

Light efficiency:

61 Lumen/Watt

Light quality:

CRI: 82.4

Color temperature:

2584 K

Output: 766 lm

Peak: 49723 cd

Power: 12.5 W

PF: 0.91

No photo

Product name:

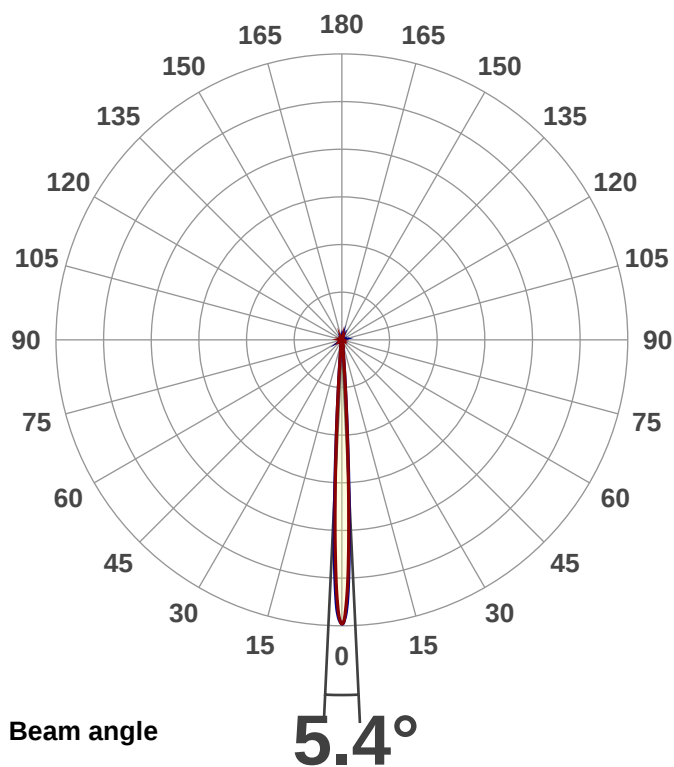
F170-1S-LO-27-8-05-X-X-X HC

Item number:

Date and time:

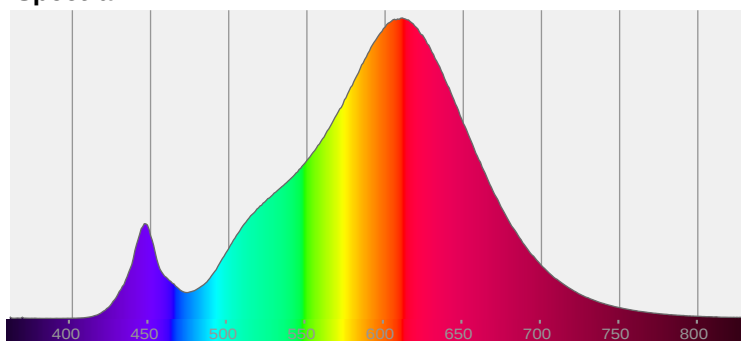
12/5/2018 11:31:35 AM

Description:

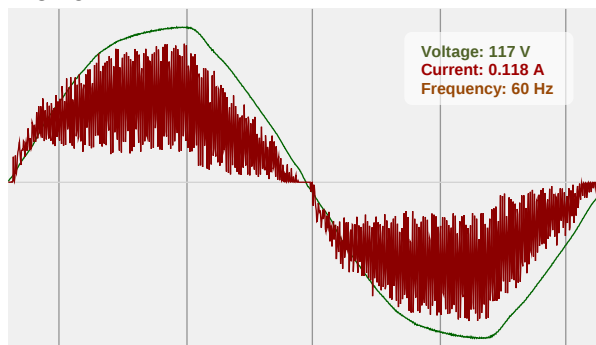


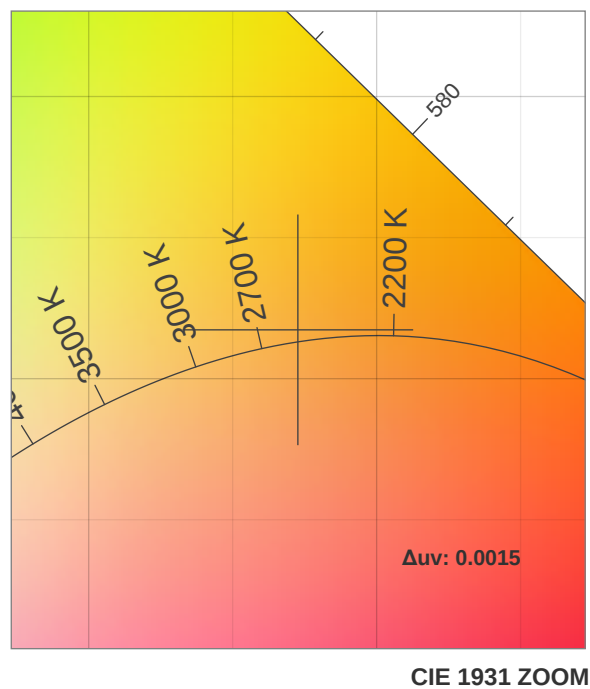
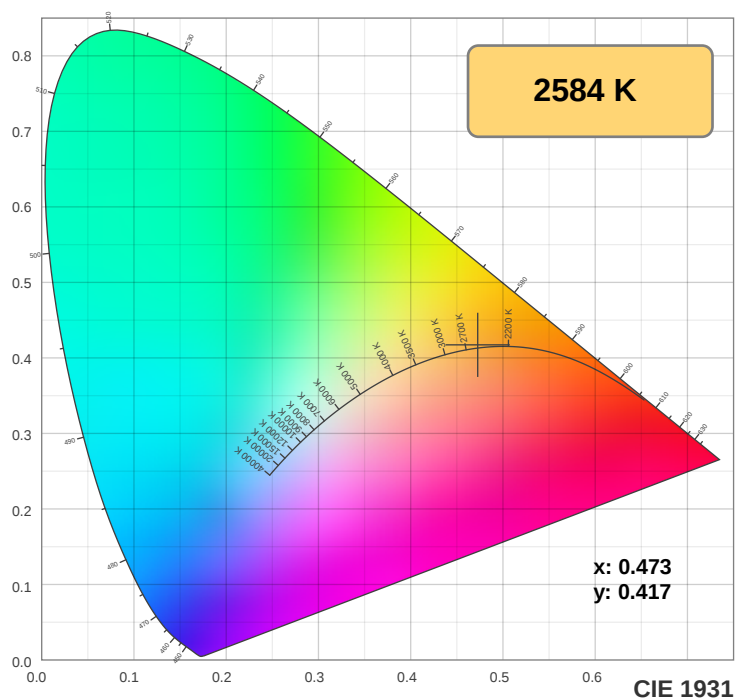
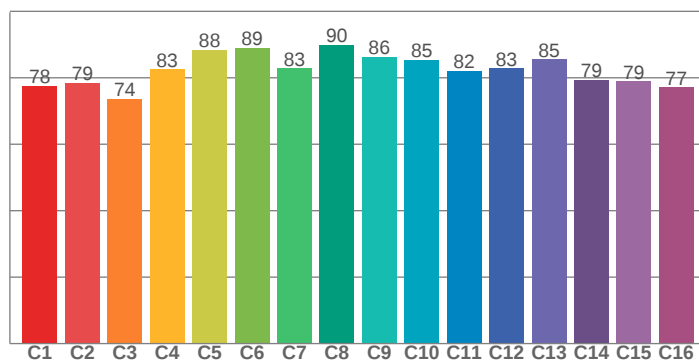
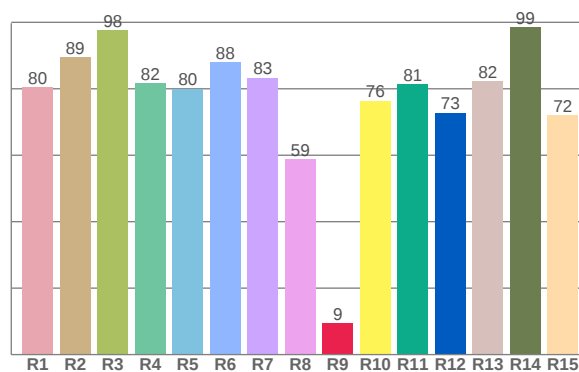
CIE 1931
x: 0.473
y: 0.417

Spectra



Power




TM30: 82.2

CRI: 82.4 (R1-R8)


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

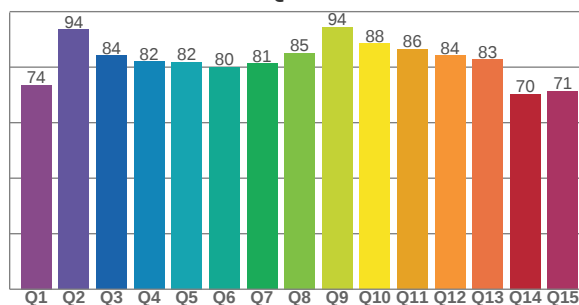
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80.5	89.5	97.7	81.6	80.1	87.9	83.3	58.9	9.4	76.4	81.4	72.8	82.3	98.6	72.1

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
77.6	78.5	73.7	82.6	88.4	89.1	82.8	89.8	86.2	85.4	82.1	82.8	85.5	79.3	79.0	77.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
73.6	93.5	84.1	82.0	81.9	80.1	81.3	85.1	94.4	88.4	86.5	84.1	82.7	70.4	71.4

CQS: 81.1


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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2584 K	82.4	9.4	82.2	97.8	81.1	0.473	0.417	0.268	0.355	0.0015

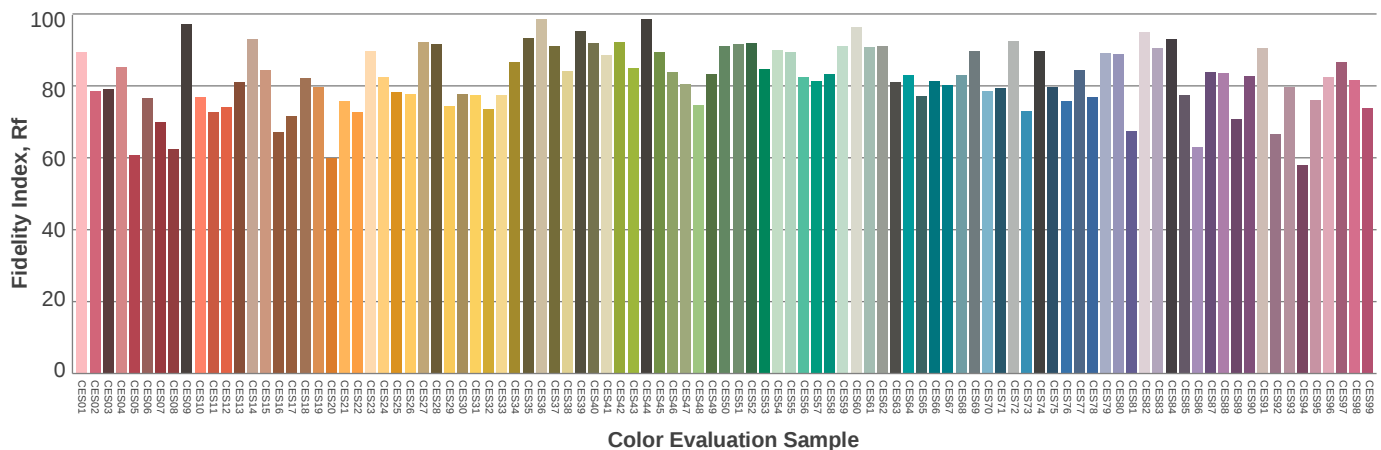
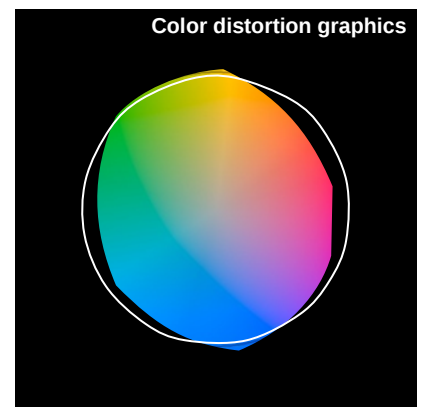
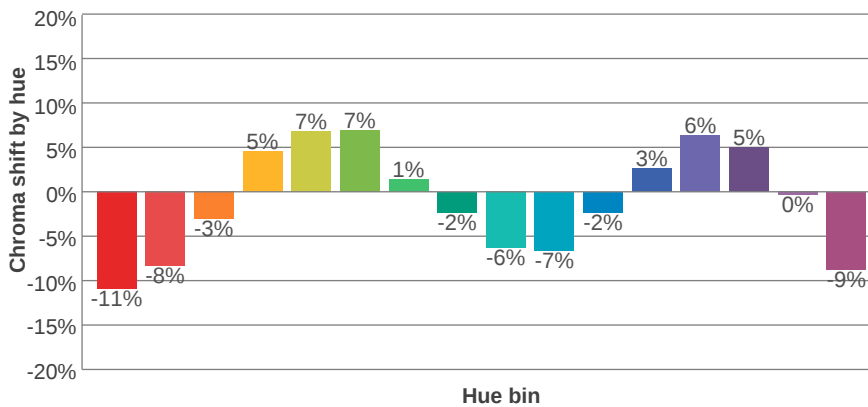
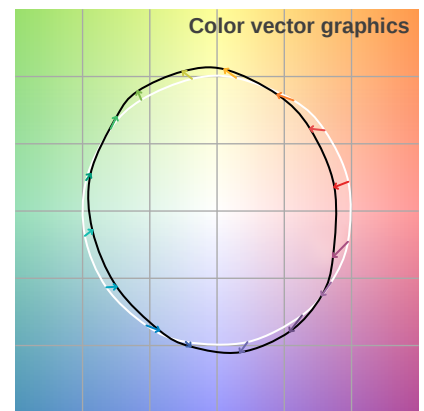
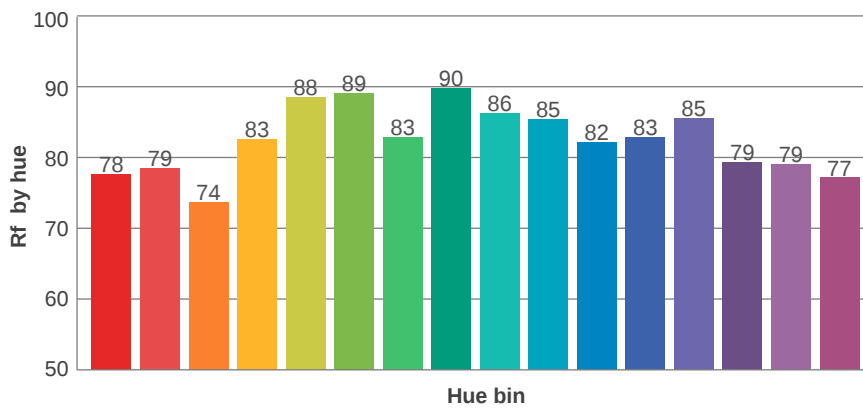
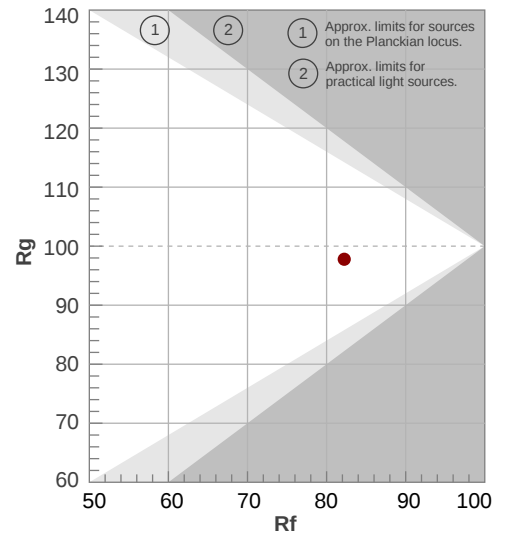
Rf 82.2

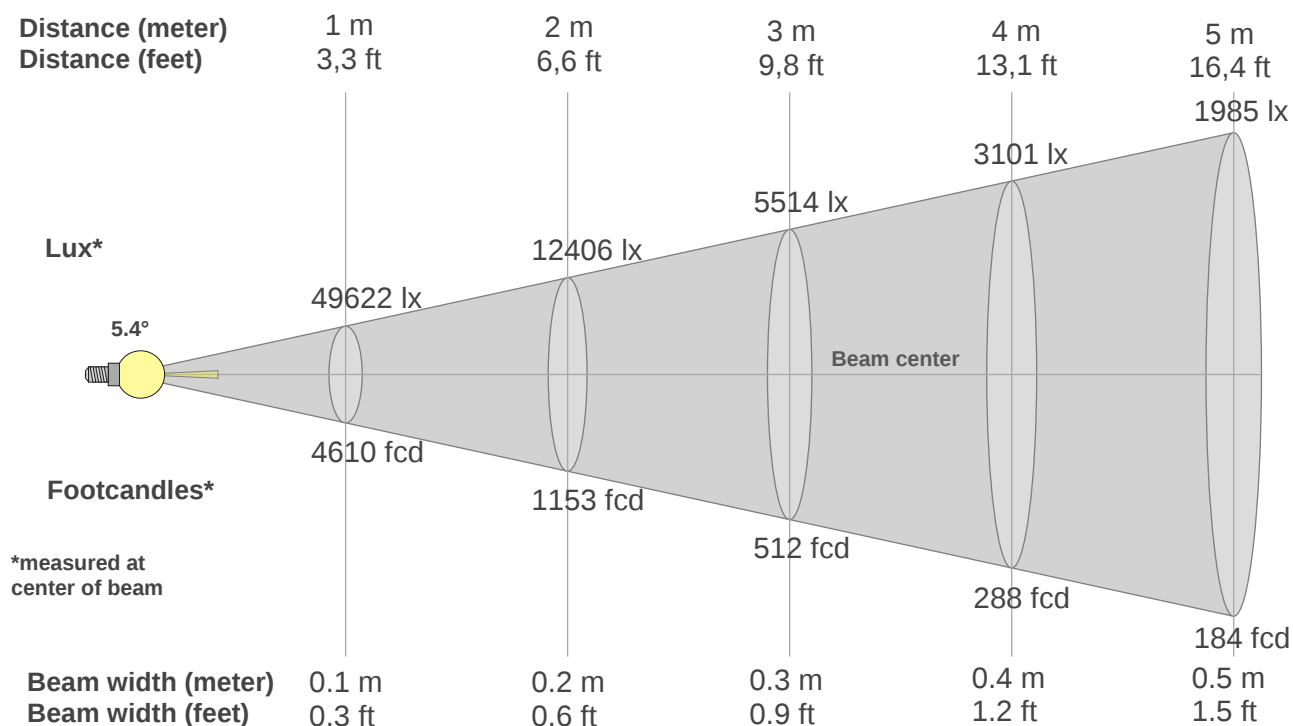
Fidelity index Rf

Rg 97.8

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	78	-11%	-2%
2	79	-8%	7%
3	74	-3%	12%
4	83	5%	10%
5	88	7%	6%
6	89	7%	-1%
7	83	1%	-10%
8	90	-2%	-5%
9	86	-6%	-3%
10	85	-7%	4%
11	82	-2%	10%
12	83	3%	4%
13	85	6%	-7%
14	79	5%	-14%
15	79	0%	-12%
16	77	-9%	-13%




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
49622lx	12406lx	5514lx	3101lx	1985lx	1378lx	1013lx	775lx	613lx	496lx	410lx	345lx	294lx	253lx	221lx	194lx	172lx	153lx	137lx	124lx
4610.1fcd	1152.5fcd	512.2fcd	288.1fcd	184.4fcd	128.1fcd	94.1fcd	72fcd	56.9fcd	46.1fcd	38.1fcd	32fcd	27.3fcd	23.5fcd	20.5fcd	18fcd	16fcd	14.2fcd	12.8fcd	11.5fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
49.6K	45.7K	34.4K	19.6K	9.5K	4.7K	2.6K	1.6K	1.2K	0.9K	0.7K	0.6K	0.5K	0.5K	0.4K	0.4K	0.3K	0.3K	0.2K	0.2K
100%	92%	69%	39%	19%	9%	5%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
49.6K	47.1K	36.8K	21.5K	10.1K	4.8K	2.6K	1.6K	1.1K	0.9K	0.7K	0.6K	0.5K	0.5K	0.4K	0.3K	0.3K	0.3K	0.2K	0.2K
100%	95%	74%	43%	20%	10%	5%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%

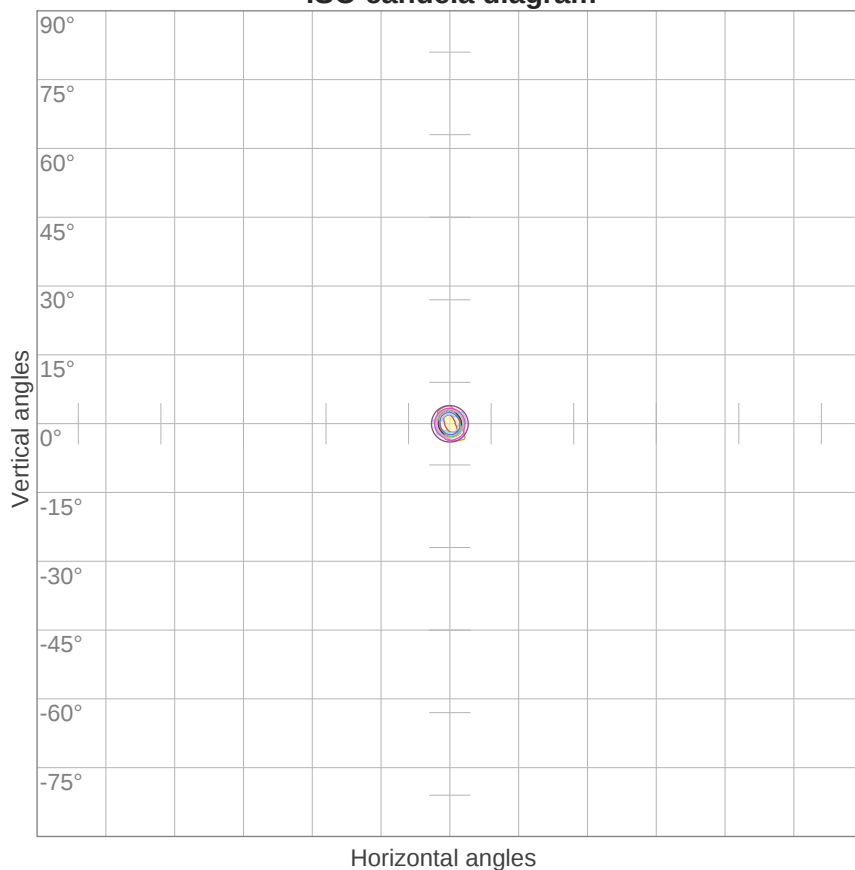
Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
49.6K	45.6K	34.0K	19.6K	9.5K	4.5K	2.6K	1.6K	1.2K	1.0K	0.8K	0.7K	0.6K	0.5K	0.4K	0.4K	0.3K	0.3K	0.2K	0.2K
100%	92%	68%	39%	19%	9%	5%	3%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	0%	0%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
49.6K	47.3K	37.4K	21.4K	9.4K	4.2K	2.3K	1.4K	1.0K	0.8K	0.7K	0.6K	0.5K	0.4K	0.4K	0.3K	0.3K	0.3K	0.2K	0.2K
100%	95%	75%	43%	19%	9%	5%	3%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
5.4°	9.8°	15.2°	94.2%	93.1%

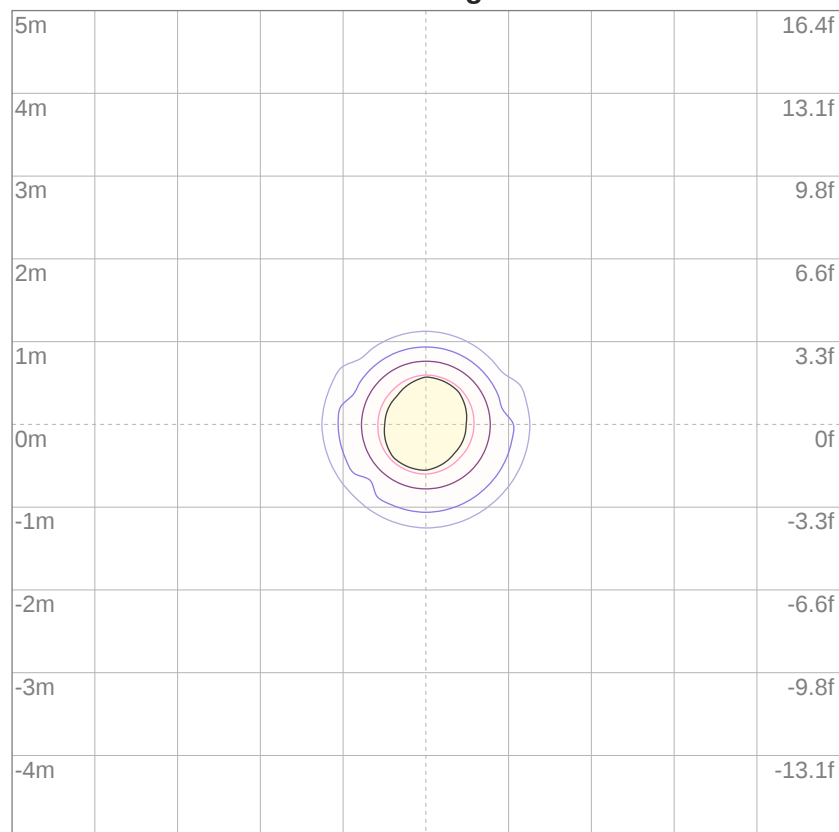
ISO candela diagram


10%	4962 cd
20%	9924 cd
30%	14887 cd
40%	19849 cd
50%	24811 cd
60%	29773 cd
70%	34736 cd
80%	39698 cd
90%	44660 cd

Conditions:

Number of c-planes: 8

Candela at center: 49622 cd

ISO lux diagram


3%	14.9 lx
5%	24.8 lx
10%	49.6 lx
30%	149 lx
50%	248 lx

Conditions:

Number of c-planes: 8

Lux at center: 496 lx

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

Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	4.7	5.3	5.0	5.6	5.9	4.1	4.8	4.4	5.0	5.3
	3H	6.4	7.0	6.7	7.3	7.6	6.9	7.5	7.3	7.8	8.1
	4H	7.0	7.6	7.3	7.9	8.2	8.9	9.5	9.3	9.8	10.1
	6H	10.5	11.0	10.9	11.4	11.7	11.2	11.7	11.6	12.1	12.4
	8H	12.0	12.5	12.4	12.8	13.2	12.2	12.7	12.6	13.0	13.4
	12H	12.9	13.4	13.3	13.7	14.1	13.2	13.7	13.6	14.0	14.4
4H	2H	5.3	5.8	5.6	6.2	6.5	4.9	5.4	5.2	5.7	6.1
	3H	7.4	7.9	7.8	8.3	8.7	8.2	8.7	8.6	9.0	9.4
	4H	8.4	8.8	8.8	9.2	9.6	10.3	10.7	10.7	11.1	11.5
	6H	12.0	12.4	12.5	12.8	13.2	12.7	13.1	13.2	13.5	14.0
	8H	13.5	13.8	14.0	14.3	14.8	13.8	14.1	14.3	14.6	15.0
	12H	14.6	14.9	15.1	15.3	15.8	14.9	15.2	15.4	15.7	16.2
8H	4H	9.2	9.5	9.7	10.0	10.5	11.0	11.3	11.4	11.7	12.2
	6H	12.9	13.1	13.4	13.6	14.1	13.7	13.9	14.2	14.4	14.9
	8H	14.5	14.7	15.0	15.2	15.8	14.9	15.1	15.4	15.6	16.2
	12H	15.8	15.9	16.3	16.5	17.0	16.2	16.4	16.8	16.9	17.5
12H	4H	9.5	9.7	10.0	10.2	10.7	11.2	11.5	11.7	11.9	12.4
	6H	13.1	13.3	13.6	13.8	14.3	13.9	14.1	14.5	14.6	15.2
	8H	14.8	15.0	15.3	15.5	16.1	15.3	15.4	15.8	16.0	16.5
Variation of the observer position for the luminaire distance S											
S = 1.0H		+0.2 / -0.2					+0.1 / -0.2				
S = 1.5H		+0.3 / -0.4					+0.2 / -0.4				
S = 2.0H		+0.5 / -0.4					+0.2 / -0.3				
Standard table		---					---				
Correction summand		---					---				
Corrected glare indices referring to 766 lm total luminous flux											

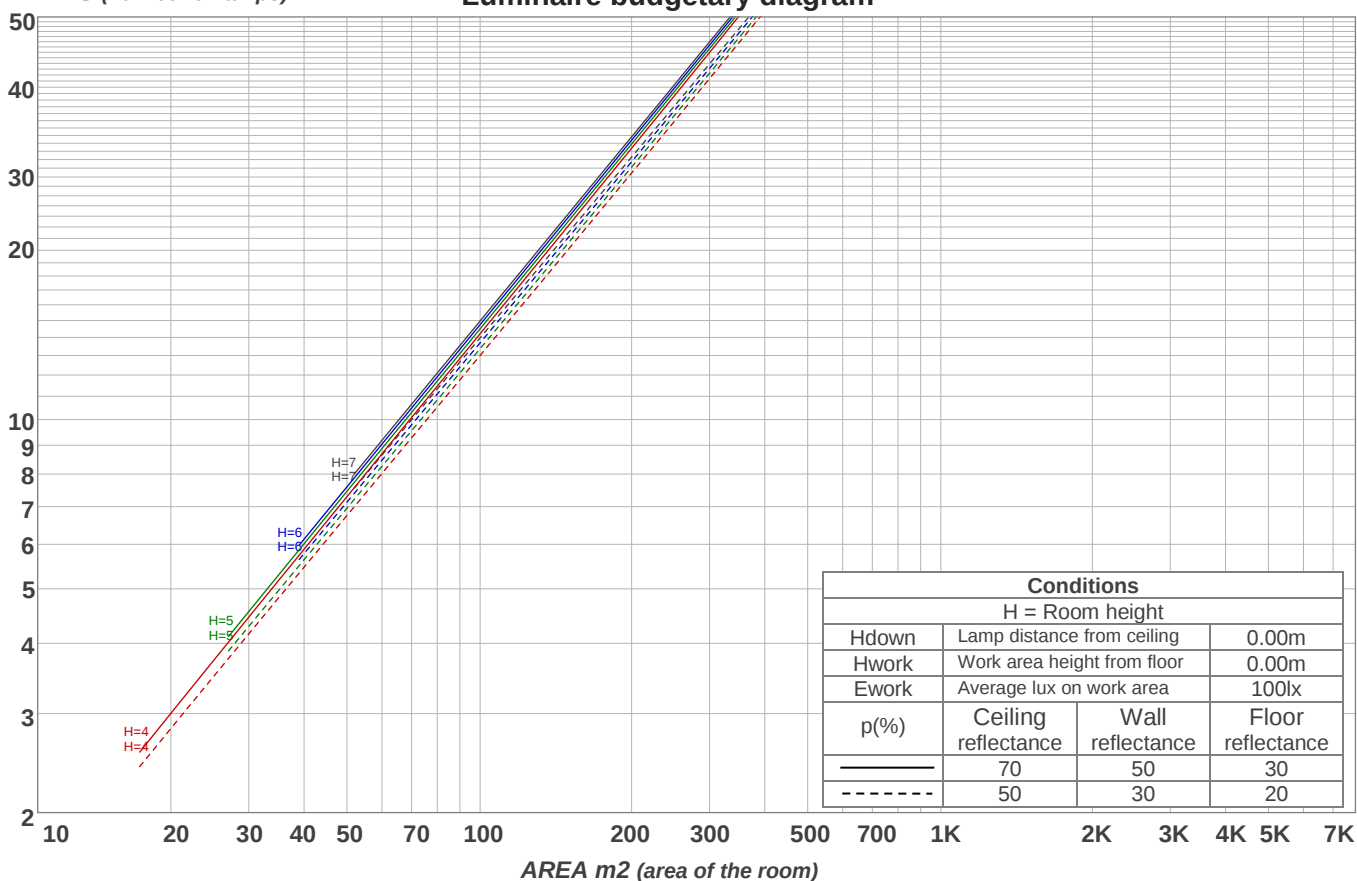
UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96
1	114	112	111	109	112	110	108	107	105	104	103	101	100	99	97	96	96	94
2	111	108	105	103	109	106	104	102	102	100	99	99	97	96	96	95	94	92
3	108	104	101	99	106	103	100	98	100	98	96	97	95	94	95	93	92	91
4	106	102	98	96	104	100	97	95	98	95	93	96	94	92	94	92	91	89
5	104	99	96	93	102	98	95	93	96	94	92	94	92	90	93	91	89	88
6	102	97	94	91	101	96	93	91	95	92	90	93	91	89	92	90	88	87
7	100	95	92	90	99	95	92	89	93	91	89	92	90	88	91	89	87	86
8	99	94	91	88	98	93	90	88	92	89	88	91	89	87	90	88	87	86
9	97	92	89	87	97	92	89	87	91	88	87	90	88	86	89	87	86	85
10	96	91	88	86	95	91	88	86	90	87	86	89	87	85	88	86	85	84

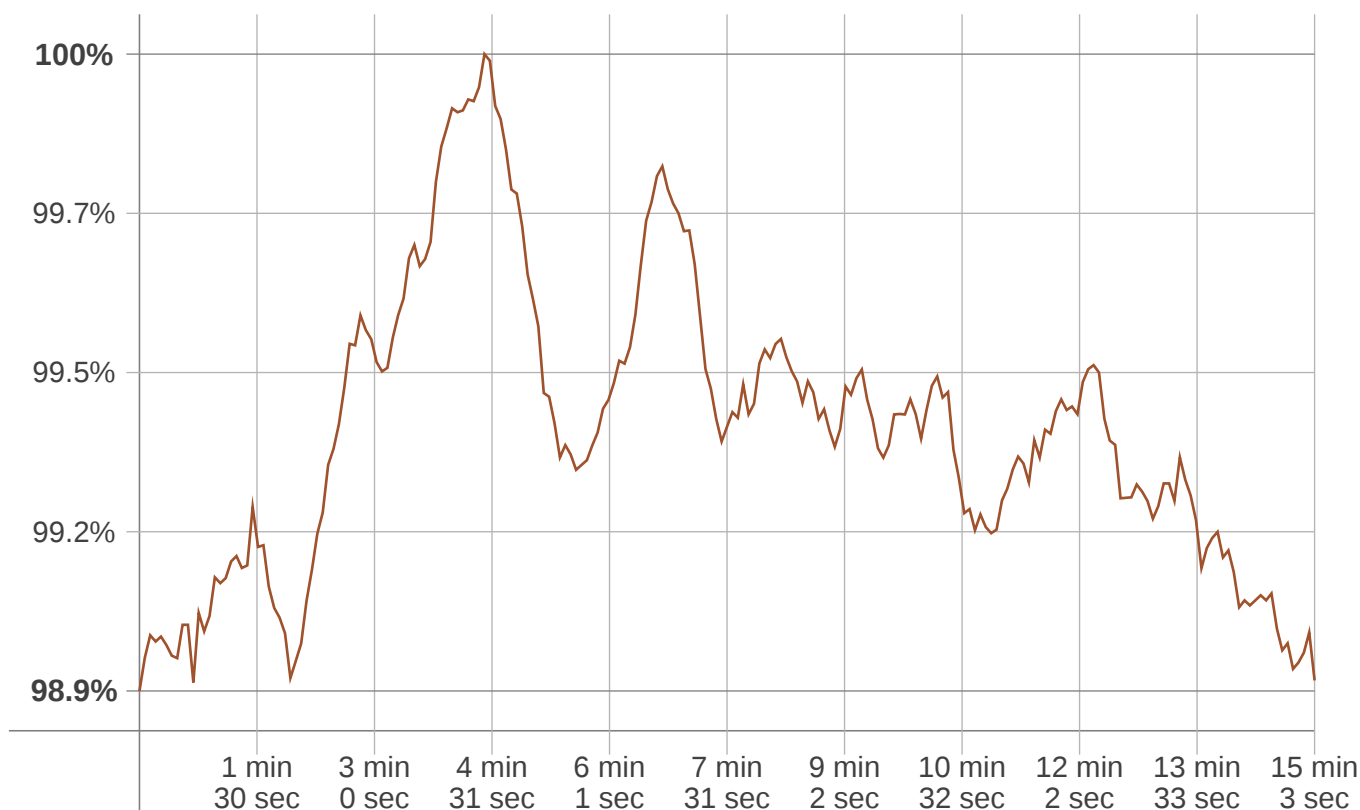
LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
555 lm	98.1 lm	39.9 lm	15.4 lm	7.02 lm	5.53 lm	4.89 lm	5.13 lm	5.03 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5.01 lm	4.79 lm	4.14 lm	4.16 lm	3.96 lm	3.07 lm	2.29 lm	1.33 lm	0.395 lm

Warmup curve

Warmup result

Warmup time:	15 min 3 sec
Warmup variation	-1.1%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2583 K	+1 K	2584 K

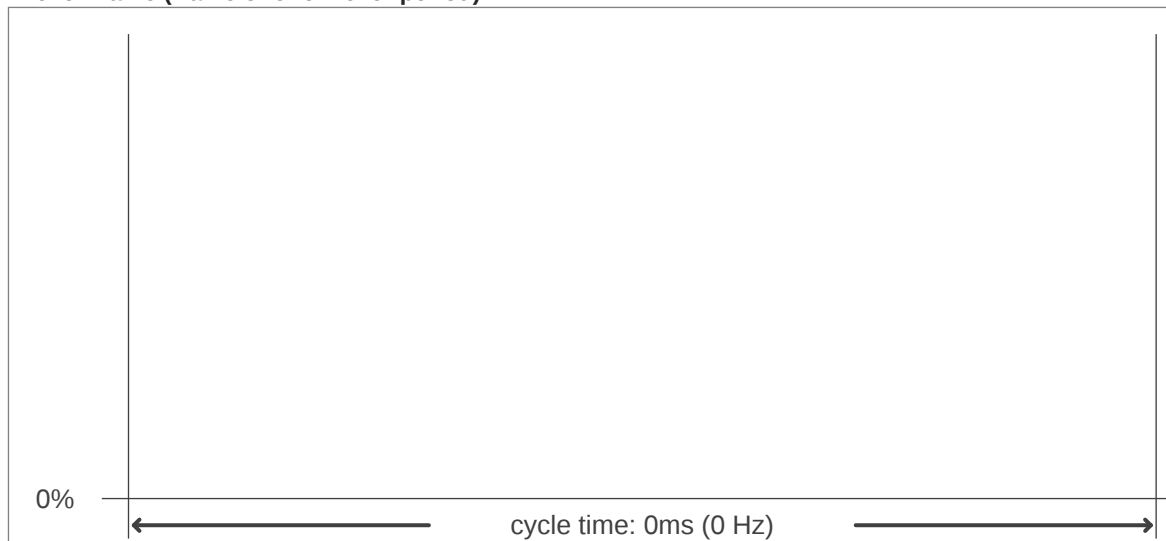
Output change

Output start	Output change	Output end
766 lm	lm	766 lm

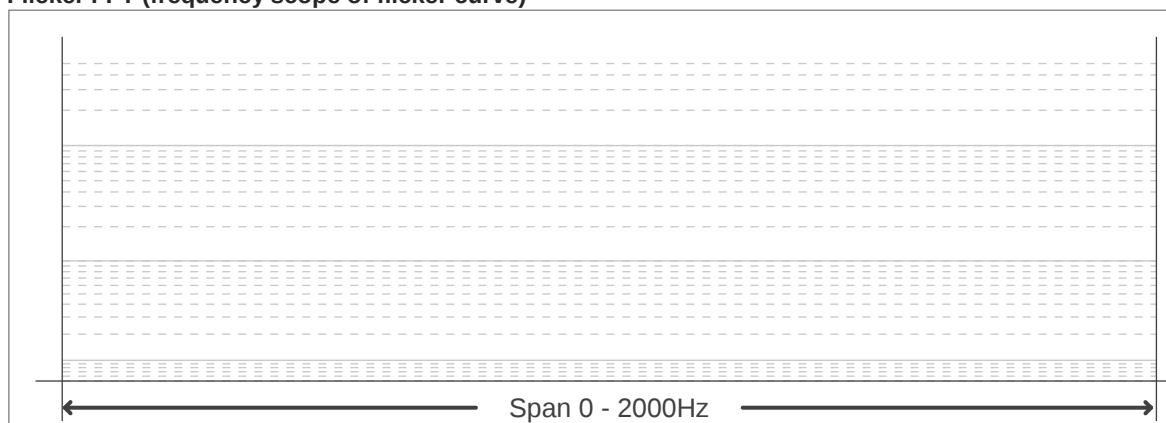
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	n/a Hz
Flicker index:	n/a
Flicker percentage:	n/a %
SVM: (Visual flicker)	n/a

Flicker conditions:

Sample rate:	60.000 samples/second
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