

Light efficiency:

150 Lumen/Watt

Light quality:

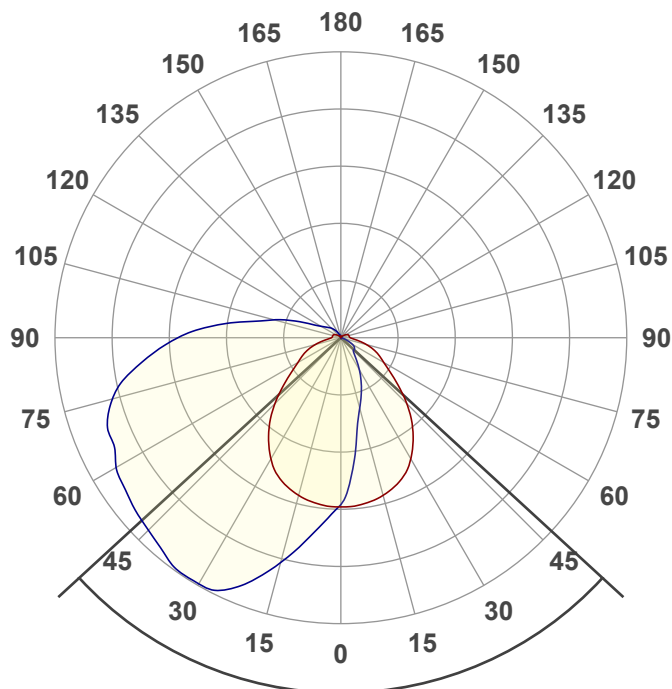
CRI: 83.8

Output: 6002 lm

Peak: 2274 cd

Power: 40.1 W

PF: 0.99



Product name:

WP3-xK40P-BABRSP

Date and time:

6/20/2022 2:13:56 PM

Beam angle

94.9°

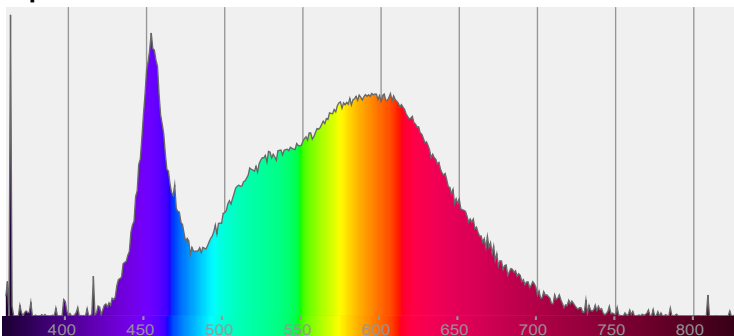


CIE 1931

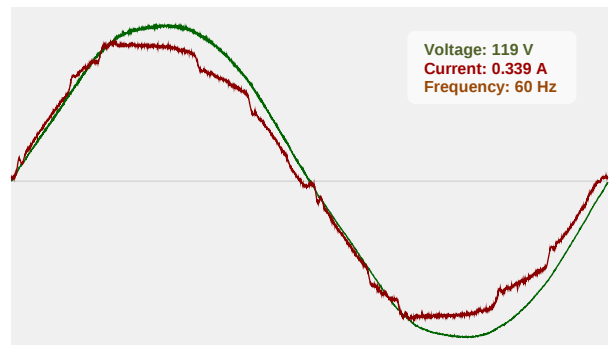
x: 0.379

y: 0.376

Spectra



Power



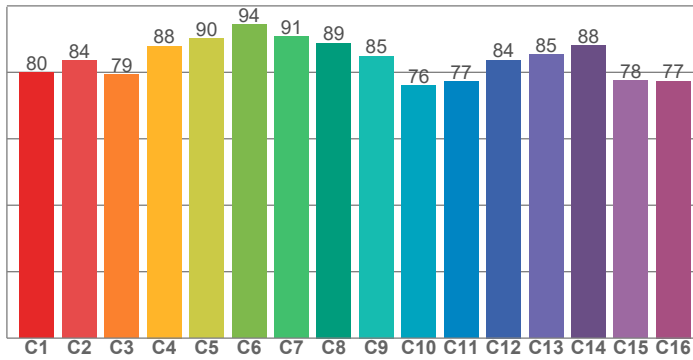
T 314.743.3067

F 314.972.6202

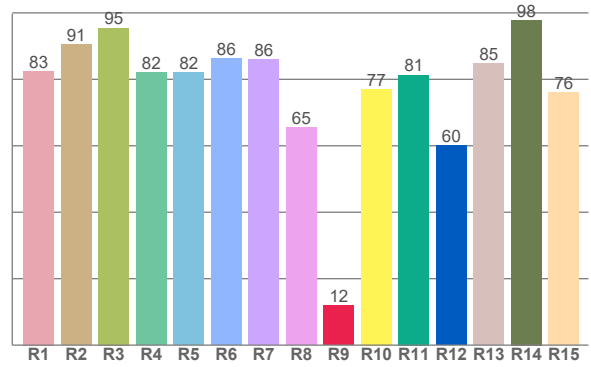
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

TM30: 83.8



CRI: 83.8 (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
82.5	90.6	95.5	82.2	82.1	86.3	86.0	65.4	11.9	77.1	81.3	60.0	84.8	97.9	76.0

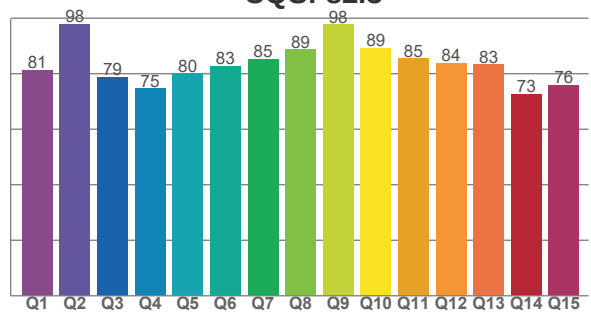
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80.0	83.6	79.4	87.9	90.2	94.4	90.9	88.8	84.9	76.0	77.2	83.7	85.4	88.0	77.5	77.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.4	97.9	78.8	74.7	80.0	82.7	85.3	88.6	97.7	89.2	85.5	83.8	83.3	72.8	76.0

CQS: 82.3



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
83.8	11.9	83.8	94.8	82.3	0.379	0.376	0.225	0.334	-0.0002



TM30 Report

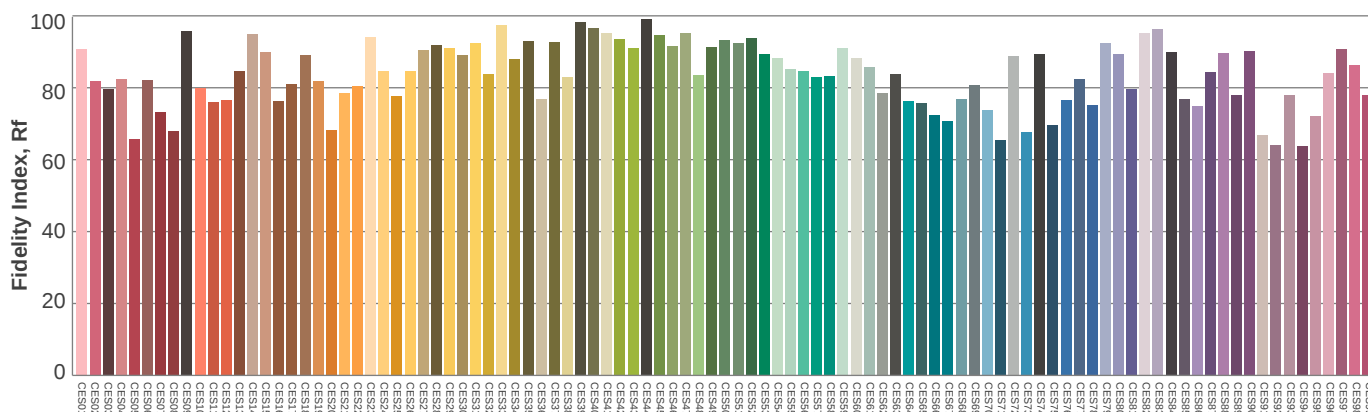
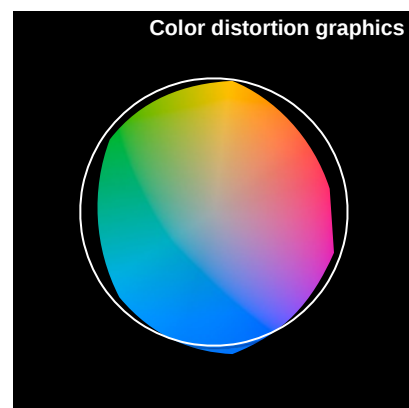
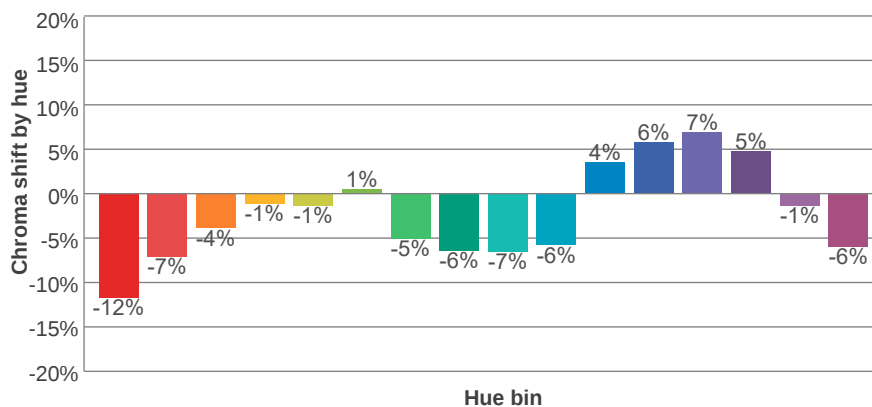
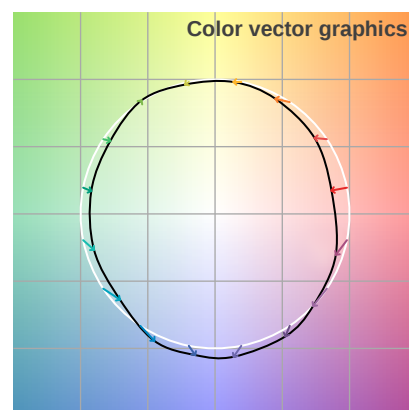
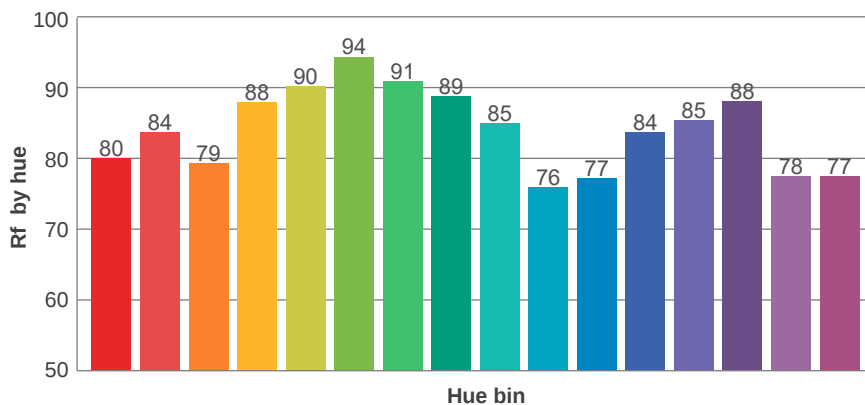
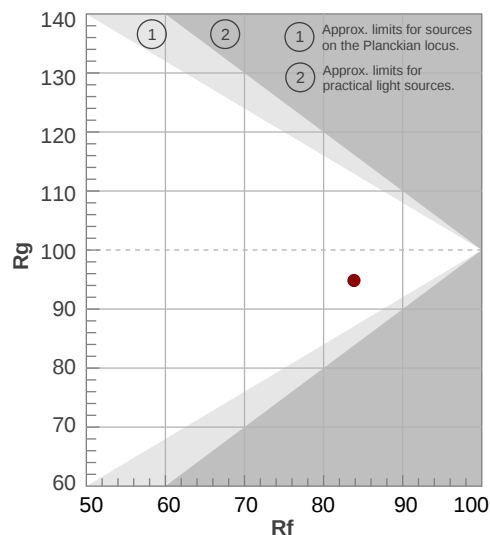
Rf 83.8

Fidelity index Rf

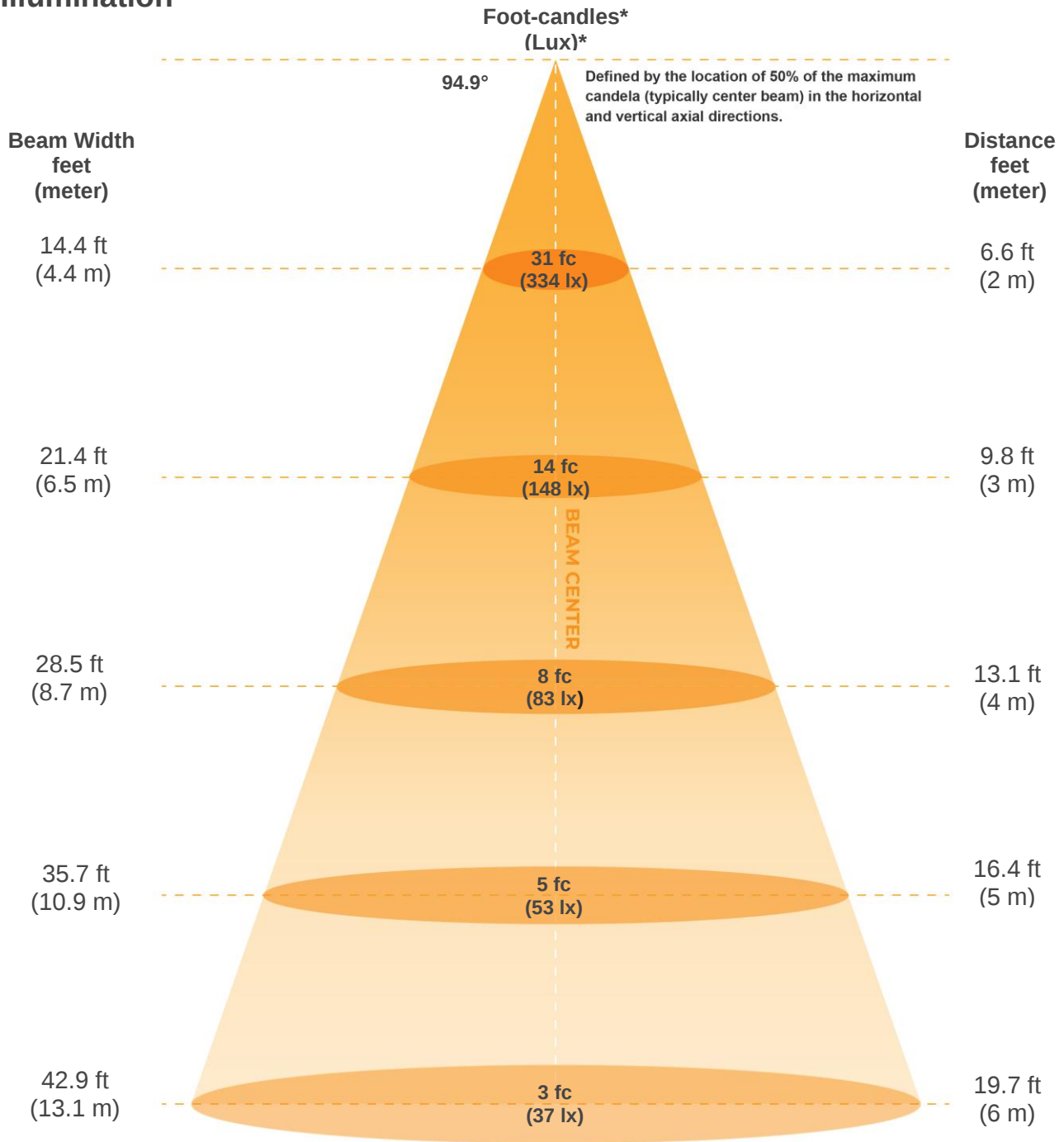
Rg 94.8

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-12%	0%
2	84	-7%	6%
3	79	-4%	10%
4	88	-1%	6%
5	90	-1%	3%
6	94	1%	-1%
7	91	-5%	-2%
8	89	-6%	1%
9	85	-7%	9%
10	76	-6%	14%
11	77	4%	15%
12	84	6%	6%
13	85	7%	-7%
14	88	5%	-7%
15	78	-1%	-16%
16	77	-6%	-12%



Illumination



*measured at center of beam

Beam intensities from 1-20m

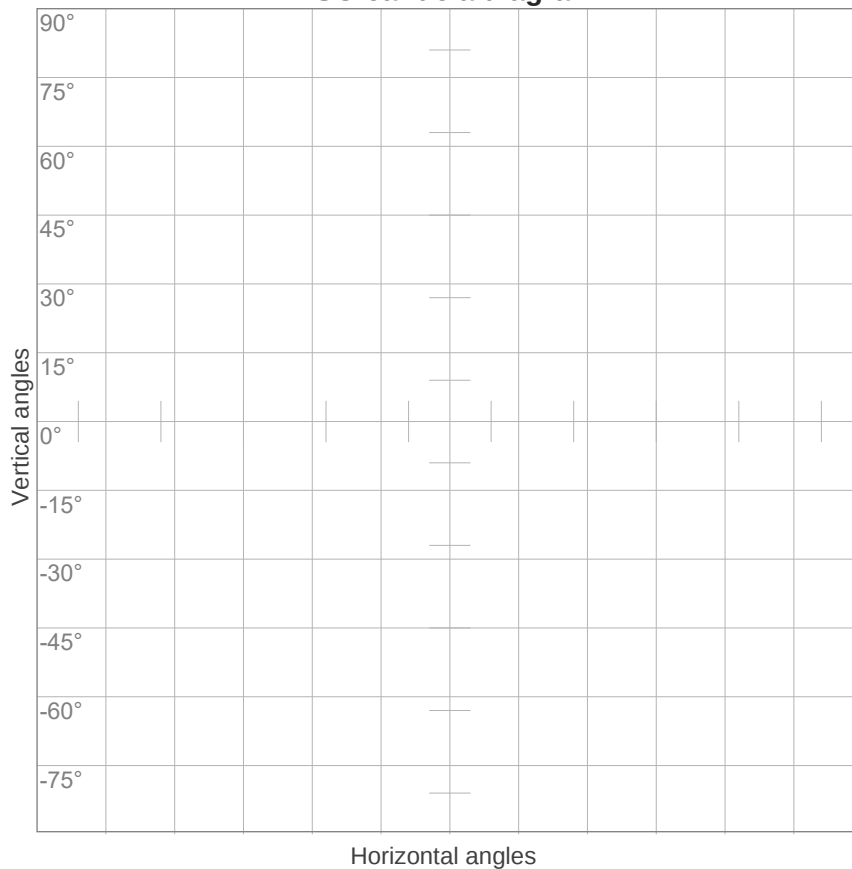
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1335lx	334lx	148lx	83lx	53lx	37lx	27lx	21lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
124fcd	31fcd	13.8fcd	7.8fcd	5fcd	3.4fcd	2.5fcd	1.9fcd	1.5fcd	1.2fcd	1fcd	0.9fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
94.9°	161.8°	229.5°	54.5%	35.1%



ISO Diagrams

ISO candela diagram



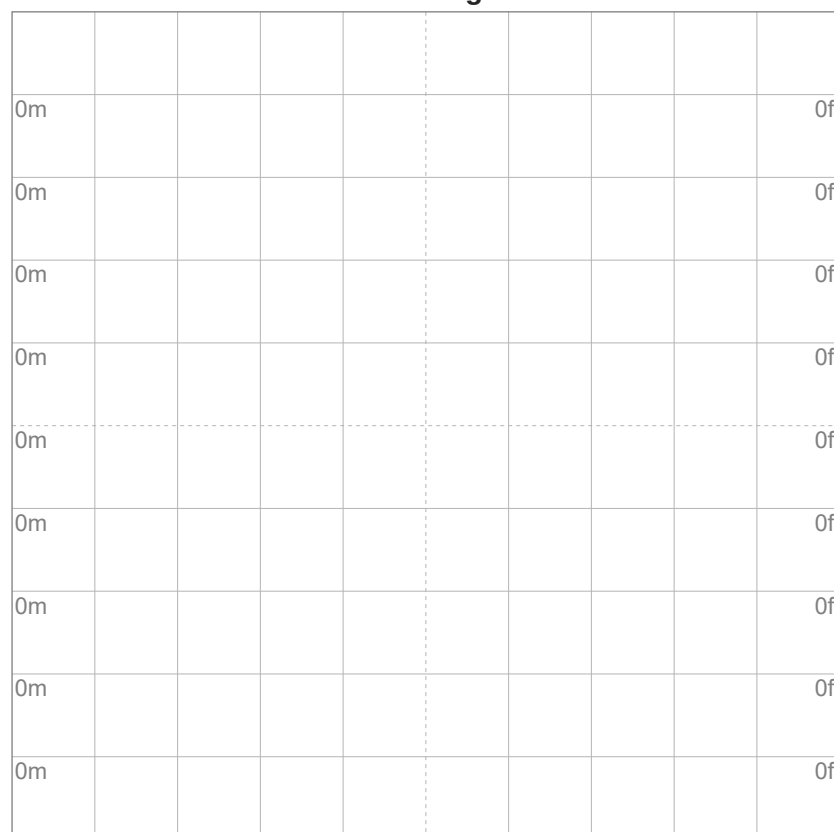
10%	134 cd
20%	267 cd
30%	401 cd
40%	534 cd
50%	668 cd
60%	801 cd
70%	935 cd
80%	1068 cd
90%	1202 cd

Conditions:

Number of c-planes: 16

Candela at center: 1335 cd

ISO lux diagram



3%	0.401 lx
5%	0.668 lx
10%	1.34 lx
30%	4.01 lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 16

Lux at center: 13.4 lx

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



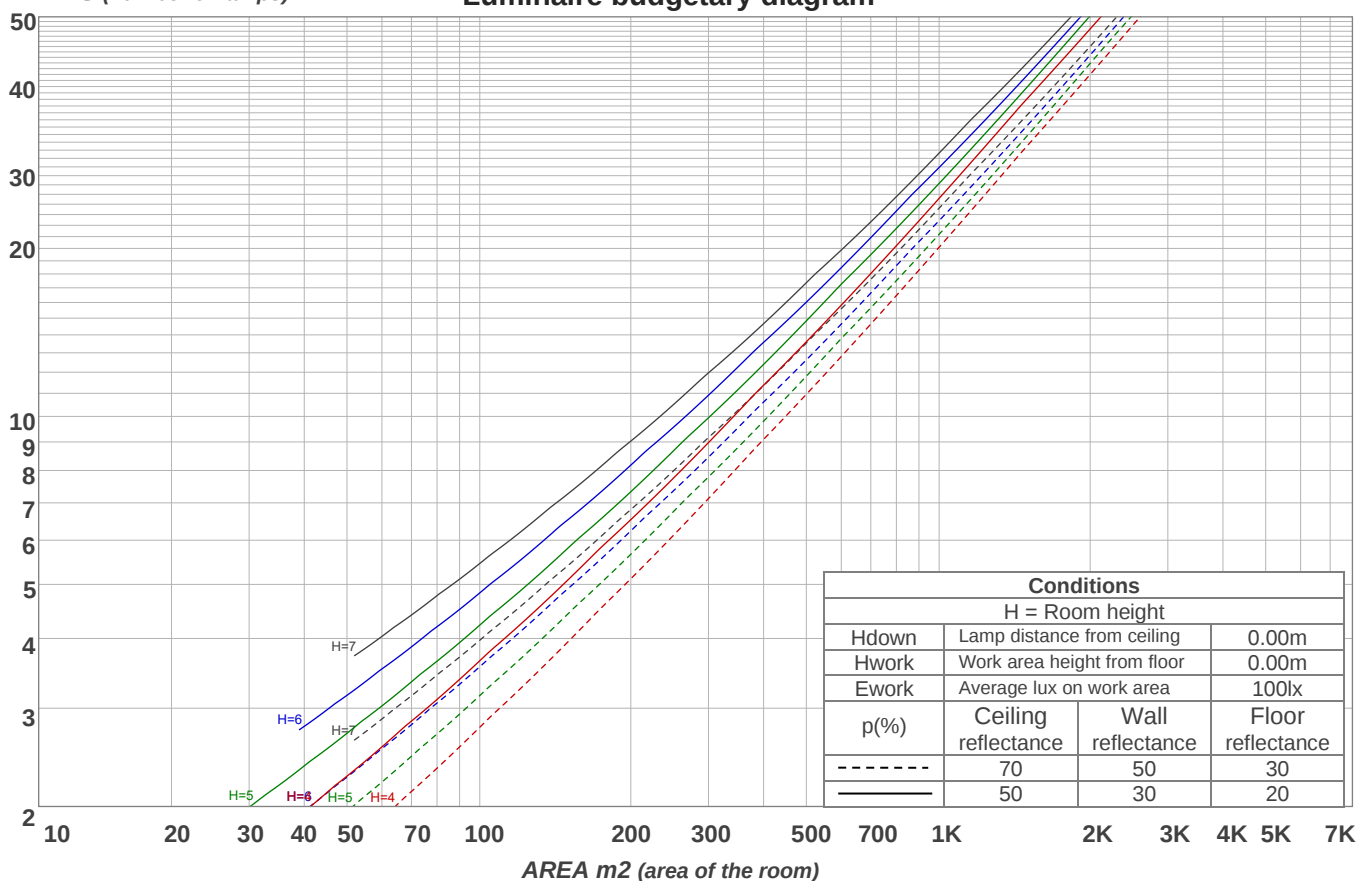
Light Planning

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	96	90	85	98	92	87	82	85	81	77	79	76	72	73	71	68	65
2	91	81	73	66	87	78	71	64	72	66	61	67	62	57	62	58	54	51
3	82	70	61	53	79	67	59	52	63	55	49	58	52	47	54	49	44	41
4	75	61	52	44	71	59	50	43	55	47	41	51	44	39	47	42	37	34
5	69	54	45	37	65	52	43	36	49	41	35	45	39	33	42	36	32	29
6	63	49	39	32	60	47	38	31	44	36	30	41	34	29	38	32	28	25
7	58	44	35	28	56	42	34	27	40	32	26	37	30	25	35	29	24	22
8	54	40	31	25	52	39	30	24	36	29	23	34	27	22	32	26	22	19
9	50	36	28	22	48	35	27	22	33	26	21	31	25	20	29	24	19	17
10	47	34	25	20	45	33	25	19	31	24	19	29	23	18	27	22	17	16

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°
122 lm	344 lm	555 lm	706 lm	767 lm	776 lm	747 lm	684 lm	541 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
339 lm	185 lm	108 lm	65.0 lm	36.2 lm	16.2 lm	5.38 lm	1.98 lm	0.664 lm

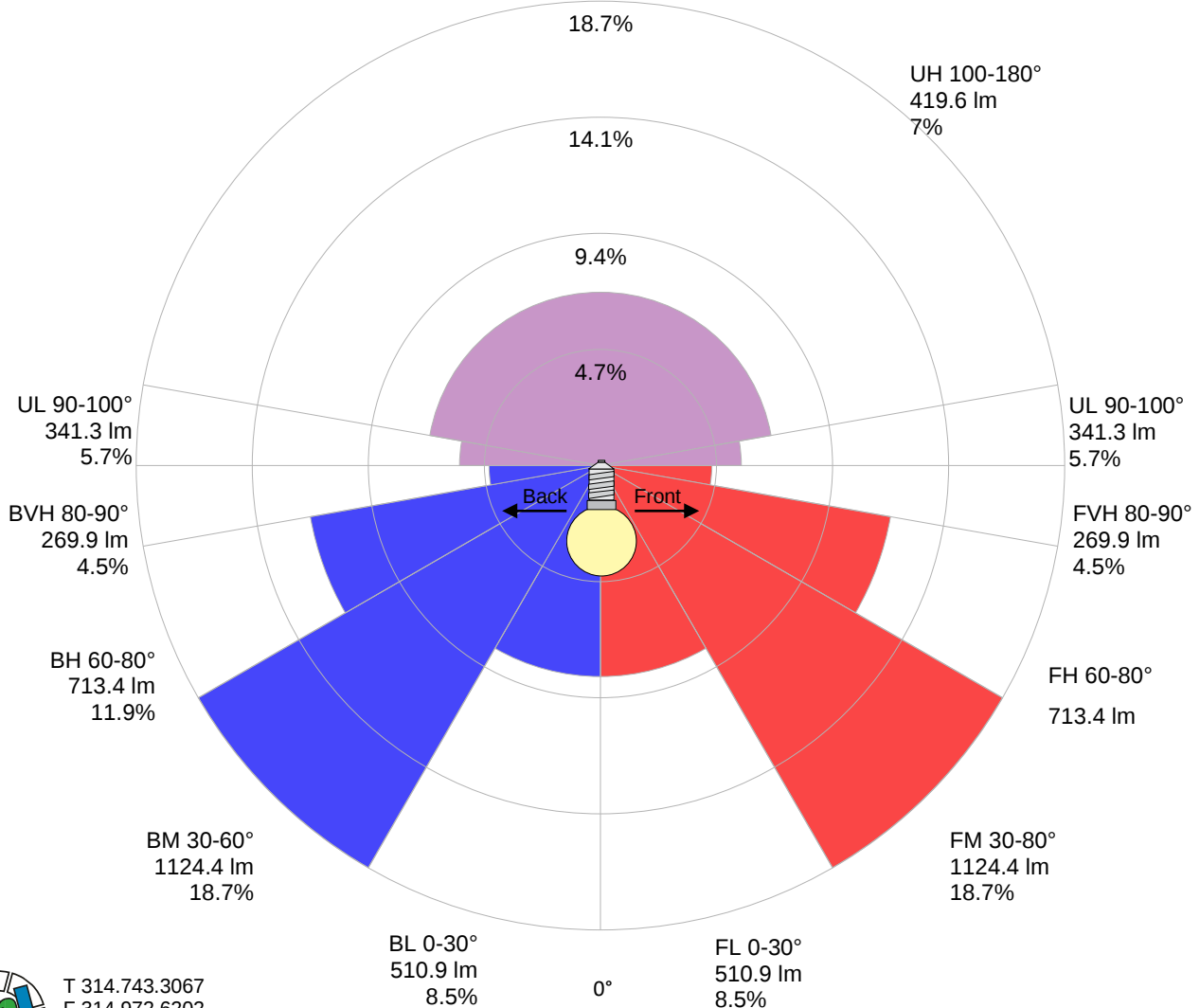


Road Report

LCS table

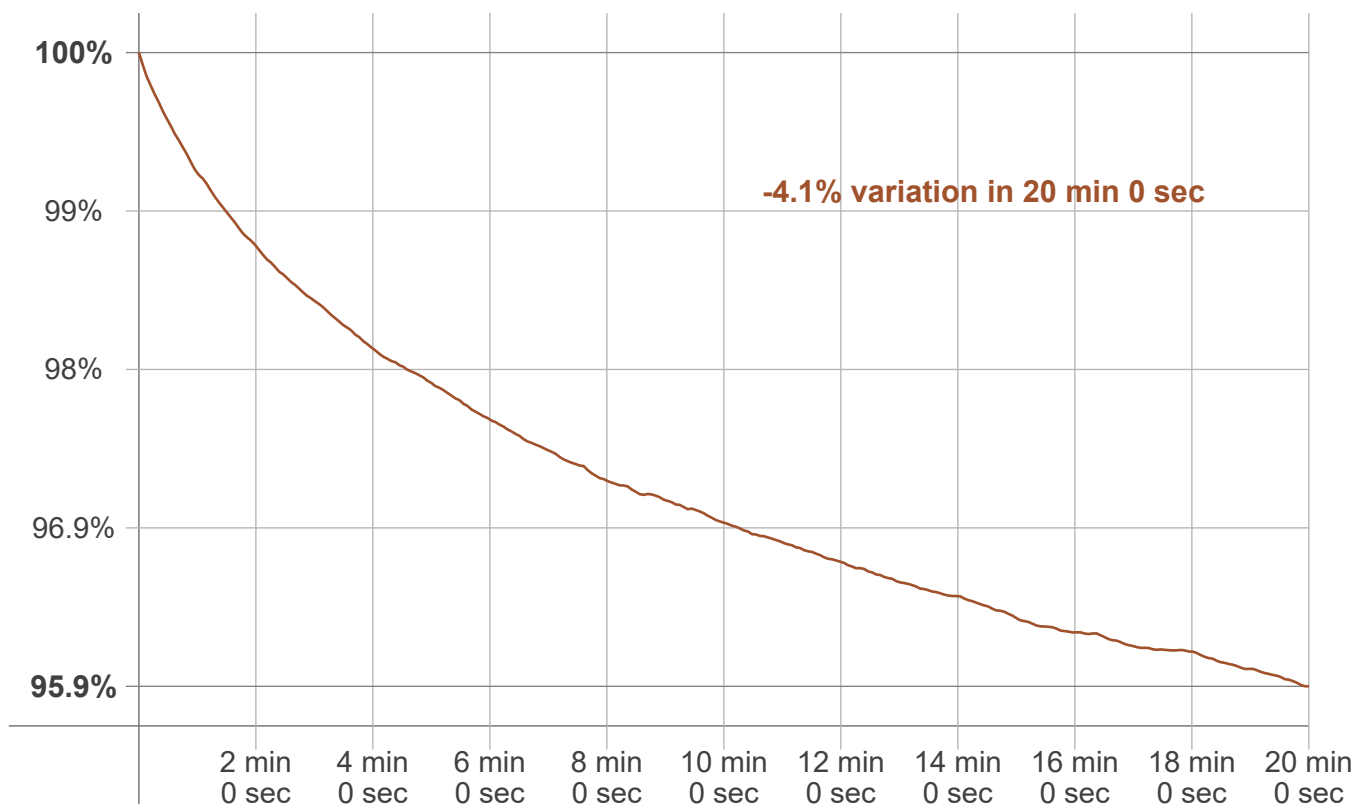
BUG rating:	B2 U3 G3	
Forward light	Lumens	Lumens %
Low(0-30):	510.9	8.5%
Medium(30-60):	1124.4	18.7%
High(60-80):	713.4	11.9%
Very high(80-90):	269.9	4.5%
Back light		
Low(0-30):	510.9	8.5%
Medium(30-60):	1124.4	18.7%
High(60-80):	713.4	11.9%
Very high(80-90):	269.9	4.5%
Uplight		
Low(90-100):	341.3	5.7%
High(100-180):	419.6	7%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 20 min 0 sec
Warmup variation	-4.1%

Warmup conditions

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

Color temperature change

CCT change
+24 K

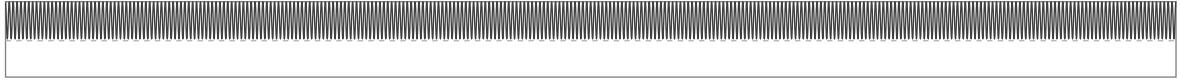
Output change

Output start	Output change	Output end
6241 lm	-239 lm	6002 lm

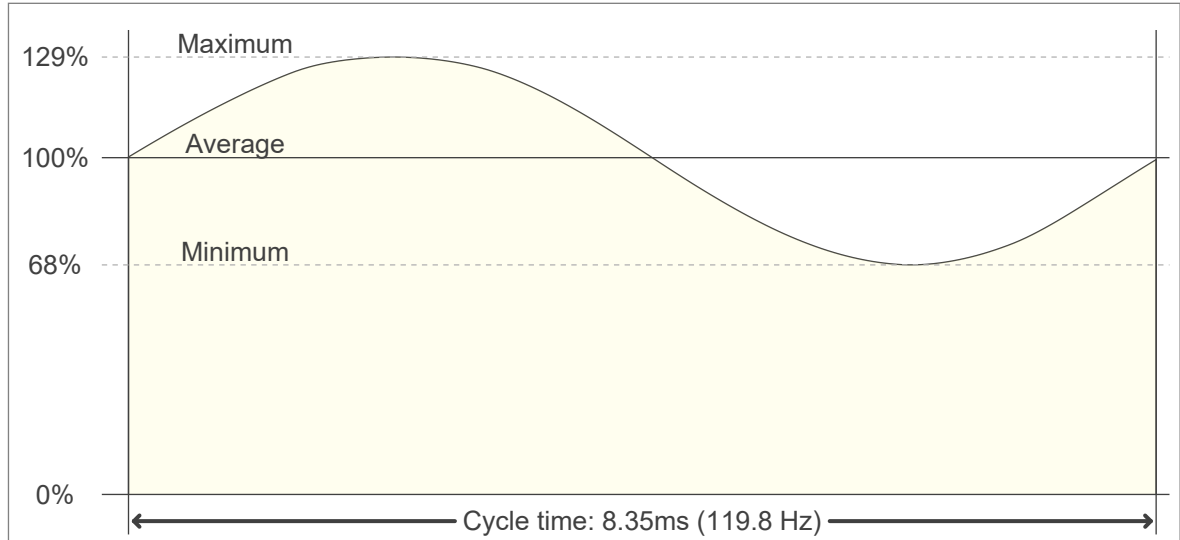


Flicker Specifications

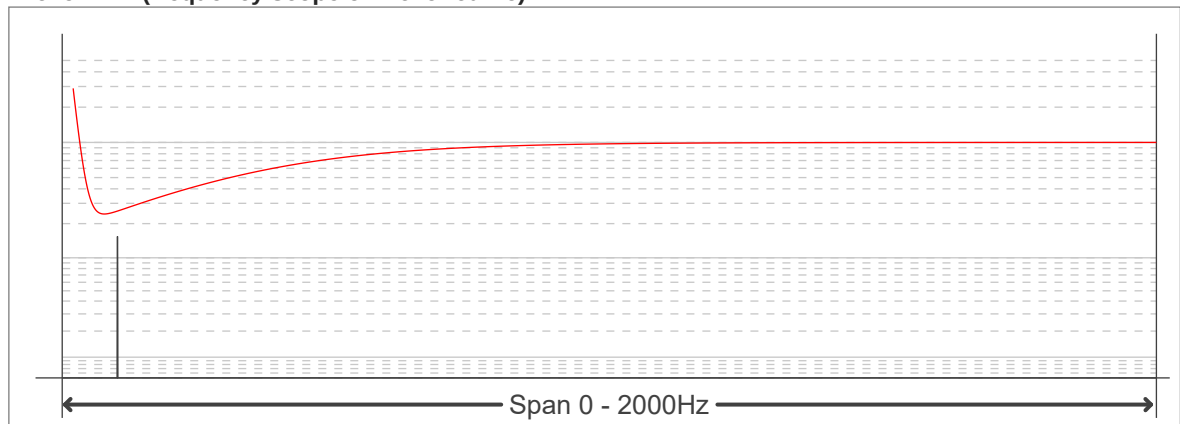
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.1
Flicker percentage:	31.24 %
SVM: (Visual flicker)	1.12

Flicker conditions:

Sample rate:	20000 samples/second
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