

Light efficiency:

54 Lumen/Watt

Light quality:

CRI: 82.5

Color temperature:

2614 K

Output: 675 lm

Peak: 14536 cd

Power: 12.6 W

PF: 0.91

No photo

Product name:

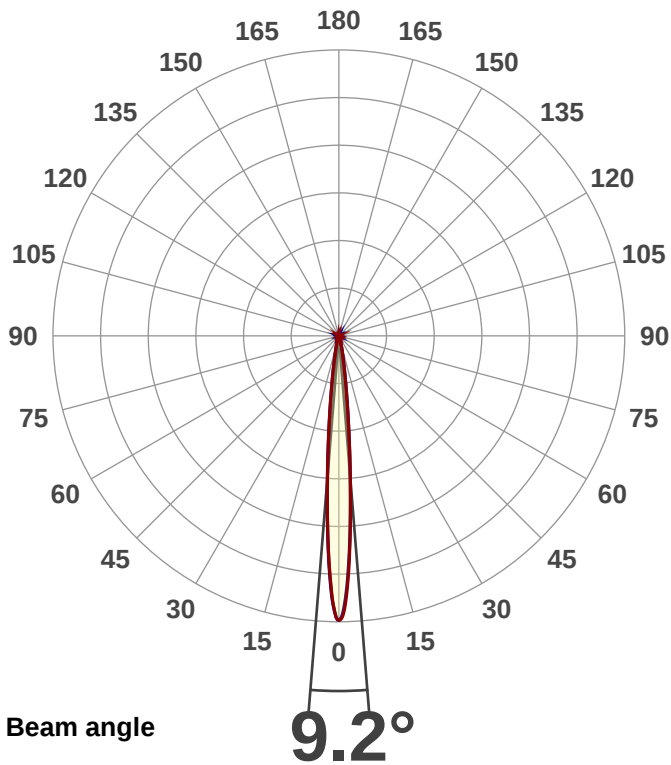
F170-1S-LO-27-8-10-X-X-X HC

Item number:

Date and time:

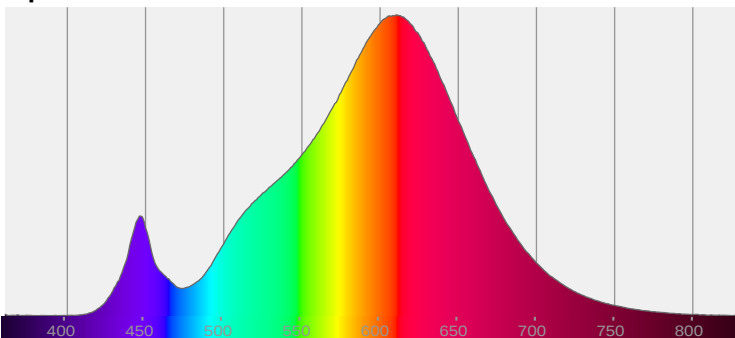
12/5/2018 11:54:22 AM

Description:

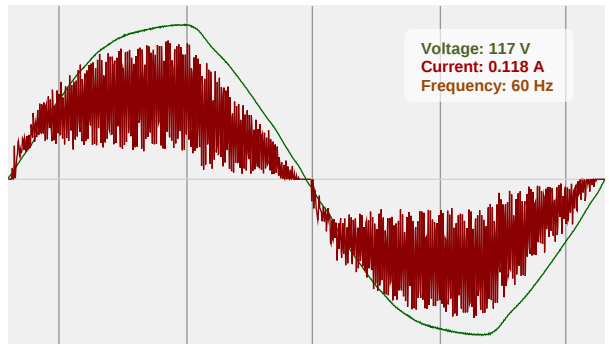


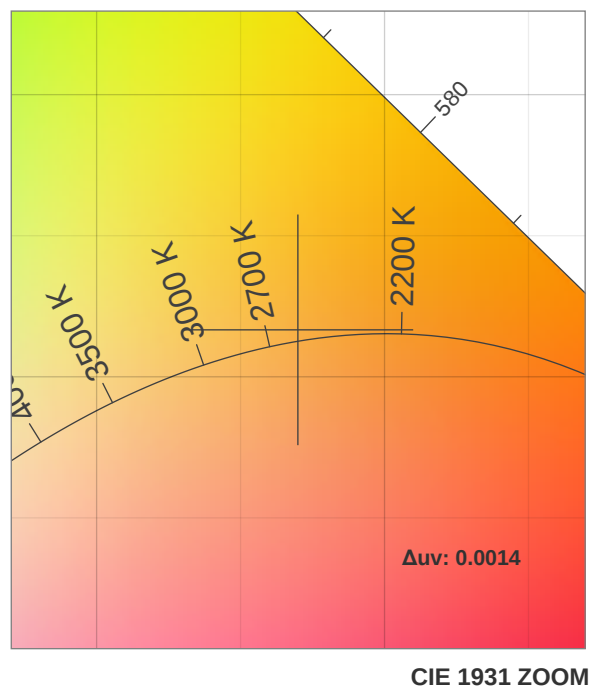
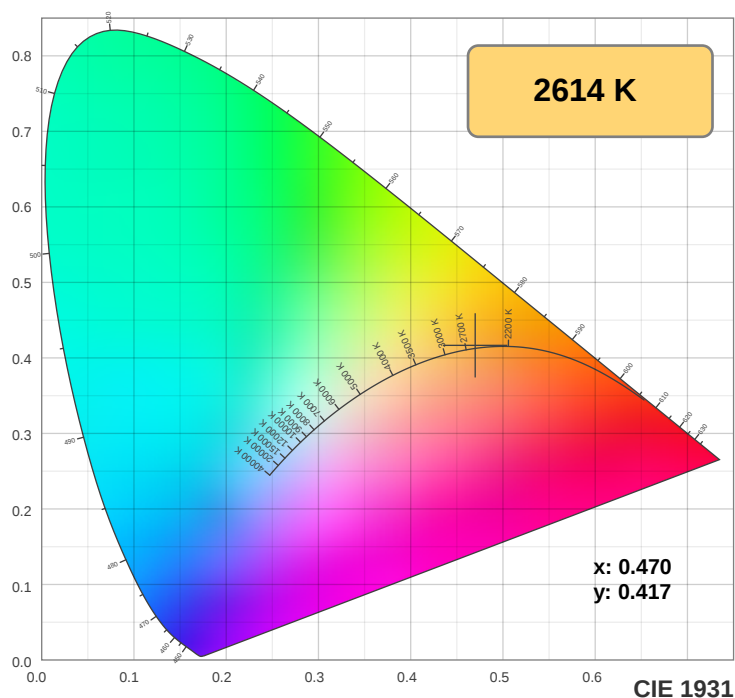
CIE 1931
x: 0.470
y: 0.417

Spectra

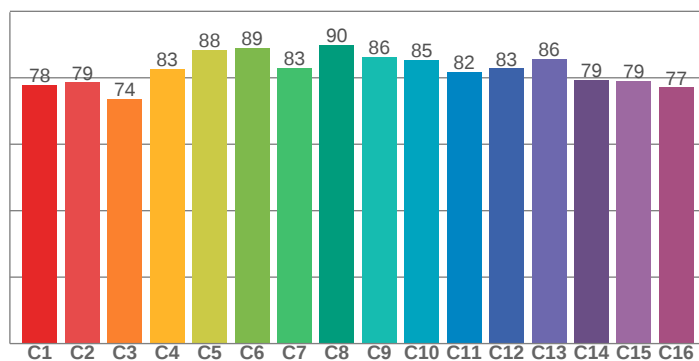


Power

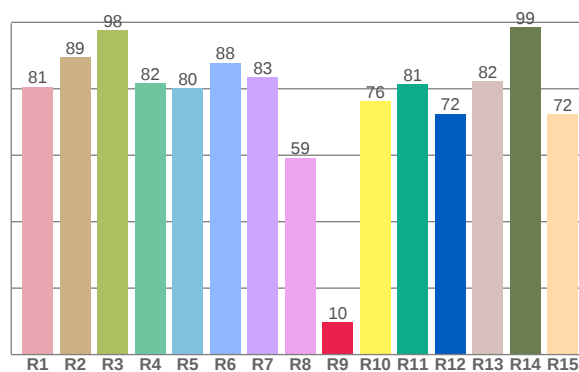




TM30: 82.3



CRI: 82.5 (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
80.6	89.4	97.6	81.7	80.2	87.8	83.5	59.2	9.8	76.3	81.5	72.5	82.3	98.5	72.3

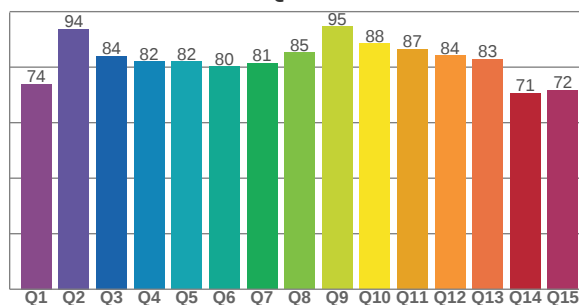
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77.8	78.7	73.7	82.6	88.4	89.0	83.0	89.9	86.3	85.4	81.8	82.8	85.7	79.4	79.2	77.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
74.0	93.8	84.0	81.9	82.1	80.3	81.4	85.2	94.7	88.5	86.5	84.2	82.9	70.6	71.7

CQS: 81.3



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
2614 K	82.5	9.8	82.3	97.9	81.3	0.470	0.417	0.266	0.354	0.0014

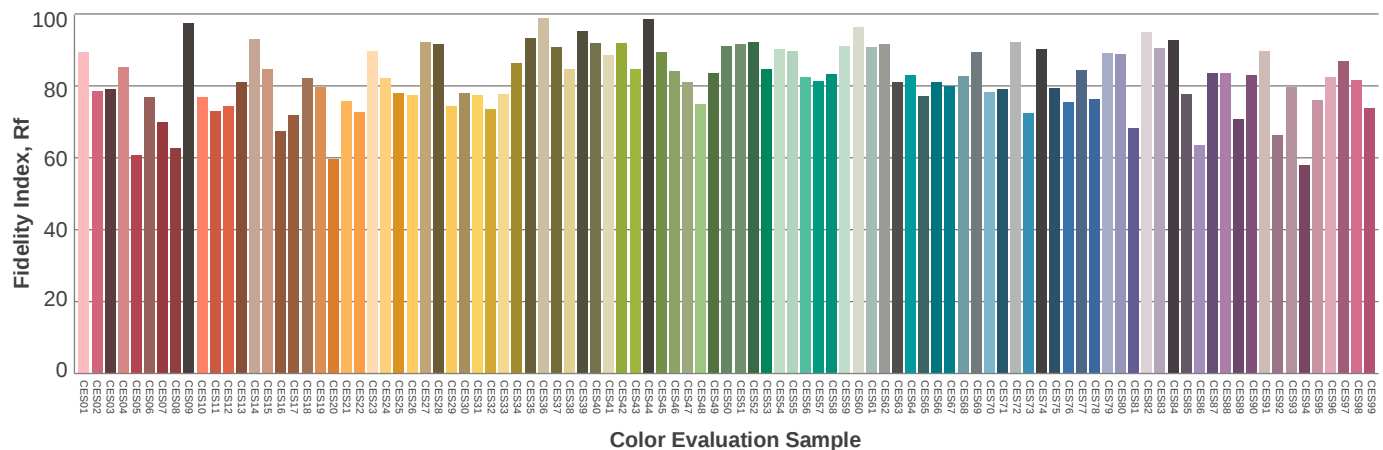
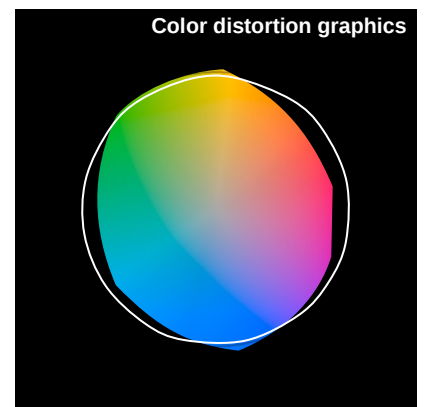
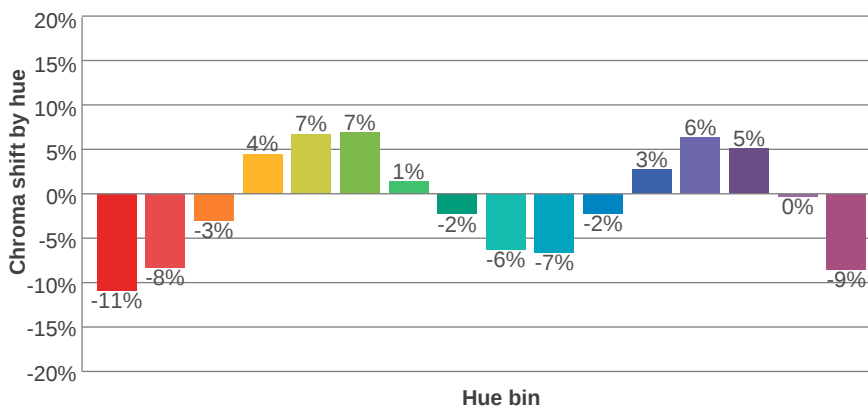
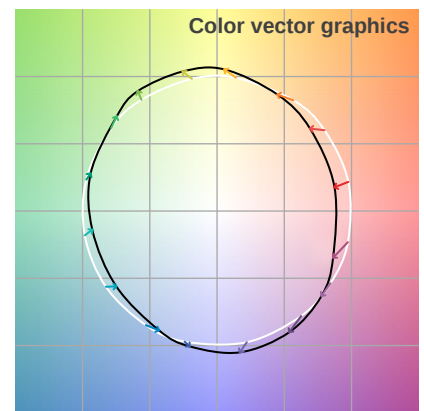
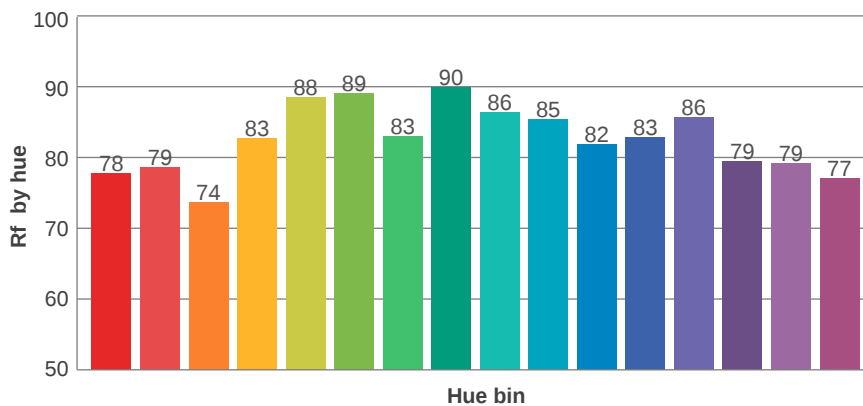
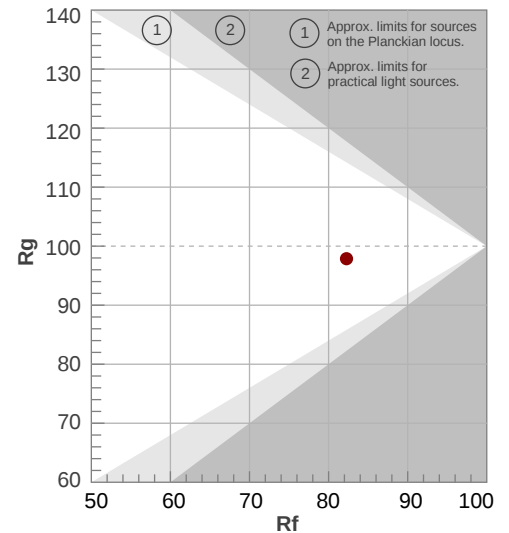
Rf 82.3

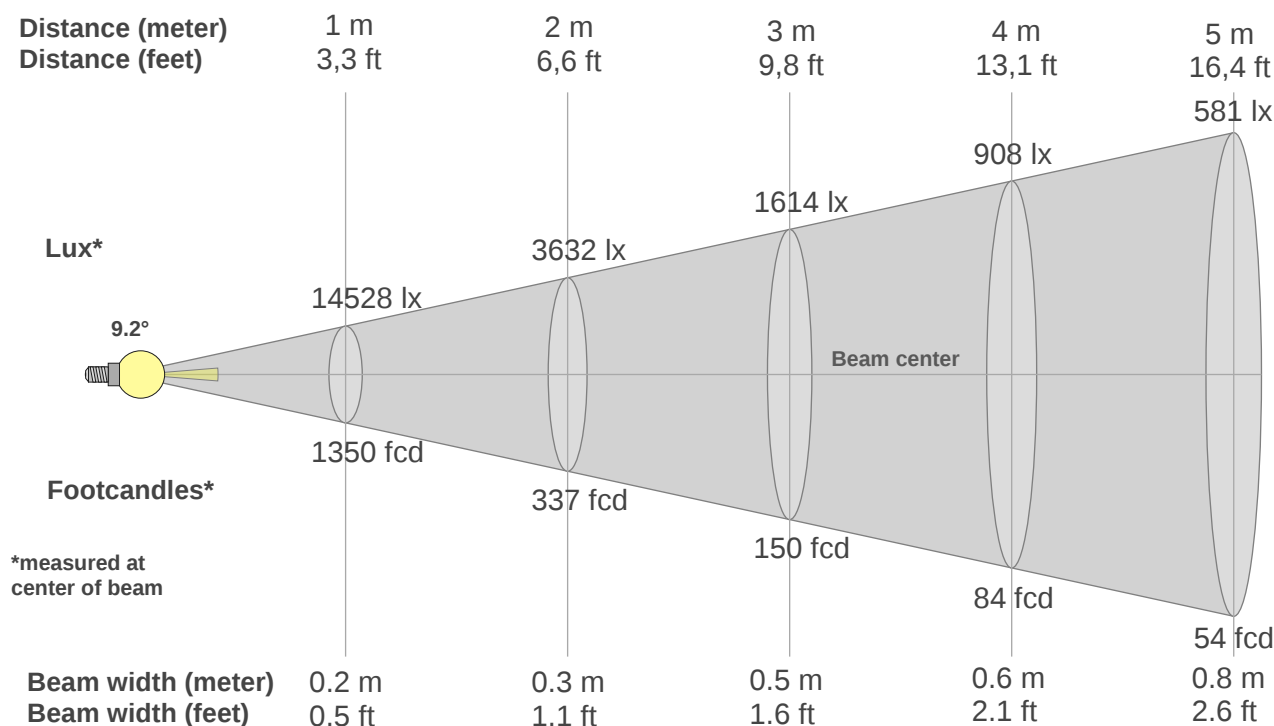
Fidelity index Rf

Rg 97.9

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	4%	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	86	6%	-7%
14	79	5%	-14%
15	79	0%	-12%
16	77	-9%	-14%




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
14528lx	3632lx	1614lx	908lx	581lx	404lx	296lx	227lx	179lx	145lx	120lx	101lx	86lx	74lx	65lx	57lx	50lx	45lx	40lx	36lx
1349.7fcd	337.4fcd	150fcd	84.4fcd	54fcd	37.5fcd	27.5fcd	21.1fcd	16.7fcd	13.5fcd	11.2fcd	9.4fcd	8fcd	6.9fcd	6fcd	5.3fcd	4.7fcd	4.2fcd	3.7fcd	3.4fcd

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°
14.5K	14.2K	12.7K	10.7K	8.6K	6.5K	4.8K	3.5K	2.6K	1.9K	1.4K	1.1K	0.8K	0.7K	0.5K	0.5K	0.4K	0.3K	0.3K	0.2K
100%	97%	88%	74%	59%	45%	33%	24%	18%	13%	10%	7%	6%	5%	4%	3%	3%	2%	2%	2%

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°
14.5K	14.0K	12.5K	10.6K	8.5K	6.5K	4.9K	3.6K	2.7K	2.0K	1.5K	1.1K	0.9K	0.7K	0.5K	0.4K	0.4K	0.3K	0.3K	0.2K
100%	96%	86%	73%	58%	45%	34%	25%	18%	14%	10%	8%	6%	5%	4%	3%	3%	2%	2%	2%

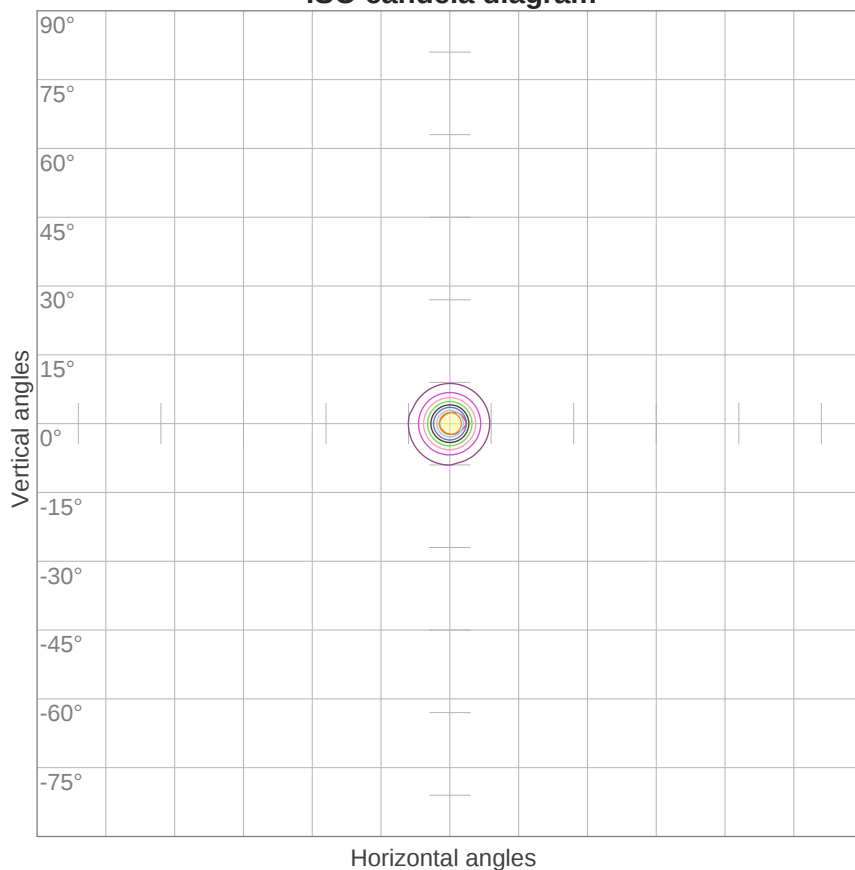
Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
14.5K	14.0K	12.4K	10.5K	8.5K	6.6K	5.0K	3.7K	2.7K	2.0K	1.5K	1.1K	0.9K	0.7K	0.6K	0.5K	0.4K	0.3K	0.3K	0.2K
100%	96%	86%	73%	58%	45%	34%	25%	19%	14%	10%	8%	6%	5%	4%	3%	3%	2%	2%	2%

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°
14.5K	14.0K	12.6K	10.6K	8.4K	6.5K	4.9K	3.6K	2.6K	2.0K	1.4K	1.1K	0.9K	0.7K	0.5K	0.4K	0.4K	0.3K	0.3K	0.2K
100%	96%	87%	73%	58%	45%	34%	25%	18%	13%	10%	8%	6%	5%	4%	3%	3%	2%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
9.2°	19.9°	32.4°	98.8%	98.4%

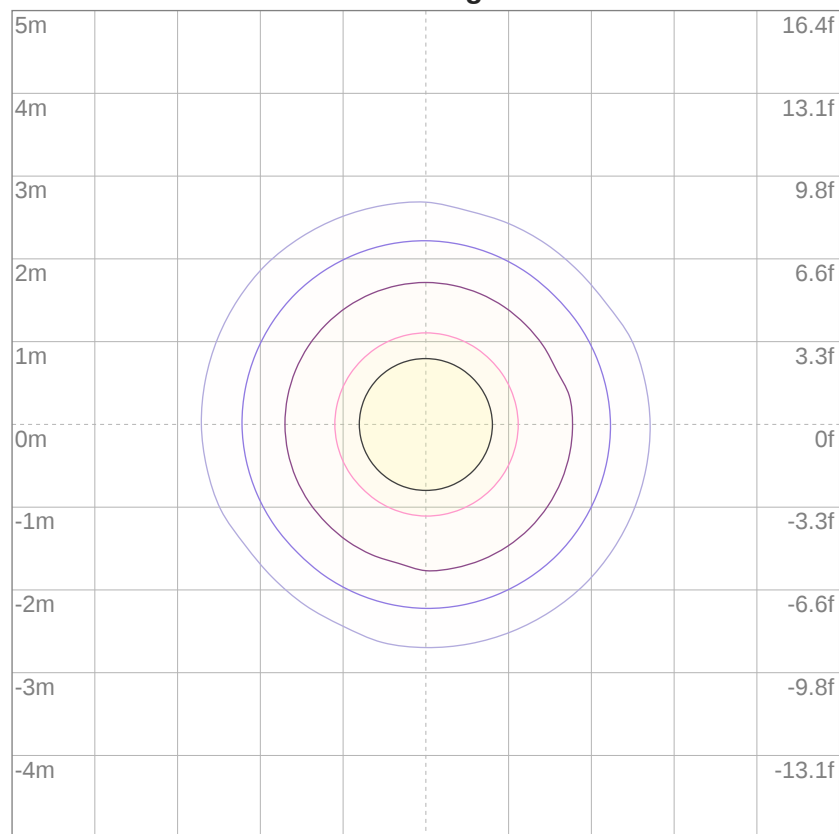
ISO candela diagram


10%	1453 cd
20%	2906 cd
30%	4358 cd
40%	5811 cd
50%	7264 cd
60%	8717 cd
70%	10169 cd
80%	11622 cd
90%	13075 cd

Conditions:

Number of c-planes: 8

Candela at center: 14528 cd

ISO lux diagram


3%	4.36 lx
5%	7.26 lx
10%	14.5 lx
30%	43.6 lx
50%	72.6 lx

Conditions:

Number of c-planes: 8

Lux at center: 145 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	1.4	2.0	1.6	2.2	2.4	0.9	1.6	1.2	1.8	2.0
	3H	1.5	2.1	1.8	2.3	2.6	1.2	1.8	1.5	2.0	2.2
	4H	1.8	2.3	2.1	2.6	2.9	1.9	2.5	2.2	2.7	3.0
	6H	2.4	2.9	2.8	3.2	3.5	2.3	2.8	2.7	3.1	3.4
	8H	2.8	3.3	3.1	3.6	3.9	2.5	3.0	2.9	3.3	3.6
	12H	3.3	3.7	3.6	4.0	4.4	2.9	3.3	3.2	3.7	4.0
4H	2H	1.3	1.9	1.6	2.1	2.4	0.9	1.5	1.3	1.8	2.0
	3H	1.7	2.2	2.1	2.5	2.8	1.5	2.0	1.9	2.3	2.6
	4H	2.2	2.6	2.6	2.9	3.3	2.4	2.8	2.8	3.2	3.5
	6H	3.1	3.5	3.5	3.8	4.2	3.0	3.3	3.4	3.7	4.1
	8H	3.7	4.0	4.1	4.3	4.8	3.4	3.7	3.8	4.1	4.5
	12H	4.3	4.6	4.8	5.0	5.4	3.9	4.2	4.4	4.6	5.0
8H	4H	2.4	2.7	2.9	3.1	3.5	2.6	2.9	3.0	3.3	3.7
	6H	3.7	3.9	4.1	4.3	4.8	3.5	3.7	3.9	4.1	4.6
	8H	4.4	4.6	4.9	5.0	5.5	4.1	4.3	4.6	4.7	5.2
	12H	5.3	5.5	5.8	5.9	6.4	5.0	5.1	5.5	5.6	6.1
12H	4H	2.5	2.8	3.0	3.2	3.6	2.6	2.9	3.1	3.3	3.7
	6H	3.9	4.0	4.3	4.5	5.0	3.7	3.9	4.2	4.3	4.8
	8H	4.7	4.9	5.2	5.3	5.9	4.5	4.7	5.0	5.2	5.7
Variation of the observer position for the luminaire distance S											
S = 1.0H		+2.0 / -1.0					+1.9 / -0.8				
S = 1.5H		+3.9 / -1.3					+3.9 / -0.9				
S = 2.0H		+5.6 / -1.5					+5.5 / -1.6				
Standard table		---					---				
Correction summand		---					---				
Corrected glare indices referring to 675 lm total luminous flux											

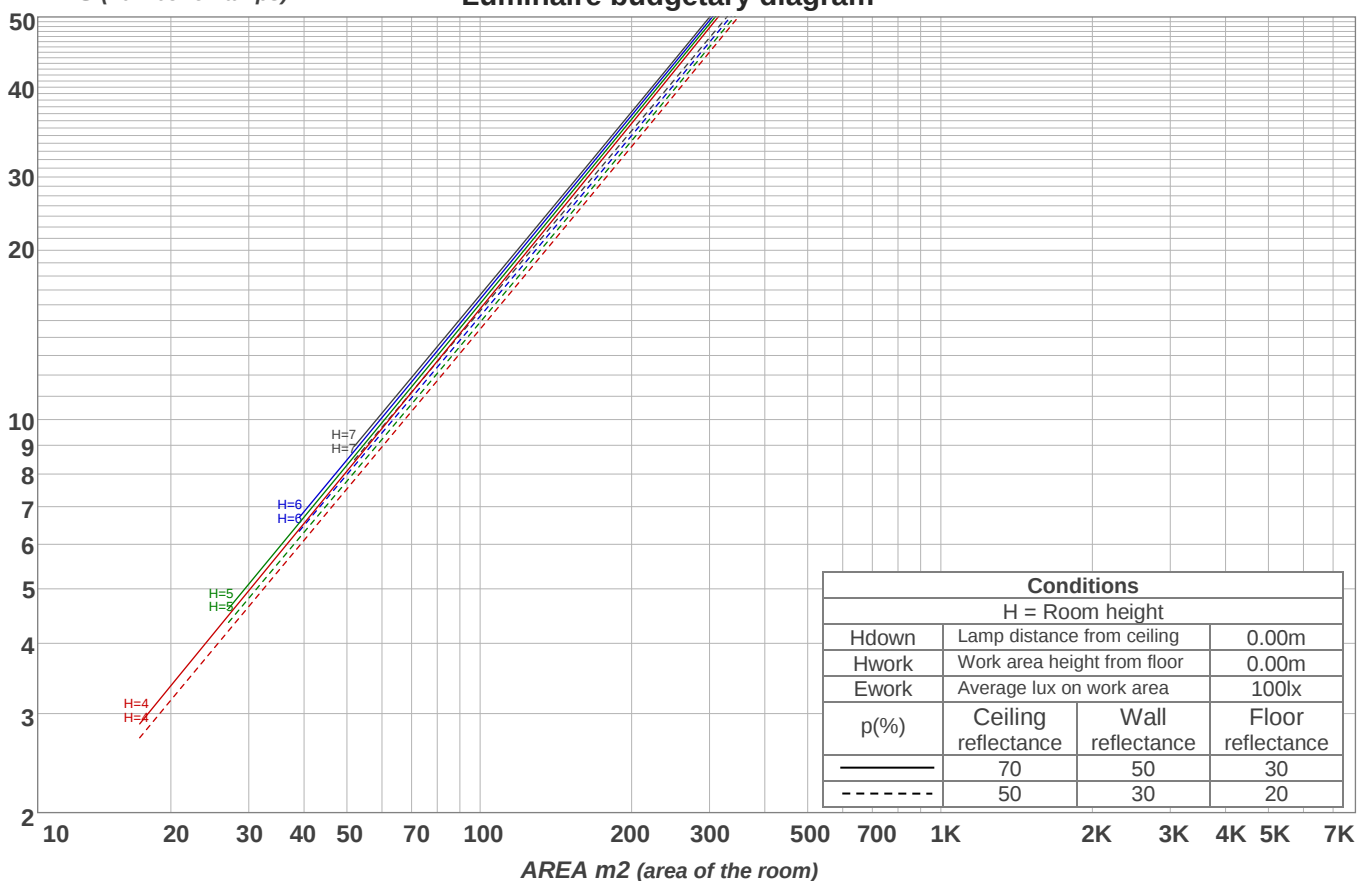
UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	116	114	112	111	113	112	110	109	107	106	105	104	103	102	100	100	99	97
2	113	110	107	105	111	108	106	104	105	103	101	102	100	99	99	98	97	96
3	110	106	103	101	108	105	102	100	102	100	98	100	98	97	98	96	95	94
4	108	103	100	98	106	102	99	97	100	98	96	98	96	95	97	95	94	93
5	105	101	98	95	104	100	97	95	98	96	94	97	95	93	95	94	92	91
6	103	99	95	93	102	98	95	93	97	94	92	95	93	91	94	92	91	90
7	102	97	94	91	101	96	93	91	95	92	91	94	92	90	93	91	90	89
8	100	95	92	90	99	95	92	90	94	91	89	93	91	89	92	90	89	88
9	99	94	90	88	98	93	90	88	92	90	88	92	89	88	91	89	87	87
10	97	92	89	87	96	92	89	87	91	89	87	91	88	87	90	88	86	86

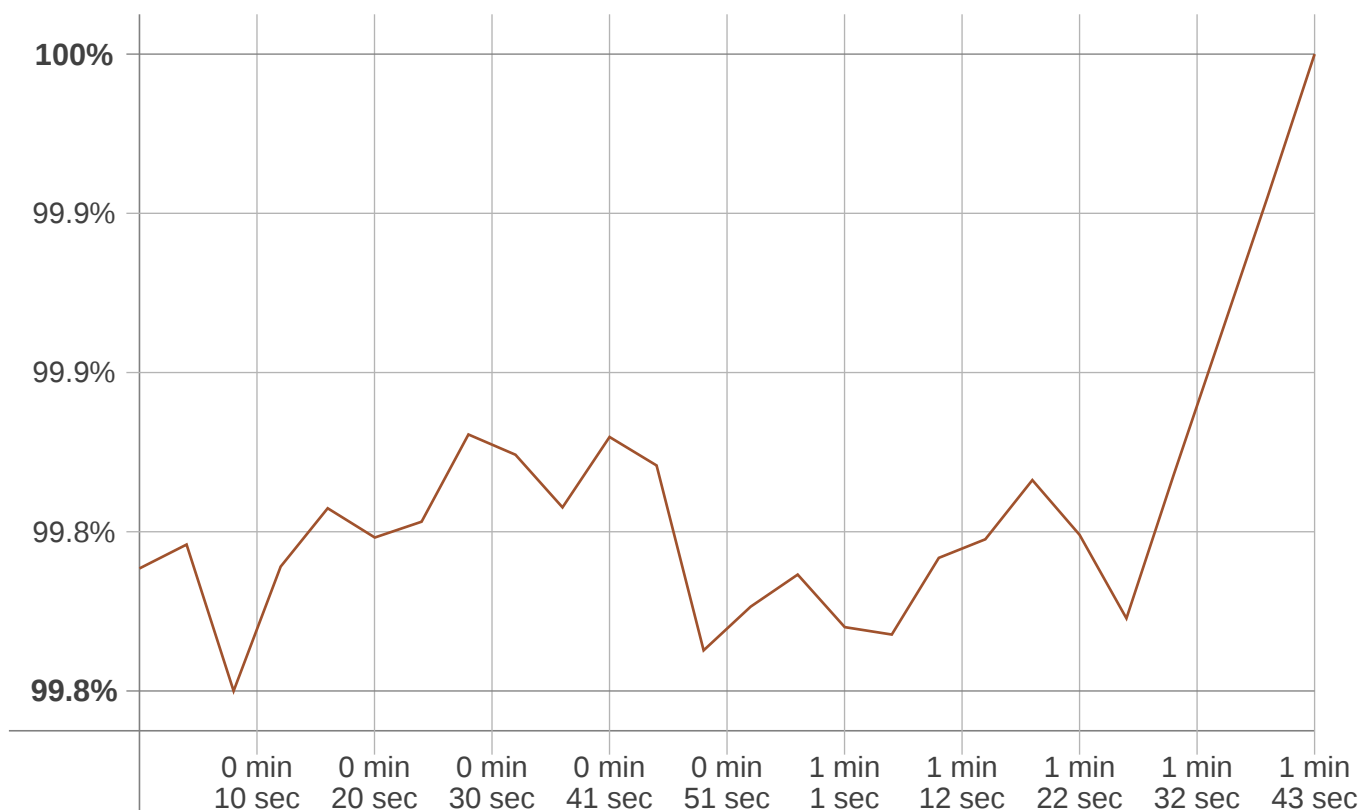
LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
456 lm	143 lm	48.3 lm	14.8 lm	3.49 lm	1.36 lm	1.16 lm	1.03 lm	0.858 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.843 lm	0.846 lm	0.866 lm	0.775 lm	0.647 lm	0.541 lm	0.397 lm	0.271 lm	0.065 lm

Warmup curve

Warmup result

Warmup time:	Not completed
Warmup variation	+0.2%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2614 K	+0 K	2614 K

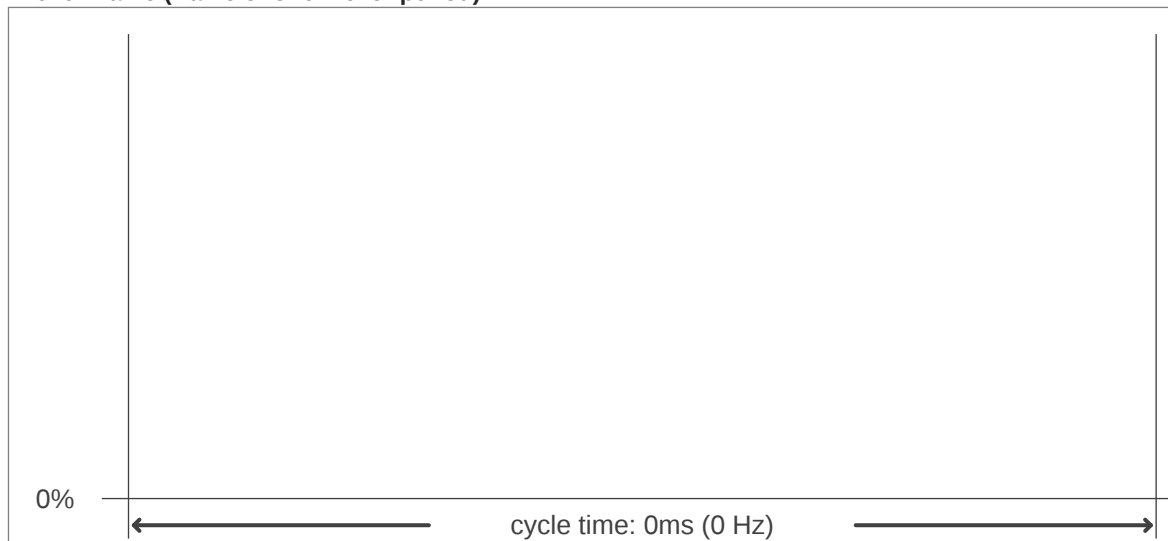
Output change

Output start	Output change	Output end
674 lm	+ 1m	675 lm

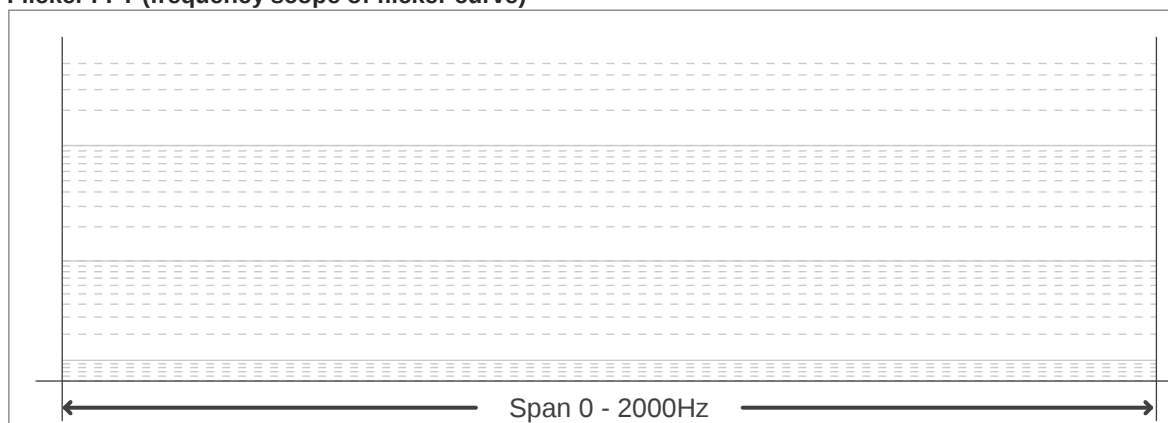
Flicker curve (complete sampled flicker signal)



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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