Light efficiency:

134 Lumen/Watt

Light quality:

CRI: 84.7

Color temperature:

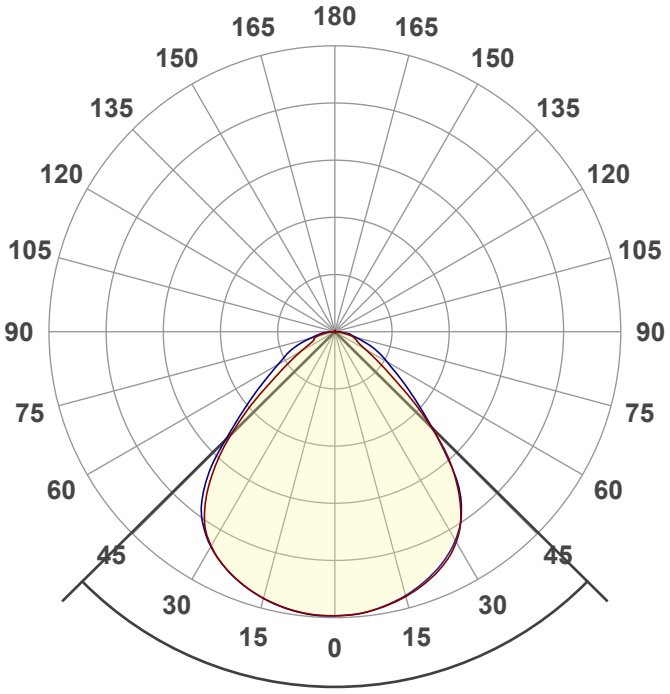
5285 K

Output: **35818 lm**

Peak: **16587 cd**

Power: **266.4 W**

PF: **1.0**



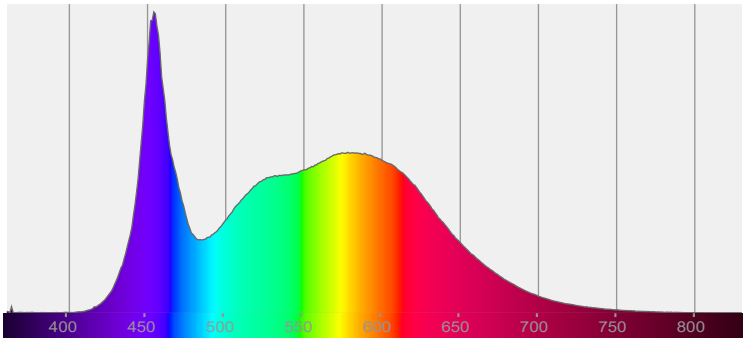
Beam angle **90.7°**

CIE 1931
x: 0.338
y: 0.344

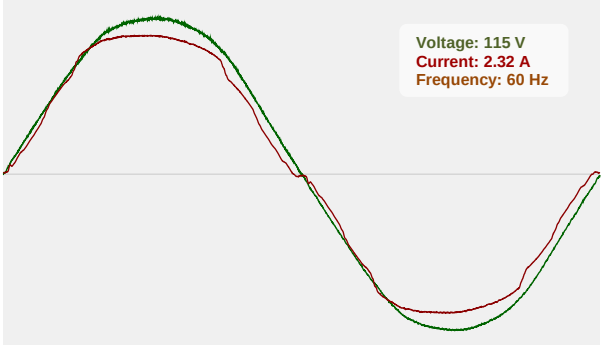
Product name:
LHBDS2-50K255ML-P1WH

Date and time:
11/8/2022 2:34:12 PM

Spectra



Power



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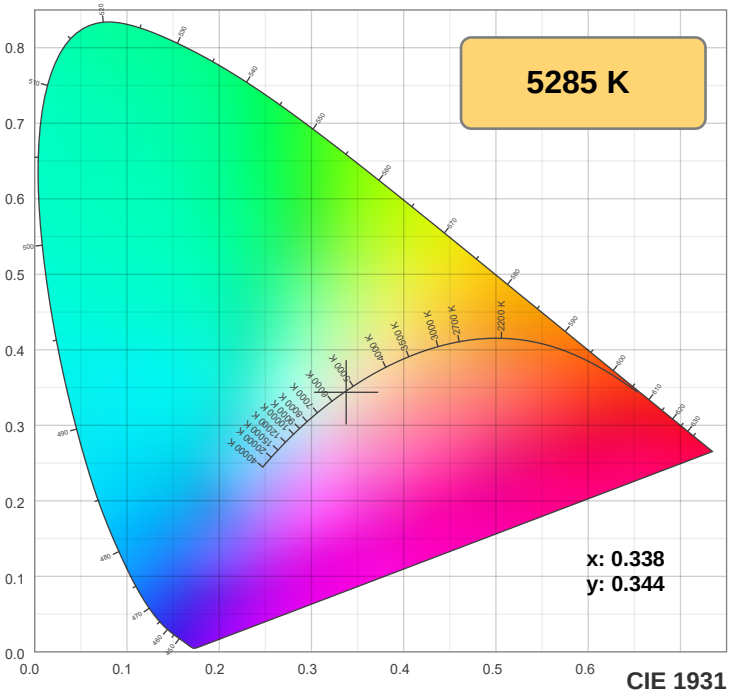
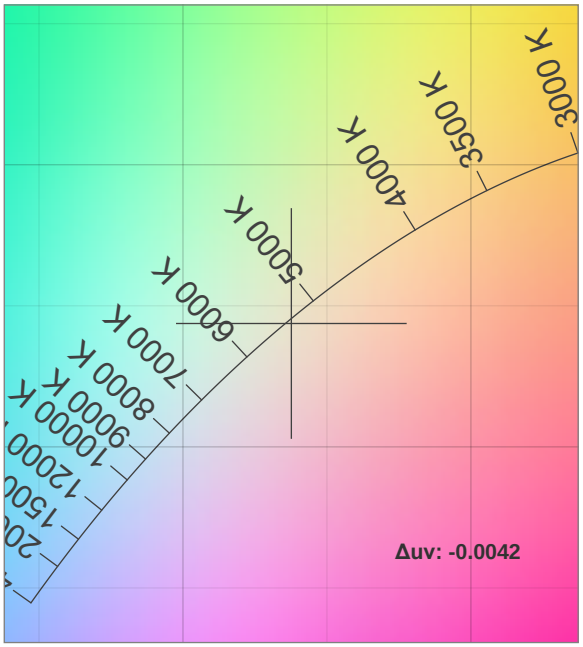
Color Specifications

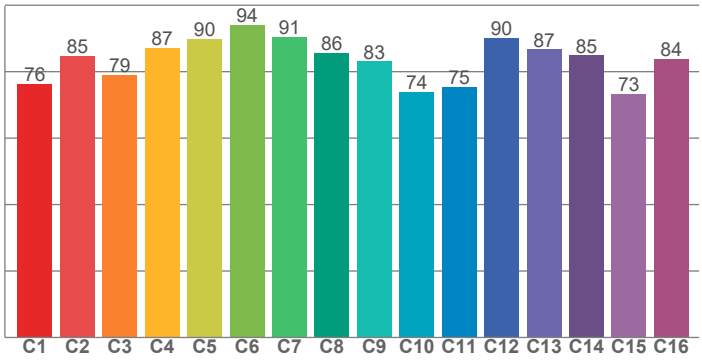


CIE 1931

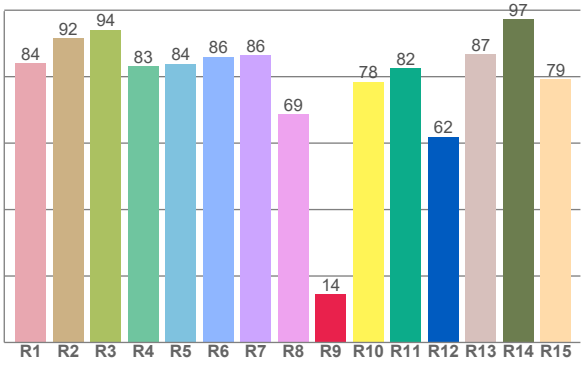


CIE 1931 ZOOM

TM30: 83.6



CRI: 84.7 (R1-R8)



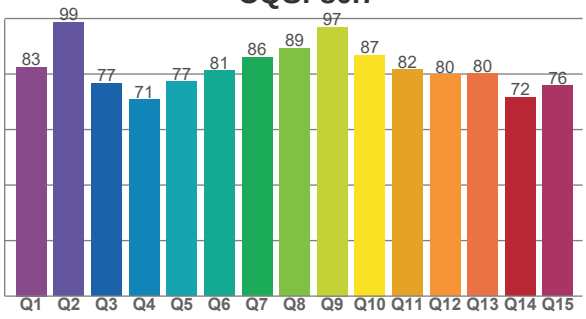
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.1	91.6	94.1	83.2	83.9	86.0	86.4	68.7	14.4	78.5	82.5	61.9	86.7	97.3	79.2

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
76.3	84.8	79.0	87.1	89.9	94.1	90.6	85.7	83.1	74.0	75.5	90.1	86.8	84.9	73.4	83.8

CQS: 80.7



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.5	98.7	76.7	70.8	77.2	81.3	86.1	89.3	97.0	86.9	81.6	79.8	80.1	71.6	75.8

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
5285 K	84.7	14.4	83.6	94.8	80.7	0.338	0.344	0.209	0.320	-0.0042

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TM30 Report

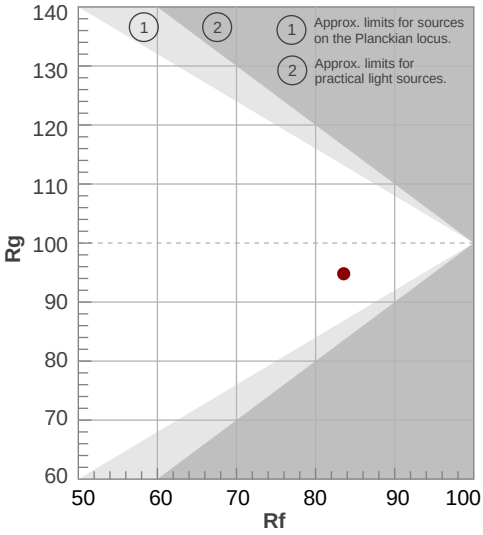
Rf 83.6

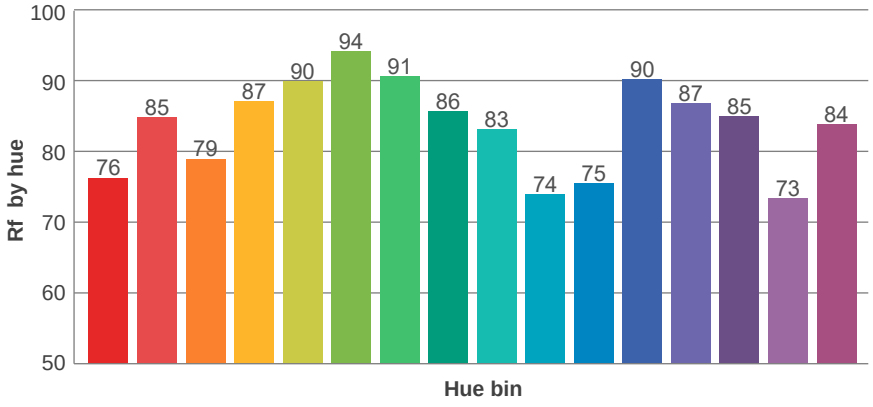
Fidelity index Rf

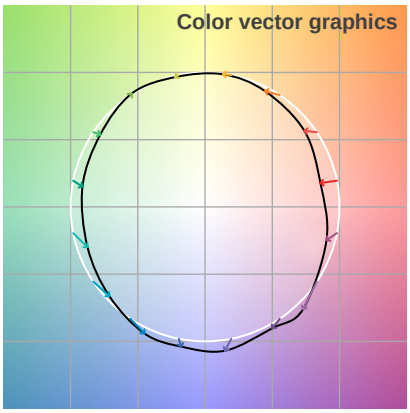
Rg 94.8

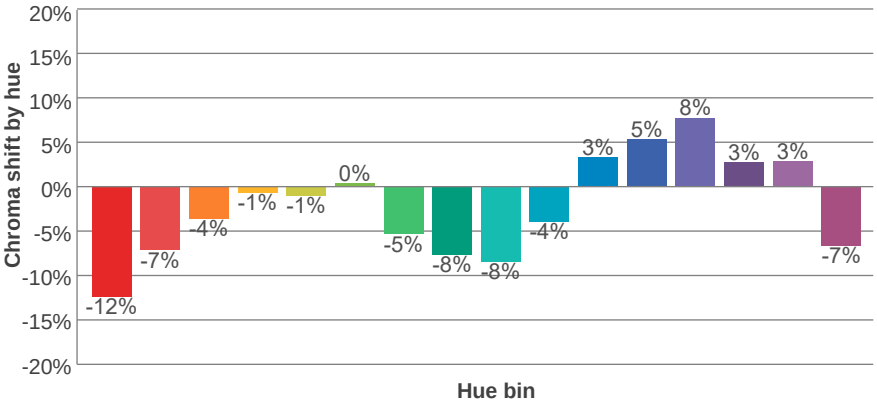
Gammut index Rg

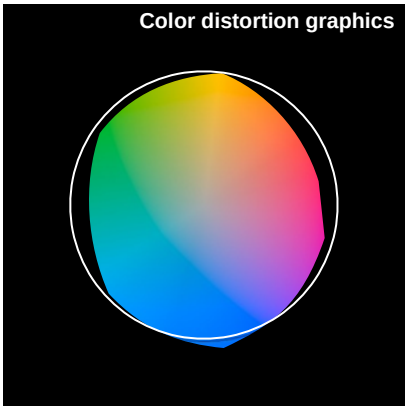
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	76	-12%	1%
2	85	-7%	6%
3	79	-4%	11%
4	87	-1%	6%
5	90	-1%	3%
6	94	0%	-1%
7	91	-5%	-1%
8	86	-8%	3%
9	83	-8%	12%
10	74	-4%	16%
11	75	3%	15%
12	90	5%	3%
13	87	8%	-6%
14	85	3%	-9%
15	73	3%	-23%
16	84	-7%	-7%

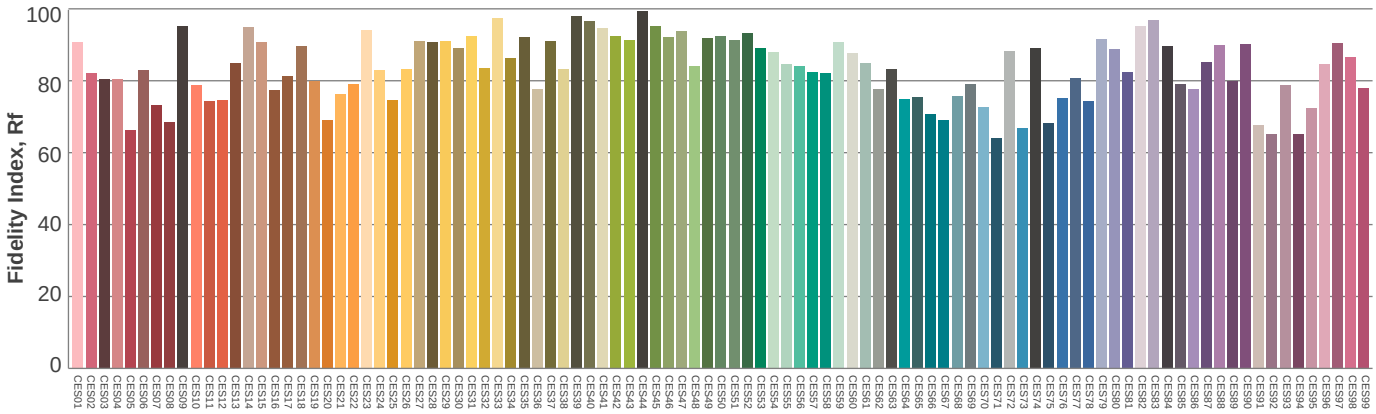












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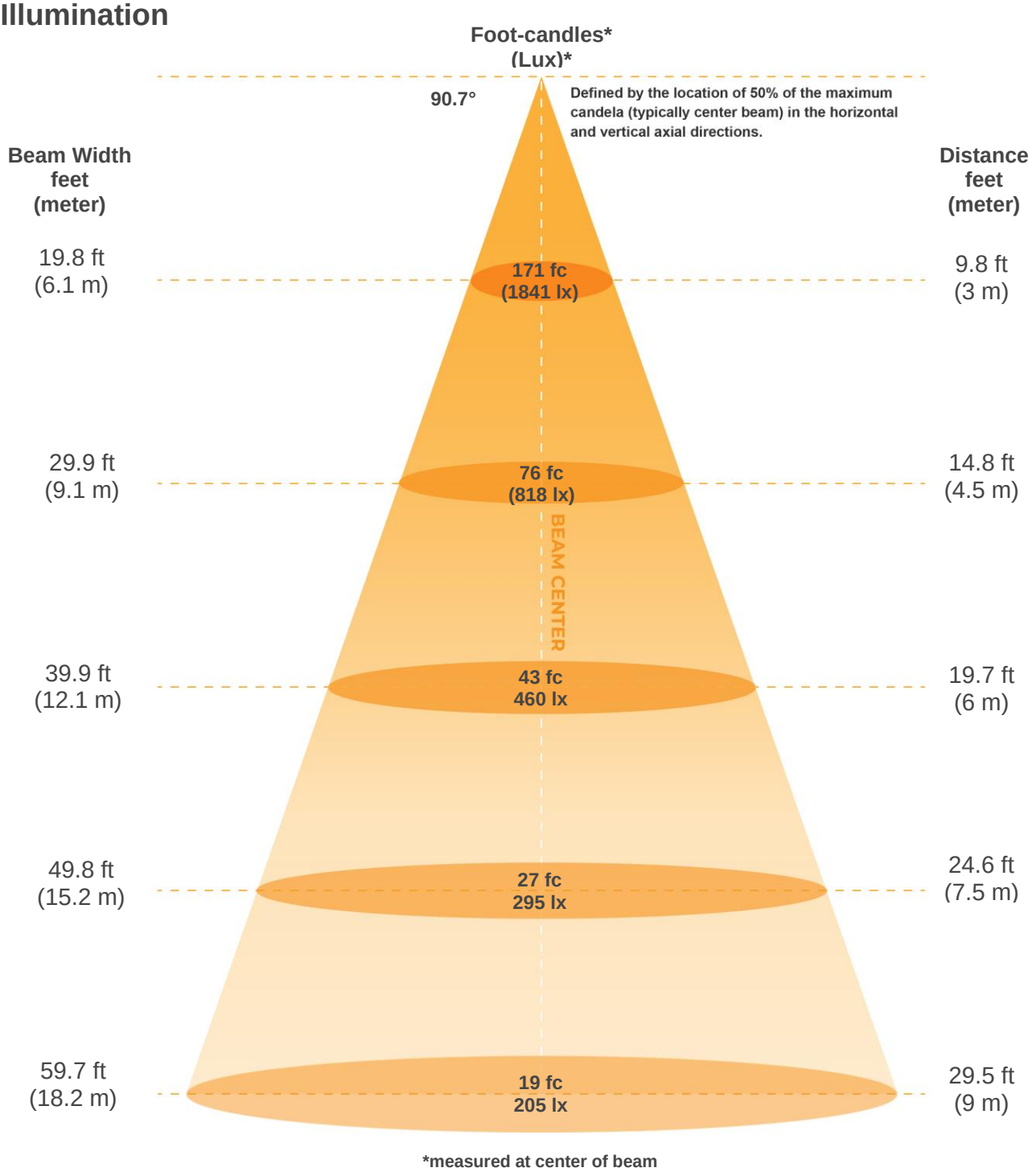
Illumination



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
16573lx	4143lx	1841lx	1036lx	663lx	460lx	338lx	259lx	205lx	166lx	137lx	115lx	98lx	85lx	74lx	65lx	57lx	51lx	46lx	41lx
1539.7f	384.9fc	171.1fc	96.2fcd	61.6fcd	42.8fcd	31.4fcd	24.1fcd	19fcd	15.4fcd	12.7fcd	10.7fcd	9.1fcd	7.9fcd	6.8fcd	6fcd	5.3fcd	4.8fcd	4.3fcd	3.8fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
90.7°	**142.3°**	**171.2°**	**87.6%**	**69.2%**

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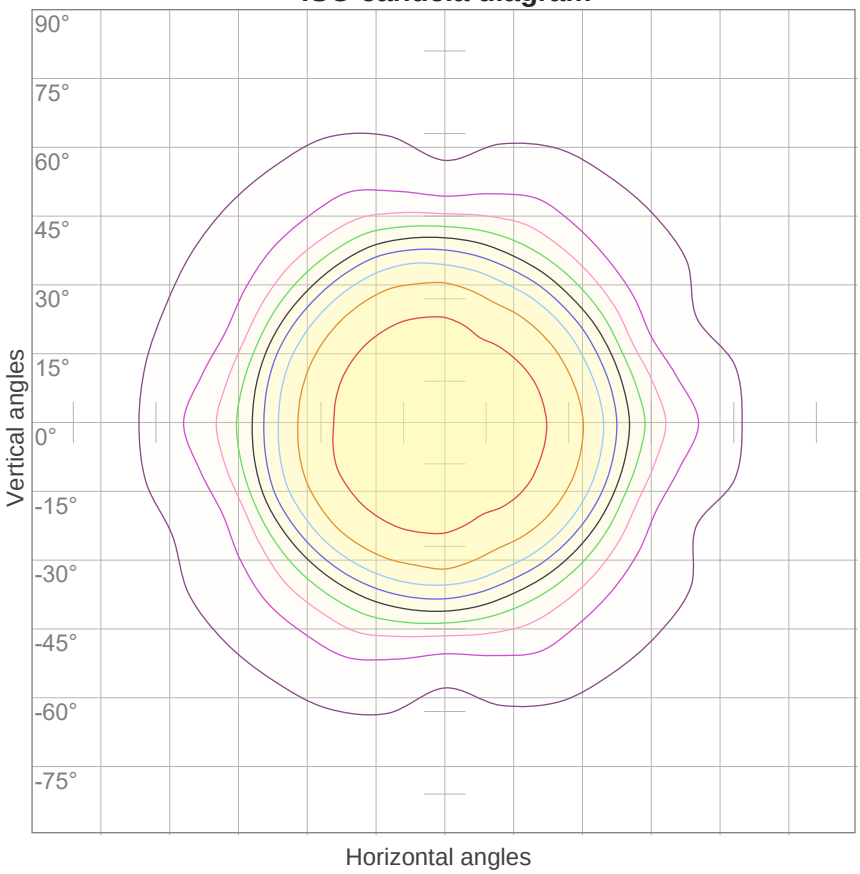
ISO Diagrams

ISO candela diagram



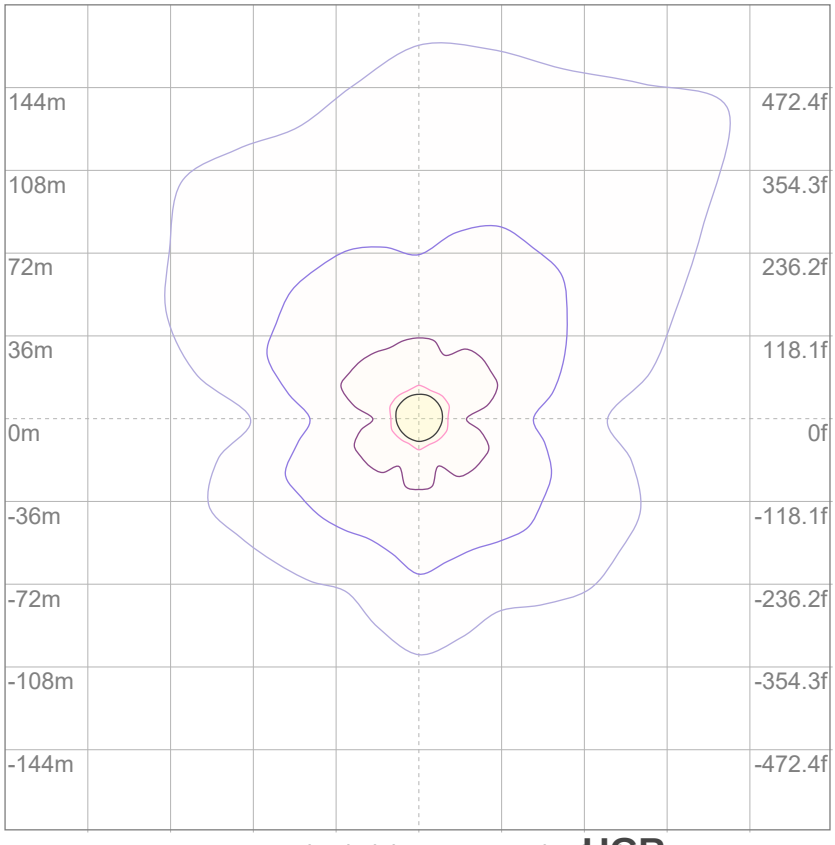
10%	1657 cd
20%	3315 cd
30%	4972 cd
40%	6629 cd
50%	8287 cd
60%	9944 cd
70%	11601 cd
80%	13259 cd
90%	14916 cd

Conditions:

Number of c-planes: 16

Candela at center: 16573 cd

ISO lux diagram



3%	4.97 lx
5%	8.29 lx
10%	16.6 lx
30%	49.7 lx
50%	82.9 lx

Conditions:

Number of c-planes: 16

Lux at center: 166 lx

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

UGR

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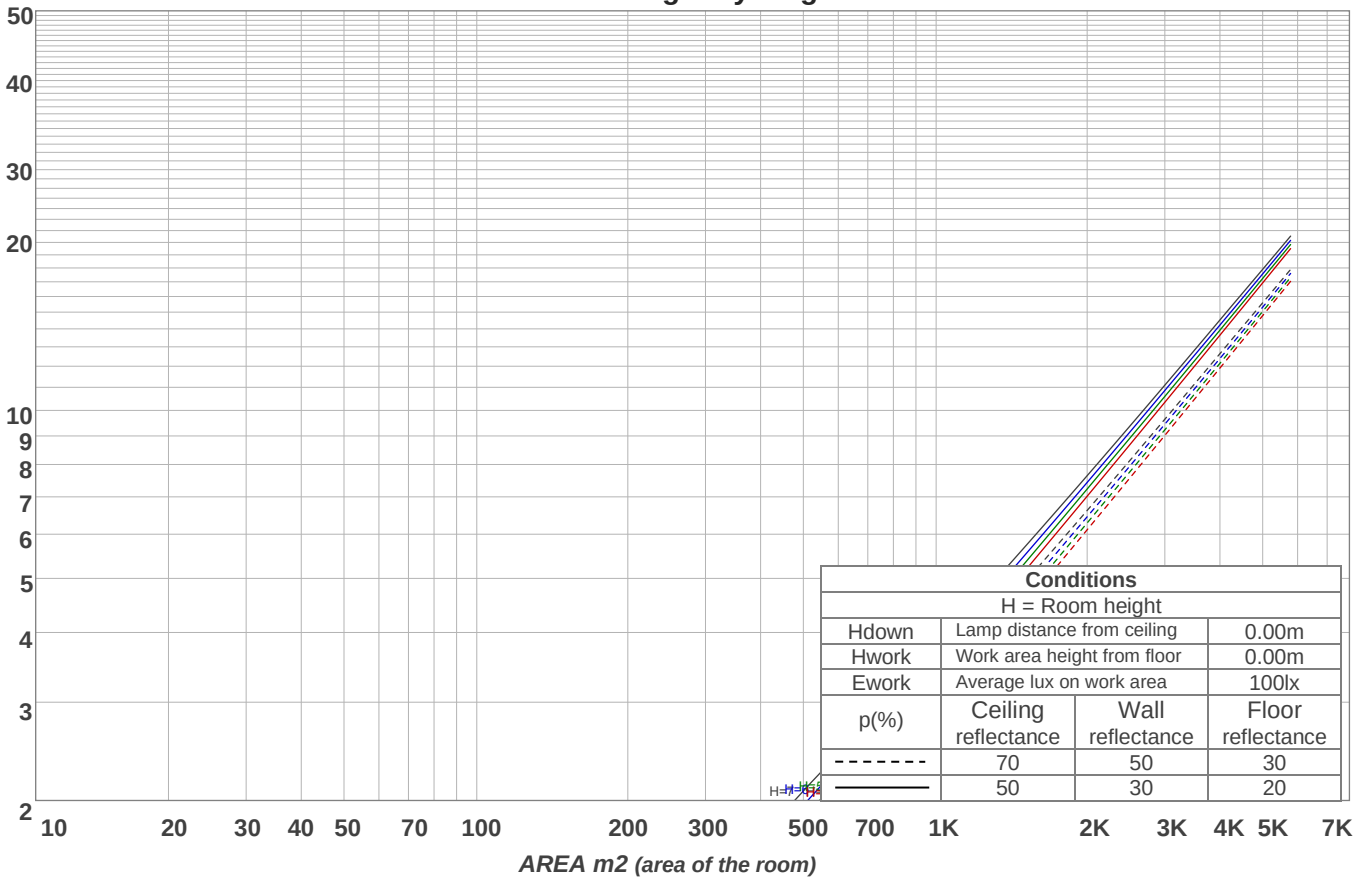
Light Planning

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	77	72	92	83	76	71	80	75	70	77	73	69	75	71	67	65
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	59	52	48	57	52	47	46
7	70	58	49	44	68	57	49	44	55	48	43	54	48	43	52	47	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	43	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
1571 lm	4523 lm	6913 lm	8109 lm	6535 lm	3742 lm	2266 lm	1501 lm	533 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
15.1 lm	12.3 lm	15.1 lm	17.4 lm	18.8 lm	18.4 lm	15.3 lm	10.4 lm	3.70 lm

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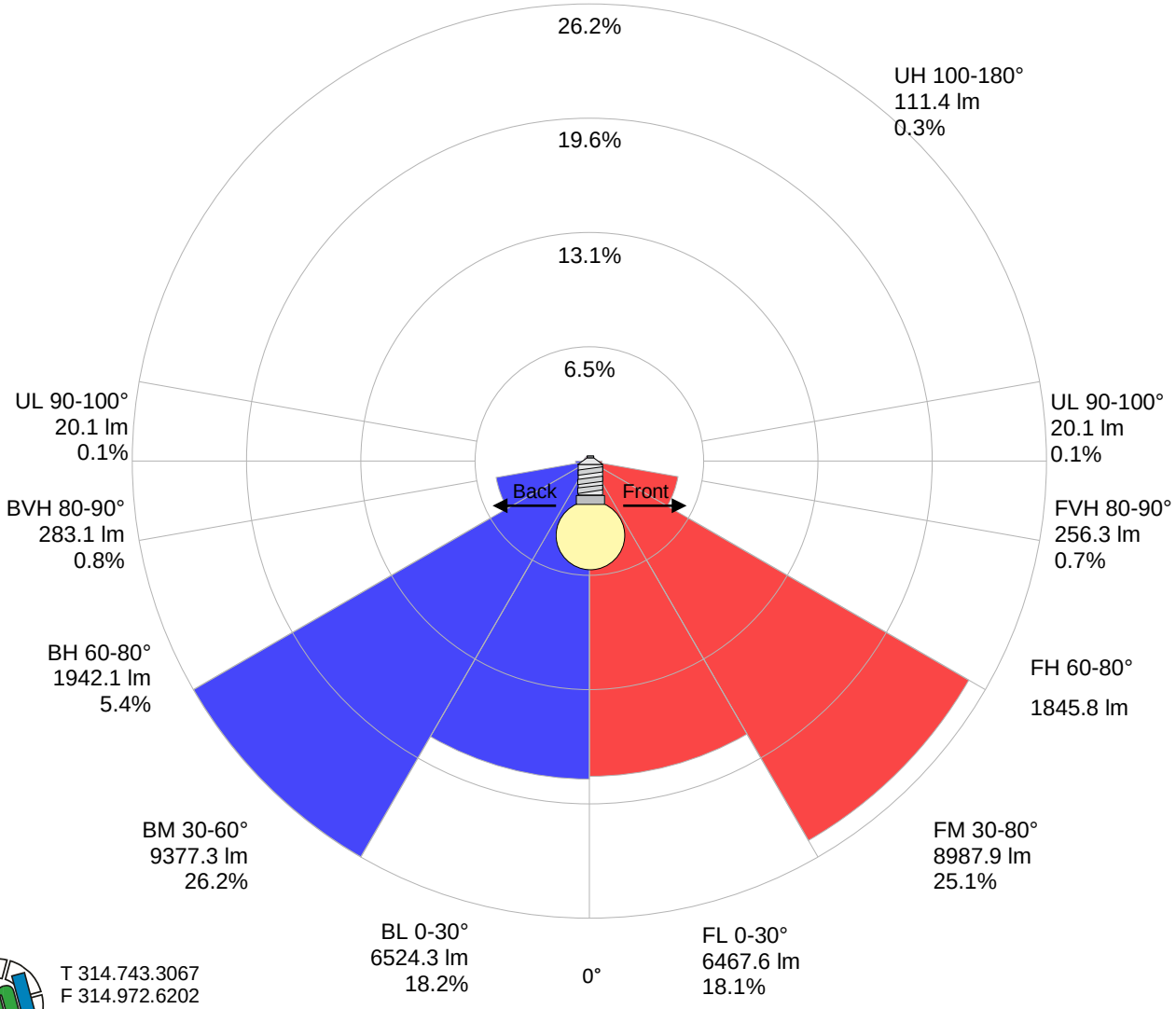
Road Report

LCS table

BUG rating:	B5 U3 G3	
Forward light	Lumens	Lumens %
Low(0-30):	6467.6	18.1%
Medium(30-60):	8987.9	25.1%
High(60-80):	1845.8	5.2%
Very high(80-90):	256.3	0.7%
Back light		
Low(0-30):	6524.3	18.2%
Medium(30-60):	9377.3	26.2%
High(60-80):	1942.1	5.4%
Very high(80-90):	283.1	0.8%
Uplight		
Low(90-100):	20.1	0.1%
High(100-180):	111.4	0.3%

LCS graph



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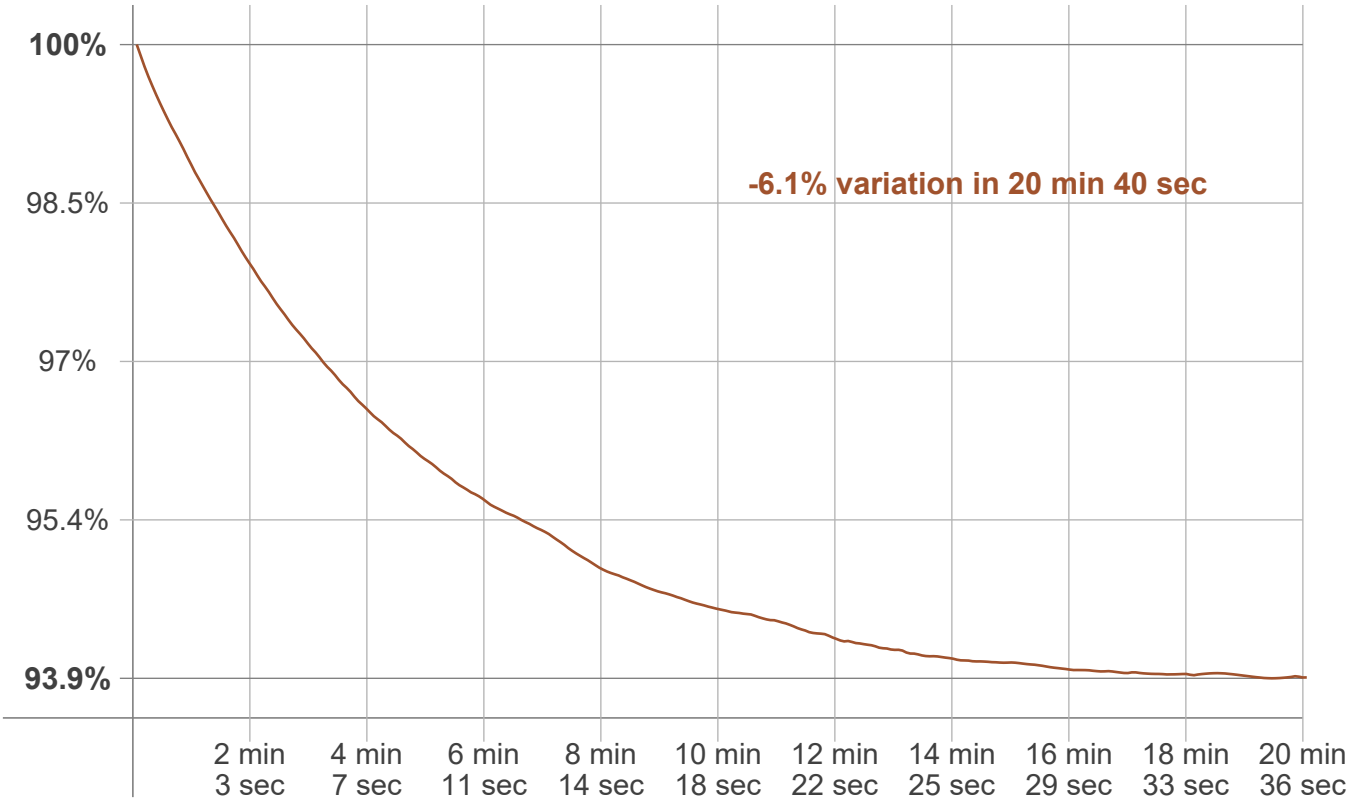
Stabilization

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 20 min 40 sec**
Warmup variation	**-6.2%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5126 K	+159 K	5285 K

Output change

Output start	Output change	Output end
38034 lm	-2216 lm	35818 lm

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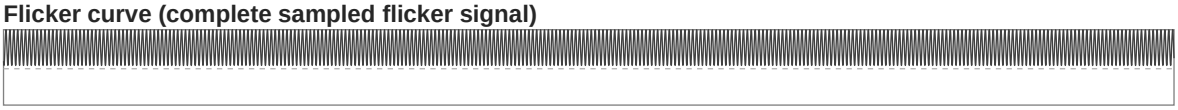
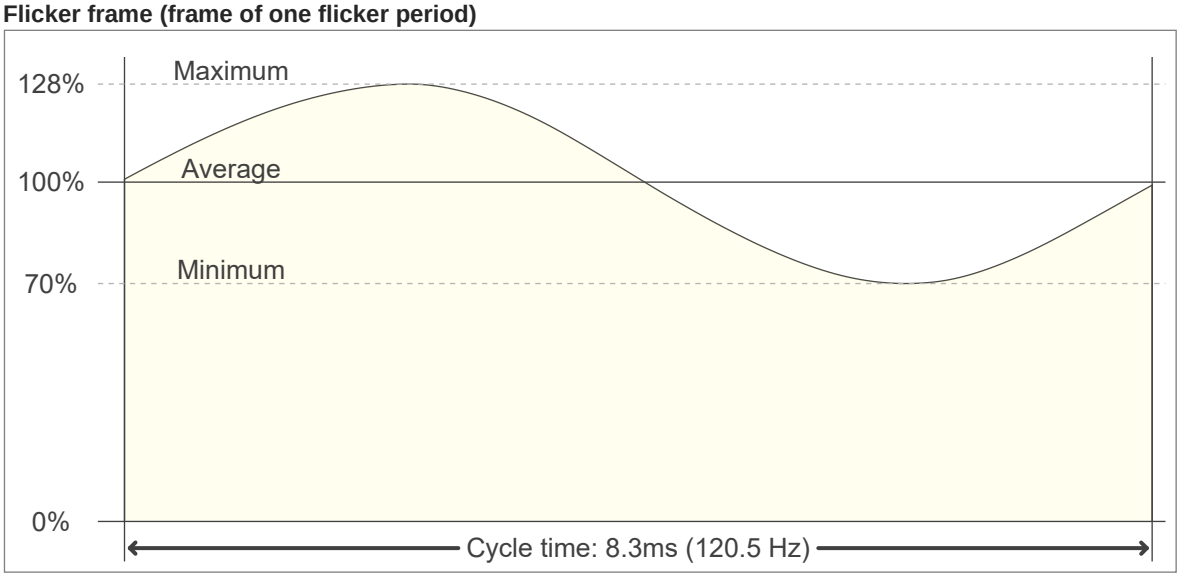
Flicker Specifications

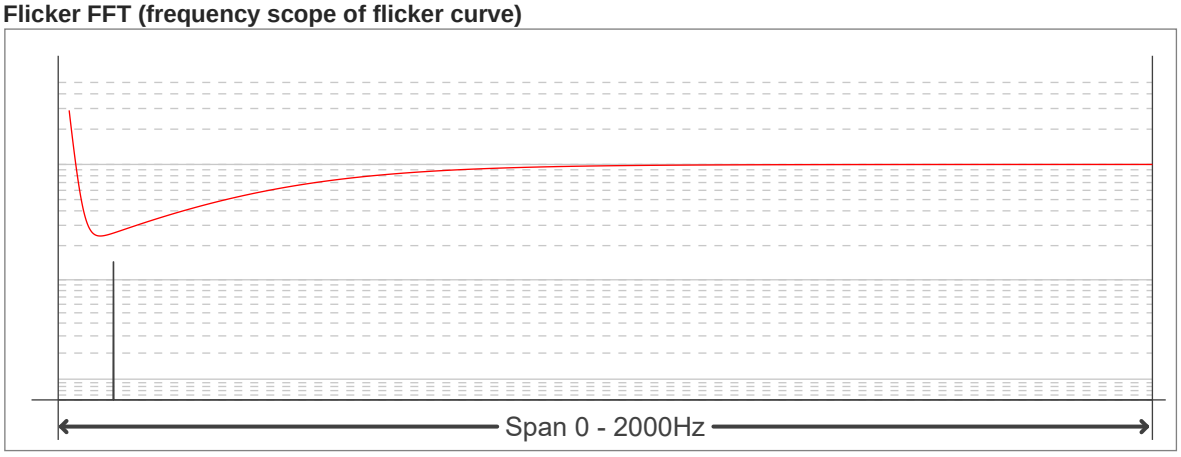
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**120.48 Hz**
Flicker index:	**0.09**
Flicker percentage:	**29.67 %**
SVM: (Visual flicker)	**1.05**

Flicker conditions:

Sample rate:	**20000 samples/second**

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