Light efficiency:

133 Lumen/Watt

Light quality:

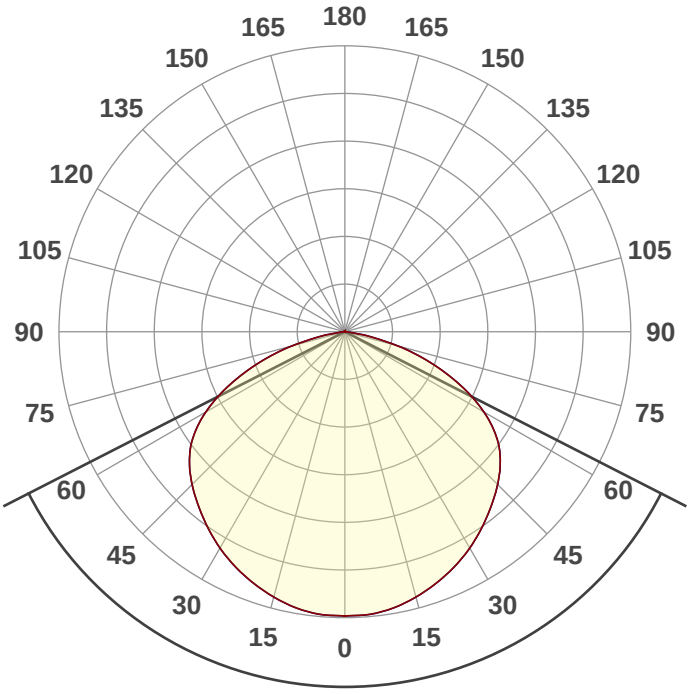
CRI: 85.2

Color temperature:

5075 K

Output: 25011 lm
Peak: 7911 cd

Power: 188.7 W
PF: 1.0



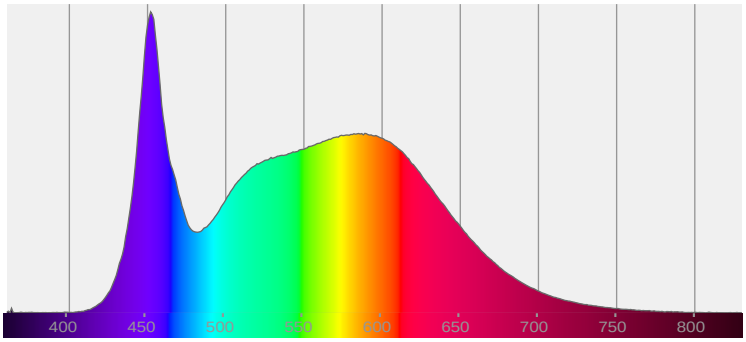
Beam angle 125.8°

Product name:
WUD-50K200H-110

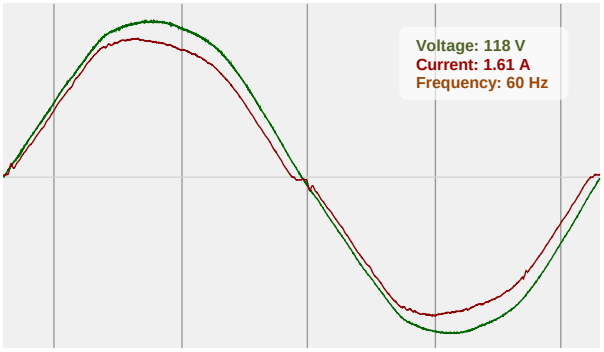
Date and time:
4/29/2019 9:50:30 AM

CIE 1931
x: 0.343
y: 0.352

Spectra



Power



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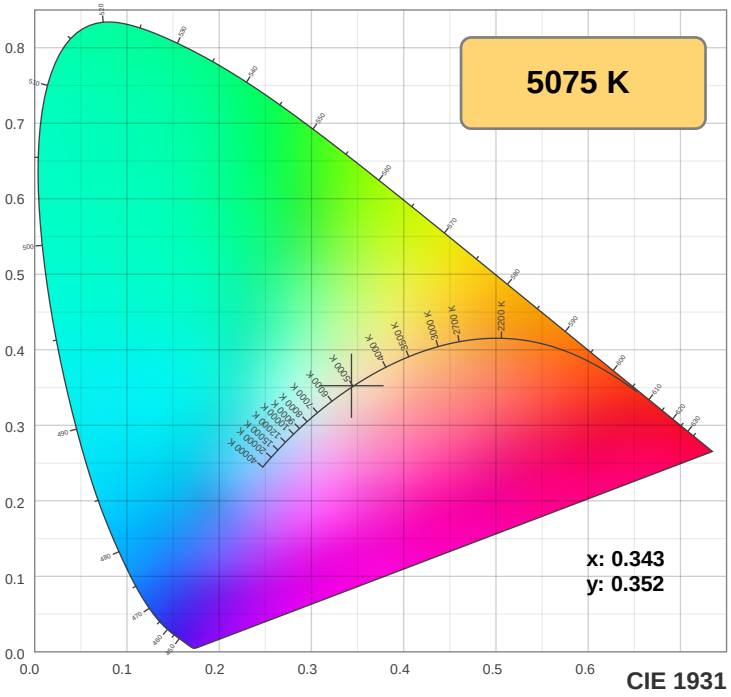
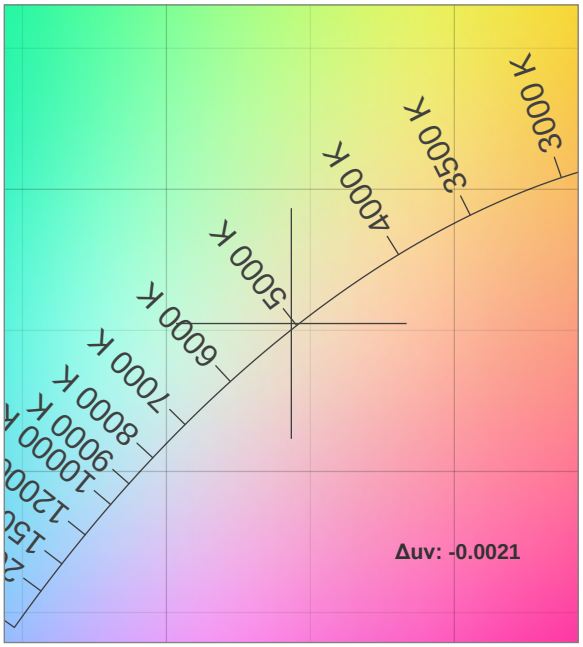
Color Specifications

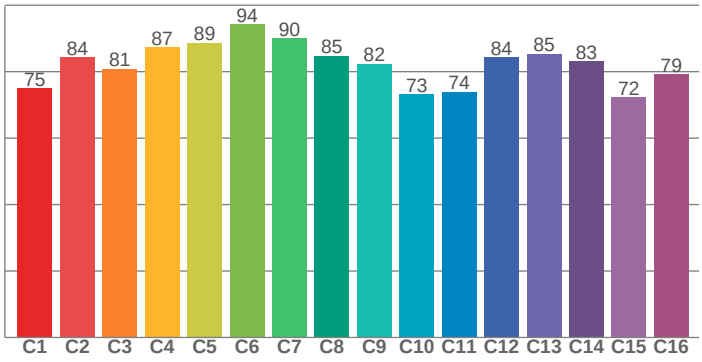


CIE 1931

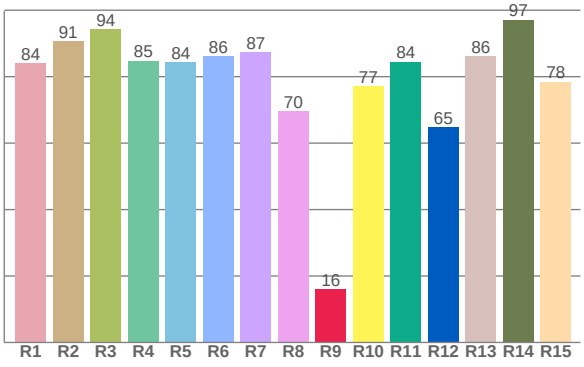


CIE 1931 ZOOM

TM30: 82.8



CRI: 85.2 (R1-R8)



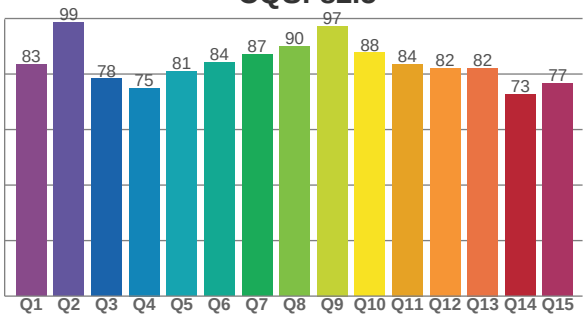
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
84.0	90.7	94.2	84.8	84.4	86.1	87.4	69.6	15.9	77.2	84.5	64.8	86.1	97.2	78.5

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
75.0	84.3	80.8	87.3	88.6	94.2	90.0	84.8	82.4	73.2	74.0	84.3	85.4	83.1	72.3	79.2

CQS: 82.5



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83.5	98.7	78.4	75.0	81.0	84.2	87.1	90.0	97.3	87.7	83.6	82.2	82.2	72.7	76.7

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
5075 K	85.2	15.9	82.8	94.7	82.5	0.343	0.352	0.210	0.323	-0.0021

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TM30 Report

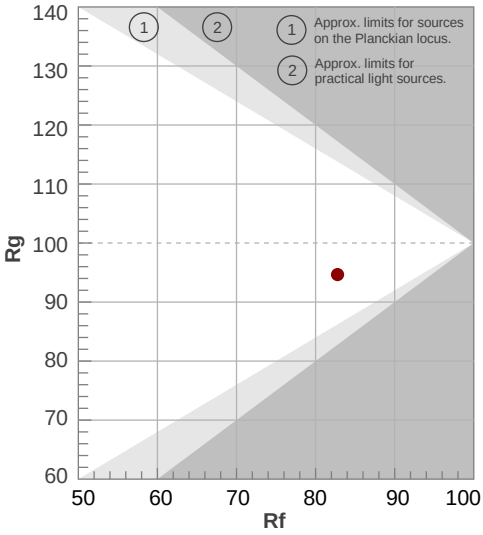
Rf 82.8

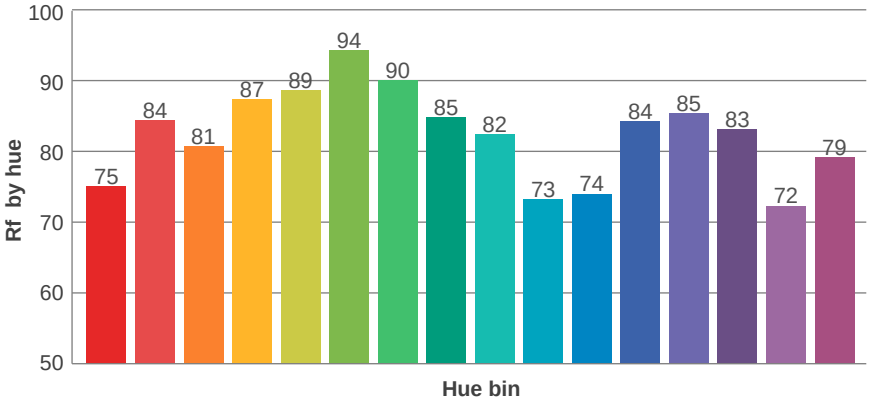
Fidelity index Rf

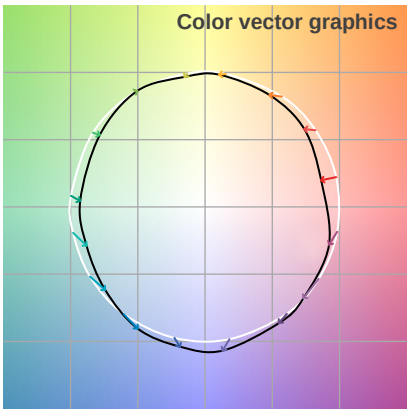
Rg 94.7

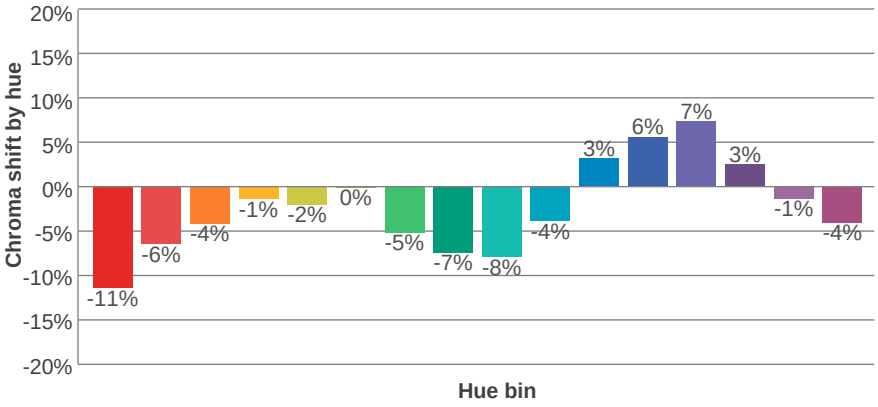
Gammut index Rg

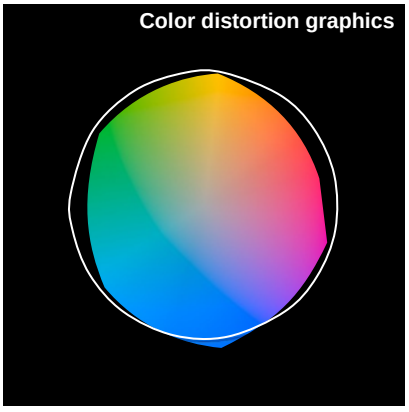
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	75	-11%	0%
2	84	-6%	5%
3	81	-4%	8%
4	87	-1%	5%
5	89	-2%	2%
6	94	0%	-1%
7	90	-5%	-1%
8	85	-7%	2%
9	82	-8%	11%
10	73	-4%	14%
11	74	3%	15%
12	84	6%	5%
13	85	7%	-7%
14	83	3%	-9%
15	72	-1%	-18%
16	79	-4%	-11%

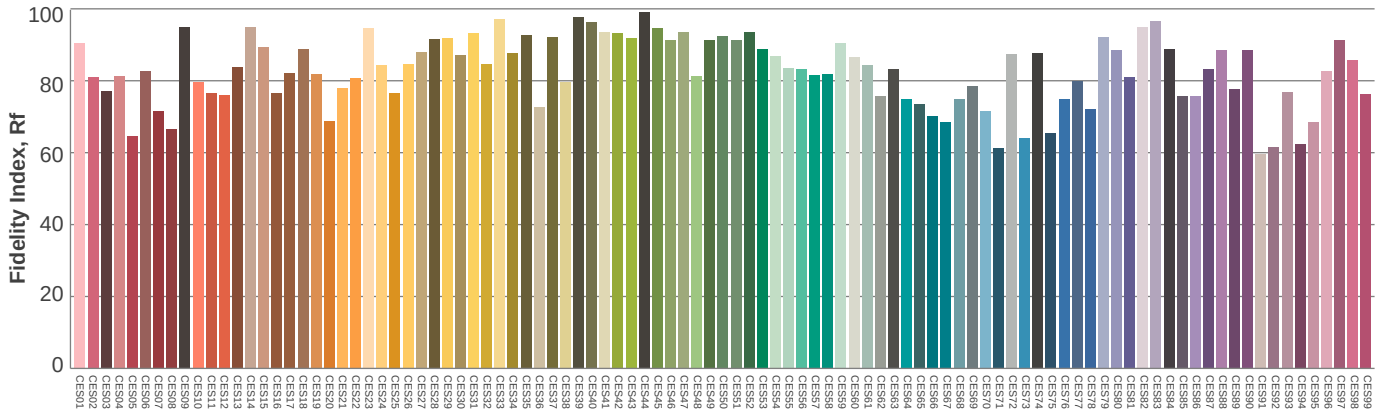












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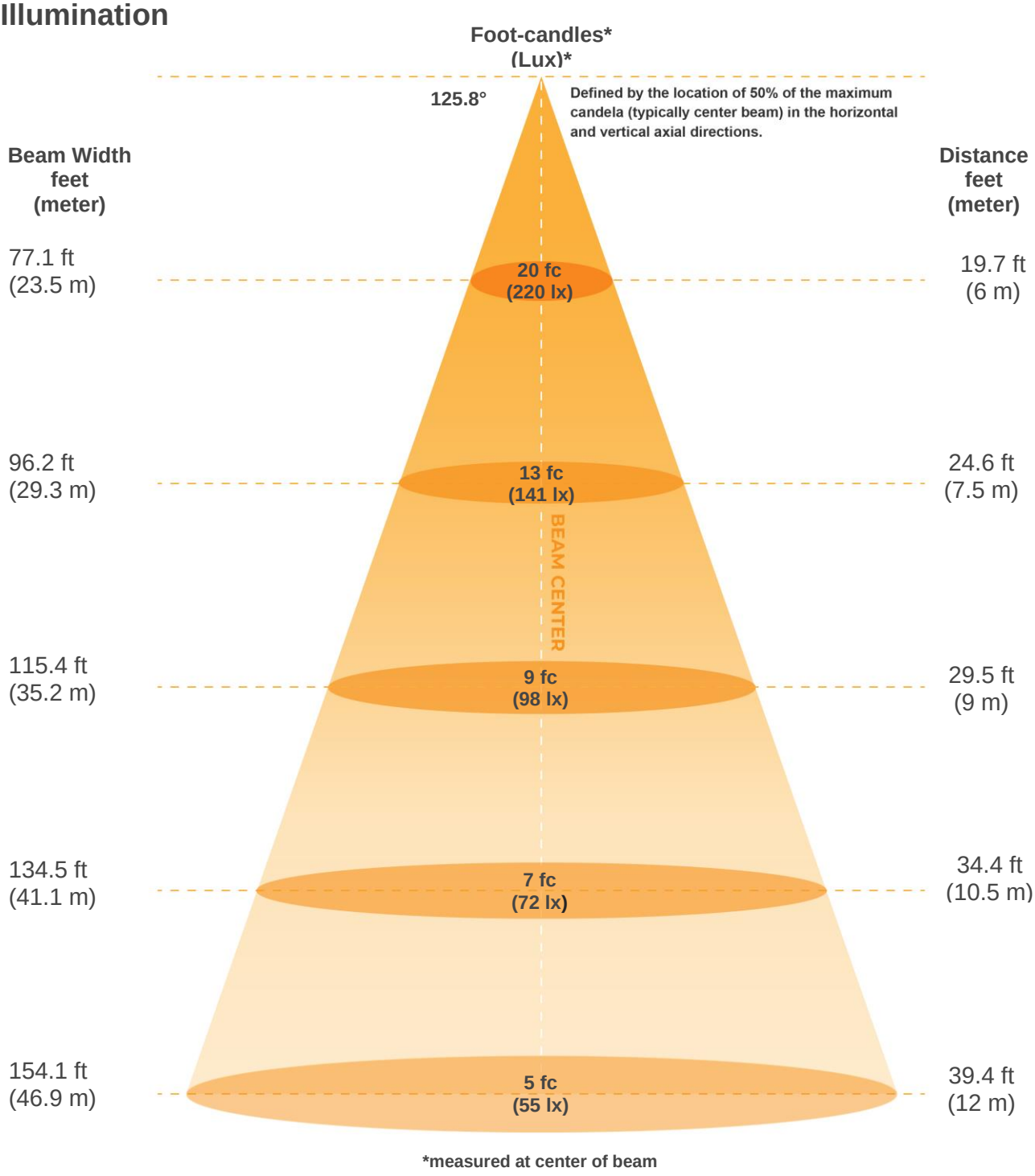
Illumination



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
7911lx	1978lx	879lx	494lx	316lx	220lx	161lx	124lx	98lx	79lx	65lx	55lx	47lx	40lx	35lx	31lx	27lx	24lx	22lx	20lx
735fcd	183.7fc	81.7fcd	45.9fcd	29.4fcd	20.4fcd	15fcd	11.5fcd	9.1fcd	7.3fcd	6.1fcd	5.1fcd	4.3fcd	3.7fcd	3.3fcd	2.9fcd	2.5fcd	2.3fcd	2fcd	1.8fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
125.8°	**157.3°**	**166.2°**	**78.5%**	**50.8%**

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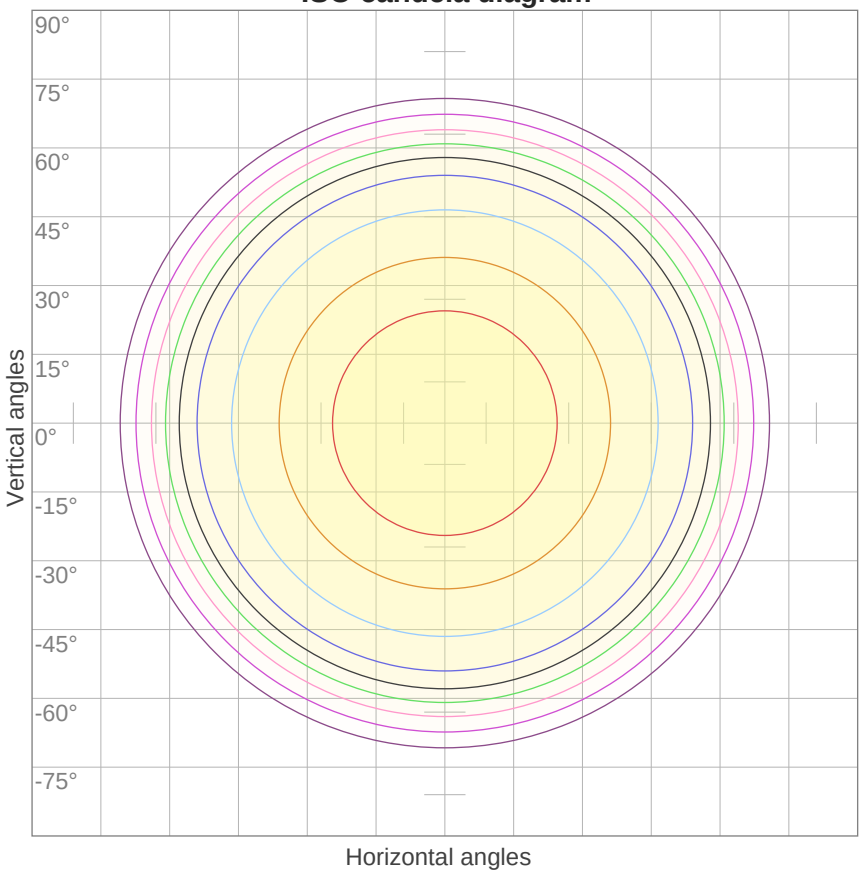
ISO Diagrams

ISO candela diagram



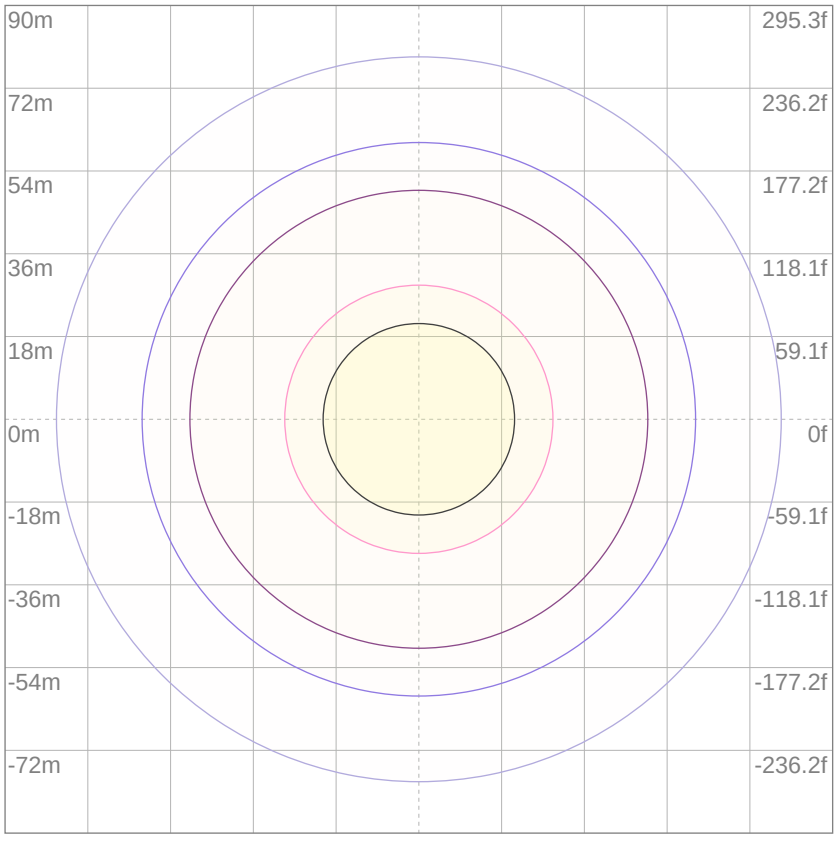
10%	791 cd
20%	1582 cd
30%	2373 cd
40%	3165 cd
50%	3956 cd
60%	4747 cd
70%	5538 cd
80%	6329 cd
90%	7120 cd

Conditions:

Number of c-planes: 16

Candela at center: 7911 cd

ISO lux diagram



3%	2.37 lx
5%	3.96 lx
10%	7.91 lx
30%	23.7 lx
50%	39.6 lx

Conditions:

Number of c-planes: 16

Lux at center: 79.1 lx

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

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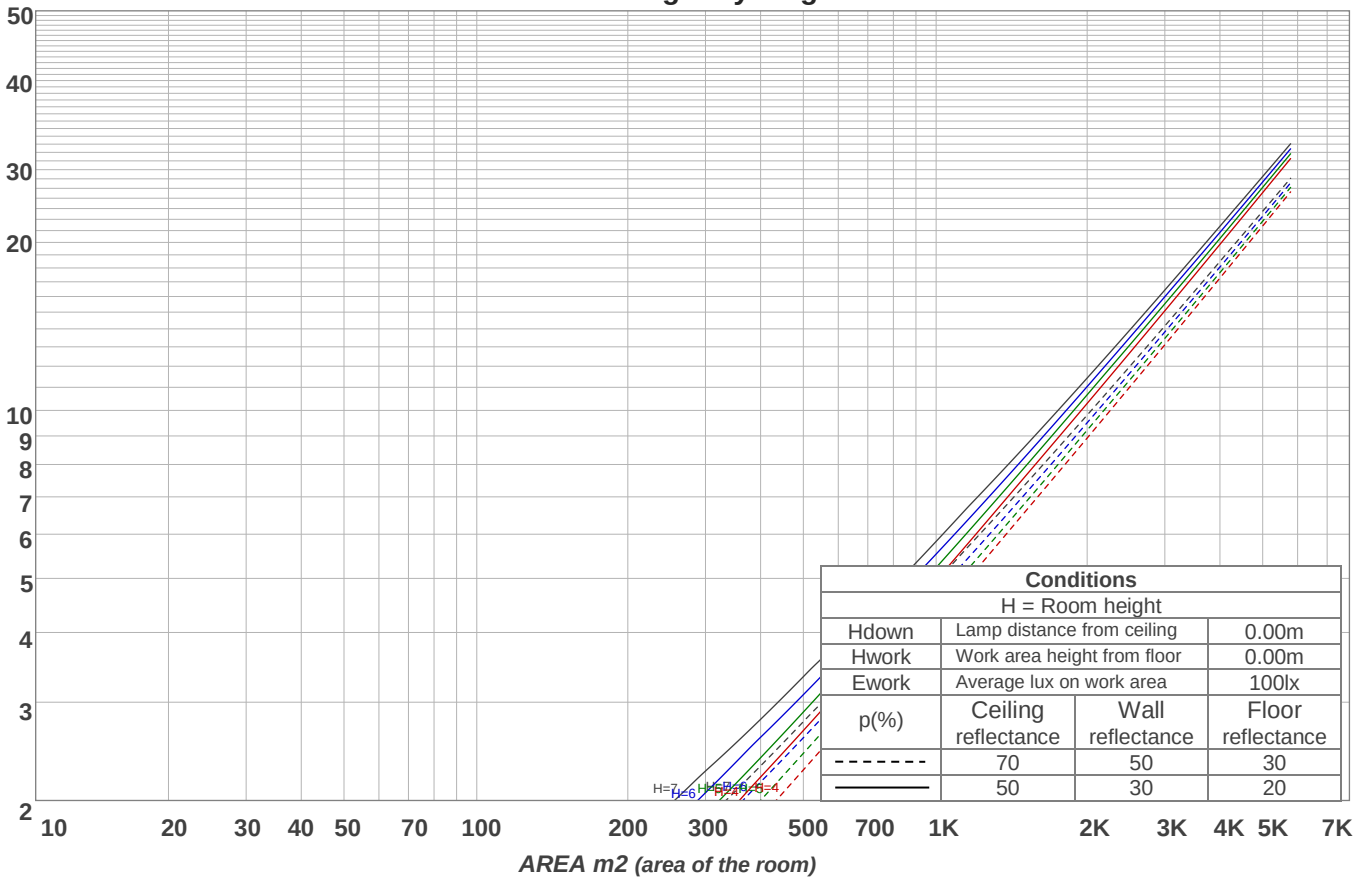
Light Planning

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	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	90	84	78	96	88	82	77	85	80	75	82	77	73	78	75	72	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	45	37	31	58	45	36	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	32	27	39	32	27	38	32	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	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°
750 lm	2159 lm	3329 lm	4169 lm	4643 lm	4582 lm	3513 lm	1626 lm	168 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
6.83 lm	8.47 lm	9.86 lm	10.9 lm	10.9 lm	9.99 lm	8.06 lm	5.22 lm	1.80 lm

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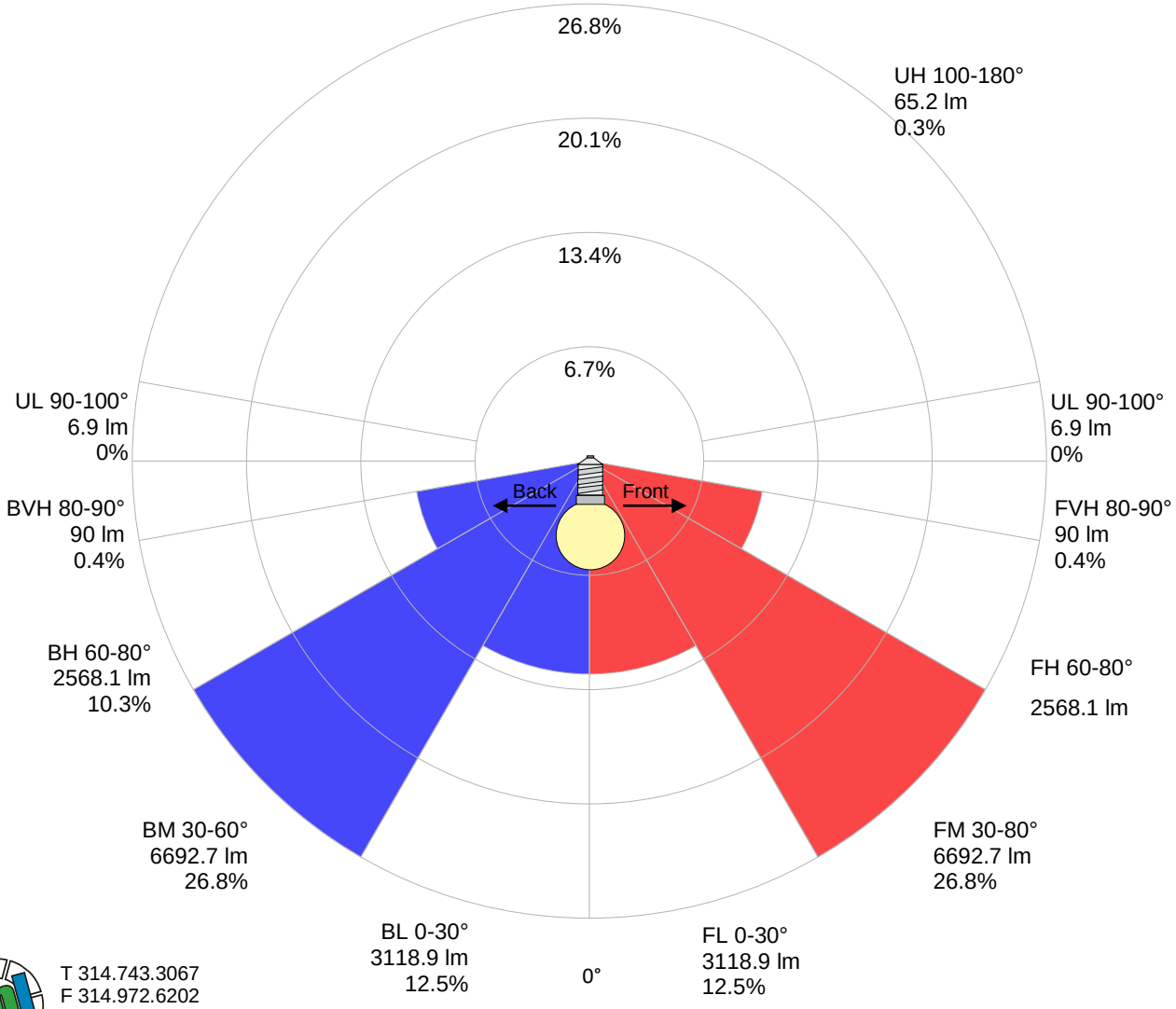
Road Report

LCS table

BUG rating:	B4 U3 G2	
Forward light	Lumens	Lumens %
Low(0-30):	3118.9	12.5%
Medium(30-60):	6692.7	26.8%
High(60-80):	2568.1	10.3%
Very high(80-90):	90	0.4%
Back light		
Low(0-30):	3118.9	12.5%
Medium(30-60):	6692.7	26.8%
High(60-80):	2568.1	10.3%
Very high(80-90):	90	0.4%
Uplight		
Low(90-100):	6.9	0%
High(100-180):	65.2	0.3%

LCS graph



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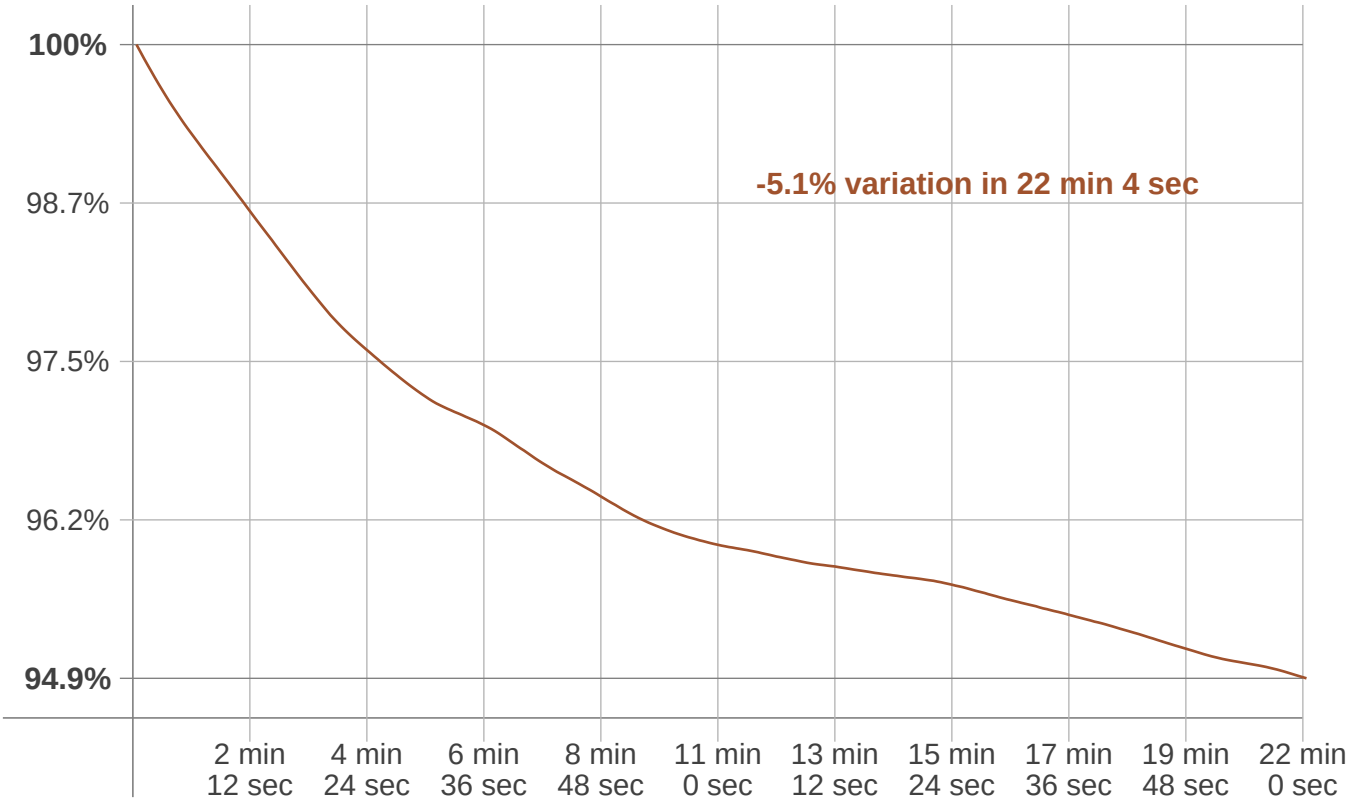
Stabilization

Warmup curve



Warmup result

Warmup time:	**22 min 4 sec**
Warmup variation	**-5.1%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4970 K	+105 K	5075 K

Output change

Output start	Output change	Output end
26329 lm	-1317 lm	25011 lm

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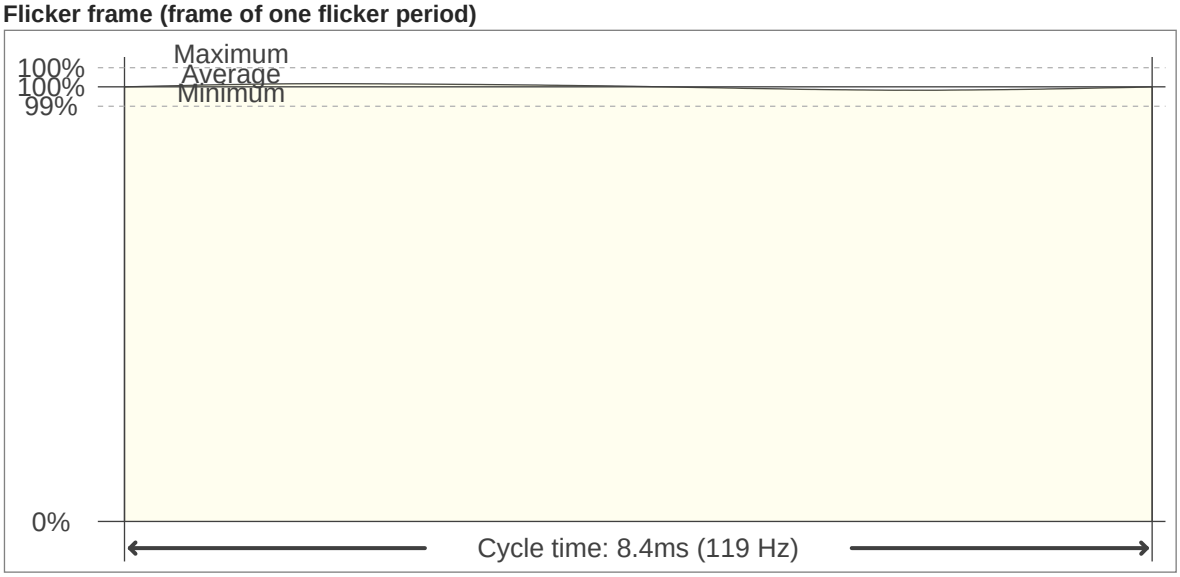
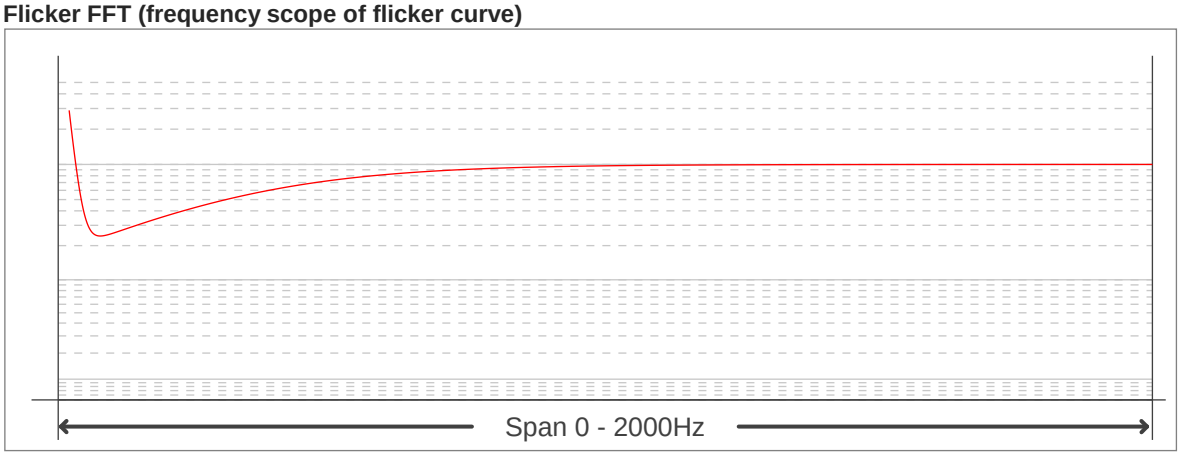
Flicker

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:	**0.78 %**
SVM: (Visual flicker)	**0.03**

Flicker conditions:

Sample rate:	**40000 samples/second**

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