

Light efficiency:



Light quality:



Color temperature:



Output: 9804 lm
Peak: 53501 cd
Power: 572 W
PF: n/a



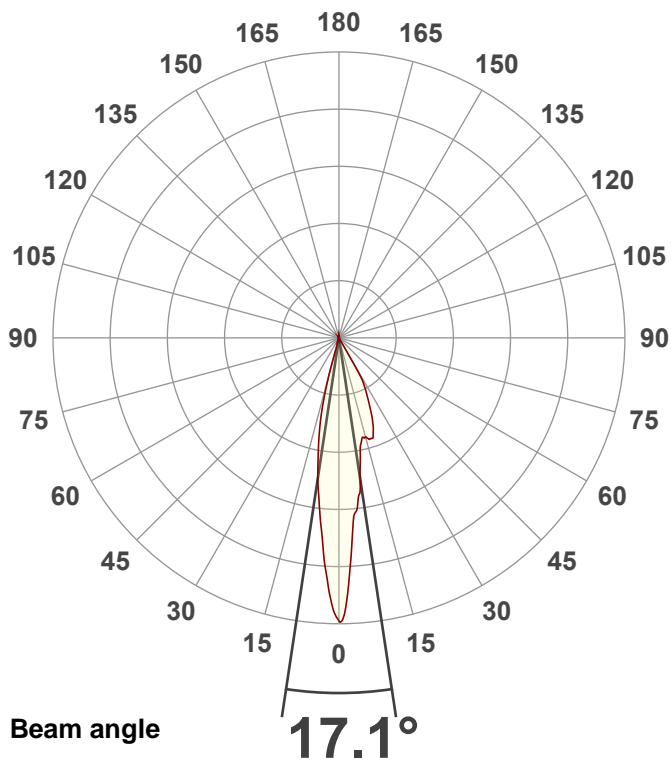
Tracking number: [n/a](#)

Product name:
Hydro Hybrid

Item number:
Zoom Out

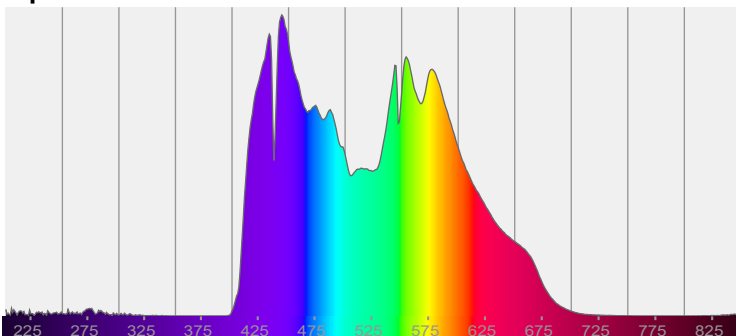
Date and time:
8/1/2024 11:48:26 AM

Description:

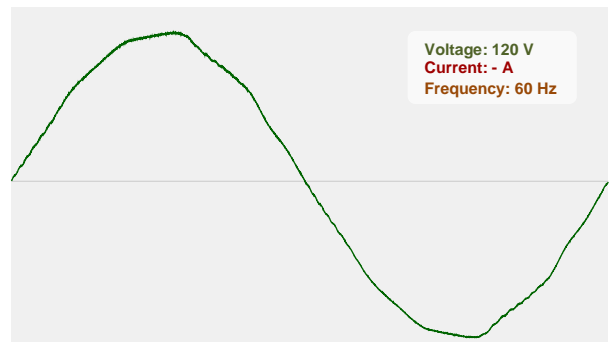


CIE 1931
x: 0.302
y: 0.316

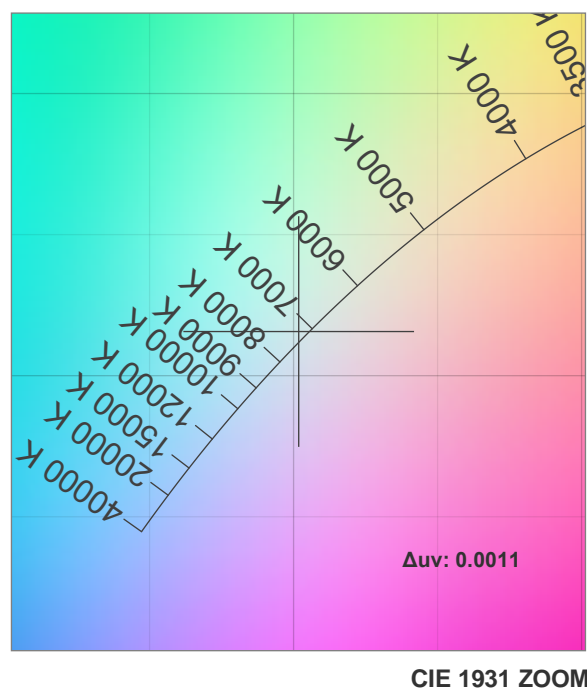
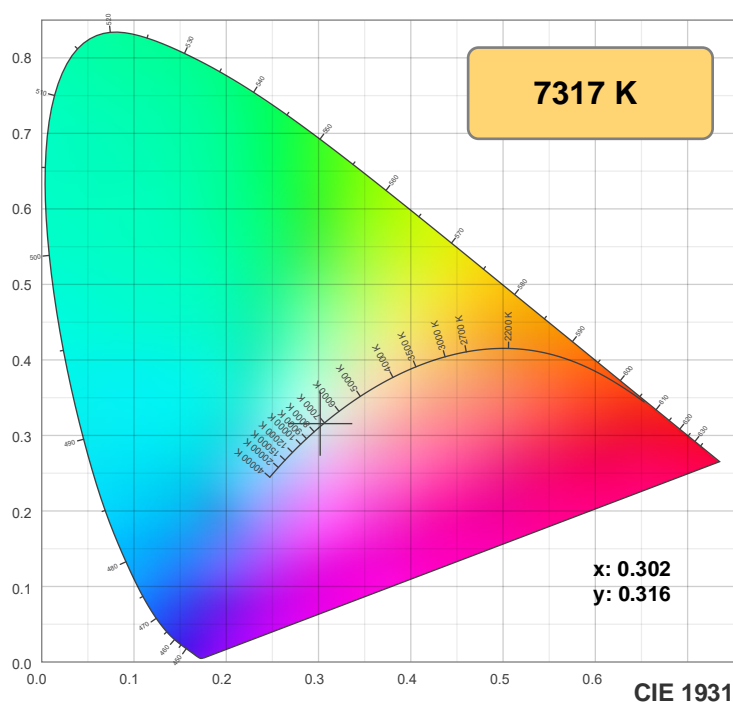
Spectra



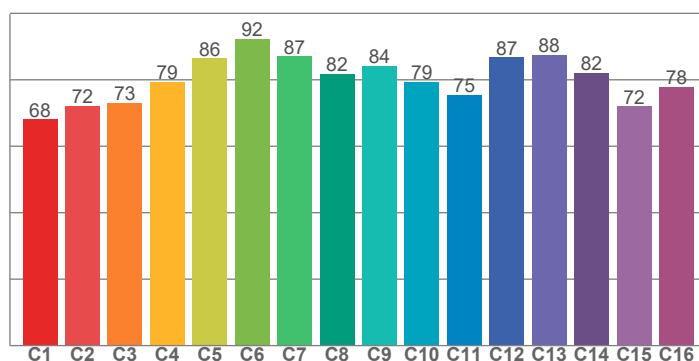
Power



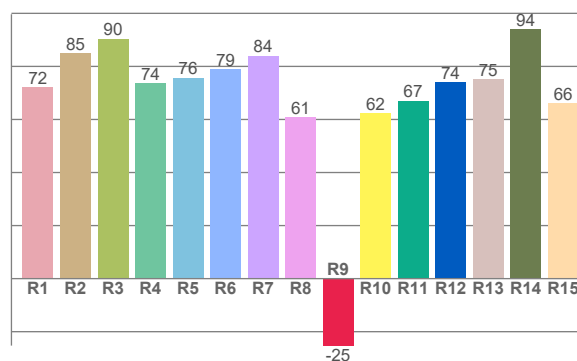
Color details



TM-30: 80.5



CRI: 77.6 (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
72.1	84.9	90.4	73.8	75.8	78.9	84.0	60.9	-25.2	62.5	67.1	74.0	75.2	94.1	66.2

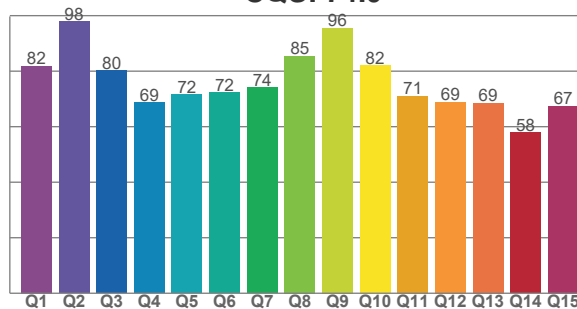
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
68.1	72.1	73.1	79.4	86.5	92.3	87.1	81.8	84.1	79.3	75.5	86.7	87.5	82.2	72.0	77.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.9	97.9	80.2	68.7	71.5	72.4	74.1	85.4	95.6	82.0	71.1	68.8	68.6	57.9	67.4

CQS: 74.0



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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
7317 K	77.6	-25.2	80.5	91.0	74.0	0.302	0.316	0.195	0.306	0.0011

TM-30 details

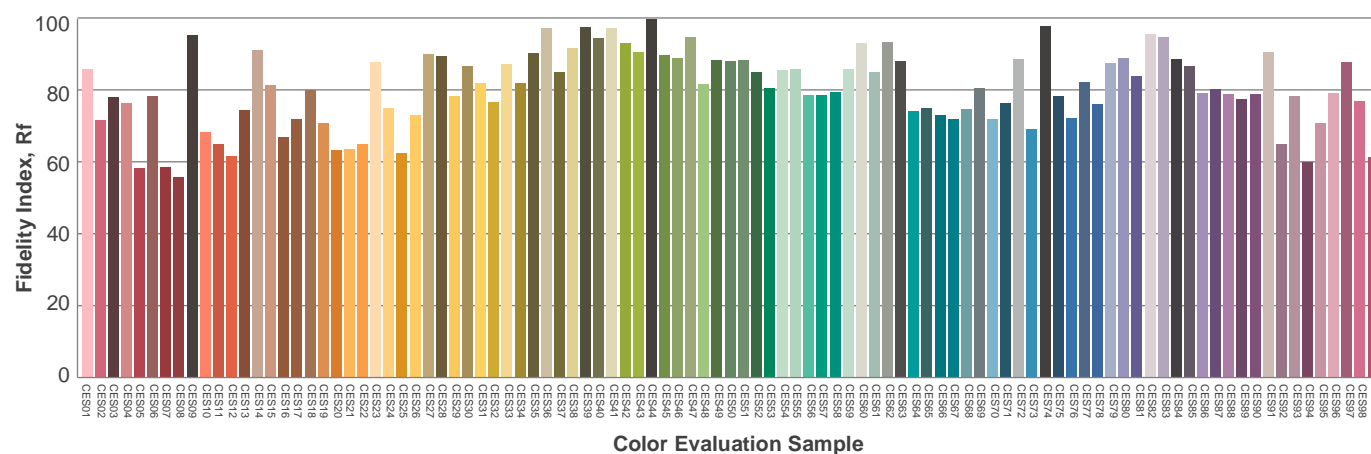
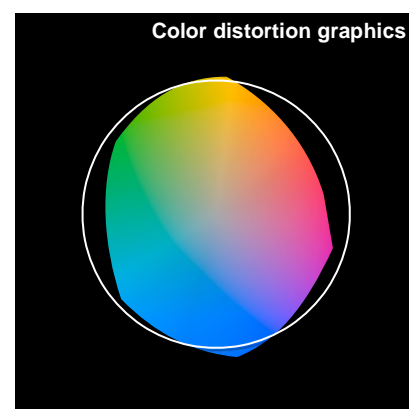
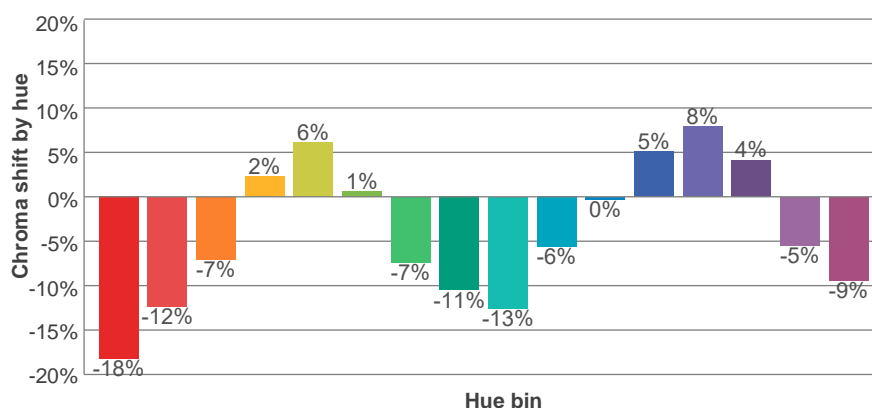
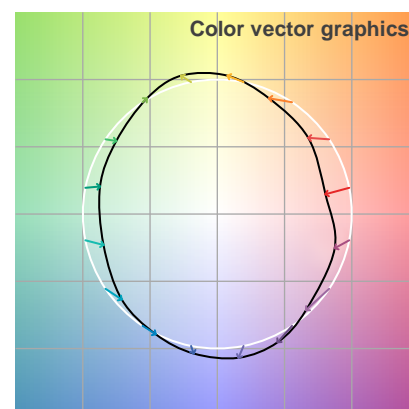
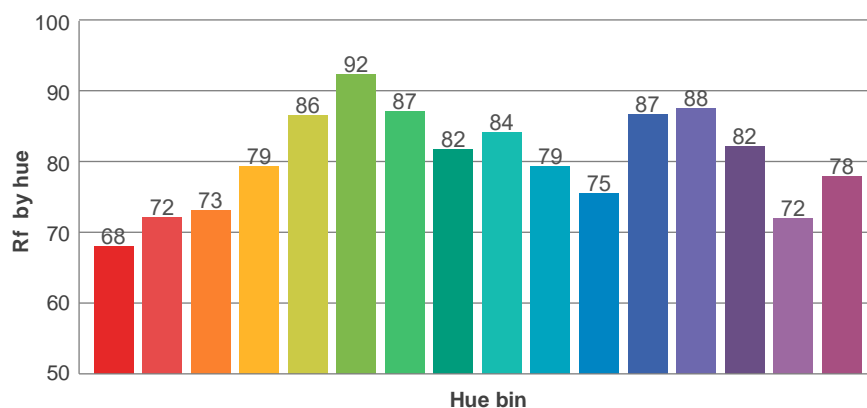
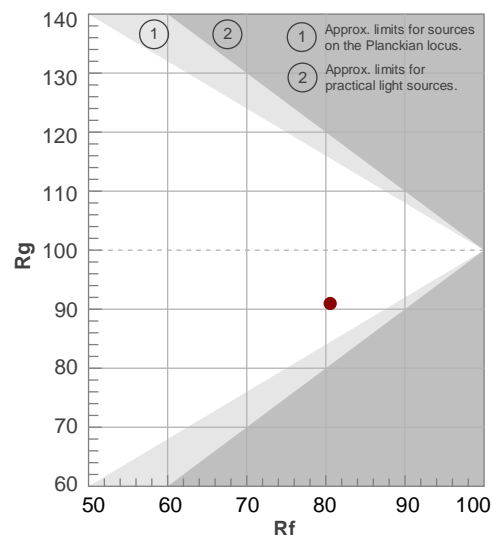
Rf 80.5

Fidelity index Rf

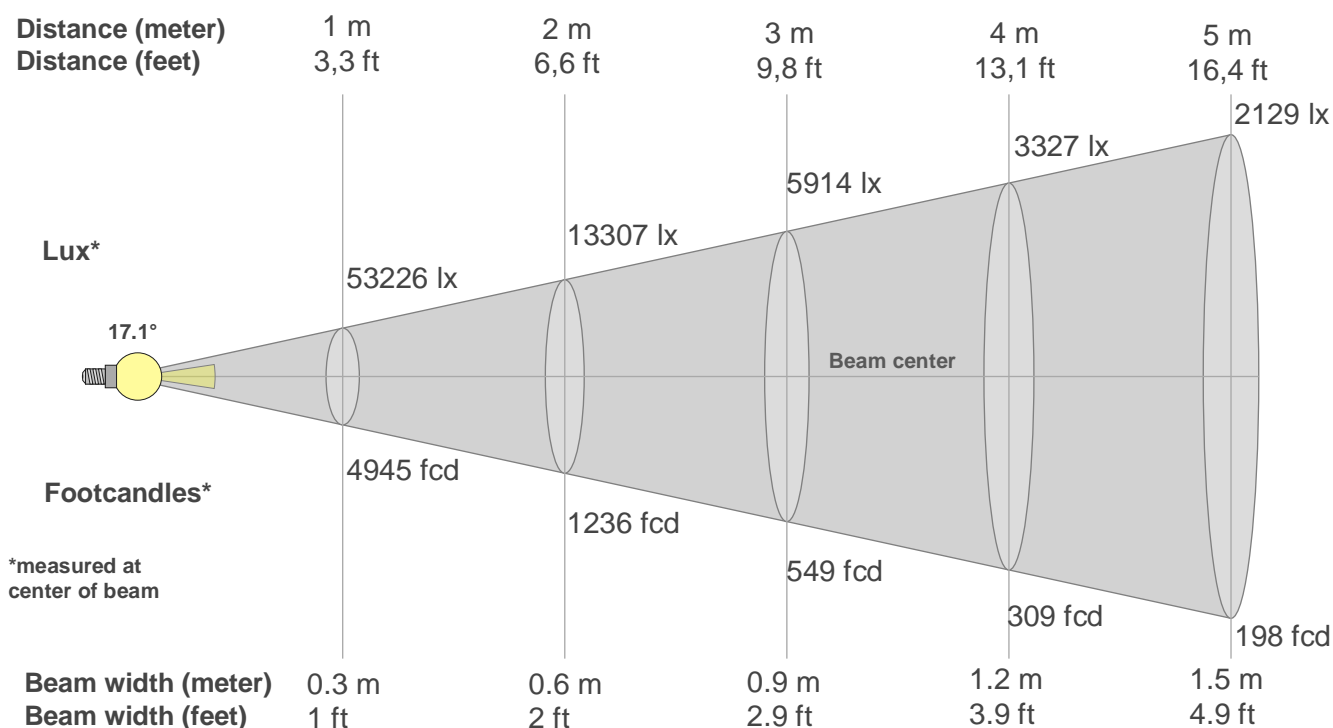
Rg 91.0

Gamut index Rg

Hue Bin	Ri	Shifts (%)	
		Chroma	Hue
1	68	-18%	-1%
2	72	-12%	10%
3	73	-7%	16%
4	79	2%	13%
5	86	6%	6%
6	92	1%	-4%
7	87	-7%	-3%
8	82	-11%	-3%
9	84	-13%	6%
10	79	-6%	13%
11	75	0%	12%
12	87	5%	3%
13	88	8%	-5%
14	82	4%	-16%
15	72	-5%	-23%
16	78	-9%	-8%



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
53226lx	13307lx	5914lx	3327lx	2129lx	1479lx	1086lx	832lx	657lx	532lx	440lx	370lx	315lx	272lx	237lx	208lx	184lx	164lx	147lx	133lx
4944.9fcd	1236.2fcd	549.4fcd	309.1fcd	197.8fcd	137.4fcd	100.9fcd	77.3fcd	61fcd	49.4fcd	40.9fcd	34.3fcd	29.3fcd	25.2fcd	22fcd	19.3fcd	17.1fcd	15.3fcd	13.7fcd	12.4fcd

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°
53.2K	47.8K	36.8K	32.4K	28.7K	23.2K	20.1K	19.4K	19.7K	19.9K	18.9K	16.9K	14.4K	12.1K	10.1K	1.7K	0.0K	0.0K	0.0K	0.0K
100%	90%	69%	61%	54%	44%	38%	36%	37%	37%	35%	32%	27%	23%	19%	3%	0%	0%	0%	0%

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°
53.2K	47.8K	36.8K	32.4K	28.7K	23.2K	20.1K	19.4K	19.7K	19.9K	18.9K	16.9K	14.4K	12.1K	10.1K	1.7K	0.0K	0.0K	0.0K	0.0K
100%	90%	69%	61%	54%	44%	38%	36%	37%	37%	35%	32%	27%	23%	19%	3%	0%	0%	0%	0%

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°
53.2K	48.6K	41.1K	33.9K	28.2K	22.5K	17.4K	11.4K	0.2K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	91%	77%	64%	53%	42%	33%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Intensities in 270° c-plane

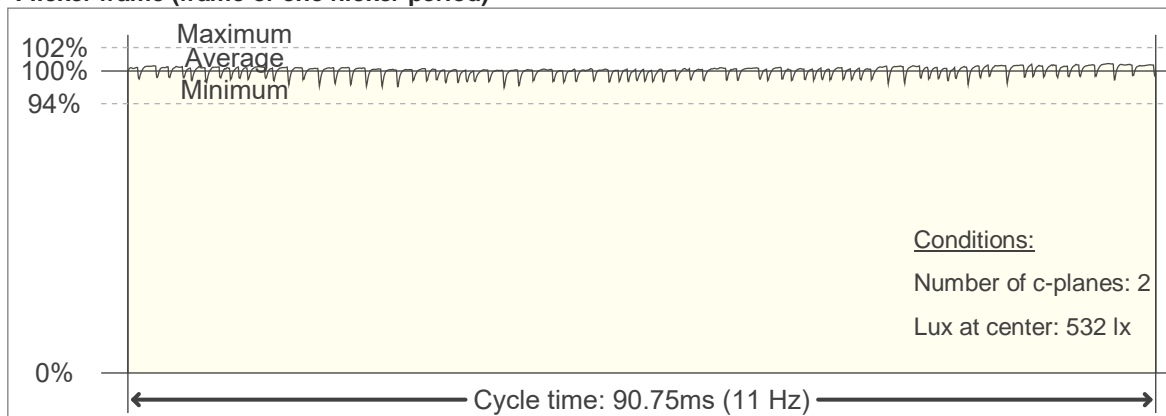
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
53.2K	48.6K	41.1K	33.9K	28.2K	22.5K	17.4K	11.4K	0.2K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	91%	77%	64%	53%	42%	33%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
17.1°	45°	45.7°	99.7%	99.7%

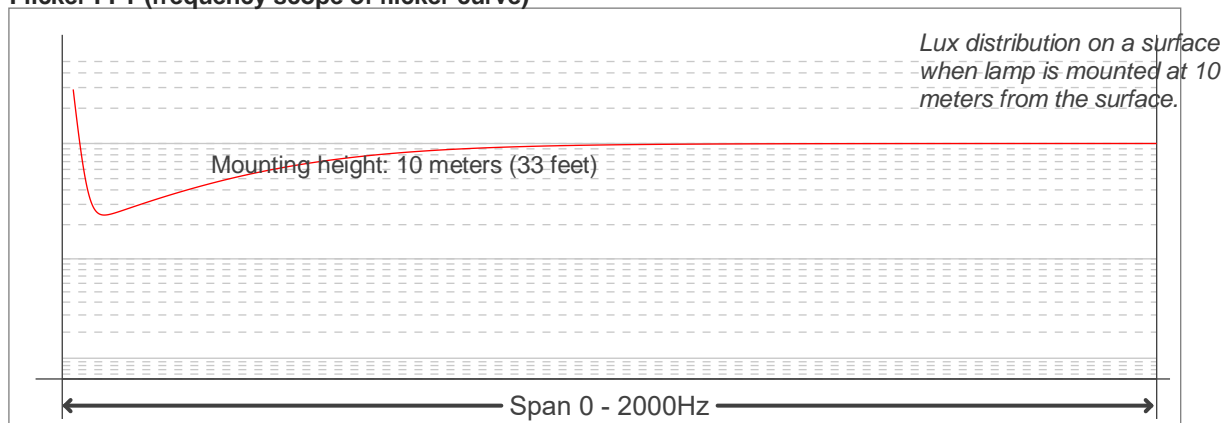
Flicker

Flicker curve (complete sampled flicker signal)

Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		11.02 Hz	
Flicker index:	0.01	JA8/10 40Hz	1.79 %
Flicker percentage:	4.95 %	JA8/10 90Hz	1.93 %
SVM: (Visual flicker)	0.01	JA8/10 200Hz	2.08 %
PstLM	1.81	JA8/10 400Hz	2.55 %
Mp	1.34	JA8/10 1000Hz	3.9 %

Flicker conditions:

Sample rate:	20000 samples/second
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