LSFD-SW3C50-H

Light efficiency:

119 Lumen/Watt

Light quality:

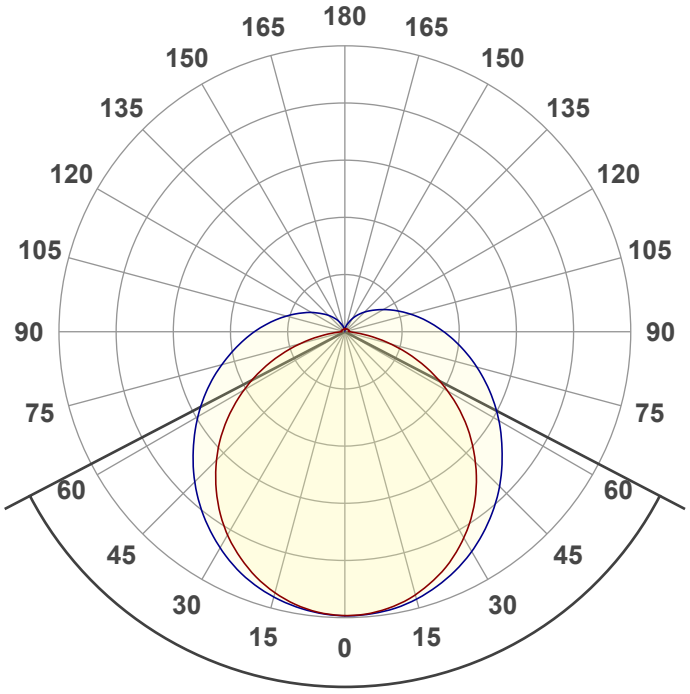
CRI: 84.1

Color temperature:

5081 K

Output: 5856 lm
Peak: 1467 cd

Power: 49.1 W
PF: 1.0



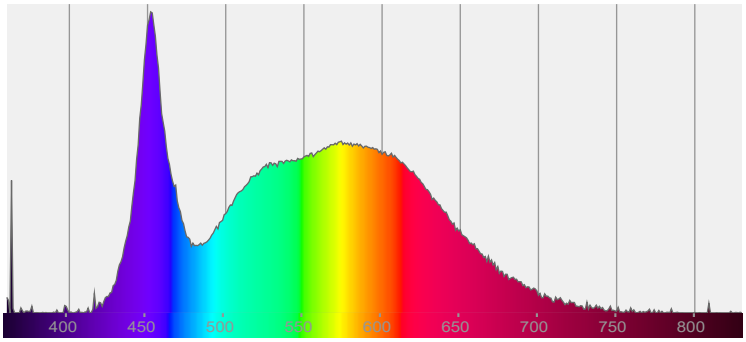
Beam angle 124.9°

Product name:
LSFD-SW3C50-H (50 W)

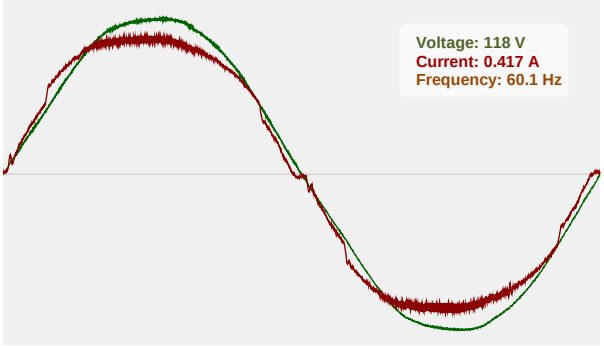
Date and time:
8/18/2022 1:13:06 PM

CIE 1931
x: 0.343
y: 0.352

Spectra



Power



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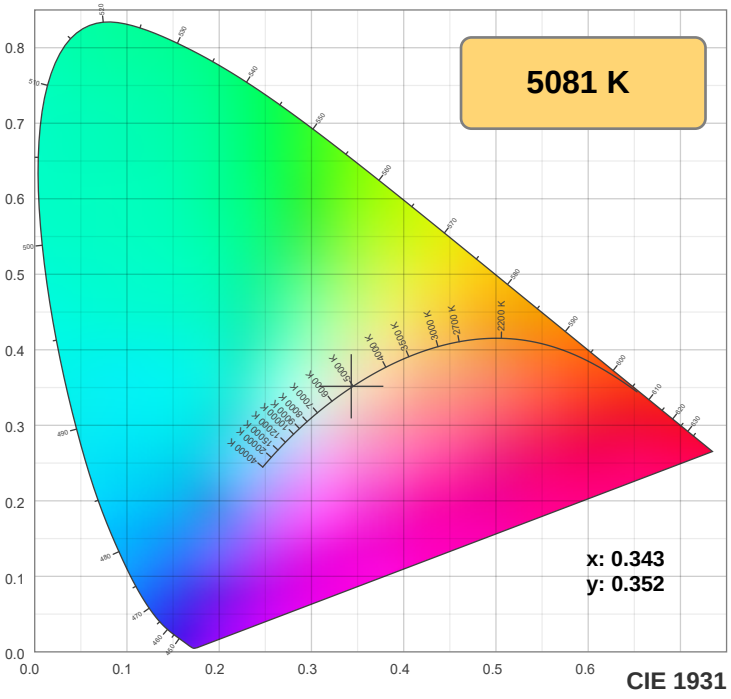
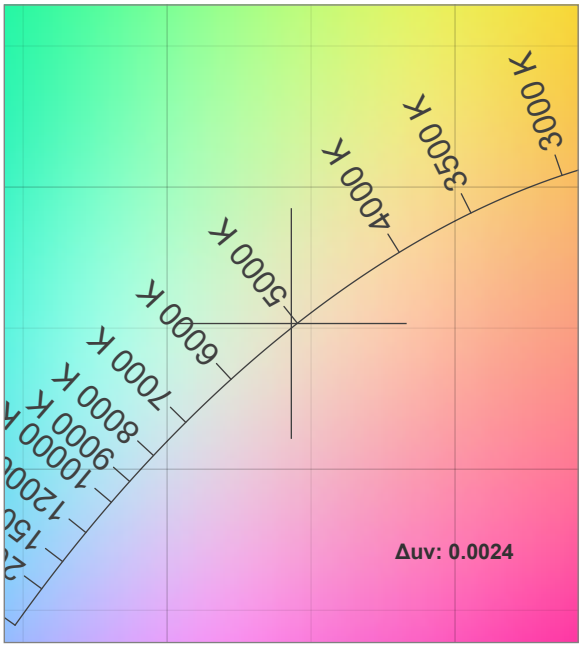
Color Specifications

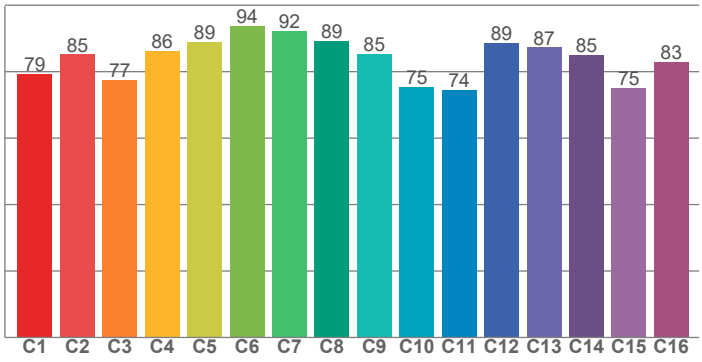


CIE 1931

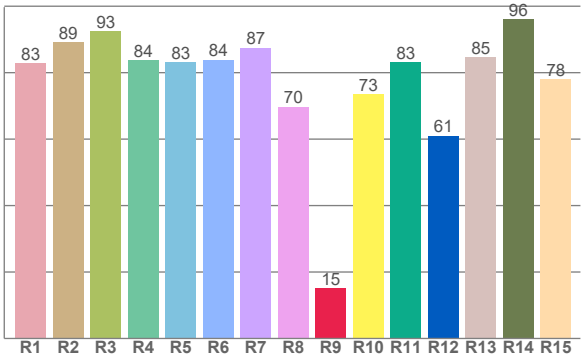


CIE 1931 ZOOM

TM30: 83.9



CRI: 84.1 (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
82.9	89.2	92.5	83.8	83.1	84.0	87.5	69.7	15.2	73.4	83.1	61.0	84.7	96.0	78.0

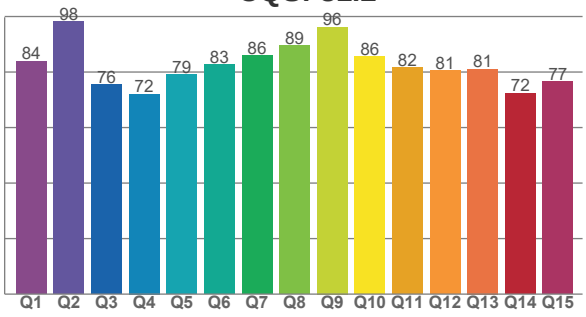
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.3	85.2	77.5	86.3	89.0	93.8	92.3	89.2	85.3	75.4	74.5	88.7	87.4	85.0	75.1	83.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.8	98.2	75.5	72.1	79.1	82.7	85.9	89.5	96.2	85.6	81.5	80.5	81.1	72.4	76.6

CQS: 81.2



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
5081 K	84.1	15.2	83.9	96.4	81.2	0.343	0.352	0.210	0.323	0.0024

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TM30 Report

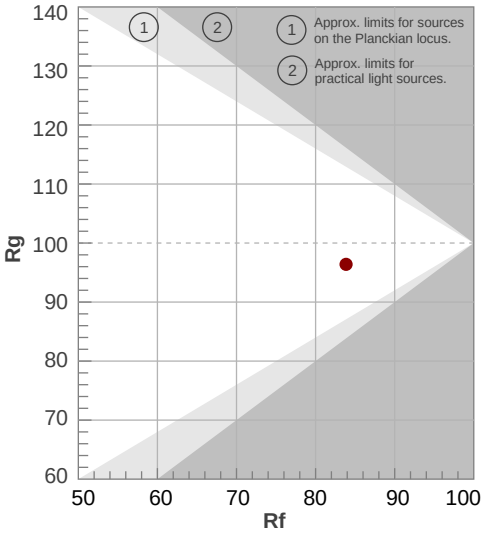
Rf 83.9

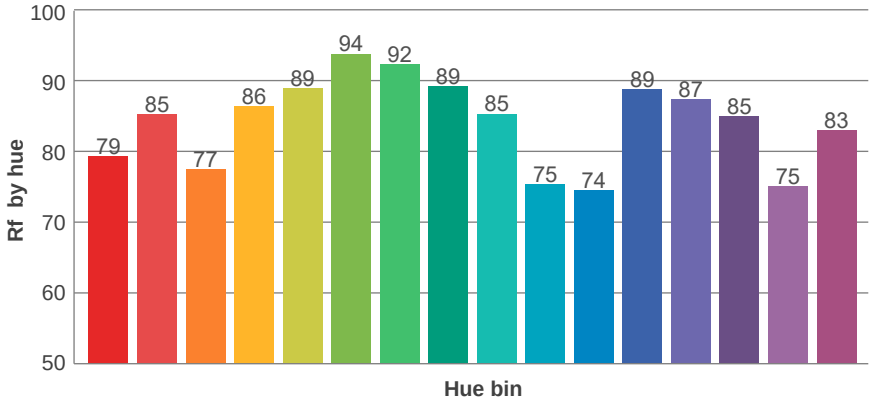
Fidelity index Rf

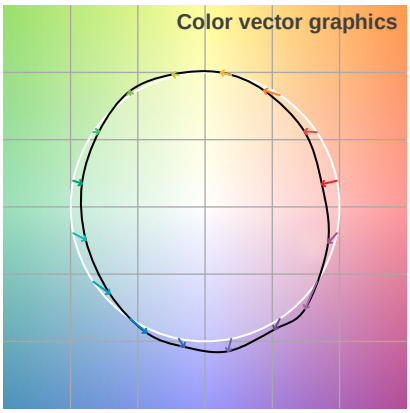
Rg 96.4

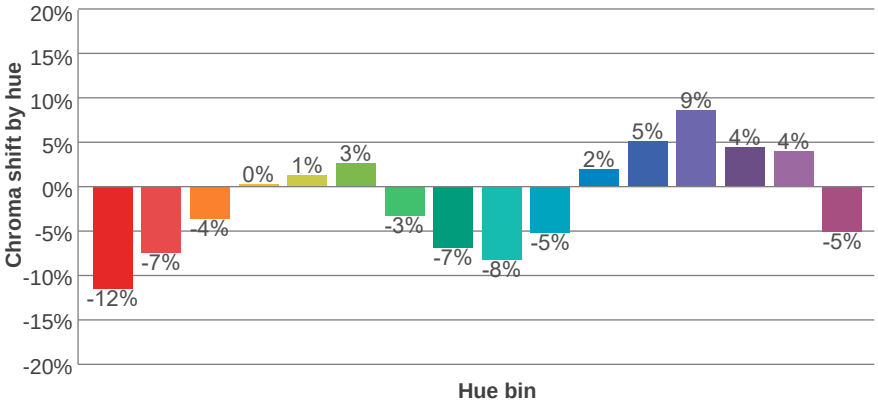
Gammut index Rg

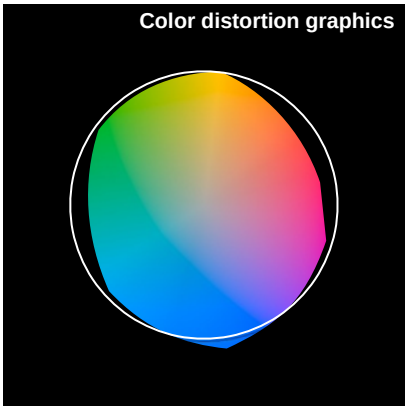
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-12%	0%
2	85	-7%	6%
3	77	-4%	12%
4	86	0%	8%
5	89	1%	5%
6	94	3%	-1%
7	92	-3%	-3%
8	89	-7%	1%
9	85	-8%	7%
10	75	-5%	14%
11	74	2%	16%
12	89	5%	5%
13	87	9%	-4%
14	85	4%	-8%
15	75	4%	-21%
16	83	-5%	-8%

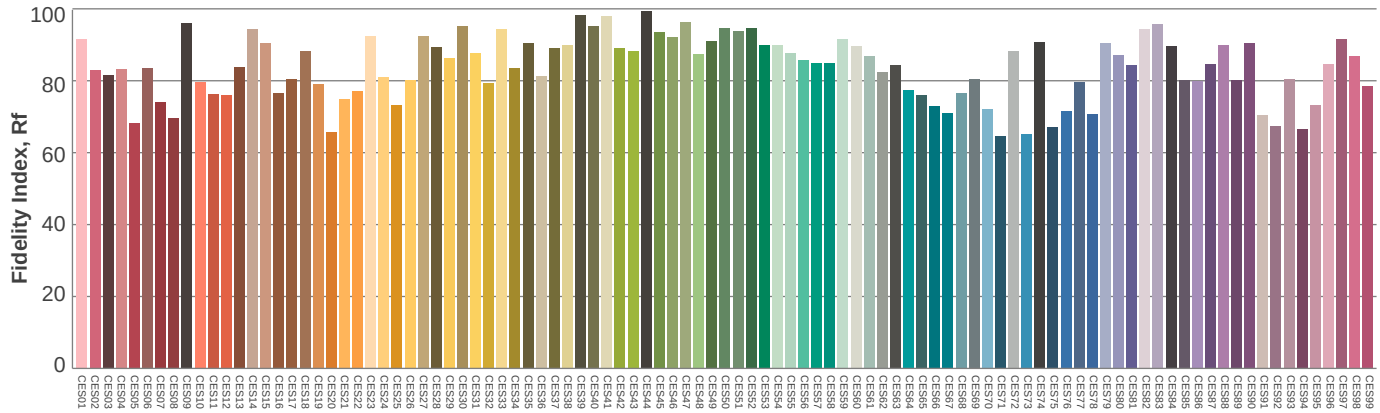












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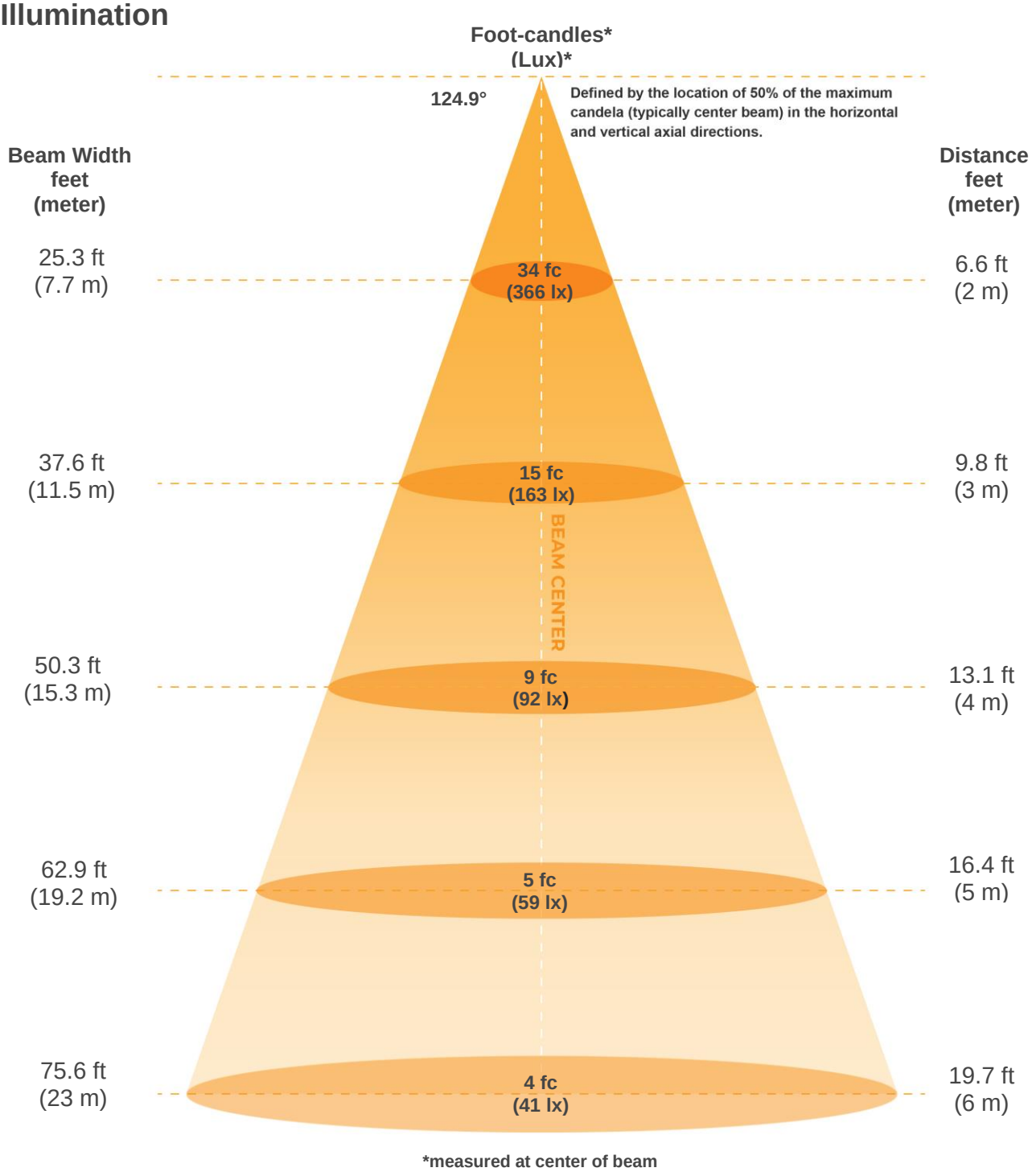
Illumination



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
1464lx	366lx	163lx	92lx	59lx	41lx	30lx	23lx	18lx	15lx	12lx	10lx	9lx	7lx	7lx	6lx	5lx	5lx	4lx	4lx
136fcd	34fcd	15.1fcd	8.5fcd	5.4fcd	3.8fcd	2.8fcd	2.1fcd	1.7fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
124.9°	**221.5°**	**285.7°**	**58.7%**	**39.0%**

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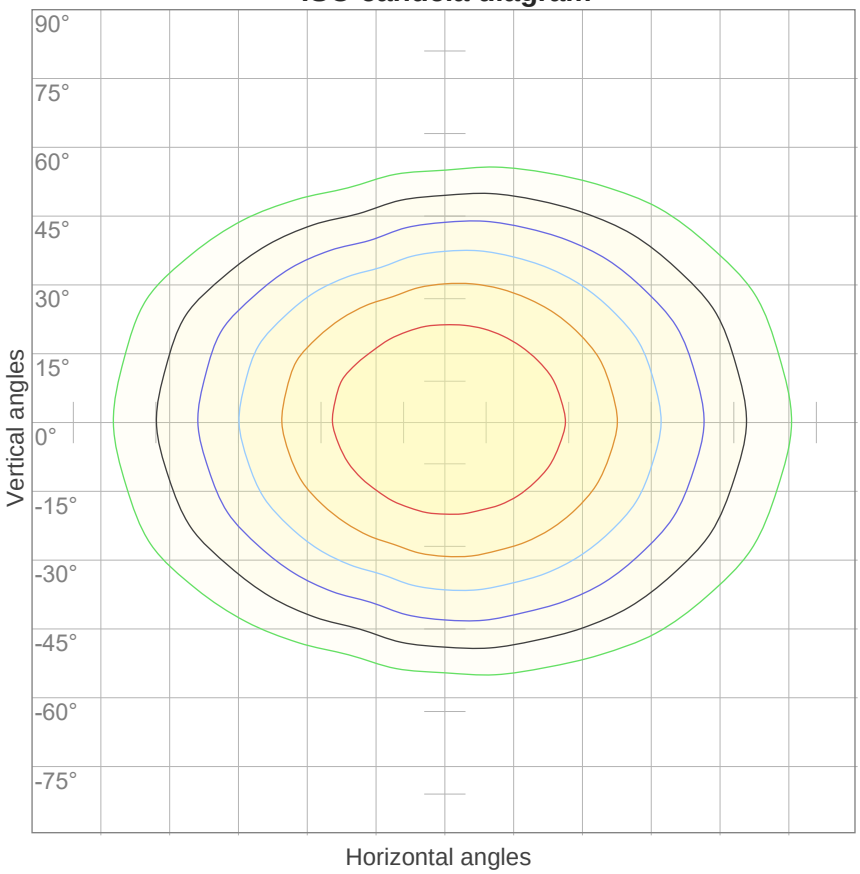
ISO Diagrams

ISO candela diagram



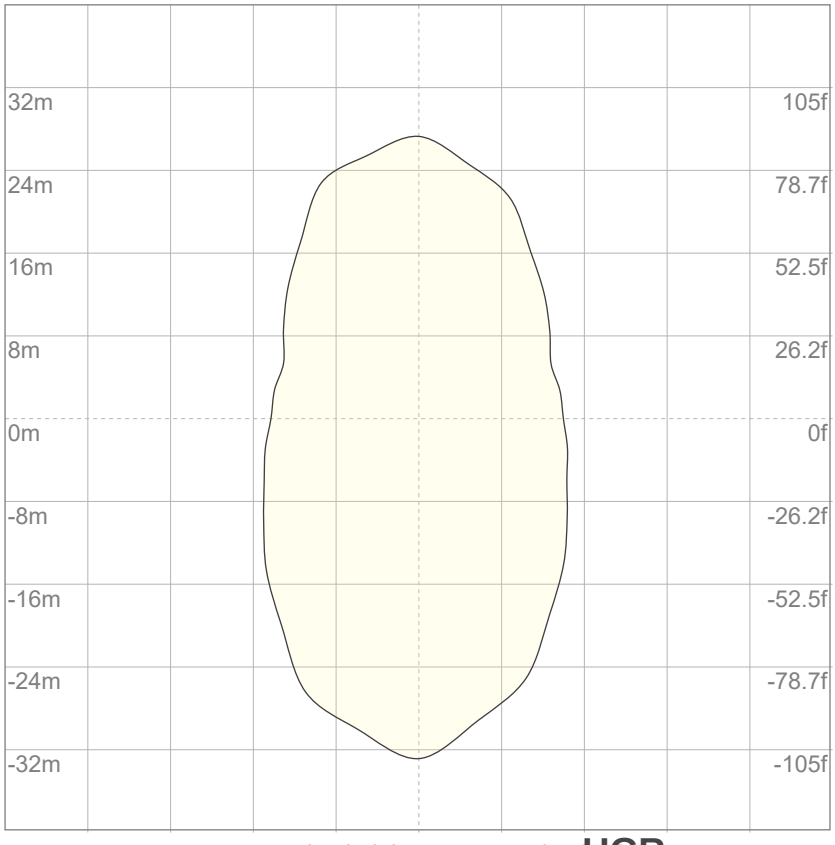
10%	146 cd
20%	293 cd
30%	439 cd
40%	586 cd
50%	732 cd
60%	879 cd
70%	1025 cd
80%	1171 cd
90%	1318 cd

Conditions:

Number of c-planes: 16

Candela at center: 1464 cd

ISO lux diagram



3%	0.439 lx
5%	0.732 lx
10%	1.46 lx
30%	4.39 lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 16

Lux at center: 14.6 lx

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

UGR

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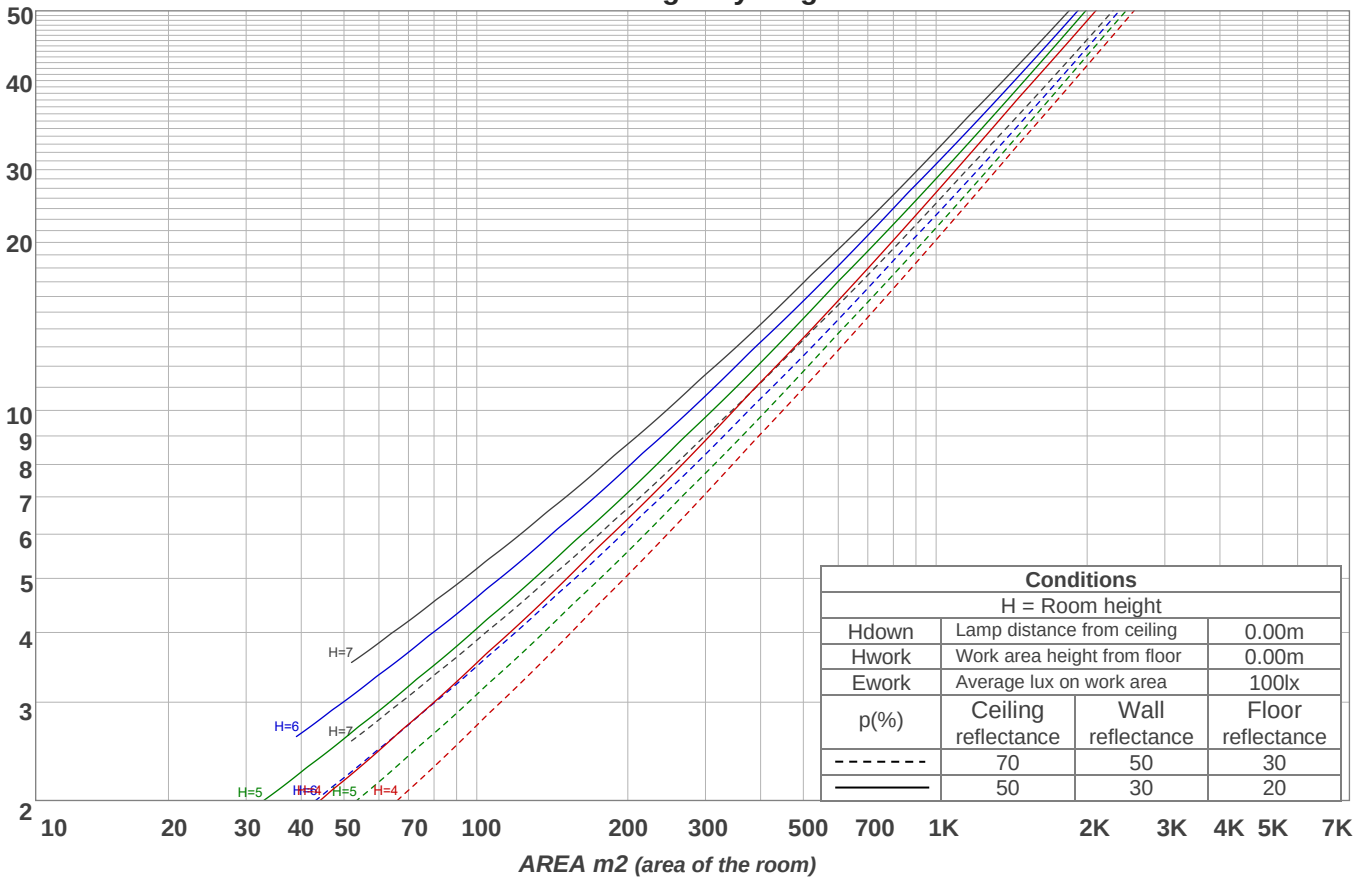
Light Planning

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	116	116	116	116	111	111	111	111	103	103	103	96	96	96	89	89	89	86
1	103	97	92	87	99	93	89	85	86	83	79	80	77	74	74	72	70	66
2	93	83	76	69	89	80	73	67	74	69	64	69	64	60	64	60	57	54
3	84	73	64	57	80	70	62	55	65	58	52	60	54	50	56	51	47	44
4	77	64	55	48	73	62	53	46	57	50	44	53	47	42	49	44	40	37
5	70	57	47	41	67	55	46	40	51	44	38	48	41	36	44	39	34	32
6	65	51	42	35	62	49	41	34	46	38	33	43	36	31	40	34	30	28
7	60	46	37	31	57	45	36	30	42	34	29	39	33	28	36	31	27	24
8	56	42	33	27	53	41	32	27	38	31	26	36	29	25	33	28	24	22
9	52	38	30	24	50	37	29	24	35	28	23	33	27	22	31	25	21	19
10	49	35	27	22	47	34	27	22	32	26	21	30	24	20	29	23	19	17

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
139 lm	398 lm	608 lm	743 lm	792 lm	760 lm	660 lm	523 lm	389 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
285 lm	205 lm	143 lm	95.3 lm	59.5 lm	33.0 lm	15.9 lm	6.20 lm	1.46 lm

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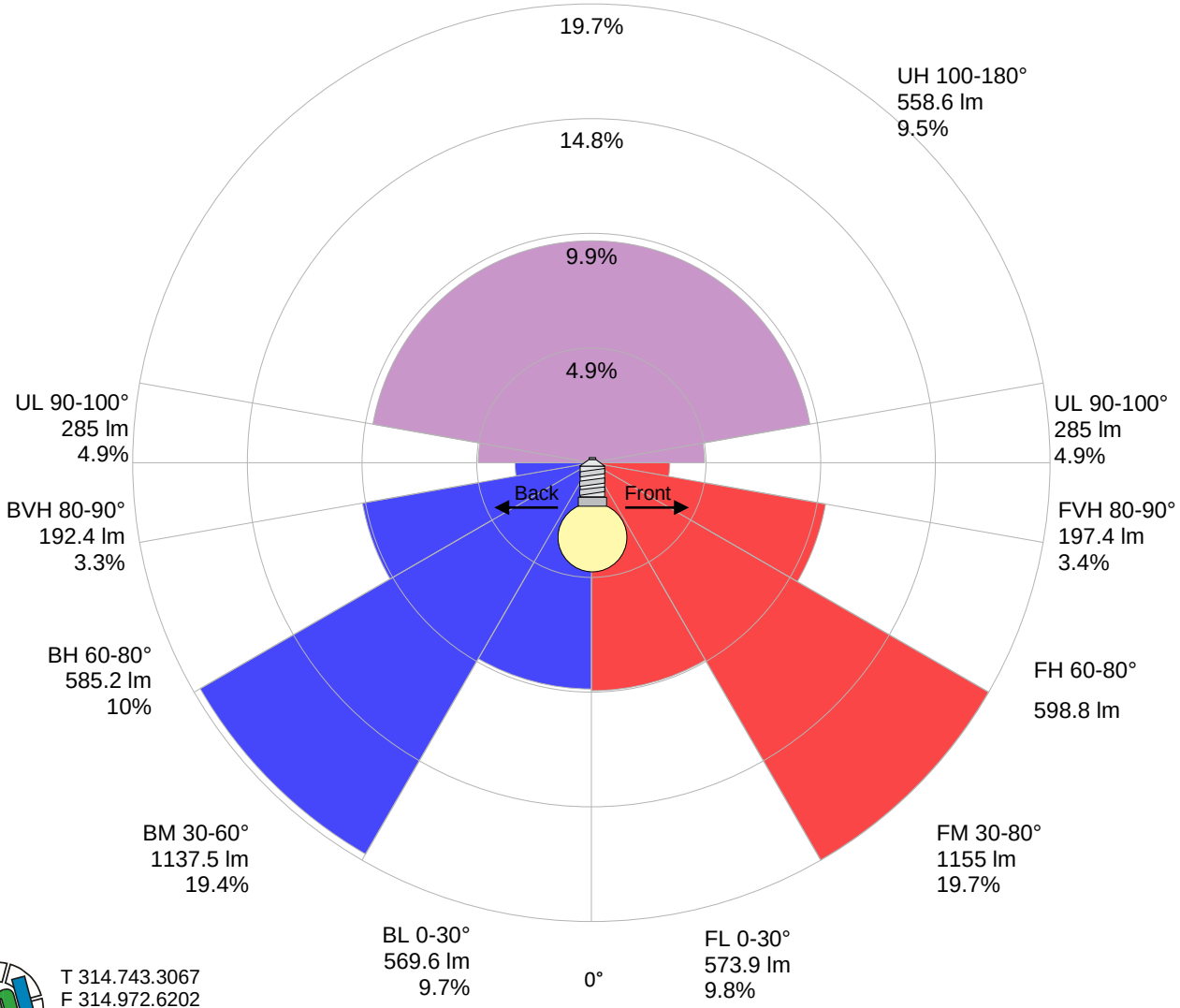
Road Report

LCS table

BUG rating:	B2 U4 G2	
Forward light	Lumens	Lumens %
Low(0-30):	573.9	9.8%
Medium(30-60):	1155	19.7%
High(60-80):	598.8	10.2%
Very high(80-90):	197.4	3.4%
Back light		
Low(0-30):	569.6	9.7%
Medium(30-60):	1137.5	19.4%
High(60-80):	585.2	10%
Very high(80-90):	192.4	3.3%
Uplight		
Low(90-100):	285	4.9%
High(100-180):	558.6	9.5%

LCS graph



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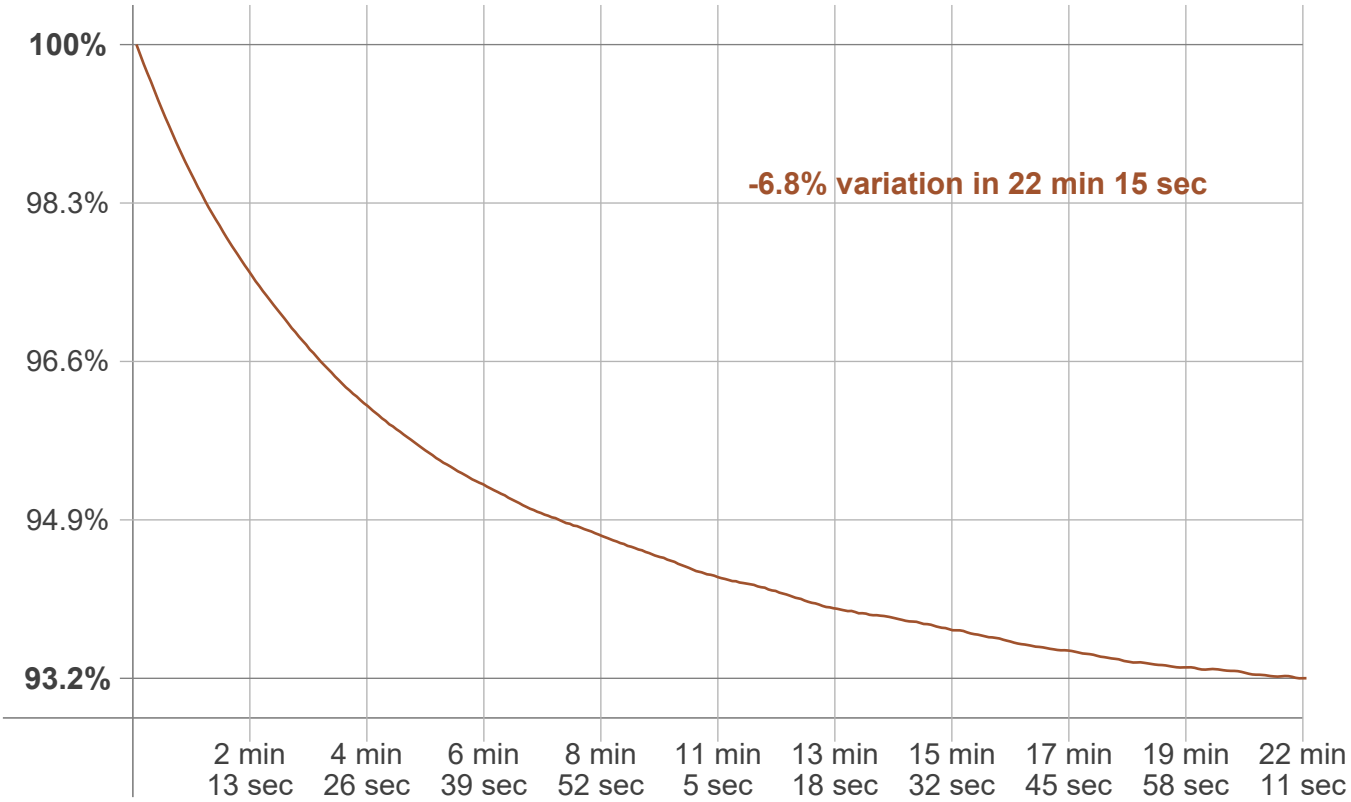
Stabilization

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 22 min 15 sec**
Warmup variation	**-6.9%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4979 K	+102 K	5081 K

Output change

Output start	Output change	Output end
6265 lm	-410 lm	5856 lm

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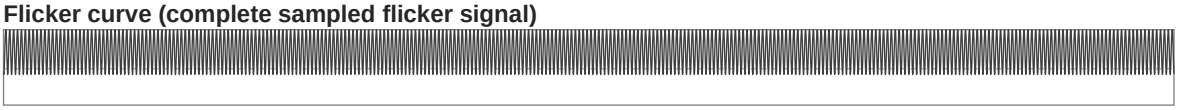
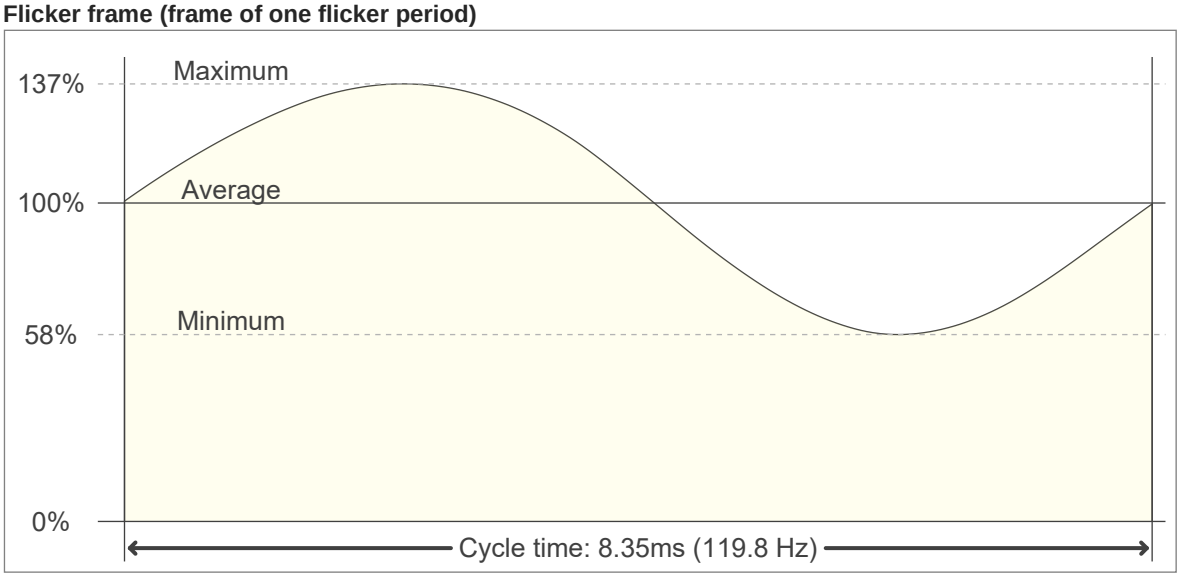
Flicker Specifications

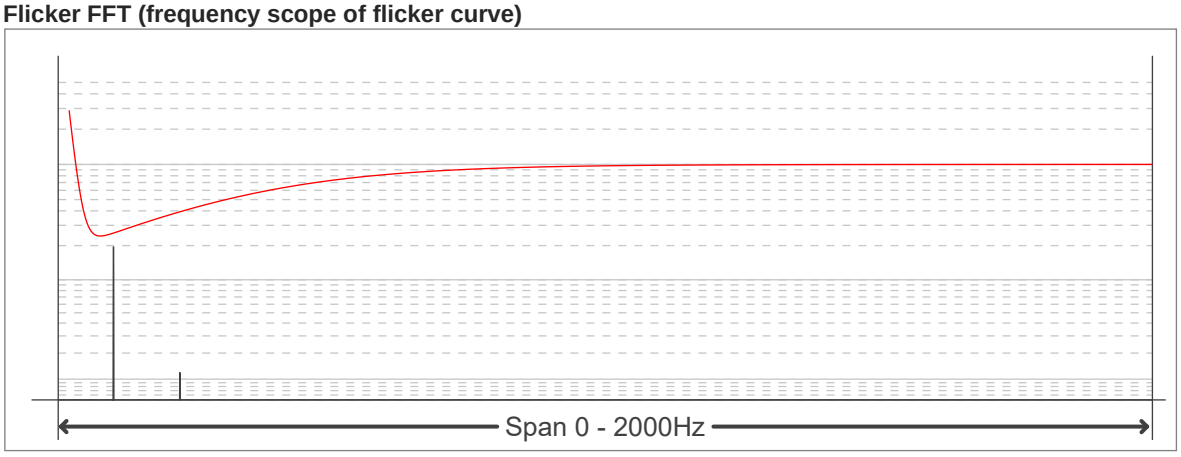
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**119.76 Hz**
Flicker index:	**0.12**
Flicker percentage:	**40.2 %**
SVM: (Visual flicker)	**1.42**

Flicker conditions:

Sample rate:	**20000 samples/second**

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