

Light efficiency:



Light quality:



Color temperature:



Output: 3173 lm

Peak: 1013 cd

Power: 30,9 W

PF: 0,95



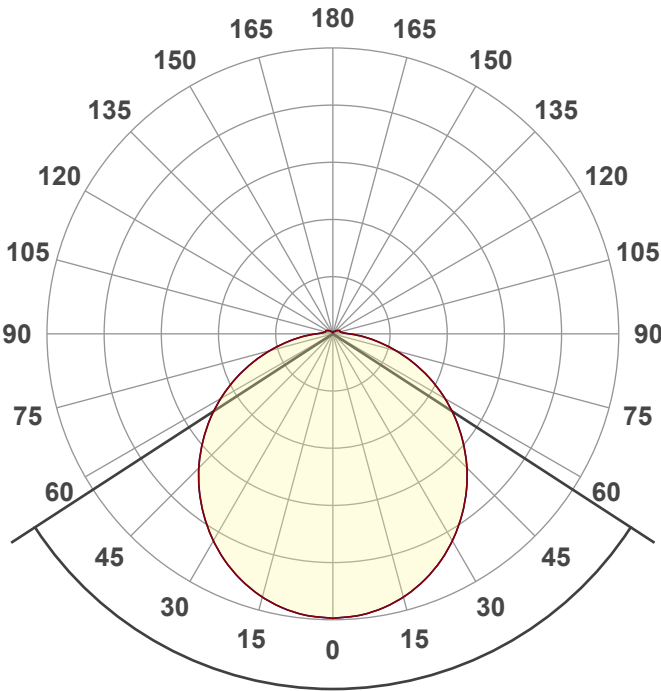
Tracking number: [VT241001-003444](#)

Product name:
804558-4000K

Item number:
804558-4000K

Date and time:
1-10-2024 12:54:59

Description:
**LED FRAME LED PANEEL | EDGE LIT |
120x30 | 32W | UGR<23 | CCT SWITCH**

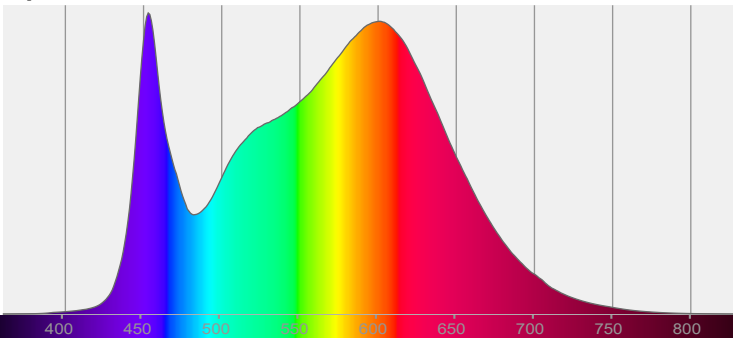


Beam angle **114°**

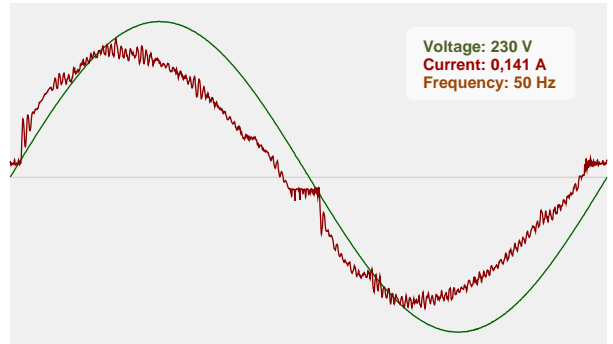


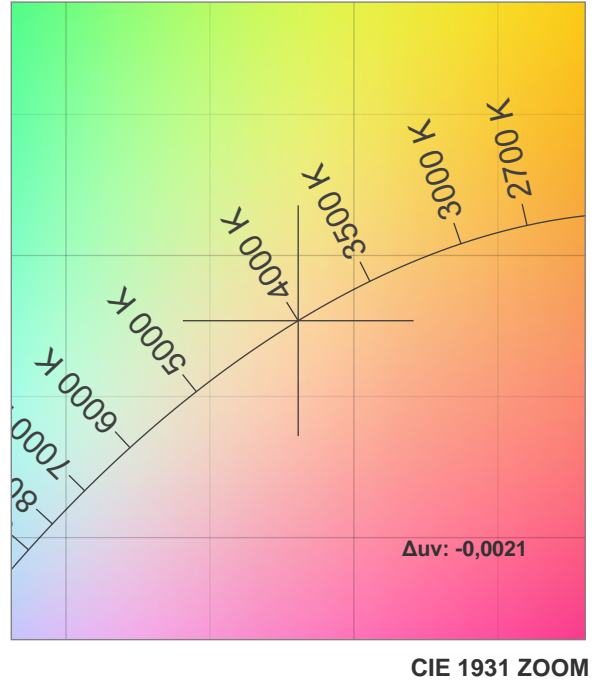
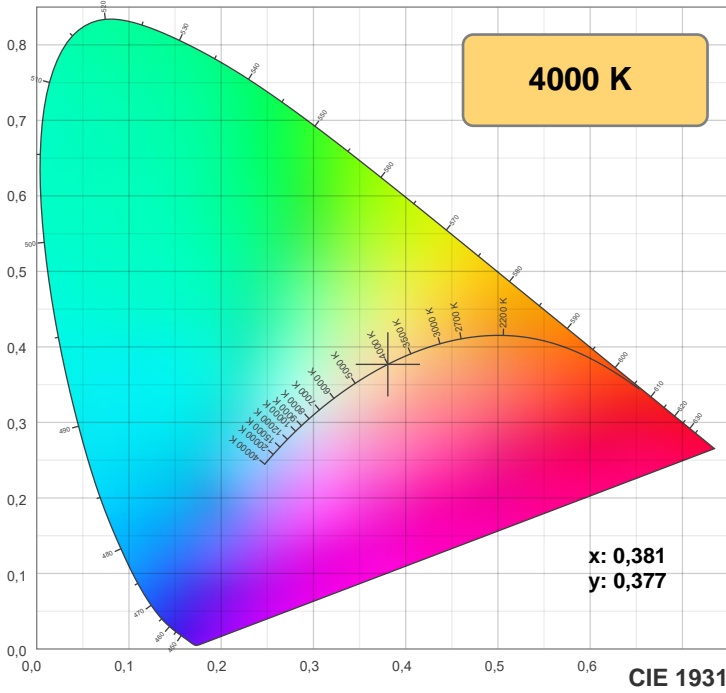
CIE 1931
x: 0,381
y: 0,377

Spectra

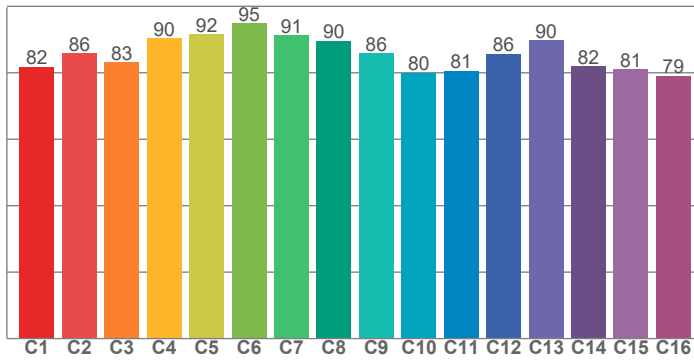


Power

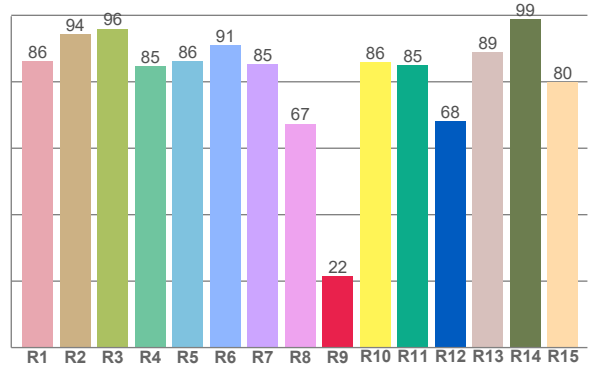




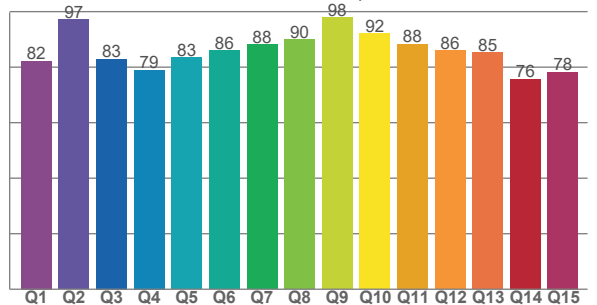
TM-30: 85,7



CRI: 86,4 (R1-R8)



CQS: 84,8



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
86,3	94,3	96,0	84,8	86,2	91,1	85,3	67,4	21,6	85,9	85,0	68,2	88,9	98,7	79,9

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
81,8	85,8	83,1	90,4	91,6	94,9	91,3	89,6	85,8	79,9	80,7	85,7	89,8	81,9	81,0	79,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82,2	97,2	83,0	78,9	83,4	86,1	88,2	90,0	97,9	92,1	88,4	86,1	85,2	75,8	78,2

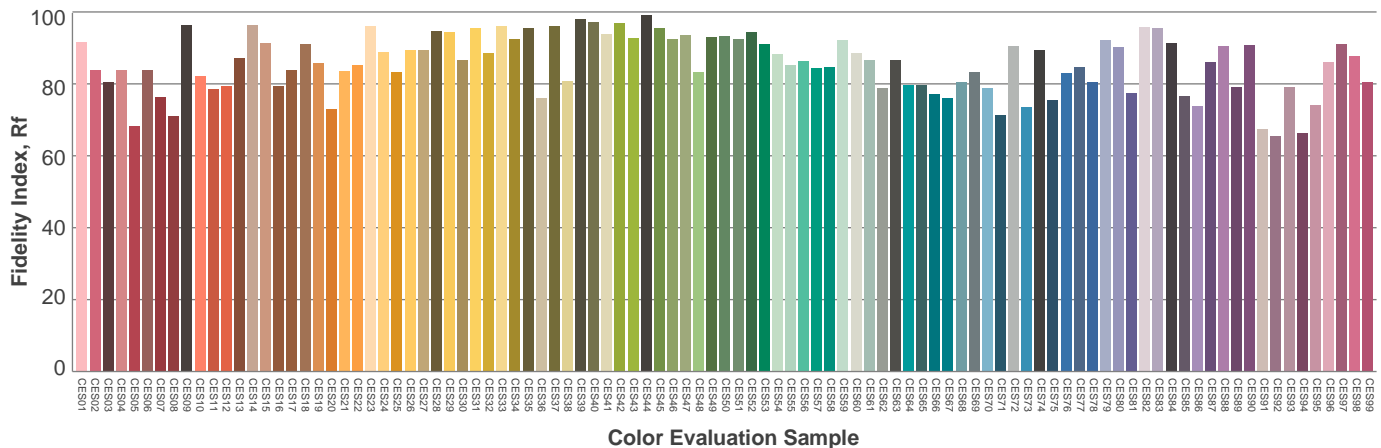
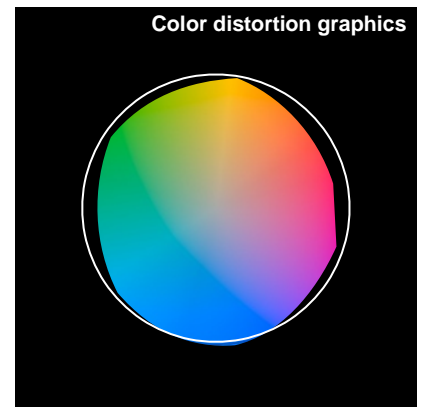
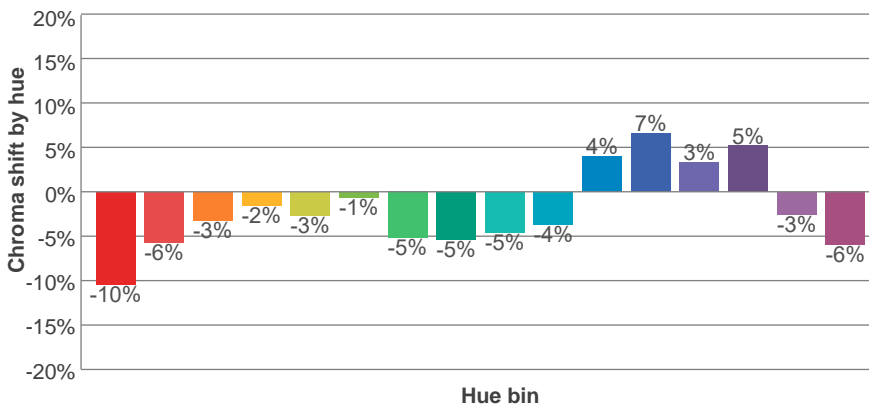
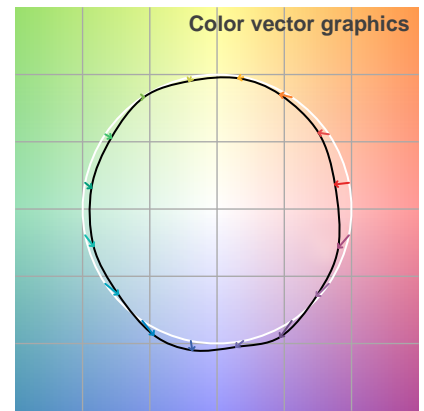
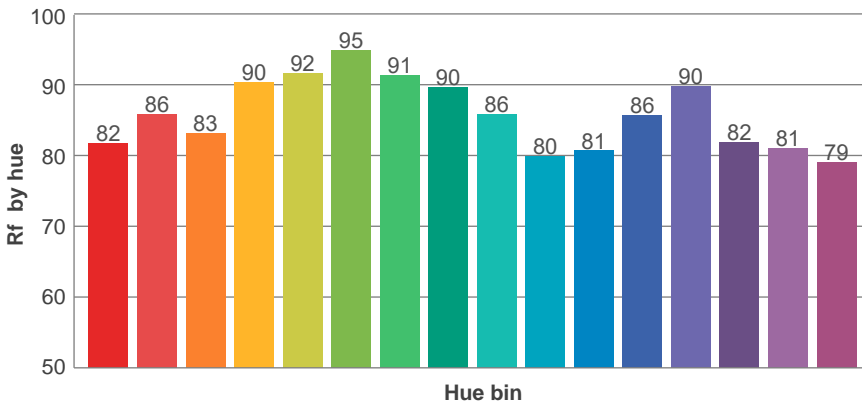
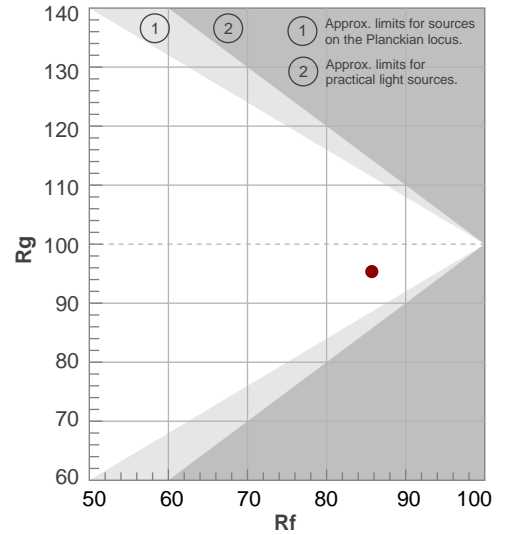
Color parameters

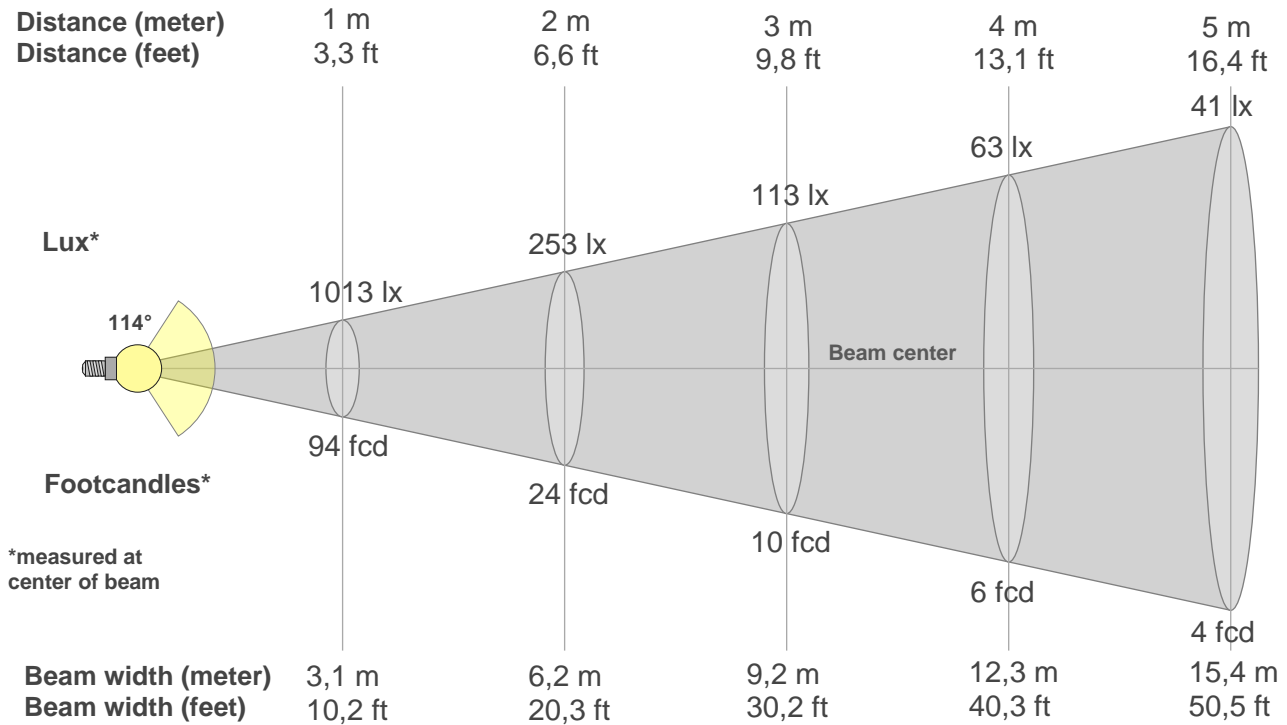
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4000 K	86,4	21,6	85,7	95,4	84,8	0,381	0,377	0,225	0,334	-0,0021

Rf 85,7
Fidelity index Rf

Rg 95,4
Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	82	-10%	1%
2	86	-6%	5%
3	83	-3%	8%
4	90	-2%	3%
5	92	-3%	2%
6	95	-1%	-1%
7	91	-5%	0%
8	90	-5%	3%
9	86	-5%	9%
10	80	-4%	12%
11	81	4%	13%
12	86	7%	2%
13	90	3%	-6%
14	82	5%	-14%
15	81	-3%	-13%
16	79	-6%	-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
1013lx	253lx	113lx	63lx	41lx	28lx	21lx	16lx	13lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx	3lx
94,1fcd	23,5fcd	10,5fcd	5,9fcd	3,8fcd	2,6fcd	1,9fcd	1,5fcd	1,2fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd

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°
1013	1008	994	971	939	899	851	798	739	675	607	536	461	385	309	234	165	107	60	39
100%	100%	98%	96%	93%	89%	84%	79%	73%	67%	60%	53%	46%	38%	30%	23%	16%	11%	6%	4%

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°
1013	1008	994	971	939	899	851	798	739	675	607	536	461	385	309	234	165	107	60	39
100%	100%	98%	96%	93%	89%	84%	79%	73%	67%	60%	53%	46%	38%	30%	23%	16%	11%	6%	4%

Intensities in 180° c-plane

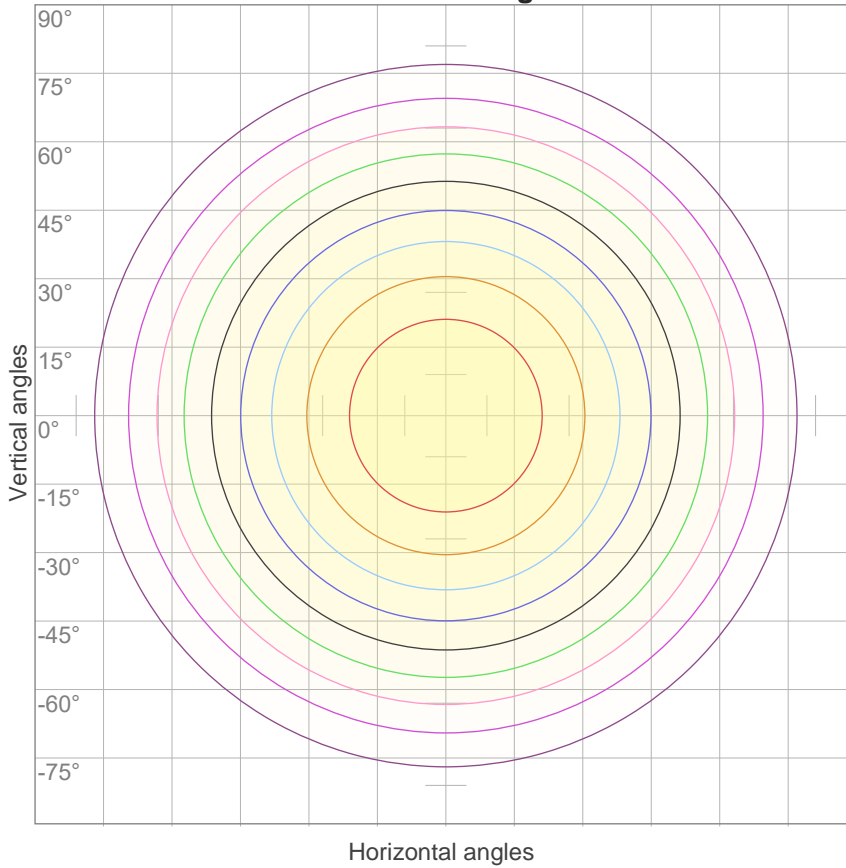
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1013	1008	994	971	939	899	851	798	739	675	607	536	461	385	309	234	165	107	60	39
100%	100%	98%	96%	93%	89%	84%	79%	73%	67%	60%	53%	46%	38%	30%	23%	16%	11%	6%	4%

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°
1013	1008	994	971	939	899	851	798	739	675	607	536	461	385	309	234	165	107	60	39
100%	100%	98%	96%	93%	89%	84%	79%	73%	67%	60%	53%	46%	38%	30%	23%	16%	11%	6%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
114°	171°	233,5°	71,9%	48,7%

iso-candela diagram



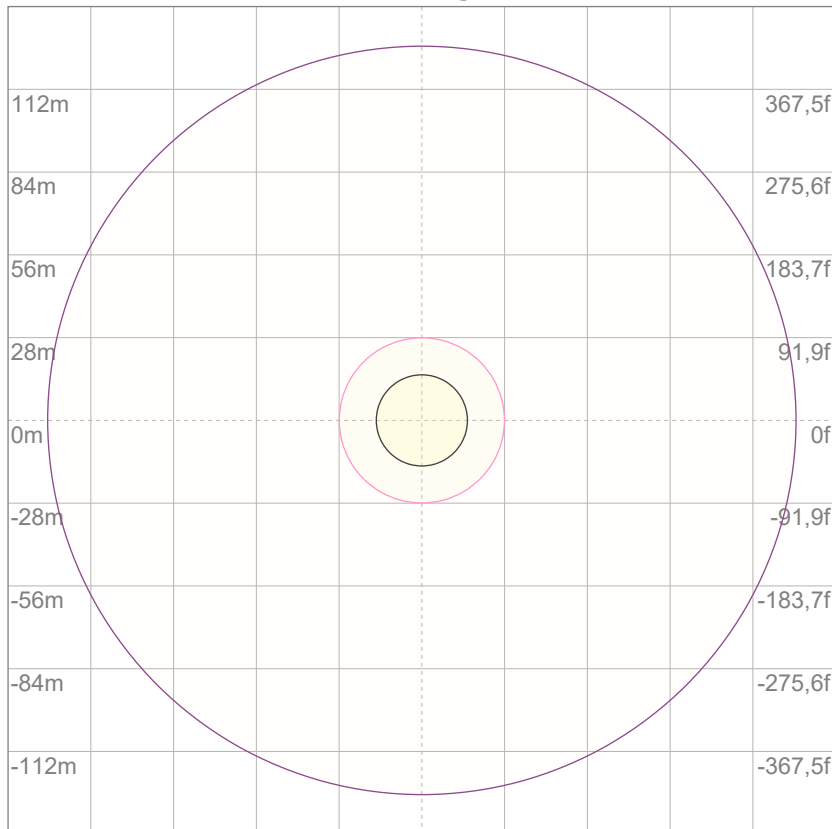
10%	101 cd
20%	203 cd
30%	304 cd
40%	405 cd
50%	506 cd
60%	608 cd
70%	709 cd
80%	810 cd
90%	911 cd

Conditions:

Number of c-planes: 12

Candela at center: 1013 cd

iso-lux diagram



3%	0,304 lx
5%	0,506 lx
10%	1,01 lx
30%	3,04 lx
50%	5,06 lx

Conditions:

Number of c-planes: 12

Lux at center: 10,1 lx

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

Glare evaluation according to UGR

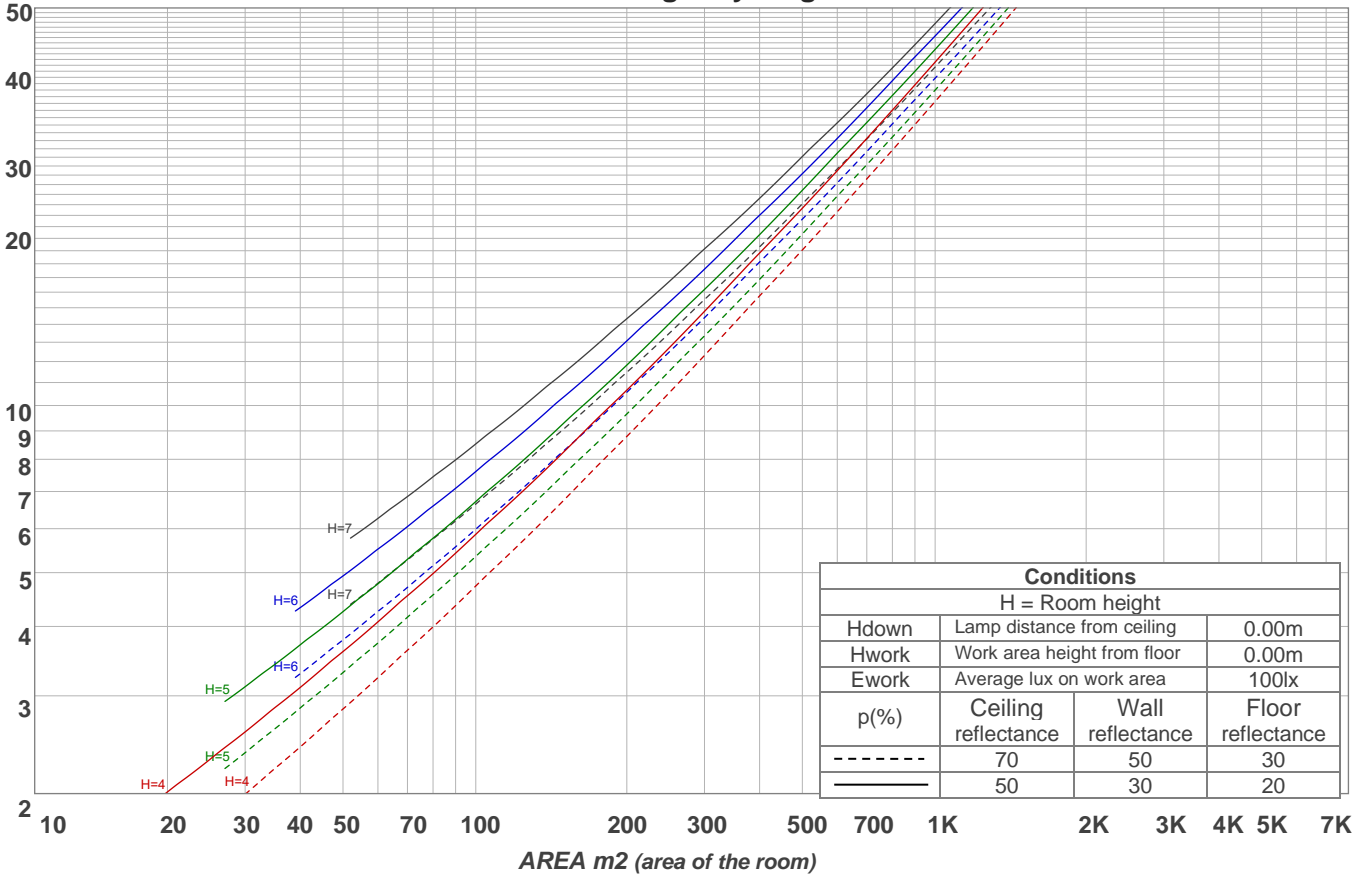
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	16,0	17,2	16,3	17,6	17,9	15,9	17,1	16,2	17,5	17,8
	3H	17,6	18,8	18,1	19,2	19,5	17,5	18,7	17,9	19,1	19,4
	4H	18,4	19,6	18,9	19,9	20,3	18,2	19,4	18,7	19,8	20,1
	6H	19,1	20,2	19,5	20,5	21,0	18,9	20,0	19,3	20,3	20,8
	8H	19,4	20,5	19,8	20,8	21,3	19,2	20,2	19,6	20,6	21,1
12H	19,7	20,7	20,1	21,1	21,6	19,4	20,4	19,9	20,8	21,4	
4H	2H	16,6	17,8	17,1	18,1	18,5	16,5	17,7	17,0	18,1	18,4
	3H	18,5	19,6	19,0	19,9	20,5	18,4	19,4	18,9	19,8	20,4
	4H	19,4	20,4	19,9	20,8	21,4	19,2	20,2	19,8	20,6	21,3
	6H	20,2	21,1	20,8	21,5	22,0	20,0	20,9	20,6	21,3	21,8
	8H	20,6	21,4	21,2	21,8	22,3	20,4	21,2	20,9	21,6	22,1
12H	21,0	21,6	21,5	22,1	22,7	20,7	21,4	21,2	21,9	22,4	
8H	4H	19,7	20,5	20,3	21,0	21,4	19,6	20,4	20,2	20,8	21,3
	6H	20,8	21,4	21,3	21,9	22,5	20,6	21,2	21,2	21,7	22,4
	8H	21,3	21,8	21,9	22,4	23,1	21,1	21,6	21,7	22,2	22,9
	12H	21,8	22,3	22,4	22,8	23,5	21,5	22,0	22,2	22,6	23,2
12H	4H	19,8	20,4	20,3	20,9	21,5	19,6	20,3	20,2	20,8	21,4
	6H	20,9	21,4	21,5	22,0	22,7	20,7	21,3	21,3	21,8	22,6
	8H	21,4	21,9	22,1	22,5	23,2	21,2	21,7	21,9	22,3	23,0
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 / -0,1					0,1 / -0,1					
S = 2.0H	0,3 / -0,3					0,3 / -0,3					
CIE 117-1995. Corrected glare indices referring to 3173 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	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	95
1	107	102	97	93	103	99	95	91	94	90	87	89	86	84	85	82	80	78
2	97	88	81	75	94	86	79	73	81	76	71	77	73	69	74	70	67	64
3	88	77	69	62	85	75	67	61	71	65	59	68	62	58	65	60	56	54
4	80	68	59	52	78	66	58	51	63	56	50	60	54	49	58	52	48	46
5	74	61	51	45	71	59	51	44	57	49	43	54	48	42	52	46	42	39
6	68	55	45	39	66	53	45	39	51	43	38	49	42	37	47	41	36	34
7	63	49	40	34	61	48	40	34	46	39	33	45	38	33	43	37	32	30
8	59	45	36	30	57	44	36	30	42	35	30	41	34	29	39	33	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	34	28	24	22

LAMPS (number of lamps)

Luminaire budgetary diagram



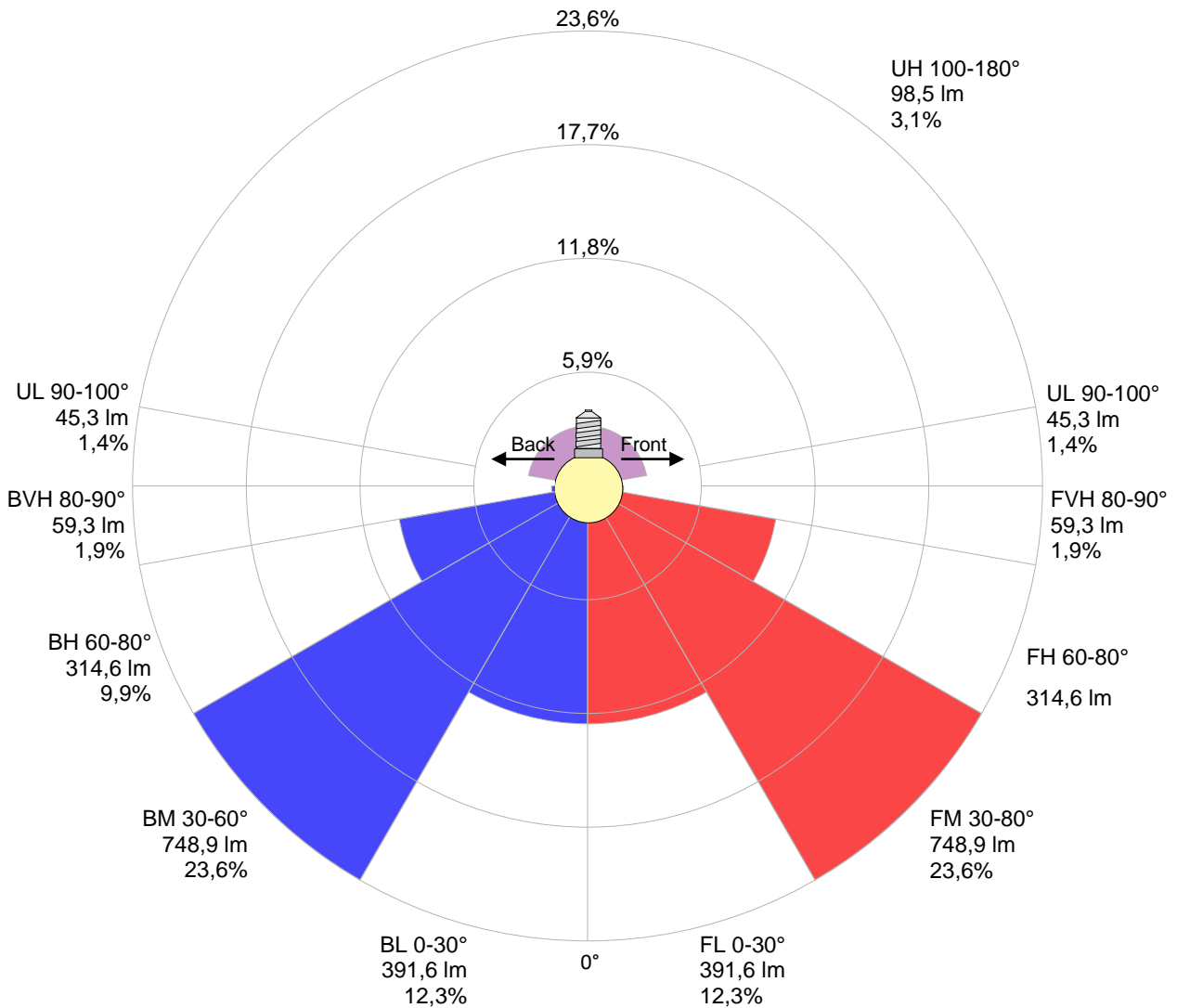
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	274 lm	414 lm	499 lm	521 lm	479 lm	381 lm	248 lm	119 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
45,0 lm	30,2 lm	25,7 lm	18,2 lm	11,2 lm	6,32 lm	4,12 lm	2,16 lm	0,607 lm

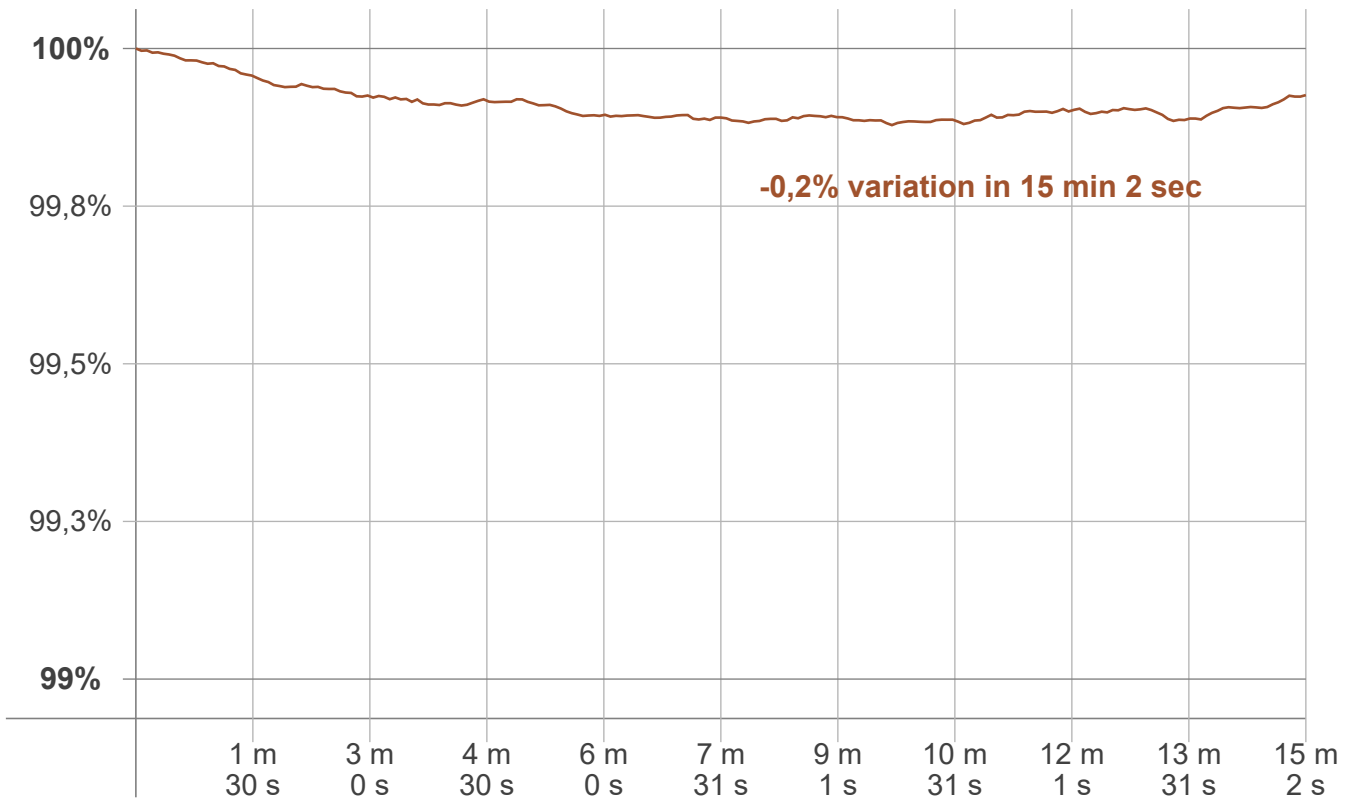
LCS table

BUG rating:	B1 U3 G1	
Forward light	Lumens	Lumens %
Low(0-30):	391,6	12,3%
Medium(30-60):	748,9	23,6%
High(60-80):	314,6	9,9%
Very high(80-90):	59,3	1,9%
Back light		
Low(0-30):	391,6	12,3%
Medium(30-60):	748,9	23,6%
High(60-80):	314,6	9,9%
Very high(80-90):	59,3	1,9%
Uplight		
Low(90-100):	45,3	1,4%
High(100-180):	98,5	3,1%

LCS graph



Warmup curve



Warmup result

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

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4000 K	+0 K	4000 K

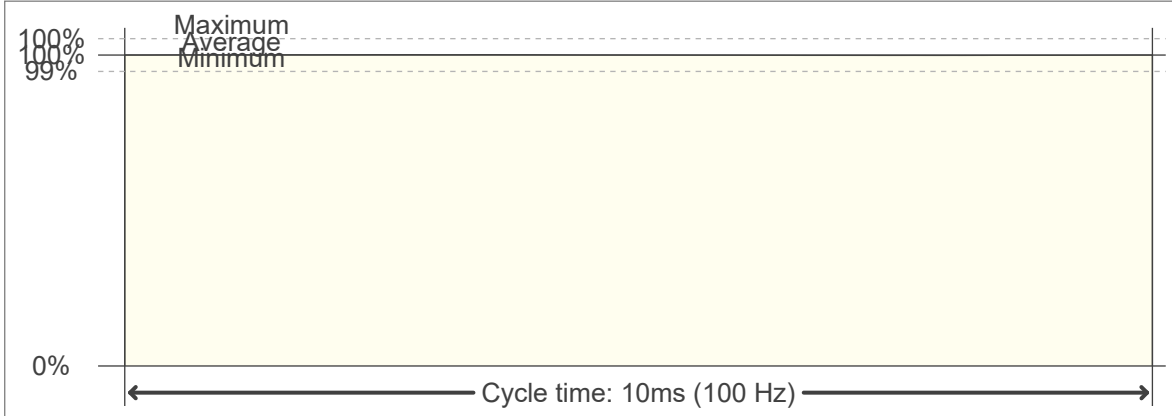
Output change

Output start	Output change	Output end
3176 lm	-3 lm	3173 lm

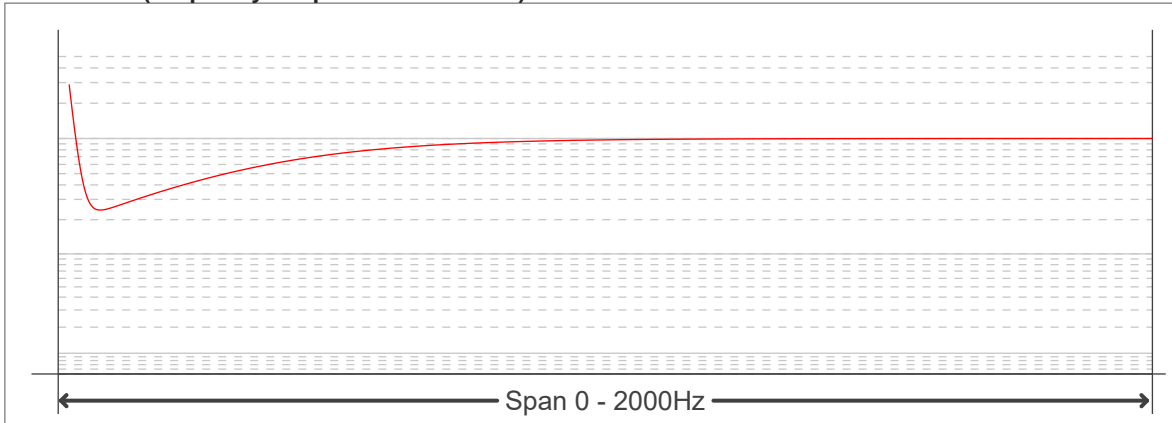
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		100 Hz	
Flicker index:	0	JA8/10 40Hz	0,01 %
Flicker percentage:	0,16 %	JA8/10 90Hz	0,02 %
SVM: (Visual flicker)	0	JA8/10 200Hz	0,13 %
PstLM	0,01	JA8/10 400Hz	0,14 %
Mp	0,01	JA8/10 1000Hz	0,15 %

Flicker conditions:

Sample rate:	20000 samples/second
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