

Light efficiency:

132 Lumen/Watt

Output: 13344 lm

Light quality:

CRI: 84.1

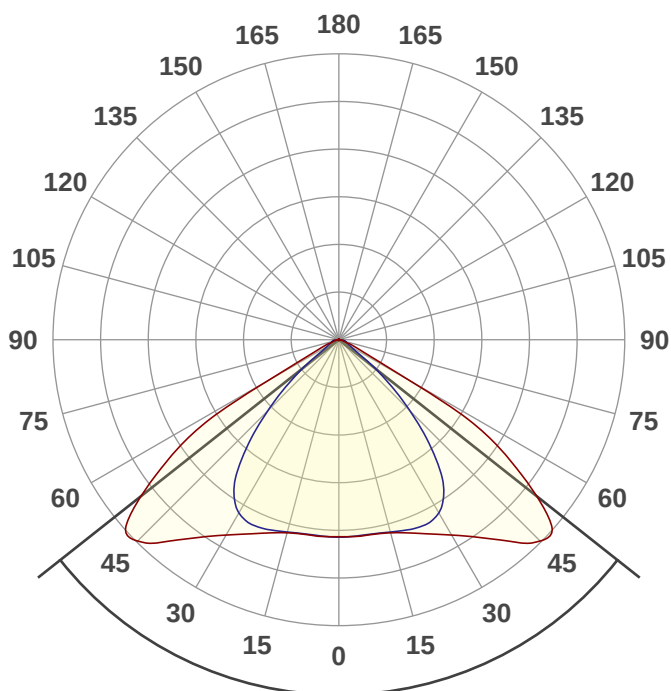
Peak: 6920 cd

Color temperature:

4954 K

Power: 100.7 W

PF: 1.0



Product name:

ALD-50K10W-C-BRC3 Type NEMA 6x5

Date and time:

4/8/2019 11:40:21 AM

Beam angle

103.3°

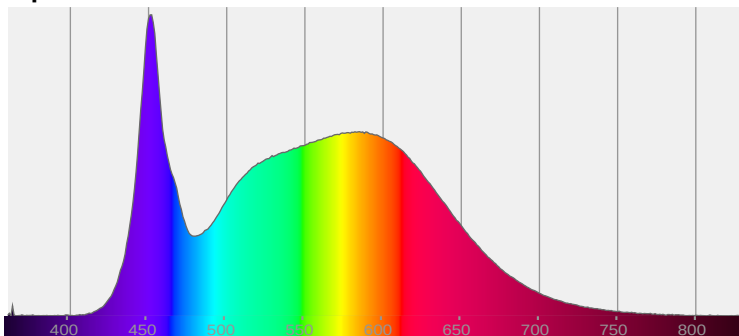


CIE 1931

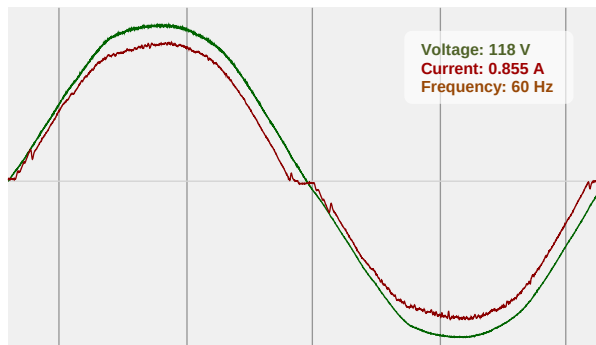
x: 0.347

y: 0.359

Spectra



Power



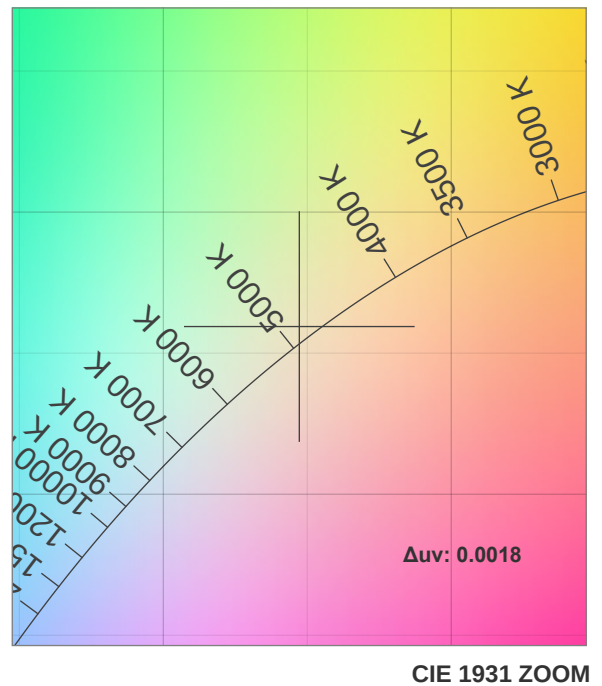
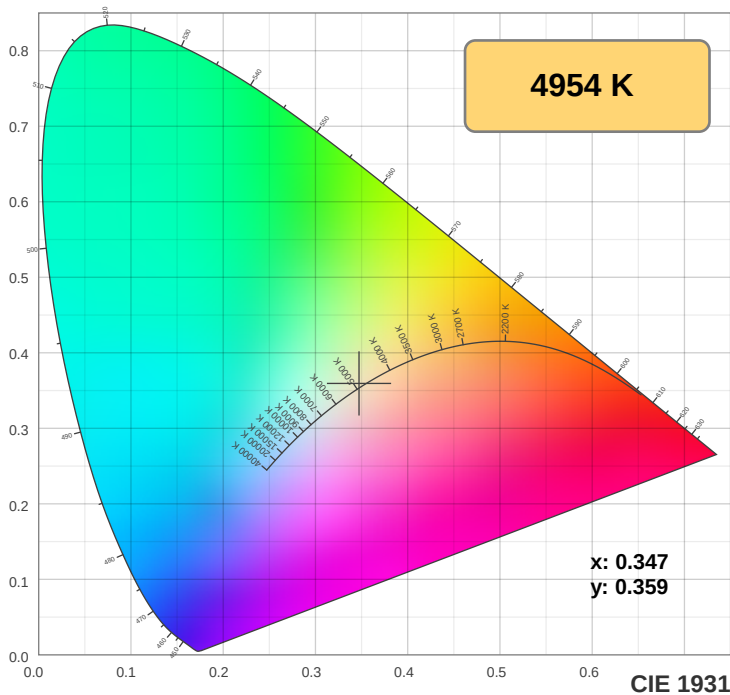
T 314.743.3067

F 314.972.6202

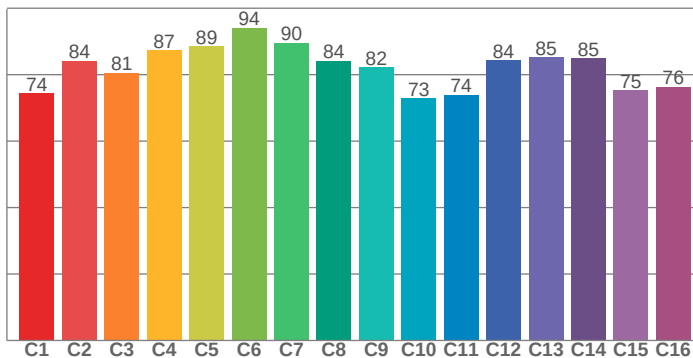
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

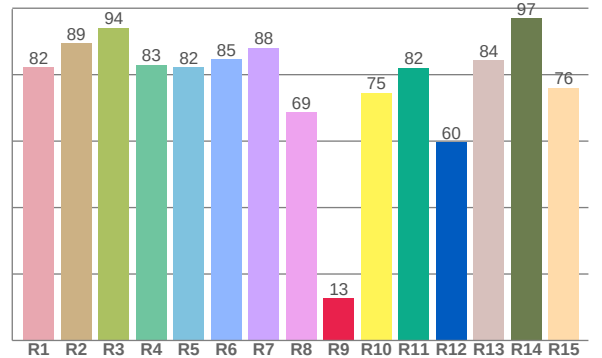
Color Specifications



TM30: 82.5



CRI: 84.1 (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
82.2	89.5	94.1	83.0	82.2	84.7	88.1	68.8	12.8	74.6	82.1	59.6	84.3	97.0	76.1

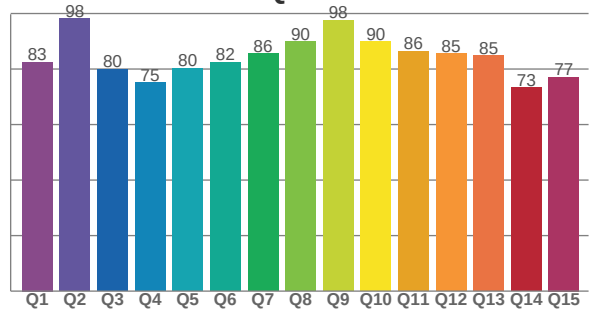
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
74.4	84.2	80.6	87.3	88.6	94.1	89.5	84.2	82.2	72.9	73.8	84.3	85.2	84.9	75.3	76.3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.6	98.2	79.9	75.1	80.3	82.4	85.6	89.9	97.5	89.9	86.4	85.5	84.9	73.4	77.1

CQS: 83.1



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
4954 K	84.1	12.8	82.5	94.1	83.1	0.347	0.359	0.210	0.326	0.0018



TM30 Report

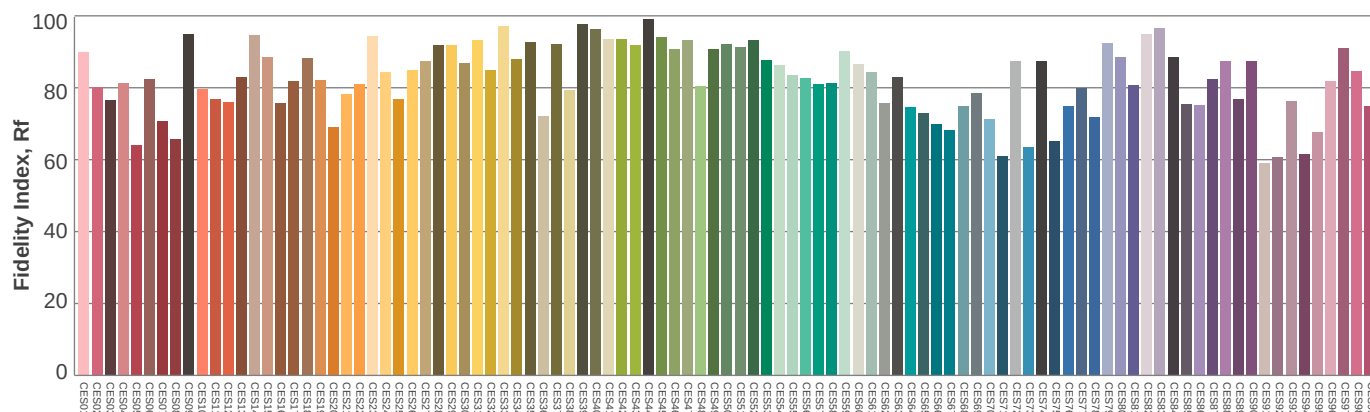
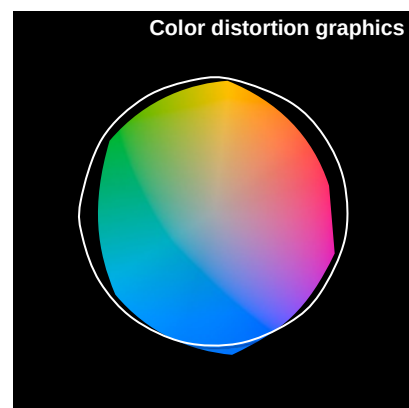
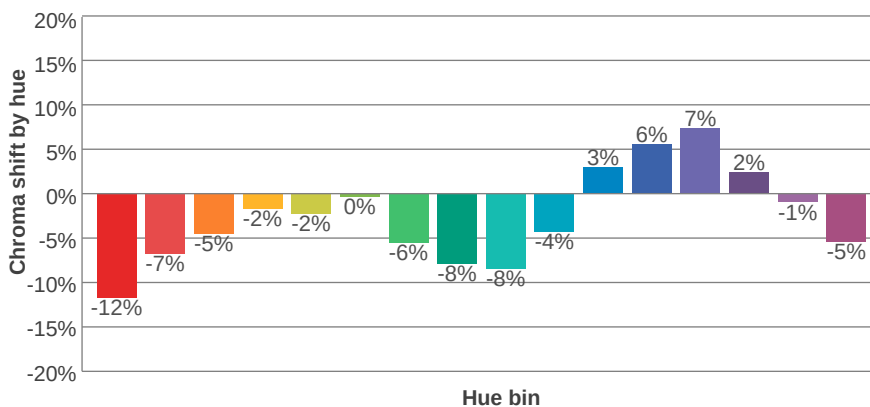
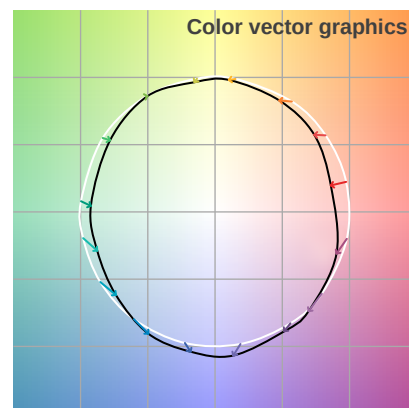
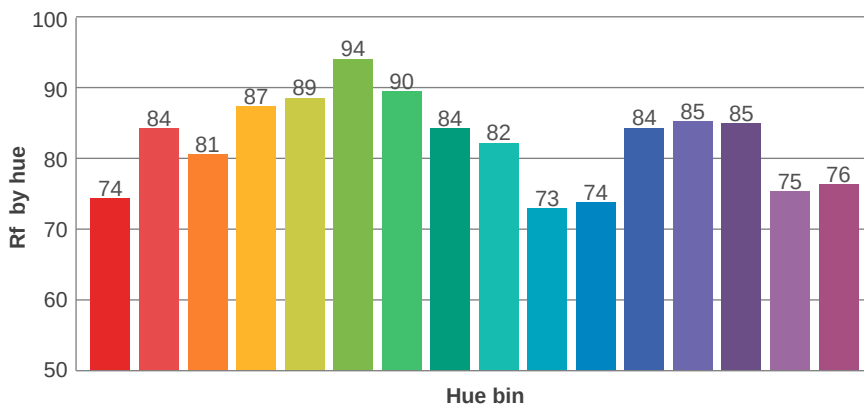
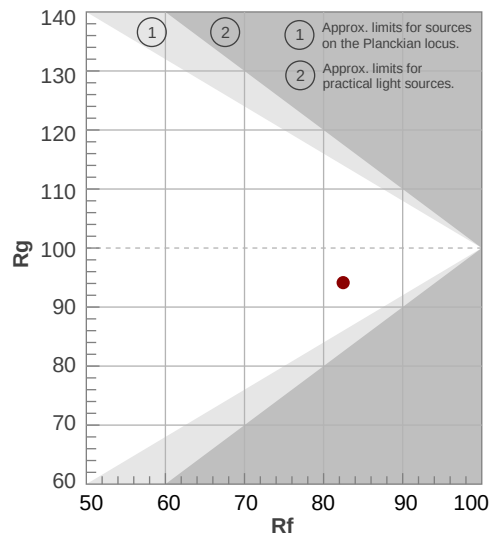
Rf 82.5

Fidelity index Rf

Rg 94.1

Gammut index Rg

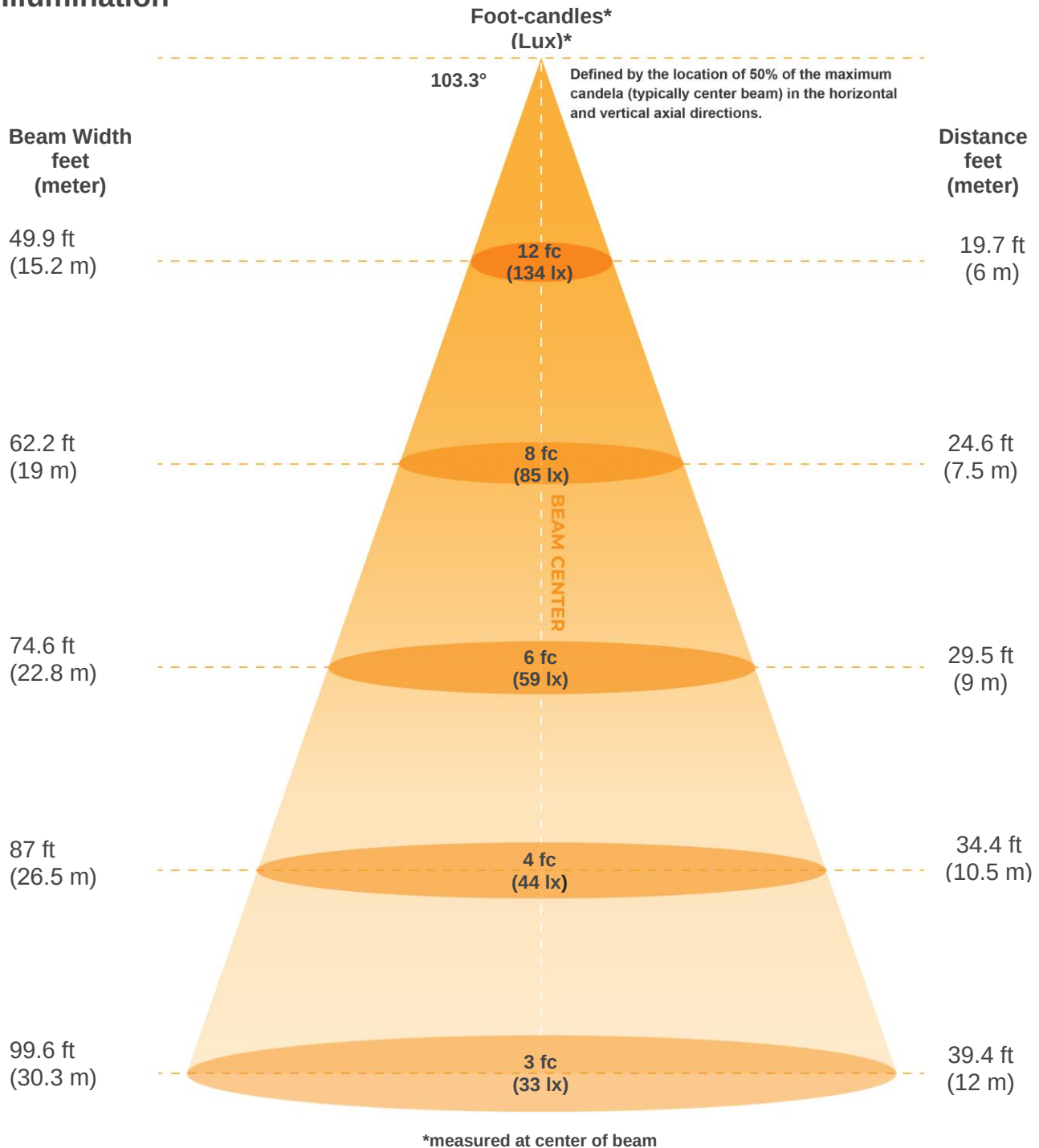
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	74	-12%	0%
2	84	-7%	5%
3	81	-5%	8%
4	87	-2%	5%
5	89	-2%	2%
6	94	0%	-1%
7	90	-6%	-2%
8	84	-8%	2%
9	82	-8%	11%
10	73	-4%	14%
11	74	3%	15%
12	84	6%	5%
13	85	7%	-7%
14	85	2%	-7%
15	75	-1%	-16%
16	76	-5%	-12%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

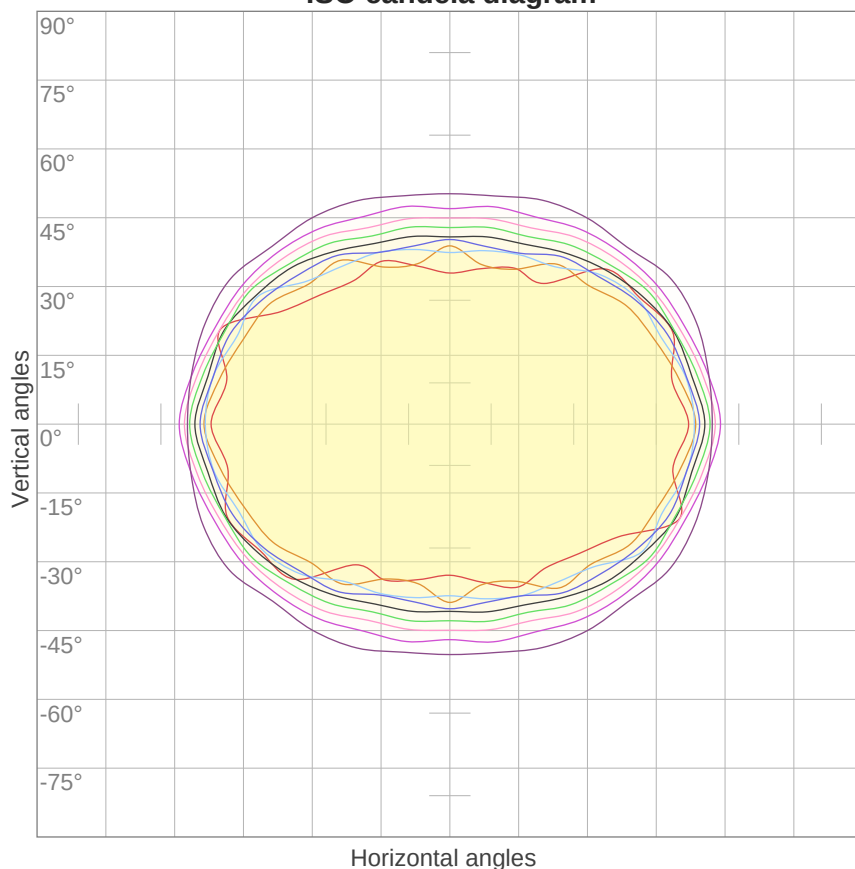
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
4807lx	1202lx	534lx	300lx	192lx	134lx	98lx	75lx	59lx	48lx	40lx	33lx	28lx	25lx	21lx	19lx	17lx	15lx	13lx	12lx
446.6fc	111.7fc	49.6fcd	27.9fcd	17.9fcd	12.4fcd	9.1fcd	7fcd	5.5fcd	4.5fcd	3.7fcd	3.1fcd	2.6fcd	2.3fcd	2fcd	1.7fcd	1.5fcd	1.4fcd	1.2fcd	1.1fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
103.3°	122.4°	152.2°	95.1%	68.2%



ISO Diagrams

ISO candela diagram



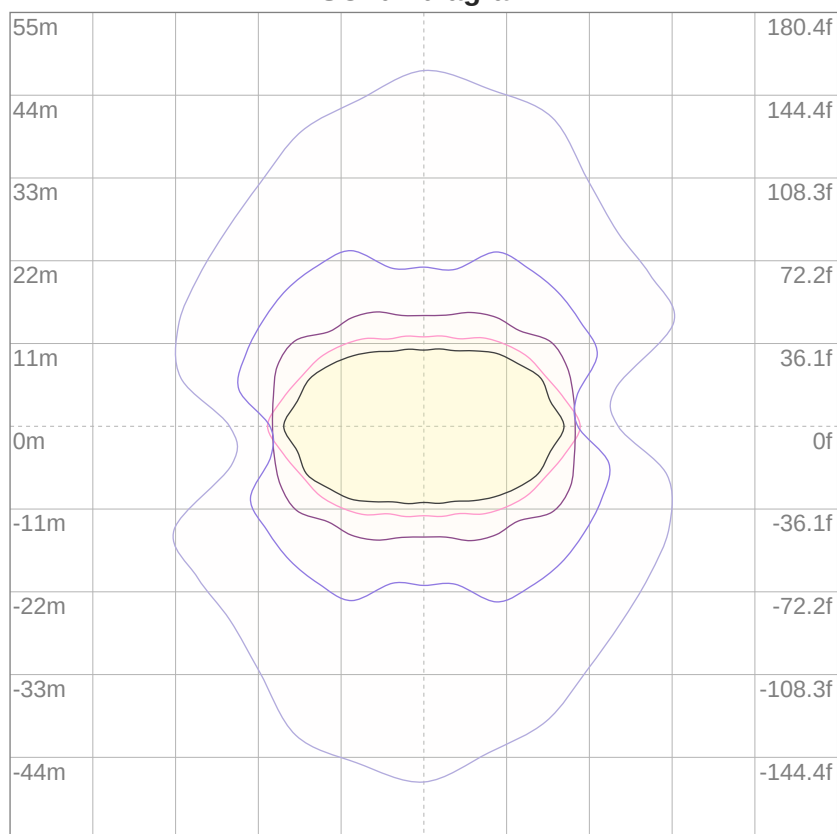
10%	481 cd
20%	961 cd
30%	1442 cd
40%	1923 cd
50%	2404 cd
60%	2884 cd
70%	3365 cd
80%	3846 cd
90%	4327 cd

Conditions:

Number of c-planes: 16

Candela at center: 4807 cd

ISO lux diagram



3%	1.44 lx
5%	2.40 lx
10%	4.81 lx
30%	14.4 lx
50%	24.0 lx

Conditions:

Number of c-planes: 16

Lux at center: 48.1 lx

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

Mounting height: 10 meters (33 feet)



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email: commercial-sales@superbriteleds.com
www.superbriteleds.com/

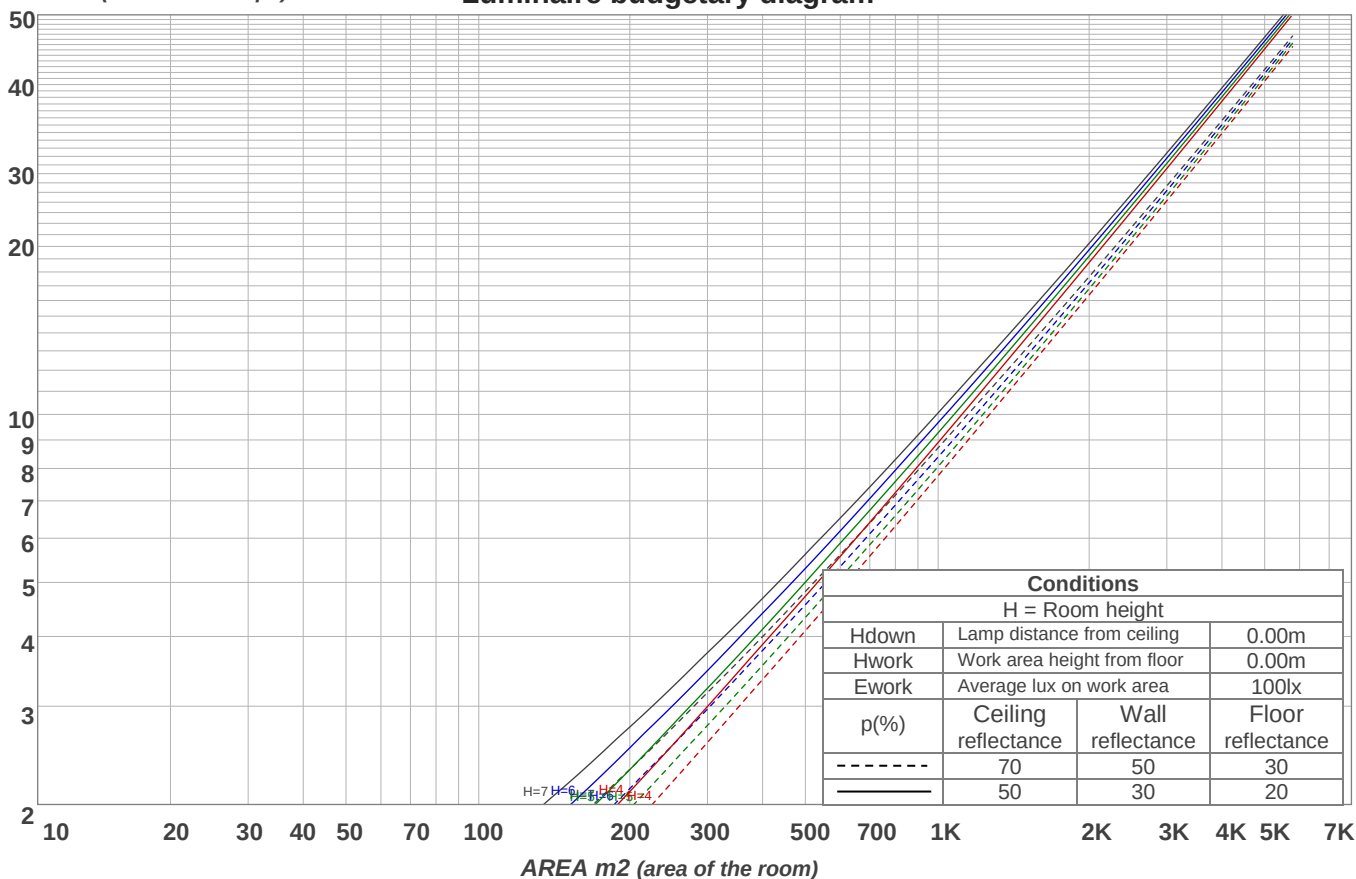
Light Planning

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	93	92	90	88
2	103	96	90	86	100	94	89	85	91	86	83	88	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	66	61	69	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	69	57	49	43	68	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	49	42	38	47	42	37	36
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	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°
459 lm	1378 lm	2341 lm	3198 lm	3318 lm	1997 lm	430 lm	155 lm	38.0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2.56 lm	2.67 lm	3.69 lm	4.64 lm	4.90 lm	4.63 lm	3.95 lm	2.68 lm	0.937 lm

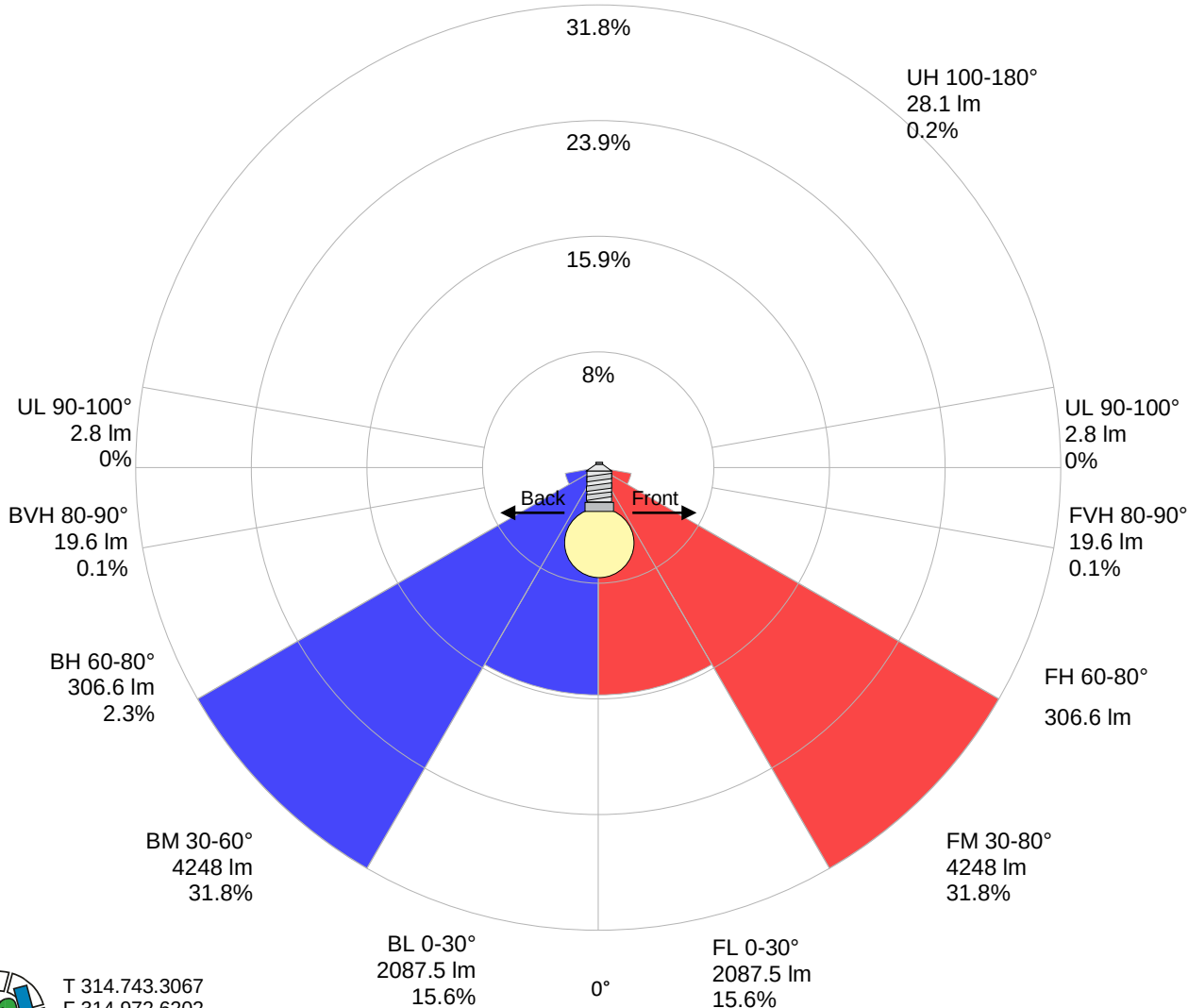


Road Report

LCS table

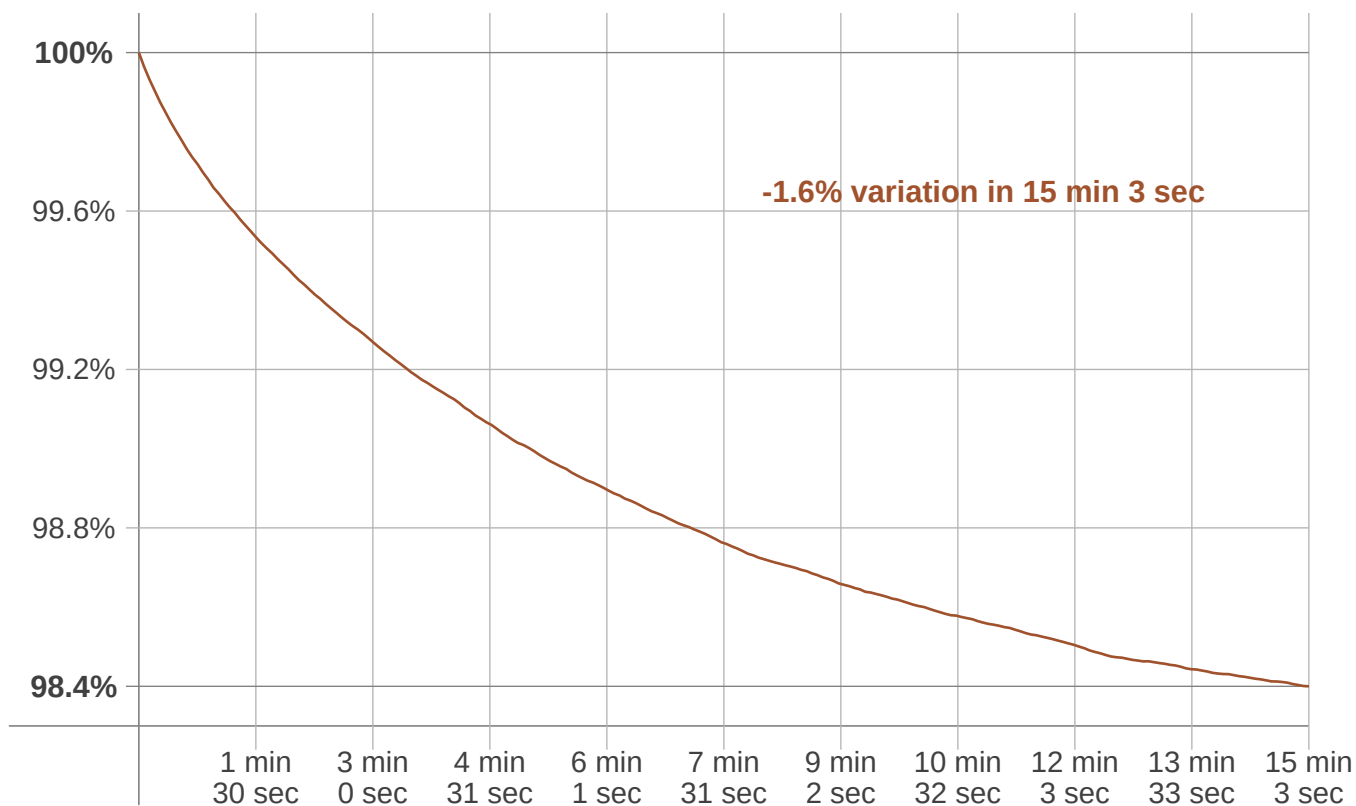
BUG rating:	B3 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	2087.5	15.6%
Medium(30-60):	4248	31.8%
High(60-80):	306.6	2.3%
Very high(80-90):	19.6	0.1%
Back light		
Low(0-30):	2087.5	15.6%
Medium(30-60):	4248	31.8%
High(60-80):	306.6	2.3%
Very high(80-90):	19.6	0.1%
Uplight		
Low(90-100):	2.8	0%
High(100-180):	28.1	0.2%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	15 min 3 sec
Warmup variation	-1.6%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4923 K	+31 K	4954 K

Output change

Output start	Output change	Output end
13551 lm	-207 lm	13344 lm

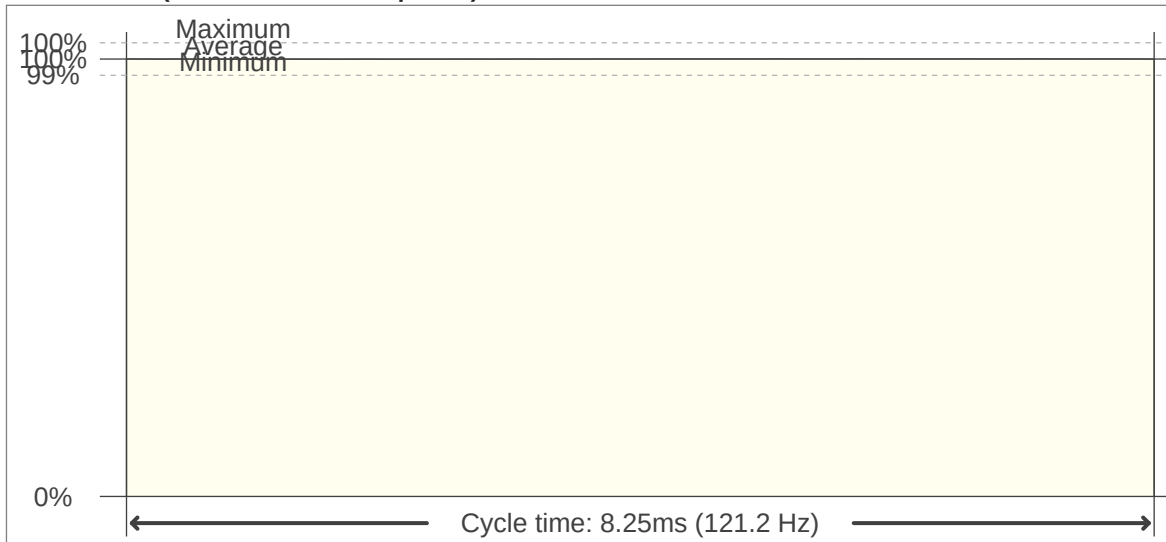


Flicker

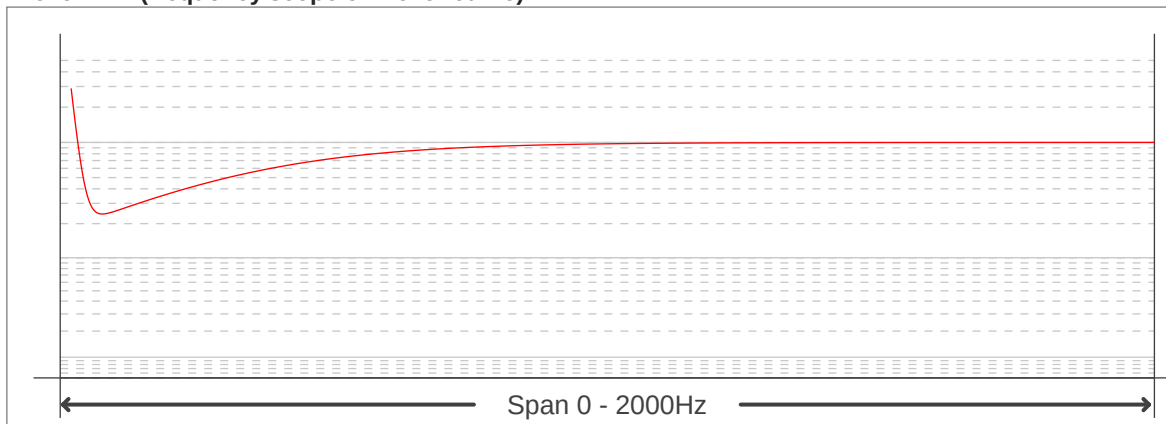
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	121.21 Hz
Flicker index:	0
Flicker percentage:	0.09 %
SVM: (Visual flicker)	0

Flicker conditions:

Sample rate:	40000 samples/second
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