

Light efficiency:

47 Lumen/Watt

Light quality:

CRI: 0,0

Color temperature:

0 K

Output: 359 lm

Peak: 144 cd

Power: 7,7 W

PF: 1,0



Product name:

Defiant-0508-XXB-L9T

Item number:

FLNP/L22A0508/XXB/L9T

Date and time:

06.07.2020 15:40:07

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:

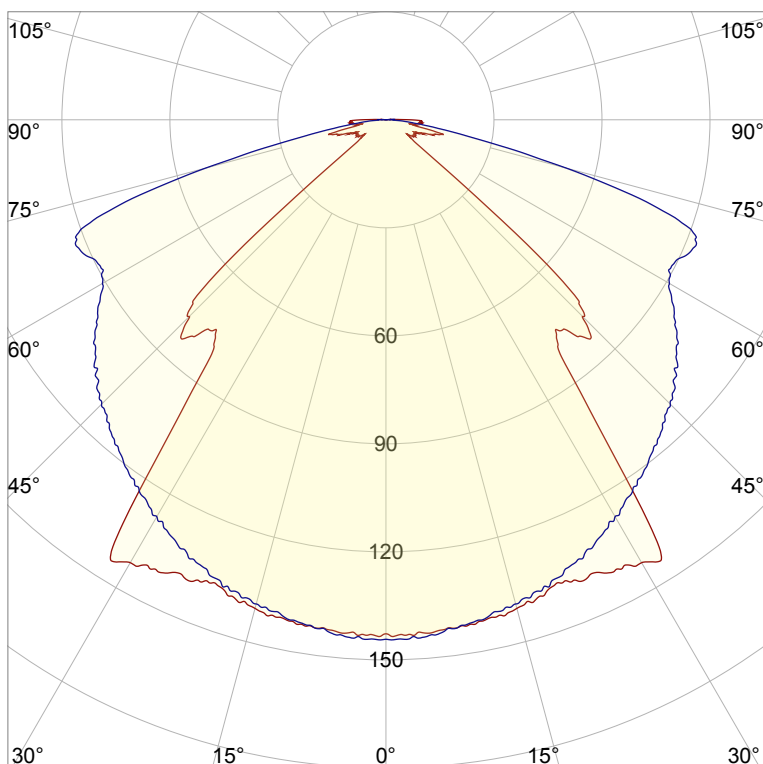
Peter Ulrich

Pruefort:

Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

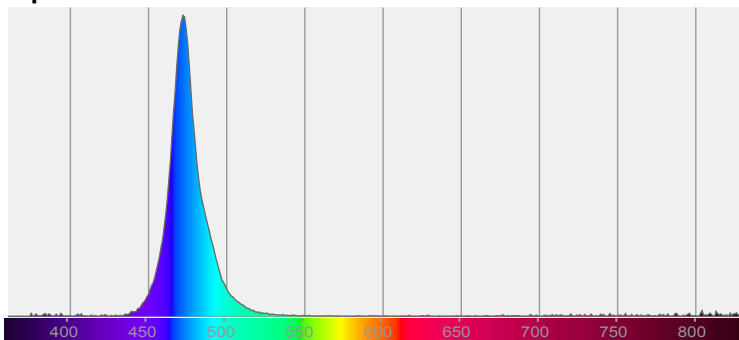


CIE 1931

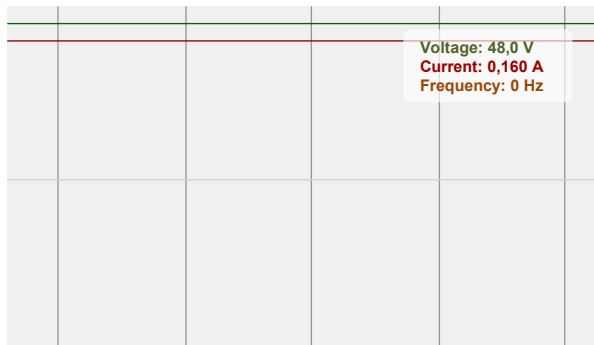
x: 0,119

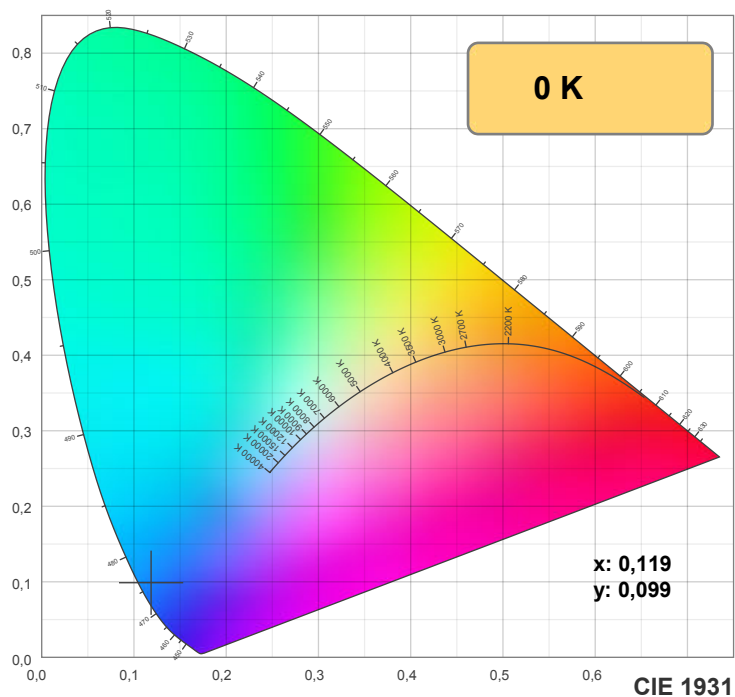
y: 0,099

Spectra

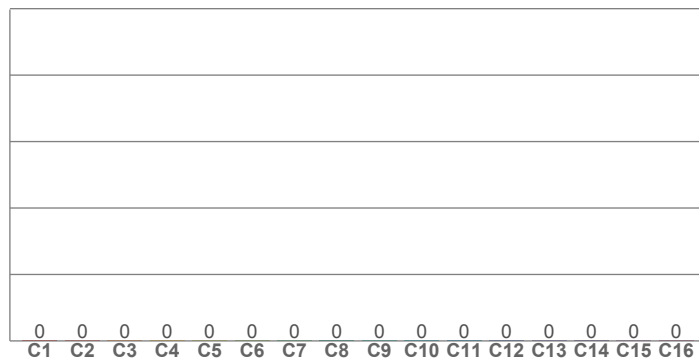


Power





TM30: 0,0



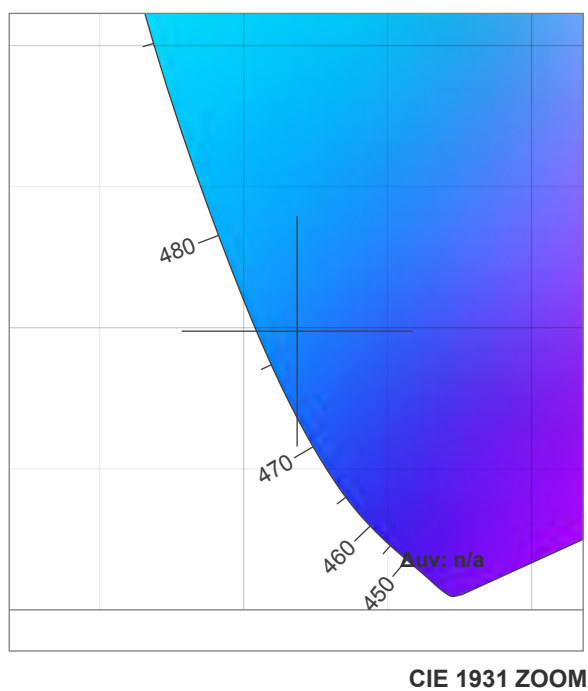
CRI R values, only R1-R8 are used to calculate final CRI value

[illegible]

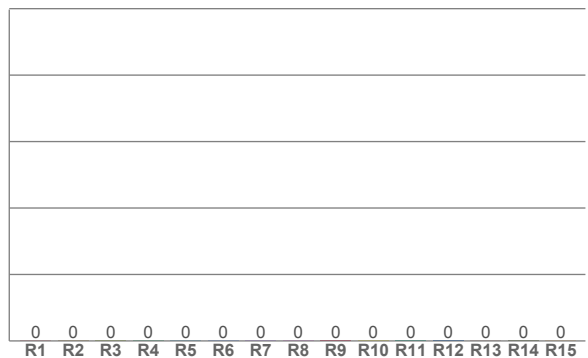
TM30 C values, 16 binned values out of total of 99 C values

[illegible]

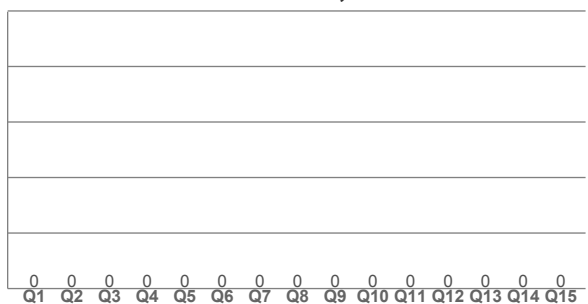
CQS Q values

[illegible]

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 diviation 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	0,120	0,150	n/a

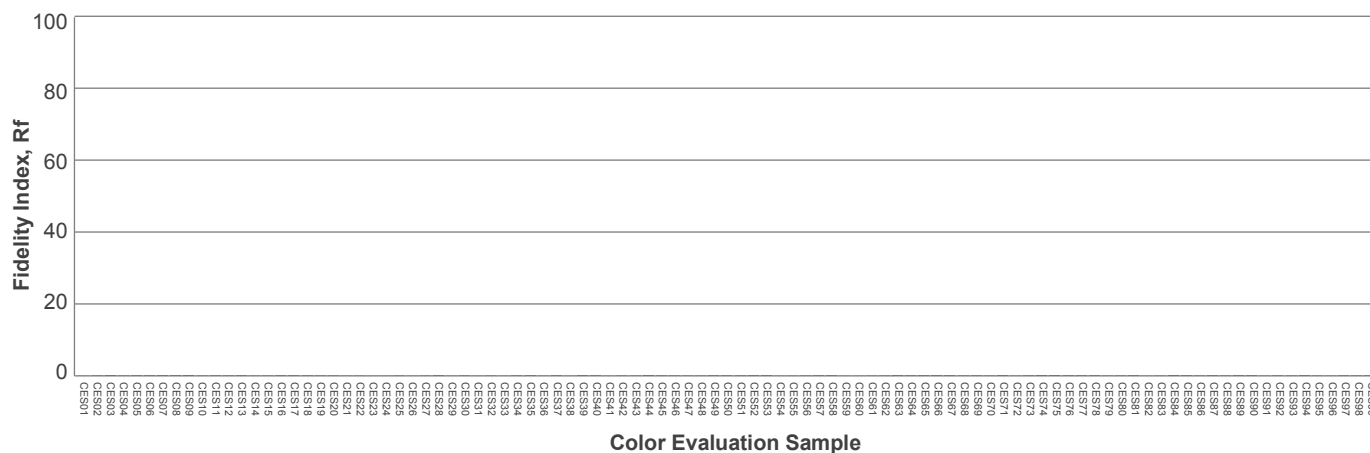
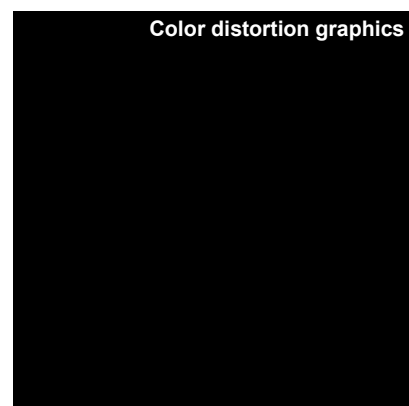
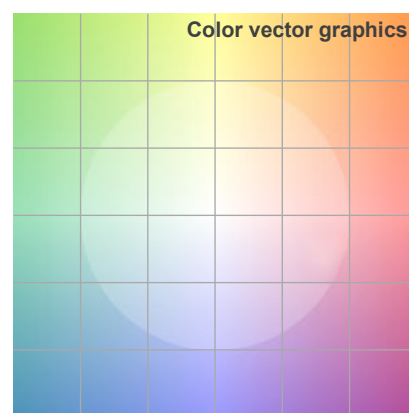
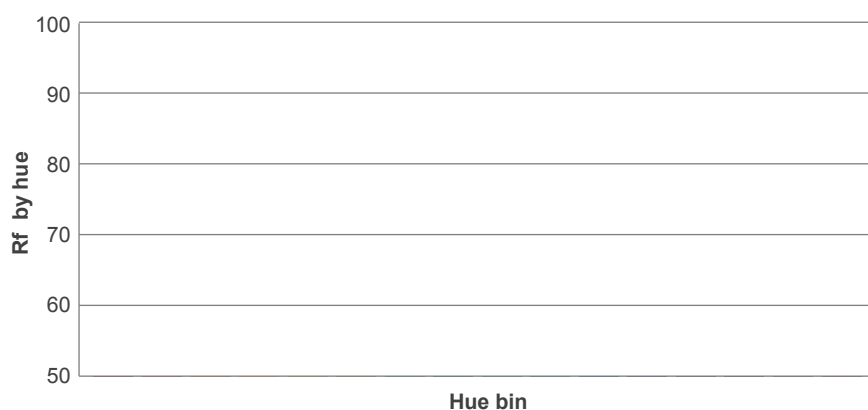
Rf 0,0

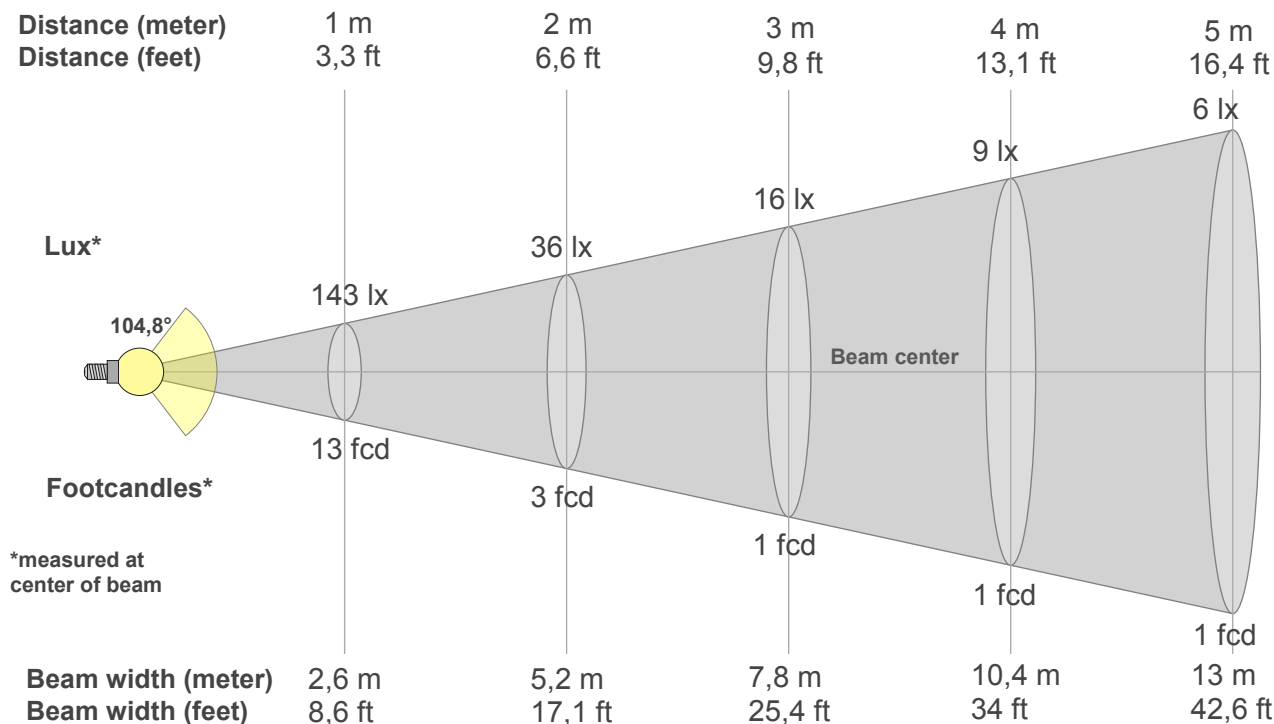
Fidelity index Rf

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
143lx	36lx	16lx	9lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx
13,3fcd	3,3fcd	1,5fcd	0,8fcd	0,5fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	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°
143	143	142	140	137	139	142	100	76	77	26	8	9	9	11	16	7	9	6	0
100%	100%	99%	98%	96%	97%	99%	69%	53%	54%	18%	5%	7%	6%	8%	11%	5%	7%	5%	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°
143	144	142	139	136	132	127	122	117	112	106	98	91	91	90	52	17	5	1	0
100%	100%	99%	97%	95%	92%	89%	85%	82%	78%	74%	68%	63%	63%	63%	36%	12%	4%	1%	0%

Intensities in 180° c-plane

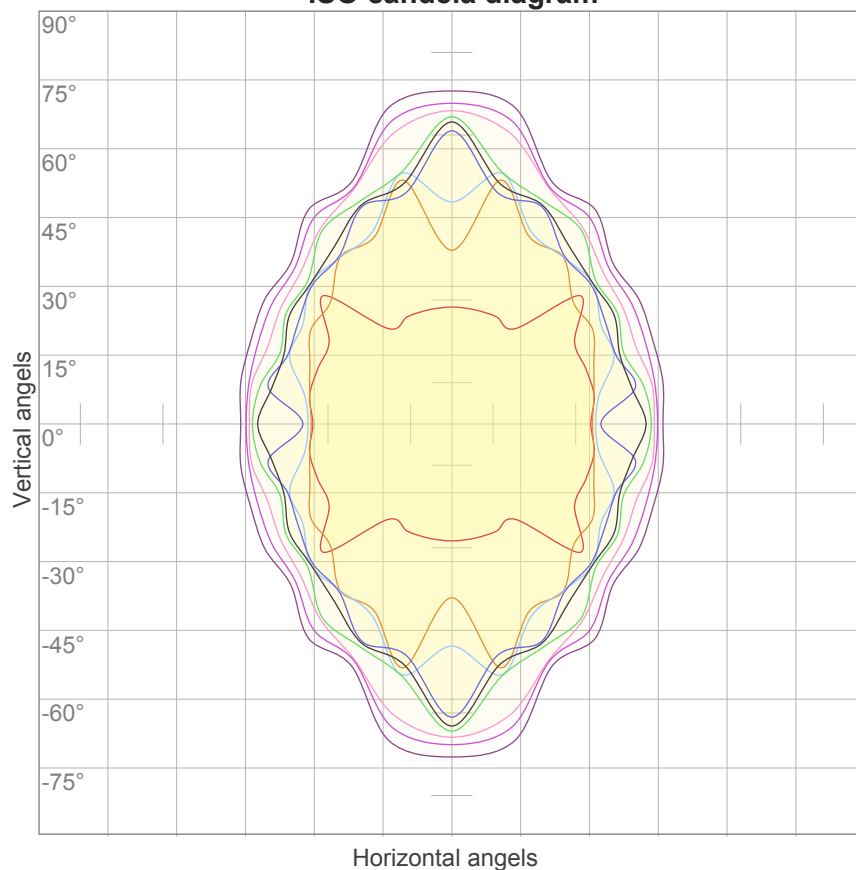
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
143	143	142	140	137	139	142	100	76	77	26	8	9	9	11	16	7	9	6	0
100%	100%	99%	98%	96%	97%	99%	69%	53%	54%	18%	5%	7%	6%	8%	11%	5%	7%	5%	0%

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°
143	144	142	139	136	132	127	122	117	112	106	98	91	91	90	52	17	5	1	0
100%	100%	99%	97%	95%	92%	89%	85%	82%	78%	74%	68%	63%	63%	63%	36%	12%	4%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
104,8°	125,1°	176,2°	85,3%	64,8%

ISO candela diagram



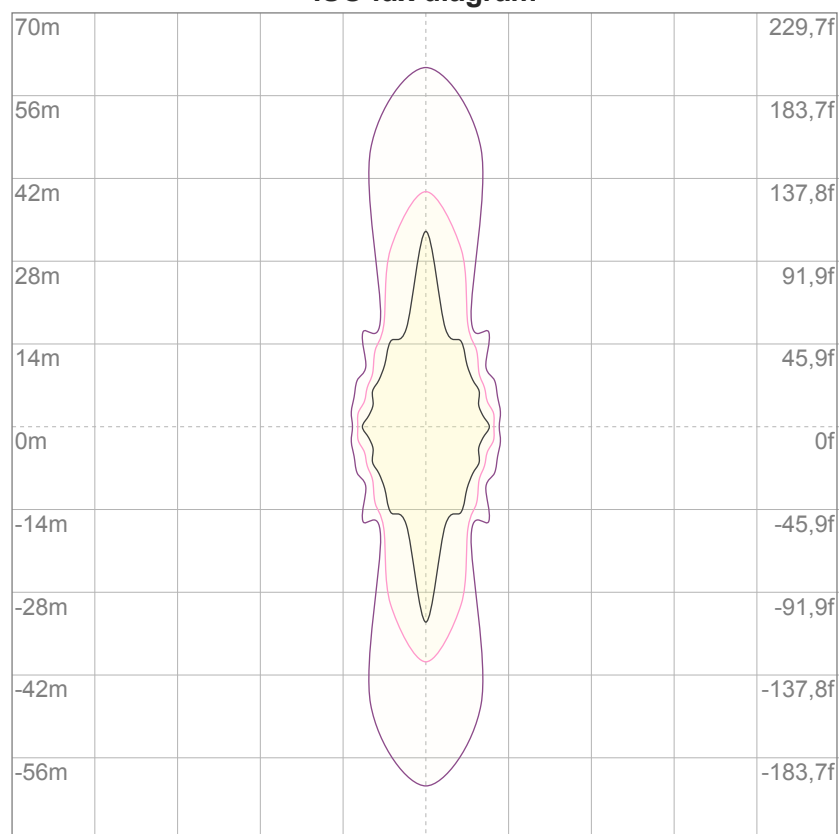
10%	14 cd
20%	29 cd
30%	43 cd
40%	57 cd
50%	72 cd
60%	86 cd
70%	100 cd
80%	115 cd
90%	129 cd

Conditions:

Number of c-planes: 16

Candela at center: 143 cd

ISO lux diagram



3%	43,0m lx
5%	71,7m lx
10%	0,143 lx
30%	0,430 lx
50%	0,717 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,43 lx

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

Glare Evaluation According to UGR

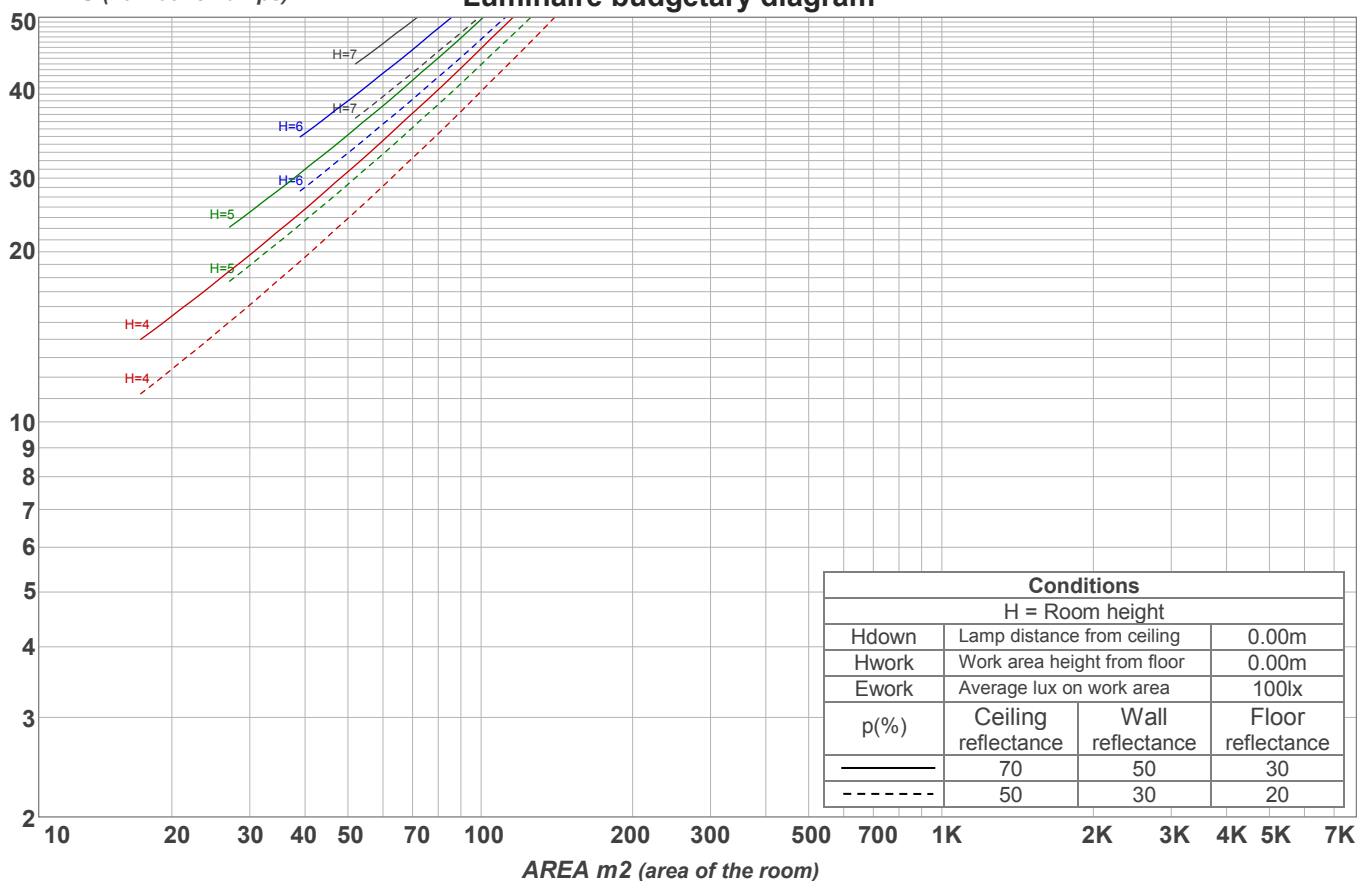
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	15,1	16,2	15,3	16,5	16,7	21,6	22,7	21,8	23,0	23,2
	3H	15,2	16,3	15,6	16,6	16,8	23,6	24,7	24,0	25,0	25,2
	4H	15,7	16,8	16,1	17,1	17,3	24,6	25,6	25,0	25,9	26,1
	6H	16,2	17,2	16,5	17,4	17,8	24,9	25,8	25,2	26,1	26,5
	8H	16,4	17,3	16,7	17,6	18,0	24,9	25,8	25,3	26,2	26,6
	12H	16,7	17,6	17,1	17,9	18,4	24,9	25,8	25,3	26,1	26,6
4H	2H	15,3	16,3	15,7	16,6	16,9	21,3	22,4	21,7	22,7	22,9
	3H	15,6	16,4	15,9	16,8	17,2	23,4	24,3	23,8	24,7	25,1
	4H	16,2	17,0	16,6	17,4	18,0	24,3	25,1	24,8	25,6	26,1
	6H	16,9	17,7	17,4	18,0	18,4	24,7	25,4	25,2	25,8	26,2
	8H	17,2	17,9	17,7	18,3	18,7	24,7	25,4	25,2	25,8	26,2
	12H	17,7	18,3	18,2	18,7	19,2	24,7	25,3	25,2	25,7	26,2
8H	4H	16,3	17,0	16,8	17,3	17,7	24,2	24,9	24,7	25,3	25,7
	6H	17,2	17,8	17,7	18,2	18,8	24,6	25,1	25,1	25,6	26,1
	8H	17,9	18,3	18,4	18,9	19,5	24,7	25,1	25,2	25,7	26,3
	12H	18,7	19,1	19,2	19,6	20,2	24,7	25,1	25,3	25,6	26,2
12H	4H	16,2	16,8	16,7	17,3	17,7	24,2	24,8	24,7	25,2	25,7
	6H	17,3	17,8	17,8	18,3	18,9	24,6	25,0	25,1	25,6	26,2
	8H	18,0	18,4	18,6	18,9	19,5	24,6	25,0	25,2	25,5	26,2
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,8 / -0,9					0,5 / -0,7				
S = 1.5H		1,4 / -1,0					1,8 / -3,2				
S = 2.0H		2,1 / -1,1					2,6 / -6,1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 359 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	109	109	109	104	104	104	99	99	99	97
1	109	105	101	98	106	102	99	96	98	95	92	93	91	89	89	87	86	83
2	101	93	87	82	98	91	86	81	87	83	79	83	80	76	80	77	74	72
3	93	83	76	70	90	81	75	69	78	72	68	75	70	66	72	68	65	63
4	86	75	67	61	83	73	66	60	70	64	59	68	62	58	65	61	57	55
5	79	67	59	53	77	66	58	53	64	57	52	62	56	51	59	54	50	48
6	73	61	53	47	71	60	52	47	58	51	46	56	50	45	54	49	45	43
7	68	56	48	42	66	55	47	42	53	46	41	51	45	41	50	44	40	38
8	64	51	43	38	62	50	43	37	49	42	37	47	41	37	46	40	36	34
9	60	47	39	34	58	46	39	34	45	38	33	44	37	33	42	37	33	31
10	56	43	36	31	54	43	36	31	42	35	30	40	34	30	39	34	30	28

LAMPS (number of lamps)

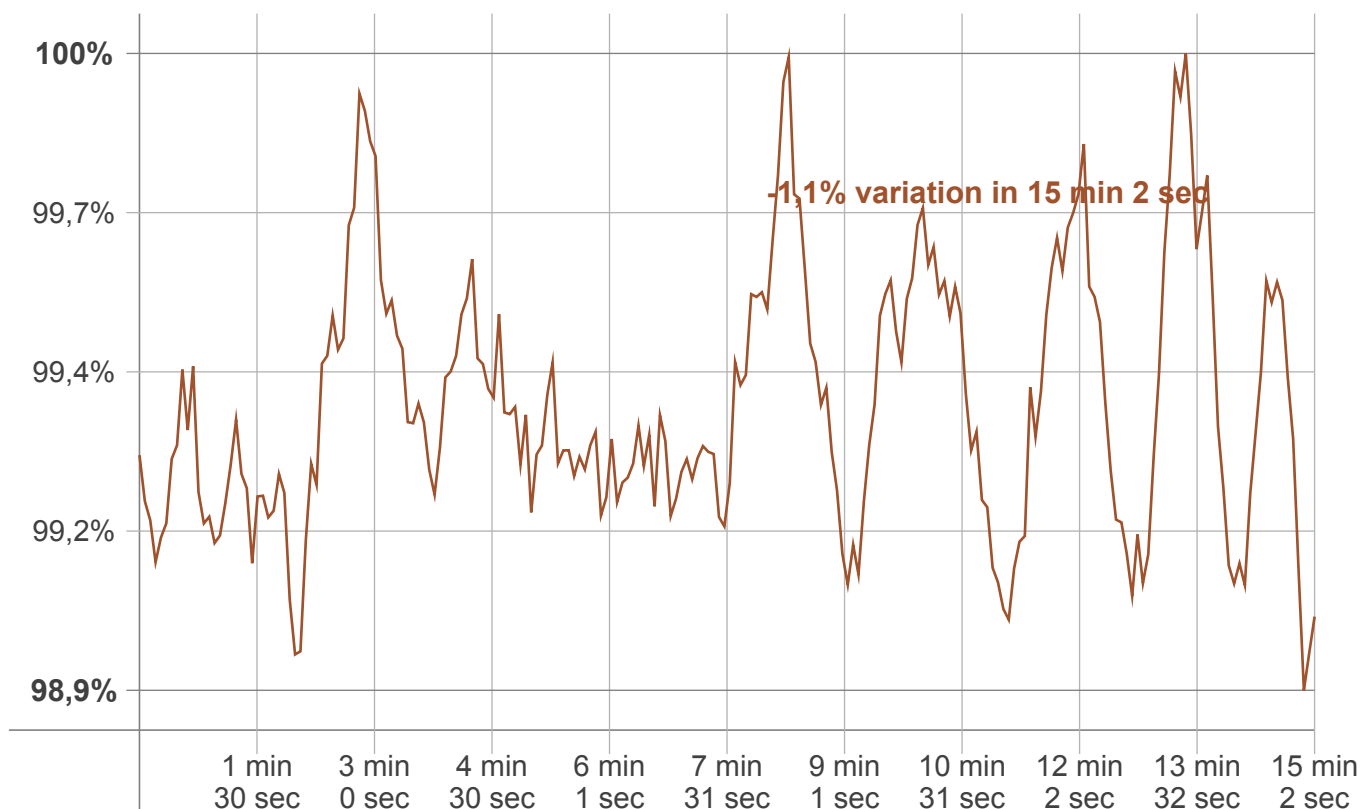
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
13,6 lm	39,4 lm	62,2 lm	78,0 lm	72,9 lm	39,9 lm	19,6 lm	14,0 lm	7,44 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3,13 lm	1,81 lm	1,61 lm	1,45 lm	1,25 lm	1,02 lm	0,749 lm	0,459 lm	0,154 lm

Warmup curve



Warmup result

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

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
359 lm	lm	359 lm