Light efficiency:

41 Lumen/Watt

Light quality:

CRI: 95.8

Color temperature:

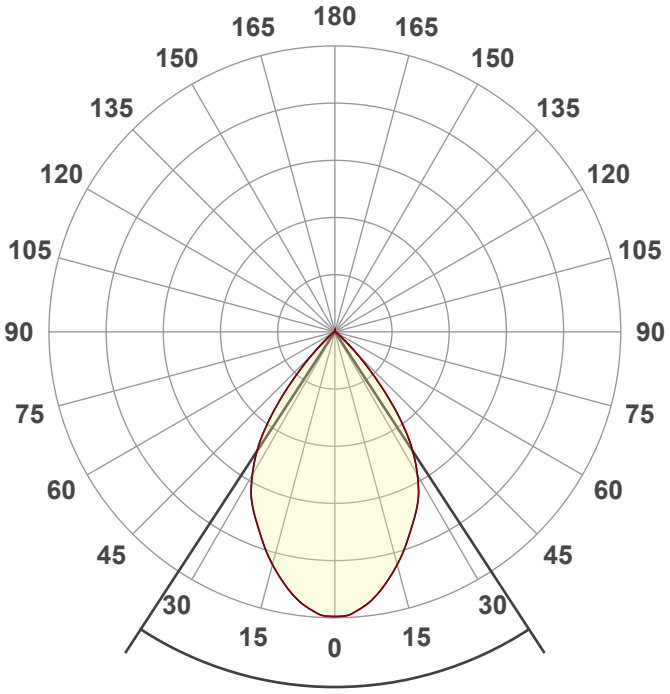
3938 K

Output: 7941 lm

Peak: 7650 cd

Power: 191.6 W

PF: 1.0



Beam angle **66.3°**

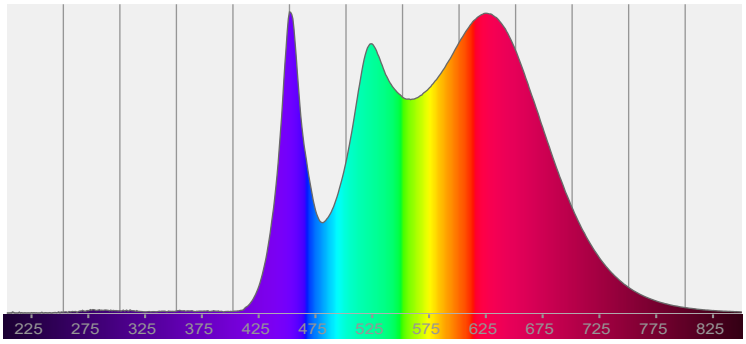
Product name:
Encore DBX (Full on,4000K)

Item number:

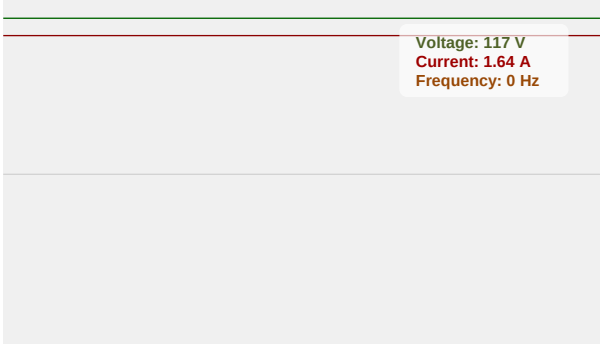
Date and time:
6/30/2026 1:48:13 PM

CIE 1931
x: 0.382
y: 0.375

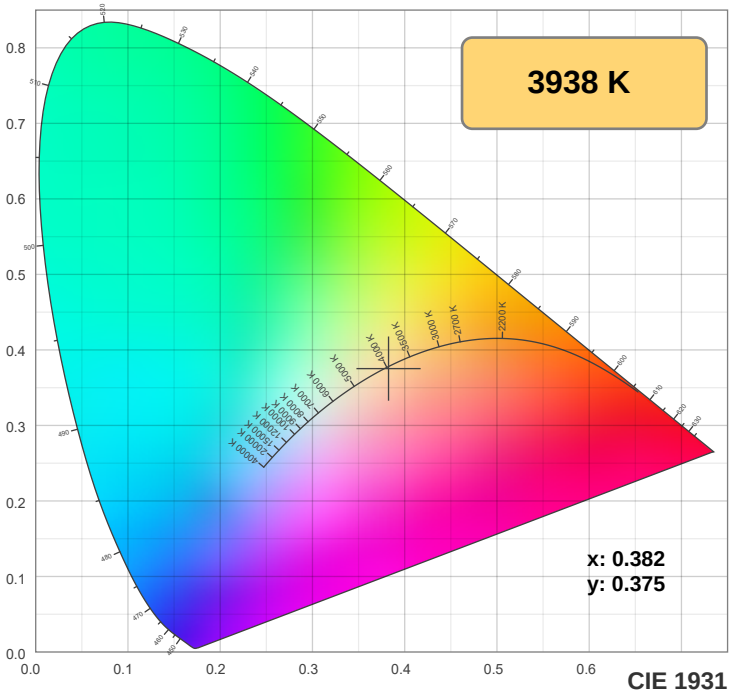
Spectra



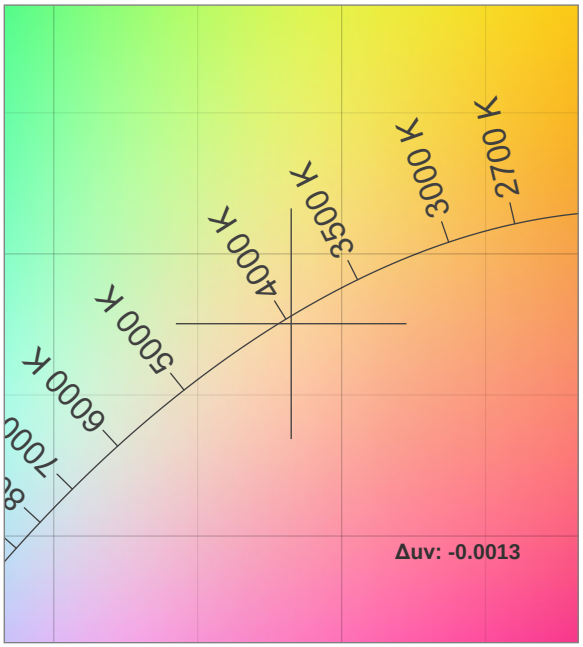
Power



Color details

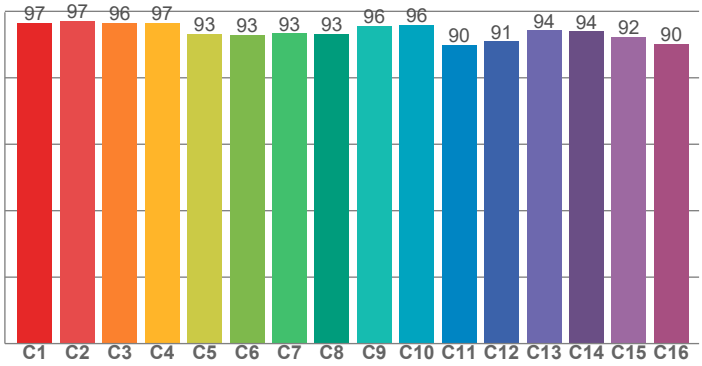


CIE 1931

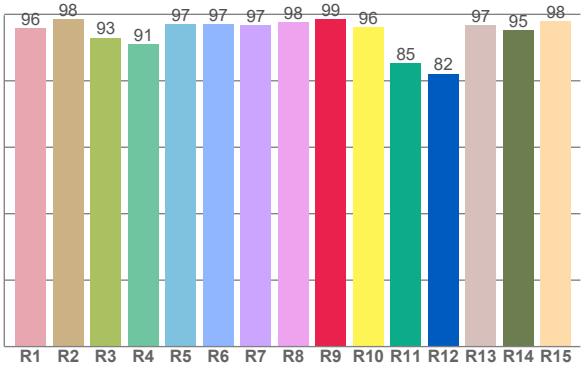


CIE 1931 ZOOM

TM-30: 94.0



CRI: 95.8 (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
95.7	98.5	92.9	90.9	96.9	96.9	96.6	97.5	98.6	96.1	85.4	82.1	96.8	95.1	98.0

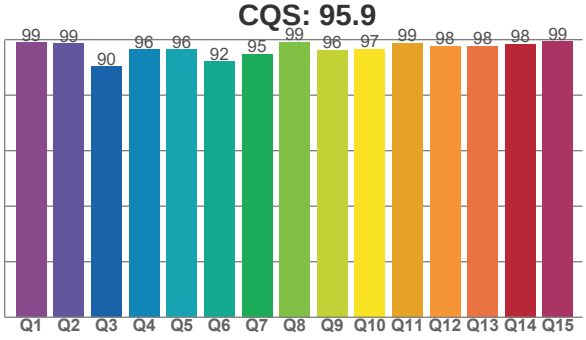
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.5	97.1	96.5	96.5	93.2	93.0	93.4	93.1	95.5	95.9	89.9	90.9	94.3	94.0	92.4	90.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
99.0	98.5	90.2	96.4	96.4	92.1	94.8	99.1	96.3	96.6	98.8	97.6	97.7	98.4	99.3

CQS: 95.9



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
3938 K	95.8	98.6	94.0	104.1	95.9	0.382	0.375	0.227	0.334	-0.0013

TM-30 details

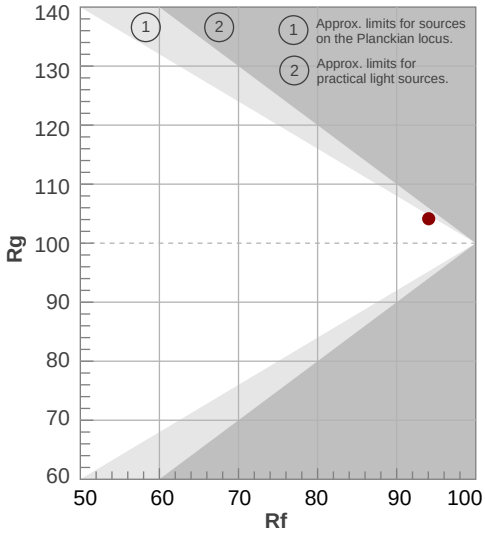
Rf 94.0

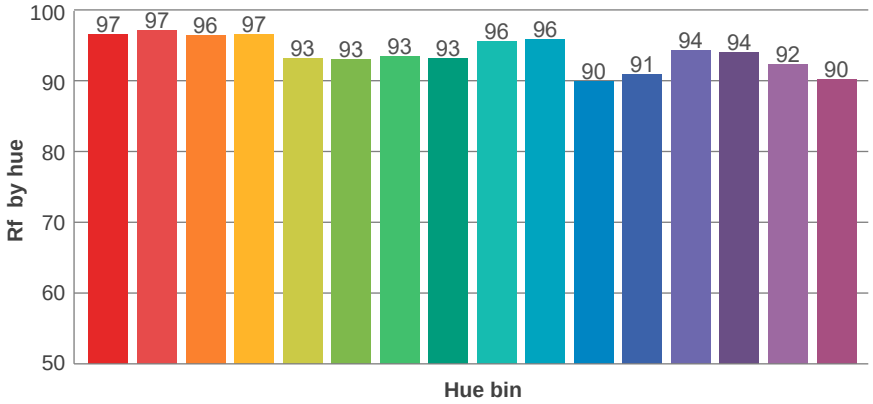
Fidelity index Rf

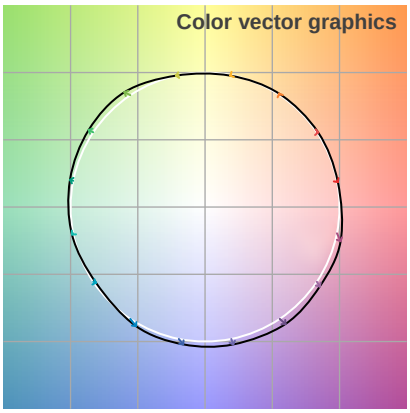
Rg 104.1

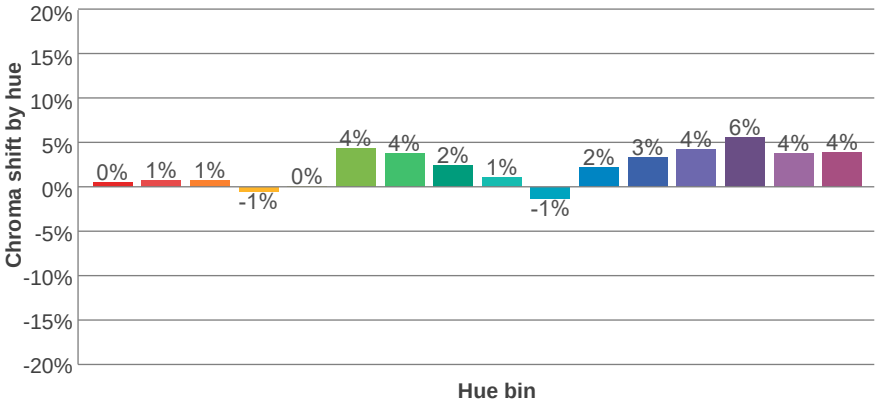
Gamut index Rg

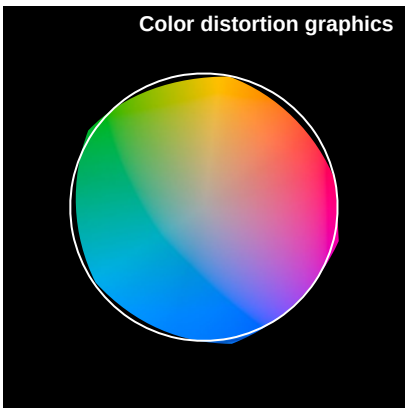
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	97	0%	-1%
2	97	1%	-1%
3	96	1%	1%
4	97	-1%	1%
5	93	0%	2%
6	93	4%	2%
7	93	4%	0%
8	93	2%	0%
9	96	1%	1%
10	96	-1%	2%
11	90	2%	6%
12	91	3%	4%
13	94	4%	1%
14	94	6%	1%
15	92	4%	-2%
16	90	4%	-5%

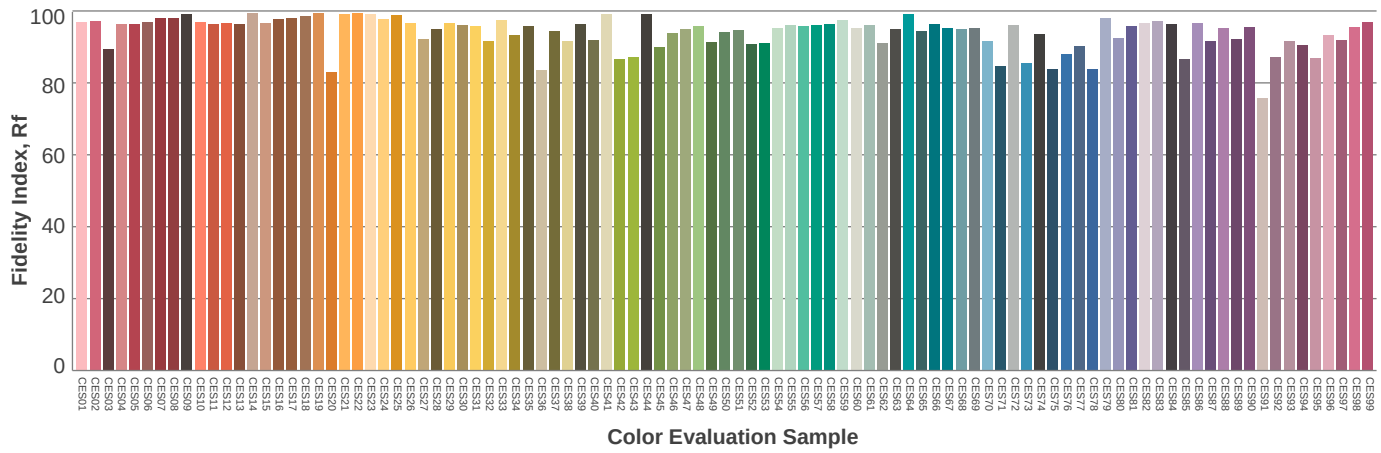




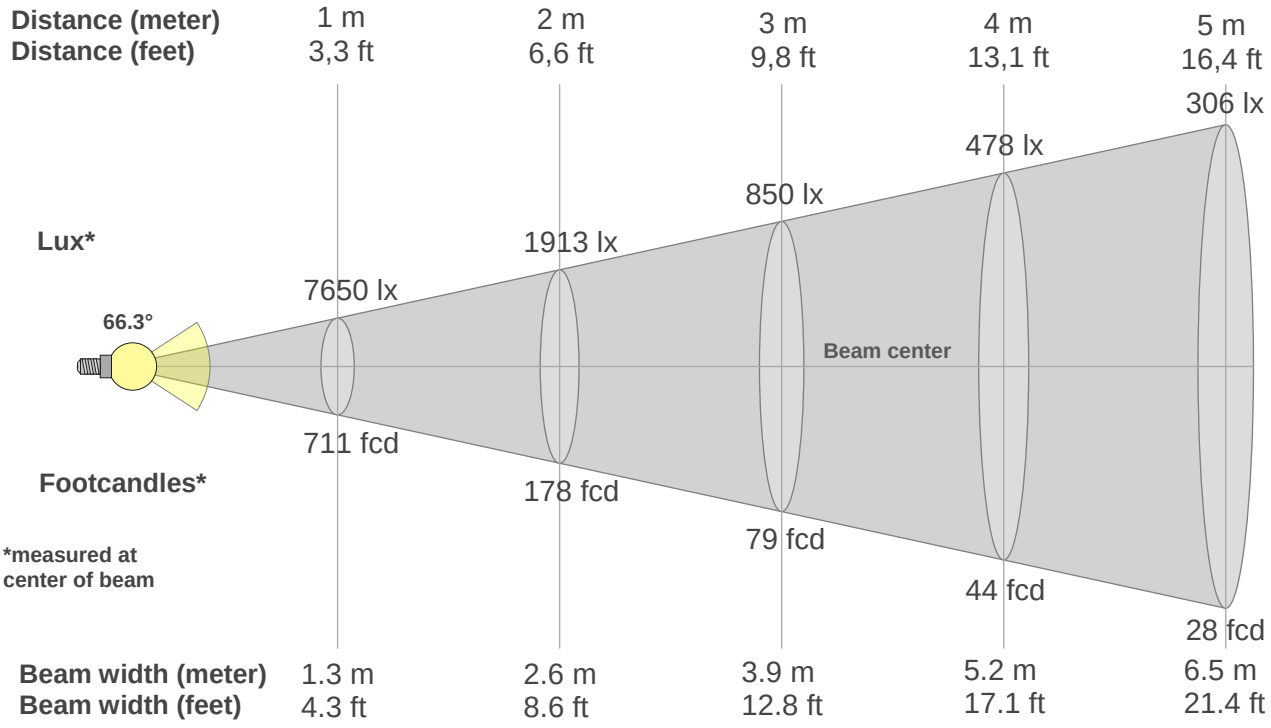








Beam details



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
7650lx	1913lx	850lx	478lx	306lx	213lx	156lx	120lx	94lx	77lx	63lx	53lx	45lx	39lx	34lx	30lx	26lx	24lx	21lx	19lx
710.7fc	177.7fc	79fcd	44.4fcd	28.4fcd	19.7fcd	14.5fcd	11.1fcd	8.8fcd	7.1fcd	5.9fcd	4.9fcd	4.2fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.2fcd	2fcd	1.8fcd

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°
7650	7650	7556	7429	7267	7068	6843	6606	6361	6104	5838	5583	5345	5089	4790	4441	4065	3639	3140	2595
100%	100%	99%	97%	95%	92%	89%	86%	83%	80%	76%	73%	70%	67%	63%	58%	53%	48%	41%	34%

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°
7650	7650	7556	7429	7267	7068	6843	6606	6361	6104	5838	5583	5345	5089	4790	4441	4065	3639	3140	2595
100%	100%	99%	97%	95%	92%	89%	86%	83%	80%	76%	73%	70%	67%	63%	58%	53%	48%	41%	34%

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°
7650	7650	7556	7429	7267	7068	6843	6606	6361	6104	5838	5583	5345	5089	4790	4441	4065	3639	3140	2595
100%	100%	99%	97%	95%	92%	89%	86%	83%	80%	76%	73%	70%	67%	63%	58%	53%	48%	41%	34%

Intensities in 270° c-plane

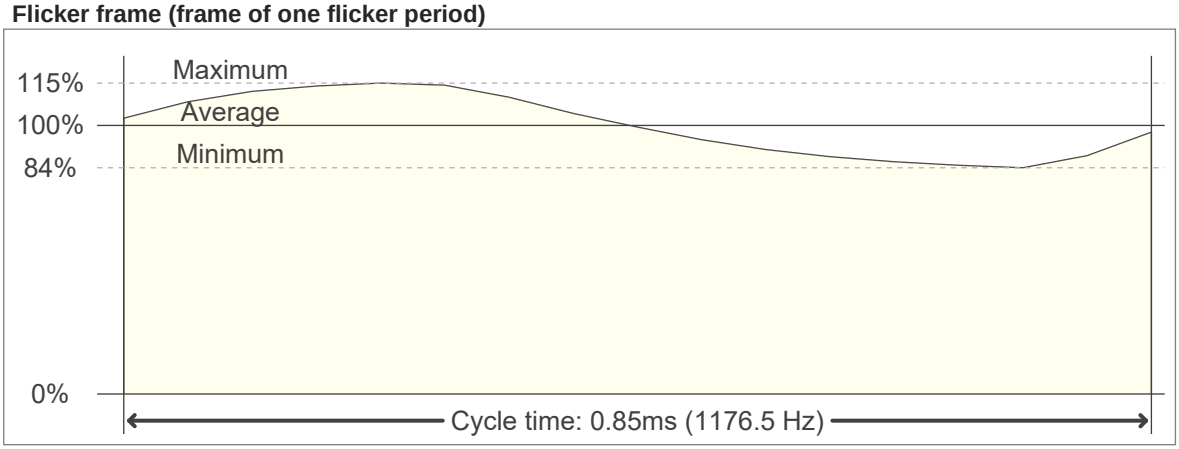
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7650	7650	7556	7429	7267	7068	6843	6606	6361	6104	5838	5583	5345	5089	4790	4441	4065	3639	3140	2595
100%	100%	99%	97%	95%	92%	89%	86%	83%	80%	76%	73%	70%	67%	63%	58%	53%	48%	41%	34%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
66.3°	**91.3°**	**104.1°**	**98.6%**	**94.3%**

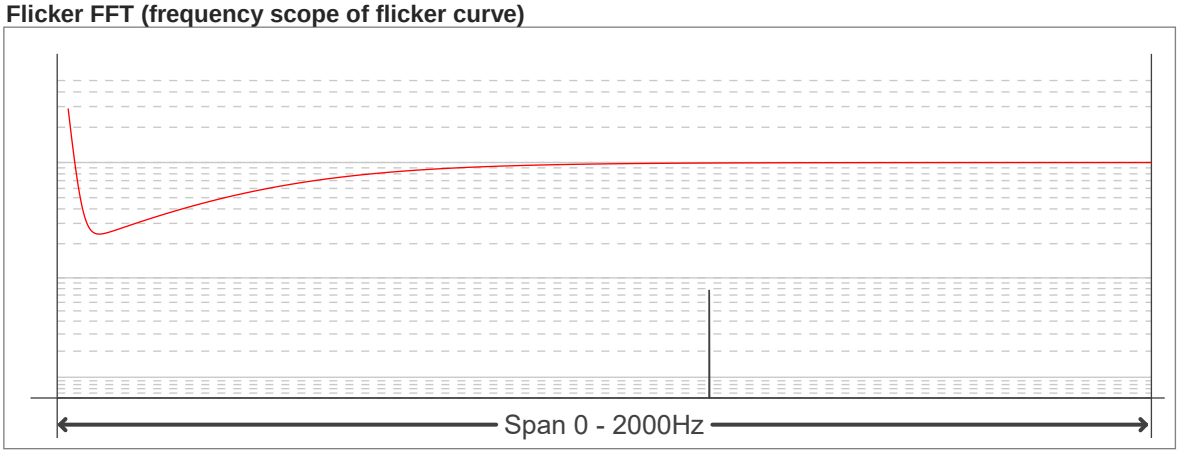
Flicker

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:	0.05	JA8/10 40Hz	0.07 %
Flicker percentage:	16.94 %	JA8/10 90Hz	0.13 %
SVM: (Visual flicker)	0.16	JA8/10 200Hz	0.29 %
PstLM	0	JA8/10 400Hz	0.61 %
Mp	0.02	JA8/10 1000Hz	2.67 %

Flicker conditions:

Sample rate:	20000 samples/second