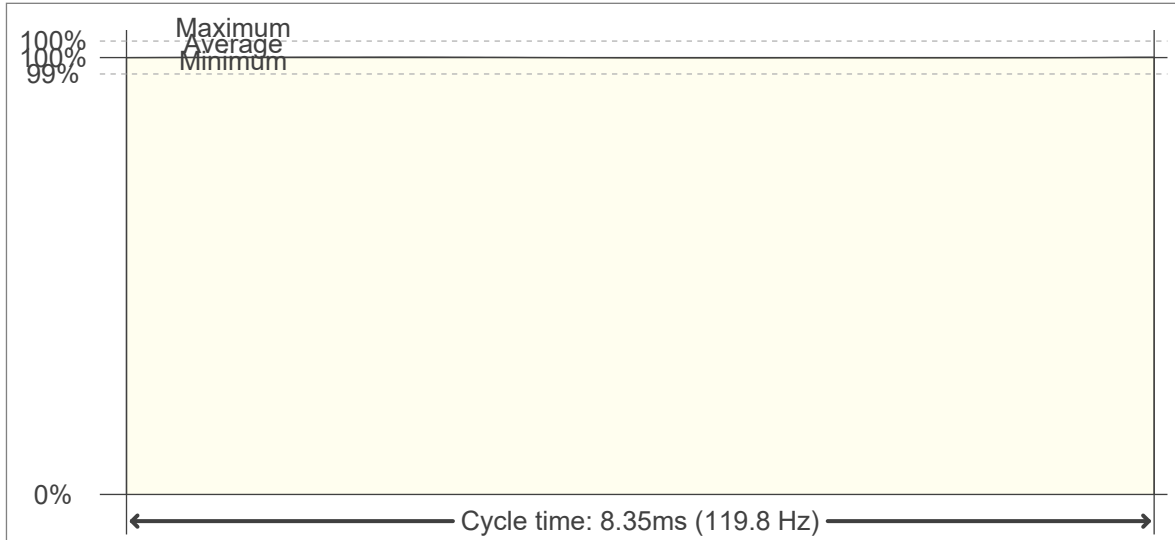


Flicker Specifications

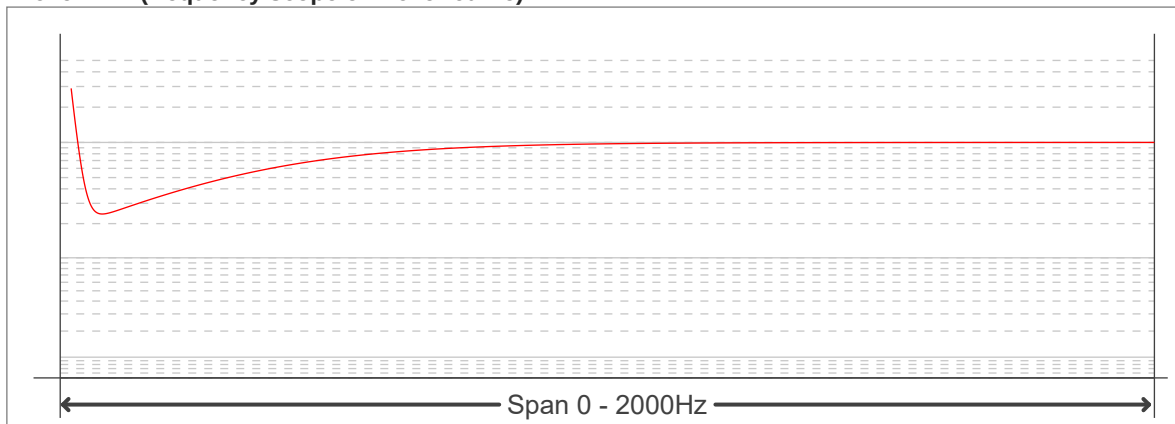
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0
Flicker percentage:	0.26 %
SVM: (Visual flicker)	0

Flicker conditions:

Sample rate:	20000 samples/second
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