

Light efficiency:



Light quality:



Color temperature:

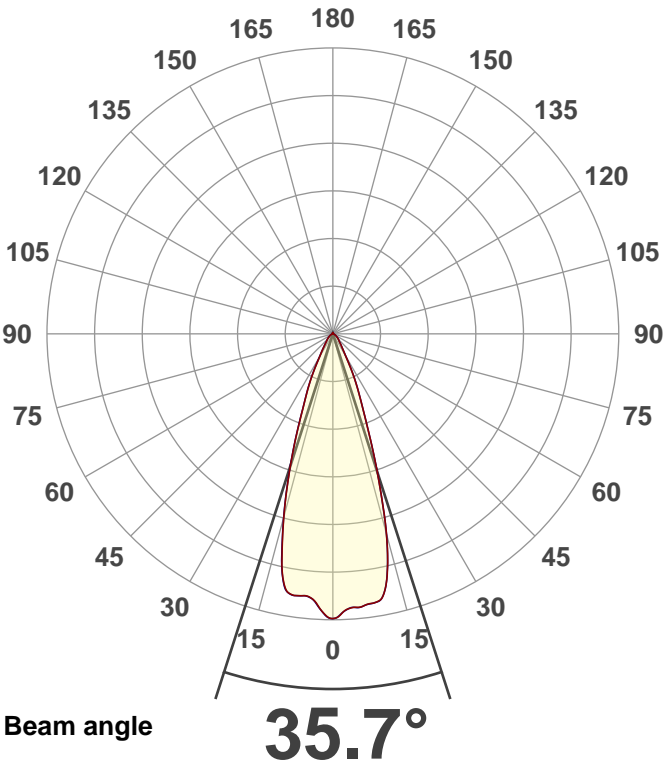


**Output: 13757 lm**  
**Peak: 29824 cd**  
**Power: 1147.9 W**  
**PF: 1.0**



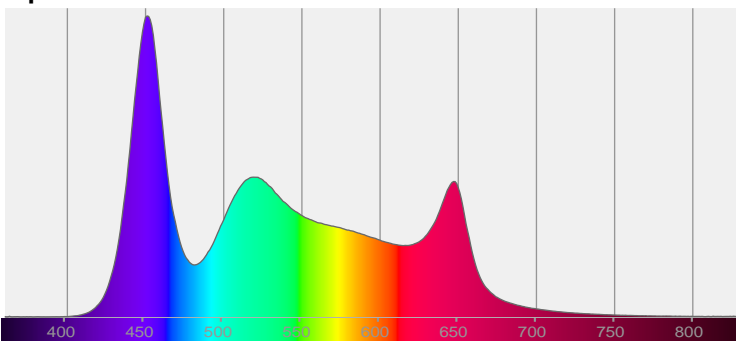
Tracking number: [n/a](#)

Product name:  
**VL5LED WASH ZOOM=255 (0094) 1#**  
 Item number:  
**VL5LED WASH ZOOM=255 (0094) 1#**  
 Date and time:  
**2020/1/19 8:48:10**  
 Description:

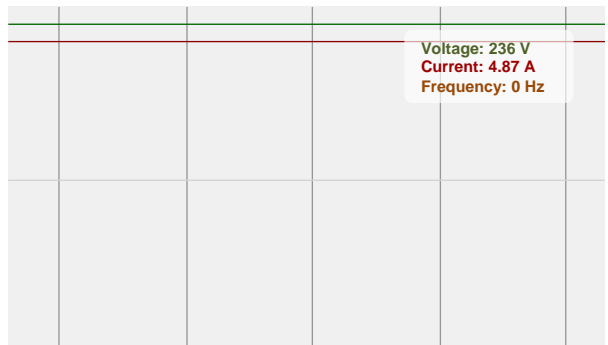


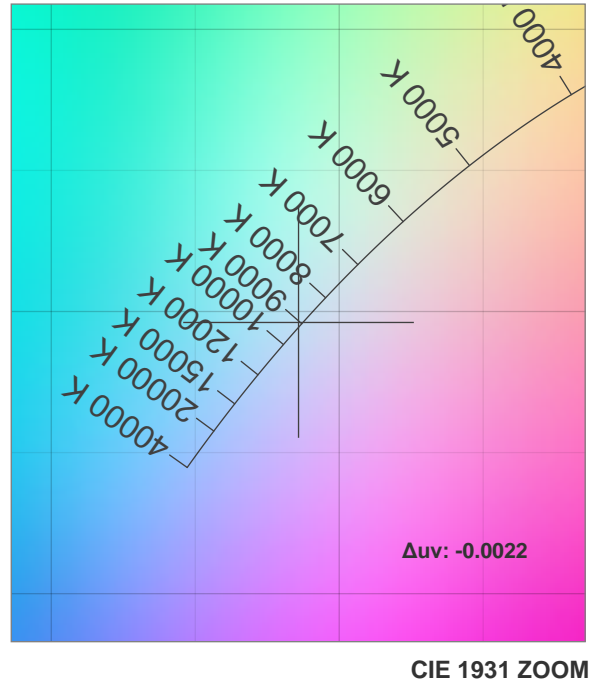
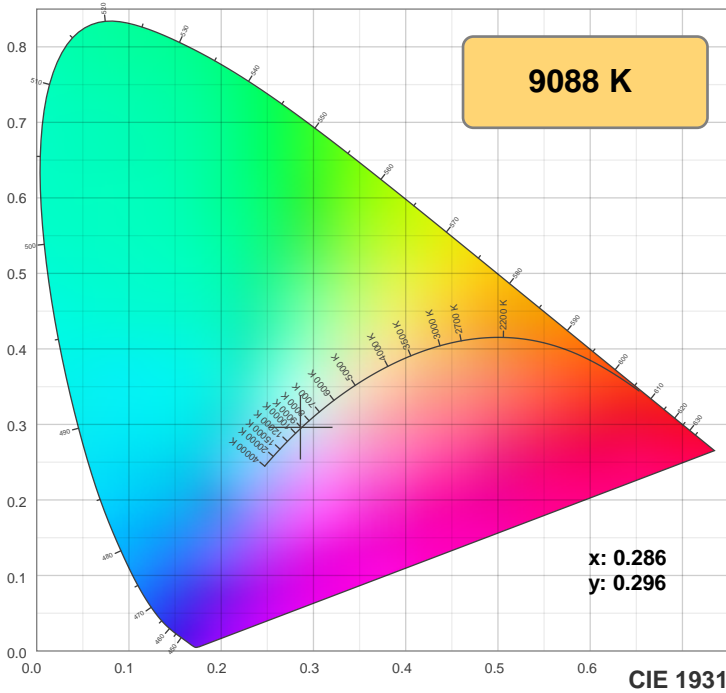
CIE 1931  
 x: 0.286  
 y: 0.296

Spectra

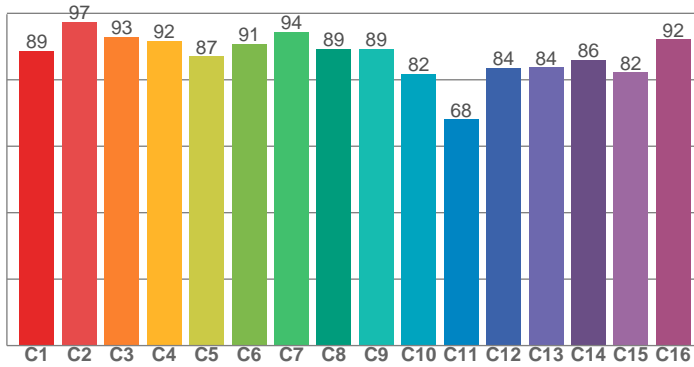


Power

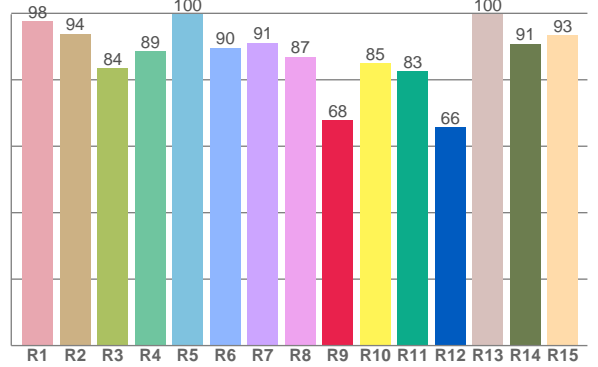




**TM30: 87.9**



**CRI: 91.4 (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
97.6	93.8	83.5	88.6	99.8	89.6	91.1	87.0	67.8	84.9	82.5	65.8	99.6	90.9	93.5

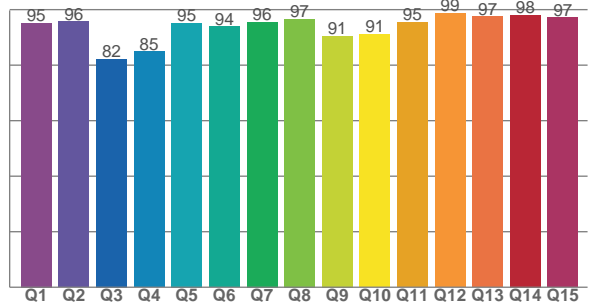
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.8	97.5	92.9	91.7	87.1	90.8	94.4	89.3	89.3	81.8	68.1	83.7	83.7	86.0	82.3	92.2

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
95.2	95.7	82.2	84.9	95.2	93.9	95.6	96.7	90.6	91.1	95.4	98.7	97.5	98.1	97.1

**CQS: 92.3**



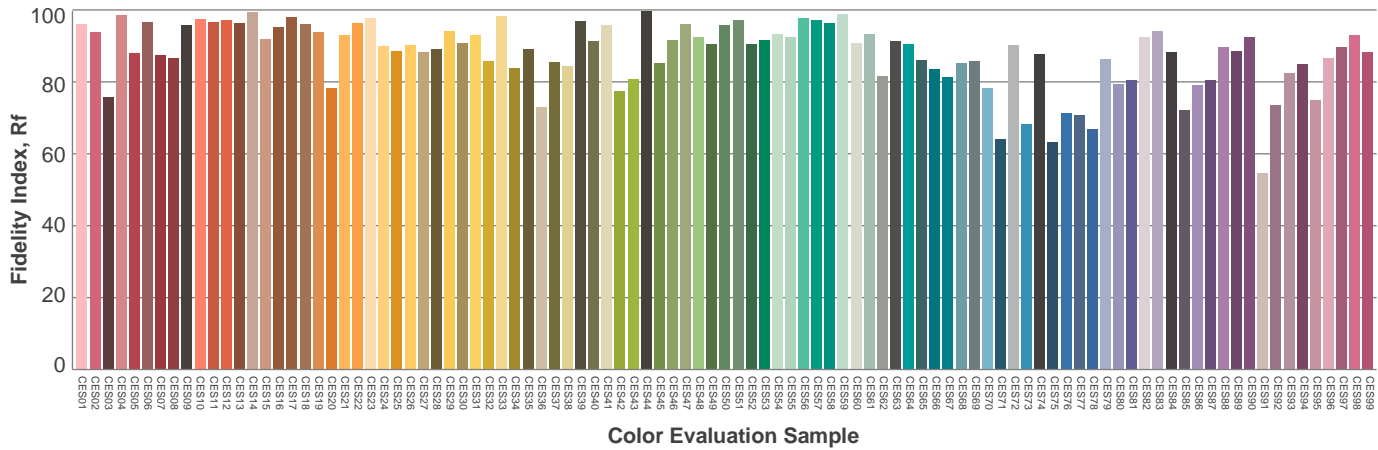
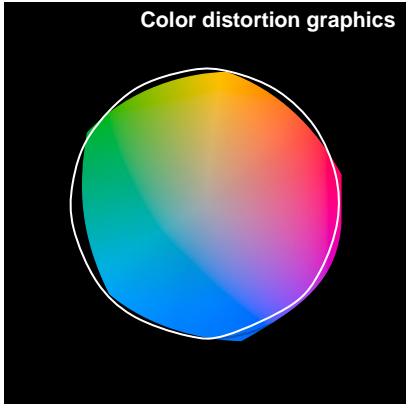
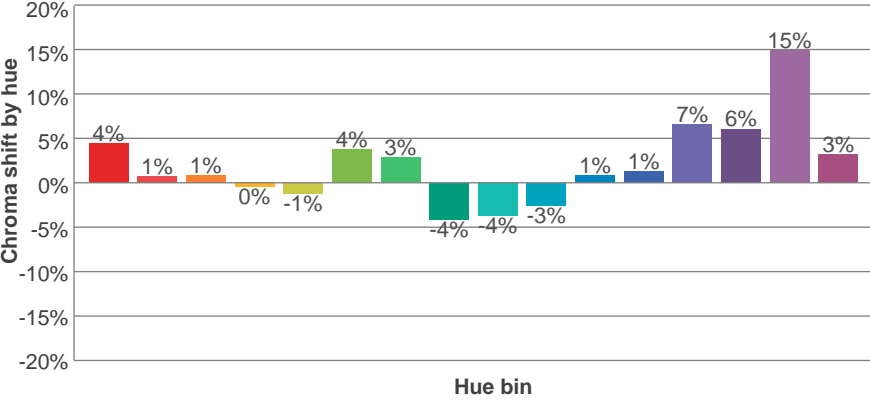
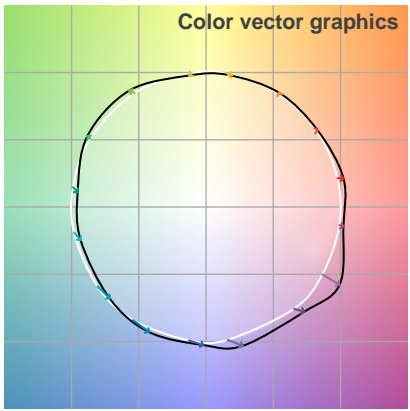
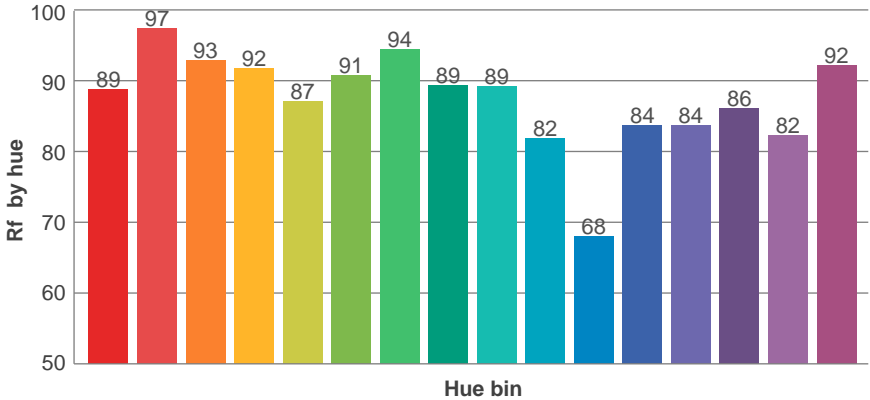
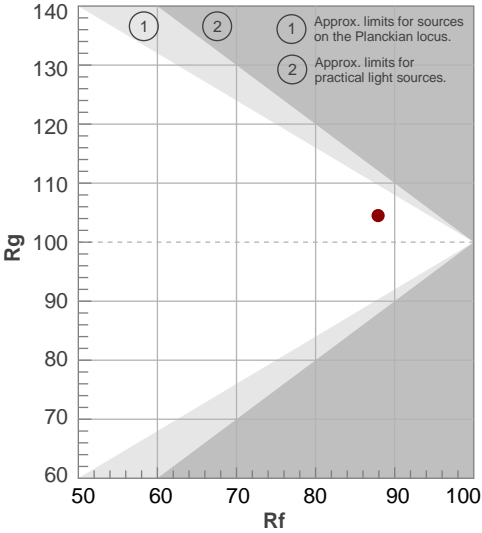
**Color parameters**

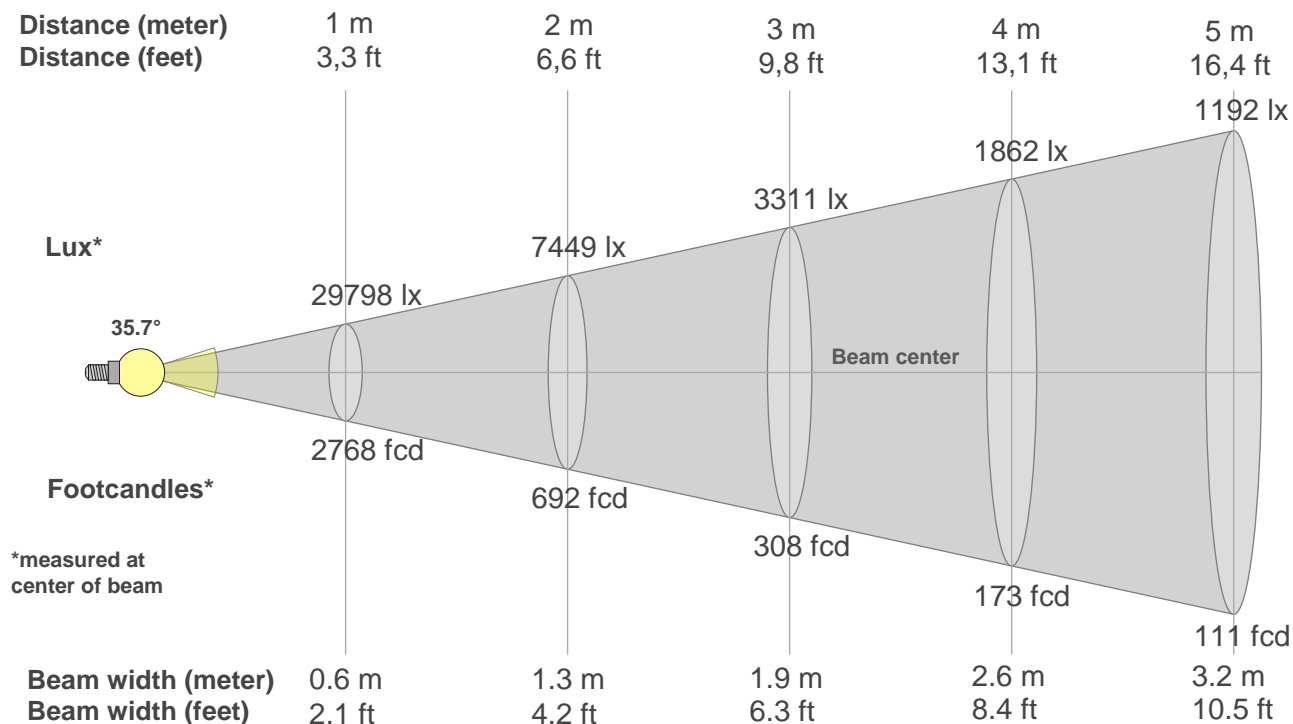
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
9088 K	91.4	67.8	87.9	104.5	92.3	0.286	0.296	0.191	0.297	-0.0022

**Rf 87.9**  
Fidelity index Rf

**Rg 104.5**  
Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	89	4%	-1%
2	97	1%	0%
3	93	1%	1%
4	92	0%	3%
5	87	-1%	2%
6	91	4%	2%
7	94	3%	0%
8	89	-4%	3%
9	89	-4%	6%
10	82	-3%	13%
11	68	1%	15%
12	84	1%	11%
13	84	7%	10%
14	86	6%	5%
15	82	15%	1%
16	92	3%	0%





**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
29798lx	7449lx	3311lx	1862lx	1192lx	828lx	608lx	466lx	368lx	298lx	246lx	207lx	176lx	152lx	132lx	116lx	103lx	92lx	83lx	74lx
2768.3fcd	692.1fcd	307.6fcd	173fcd	110.7fcd	76.9fcd	56.5fcd	43.3fcd	34.2fcd	27.7fcd	22.9fcd	19.2fcd	16.4fcd	14.1fcd	12.3fcd	10.8fcd	9.6fcd	8.5fcd	7.7fcd	6.9fcd

**Intensities in 0° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
29.8K	29.3K	28.8K	28.8K	28.6K	28.3K	26.8K	23.7K	19.4K	14.9K	11.1K	8.3K	6.6K	5.1K	3.8K	2.7K	2.1K	1.7K	1.5K	1.2K
100%	98%	97%	97%	96%	95%	90%	80%	65%	50%	37%	28%	22%	17%	13%	9%	7%	6%	5%	4%

**Intensities in 90° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
29.8K	29.3K	28.8K	28.8K	28.6K	28.3K	26.9K	23.6K	19.4K	14.9K	11.0K	8.3K	6.6K	5.1K	3.7K	2.7K	2.1K	1.7K	1.5K	1.2K
100%	98%	97%	97%	96%	95%	90%	79%	65%	50%	37%	28%	22%	17%	12%	9%	7%	6%	5%	4%

**Intensities in 180° c-plane**

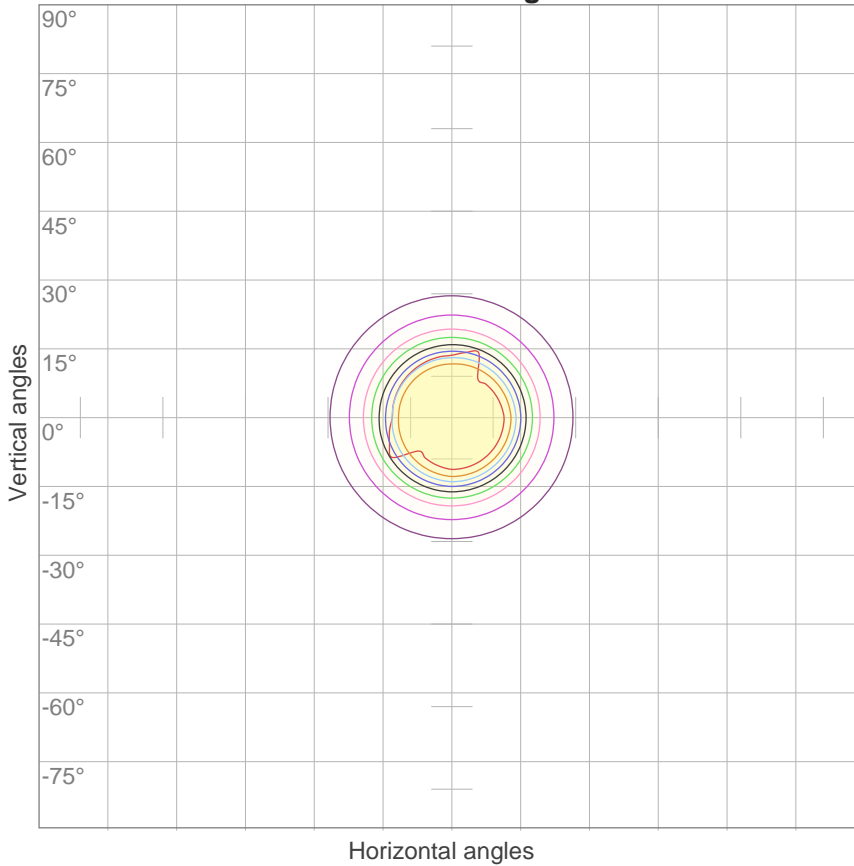
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
29.8K	29.2K	28.1K	27.7K	27.7K	27.4K	25.5K	21.8K	18.0K	14.3K	11.0K	8.3K	6.6K	5.2K	3.8K	2.8K	2.2K	1.8K	1.5K	1.2K
100%	98%	94%	93%	93%	92%	86%	73%	60%	48%	37%	28%	22%	17%	13%	9%	7%	6%	5%	4%

**Intensities in 270° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
29.8K	29.3K	28.1K	27.7K	27.7K	27.4K	25.5K	21.9K	18.0K	14.3K	11.0K	8.3K	6.6K	5.2K	3.9K	2.8K	2.2K	1.8K	1.5K	1.2K
100%	98%	94%	93%	93%	92%	86%	73%	61%	48%	37%	28%	22%	18%	13%	9%	8%	6%	5%	4%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
35.7°	59°	93.4°	94.5%	89.4%

**ISO candela diagram**



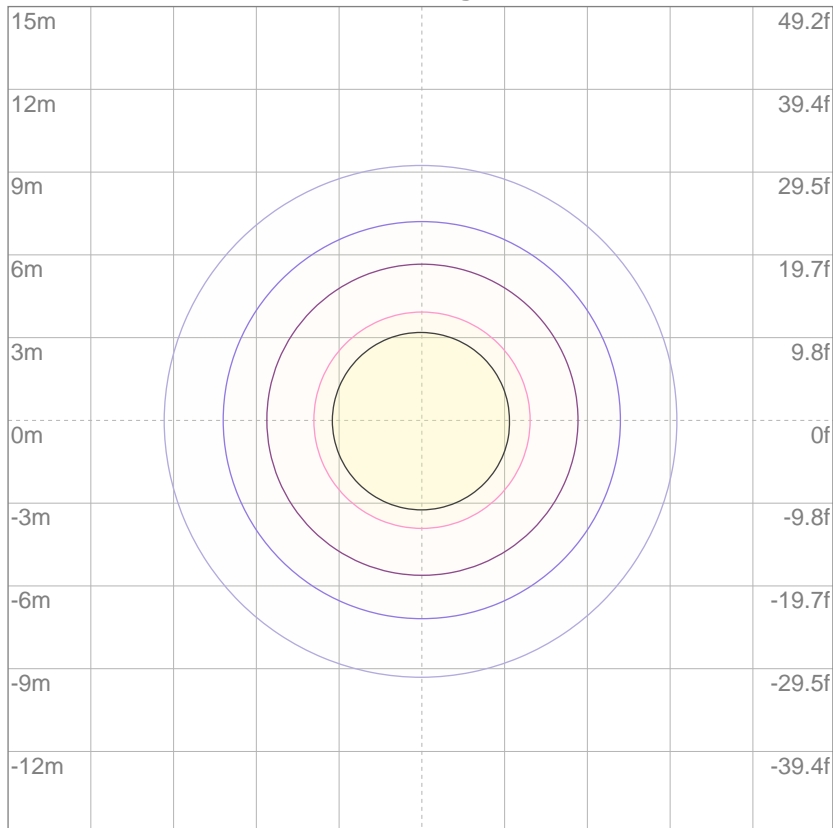
10%	2980 cd
20%	5960 cd
30%	8939 cd
40%	11919 cd
50%	14899 cd
60%	17879 cd
70%	20858 cd
80%	23838 cd
90%	26818 cd

Conditions:

Number of c-planes: 4

Candela at center: 29798 cd

**ISO lux diagram**



3%	8.94 lx
5%	14.9 lx
10%	29.8 lx
30%	89.4 lx
50%	149 lx

Conditions:

Number of c-planes: 4

Lux at center: 298 lx

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

Mounting height: 10 meters (33 feet)

**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
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				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 13757 lm total luminous flux										

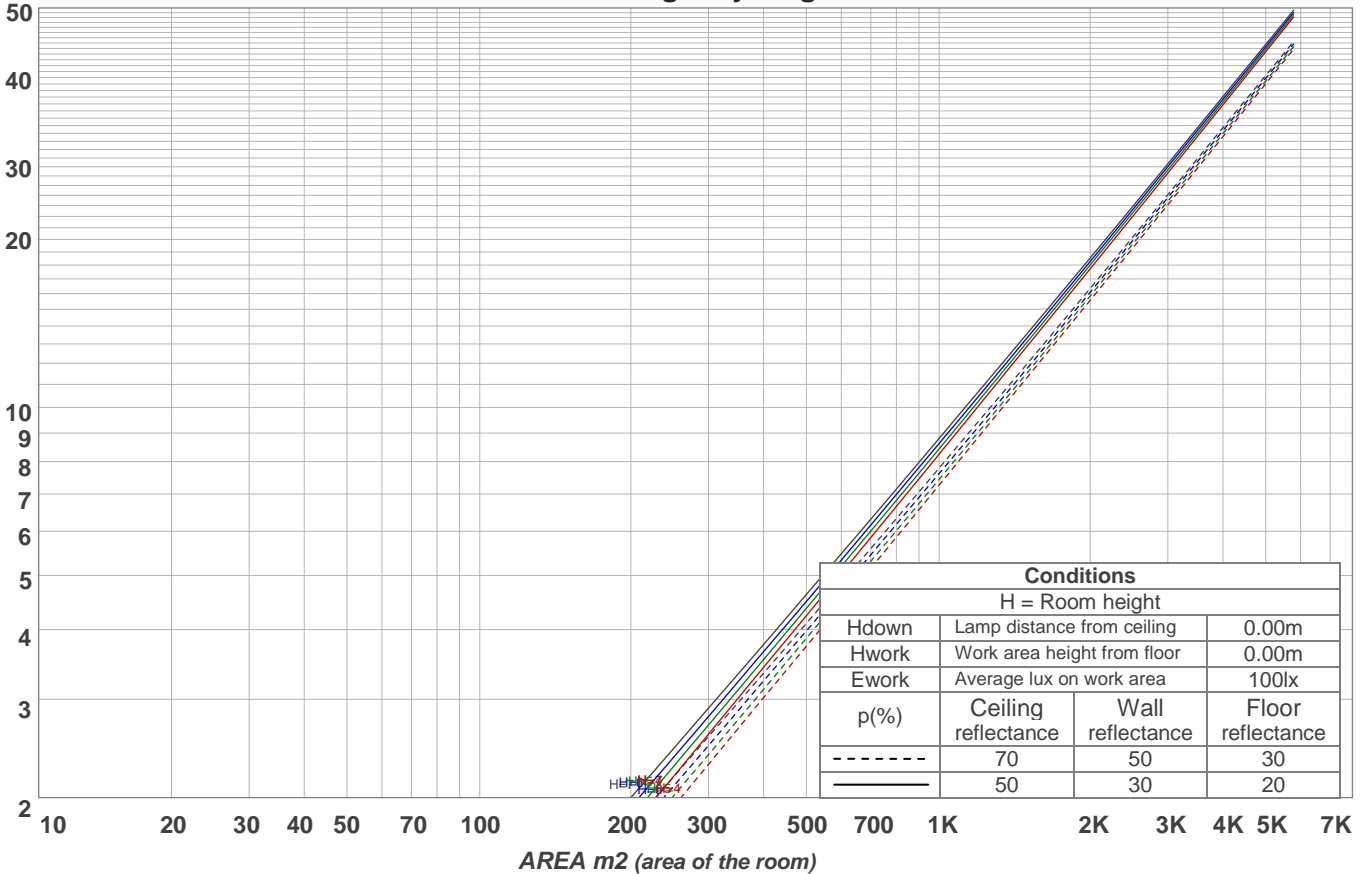
UGR error. Make sure you have installed the LDT editor from Dialux.

**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	0
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																		
	Room Values are expressed as percentage of Lumens delivered to the task surface																		
<b>0</b>	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97	
<b>1</b>	113	110	108	106	110	108	106	104	103	102	100	99	98	97	95	94	93	91	
<b>2</b>	108	103	99	96	105	101	98	95	98	95	92	94	92	90	91	89	88	86	
<b>3</b>	103	97	92	89	101	95	91	88	92	89	86	90	87	84	87	85	83	81	
<b>4</b>	98	91	86	82	97	90	85	82	88	84	81	85	82	79	83	81	78	77	
<b>5</b>	94	87	81	77	93	86	81	77	84	79	76	82	78	75	80	77	74	73	
<b>6</b>	90	82	77	73	89	81	76	73	80	75	72	78	74	71	77	73	71	69	
<b>7</b>	87	79	73	69	85	78	73	69	76	72	69	75	71	68	74	70	68	66	
<b>8</b>	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	67	65	63	
<b>9</b>	80	72	67	63	79	71	66	63	70	66	63	69	65	62	68	65	62	61	
<b>10</b>	78	69	64	61	77	69	64	60	68	63	60	67	63	60	66	62	60	58	

LAMPS (number of lamps)

**Luminaire budgetary diagram**



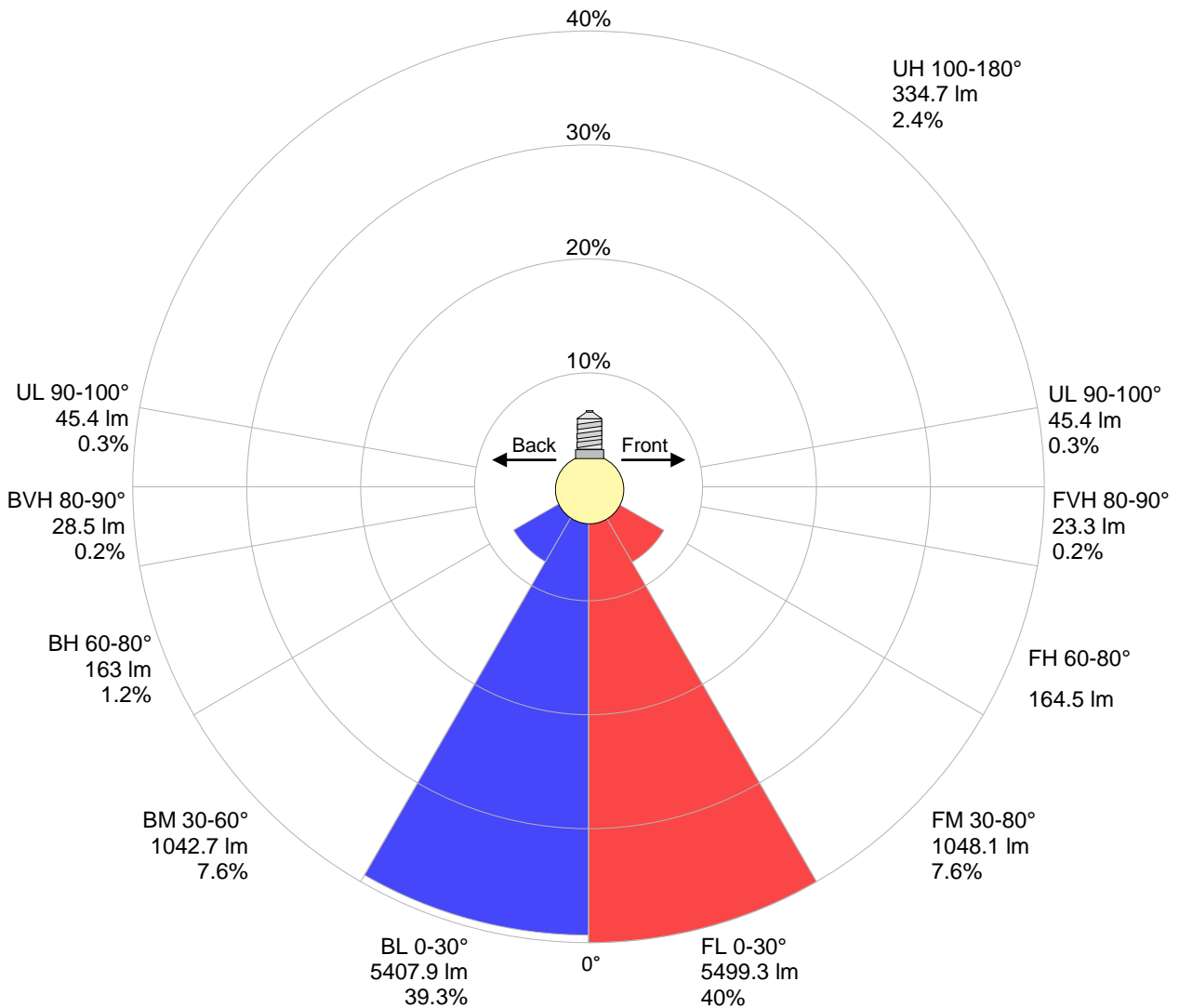
**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
2701 lm	5490 lm	2717 lm	1048 lm	631 lm	411 lm	230 lm	98.3 lm	51.0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
45.4 lm	43.3 lm	44.1 lm	51.4 lm	57.4 lm	55.9 lm	45.7 lm	27.8 lm	9.11 lm

LCS table

BUG rating:	B5 U3 G1	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	5499.3	40%
Medium(30-60):	1048.1	7.6%
High(60-80):	164.5	1.2%
Very high(80-90):	23.3	0.2%
<b>Back light</b>		
Low(0-30):	5407.9	39.3%
Medium(30-60):	1042.7	7.6%
High(60-80):	163	1.2%
Very high(80-90):	28.5	0.2%
<b>Uplight</b>		
Low(90-100):	45.4	0.3%
High(100-180):	334.7	2.4%

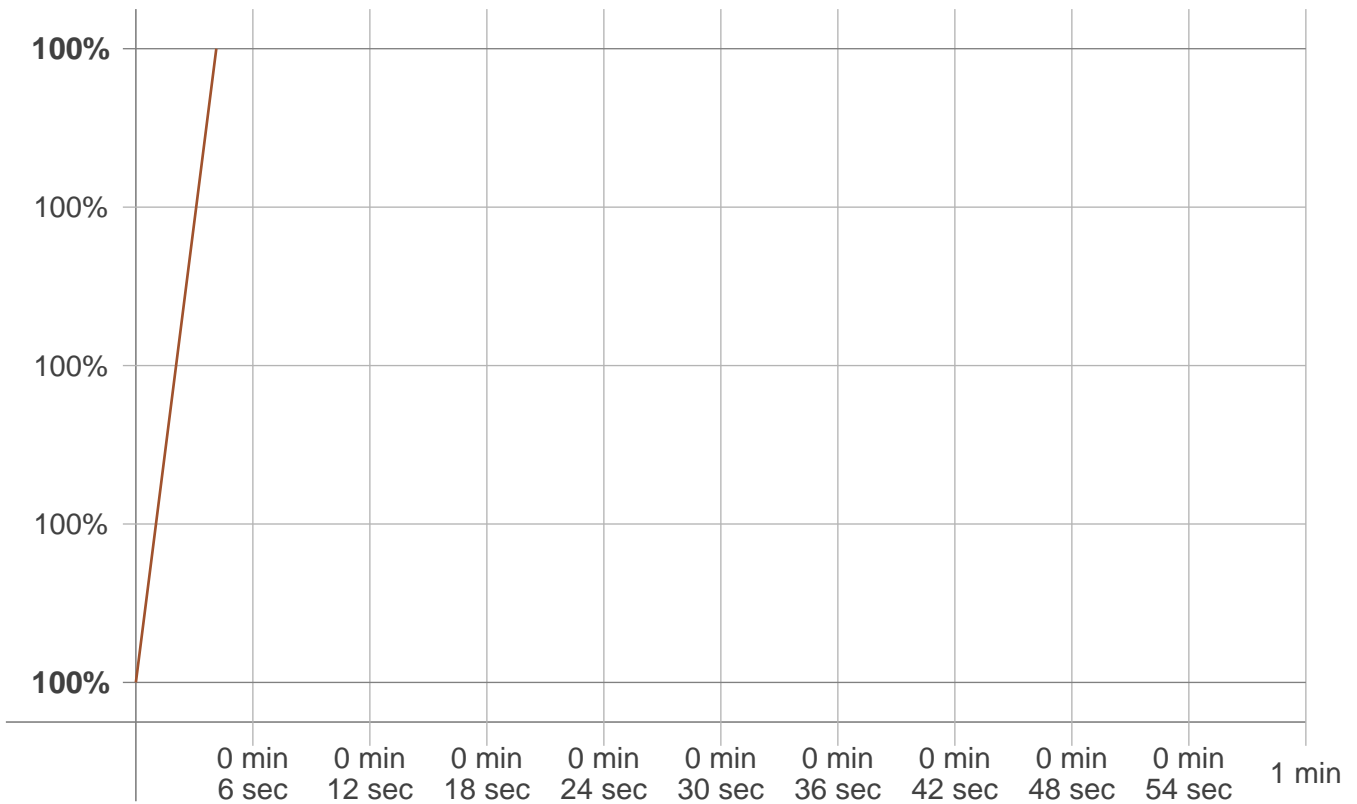
LCS graph





**Stabilization**

**Warmup curve**



**Warmup result**

<b>Warmup time:</b>	<b>Not completed</b>
<b>Warmup variation</b>	<b>+0.0%</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**

<b>CCT start</b>	<b>CCT change</b>	<b>CCT end</b>
<b>9091 K</b>	<b>-3 K</b>	<b>9088 K</b>

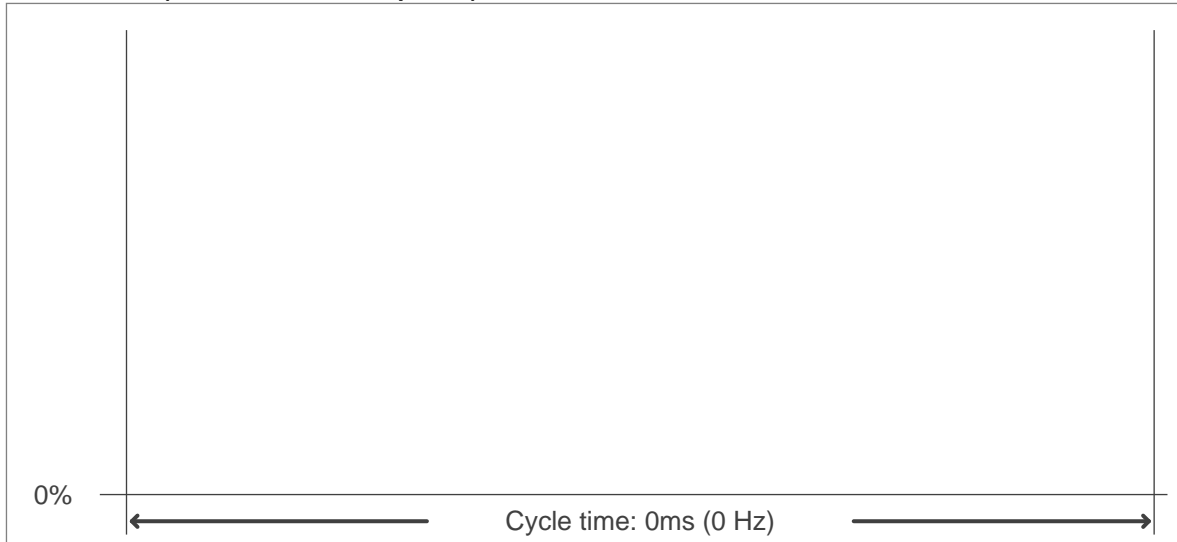
**Output change**

<b>Output start</b>	<b>Output change</b>	<b>Output end</b>
<b>13756 lm</b>	<b>+1 lm</b>	<b>13757 lm</b>

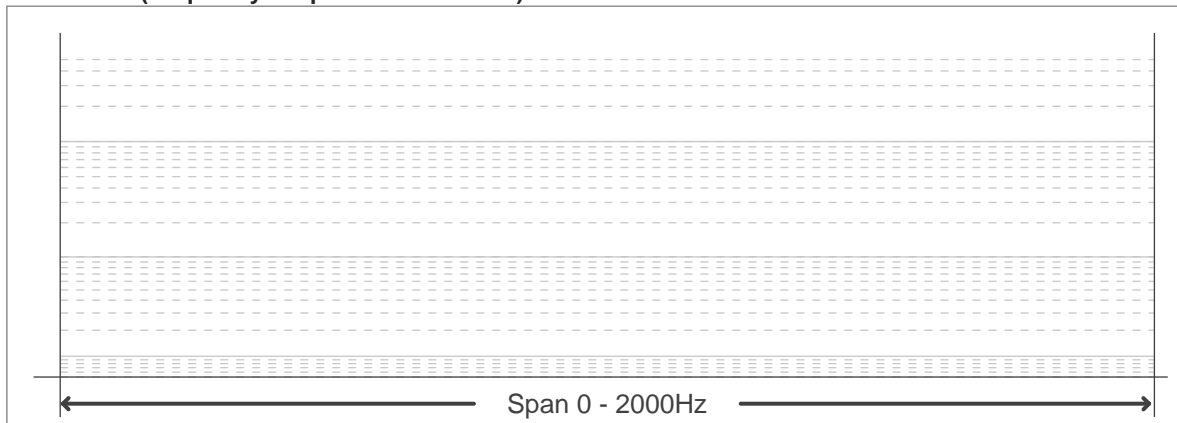
**Flicker curve (complete sampled flicker signal)**



**Flicker frame (frame of one flicker period)**



**Flicker FFT (frequency scope of flicker curve)**



**Flicker results:**

<b>Flicker frequency:</b>	<b>n/a Hz</b>
<b>Flicker index:</b>	<b>n/a</b>
<b>Flicker percentage:</b>	<b>n/a %</b>
<b>SVM: (Visual flicker)</b>	<b>n/a</b>

**Flicker conditions:**

<b>Sample rate:</b>	<b>0 samples/second</b>
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