

Light efficiency:

102 Lumen/Watt

Light quality:

CRI: 85,5

Color temperature:

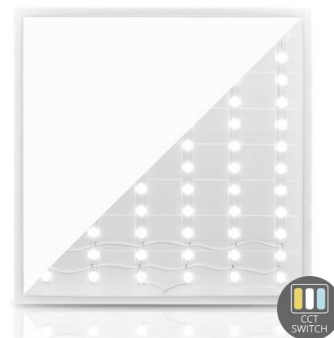
4000 K

Output: 1423 lm

Peak: 481 cd

Power: 14,0 W

PF: 0,95



Tracking number: [VT240920-007900](#)

Product name:

272125-4000K

Item number:

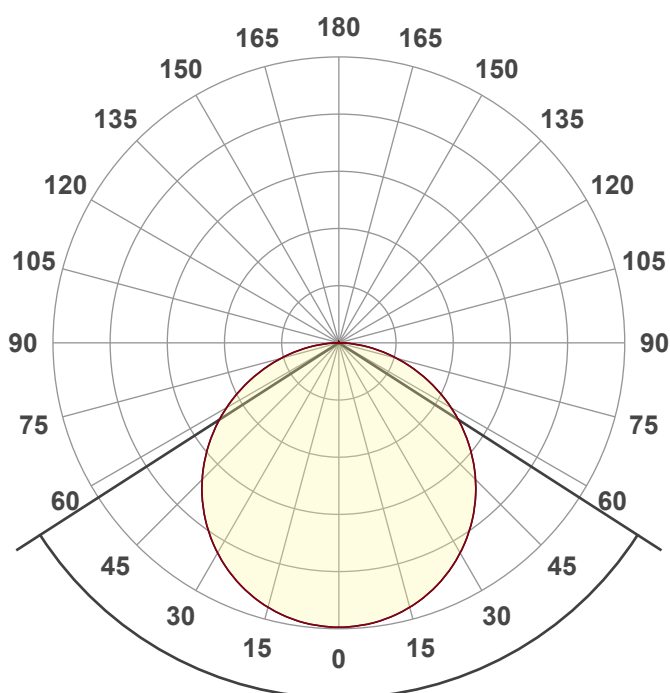
272125-4000K

Date and time:

20-9-2024 16:26:26

Description:

**BACK-LIT LED PANEEL | LEDA |
30X30CM | 15W | CCT-SWITCH**



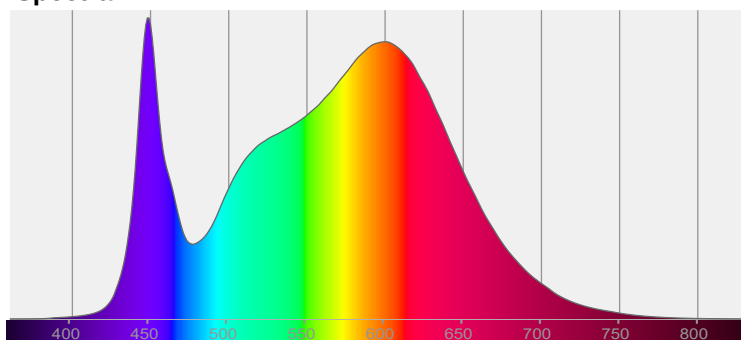
Beam angle

114,5°

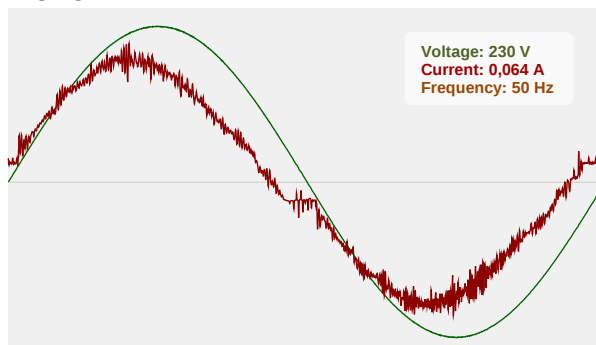


CIE 1931
x: 0,381
y: 0,377

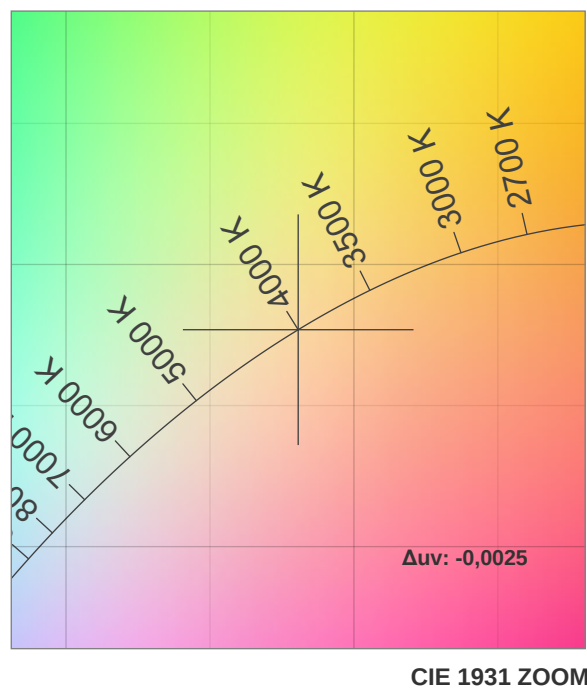
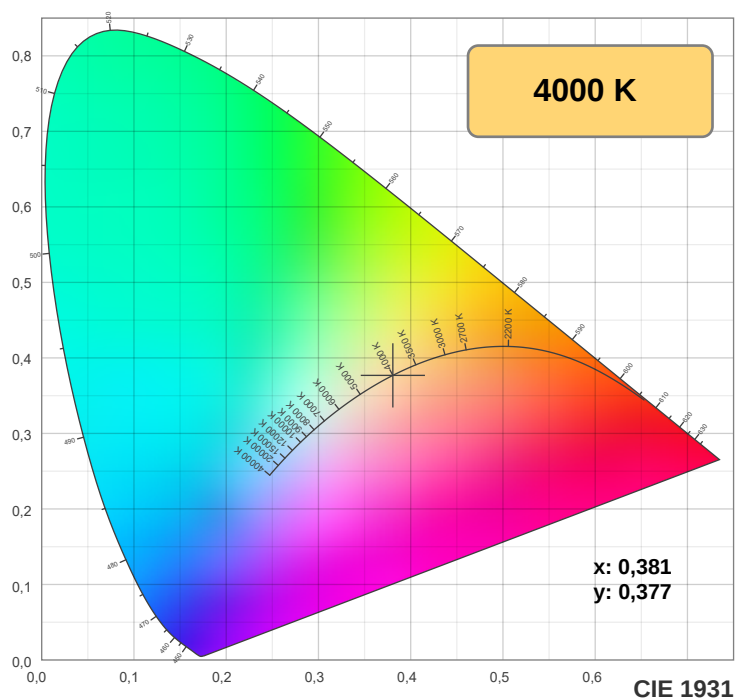
Spectra



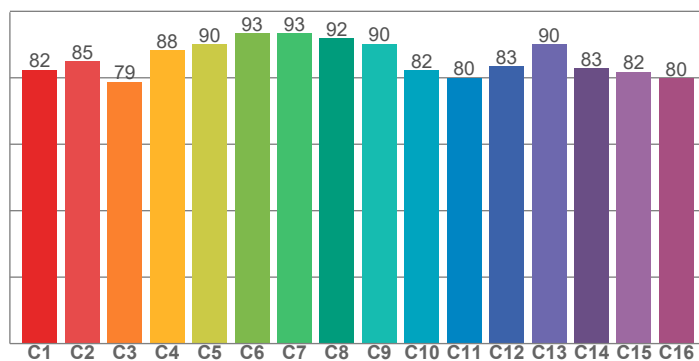
Power



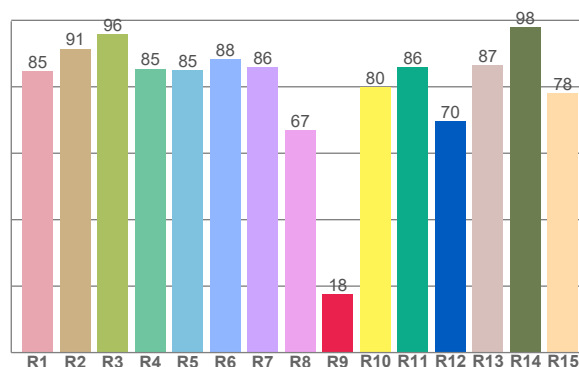
Voltage: 230 V
Current: 0,064 A
Frequency: 50 Hz



TM-30: 85,6



CRI: 85,5 (R1-R8)



TM-30 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
84,8	91,5	95,9	85,5	85,1	88,4	86,0	67,0	17,7	79,9	85,9	69,7	86,6	98,0	78,1

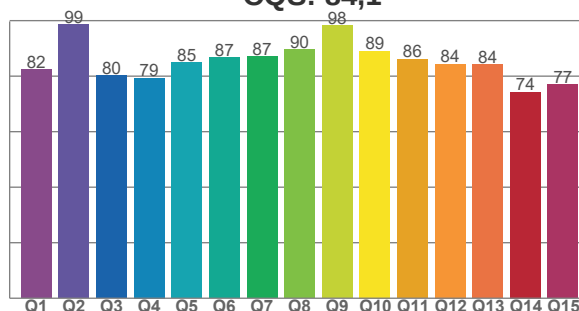
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
82,5	84,9	78,8	88,2	90,2	93,4	93,4	92,0	90,2	82,2	80,0	83,4	90,0	82,9	81,7	79,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82,4	98,7	80,3	79,4	84,9	86,7	87,1	89,5	98,2	89,1	86,1	84,4	84,1	74,3	77,1

CQS: 84,1



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
4000 K	85,5	17,7	85,6	97,8	84,1	0,381	0,377	0,225	0,334	-0,0025

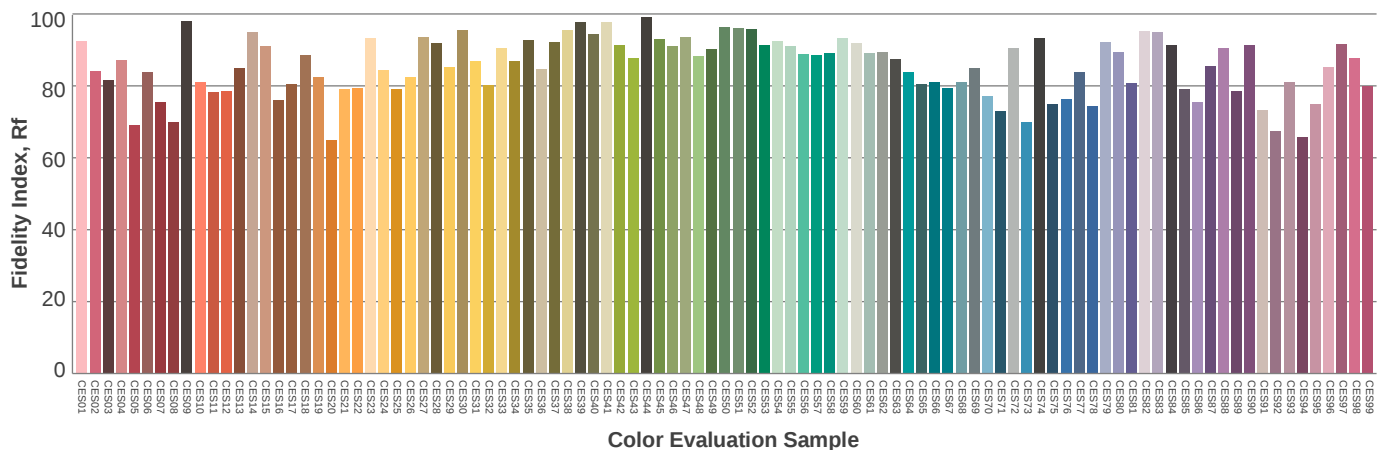
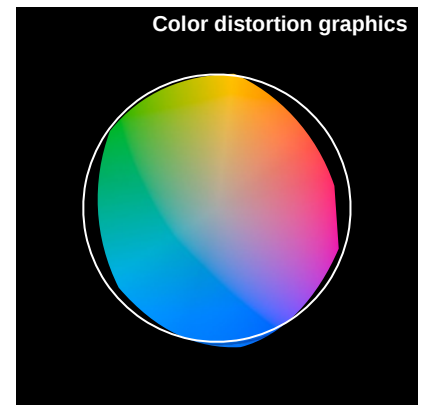
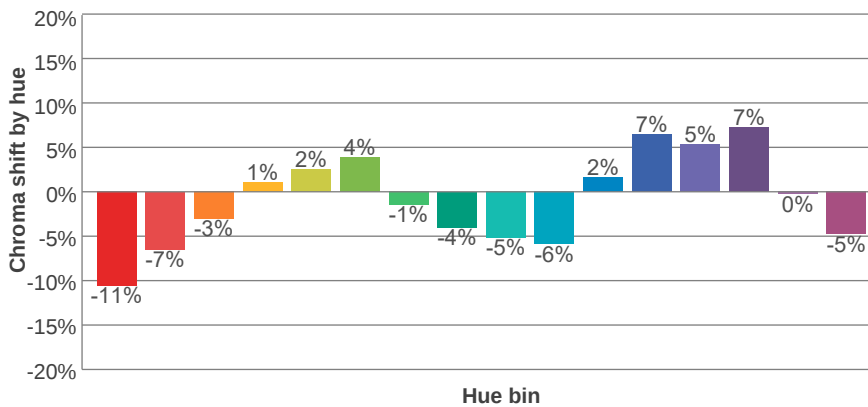
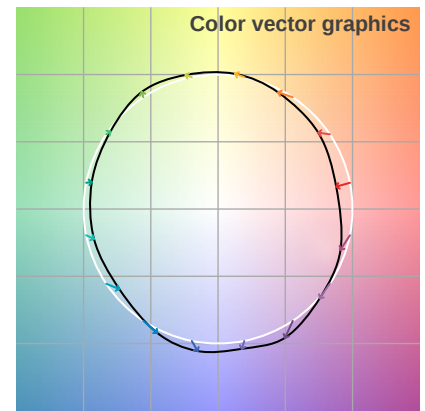
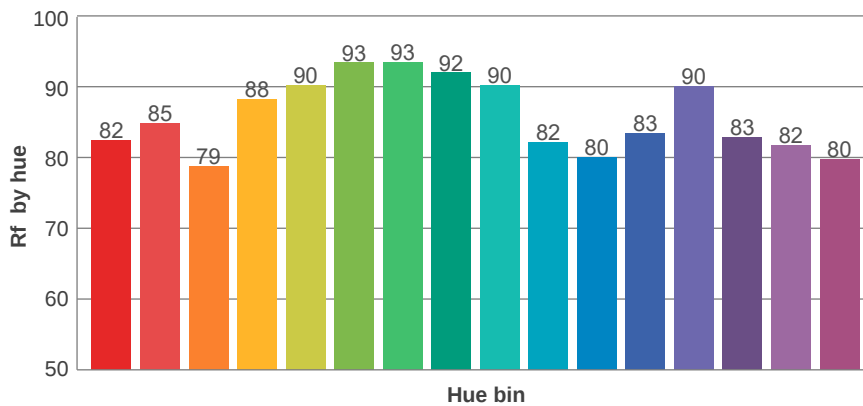
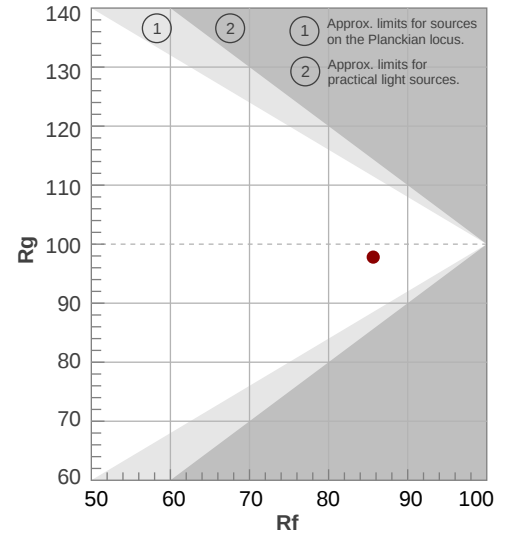
Rf 85,6

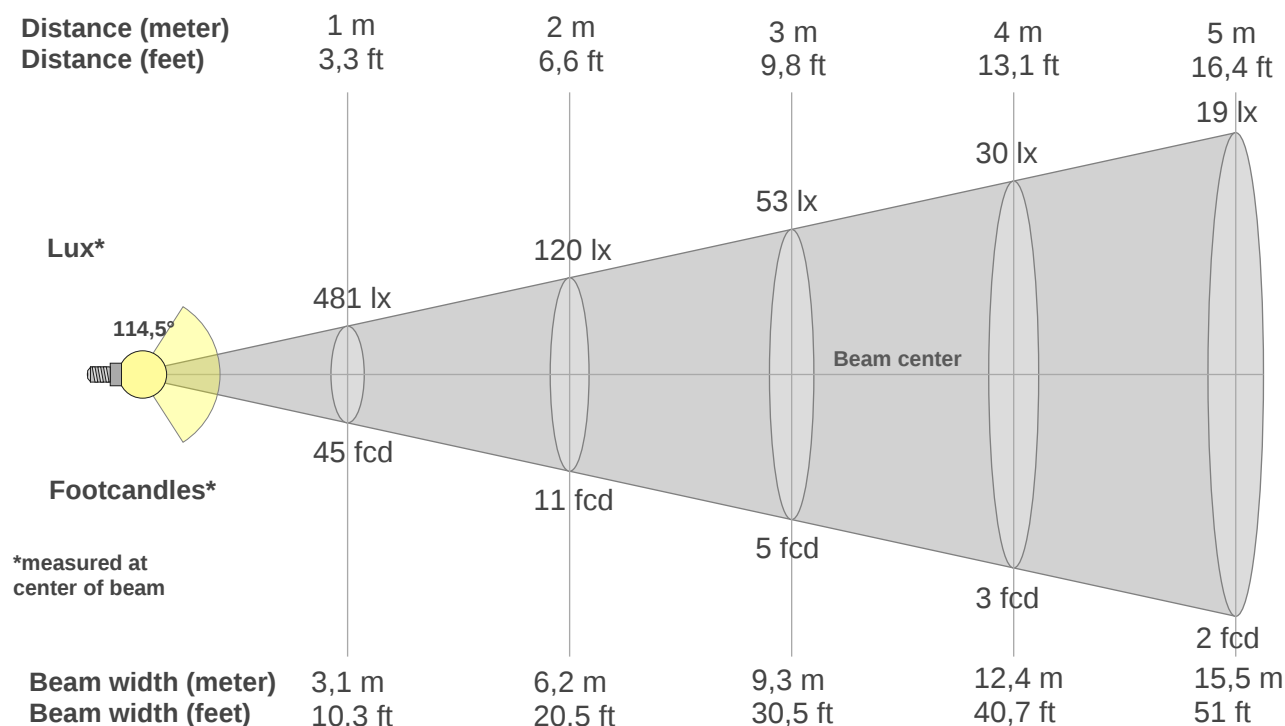
Fidelity index Rf

Rg 97,8

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	82	-11%	-1%
2	85	-7%	6%
3	79	-3%	11%
4	88	1%	7%
5	90	2%	4%
6	93	4%	-1%
7	93	-1%	-3%
8	92	-4%	-1%
9	90	-5%	4%
10	82	-6%	9%
11	80	2%	13%
12	83	7%	6%
13	90	5%	-3%
14	83	7%	-12%
15	82	0%	-13%
16	80	-5%	-12%




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
481lx	120lx	53lx	30lx	19lx	13lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx
44,7fcd	11,2fcd	5fcd	2,8fcd	1,8fcd	1,2fcd	0,9fcd	0,7fcd	0,6fcd	0,4fcd	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°
481	479	473	463	449	432	410	386	358	327	293	257	219	180	141	102	64	30	8	1
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	46%	37%	29%	21%	13%	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°
481	479	473	463	449	432	410	386	358	327	293	257	219	180	141	102	64	30	8	1
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	46%	37%	29%	21%	13%	6%	2%	0%

Intensities in 180° c-plane

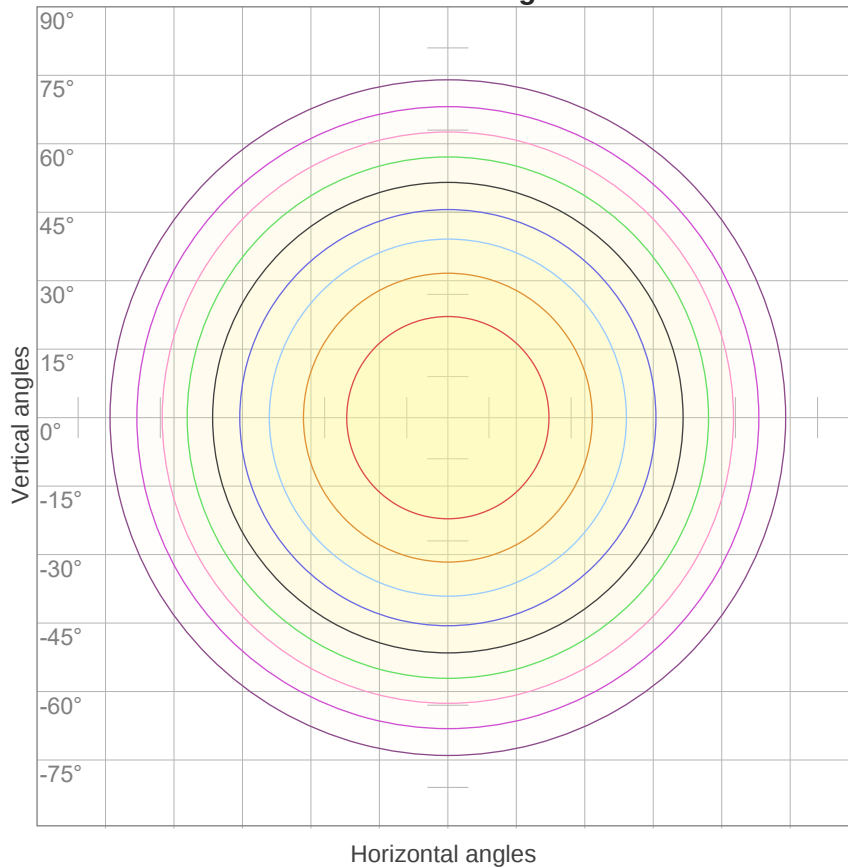
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
481	479	473	463	449	432	410	386	358	327	293	257	219	180	141	102	64	30	8	1
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	46%	37%	29%	21%	13%	6%	2%	0%

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°
481	479	473	463	449	432	410	386	358	327	293	257	219	180	141	102	64	30	8	1
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	46%	37%	29%	21%	13%	6%	2%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
114,5°	164,5°	177,3°	77,3%	52,3%

iso-candela diagram



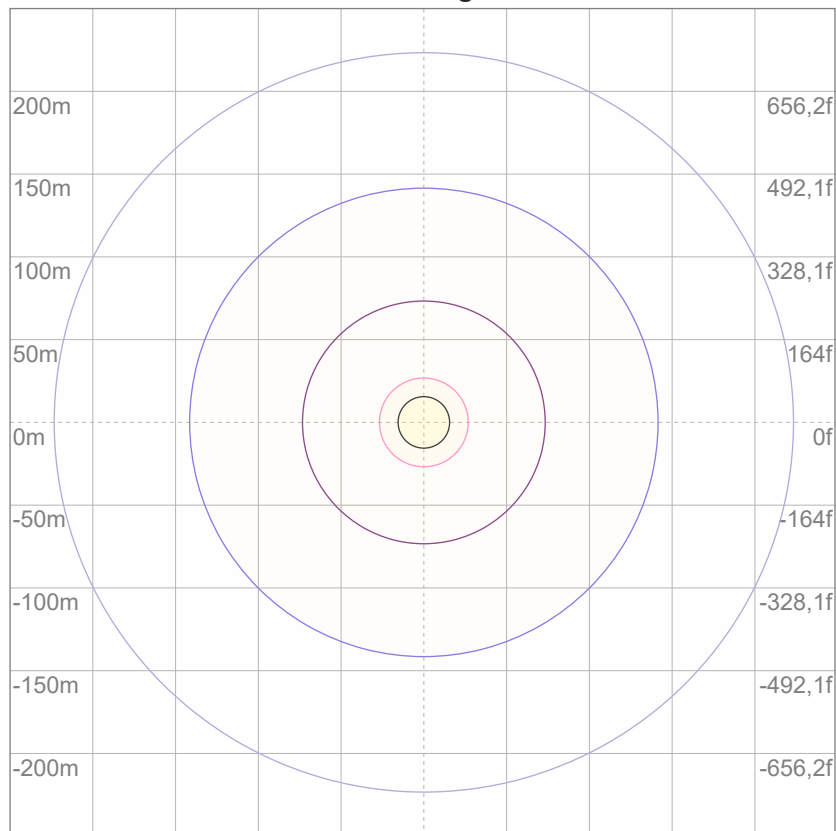
10%	48 cd
20%	96 cd
30%	144 cd
40%	192 cd
50%	241 cd
60%	289 cd
70%	337 cd
80%	385 cd
90%	433 cd

Conditions:

Number of c-planes: 12

Candela at center: 481 cd

iso-lux diagram



3%	0,144 lx
5%	0,241 lx
10%	0,481 lx
30%	1,44 lx
50%	2,41 lx

Conditions:

Number of c-planes: 12

Lux at center: 4,81 lx

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

Glare evaluation according to UGR

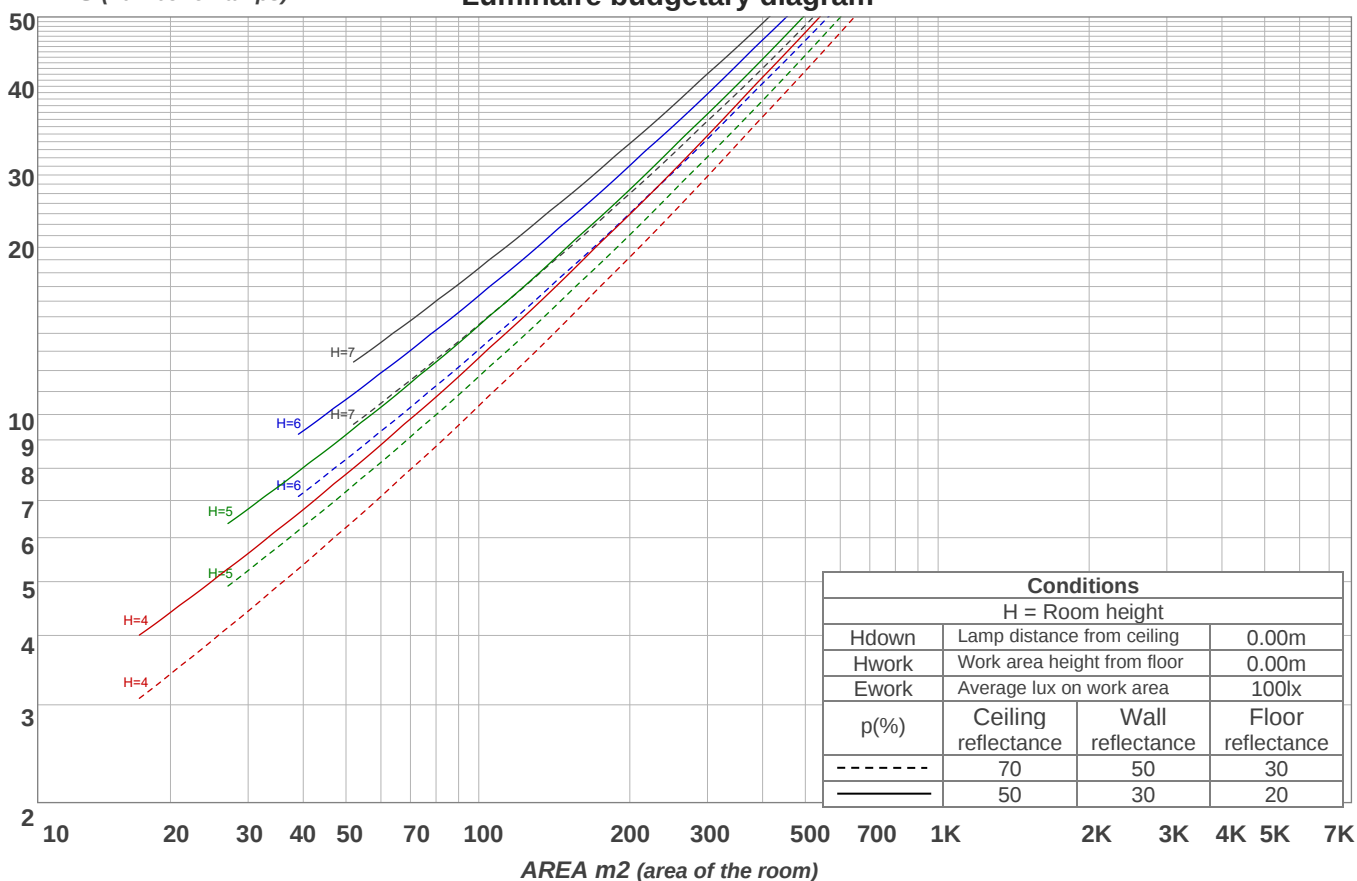
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19,2	20,4	19,4	20,7	20,9	19,2	20,4	19,4	20,7	20,9
	3H	20,6	21,9	21,1	22,2	22,4	20,6	21,9	21,1	22,2	22,4
	4H	21,3	22,5	21,7	22,8	23,1	21,3	22,5	21,7	22,8	23,1
	6H	21,9	22,9	22,2	23,2	23,6	21,9	22,9	22,2	23,2	23,6
	8H	22,0	23,1	22,4	23,4	23,8	22,0	23,1	22,4	23,4	23,8
	12H	22,1	23,1	22,5	23,5	23,9	22,1	23,1	22,5	23,5	23,9
4H	2H	19,8	21,0	20,2	21,3	21,5	19,8	21,0	20,2	21,3	21,5
	3H	21,6	22,6	21,9	22,9	23,4	21,6	22,6	21,9	22,9	23,4
	4H	22,3	23,2	22,7	23,6	24,2	22,3	23,2	22,7	23,6	24,2
	6H	22,9	23,8	23,4	24,1	24,5	22,9	23,8	23,4	24,1	24,5
	8H	23,1	23,9	23,6	24,3	24,7	23,1	23,9	23,6	24,3	24,7
	12H	23,2	23,9	23,7	24,4	24,8	23,2	23,9	23,7	24,3	24,8
8H	4H	22,6	23,4	23,1	23,8	24,2	22,6	23,4	23,1	23,8	24,1
	6H	23,3	24,0	23,8	24,4	25,0	23,3	24,0	23,8	24,4	25,0
	8H	23,7	24,2	24,2	24,7	25,4	23,7	24,2	24,2	24,7	25,4
	12H	23,9	24,3	24,5	24,9	25,5	23,9	24,3	24,5	24,8	25,5
12H	4H	22,6	23,3	23,1	23,7	24,2	22,6	23,3	23,1	23,7	24,2
	6H	23,4	24,0	23,9	24,5	25,1	23,4	24,0	23,9	24,5	25,1
	8H	23,8	24,2	24,3	24,7	25,4	23,8	24,2	24,3	24,7	25,3
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 / -0,4				
CIE 117-1995. Corrected glare indices referring to 1423 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	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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

LAMPS (number of lamps)

Luminaire budgetary diagram



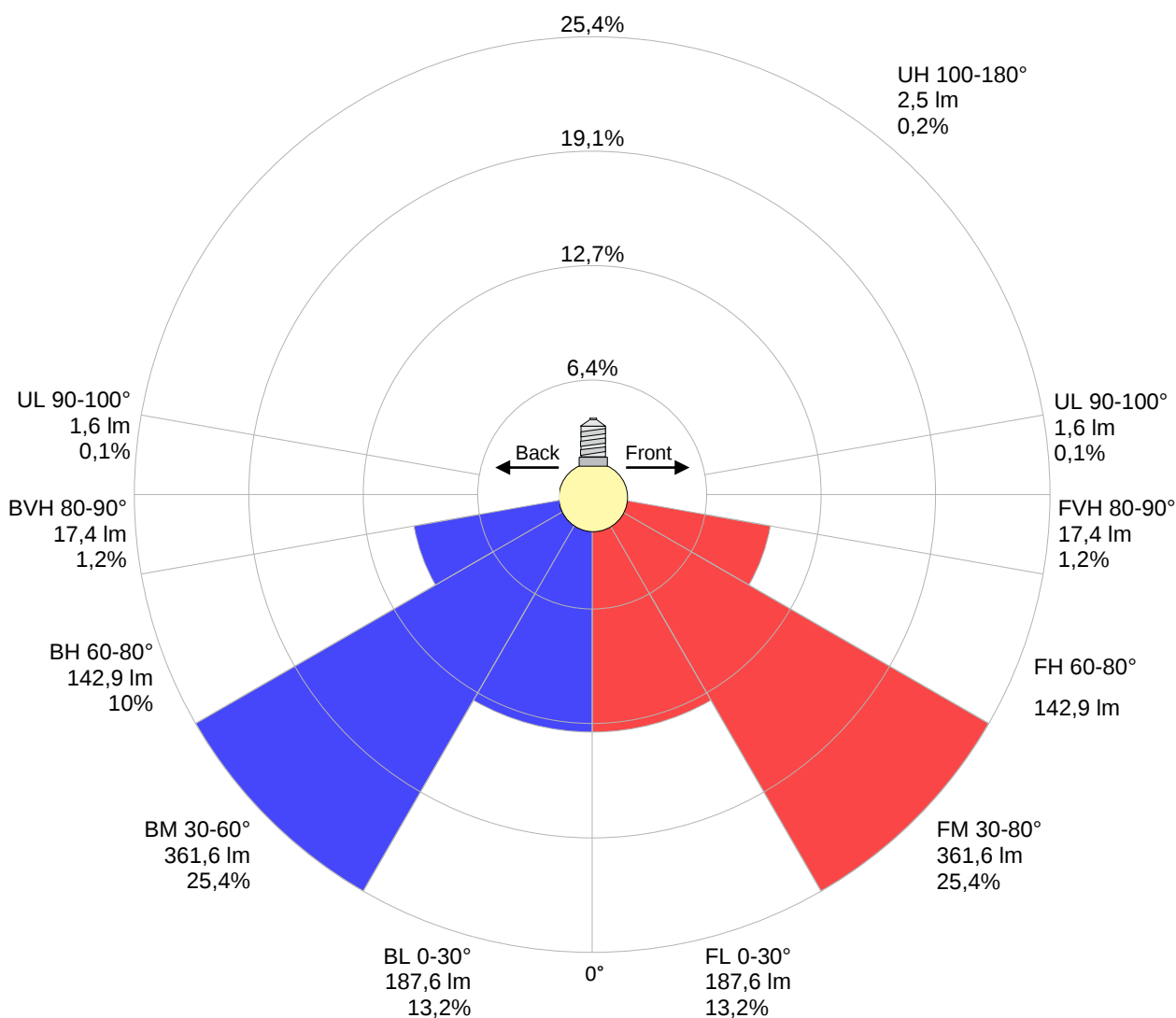
Zonal Lumen Summary

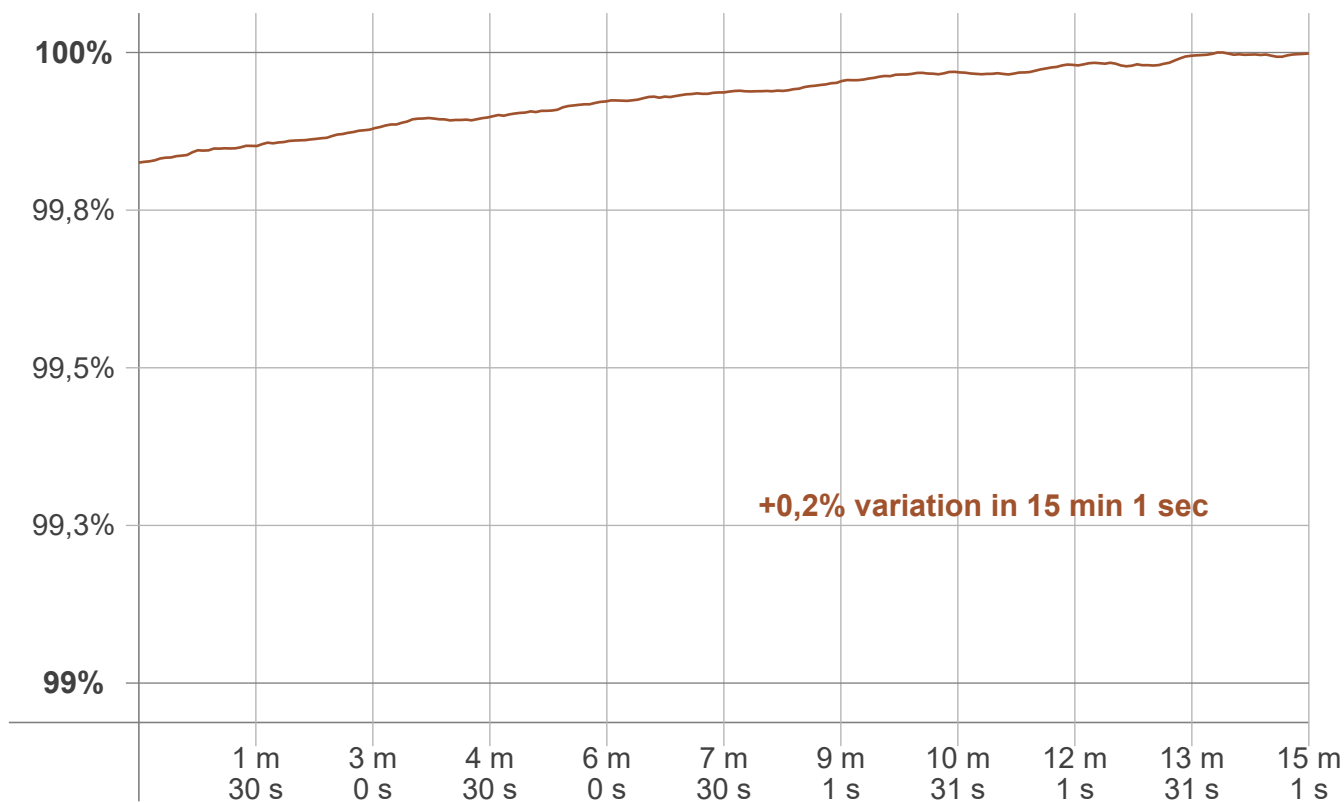
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	131 lm	199 lm	242 lm	252 lm	230 lm	178 lm	107 lm	33,9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,862 lm	0,342 lm	0,415 lm	0,433 lm	0,411 lm	0,368 lm	0,298 lm	0,202 lm	0,068 lm

LCS table

BUG rating:	B1 U1 G1	
Forward light	Lumens	Lumens %
Low(0-30):	187,6	13,2%
Medium(30-60):	361,6	25,4%
High(60-80):	142,9	10%
Very high(80-90):	17,4	1,2%
Back light		
Low(0-30):	187,6	13,2%
Medium(30-60):	361,6	25,4%
High(60-80):	142,9	10%
Very high(80-90):	17,4	1,2%
Uplight		
Low(90-100):	1,6	0,1%
High(100-180):	2,5	0,2%

LCS graph



Warmup curve

Warmup result

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

Warmup conditions

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

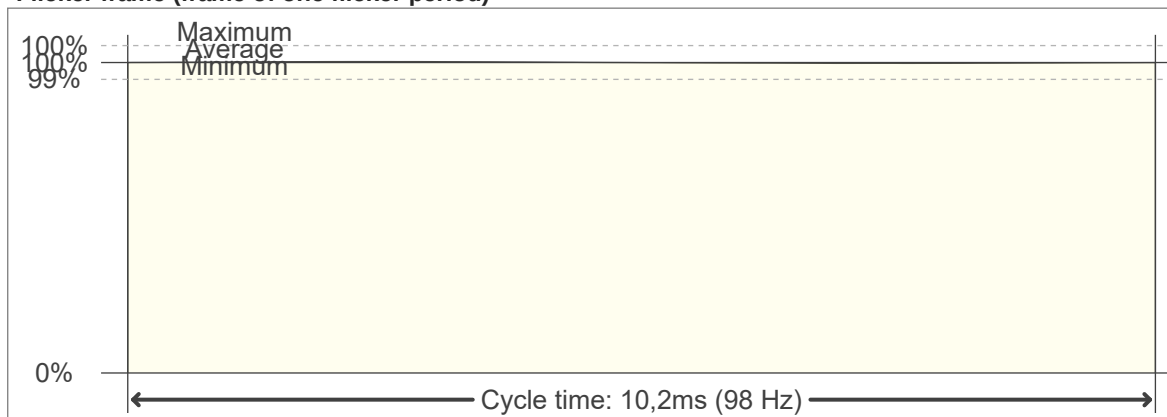
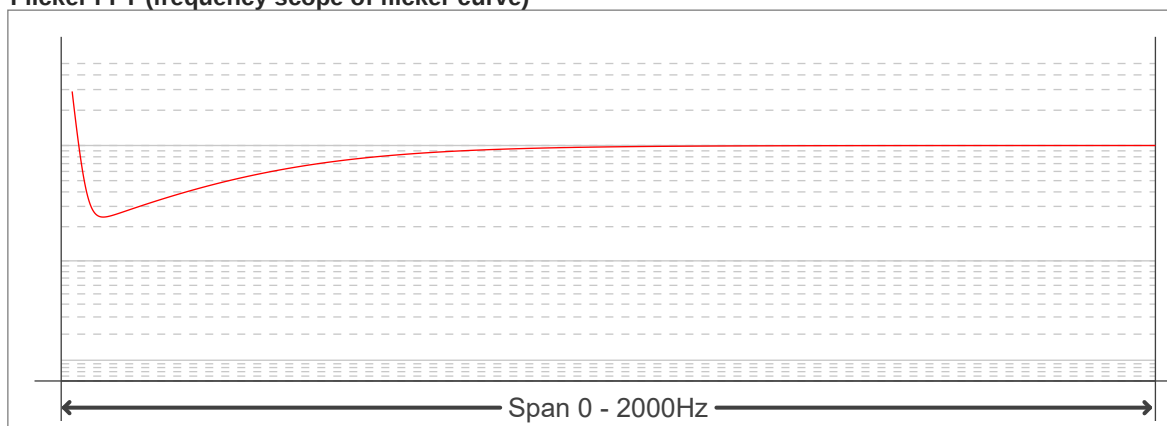
Color temperature change

CCT start	CCT change	CCT end
3998 K	+2 K	4000 K

Output change

Output start	Output change	Output end
1420 lm	+3 lm	1423 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:		98,04 Hz	
Flicker index:	0	JA8/10 40Hz	0,02 %
Flicker percentage:	0,31 %	JA8/10 90Hz	0,03 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,3 %
PstLM	0,01	JA8/10 400Hz	0,31 %
Mp	0,01	JA8/10 1000Hz	0,3 %

Flicker conditions:

Sample rate:	20000 samples/second
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