

Light efficiency:



Light quality:



Color temperature:

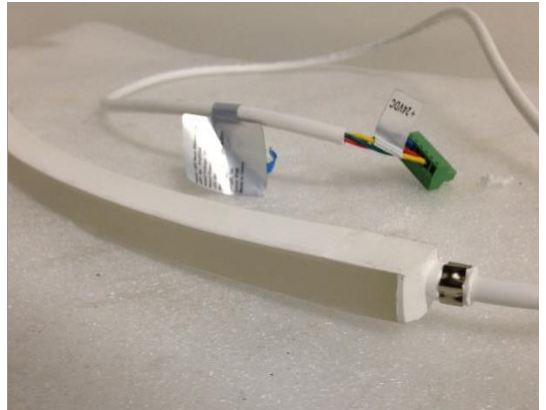


Output: 19.3 lm

Peak: 6.00 cd

Power: 1.7 W

PF: 0.38



Product name:

Flex Tube SE RGB

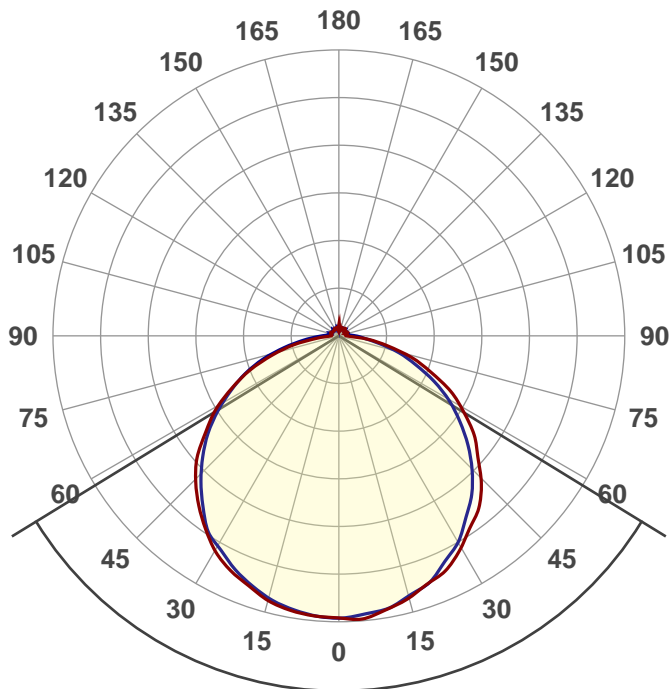
Item number:

Red

Date:

6/6/2017

Description:



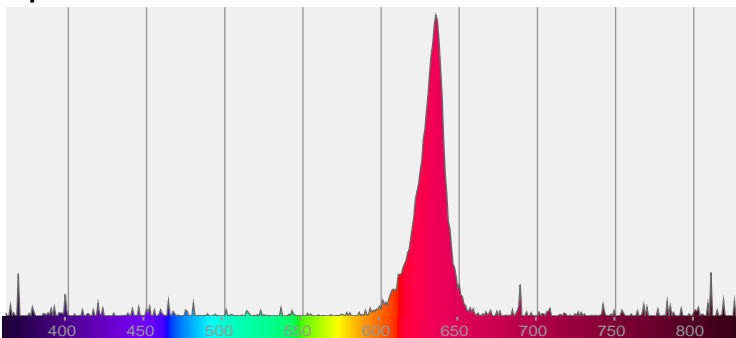
Beam angle

116.9°

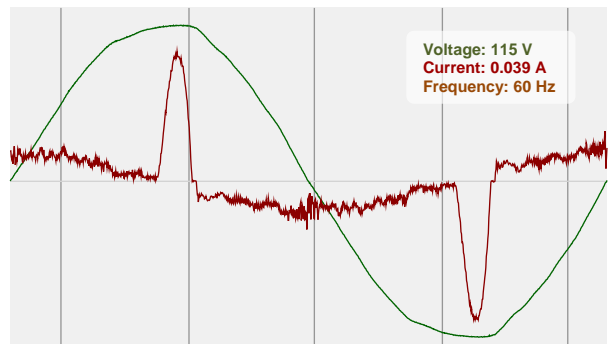


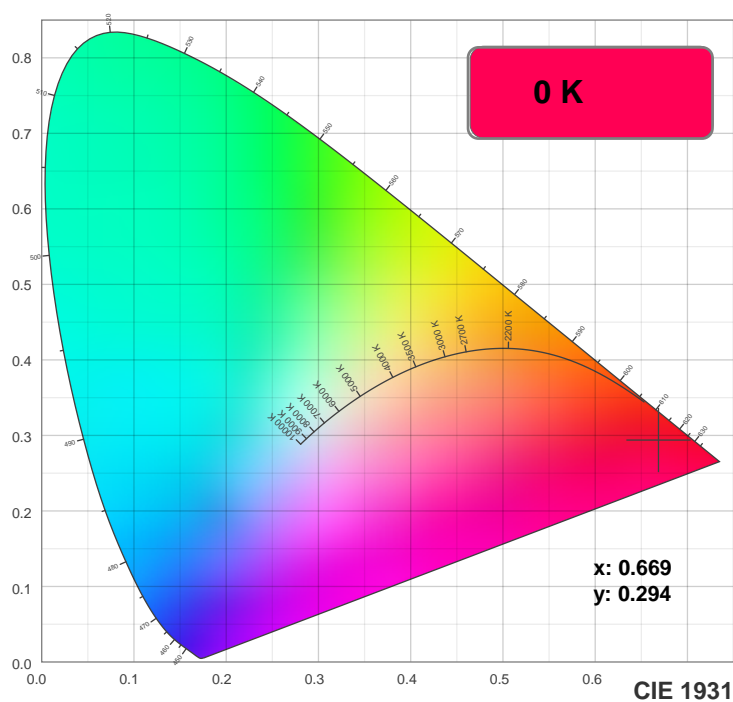
CIE 1931
x: 0.669
y: 0.294

Spectra

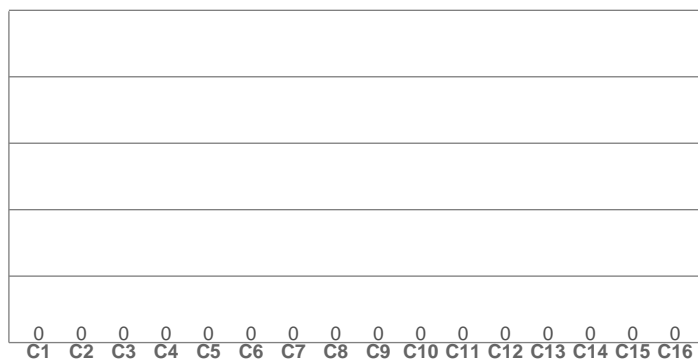


Power





TM30: 0.0



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

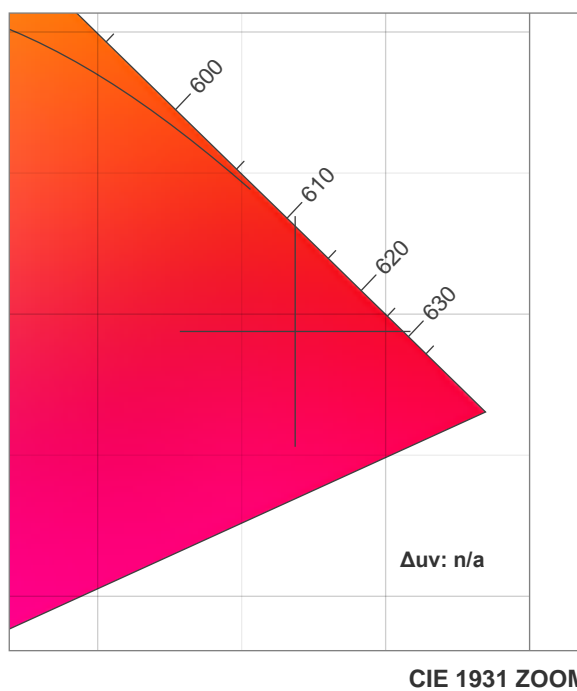
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

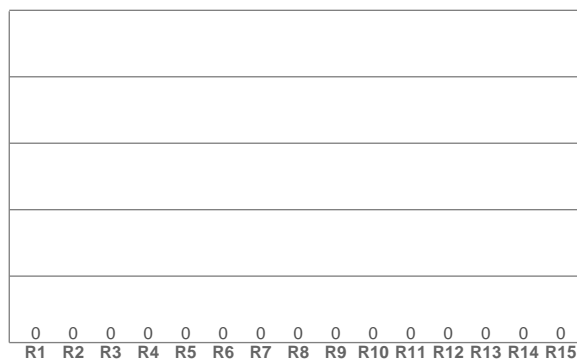
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CQS Q values

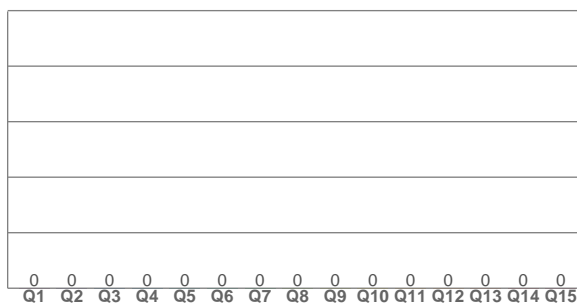
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



CRI: 0.0 (R1-R8)



CQS: 0.0



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
0 K	0.0	0.0	0.0	0.0	0.0	0.669	0.294	0.515	0.340	n/a

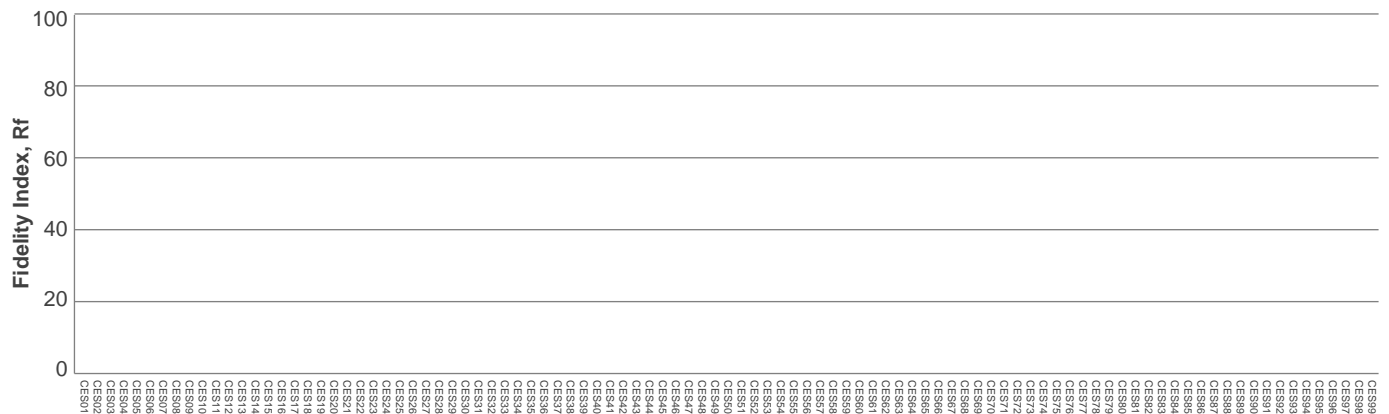
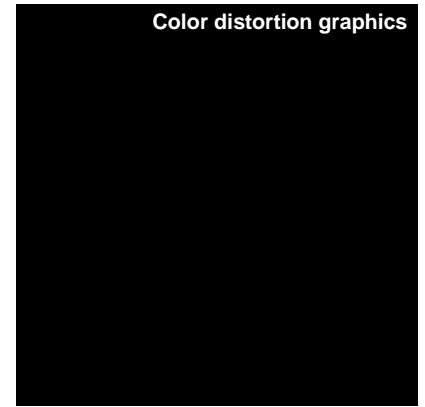
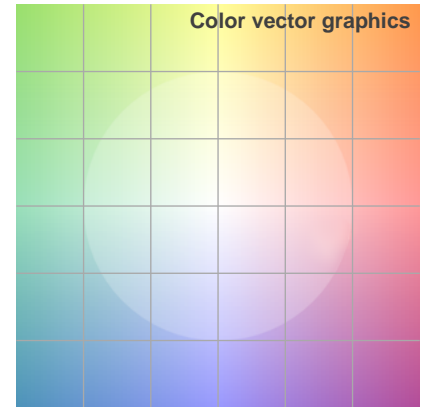
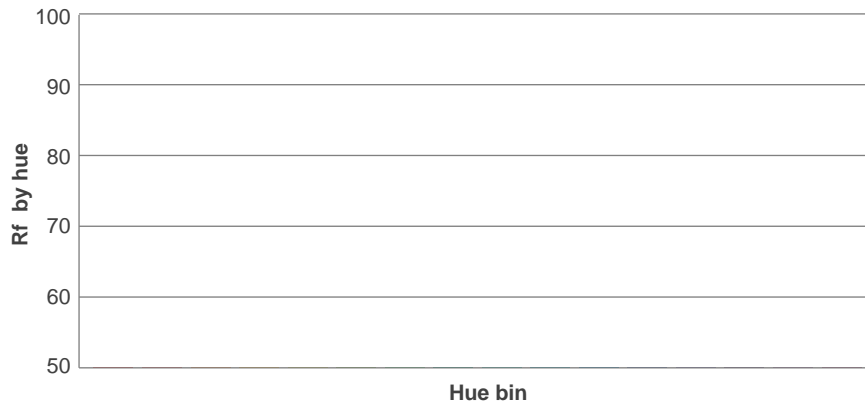
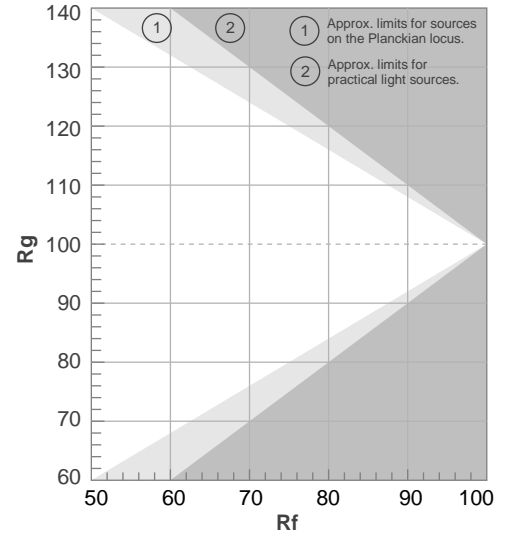
Rf 0.0

Fidelity index Rf

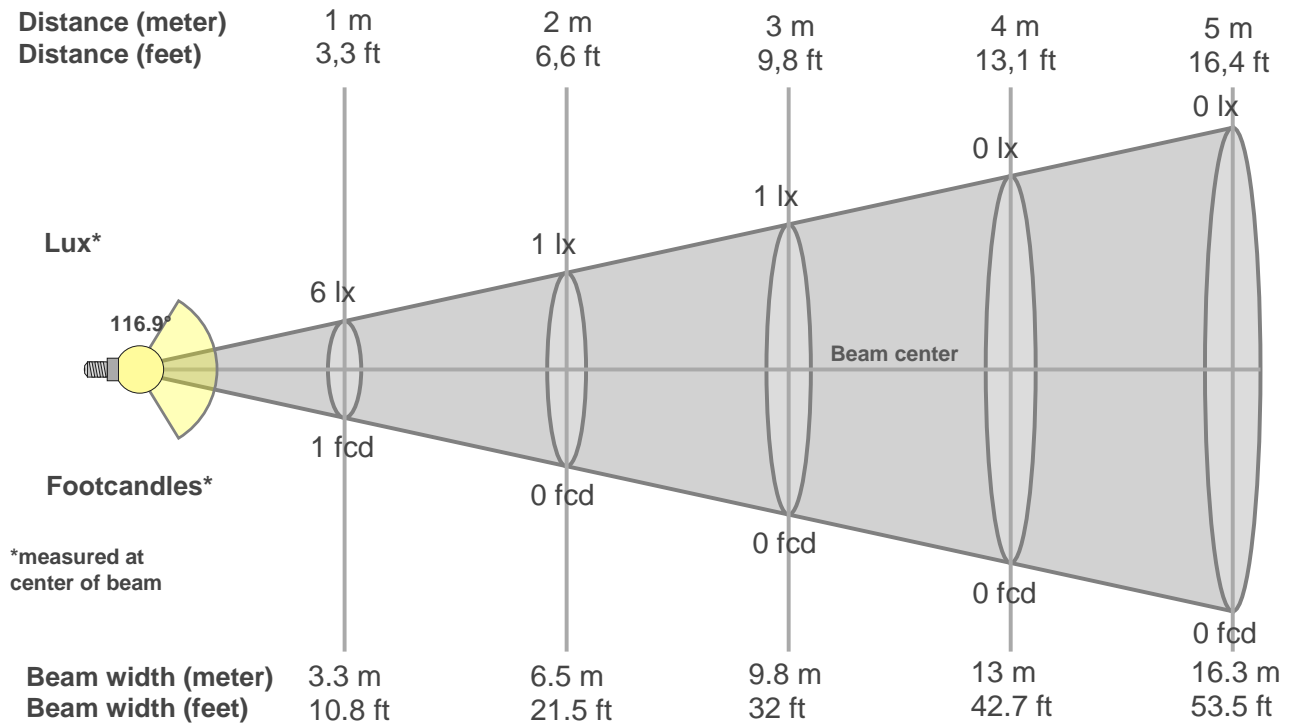
Rg 0.0

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%



Color Evaluation Sample



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
6lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx	0lx
0.6fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
5.96	6.00	5.87	5.73	5.56	5.42	5.17	4.88	4.62	4.25	3.82	3.43	2.97	2.48	1.94	1.43	0.91	0.47	0.18	0.17
100%	101%	98%	96%	93%	91%	87%	82%	78%	71%	64%	58%	50%	42%	33%	24%	15%	8%	3%	3%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
5.96	5.91	5.85	5.69	5.56	5.28	5.04	4.68	4.37	3.98	3.55	3.11	2.66	2.18	1.68	1.26	0.82	0.52	0.36	0.23
100%	99%	98%	95%	93%	89%	85%	79%	73%	67%	60%	52%	45%	37%	28%	21%	14%	9%	6%	4%

Intensities in 180° c-plane

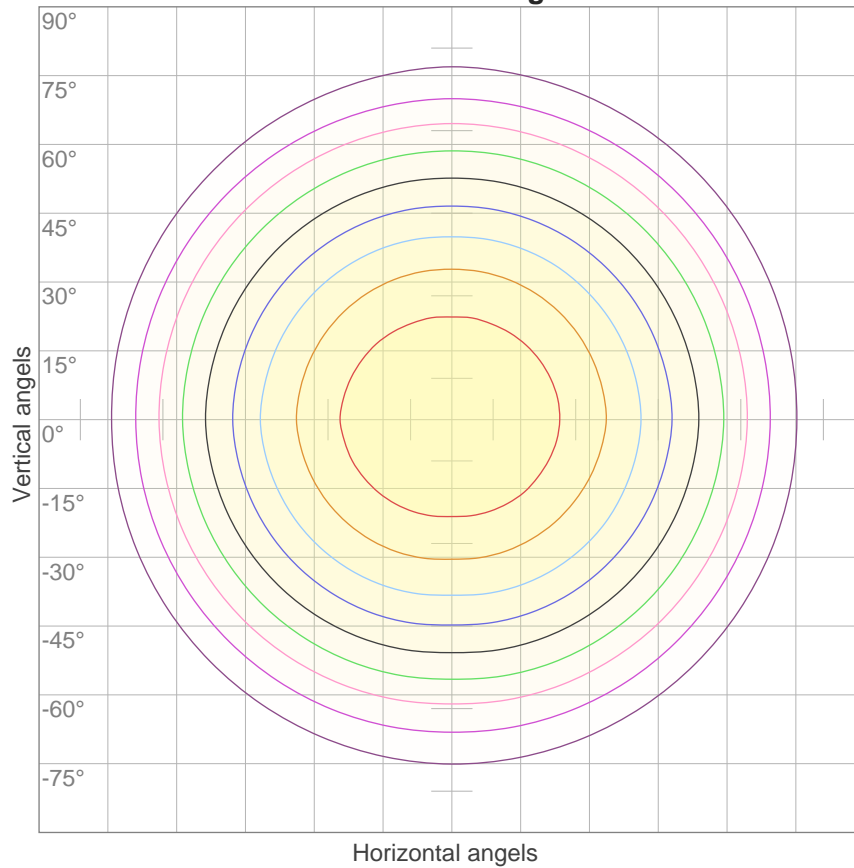
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
5.96	5.94	5.89	5.79	5.61	5.45	5.24	4.93	4.62	4.28	3.88	3.39	2.94	2.41	1.89	1.35	0.85	0.39	0.18	0.15
100%	100%	99%	97%	94%	91%	88%	83%	77%	72%	65%	57%	49%	40%	32%	23%	14%	7%	3%	3%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
5.96	5.93	5.85	5.73	5.56	5.35	5.12	4.88	4.50	4.12	3.72	3.30	2.84	2.39	1.95	1.47	1.00	0.63	0.37	0.25
100%	100%	98%	96%	93%	90%	86%	82%	75%	69%	62%	55%	48%	40%	33%	25%	17%	10%	6%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116.9°	167.4°	360°	0.7%	0.5%

ISO candela diagram



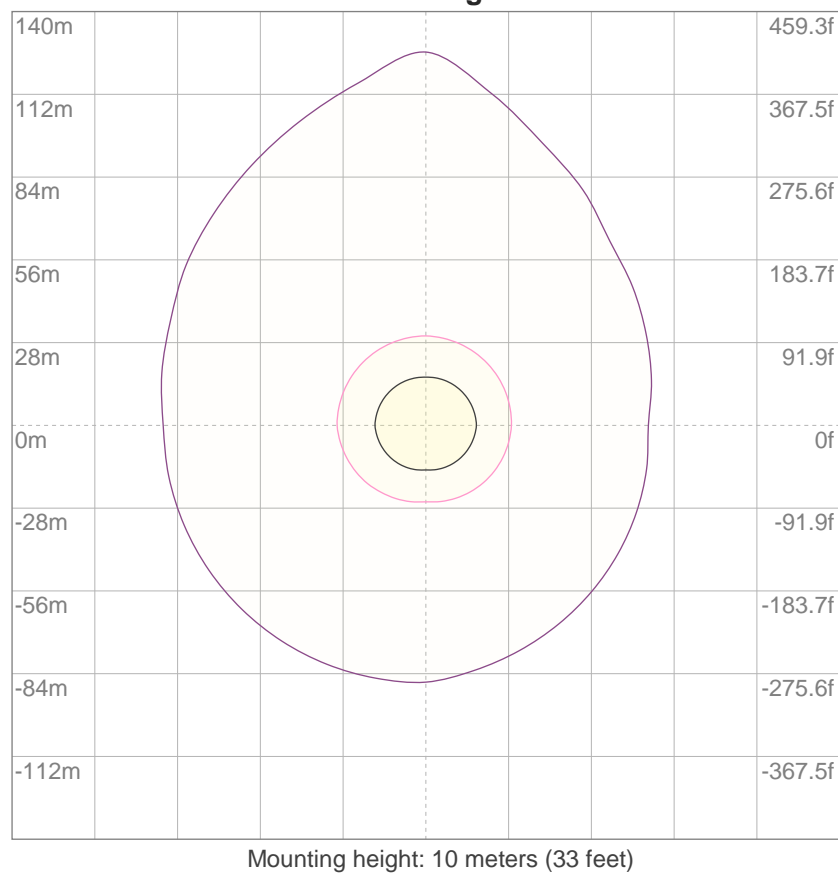
10%	1 cd
20%	1 cd
30%	2 cd
40%	2 cd
50%	3 cd
60%	4 cd
70%	4 cd
80%	5 cd
90%	5 cd

Conditions:

Number of c-planes: 4

Candela at center: 6 cd

ISO lux diagram



3%	1.79m lx
5%	2.98m lx
10%	5.96m lx
30%	17.9m lx
50%	29.8m lx

Conditions:

Number of c-planes: 4

Lux at center: 59.6m lx

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

UGR

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	27.4	28.6	27.7	29.0	29.3	26.9	28.2	27.3	28.5	28.9
	3H	29.1	30.3	29.5	30.6	31.0	28.5	29.7	28.9	30.0	30.4
	4H	29.8	30.9	30.3	31.3	31.7	29.2	30.3	29.6	30.7	31.1
	6H	30.4	31.4	30.8	31.8	32.3	29.8	30.8	30.2	31.2	31.6
	8H	30.6	31.6	31.1	32.0	32.5	30.0	31.0	30.4	31.4	31.8
	12H	30.8	31.7	31.3	32.2	32.6	30.2	31.1	30.7	31.6	32.0
4H	2H	28.0	29.1	28.5	29.5	29.9	27.7	28.7	28.1	29.1	29.5
	3H	30.0	30.9	30.4	31.3	31.8	29.4	30.4	29.9	30.8	31.3
	4H	30.8	31.7	31.3	32.1	32.6	30.3	31.1	30.8	31.6	32.0
	6H	31.6	32.3	32.1	32.8	33.3	31.0	31.7	31.5	32.2	32.7
	8H	31.8	32.5	32.4	33.0	33.5	31.3	31.9	31.8	32.4	33.0
	12H	32.1	32.7	32.6	33.2	33.8	31.6	32.2	32.1	32.7	33.2
8H	4H	31.2	31.8	31.7	32.3	32.9	30.6	31.3	31.1	31.8	32.3
	6H	32.1	32.6	32.6	33.1	33.7	31.5	32.0	32.0	32.6	33.1
	8H	32.5	32.9	33.0	33.5	34.1	31.9	32.4	32.5	32.9	33.5
	12H	32.8	33.2	33.4	33.8	34.4	32.3	32.7	32.9	33.3	33.9
12H	4H	31.2	31.8	31.7	32.3	32.9	30.7	31.3	31.2	31.8	32.3
	6H	32.1	32.6	32.7	33.2	33.8	31.6	32.1	32.1	32.6	33.2
	8H	32.6	33.0	33.2	33.6	34.2	32.0	32.5	32.6	33.0	33.6
Variation of the observer position for the luminaire distance S											
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1				
S = 1.5H		+0.2 / -0.3					+0.3 / -0.3				
S = 2.0H		+0.3 / -0.5					+0.4 / -0.6				
Standard table		BK07					BK07				
Correction summand		15.8					15.2				
Corrected glare indices referring to 19.3 lm total luminous flux											

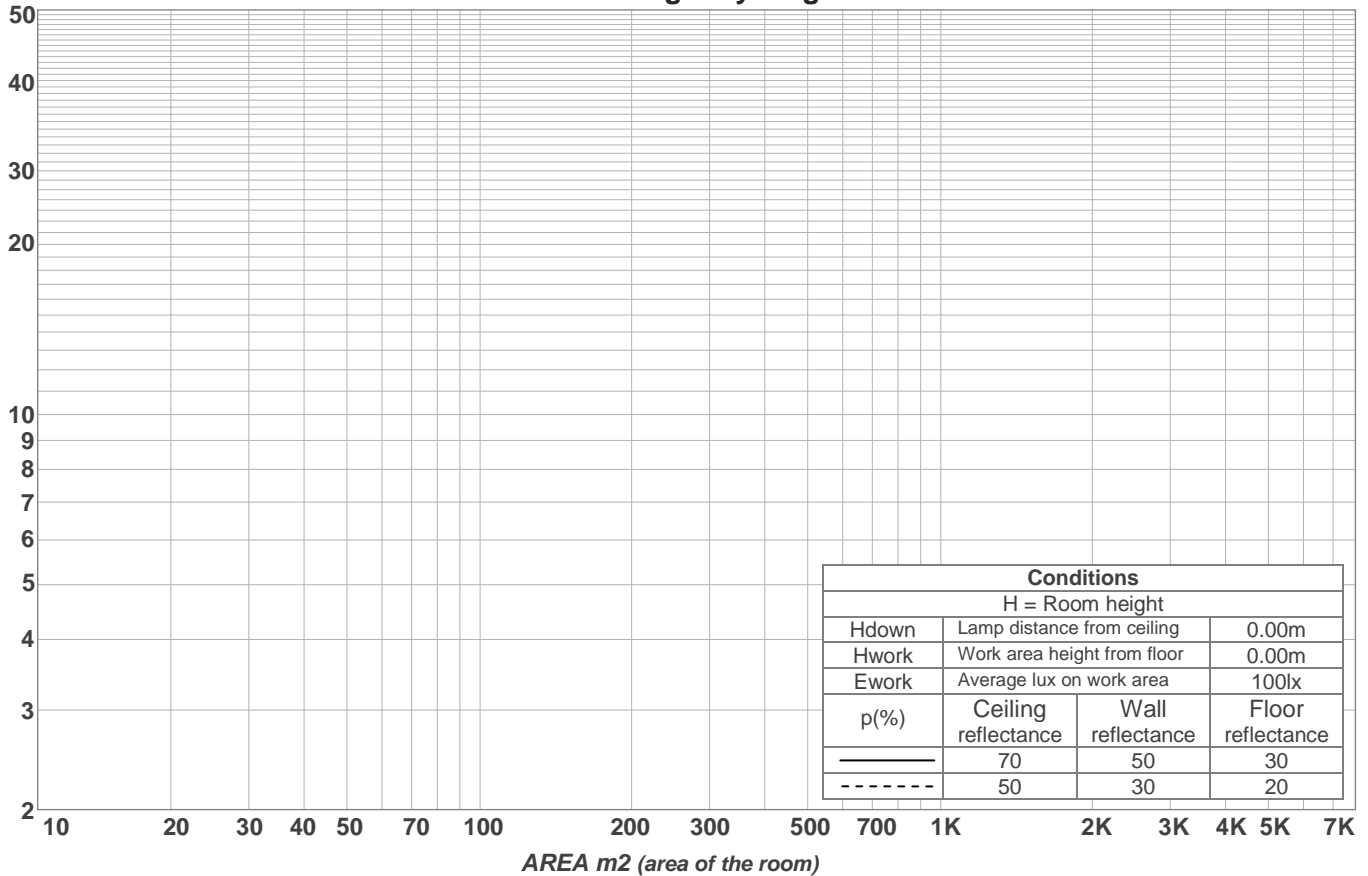
UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	107	102	97	93	103	99	95	91	94	90	87	89	86	83	84	82	80	77
2	97	88	81	75	94	86	79	74	81	76	71	77	73	69	73	70	66	64
3	88	77	69	62	85	75	67	61	71	65	59	68	62	58	64	60	56	53
4	80	68	59	52	78	66	58	52	63	56	50	60	54	49	57	52	48	45
5	74	61	51	45	71	59	51	44	56	49	43	54	47	42	51	46	41	39
6	68	54	45	39	66	53	45	38	51	43	38	49	42	37	47	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	38	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	32	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	22

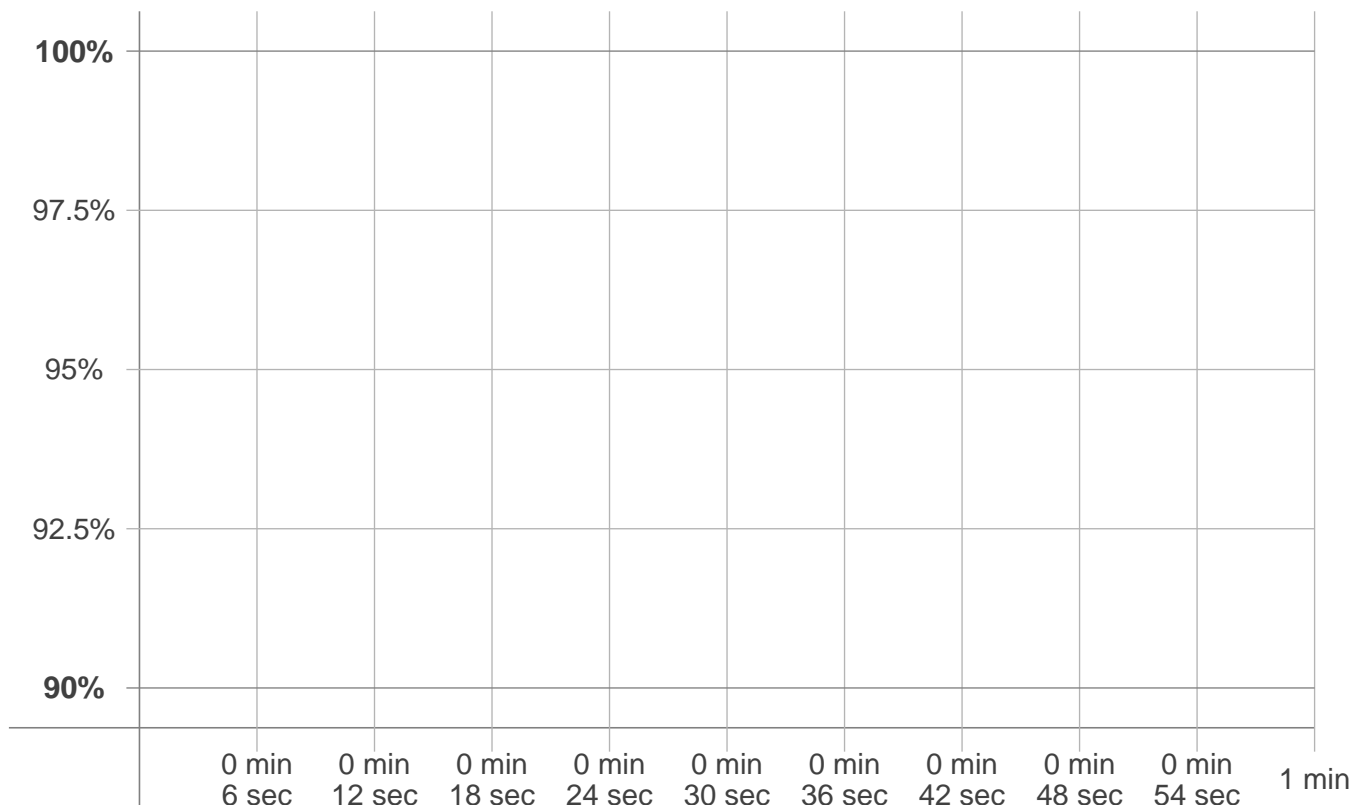
LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
0.564 lm	1.62 lm	2.48 lm	3.03 lm	3.20 lm	2.96 lm	2.34 lm	1.45 lm	0.566 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.224 lm	0.185 lm	0.172 lm	0.145 lm	0.129 lm	0.102 lm	0.074 lm	0.045 lm	0.016 lm

Warmup curve

Warmup result

Warmup time:	n/a
Warmup variation	n/a%

Warmup conditions

Stable period:	n/a
Stable change max:	n/a%
Minimum time:	n/a

Color temperature change

CCT start	CCT change	CCT end
n/a K	n/a K	0 K

Output change

Output start	Output change	Output end
n/a lm	n/a lm	19.3 lm