Light efficiency:

122 Lumen/Watt

Light quality:

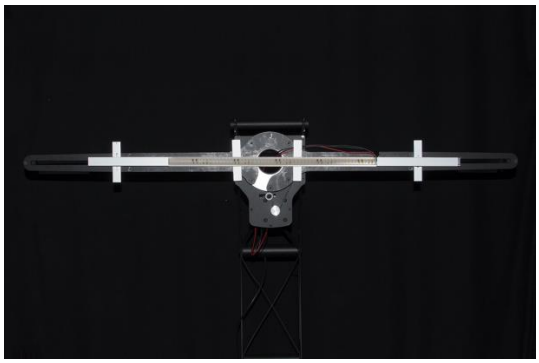
CRI: 0,0

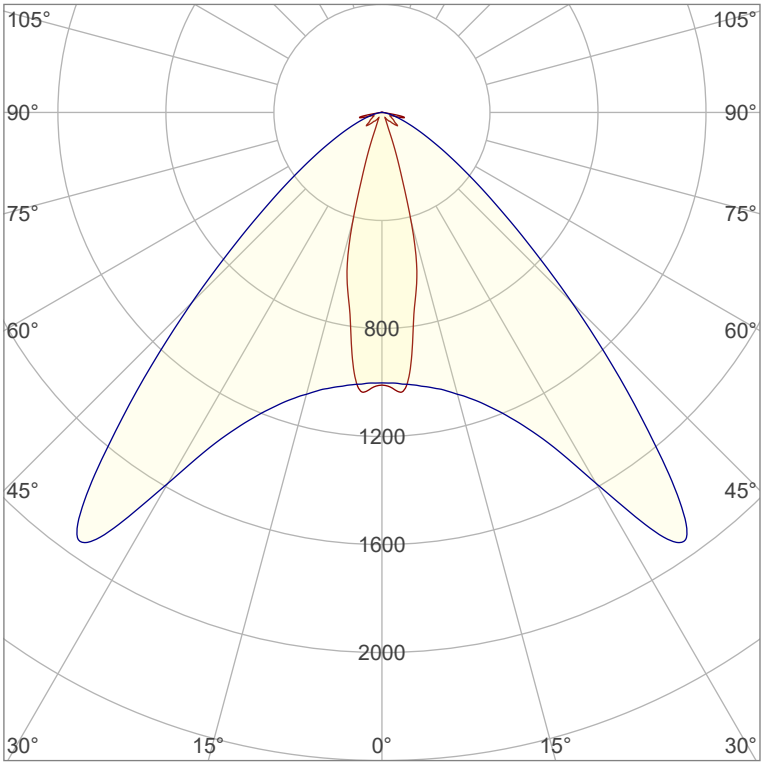
Color temperature:

0 K

Output: 934 lm
Peak: 1939 cd

Power: 7,7 W
PF: 1,0





CIE 1931
x: 0,199
y: 0,732

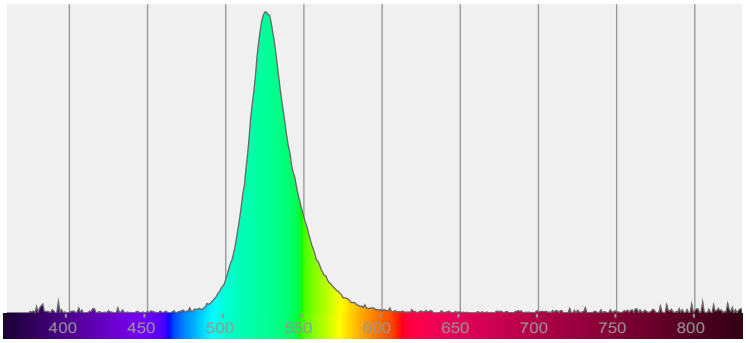
Product name:
Defiant-3_510mm_XXG_Lens-30°-Transparent

Item number:
NP/L3C/22C/0510/XXG/L3T

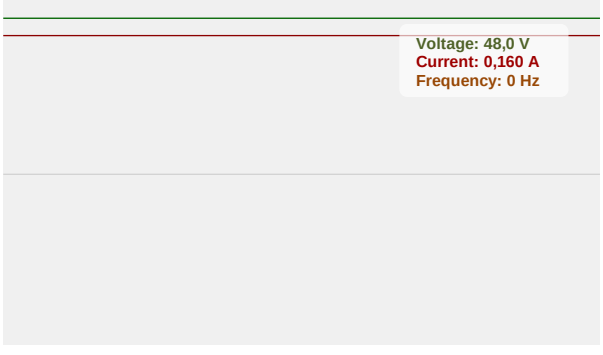
Date and time:
08.07.2020 10:00:21

Description:
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

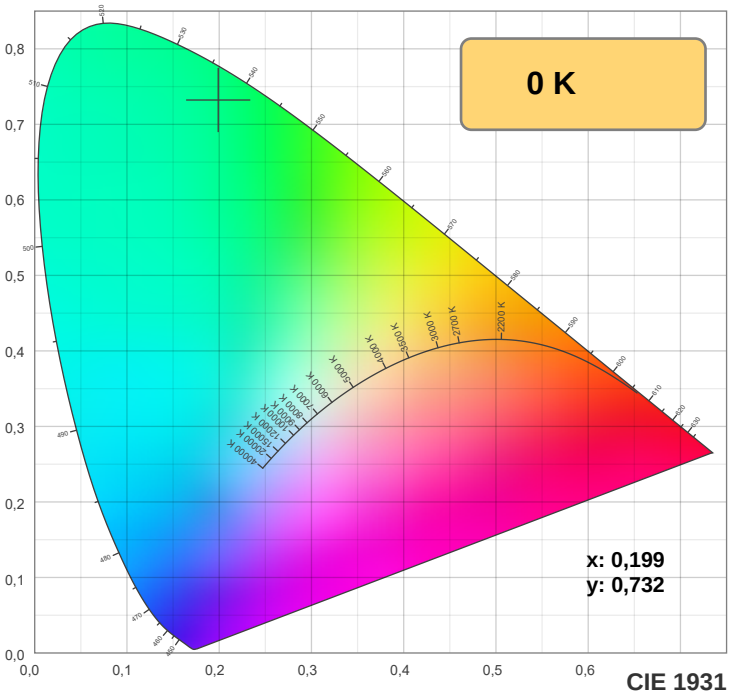
Spectra

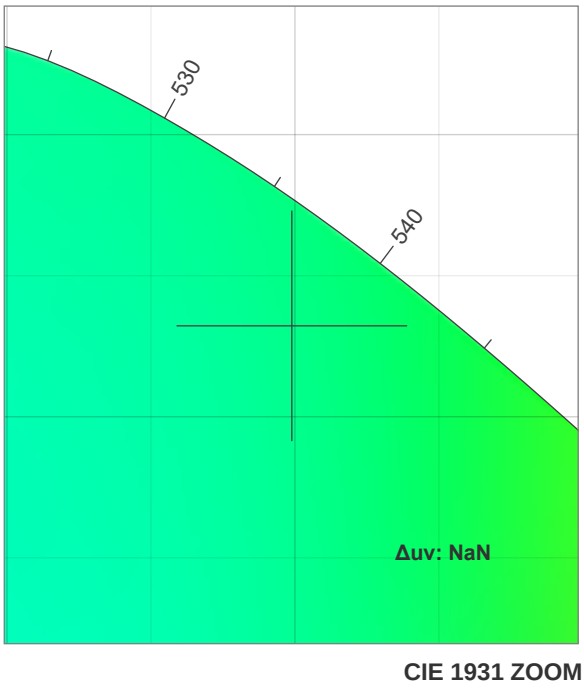


Power

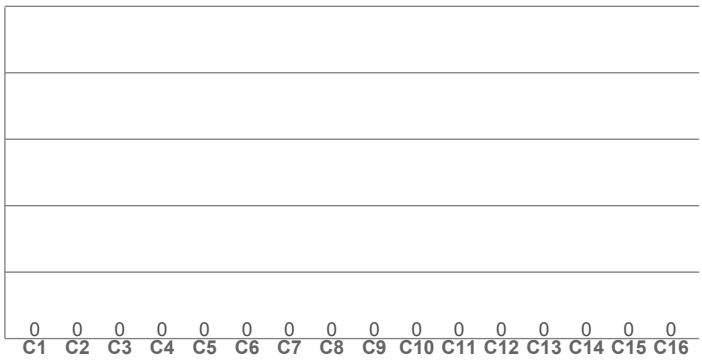


Color details

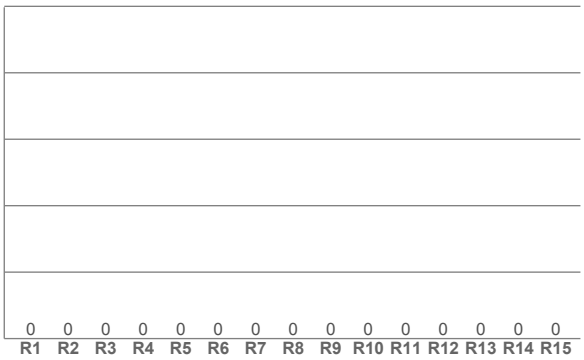




TM30: 0,0



CRI: 0,0 (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
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

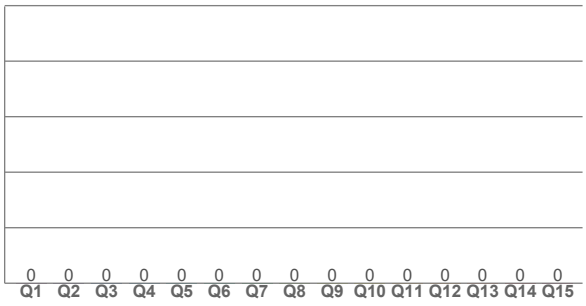
TM30 C values, 16 binned values out of total of 99 C values

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



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	0,199	0,732	0,070	0,386	NaN

TM30 details

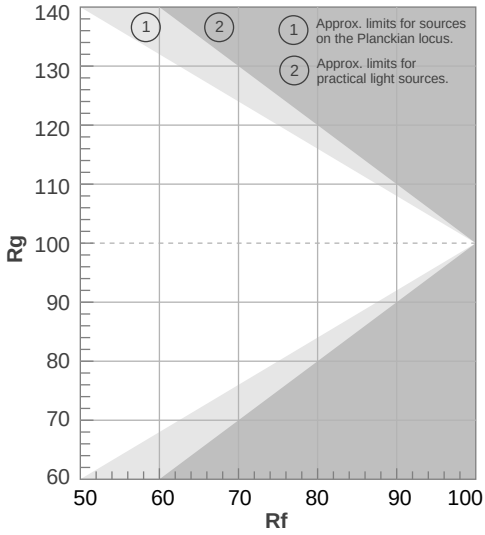
Rf 0,0

Fidelity index Rf

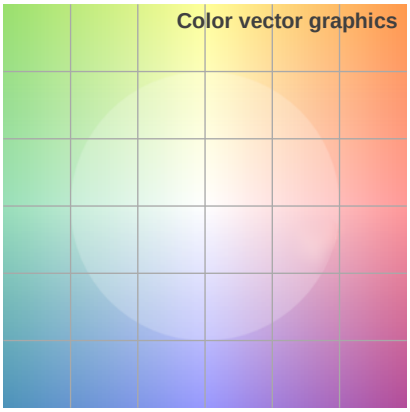
Rg 0,0

Gammut index Rg

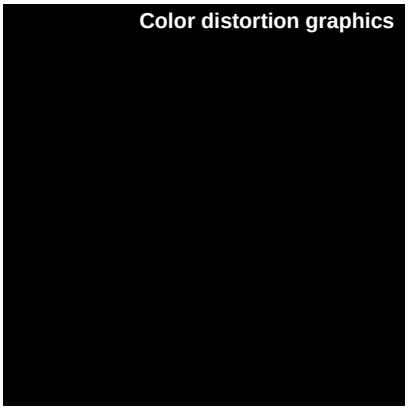
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%

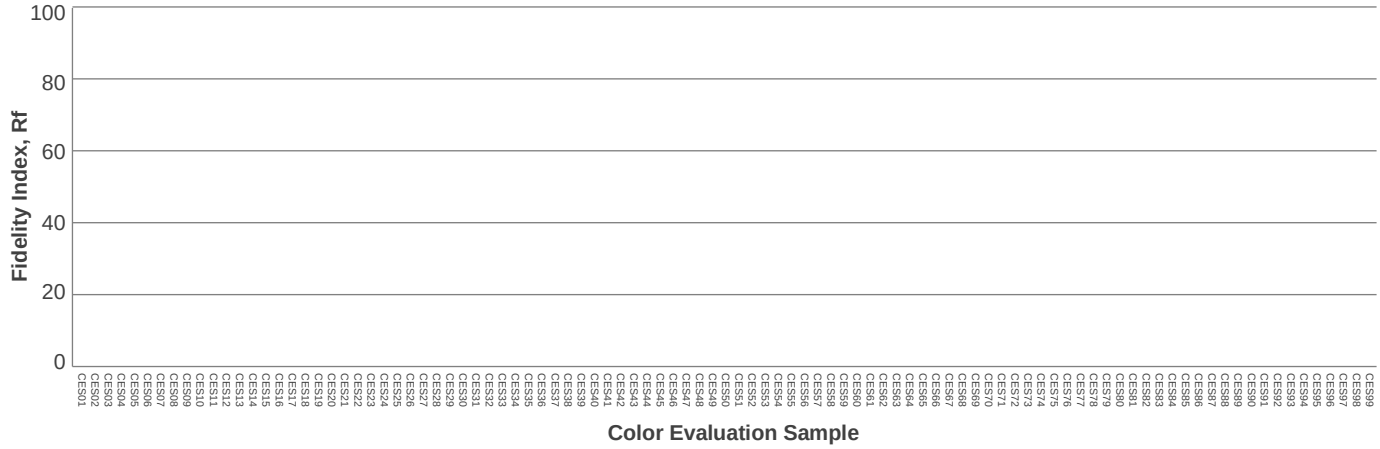




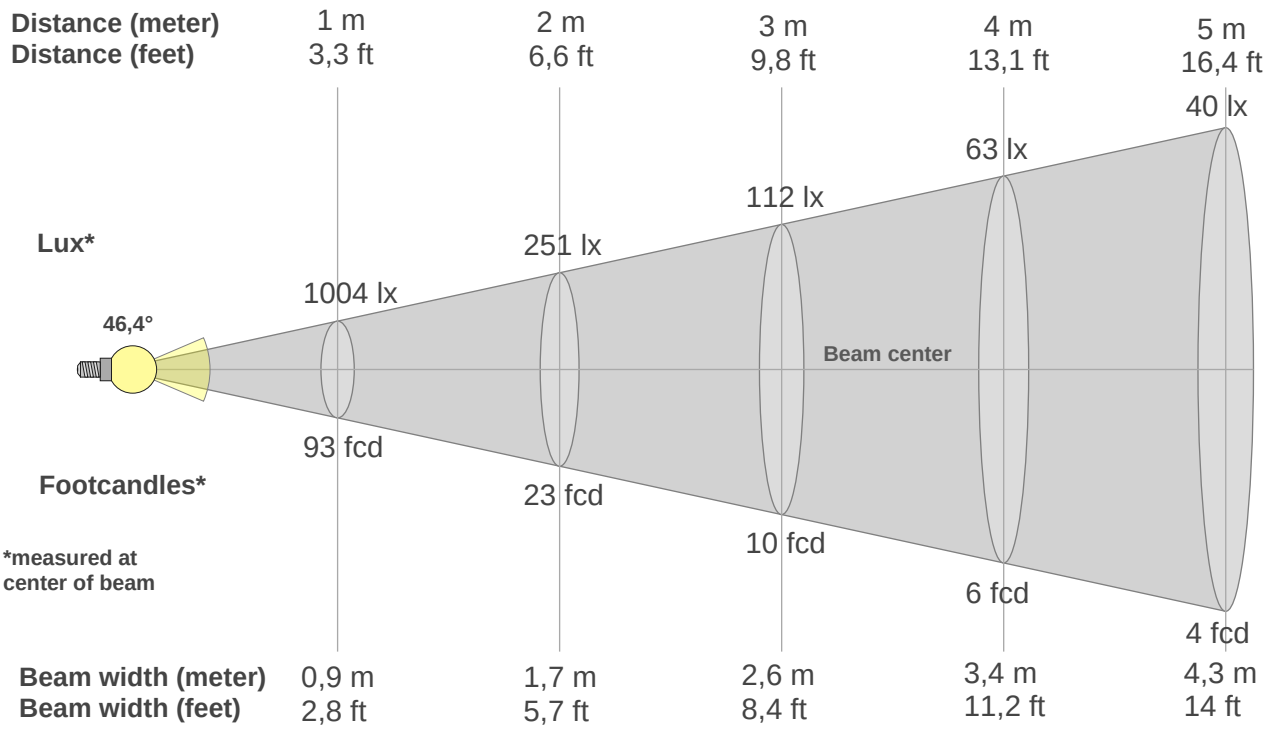








Beam details



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
1004lx	251lx	112lx	63lx	40lx	28lx	20lx	16lx	12lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	3lx
93,2fcd	23,3fcd	10,4fcd	5,8fcd	3,7fcd	2,6fcd	1,9fcd	1,5fcd	1,2fcd	0,9fcd	0,8fcd	0,6fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd

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°
1004	1020	1037	974	826	708	621	499	329	200	118	64	45	35	28	23	23	29	33	38
100%	102%	103%	97%	82%	71%	62%	50%	33%	20%	12%	6%	4%	3%	3%	2%	2%	3%	3%	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°
1004	1003	1008	1014	1023	1034	1048	1068	1092	1121	1159	1204	1262	1338	1443	1587	1758	1908	1916	1755
100%	100%	100%	101%	102%	103%	104%	106%	109%	112%	115%	120%	126%	133%	144%	158%	175%	190%	191%	175%

Intensities in 180° c-plane

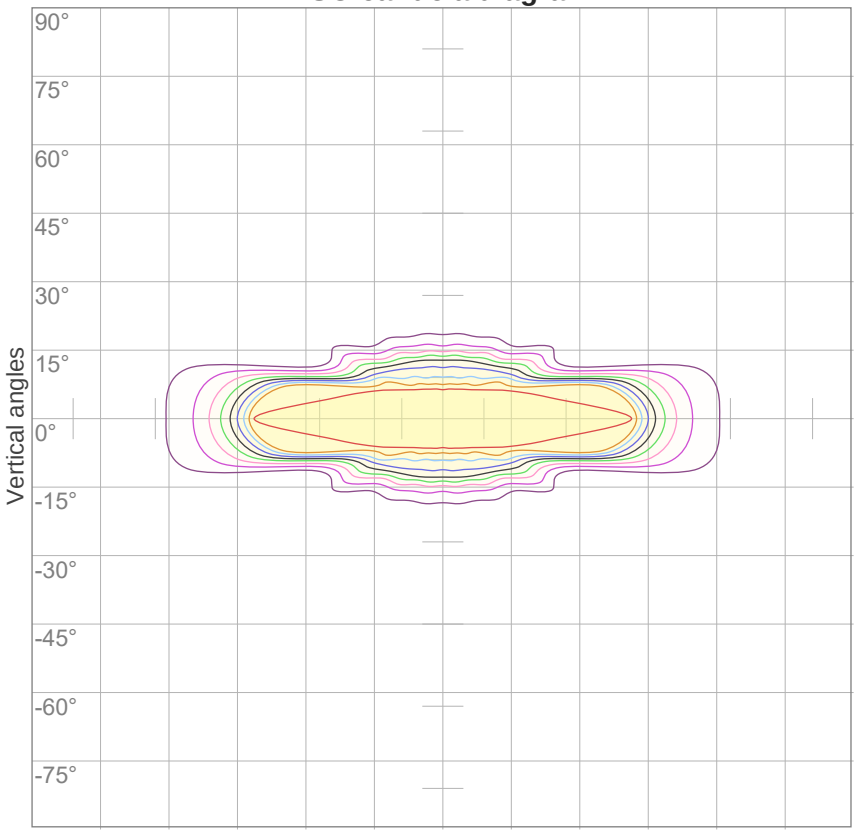
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1004	1020	1037	974	826	708	621	499	329	200	118	64	45	35	28	23	23	29	33	38
100%	102%	103%	97%	82%	71%	62%	50%	33%	20%	12%	6%	4%	3%	3%	2%	2%	3%	3%	4%

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°
1004	1003	1008	1014	1023	1034	1048	1068	1092	1121	1159	1204	1262	1338	1443	1587	1758	1908	1916	1755
100%	100%	100%	101%	102%	103%	104%	106%	109%	112%	115%	120%	126%	133%	144%	158%	175%	190%	191%	175%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
46,4°	**63,7°**	**152,7°**	**88,2%**	**73,5%**

ISO candela diagram



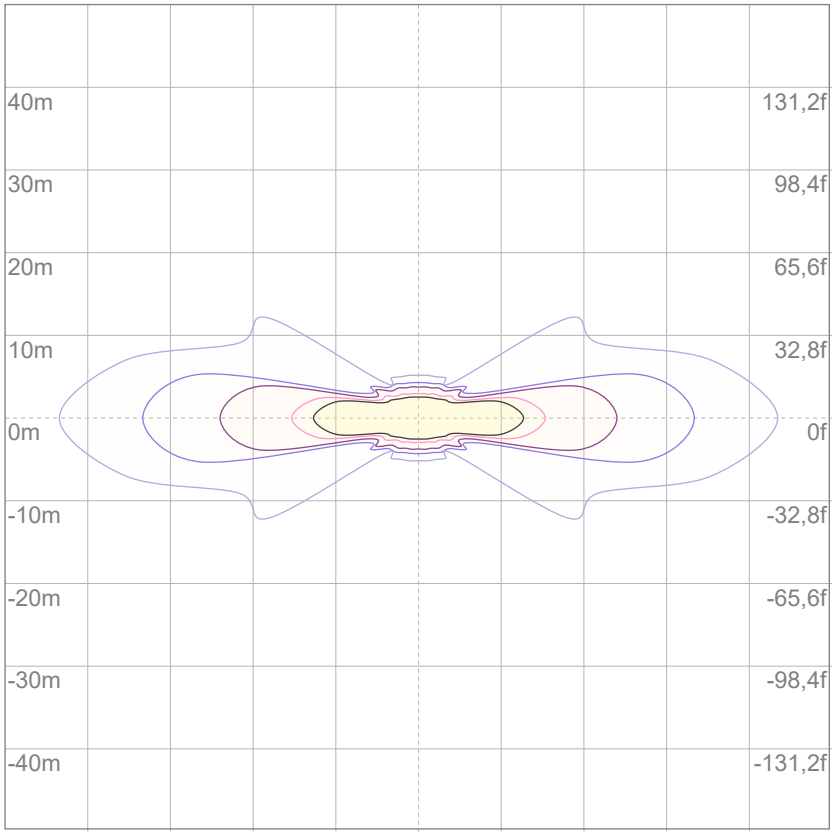
10%	100 cd
20%	201 cd
30%	301 cd
40%	401 cd
50%	502 cd
60%	602 cd
70%	703 cd
80%	803 cd
90%	903 cd

Conditions:

Number of c-planes: 16

Candela at center: 1004 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,301 lx
5%	0,502 lx
10%	1,00 lx
30%	3,01 lx
50%	5,02 lx

Conditions:

Number of c-planes: 16

Lux at center: 10,0 lx

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

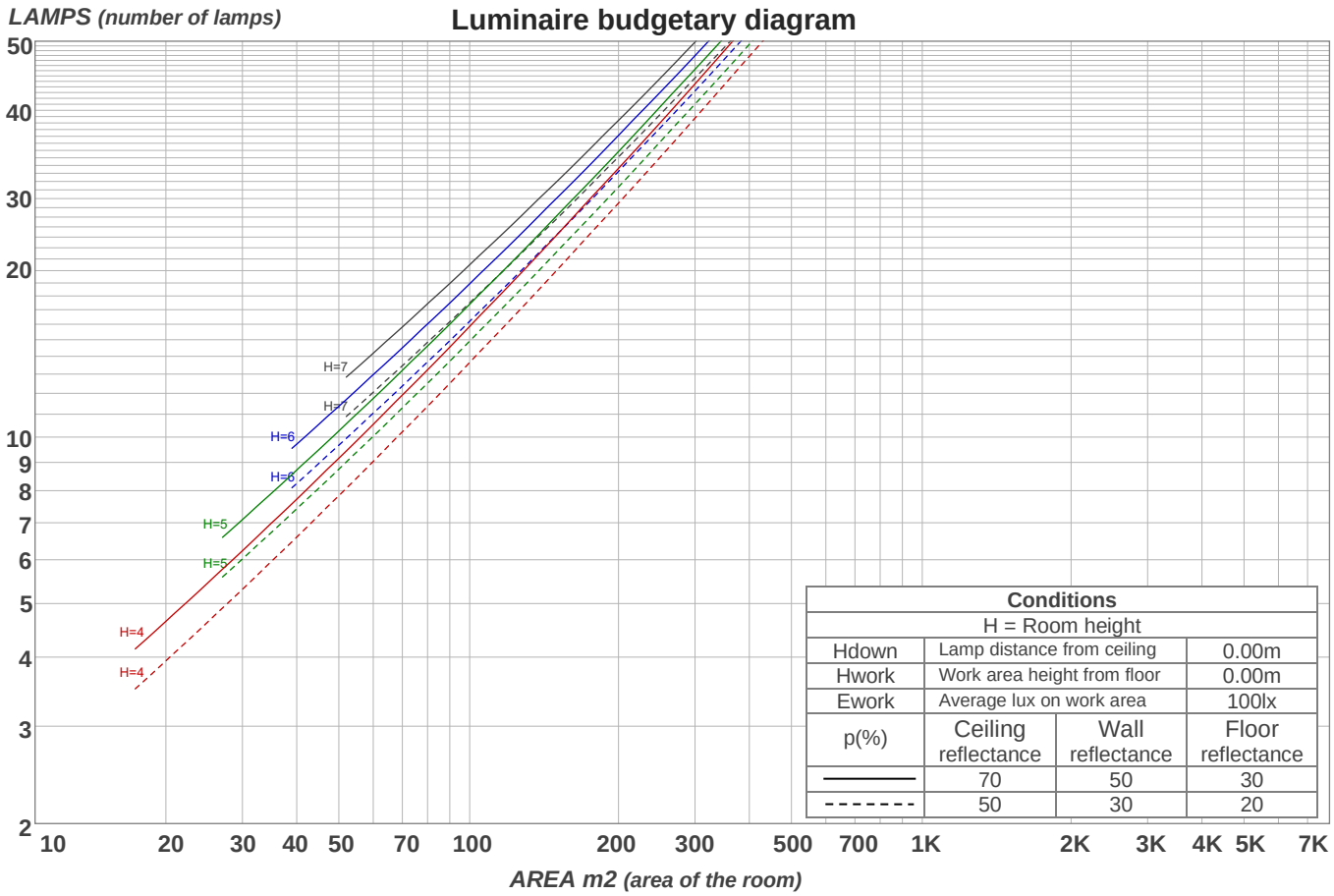
Glare Evaluation According to UGR

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	13,5	14,4	13,7	14,7	14,9	25,6	26,6	25,8	26,8	27,0
	3H	14,9	16,0	15,3	16,2	16,4	25,8	26,8	26,2	27,1	27,3
	4H	17,5	18,5	17,9	18,7	19,0	25,9	26,9	26,3	27,1	27,4
	6H	20,7	21,5	21,0	21,8	22,2	26,0	26,8	26,3	27,1	27,5
	8H	20,9	21,7	21,2	22,0	22,4	26,0	26,8	26,3	27,1	27,5
	12H	20,9	21,7	21,2	22,0	22,5	26,0	26,7	26,3	27,1	27,5
4H	2H	14,0	14,9	14,4	15,2	15,4	25,3	26,3	25,7	26,5	26,8
	3H	15,8	16,6	16,1	16,9	17,3	25,7	26,5	26,0	26,8	27,2
	4H	18,6	19,3	19,0	19,7	20,3	25,7	26,4	26,2	26,9	27,4
	6H	22,1	22,8	22,6	23,2	23,5	25,8	26,5	26,3	26,9	27,2
	8H	22,4	23,0	22,9	23,4	23,8	25,8	26,5	26,3	26,8	27,2
	12H	22,4	22,9	22,9	23,3	23,8	25,8	26,3	26,3	26,7	27,2
8H	4H	18,9	19,6	19,4	19,9	20,3	25,6	26,3	26,1	26,7	27,0
	6H	22,8	23,3	23,3	23,7	24,3	25,8	26,3	26,3	26,7	27,2
	8H	23,2	23,6	23,7	24,1	24,8	25,8	26,2	26,3	26,8	27,4
	12H	23,2	23,6	23,8	24,1	24,7	25,9	26,2	26,4	26,7	27,3
12H	4H	18,9	19,5	19,4	19,9	20,4	25,6	26,2	26,1	26,6	27,1
	6H	22,9	23,3	23,4	23,9	24,5	25,9	26,3	26,4	26,8	27,4
	8H	23,4	23,7	24,0	24,2	24,8	25,9	26,3	26,5	26,8	27,4
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / 0,0					2,9 / -3,5				
S = 1.5H		0,2 / -0,1					5,2 / -4,9				
S = 2.0H		0,2 / -0,3					7,0 / -5,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 934 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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	111	107	103	100	108	104	101	98	100	97	95	96	94	92	92	91	89	87
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	96	88	81	76	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	90	80	73	68	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	74	66	61	82	73	66	61	71	65	60	69	63	59	67	62	59	57
6	79	68	61	56	77	67	60	55	66	59	55	64	58	54	62	58	54	52
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	58	53	50	48
8	71	59	52	47	69	59	52	47	57	51	47	56	50	46	55	50	46	45
9	67	55	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

Luminaire budgetary diagram

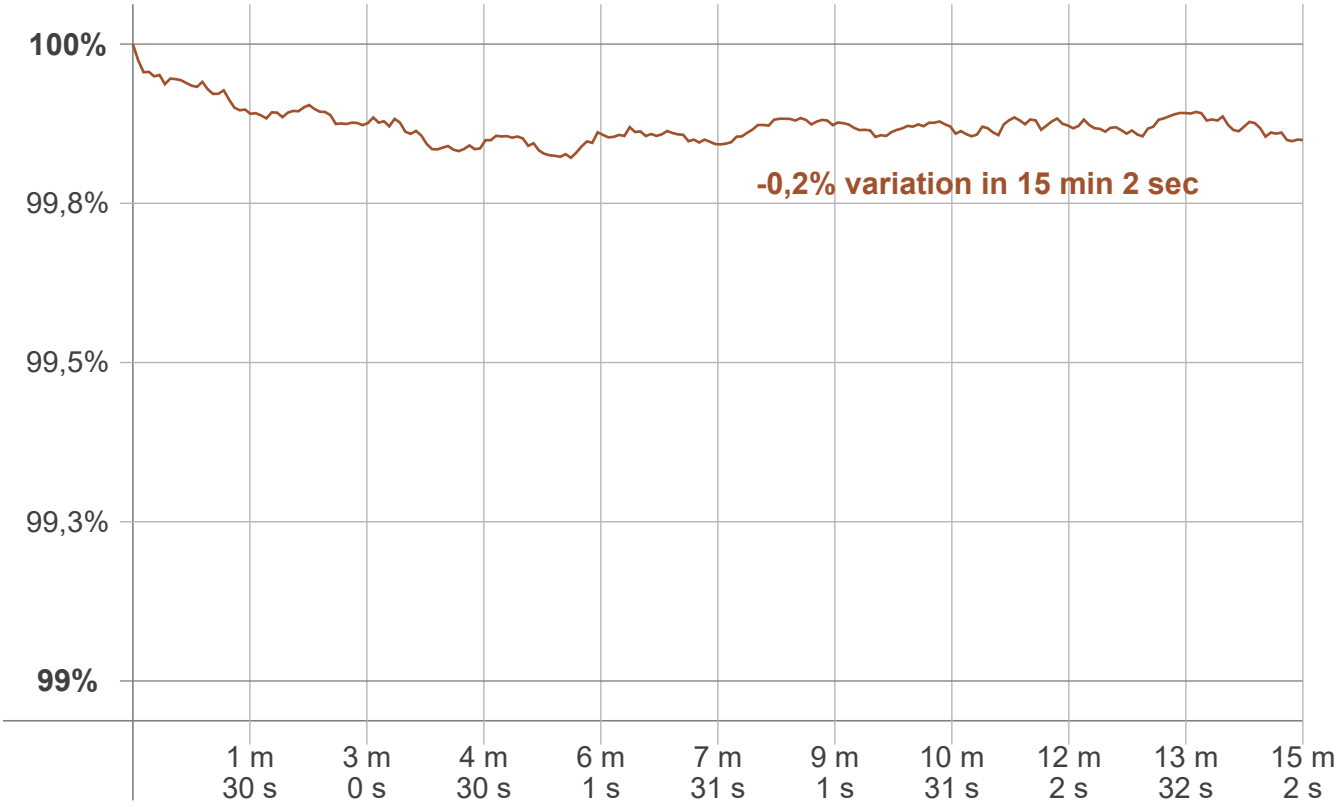


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
92,1 lm	195 lm	163 lm	166 lm	127 lm	81,2 lm	45,0 lm	37,3 lm	19,3 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,10 lm	1,61 lm	0,632 lm	0,572 lm	0,488 lm	0,390 lm	0,288 lm	0,176 lm	2,08 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 2 sec**
Warmup variation	**-0,2%**

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
936 lm	-2 lm	934 lm