



Light efficiency:

81 Lumen/Watt

Light quality:

CRI: 93,5

Color temperature:

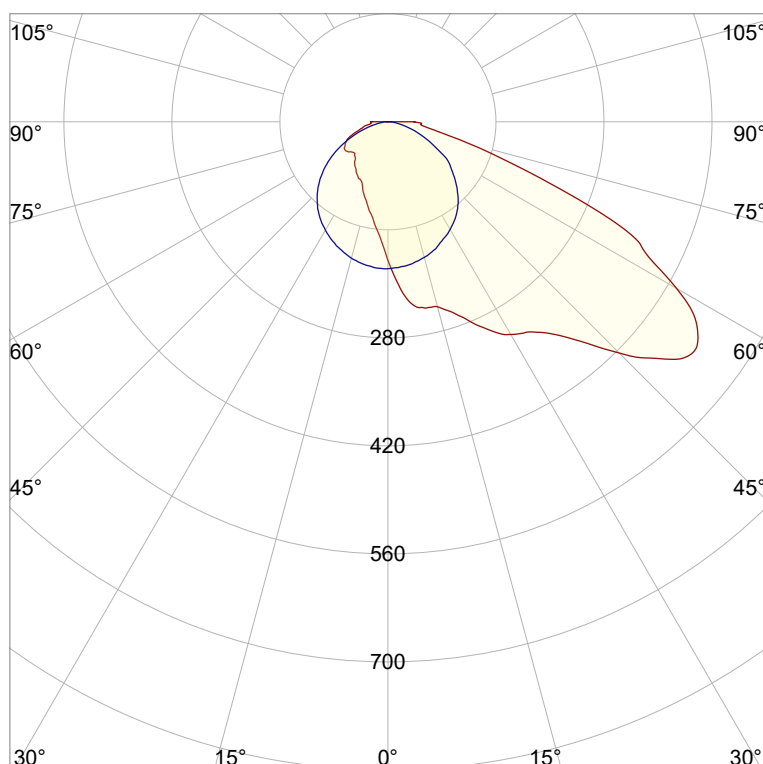
6737 K

Output: 778 lm

Peak: 496 cd

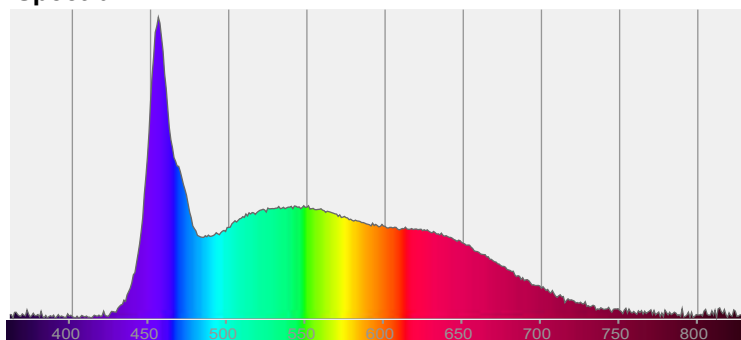
Power: 9,6 W

PF: 1,0



CIE 1931
x: 0,309
y: 0,325

Spectra

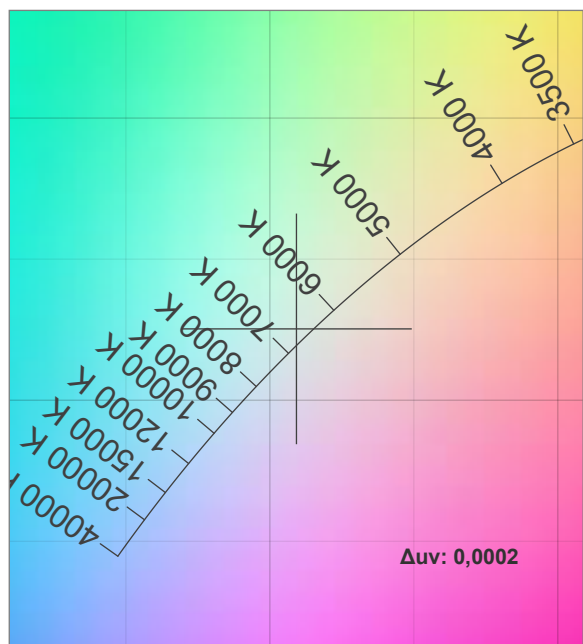
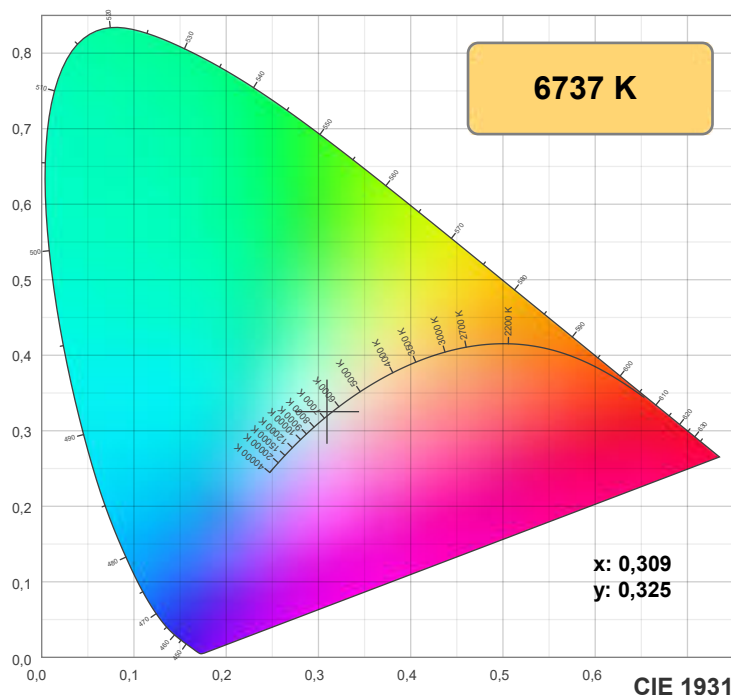


Power

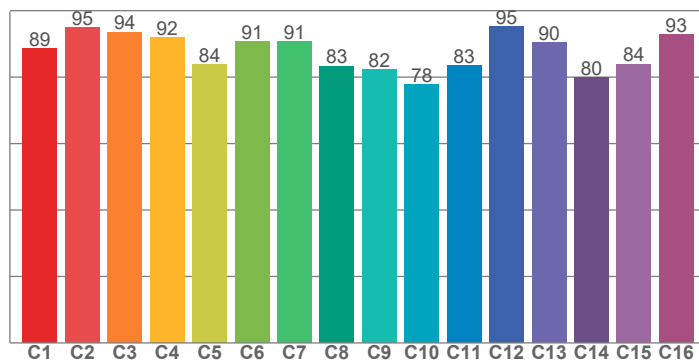
Voltage: 48,0 V
Current: 0,200 A
Frequency: 0 Hz



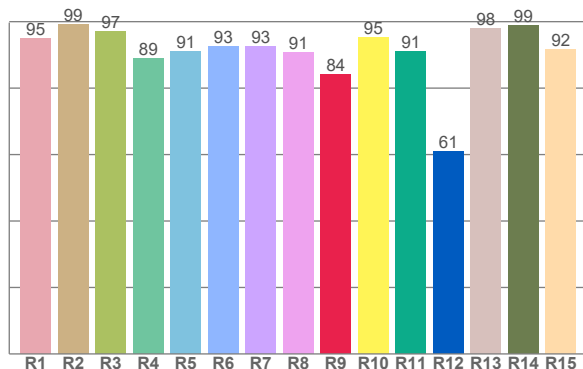
Color details



TM30: 87,6



CRI: 93,5 (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
95,1	99,3	97,1	89,1	91,1	92,6	92,7	90,7	84,2	95,4	91,0	61,1	97,8	99,0	91,8

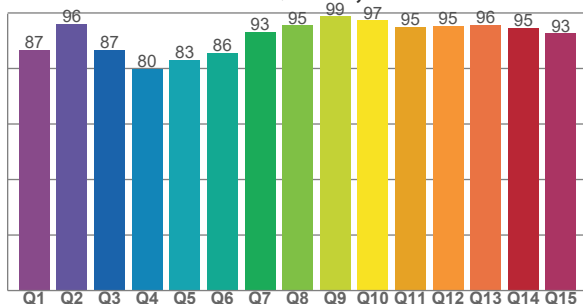
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,5	94,8	93,5	91,9	83,7	90,6	90,7	83,4	82,3	77,8	83,4	95,3	90,3	79,9	84,0	92,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86,8	96,1	86,8	79,9	83,1	85,5	93,0	95,5	98,7	97,3	94,8	95,3	95,8	94,7	92,6

CQS: 90,0



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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6737 K	93,5	84,2	87,6	96,0	90,0	0,309	0,325	0,197	0,311	0,0002



TM30 details



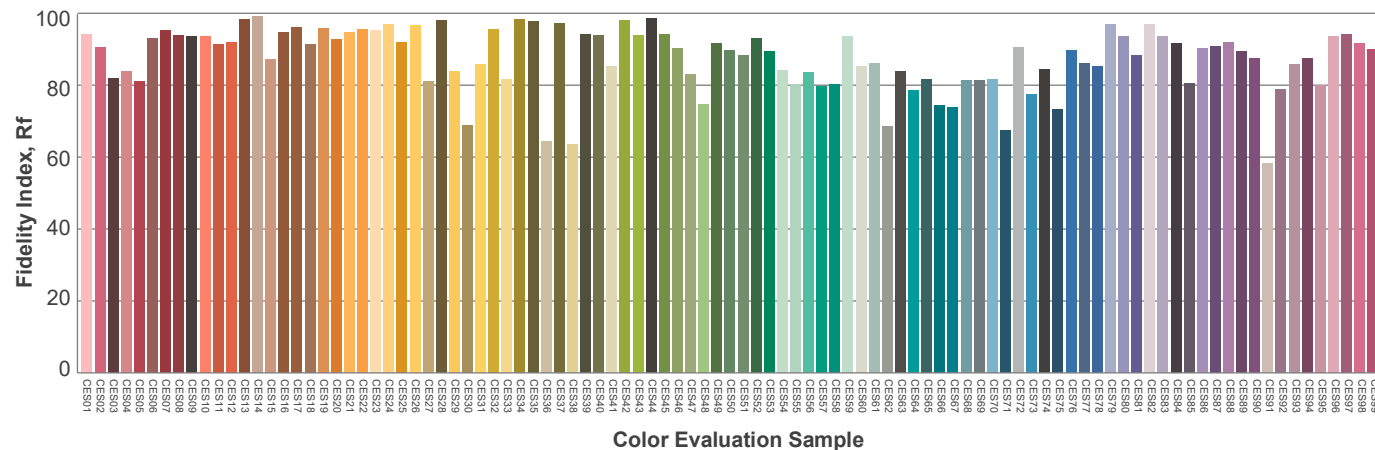
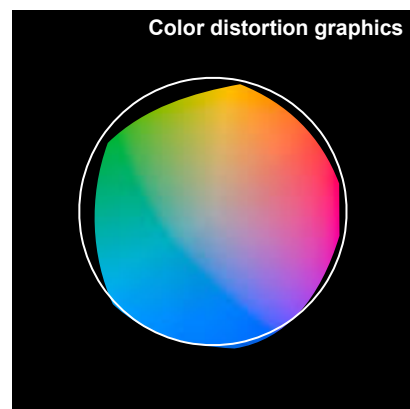
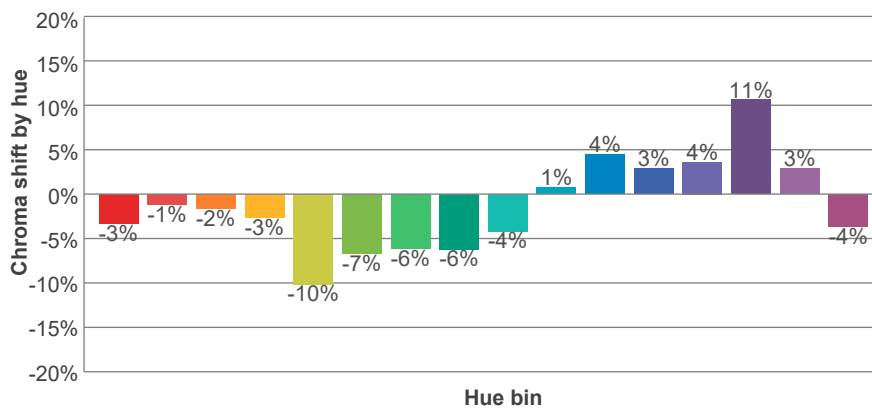
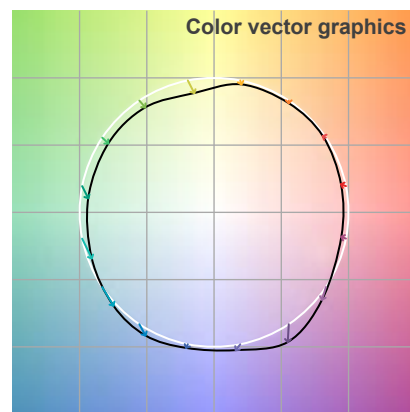
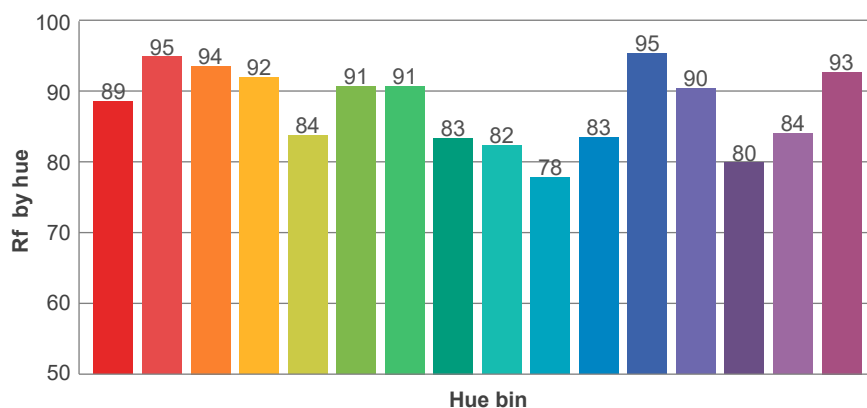
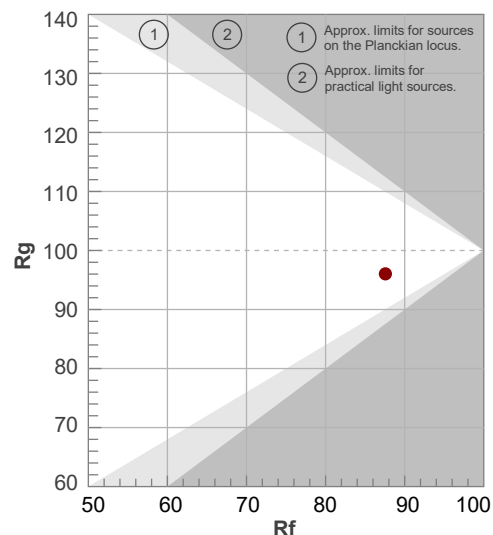
Rf 87,6

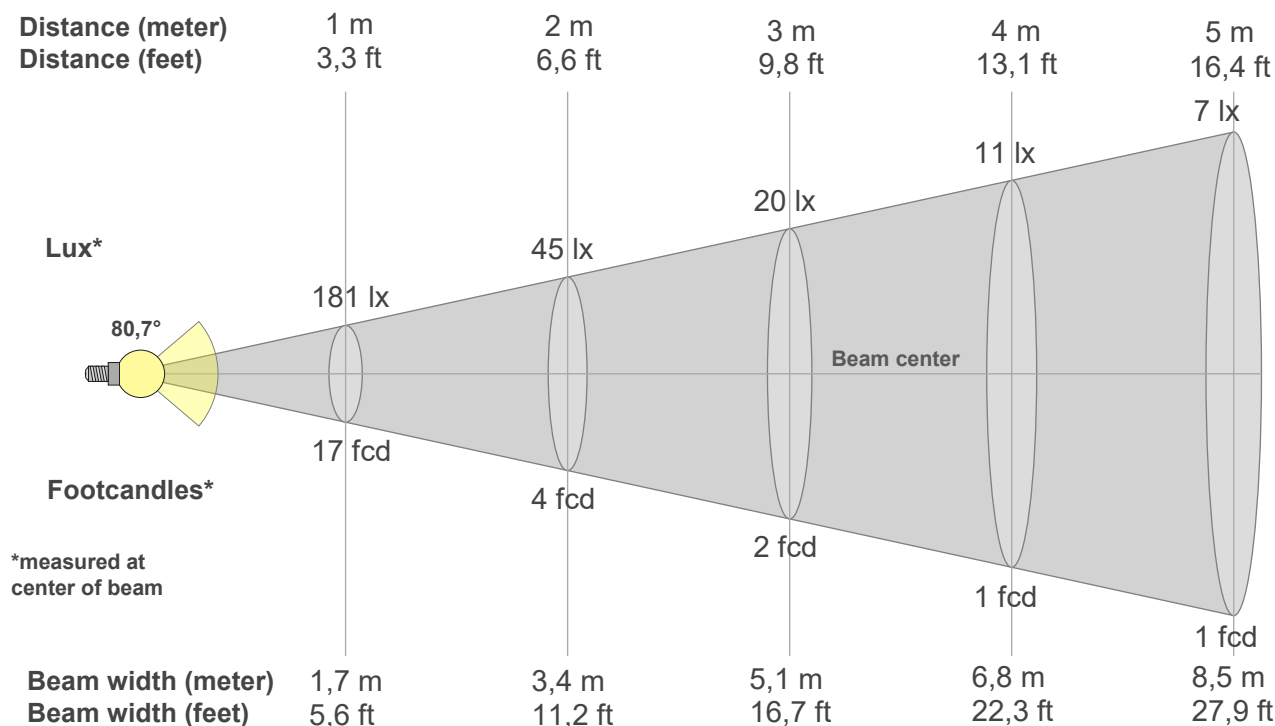
Fidelity index Rf

Rg 96,0

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-3%	2%
2	95	-1%	2%
3	94	-2%	-1%
4	92	-3%	-1%
5	84	-10%	-3%
6	91	-7%	-1%
7	91	-6%	1%
8	83	-6%	8%
9	82	-4%	16%
10	78	1%	16%
11	83	4%	8%
12	95	3%	-1%
13	90	4%	-4%
14	80	11%	-8%
15	84	3%	-9%
16	93	-4%	1%





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
181lx	45lx	20lx	11lx	7lx	5lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx
16,8fcd	4,2fcd	1,9fcd	1fcd	0,7fcd	0,5fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	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°
181	223	244	248	267	295	318	333	366	424	479	490	432	348	203	107	60	43	13	0
100%	123%	135%	138%	148%	163%	176%	184%	203%	235%	265%	272%	239%	193%	112%	59%	33%	24%	7%	0%

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°
181	189	186	182	176	168	161	152	141	127	112	98	78	58	40	25	13	6	4	0
100%	104%	103%	101%	98%	93%	89%	84%	78%	71%	62%	54%	43%	32%	22%	14%	7%	4%	2%	0%

Intensities in 180° c-plane

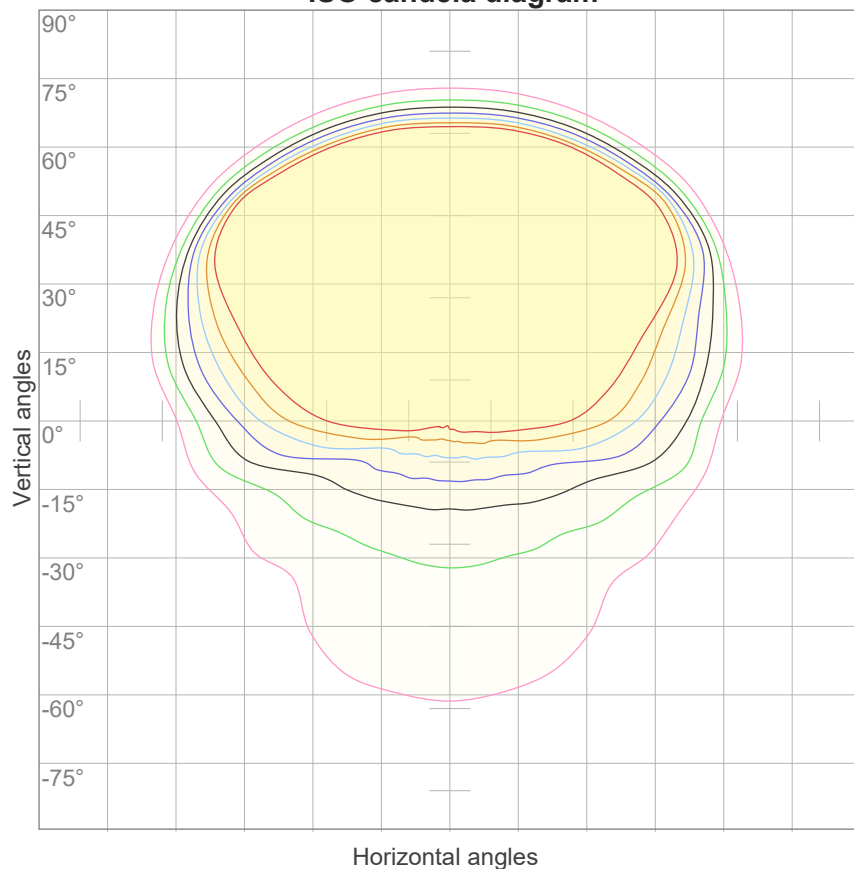
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
181	144	123	107	95	83	79	73	67	61	61	66	65	59	49	37	30	22	20	0
100%	80%	68%	59%	52%	46%	44%	40%	37%	34%	34%	37%	36%	33%	27%	21%	16%	12%	11%	0%

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°
181	190	187	183	177	170	162	153	142	129	114	97	79	60	41	25	13	5	0	0
100%	105%	104%	101%	98%	94%	90%	85%	79%	72%	63%	54%	44%	33%	23%	14%	7%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
80,7°	160,1°	179,2°	70,2%	40,9%

ISO candela diagram



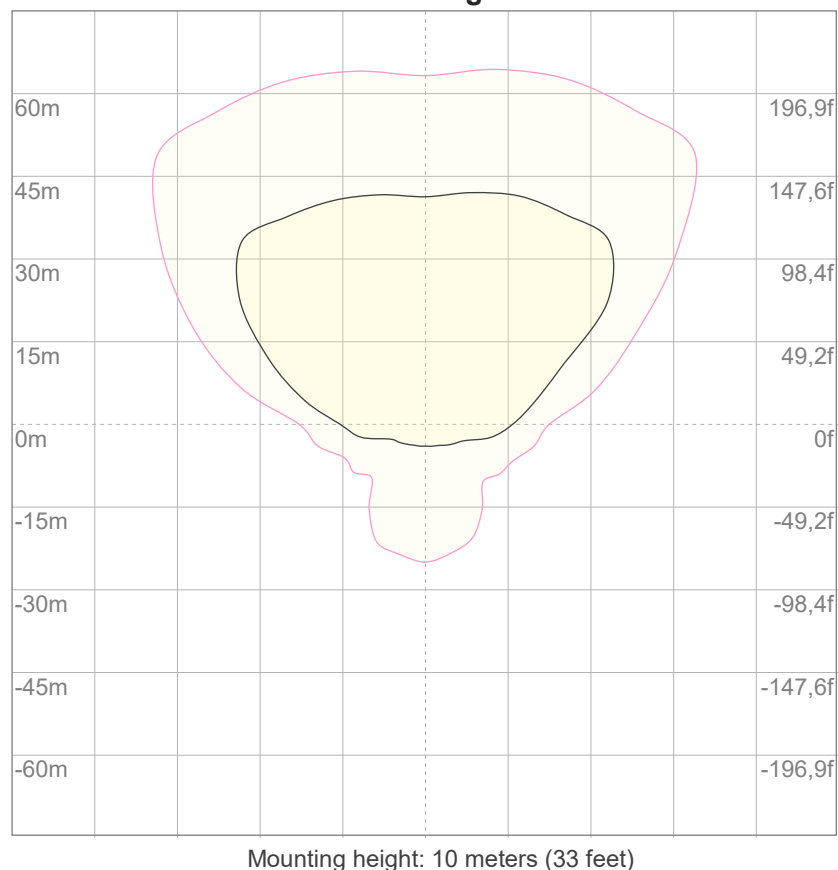
10%	18 cd
20%	36 cd
30%	54 cd
40%	72 cd
50%	90 cd
60%	108 cd
70%	126 cd
80%	144 cd
90%	162 cd

Conditions:

Number of c-planes: 16

Candela at center: 181 cd

ISO lux diagram



3%	54,2m lx
5%	90,3m lx
10%	0,181 lx
30%	0,542 lx
50%	0,903 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,81 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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 778 lm total luminous flux										

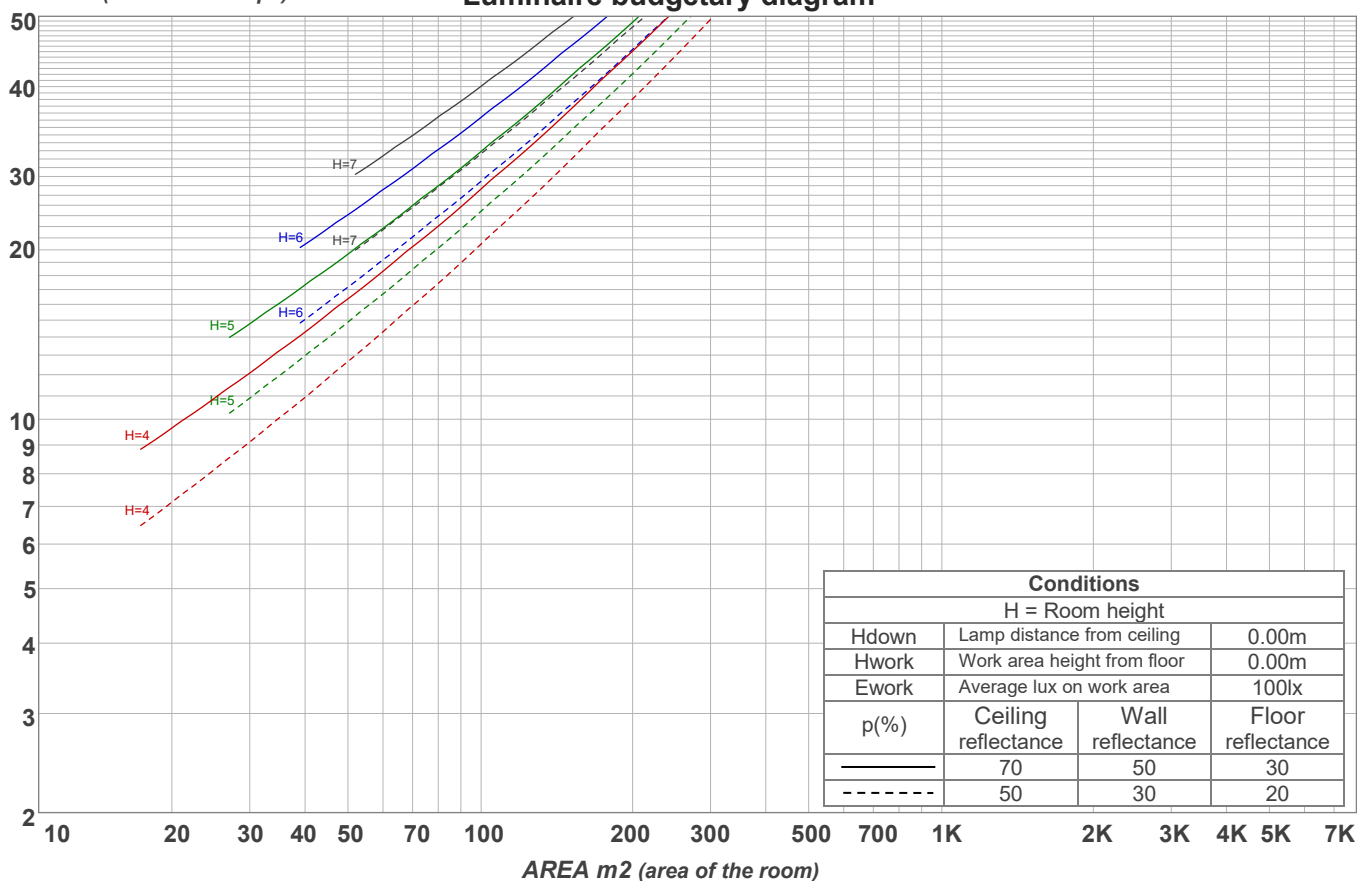
UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	102	102	102	100
1	107	101	96	92	104	99	94	90	95	91	87	91	88	85	87	85	82	80
2	96	86	79	72	93	84	77	71	81	75	69	77	72	68	74	70	66	64
3	86	74	65	58	84	73	64	57	70	62	56	67	61	55	64	59	54	52
4	78	65	55	48	76	63	54	47	61	53	46	58	51	46	56	50	45	43
5	71	57	47	40	69	56	47	40	54	45	39	52	44	39	50	43	38	36
6	65	51	41	34	63	50	41	34	48	40	33	46	39	33	44	38	33	31
7	60	46	36	29	58	45	36	29	43	35	29	42	34	29	40	34	28	26
8	56	41	32	26	54	40	32	26	39	31	25	38	31	25	37	30	25	23
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20
10	49	34	26	20	47	34	26	20	33	25	20	32	25	20	31	25	20	18

LAMPS (number of lamps)

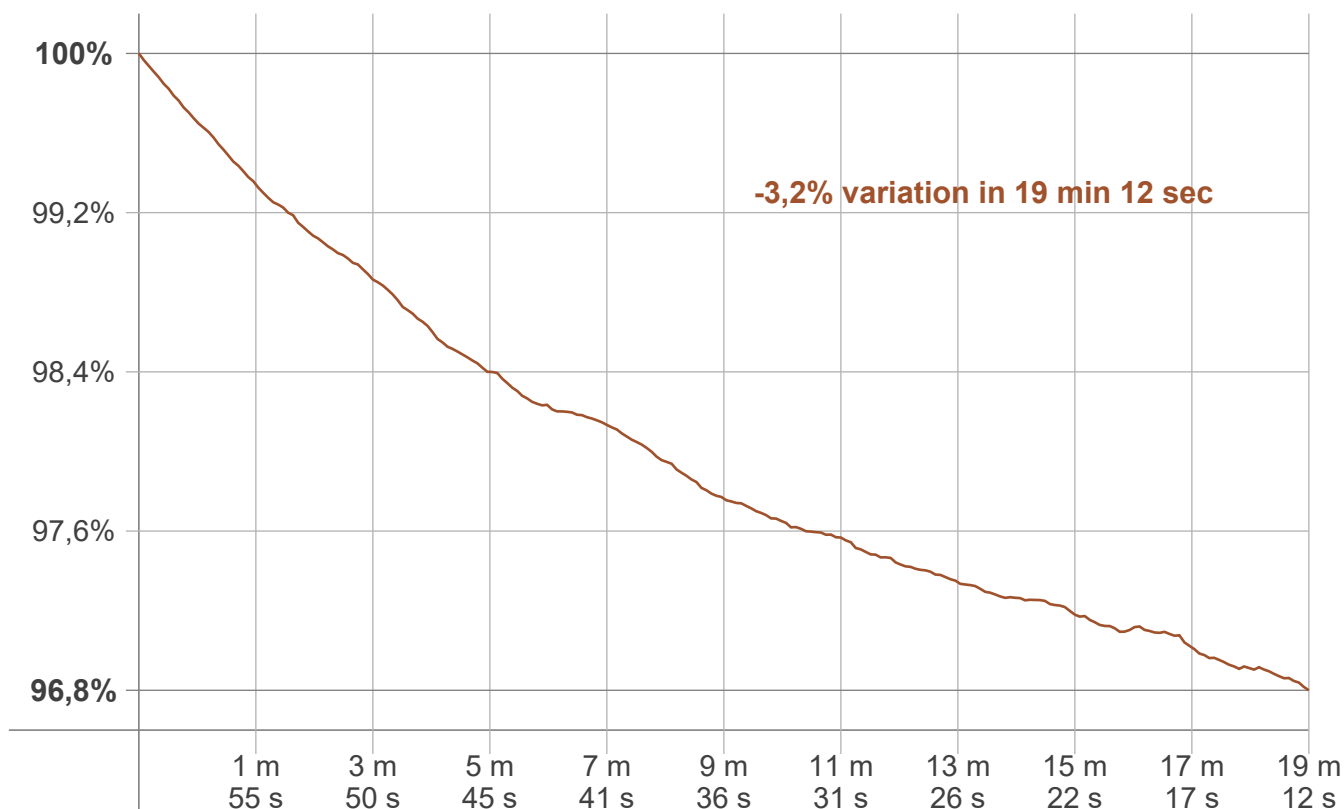
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
17,4 lm	50,4 lm	80,0 lm	107 lm	134 lm	157 lm	134 lm	69,1 lm	28,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,053 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 19 min 12 sec
Warmup variation	-3,2%

Warmup conditions

Stable period:	15 min
Stable change max:	2,0%
Minimum time:	15 min

Color temperature change

CCT start	CCT change	CCT end
6725 K	+12 K	6737 K

Output change

Output start	Output change	Output end
803 lm	-24 lm	778 lm