

Light efficiency:

43 Lumen/Watt

Light quality:

CRI: 0,0

Color temperature:

0 K

Output: 333 lm

Peak: 480 cd

Power: 7,7 W

PF: 1,0



Product name:

Defiant-0508-XXB-L1F

Item number:

FLNP/L22A0508/XXB/L1F

Date and time:

08.07.2020 15:40:20

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:

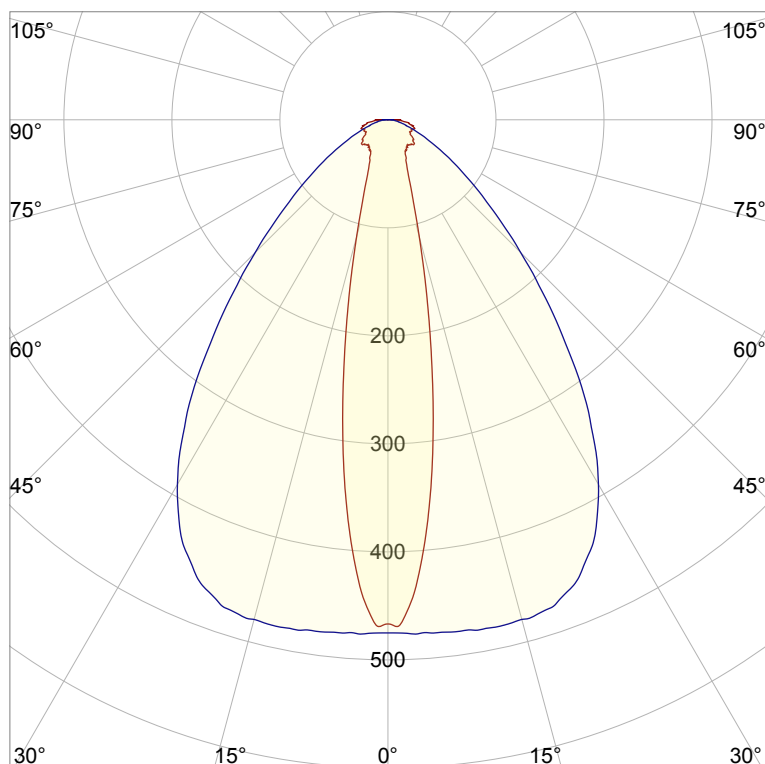
Peter Ulrich

Pruefort:

Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

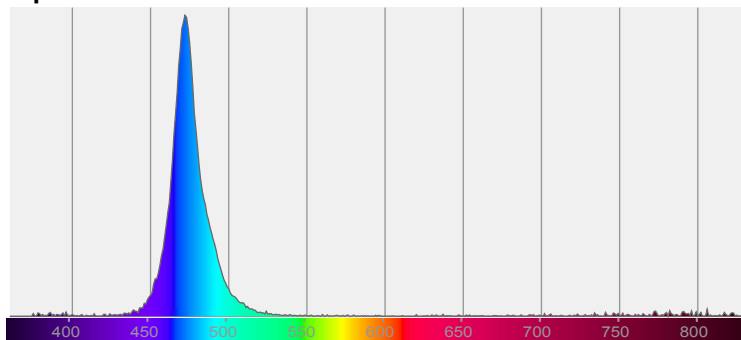


CIE 1931

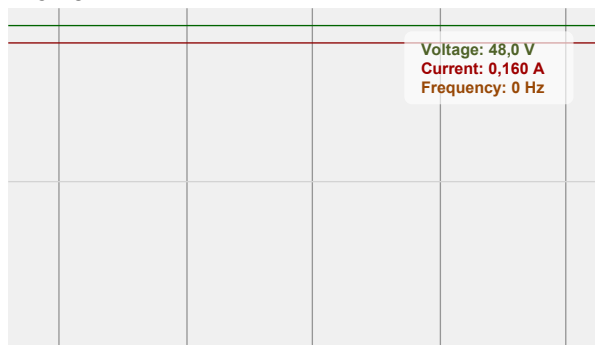
x: 0,119

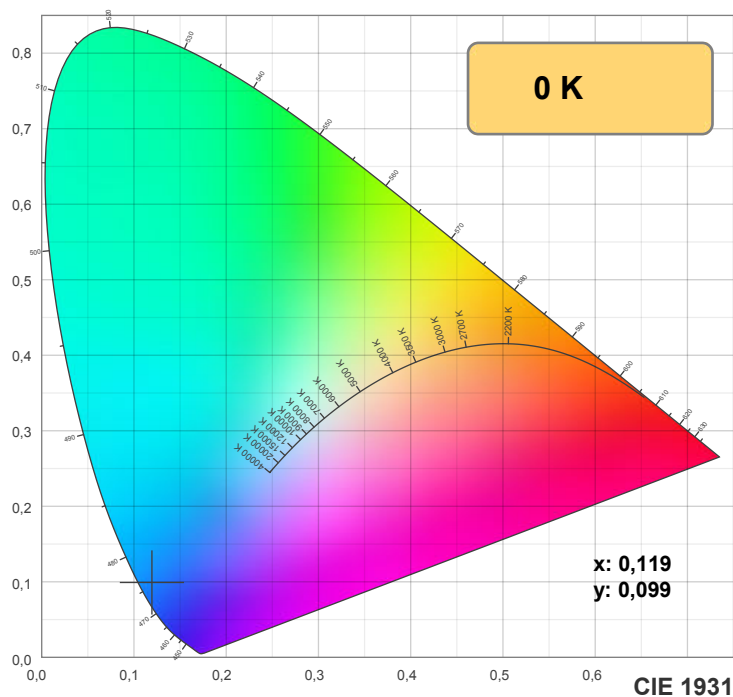
y: 0,099

Spectra

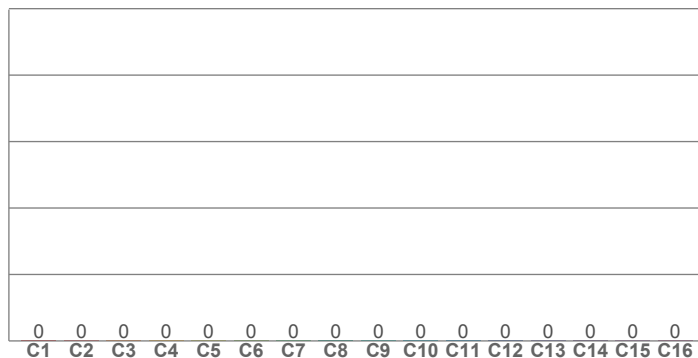


Power





TM30: 0,0



CRI R values, only R1-R8 are used to calculate final CRI value

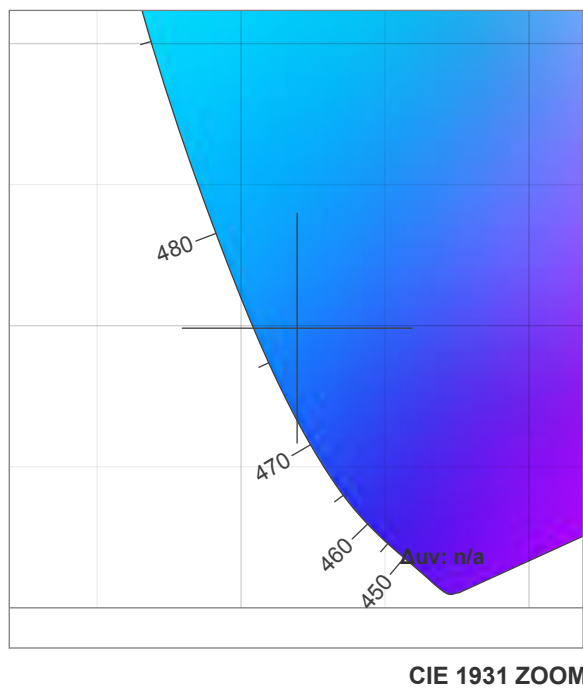
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

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

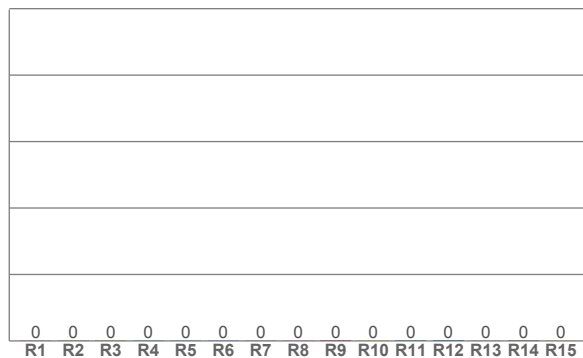
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS Q values

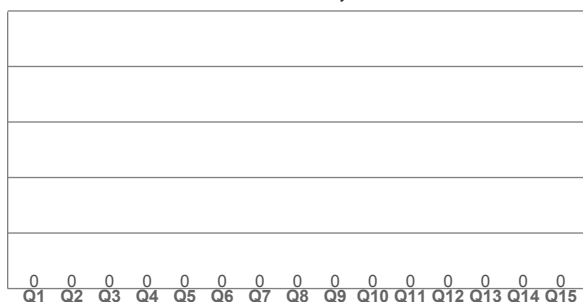
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0



CRI: 0,0 (R1-R8)



CQS: 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	0,119	0,099	0,121	0,151	n/a

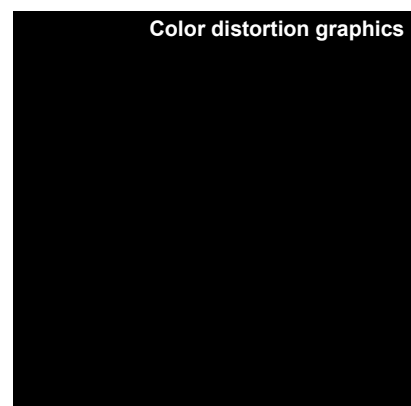
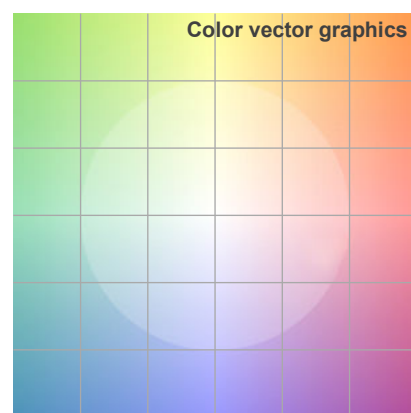
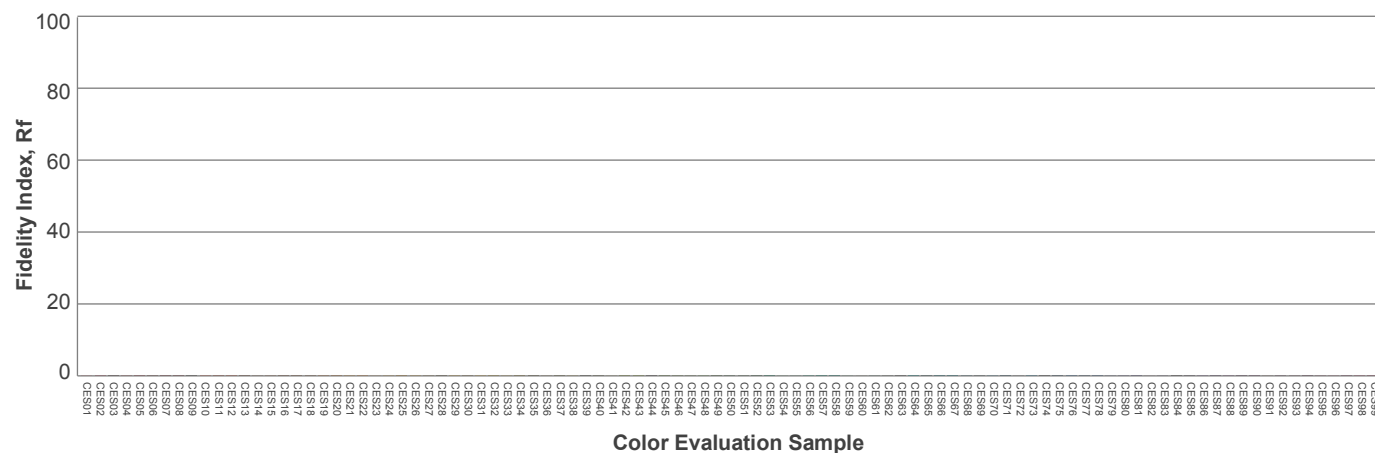
Rf 0,0

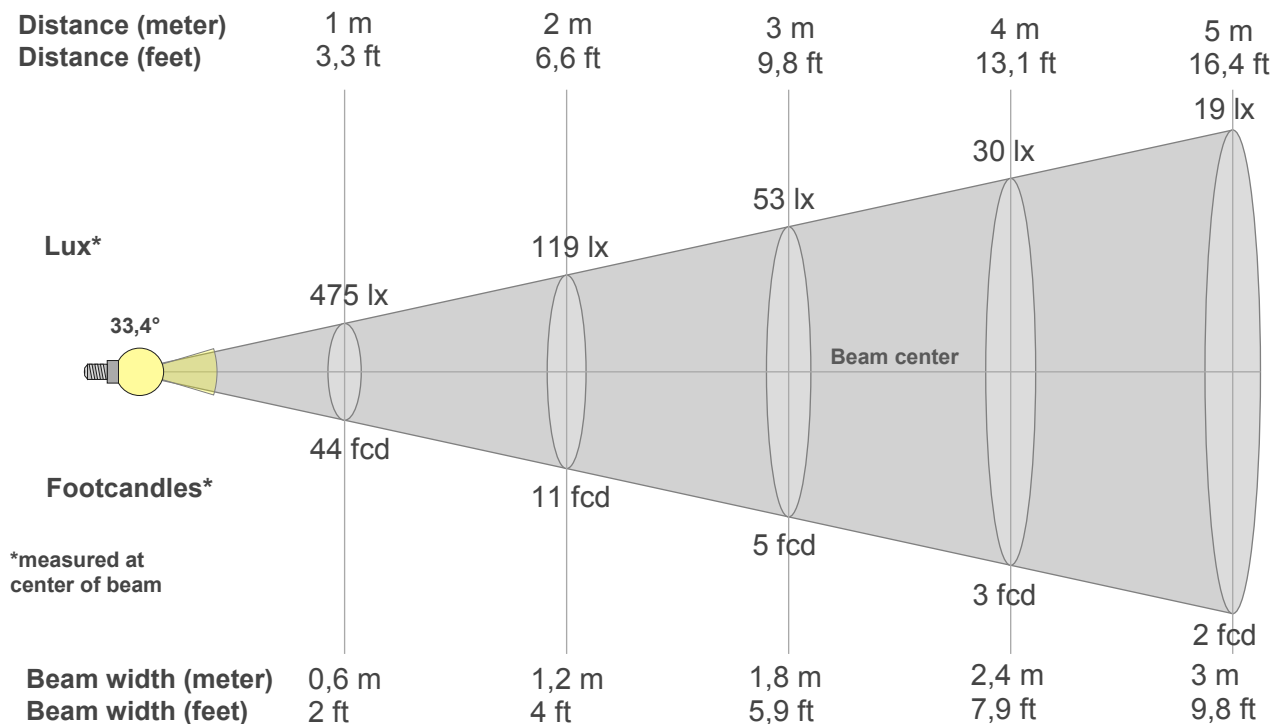
Fidelity index Rf

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
475lx	119lx	53lx	30lx	19lx	13lx	10lx	7lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx
44,1fcd	11fcd	4,9fcd	2,8fcd	1,8fcd	1,2fcd	0,9fcd	0,7fcd	0,5fcd	0,4fcd	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°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
475	458	418	363	299	235	178	131	96	72	56	47	41	38	34	33	33	31	30	29
100%	97%	88%	76%	63%	50%	37%	28%	20%	15%	12%	10%	9%	8%	7%	7%	7%	6%	6%	6%

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°
475	476	476	477	478	480	480	479	479	477	470	462	449	434	413	390	363	334	304	272
100%	100%	100%	100%	101%	101%	101%	101%	101%	100%	99%	97%	95%	91%	87%	82%	77%	70%	64%	57%

Intensities in 180° c-plane

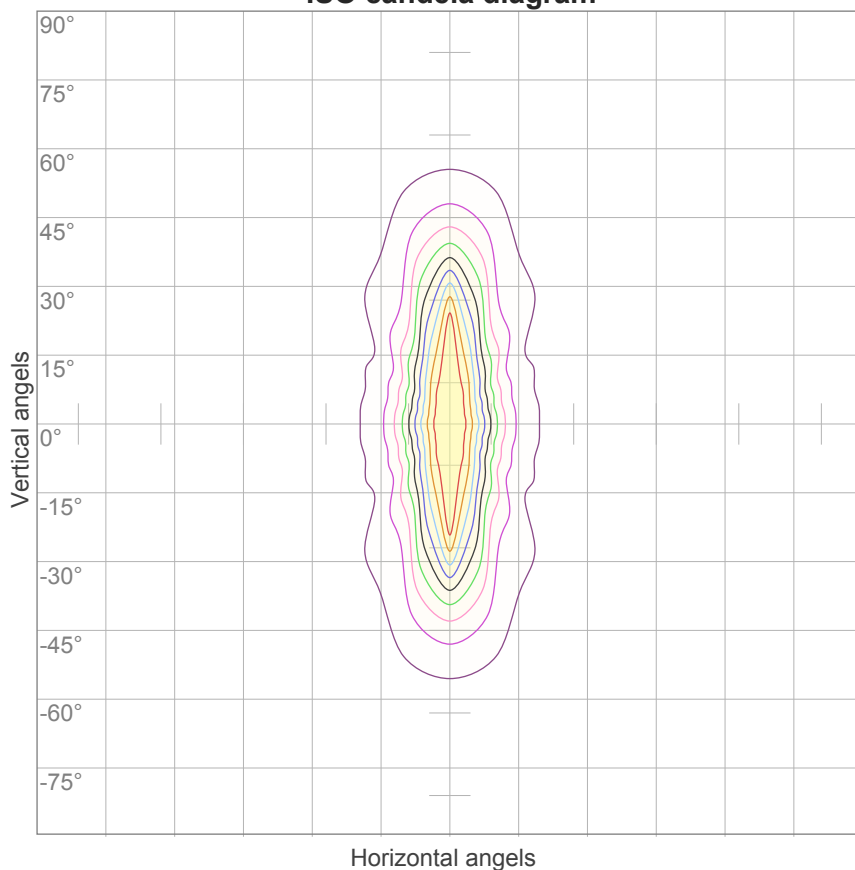
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
475	458	418	363	299	235	178	131	96	72	56	47	41	38	34	33	33	31	30	29
100%	97%	88%	76%	63%	50%	37%	28%	20%	15%	12%	10%	9%	8%	7%	7%	7%	6%	6%	6%

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°
475	476	476	477	478	480	480	479	479	477	470	462	449	434	413	390	363	334	304	272
100%	100%	100%	100%	101%	101%	101%	101%	101%	100%	99%	97%	95%	91%	87%	82%	77%	70%	64%	57%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
33,4°	67,1°	166,3°	82,2%	67,7%

ISO candela diagram



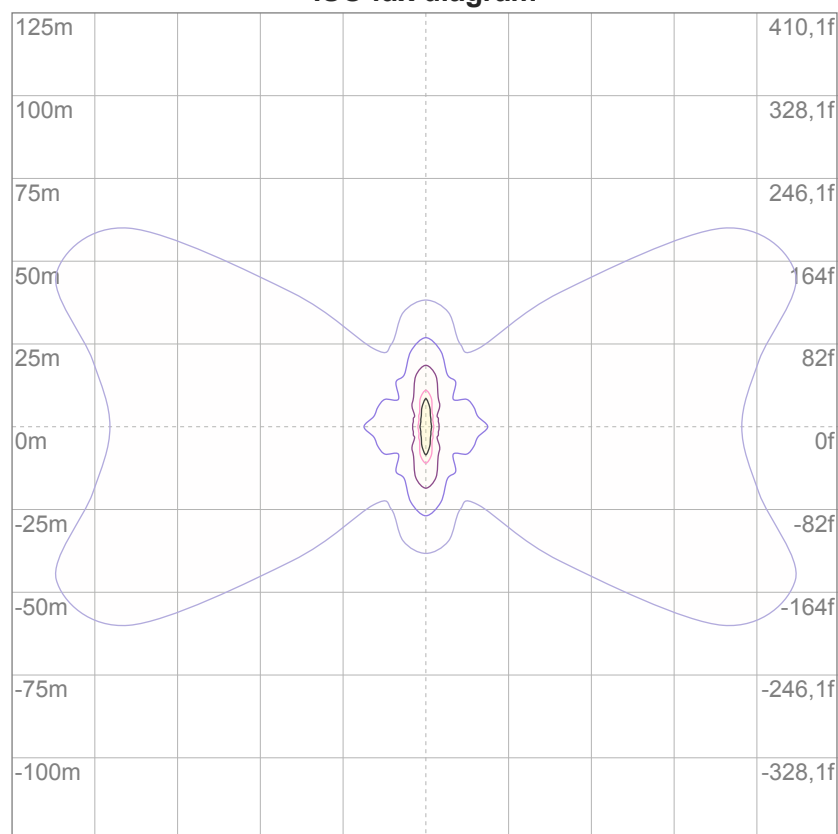
10%	47 cd
20%	95 cd
30%	142 cd
40%	190 cd
50%	237 cd
60%	285 cd
70%	332 cd
80%	380 cd
90%	427 cd

Conditions:

Number of c-planes: 16

Candela at center: 475 cd

ISO lux diagram



3%	0,142 lx
5%	0,237 lx
10%	0,475 lx
30%	1,42 lx
50%	2,37 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,75 lx

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

Glare Evaluation According to UGR

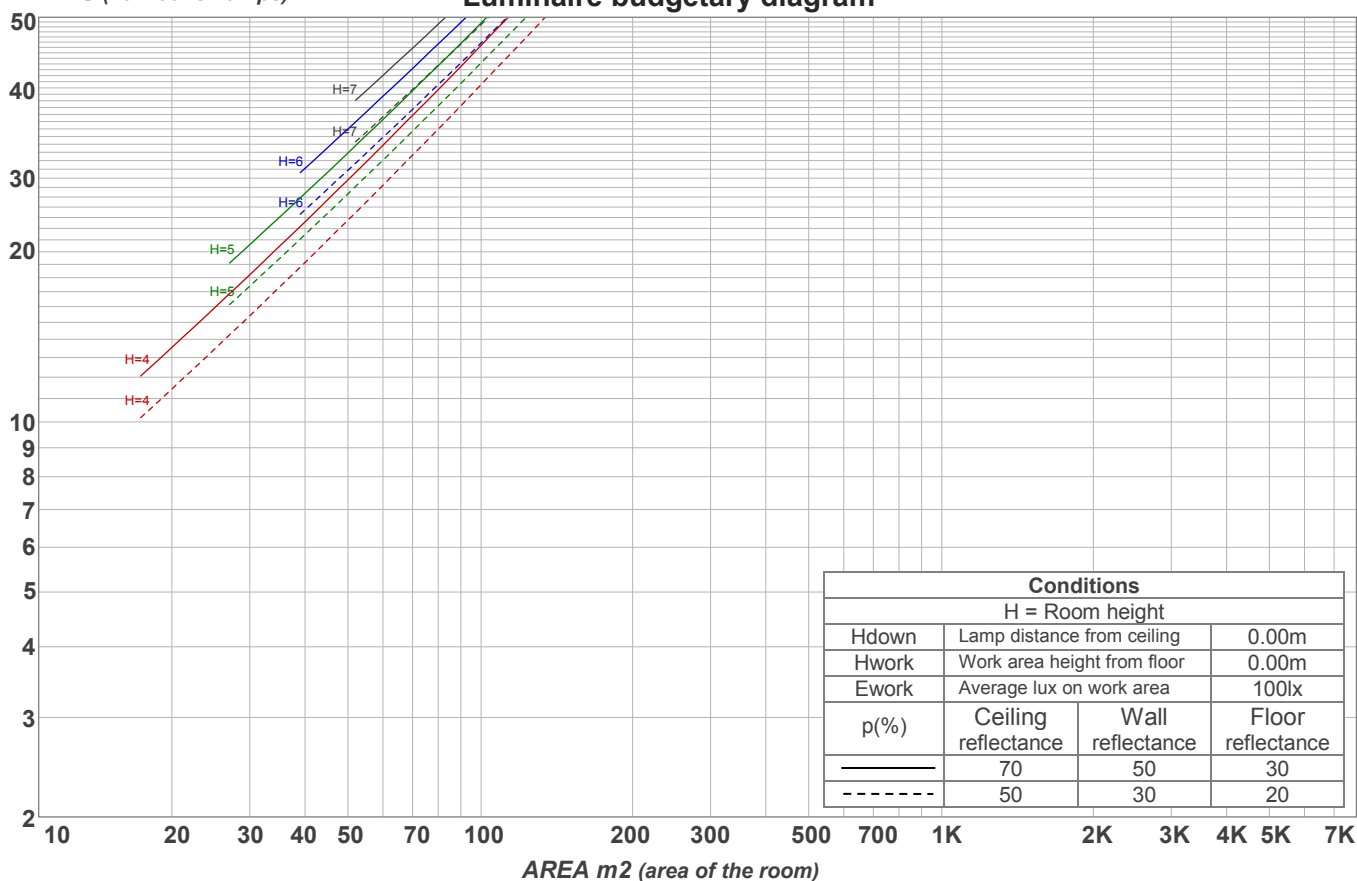
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	12,2	13,2	12,4	13,5	13,7	19,1	20,1	19,3	20,3	20,6
	3H	14,6	15,7	15,0	15,9	16,1	19,7	20,8	20,1	21,0	21,2
	4H	16,0	17,1	16,4	17,3	17,6	20,0	21,0	20,4	21,3	21,5
	6H	17,3	18,2	17,6	18,5	18,8	20,3	21,2	20,6	21,5	21,9
	8H	17,8	18,6	18,1	19,0	19,4	20,4	21,3	20,8	21,6	22,0
	12H	18,1	18,9	18,4	19,3	19,7	20,5	21,4	20,9	21,7	22,1
4H	2H	12,8	13,9	13,2	14,1	14,4	18,9	19,9	19,3	20,2	20,4
	3H	15,6	16,4	15,9	16,7	17,2	19,7	20,6	20,1	20,9	21,4
	4H	17,1	17,9	17,5	18,3	18,8	20,1	20,8	20,5	21,3	21,8
	6H	18,5	19,3	19,0	19,6	20,0	20,4	21,2	20,9	21,6	21,9
	8H	19,1	19,8	19,6	20,2	20,5	20,6	21,3	21,1	21,7	22,1
	12H	19,5	20,1	20,0	20,5	21,0	20,8	21,4	21,3	21,8	22,3
8H	4H	17,5	18,2	18,0	18,6	18,9	20,1	20,9	20,6	21,2	21,6
	6H	19,1	19,7	19,7	20,1	20,7	20,7	21,2	21,2	21,7	22,2
	8H	19,9	20,4	20,4	20,9	21,5	21,0	21,4	21,5	22,0	22,6
	12H	20,4	20,8	21,0	21,3	22,0	21,2	21,6	21,8	22,1	22,8
12H	4H	17,5	18,1	18,0	18,5	19,0	20,2	20,7	20,6	21,2	21,6
	6H	19,3	19,8	19,8	20,3	20,9	20,8	21,2	21,3	21,7	22,4
	8H	20,1	20,5	20,7	21,0	21,6	21,1	21,5	21,7	22,0	22,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,1 / -1,0				
S = 1.5H		0,1 / -0,1					2,4 / -1,5				
S = 2.0H		0,3 / -0,2					3,7 / -2,1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 333 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	105	105	105	100	100	100	98
1	109	105	101	98	106	102	99	96	98	95	92	94	91	89	90	88	86	84
2	101	94	88	83	99	92	87	82	88	84	80	85	81	78	81	78	76	74
3	94	85	78	73	92	84	77	72	80	75	71	77	73	69	75	71	68	66
4	88	78	71	65	86	77	70	64	74	68	63	71	66	62	69	65	61	59
5	83	72	64	59	81	71	63	58	68	62	57	66	61	57	64	60	56	54
6	78	66	59	53	76	65	58	53	64	57	53	62	56	52	60	55	51	50
7	73	62	54	49	72	61	54	49	59	53	48	58	52	48	56	51	48	46
8	69	58	51	46	68	57	50	45	56	49	45	54	49	45	53	48	44	43
9	66	54	47	43	64	54	47	42	52	46	42	51	46	42	50	45	42	40
10	63	51	44	40	61	51	44	40	50	44	40	49	43	39	48	43	39	38

LAMPS (number of lamps)

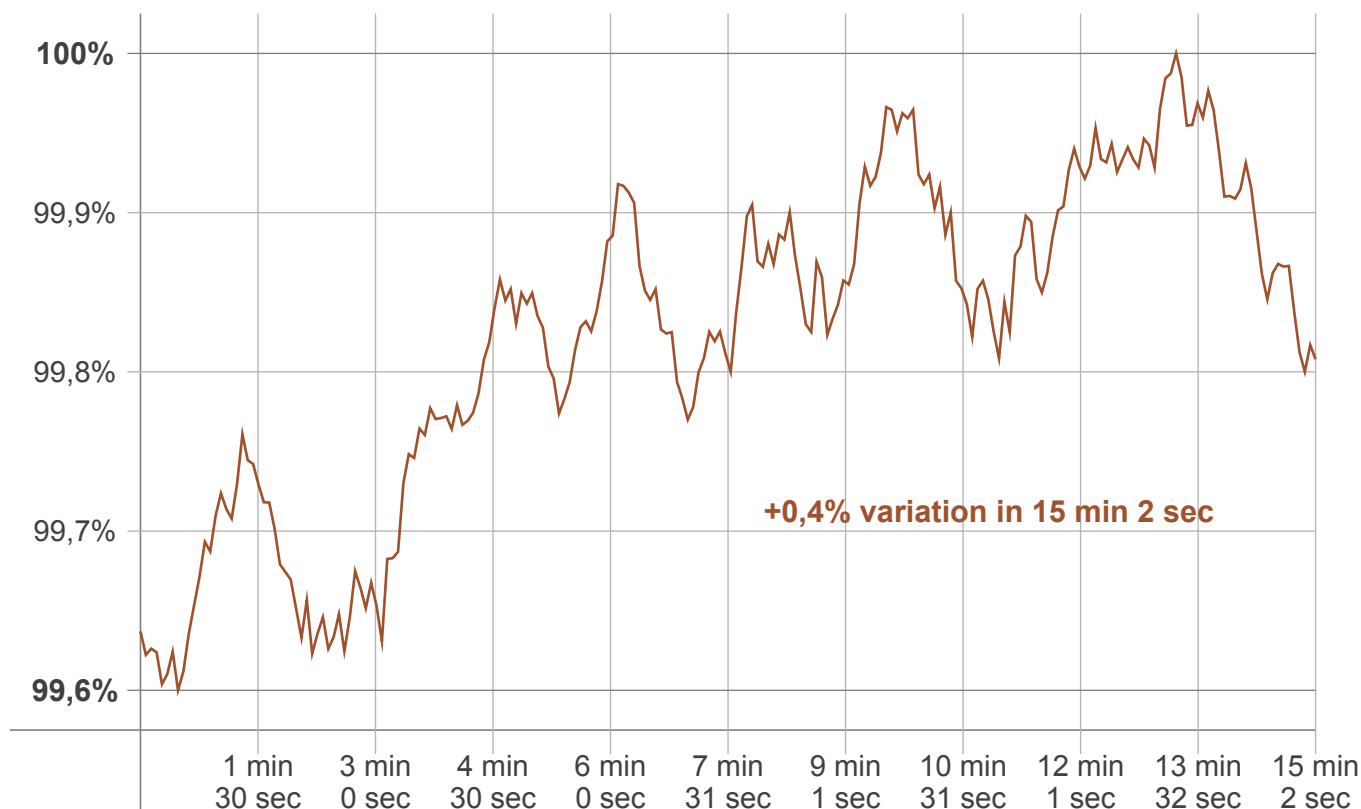
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
37,4 lm	63,1 lm	56,4 lm	48,3 lm	38,9 lm	30,0 lm	21,3 lm	17,7 lm	12,3 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,79 lm	2,70 lm	1,25 lm	0,787 lm	0,310 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm

Warmup curve



Warmup result

Warmup time:	15 min 2 sec
Warmup variation	+0,4%

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
333 lm	+ lm	333 lm