Light efficiency:

33 Lumen/Watt

Light quality:

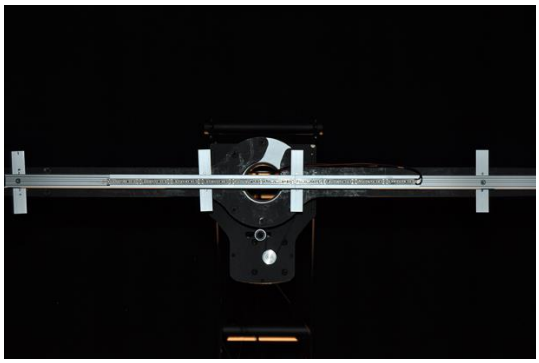
CRI: 0,0

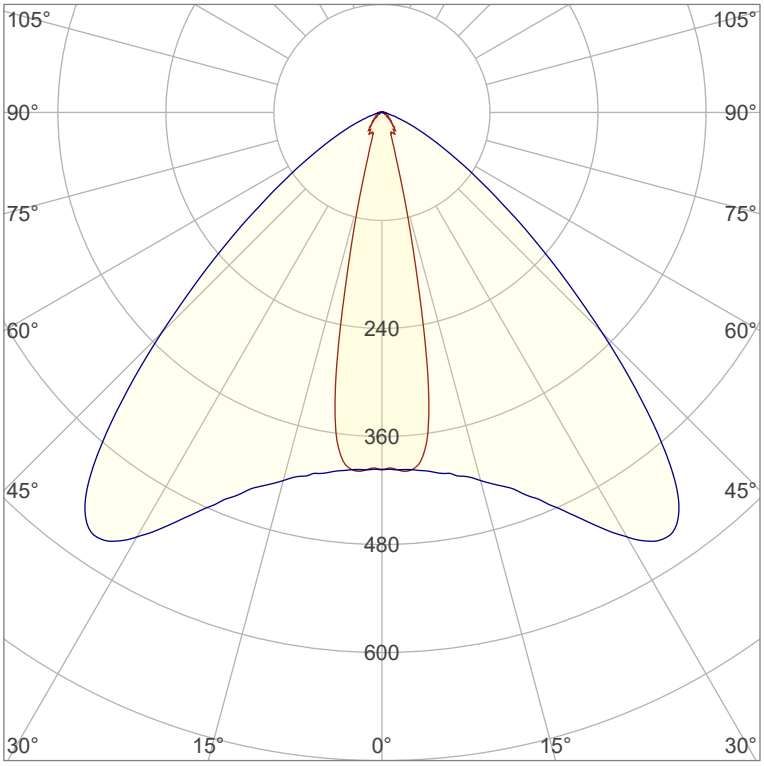
Color temperature:

0 K

Output: 321 lm
Peak: 568 cd

Power: 9,6 W
PF: 1,0





Product name:
Defiant-3_510mm_XXR_Inlay-Lens-30°

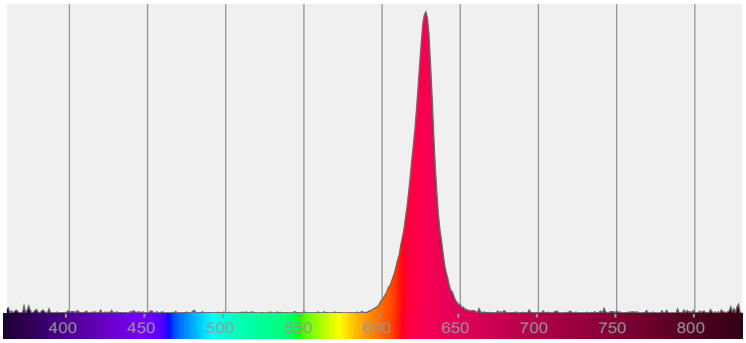
Item number:
NP/L3C/22C/0510/XXR/IL3F

Date and time:
29.08.2025 15:36:13

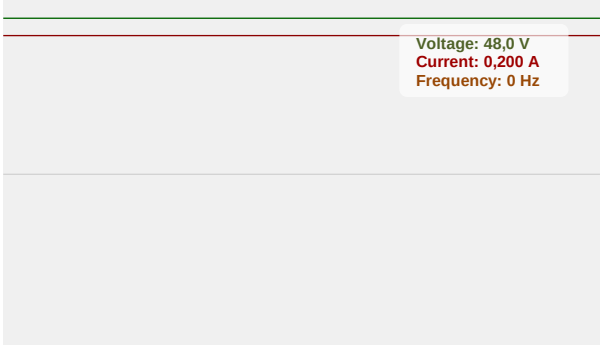
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 13.10.2023
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

CIE 1931
x: 0,694
y: 0,306

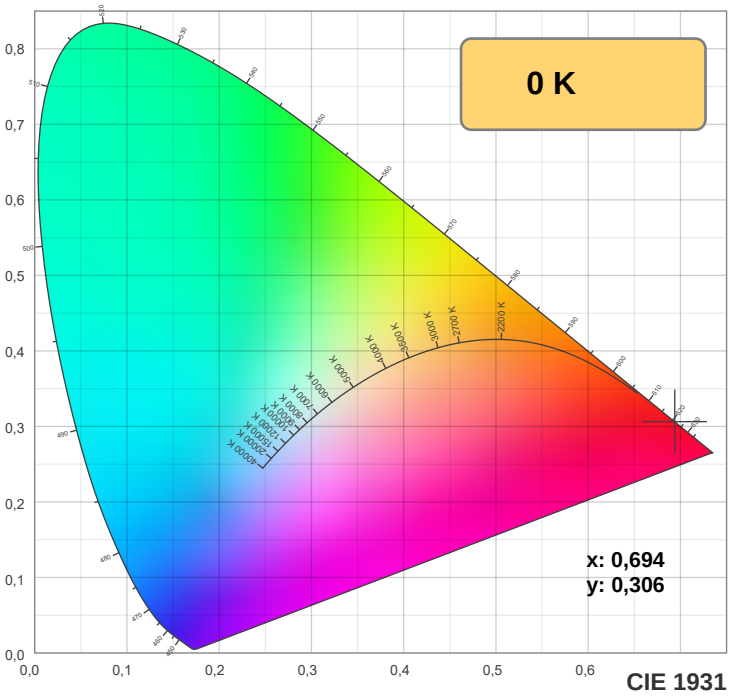
Spectra

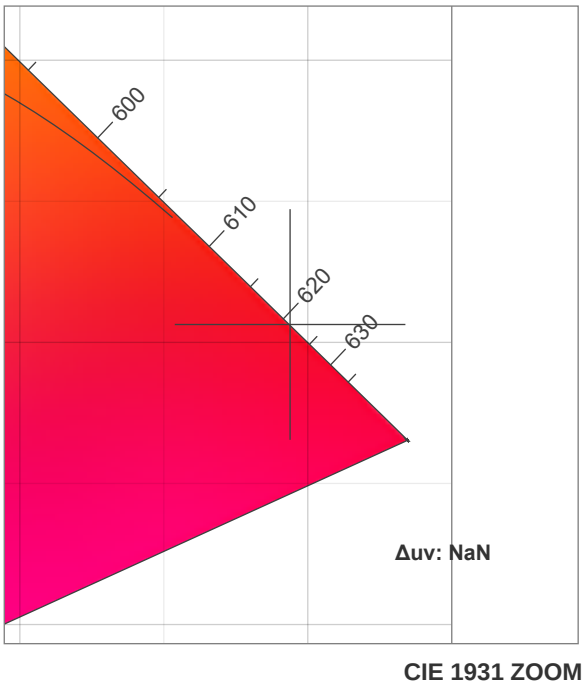


Power

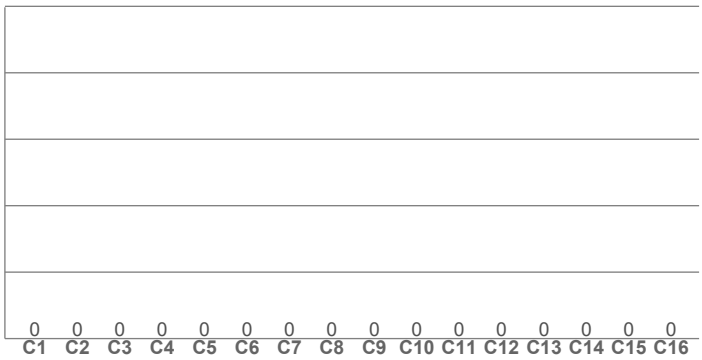


Color details

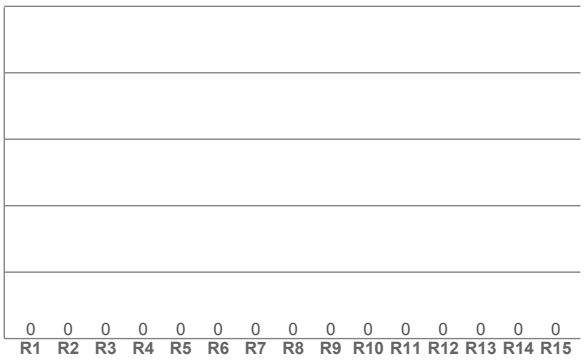




TM30: 0,0



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

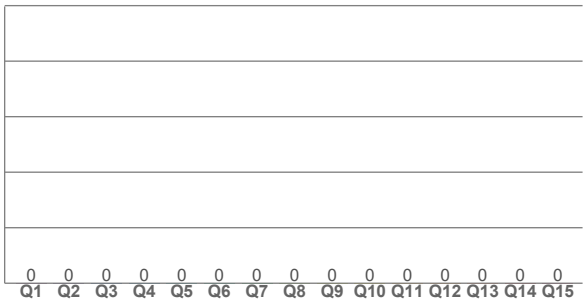
TM30 C values, 16 binned values out of total of 99 C values

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	0,694	0,306	0,525	0,348	NaN

TM30 details

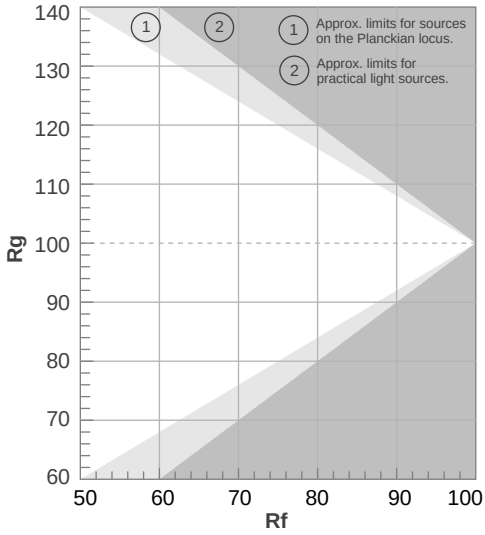
Rf 0,0

Fidelity index Rf

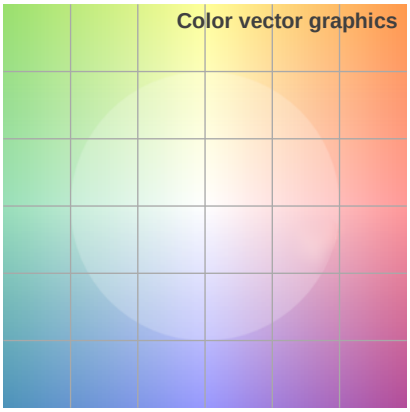
Rg 0,0

Gammut index Rg

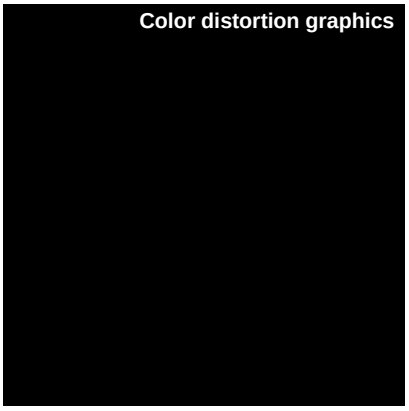
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%

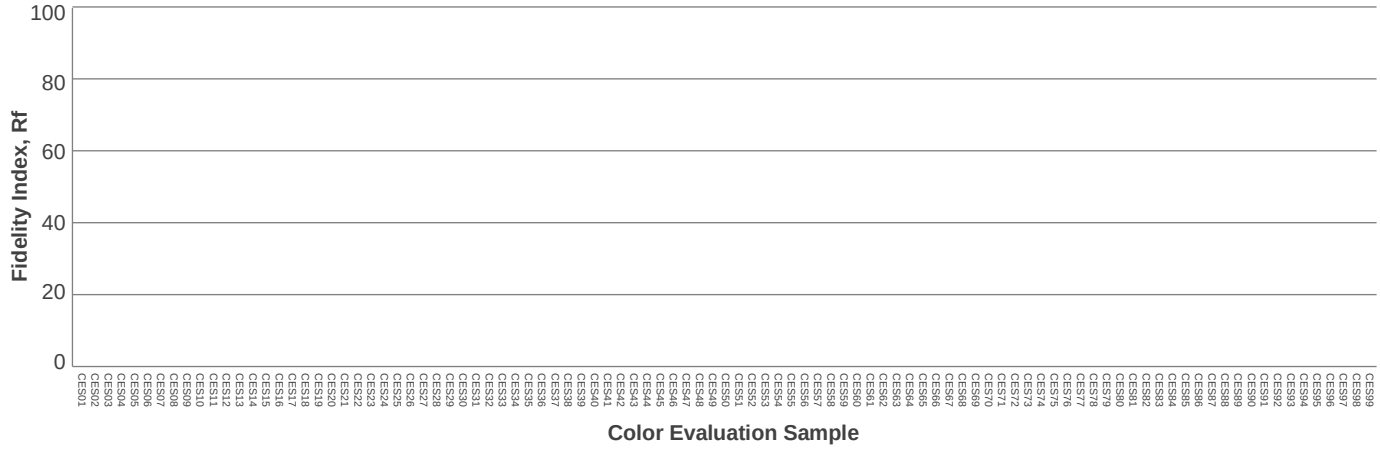




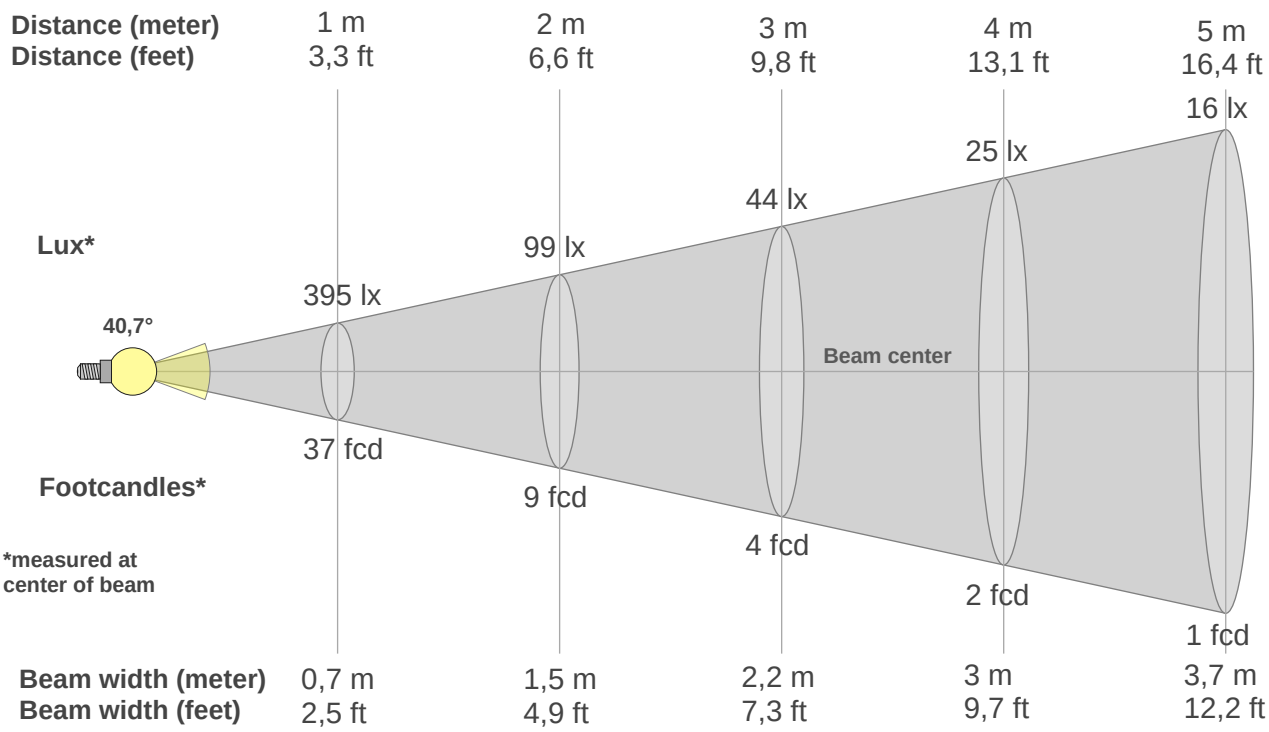








Beam details



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
395lx	99lx	44lx	25lx	16lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
36,7fcd	9,2fcd	4,1fcd	2,3fcd	1,5fcd	1fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	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°
395	396	399	392	363	292	191	118	71	47	34	27	25	24	26	27	25	23	24	22
100%	100%	101%	99%	92%	74%	48%	30%	18%	12%	9%	7%	6%	6%	7%	7%	6%	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°
395	397	398	400	403	407	413	419	428	437	449	463	481	501	524	544	561	568	559	532
100%	100%	101%	101%	102%	103%	104%	106%	108%	110%	114%	117%	122%	127%	132%	138%	142%	144%	141%	135%

Intensities in 180° c-plane

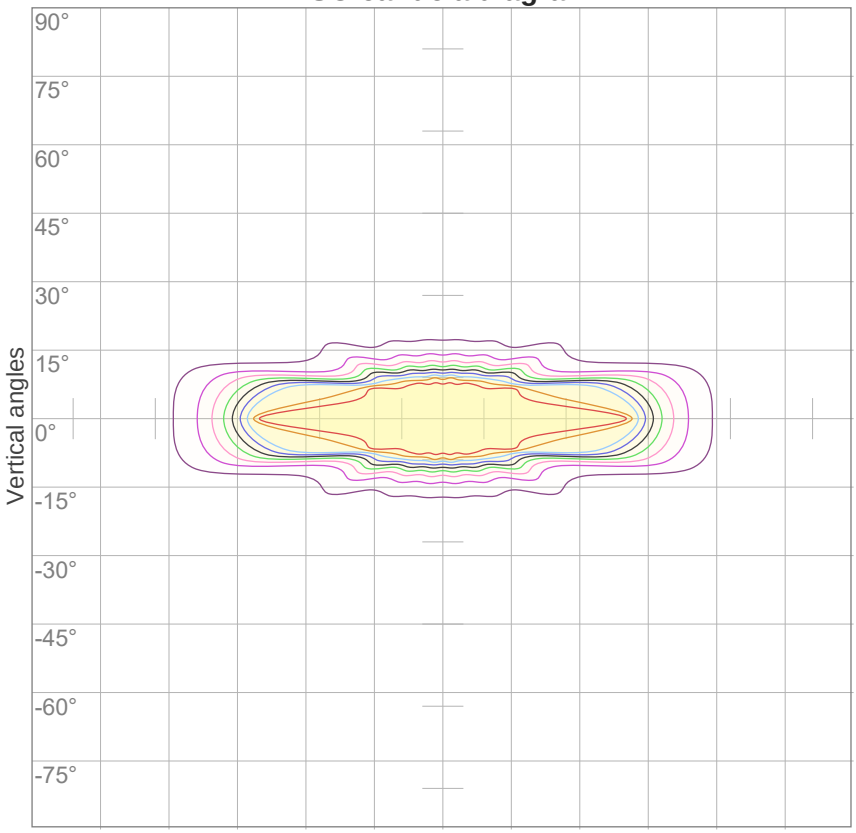
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
395	396	399	392	363	292	191	118	71	47	34	27	25	24	26	27	25	23	24	22
100%	100%	101%	99%	92%	74%	48%	30%	18%	12%	9%	7%	6%	6%	7%	7%	6%	6%	6%	6%

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°
395	397	398	400	403	407	413	419	428	437	449	463	481	501	524	544	561	568	559	532
100%	100%	101%	101%	102%	103%	104%	106%	108%	110%	114%	117%	122%	127%	132%	138%	142%	144%	141%	135%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40,7°	61,1°	120,6°	92,3%	78,3%

ISO candela diagram



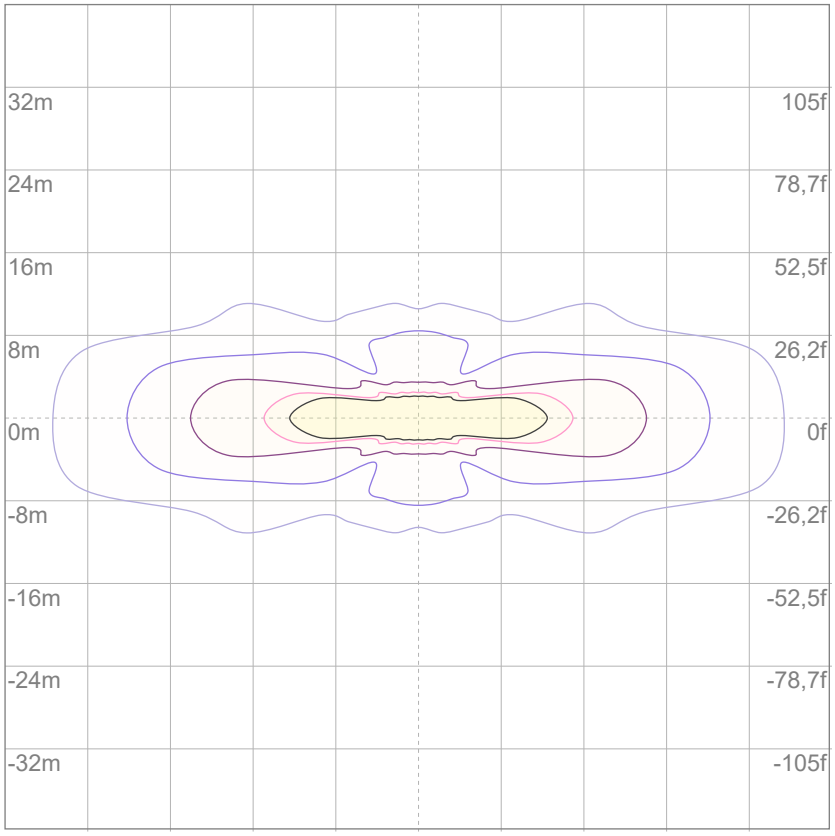
10%	40 cd
20%	79 cd
30%	119 cd
40%	158 cd
50%	198 cd
60%	237 cd
70%	277 cd
80%	316 cd
90%	356 cd

Conditions:

Number of c-planes: 16

Candela at center: 395 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,119 lx
5%	0,198 lx
10%	0,395 lx
30%	1,19 lx
50%	1,98 lx

Conditions:

Number of c-planes: 16

Lux at center: 3,95 lx

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

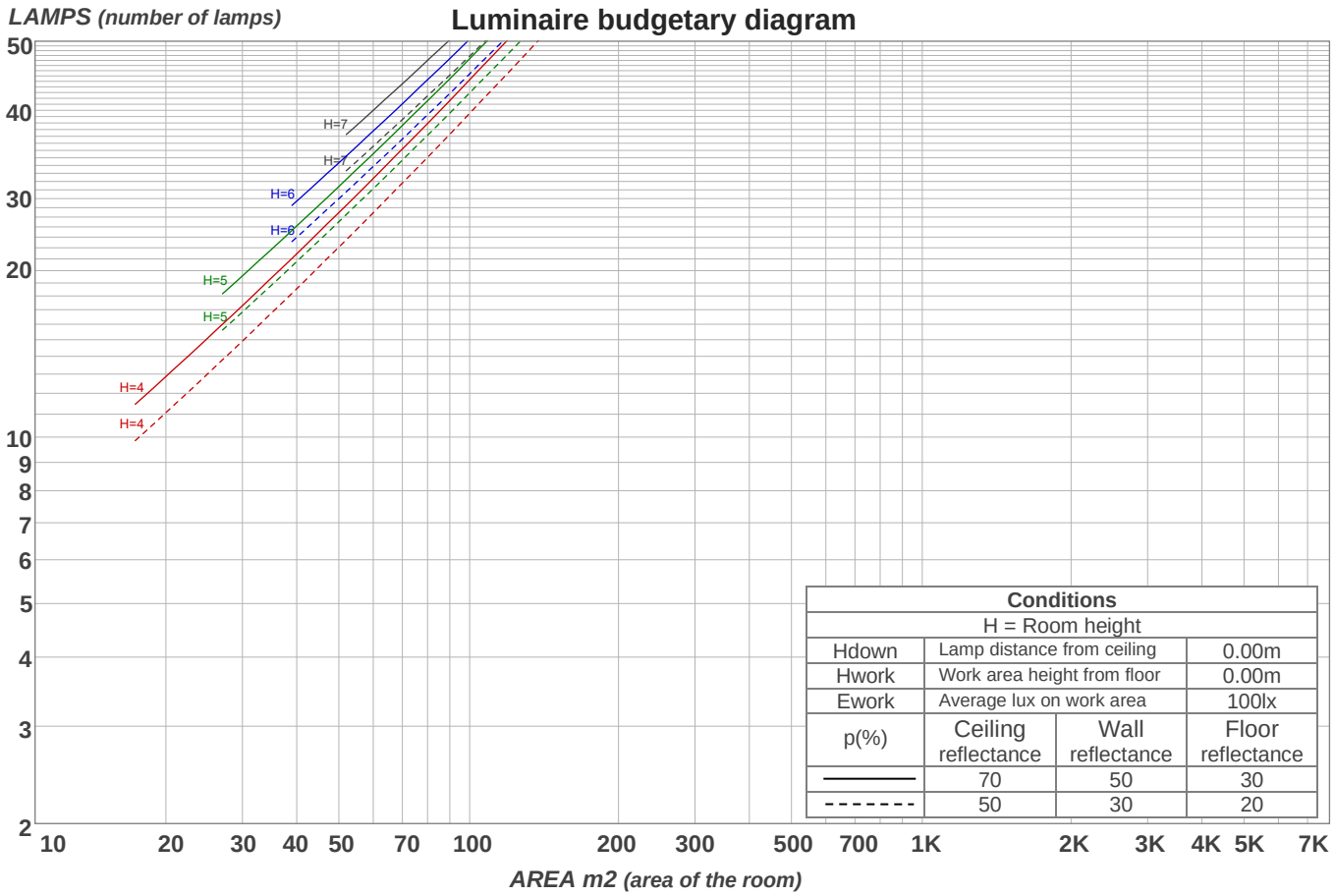
Glare Evaluation According to UGR

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	6,1	6,9	6,2	7,2	7,4	22,1	23,0	22,3	23,2	23,4
	3H	6,5	7,5	6,9	7,7	7,9	22,2	23,2	22,6	23,4	23,6
	4H	7,0	7,9	7,4	8,1	8,4	22,3	23,2	22,7	23,4	23,7
	6H	7,8	8,6	8,1	8,9	9,2	22,3	23,1	22,6	23,4	23,7
	8H	8,3	9,0	8,6	9,4	9,8	22,3	23,0	22,6	23,3	23,7
	12H	8,9	9,6	9,2	9,9	10,4	22,2	23,0	22,6	23,3	23,7
4H	2H	7,2	8,2	7,6	8,4	8,6	21,8	22,7	22,2	22,9	23,1
	3H	8,0	8,7	8,4	9,1	9,5	22,1	22,8	22,5	23,2	23,6
	4H	8,4	9,1	8,8	9,5	10,0	22,1	22,8	22,5	23,2	23,7
	6H	9,2	9,9	9,7	10,2	10,6	22,1	22,8	22,6	23,1	23,5
	8H	9,8	10,4	10,3	10,7	11,1	22,1	22,7	22,6	23,0	23,4
	12H	10,4	10,9	10,9	11,3	11,8	22,0	22,5	22,5	22,9	23,4
8H	4H	9,1	9,7	9,6	10,0	10,4	22,0	22,6	22,5	22,9	23,3
	6H	10,1	10,5	10,6	11,0	11,5	22,0	22,4	22,5	22,9	23,4
	8H	10,8	11,1	11,3	11,7	12,3	22,0	22,4	22,5	22,9	23,5
	12H	11,6	11,9	12,2	12,4	13,0	22,0	22,3	22,6	22,8	23,4
12H	4H	9,2	9,7	9,7	10,1	10,5	21,9	22,4	22,4	22,8	23,3
	6H	10,3	10,7	10,8	11,2	11,8	22,0	22,4	22,5	22,9	23,5
	8H	11,1	11,4	11,6	11,9	12,5	22,0	22,3	22,6	22,8	23,4
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,2 / -0,2					2,9 / -4,3				
S = 1.5H		0,4 / -0,4					5,2 / -6,2				
S = 2.0H		0,6 / -0,8					7,0 / -7,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 321 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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	84	82	80
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	77	74	73
4	92	83	76	71	90	82	75	71	79	74	70	77	72	69	75	71	68	66
5	86	76	70	64	85	75	69	64	73	68	63	72	67	63	70	65	62	60
6	81	71	64	59	80	70	63	59	68	63	58	67	62	58	65	61	57	56
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51
8	73	62	55	50	71	61	55	50	60	54	50	59	54	50	58	53	49	48
9	69	58	51	47	68	58	51	47	56	51	47	55	50	46	55	50	46	45
10	66	55	48	44	65	54	48	44	53	48	44	52	47	44	52	47	43	42

Luminaire budgetary diagram

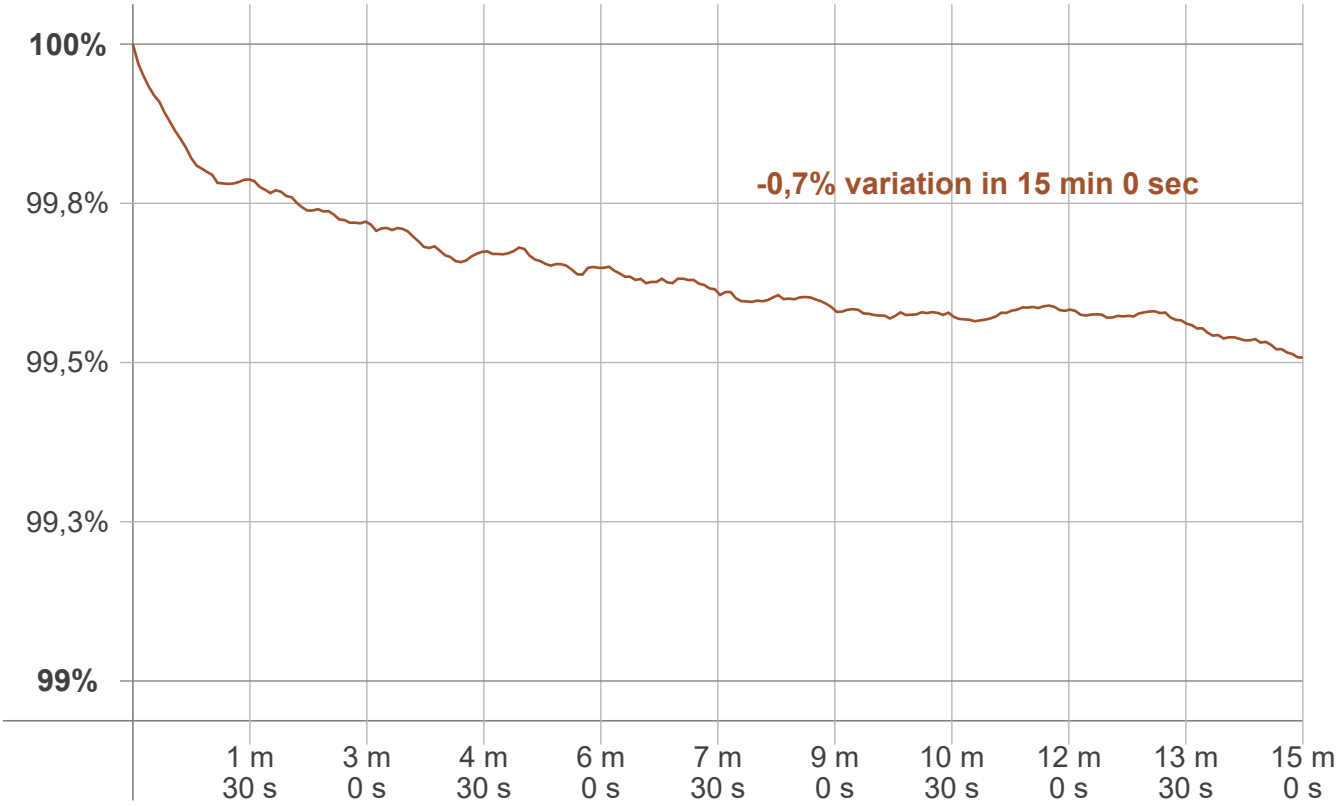


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
37,3 lm	70,2 lm	58,2 lm	59,7 lm	45,9 lm	25,1 lm	12,6 lm	5,88 lm	3,11 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,05 lm	0,395 lm	0,364 lm	0,329 lm	0,284 lm	0,231 lm	0,170 lm	0,104 lm	0,035 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 0 sec**
Warmup variation	**-0,7%**

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
323 lm	-2 lm	321 lm