Light efficiency:

43 Lumen/Watt

Light quality:

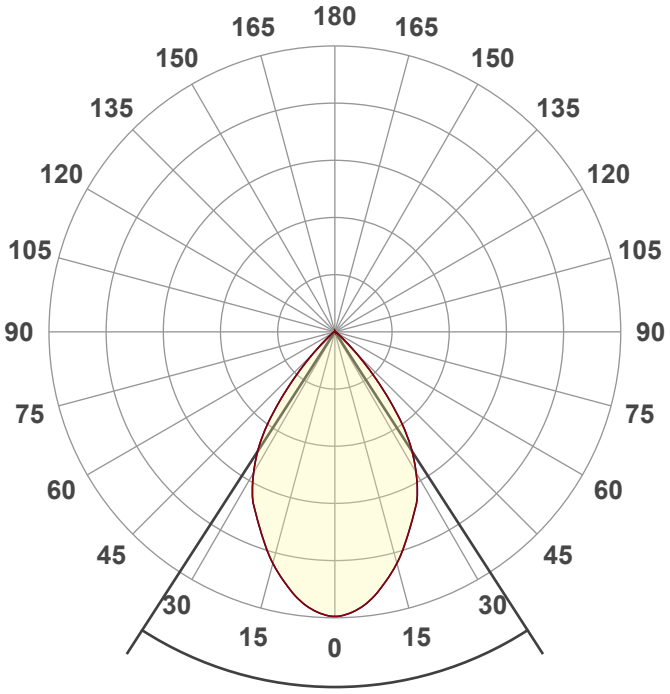
CRI: 96.6

Color temperature:

2490 K

Output: 8475 lm
Peak: 8281 cd

Power: 196.3 W
PF: 1.0



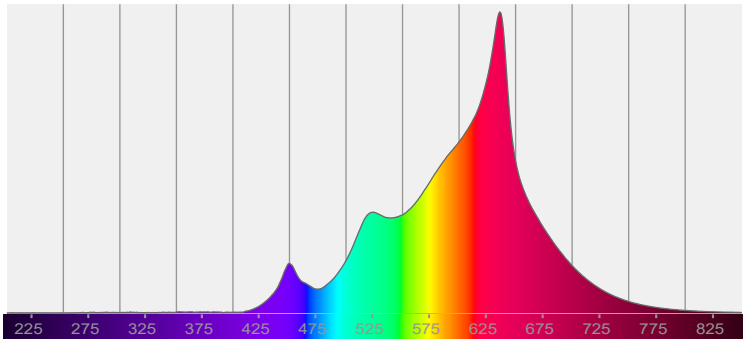
Beam angle 65.7°

CIE 1931
x: 0.480
y: 0.417

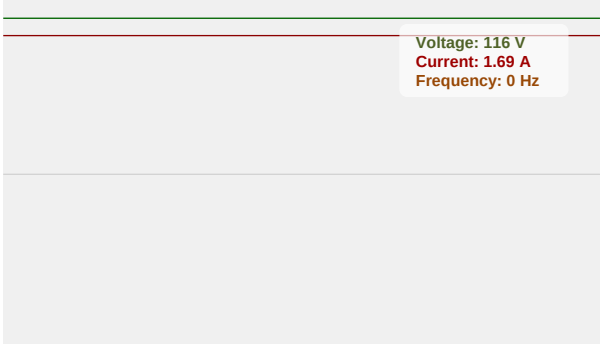
Product name:
Encore DBX (Full on,High CRI)
Item number:

Date and time:
7/2/2026 12:35:55 PM

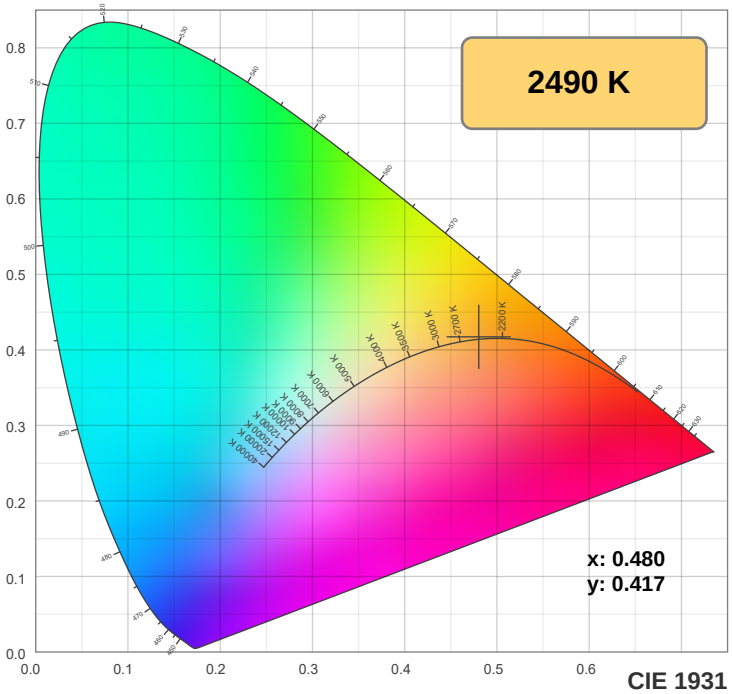
Spectra



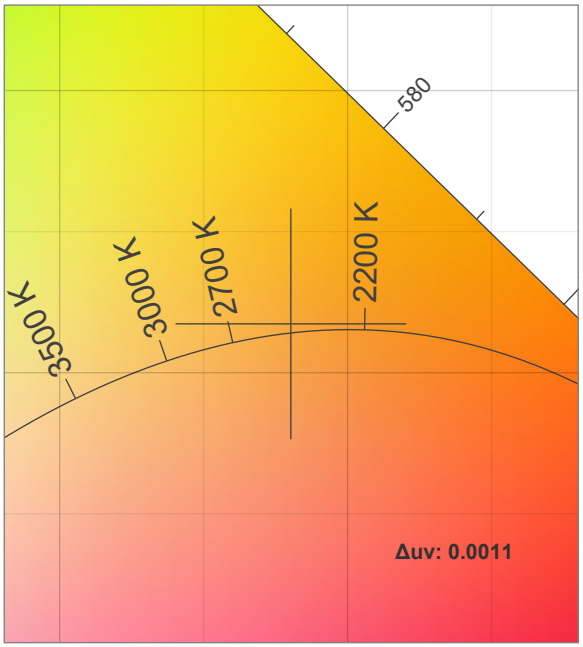
Power



Color details

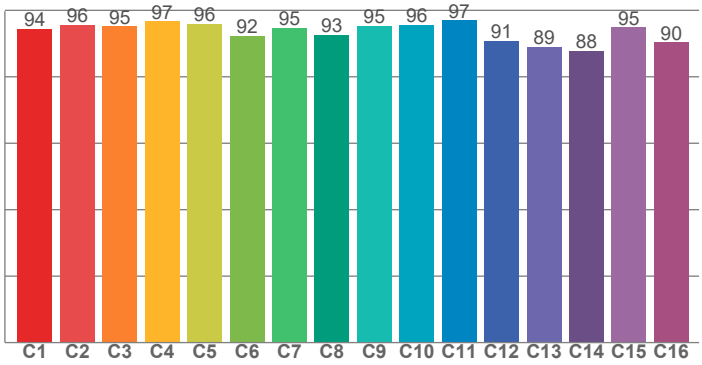


CIE 1931

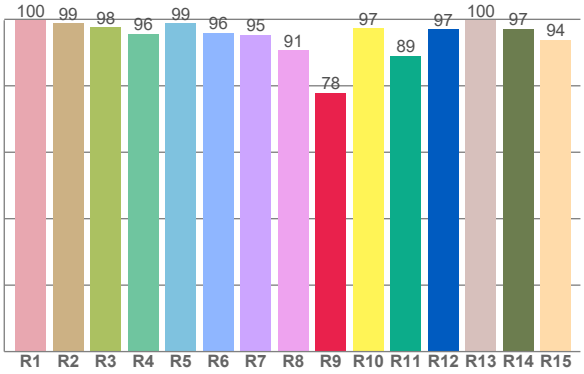


CIE 1931 ZOOM

TM-30: 94.2



CRI: 96.6 (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
99.8	98.9	97.6	95.6	98.8	96.0	95.3	90.7	77.9	97.3	89.1	96.9	99.8	97.2	93.9

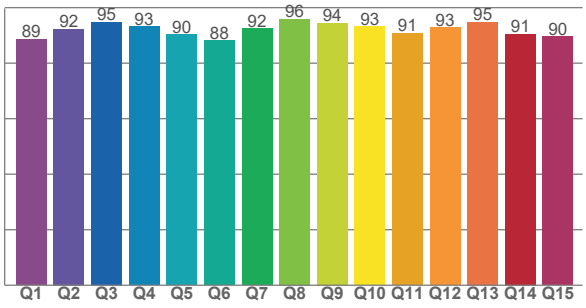
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.5	95.7	95.2	96.7	96.0	92.2	94.7	92.6	95.4	95.6	97.0	90.7	89.0	87.8	94.9	90.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88.6	92.3	94.8	93.2	90.3	88.2	92.5	95.9	94.5	93.2	90.8	92.8	94.8	90.5	89.5

CQS: 91.5



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
2490 K	96.6	77.9	94.2	101.6	91.5	0.480	0.417	0.273	0.355	0.0011

TM-30 details

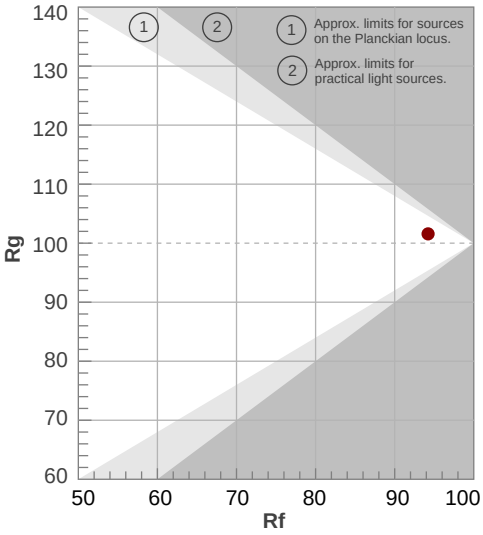
Rf 94.2

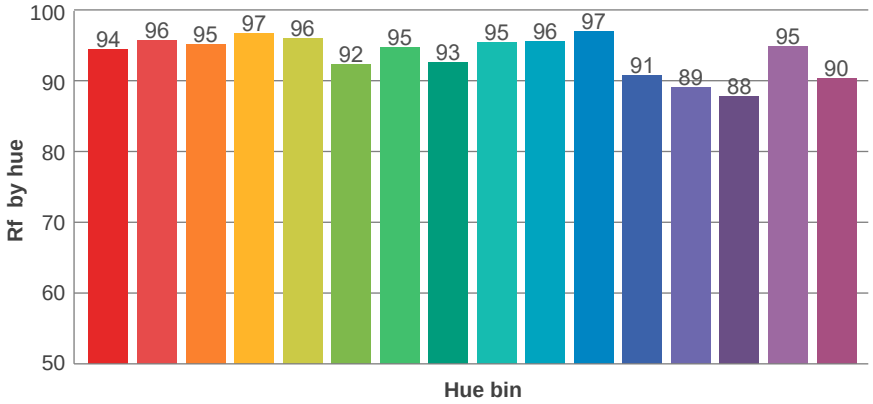
Fidelity index Rf

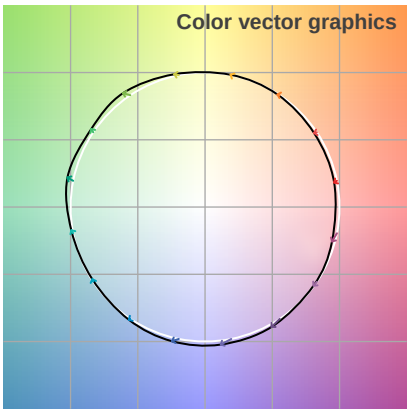
Rg 101.6

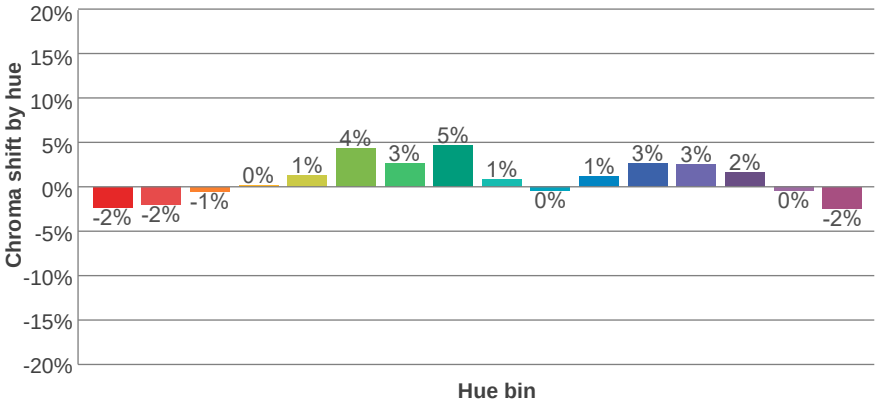
Gamut index Rg

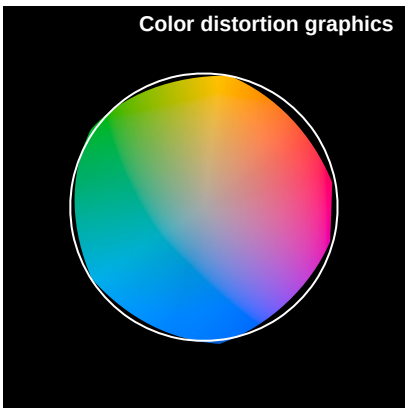
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	94	-2%	-1%
2	96	-2%	1%
3	95	-1%	2%
4	97	0%	1%
5	96	1%	3%
6	92	4%	4%
7	95	3%	-1%
8	93	5%	-2%
9	95	1%	-2%
10	96	0%	-2%
11	97	1%	-1%
12	91	3%	-5%
13	89	3%	-8%
14	88	2%	-8%
15	95	0%	-4%
16	90	-2%	-7%

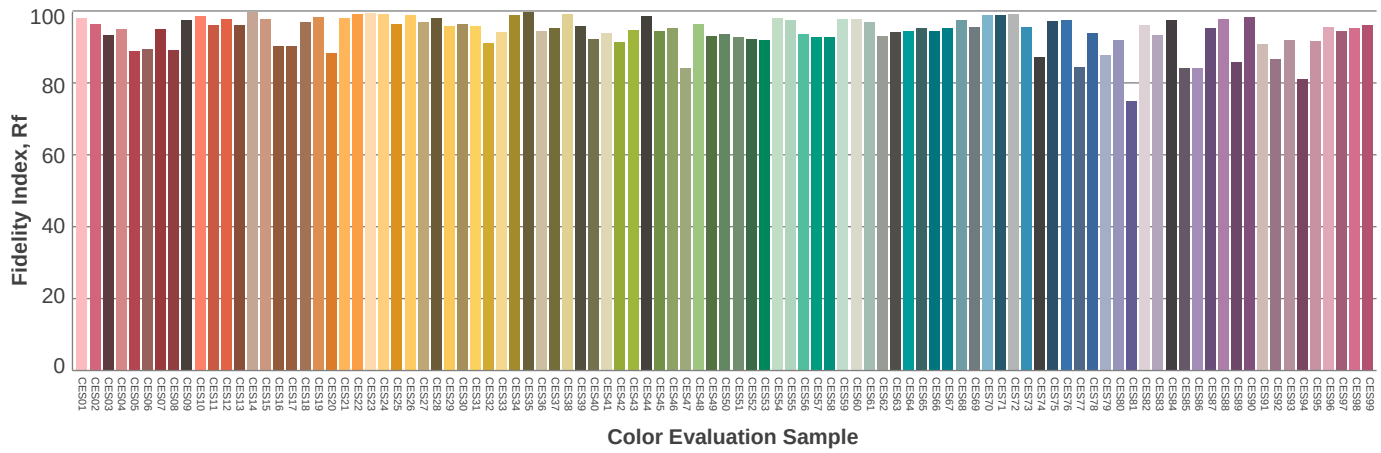




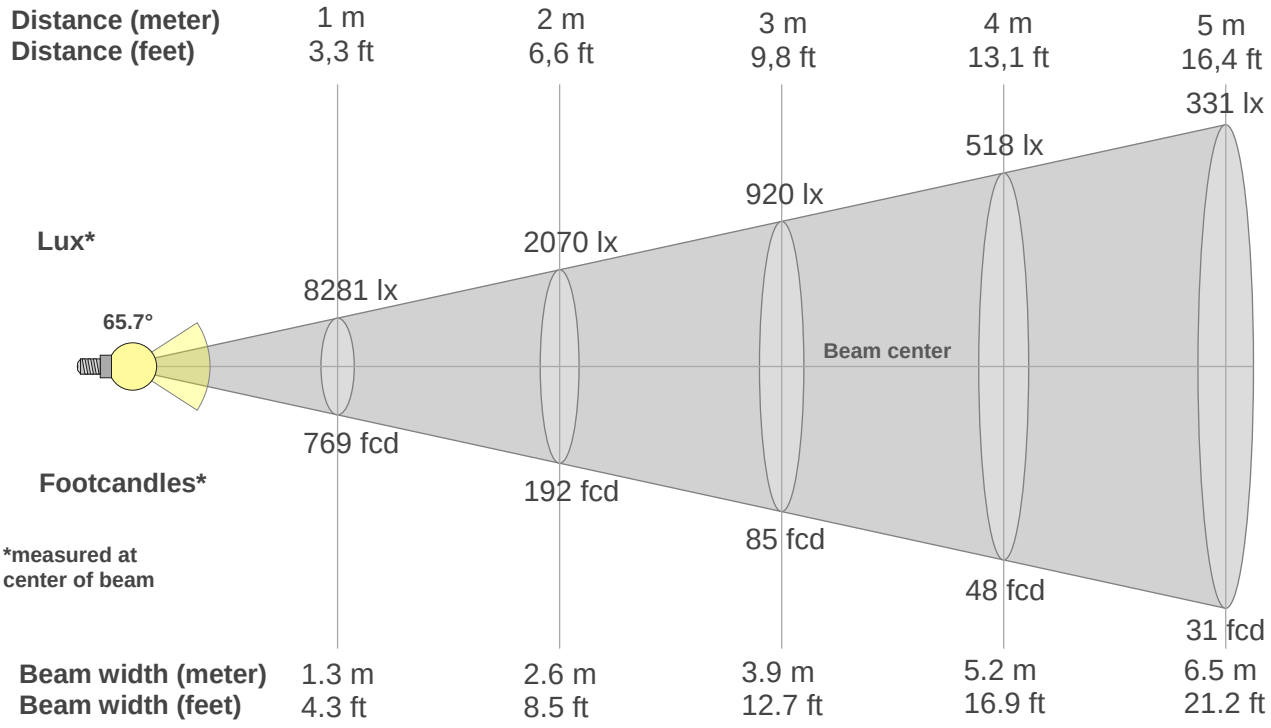








Beam details



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
8281lx	2070lx	920lx	518lx	331lx	230lx	169lx	129lx	102lx	83lx	68lx	58lx	49lx	42lx	37lx	32lx	29lx	26lx	23lx	21lx
769.3fcd	192.3fcd	85.5fcd	48.1fcd	30.8fcd	21.4fcd	15.7fcd	12fcd	9.5fcd	7.7fcd	6.4fcd	5.3fcd	4.6fcd	3.9fcd	3.4fcd	3fcd	2.7fcd	2.4fcd	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°
8281	8245	8155	8020	7829	7604	7362	7112	6846	6549	6258	5978	5711	5455	5108	4729	4322	3878	3358	2749
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°
8281	8245	8155	8020	7829	7604	7362	7112	6846	6549	6258	5978	5711	5455	5108	4729	4322	3878	3358	2749
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°
8281	8245	8155	8020	7829	7604	7362	7112	6846	6549	6258	5978	5711	5455	5108	4729	4322	3878	3358	2749
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

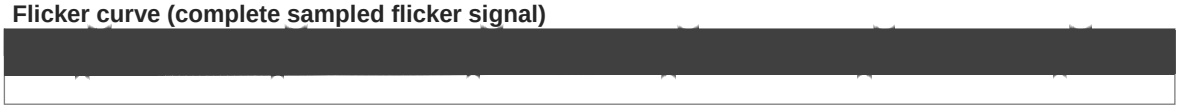
Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
8281	8245	8155	8020	7829	7604	7362	7112	6846	6549	6258	5978	5711	5455	5108	4729	4322	3878	3358	2749
100%	100%	98%	97%	95%	92%	89%	86%	83%	79%	76%	72%	69%	66%	62%	57%	52%	47%	41%	33%

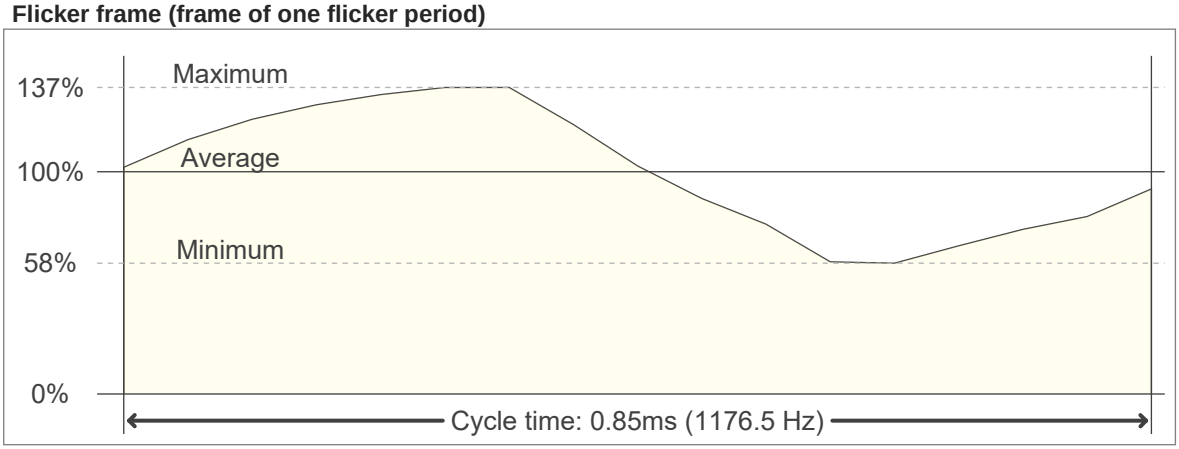
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
65.7°	**90.9°**	**104°**	**98.6%**	**94.5%**

Flicker

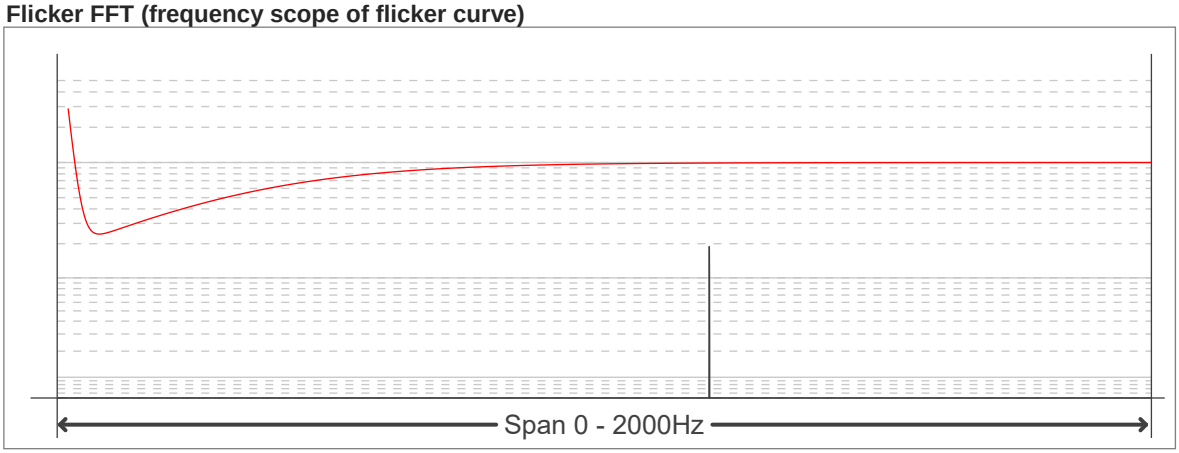
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		1176.47 Hz	
Flicker index:	0.12	JA8/10 40Hz	0.32 %
Flicker percentage:	42.72 %	JA8/10 90Hz	0.71 %
SVM: (Visual flicker)	0.38	JA8/10 200Hz	1.55 %
PstLM	0	JA8/10 400Hz	3.11 %
Mp	0.06	JA8/10 1000Hz	9.49 %

Flicker conditions:

Sample rate:	20000 samples/second