

Light efficiency:



Output: 18023 lm

Light quality:



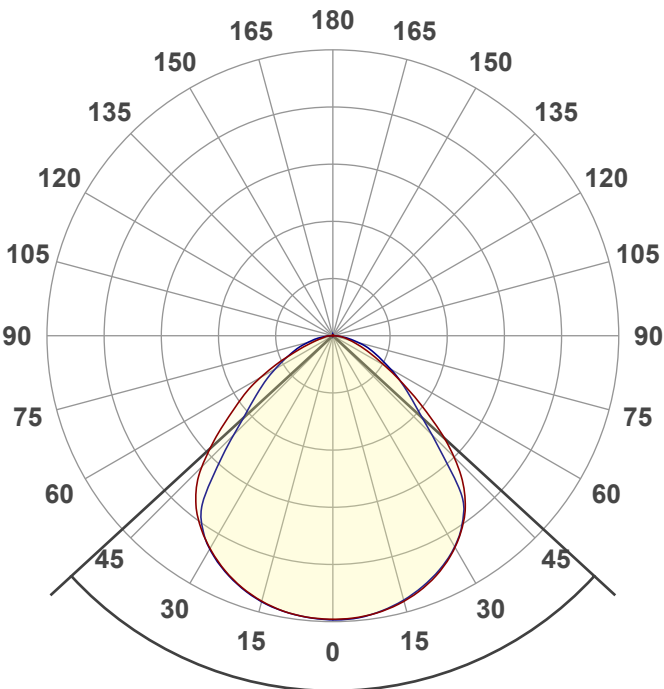
Peak: 7828 cd

Color temperature:



Power: 133 W

PF: 1.0



Product name:
LHBDS2-50K130ML-P1WH

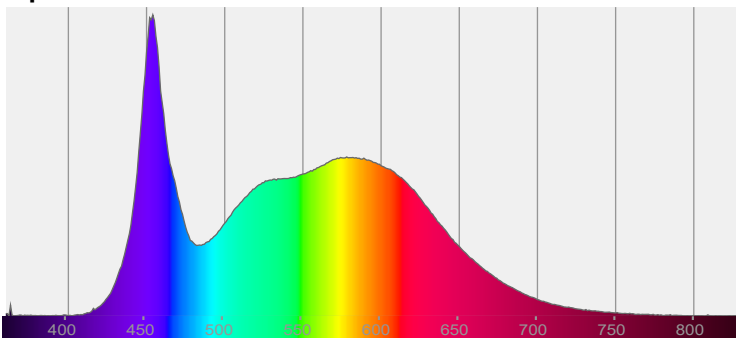
Date and time:
11/7/2022 3:11:45 PM

Beam angle **94.8°**

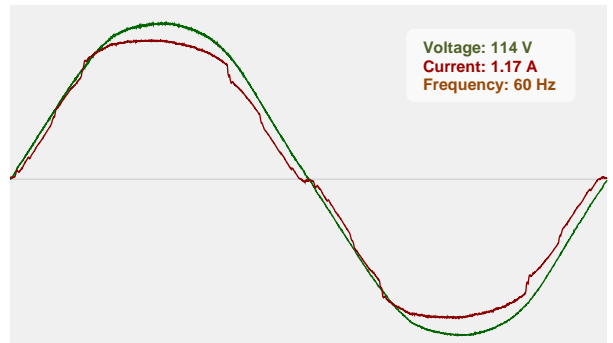


CIE 1931
x: 0.337
y: 0.343

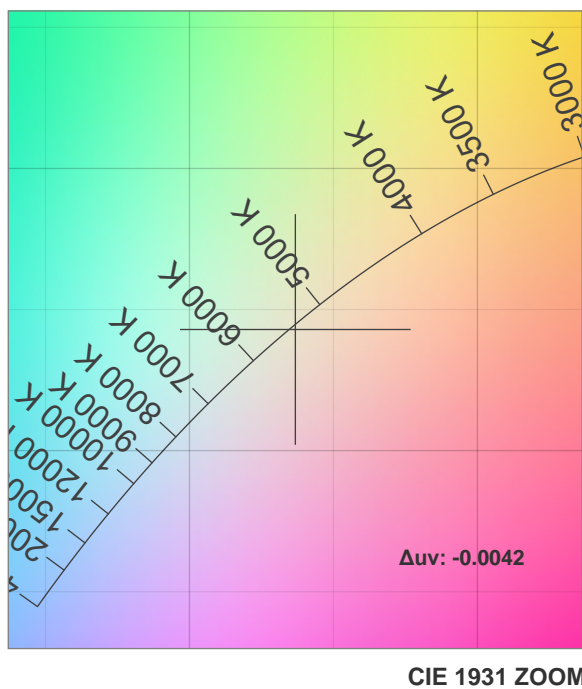
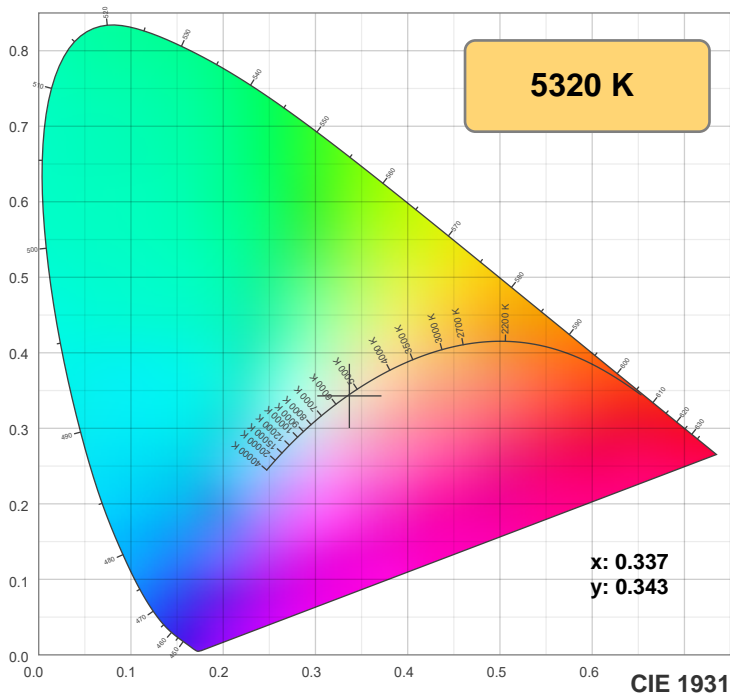
Spectra



Power

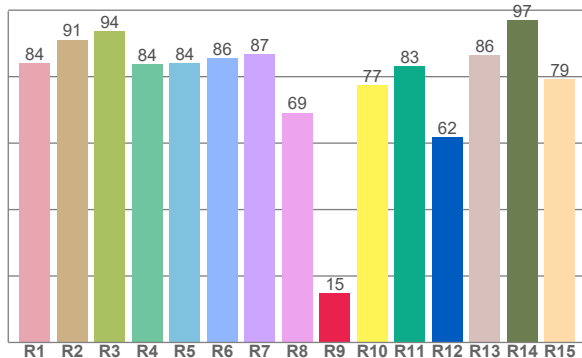
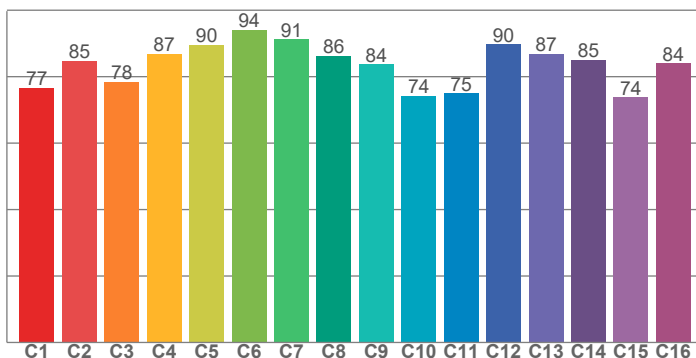


Color Specifications



TM30: 83.6

CRI: 84.8 (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	91.1	93.8	83.7	84.0	85.5	86.7	69.2	14.8	77.5	83.1	61.8	86.5	97.0	79.2

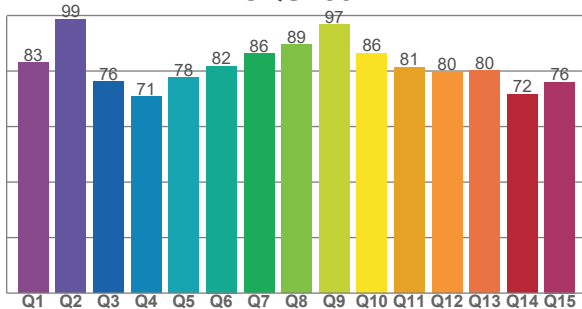
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
76.6	84.8	78.5	86.9	89.7	94.1	91.2	86.3	83.7	74.2	75.0	89.7	87.0	85.1	73.8	84.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.0	98.6	76.2	70.8	77.7	81.8	86.3	89.5	96.7	86.4	81.4	79.7	80.1	71.7	76.0

CQS: 80.7



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 division from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5320 K	84.8	14.8	83.6	95.2	80.7	0.337	0.343	0.209	0.319	-0.0042

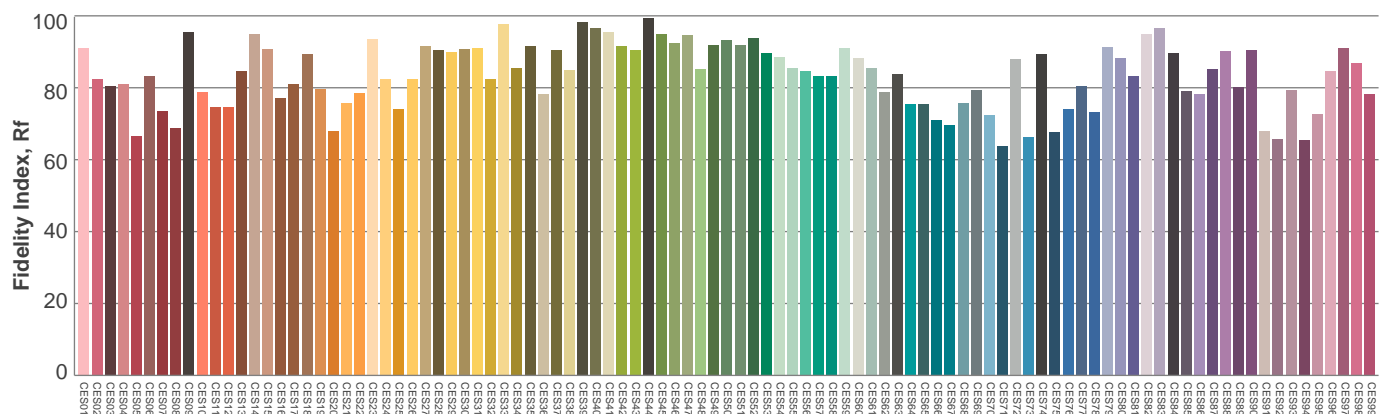
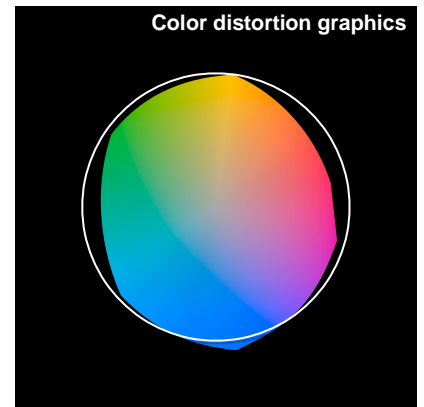
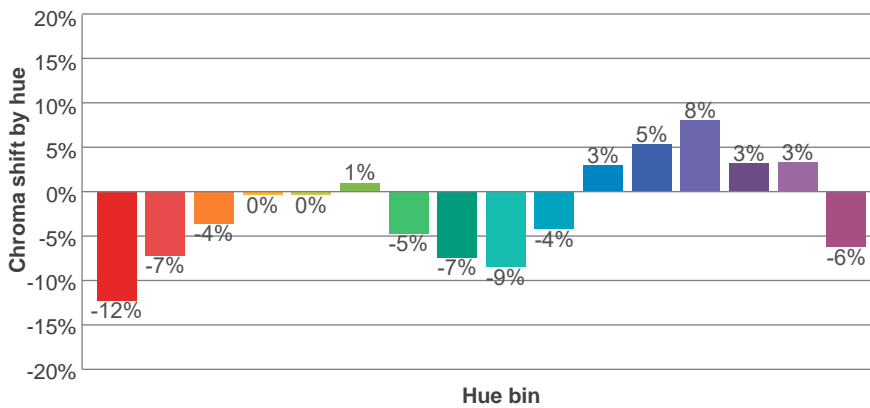
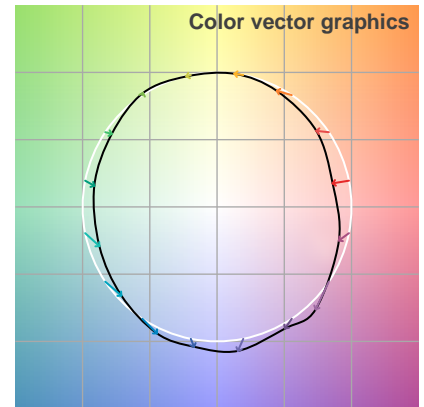
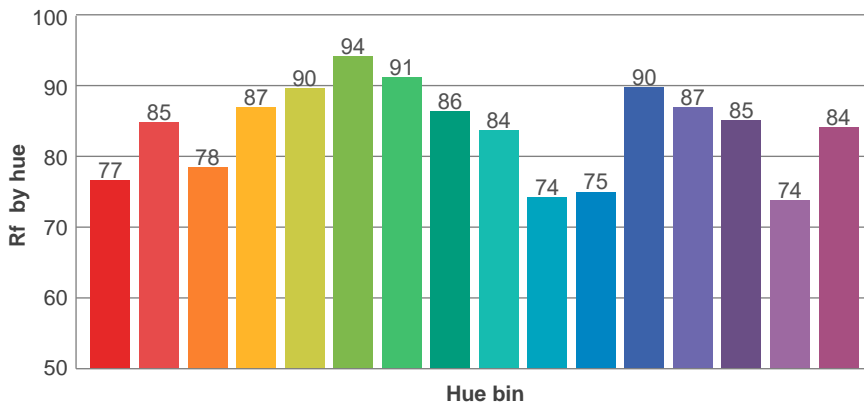
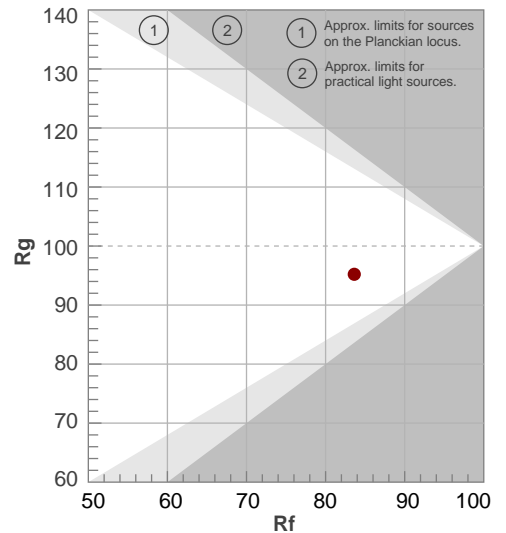


TM30 Report

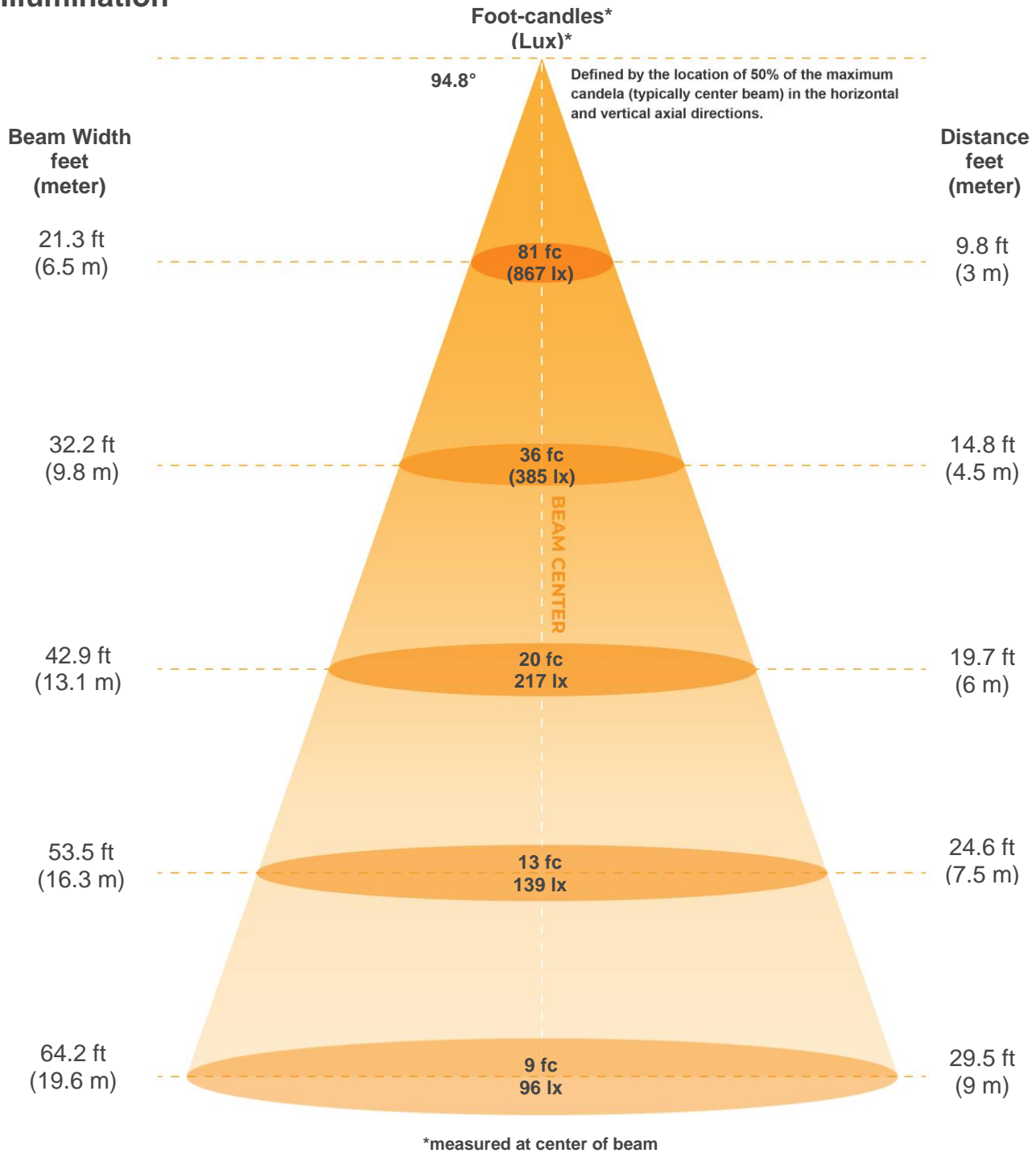
Rf 83.6
Fidelity index Rf

Rg 95.2
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	77	-12%	0%
2	85	-7%	6%
3	78	-4%	11%
4	87	0%	7%
5	90	0%	3%
6	94	1%	-1%
7	91	-5%	-2%
8	86	-7%	2%
9	84	-9%	12%
10	74	-4%	15%
11	75	3%	15%
12	90	5%	4%
13	87	8%	-6%
14	85	3%	-8%
15	74	3%	-23%
16	84	-6%	-7%



Illumination



Beam intensities from 1-20m

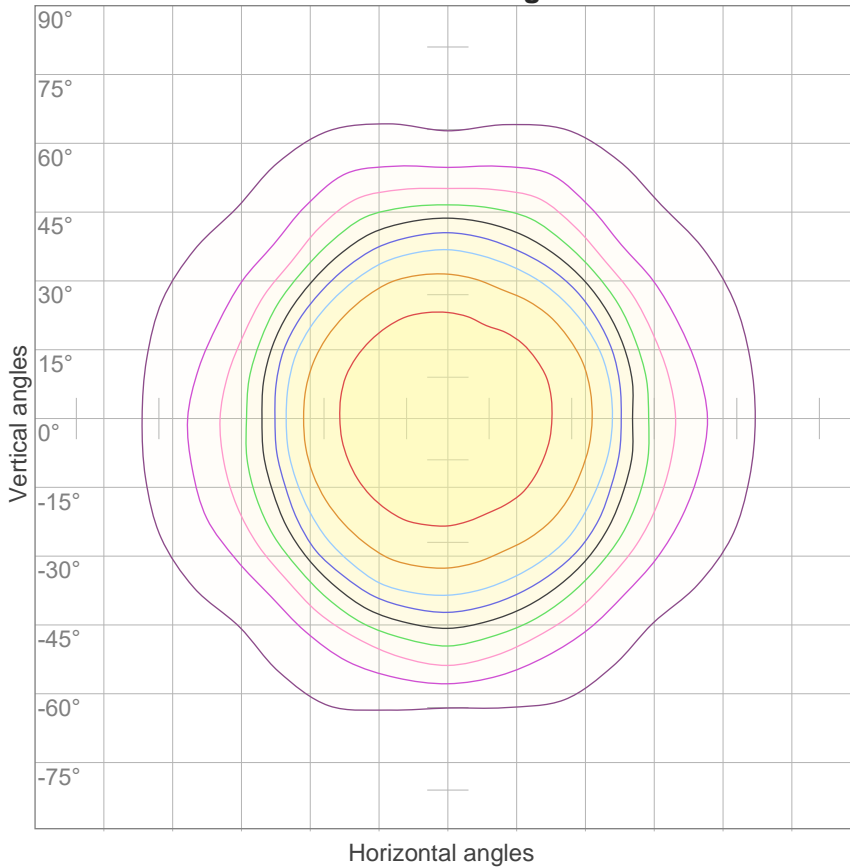
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
7800lx	1950lx	867lx	488lx	312lx	217lx	159lx	122lx	96lx	78lx	64lx	54lx	46lx	40lx	35lx	30lx	27lx	24lx	22lx	20lx
724.7fc	181.2fc	80.5fcd	45.3fcd	29fcd	20.1fcd	14.8fcd	11.3fcd	8.9fcd	7.2fcd	6fcd	5fcd	4.3fcd	3.7fcd	3.2fcd	2.8fcd	2.5fcd	2.2fcd	2fcd	1.8fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
94.8°	146.8°	170.1°	87.0%	66.0%



ISO Diagrams

ISO candela diagram



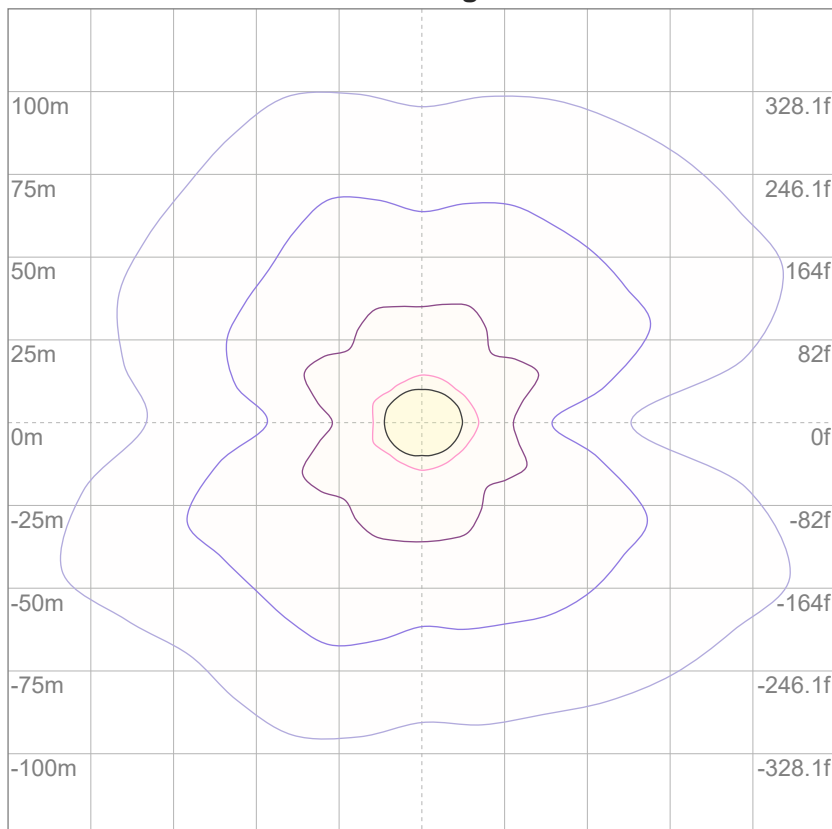
10%	780 cd
20%	1560 cd
30%	2340 cd
40%	3120 cd
50%	3900 cd
60%	4680 cd
70%	5460 cd
80%	6240 cd
90%	7020 cd

Conditions:

Number of c-planes: 16

Candela at center: 7800 cd

ISO lux diagram



3%	2.34 lx
5%	3.90 lx
10%	7.80 lx
30%	23.4 lx
50%	39.0 lx

Conditions:

Number of c-planes: 16

Lux at center: 78.0 lx

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

Mounting height: 10 meters (33 feet) UGR



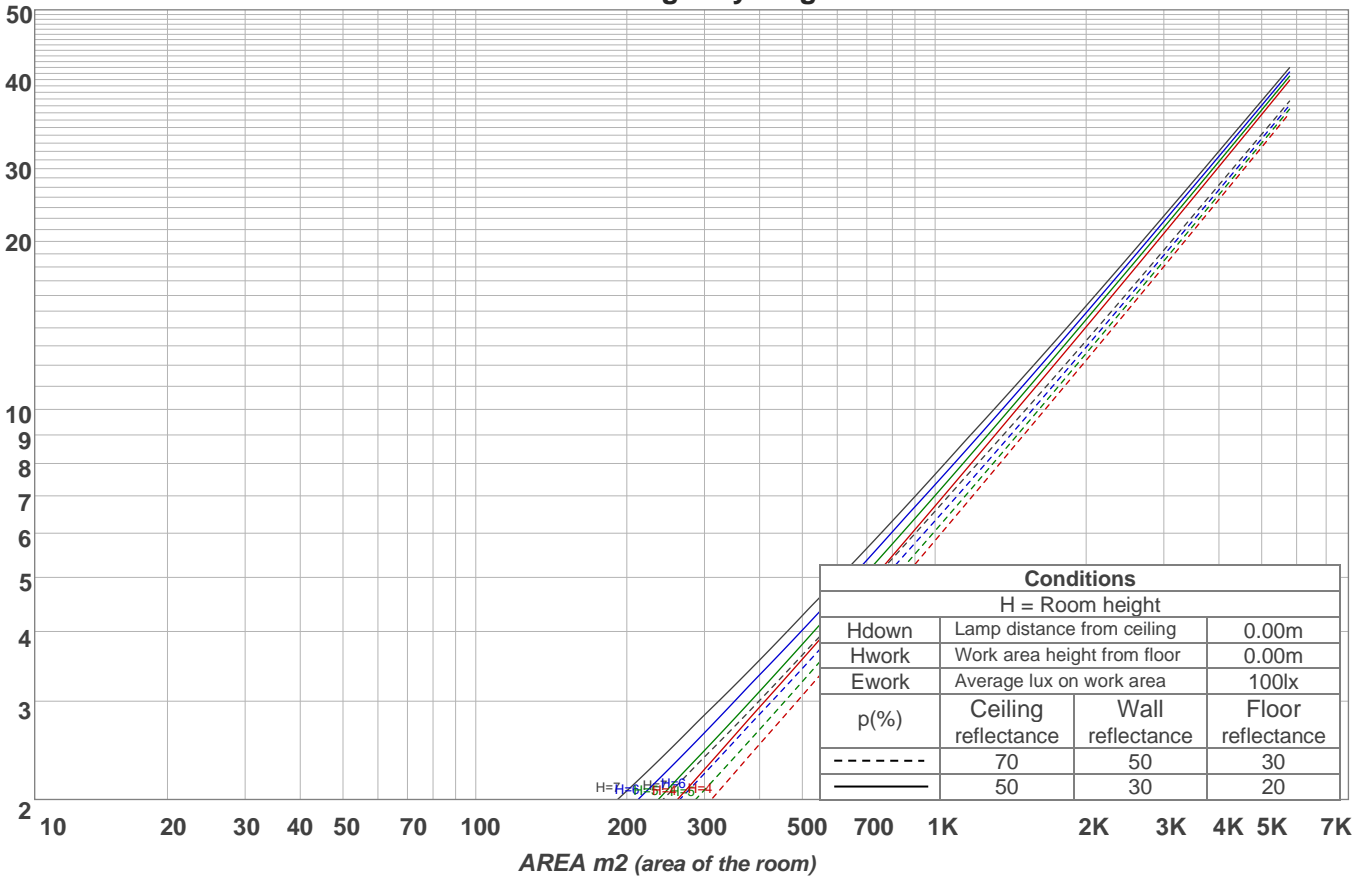
Light Planning

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	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	107	104	100	97	99	97	94	95	93	91	92	90	88	86	
2	101	94	88	83	99	92	87	82	89	84	80	85	81	78	82	79	76	74	
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	66	64	
4	86	75	67	61	84	74	67	61	71	65	60	69	64	59	67	62	58	56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44	
7	69	56	48	42	67	55	48	42	54	47	42	52	46	42	51	46	41	39	
8	64	52	44	38	63	51	43	38	50	43	38	48	42	37	47	42	37	35	
9	60	48	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32	
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31	29	

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°
739 lm	2130 lm	3261 lm	3912 lm	3422 lm	2217 lm	1294 lm	745 lm	236 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
6.94 lm	7.02 lm	8.20 lm	9.60 lm	10.2 lm	9.83 lm	8.15 lm	5.55 lm	1.96 lm

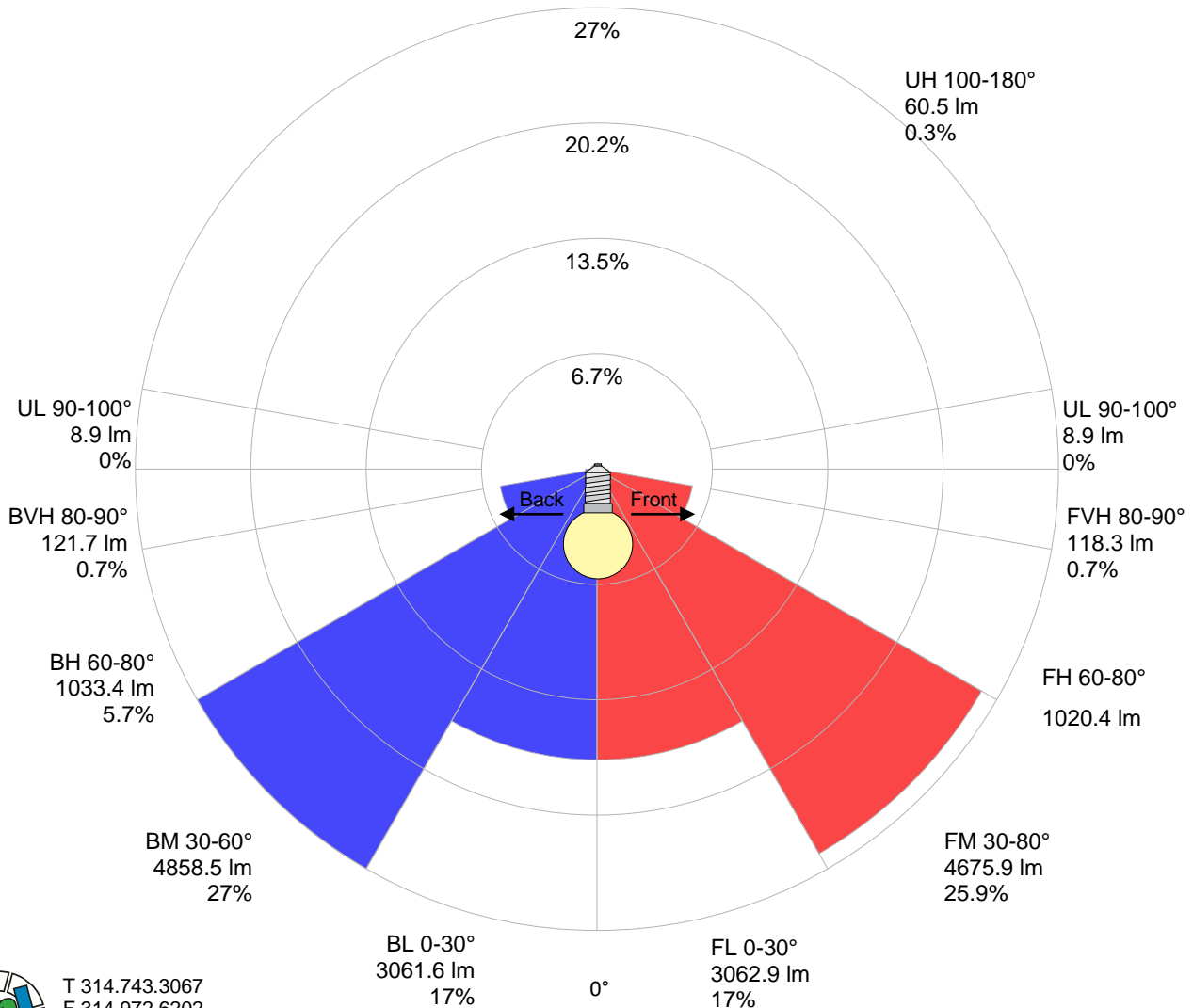


Road Report

LCS table

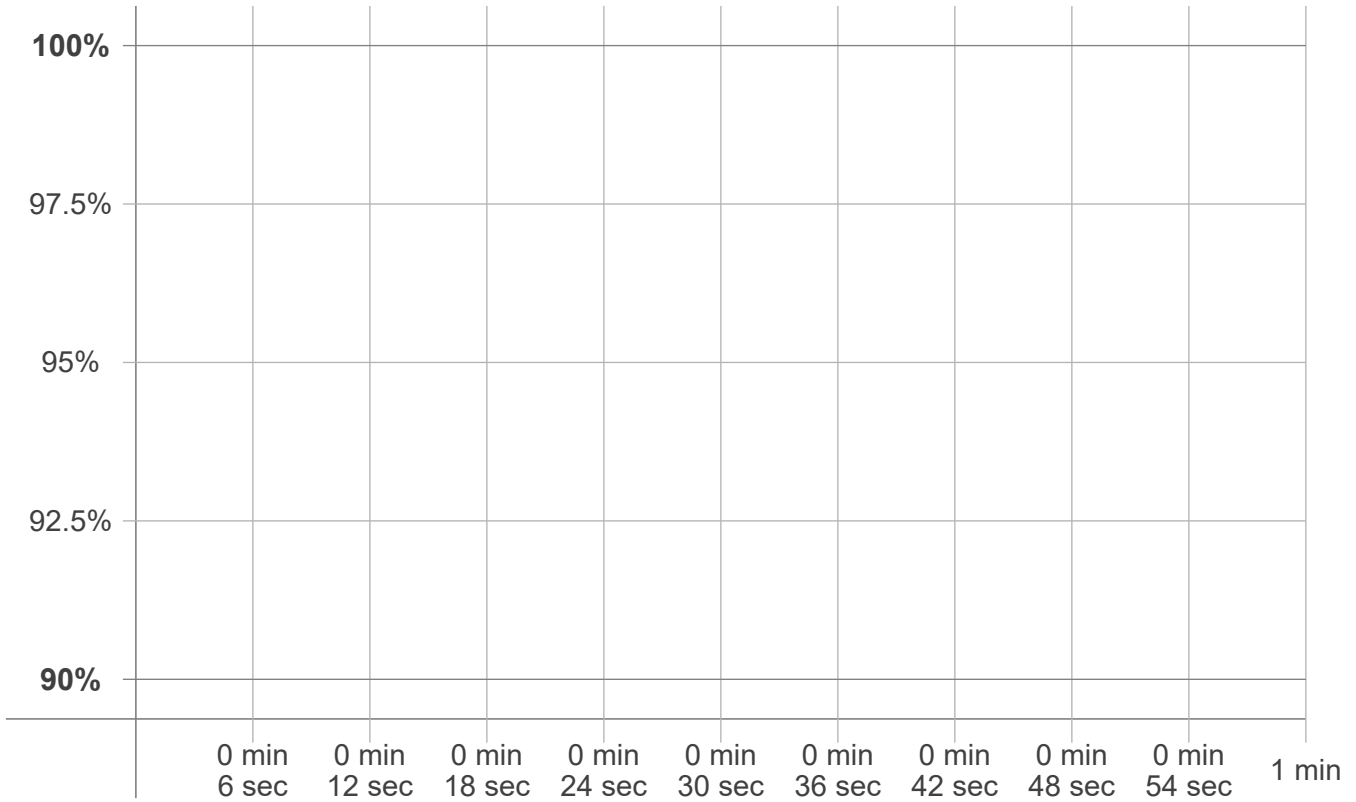
BUG rating:	B4 U3 G3	
Forward light	Lumens	Lumens %
Low(0-30):	3062.9	17%
Medium(30-60):	4675.9	25.9%
High(60-80):	1020.4	5.7%
Very high(80-90):	118.3	0.7%
Back light		
Low(0-30):	3061.6	17%
Medium(30-60):	4858.5	27%
High(60-80):	1033.4	5.7%
Very high(80-90):	121.7	0.7%
Uplight		
Low(90-100):	8.9	0%
High(100-180):	60.5	0.3%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	n/a
Warmup variation	n/a%

Warmup conditions

Stable period:	n/a
Stable change max:	n/a%
Minimum time:	n/a

Color temperature change

CCT start	CCT change	CCT end
n/a K	n/a K	5320 K

Output change

Output start	Output change	Output end
n/a lm	n/a lm	18023 lm

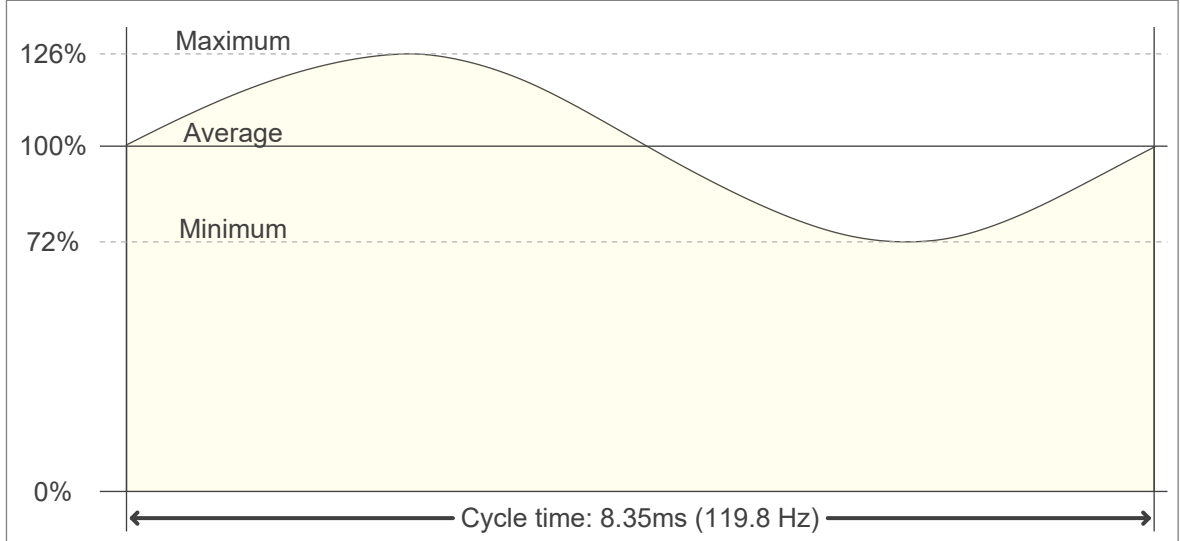


Flicker Specifications

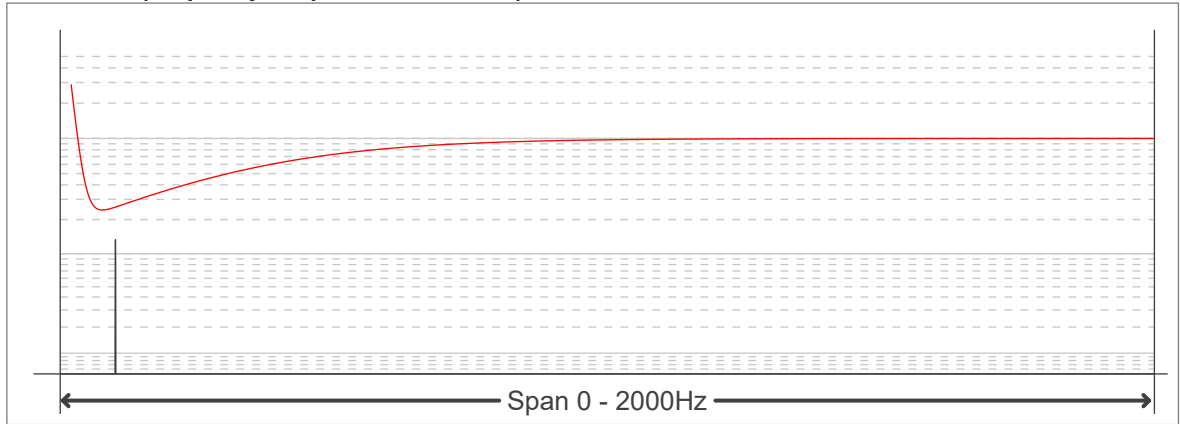
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.08
Flicker percentage:	27.45 %
SVM: (Visual flicker)	0.97

Flicker conditions:

Sample rate:	20000 samples/second
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