

Light efficiency:

142 Lumen/Watt

Light quality:

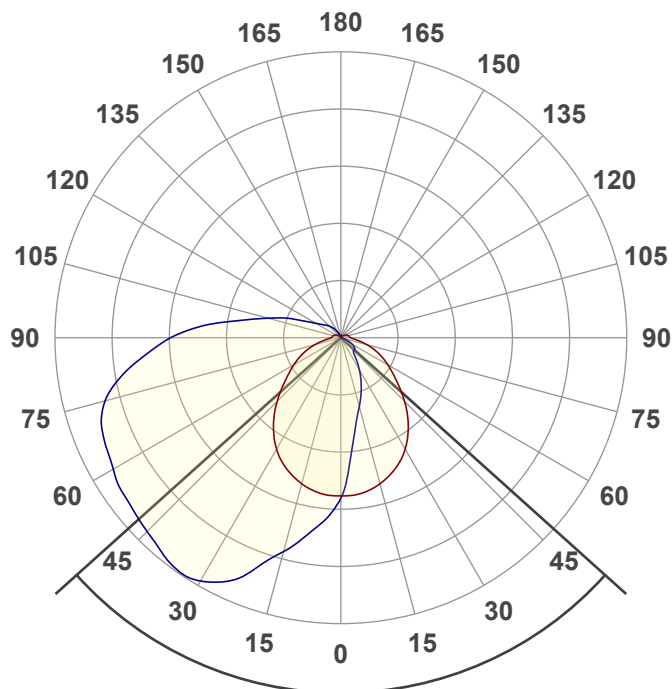
CRI: 83.9

Output: 17538 lm

Peak: 6589 cd

Power: 123.5 W

PF: 0.99



Product name:

WP3-xK120P-BABRSP

Date and time:

6/17/2022 2:32:13 PM

Beam angle

96.1°

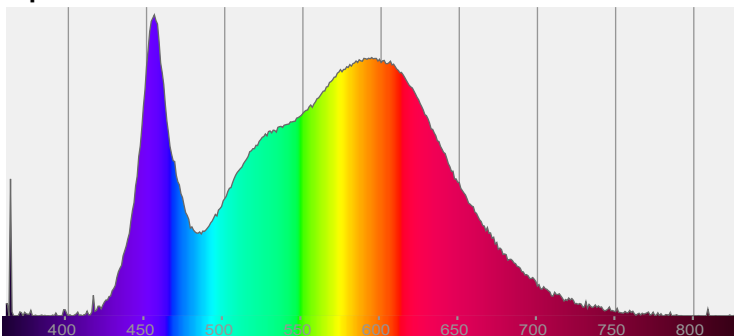


CIE 1931

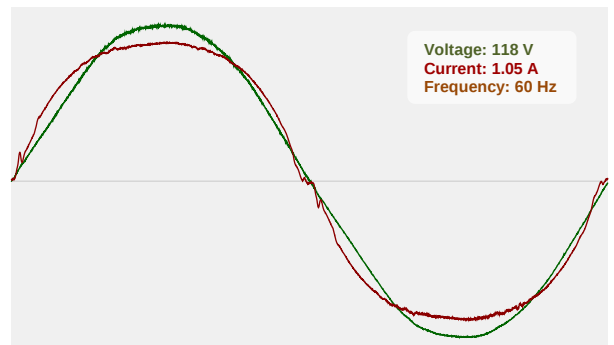
x: 0.379

y: 0.374

Spectra



Power



T 314.743.3067

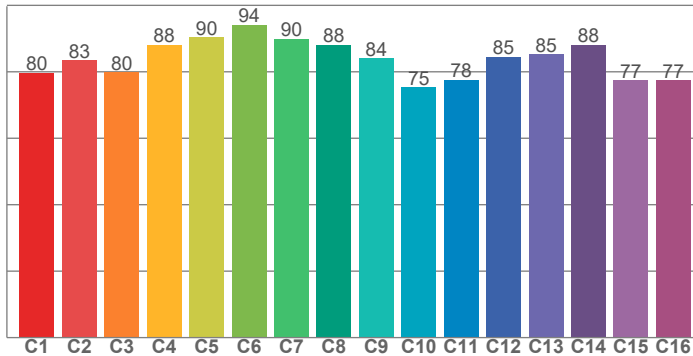
F 314.972.6202

email: commercial-sales@superbrightleds.com

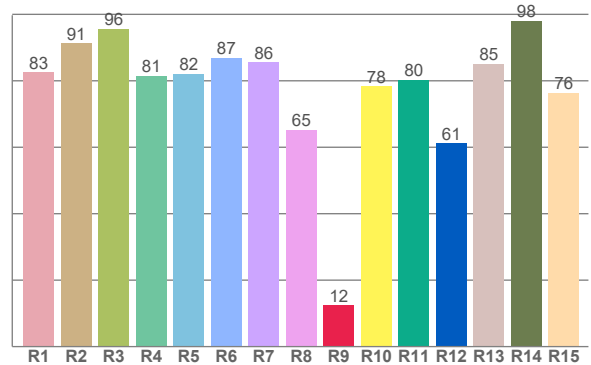
www.superbrightleds.com/

Color Specifications

TM30: 83.7



CRI: 83.9 (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
82.7	91.2	95.7	81.5	82.1	86.9	85.6	65.3	12.4	78.3	80.3	61.3	85.1	98.1	76.4

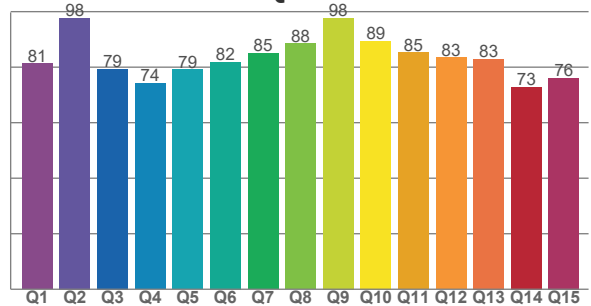
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.7	83.5	79.8	88.0	90.3	94.2	90.0	88.0	84.0	75.3	77.5	84.5	85.3	88.0	77.4	77.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.2	97.6	79.4	74.2	79.2	81.9	85.0	88.5	97.7	89.5	85.3	83.4	83.0	72.9	76.0

CQS: 82.2



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
83.9	12.4	83.7	94.3	82.2	0.379	0.374	0.225	0.333	-0.0007



TM30 Report

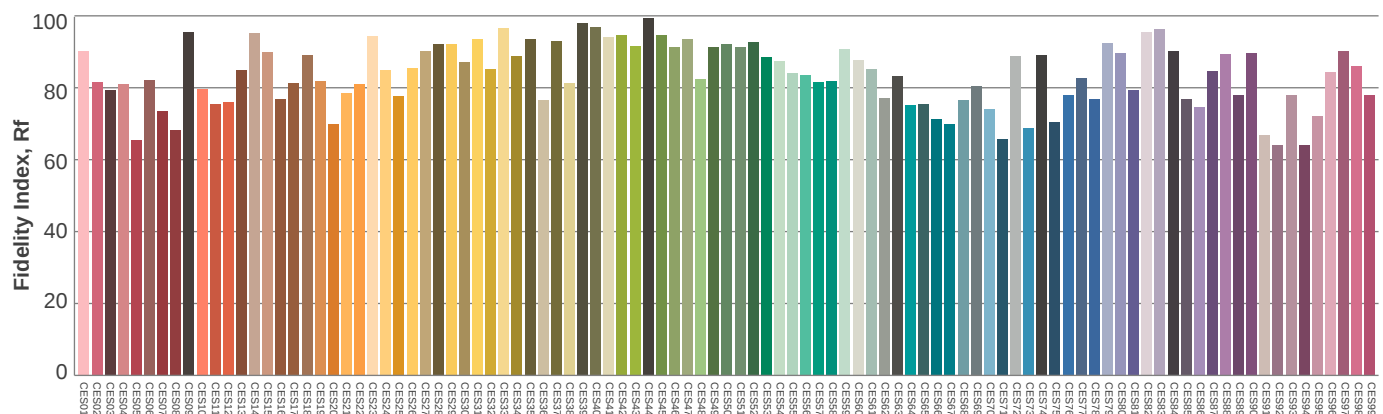
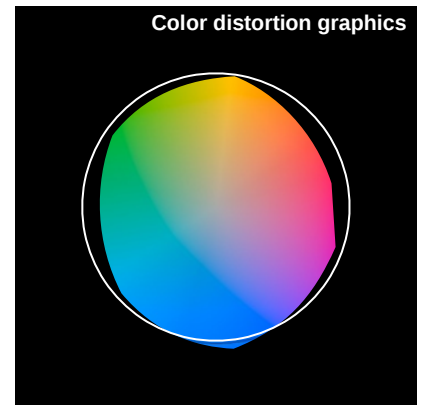
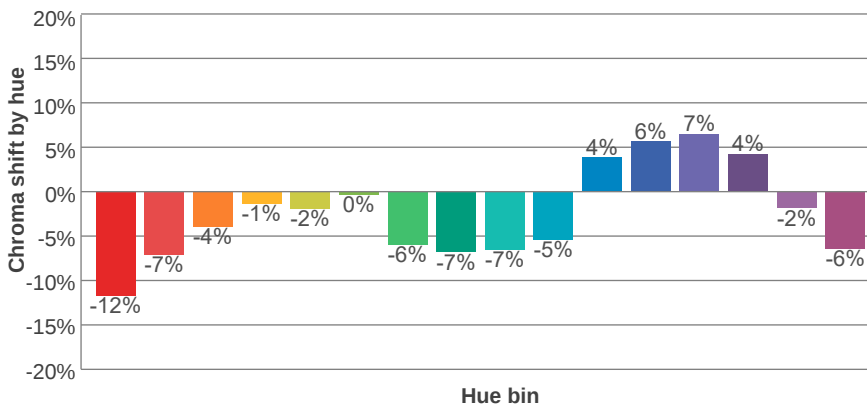
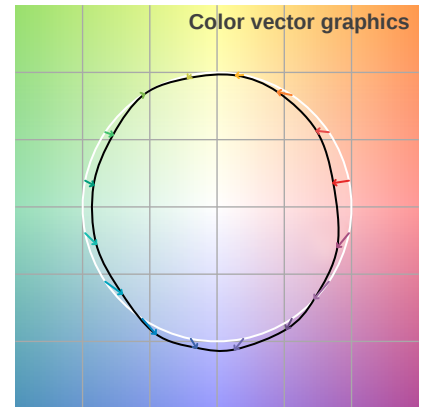
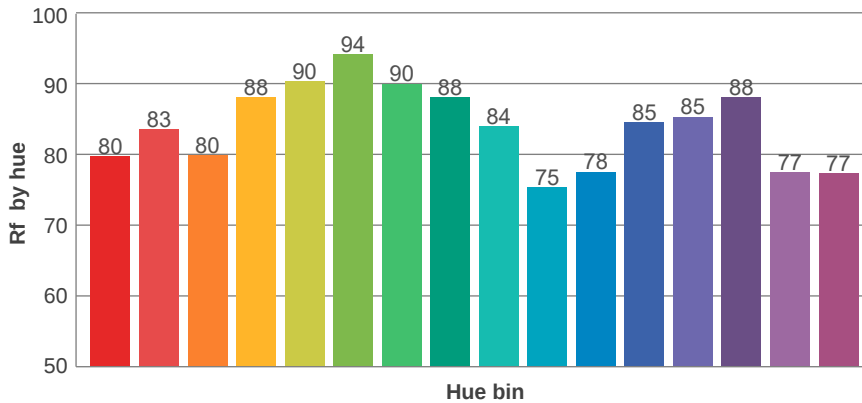
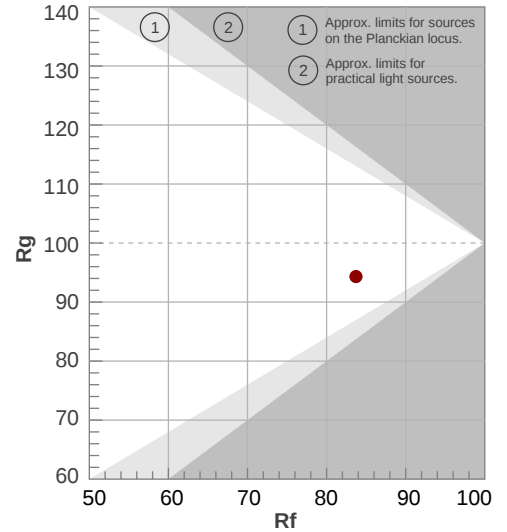
Rf 83.7

Fidelity index Rf

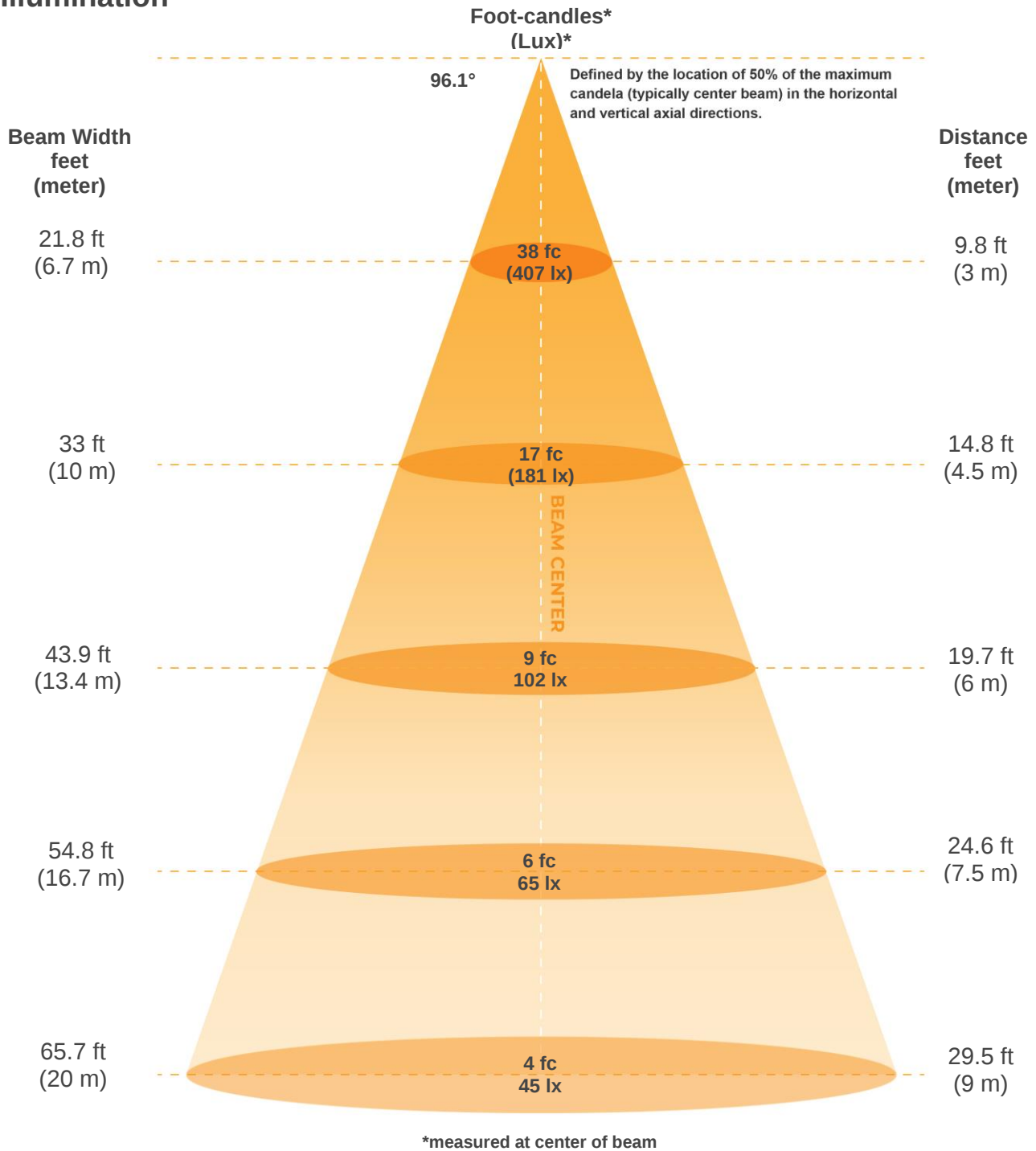
Rg 94.3

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-12%	1%
2	83	-7%	6%
3	80	-4%	10%
4	88	-1%	5%
5	90	-2%	3%
6	94	0%	-2%
7	90	-6%	-2%
8	88	-7%	2%
9	84	-7%	10%
10	75	-5%	14%
11	78	4%	15%
12	85	6%	5%
13	85	7%	-8%
14	88	4%	-7%
15	77	-2%	-16%
16	77	-6%	-12%



Illumination



Beam intensities from 1-20m

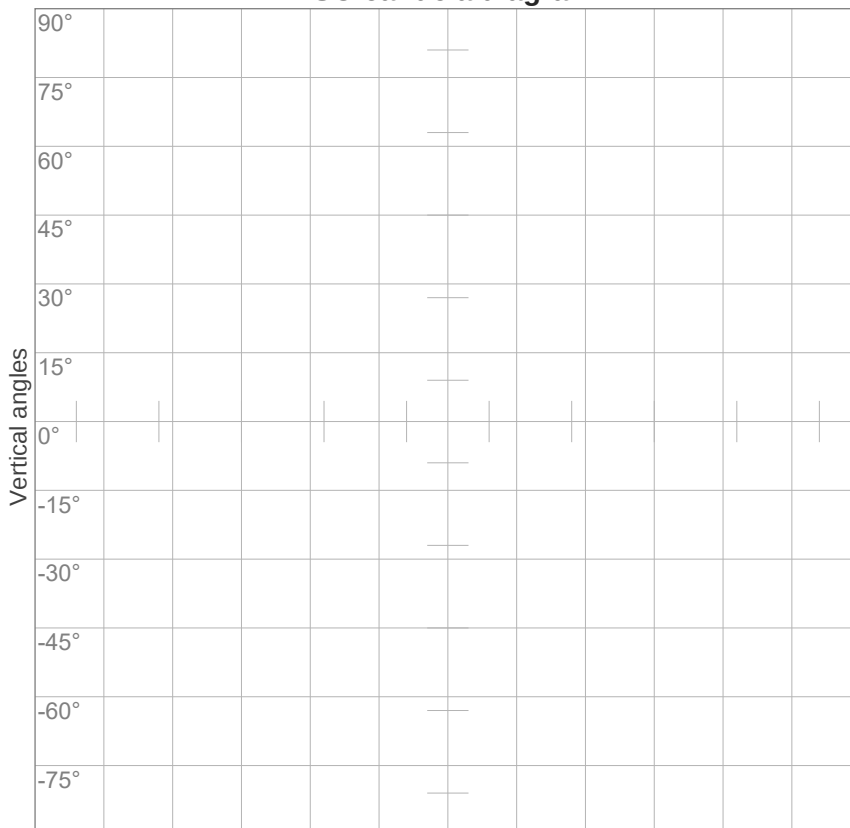
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
366lx	915lx	407lx	229lx	146lx	102lx	75lx	57lx	45lx	37lx	30lx	25lx	22lx	19lx	16lx	14lx	13lx	11lx	10lx	9lx
340.2fc	85fcd	37.8fcd	21.3fcd	13.6fcd	9.4fcd	6.9fcd	5.3fcd	4.2fcd	3.4fcd	2.8fcd	2.4fcd	2fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.9fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
96.1°	163.6°	229.7°	53.1%	33.7%



ISO Diagrams

ISO candela diagram



10%	366 cd
20%	732 cd
30%	1098 cd
40%	1465 cd
50%	1831 cd
60%	2197 cd
70%	2563 cd
80%	2929 cd
90%	3295 cd

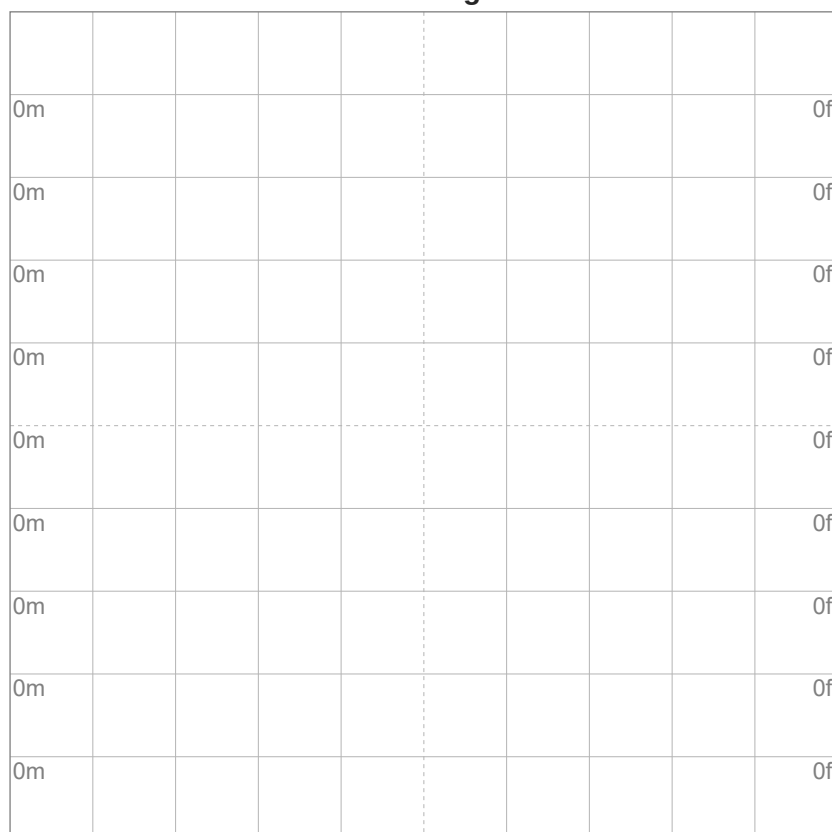
Conditions:

Number of c-planes: 16

Candela at center: 3661 cd

Horizontal angles

ISO lux diagram



3%	1.10 lx
5%	1.83 lx
10%	3.66 lx
30%	11.0 lx
50%	18.3 lx

Conditions:

Number of c-planes: 16

Lux at center: 36.6 lx

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

Mounting height: 10 meters (33 feet) **UGR**



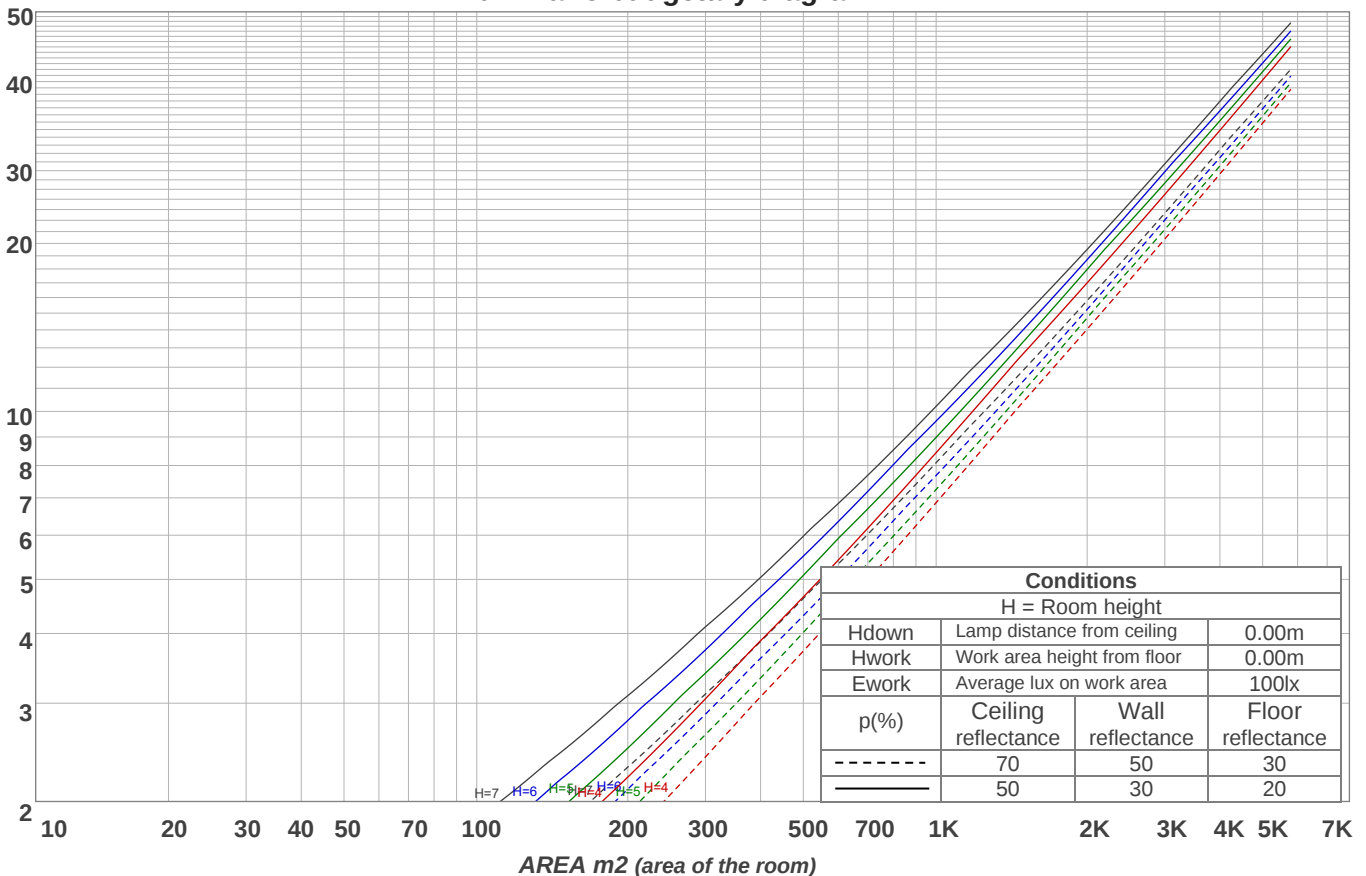
Light Planning

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	89	84	97	91	86	81	85	80	76	78	75	72	73	70	67	64
2	91	81	72	65	87	77	70	63	72	65	60	66	61	56	61	57	53	50
3	82	70	60	52	78	67	58	51	62	54	48	57	51	46	53	48	43	40
4	74	61	51	43	71	59	49	42	54	46	40	50	44	38	46	41	36	33
5	68	54	44	37	65	52	43	36	48	40	34	45	38	32	41	36	31	28
6	63	48	38	31	60	46	37	31	43	35	29	40	33	28	37	31	27	24
7	58	43	34	27	55	42	33	27	39	31	26	36	30	25	34	28	23	21
8	54	39	30	24	51	38	30	24	36	28	23	33	27	22	31	25	21	19
9	50	36	27	21	48	35	27	21	33	25	20	31	24	19	29	23	19	17
10	47	33	25	19	45	32	24	19	30	23	18	28	22	17	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°
335 lm	950 lm	1541 lm	1998 lm	2210 lm	2282 lm	2228 lm	2047 lm	1625 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1042 lm	578 lm	328 lm	191 lm	107 lm	48.8 lm	17.5 lm	6.52 lm	2.18 lm

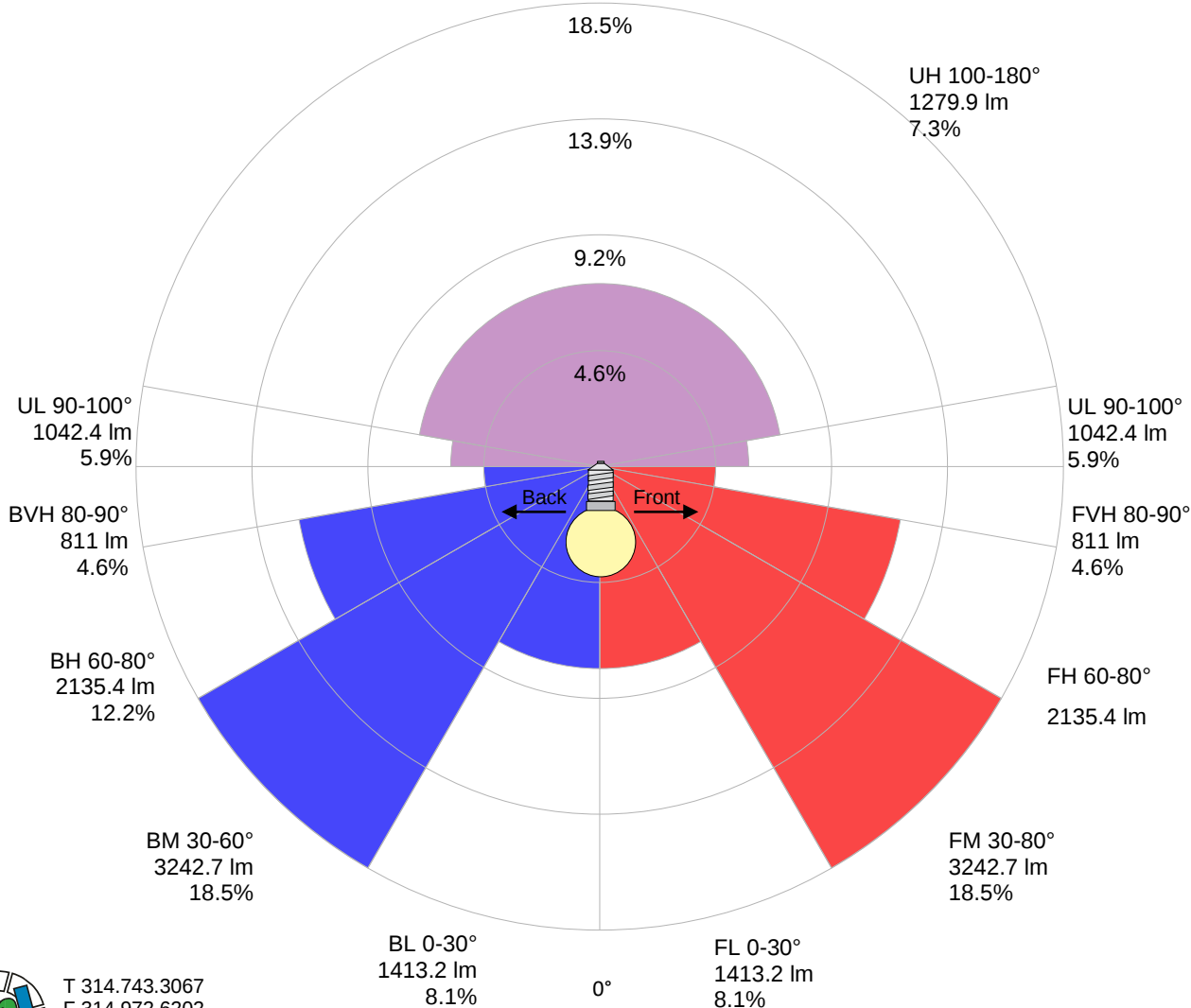


Road Report

LCS table

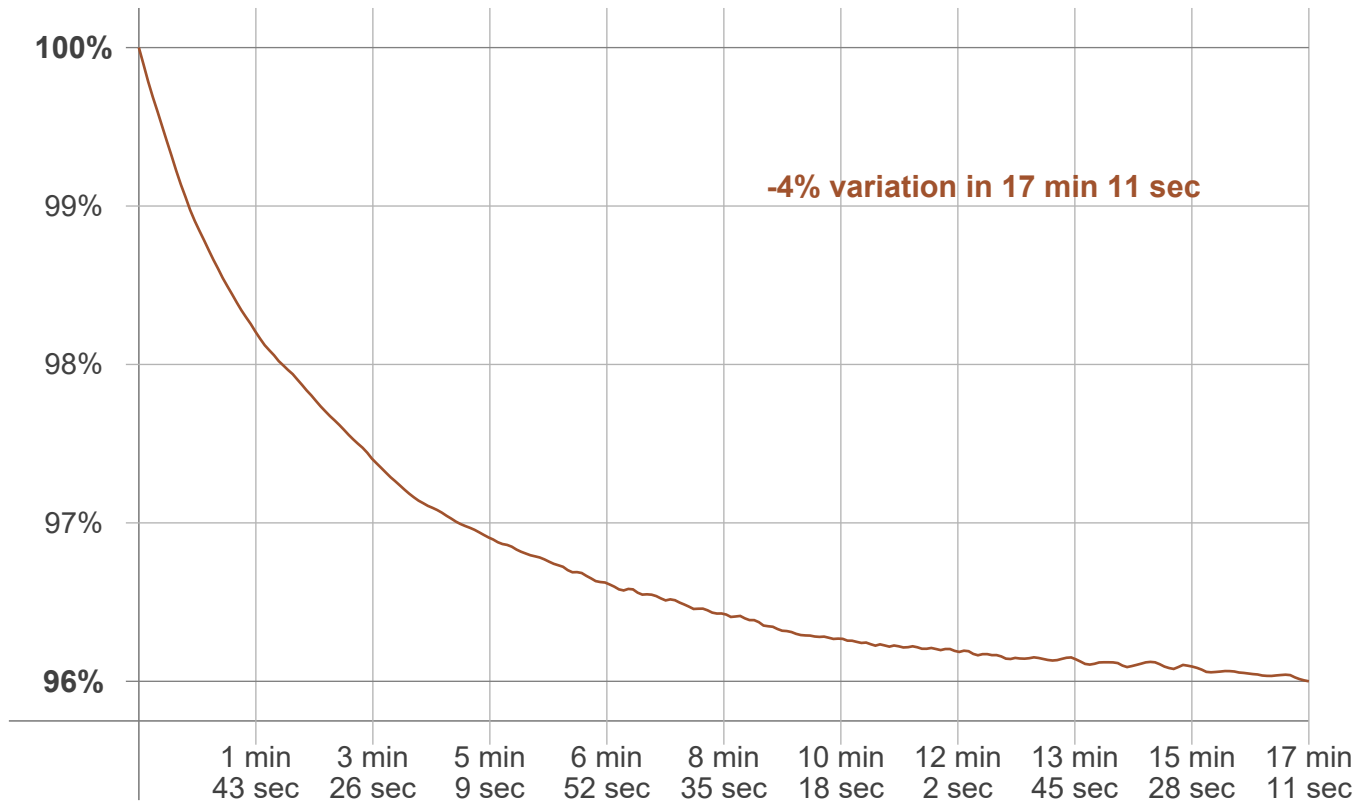
BUG rating:	B3 U5 G5	
Forward light	Lumens	Lumens %
Low(0-30):	1413.2	8.1%
Medium(30-60):	3242.7	18.5%
High(60-80):	2135.4	12.2%
Very high(80-90):	811	4.6%
Back light		
Low(0-30):	1413.2	8.1%
Medium(30-60):	3242.7	18.5%
High(60-80):	2135.4	12.2%
Very high(80-90):	811	4.6%
Uplight		
Low(90-100):	1042.4	5.9%
High(100-180):	1279.9	7.3%

LCS graph



Stabilization

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 17 min 11 sec
Warmup variation	-4.0%

Warmup conditions

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

Color temperature change

CCT change
+56 K

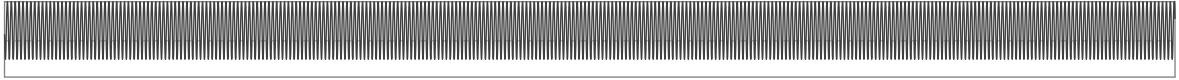
Output change

Output start	Output change	Output end
18202 lm	-664 lm	17538 lm

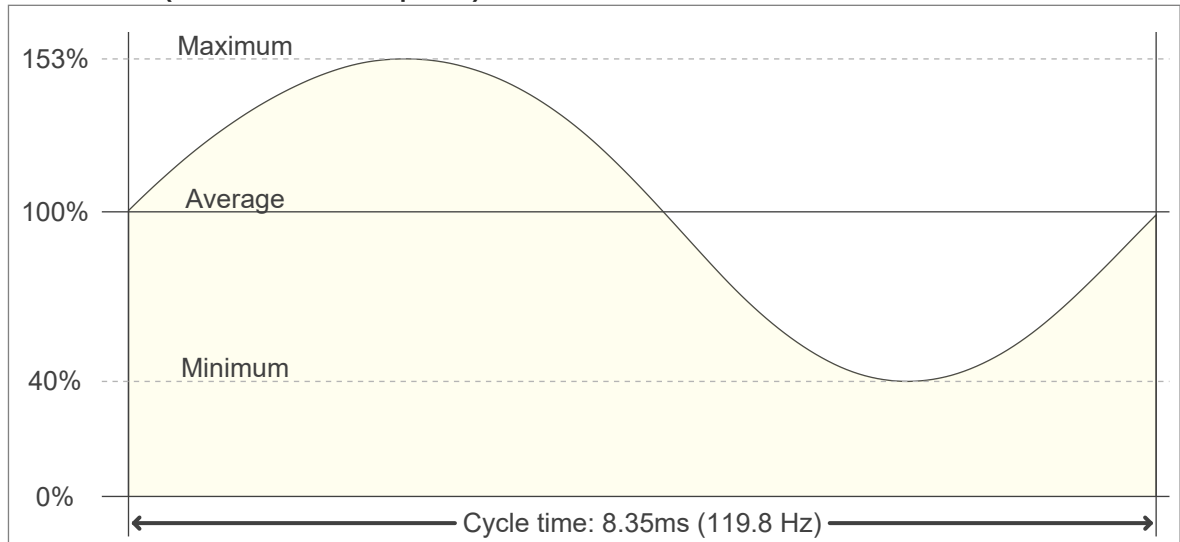


Flicker Specifications

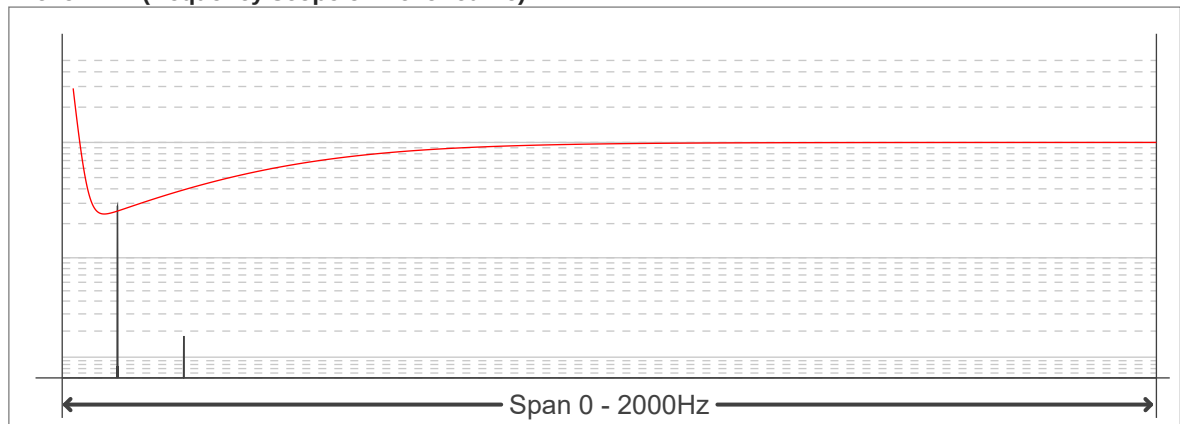
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.18
Flicker percentage:	58.47 %
SVM: (Visual flicker)	2.07

Flicker conditions:

Sample rate:	20000 samples/second
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