Light efficiency:

153 Lumen/Watt

Light quality:

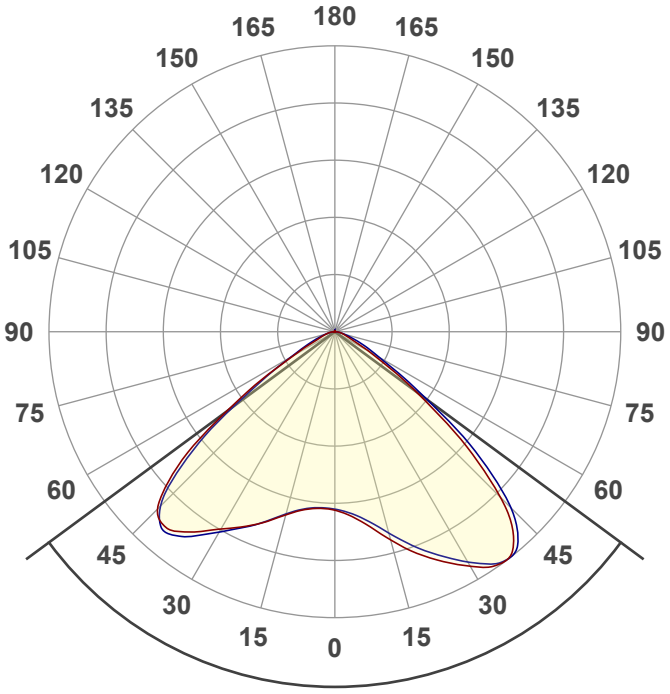
CRI: 72.5

Color temperature:

5033 K

Output: 25049 lm
Peak: 11039 cd

Power: 163.6 W
PF: 1.0



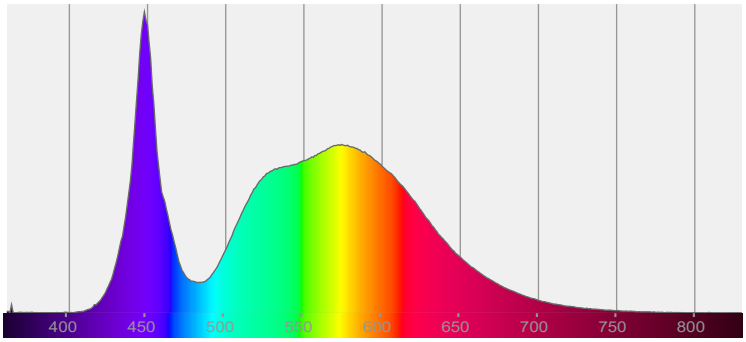
Beam angle 107.2°

CIE 1931
x: 0.345
y: 0.357

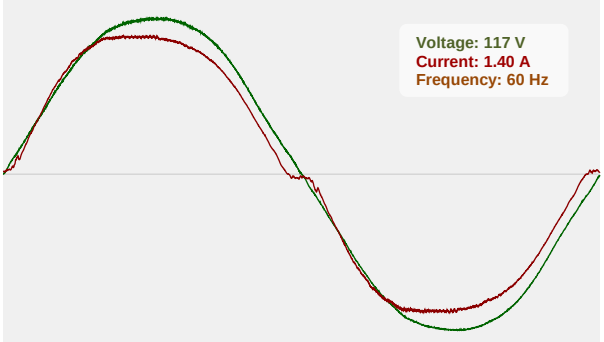
Product name:
FY-HB-600C-160WNC-L50K336D623

Date and time:
10/7/2022 10:44:32 AM

Spectra



Power



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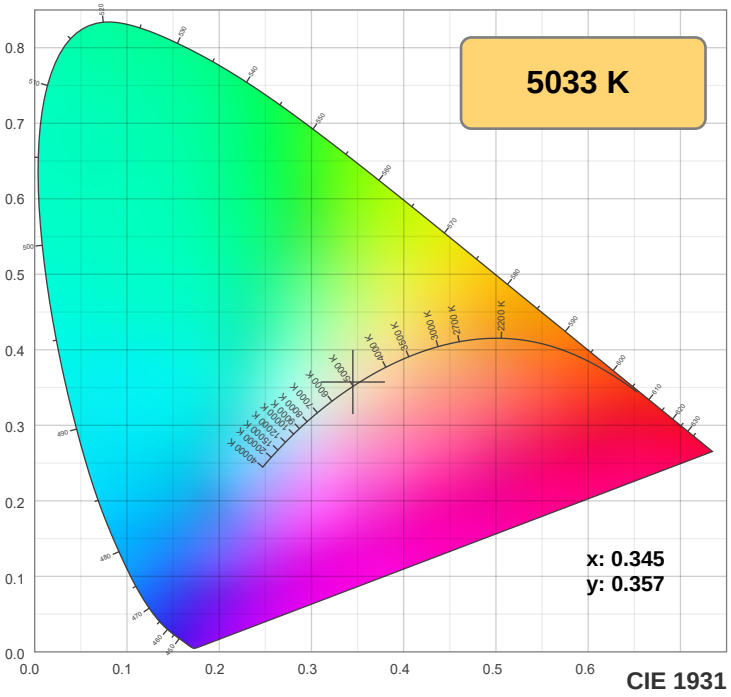
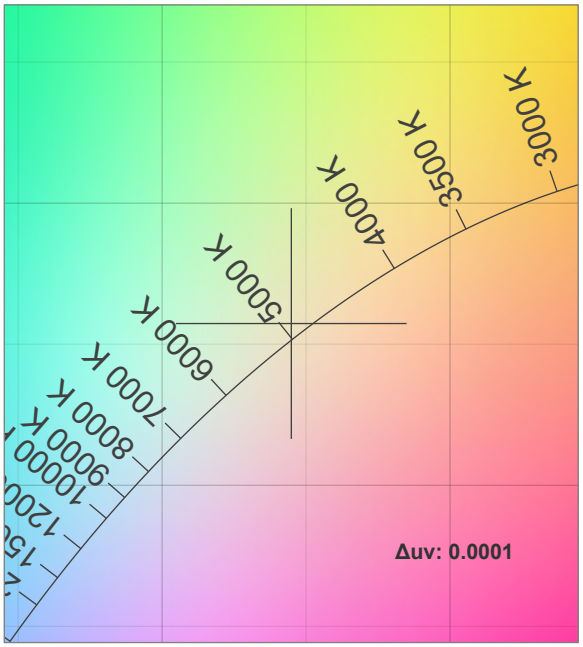
Color Specifications

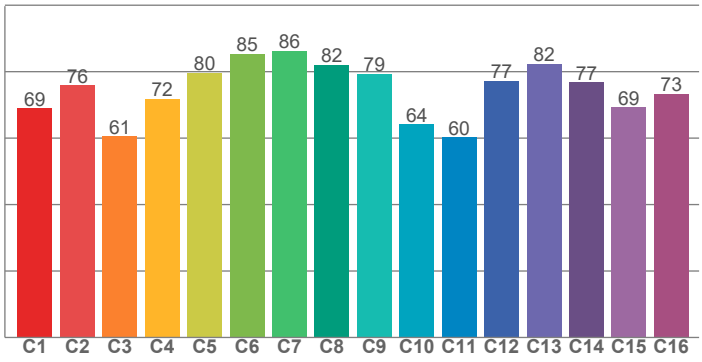


CIE 1931

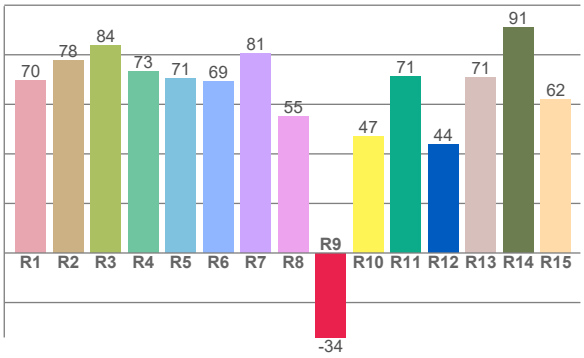


CIE 1931 ZOOM

TM30: 73.9



CRI: 72.5 (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
69.6	77.5	83.7	73.3	70.5	69.4	80.6	55.1	-34.1	47.0	71.1	43.6	70.9	90.9	61.9

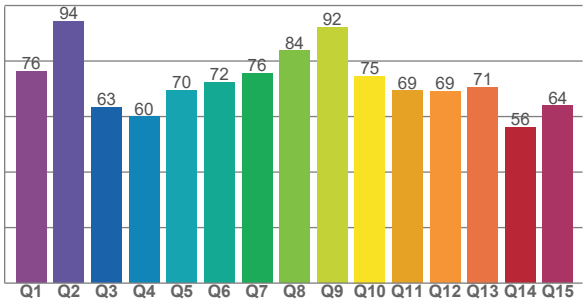
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
69.0	75.9	60.5	71.7	79.6	85.3	86.3	82.0	79.3	64.2	60.2	77.2	82.4	76.8	69.3	73.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76.3	94.3	63.4	59.9	69.5	72.3	75.6	83.8	92.2	74.6	69.4	69.2	70.6	56.1	63.9

CQS: 70.8



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
5033 K	72.5	-34.1	73.9	94.9	70.8	0.345	0.357	0.209	0.325	0.0001

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TM30 Report

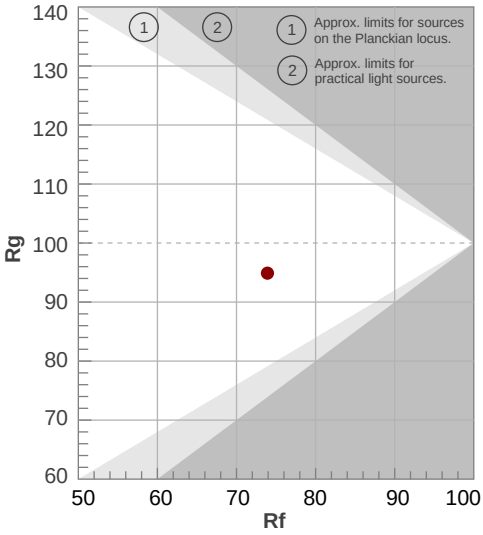
Rf 73.9

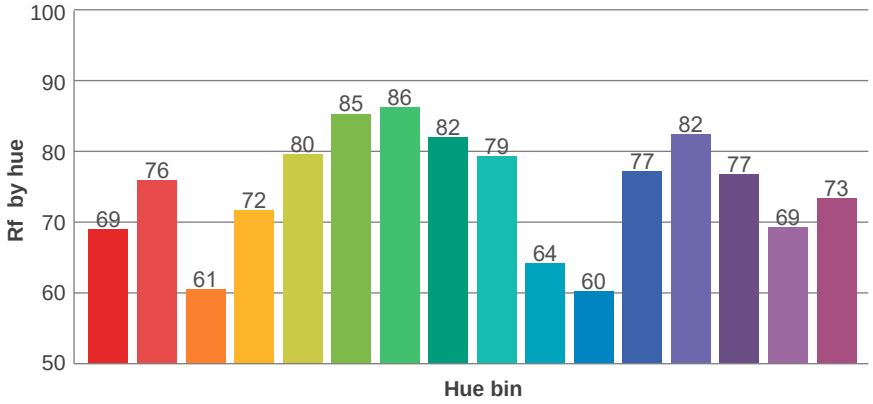
Fidelity index Rf

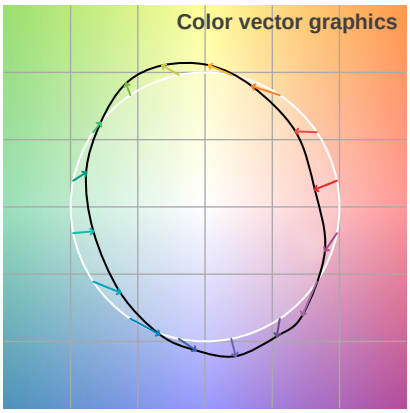
Rg 94.9

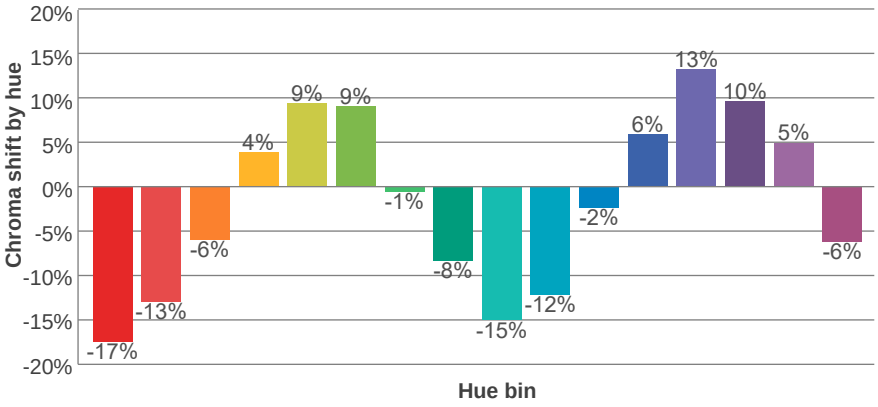
Gammut index Rg

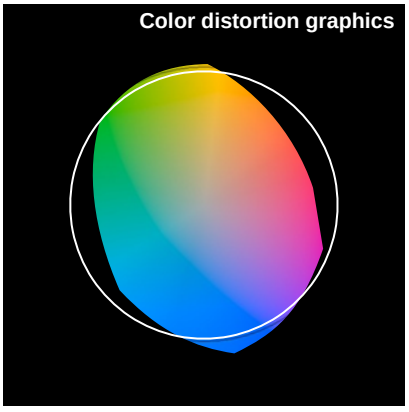
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	69	-17%	-3%
2	76	-13%	9%
3	61	-6%	21%
4	72	4%	18%
5	80	9%	11%
6	85	9%	-2%
7	86	-1%	-9%
8	82	-8%	-8%
9	79	-15%	2%
10	64	-12%	18%
11	60	-2%	25%
12	77	6%	14%
13	82	13%	1%
14	77	10%	-9%
15	69	5%	-27%
16	73	-6%	-15%

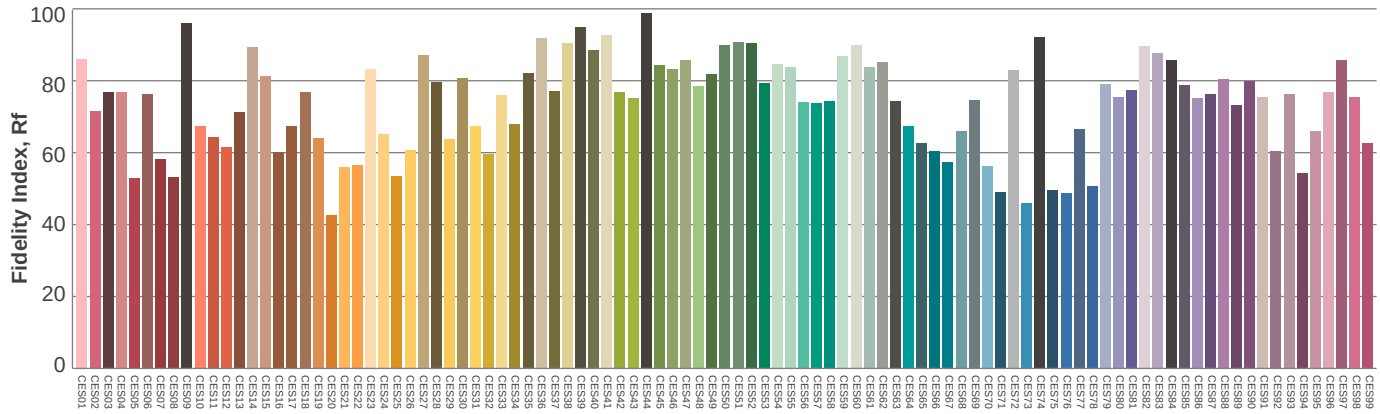












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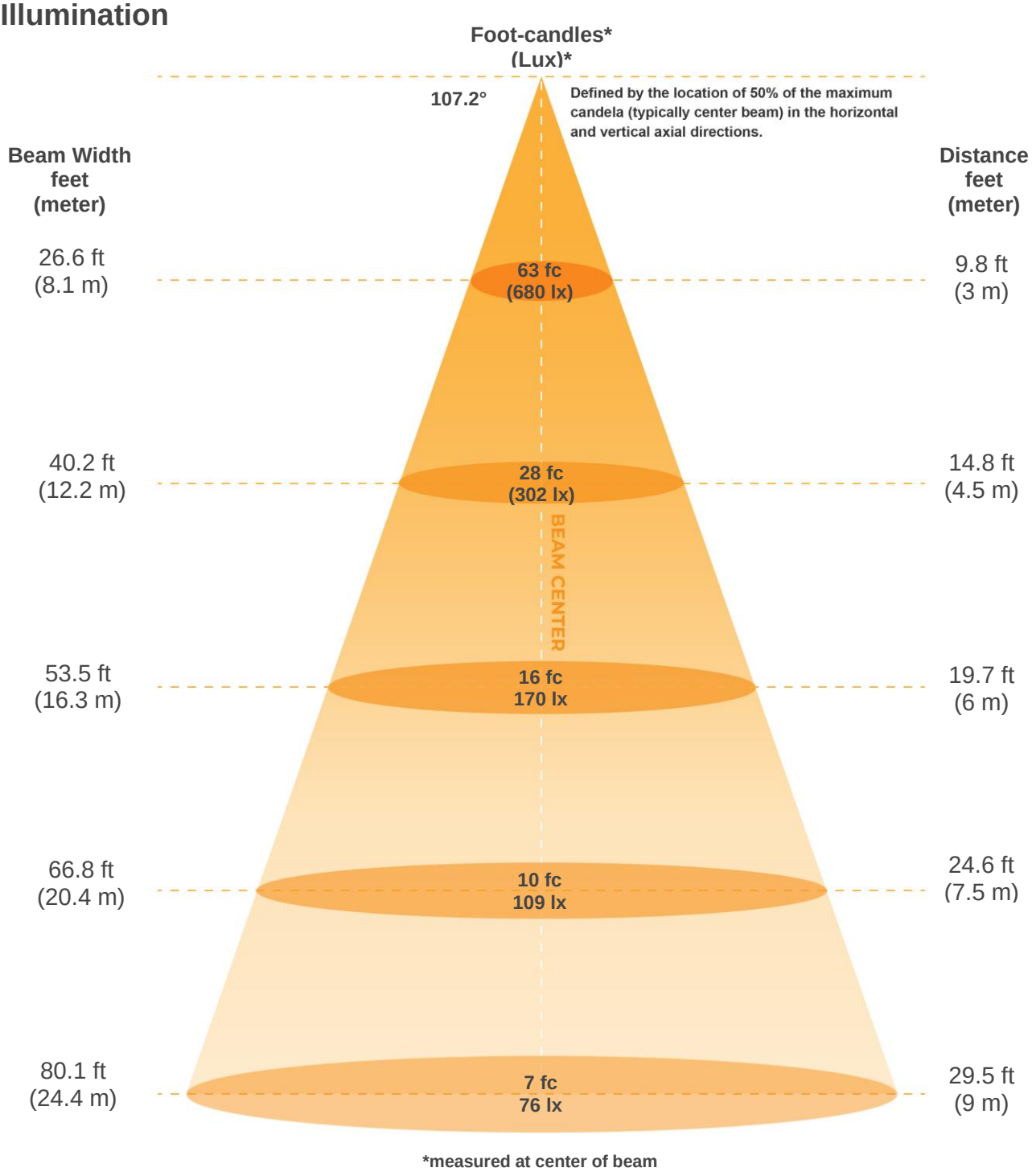
Illumination



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
6123lx	1531lx	680lx	383lx	245lx	170lx	125lx	96lx	76lx	61lx	51lx	43lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
568.9fc	142.2fc	63.2fcd	35.6fcd	22.8fcd	15.8fcd	11.6fcd	8.9fcd	7fcd	5.7fcd	4.7fcd	4fcd	3.4fcd	2.9fcd	2.5fcd	2.2fcd	2fcd	1.8fcd	1.6fcd	1.4fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
107.2°	**130.8°**	**156.8°**	**93.1%**	**63.4%**

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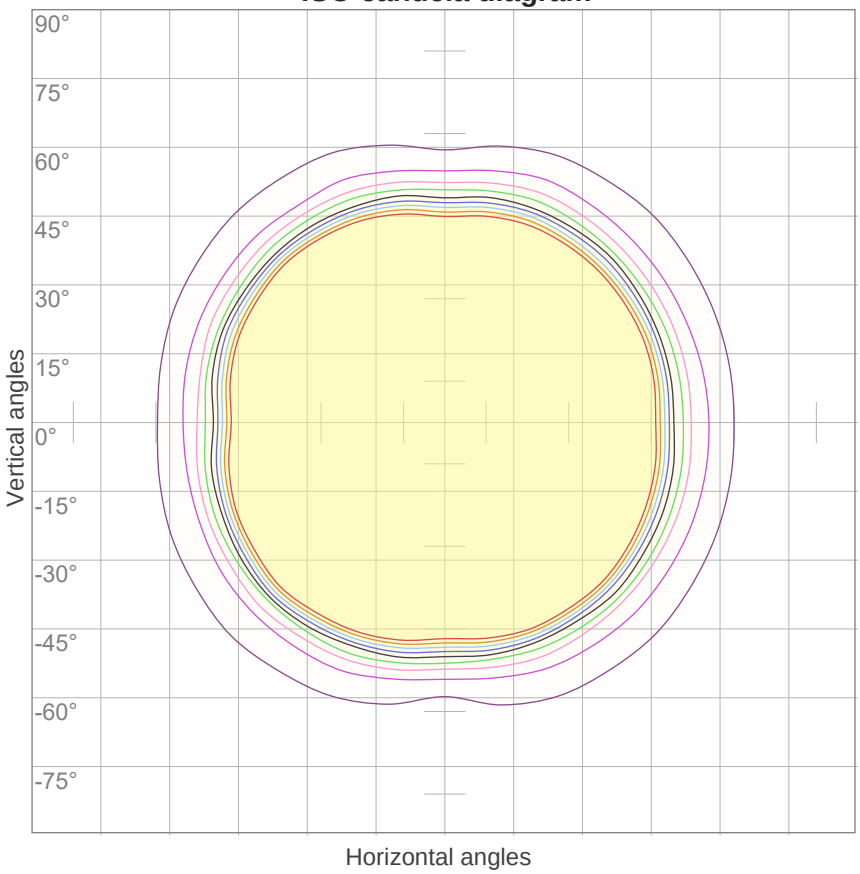
ISO Diagrams

ISO candela diagram



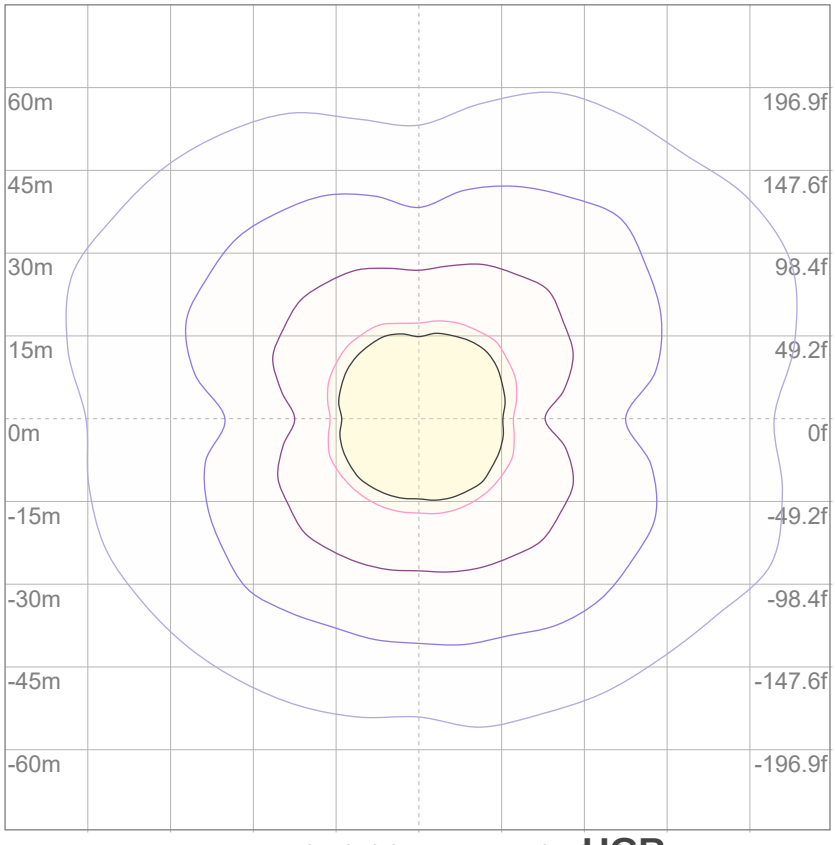
10%	612 cd
20%	1225 cd
30%	1837 cd
40%	2449 cd
50%	3062 cd
60%	3674 cd
70%	4286 cd
80%	4898 cd
90%	5511 cd

Conditions:

Number of c-planes: 16

Candela at center: 6123 cd

ISO lux diagram



3%	1.84 lx
5%	3.06 lx
10%	6.12 lx
30%	18.4 lx
50%	30.6 lx

Conditions:

Number of c-planes: 16

Lux at center: 61.2 lx

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

UGR

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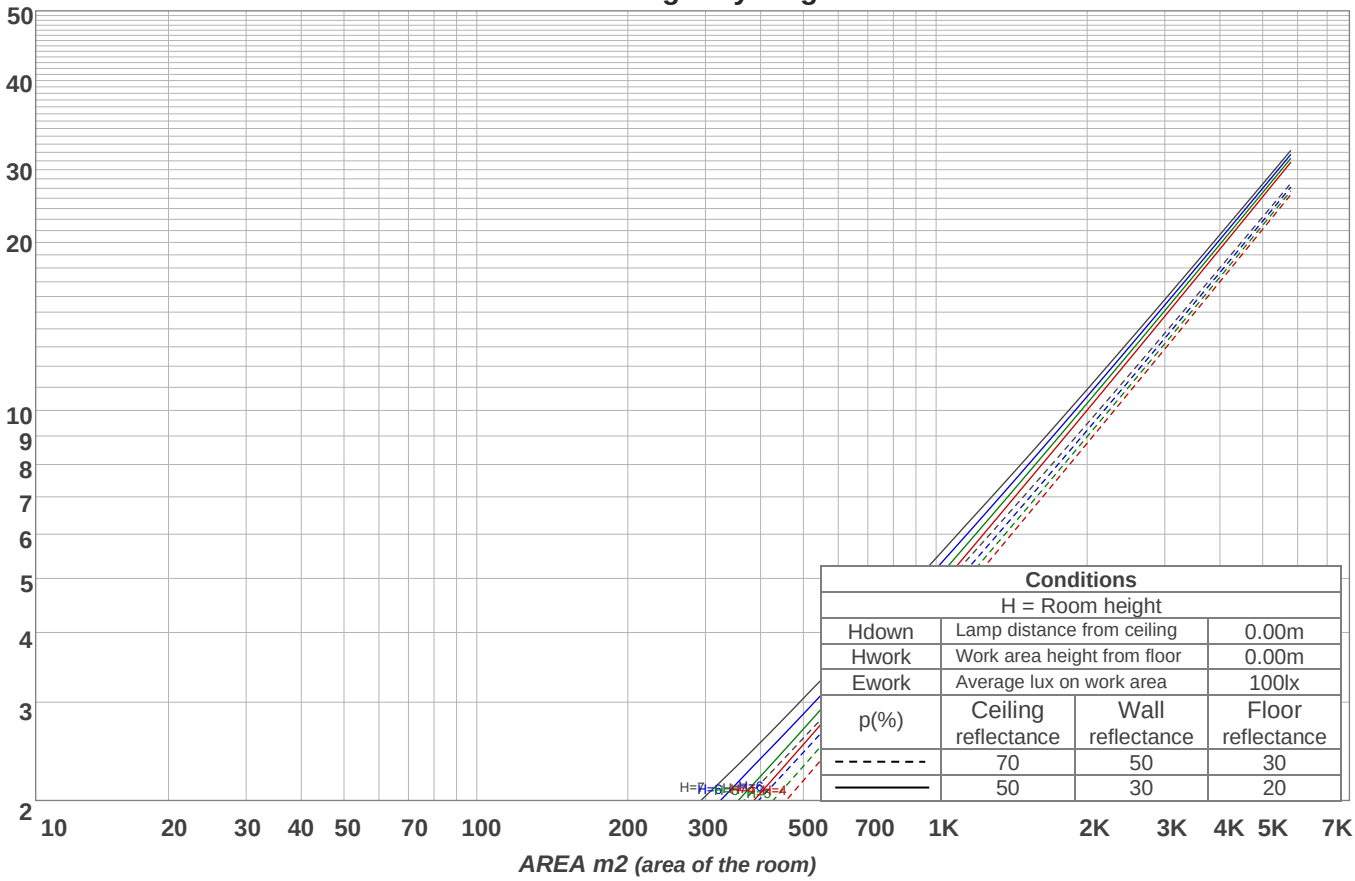
Light Planning

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	58	52	77	66	58	52	63	57	51	62	55	51	60	54	50	48
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	54	45	40	65	53	45	39	52	44	39	50	44	39	49	43	38	37
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	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°
599 lm	1978 lm	3764 lm	5933 lm	7051 lm	3984 lm	1135 lm	427 lm	96.8 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5.98 lm	7.20 lm	10.1 lm	12.5 lm	13.2 lm	12.0 lm	9.87 lm	6.49 lm	2.32 lm

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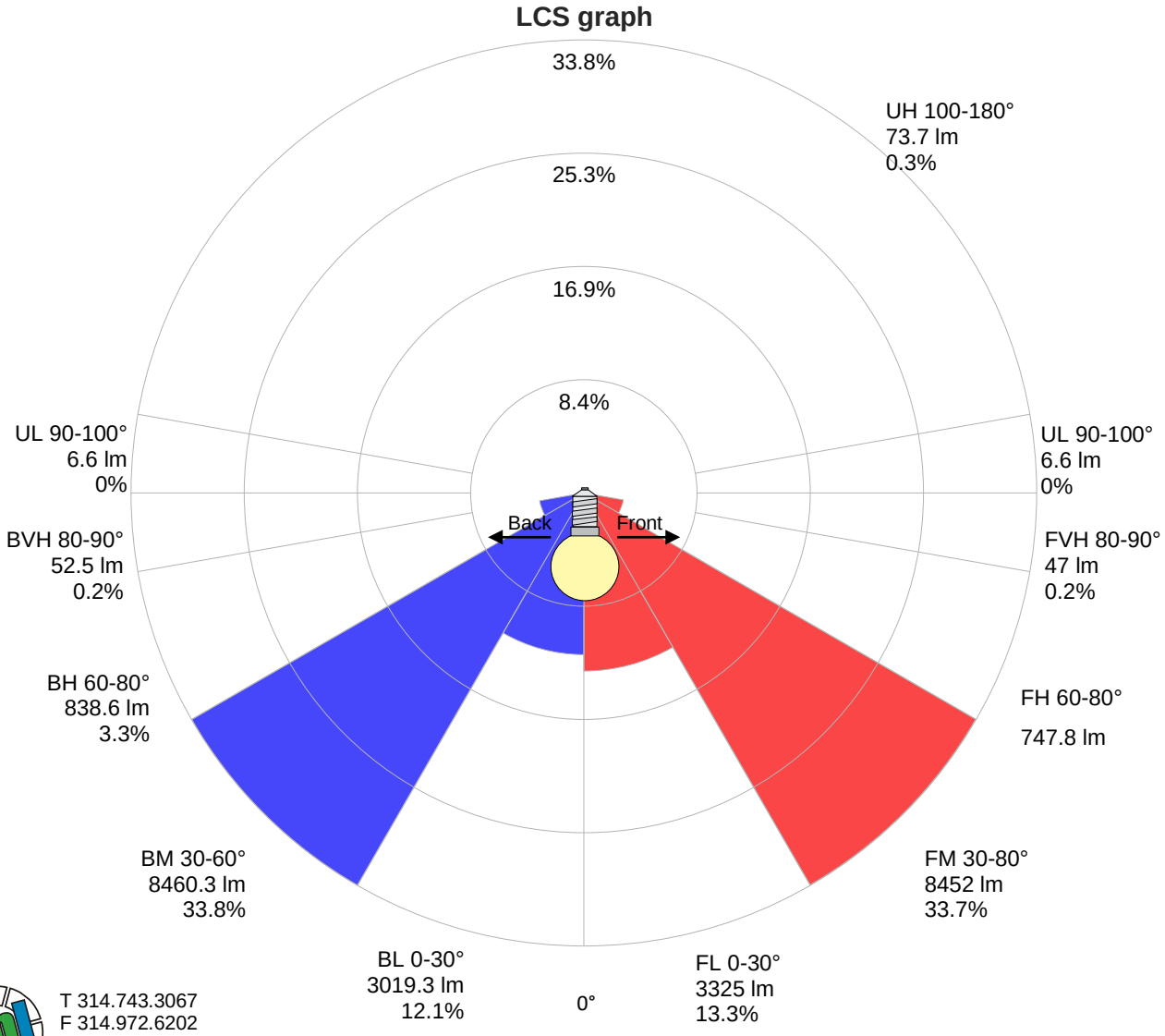
Road Report

LCS table

BUG rating:	B4 U3 G2	
Forward light	Lumens	Lumens %
Low(0-30):	3325	13.3%
Medium(30-60):	8452	33.7%
High(60-80):	747.8	3%
Very high(80-90):	47	0.2%
Back light		
Low(0-30):	3019.3	12.1%
Medium(30-60):	8460.3	33.8%
High(60-80):	838.6	3.3%
Very high(80-90):	52.5	0.2%
Uplight		
Low(90-100):	6.6	0%
High(100-180):	73.7	0.3%

LCS graph



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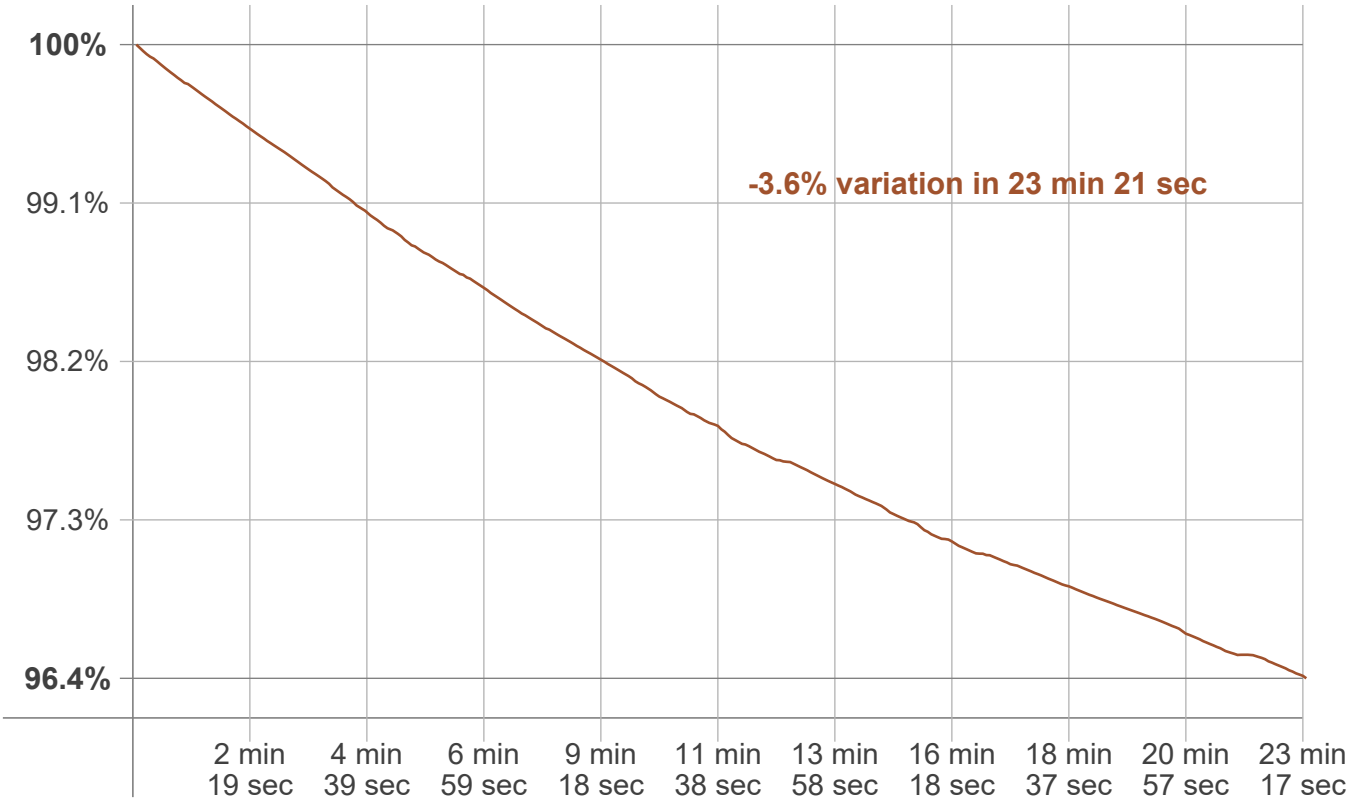
Stabilization

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 23 min 21 sec**
Warmup variation	**-3.6%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4994 K	+39 K	5033 K

Output change

Output start	Output change	Output end
25956 lm	-906 lm	25049 lm

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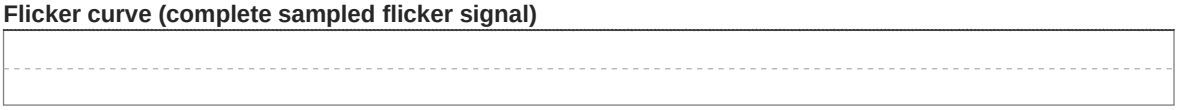
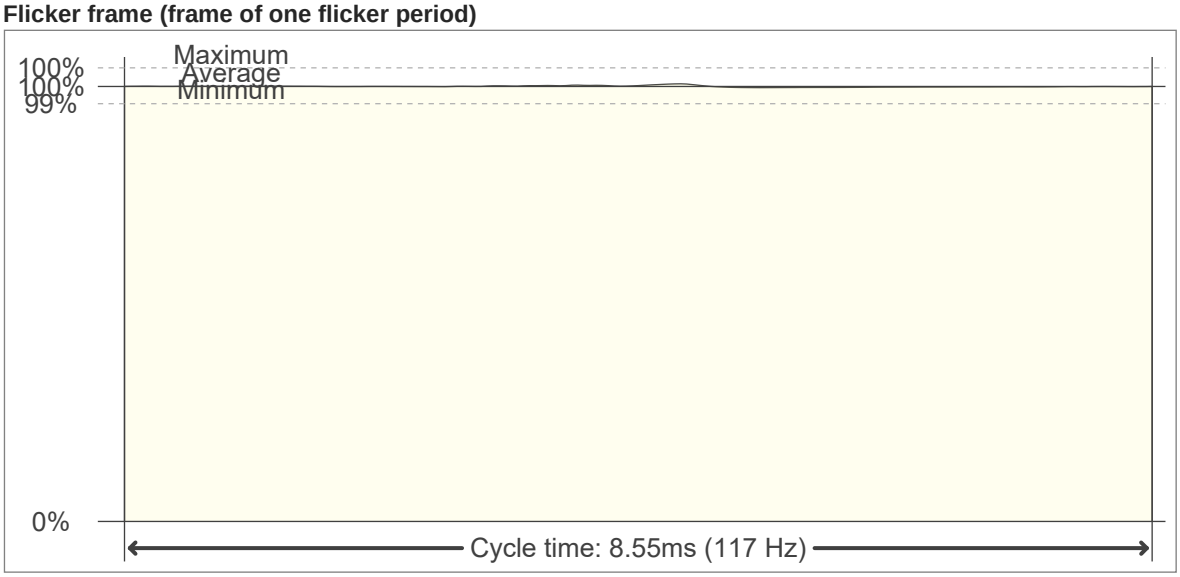
Flicker Specifications

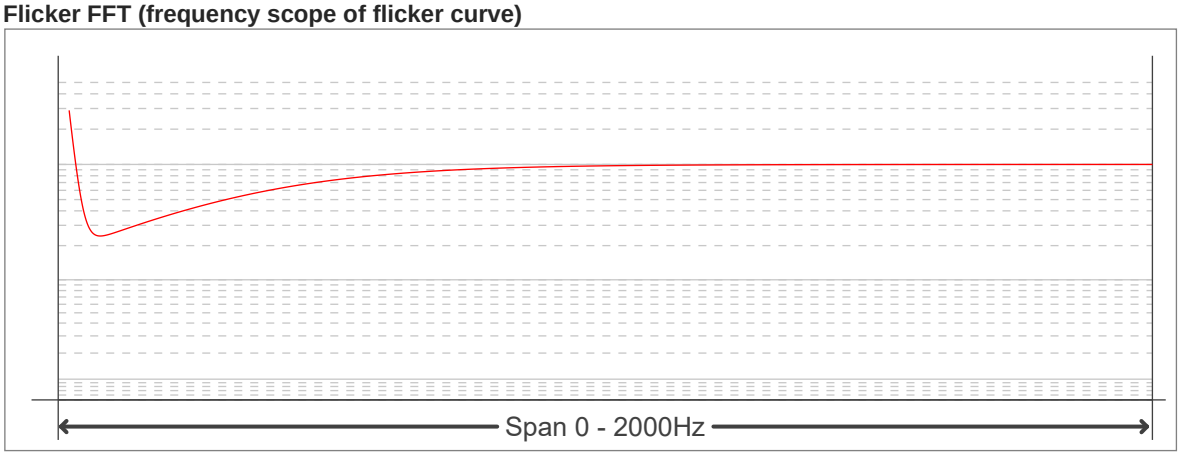
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**116.96 Hz**
Flicker index:	**0**
Flicker percentage:	**0.53 %**
SVM: (Visual flicker)	**0.01**

Flicker conditions:

Sample rate:	**20000 samples/second**

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