Light efficiency:

53 Lumen/Watt

Light quality:

CRI: 77.0

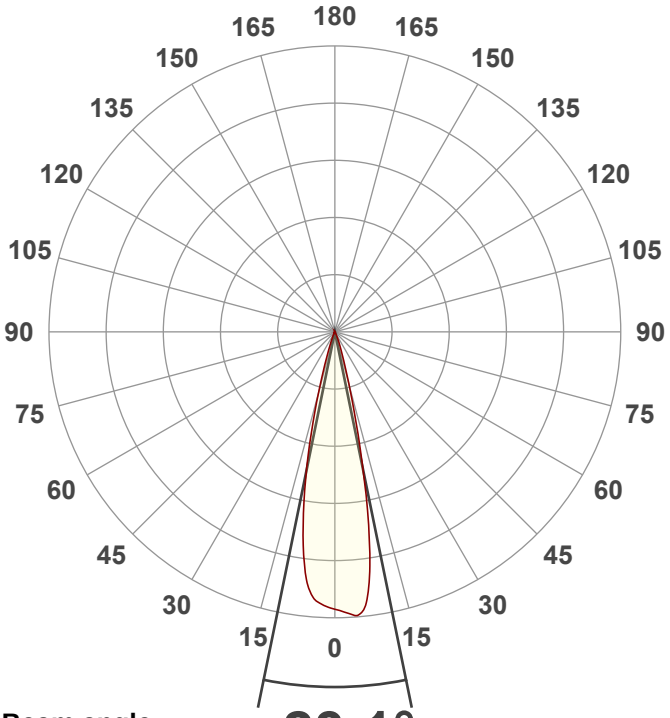
Color temperature:

7342 K

Output: 653 lm
Peak: 4175 cd

Power: 12.2 W
PF: 0.5





Beam angle 23.1°

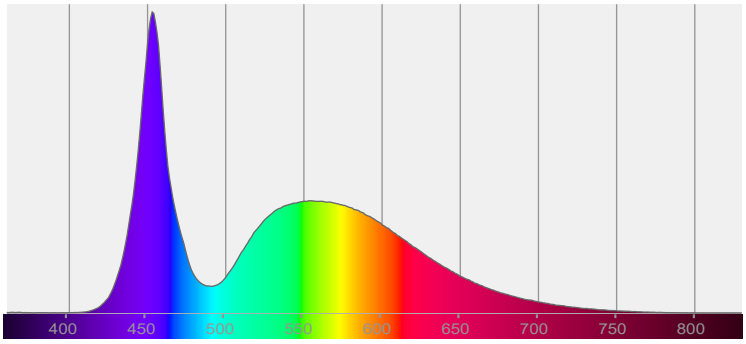
Product name:
LP 12 Hex (White)

Item number:
White

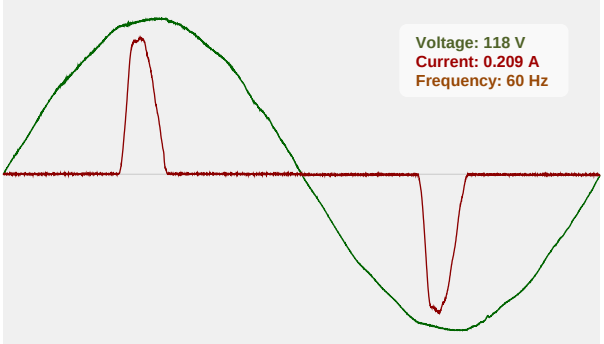
Date and time:
9/12/2019 1:22:24 PM

CIE 1931
x: 0.304
y: 0.305

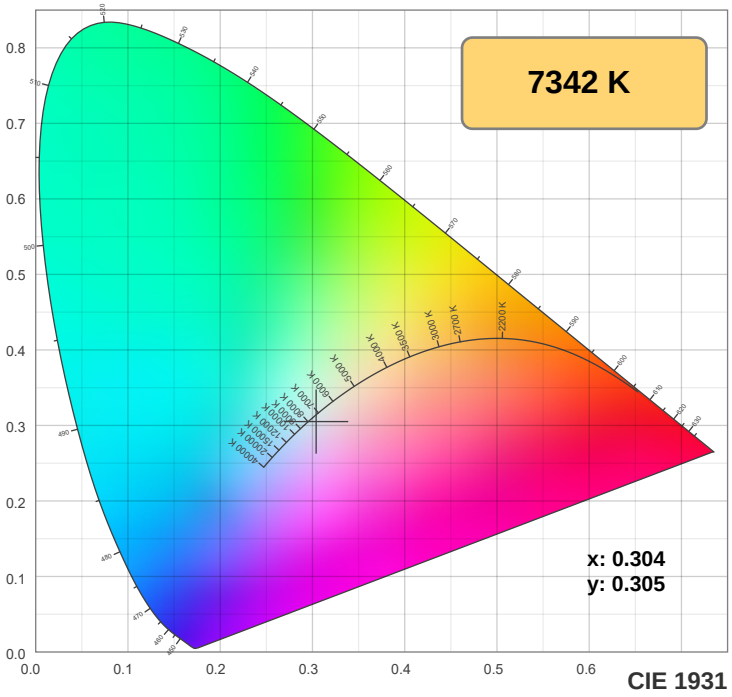
Spectra



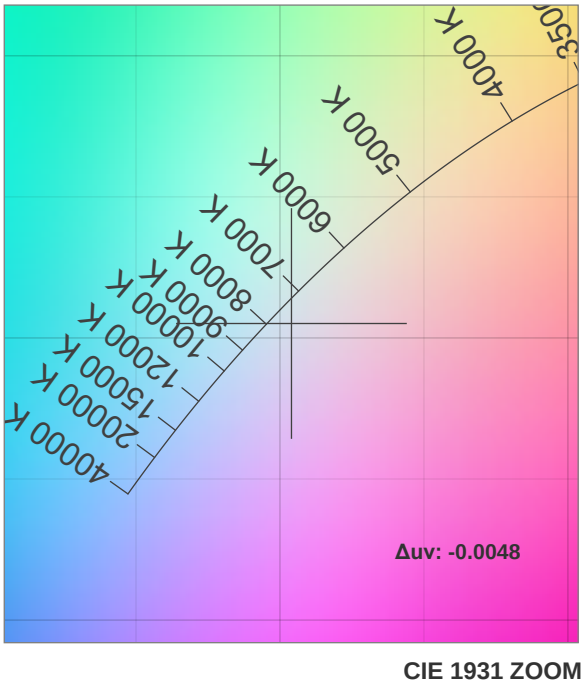
Power



Color details

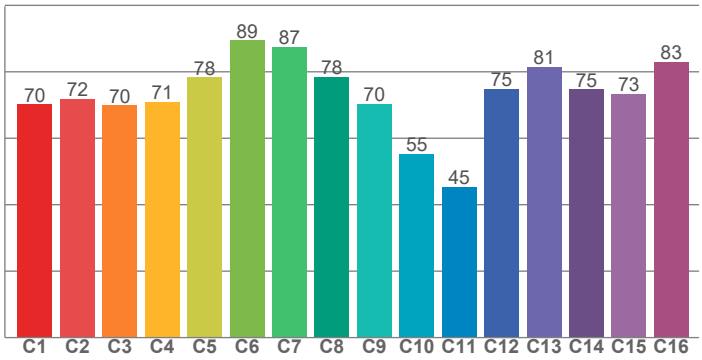


CIE 1931

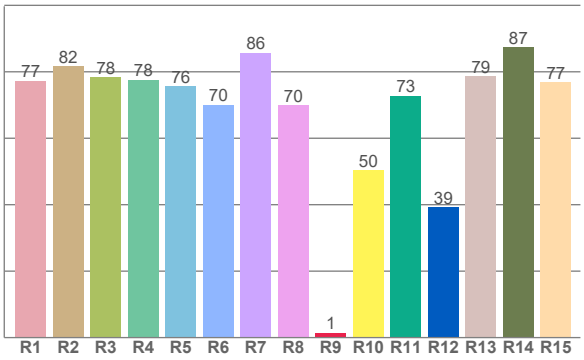


CIE 1931 ZOOM

TM-30: 73.4



CRI: 77.0 (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
77.3	81.7	78.3	77.6	75.6	70.1	85.7	70.0	1.5	50.4	72.7	39.2	78.6	87.5	76.8

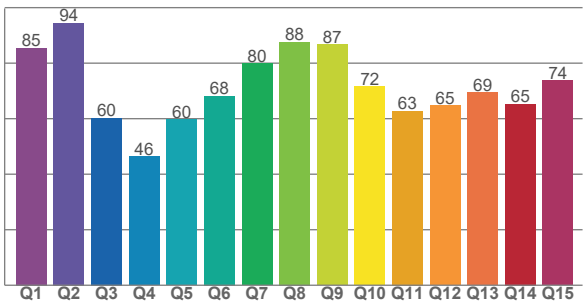
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
70.2	71.9	69.9	71.0	78.3	89.5	87.5	78.5	70.3	55.3	45.4	74.8	81.5	74.6	73.4	83.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85.5	94.4	60.2	46.3	59.6	68.2	79.8	87.6	86.7	71.5	62.8	64.7	69.4	65.3	73.7

CQS: 69.0



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
7342 K	77.0	1.5	73.4	93.1	69.0	0.304	0.305	0.201	0.302	-0.0048

TM-30 details

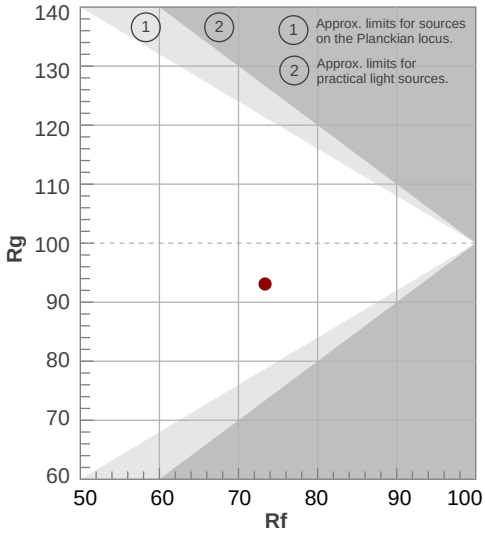
Rf 73.4

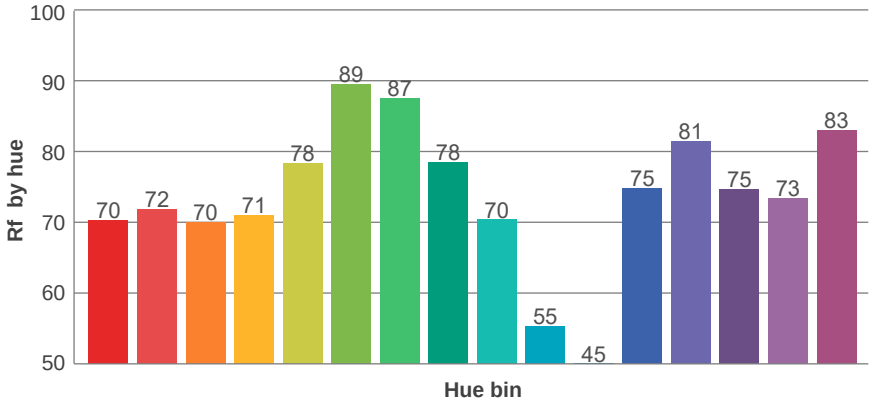
Fidelity index Rf

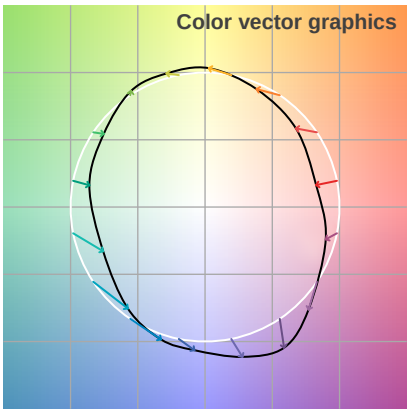
Rg 93.1

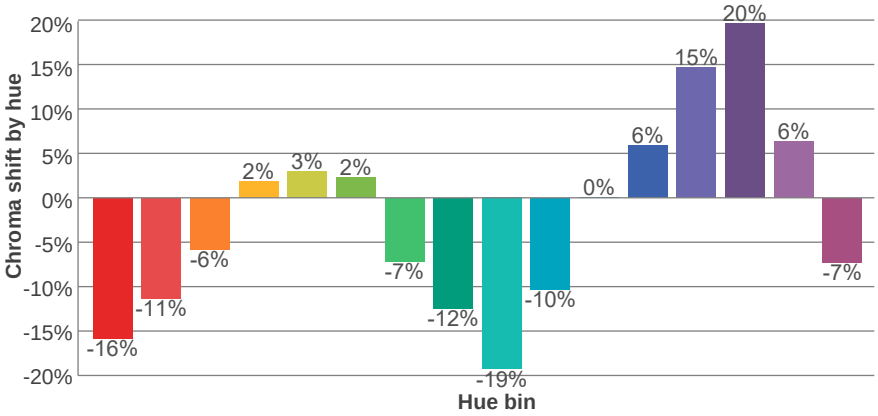
Gamut index Rg

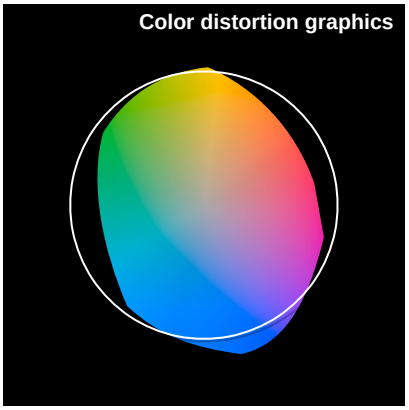
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	70	-16%	0%
2	72	-11%	11%
3	70	-6%	17%
4	71	2%	17%
5	78	3%	9%
6	89	2%	-2%
7	87	-7%	-3%
8	78	-12%	1%
9	70	-19%	17%
10	55	-10%	31%
11	45	0%	27%
12	75	6%	13%
13	81	15%	6%
14	75	20%	-9%
15	73	6%	-21%
16	83	-7%	-6%

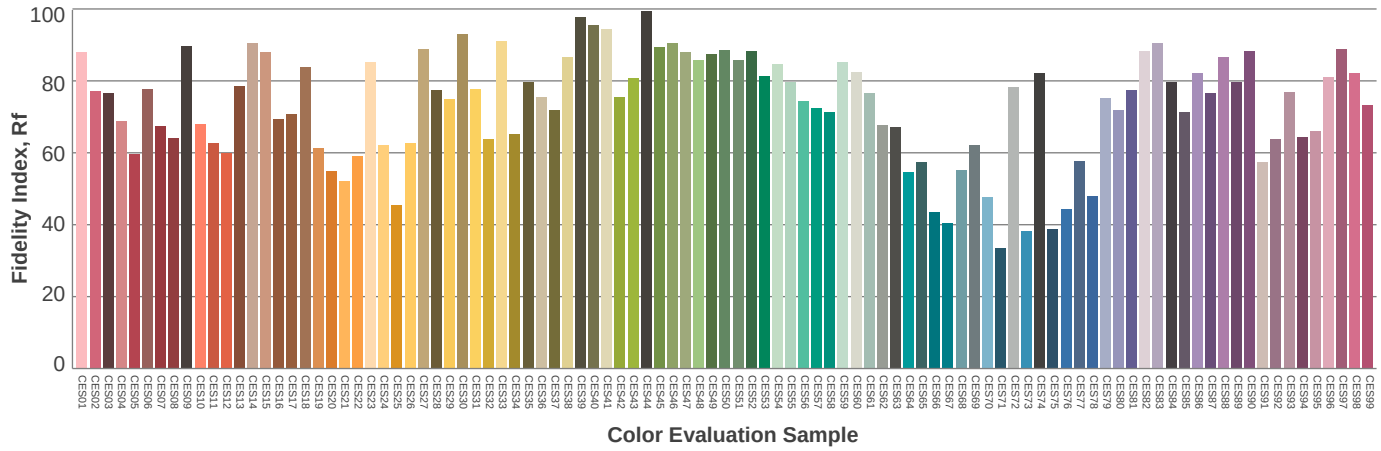




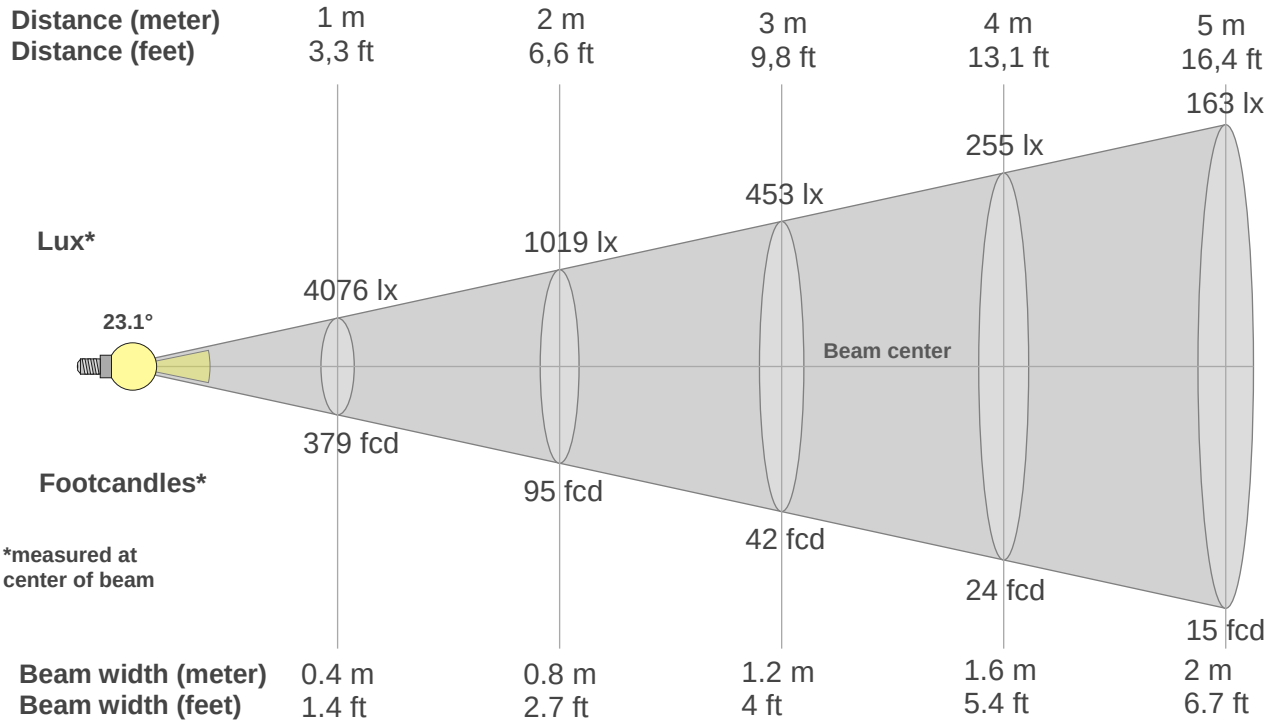








Beam details



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
4076lx	1019lx	453lx	255lx	163lx	113lx	83lx	64lx	50lx	41lx	34lx	28lx	24lx	21lx	18lx	16lx	14lx	13lx	11lx	10lx
378.7fcd	94.7fcd	42.1fcd	23.7fcd	15.1fcd	10.5fcd	7.7fcd	5.9fcd	4.7fcd	3.8fcd	3.1fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
4076	4095	4121	4146	4163	4152	4062	3901	3620	3264	2830	2364	1876	1471	1097	838	598	466	344	277
100%	100%	101%	102%	102%	102%	100%	96%	89%	80%	69%	58%	46%	36%	27%	21%	15%	11%	8%	7%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
4076	4095	4121	4146	4163	4152	4062	3901	3620	3264	2830	2364	1876	1471	1097	838	598	466	344	277
100%	100%	101%	102%	102%	102%	100%	96%	89%	80%	69%	58%	46%	36%	27%	21%	15%	11%	8%	7%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
4076	4056	4028	3996	3948	3871	3738	3545	3284	2978	2640	2289	1933	1581	1231	954	687	518	363	276
100%	100%	99%	98%	97%	95%	92%	87%	81%	73%	65%	56%	47%	39%	30%	23%	17%	13%	9%	7%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
4076	4056	4028	3996	3948	3871	3738	3545	3284	2978	2640	2289	1933	1581	1231	954	687	518	363	276
100%	100%	99%	98%	97%	95%	92%	87%	81%	73%	65%	56%	47%	39%	30%	23%	17%	13%	9%	7%

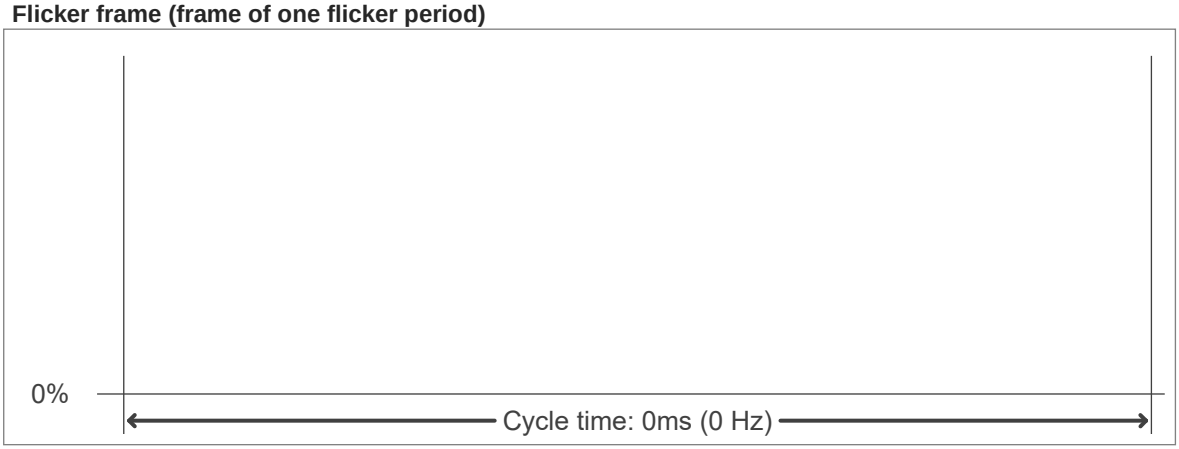
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.1°	**35°**	**45.6°**	**100.0%**	**100.0%**

Flicker

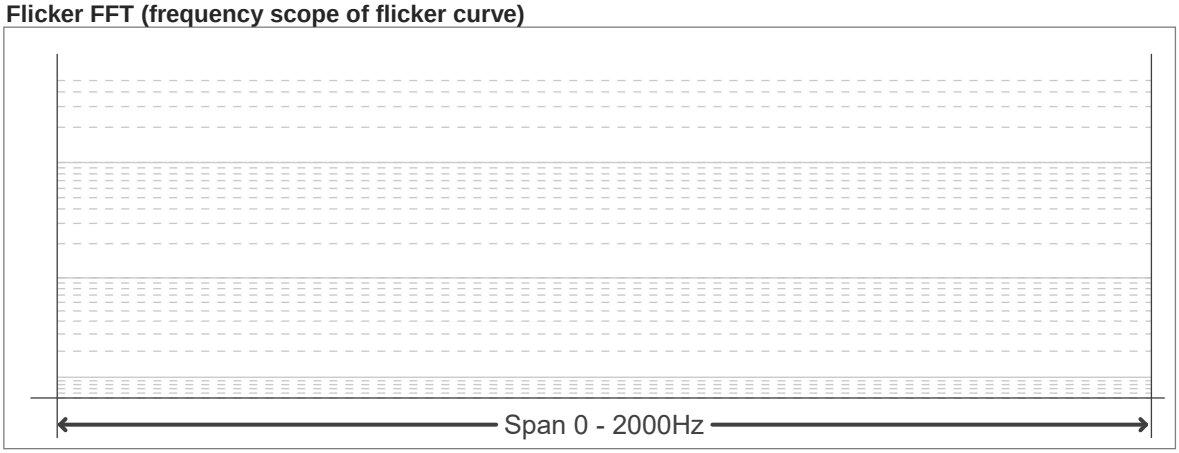
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		n/a Hz	
Flicker index:	n/a	JA8/10 40Hz	n/a %
Flicker percentage:	n/a %	JA8/10 90Hz	n/a %
SVM: (Visual flicker)	n/a	JA8/10 200Hz	n/a %
PstLM	n/a	JA8/10 400Hz	n/a %
Mp	n/a	JA8/10 1000Hz	n/a %

Flicker conditions:

Sample rate:	n/a samples/second