

Light efficiency:



Light quality:



Color temperature:

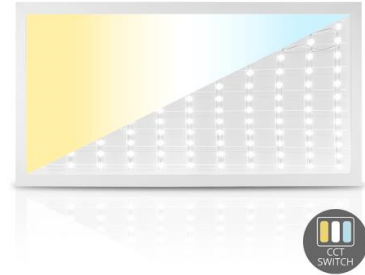


Output: 4910 lm

Peak: 1668 cd

Power: 46,3 W

PF: 0,97



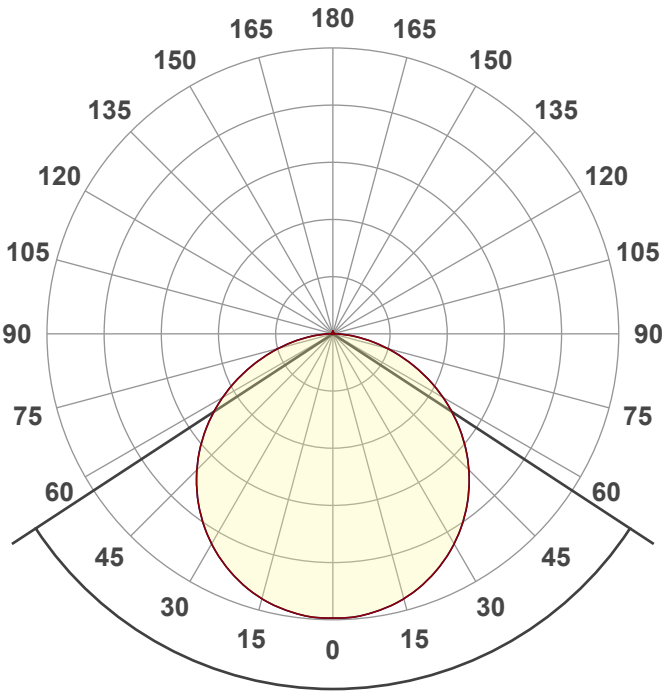
Tracking number: [VT241007-007887](#)

Product name:
848247-3000K

Item number:
848247-3000K

Date and time:
7-10-2024 14:06:10

Description:
**BACK-LIT LED PANEEL | LEDA |
120x60CM | 50W | CCT-SWITCH**

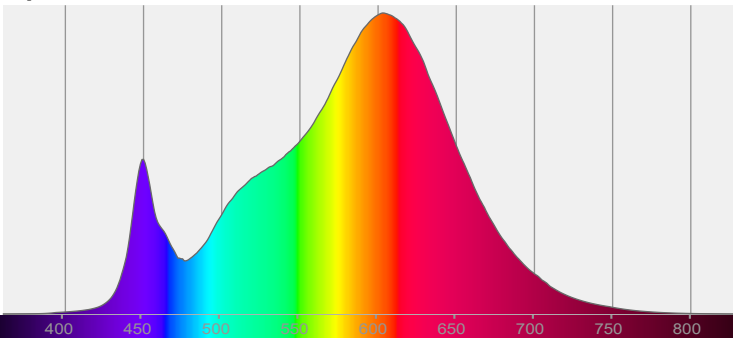


Beam angle **113,6°**

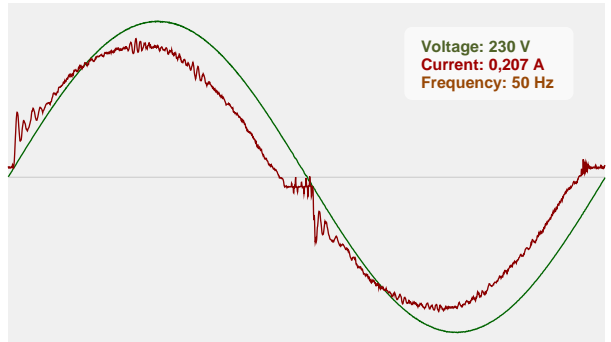


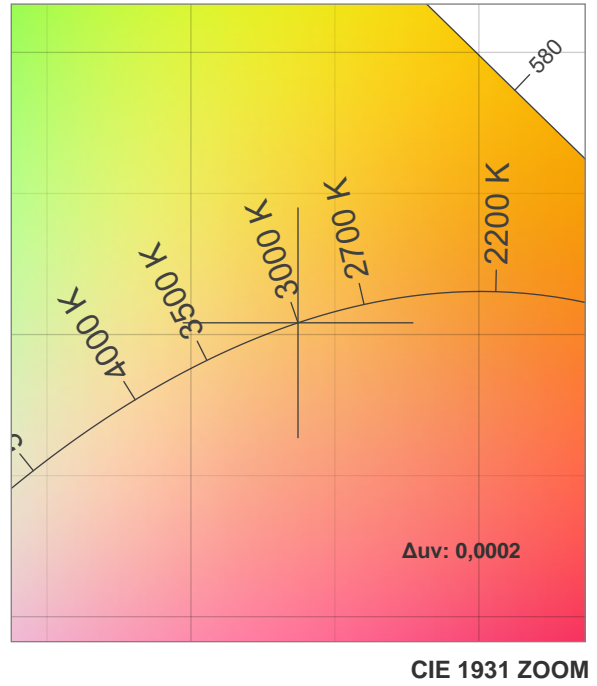
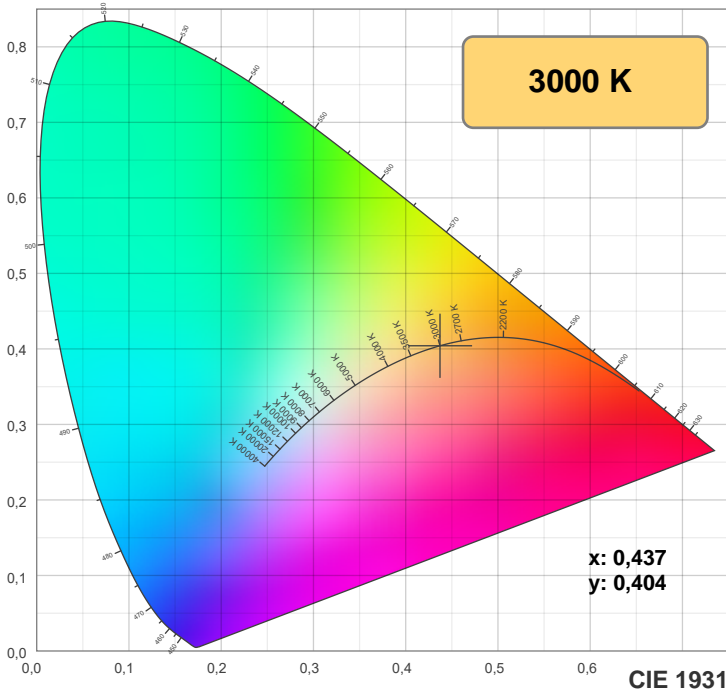
CIE 1931
x: 0,437
y: 0,404

Spectra

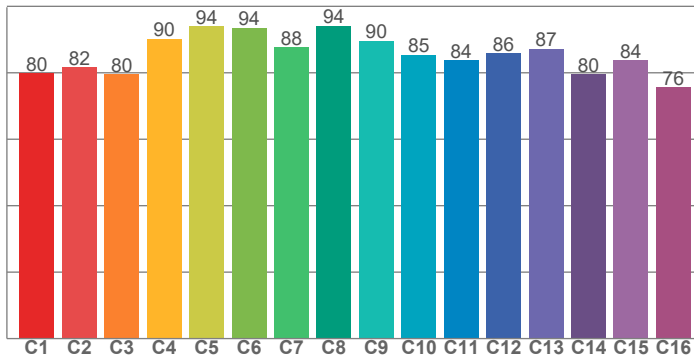


Power

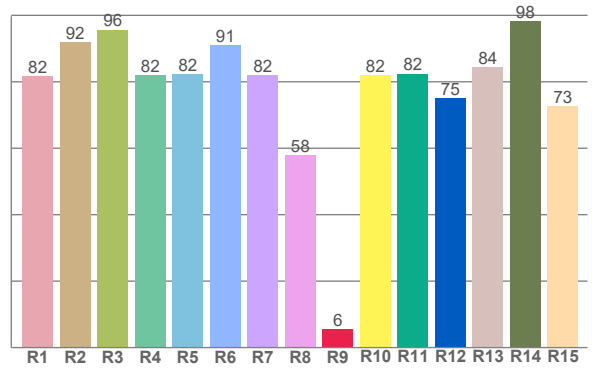




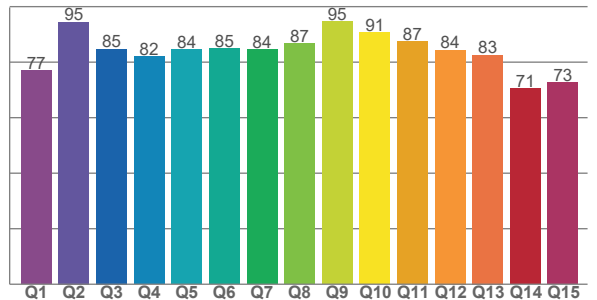
TM-30: 85,6



CRI: 83,1 (R1-R8)



CQS: 82,7



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
81,7	91,9	95,7	81,9	82,3	91,0	82,0	58,0	5,7	82,1	82,4	75,0	84,3	98,3	72,7

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
79,8	81,6	79,5	90,2	94,0	93,5	87,7	94,1	89,7	85,3	83,8	85,9	87,2	79,6	83,7	75,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76,9	94,5	84,7	82,1	84,5	84,9	84,5	86,7	94,7	90,7	87,5	84,3	82,6	70,6	72,7

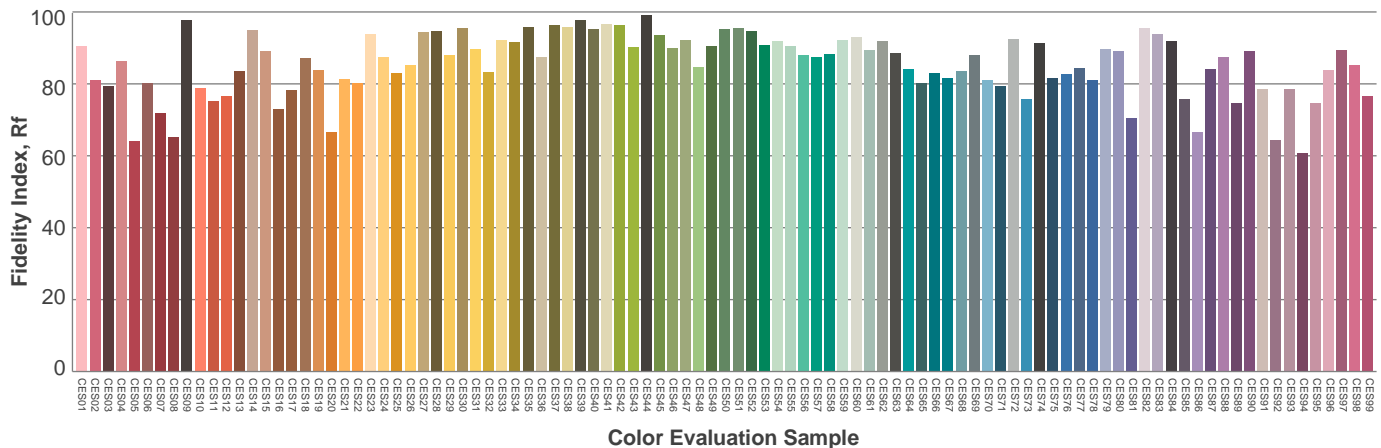
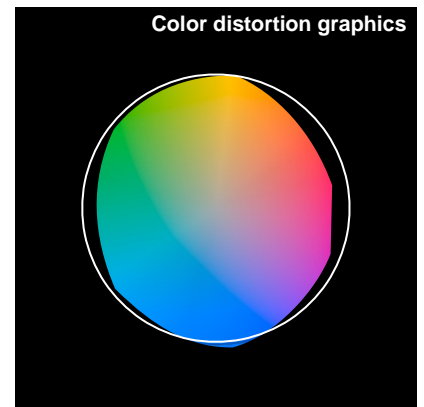
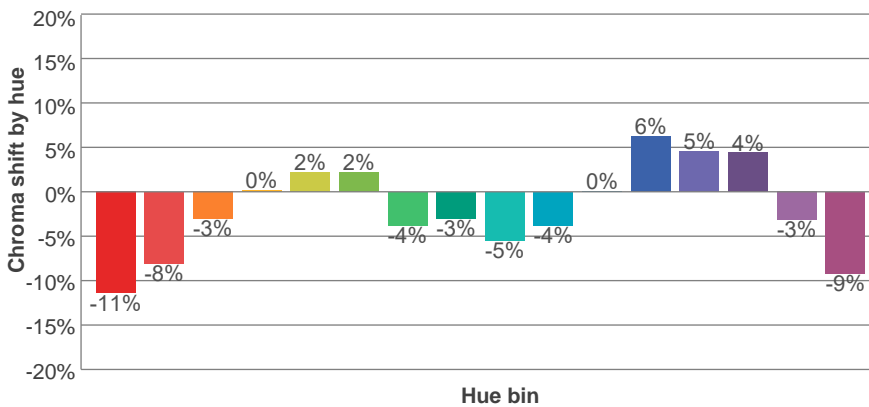
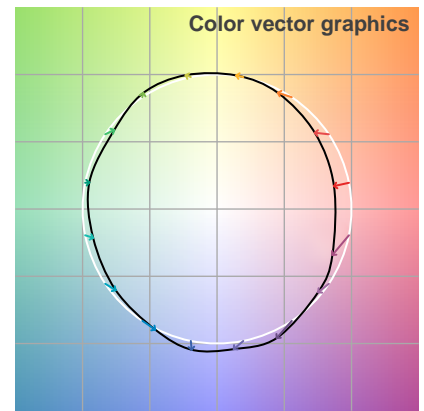
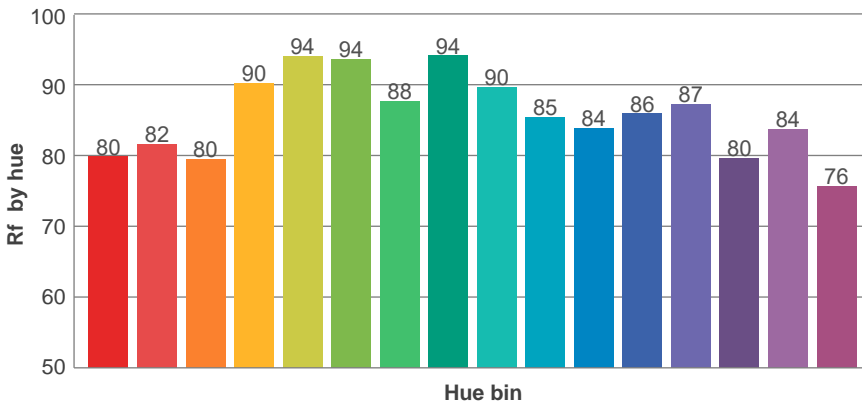
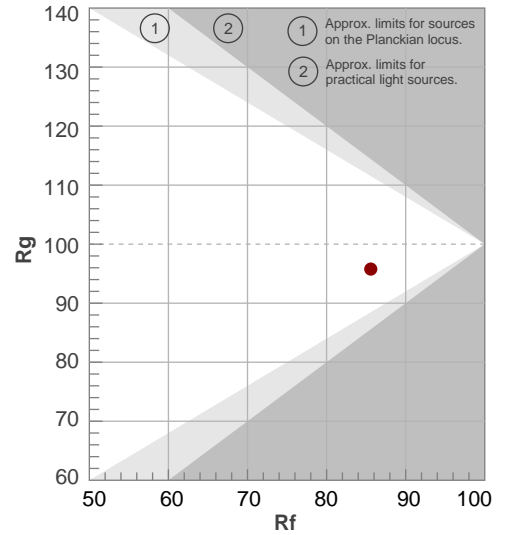
Color parameters

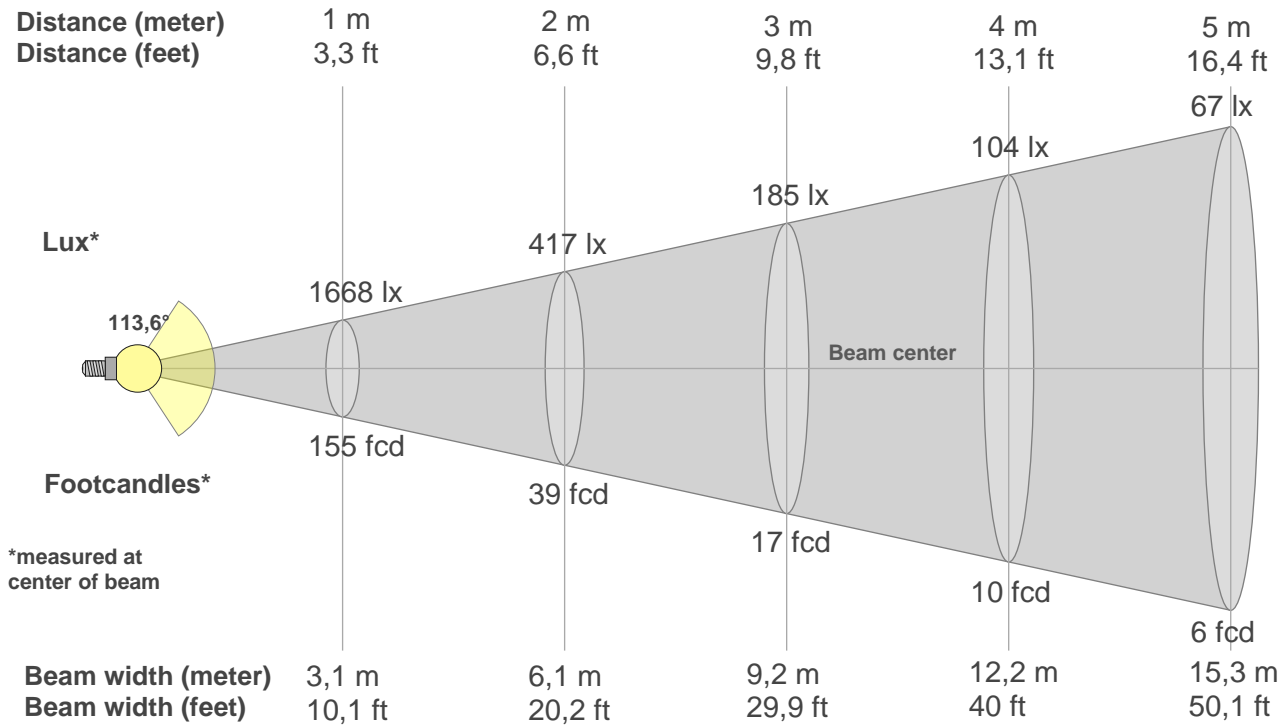
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	83,1	5,7	85,6	95,8	82,7	0,437	0,404	0,251	0,348	0,0002

Rf 85,6
Fidelity index Rf

Rg 95,8
Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	80	-11%	0%
2	82	-8%	7%
3	80	-3%	10%
4	90	0%	5%
5	94	2%	4%
6	94	2%	-2%
7	88	-4%	-6%
8	94	-3%	-1%
9	90	-5%	3%
10	85	-4%	8%
11	84	0%	12%
12	86	6%	2%
13	87	5%	-8%
14	80	4%	-16%
15	84	-3%	-10%
16	76	-9%	-17%





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
1668lx	417lx	185lx	104lx	67lx	46lx	34lx	26lx	21lx	17lx	14lx	12lx	10lx	9lx	7lx	7lx	6lx	5lx	5lx	4lx
155fcd	38,7fcd	17,2fcd	9,7fcd	6,2fcd	4,3fcd	3,2fcd	2,4fcd	1,9fcd	1,5fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd

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°
1668	1663	1642	1608	1559	1497	1422	1335	1237	1128	1009	882	747	608	468	333	207	99	29	7
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	36%	28%	20%	12%	6%	2%	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°
1668	1663	1642	1608	1559	1497	1422	1335	1237	1128	1009	882	747	608	468	333	207	99	29	7
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	36%	28%	20%	12%	6%	2%	0%

Intensities in 180° c-plane

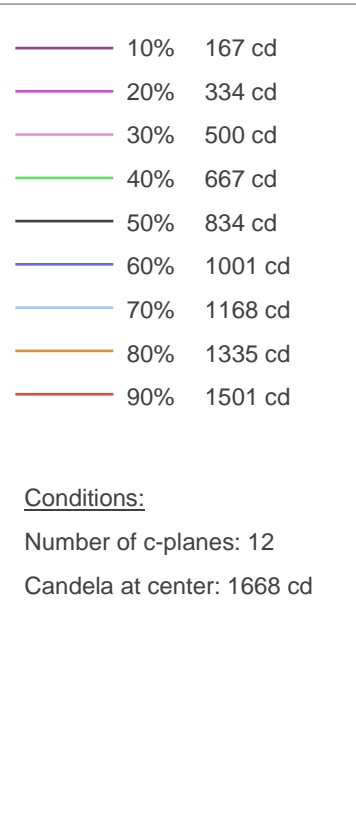
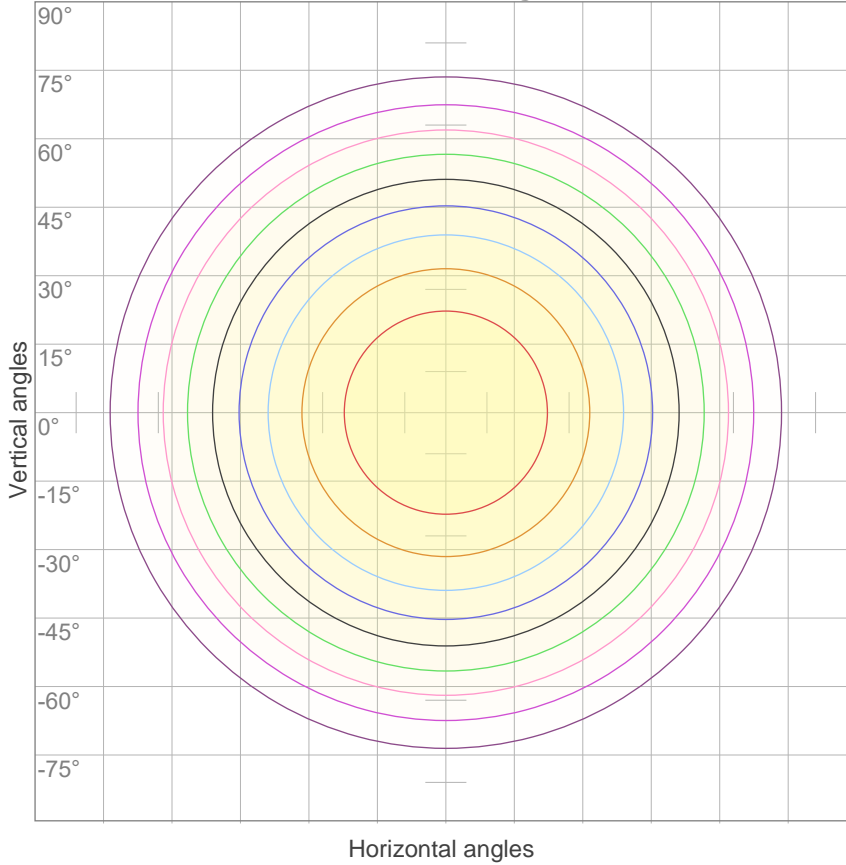
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1668	1663	1642	1608	1559	1497	1422	1335	1237	1128	1009	882	747	608	468	333	207	99	29	7
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	36%	28%	20%	12%	6%	2%	0%

Intensities in 270° c-plane

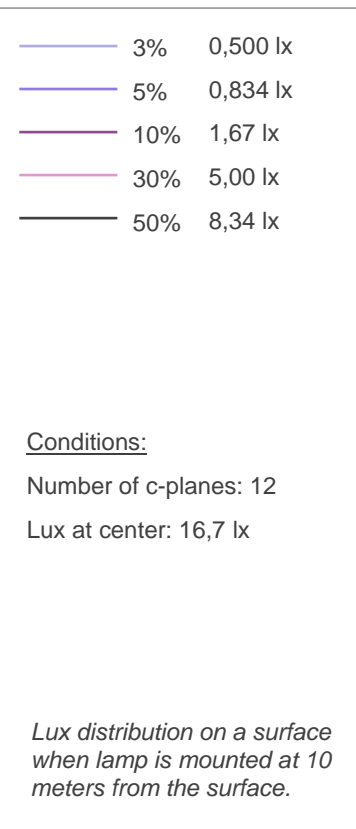
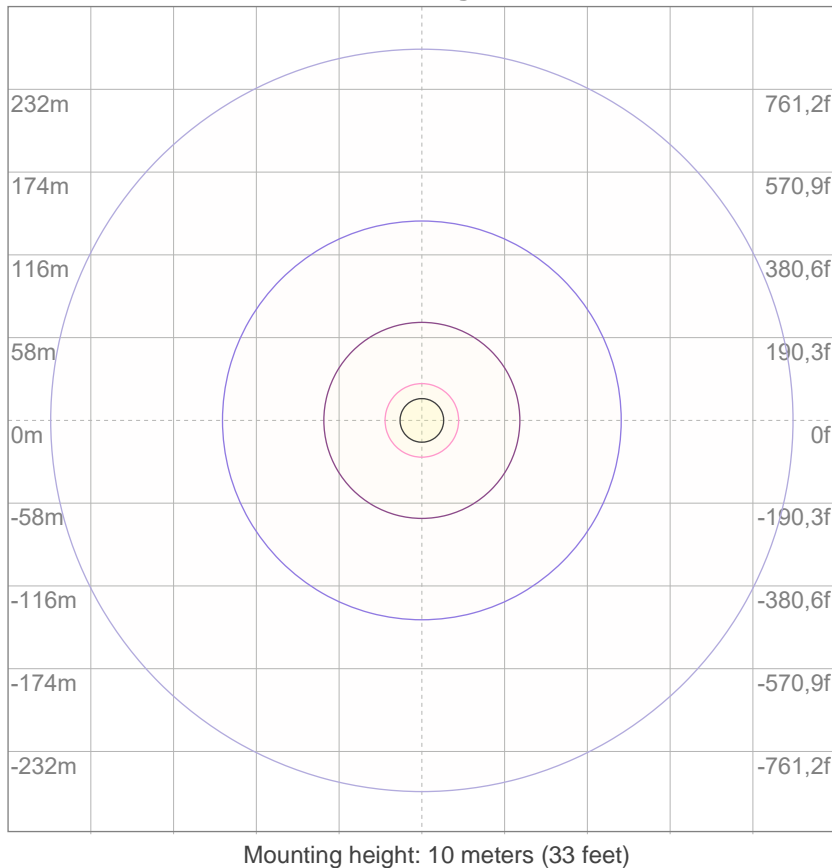
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1668	1663	1642	1608	1559	1497	1422	1335	1237	1128	1009	882	747	608	468	333	207	99	29	7
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	36%	28%	20%	12%	6%	2%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
113,6°	163,4°	176,5°	77,3%	52,5%

iso-candela diagram



iso-lux diagram



Glare evaluation according to UGR

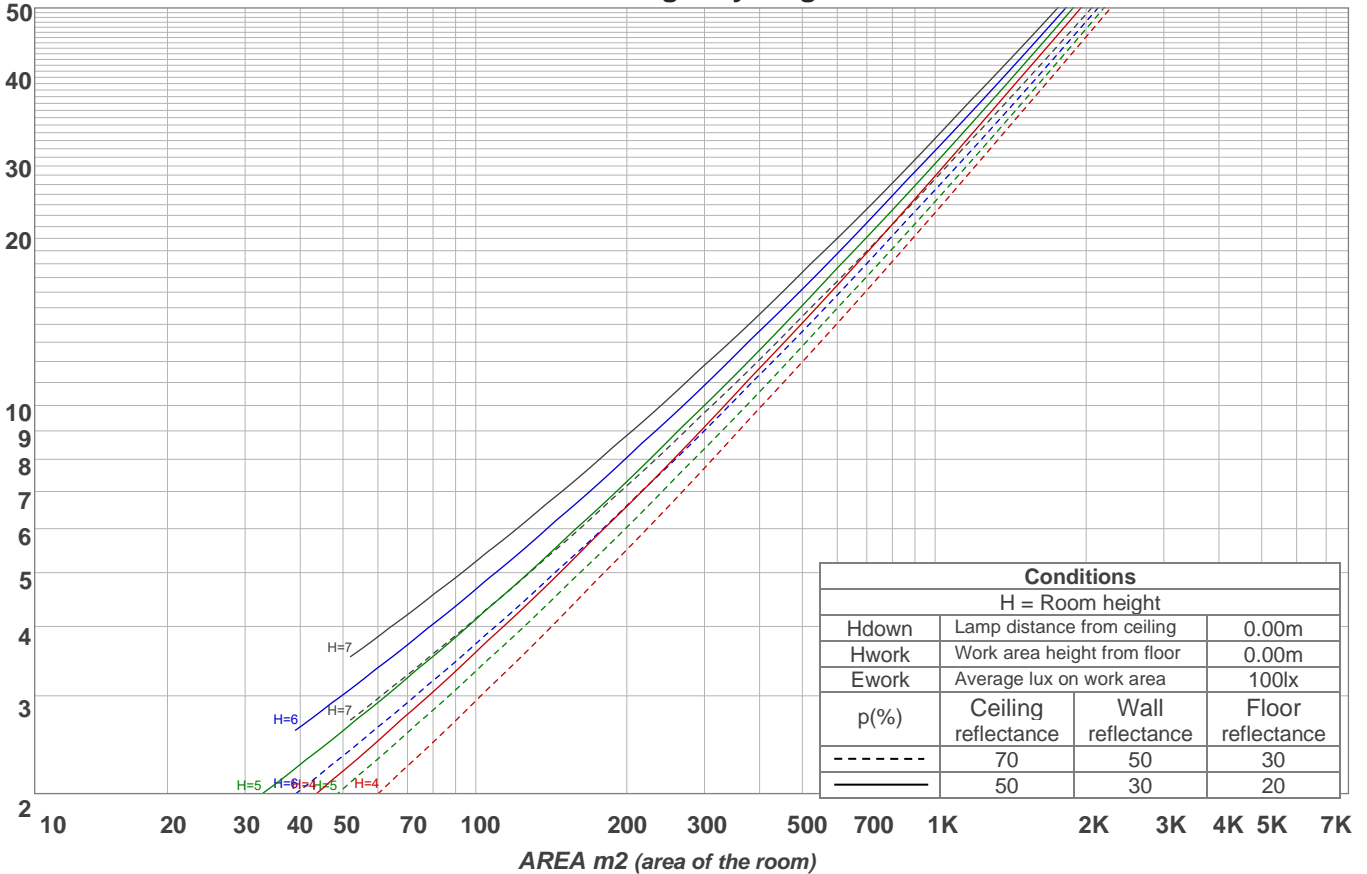
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	15,6	16,8	15,8	17,1	17,4	15,6	16,8	15,8	17,1	17,3
	3H	17,1	18,3	17,5	18,6	18,8	17,0	18,3	17,4	18,6	18,8
	4H	17,7	18,9	18,1	19,2	19,5	17,6	18,9	18,1	19,2	19,4
	6H	18,3	19,3	18,6	19,6	20,0	18,2	19,3	18,5	19,5	19,9
	8H	18,4	19,5	18,8	19,8	20,2	18,3	19,4	18,7	19,7	20,1
	12H	18,5	19,5	18,9	19,9	20,3	18,4	19,4	18,8	19,8	20,3
4H	2H	16,2	17,4	16,6	17,7	18,0	16,2	17,4	16,6	17,7	17,9
	3H	18,0	19,0	18,4	19,3	19,8	17,9	18,9	18,3	19,3	19,8
	4H	18,7	19,6	19,1	20,0	20,6	18,6	19,5	19,1	20,0	20,5
	6H	19,3	20,2	19,8	20,5	20,9	19,2	20,1	19,7	20,5	20,9
	8H	19,5	20,3	20,0	20,7	21,1	19,4	20,2	19,9	20,6	21,0
	12H	19,7	20,3	20,2	20,8	21,3	19,6	20,3	20,1	20,7	21,2
8H	4H	19,0	19,8	19,5	20,1	20,5	18,9	19,7	19,4	20,1	20,5
	6H	19,7	20,3	20,2	20,8	21,4	19,7	20,3	20,2	20,8	21,3
	8H	20,1	20,6	20,6	21,1	21,8	20,0	20,5	20,5	21,1	21,7
	12H	20,3	20,8	20,9	21,3	21,9	20,2	20,7	20,8	21,2	21,8
12H	4H	19,0	19,6	19,5	20,1	20,6	18,9	19,6	19,4	20,0	20,5
	6H	19,8	20,4	20,3	20,9	21,5	19,8	20,3	20,3	20,8	21,5
	8H	20,2	20,6	20,8	21,1	21,8	20,1	20,6	20,7	21,1	21,7
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,1 / -0,1					0,1 / -0,1					
S = 1.5H	0,1 / -0,2					0,1 / -0,2					
S = 2.0H	0,4 / -0,4					0,4 / -0,5					
CIE 117-1995. Corrected glare indices referring to 4910 lm total luminous flux											

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	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	108	103	99	95	105	101	97	93	97	93	90	92	90	87	89	87	85	82
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	78	74	71	68
3	90	79	71	64	87	77	69	63	74	67	62	71	66	61	68	64	60	57
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	36	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	35	31	29
9	56	42	34	29	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	36	30	25	36	30	25	24

LAMPS (number of lamps)

Luminaire budgetary diagram



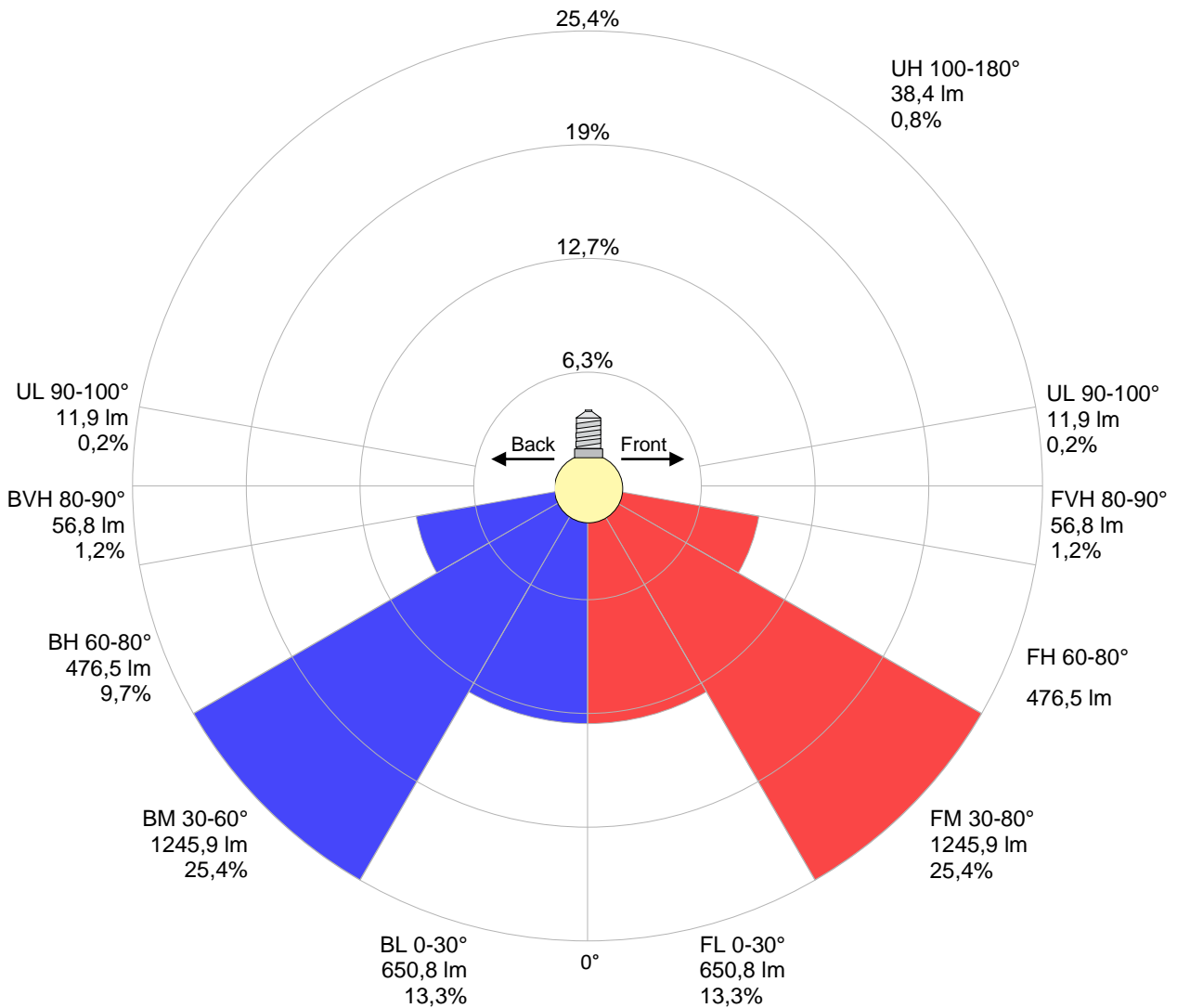
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	454 lm	690 lm	836 lm	870 lm	788 lm	601 lm	352 lm	111 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
10,9 lm	7,06 lm	6,92 lm	6,53 lm	5,87 lm	5,06 lm	3,74 lm	2,46 lm	0,795 lm

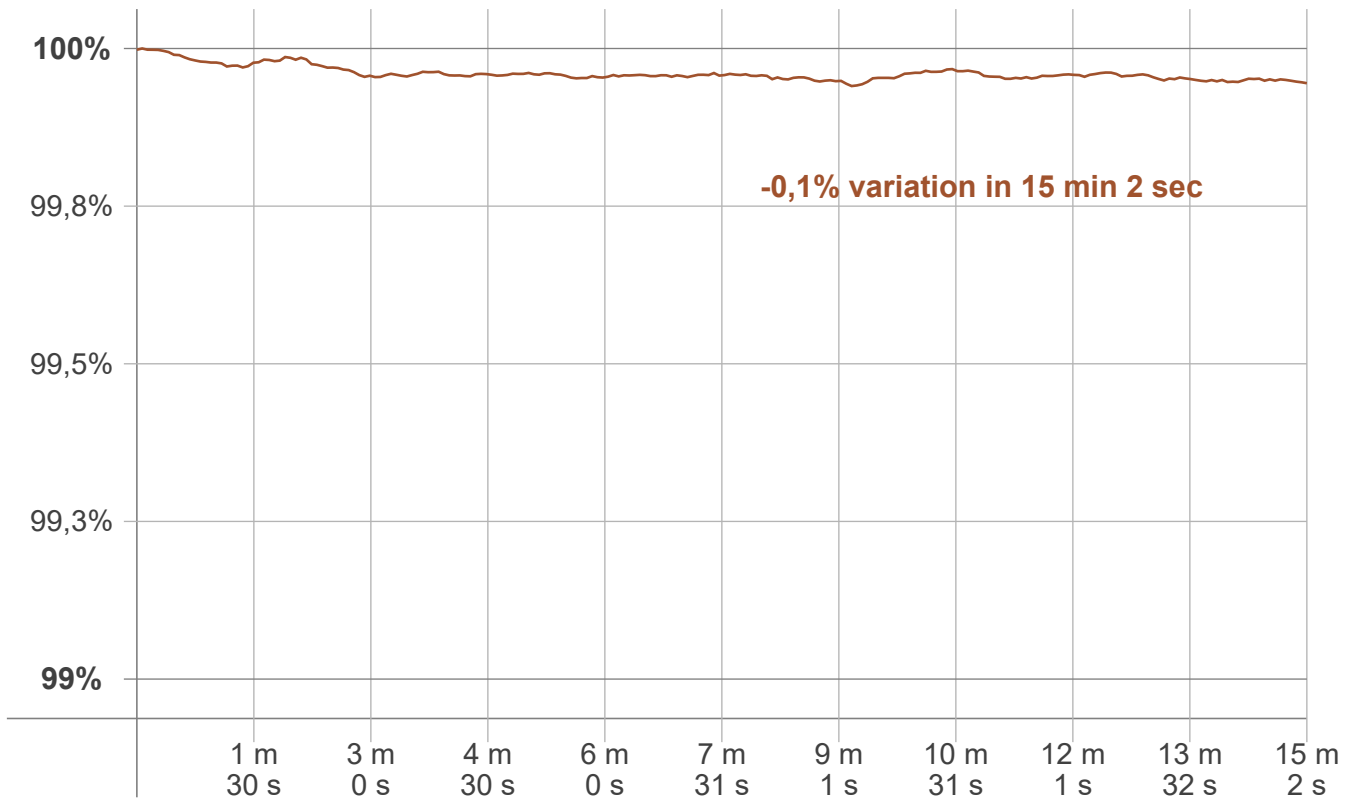
LCS table

BUG rating:	B2 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	650,8	13,3%
Medium(30-60):	1245,9	25,4%
High(60-80):	476,5	9,7%
Very high(80-90):	56,8	1,2%
Back light		
Low(0-30):	650,8	13,3%
Medium(30-60):	1245,9	25,4%
High(60-80):	476,5	9,7%
Very high(80-90):	56,8	1,2%
Uplight		
Low(90-100):	11,9	0,2%
High(100-180):	38,4	0,8%

LCS graph



Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 2 sec
Warmup variation	-0,1%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2999 K	+1 K	3000 K

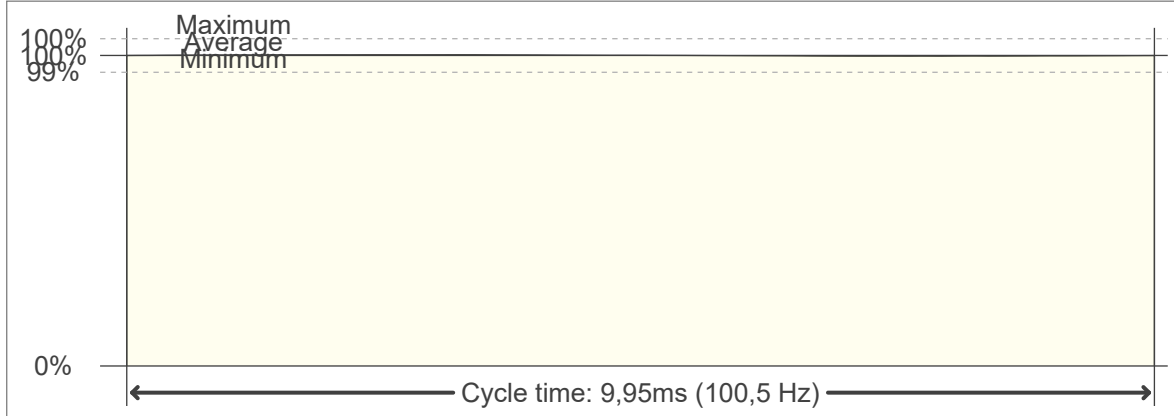
Output change

Output start	Output change	Output end
4912 lm	-2 lm	4910 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:		100,5 Hz	
Flicker index:	0	JA8/10 40Hz	0,03 %
Flicker percentage:	0,33 %	JA8/10 90Hz	0,05 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,3 %
PstLM	0,02	JA8/10 400Hz	0,31 %
Mp	0,02	JA8/10 1000Hz	0,32 %

Flicker conditions:

Sample rate:	20000 samples/second
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