

Light efficiency:



Light quality:



Color temperature:

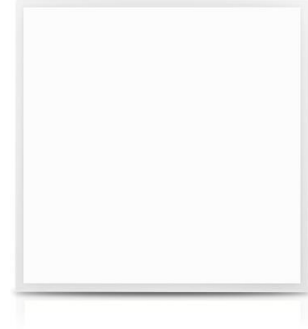


Output: 3921 lm

Peak: 2042 cd

Power: 32,6 W

PF: 0,96



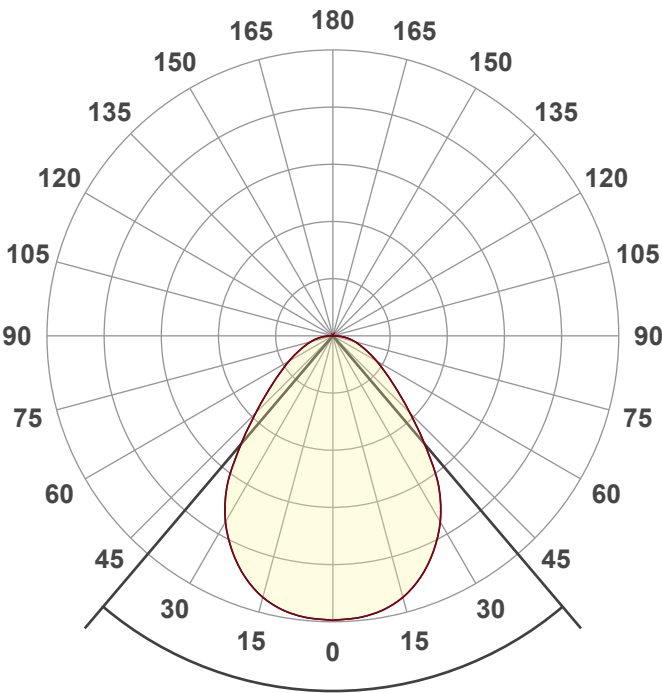
Tracking number: [n/a](#)

Product name:
273627-6000K

Item number:
273627-6000K

Date and time:
5-8-2024 09:44:09

Description:
**SIDE-LIT LED PANEEL | LUNA |
60X60CM | 30W**



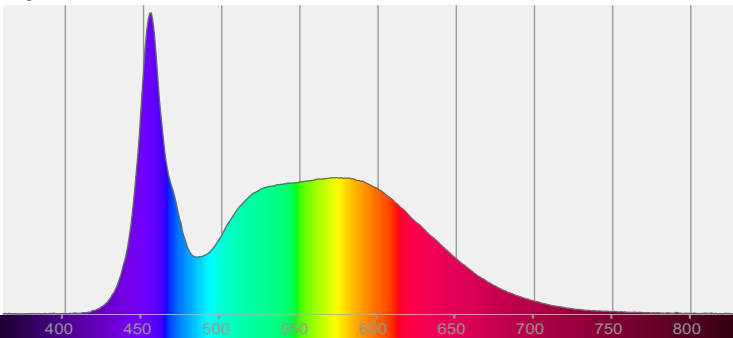
Beam angle

80,6°

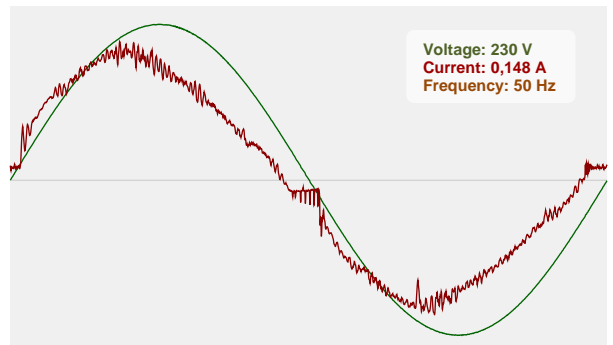


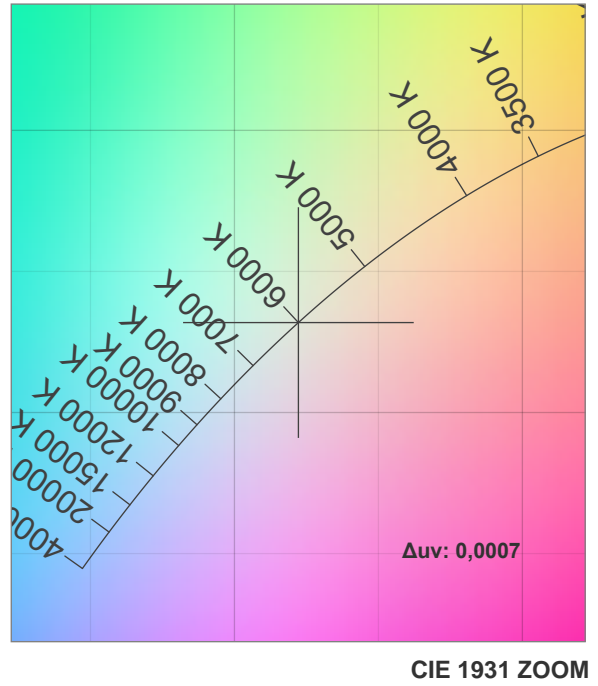
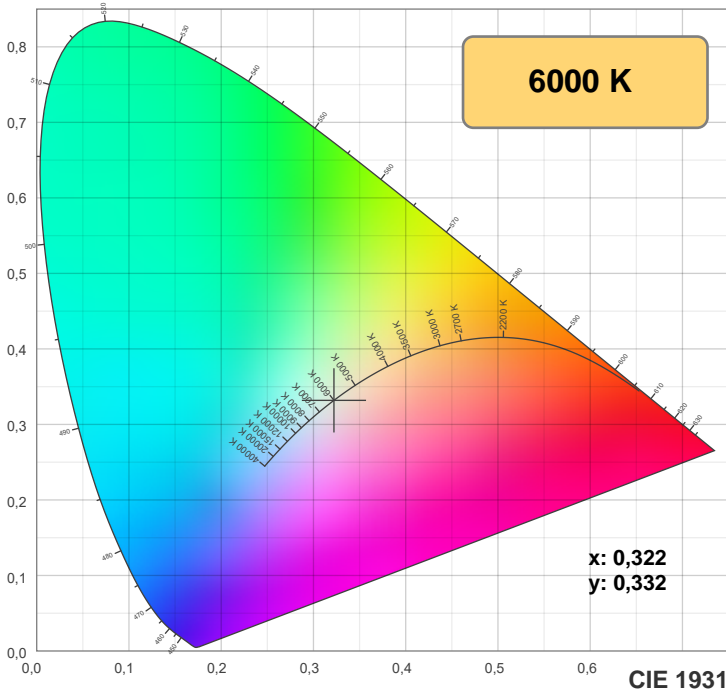
CIE 1931
x: 0,322
y: 0,332

Spectra



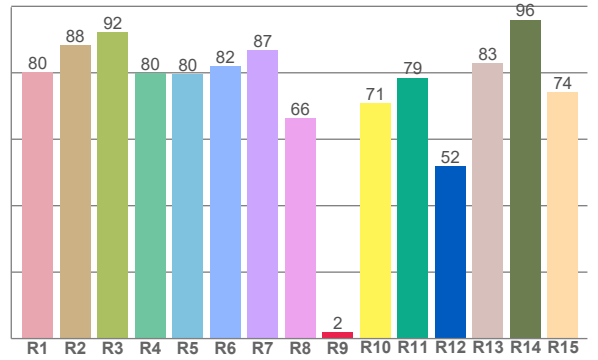
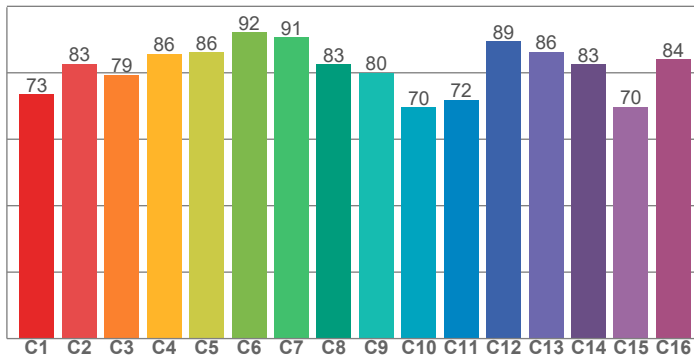
Power





TM-30: 81,4

CRI: 81,9 (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
80,1	88,4	92,1	79,8	79,6	82,1	86,9	66,4	2,0	70,8	78,5	51,8	82,9	96,0	74,2

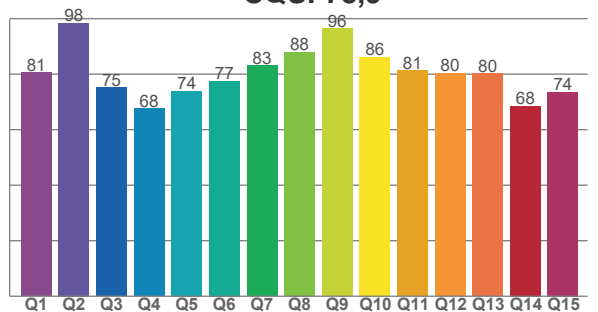
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
73,5	82,7	79,4	85,7	86,1	92,2	90,8	82,6	80,0	69,7	71,9	89,5	86,3	82,5	69,7	84,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,6	98,4	75,2	67,6	74,0	77,5	83,2	88,0	96,5	86,2	81,3	80,3	80,3	68,5	73,6

CQS: 78,9



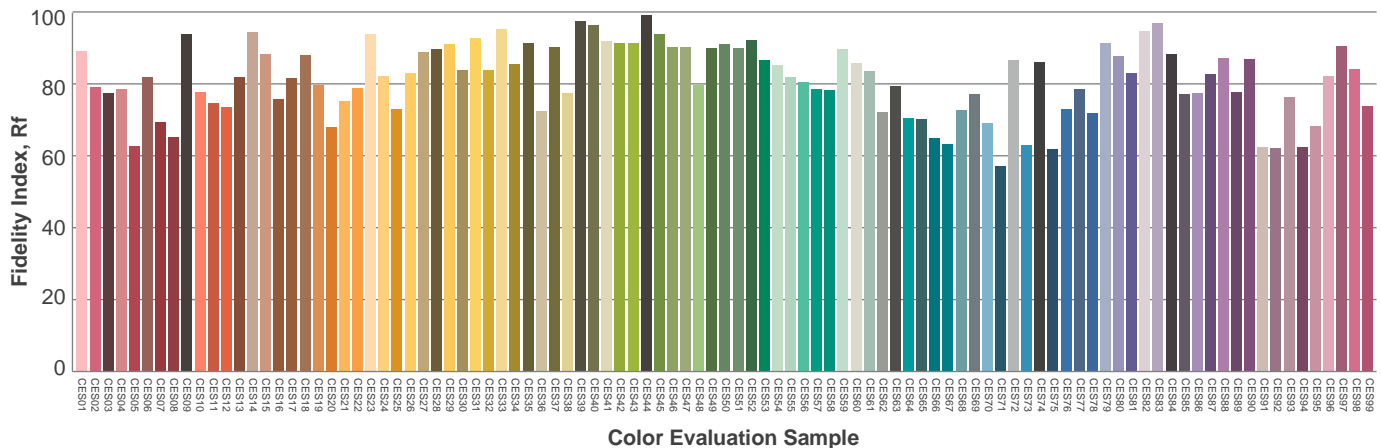
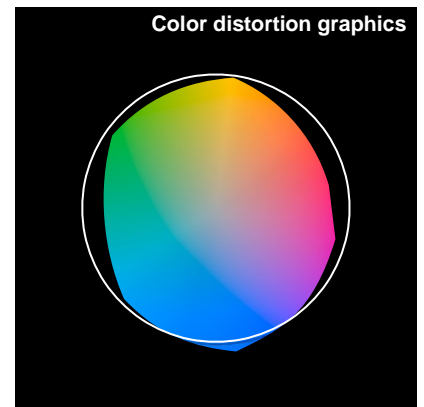
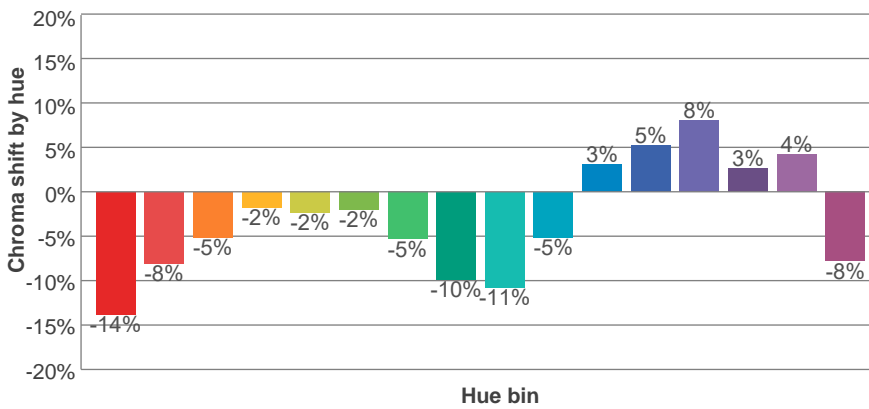
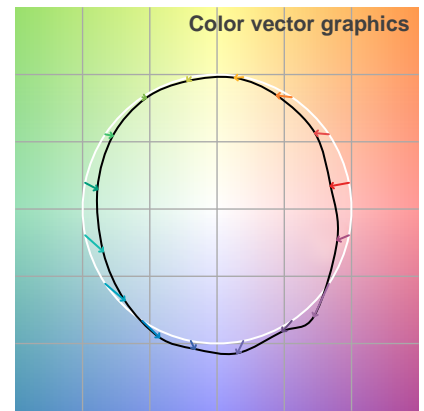
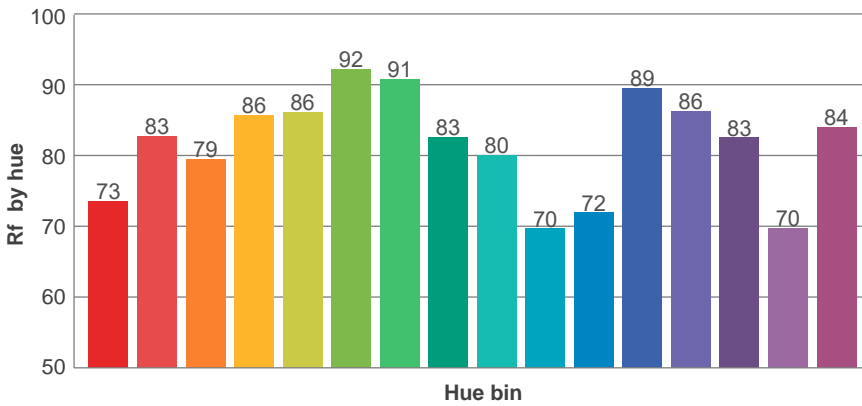
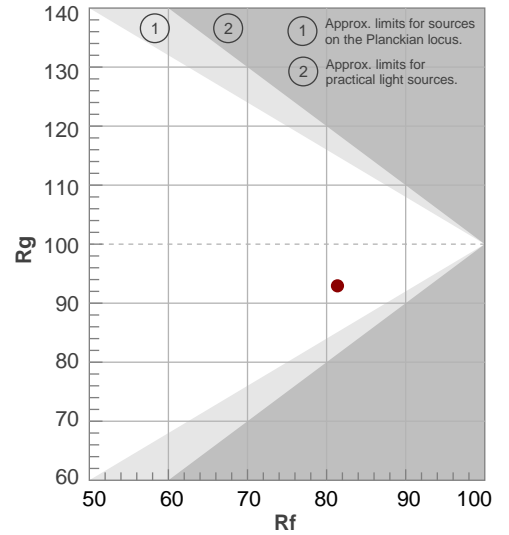
Color parameters

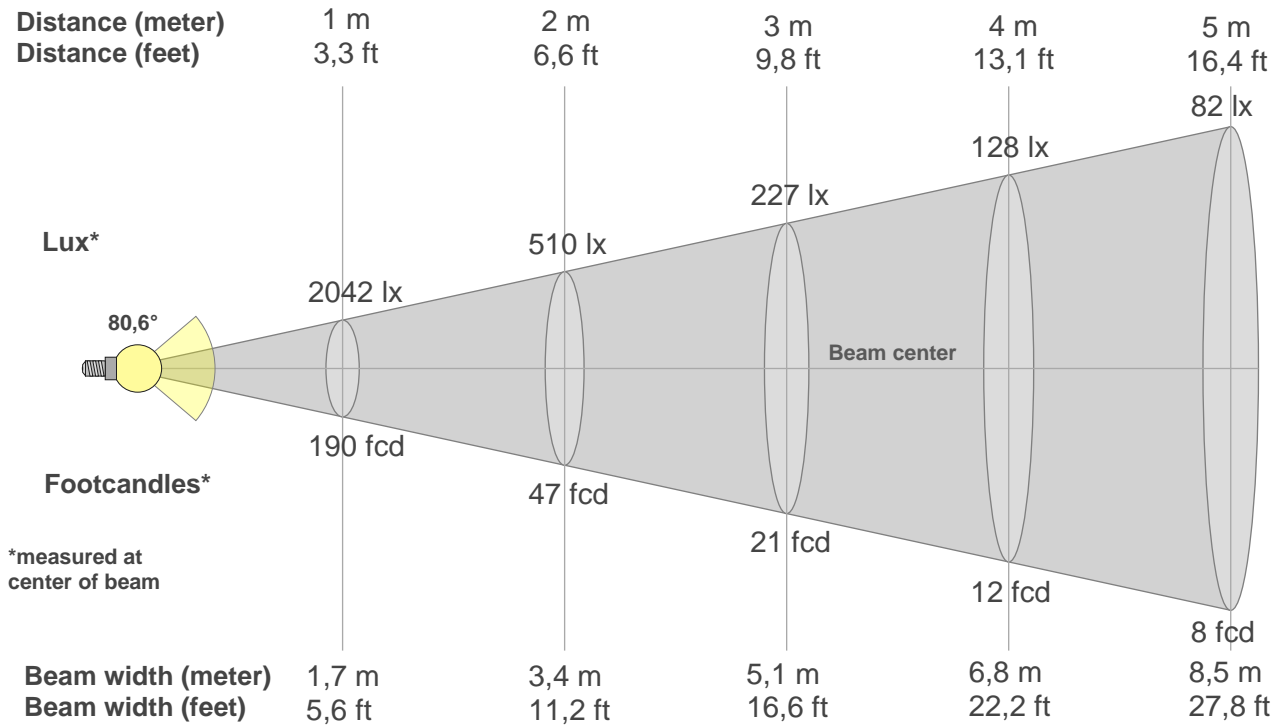
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6000 K	81,9	2,0	81,4	92,9	78,9	0,322	0,332	0,203	0,314	0,0007

Rf 81,4
Fidelity index Rf

Rg 92,9
Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	73	-14%	0%
2	83	-8%	6%
3	79	-5%	10%
4	86	-2%	6%
5	86	-2%	3%
6	92	-2%	-2%
7	91	-5%	-2%
8	83	-10%	3%
9	80	-11%	14%
10	70	-5%	18%
11	72	3%	17%
12	89	5%	4%
13	86	8%	-6%
14	83	3%	-10%
15	70	4%	-26%
16	84	-8%	-5%





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
2042lx	510lx	227lx	128lx	82lx	57lx	42lx	32lx	25lx	20lx	17lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	6lx	5lx
189,7fc	47,4fcd	21,1fcd	11,9fcd	7,6fcd	5,3fcd	3,9fcd	3fcd	2,3fcd	1,9fcd	1,6fcd	1,3fcd	1,1fcd	1fcd	0,8fcd	0,7fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd

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°
2042	2033	2004	1942	1842	1707	1540	1323	1039	787	600	465	365	283	217	165	117	65	16	2
100%	100%	98%	95%	90%	84%	75%	65%	51%	39%	29%	23%	18%	14%	11%	8%	6%	3%	1%	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°
2042	2033	2004	1942	1842	1707	1540	1323	1039	787	600	465	365	283	217	165	117	65	16	2
100%	100%	98%	95%	90%	84%	75%	65%	51%	39%	29%	23%	18%	14%	11%	8%	6%	3%	1%	0%

Intensities in 180° c-plane

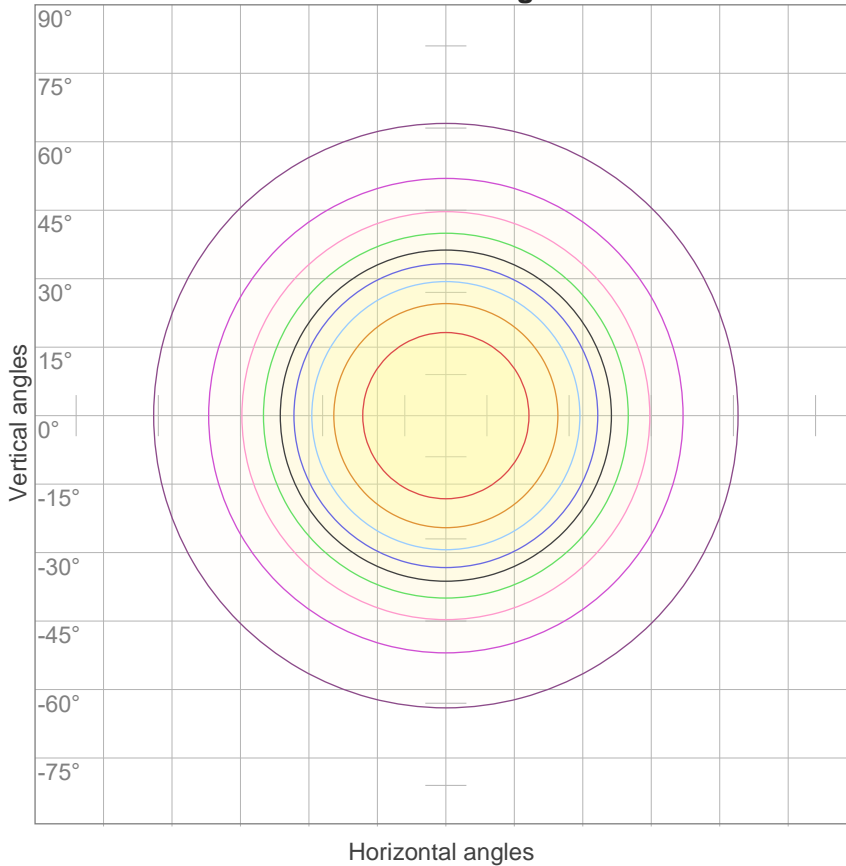
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
2042	2033	2004	1942	1842	1707	1540	1323	1039	787	600	465	365	283	217	165	117	65	16	2
100%	100%	98%	95%	90%	84%	75%	65%	51%	39%	29%	23%	18%	14%	11%	8%	6%	3%	1%	0%

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°
2042	2033	2004	1942	1842	1707	1540	1323	1039	787	600	465	365	283	217	165	117	65	16	2
100%	100%	98%	95%	90%	84%	75%	65%	51%	39%	29%	23%	18%	14%	11%	8%	6%	3%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
80,6°	142,3°	172,9°	86,0%	68,2%

iso-candela diagram



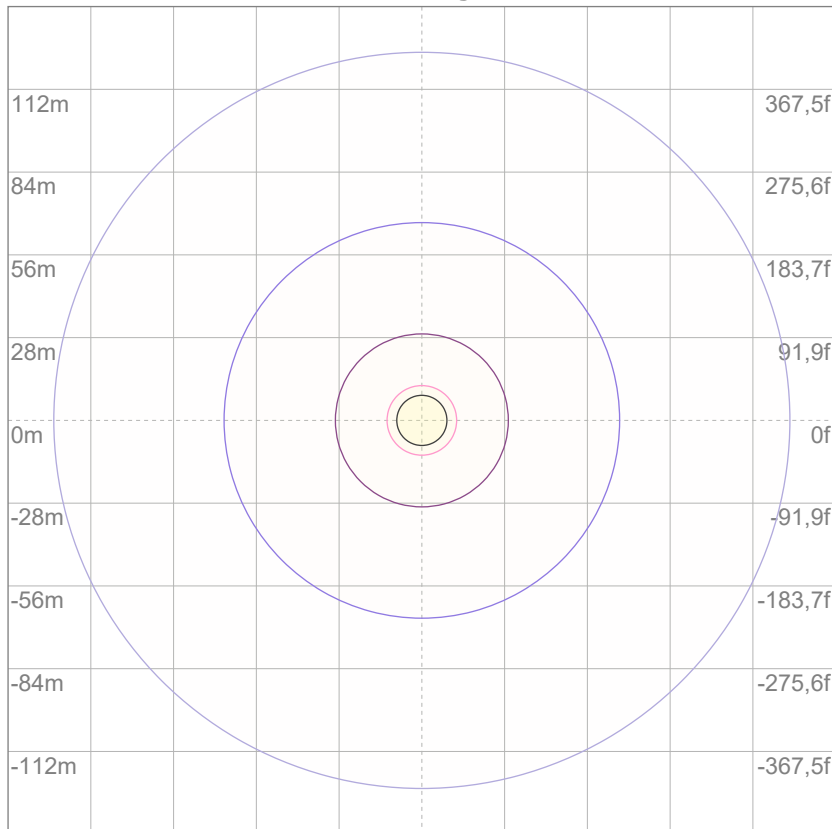
10%	204 cd
20%	408 cd
30%	612 cd
40%	817 cd
50%	1021 cd
60%	1225 cd
70%	1429 cd
80%	1633 cd
90%	1837 cd

Conditions:

Number of c-planes: 12

Candela at center: 2042 cd

iso-lux diagram



Mounting height: 10 meters (33 feet)

3%	0,612 lx
5%	1,02 lx
10%	2,04 lx
30%	6,12 lx
50%	10,2 lx

Conditions:

Number of c-planes: 12

Lux at center: 20,4 lx

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

Glare evaluation according to UGR

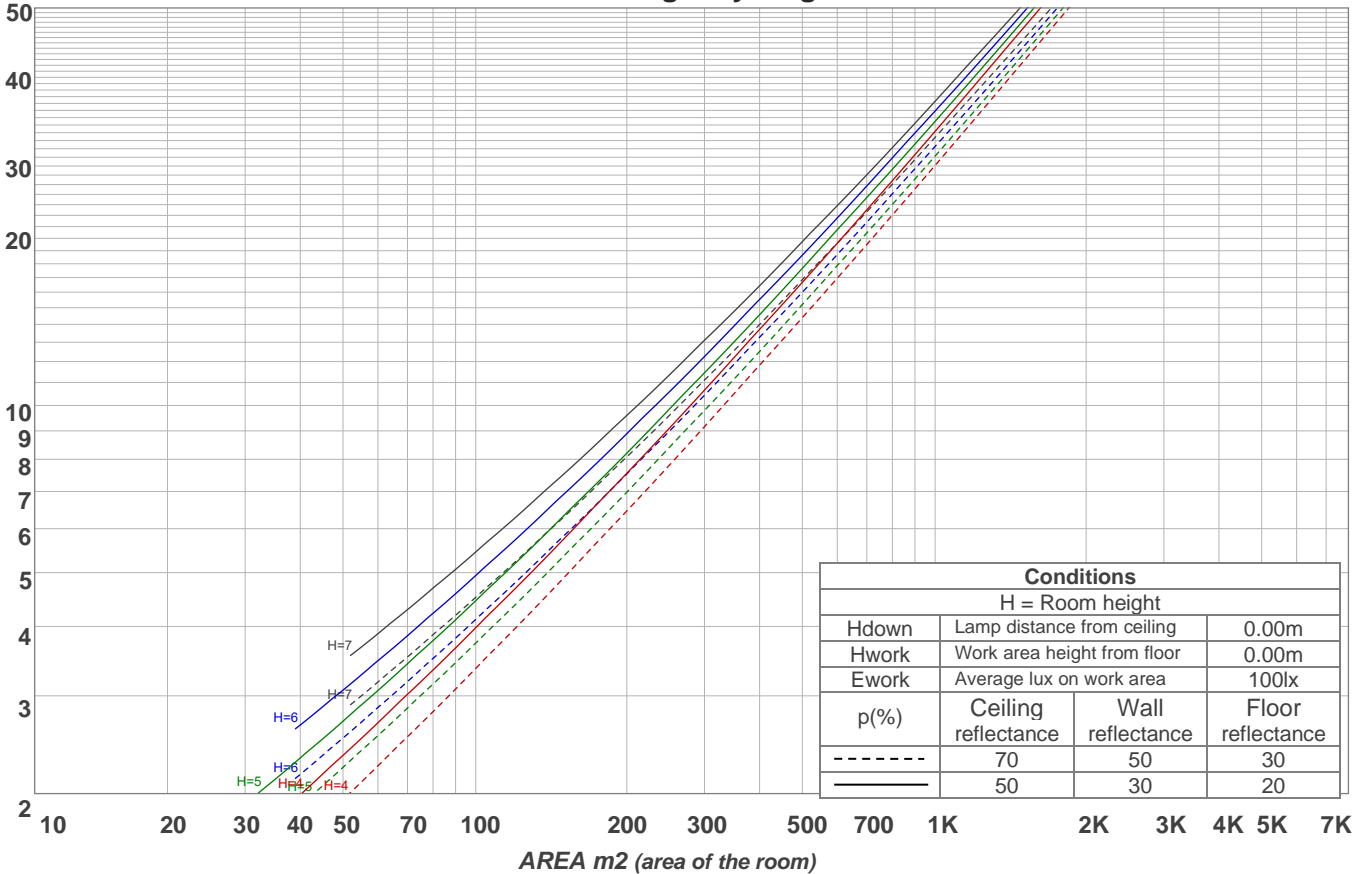
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	15,3	16,3	15,5	16,6	16,8	15,3	16,3	15,5	16,6	16,8
	3H	16,2	17,3	16,6	17,6	17,8	16,2	17,3	16,6	17,6	17,8
	4H	16,8	17,8	17,2	18,1	18,3	16,8	17,8	17,2	18,1	18,3
	6H	17,4	18,3	17,7	18,6	18,9	17,4	18,3	17,7	18,6	18,9
	8H	17,6	18,5	17,9	18,8	19,2	17,6	18,5	17,9	18,8	19,2
12H	17,7	18,6	18,1	19,0	19,4	17,7	18,6	18,1	19,0	19,4	
4H	2H	15,6	16,6	16,0	16,9	17,2	15,6	16,6	16,0	16,9	17,2
	3H	16,9	17,8	17,3	18,2	18,6	16,9	17,8	17,3	18,2	18,6
	4H	17,6	18,4	18,0	18,8	19,3	17,6	18,4	18,0	18,8	19,3
	6H	18,3	19,0	18,8	19,4	19,8	18,3	19,0	18,8	19,4	19,8
	8H	18,6	19,3	19,1	19,6	20,0	18,6	19,3	19,1	19,6	20,0
12H	18,8	19,4	19,3	19,8	20,3	18,8	19,4	19,3	19,8	20,3	
8H	4H	17,9	18,6	18,4	18,9	19,3	17,9	18,6	18,4	18,9	19,3
	6H	18,7	19,3	19,3	19,7	20,3	18,7	19,3	19,3	19,7	20,3
	8H	19,2	19,6	19,7	20,2	20,8	19,2	19,6	19,7	20,2	20,8
	12H	19,6	20,0	20,2	20,5	21,1	19,6	20,0	20,2	20,5	21,1
12H	4H	17,9	18,5	18,4	18,9	19,4	17,9	18,5	18,4	18,9	19,4
	6H	18,9	19,3	19,4	19,8	20,5	18,9	19,3	19,4	19,8	20,5
	8H	19,3	19,7	19,9	20,2	20,9	19,3	19,7	19,9	20,2	20,9
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,1 / -0,2					0,1 / -0,2					
S = 1.5H	0,3 / -0,4					0,3 / -0,4					
S = 2.0H	0,7 / -0,6					0,7 / -0,6					
CIE 117-1995. Corrected glare indices referring to 3921 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	99			
1	110	106	102	99	107	103	100	97	99	96	94	95	93	91	92	90	88	86			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75			
3	94	84	77	72	91	83	76	71	80	74	70	77	72	68	75	71	67	65			
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	59	57			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51			
6	75	63	55	49	73	62	55	49	60	54	49	59	53	48	57	52	48	46			
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	47	43	41			
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38			
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34			
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32			

LAMPS (number of lamps)

Luminaire budgetary diagram



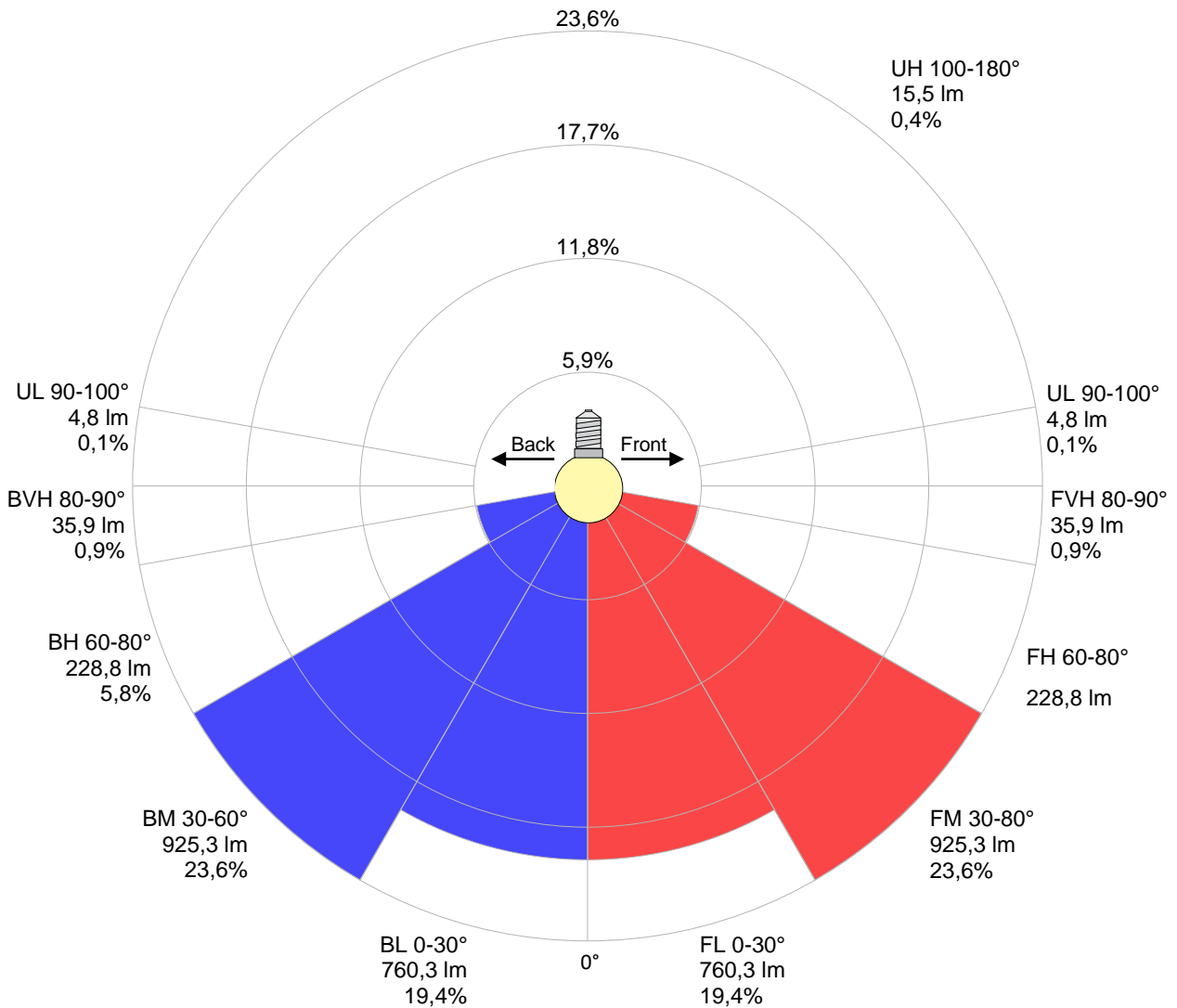
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	546 lm	783 lm	816 lm	614 lm	420 lm	283 lm	175 lm	71,9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4,48 lm	1,81 lm	2,21 lm	2,45 lm	2,64 lm	2,52 lm	2,00 lm	1,35 lm	0,483 lm

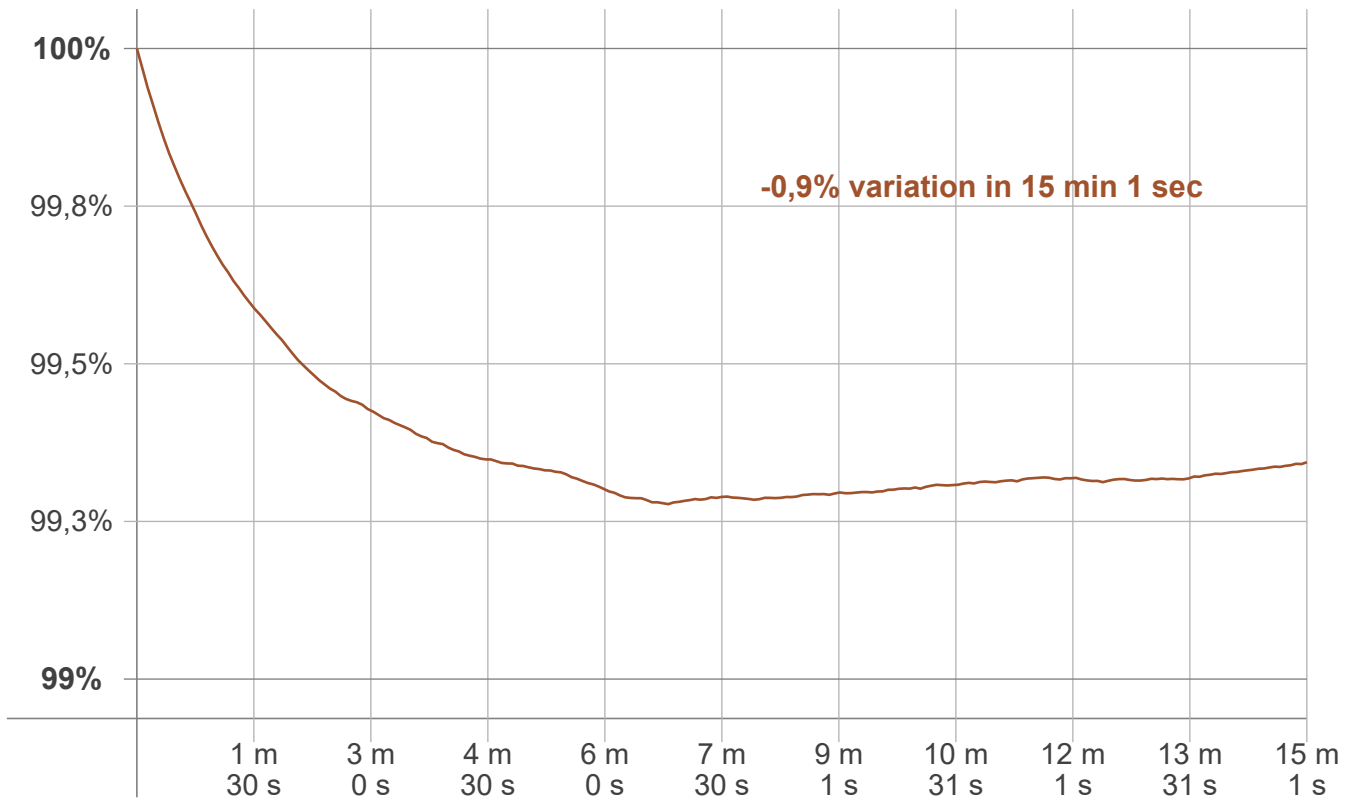
LCS table

BUG rating:	B2 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	760,3	19,4%
Medium(30-60):	925,3	23,6%
High(60-80):	228,8	5,8%
Very high(80-90):	35,9	0,9%
Back light		
Low(0-30):	760,3	19,4%
Medium(30-60):	925,3	23,6%
High(60-80):	228,8	5,8%
Very high(80-90):	35,9	0,9%
Uplight		
Low(90-100):	4,8	0,1%
High(100-180):	15,5	0,4%

LCS graph



Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 1 sec
Warmup variation	-0,9%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5947 K	+53 K	6000 K

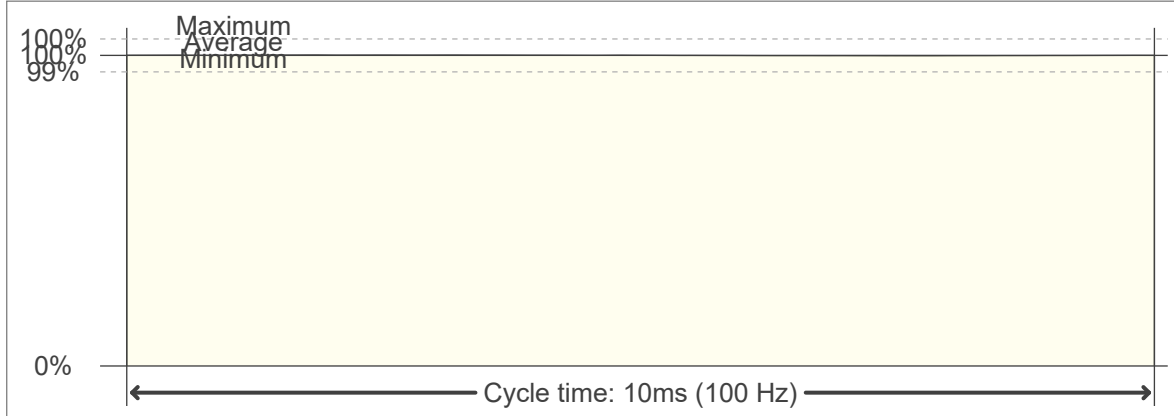
Output change

Output start	Output change	Output end
3951 lm	-30 lm	3921 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	0,02 %
Flicker percentage:	0,22 %	JA8/10 90Hz	0,03 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,18 %
PstLM	0,02	JA8/10 400Hz	0,18 %
Mp	0,01	JA8/10 1000Hz	0,2 %

Flicker conditions:

Sample rate:	20000 samples/second
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