Light efficiency:

133 Lumen/Watt

Light quality:

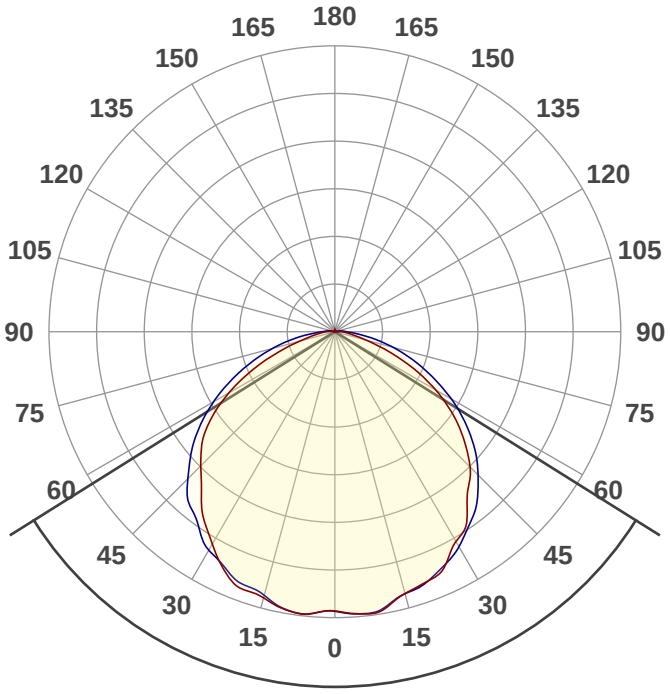
CRI: 84.0

Color temperature:

5215 K

Output: 19987 lm
Peak: 6705 cd

Power: 150.6 W
PF: 1.0



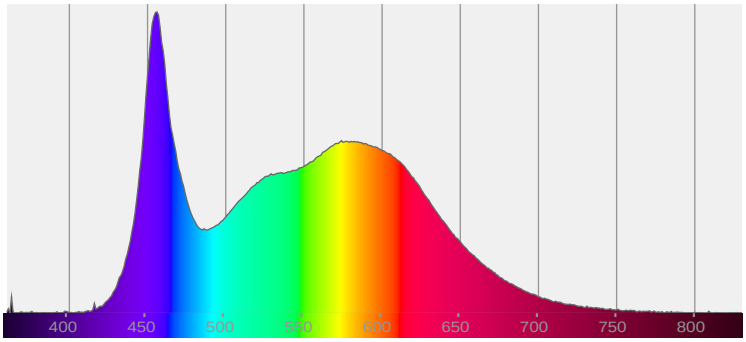
Beam angle 115.9°

Product name:
LCS15-50K150-SHSWH

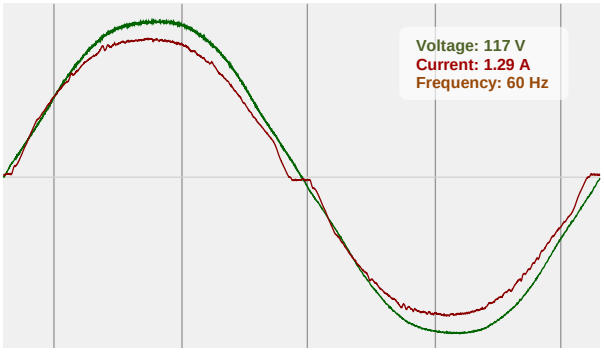
Date and time:
6/8/2020 11:45:16 AM

CIE 1931
x: 0.339
y: 0.345

Spectra



Power



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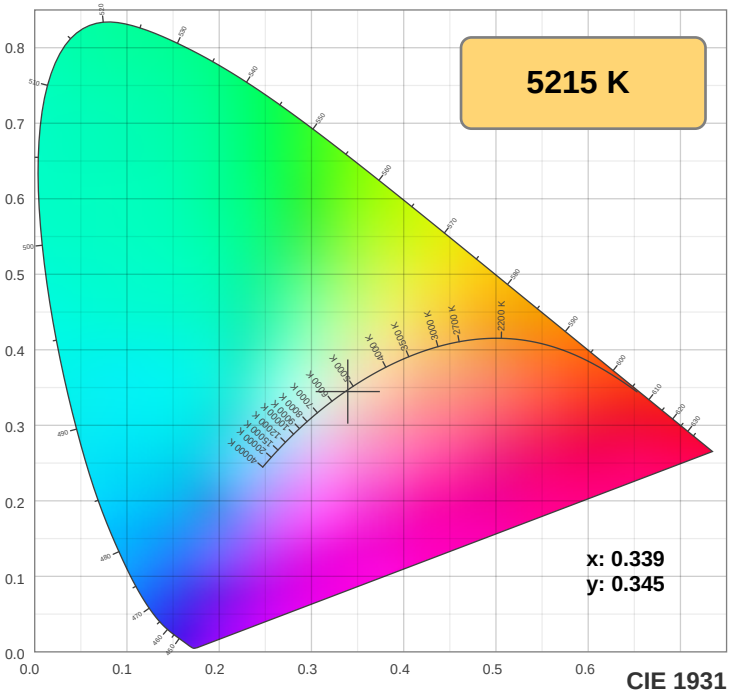
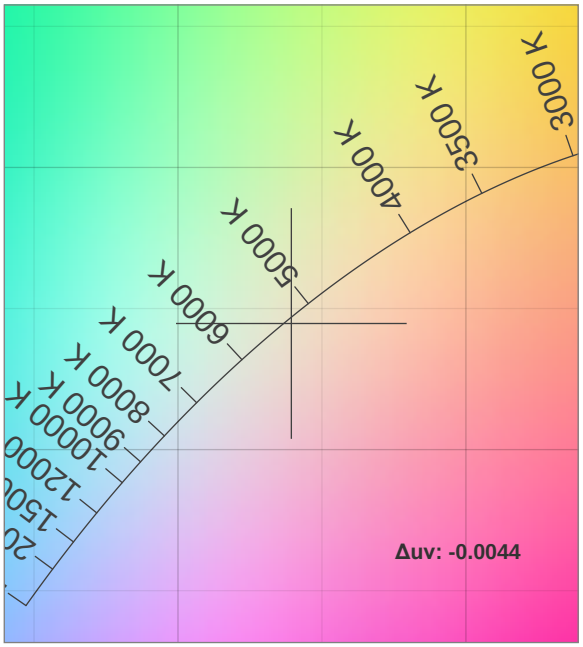
Color Specifications

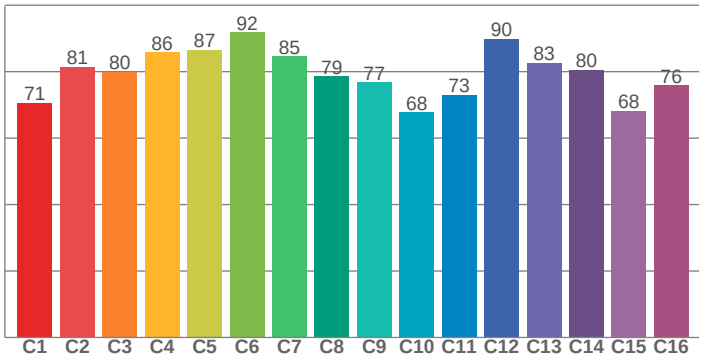


CIE 1931

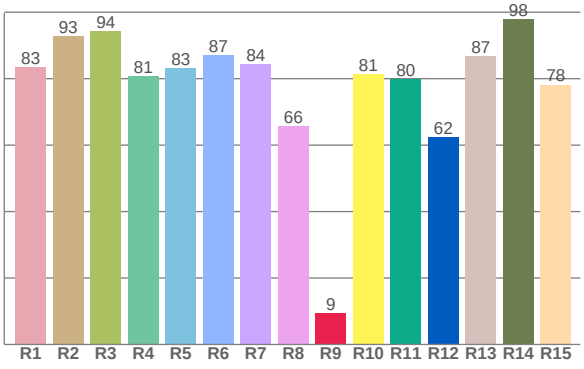


CIE 1931 ZOOM

TM30: 79.7



CRI: 84.0 (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
83.4	92.9	94.3	80.8	83.1	87.0	84.4	65.8	9.3	81.4	79.8	62.3	86.8	97.8	78.2

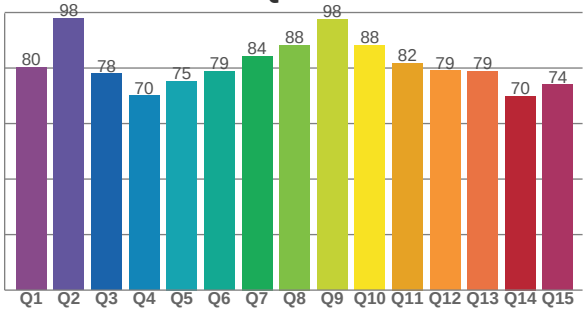
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
70.6	81.4	80.0	85.8	86.6	91.9	84.6	78.6	76.8	67.8	73.0	89.9	82.6	80.5	68.1	75.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80.3	97.9	78.1	70.1	75.3	78.8	84.3	88.3	97.6	88.2	81.8	79.1	78.8	69.9	74.1

CQS: 79.8



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5215 K	84.0	9.3	79.7	92.0	79.8	0.339	0.345	0.210	0.320	-0.0044

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TM30 Report

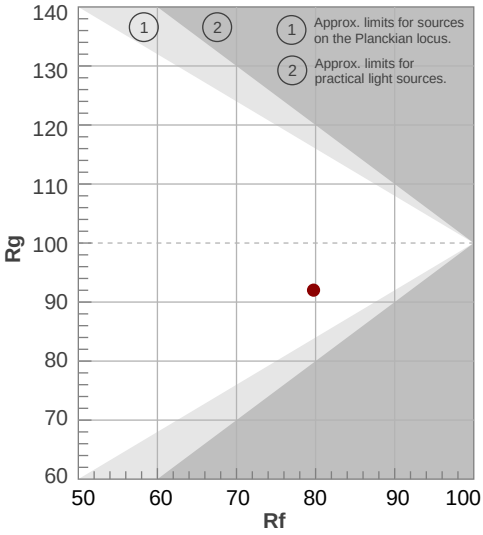
Rf 79.7

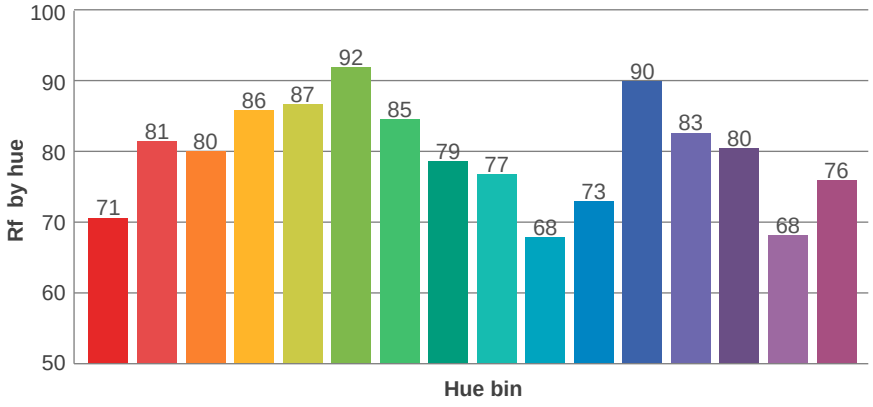
Fidelity index Rf

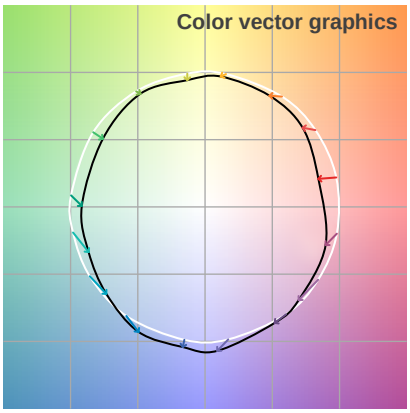
Rg 92.0

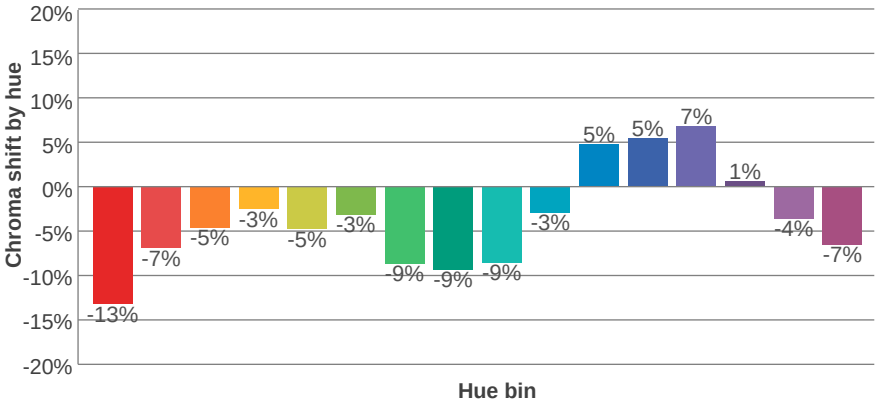
Gammut index Rg

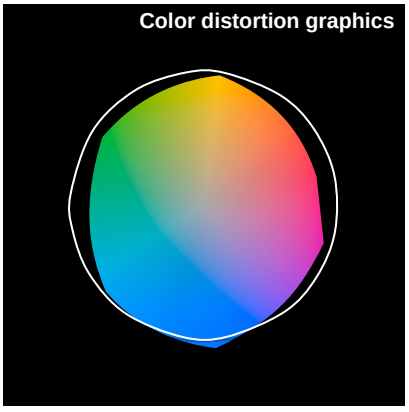
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	71	-13%	2%
2	81	-7%	7%
3	80	-5%	8%
4	86	-3%	3%
5	87	-5%	1%
6	92	-3%	-2%
7	85	-9%	0%
8	79	-9%	6%
9	77	-9%	17%
10	68	-3%	18%
11	73	5%	14%
12	90	5%	0%
13	83	7%	-10%
14	80	1%	-11%
15	68	-4%	-21%
16	76	-7%	-10%

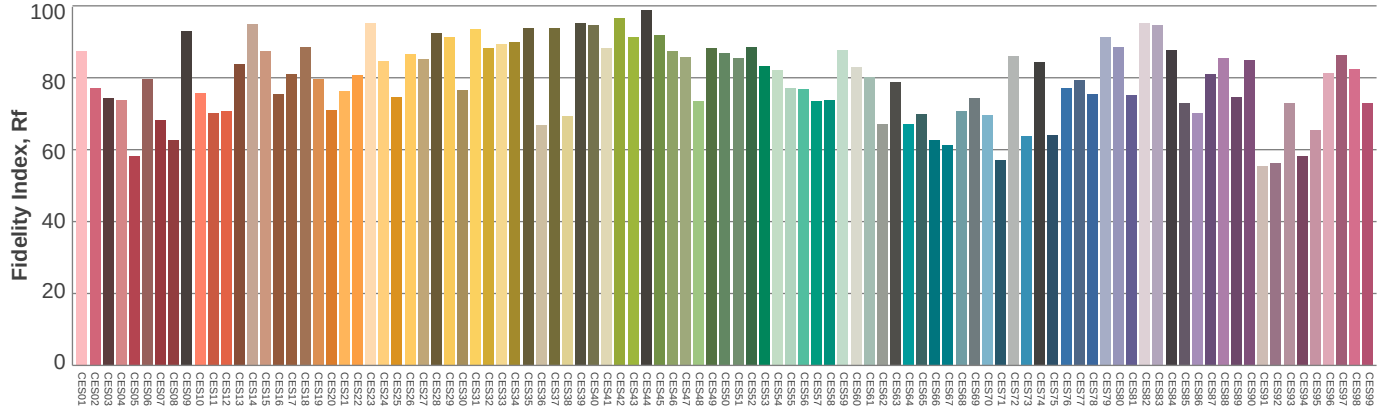












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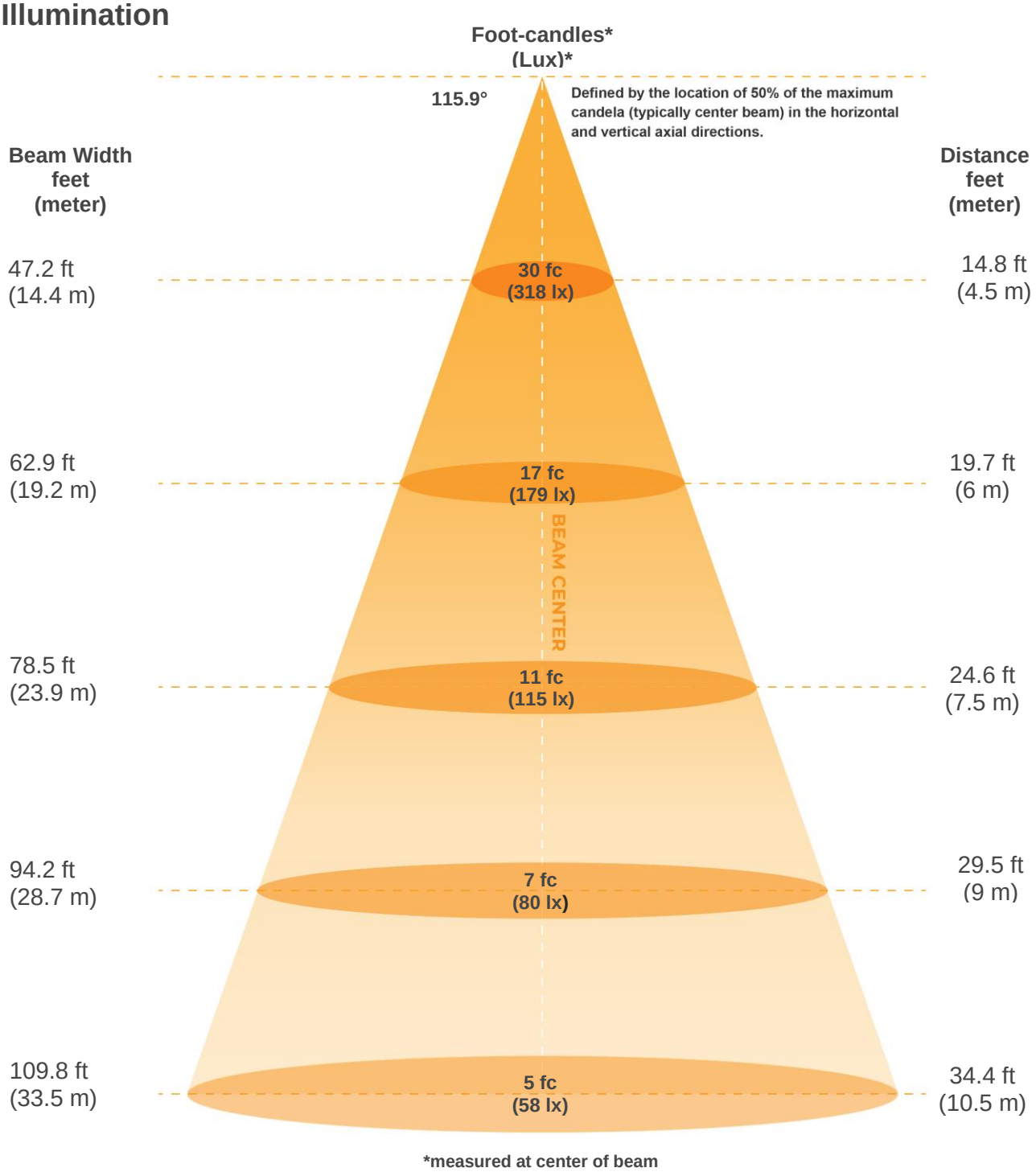
Illumination



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
6449lx	1612lx	717lx	403lx	258lx	179lx	132lx	101lx	80lx	64lx	53lx	45lx	38lx	33lx	29lx	25lx	22lx	20lx	18lx	16lx
599.1fc	149.8fc	66.6fcd	37.4fcd	24fcd	16.6fcd	12.2fcd	9.4fcd	7.4fcd	6fcd	5fcd	4.2fcd	3.5fcd	3.1fcd	2.7fcd	2.3fcd	2.1fcd	1.8fcd	1.7fcd	1.5fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
115.9°	**162.9°**	**187.6°**	**77.4%**	**52.2%**

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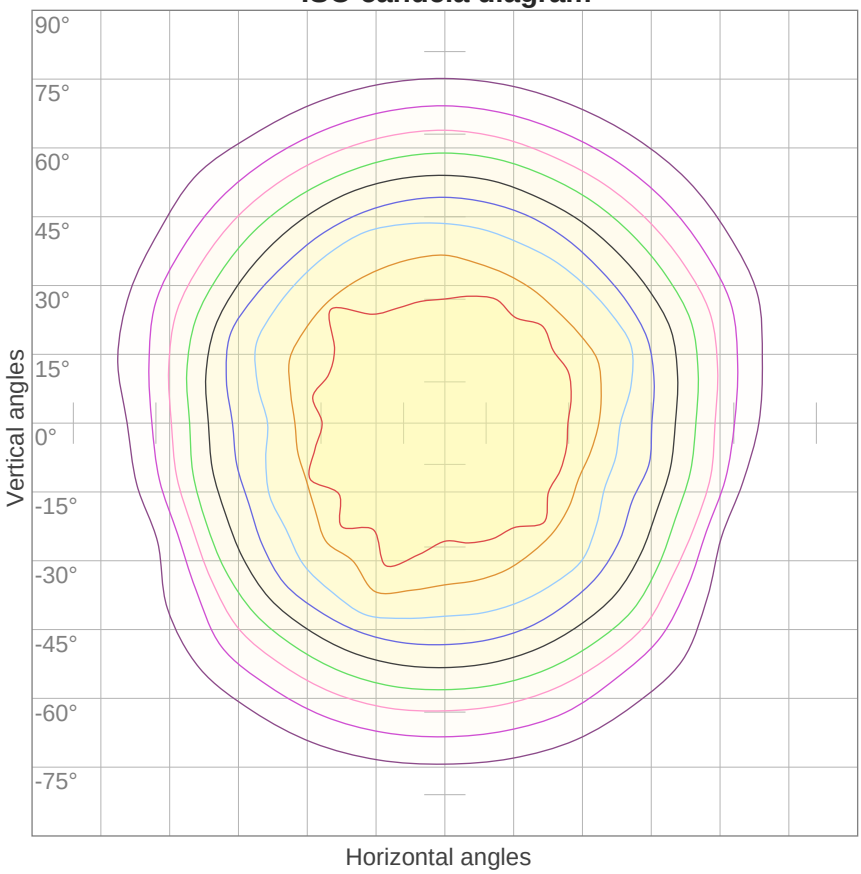
ISO Diagrams

ISO candela diagram



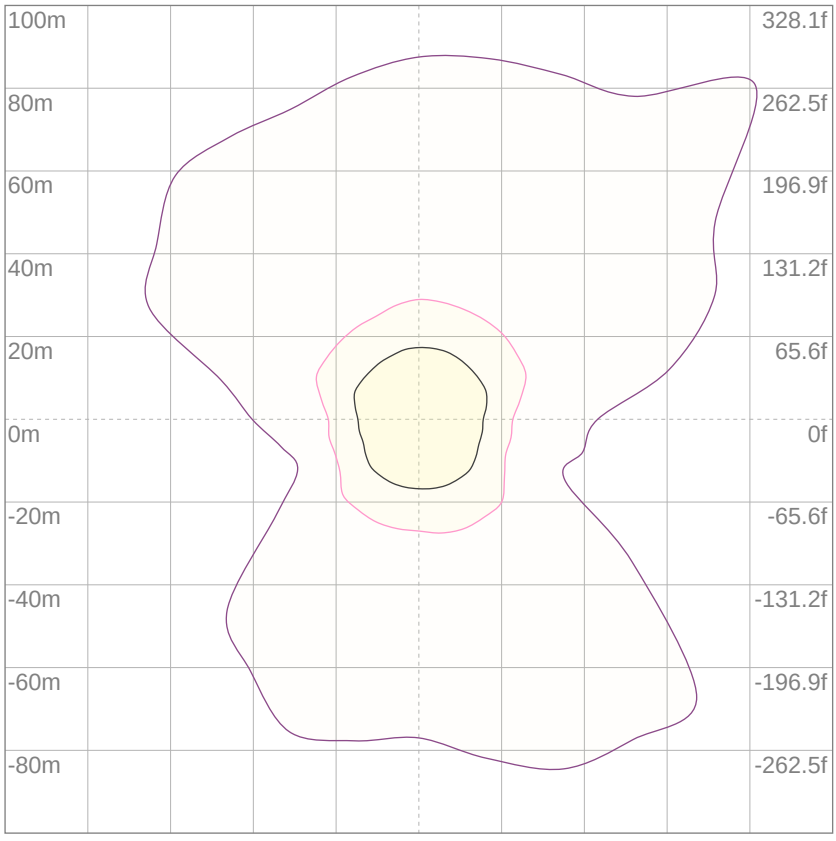
10%	645 cd
20%	1290 cd
30%	1935 cd
40%	2580 cd
50%	3225 cd
60%	3870 cd
70%	4514 cd
80%	5159 cd
90%	5804 cd

Conditions:

Number of c-planes: 16

Candela at center: 6449 cd

ISO lux diagram



3%	1.93 lx
5%	3.22 lx
10%	6.45 lx
30%	19.3 lx
50%	32.2 lx

Conditions:

Number of c-planes: 16

Lux at center: 64.5 lx

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

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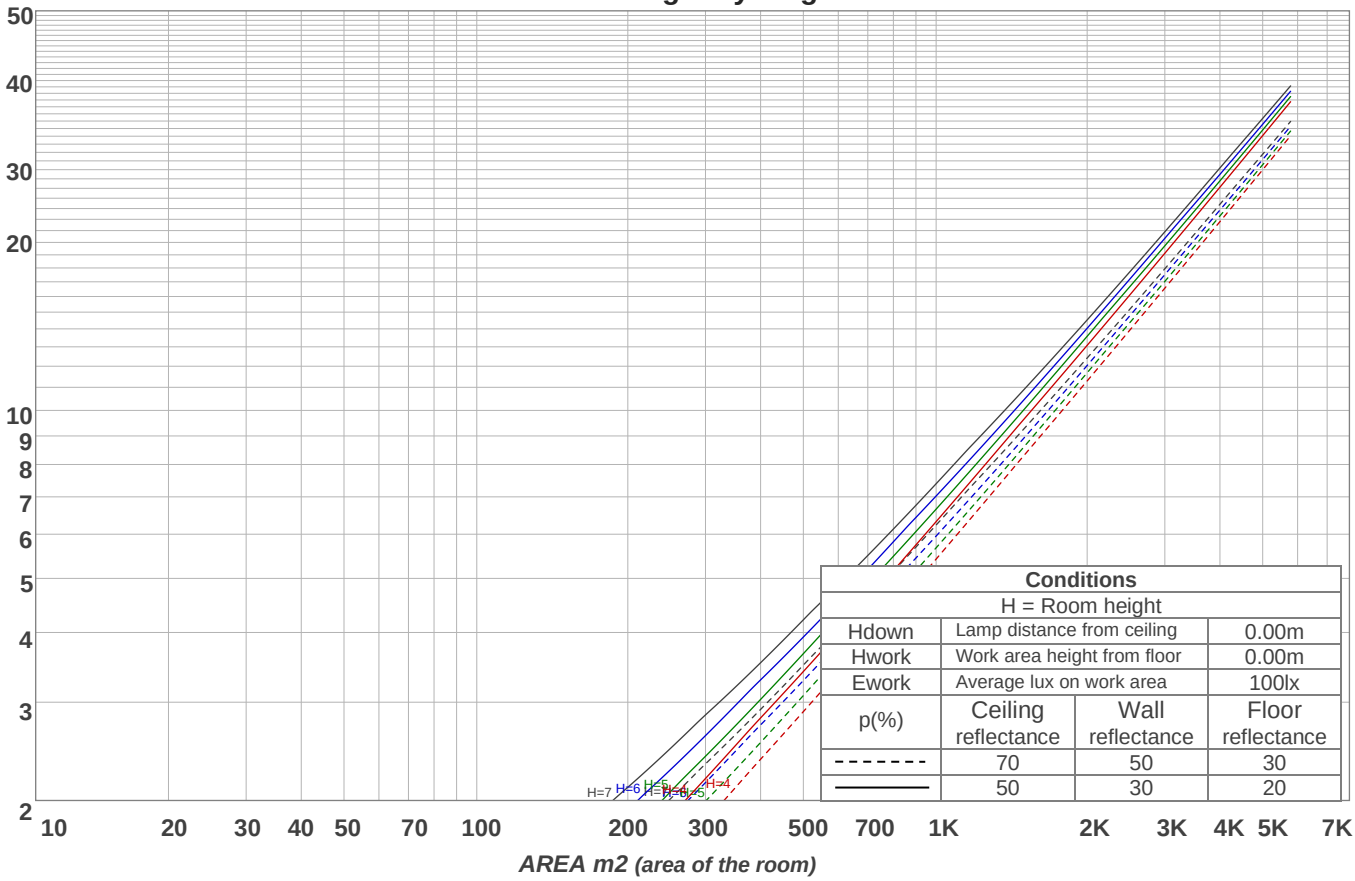
Light Planning

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	110	110	110	105	105	105	101	101	101	99
1	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	77	74	70	68
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	68	63	59	57
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	37
7	64	51	42	36	62	50	41	35	48	41	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
626 lm	1811 lm	2797 lm	3397 lm	3589 lm	3253 lm	2392 lm	1309 lm	549 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
153 lm	24.7 lm	16.4 lm	17.0 lm	16.4 lm	14.7 lm	11.7 lm	7.53 lm	2.64 lm

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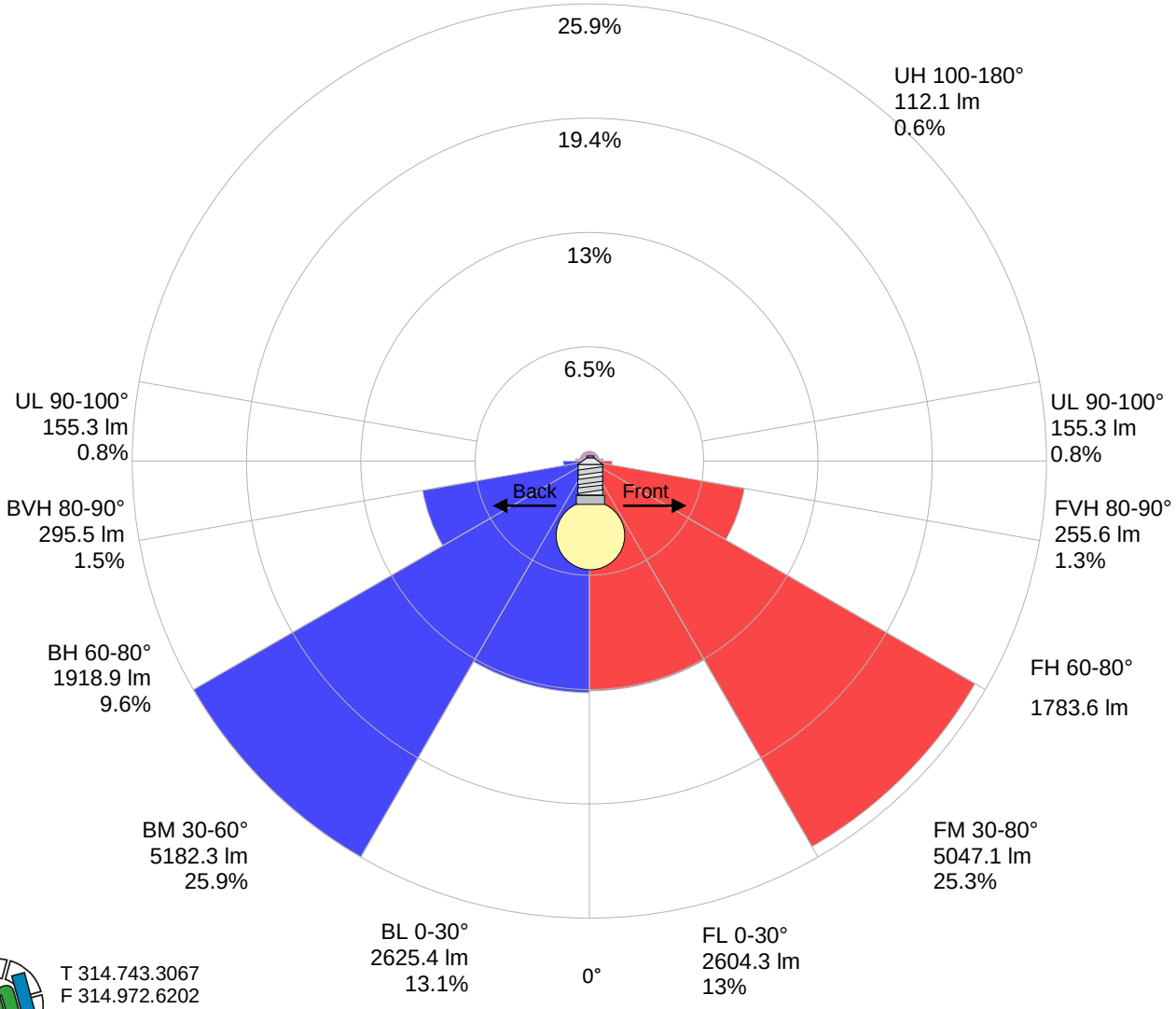
Road Report

LCS table

BUG rating:	B4 U3 G3	
Forward light	Lumens	Lumens %
Low(0-30):	2604.3	13%
Medium(30-60):	5047.1	25.3%
High(60-80):	1783.6	8.9%
Very high(80-90):	255.6	1.3%
Back light		
Low(0-30):	2625.4	13.1%
Medium(30-60):	5182.3	25.9%
High(60-80):	1918.9	9.6%
Very high(80-90):	295.5	1.5%
Uplight		
Low(90-100):	155.3	0.8%
High(100-180):	112.1	0.6%

LCS graph



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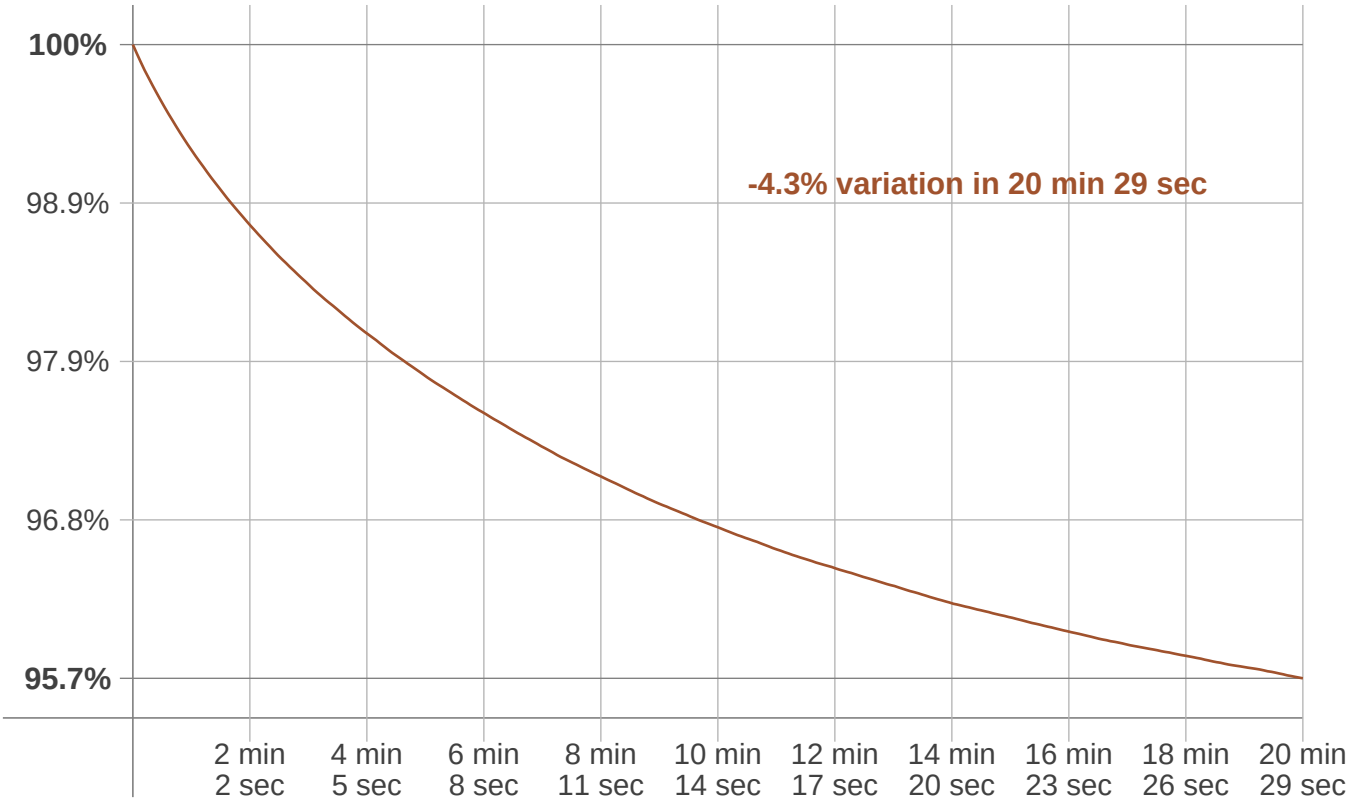
Stabilization

Warmup curve



Warmup result

Warmup time:	**20 min 29 sec**
Warmup variation	**-4.3%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5117 K	+98 K	5215 K

Output change

Output start	Output change	Output end
20841 lm	-853 lm	19987 lm

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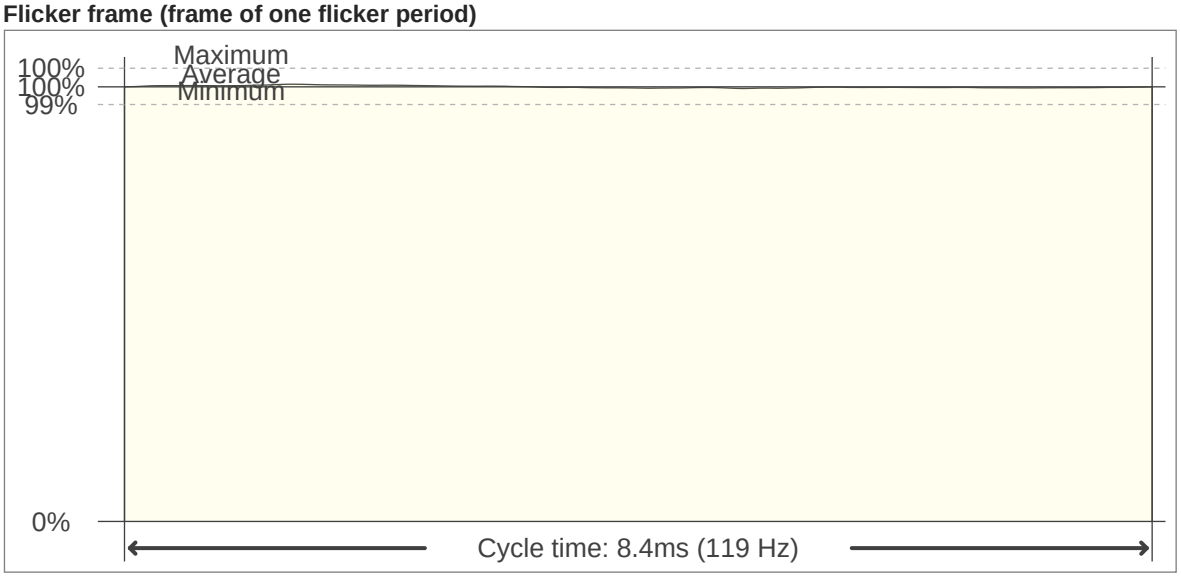
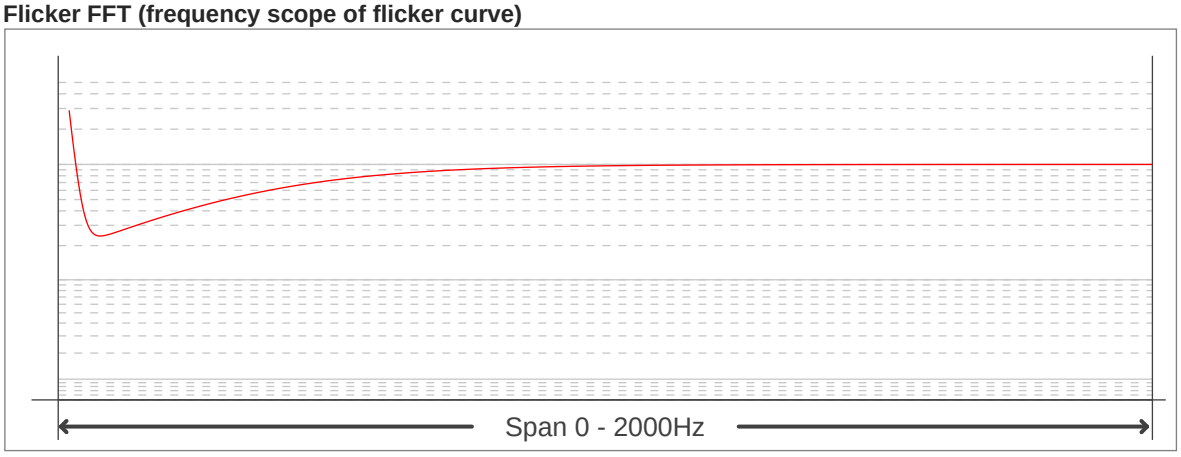
Flicker

Flicker curve (complete sampled flicker signal)

Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**119.05 Hz**
Flicker index:	**0**
Flicker percentage:	**0.61 %**
SVM: (Visual flicker)	**0.01**

Flicker conditions:

Sample rate:	**40000 samples/second**

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