Light efficiency:

38 Lumen/Watt

Light quality:

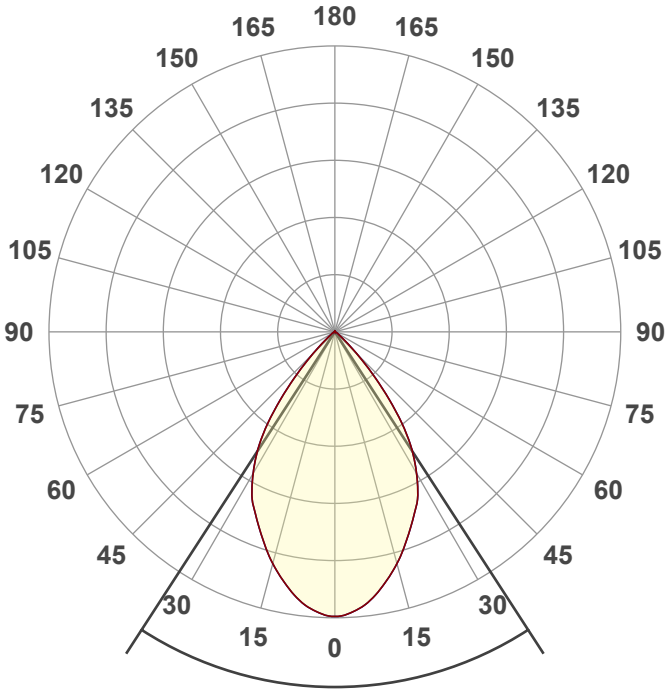
CRI: 95.7

Color temperature:

2818 K

Output: 8370 lm
Peak: 8141 cd

Power: 222 W
PF: 1.0



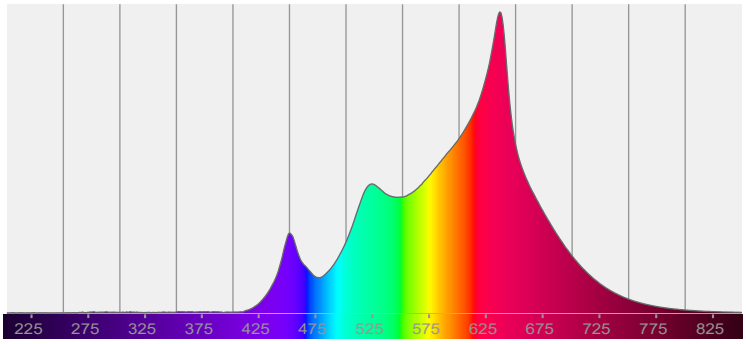
Beam angle **65.9°**

Product name:
Encore DBX (Full on,2700K)
Item number:

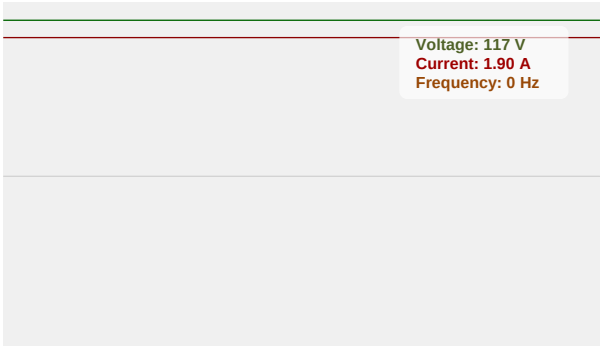
Date and time:
6/30/2026 1:30:22 PM

CIE 1931
x: 0.452
y: 0.410

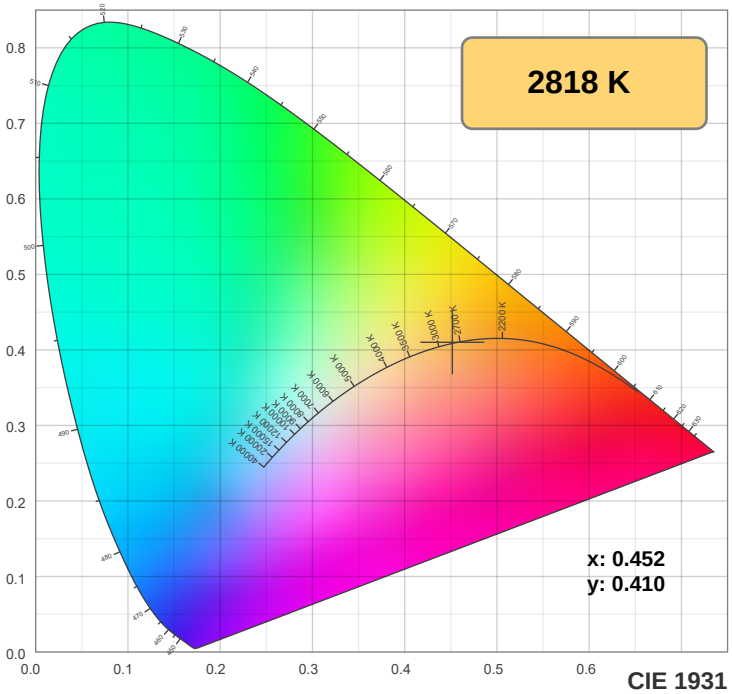
Spectra



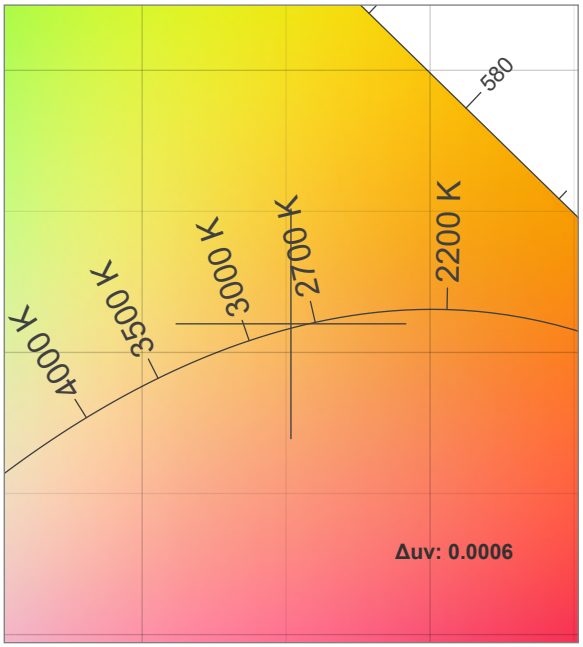
Power



Color details

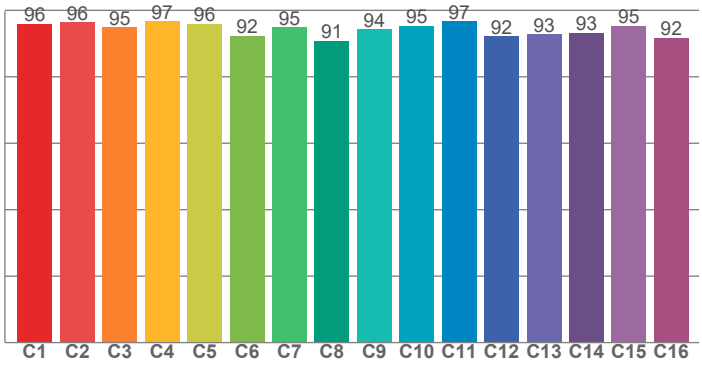


CIE 1931

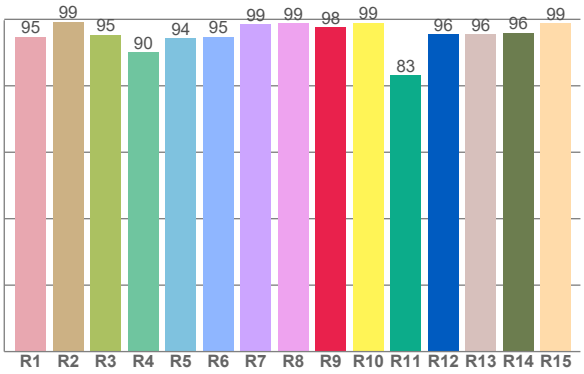


CIE 1931 ZOOM

TM-30: 94.7



CRI: 95.7 (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
94.8	99.3	95.3	90.2	94.3	94.8	98.5	98.7	97.6	98.9	83.1	95.5	95.6	96.0	98.9

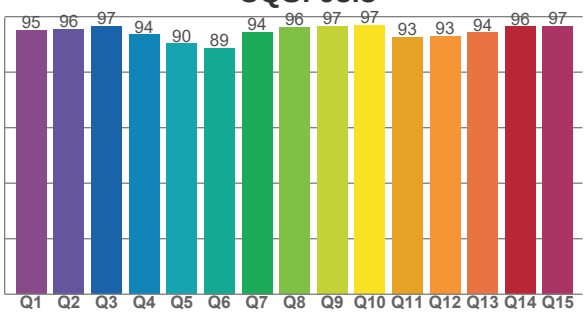
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.0	96.4	94.9	96.7	95.9	92.3	94.8	90.8	94.2	95.4	96.6	92.1	92.7	93.3	95.3	91.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.1	95.6	96.5	93.6	90.3	88.7	94.5	96.3	96.7	96.9	92.7	93.0	94.2	96.5	96.6

CQS: 93.8



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
2818 K	95.7	97.6	94.7	103.3	93.8	0.452	0.410	0.257	0.351	0.0006

TM-30 details

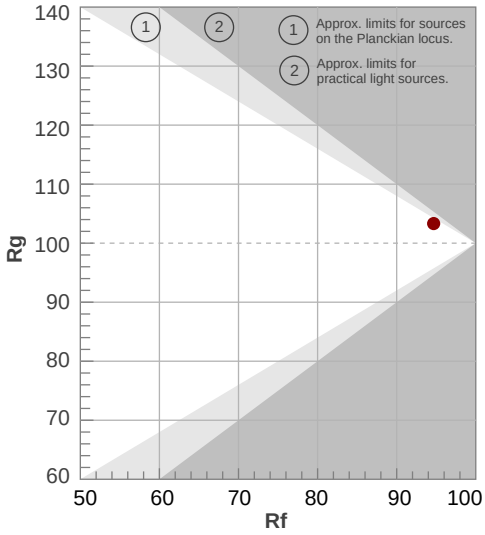
Rf 94.7

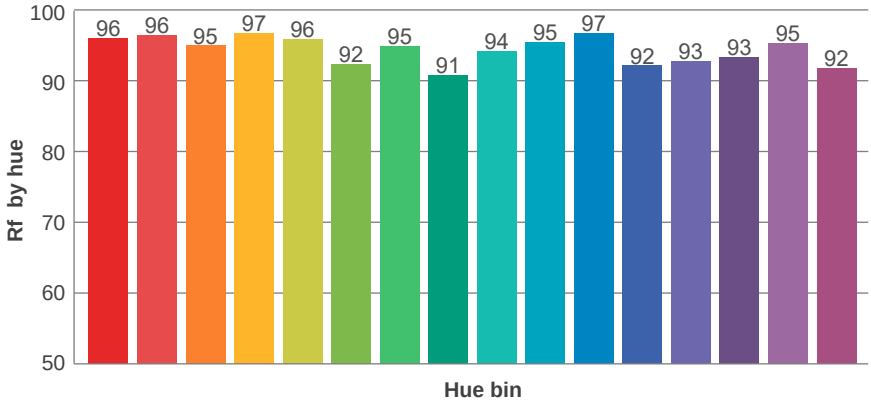
Fidelity index Rf

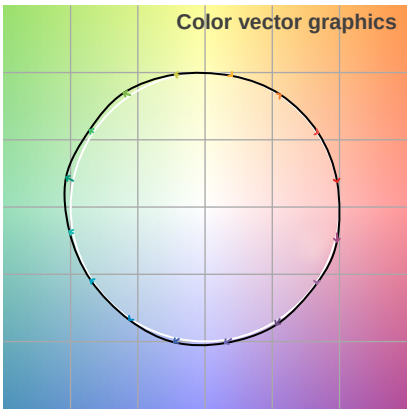
Rg 103.3

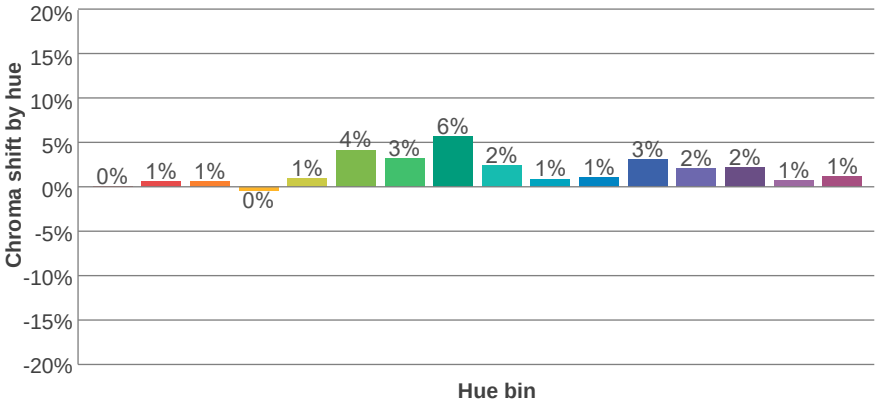
Gamut index Rg

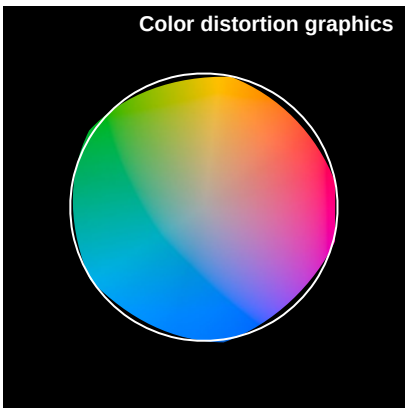
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	96	0%	-1%
2	96	1%	-1%
3	95	1%	0%
4	97	0%	-1%
5	96	1%	3%
6	92	4%	3%
7	95	3%	0%
8	91	6%	-2%
9	94	2%	-2%
10	95	1%	-2%
11	97	1%	0%
12	92	3%	-3%
13	93	2%	-5%
14	93	2%	-5%
15	95	1%	-1%
16	92	1%	-6%

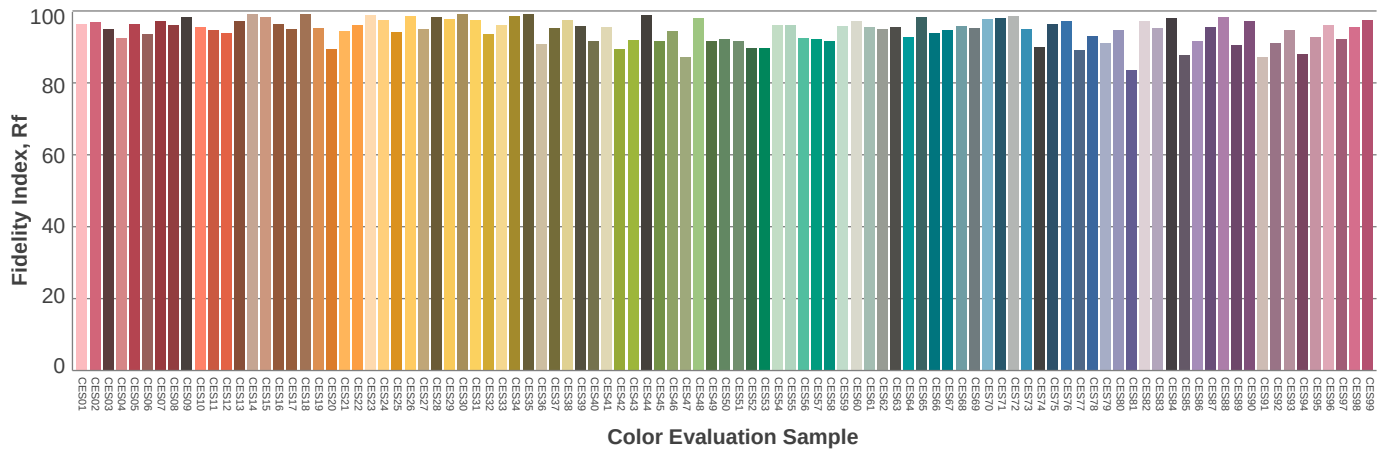




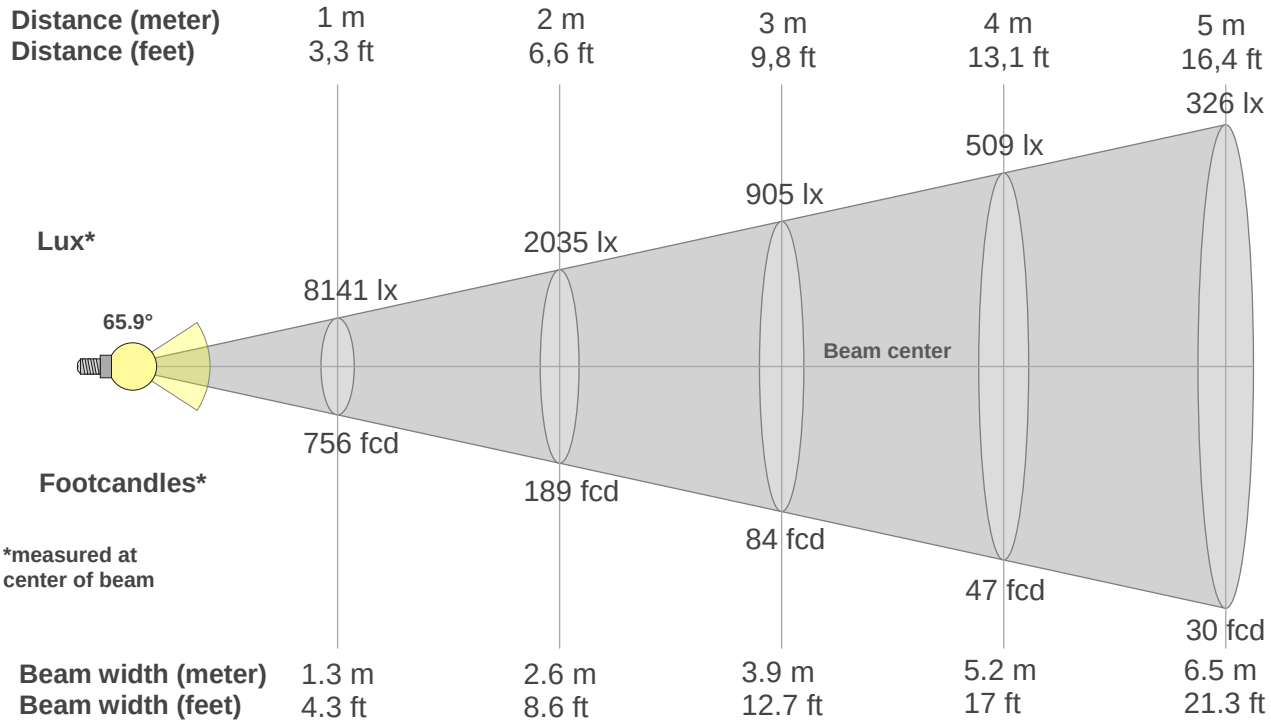








Beam details



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
8141lx	2035lx	905lx	509lx	326lx	226lx	166lx	127lx	101lx	81lx	67lx	57lx	48lx	42lx	36lx	32lx	28lx	25lx	23lx	20lx
756.3fcd	189.1fcd	84fcd	47.3fcd	30.3fcd	21fcd	15.4fcd	11.8fcd	9.3fcd	7.6fcd	6.3fcd	5.3fcd	4.5fcd	3.9fcd	3.4fcd	3fcd	2.6fcd	2.3fcd	2.1fcd	1.9fcd

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°
8141	8110	8017	7887	7703	7485	7247	7001	6740	6455	6173	5900	5636	5385	5049	4677	4276	3840	3316	2723
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	53%	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°
8141	8110	8017	7887	7703	7485	7247	7001	6740	6455	6173	5900	5636	5385	5049	4677	4276	3840	3316	2723
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	53%	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°
8141	8110	8017	7887	7703	7485	7247	7001	6740	6455	6173	5900	5636	5385	5049	4677	4276	3840	3316	2723
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	53%	47%	41%	33%

Intensities in 270° c-plane

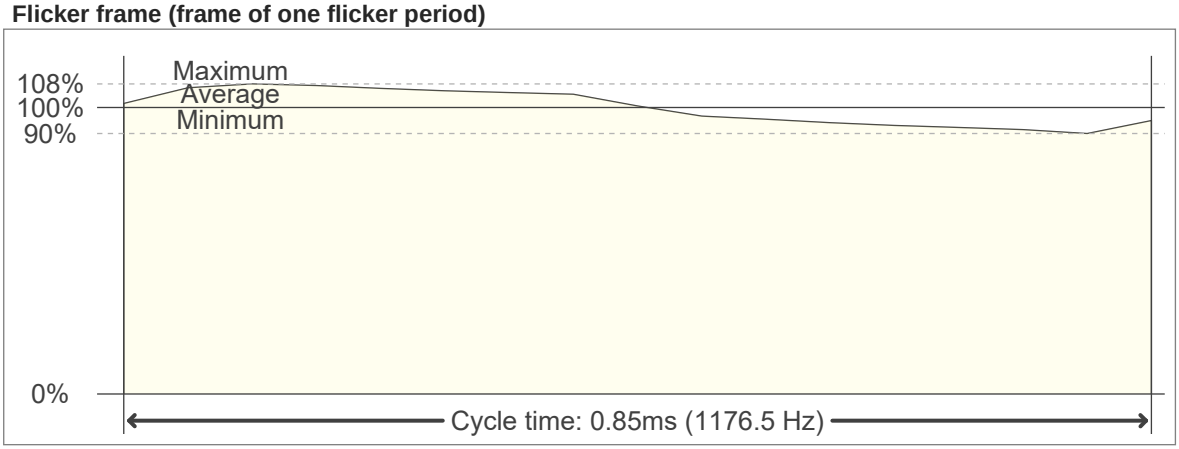
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8141	8110	8017	7887	7703	7485	7247	7001	6740	6455	6173	5900	5636	5385	5049	4677	4276	3840	3316	2723
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	53%	47%	41%	33%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
65.9°	**91°**	**103.9°**	**98.6%**	**94.5%**

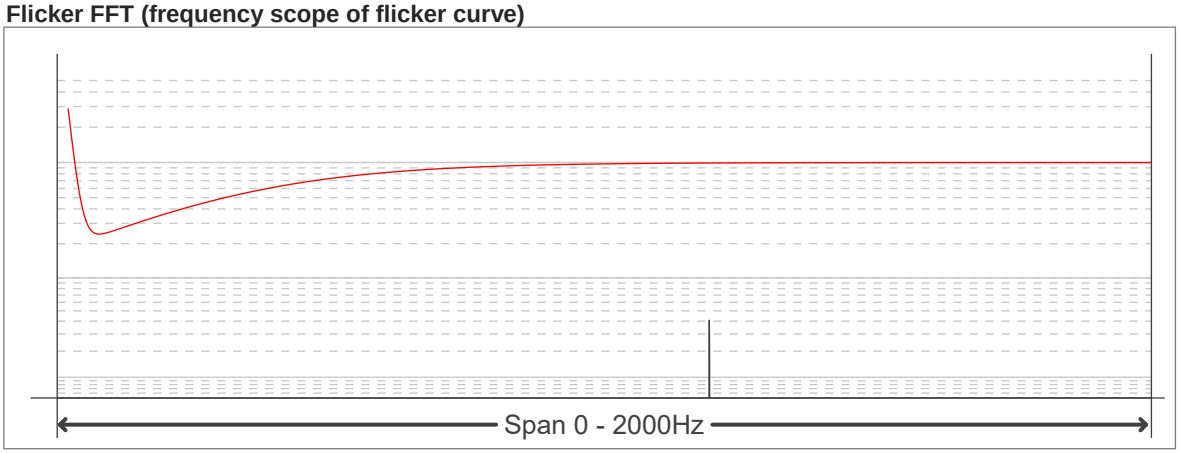
Flicker

Flicker curve (complete sampled flicker signal)

Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		1176.47 Hz	
Flicker index:	0.03	JA8/10 40Hz	0.04 %
Flicker percentage:	9.4 %	JA8/10 90Hz	0.05 %
SVM: (Visual flicker)	0.08	JA8/10 200Hz	0.08 %
PstLM	0	JA8/10 400Hz	0.17 %
Mp	0.01	JA8/10 1000Hz	1 %

Flicker conditions:

Sample rate:	20000 samples/second