Light efficiency:

24 Lumen/Watt

Light quality:

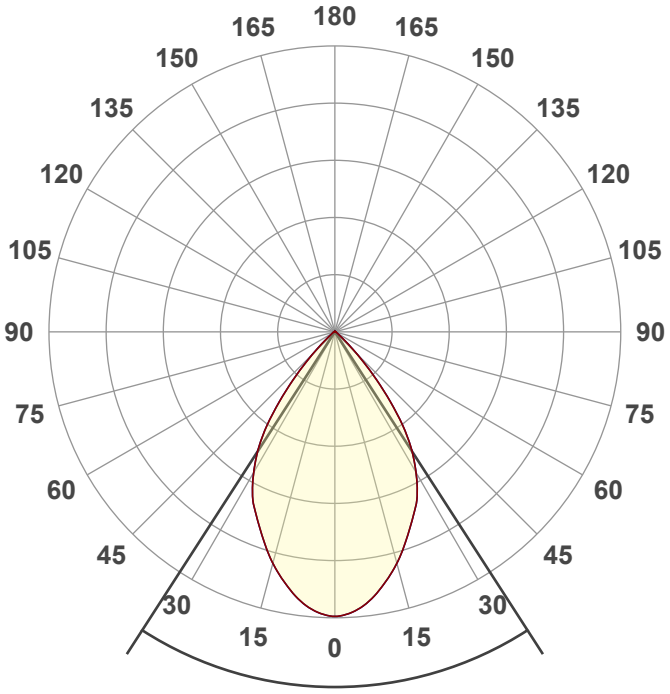
CRI: 89.4

Color temperature:

2810 K

Output: 7540 lm
Peak: 7371 cd

Power: 308 W
PF: 1.0



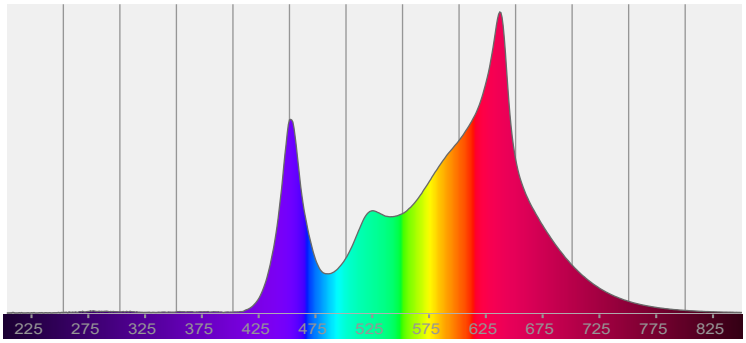
Beam angle 65.7°

CIE 1931
x: 0.416
y: 0.342

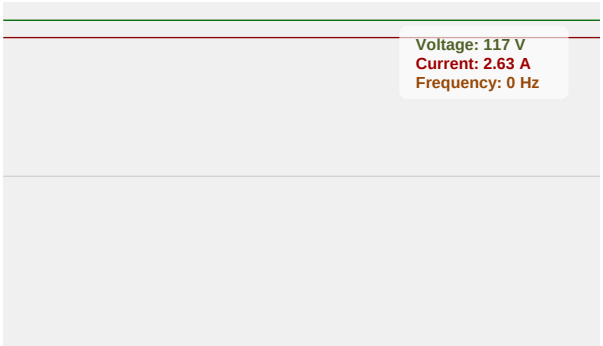
Product name:
Encore DBX (Full on)
Item number:

Date and time:
6/30/2026 2:29:23 PM

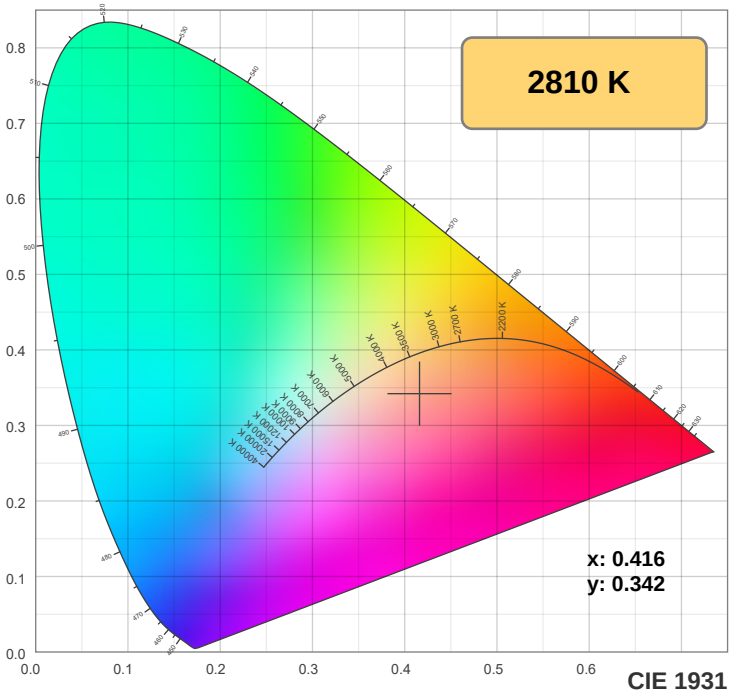
Spectra



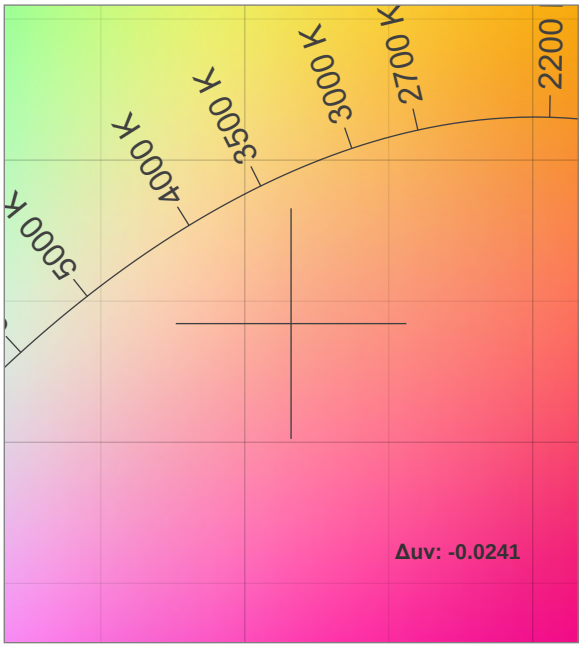
Power



Color details

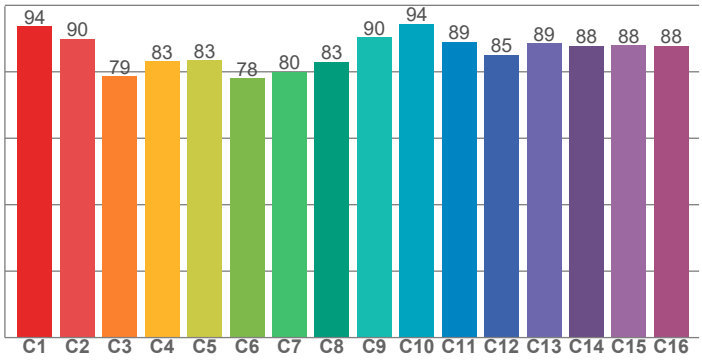


CIE 1931

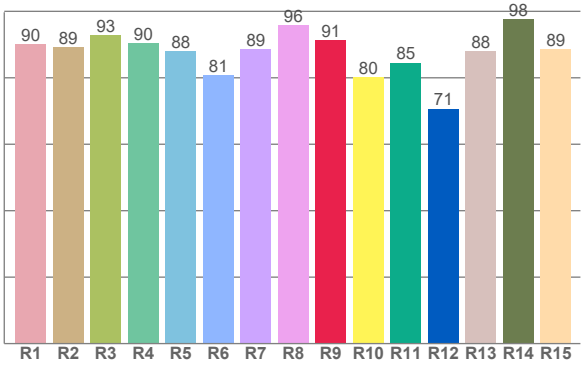


CIE 1931 ZOOM

TM-30: 86.8



CRI: 89.4 (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
90.0	89.2	92.8	90.4	88.1	80.7	88.6	95.8	91.4	80.2	84.5	70.7	88.0	97.7	88.5

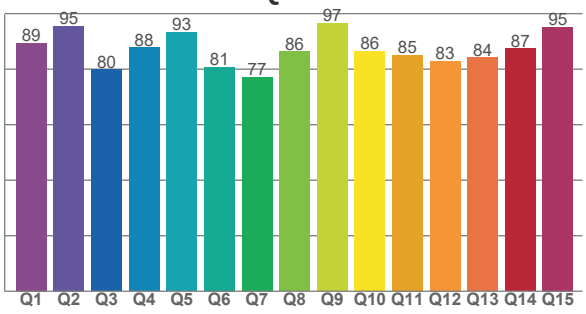
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
93.7	89.9	78.6	83.1	83.4	78.0	79.9	82.9	90.4	94.4	89.0	85.0	88.6	87.8	88.0	87.8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.5	95.5	79.9	87.8	93.3	80.8	77.1	86.3	96.5	86.4	85.0	83.0	84.1	87.4	95.2

CQS: 85.8



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
2810 K	89.4	91.4	86.8	112.5	85.8	0.416	0.342	0.265	0.327	-0.0241

TM-30 details

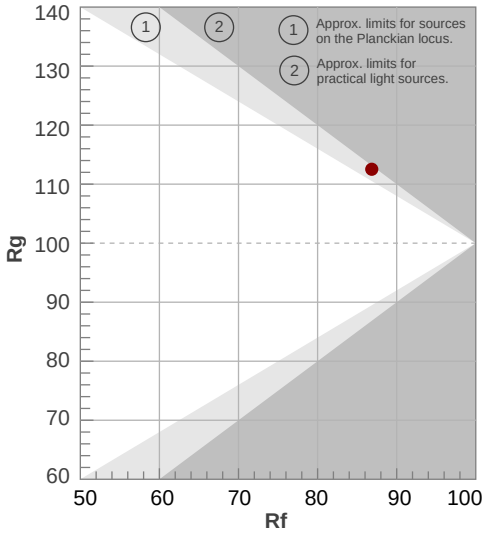
Rf 86.8

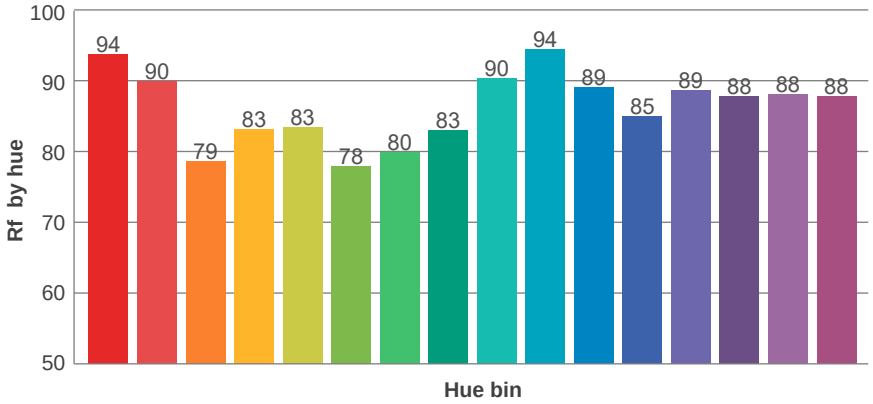
Fidelity index Rf

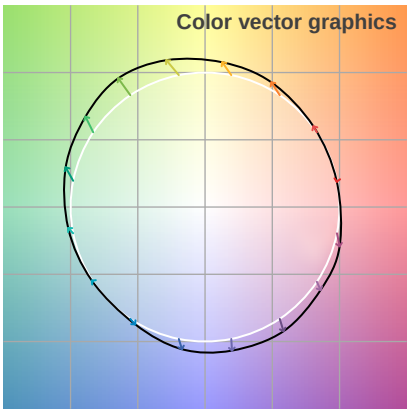
Rg 112.5

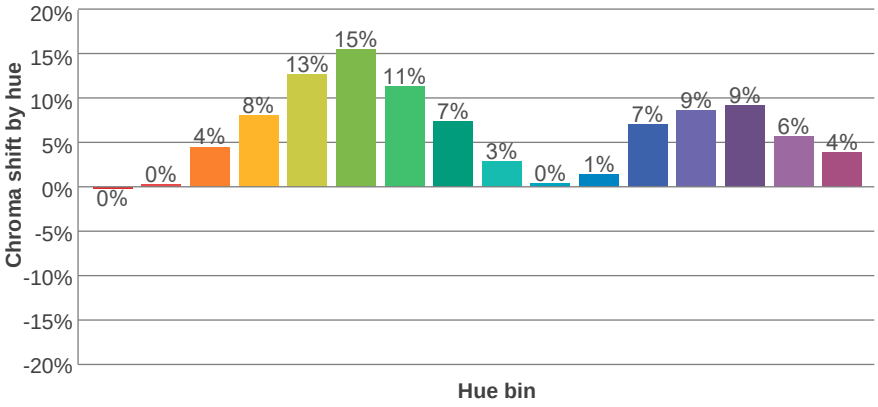
Gamut index Rg

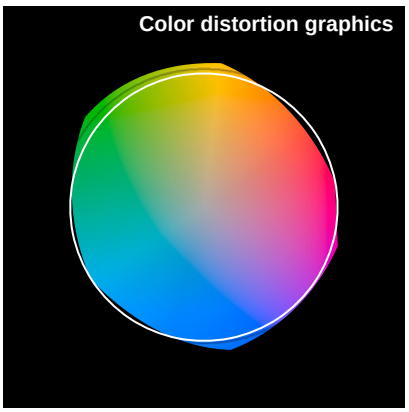
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	94	0%	-1%
2	90	0%	5%
3	79	4%	10%
4	83	8%	8%
5	83	13%	7%
6	78	15%	1%
7	80	11%	-6%
8	83	7%	-9%
9	90	3%	-5%
10	94	0%	-1%
11	89	1%	5%
12	85	7%	4%
13	89	9%	-1%
14	88	9%	-3%
15	88	6%	-4%
16	88	4%	-9%

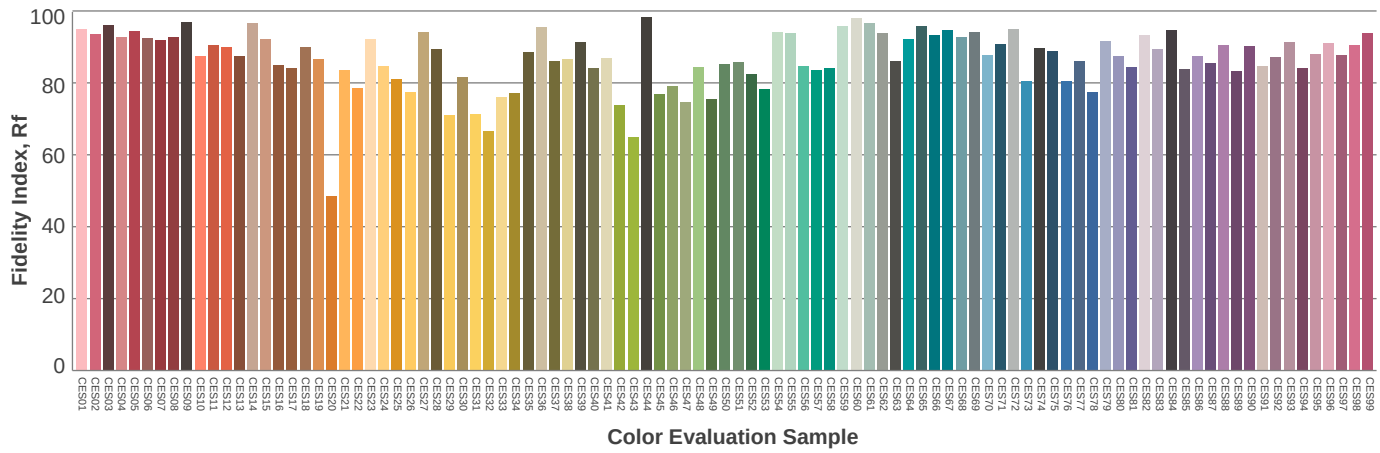




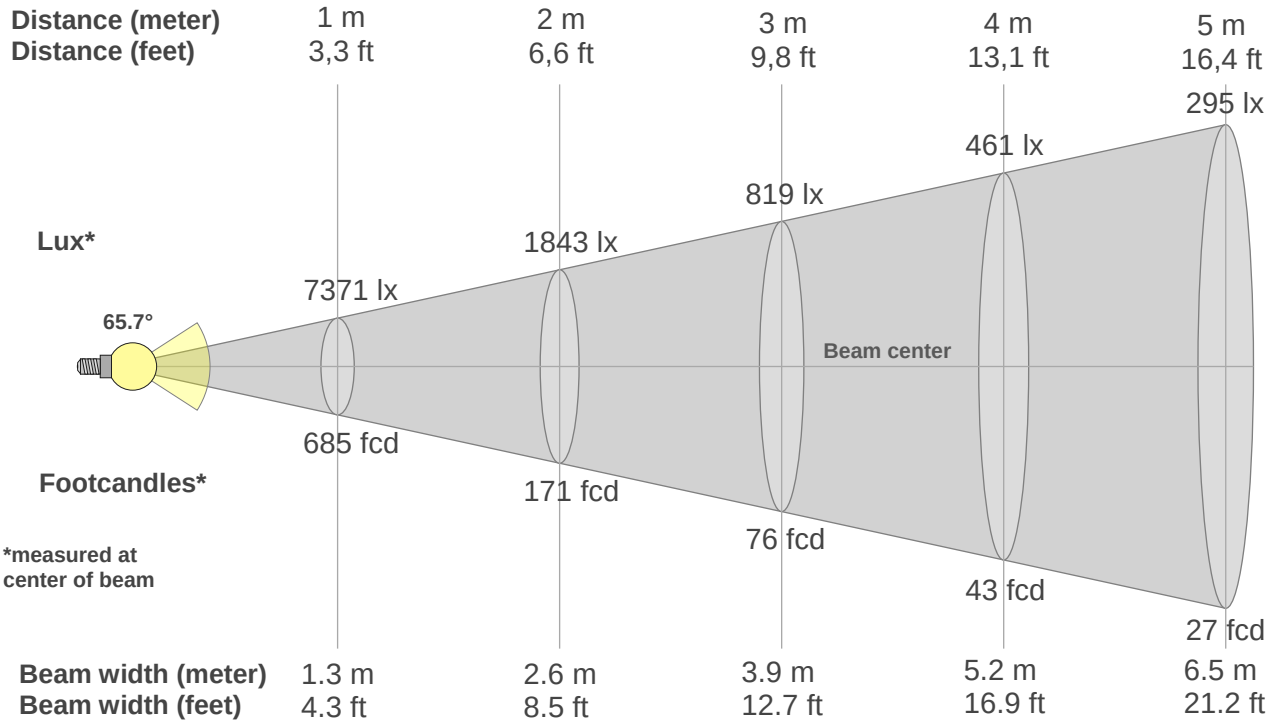








Beam details



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
7371lx	1843lx	819lx	461lx	295lx	205lx	150lx	115lx	91lx	74lx	61lx	51lx	44lx	38lx	33lx	29lx	26lx	23lx	20lx	18lx
684.8fc	171.2fc	76.1fcd	42.8fcd	27.4fcd	19fcd	14fcd	10.7fcd	8.5fcd	6.8fcd	5.7fcd	4.8fcd	4.1fcd	3.5fcd	3fcd	2.7fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7371	7338	7259	7141	6970	6770	6555	6331	6092	5828	5569	5320	5083	4852	4545	4206	3844	3447	2987	2442
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7371	7338	7259	7141	6970	6770	6555	6331	6092	5828	5569	5320	5083	4852	4545	4206	3844	3447	2987	2442
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7371	7338	7259	7141	6970	6770	6555	6331	6092	5828	5569	5320	5083	4852	4545	4206	3844	3447	2987	2442
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

Intensities in 270° c-plane

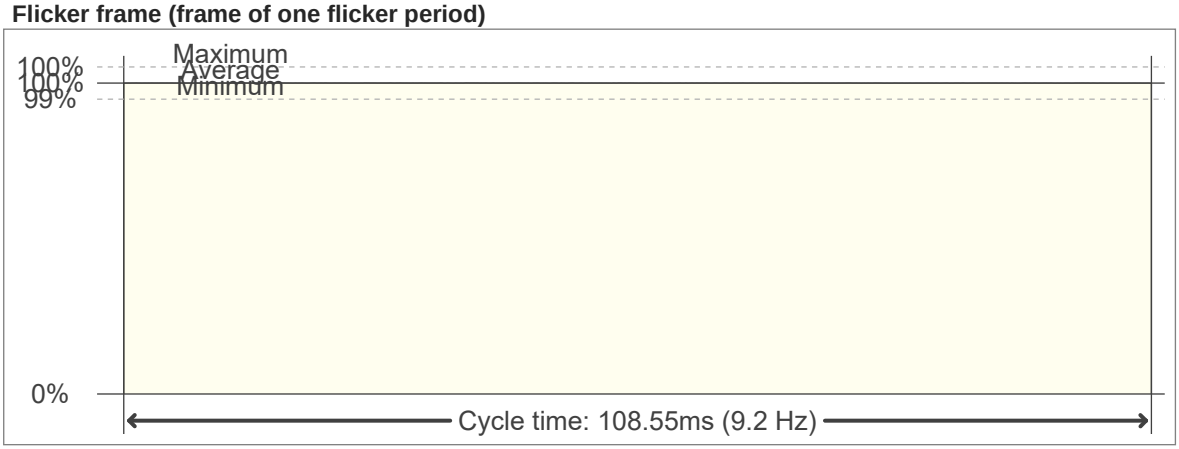
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7371	7338	7259	7141	6970	6770	6555	6331	6092	5828	5569	5320	5083	4852	4545	4206	3844	3447	2987	2442
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
65.7°	**90.9°**	**104°**	**98.6%**	**94.5%**

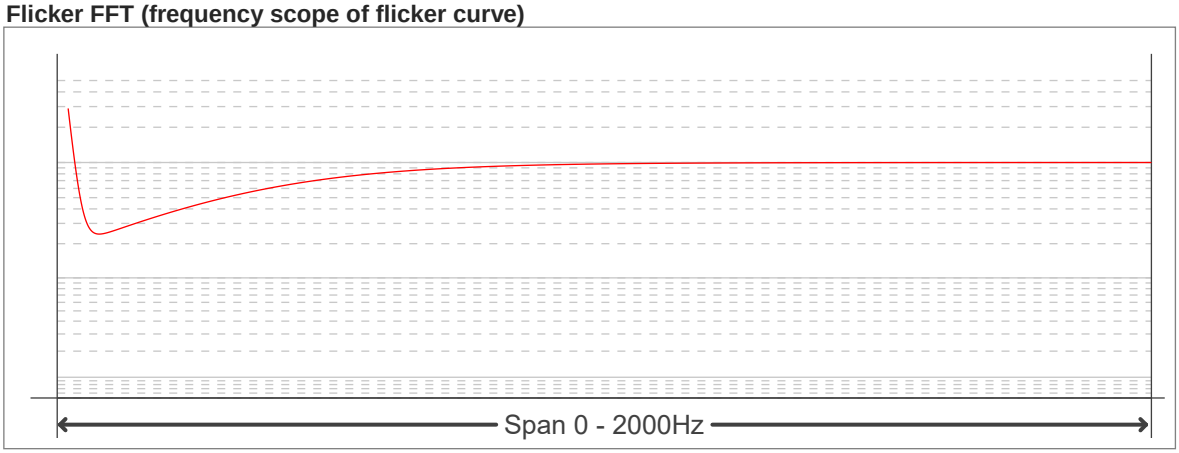
Flicker

Flicker curve (complete sampled flicker signal)

Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		9.21 Hz	
Flicker index:	0	JA8/10 40Hz	0.2 %
Flicker percentage:	0.19 %	JA8/10 90Hz	0.2 %
SVM: (Visual flicker)	0	JA8/10 200Hz	0.19 %
PstLM	0.03	JA8/10 400Hz	0.19 %
Mp	0.04	JA8/10 1000Hz	0.2 %

Flicker conditions:

Sample rate:	20000 samples/second