

Light efficiency:

131 Lumen/Watt

Output: 19617 lm

Light quality:

CRI: 83.4

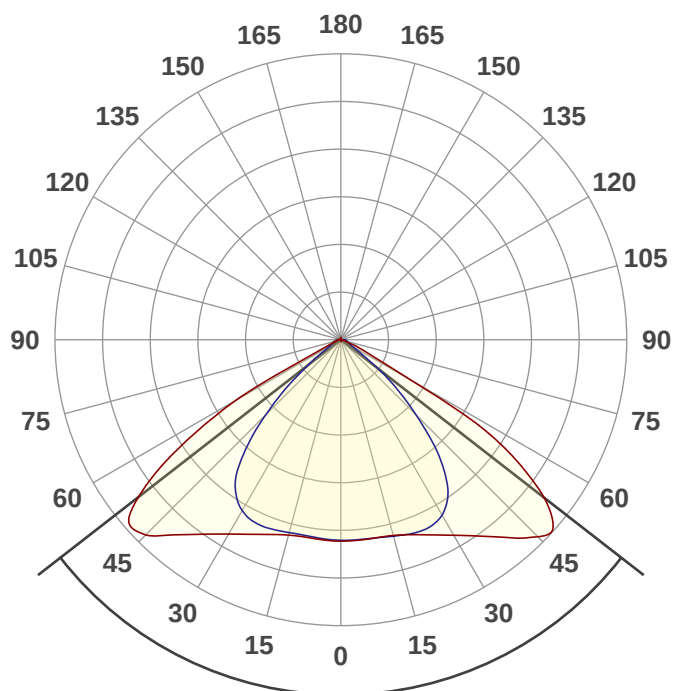
Peak: 10043 cd

Color temperature:

5015 K

Power: 150 W

PF: 1.0



Product name:

ALD-50K15W-C-BRC3 NEMA 6x5

Date and time:

4/11/2019 2:52:34 PM

Beam angle

104.3°

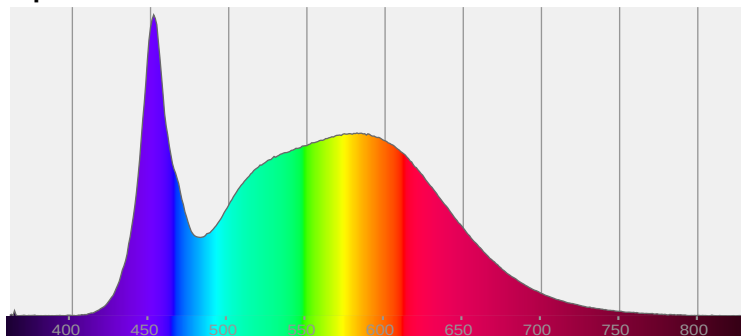


CIE 1931

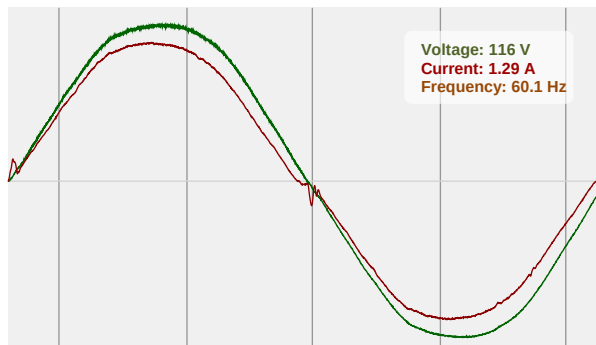
x: 0.345

y: 0.358

Spectra



Power



Voltage: 116 V
Current: 1.29 A
Frequency: 60.1 Hz



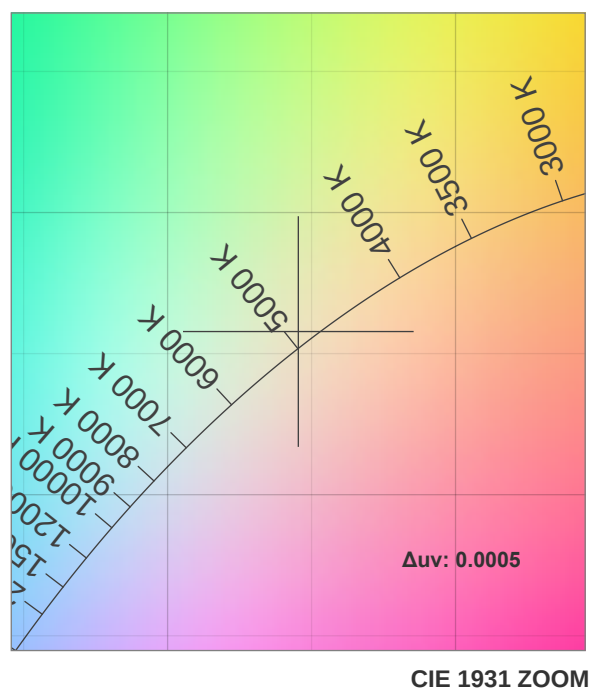
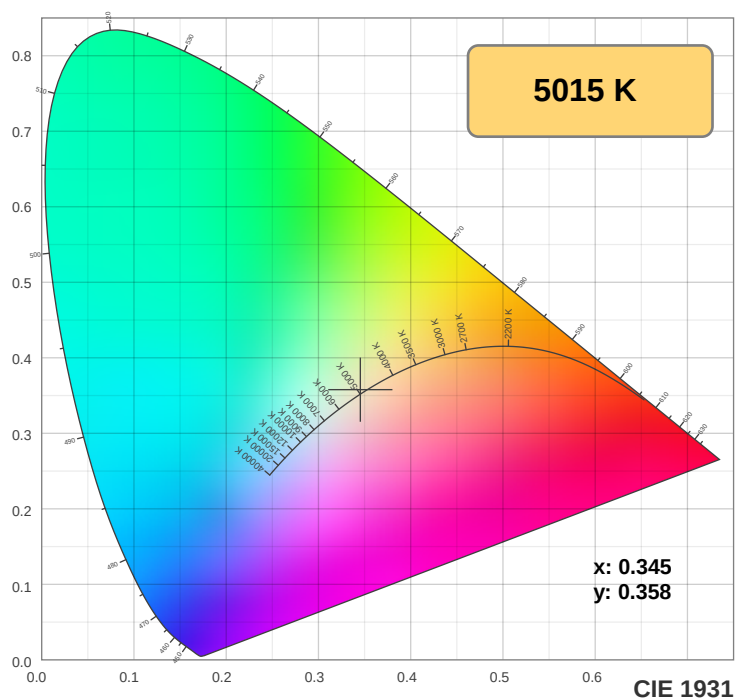
T 314.743.3067

F 314.972.6202

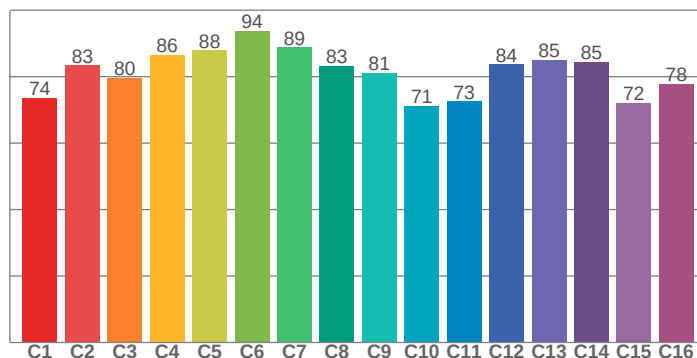
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

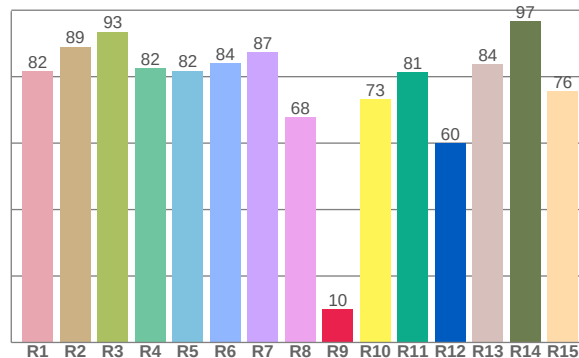
Color Specifications



TM30: 81.7



CRI: 83.4 (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
81.6	89.0	93.5	82.5	81.7	84.0	87.4	67.9	10.1	73.3	81.4	60.0	83.7	96.6	75.7

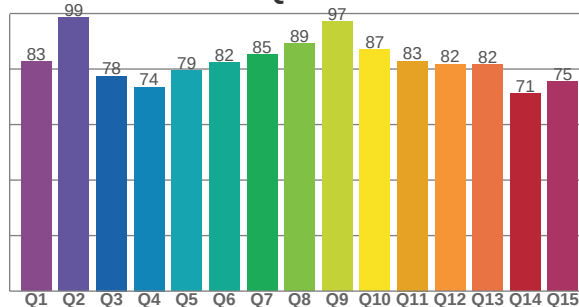
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
73.5	83.4	79.7	86.5	88.0	93.7	88.9	83.3	81.1	71.2	72.6	83.7	85.1	84.5	72.1	77.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.6	98.6	77.5	73.6	79.4	82.2	85.2	89.1	97.0	87.0	82.9	81.7	81.6	71.1	75.4

CQS: 81.4



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
5015 K	83.4	10.1	81.7	93.8	81.4	0.345	0.358	0.209	0.325	0.0005



TM30 Report

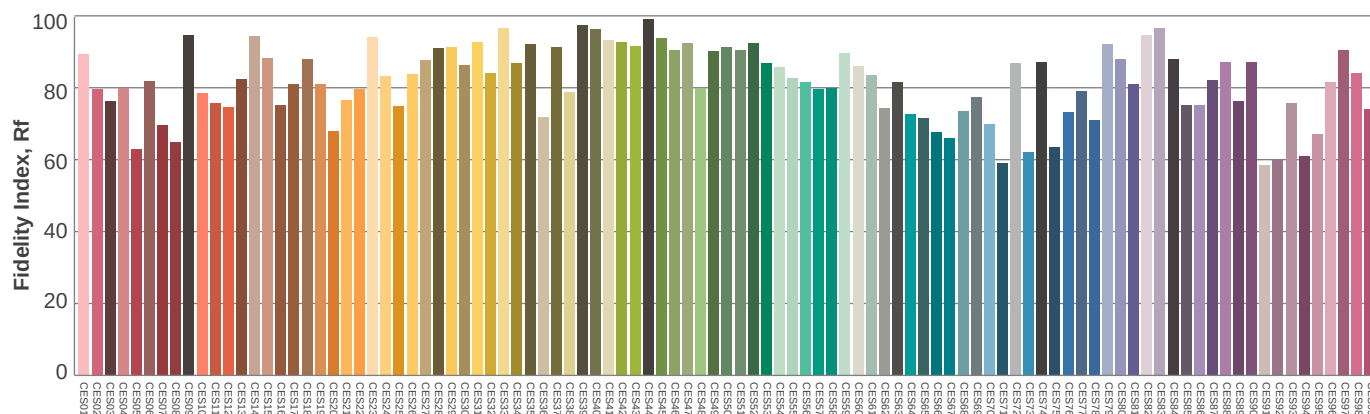
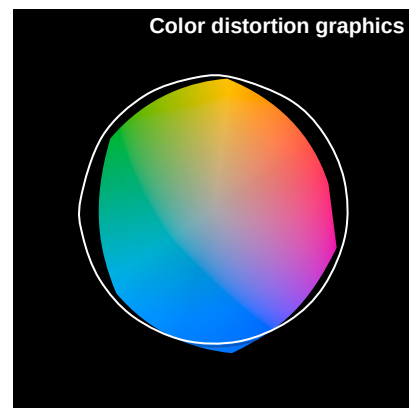
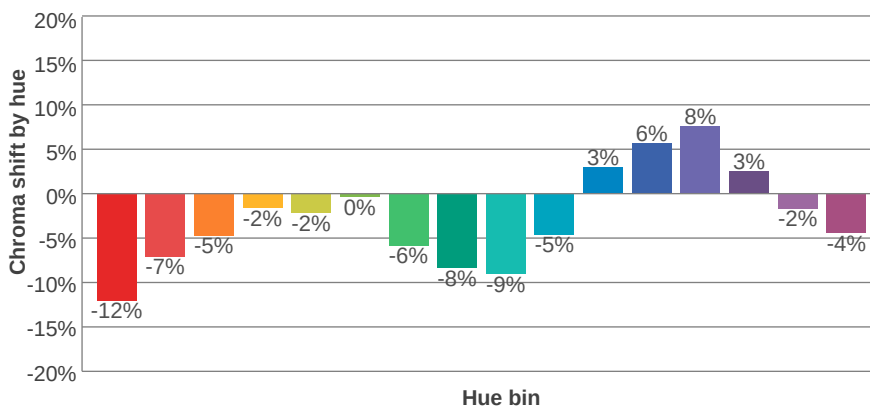
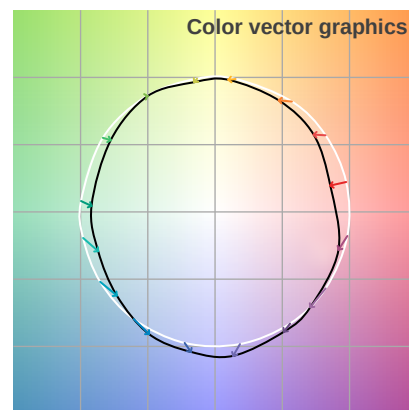
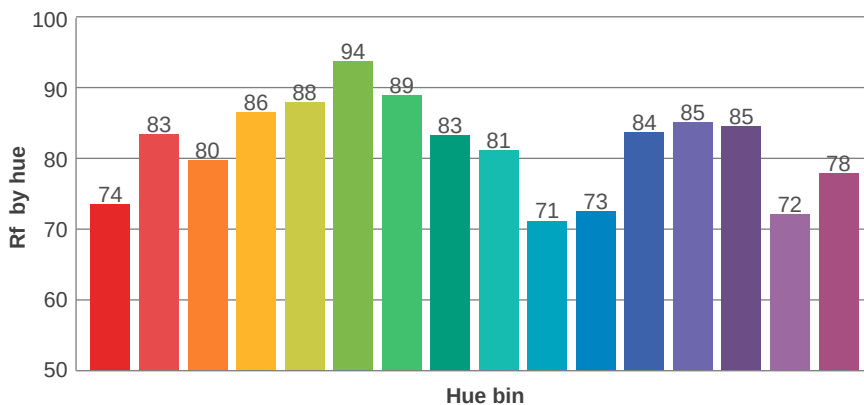
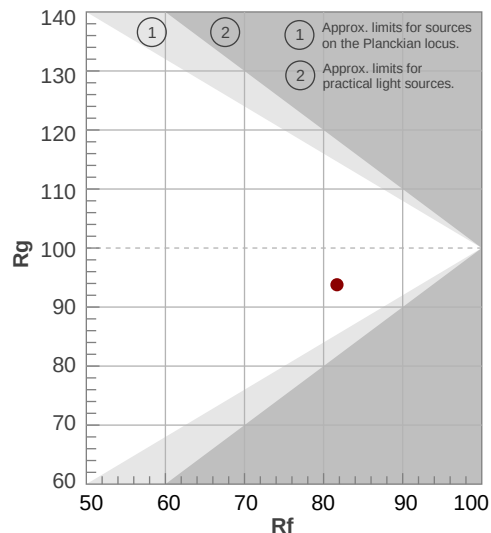
Rf 81.7

Fidelity index Rf

Rg 93.8

Gammut index Rg

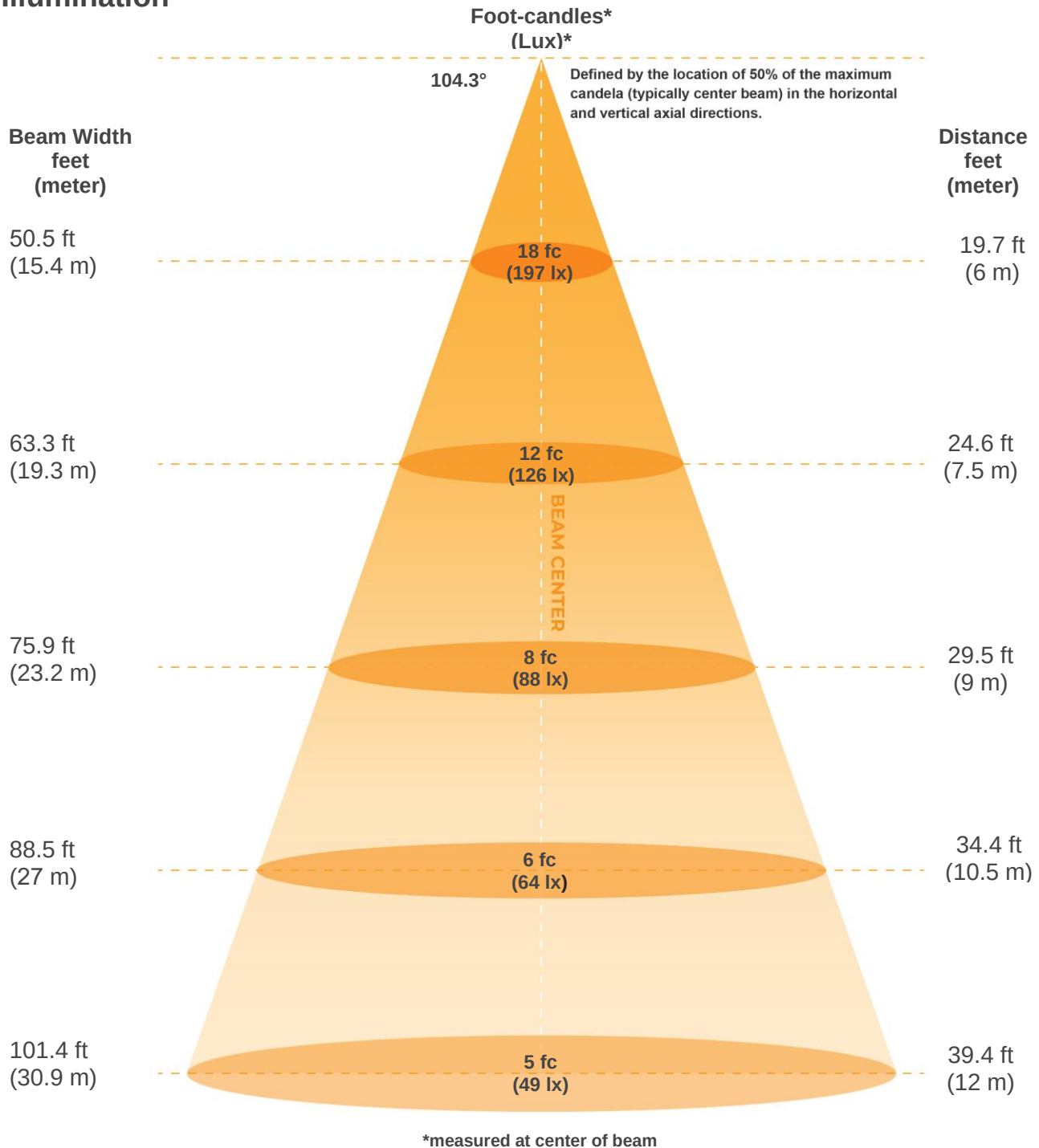
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	74	-12%	0%
2	83	-7%	5%
3	80	-5%	9%
4	86	-2%	5%
5	88	-2%	3%
6	94	0%	-1%
7	89	-6%	-2%
8	83	-8%	2%
9	81	-9%	12%
10	71	-5%	15%
11	73	3%	16%
12	84	6%	6%
13	85	8%	-7%
14	85	3%	-7%
15	72	-2%	-18%
16	78	-4%	-11%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

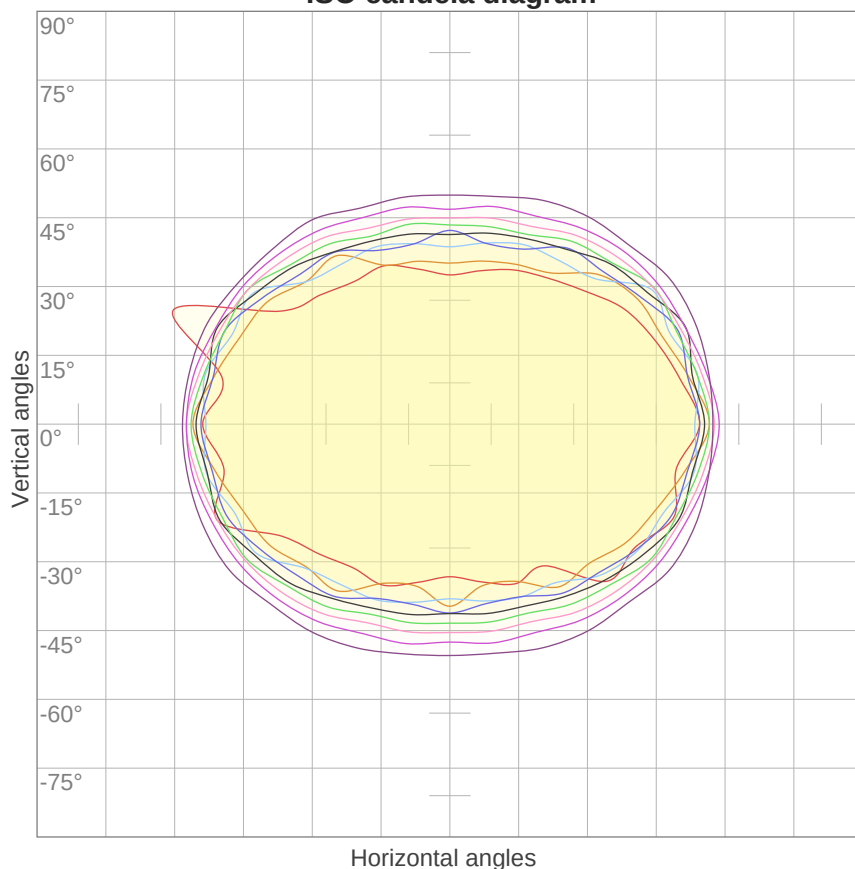
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
7103lx	1776lx	789lx	444lx	284lx	197lx	145lx	111lx	88lx	71lx	59lx	49lx	42lx	36lx	32lx	28lx	25lx	22lx	20lx	18lx
659.9fc	165fcd	73.3fcd	41.2fcd	26.4fcd	18.3fcd	13.5fcd	10.3fcd	8.1fcd	6.6fcd	5.5fcd	4.6fcd	3.9fcd	3.4fcd	2.9fcd	2.6fcd	2.3fcd	2fcd	1.8fcd	1.6fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
104.3°	122.6°	150.6°	95.3%	67.6%



ISO Diagrams

ISO candela diagram



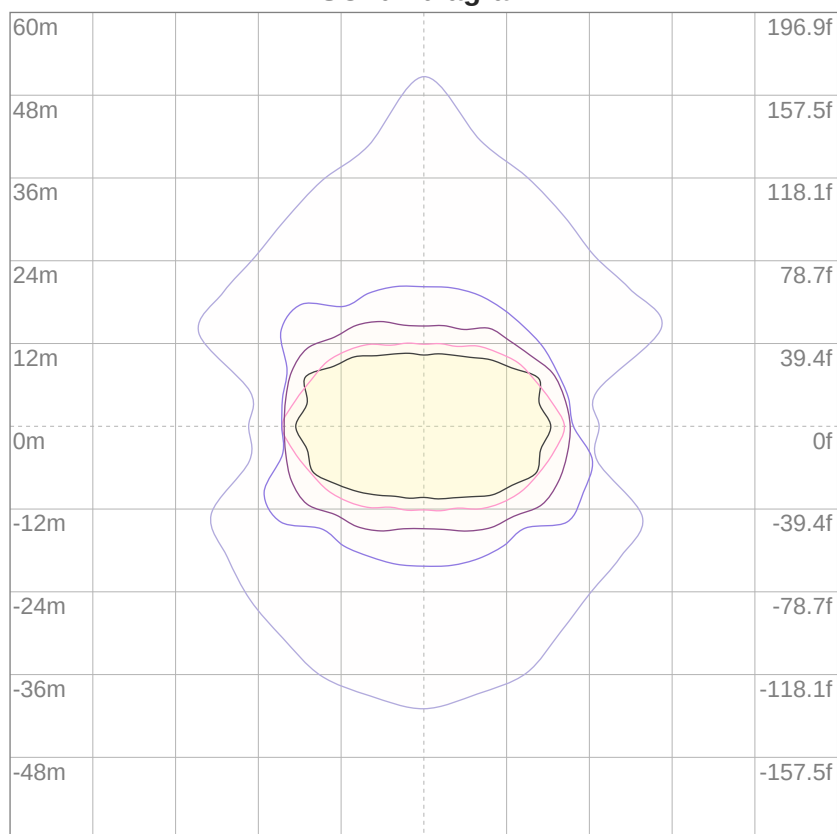
10%	710 cd
20%	1421 cd
30%	2131 cd
40%	2841 cd
50%	3551 cd
60%	4262 cd
70%	4972 cd
80%	5682 cd
90%	6393 cd

Conditions:

Number of c-planes: 16

Candela at center: 7103 cd

ISO lux diagram



3%	2.13 lx
5%	3.55 lx
10%	7.10 lx
30%	21.3 lx
50%	35.5 lx

Conditions:

Number of c-planes: 16

Lux at center: 71.0 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*

Mounting height: 10 meters (33 feet)



T 314.743.3067
F 314.972.6202
email: commercial-sales@superbriteleds.com
www.superbriteleds.com/

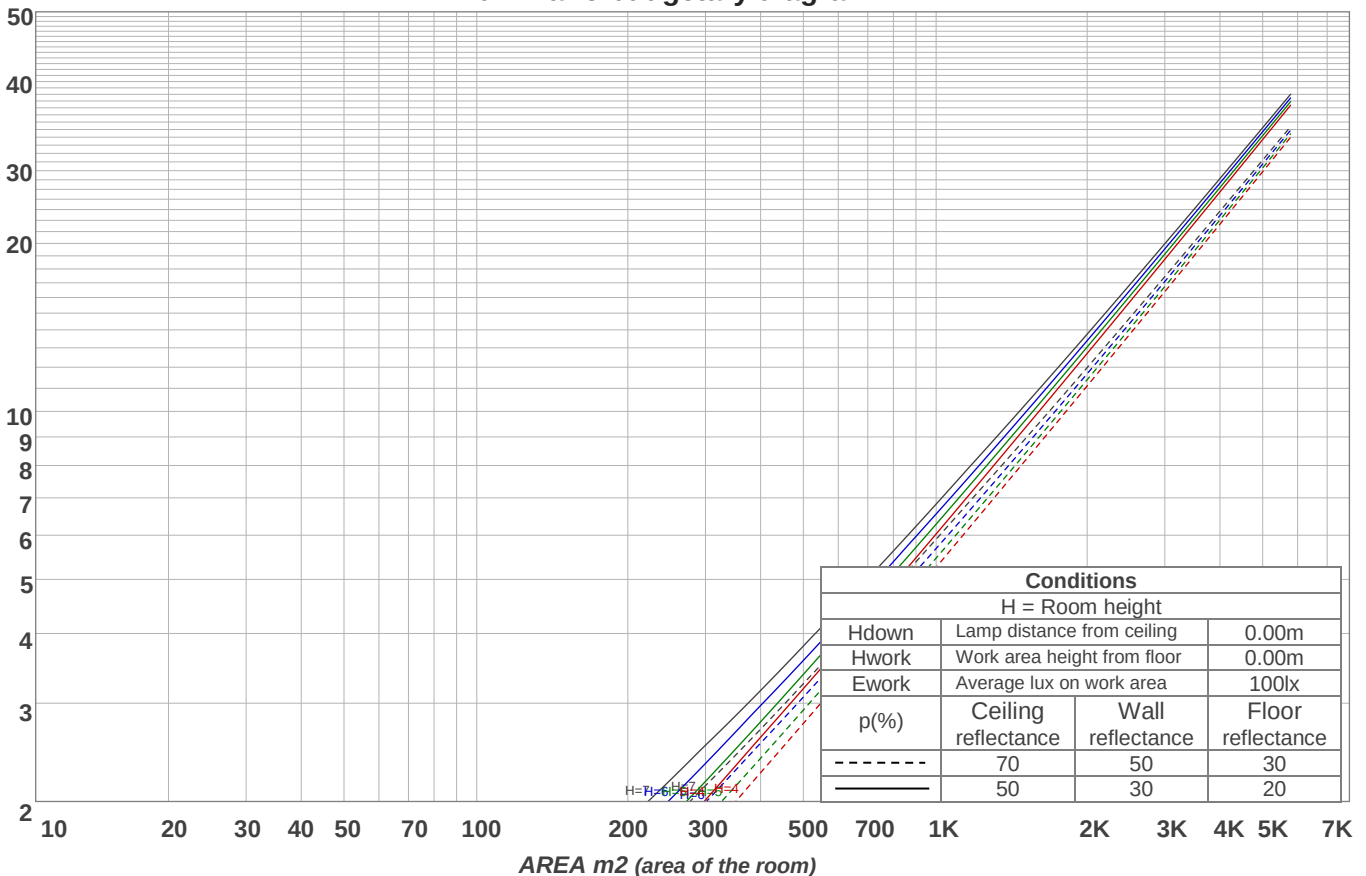
Light Planning

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	65	61	69	64	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	43	38	34	32
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
677 lm	2022 lm	3401 lm	4639 lm	4895 lm	3055 lm	629 lm	209 lm	47.9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2.92 lm	3.59 lm	4.80 lm	6.39 lm	7.11 lm	6.91 lm	5.98 lm	4.01 lm	1.40 lm

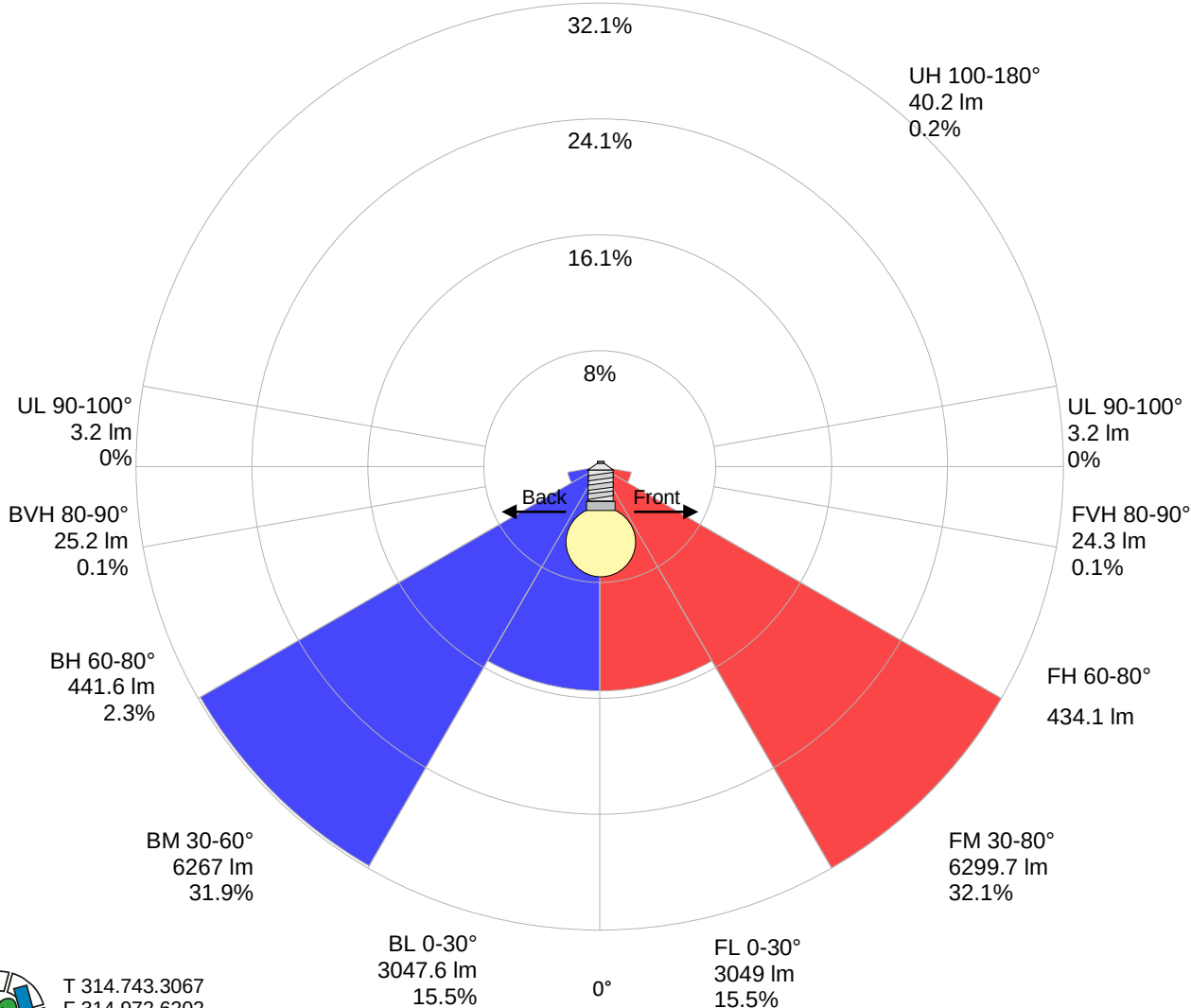


Road Report

LCS table

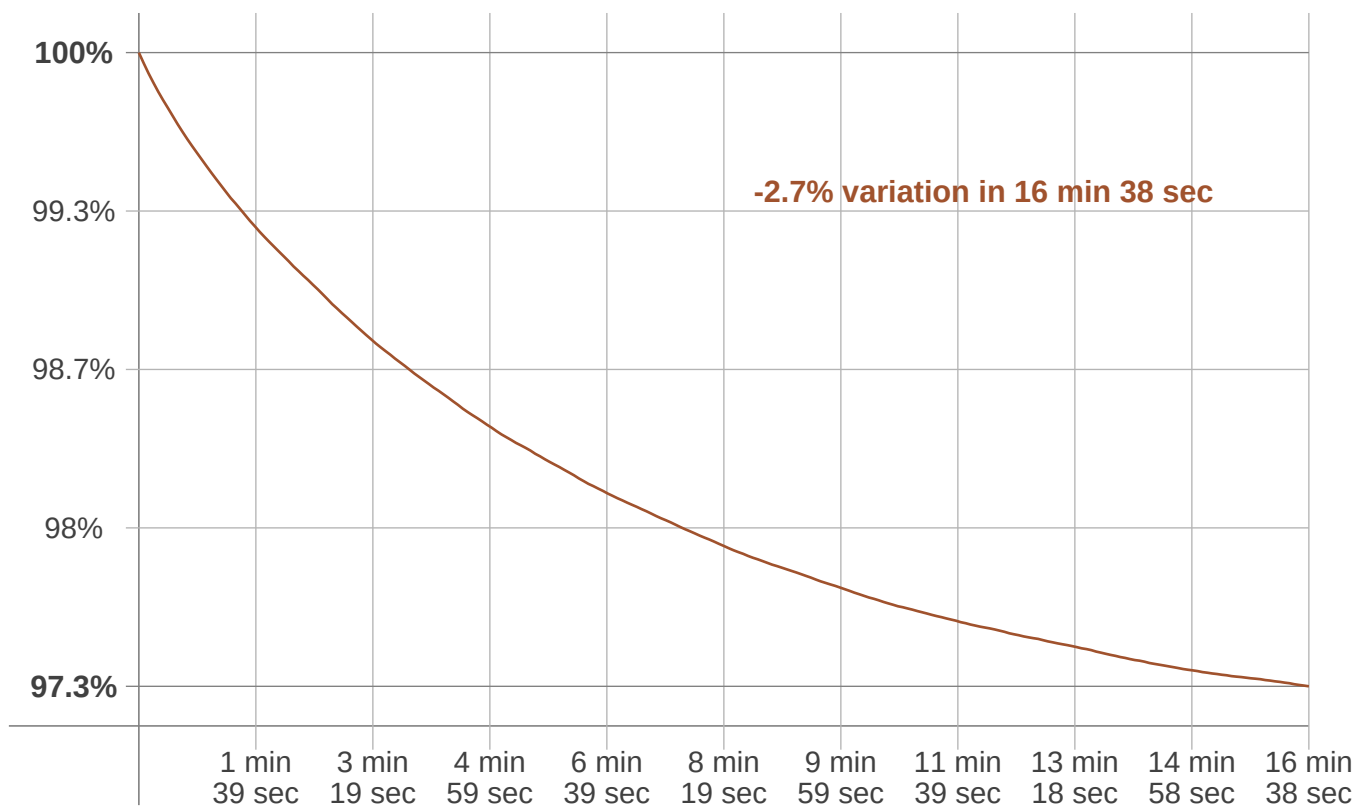
BUG rating:	B4 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	3049	15.5%
Medium(30-60):	6299.7	32.1%
High(60-80):	434.1	2.2%
Very high(80-90):	24.3	0.1%
Back light		
Low(0-30):	3047.6	15.5%
Medium(30-60):	6267	31.9%
High(60-80):	441.6	2.3%
Very high(80-90):	25.2	0.1%
Uplight		
Low(90-100):	3.2	0%
High(100-180):	40.2	0.2%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	16 min 38 sec
Warmup variation	-2.7%

Warmup conditions

Stable period:	15 min
Stable change max:	2.0%
Minimum time:	15 min

Color temperature change

CCT start	CCT change	CCT end
4962 K	+53 K	5015 K

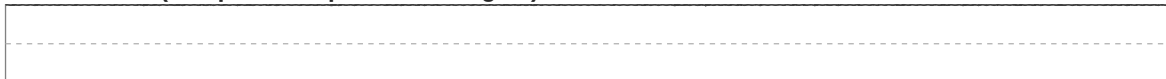
Output change

Output start	Output change	Output end
20137 lm	-520 lm	19617 lm

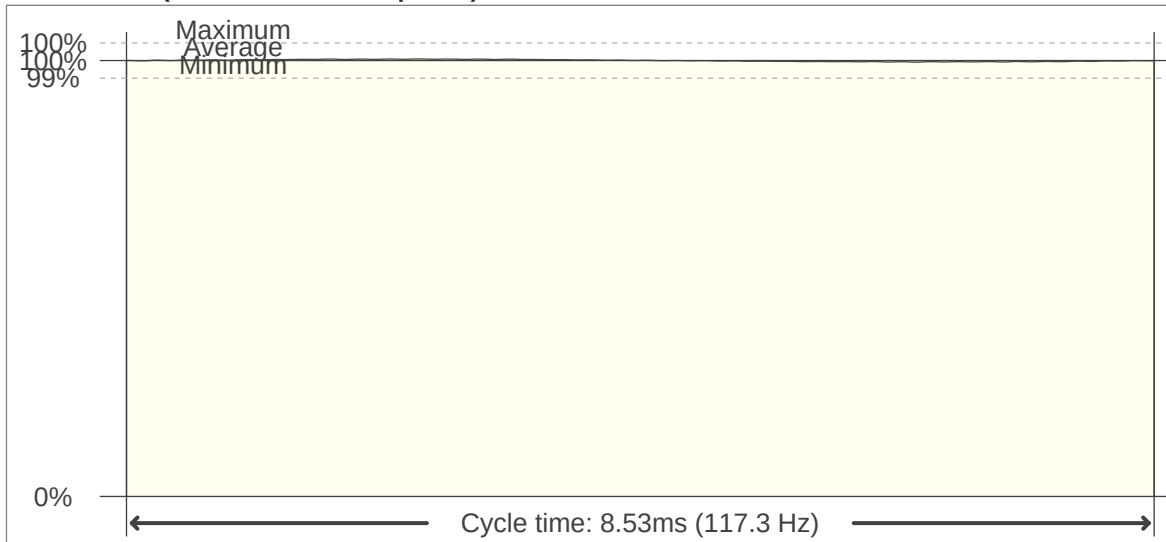


Flicker

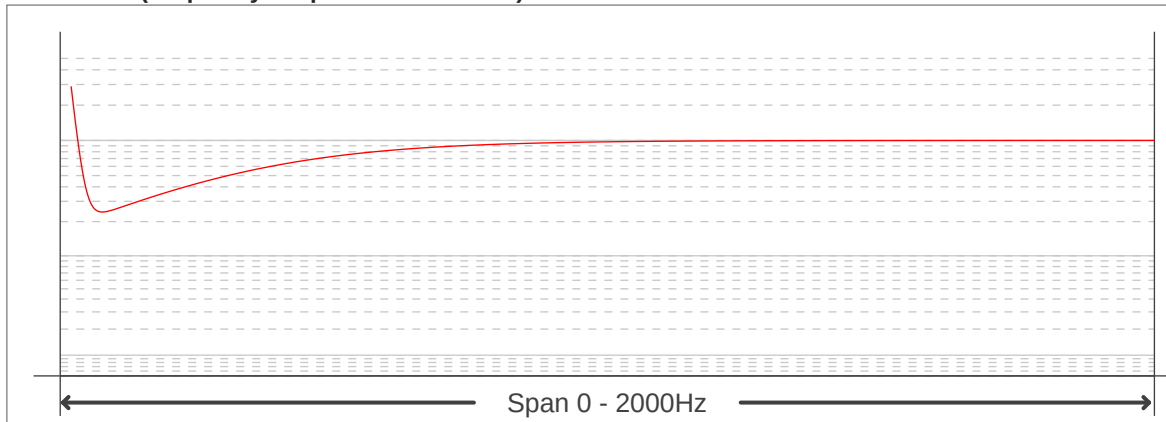
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	117.3 Hz
Flicker index:	0
Flicker percentage:	0.5 %
SVM: (Visual flicker)	0.01

Flicker conditions:

Sample rate:	40000 samples/second
--------------	----------------------

