

### Light efficiency:

**49 Lumen/Watt**

### Light quality:

**CRI: 0,0**

### Color temperature:

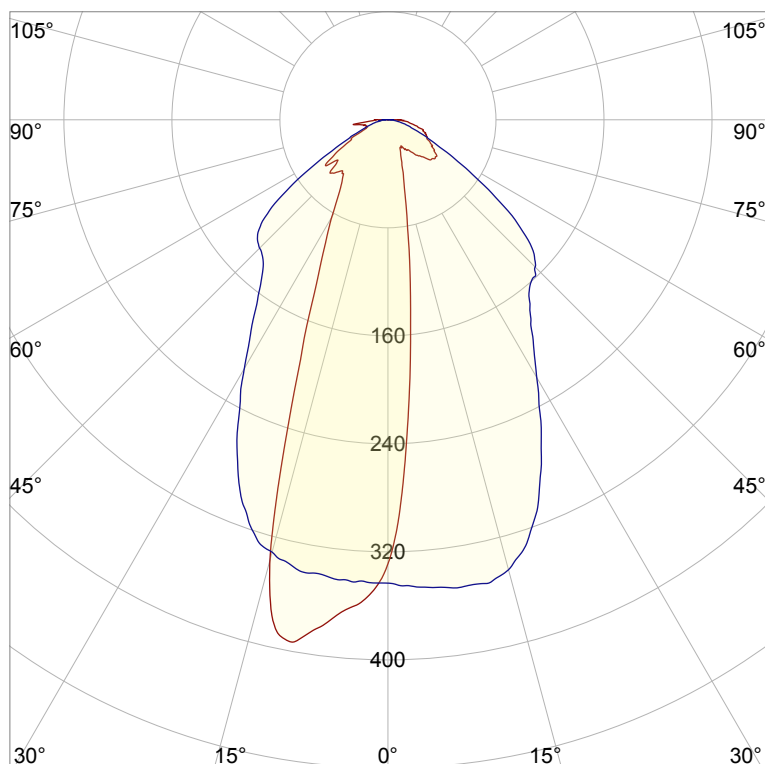
**0 K**

**Output: 377 lm**

**Peak: 440 cd**

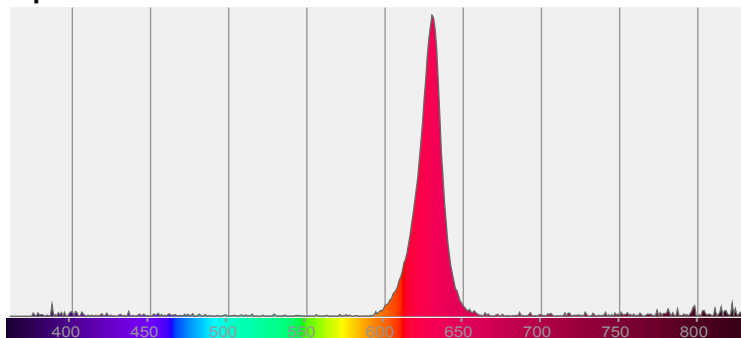
**Power: 7,7 W**

**PF: 1,0**

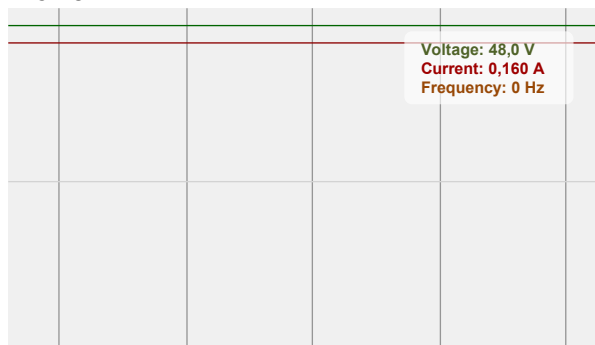


**CIE 1931**  
**x: 0,680**  
**y: 0,300**

### Spectra



### Power



### Product name:

**Defiant-0508-XXR-LAF-2**

### Item number:

**FLNP/L22A0508/XXR/LAF-2**

### Date and time:

**10.07.2020 09:04:24**

### Description:

**Rank: R2G2B4/RC2GA2BA5/A**

**Toleranzen:**

**Lumen +/-4%**

**Candela +/-2,5%**

**Colour Temp +/-35 K**

**CRI +/-0,7**

**Angular Resolution 1 Grad Step**

**Last Calibration 20.05.2020**

**Pruefer:**

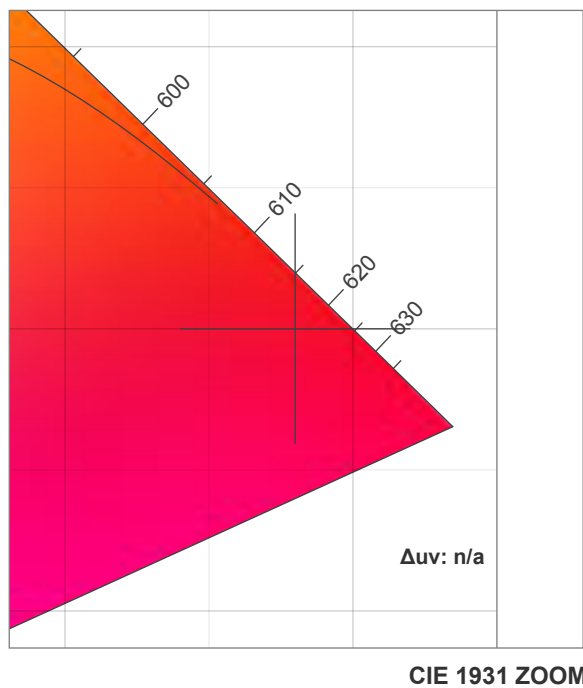
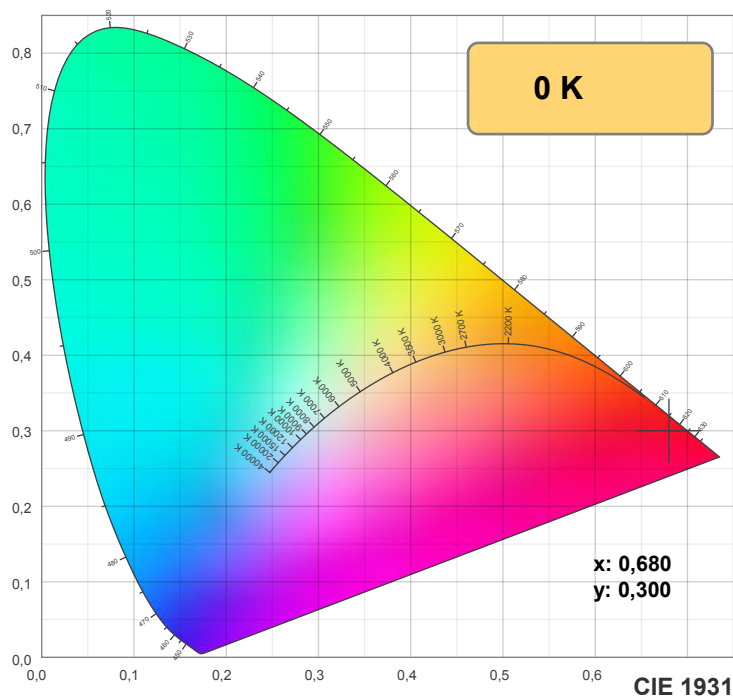
**Peter Ulrich**

**Pruefort:**

**Lichtlabor**

**Gaustrasse 13**

**55411 Bingen am Rhein**



**TM30: 0,0**

**CRI: 0,0 (R1-R8)**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15	

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
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

**CQS: 0,0**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	

## 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	$\Delta uv$
0 K	0,0	0,0	0,0	0,0	0,0	0,680	0,300	0,519	0,344	n/a

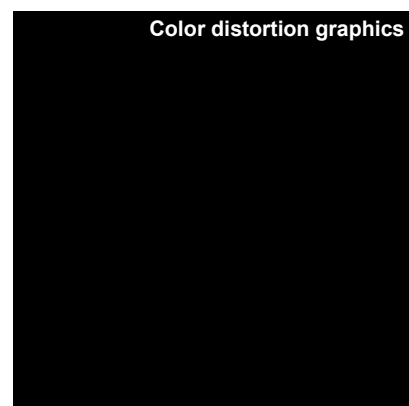
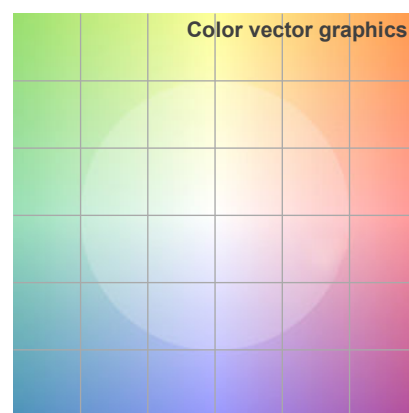
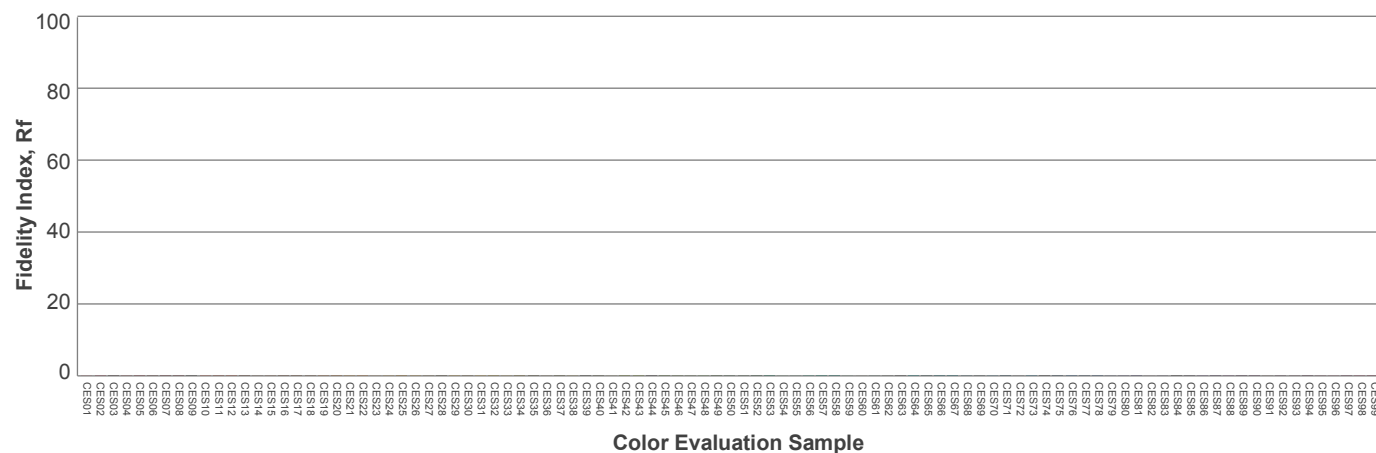
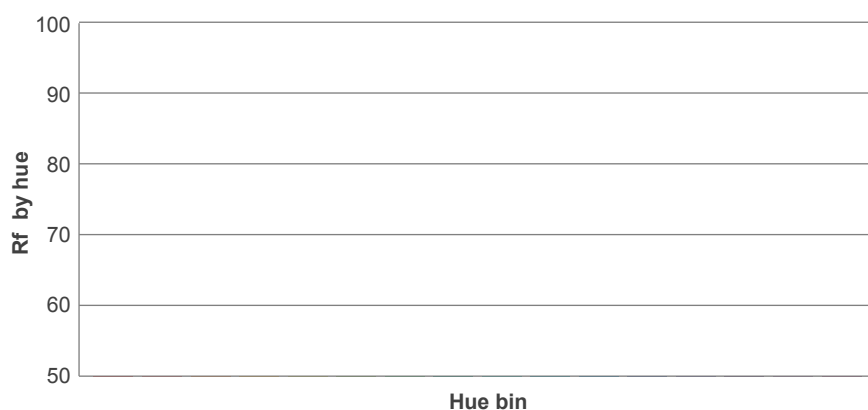
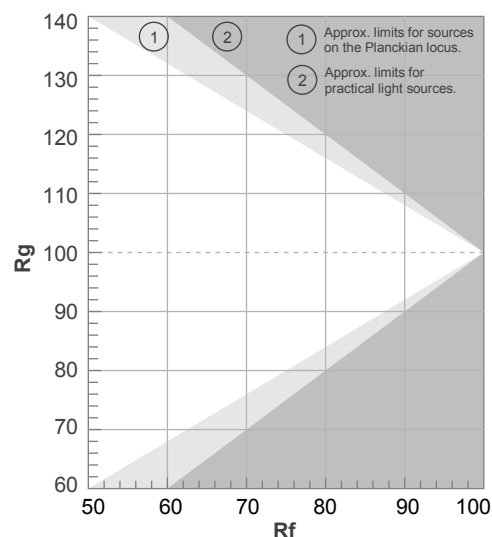
## Rf 0,0

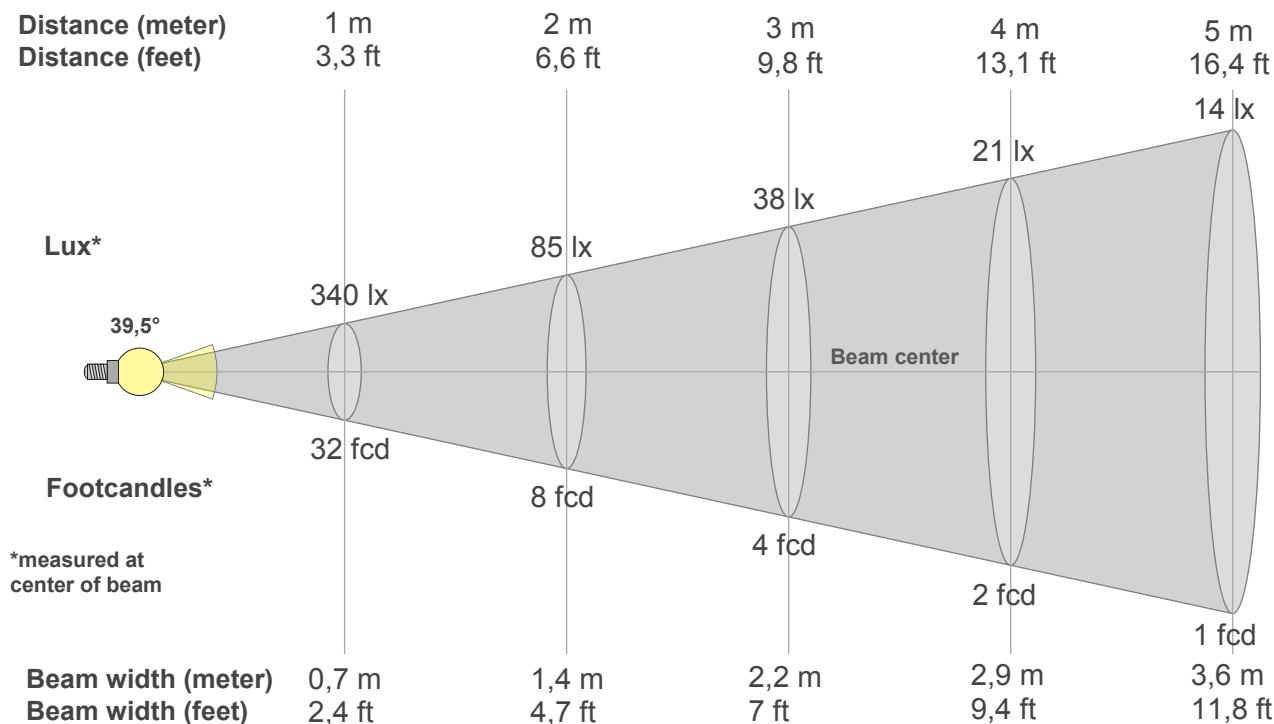
Fidelity index Rf

## Rg 0,0

Gammut index Rg

		Graphic shifts (%)	
Hue Bin	R <sub>f</sub>	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	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
340lx	85lx	38lx	21lx	14lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
31,6fcd	7,9fcd	3,5fcd	2fcd	1,3fcd	0,9fcd	0,6fcd	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°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
340	281	217	161	118	86	64	50	41	33	28	24	22	23	23	25	27	27	29	32
100%	83%	64%	47%	35%	25%	19%	15%	12%	10%	8%	7%	7%	7%	7%	7%	8%	8%	9%	10%

## 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°
340	345	347	348	350	350	351	347	340	331	316	299	279	259	238	220	205	191	180	170
100%	101%	102%	102%	103%	103%	103%	102%	100%	97%	93%	88%	82%	76%	70%	65%	60%	56%	53%	50%

## Intensities in 180° c-plane

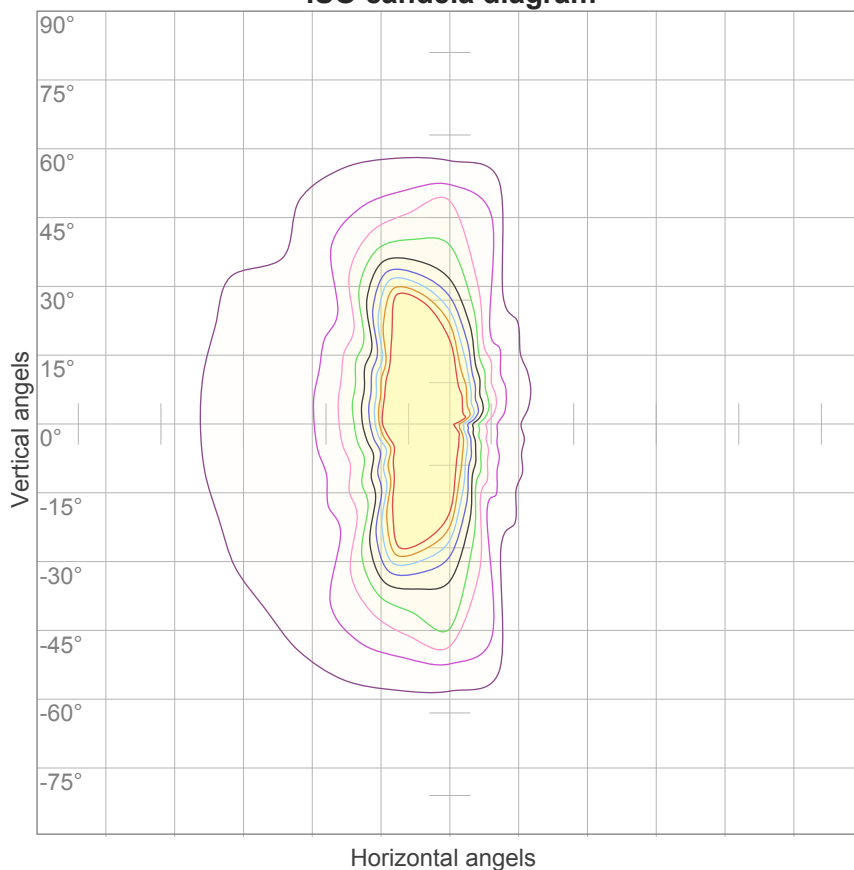
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
340	350	361	370	381	392	389	361	306	240	189	155	127	109	95	83	72	64	58	54
100%	103%	106%	109%	112%	115%	114%	106%	90%	71%	56%	46%	37%	32%	28%	24%	21%	19%	17%	16%

## 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°
340	343	343	343	341	341	338	335	330	322	308	293	274	254	233	213	194	178	164	153
100%	101%	101%	101%	100%	100%	99%	98%	97%	94%	90%	86%	81%	75%	68%	62%	57%	52%	48%	45%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39,5°	98,8°	174,5°	83,1%	65,2%

### ISO candela diagram



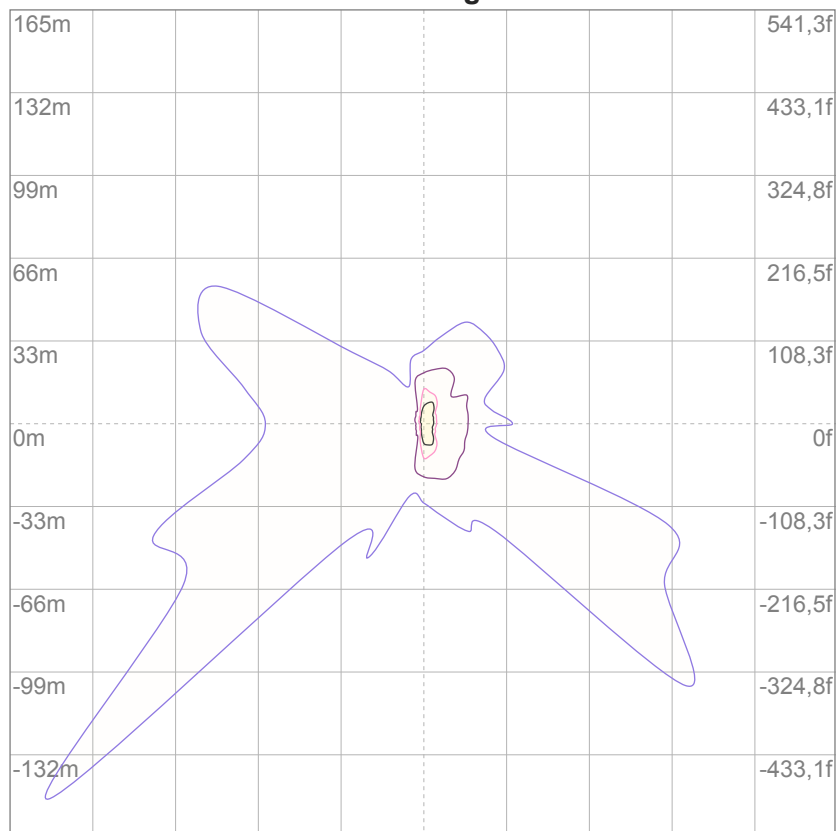
10%	34 cd
20%	68 cd
30%	102 cd
40%	136 cd
50%	170 cd
60%	204 cd
70%	238 cd
80%	272 cd
90%	306 cd

#### Conditions:

Number of c-planes: 16

Candela at center: 340 cd

### ISO lux diagram



3%	0,102 lx
5%	0,170 lx
10%	0,340 lx
30%	1,02 lx
50%	1,70 lx

#### Conditions:

Number of c-planes: 16

Lux at center: 3,40 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
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 377 lm total luminous flux										

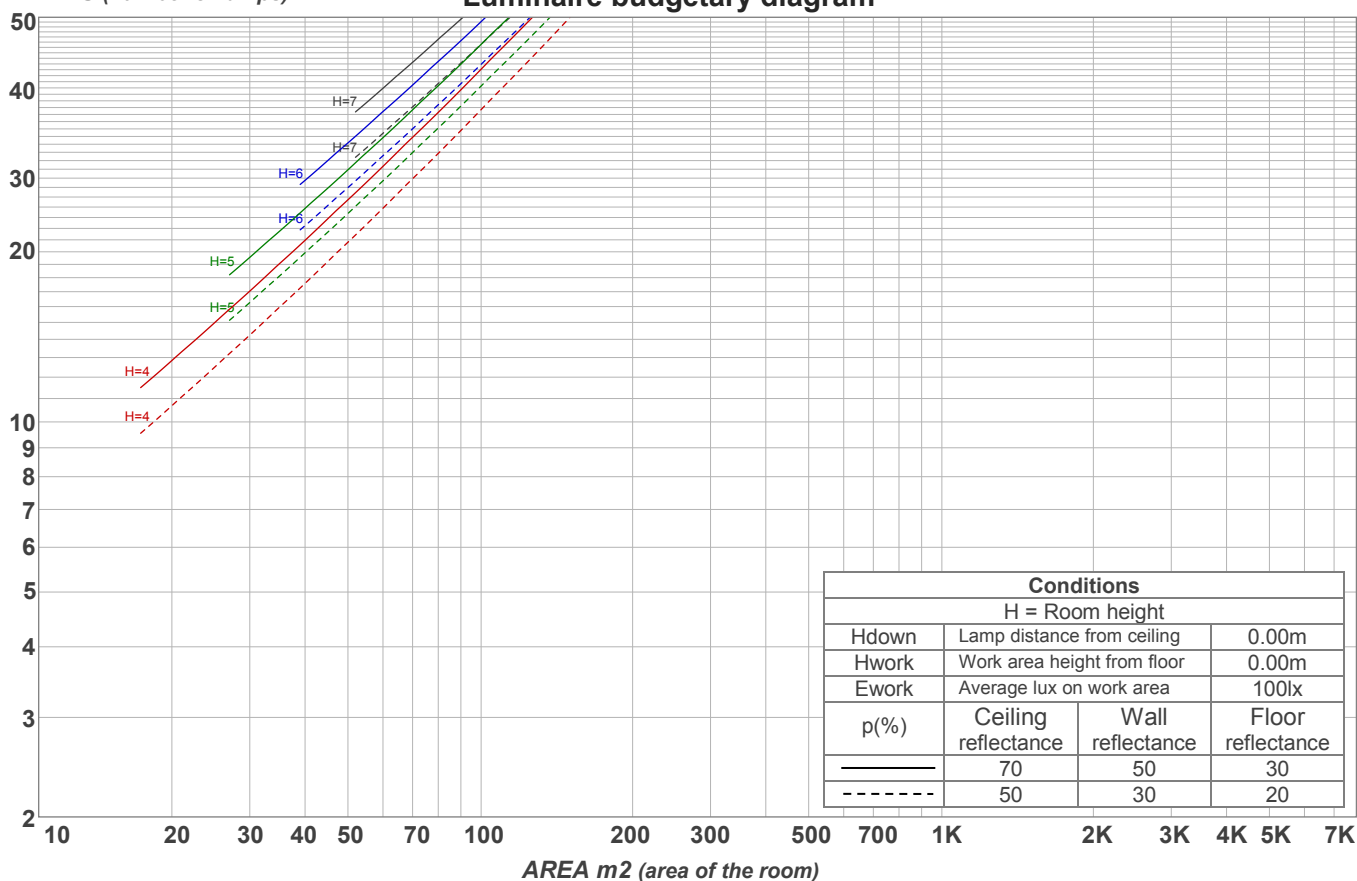
UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

## 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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65
4	87	76	68	62	85	75	68	62	73	66	61	70	65	60	68	64	60	58
5	81	70	62	56	79	69	61	55	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40
9	63	51	44	39	62	51	44	39	50	43	39	49	43	39	48	42	38	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

LAMPS (number of lamps)

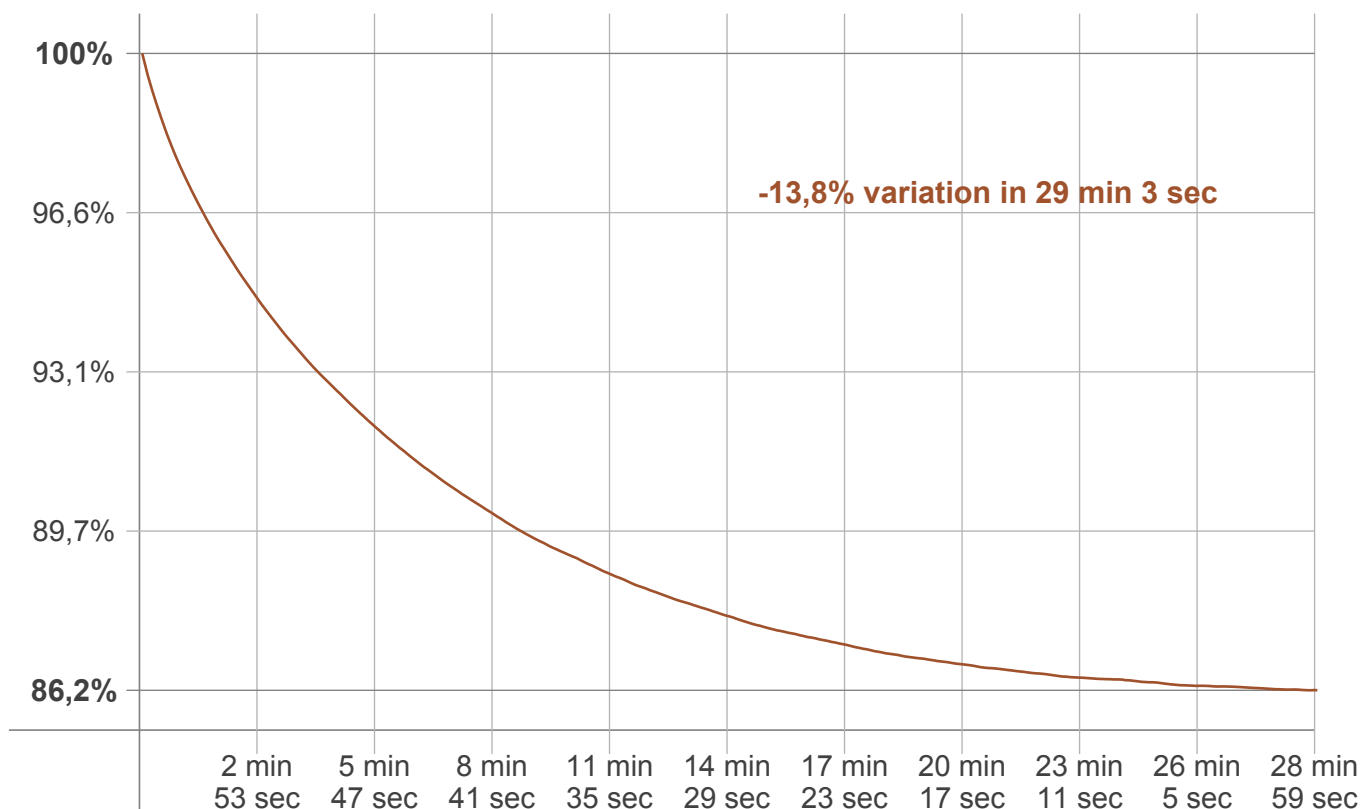
Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
29,2 lm	66,7 lm	68,5 lm	56,7 lm	49,5 lm	42,9 lm	29,0 lm	20,0 lm	14,7 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,033 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm

### Warmup curve



### Warmup result

Warmup time:	29 min 3 sec
Warmup variation	-14,0%

### Warmup conditions

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

### Color temperature change

CCT start	CCT change	CCT end
0 K	0 K	0 K

### Output change

Output start	Output change	Output end
434 lm	-57 lm	377 lm