

Light efficiency:



Light quality:



Color temperature:



Output: 510 lm

Peak: 499 cd

Power: 6,4 W

PF: 0,91



Tracking number: [VT240926-007184](#)

Product name:

276666-3000K

Item number:

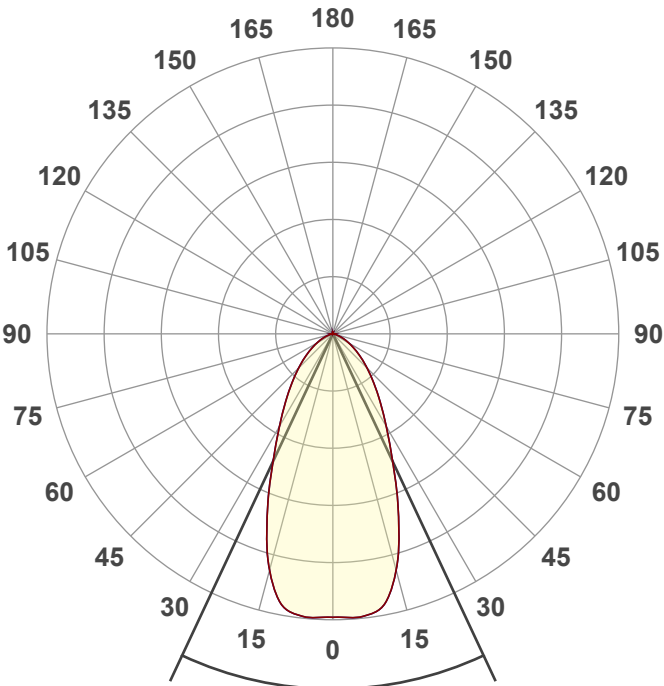
276666-3000K

Date and time:

26-9-2024 13:32:19

Description:

GU10 SPOT | SPONDE | 7W | DIMBAAR



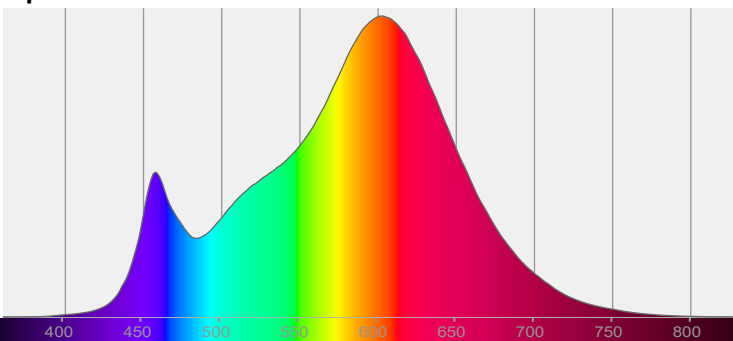
Beam angle

50,2°

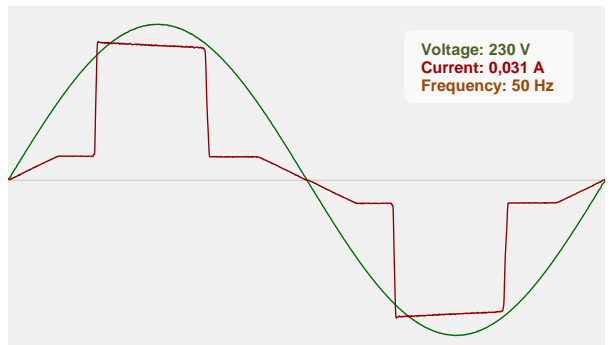


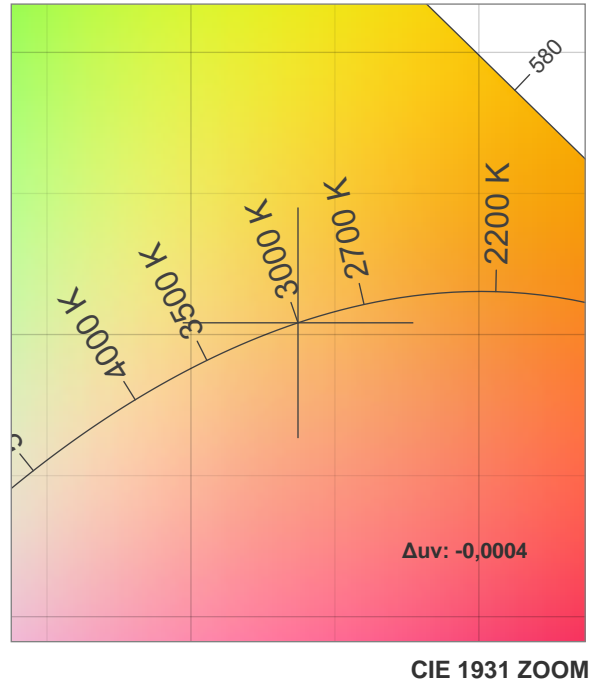
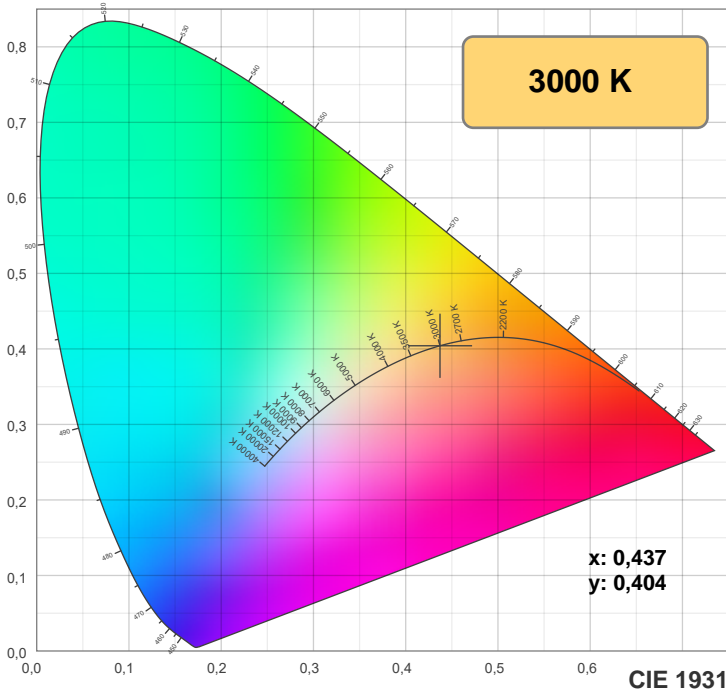
CIE 1931
x: 0,437
y: 0,404

Spectra

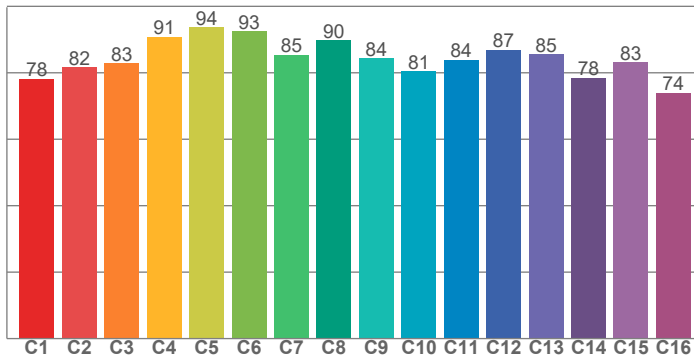


Power

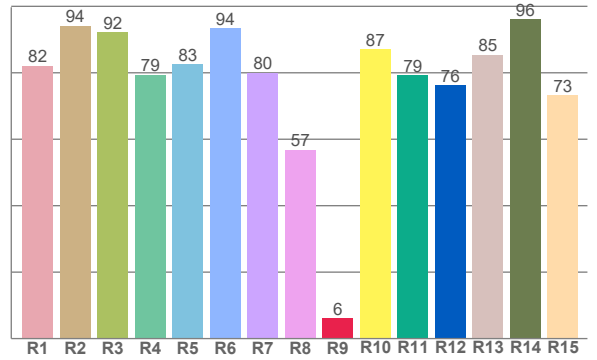




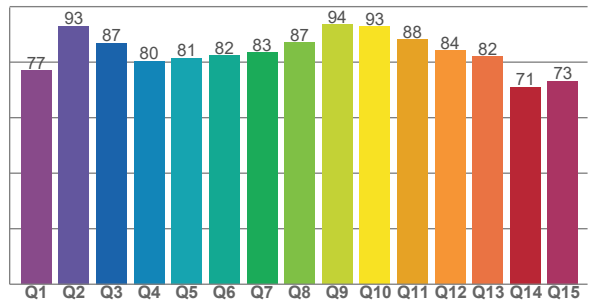
TM-30: 84,5



CRI: 82,6 (R1-R8)



CQS: 82,4



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
82,1	94,2	92,1	79,4	82,7	93,5	80,0	56,9	6,0	87,0	79,2	76,2	85,5	96,3	73,3

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
78,1	81,7	82,8	90,9	93,8	92,5	85,4	89,7	84,4	80,5	83,9	86,9	85,5	78,5	83,2	74,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,1	93,0	87,0	80,4	81,5	82,4	83,4	87,0	93,6	92,8	88,1	84,2	82,1	71,0	73,3

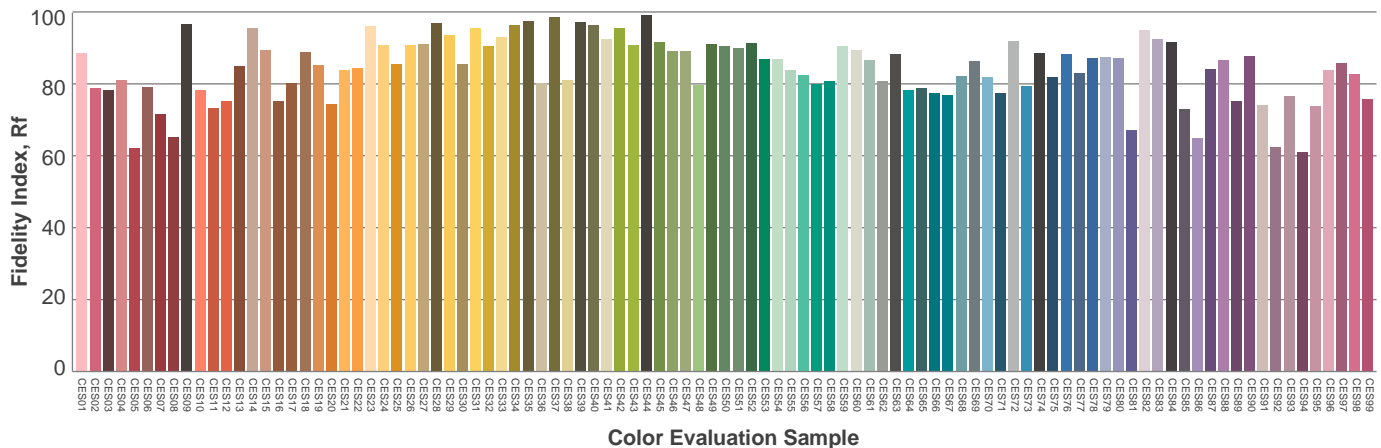
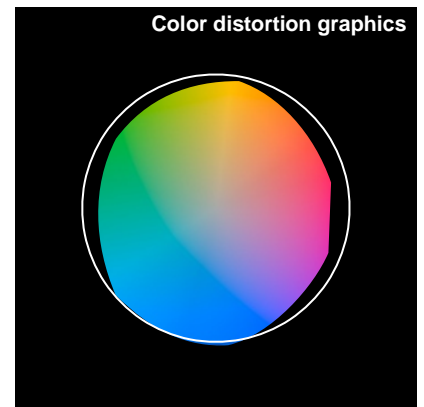
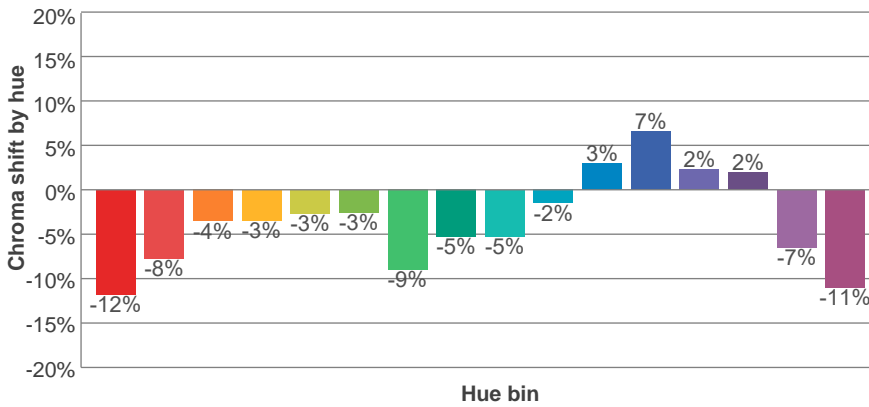
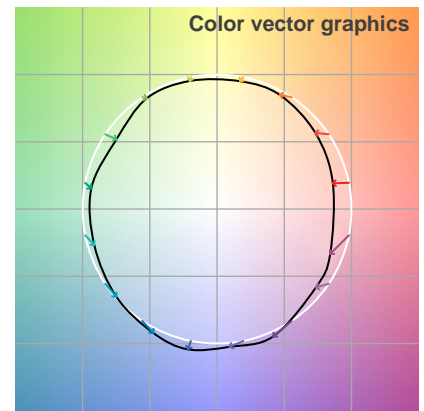
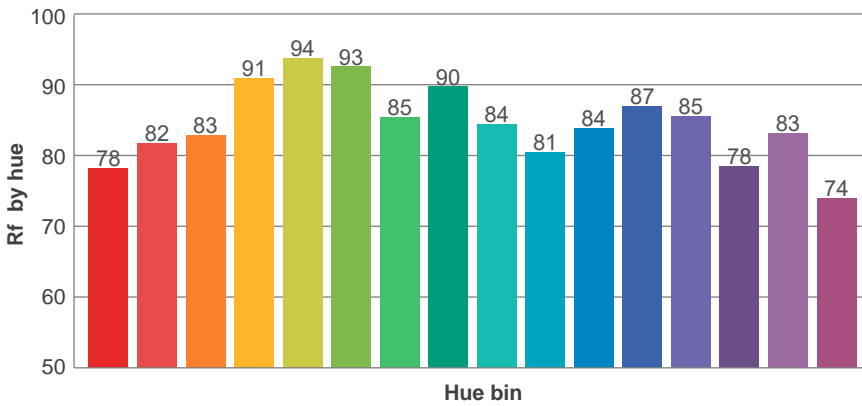
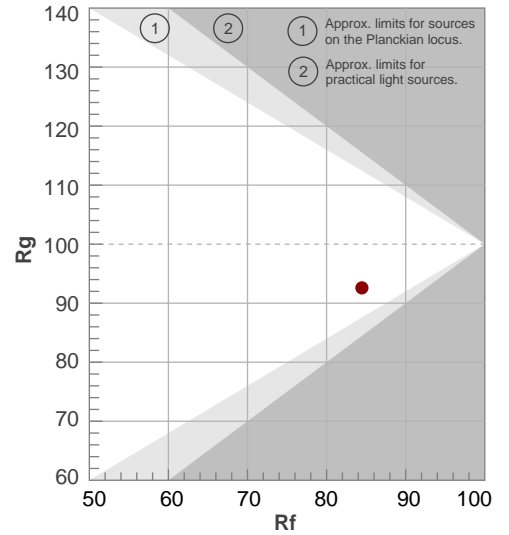
Color parameters

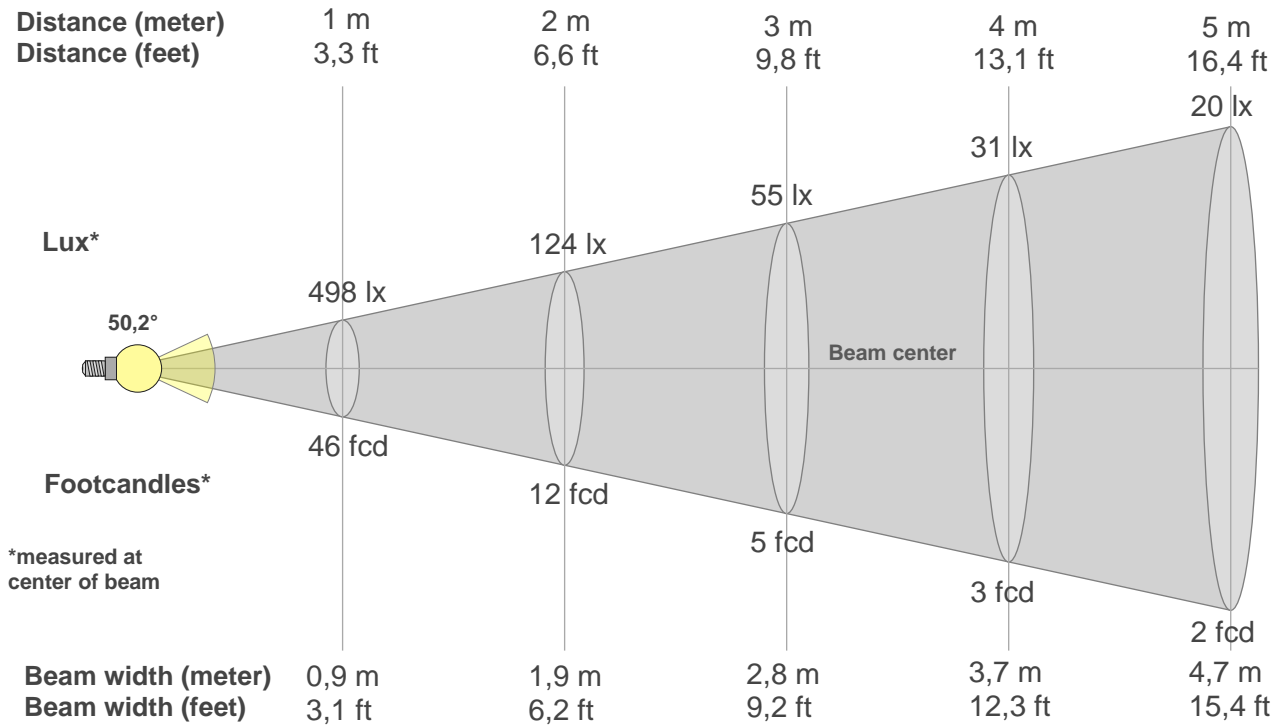
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	82,6	6,0	84,5	92,6	82,4	0,437	0,404	0,251	0,348	-0,0004

Rf 84,5
Fidelity index Rf

Rg 92,6
Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	78	-12%	2%
2	82	-8%	7%
3	83	-4%	8%
4	91	-3%	2%
5	94	-3%	1%
6	93	-3%	-2%
7	85	-9%	-2%
8	90	-5%	3%
9	84	-5%	8%
10	81	-2%	13%
11	84	3%	12%
12	87	7%	-1%
13	85	2%	-11%
14	78	2%	-18%
15	83	-7%	-8%
16	74	-11%	-16%





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
498lx	124lx	55lx	31lx	20lx	14lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx
46,2fcd	11,6fcd	5,1fcd	2,9fcd	1,8fcd	1,3fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd

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°
498	499	485	427	337	251	189	145	112	85	64	47	33	22	13	6	2	1	0	0
100%	100%	97%	86%	68%	51%	38%	29%	22%	17%	13%	9%	7%	4%	3%	1%	0%	0%	0%	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°
498	499	485	427	337	251	189	145	112	85	64	47	33	22	13	6	2	1	0	0
100%	100%	97%	86%	68%	51%	38%	29%	22%	17%	13%	9%	7%	4%	3%	1%	0%	0%	0%	0%

Intensities in 180° c-plane

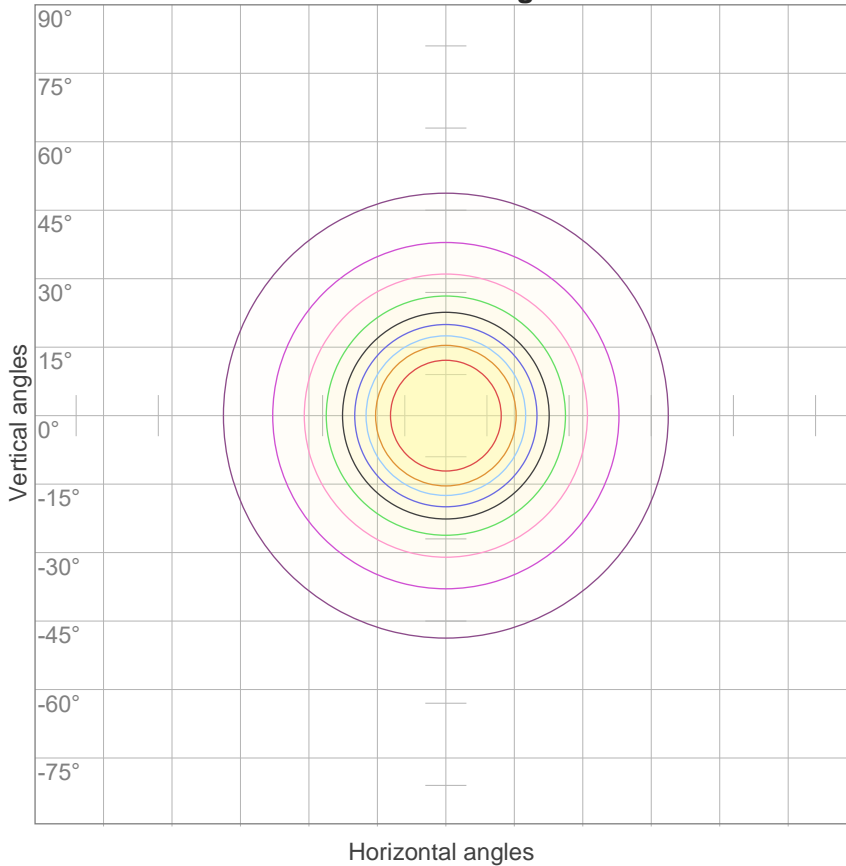
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
498	499	485	427	337	251	189	145	112	85	64	47	33	22	13	6	2	1	0	0
100%	100%	97%	86%	68%	51%	38%	29%	22%	17%	13%	9%	7%	4%	3%	1%	0%	0%	0%	0%

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°
498	499	485	427	337	251	189	145	112	85	64	47	33	22	13	6	2	1	0	0
100%	100%	97%	86%	68%	51%	38%	29%	22%	17%	13%	9%	7%	4%	3%	1%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
50,2°	108,2°	140°	94,1%	79,9%

iso-candela diagram



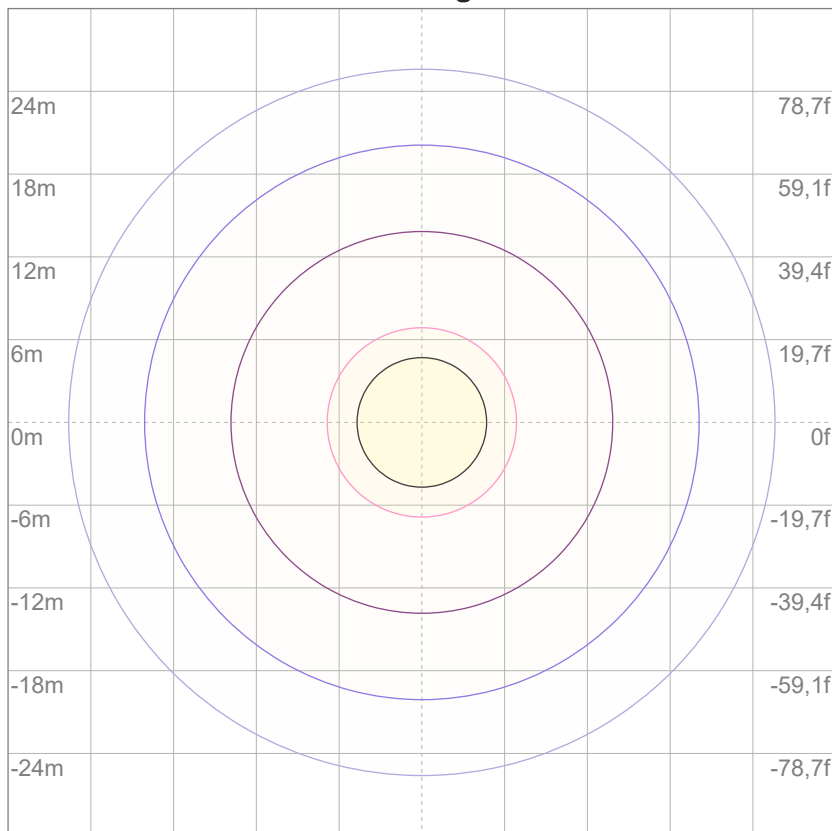
10%	50 cd
20%	100 cd
30%	149 cd
40%	199 cd
50%	249 cd
60%	299 cd
70%	348 cd
80%	398 cd
90%	448 cd

Conditions:

Number of c-planes: 12

Candela at center: 498 cd

iso-lux diagram



3%	0,149 lx
5%	0,249 lx
10%	0,498 lx
30%	1,49 lx
50%	2,49 lx

Conditions:

Number of c-planes: 12

Lux at center: 4,98 lx

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

Glare evaluation according to UGR

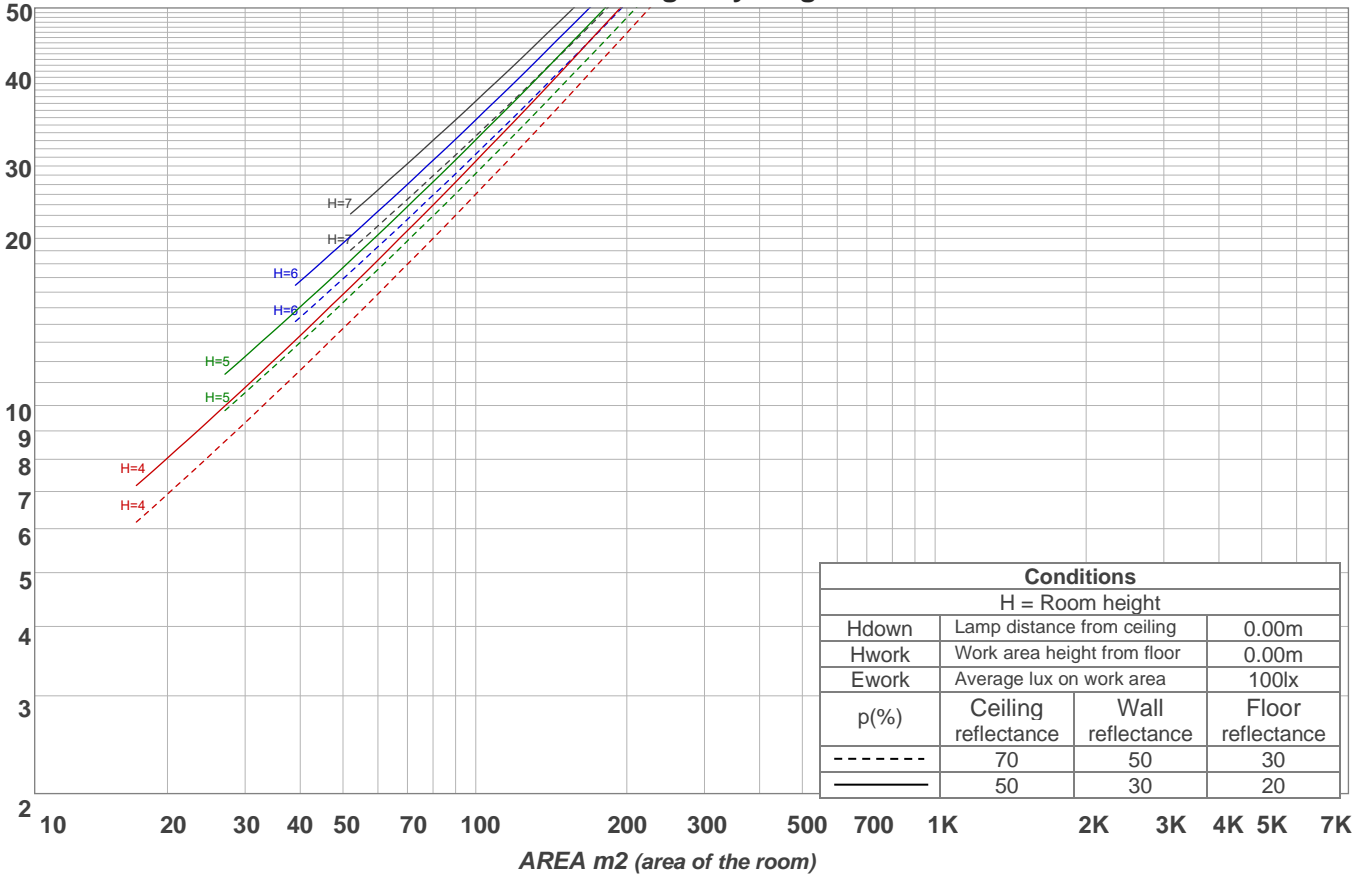
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	24,9	25,7	25,0	26,0	26,2	24,9	25,7	25,0	26,0	26,2
	3H	25,2	26,1	25,6	26,3	26,5	25,2	26,1	25,6	26,3	26,5
	4H	25,2	26,1	25,6	26,4	26,6	25,2	26,1	25,6	26,4	26,6
	6H	25,3	26,0	25,6	26,3	26,7	25,3	26,0	25,6	26,3	26,7
	8H	25,3	26,0	25,6	26,3	26,7	25,3	26,0	25,6	26,3	26,7
	12H	25,2	25,9	25,6	26,3	26,7	25,2	25,9	25,6	26,3	26,7
4H	2H	25,0	25,9	25,4	26,1	26,4	25,0	25,9	25,4	26,1	26,4
	3H	25,6	26,3	25,9	26,6	27,0	25,6	26,3	25,9	26,6	27,0
	4H	25,6	26,2	26,0	26,7	27,2	25,6	26,2	26,0	26,7	27,2
	6H	25,6	26,3	26,1	26,6	27,0	25,6	26,3	26,1	26,6	27,0
	8H	25,6	26,2	26,1	26,5	26,9	25,6	26,2	26,1	26,5	26,9
	12H	25,5	26,0	26,0	26,4	26,9	25,5	26,0	26,0	26,4	26,9
8H	4H	25,6	26,2	26,1	26,5	26,9	25,6	26,2	26,1	26,5	26,9
	6H	25,6	26,0	26,1	26,5	27,0	25,6	26,0	26,1	26,5	27,0
	8H	25,6	26,0	26,1	26,5	27,1	25,6	26,0	26,1	26,5	27,1
	12H	25,6	25,9	26,2	26,4	27,0	25,6	25,9	26,2	26,4	27,0
12H	4H	25,5	26,0	26,0	26,4	26,9	25,5	26,0	26,0	26,4	26,9
	6H	25,6	26,0	26,1	26,5	27,1	25,6	26,0	26,1	26,5	27,1
	8H	25,6	25,9	26,2	26,4	27,0	25,6	25,9	26,2	26,4	27,0
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,5 / -0,8					0,5 / -0,8					
S = 1.5H	1,4 / -1,8					1,4 / -1,8					
S = 2.0H	2,5 / -3,2					2,5 / -3,2					
CIE 117-1995. Corrected glare indices referring to 510 lm total luminous flux											

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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61			
6	82	71	64	59	80	71	64	59	69	63	59	67	62	58	66	61	58	56			
7	77	66	60	55	76	66	59	55	64	58	54	63	58	54	62	57	54	52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42			

LAMPS (number of lamps)

Luminaire budgetary diagram



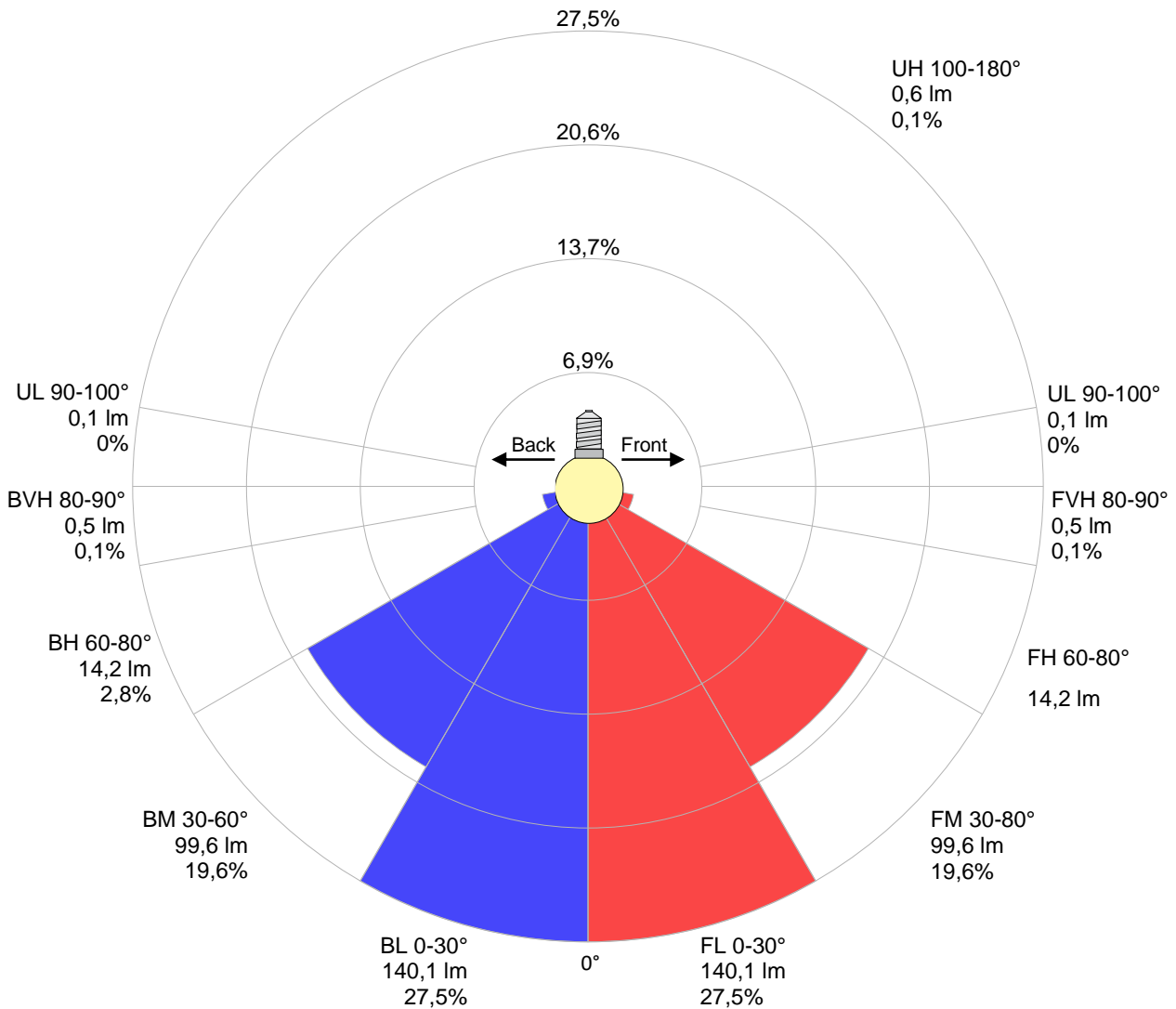
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	117 lm	116 lm	90,9 lm	66,1 lm	42,2 lm	21,8 lm	6,64 lm	0,938 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,094 lm	0,087 lm	0,087 lm	0,082 lm	0,085 lm	0,092 lm	0,078 lm	0,053 lm	0,016 lm

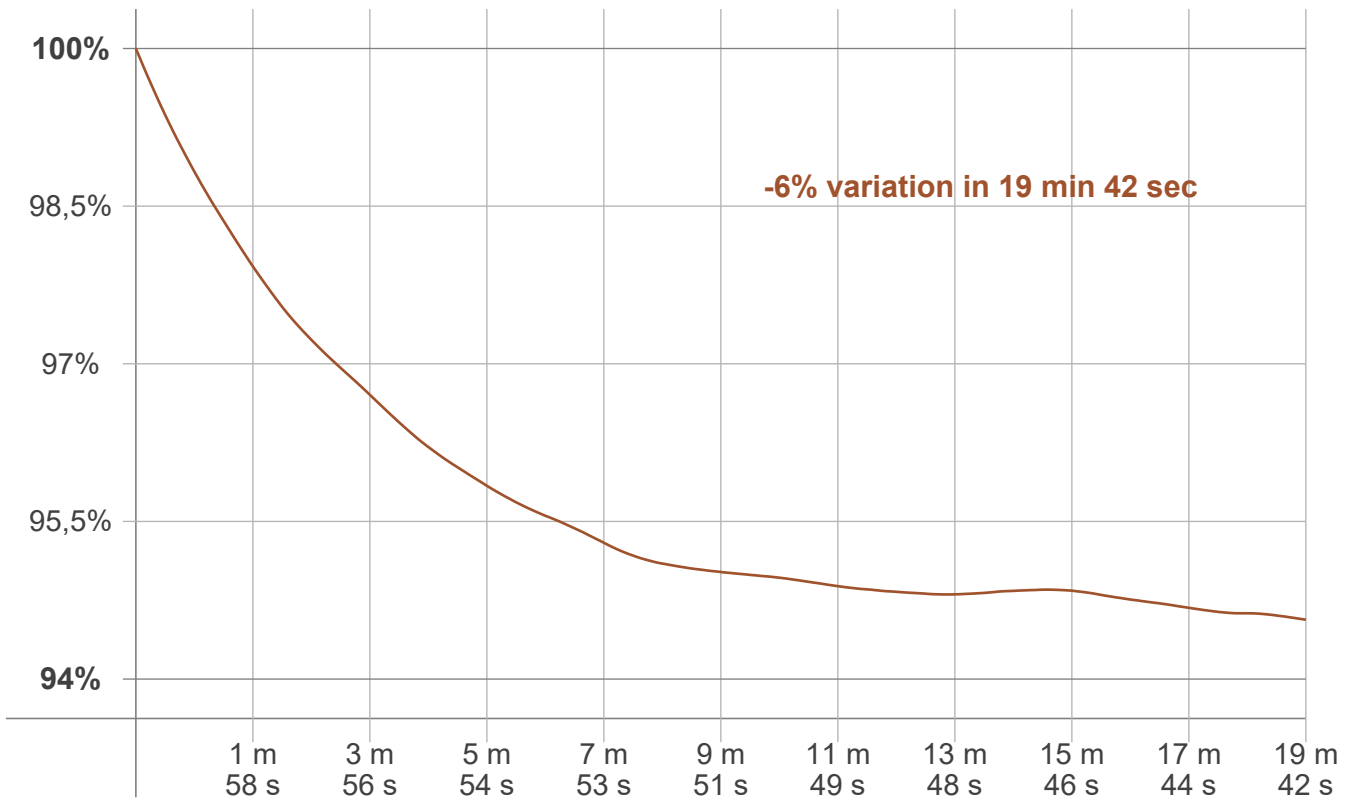
LCS table

BUG rating:	B1 U1 G0	
Forward light	Lumens	Lumens %
Low(0-30):	140,1	27,5%
Medium(30-60):	99,6	19,6%
High(60-80):	14,2	2,8%
Very high(80-90):	0,5	0,1%
Back light		
Low(0-30):	140,1	27,5%
Medium(30-60):	99,6	19,6%
High(60-80):	14,2	2,8%
Very high(80-90):	0,5	0,1%
Uplight		
Low(90-100):	0,1	0%
High(100-180):	0,6	0,1%

LCS graph



Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 19 min 42 sec
Warmup variation	-6,0%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2967 K	+33 K	3000 K

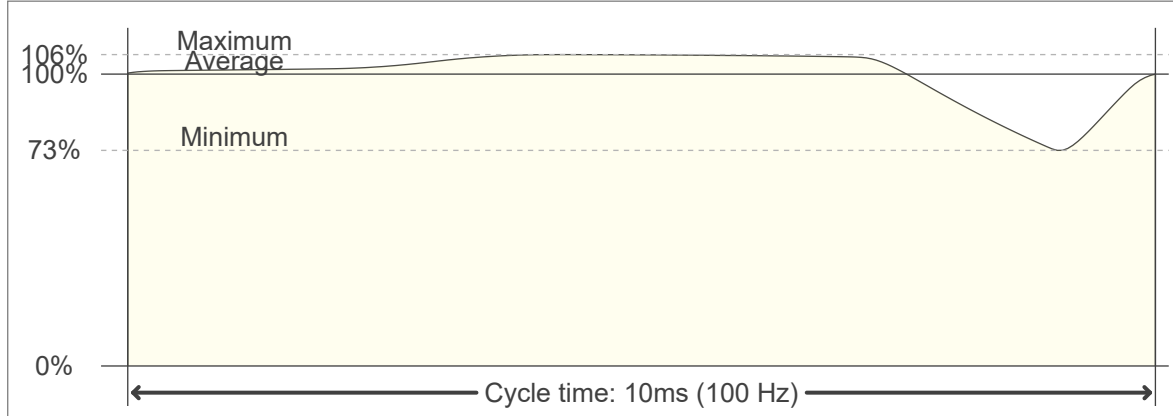
Output change

Output start	Output change	Output end
541 lm	-31 lm	510 lm

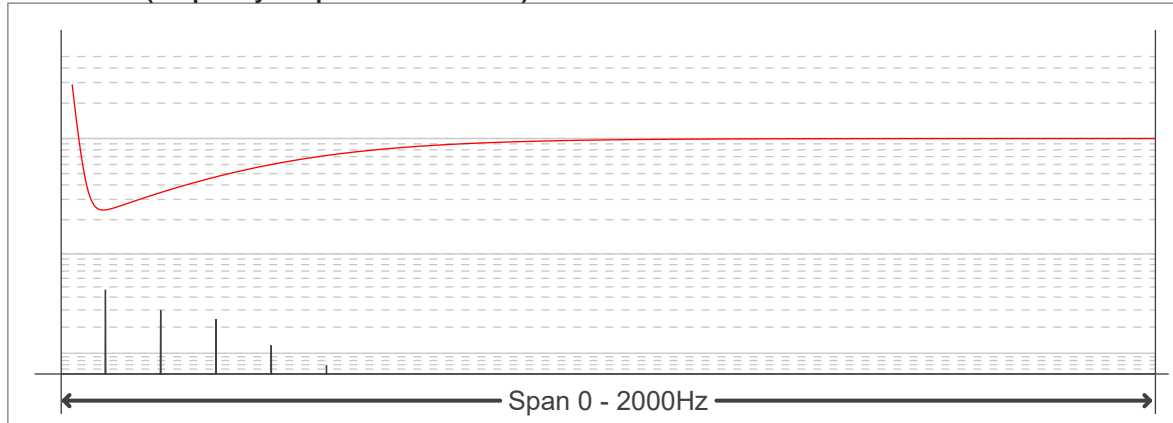
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		100 Hz	
Flicker index:	0,03	JA8/10 40Hz	0,01 %
Flicker percentage:	18,25 %	JA8/10 90Hz	0,08 %
SVM: (Visual flicker)	0,37	JA8/10 200Hz	10,63 %
PstLM	0,02	JA8/10 400Hz	15,58 %
Mp	0,01	JA8/10 1000Hz	17,81 %

Flicker conditions:

Sample rate:	20000 samples/second
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