Light efficiency:

141 Lumen/Watt

Light quality:

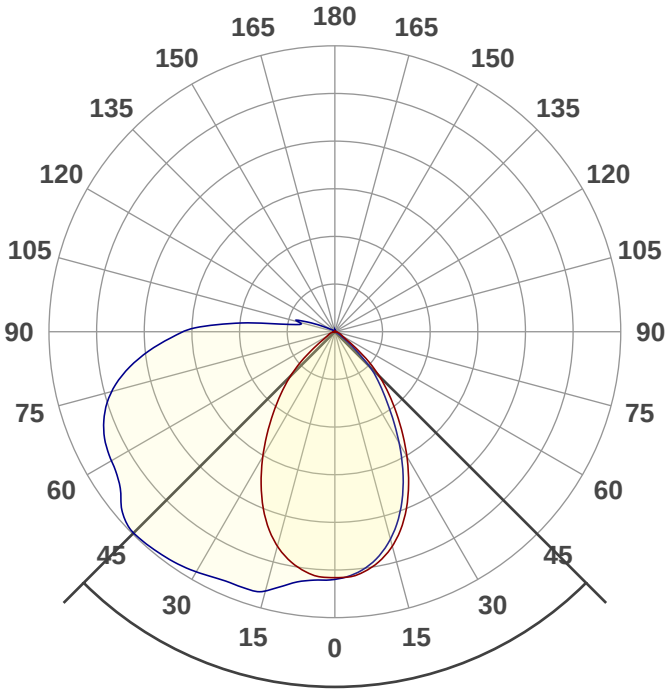
CRI: 73.4

Color temperature:

5441 K

Output: 11274 lm
Peak: 5401 cd

Power: 80.1 W
PF: 0.99



Beam angle **90°**

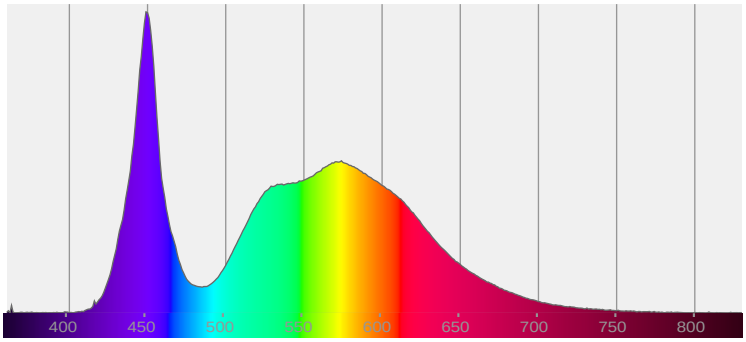
CIE 1931
x: 0.334
y: 0.335

Product name:
WPR2-50K80-WST1-BRP

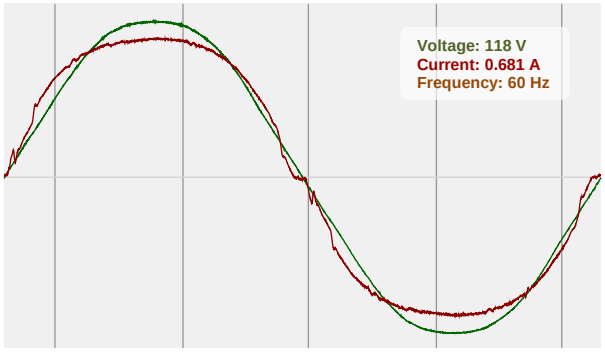
Light Head Aiming:
rear in default position, facing straight down; front rotated up 60°, facing outward

Date and time:
3/9/2021 12:24:06 PM

Spectra



Power



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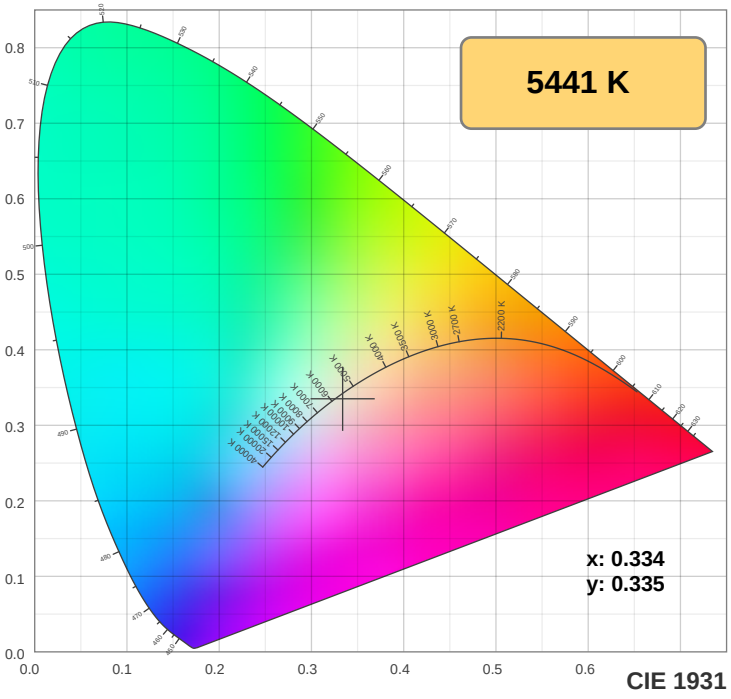
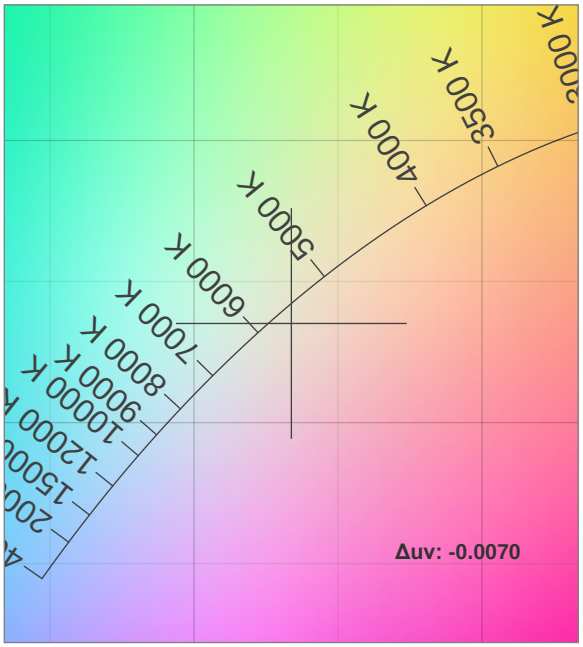
Color Specifications

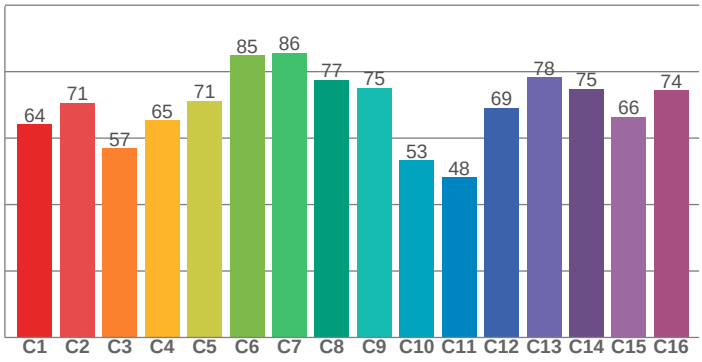


CIE 1931

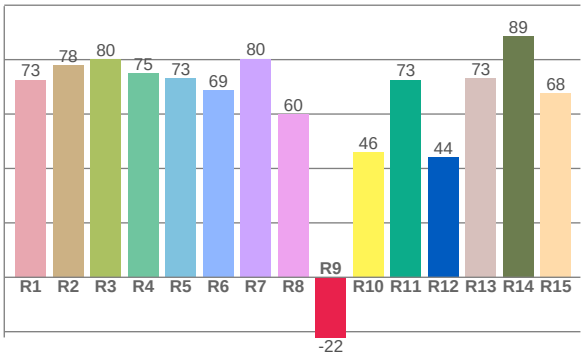


CIE 1931 ZOOM

TM30: 69.1



CRI: 73.4 (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
72.6	78.0	80.2	74.9	73.0	68.7	80.3	59.9	-22.1	46.0	72.6	44.0	73.0	88.6	67.6

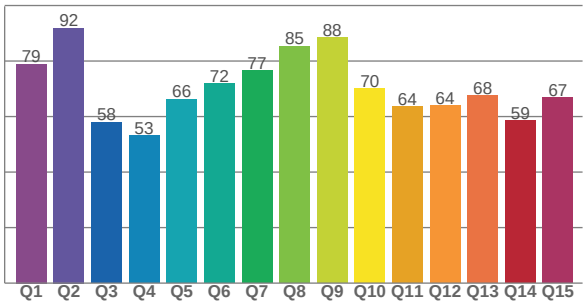
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64.1	70.7	57.0	65.3	71.1	84.9	85.6	77.5	75.2	53.3	48.1	69.0	78.3	74.8	66.4	74.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
78.9	91.9	57.9	53.1	66.3	71.9	76.6	85.4	88.4	70.1	63.6	64.0	67.5	58.5	66.8

CQS: 68.7



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5441 K	73.4	-22.1	69.1	95.0	68.7	0.334	0.335	0.210	0.316	-0.0070

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TM30 Report

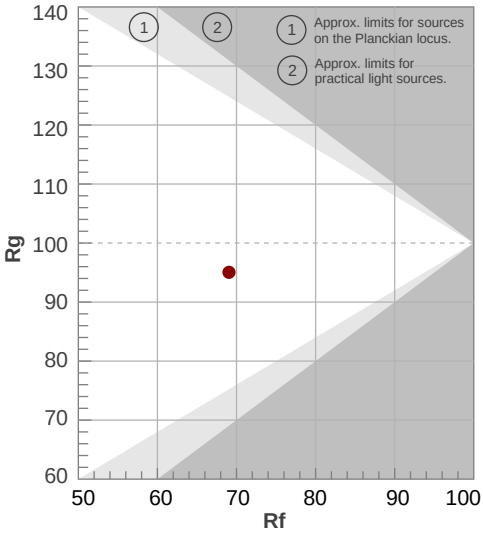
Rf 69.1

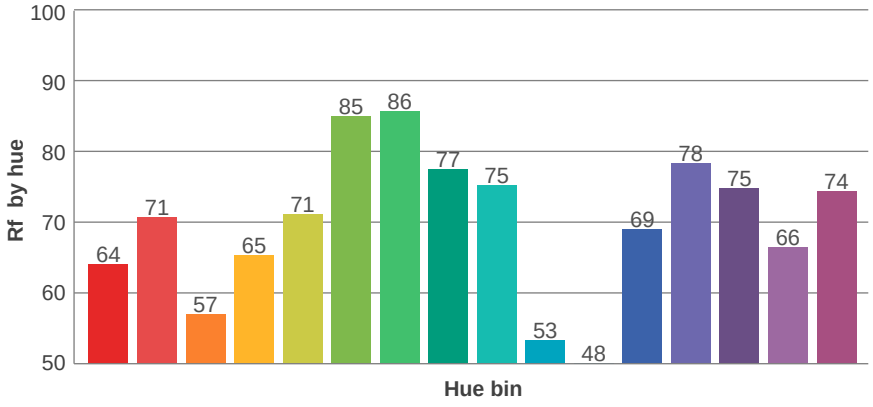
Fidelity index Rf

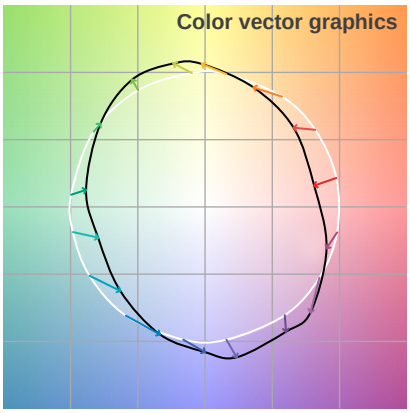
Rg 95.0

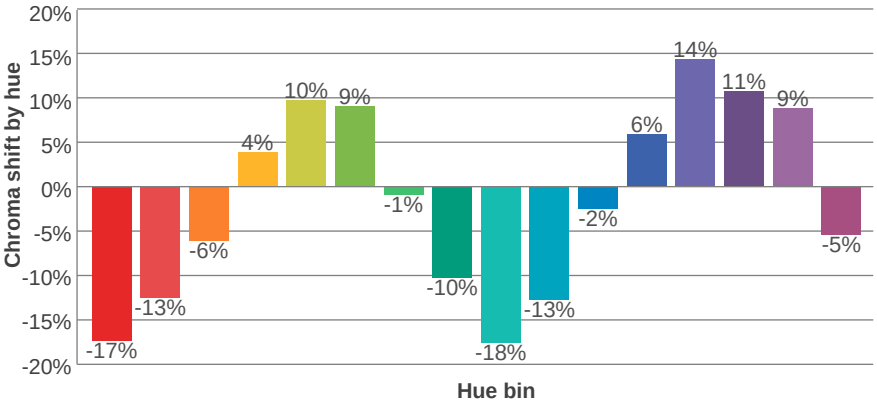
Gammut index Rg

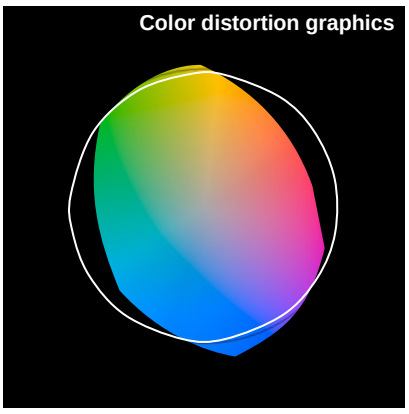
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	64	-17%	-2%
2	71	-13%	10%
3	57	-6%	21%
4	65	4%	19%
5	71	10%	12%
6	85	9%	0%
7	86	-1%	-8%
8	77	-10%	-6%
9	75	-18%	8%
10	53	-13%	22%
11	48	-2%	29%
12	69	6%	18%
13	78	14%	5%
14	75	11%	-6%
15	66	9%	-25%
16	74	-5%	-13%

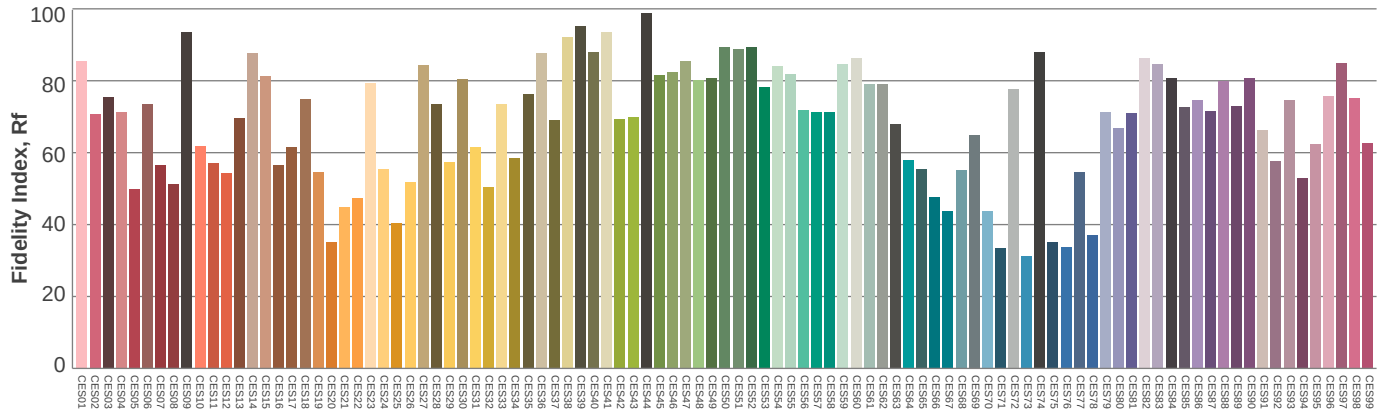












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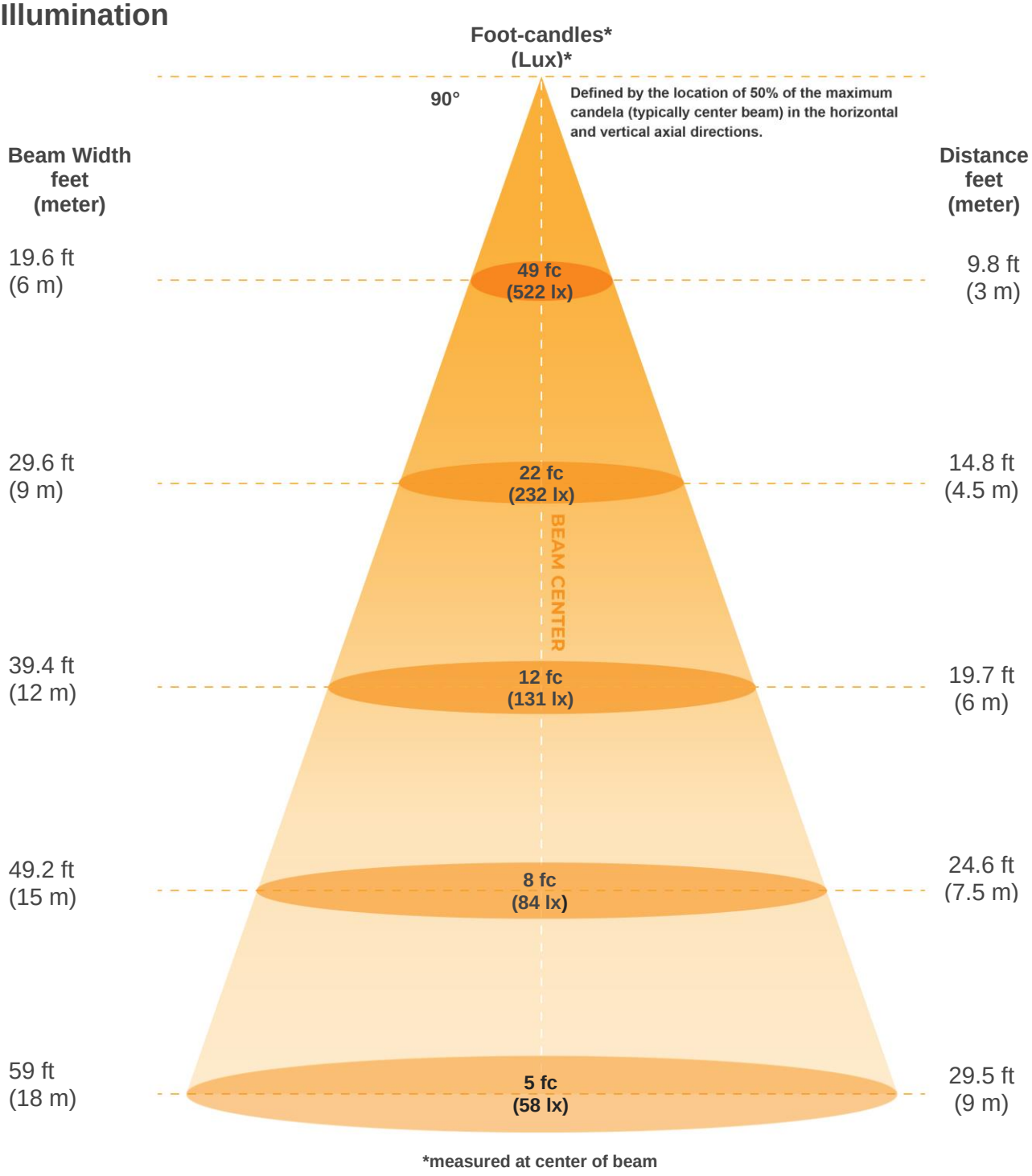
Illumination



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
4702lx	1175lx	522lx	294lx	188lx	131lx	96lx	73lx	58lx	47lx	39lx	33lx	28lx	24lx	21lx	18lx	16lx	15lx	13lx	12lx
436.8fc	109.2fc	48.5fcd	27.3fcd	17.5fcd	12.1fcd	8.9fcd	6.8fcd	5.4fcd	4.4fcd	3.6fcd	3fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1.1fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
90°	135.1°	158.3°	70.2%	52.9%

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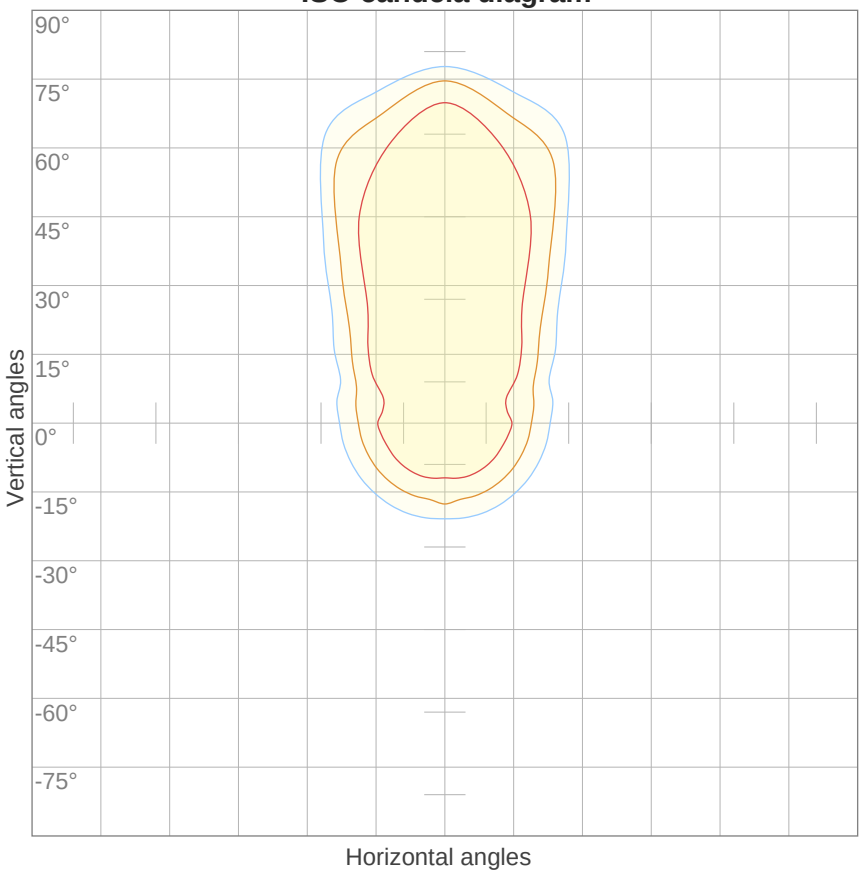
ISO Diagrams

ISO candela diagram



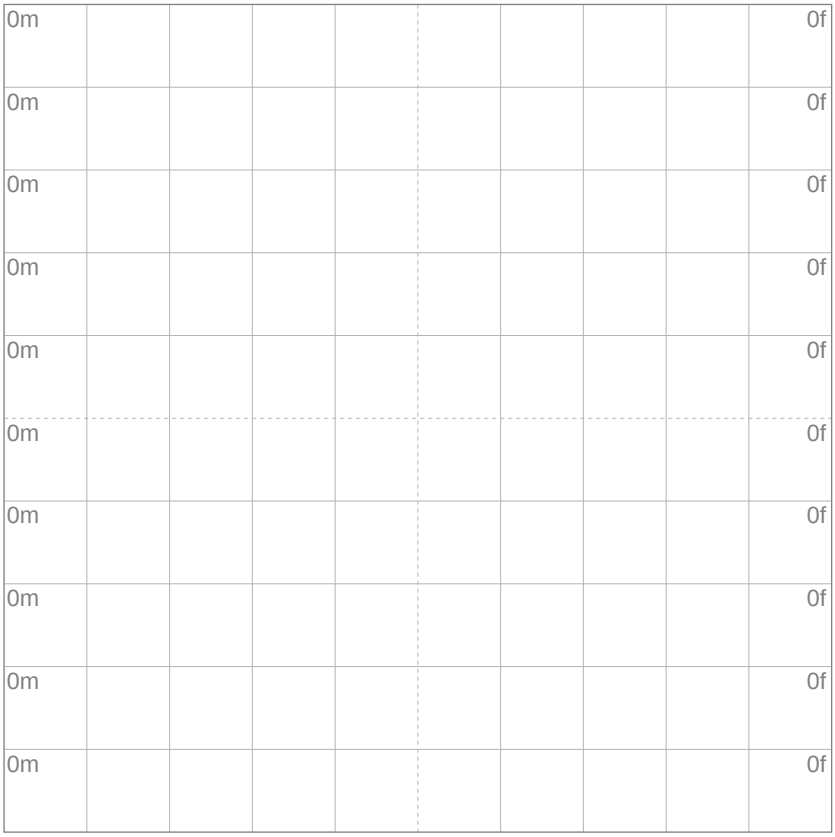
10%	470 cd
20%	940 cd
30%	1410 cd
40%	1881 cd
50%	2351 cd
60%	2821 cd
70%	3291 cd
80%	3761 cd
90%	4231 cd

Conditions:

Number of c-planes: 16

Candela at center: 4702 cd

ISO lux diagram



3%	1.41 lx
5%	2.35 lx
10%	4.70 lx
30%	14.1 lx
50%	23.5 lx

Conditions:

Number of c-planes: 16

Lux at center: 47.0 lx

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

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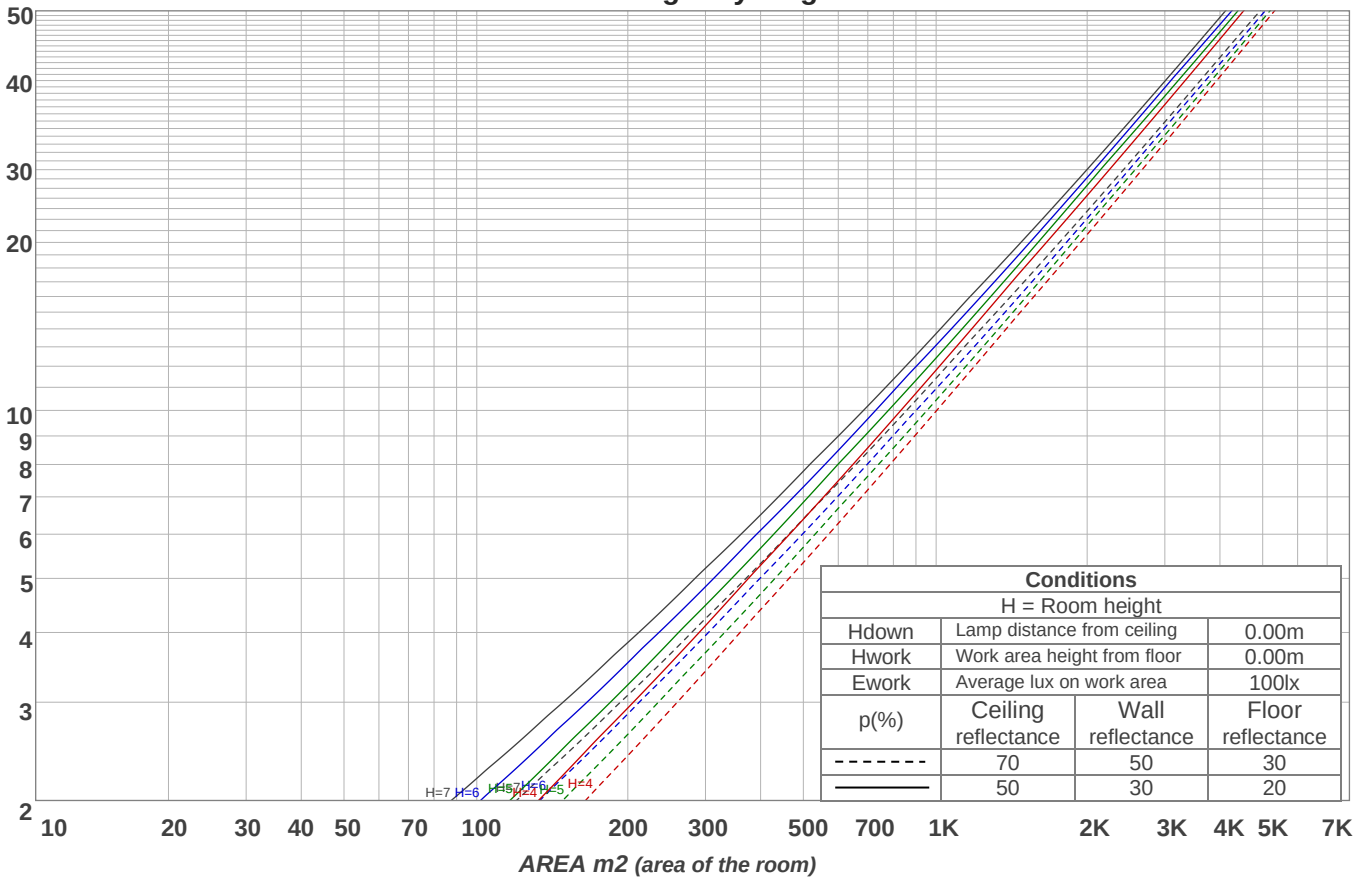
Light Planning

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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	106	101	96	91	102	98	93	89	92	89	85	87	84	82	83	80	78	76
2	96	88	81	75	93	85	79	73	81	75	71	77	72	68	73	69	66	63
3	88	78	69	63	85	75	68	62	72	65	60	68	63	58	65	60	56	54
4	81	69	60	54	78	68	59	53	64	57	52	61	55	50	58	53	49	47
5	75	62	53	47	73	61	53	46	58	51	45	56	49	44	53	48	43	41
6	70	57	48	42	67	55	47	41	53	46	40	51	44	39	49	43	39	37
7	65	52	43	37	63	51	43	37	49	41	36	47	40	35	45	39	35	33
8	61	47	39	33	59	47	39	33	45	38	33	43	37	32	41	36	32	30
9	57	44	36	30	55	43	35	30	41	35	30	40	34	29	39	33	29	27
10	54	41	33	28	52	40	33	28	39	32	27	37	31	27	36	30	26	25

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
441 lm	1231 lm	1698 lm	1765 lm	1583 lm	1193 lm	1063 lm	935 lm	697 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
394 lm	171 lm	49.6 lm	19.8 lm	11.8 lm	8.42 lm	6.46 lm	4.21 lm	1.46 lm

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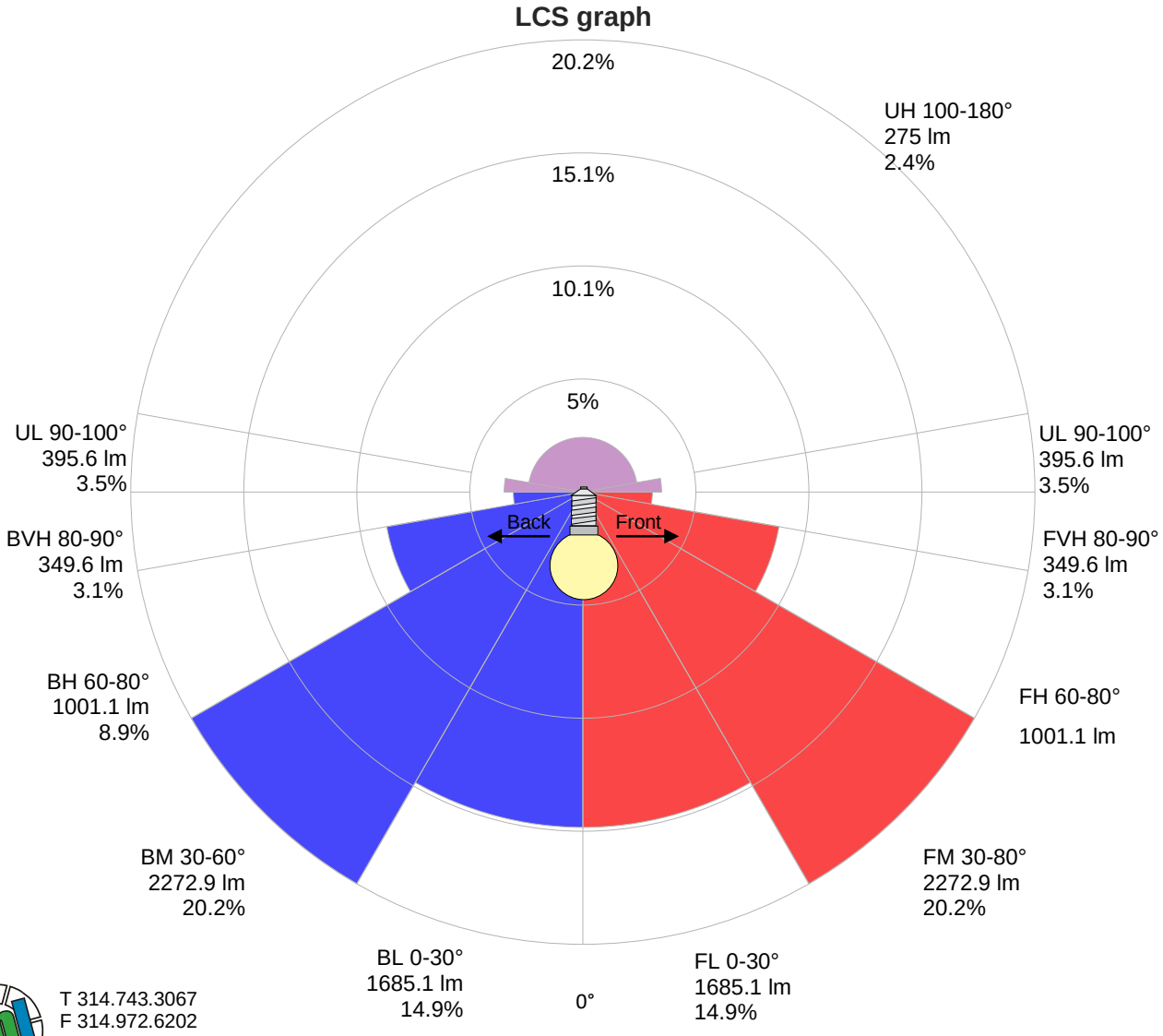
Road Report

LCS table

BUG rating:	B3 U3 G3	
Forward light	Lumens	Lumens %
Low(0-30):	1685.1	14.9%
Medium(30-60):	2272.9	20.2%
High(60-80):	1001.1	8.9%
Very high(80-90):	349.6	3.1%
Back light		
Low(0-30):	1685.1	14.9%
Medium(30-60):	2272.9	20.2%
High(60-80):	1001.1	8.9%
Very high(80-90):	349.6	3.1%
Uplight		
Low(90-100):	395.6	3.5%
High(100-180):	275	2.4%

LCS graph



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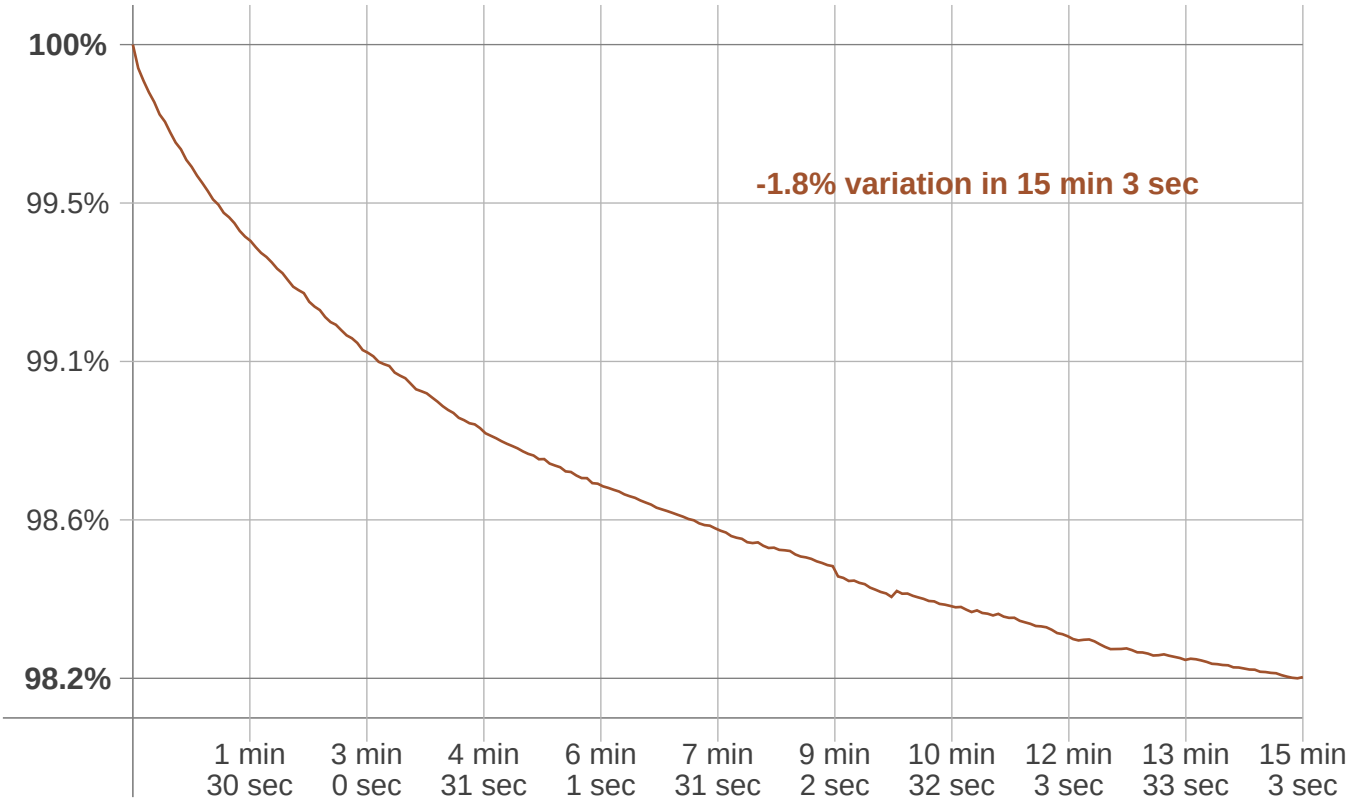
Stabilization

Warmup curve



Warmup result

Warmup time:	**15 min 3 sec**
Warmup variation	**-1.8%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5419 K	+22 K	5441 K

Output change

Output start	Output change	Output end
11447 lm	-173 lm	11274 lm

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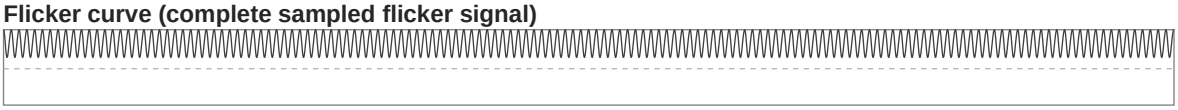
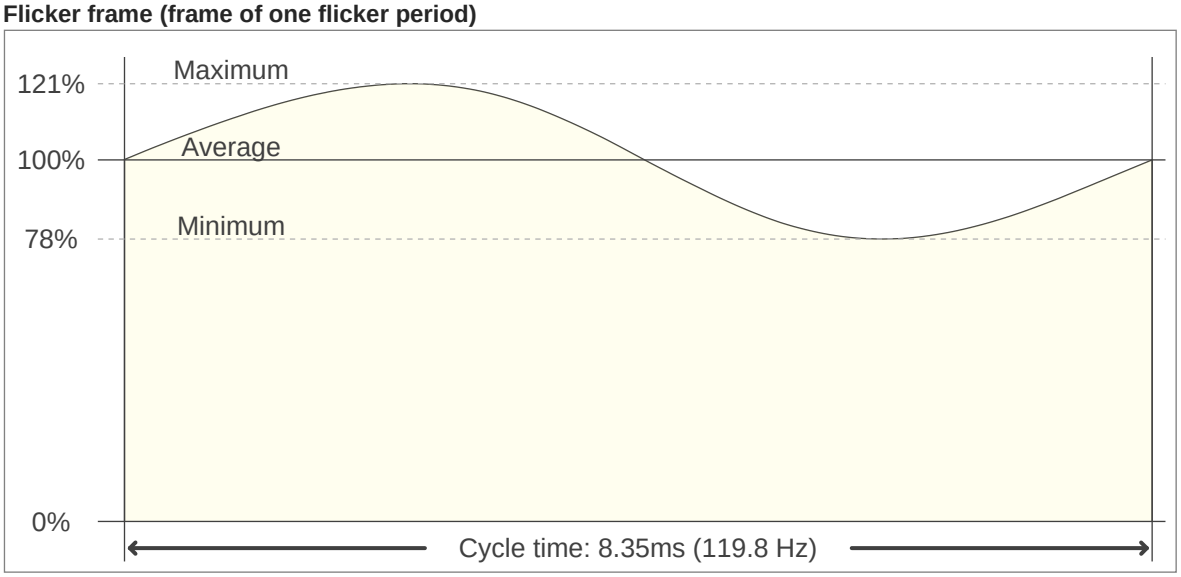
Flicker

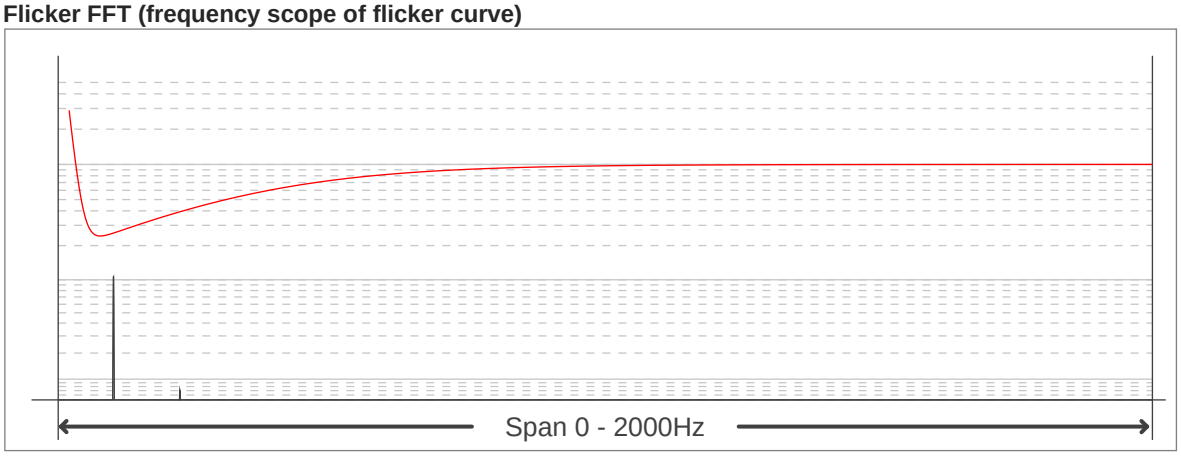
Flicker curve (complete sampled flicker signal)



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:	**21.59 %**
SVM: (Visual flicker)	**0.77**

Flicker conditions:

Sample rate:	**40000 samples/second**

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