

Light efficiency:

44 Lumen/Watt

Light quality:

CRI: 0,0

Color temperature:

0 K

Output: 335 lm

Peak: 137 cd

Power: 7,7 W

PF: 1,0



Product name:

Defiant-0508-XXB-L9F

Item number:

FLNP/L22A0508/XXB/L9F

Date and time:

06.07.2020 16:05:38

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:

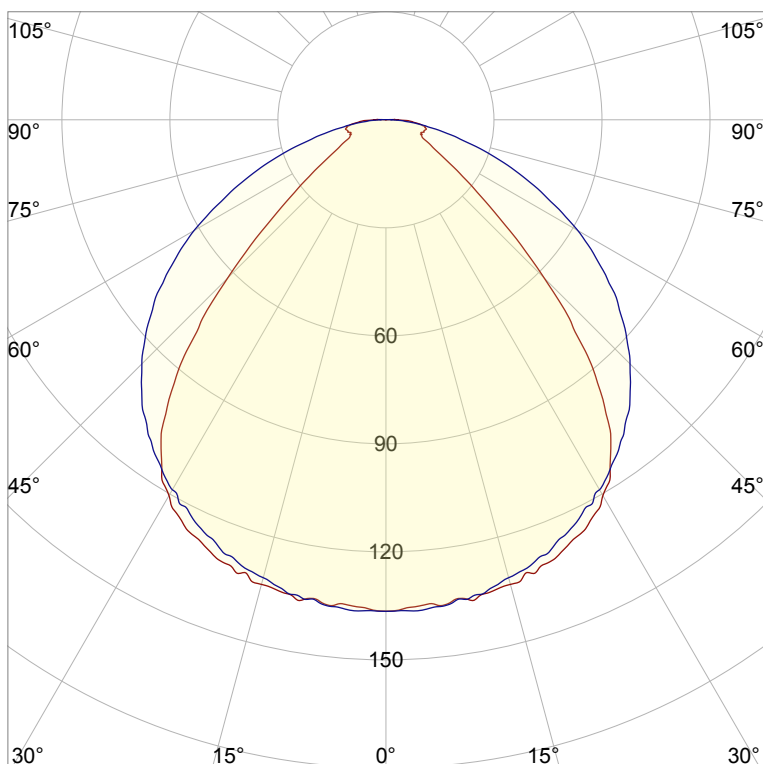
Peter Ulrich

Pruefort:

Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

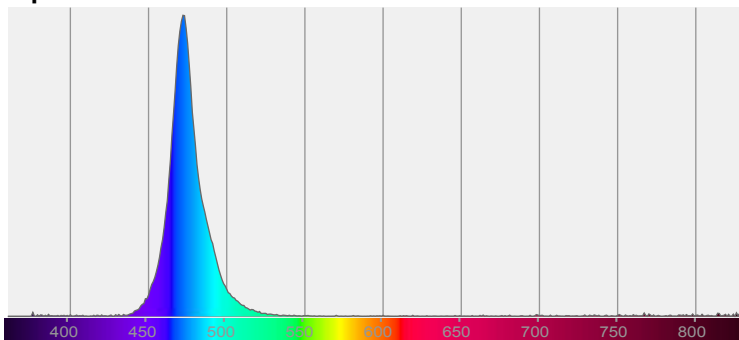


CIE 1931

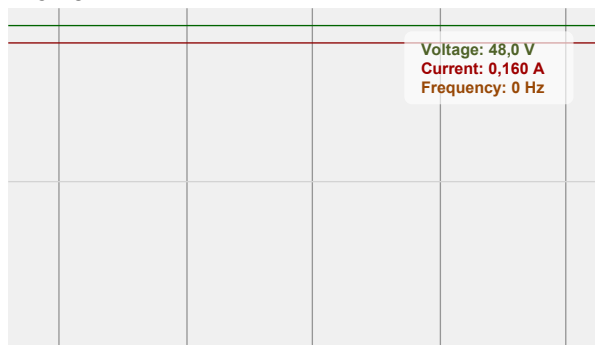
x: 0,118

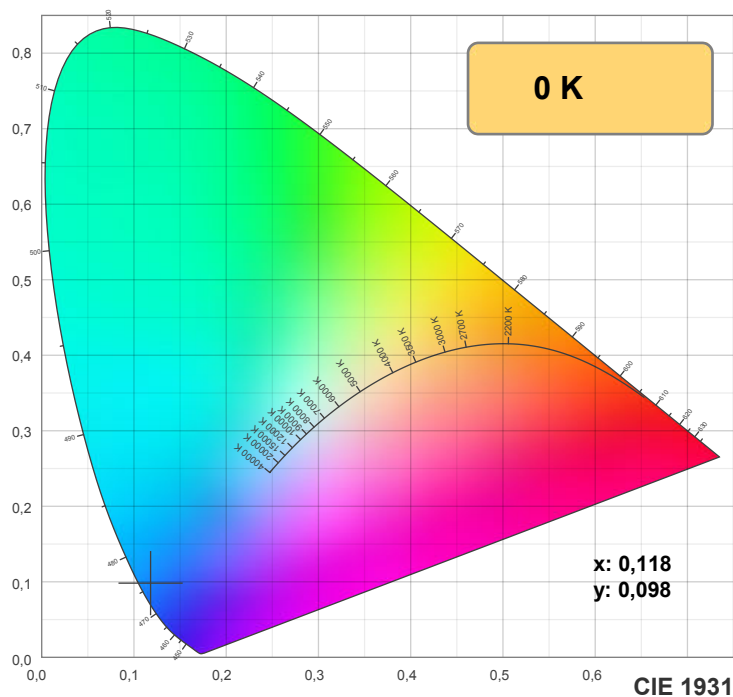
y: 0,098

Spectra



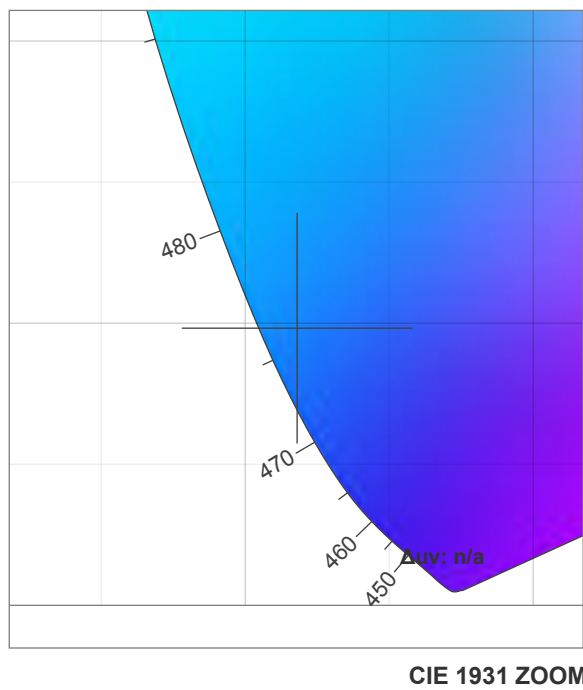
Power





TM30: 0,0

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



CRI: 0,0 (R1-R8)

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	

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	

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

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
0 K	0,0	0,0	0,0	0,0	0,0	0,118	0,098	0,120	0,149	n/a

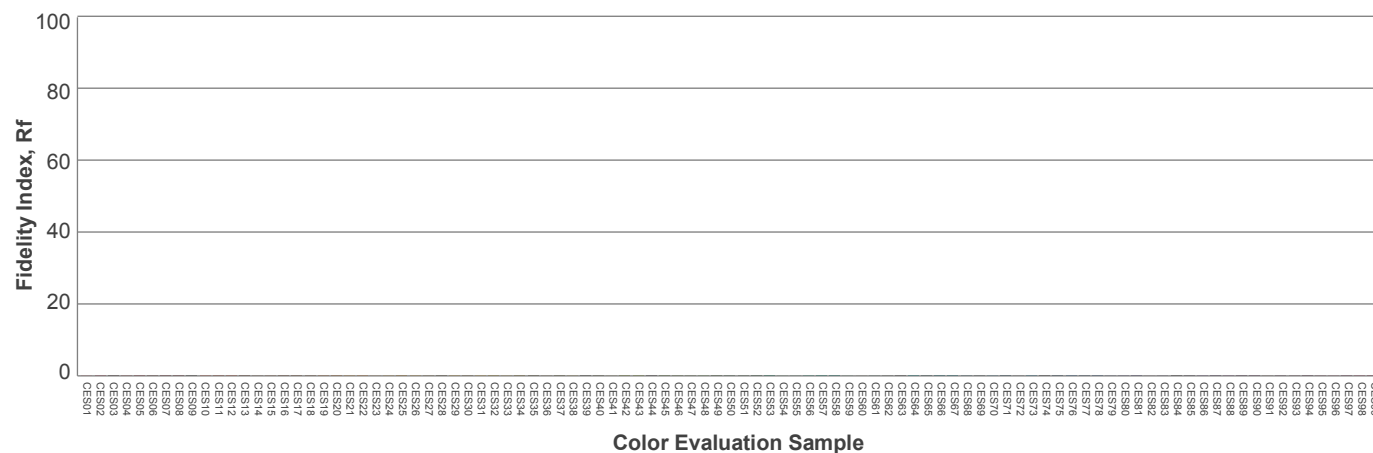
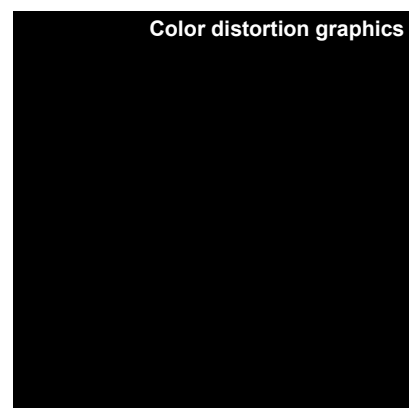
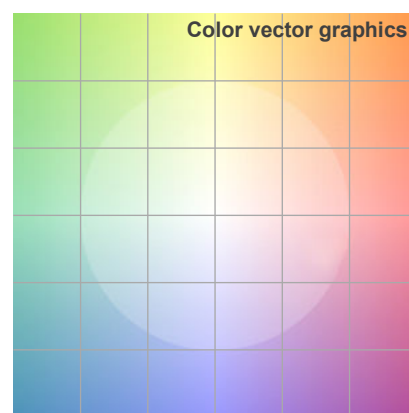
Rf 0,0

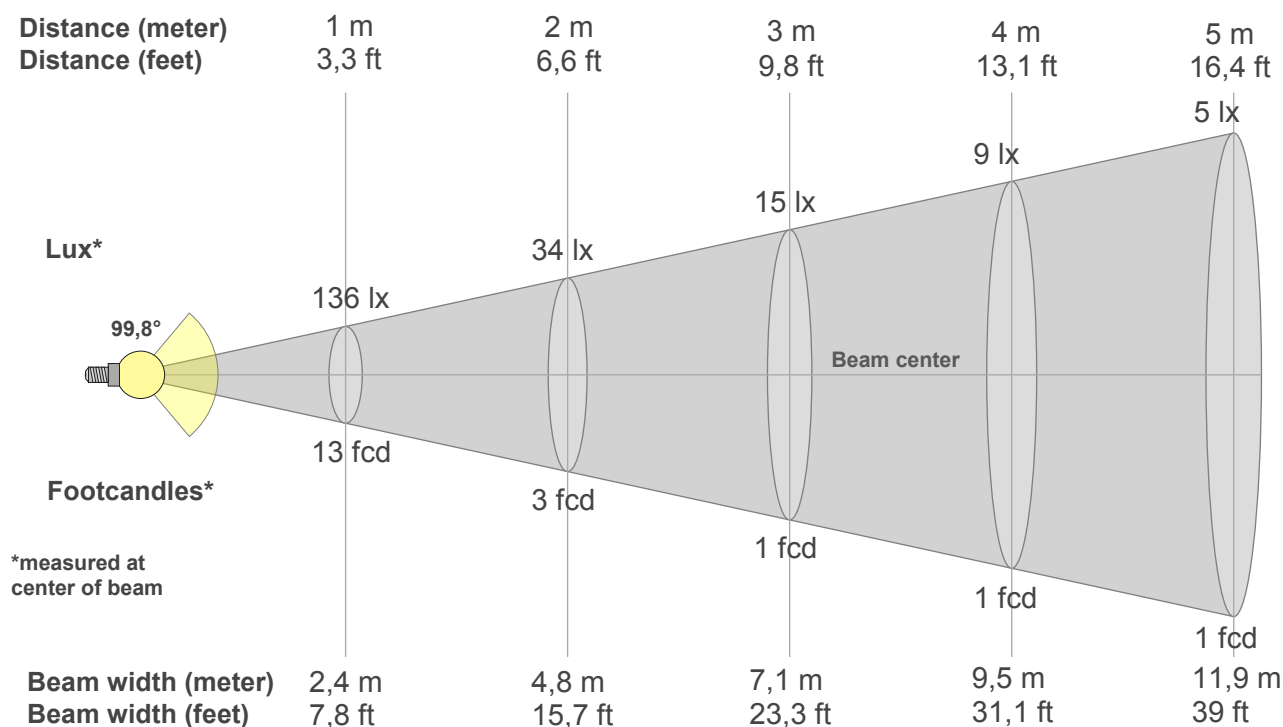
Fidelity index Rf

Rg 0,0

Gammut index Rg

		Graphic shifts (%)	
Hue Bin	R _f	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
136lx	34lx	15lx	9lx	5lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx
12,7fcd	3,2fcd	1,4fcd	0,8fcd	0,5fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd	0fcd	0fcd	0fcd	0fcd

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°
136	135	135	134	131	127	121	109	89	62	38	23	15	11	10	11	11	8	3	0
100%	99%	99%	98%	96%	93%	88%	80%	65%	46%	28%	17%	11%	8%	8%	8%	8%	6%	2%	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°
136	136	135	132	129	124	119	112	105	96	86	74	61	48	35	22	13	6	1	0
100%	100%	99%	97%	94%	91%	87%	82%	77%	70%	63%	54%	45%	35%	26%	16%	9%	4%	1%	0%

Intensities in 180° c-plane

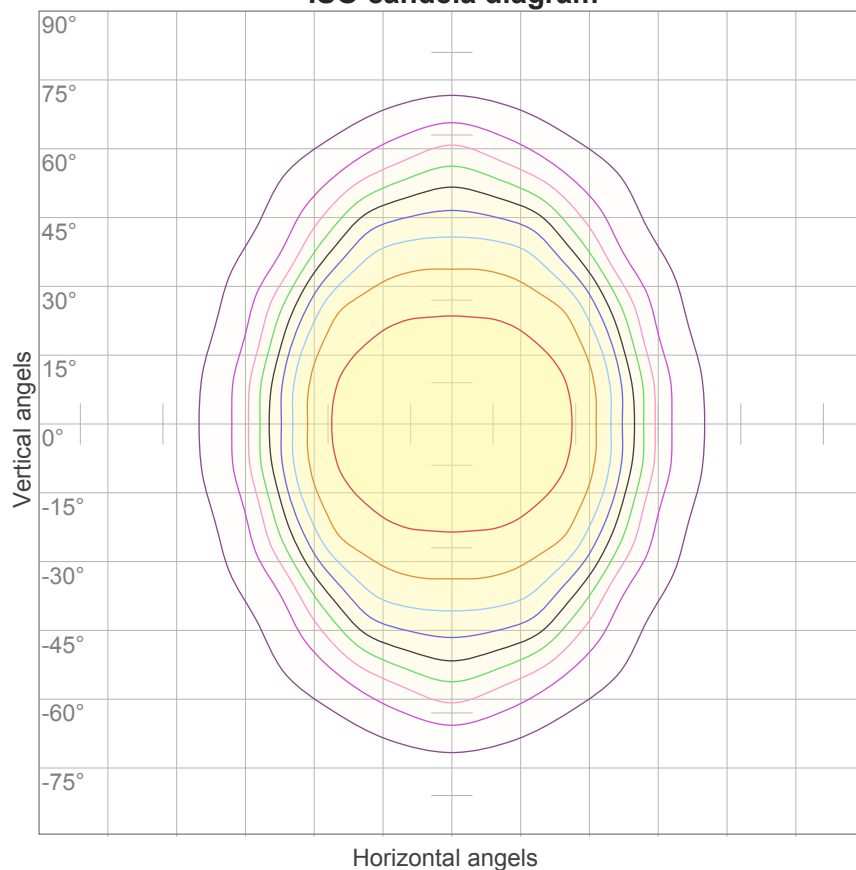
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
136	135	135	134	131	127	121	109	89	62	38	23	15	11	10	11	11	8	3	0
100%	99%	99%	98%	96%	93%	88%	80%	65%	46%	28%	17%	11%	8%	8%	8%	8%	6%	2%	0%

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°
136	136	135	132	129	124	119	112	105	96	86	74	61	48	35	22	13	6	1	0
100%	100%	99%	97%	94%	91%	87%	82%	77%	70%	63%	54%	45%	35%	26%	16%	9%	4%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
99,8°	137,6°	181°	84,4%	63,3%

ISO candela diagram



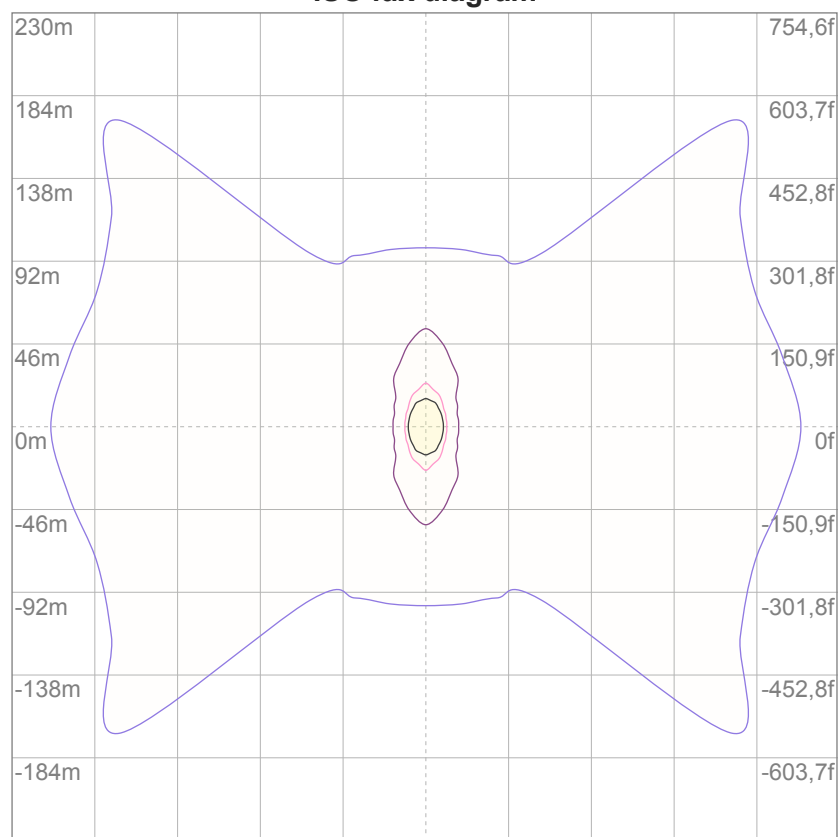
10%	14 cd
20%	27 cd
30%	41 cd
40%	55 cd
50%	68 cd
60%	82 cd
70%	95 cd
80%	109 cd
90%	123 cd

Conditions:

Number of c-planes: 16

Candela at center: 136 cd

ISO lux diagram



3%	40,9m lx
5%	68,1m lx
10%	0,136 lx
30%	0,409 lx
50%	0,681 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,36 lx

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

Glare Evaluation According to UGR

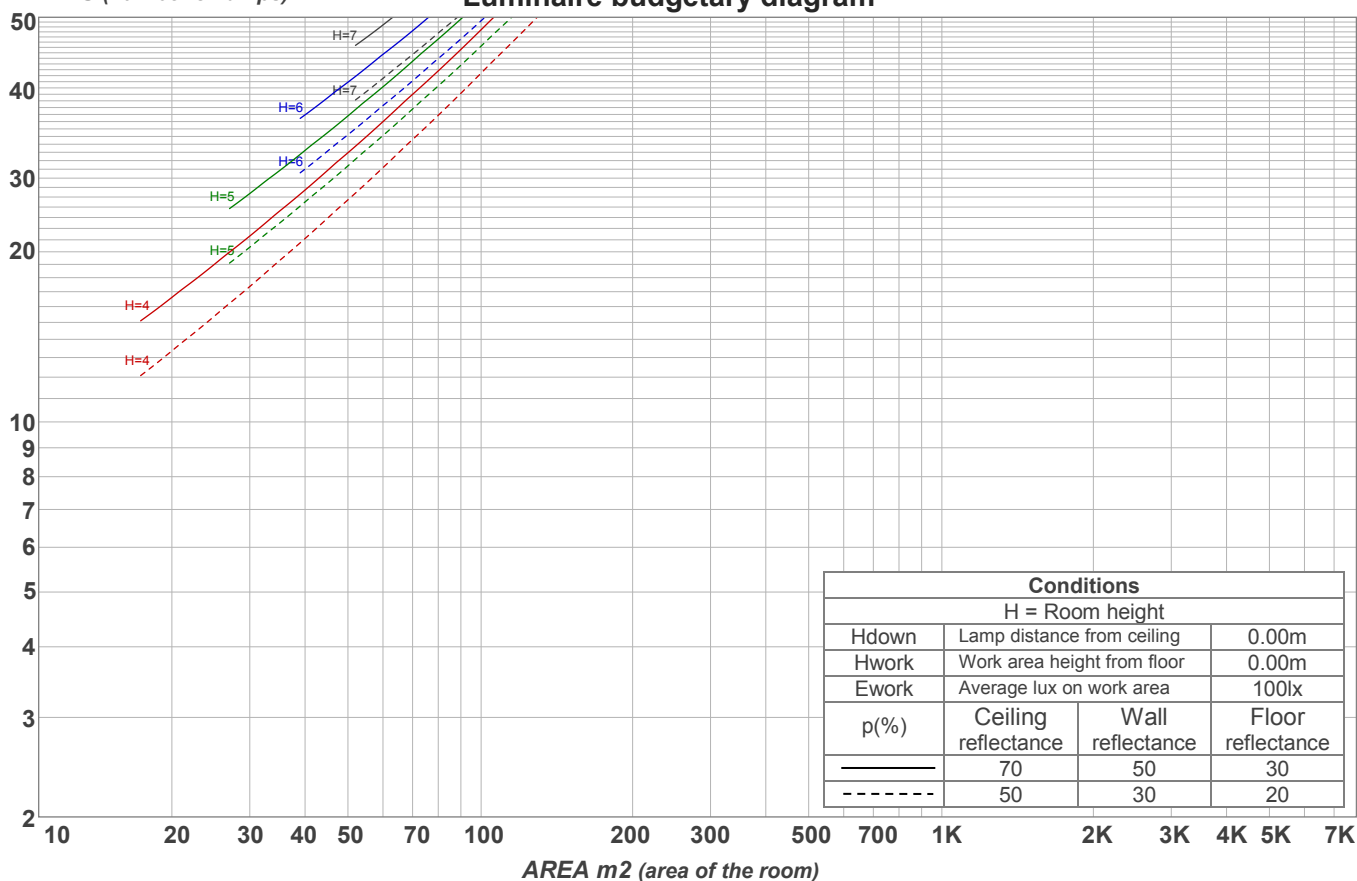
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	15,6	16,7	15,8	17,0	17,2	20,4	21,5	20,6	21,8	22,0
	3H	15,8	16,9	16,2	17,2	17,4	21,5	22,6	21,9	22,9	23,1
	4H	16,1	17,2	16,5	17,4	17,7	22,0	23,0	22,4	23,3	23,6
	6H	16,6	17,6	16,9	17,9	18,2	22,4	23,3	22,7	23,6	24,0
	8H	16,9	17,8	17,2	18,1	18,5	22,5	23,4	22,8	23,7	24,1
	12H	17,1	17,9	17,4	18,3	18,7	22,5	23,4	22,9	23,8	24,2
4H	2H	16,0	17,1	16,4	17,4	17,6	20,3	21,3	20,7	21,6	21,9
	3H	16,4	17,3	16,8	17,7	18,1	21,6	22,5	21,9	22,8	23,3
	4H	16,8	17,6	17,2	18,0	18,5	22,0	22,9	22,5	23,3	23,8
	6H	17,4	18,2	17,9	18,6	18,9	22,5	23,3	23,0	23,6	24,0
	8H	17,8	18,5	18,3	18,9	19,3	22,7	23,4	23,2	23,7	24,1
	12H	18,1	18,7	18,6	19,1	19,6	22,8	23,4	23,3	23,8	24,3
8H	4H	17,0	17,7	17,5	18,1	18,5	22,0	22,7	22,5	23,1	23,5
	6H	17,9	18,4	18,4	18,9	19,4	22,5	23,1	23,0	23,5	24,1
	8H	18,4	18,9	18,9	19,4	20,0	22,8	23,3	23,3	23,8	24,4
	12H	18,9	19,3	19,4	19,8	20,4	23,0	23,4	23,6	23,9	24,5
12H	4H	17,0	17,7	17,5	18,1	18,5	22,0	22,6	22,5	23,0	23,5
	6H	18,0	18,5	18,5	19,0	19,6	22,5	23,0	23,1	23,5	24,2
	8H	18,6	19,0	19,2	19,5	20,1	22,8	23,2	23,4	23,7	24,3
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,4 / -0,7					0,1 / -0,2				
S = 1.5H		1,1 / -1,1					0,7 / -1,0				
S = 2.0H		1,9 / -1,4					1,6 / -1,9				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 335 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	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100	97
1	109	105	101	97	106	102	99	96	98	95	92	93	91	89	89	88	86	84
2	100	93	87	82	98	91	85	80	87	82	78	83	79	76	80	77	74	72
3	92	83	75	69	90	81	74	69	78	72	67	75	70	66	72	68	64	62
4	85	74	66	60	83	73	65	59	70	64	58	67	62	57	65	60	56	54
5	79	67	59	52	77	66	58	52	63	57	51	61	55	51	59	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	47	41	53	46	41	51	45	40	50	44	40	38
8	63	51	43	37	62	50	42	37	48	41	37	47	41	36	46	40	36	34
9	59	47	39	34	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	36	30	54	42	35	30	41	35	30	40	34	30	39	34	30	28

LAMPS (number of lamps)

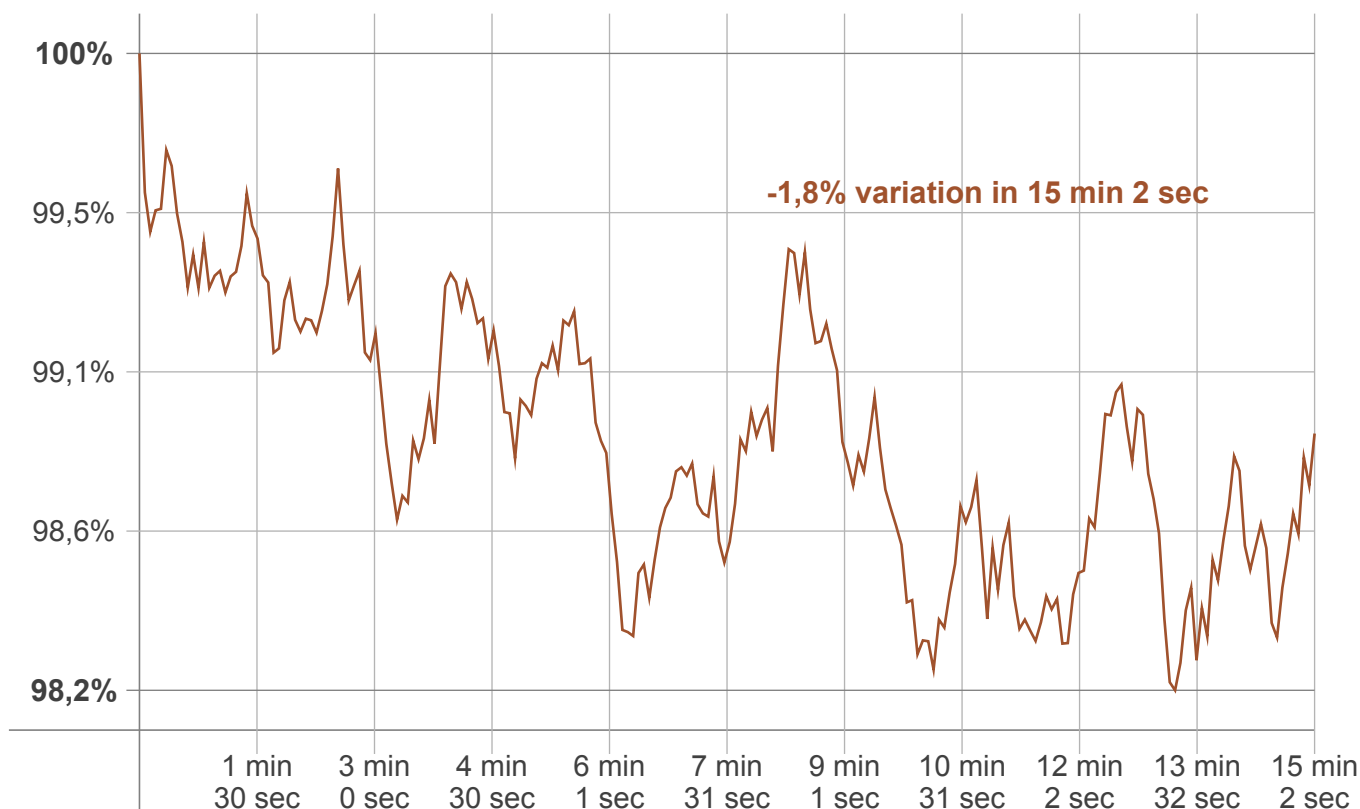
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
12,9 lm	37,4 lm	57,9 lm	70,1 lm	63,5 lm	41,2 lm	22,7 lm	13,5 lm	7,56 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,21 lm	1,69 lm	1,17 lm	0,977 lm	0,844 lm	0,684 lm	0,504 lm	0,309 lm	0,104 lm

Warmup curve



Warmup result

Warmup time:	15 min 2 sec
Warmup variation	-1,8%

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
337 lm	-2 lm	335 lm