

Light efficiency:

147 Lumen/Watt

Output: 8345 lm

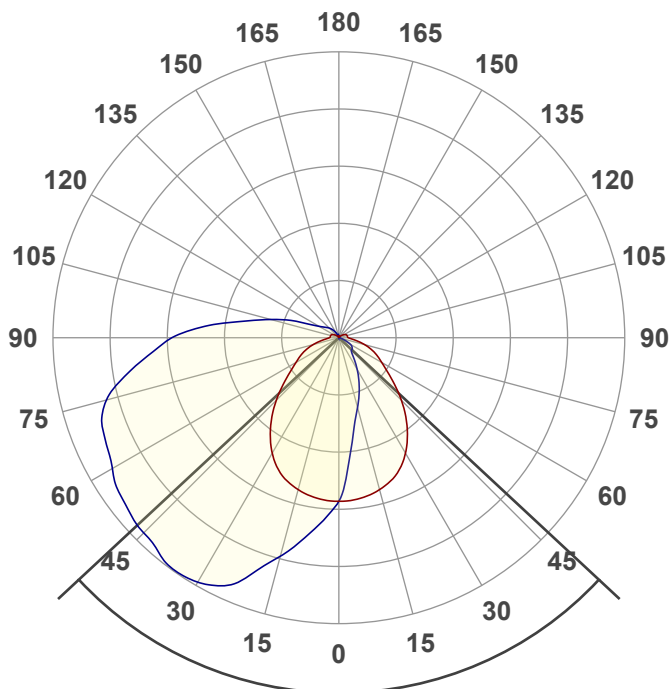
Light quality:

CRI: 83.1

Peak: 3167 cd

Power: 56.8 W

PF: 0.99



Product name:

WP3-xK60P-BABRSP

Date and time:

6/20/2022 1:23:57 PM

Beam angle

94.1°

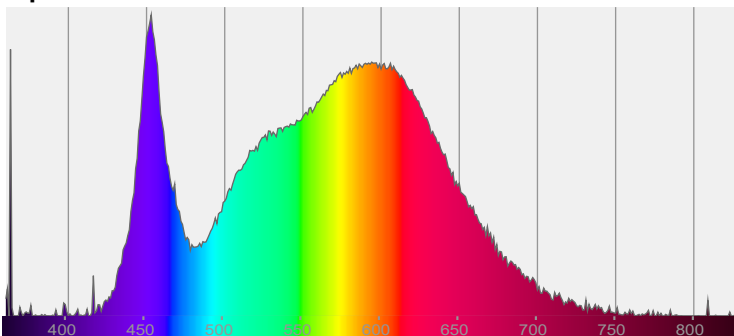


CIE 1931

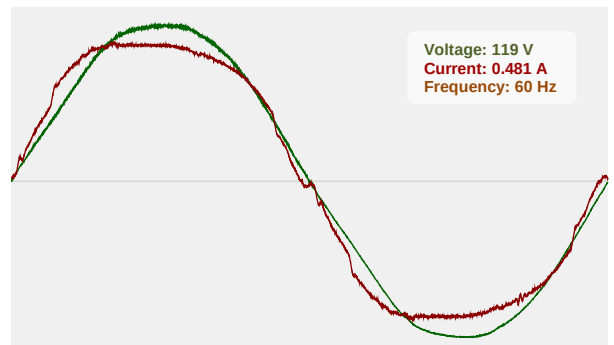
x: 0.382

y: 0.378

Spectra



Power



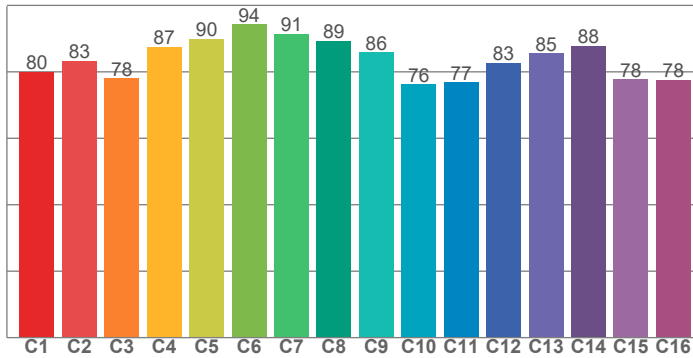
T 314.743.3067

F 314.972.6202

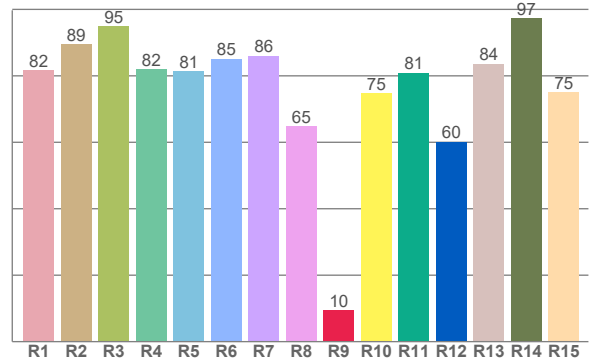
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

TM30: 83.8



CRI: 83.1 (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
81.6	89.5	94.9	81.9	81.3	85.1	86.0	64.8	9.6	74.8	80.9	60.1	83.6	97.4	75.0

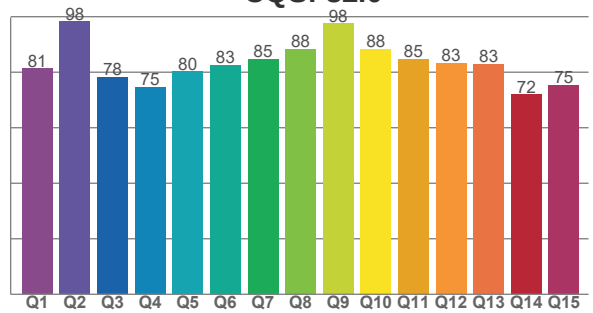
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.9	83.2	78.1	87.5	89.9	94.3	91.4	89.2	85.9	76.3	76.9	82.7	85.5	87.9	77.7	77.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.3	98.2	78.1	74.7	80.2	82.7	84.8	88.3	97.6	88.3	84.7	83.2	82.8	72.0	75.4

CQS: 82.0



Color parameters

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
CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
83.1	9.6	83.8	95.3	82.0	0.382	0.378	0.226	0.335	0.0001



TM30 Report

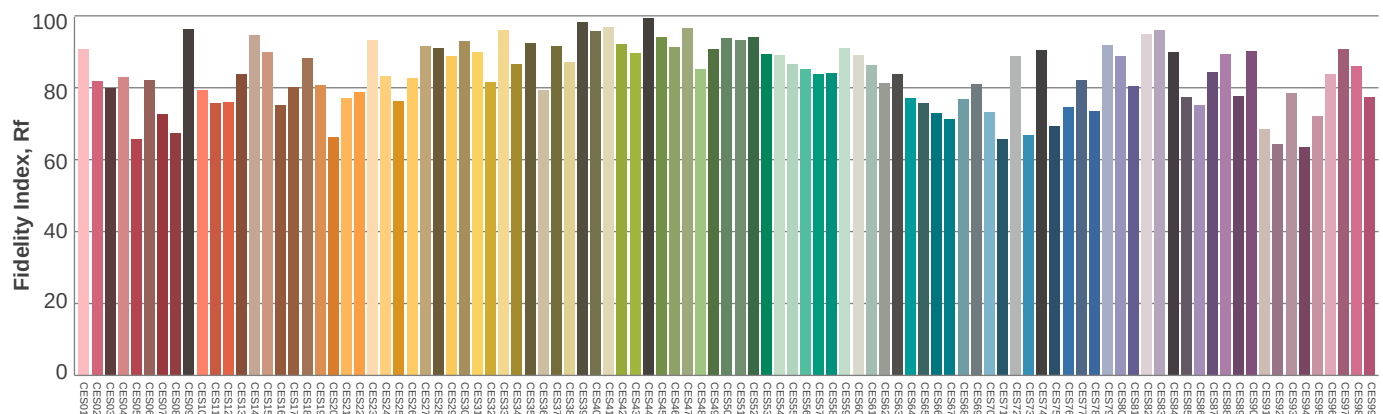
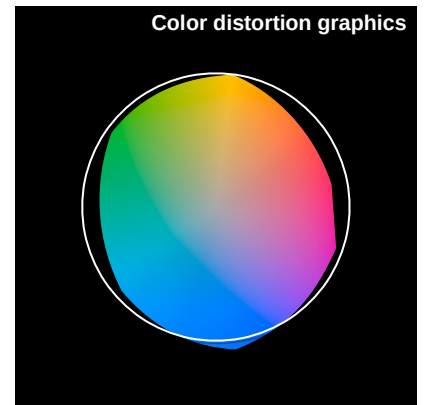
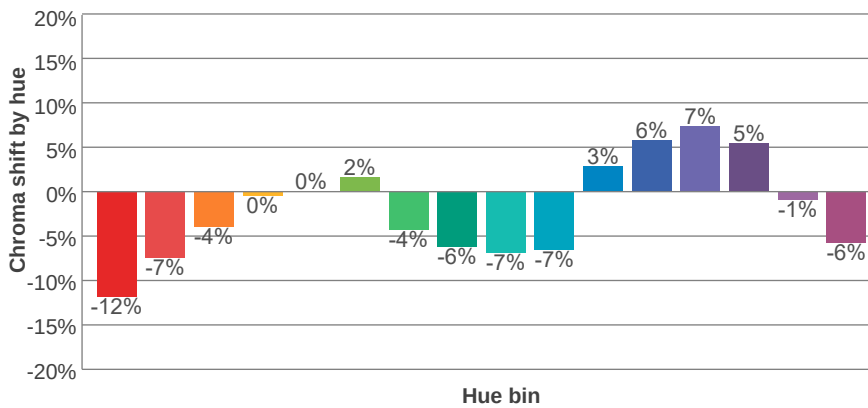
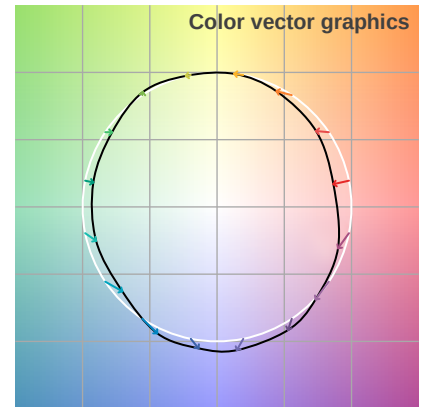
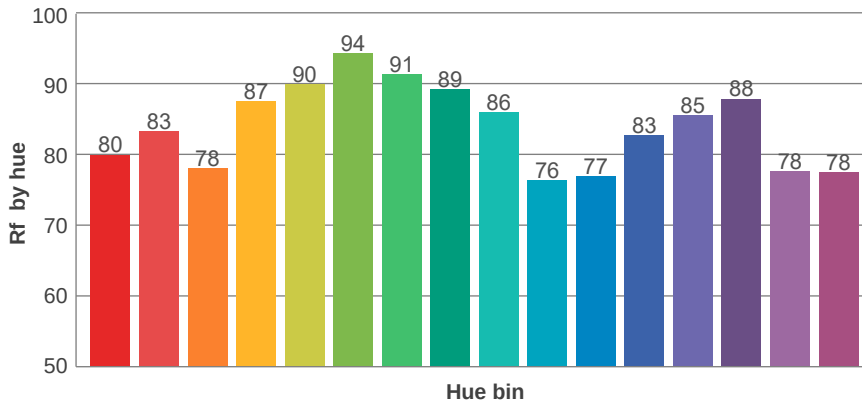
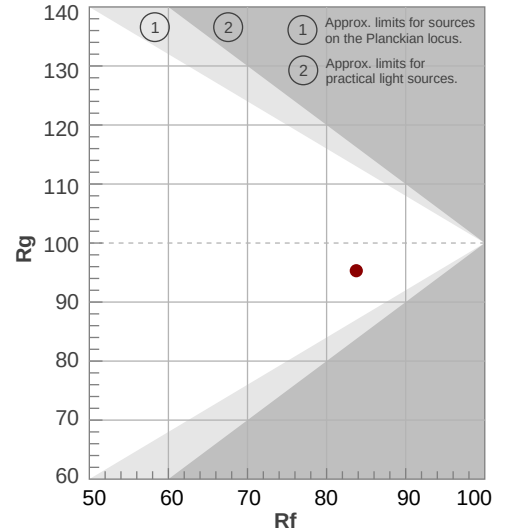
Rf 83.8

Fidelity index Rf

Rg 95.3

Gamut index Rg

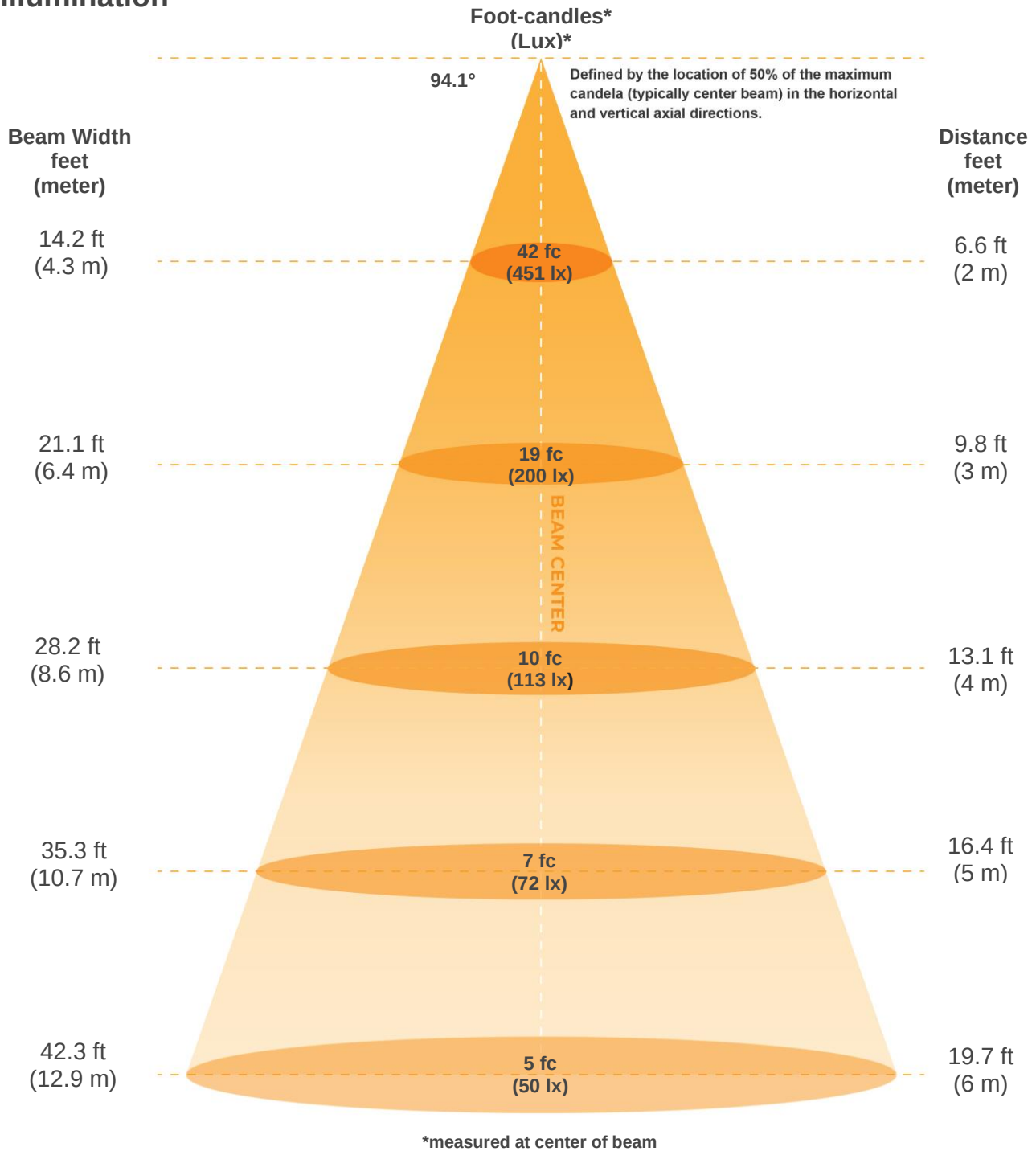
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-12%	0%
2	83	-7%	6%
3	78	-4%	11%
4	87	0%	7%
5	90	0%	4%
6	94	2%	-2%
7	91	-4%	-3%
8	89	-6%	0%
9	86	-7%	7%
10	76	-7%	13%
11	77	3%	15%
12	83	6%	7%
13	85	7%	-6%
14	88	5%	-7%
15	78	-1%	-17%
16	78	-6%	-13%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

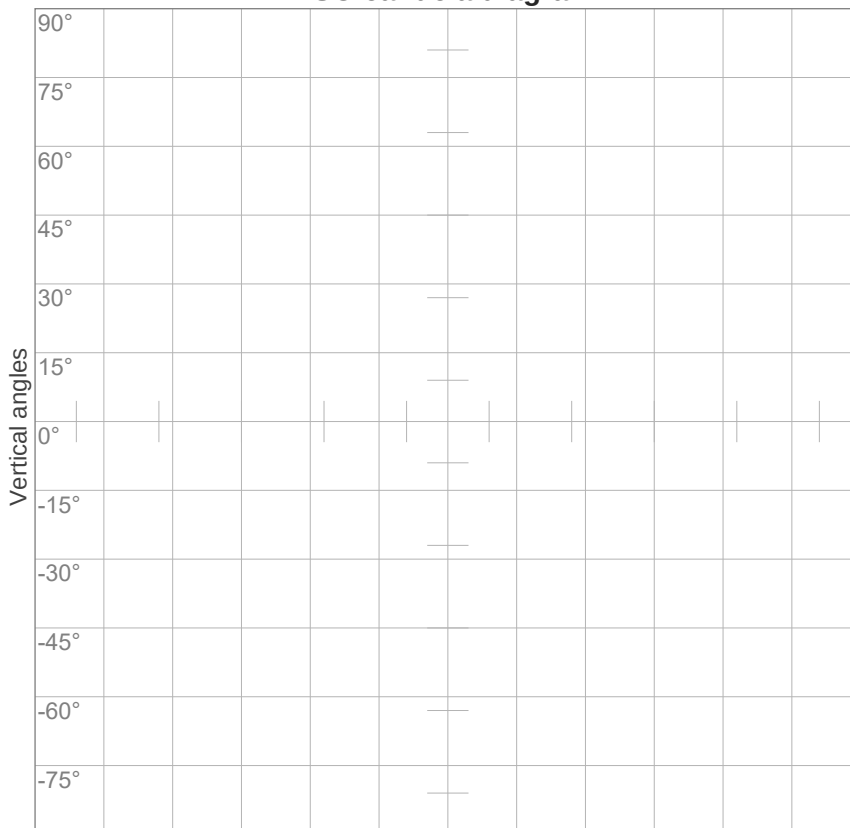
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1804lx	451lx	200lx	113lx	72lx	50lx	37lx	28lx	22lx	18lx	15lx	13lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	5lx
167.6fcd	41.9fcd	18.6fcd	10.5fcd	6.7fcd	4.7fcd	3.4fcd	2.6fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1fcd	0.9fcd	0.7fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
94.1°	163.1°	231.1°	54.0%	34.6%



ISO Diagrams

ISO candela diagram



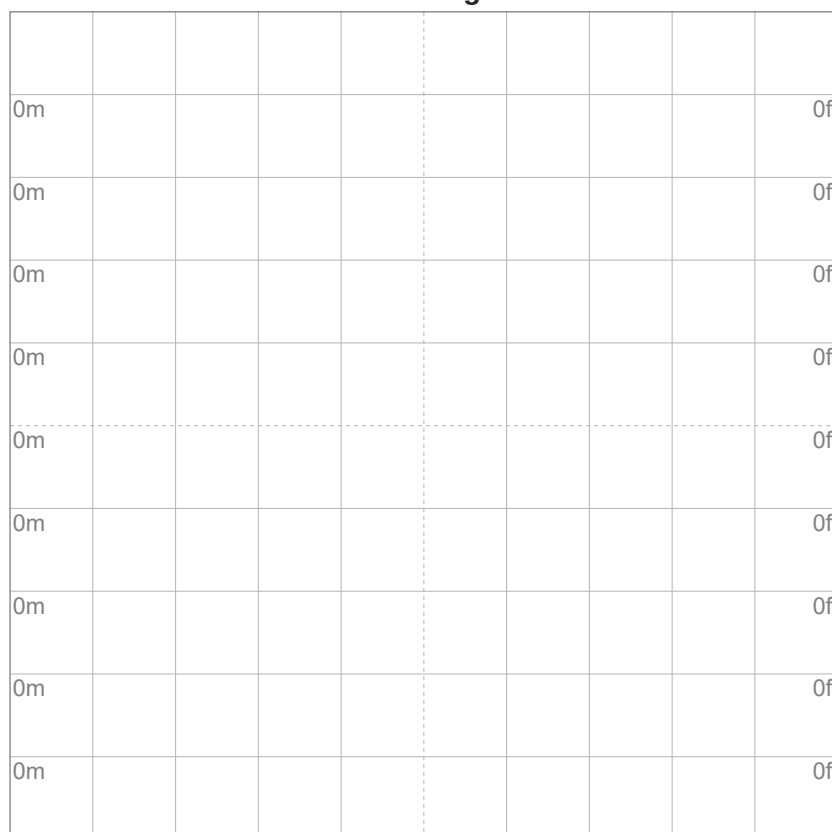
10%	180 cd
20%	361 cd
30%	541 cd
40%	722 cd
50%	902 cd
60%	1083 cd
70%	1263 cd
80%	1443 cd
90%	1624 cd

Conditions:

Number of c-planes: 16

Candela at center: 1804 cd

ISO lux diagram



3%	0.541 lx
5%	0.902 lx
10%	1.80 lx
30%	5.41 lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 16

Lux at center: 18.0 lx

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



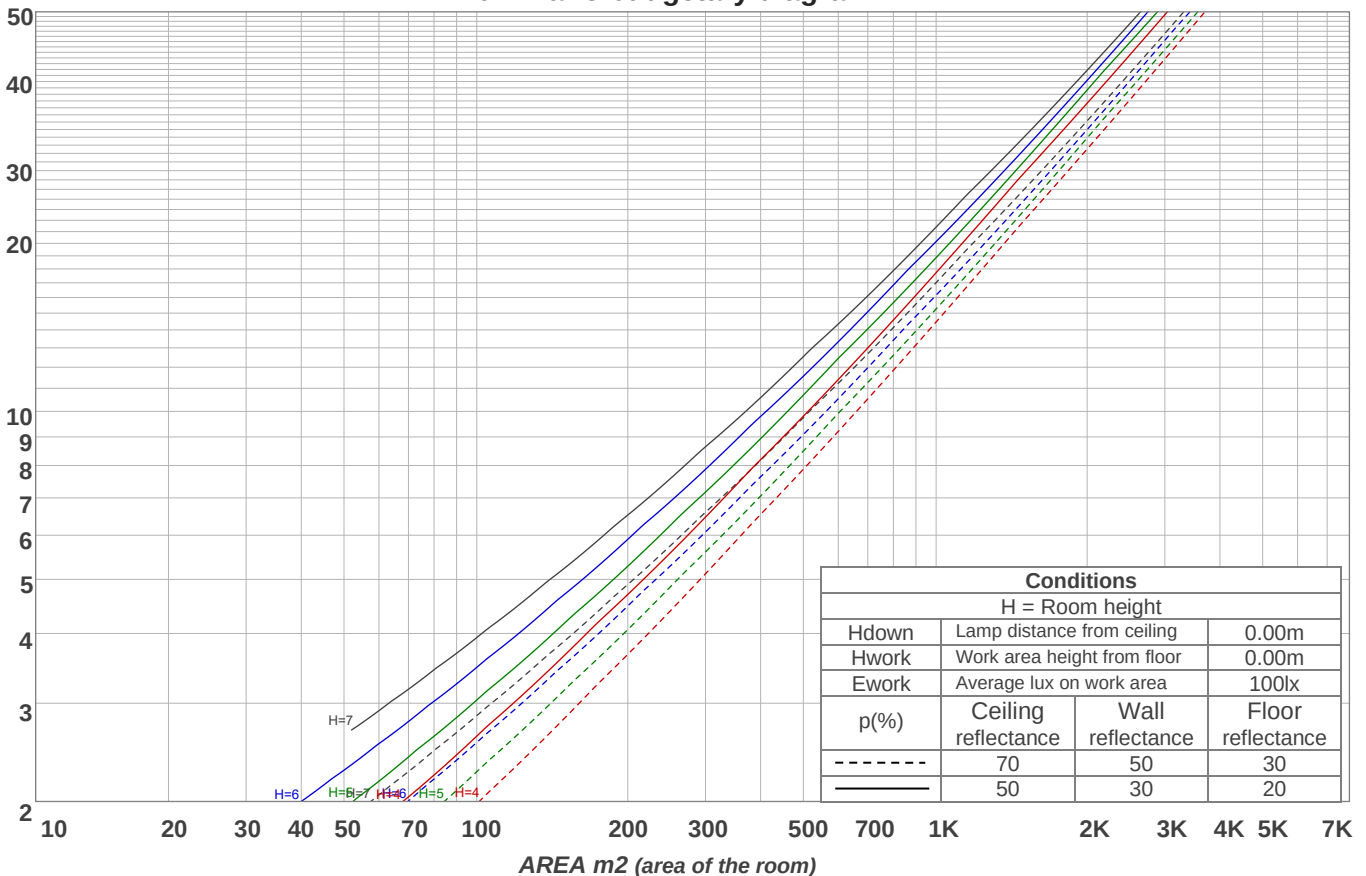
Light Planning

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	90	90	90	87
1	102	95	90	84	98	92	87	82	85	81	77	79	75	72	73	70	68	64
2	91	81	73	66	87	78	70	64	72	66	60	67	62	57	62	58	54	51
3	82	70	60	53	78	67	59	52	62	55	49	58	52	46	53	48	44	41
4	75	61	51	44	71	59	50	43	55	47	41	51	44	39	47	41	37	34
5	68	54	44	37	65	52	43	36	49	41	35	45	38	33	42	36	31	29
6	63	48	39	32	60	47	38	31	44	36	30	41	34	29	38	32	27	25
7	58	44	34	28	55	42	33	27	39	32	26	37	30	25	34	28	24	22
8	54	40	31	24	52	38	30	24	36	28	23	34	27	22	32	26	21	19
9	50	36	28	22	48	35	27	21	33	26	21	31	24	20	29	23	19	17
10	47	33	25	20	45	32	24	19	30	23	19	29	22	18	27	21	17	15

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°
164 lm	467 lm	757 lm	971 lm	1063 lm	1082 lm	1044 lm	957 lm	758 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
485 lm	266 lm	153 lm	92.4 lm	51.7 lm	23.2 lm	7.62 lm	2.71 lm	0.915 lm

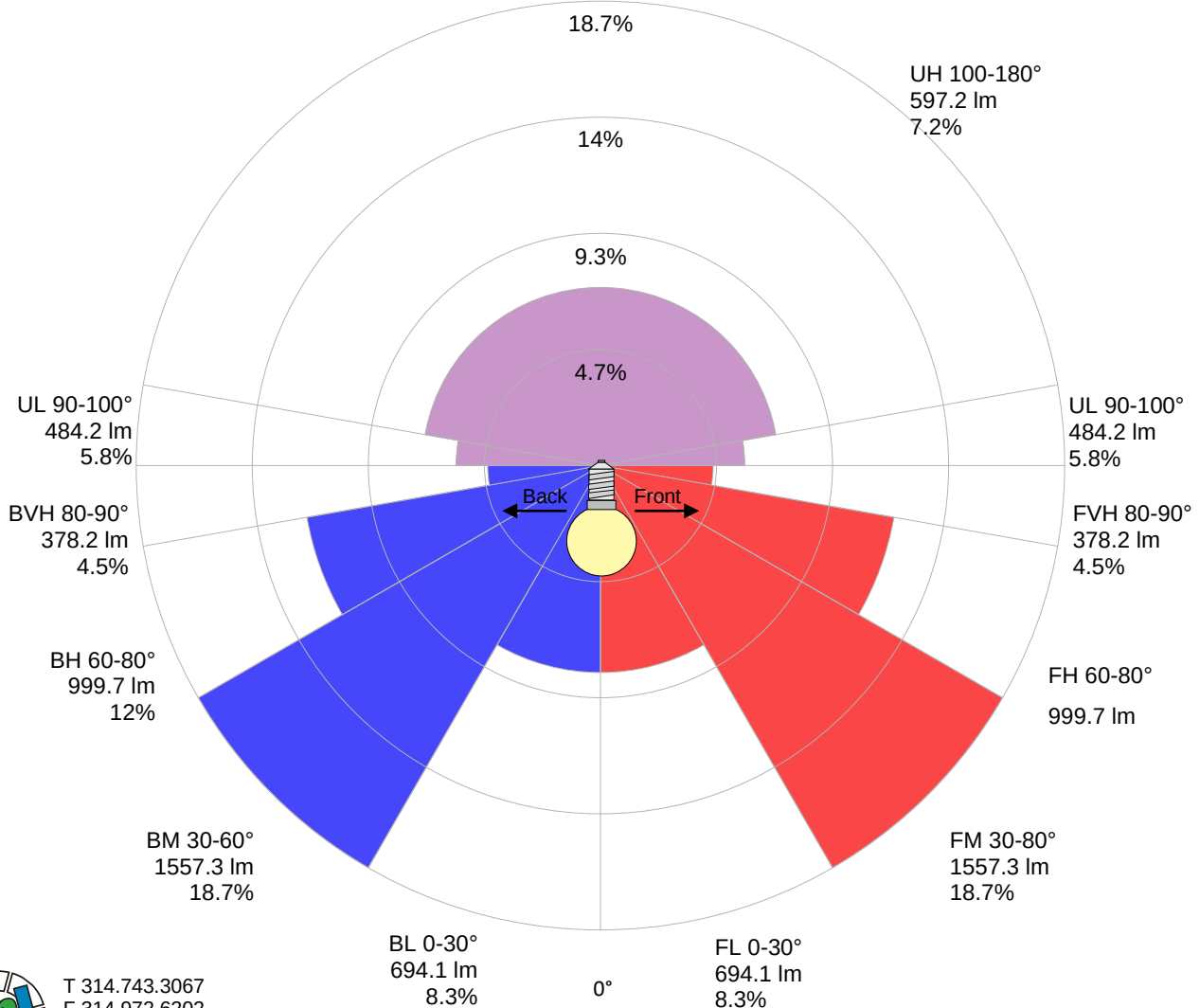


Road Report

LCS table

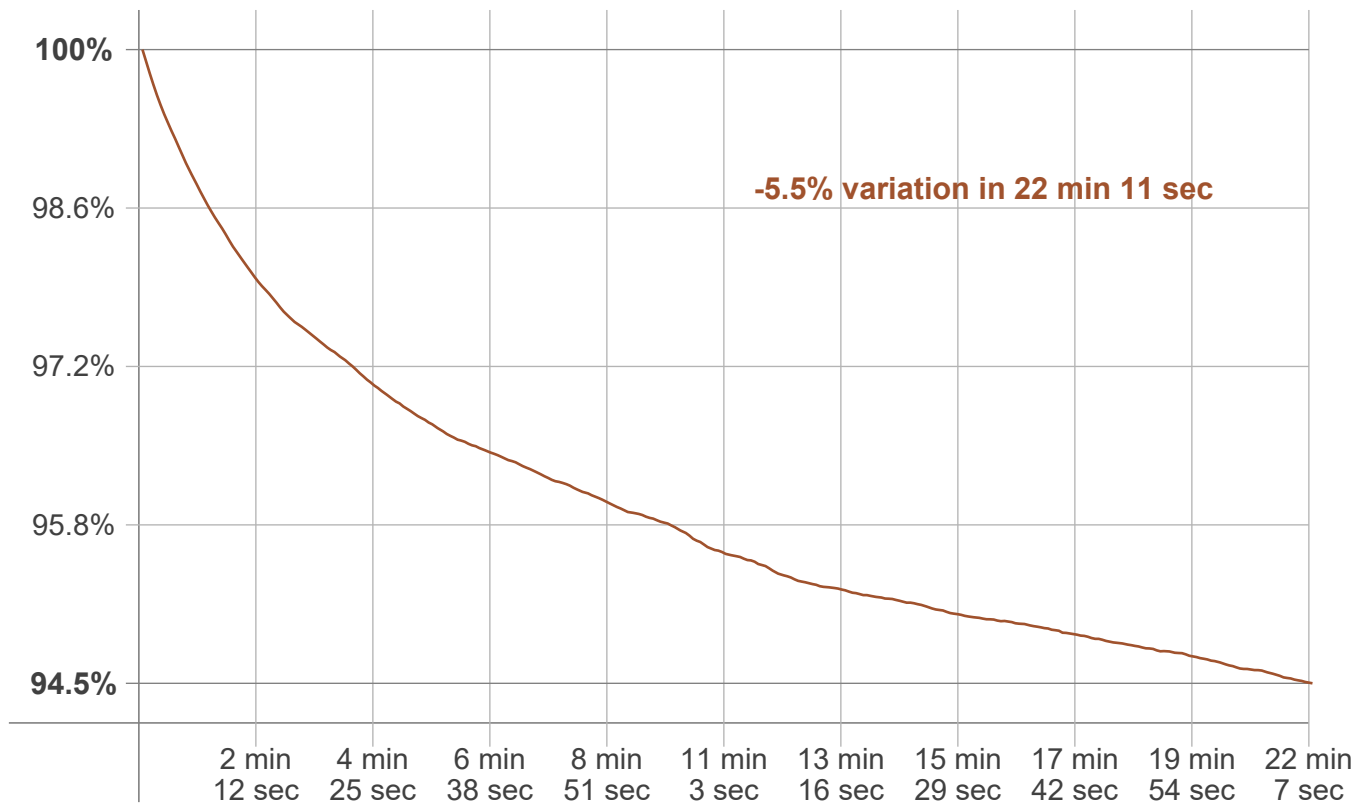
BUG rating:	B2 U4 G3	
Forward light	Lumens	Lumens %
Low(0-30):	694.1	8.3%
Medium(30-60):	1557.3	18.7%
High(60-80):	999.7	12%
Very high(80-90):	378.2	4.5%
Back light		
Low(0-30):	694.1	8.3%
Medium(30-60):	1557.3	18.7%
High(60-80):	999.7	12%
Very high(80-90):	378.2	4.5%
Uplight		
Low(90-100):	484.2	5.8%
High(100-180):	597.2	7.2%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 22 min 11 sec
Warmup variation	-5.6%

Warmup conditions

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

Color temperature change

CCT change
+33 K

Output change

Output start	Output change	Output end
8812 lm	-467 lm	8345 lm

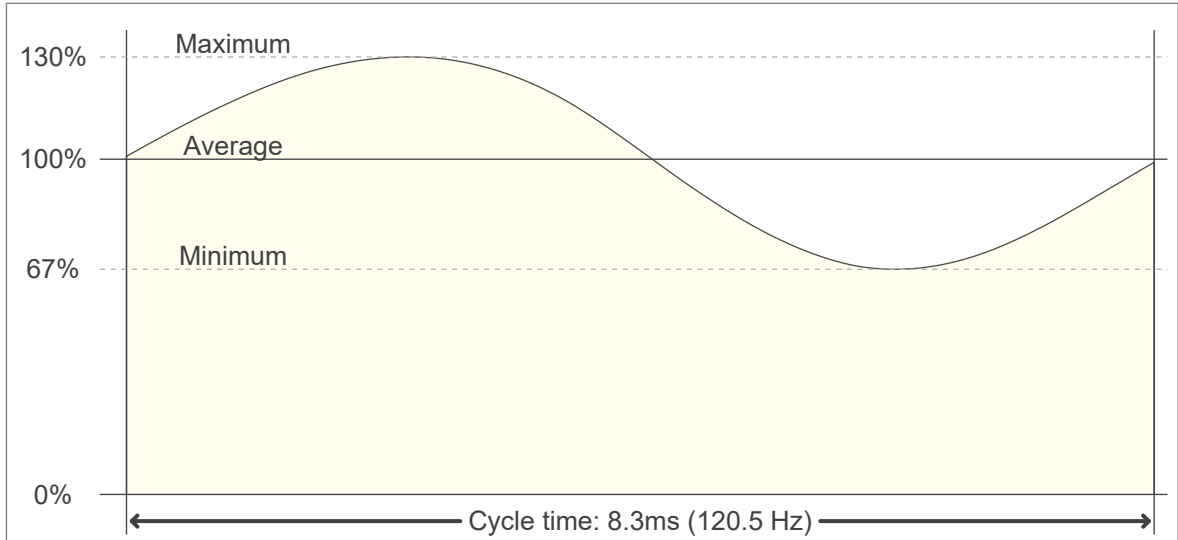


Flicker Specifications

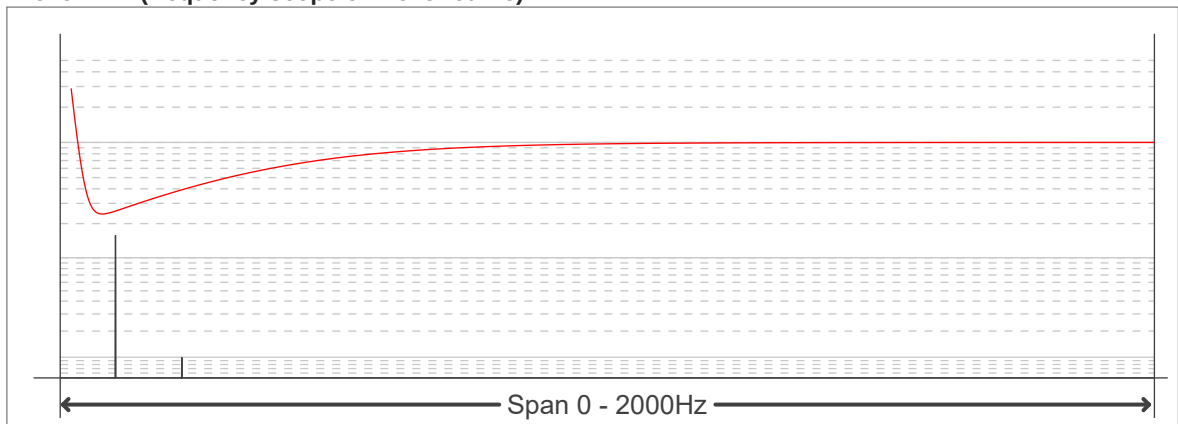
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	120.48 Hz
Flicker index:	0.1
Flicker percentage:	32.14 %
SVM: (Visual flicker)	1.15

Flicker conditions:

Sample rate:	20000 samples/second
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