

# OPTIQUE

Light efficiency:

n/a Lumen/Watt

Light quality:

CRI: 95.7

Color temperature:

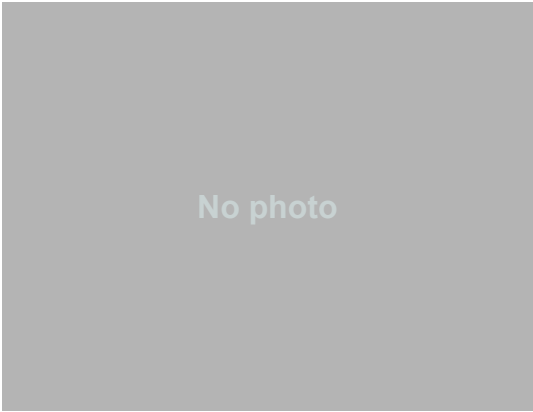
2883 K

Output: 664 lm

Peak: 399 cd

Power: 0.00 W

PF: n/a



No photo

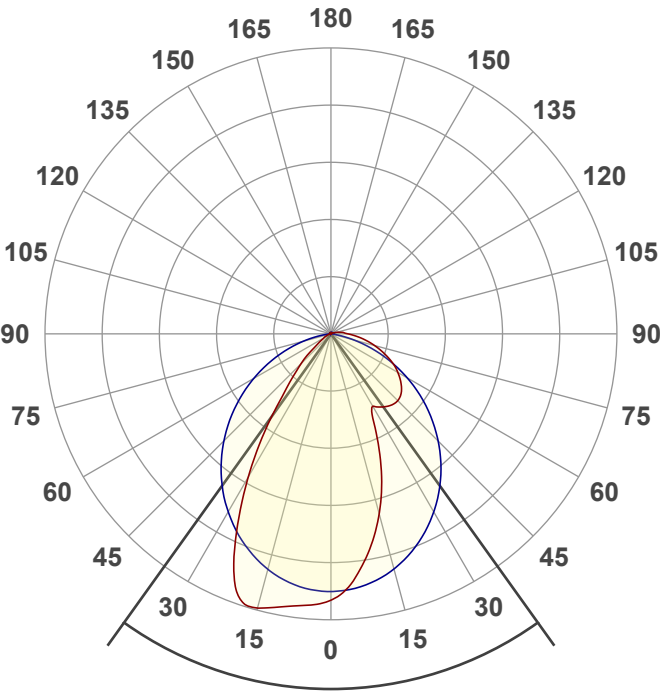
Tracking number: [n/a](#)

Product name:  
**OP-REC-PRFM2 L15-3000K**

Item number:  
**OP-01-12MM-D-1500LM-24V-4000K-IN**

Date and time:  
**6/12/2026 9:13:42 AM**

Description:

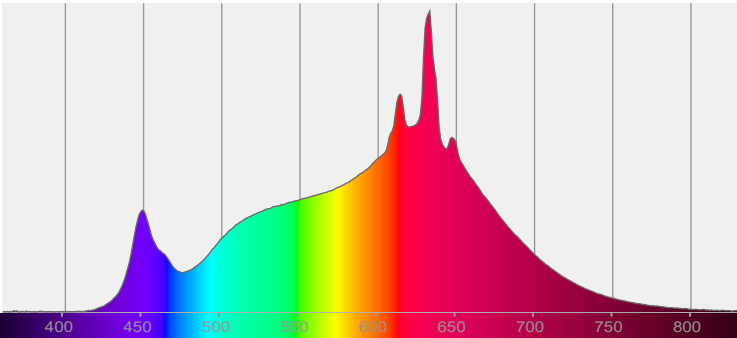


Beam angle 71.2°

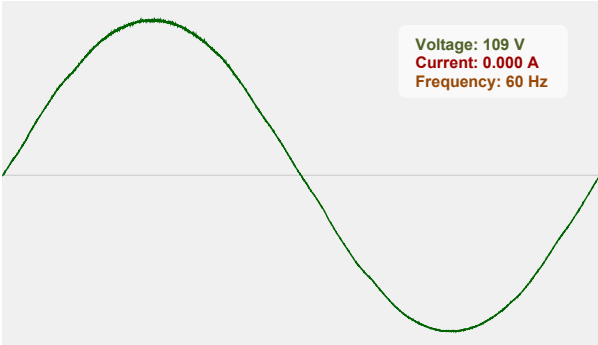


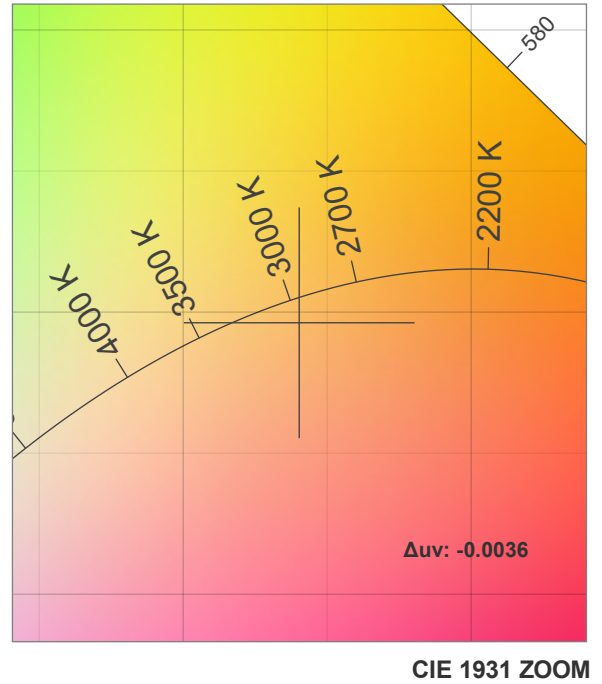
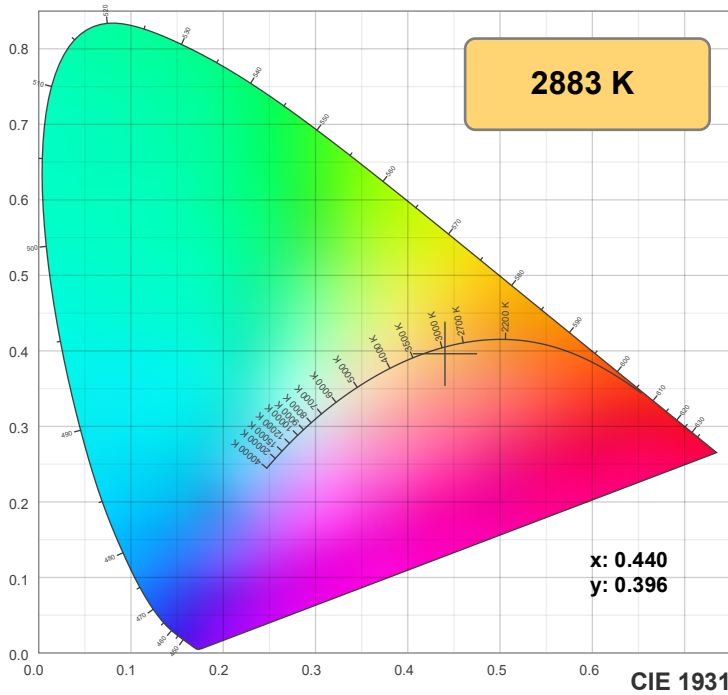
CIE 1931  
x: 0.440  
y: 0.396

Spectra

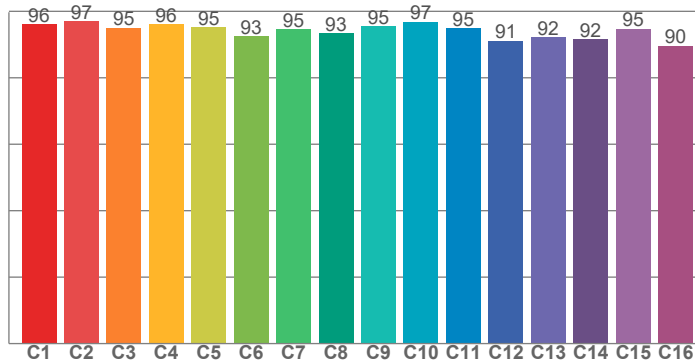


Power

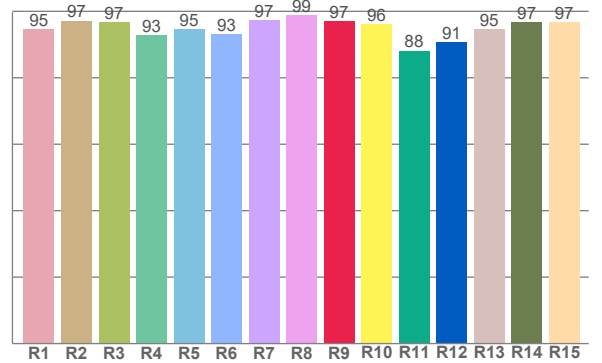




**TM30: 94.5**



**CRI: 95.7 (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
94.5	97.2	96.8	92.8	94.5	93.2	97.4	98.9	97.0	96.1	88.2	90.7	94.7	96.8	96.7

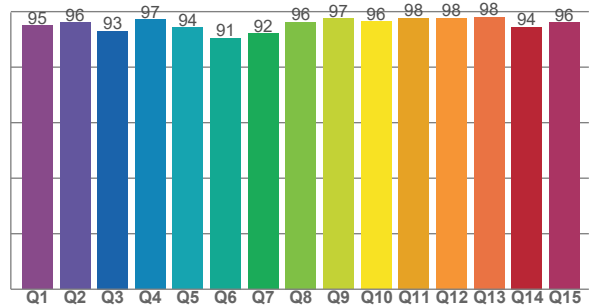
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.1	97.0	95.1	96.1	95.2	92.5	94.7	93.4	95.4	96.8	94.9	91.1	92.2	91.6	94.8	89.6

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.1	96.1	93.1	97.2	94.3	90.6	92.1	96.3	97.5	96.5	97.8	97.7	98.0	94.5	96.2

**CQS: 94.8**



### 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
2883 K	95.7	97.0	94.5	104.2	94.8	0.440	0.396	0.256	0.346	-0.0036

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## TM-30 details

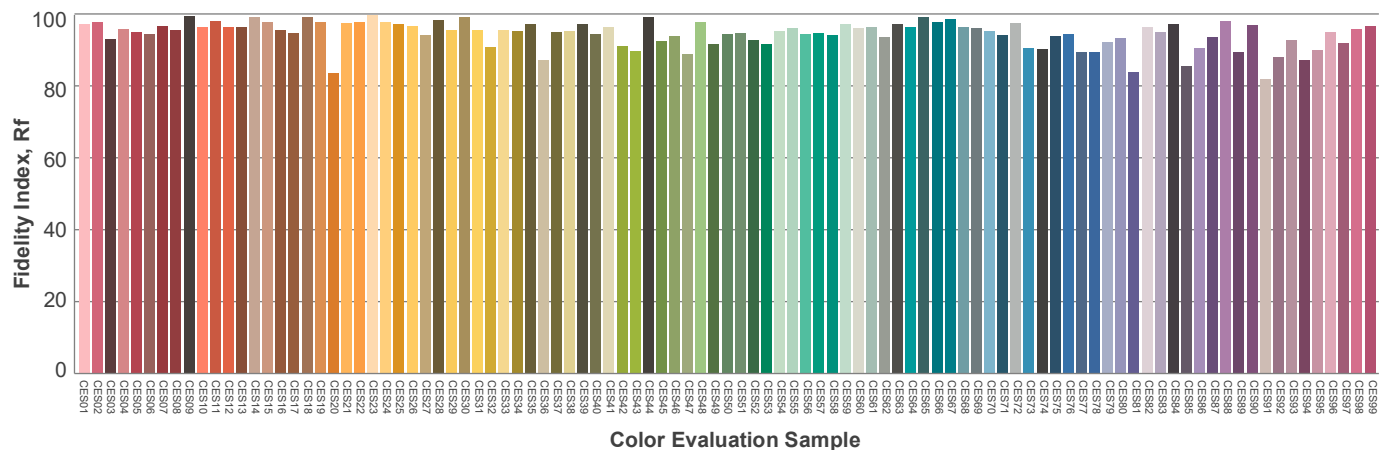
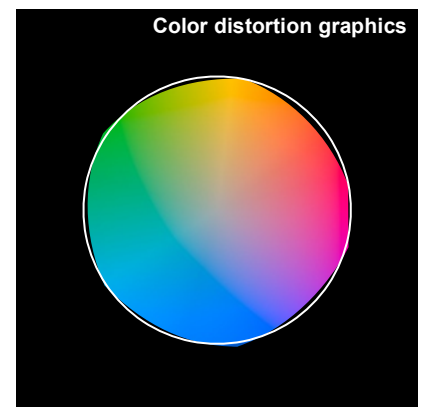
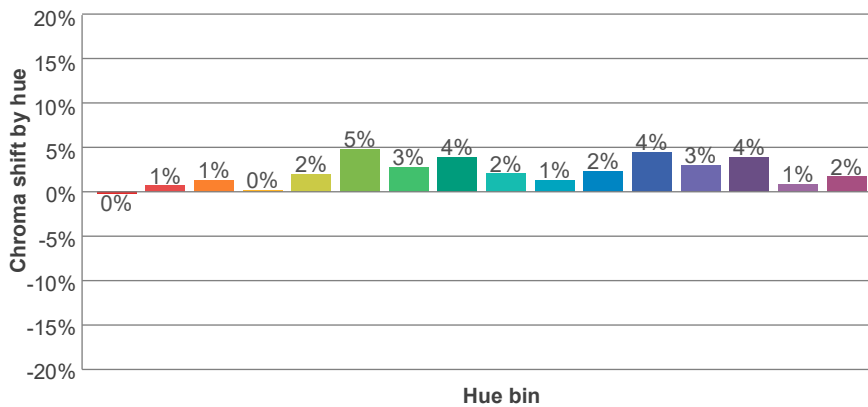
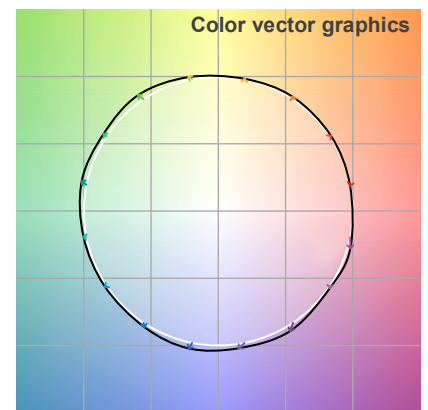
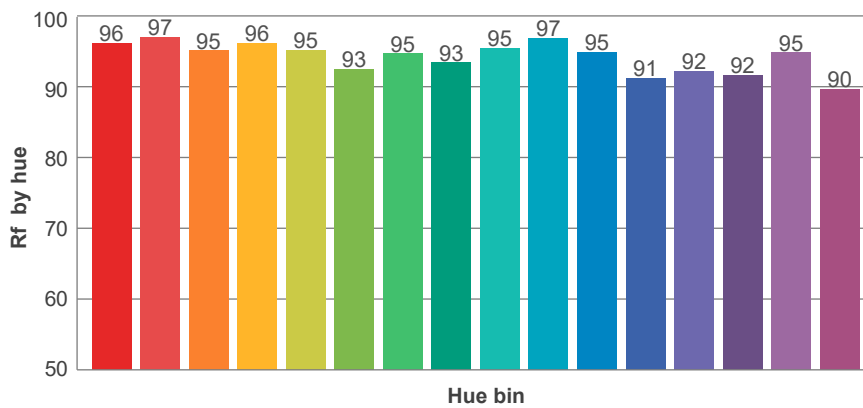
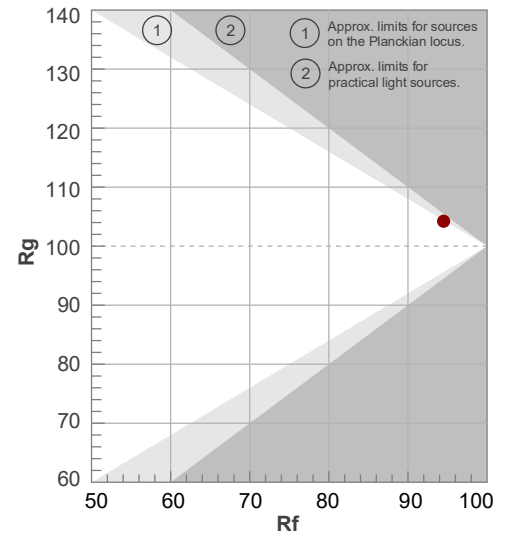
**Rf 94.5**

Fidelity index Rf

**Rg 104.2**

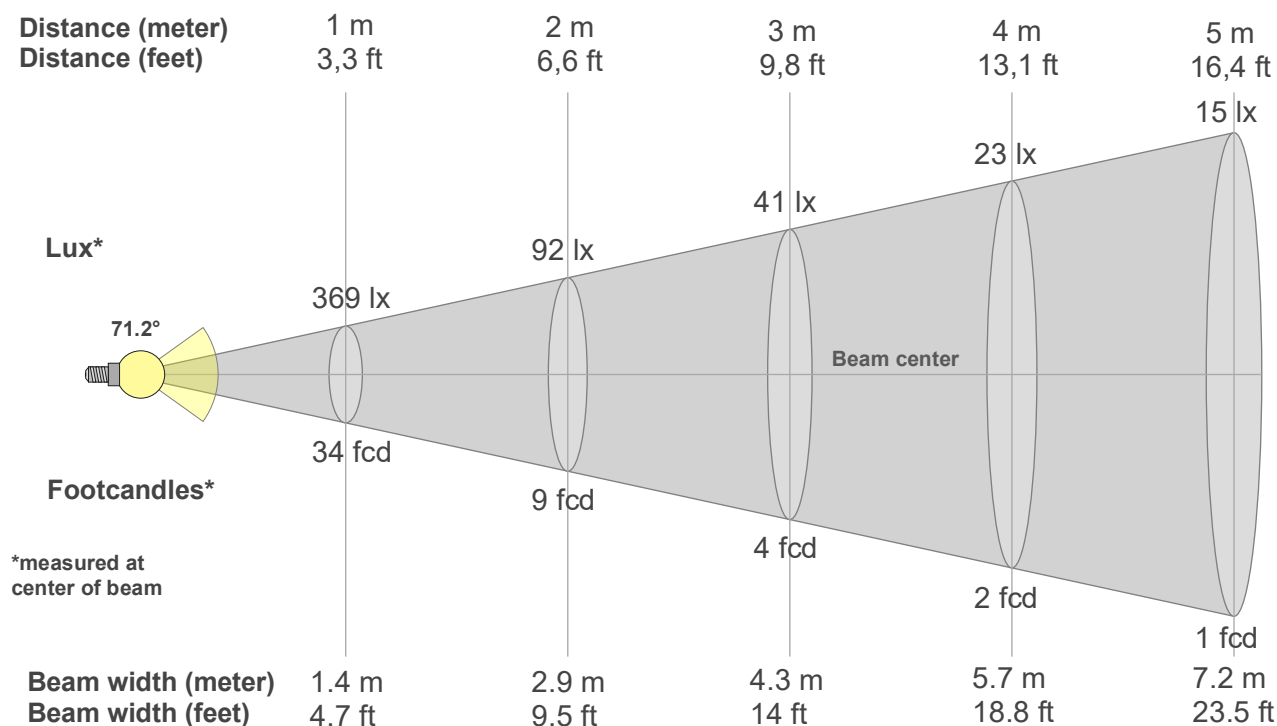
Gamut index Rg

Hue Bin	R <sub>r</sub>	Shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	97	1%	0%
3	95	1%	1%
4	96	0%	0%
5	95	2%	2%
6	93	5%	2%
7	95	3%	0%
8	93	4%	-2%
9	95	2%	-1%
10	97	1%	0%
11	95	2%	2%
12	91	4%	-2%
13	92	3%	-5%
14	92	4%	-5%
15	95	1%	-1%
16	90	2%	-8%



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## Beam details



### 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
369lx	92lx	41lx	23lx	15lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
34.3fcd	8.6fcd	3.8fcd	2.1fcd	1.4fcd	1fcd	0.7fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd	0.1fcd	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°
369	345	305	258	205	147	117	124	129	131	127	119	107	94	78	63	48	35	24	18
100%	94%	83%	70%	55%	40%	32%	34%	35%	35%	34%	32%	29%	25%	21%	17%	13%	9%	6%	5%

### 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°
369	355	348	338	323	306	285	262	237	210	182	153	122	92	62	33	10	1	1	0
100%	96%	94%	91%	88%	83%	77%	71%	64%	57%	49%	41%	33%	25%	17%	9%	3%	0%	0%	0%

### Intensities in 180° c-plane

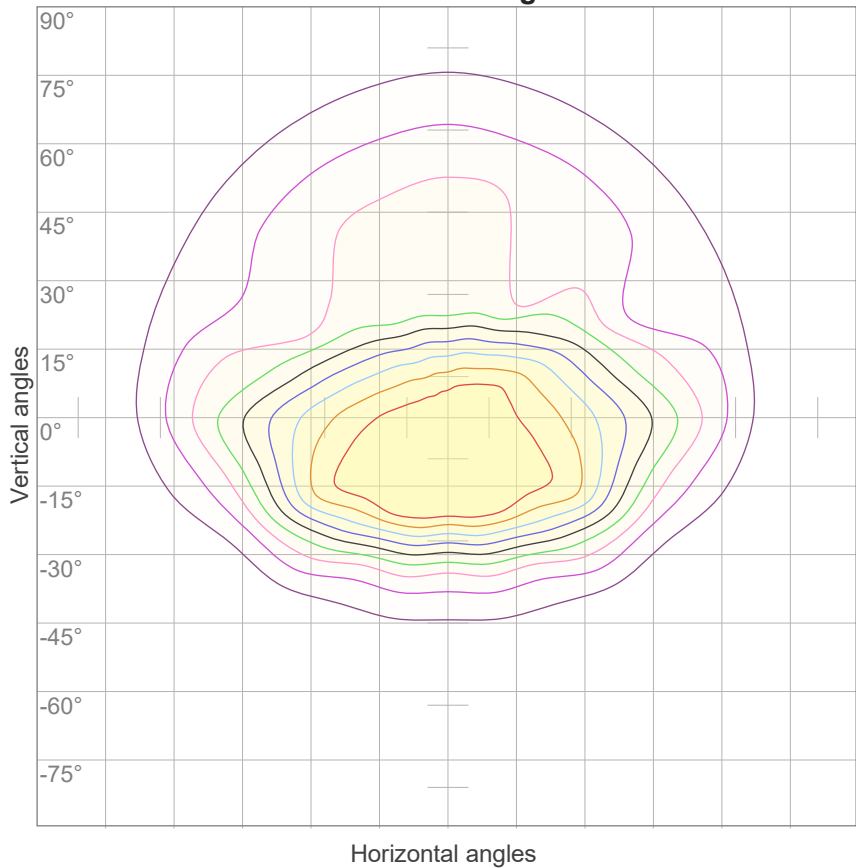
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
369	378	384	394	380	312	229	151	92	59	32	18	11	8	5	2	0	0	1	1
100%	102%	104%	107%	103%	85%	62%	41%	25%	16%	9%	5%	3%	2%	1%	1%	0%	0%	0%	0%

### 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°
369	355	349	338	323	306	285	262	237	210	182	153	123	94	66	40	17	4	2	1
100%	96%	95%	92%	88%	83%	77%	71%	64%	57%	49%	41%	33%	26%	18%	11%	5%	1%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
71.2°	136.6°	162.6°	83.7%	65.1%

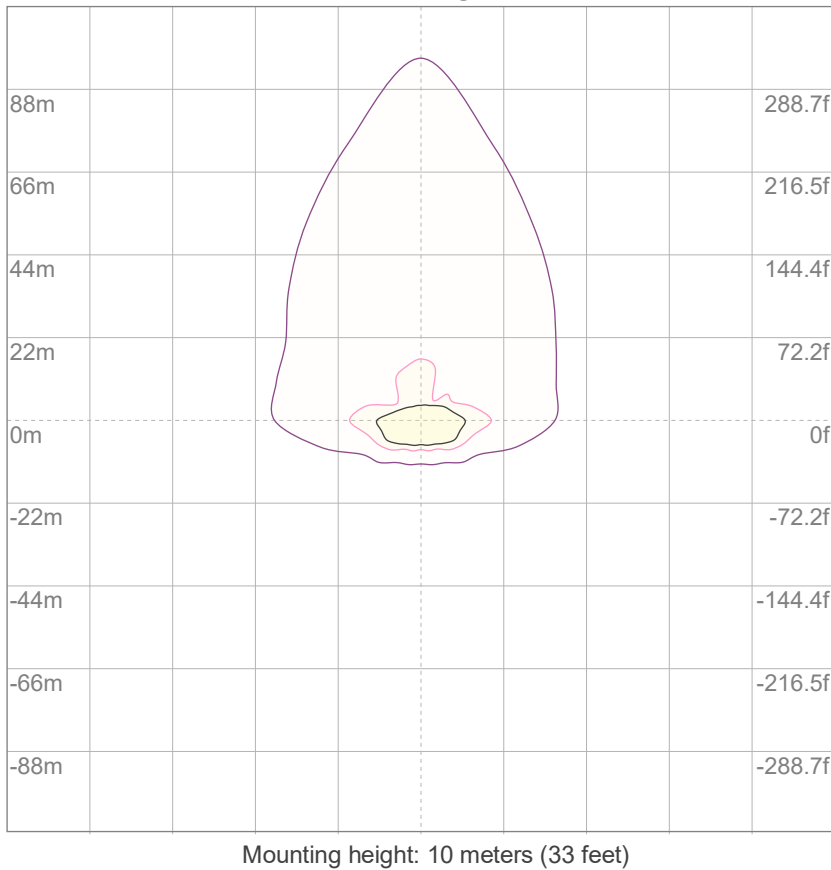
iso-candela diagram



10%	37 cd
20%	74 cd
30%	111 cd
40%	148 cd
50%	184 cd
60%	221 cd
70%	258 cd
80%	295 cd
90%	332 cd

Conditions:  
Number of c-planes: 12  
Candela at center: 369 cd

iso-lux diagram



3%	0.111 lx
5%	0.184 lx
10%	0.369 lx
30%	1.11 lx
50%	1.84 lx

Conditions:  
Number of c-planes: 12  
Lux at center: 3.69 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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
CIE 117-1995. Corrected glare indices referring to 664 lm total luminous flux										

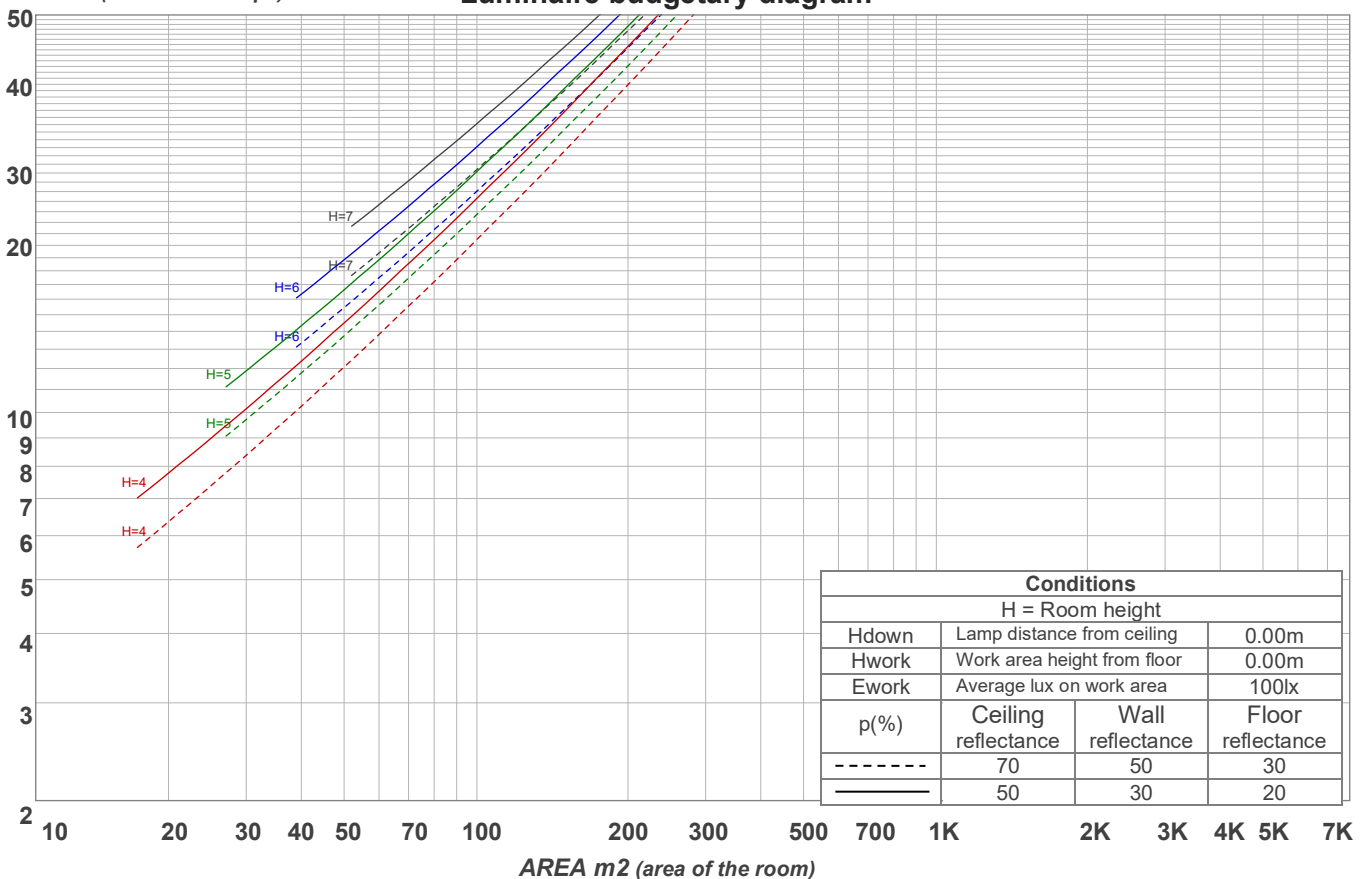
UGR data could not be calculated due to missing/wrong symmetry. Go to Edit -> Photometric -> Corrections and select Correct asymmetry (UGR not defined for asymmetrical distributions)..

### 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	110	110	110	105	105	105	100	100	100	98
1	109	105	101	98	107	103	99	96	98	95	93	94	92	90	90	88	87	85
2	101	94	88	82	98	92	86	81	88	83	79	84	80	77	81	78	75	73
3	93	84	76	71	91	82	75	70	79	73	68	76	71	67	73	69	66	64
4	86	75	68	62	84	74	67	61	71	65	60	69	63	59	67	62	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	61	56	52	50
6	75	62	54	49	73	61	54	48	60	53	48	58	52	47	56	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	53	47	43	52	46	42	40
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	46	38	33	56	45	38	33	44	37	33	43	37	33	42	36	33	31

LAMPS (number of lamps)

### Luminaire budgetary diagram



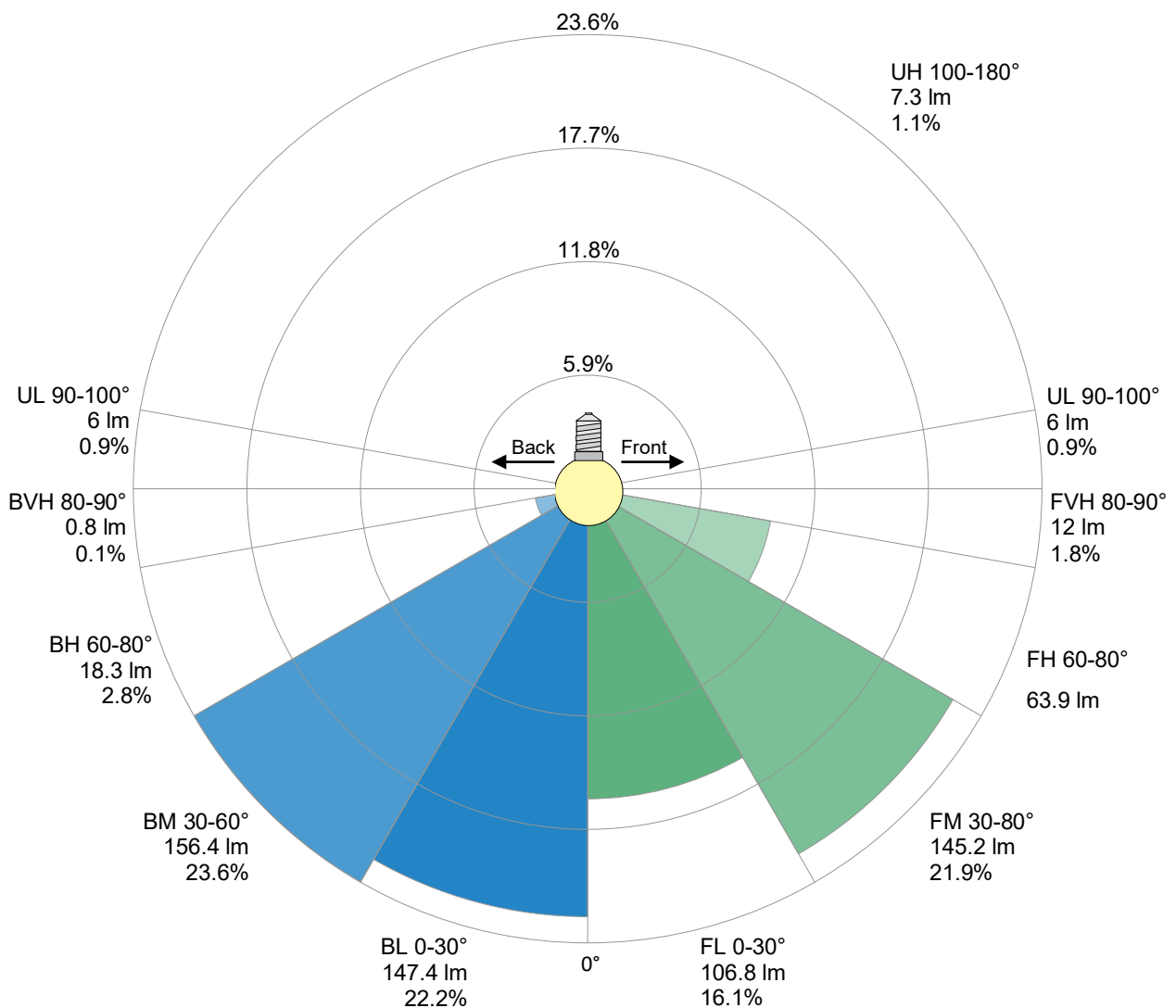
### Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	93.9 lm	126 lm	124 lm	102 lm	75.6 lm	52.2 lm	30.0 lm	12.8 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
6.03 lm	2.56 lm	1.13 lm	0.973 lm	0.913 lm	0.747 lm	0.540 lm	0.294 lm	0.096 lm

LCS table

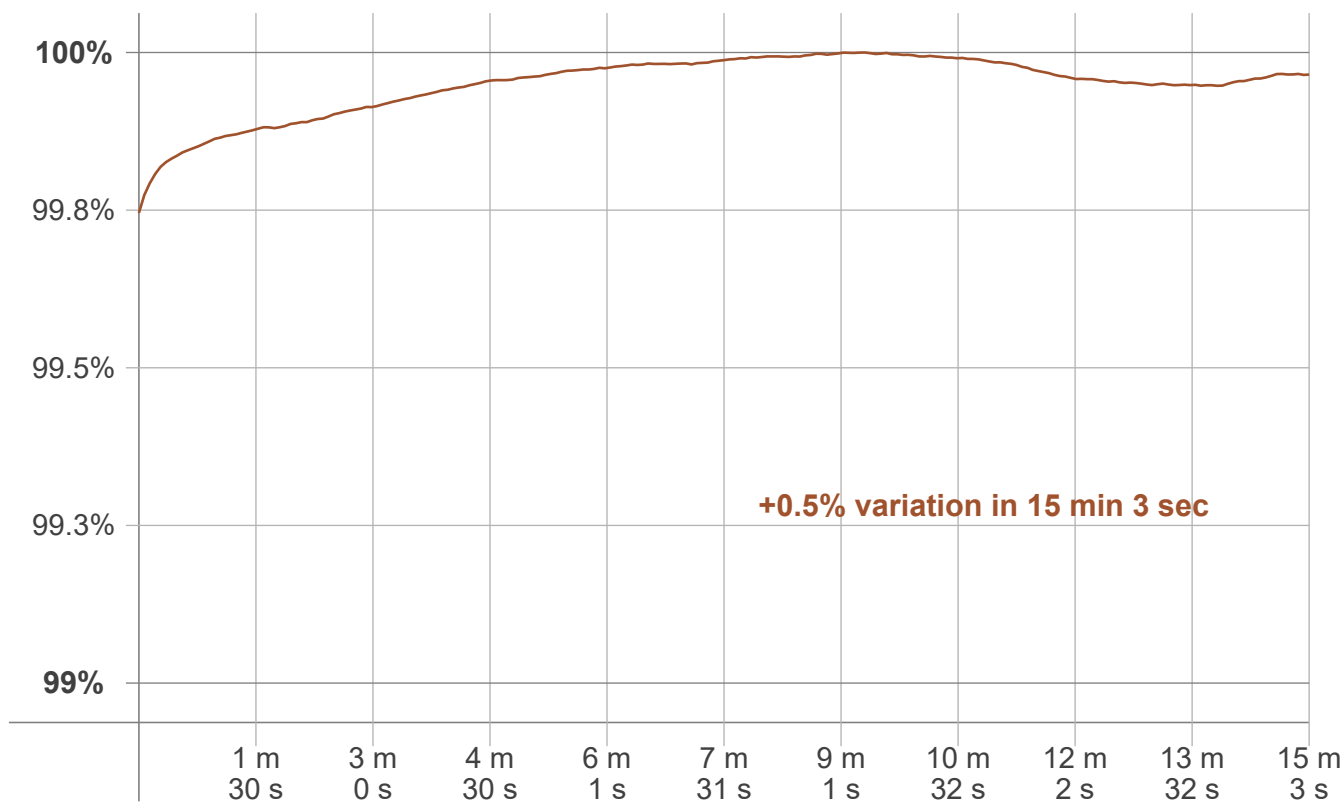
BUG rating:	B1 U1 G1	
Forward light	Lumens	Lumens %
Low(0-30):	106.8	16.1%
Medium(30-60):	145.2	21.9%
High(60-80):	63.9	9.6%
Very high(80-90):	12	1.8%
Back light		
Low(0-30):	147.4	22.2%
Medium(30-60):	156.4	23.6%
High(60-80):	18.3	2.8%
Very high(80-90):	0.8	0.1%
Uplight		
Low(90-100):	6	0.9%
High(100-180):	7.3	1.1%

LCS graph





### Warmup curve



### Warmup result

Warmup time:	Lamp stabilized in 15 min 3 sec
Warmup variation	+0.5%

### Warmup conditions

Stable period:	15 min
Stable change max:	2.0%
Minimum time:	15 min

### Color temperature change

CCT start	CCT change	CCT end
2900 K	-17 K	2883 K

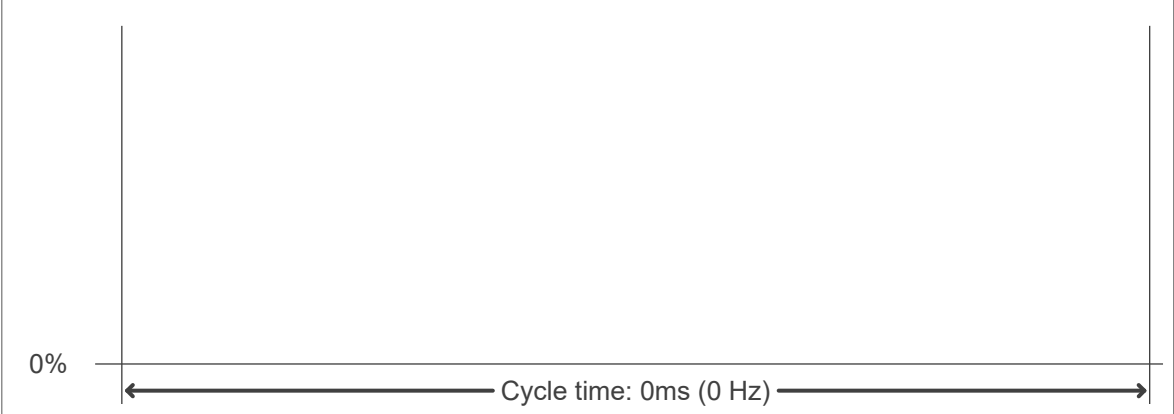
### Output change

Output start	Output change	Output end
662 lm	+2 lm	664 lm

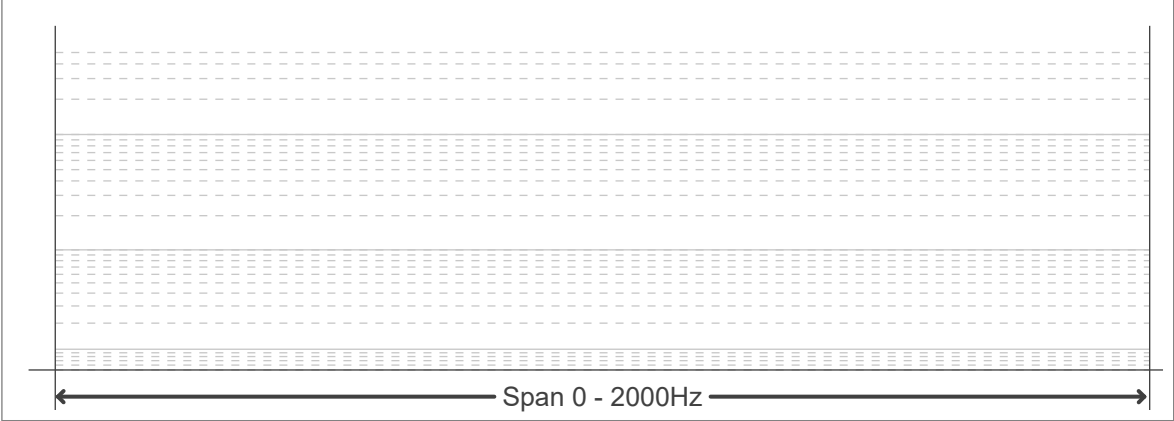
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		n/a Hz	
Flicker index:	n/a	JA8/10 40Hz	n/a %
Flicker percentage:	n/a %	JA8/10 90Hz	n/a %
SVM: (Visual flicker)	n/a	JA8/10 200Hz	n/a %
PstLM	n/a	JA8/10 400Hz	n/a %
Mp	n/a	JA8/10 1000Hz	n/a %

Flicker conditions:

Sample rate:	n/a samples/second
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