

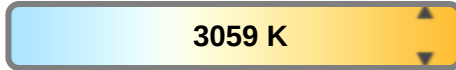
Light efficiency:



Light quality:



Color temperature:

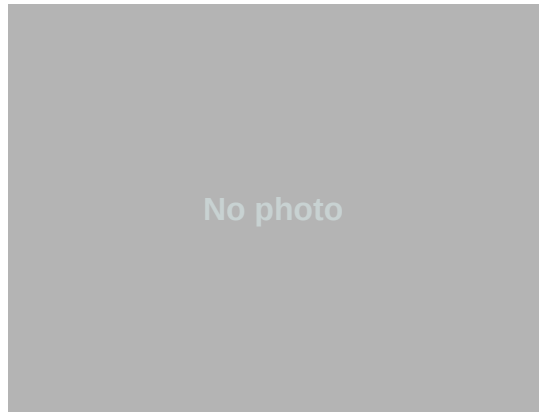


Output: 338 lm

Peak: 6040 cd

Power: 11.9 W

PF: 0.99



Product name:

F080-1S-HO-30-9-10-X-X-X HC

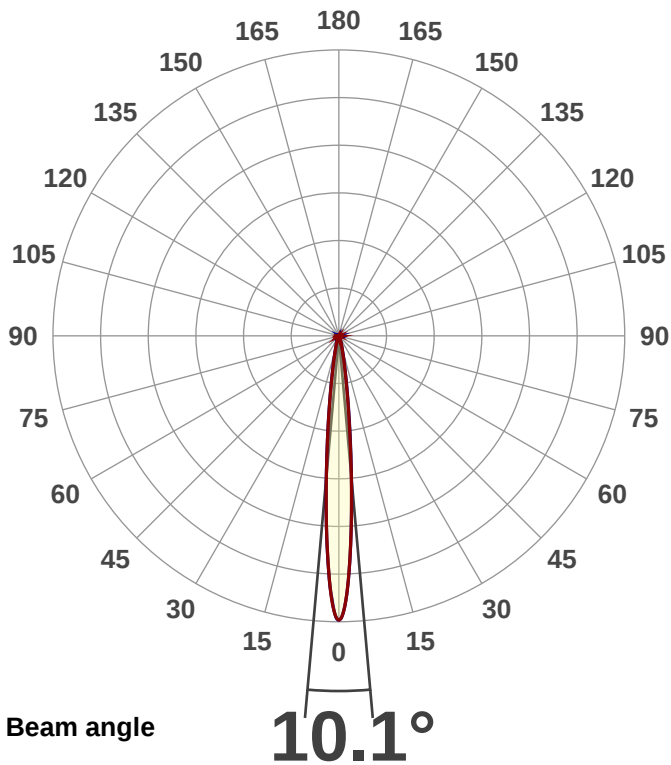
Item number:

RISE F080

Date and time:

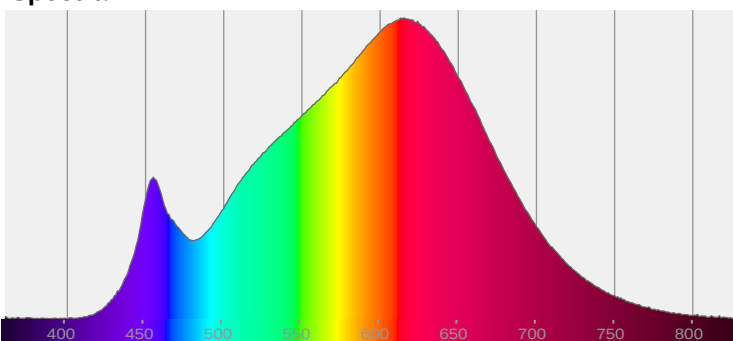
11/8/2018 3:02:59 PM

Description:

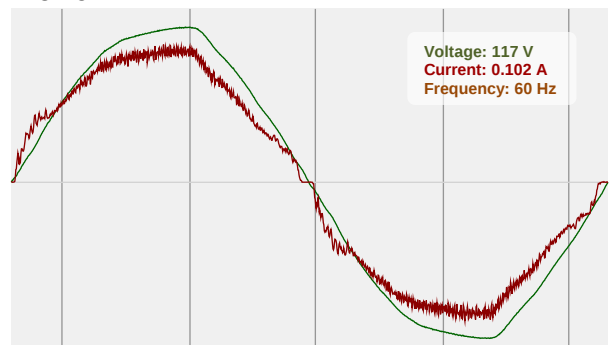


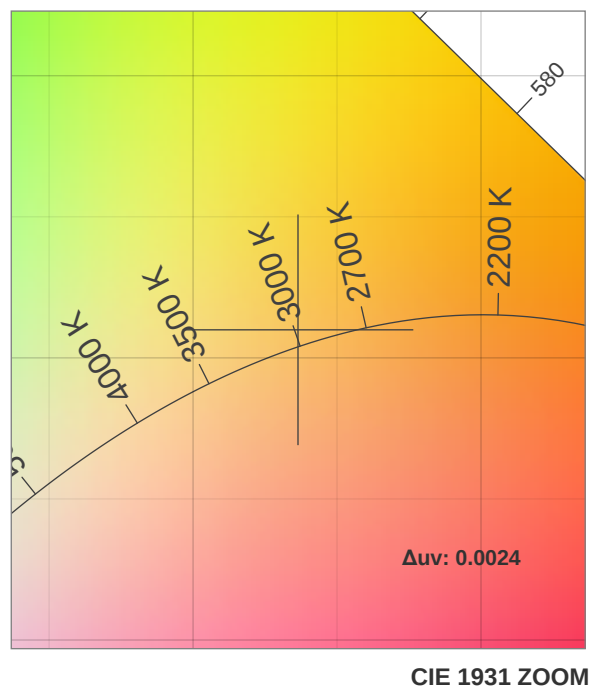
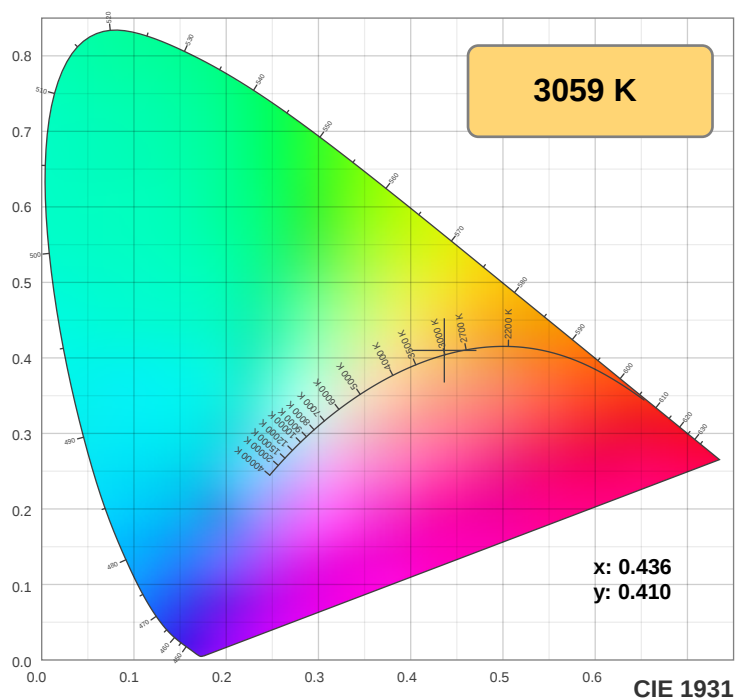
CIE 1931
x: 0.436
y: 0.410

Spectra

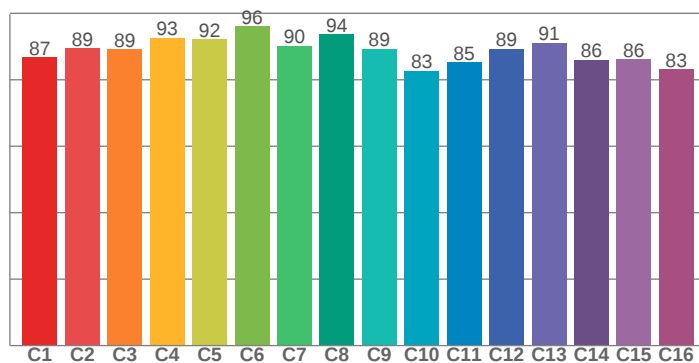


Power

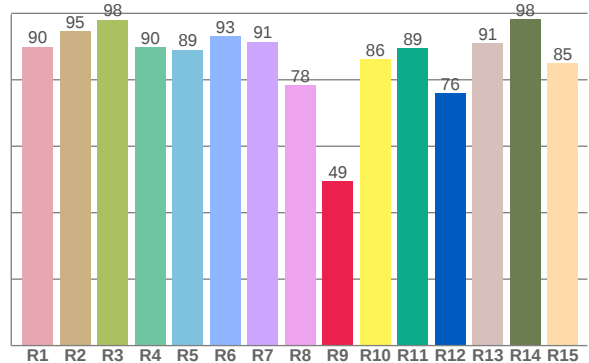




TM30: 88.9



CRI: 90.5 (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
89.9	94.5	98.0	89.7	89.1	93.1	91.4	78.3	49.5	86.2	89.5	75.9	91.0	98.3	85.0

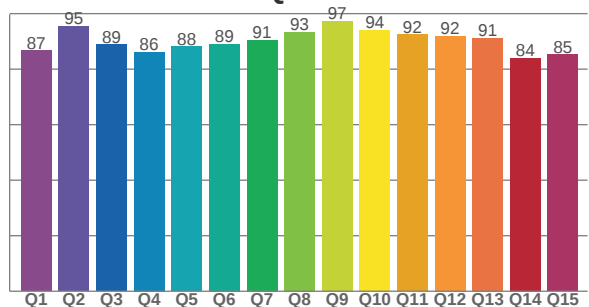
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
86.7	89.4	89.1	92.7	92.2	96.0	90.2	93.6	89.2	82.7	85.2	89.4	91.1	86.0	86.1	83.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86.7	95.5	88.8	86.1	88.1	89.0	90.5	93.3	97.3	94.0	92.5	91.9	91.2	84.0	85.3

CQS: 89.5



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
3059 K	90.5	49.5	88.9	96.5	89.5	0.436	0.410	0.248	0.349	0.0024

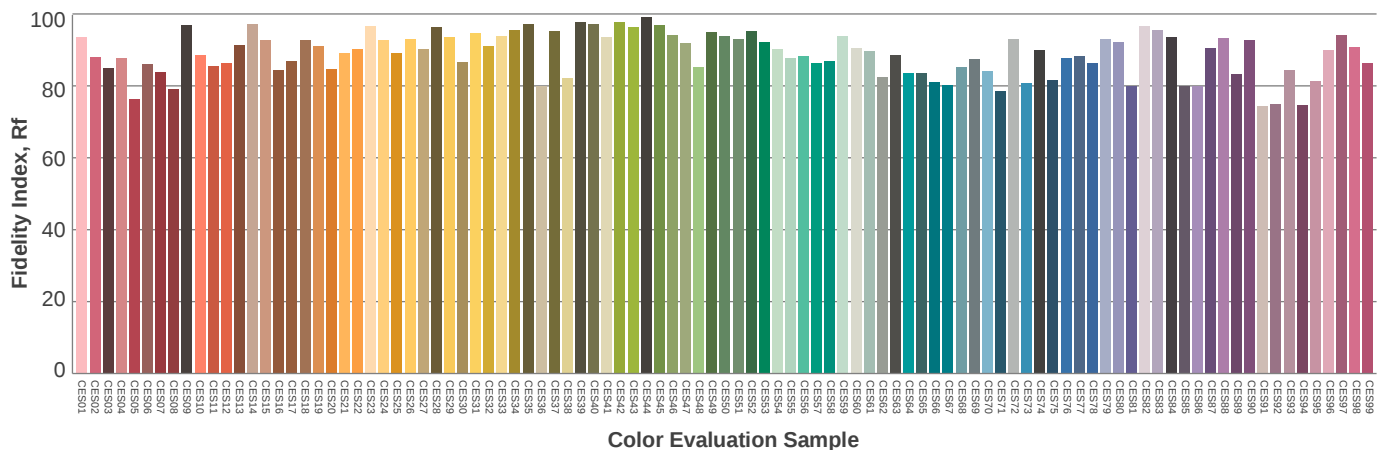
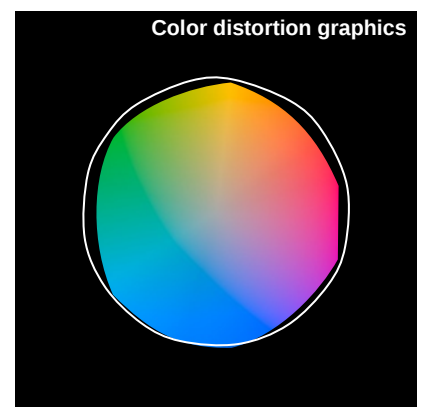
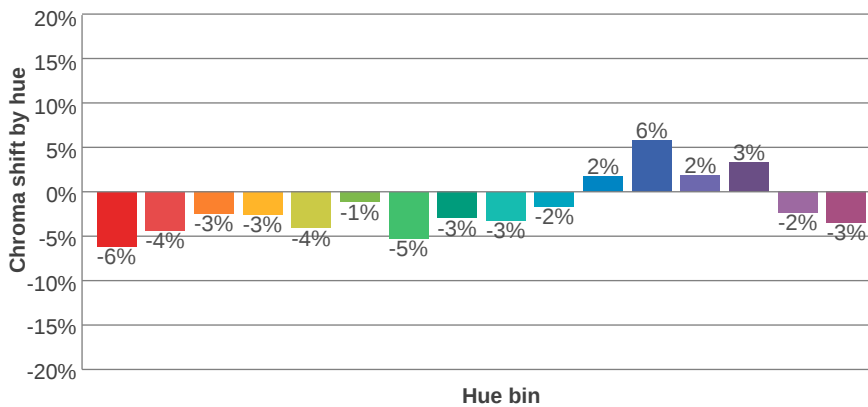
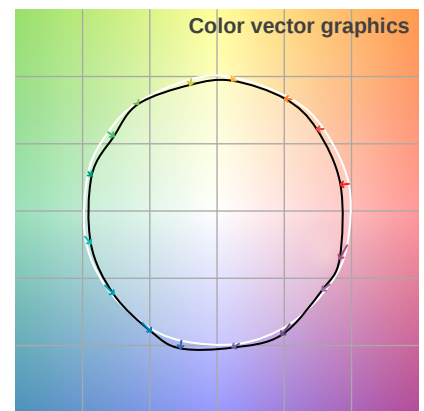
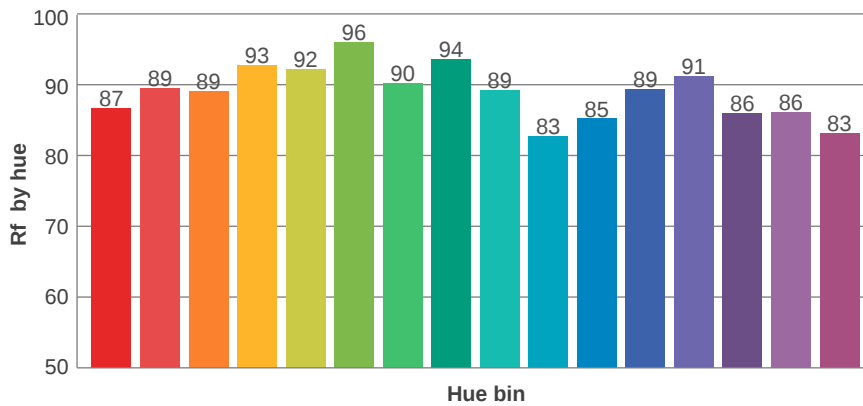
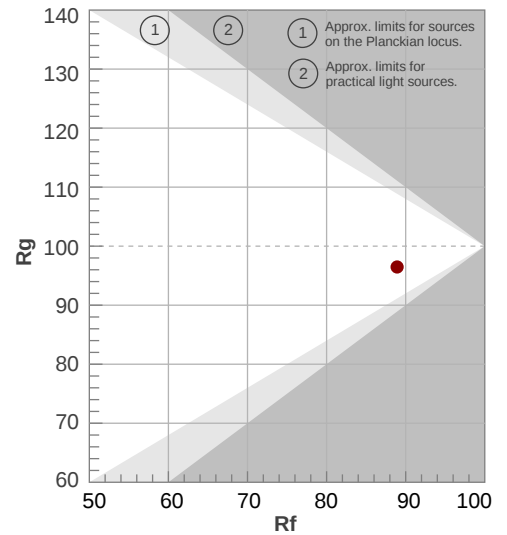
Rf 88.9

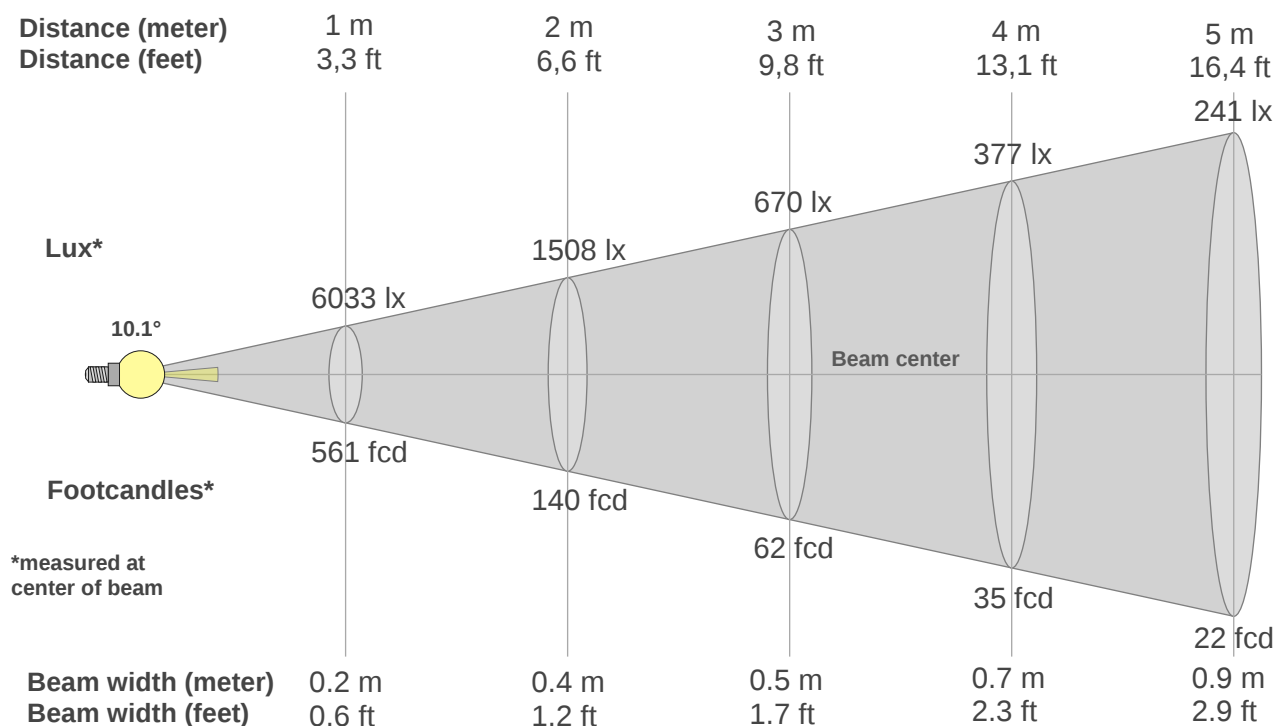
Fidelity index Rf

Rg 96.5

Gammut index Rg

Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	87	-6%	1%
2	89	-4%	3%
3	89	-3%	4%
4	93	-3%	1%
5	92	-4%	2%
6	96	-1%	0%
7	90	-5%	0%
8	94	-3%	2%
9	89	-3%	6%
10	83	-2%	9%
11	85	2%	9%
12	89	6%	0%
13	91	2%	-5%
14	86	3%	-9%
15	86	-2%	-7%
16	83	-3%	-11%




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
6033lx	1508lx	670lx	377lx	241lx	168lx	123lx	94lx	74lx	60lx	50lx	42lx	36lx	31lx	27lx	24lx	21lx	19lx	17lx	15lx
560.5fcd	140.1fcd	62.3fcd	35fcd	22.4fcd	15.6fcd	11.4fcd	8.8fcd	6.9fcd	5.6fcd	4.6fcd	3.9fcd	3.3fcd	2.9fcd	2.5fcd	2.2fcd	1.9fcd	1.7fcd	1.6fcd	1.4fcd

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°
6033	5848	5336	4614	3835	3051	2335	1774	1338	1003	764	589	464	369	300	246	205	171	145	123
100%	97%	88%	76%	64%	51%	39%	29%	22%	17%	13%	10%	8%	6%	5%	4%	3%	3%	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°
6033	5840	5339	4616	3826	3073	2391	1827	1387	1051	795	614	483	382	305	250	207	172	147	126
100%	97%	88%	77%	63%	51%	40%	30%	23%	17%	13%	10%	8%	6%	5%	4%	3%	3%	2%	2%

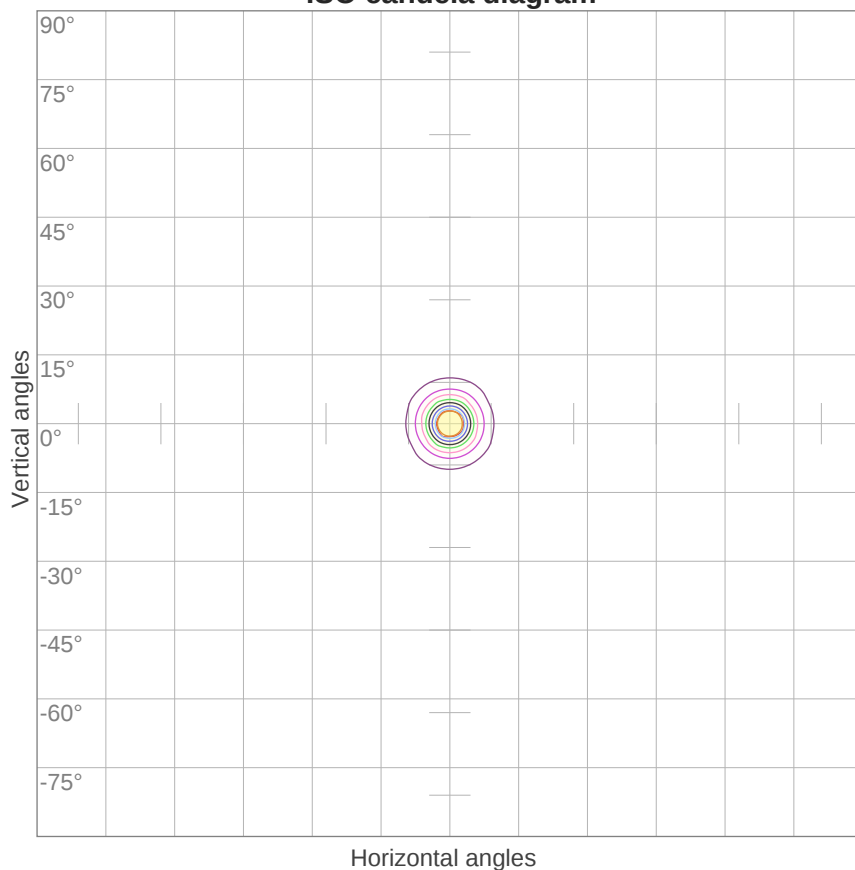
Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
6033	5845	5335	4605	3831	3050	2363	1809	1366	1021	771	595	466	372	300	246	204	171	146	124
100%	97%	88%	76%	63%	51%	39%	30%	23%	17%	13%	10%	8%	6%	5%	4%	3%	3%	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°
6033	5838	5339	4623	3838	3074	2373	1825	1372	1047	801	619	486	385	313	255	210	175	147	125
100%	97%	88%	77%	64%	51%	39%	30%	23%	17%	13%	10%	8%	6%	5%	4%	3%	3%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
10.1°	22.1°	35.8°	98.6%	98.2%

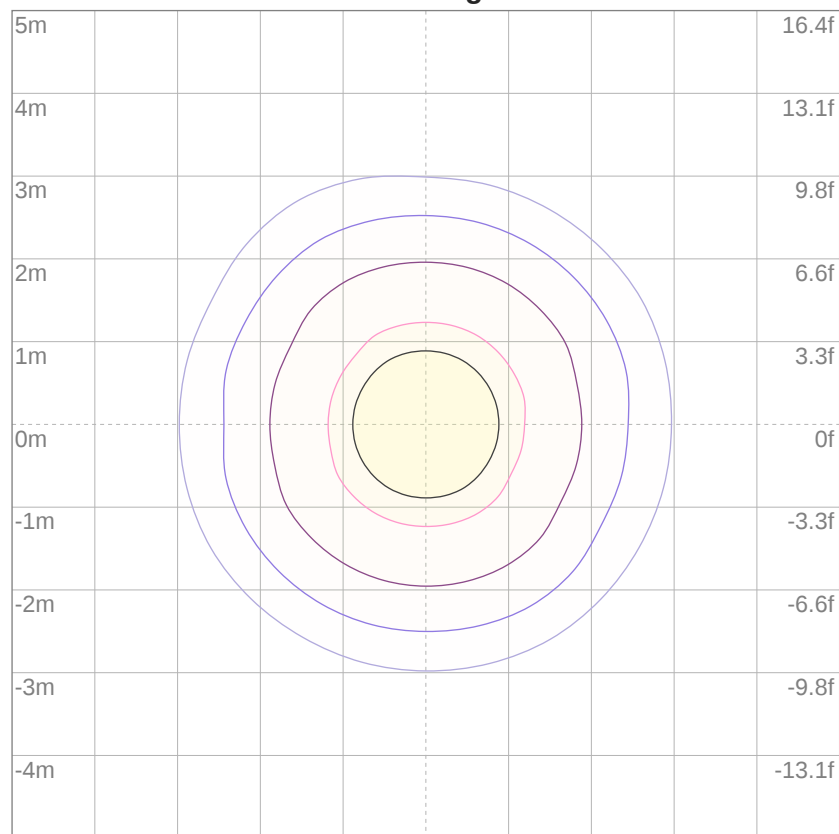
ISO candela diagram


10%	603 cd
20%	1207 cd
30%	1810 cd
40%	2413 cd
50%	3017 cd
60%	3620 cd
70%	4223 cd
80%	4827 cd
90%	5430 cd

Conditions:

Number of c-planes: 12

Candela at center: 6033 cd

ISO lux diagram


3%	1.81 lx
5%	3.02 lx
10%	6.03 lx
30%	18.1 lx
50%	30.2 lx

Conditions:

Number of c-planes: 12

Lux at center: 60.3 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	-0.5	0.1	-0.3	0.3	0.5	-0.8	-0.2	-0.5	0.0	0.2
	3H	-0.1	0.5	0.2	0.7	1.0	-0.4	0.2	-0.1	0.4	0.7
	4H	0.6	1.1	0.9	1.4	1.6	0.5	1.1	0.8	1.3	1.6
	6H	1.5	2.0	1.8	2.3	2.6	1.8	2.3	2.1	2.6	2.9
	8H	1.9	2.4	2.3	2.7	3.0	2.1	2.6	2.4	2.9	3.2
	12H	2.3	2.8	2.7	3.1	3.4	2.4	2.9	2.8	3.2	3.5
4H	2H	-0.5	0.0	-0.2	0.3	0.6	-0.7	-0.2	-0.4	0.1	0.3
	3H	0.2	0.6	0.5	1.0	1.3	-0.2	0.3	0.2	0.6	0.9
	4H	1.1	1.5	1.5	1.9	2.2	0.9	1.3	1.3	1.7	2.0
	6H	2.4	2.7	2.8	3.1	3.5	2.4	2.8	2.9	3.1	3.5
	8H	3.0	3.3	3.4	3.7	4.1	2.9	3.2	3.3	3.6	4.0
	12H	3.5	3.8	4.0	4.2	4.6	3.4	3.6	3.8	4.1	4.5
8H	4H	1.4	1.6	1.8	2.0	2.5	1.2	1.4	1.6	1.8	2.3
	6H	2.9	3.1	3.3	3.5	4.0	2.8	3.0	3.2	3.4	3.9
	8H	3.6	3.8	4.1	4.3	4.7	3.4	3.5	3.8	4.0	4.5
	12H	4.3	4.5	4.8	5.0	5.5	4.2	4.4	4.7	4.8	5.3
12H	4H	1.4	1.6	1.8	2.0	2.5	1.2	1.5	1.7	1.9	2.3
	6H	3.0	3.2	3.5	3.6	4.1	2.9	3.1	3.4	3.5	4.0
	8H	3.8	4.0	4.3	4.4	5.0	3.6	3.7	4.1	4.2	4.7
Variation of the observer position for the luminaire distance S											
S = 1.0H		+1.7 / -0.7					+1.6 / -0.6				
S = 1.5H		+3.4 / -0.9					+3.3 / -0.9				
S = 2.0H		+5.0 / -1.2					+4.9 / -0.9				
Standard table		---					---				
Correction summand		---					---				
Corrected glare indices referring to 338 lm total luminous flux											

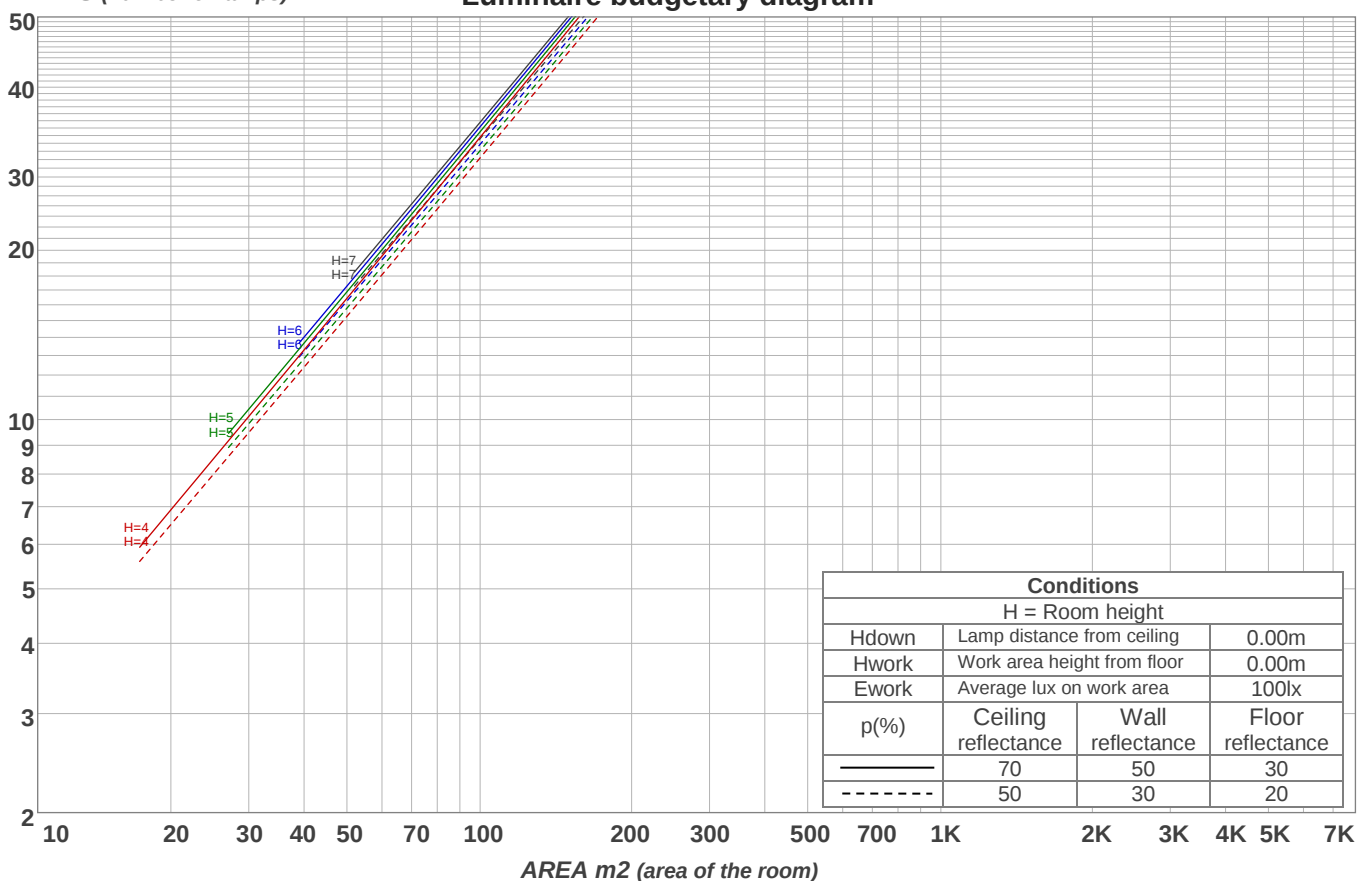
UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	115	114	112	110	113	111	110	108	107	106	105	103	103	102	100	99	99	97
2	112	109	107	104	110	107	105	103	104	102	101	101	100	99	99	98	97	95
3	110	106	103	100	108	104	102	99	102	100	98	99	98	96	97	96	95	93
4	107	103	99	97	106	102	99	96	100	97	95	98	96	94	96	94	93	92
5	105	100	97	94	104	99	96	94	98	95	93	96	94	92	95	93	91	90
6	103	98	94	92	102	97	94	92	96	93	91	94	92	90	93	91	90	89
7	101	96	92	90	100	95	92	90	94	91	89	93	91	89	92	90	88	88
8	99	94	91	88	98	93	90	88	93	90	88	92	89	88	91	89	87	86
9	97	92	89	87	97	92	89	87	91	88	87	90	88	86	90	88	86	85
10	96	91	88	86	95	90	88	86	90	87	85	89	87	85	89	86	85	84

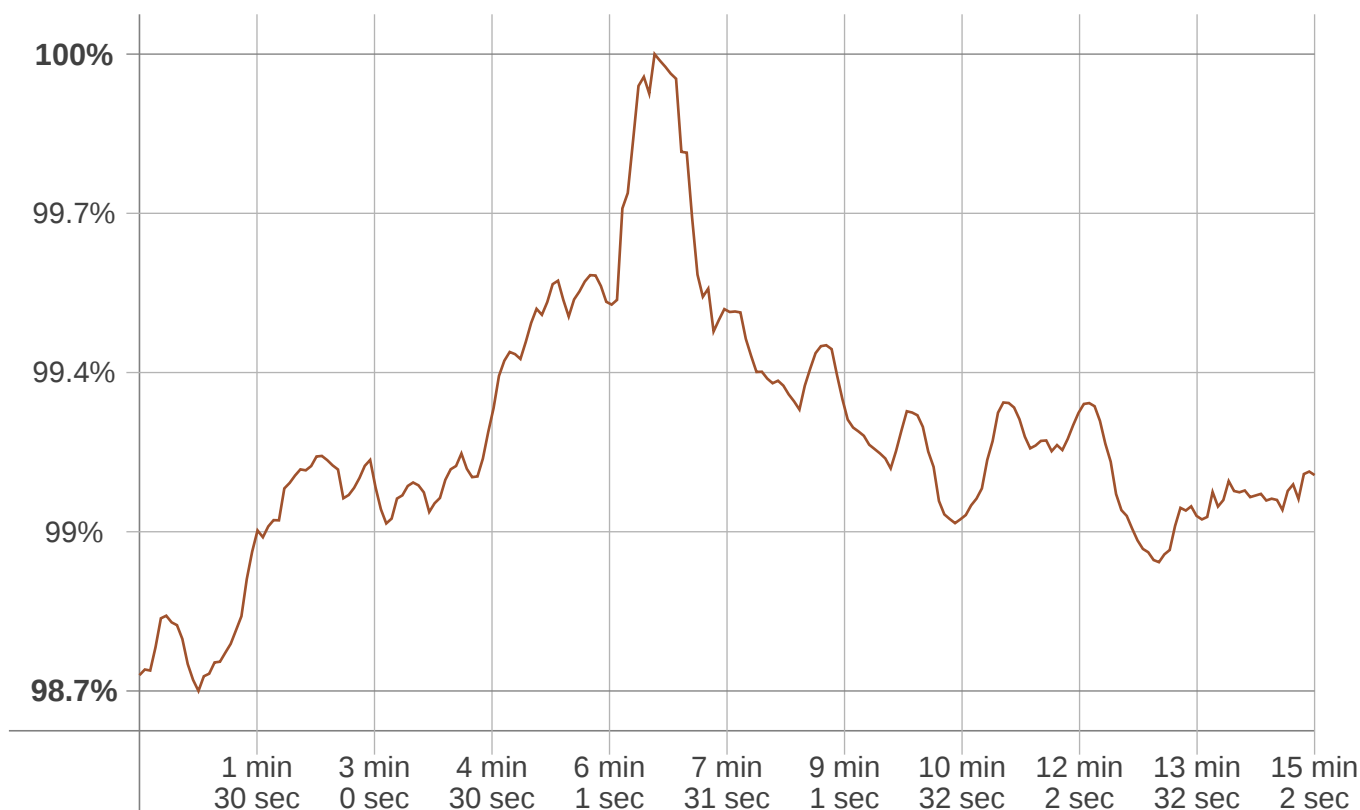
LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
216 lm	79.5 lm	26.9 lm	8.15 lm	1.63 lm	0.836 lm	0.655 lm	0.613 lm	0.553 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.560 lm	0.519 lm	0.450 lm	0.424 lm	0.355 lm	0.285 lm	0.243 lm	0.143 lm	0.046 lm

Warmup curve

Warmup result

Warmup time:	15 min 2 sec
Warmup variation	+1.3%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
3058 K	+1 K	3059 K

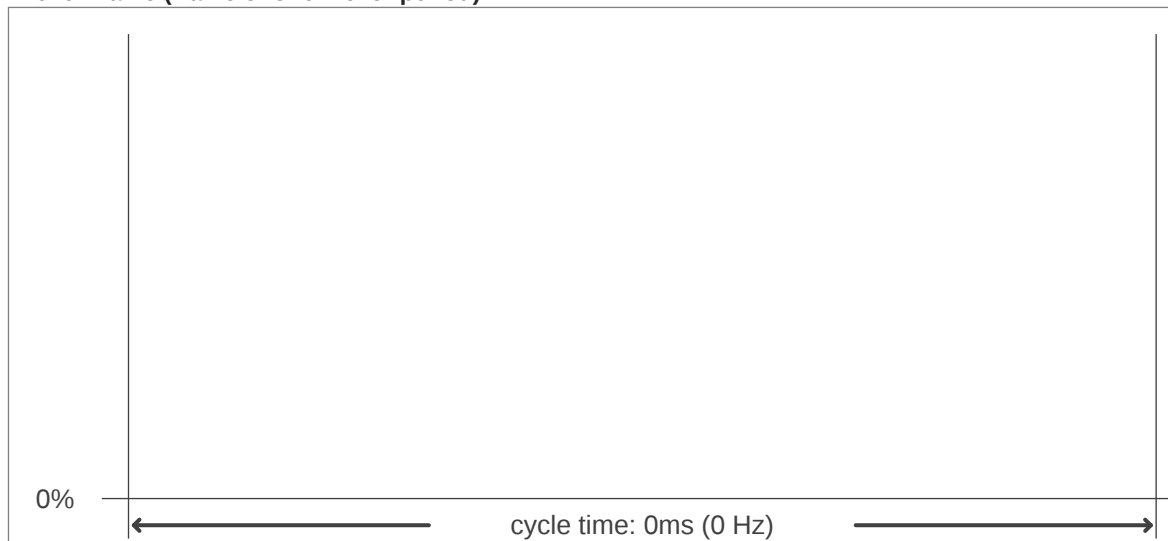
Output change

Output start	Output change	Output end
337 lm	+1 lm	338 lm

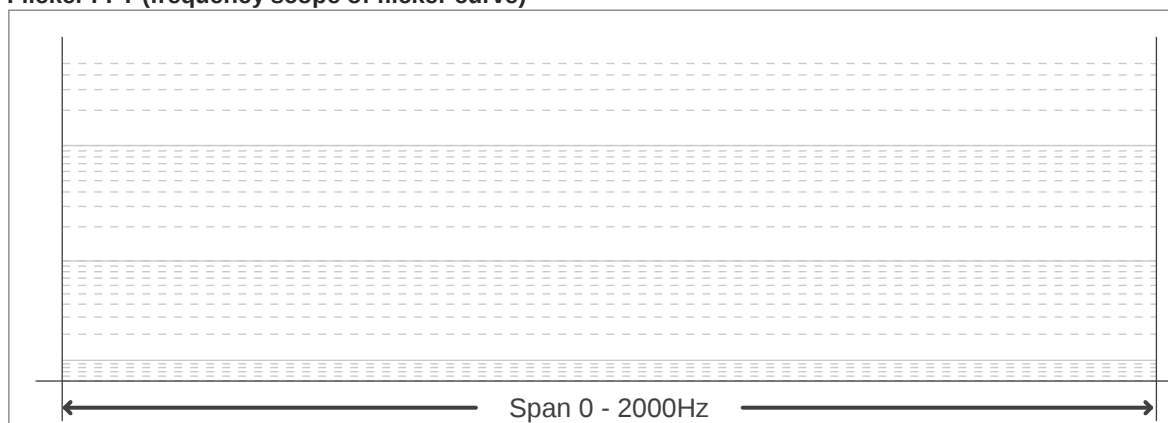
Flicker curve (complete sampled flicker signal)



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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