Light efficiency:

51 Lumen/Watt

Light quality:

CRI: 91.7

Color temperature:

8844 K

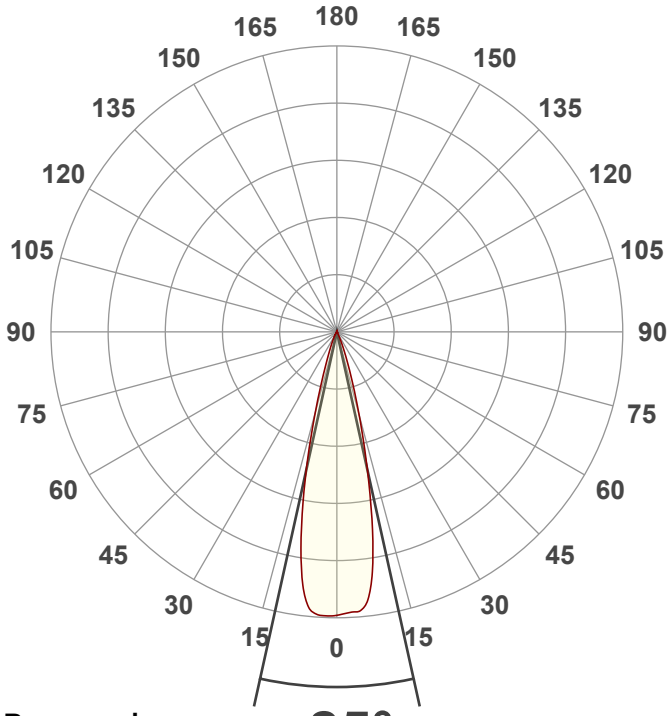
Output: 1653 lm

Peak: 8712 cd

Power: 32.2 W

PF: 0.53





Beam angle

25°

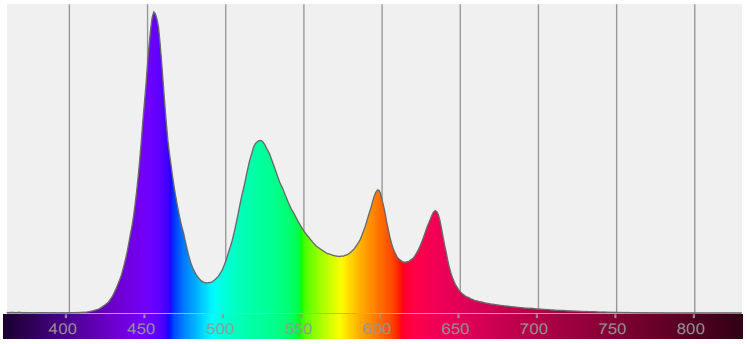
Product name:
LP 12 Hex (CRI)

Item number:
CRI

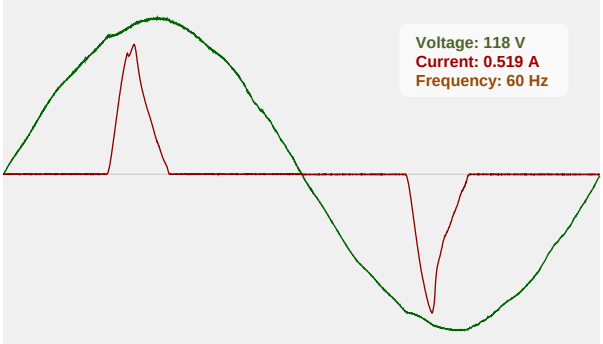
Date and time:
9/12/2019 1:12:42 PM

CIE 1931
x: 0.282
y: 0.311

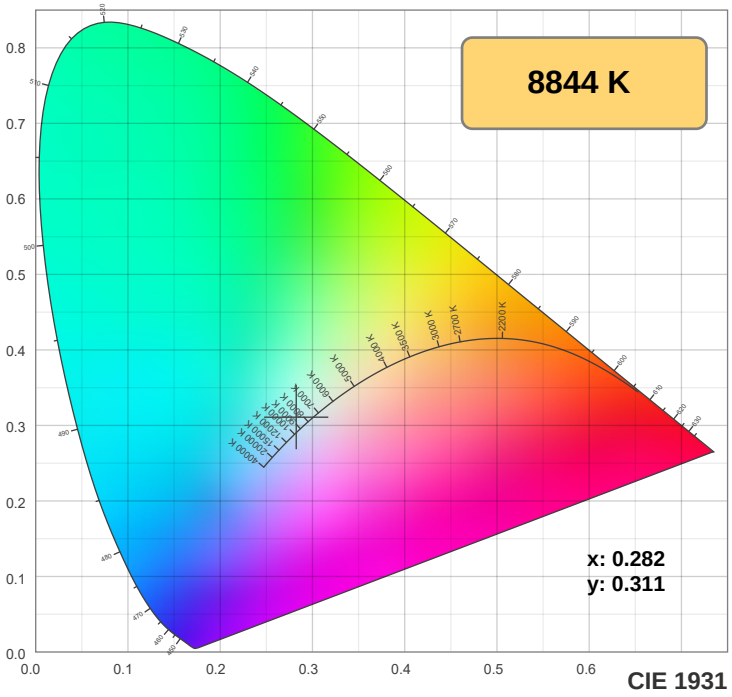
Spectra



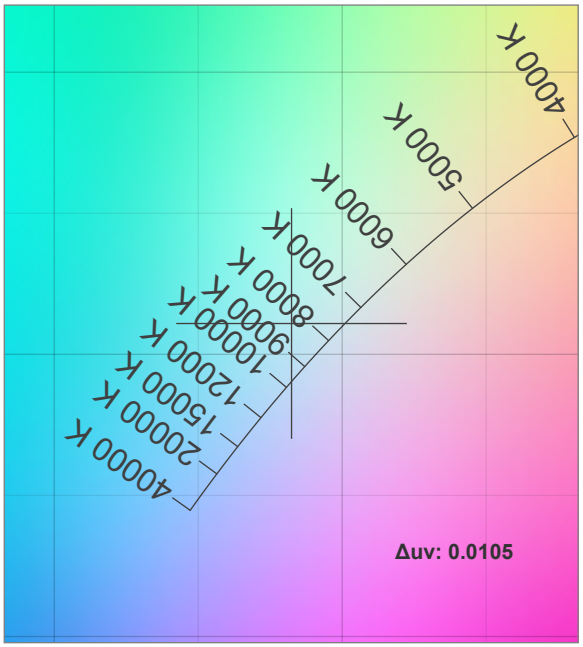
Power



Color details

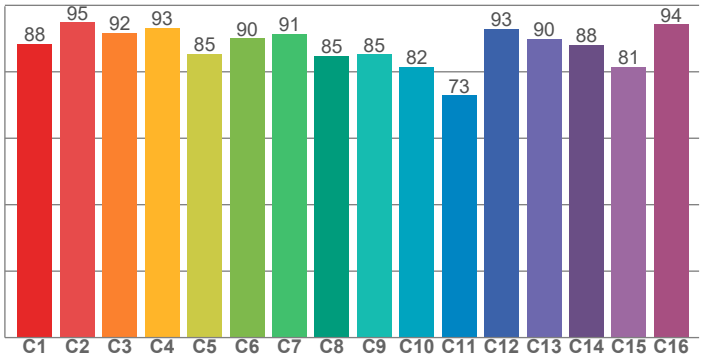


CIE 1931

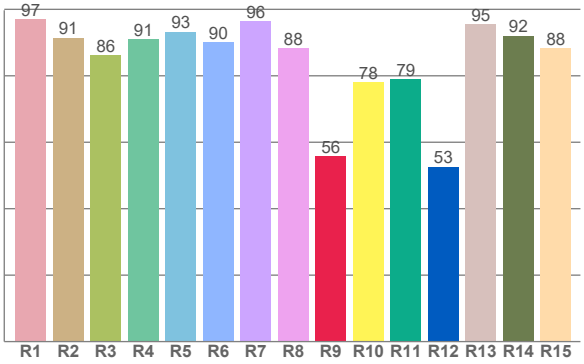


CIE 1931 ZOOM

TM-30: 87.8



CRI: 91.7 (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
97.0	91.4	86.2	91.0	93.2	90.0	96.4	88.3	55.8	78.0	79.0	52.6	95.5	92.0	88.3

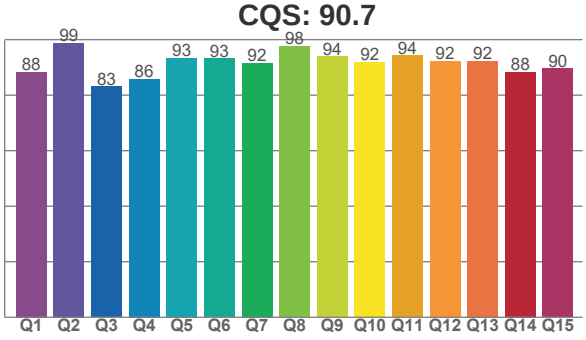
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.4	94.9	91.7	93.2	85.4	90.1	91.4	84.7	85.3	81.5	72.9	93.0	89.9	88.1	81.4	94.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.3	98.9	83.1	85.9	93.3	93.2	91.6	97.6	93.9	92.0	94.2	92.3	92.2	88.4	89.6

CQS: 90.7



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
8844 K	91.7	55.8	87.8	99.1	90.7	0.282	0.311	0.183	0.303	0.0105

TM-30 details

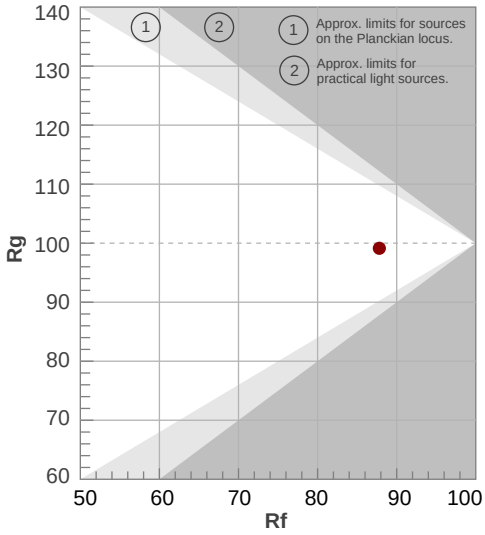
Rf 87.8

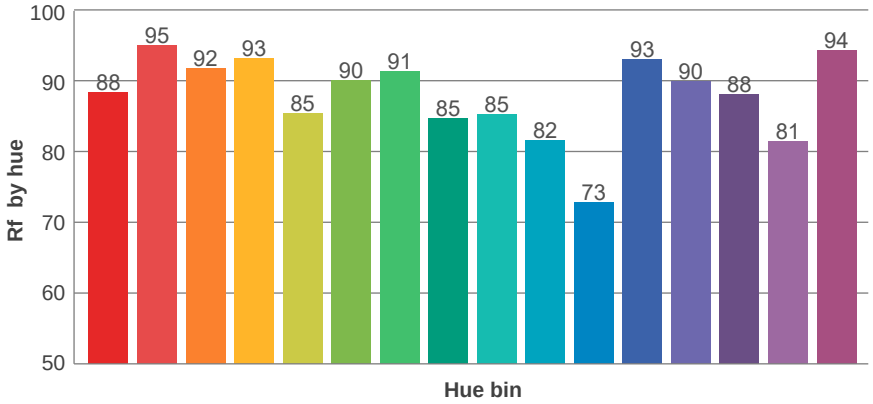
Fidelity index Rf

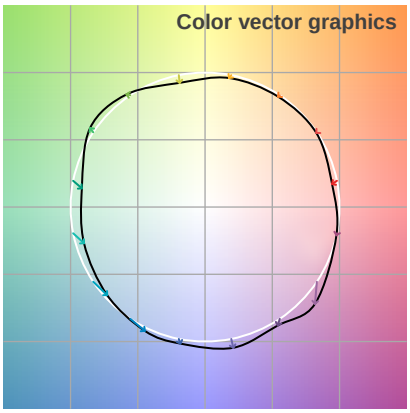
Rg 99.1

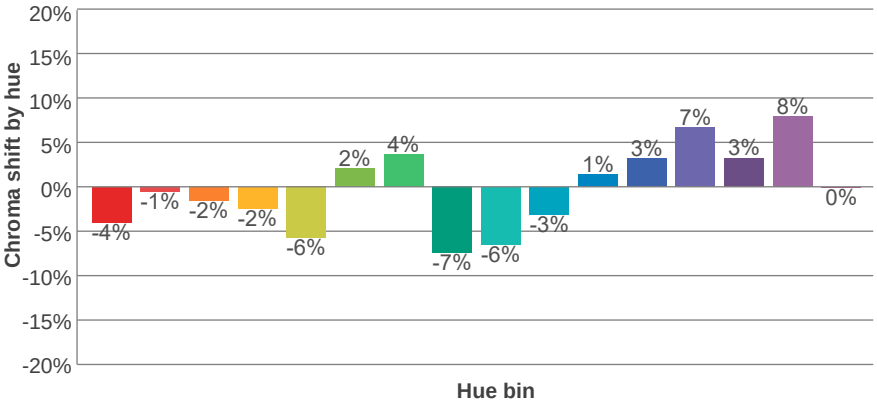
Gamut index Rg

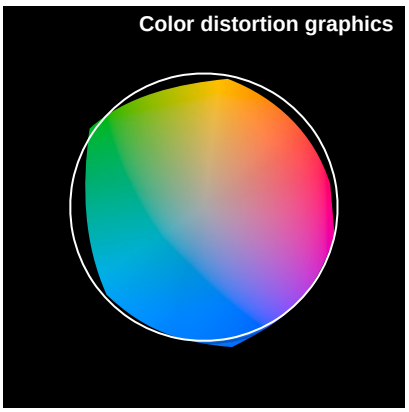
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	88	-4%	-2%
2	95	-1%	0%
3	92	-2%	0%
4	93	-2%	1%
5	85	-6%	1%
6	90	2%	2%
7	91	4%	-1%
8	85	-7%	4%
9	85	-6%	9%
10	82	-3%	14%
11	73	1%	14%
12	93	3%	2%
13	90	7%	0%
14	88	3%	-4%
15	81	8%	-14%
16	94	0%	-1%

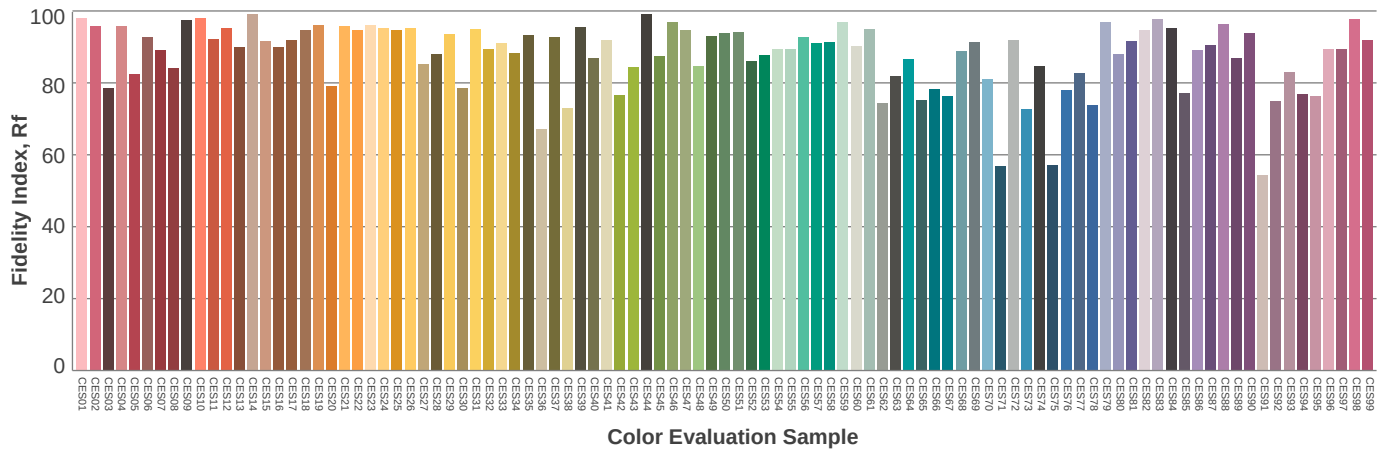




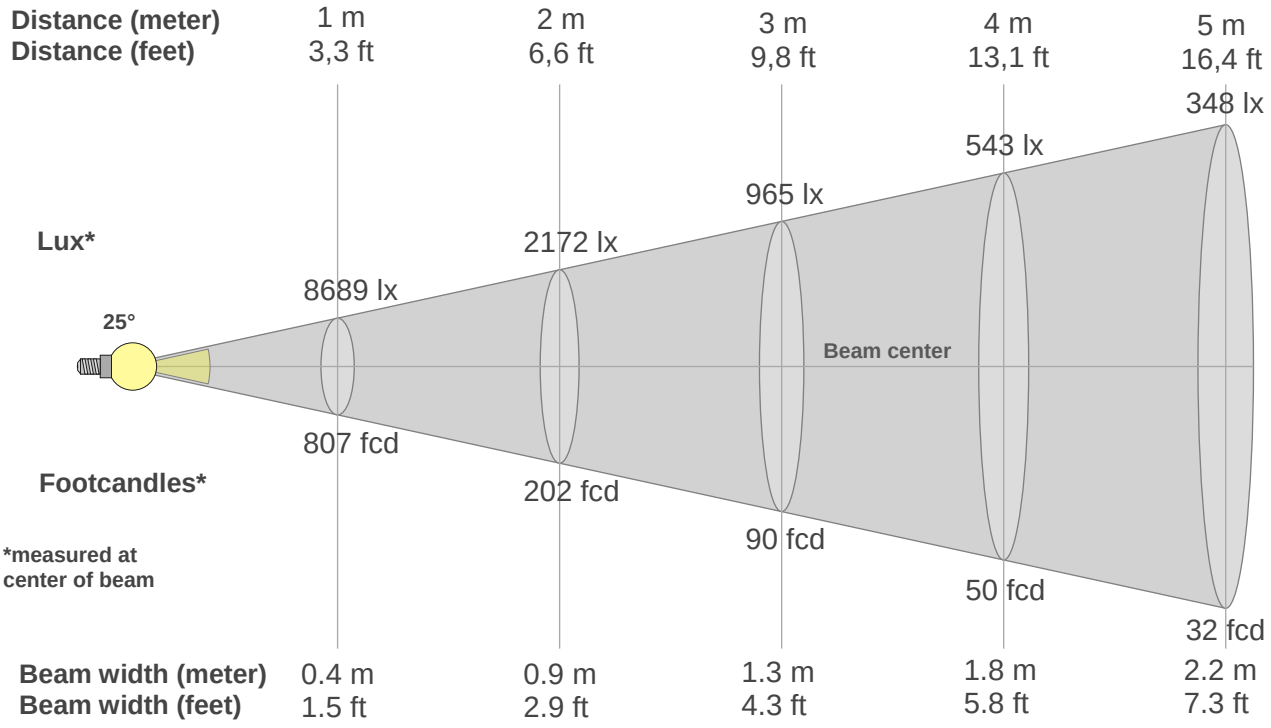








Beam details



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
8689lx	2172lx	965lx	543lx	348lx	241lx	177lx	136lx	107lx	87lx	72lx	60lx	51lx	44lx	39lx	34lx	30lx	27lx	24lx	22lx
807.2fcd	201.8fcd	89.7fcd	50.4fcd	32.3fcd	22.4fcd	16.5fcd	12.6fcd	10fcd	8.1fcd	6.7fcd	5.6fcd	4.8fcd	4.1fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.2fcd	2fcd

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°
8689	8659	8632	8606	8590	8550	8373	8092	7632	7026	6318	5523	4707	3972	3269	2669	2139	1699	1346	1038
100%	100%	99%	99%	99%	98%	96%	93%	88%	81%	73%	64%	54%	46%	38%	31%	25%	20%	15%	12%

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°
8689	8659	8632	8606	8590	8550	8373	8092	7632	7026	6318	5523	4707	3972	3269	2669	2139	1699	1346	1038
100%	100%	99%	99%	99%	98%	96%	93%	88%	81%	73%	64%	54%	46%	38%	31%	25%	20%	15%	12%

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°
8689	8706	8711	8700	8683	8580	8436	8074	7617	6990	6279	5504	4727	3950	3238	2566	2035	1583	1233	978
100%	100%	100%	100%	100%	99%	97%	93%	88%	80%	72%	63%	54%	45%	37%	30%	23%	18%	14%	11%

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°
8689	8706	8711	8700	8683	8580	8436	8074	7617	6990	6279	5504	4727	3950	3238	2566	2035	1583	1233	978
100%	100%	100%	100%	100%	99%	97%	93%	88%	80%	72%	63%	54%	45%	37%	30%	23%	18%	14%	11%

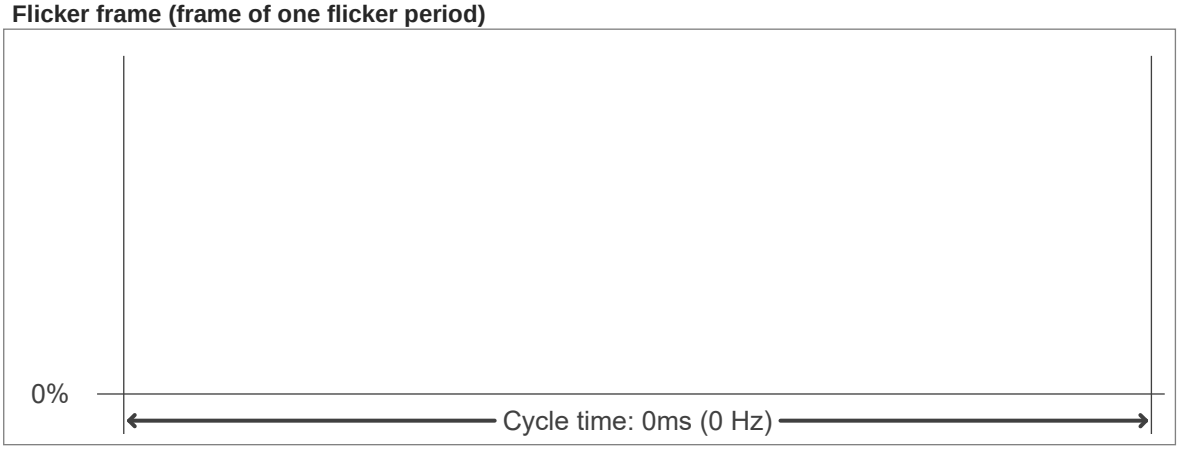
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
25°	**39.3°**	**51.6°**	**100.0%**	**99.9%**

Flicker

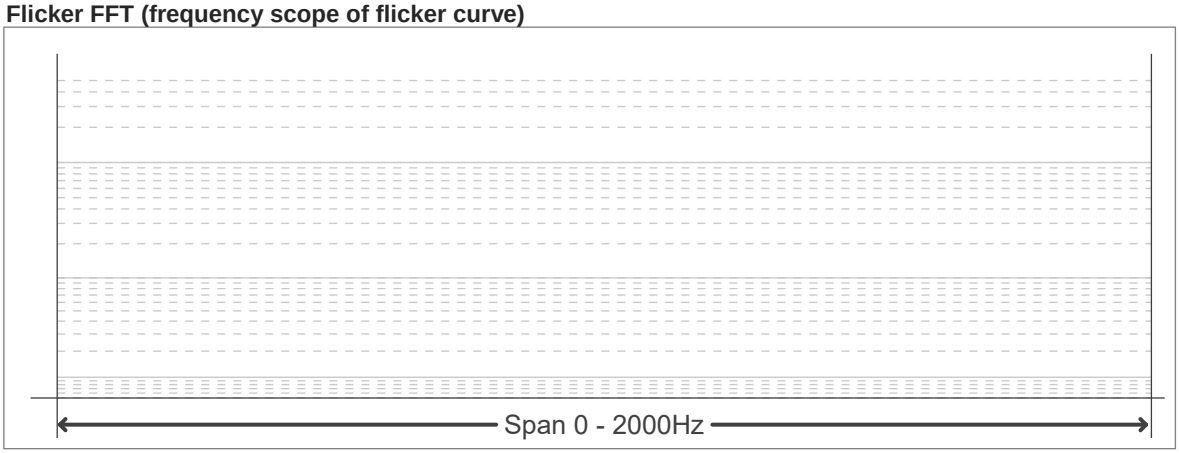
Flicker curve (complete sampled flicker signal)



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