Light efficiency:

133 Lumen/Watt

Light quality:

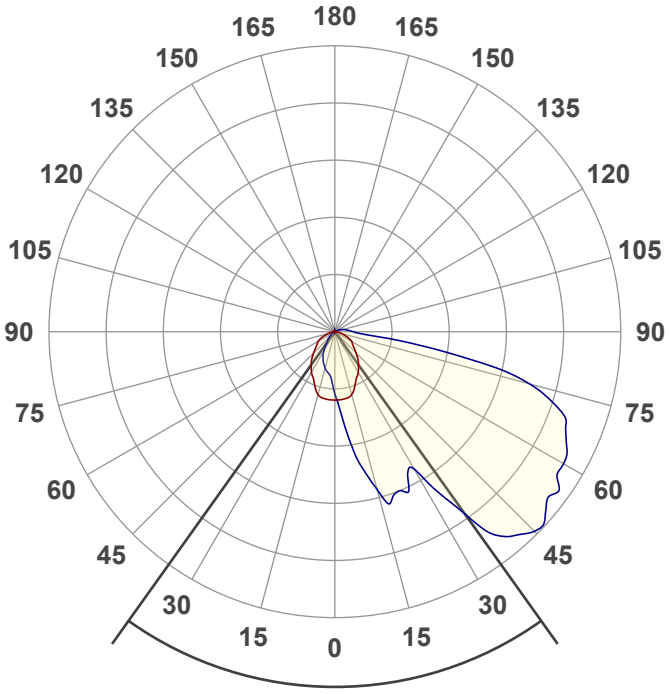
CRI: 84.6

Color temperature:

5038 K

Output: 5078 lm
Peak: 3199 cd

Power: 38.2 W
PF: 1.0



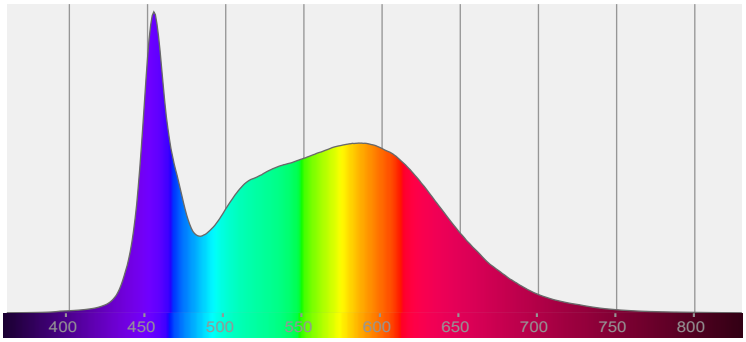
Beam angle 71°

CIE 1931
x: 0.345
y: 0.355

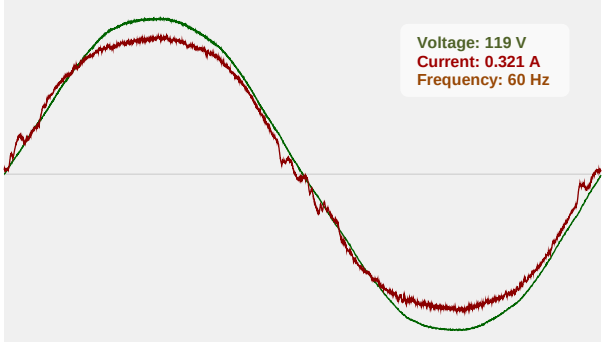
Product name:
WPGL-50K40-H (GS)

Date and time:
5/20/2021 2:37:20 PM

Spectra



Power



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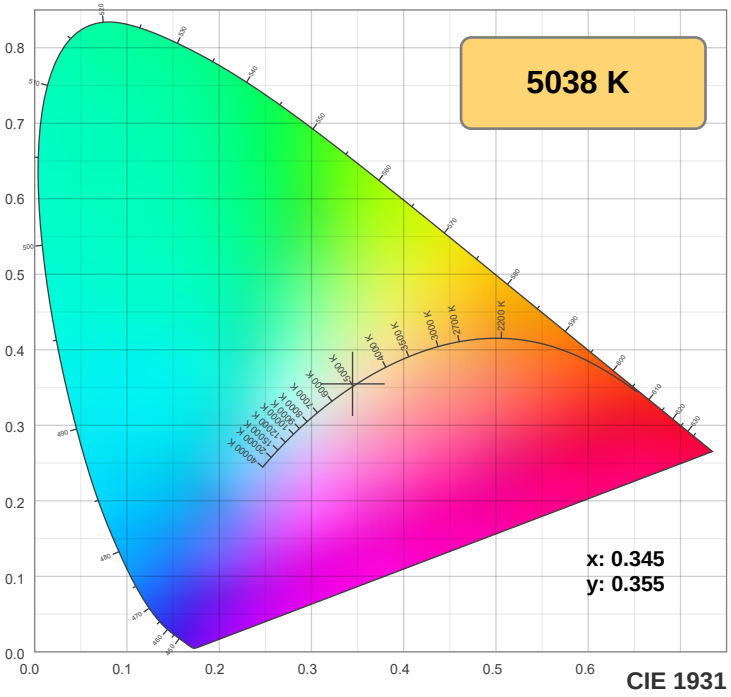
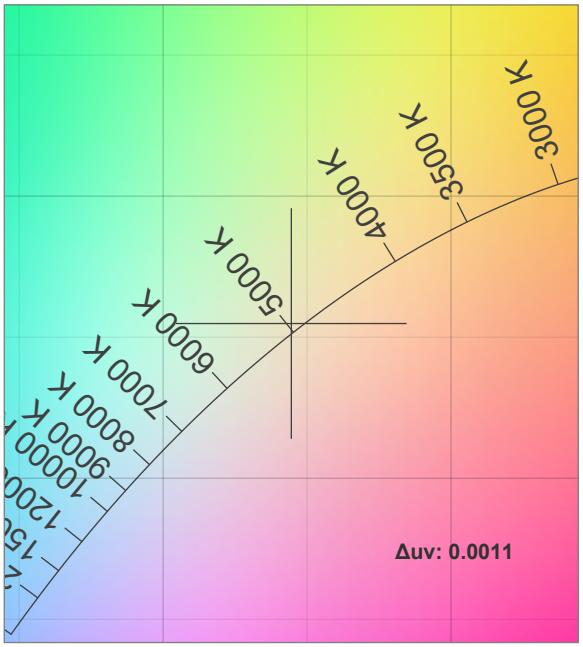
Color Specifications

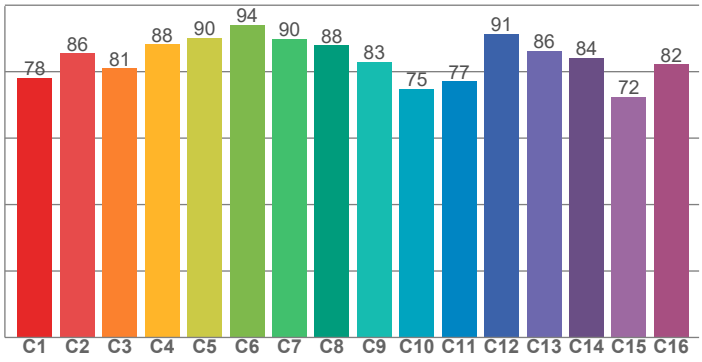


CIE 1931

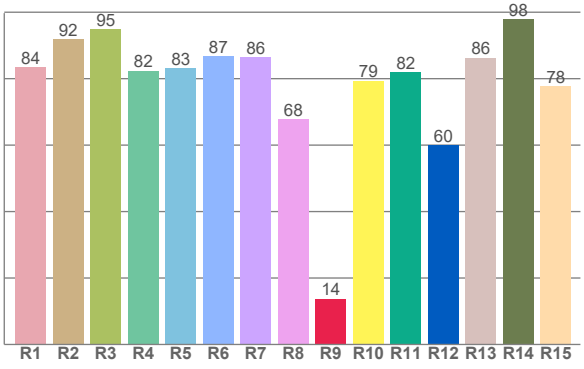


CIE 1931 ZOOM

TM30: 83.9



CRI: 84.6 (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
83.5	91.8	95.0	82.4	83.2	86.8	86.4	67.9	13.7	79.4	81.9	60.0	86.3	97.9	77.8

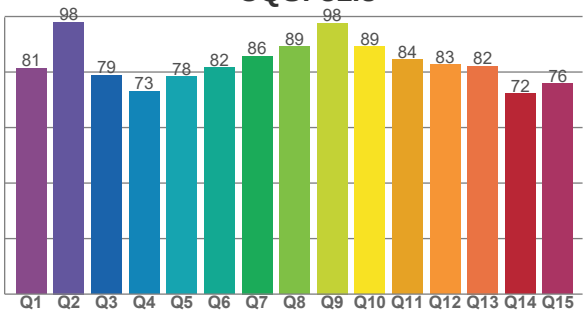
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78.1	85.5	81.0	88.2	90.1	94.1	89.9	88.0	82.9	74.9	77.1	91.3	86.2	84.1	72.5	82.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.4	98.0	78.8	73.0	78.3	81.5	85.7	89.2	97.7	89.2	84.4	82.6	82.2	72.2	75.9

CQS: 81.8



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
5038 K	84.6	13.7	83.9	94.4	81.8	0.345	0.355	0.210	0.324	0.0011

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TM30 Report

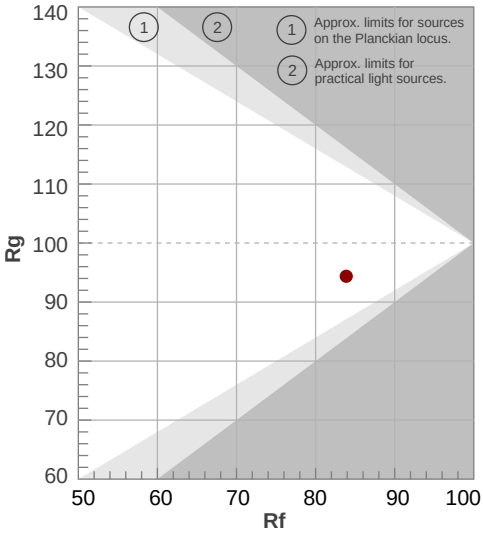
Rf 83.9

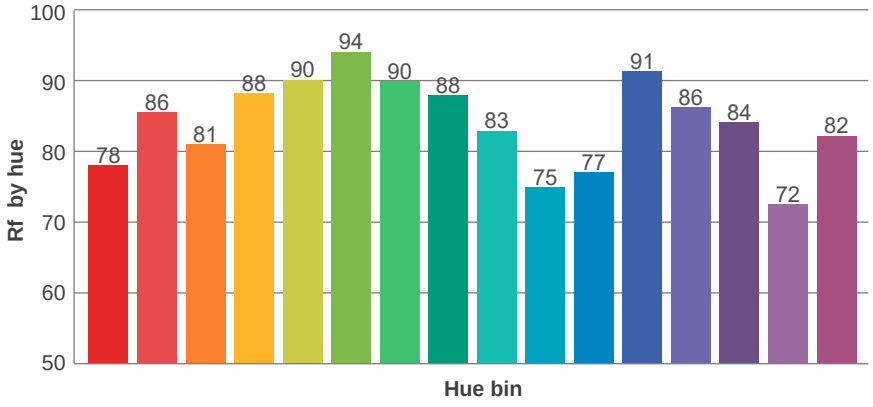
Fidelity index Rf

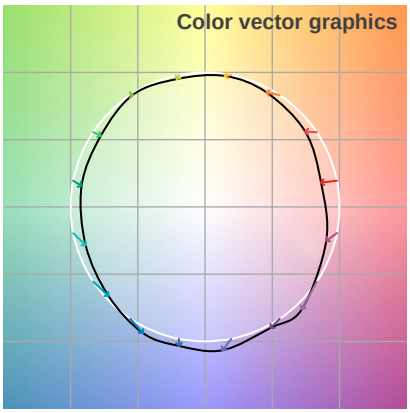
Rg 94.4

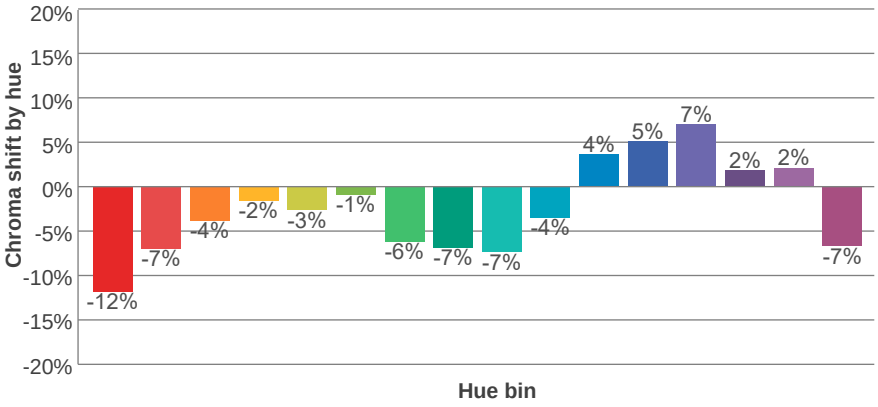
Gammut index Rg

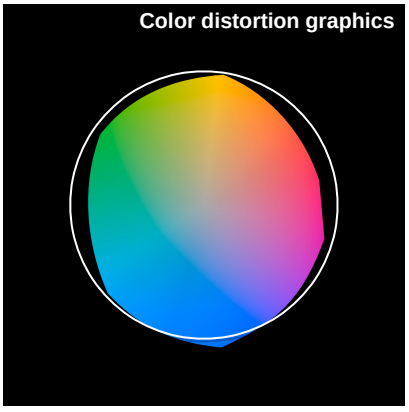
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	78	-12%	1%
2	86	-7%	5%
3	81	-4%	9%
4	88	-2%	5%
5	90	-3%	2%
6	94	-1%	-2%
7	90	-6%	-1%
8	88	-7%	3%
9	83	-7%	11%
10	75	-4%	15%
11	77	4%	14%
12	91	5%	1%
13	86	7%	-8%
14	84	2%	-9%
15	72	2%	-23%
16	82	-7%	-7%

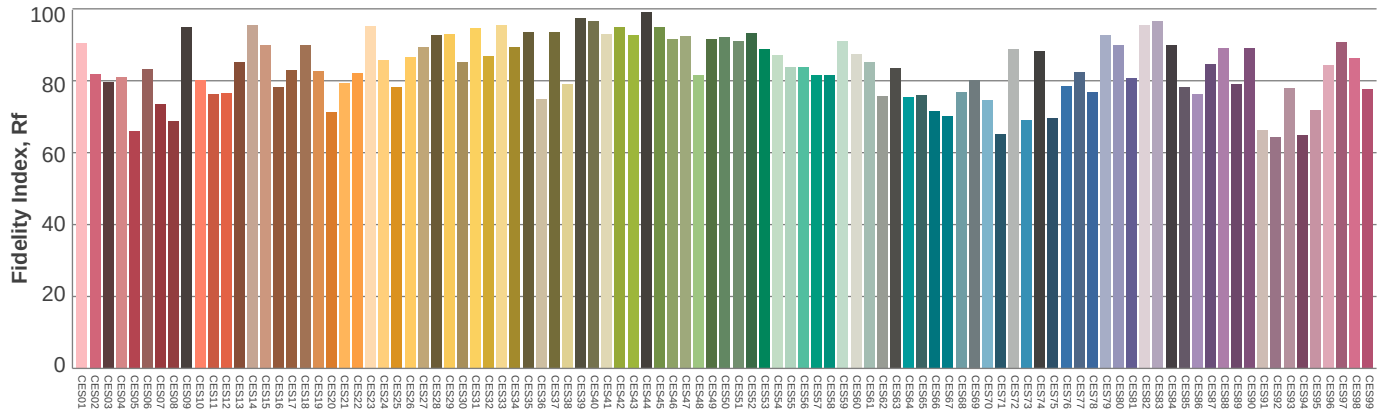












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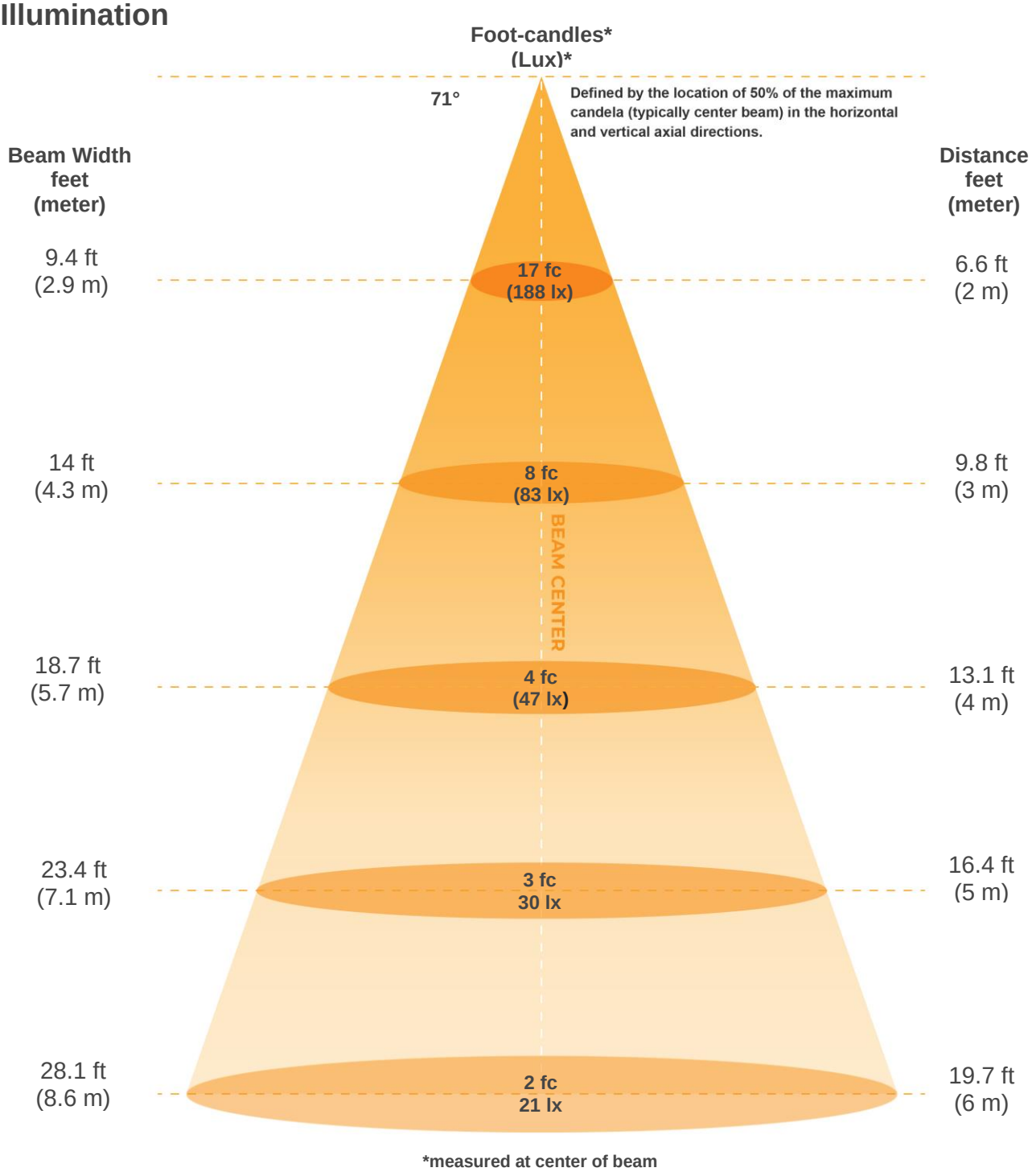
Illumination



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
751lx	188lx	83lx	47lx	30lx	21lx	15lx	12lx	9lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx
69.8fcd	17.5fcd	7.8fcd	4.4fcd	2.8fcd	1.9fcd	1.4fcd	1.1fcd	0.9fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
71°	**128.2°**	**164.2°**	**63.6%**	**36.0%**

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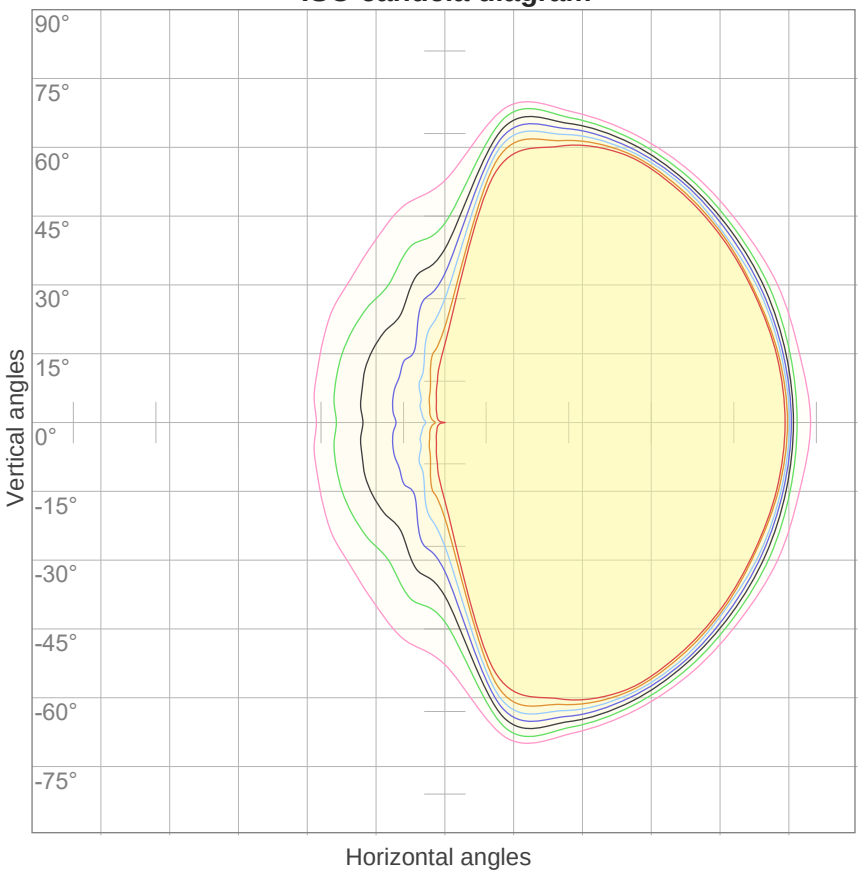
ISO Diagrams

ISO candela diagram



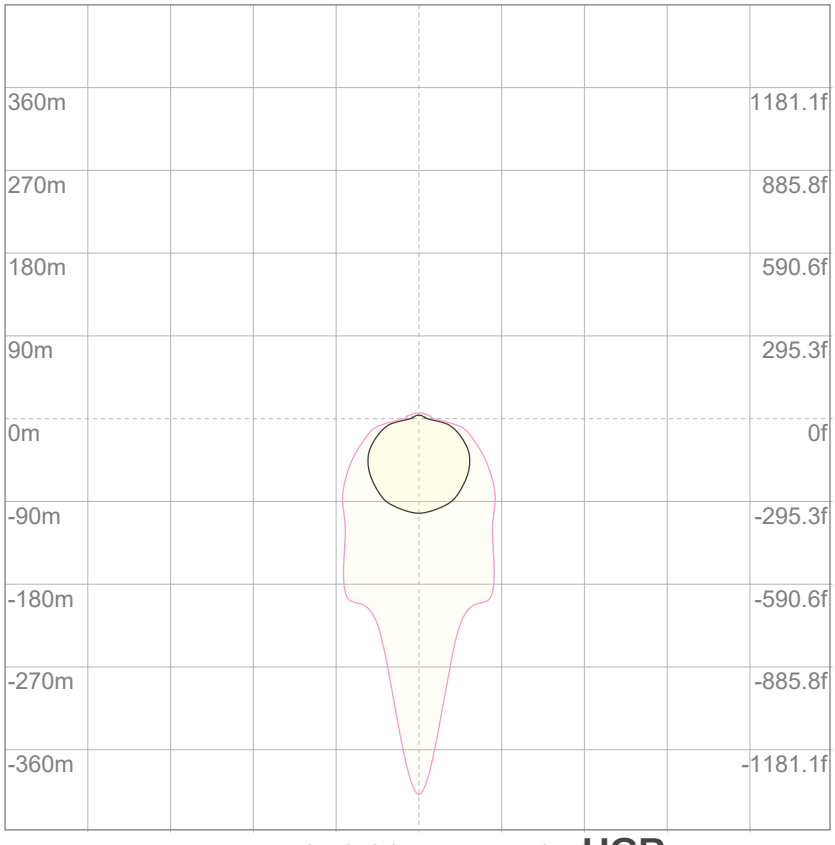
10%	75 cd
20%	150 cd
30%	225 cd
40%	301 cd
50%	376 cd
60%	451 cd
70%	526 cd
80%	601 cd
90%	676 cd

Conditions:

Number of c-planes: 16

Candela at center: 751 cd

ISO lux diagram



3%	0.225 lx
5%	0.376 lx
10%	0.751 lx
30%	2.25 lx
50%	3.76 lx

Conditions:

Number of c-planes: 16

Lux at center: 7.51 lx

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

UGR

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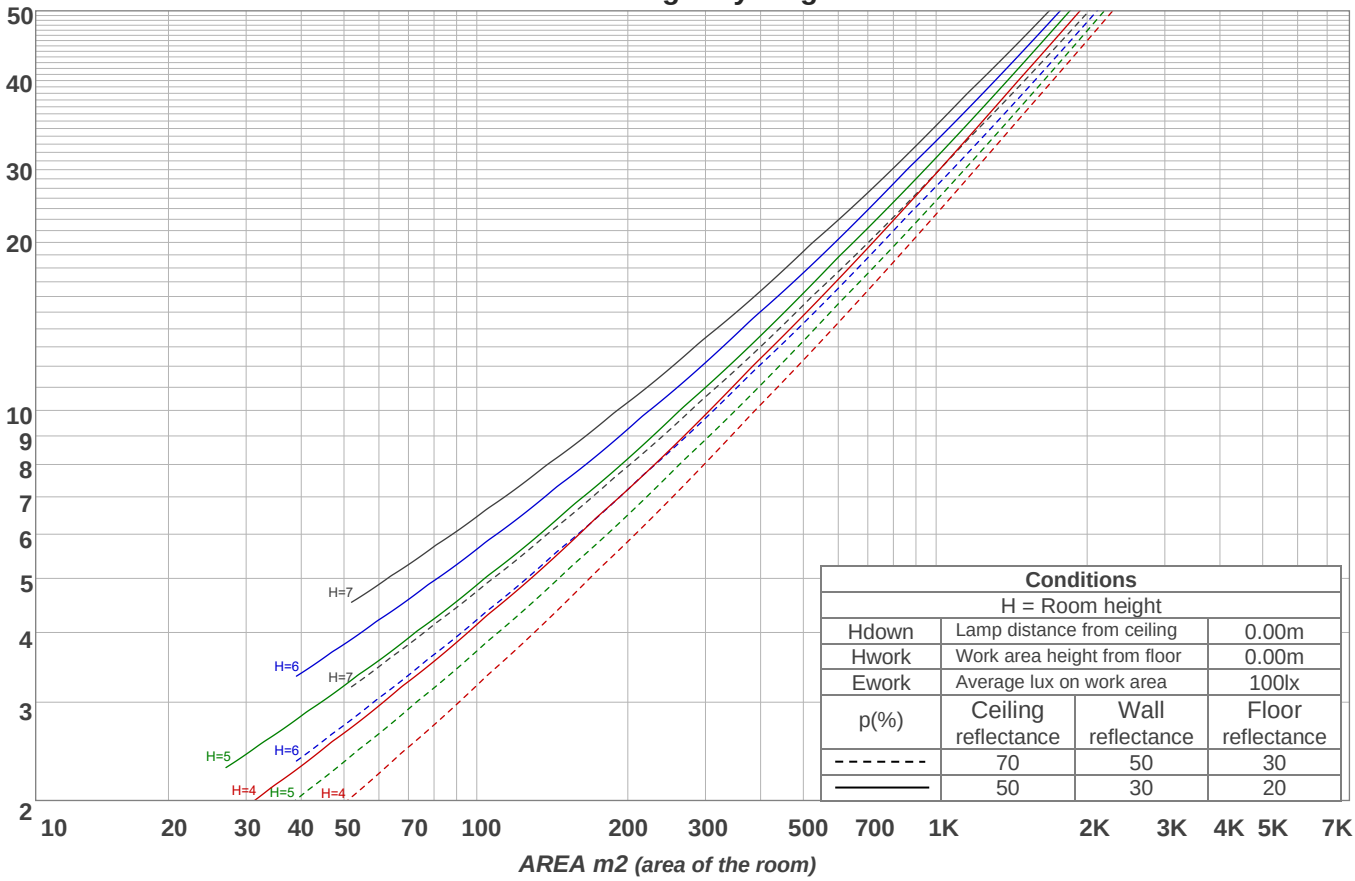
Light Planning

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	100	100	100	98
1	106	100	95	90	103	97	93	88	93	89	85	88	85	82	84	82	79	77
2	94	84	76	69	91	82	75	68	78	72	66	74	69	64	71	66	62	60
3	84	72	62	55	81	70	61	54	67	59	53	63	57	51	60	55	50	48
4	76	62	52	44	73	61	51	44	58	49	43	55	48	42	52	46	41	39
5	69	55	44	37	67	53	44	36	51	42	36	48	41	35	46	40	34	32
6	63	48	38	31	61	47	38	31	45	37	30	43	36	30	41	35	29	27
7	58	43	33	27	56	42	33	26	40	32	26	39	31	26	37	30	25	23
8	54	39	30	23	52	38	29	23	37	28	23	35	28	22	34	27	22	20
9	50	35	26	20	48	35	26	20	33	26	20	32	25	20	31	24	20	18
10	47	32	24	18	45	32	24	18	31	23	18	29	23	18	28	22	17	16

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
77.6 lm	272 lm	446 lm	627 lm	853 lm	955 lm	925 lm	656 lm	152 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
54.0 lm	29.3 lm	12.6 lm	5.67 lm	4.25 lm	3.24 lm	2.34 lm	1.38 lm	0.478 lm

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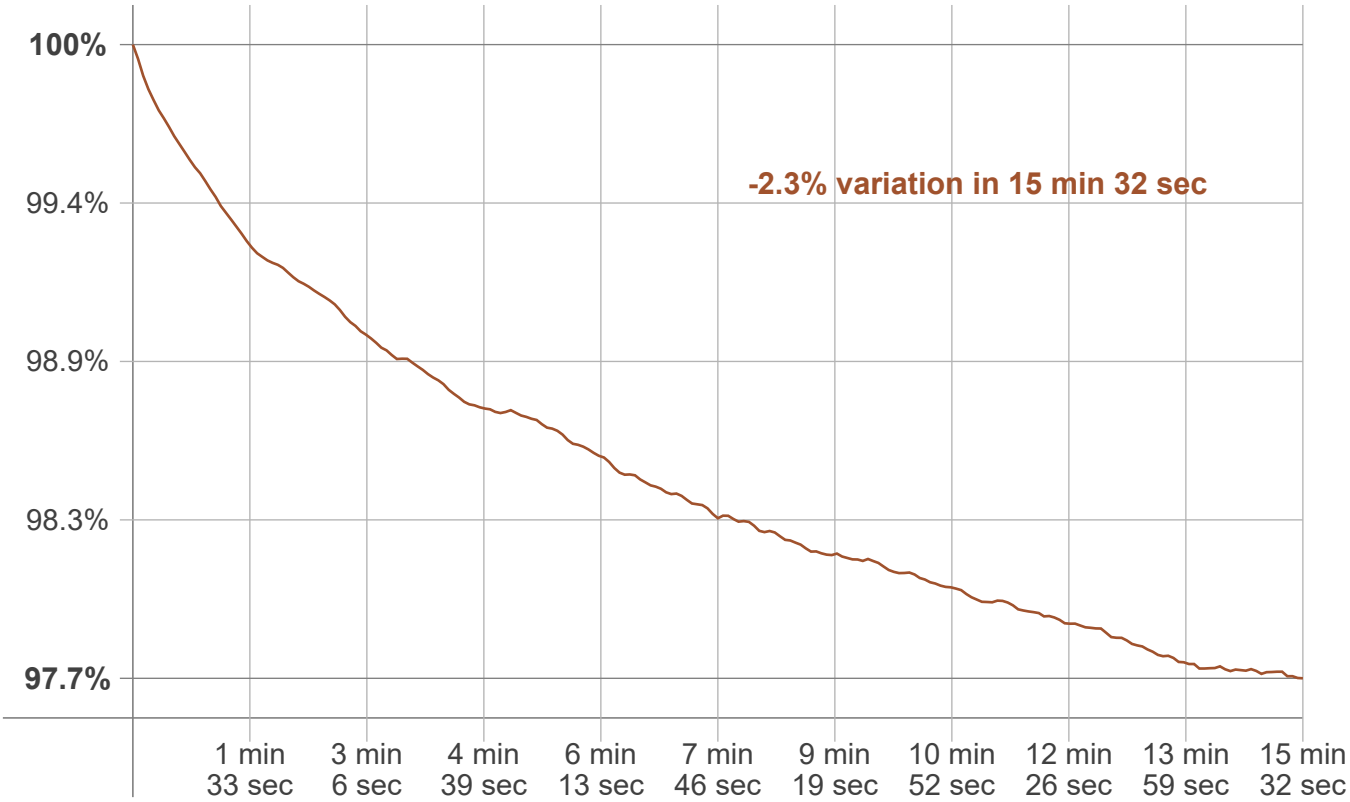
Stabilization

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 32 sec**
Warmup variation	**-2.3%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5007 K	+31 K	5038 K

Output change

Output start	Output change	Output end
5186 lm	-108 lm	5078 lm

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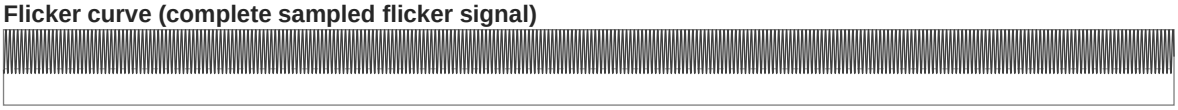
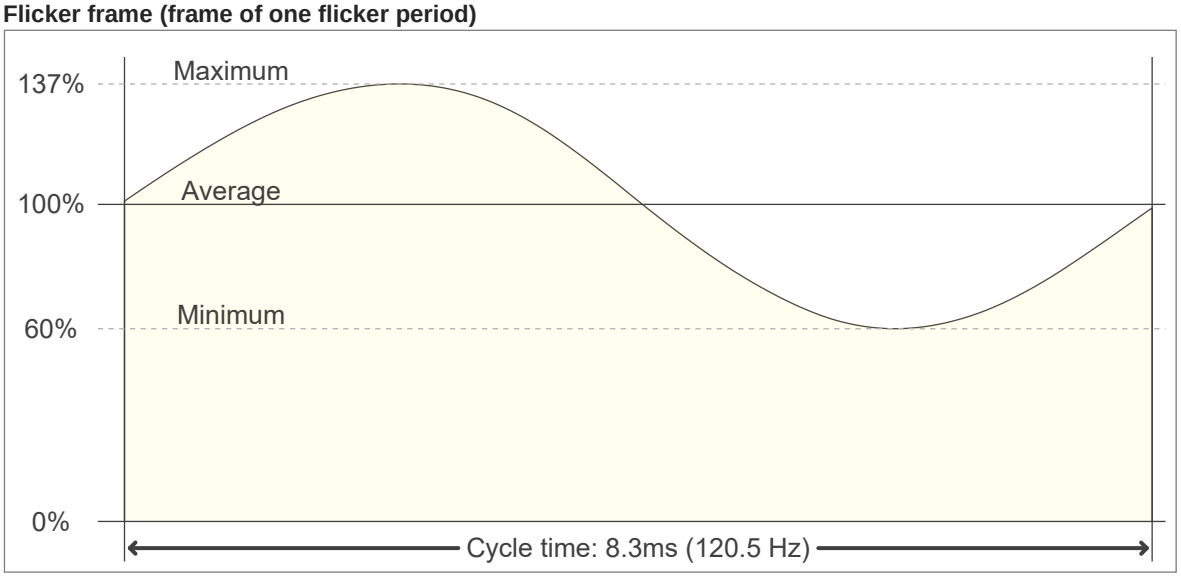
Flicker Specifications

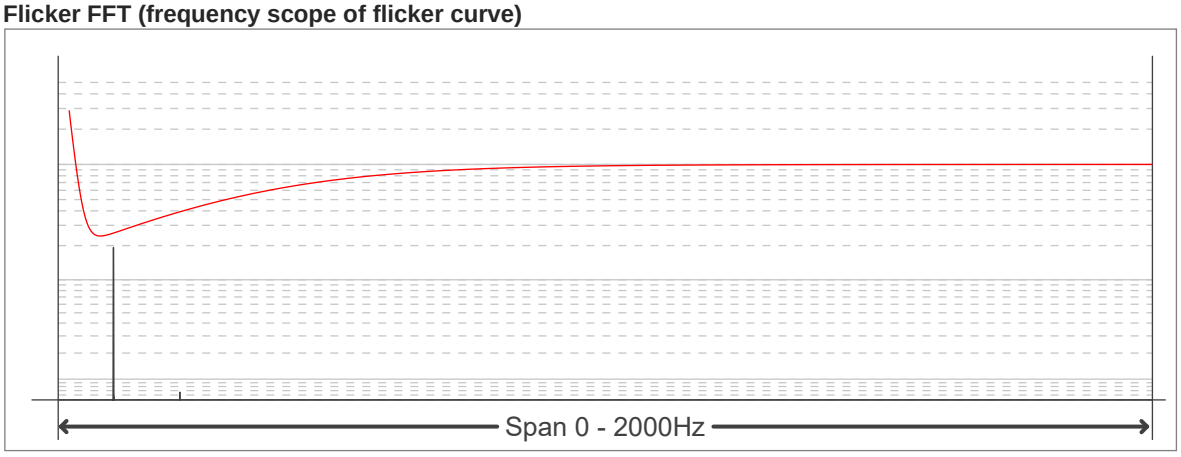
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**120.48 Hz**
Flicker index:	**0.12**
Flicker percentage:	**38.95 %**
SVM: (Visual flicker)	**1.4**

Flicker conditions:

Sample rate:	**20000 samples/second**

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