Light efficiency:

134 Lumen/Watt

Light quality:

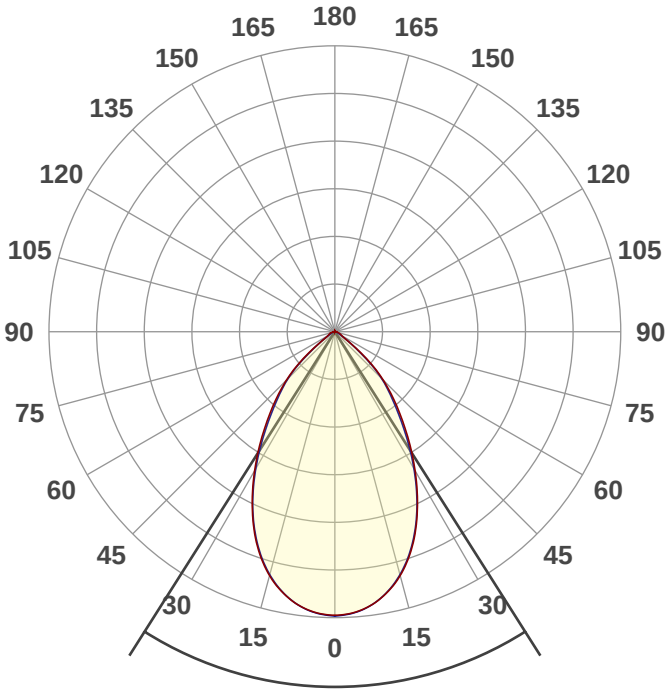
CRI: 73.8

Color temperature:

5503 K

Output: 16340 lm
Peak: 13650 cd

Power: 122.2 W
PF: 1.0



Beam angle **64.8°**

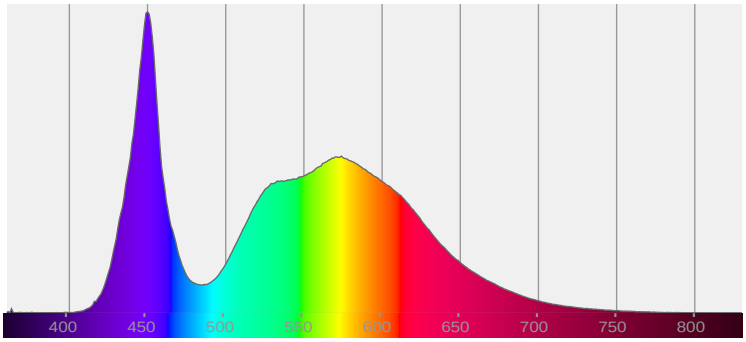
CIE 1931
x: 0.332
y: 0.332

Product name:
WPR2-50K120-FST1-BRP

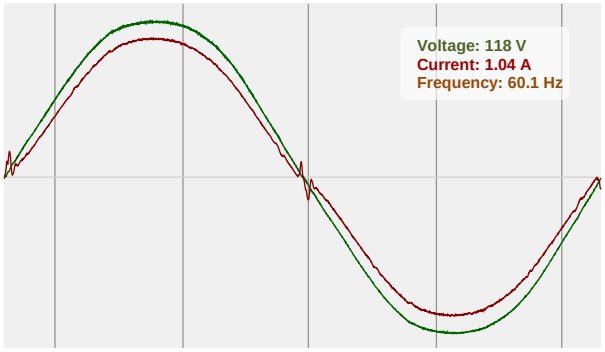
Light Head Aiming:
both in default position, facing straight down

Date and time:
3/9/2021 3:58:27 PM

Spectra



Power



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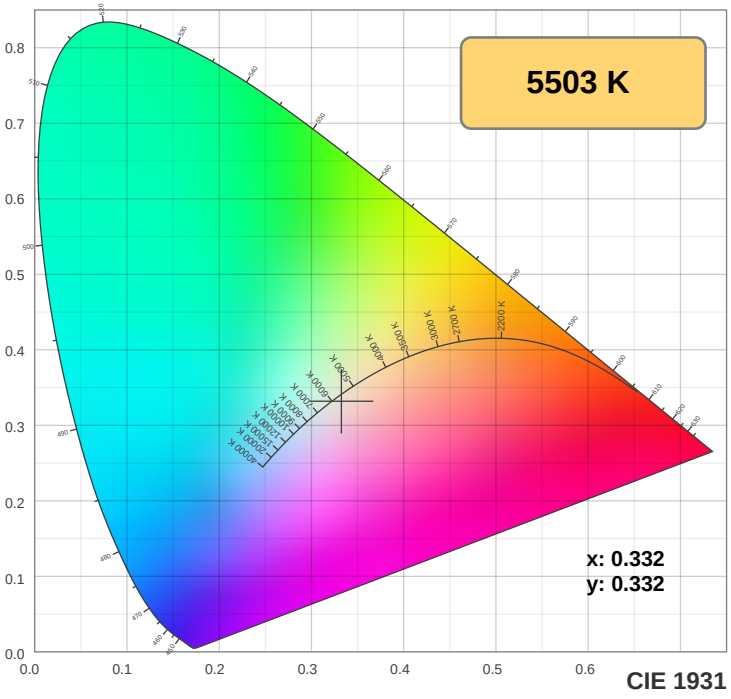
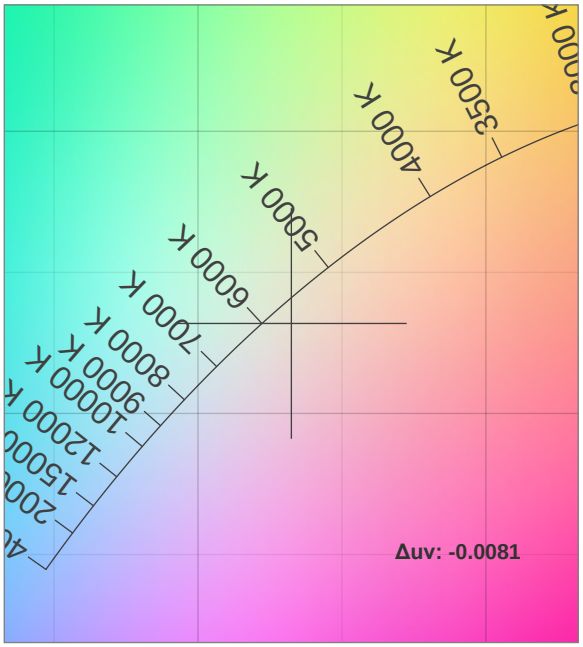
Color Specifications

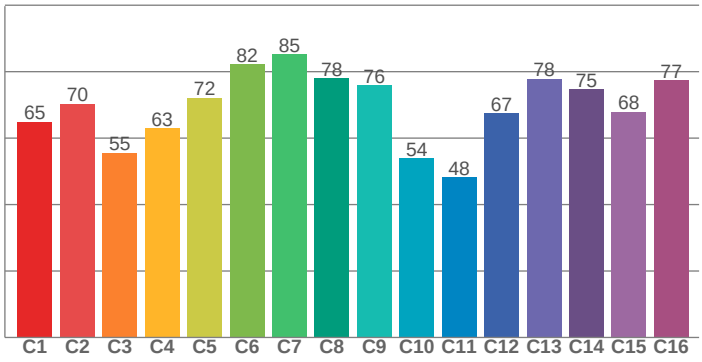


CIE 1931

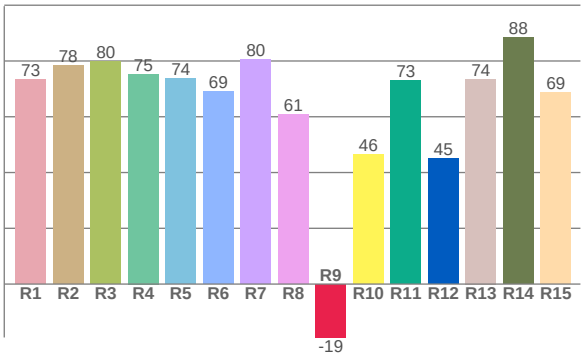


CIE 1931 ZOOM

TM30: 68.7



CRI: 73.8 (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
73.2	78.3	79.9	75.3	73.6	68.9	80.4	60.9	-19.1	46.4	73.0	45.2	73.6	88.4	68.8

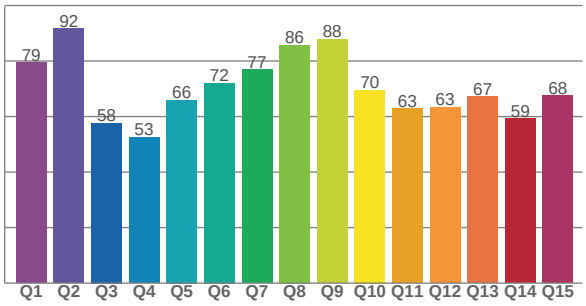
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
64.9	70.3	55.5	63.0	72.0	82.2	85.3	78.0	75.9	53.9	48.2	67.5	77.8	74.7	67.9	77.4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.4	91.6	57.7	52.5	66.0	72.1	77.0	85.7	87.9	69.6	62.9	63.3	67.1	59.2	67.5

CQS: 68.6



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
5503 K	73.8	-19.1	68.7	96.0	68.6	0.332	0.332	0.210	0.315	-0.0081

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TM30 Report

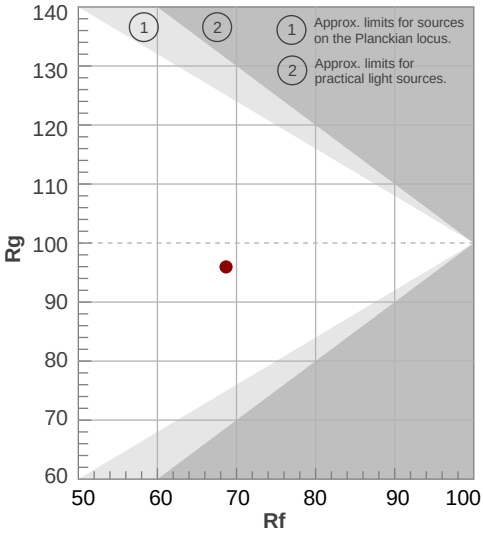
Rf 68.7

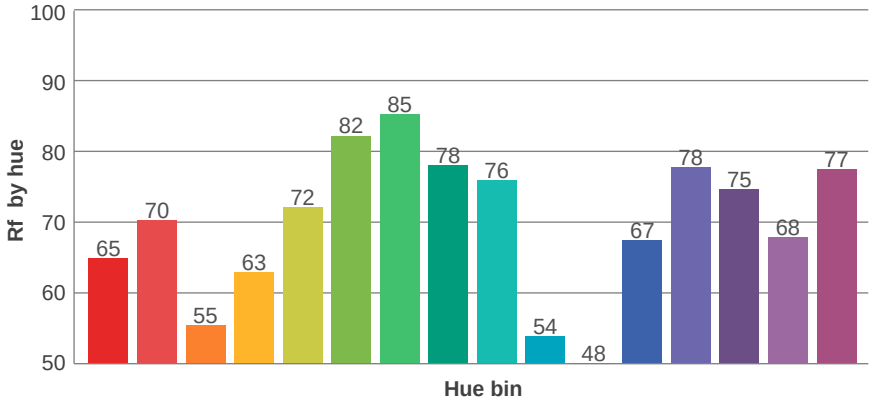
Fidelity index Rf

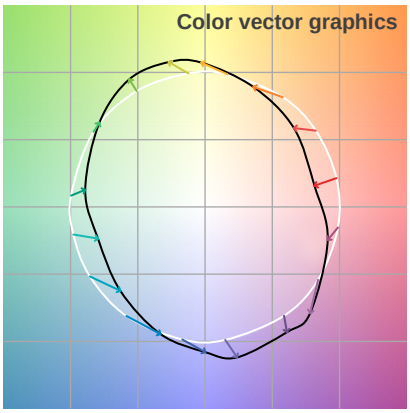
Rg 96.0

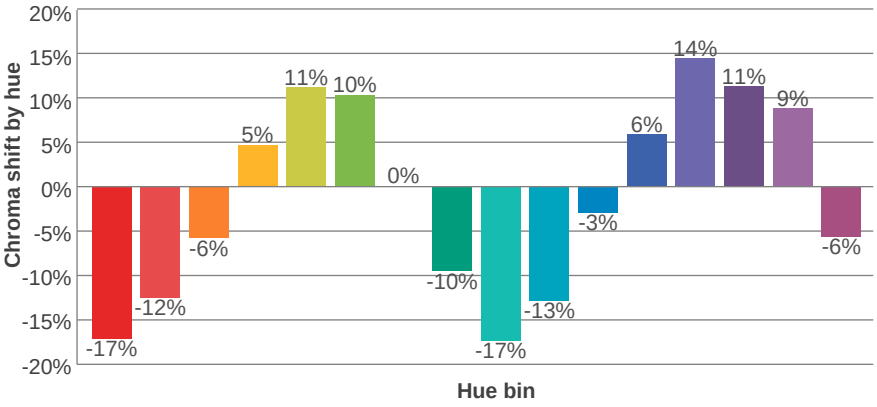
Gammut index Rg

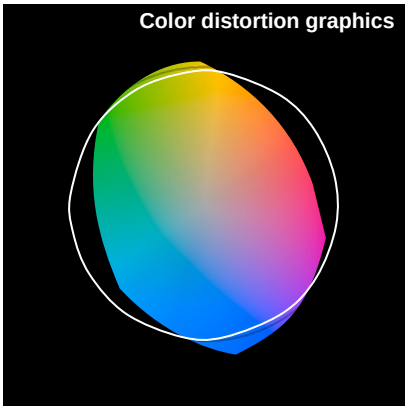
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	65	-17%	-2%
2	70	-12%	11%
3	55	-6%	22%
4	63	5%	21%
5	72	11%	13%
6	82	10%	0%
7	85	0%	-8%
8	78	-10%	-6%
9	76	-17%	7%
10	54	-13%	21%
11	48	-3%	29%
12	67	6%	19%
13	78	14%	6%
14	75	11%	-5%
15	68	9%	-24%
16	77	-6%	-11%

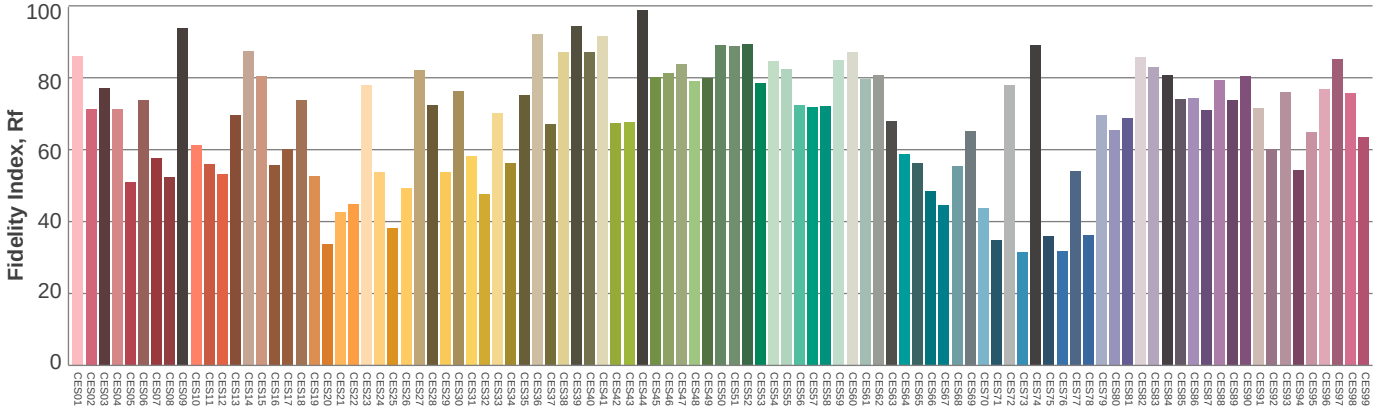












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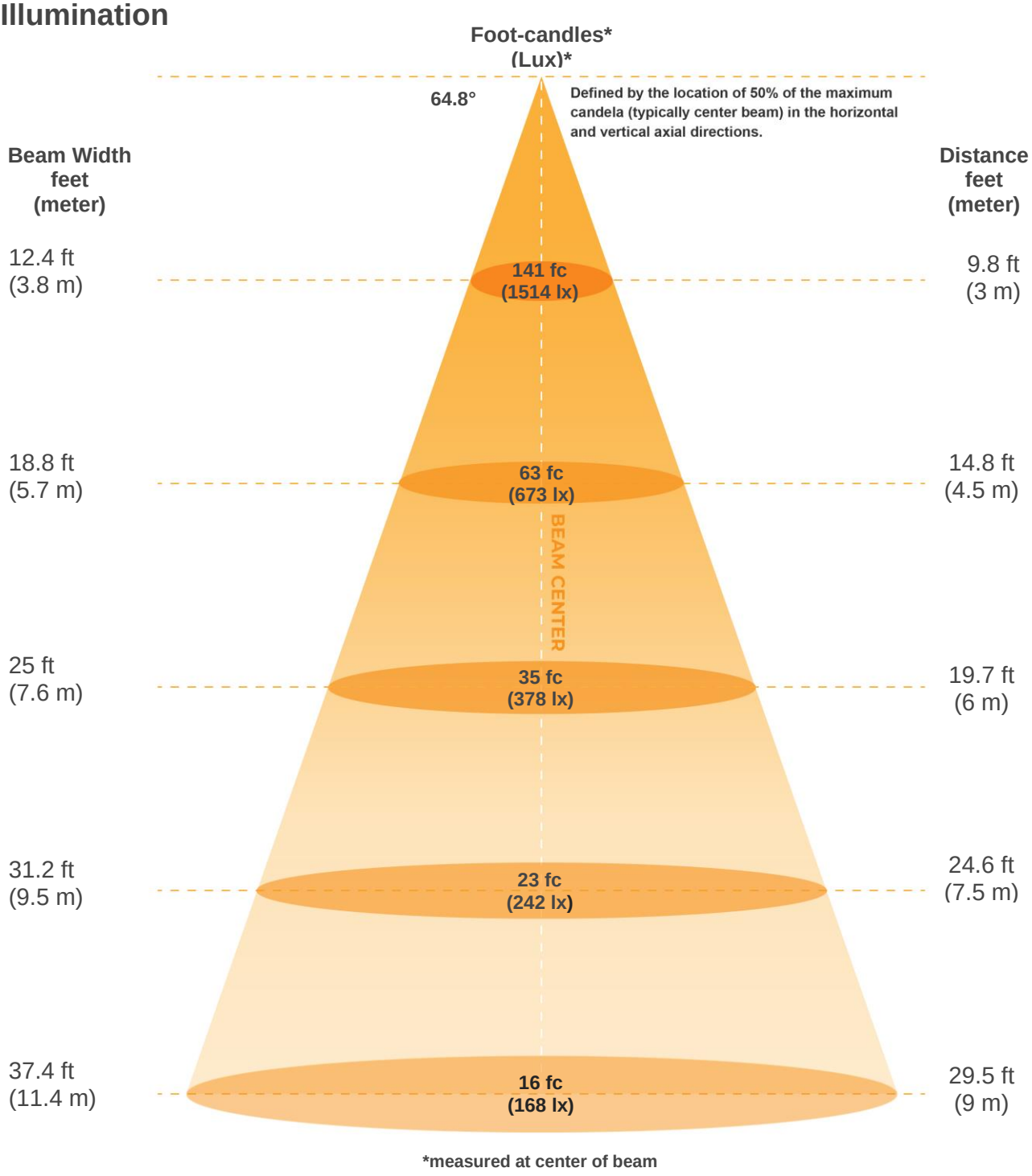
Illumination



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
13624lx	3406lx	1514lx	851lx	545lx	378lx	278lx	213lx	168lx	136lx	113lx	95lx	81lx	70lx	61lx	53lx	47lx	42lx	38lx	34lx
1265.7f	316.4fc	140.6fc	79.1fcd	50.6fcd	35.2fcd	25.8fcd	19.8fcd	15.6fcd	12.7fcd	10.5fcd	8.8fcd	7.5fcd	6.5fcd	5.6fcd	4.9fcd	4.4fcd	3.9fcd	3.5fcd	3.2fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
64.8°	**104°**	**122.3°**	**97.2%**	**86.0%**

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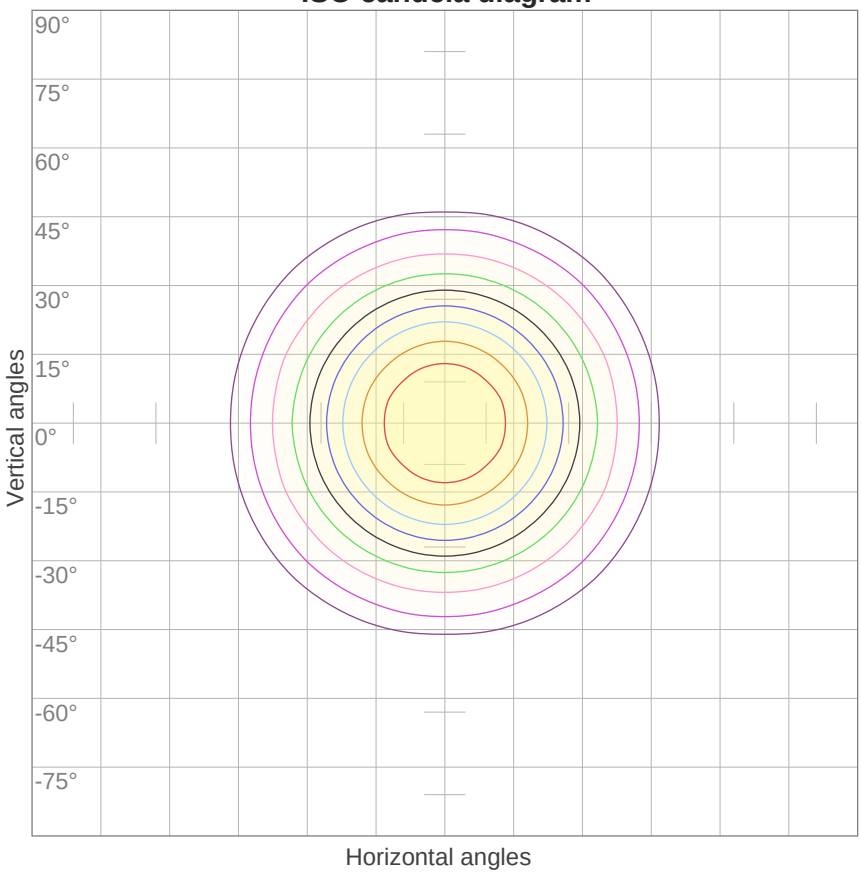
ISO Diagrams

ISO candela diagram



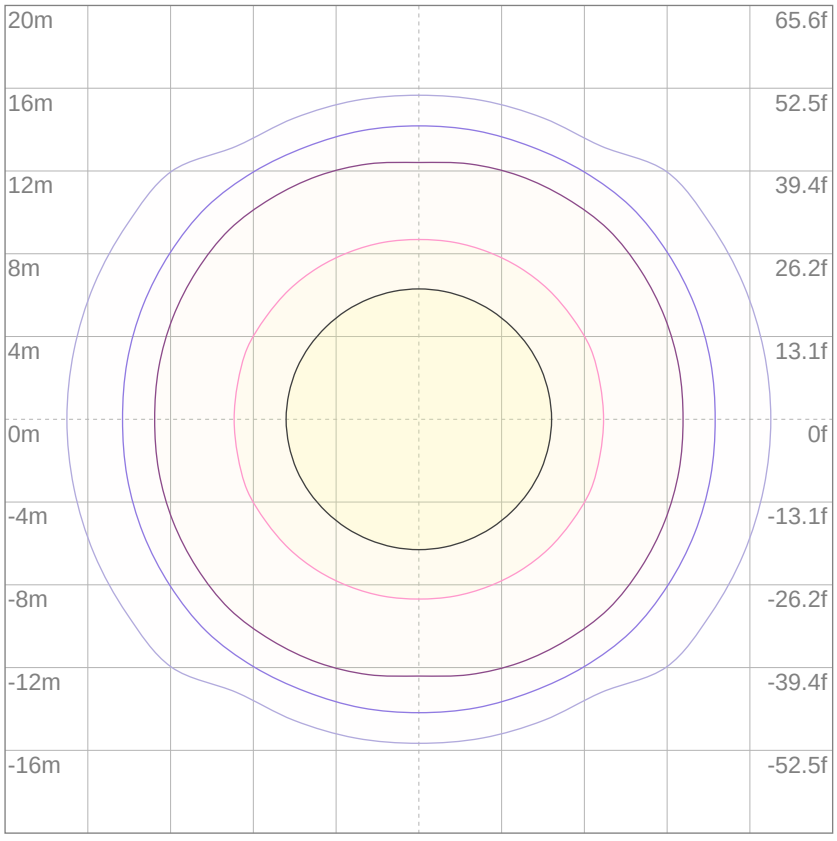
10%	1362 cd
20%	2725 cd
30%	4087 cd
40%	5449 cd
50%	6812 cd
60%	8174 cd
70%	9537 cd
80%	10899 cd
90%	12261 cd

Conditions:

Number of c-planes: 16

Candela at center: 13624 cd

ISO lux diagram



3%	4.09 lx
5%	6.81 lx
10%	13.6 lx
30%	40.9 lx
50%	68.1 lx

Conditions:

Number of c-planes: 16

Lux at center: 136 lx

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

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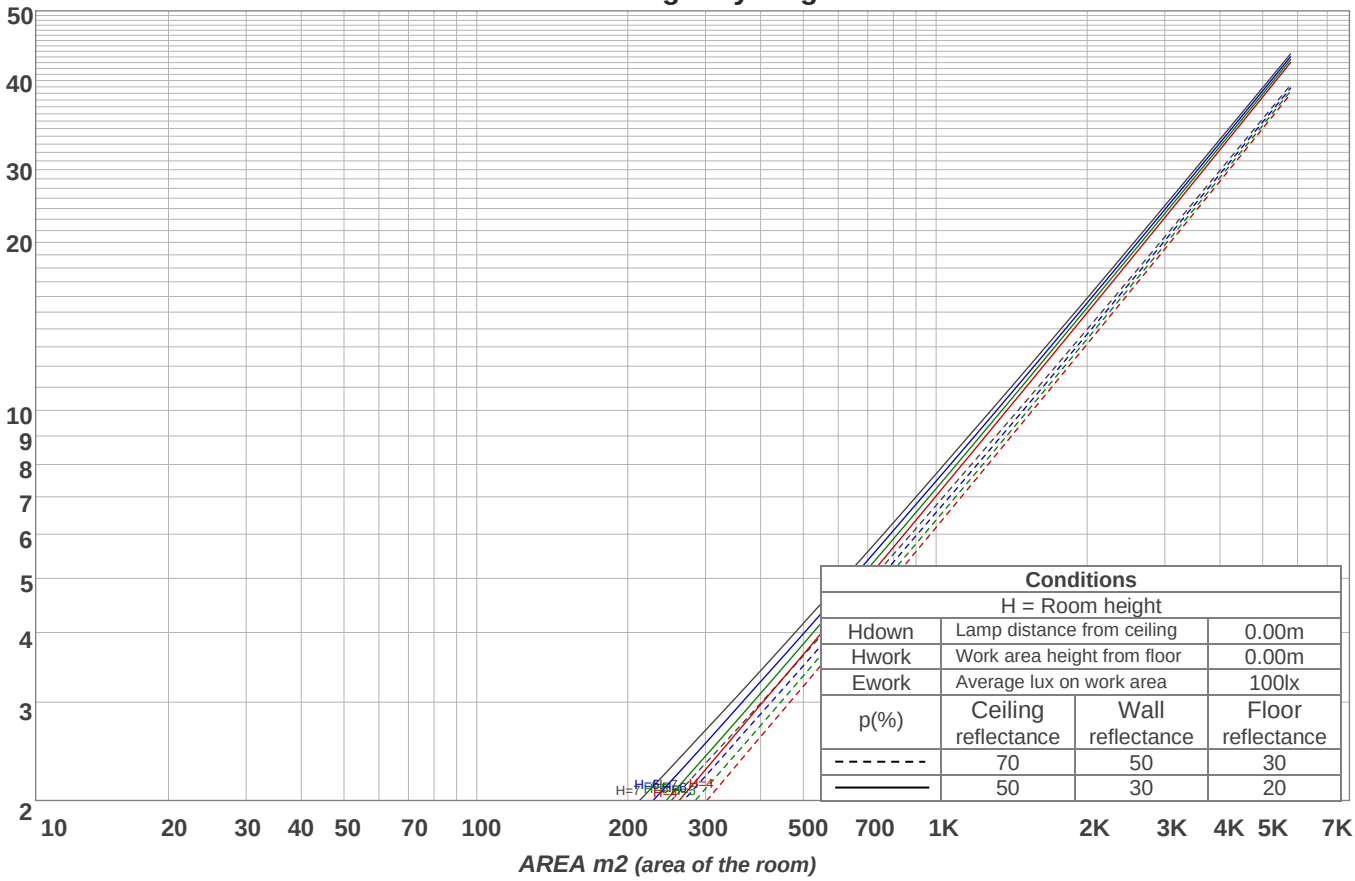
Light Planning

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	112	109	106	104	110	107	105	102	103	101	99	99	97	96	96	94	93	91
2	106	100	96	92	103	98	94	91	95	92	88	92	89	86	89	87	85	83
3	99	92	86	82	97	90	85	81	88	83	80	85	81	78	83	80	77	75
4	93	85	78	73	91	83	78	73	81	76	72	79	75	71	77	73	70	69
5	88	78	71	66	86	77	71	66	75	70	66	73	69	65	72	68	64	63
6	83	72	66	61	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	56	76	66	60	55	65	59	55	64	59	55	63	58	54	53
8	73	63	56	51	72	62	56	51	61	55	51	60	54	51	59	54	50	49
9	69	58	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
1269 lm	3377 lm	4259 lm	3722 lm	2480 lm	782 lm	253 lm	114 lm	23.3 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3.93 lm	4.31 lm	5.46 lm	7.72 lm	9.85 lm	10.9 lm	10.1 lm	7.08 lm	2.62 lm

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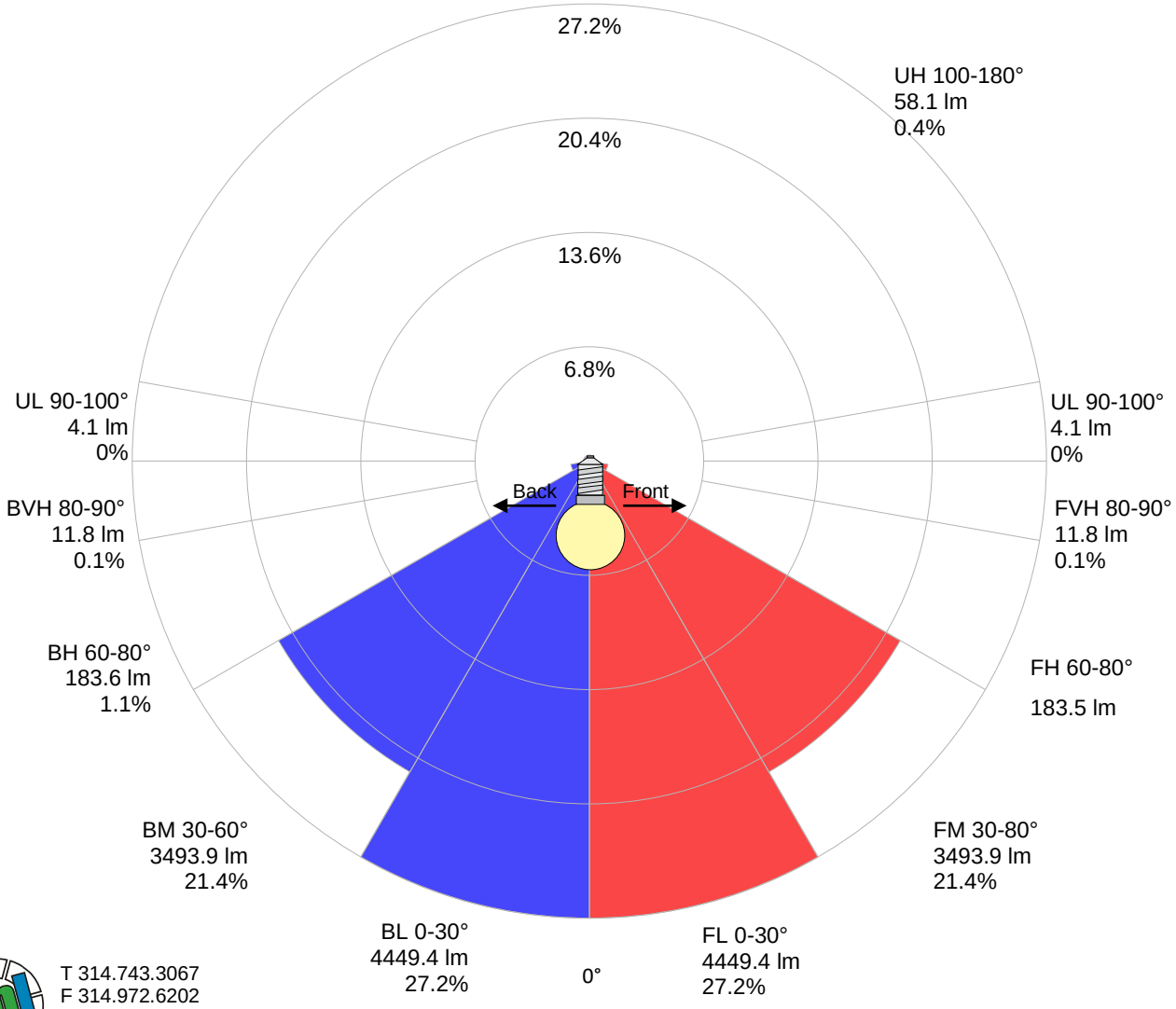
Road Report

LCS table

BUG rating:	B4 U3 G1	
Forward light	Lumens	Lumens %
Low(0-30):	4449.4	27.2%
Medium(30-60):	3493.9	21.4%
High(60-80):	183.5	1.1%
Very high(80-90):	11.8	0.1%
Back light		
Low(0-30):	4449.4	27.2%
Medium(30-60):	3493.9	21.4%
High(60-80):	183.6	1.1%
Very high(80-90):	11.8	0.1%
Uplight		
Low(90-100):	4.1	0%
High(100-180):	58.1	0.4%

LCS graph



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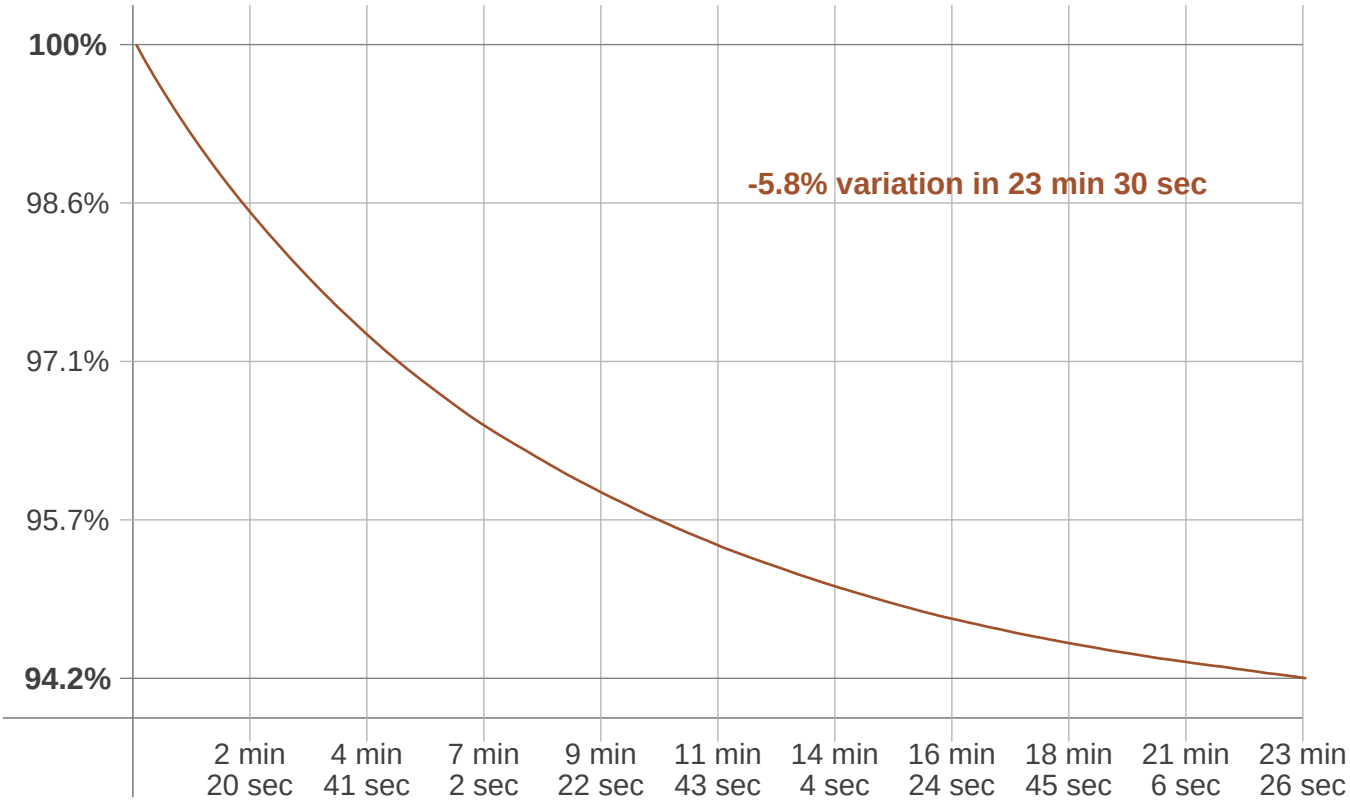
Stabilization

Warmup curve



Warmup result

Warmup time:	**23 min 30 sec**
Warmup variation	**-5.8%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5389 K	+114 K	5503 K

Output change

Output start	Output change	Output end
17317 lm	-976 lm	16340 lm

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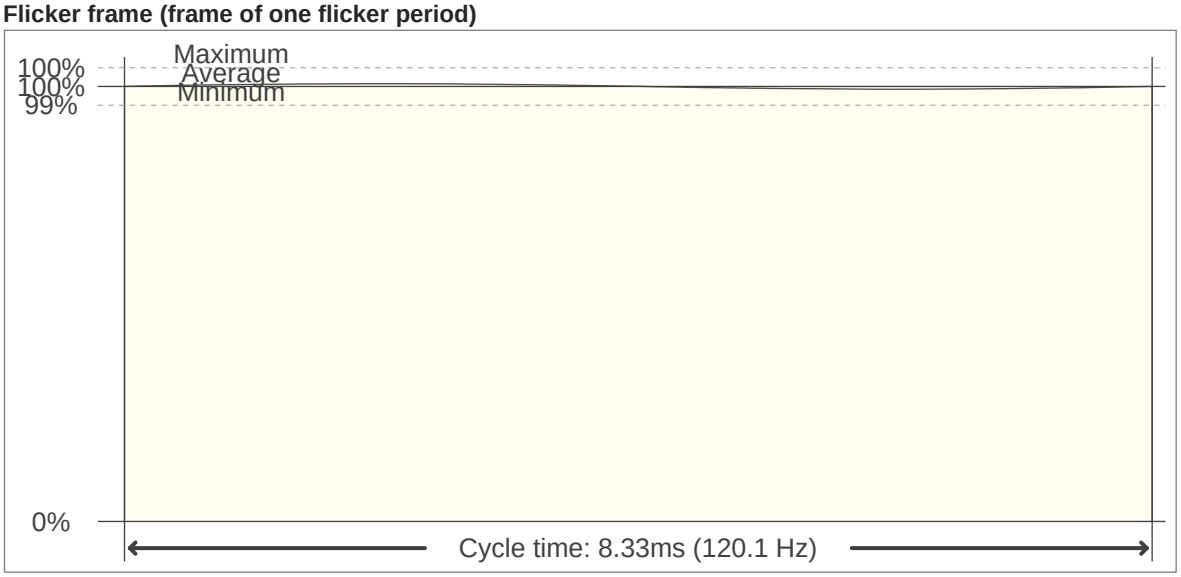
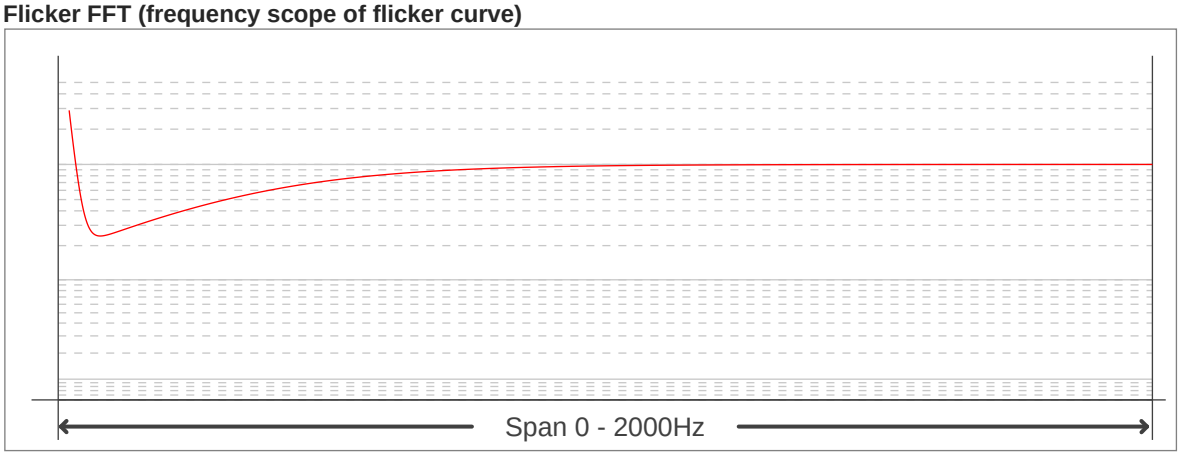
Flicker

Flicker curve (complete sampled flicker signal)

Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**120.12 Hz**
Flicker index:	**0**
Flicker percentage:	**0.65 %**
SVM: (Visual flicker)	**0.02**

Flicker conditions:

Sample rate:	**40000 samples/second**

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