

Light efficiency:



Light quality:



Color temperature:



**Output: 537 lm**

**Peak: 506 cd**

**Power: 6,3 W**

**PF: 0,91**



Tracking number: [VT240925-009164](#)

Product name:

**803131-3000K**

Item number:

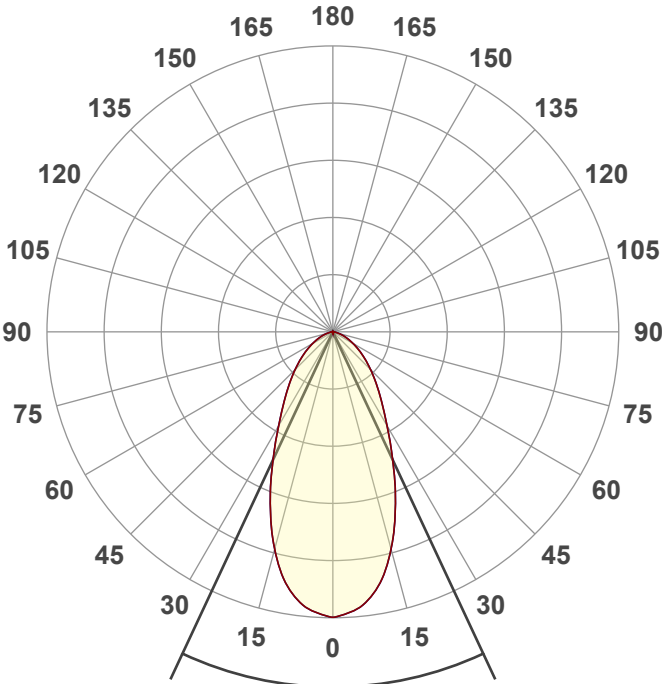
**803131-3000K**

Date and time:

**25-9-2024 13:41:12**

Description:

**GU10 SPOT | SPONDE 7W | DIMBAAR**



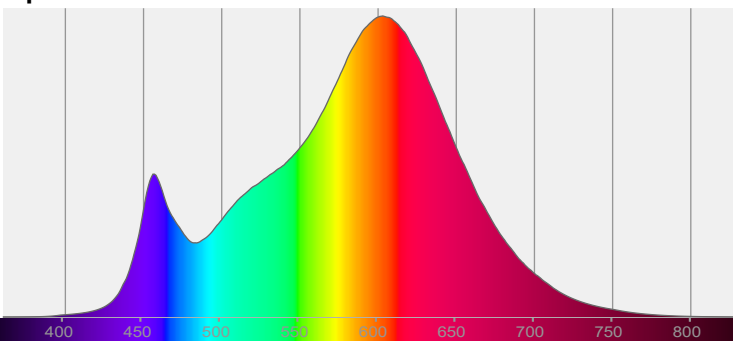
Beam angle

**50,1°**

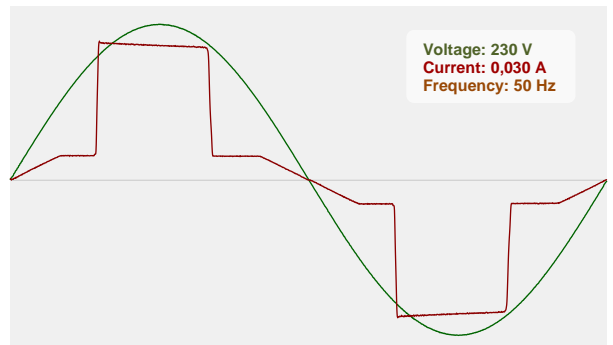


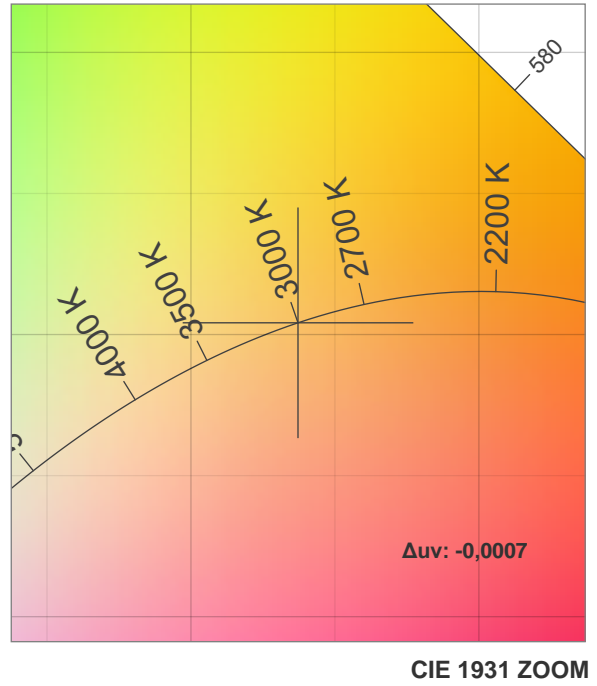
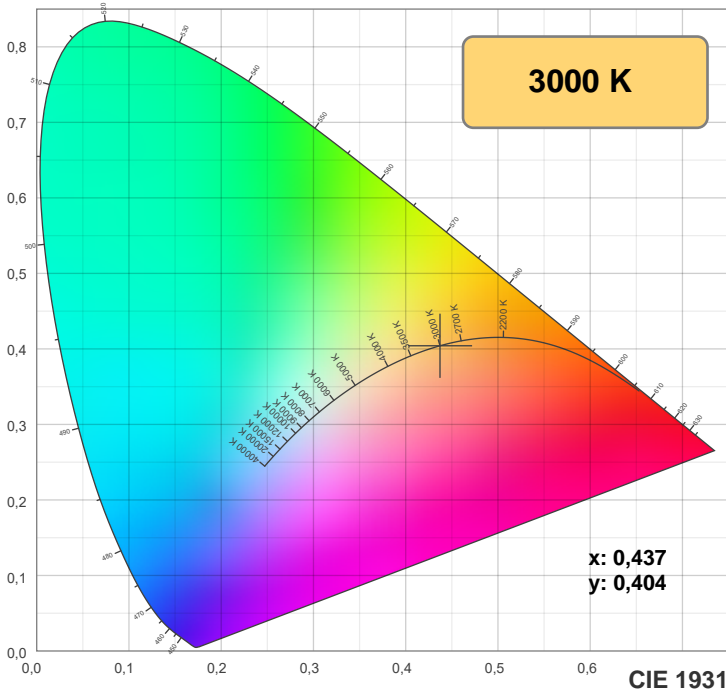
CIE 1931  
x: 0,437  
y: 0,404

Spectra



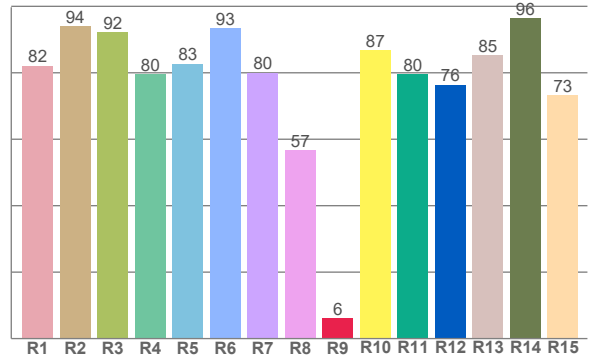
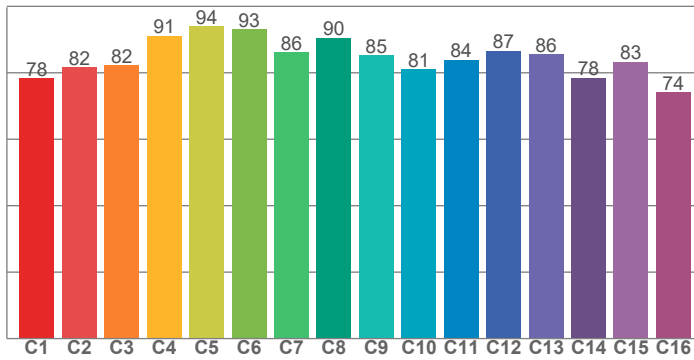
Power



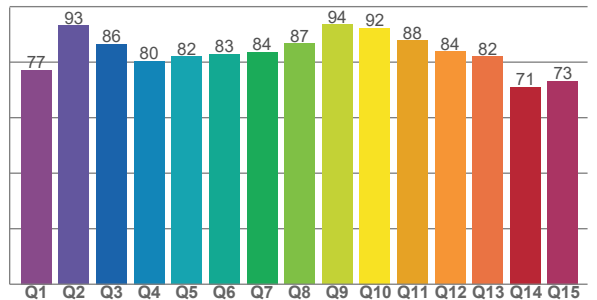


**TM-30: 84,7**

**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	94,1	92,3	79,7	82,7	93,4	80,1	56,8	6,1	86,8	79,6	76,4	85,4	96,4	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
78,4	81,6	82,2	91,1	93,9	93,0	86,1	90,5	85,2	81,1	83,9	86,7	85,6	78,5	83,4	74,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77,1	93,1	86,5	80,5	82,0	83,0	83,7	86,7	93,6	92,4	87,8	83,9	82,0	71,1	73,2

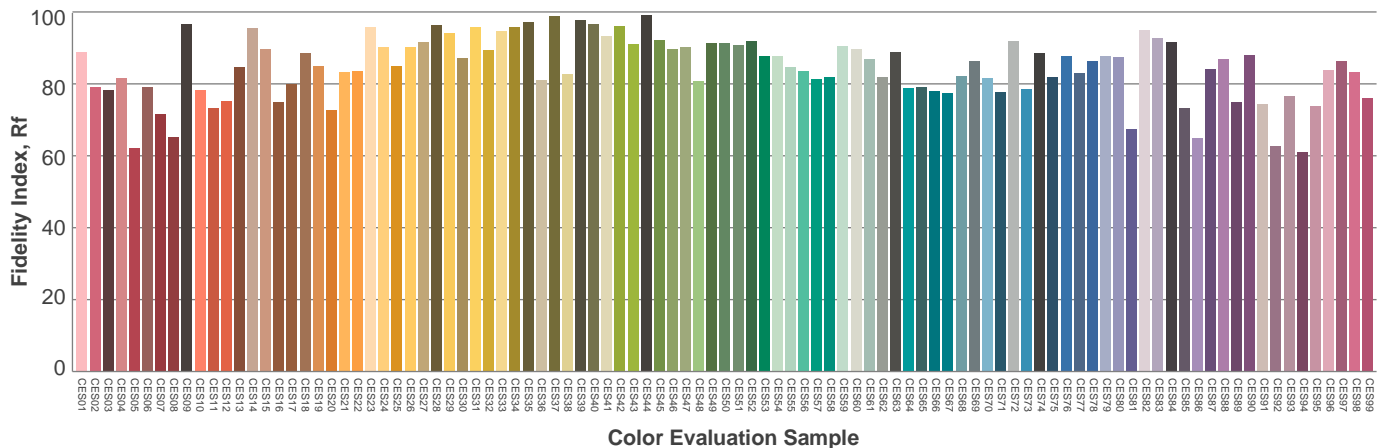
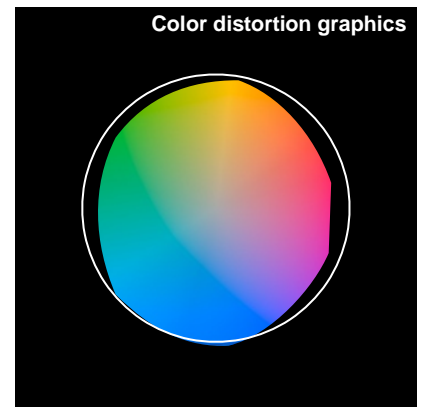
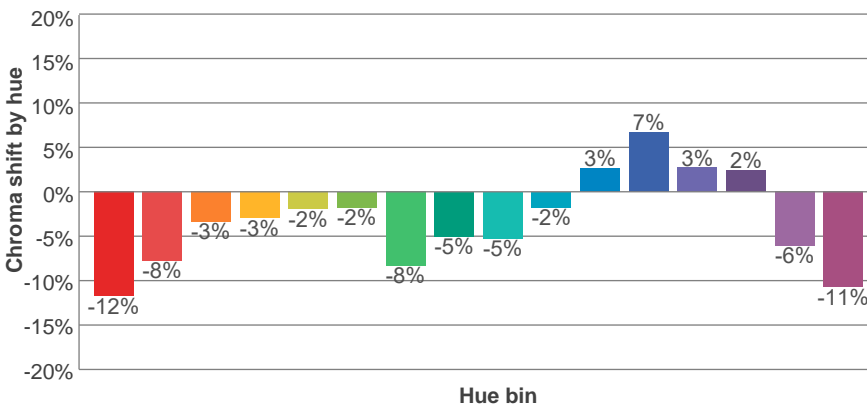
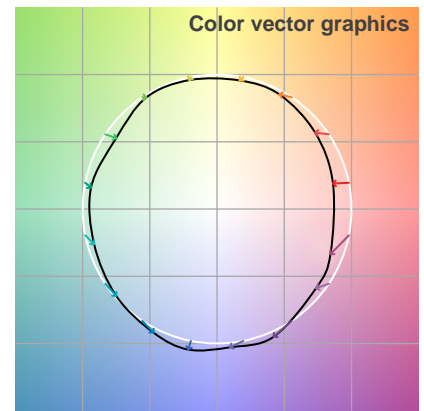
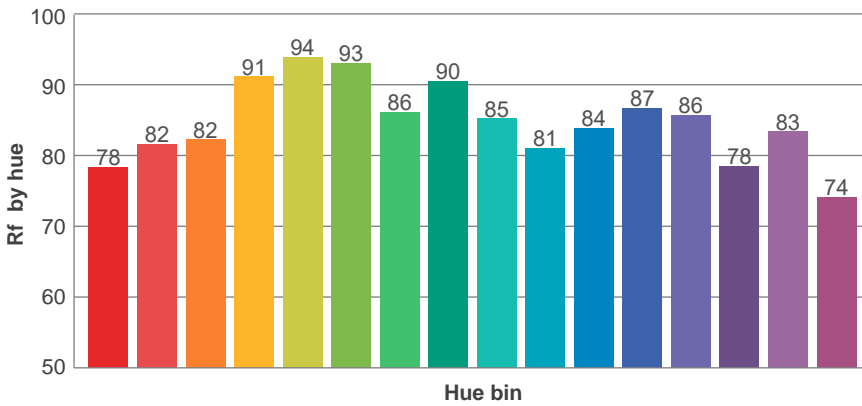
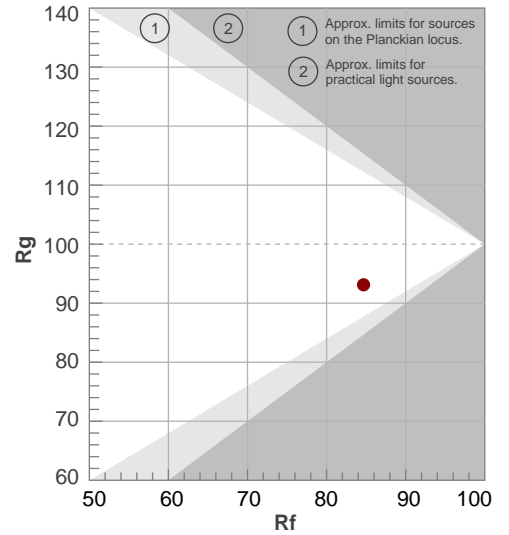
**Color parameters**

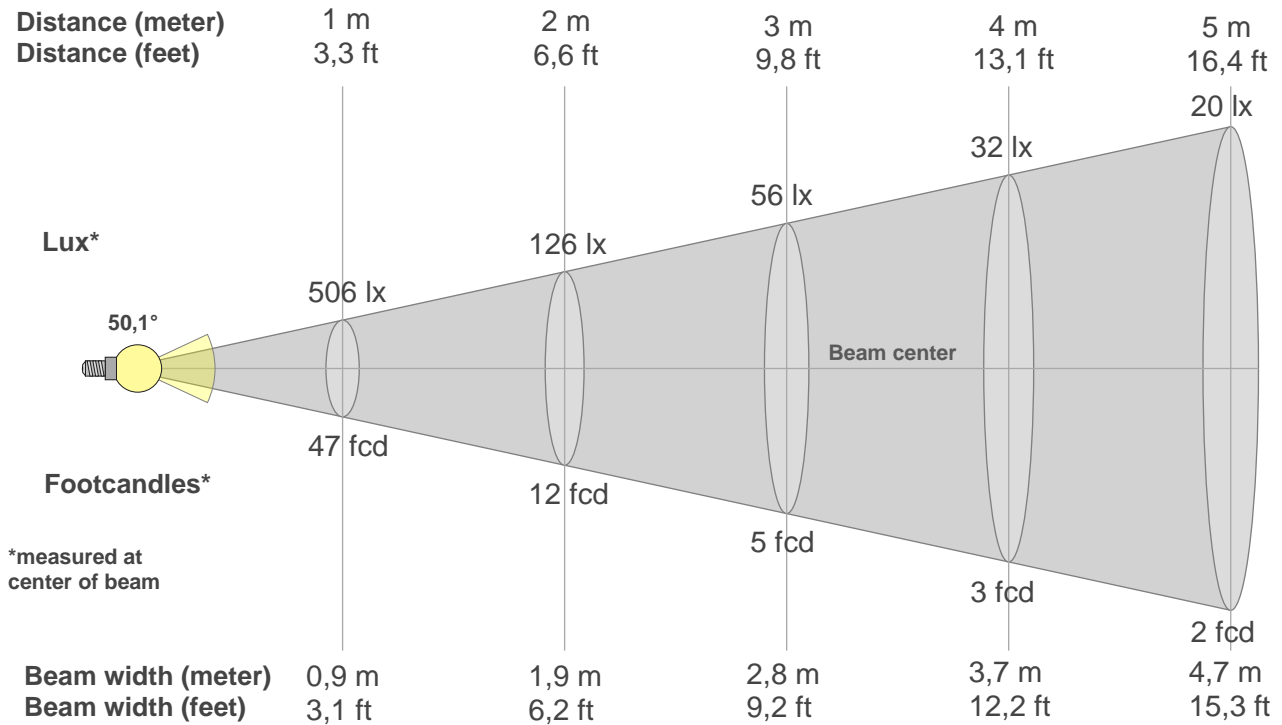
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	82,6	6,1	84,7	93,1	82,4	0,437	0,404	0,251	0,348	-0,0007

**Rf 84,7**  
Fidelity index Rf

**Rg 93,1**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	78	-12%	2%
2	82	-8%	7%
3	82	-3%	9%
4	91	-3%	2%
5	94	-2%	2%
6	93	-2%	-2%
7	86	-8%	-2%
8	90	-5%	3%
9	85	-5%	8%
10	81	-2%	12%
11	84	3%	12%
12	87	7%	-1%
13	86	3%	-11%
14	78	2%	-18%
15	83	-6%	-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
506lx	126lx	56lx	32lx	20lx	14lx	10lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx
47fcd	11,7fcd	5,2fcd	2,9fcd	1,9fcd	1,3fcd	1fcd	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°
506	493	458	399	326	253	194	152	121	95	74	57	42	29	19	11	5	2	1	0
100%	98%	91%	79%	64%	50%	38%	30%	24%	19%	15%	11%	8%	6%	4%	2%	1%	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°
506	493	458	399	326	253	194	152	121	95	74	57	42	29	19	11	5	2	1	0
100%	98%	91%	79%	64%	50%	38%	30%	24%	19%	15%	11%	8%	6%	4%	2%	1%	0%	0%	0%

**Intensities in 180° c-plane**

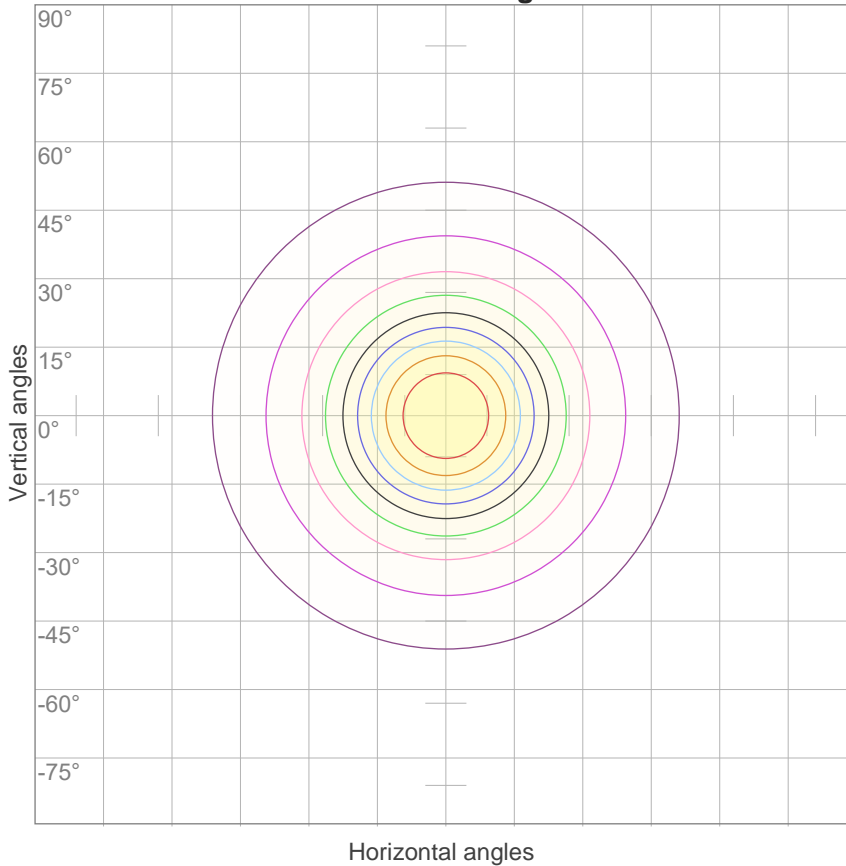
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
506	493	458	399	326	253	194	152	121	95	74	57	42	29	19	11	5	2	1	0
100%	98%	91%	79%	64%	50%	38%	30%	24%	19%	15%	11%	8%	6%	4%	2%	1%	0%	0%	0%

**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°
506	493	458	399	326	253	194	152	121	95	74	57	42	29	19	11	5	2	1	0
100%	98%	91%	79%	64%	50%	38%	30%	24%	19%	15%	11%	8%	6%	4%	2%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>50,1°</b>	<b>113,8°</b>	<b>148°</b>	<b>91,7%</b>	<b>75,9%</b>

**iso-candela diagram**



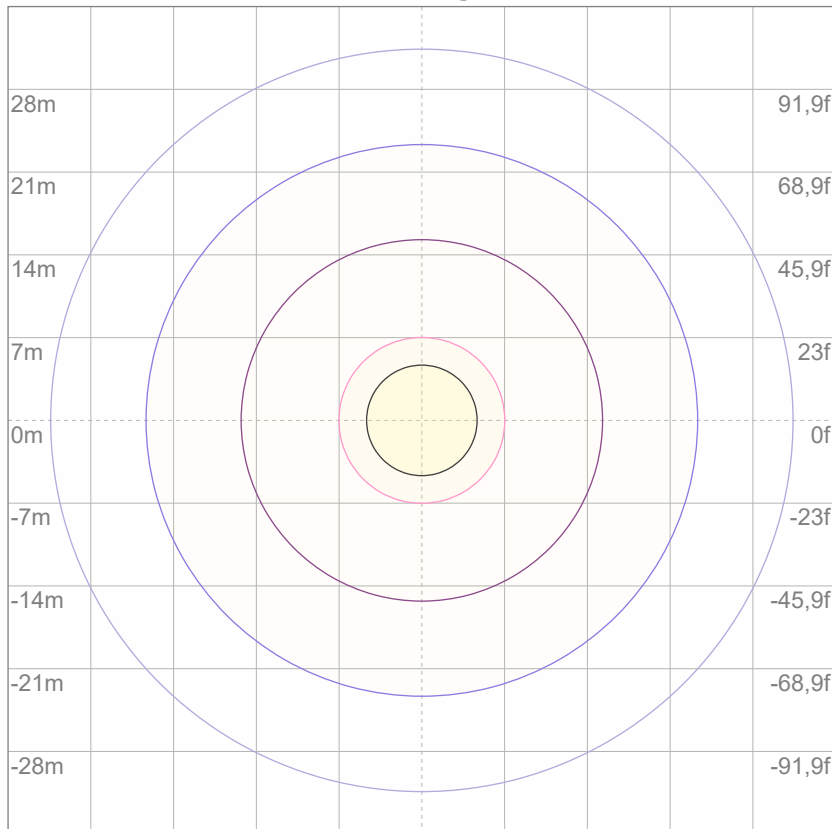
10%	51 cd
20%	101 cd
30%	152 cd
40%	202 cd
50%	253 cd
60%	303 cd
70%	354 cd
80%	404 cd
90%	455 cd

Conditions:

Number of c-planes: 12

Candela at center: 506 cd

**iso-lux diagram**



Mounting height: 10 meters (33 feet)

3%	0,152 lx
5%	0,253 lx
10%	0,506 lx
30%	1,52 lx
50%	2,53 lx

Conditions:

Number of c-planes: 12

Lux at center: 5,06 lx

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

Glare evaluation according to UGR

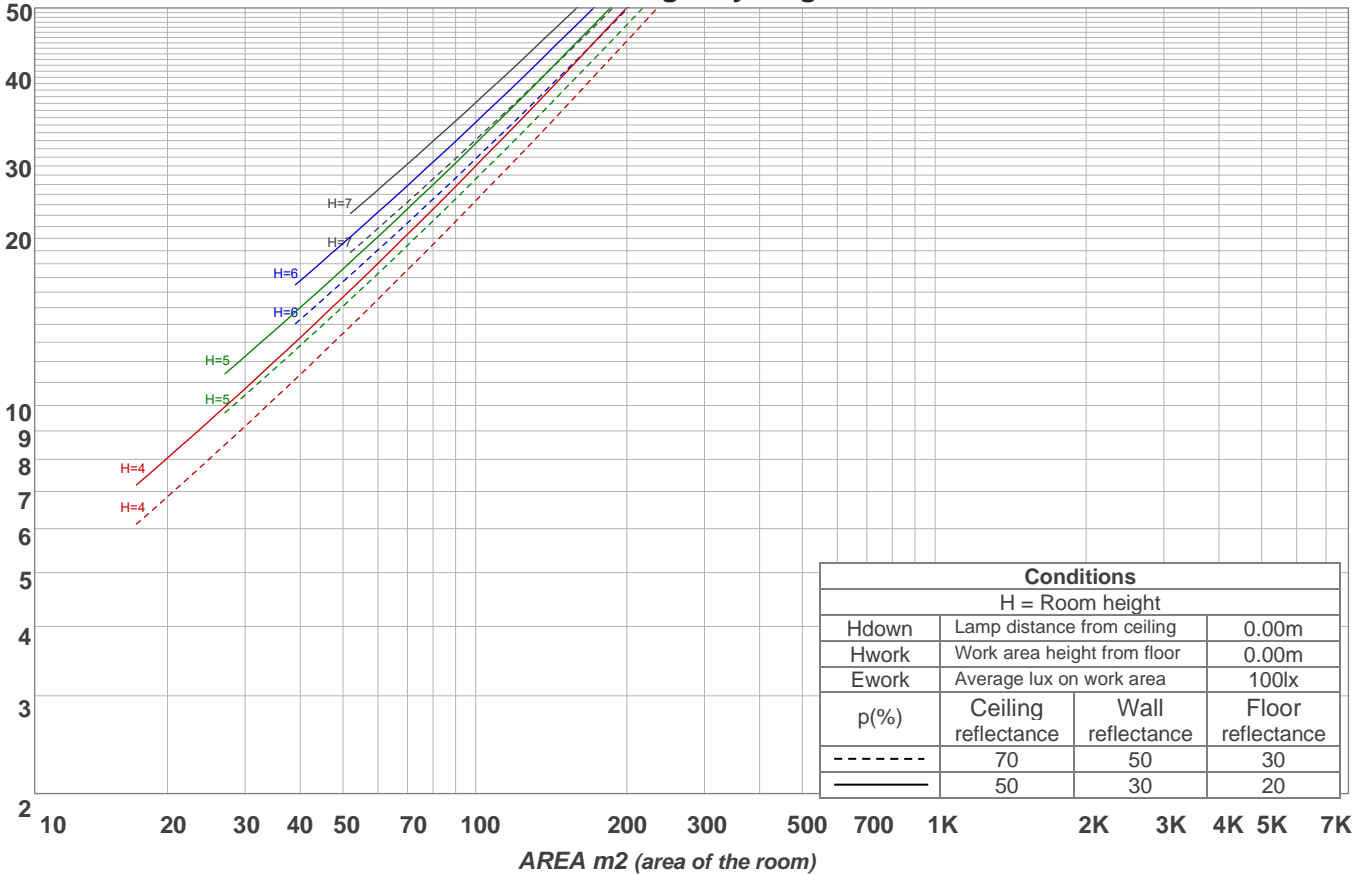
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	23,9	24,8	24,1	25,1	25,3	23,9	24,8	24,1	25,1	25,3
	3H	24,3	25,3	24,7	25,5	25,7	24,3	25,3	24,7	25,5	25,7
	4H	24,4	25,4	24,8	25,6	25,9	24,4	25,4	24,8	25,6	25,9
	6H	24,5	25,3	24,8	25,6	26,0	24,5	25,3	24,8	25,6	26,0
	8H	24,5	25,3	24,8	25,6	26,0	24,5	25,3	24,8	25,6	26,0
12H	24,5	25,2	24,8	25,6	26,0	24,5	25,2	24,8	25,6	26,0	
4H	2H	24,1	25,0	24,5	25,3	25,5	24,1	25,0	24,5	25,3	25,5
	3H	24,8	25,5	25,1	25,9	26,3	24,8	25,5	25,1	25,9	26,3
	4H	24,9	25,6	25,3	26,0	26,5	24,9	25,6	25,3	26,0	26,5
	6H	25,0	25,7	25,5	26,0	26,4	25,0	25,7	25,5	26,0	26,4
	8H	24,9	25,6	25,5	25,9	26,3	24,9	25,6	25,5	25,9	26,3
12H	24,9	25,4	25,4	25,8	26,3	24,9	25,4	25,4	25,8	26,3	
8H	4H	24,9	25,5	25,4	25,9	26,3	24,9	25,5	25,4	25,9	26,3
	6H	25,0	25,5	25,5	25,9	26,5	25,0	25,5	25,5	25,9	26,5
	8H	25,1	25,5	25,6	26,0	26,6	25,1	25,5	25,6	26,0	26,6
	12H	25,1	25,4	25,6	25,9	26,5	25,1	25,4	25,6	25,9	26,5
12H	4H	24,9	25,4	25,4	25,8	26,3	24,9	25,4	25,4	25,8	26,3
	6H	25,0	25,4	25,6	25,9	26,6	25,0	25,4	25,6	25,9	26,6
	8H	25,0	25,4	25,6	25,9	26,5	25,0	25,4	25,6	25,9	26,5
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,4 / -0,6					0,4 / -0,6					
S = 1.5H	1,1 / -1,4					1,1 / -1,4					
S = 2.0H	2,0 / -2,5					2,0 / -2,5					
CIE 117-1995. Corrected glare indices referring to 537 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	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	59	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39

LAMPS (number of lamps)

**Luminaire budgetary diagram**



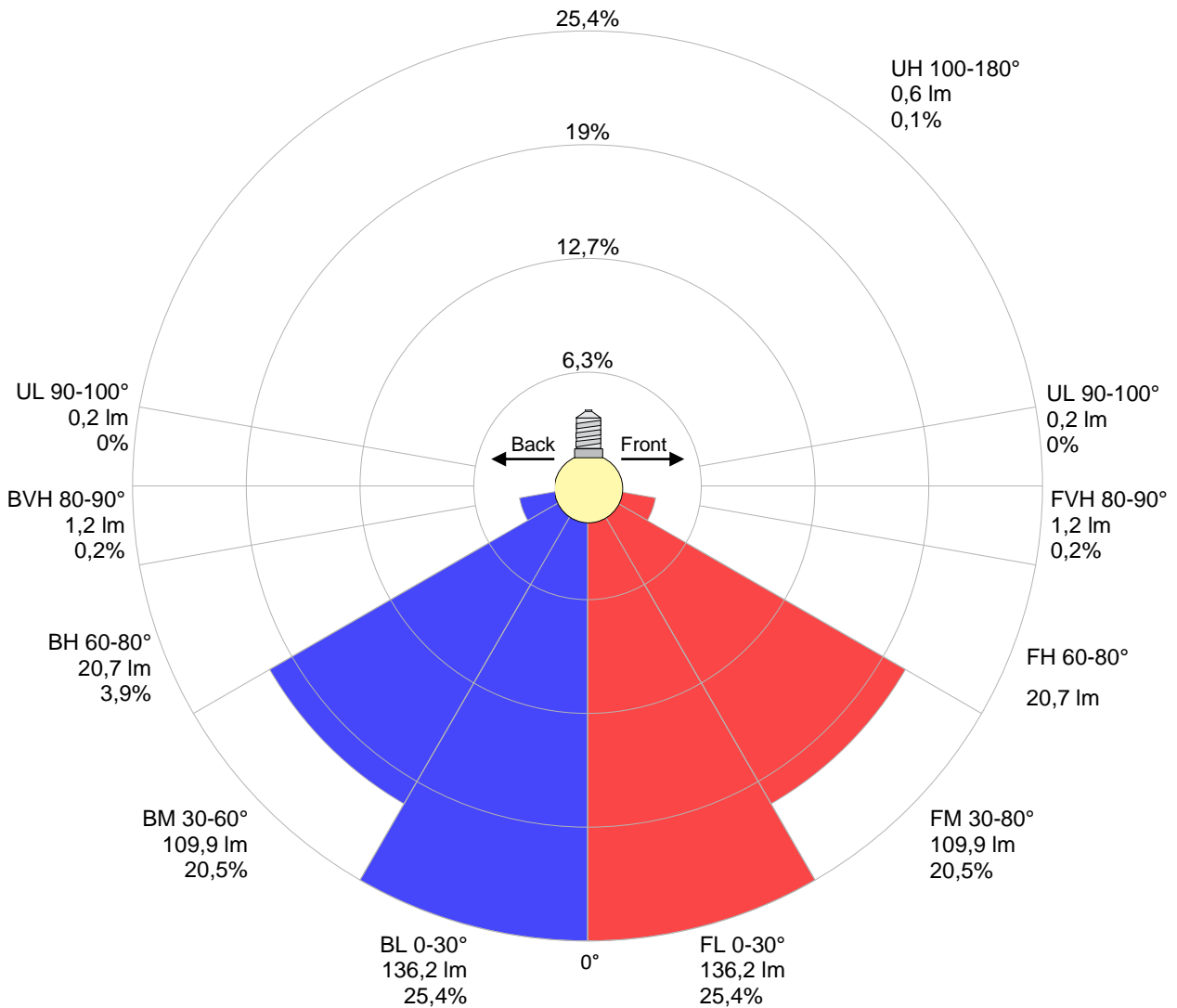
**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	111 lm	116 lm	95,2 lm	73,6 lm	50,8 lm	29,3 lm	12,0 lm	2,41 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,211 lm	0,099 lm	0,099 lm	0,105 lm	0,099 lm	0,092 lm	0,072 lm	0,052 lm	0,014 lm

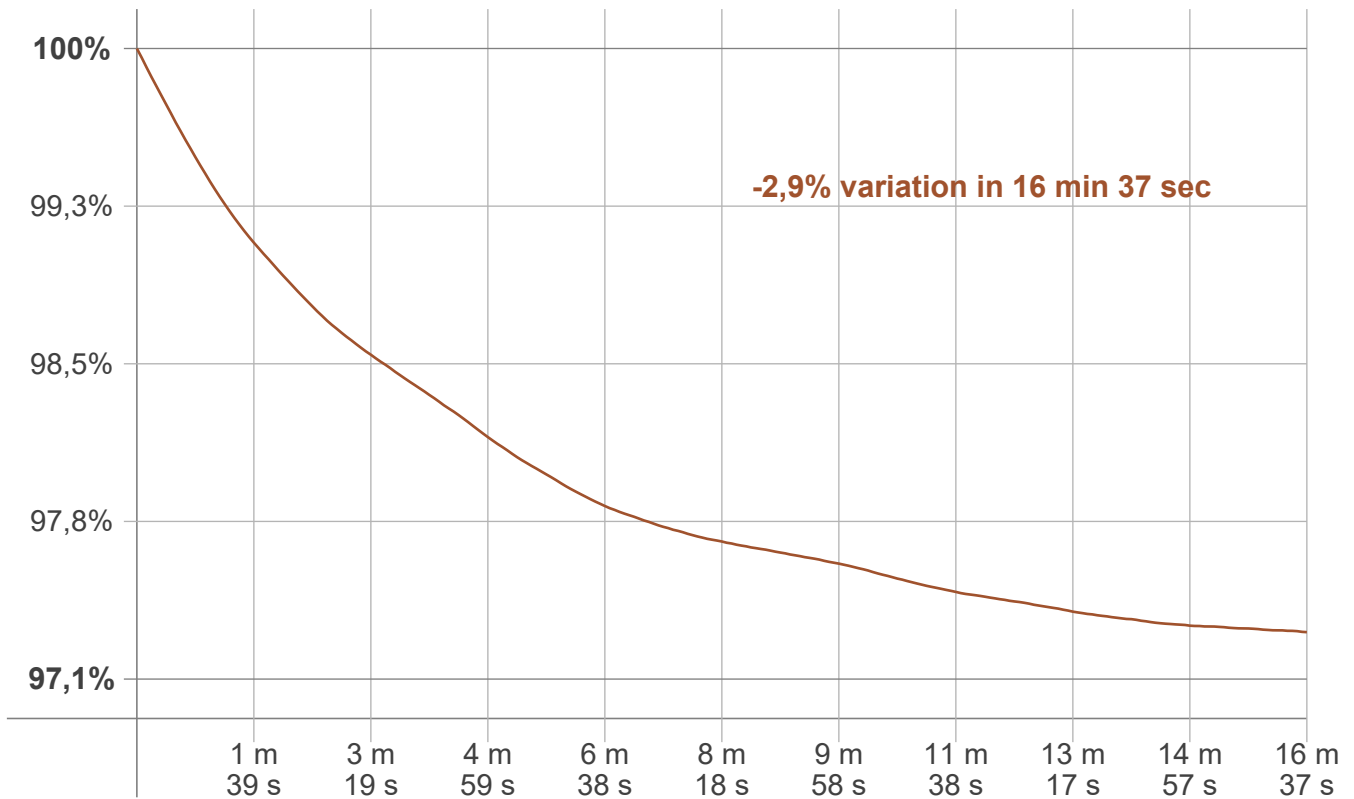
LCS table

BUG rating:	B1 U1 G0	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	136,2	25,4%
Medium(30-60):	109,9	20,5%
High(60-80):	20,7	3,9%
Very high(80-90):	1,2	0,2%
<b>Back light</b>		
Low(0-30):	136,2	25,4%
Medium(30-60):	109,9	20,5%
High(60-80):	20,7	3,9%
Very high(80-90):	1,2	0,2%
<b>Uplight</b>		
Low(90-100):	0,2	0%
High(100-180):	0,6	0,1%

LCS graph



**Warmup curve**



**Warmup result**

<b>Warmup time:</b>	<b>Lamp stabilized in 16 min 37 sec</b>
<b>Warmup variation</b>	<b>-2,9%</b>

**Warmup conditions**

<b>Stable period:</b>	<b>15 min</b>
<b>Stable change max:</b>	<b>2,0%</b>
<b>Minimum time:</b>	<b>15 min</b>

**Color temperature change**

CCT start	CCT change	CCT end
2981 K	+19 K	3000 K

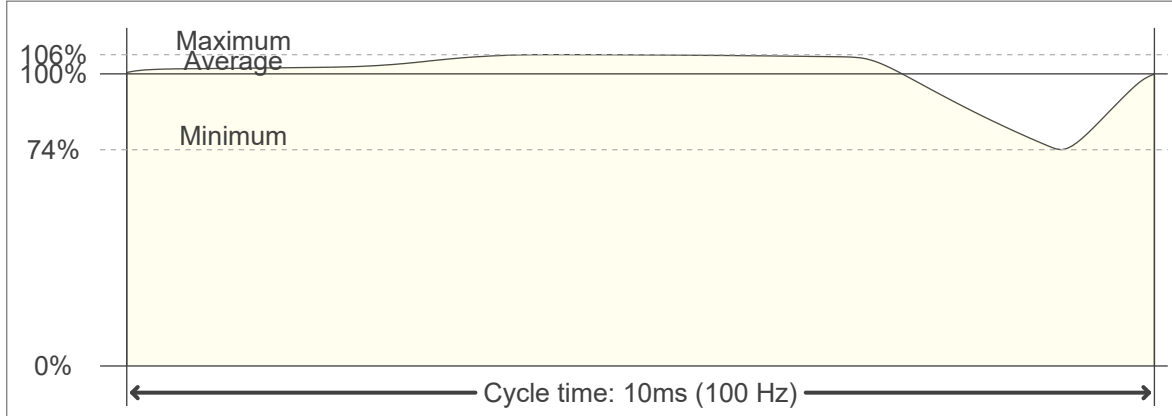
**Output change**

Output start	Output change	Output end
553 lm	-16 lm	537 lm

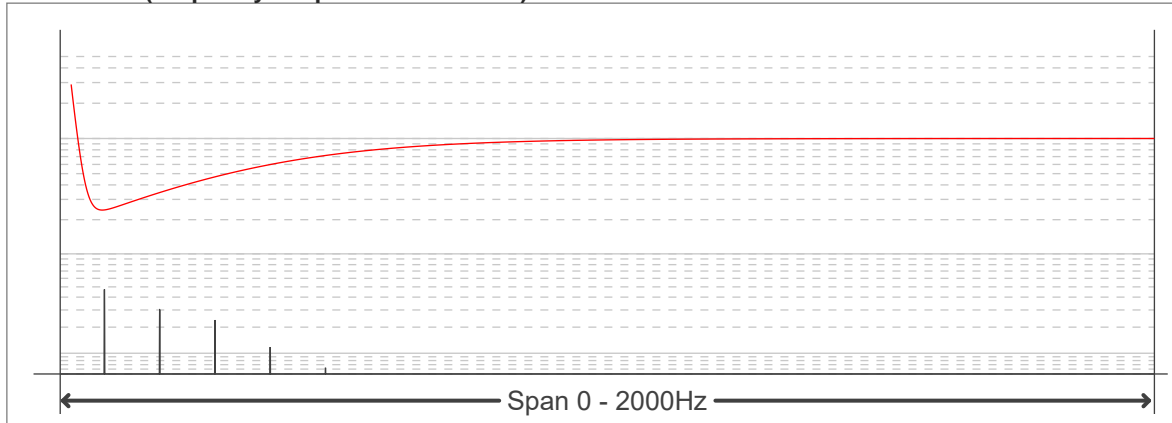
**Flicker curve (complete sampled flicker signal)**



**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	0,02 %
Flicker percentage:	18,04 %	JA8/10 90Hz	0,1 %
SVM: (Visual flicker)	0,38	JA8/10 200Hz	10,71 %
PstLM	0,02	JA8/10 400Hz	15,54 %
Mp	0,01	JA8/10 1000Hz	17,6 %

**Flicker conditions:**

Sample rate:	20000 samples/second
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