Light efficiency:

113 Lumen/Watt

Light quality:

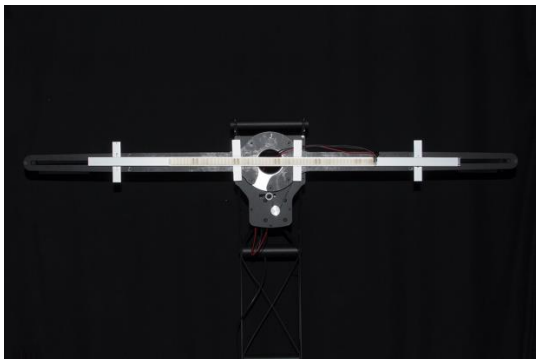
CRI: 94,3

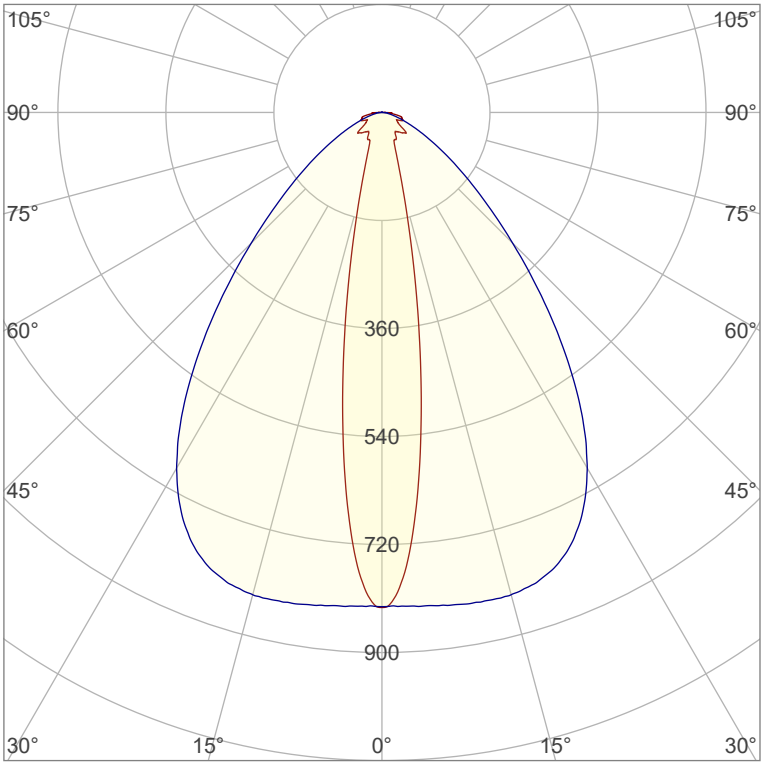
Color temperature:

2700 K

Output: 541 lm
Peak: 833 cd

Power: 4,8 W
PF: 1,0





CIE 1931
x: 0,460
y: 0,411

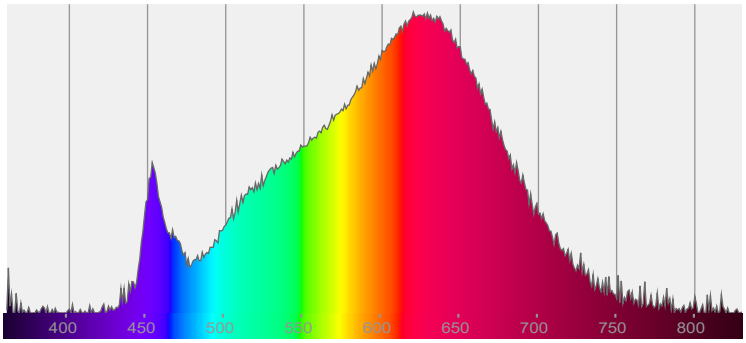
Product name:
Victory-7_510mm_927_Lens-15°-Frosted

Item number:
NP/L1C/03F/0510/927/L1F

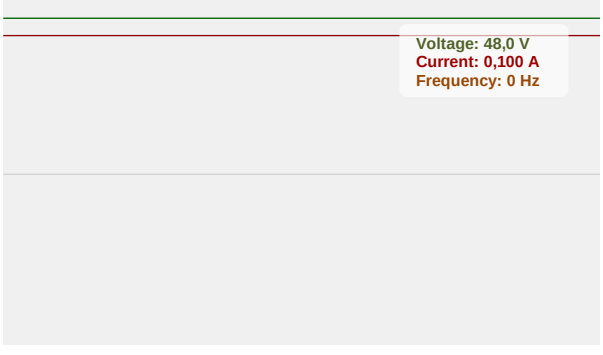
Date and time:
03.06.2022 09:11:52

Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 20-09-2021
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

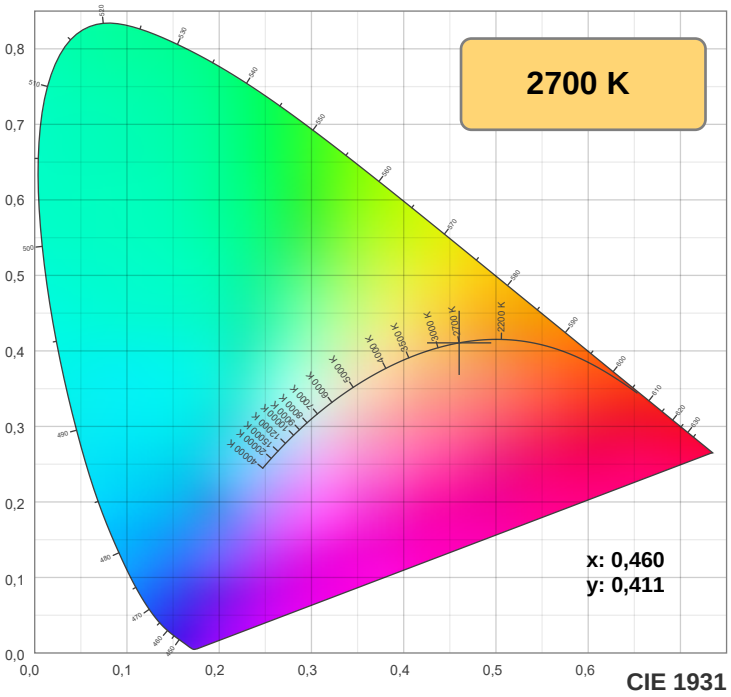
Spectra



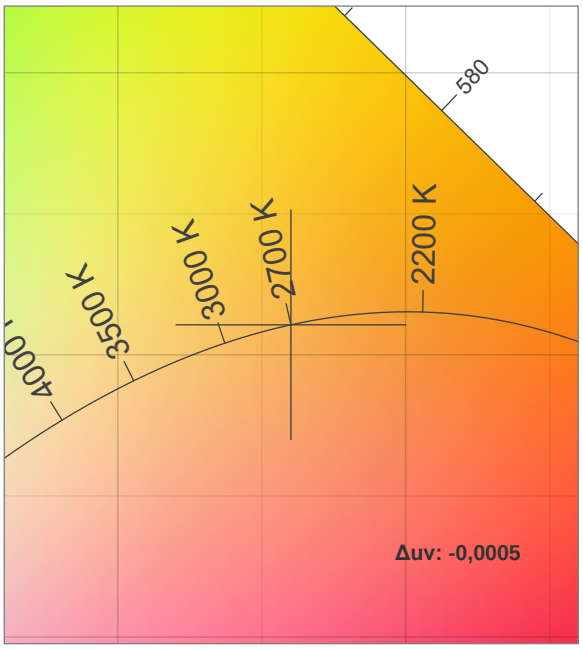
Power



Color details

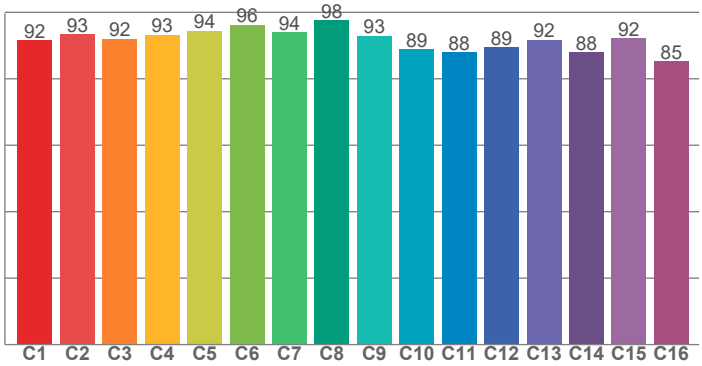


CIE 1931

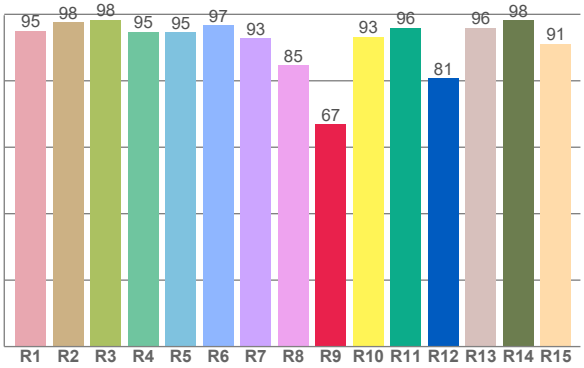


CIE 1931 ZOOM

TM30: 91,6



CRI: 94,3 (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
95,1	97,7	98,4	94,7	94,5	96,6	92,8	84,8	66,9	93,2	96,0	80,7	95,9	98,2	91,1

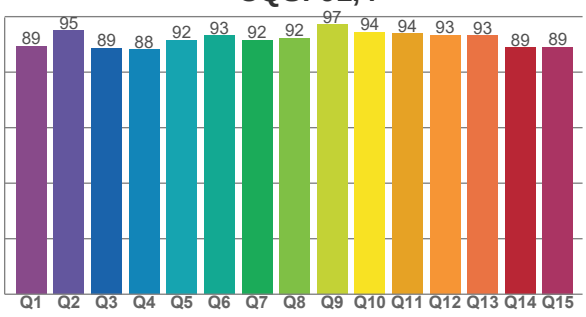
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	93,3	91,9	93,3	94,5	96,3	94,0	97,6	92,9	88,8	88,0	89,5	91,7	87,9	92,2	85,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,3	95,0	88,8	88,1	91,6	93,2	91,6	92,4	97,1	94,4	93,9	93,4	93,1	88,9	89,0

CQS: 91,4



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
2700 K	94,3	66,9	91,6	99,3	91,4	0,460	0,411	0,263	0,352	-0,0005

TM30 details

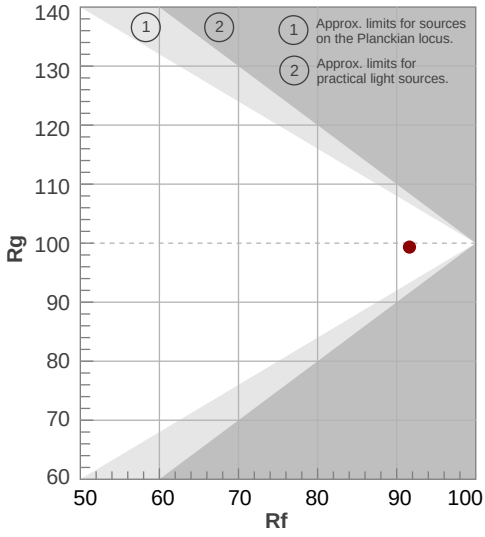
Rf 91,6

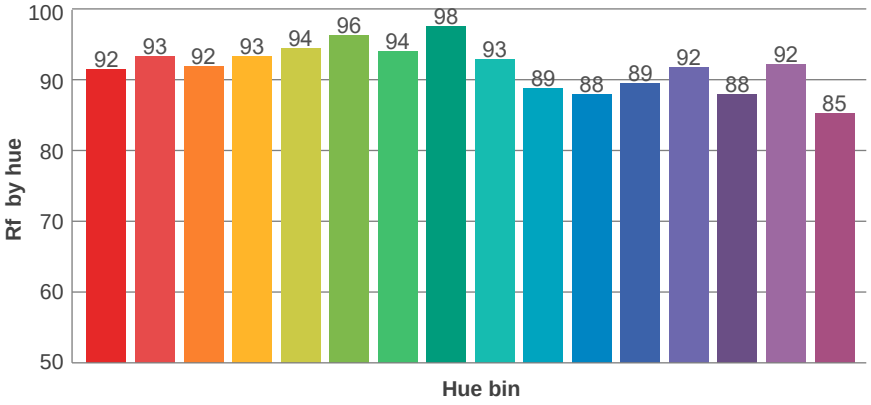
Fidelity index Rf

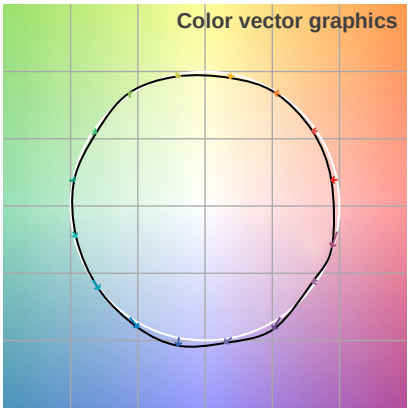
Rg 99,3

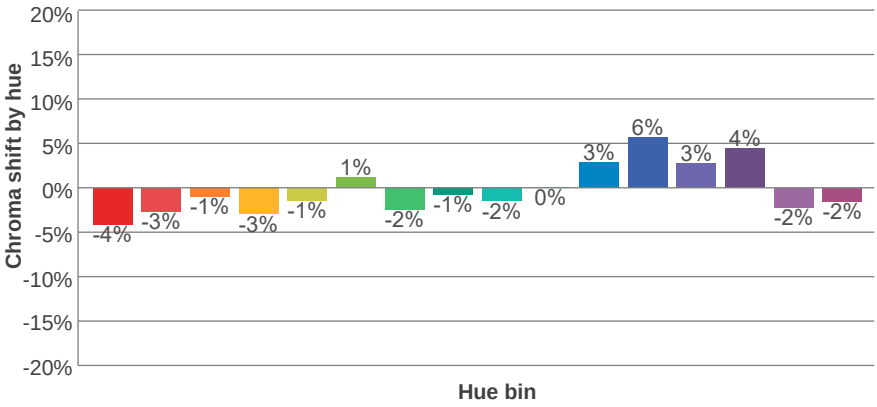
Gammut index Rg

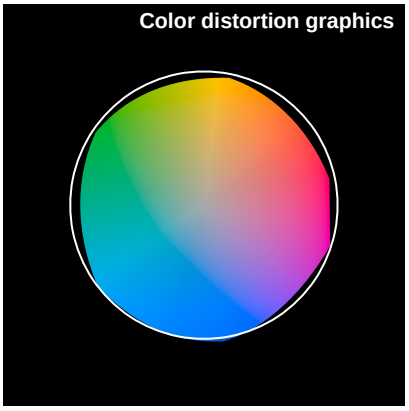
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	92	-4%	1%
2	93	-3%	2%
3	92	-1%	4%
4	93	-3%	0%
5	94	-1%	2%
6	96	1%	1%
7	94	-2%	0%
8	98	-1%	1%
9	93	-2%	4%
10	89	0%	8%
11	88	3%	9%
12	89	6%	1%
13	92	3%	-5%
14	88	4%	-9%
15	92	-2%	-3%
16	85	-2%	-11%

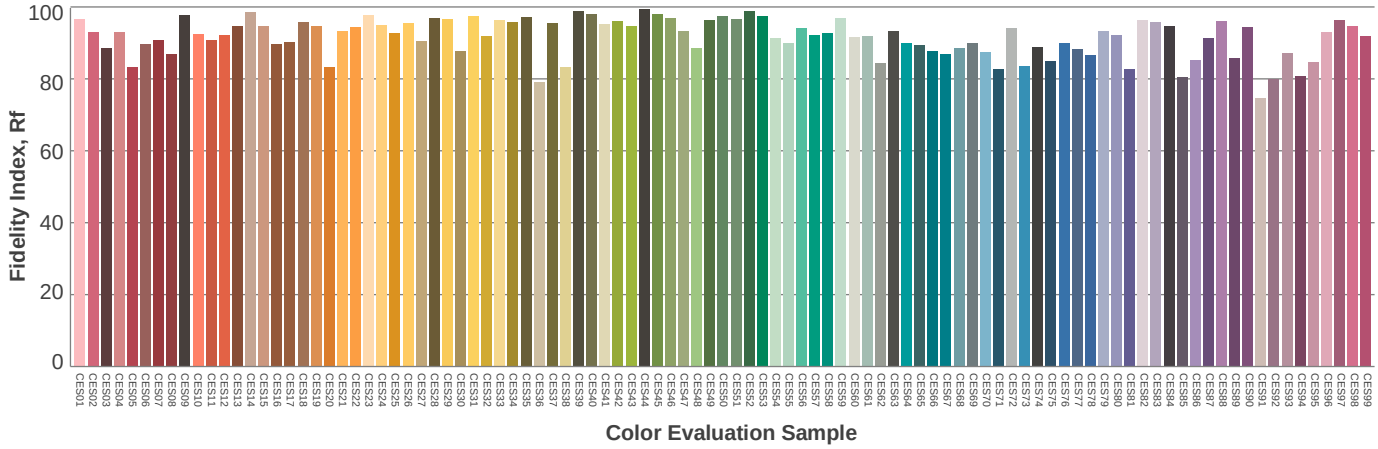




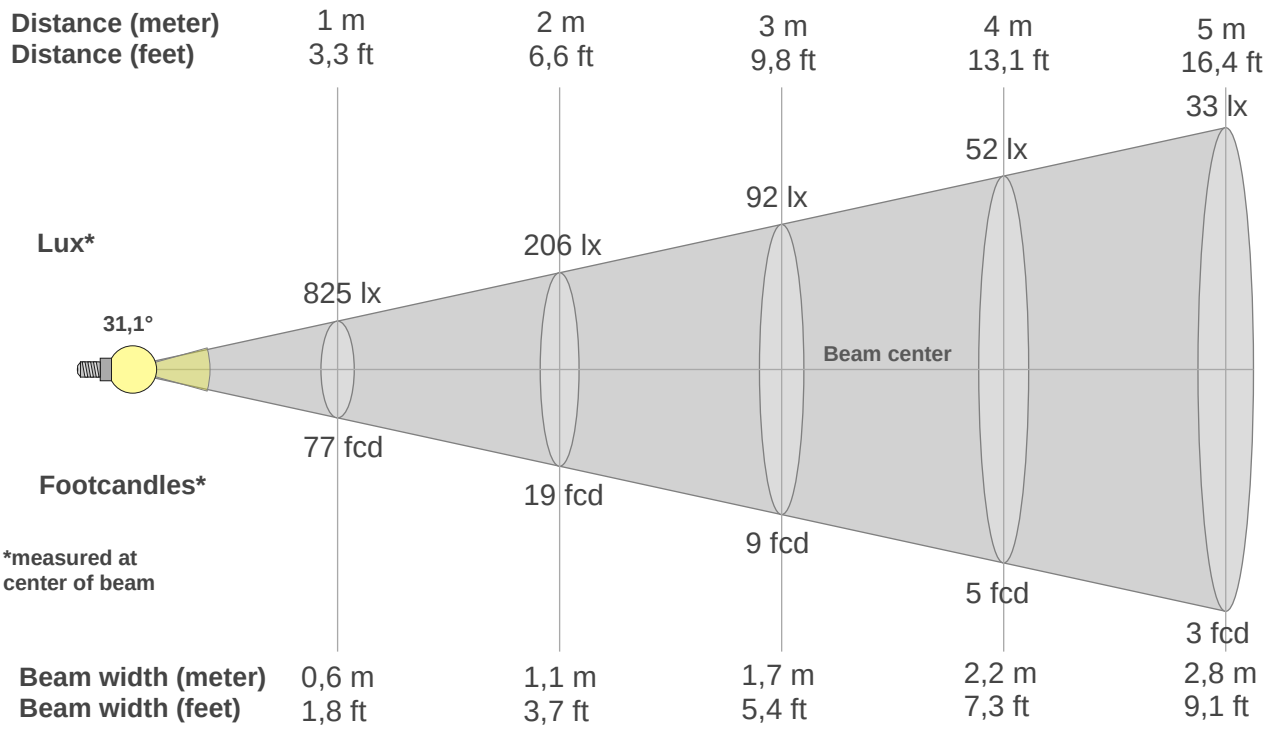








Beam details



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
825lx	206lx	92lx	52lx	33lx	23lx	17lx	13lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx
76,7fcd	19,2fcd	8,5fcd	4,8fcd	3,1fcd	2,1fcd	1,6fcd	1,2fcd	0,9fcd	0,8fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	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°
825	796	713	597	470	349	246	169	117	85	66	54	51	50	50	48	42	40	39	41
100%	96%	86%	72%	57%	42%	30%	20%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%	5%

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°
825	824	825	826	829	831	832	833	830	825	815	801	782	755	723	684	640	591	538	484
100%	100%	100%	100%	100%	101%	101%	101%	101%	100%	99%	97%	95%	92%	88%	83%	78%	72%	65%	59%

Intensities in 180° c-plane

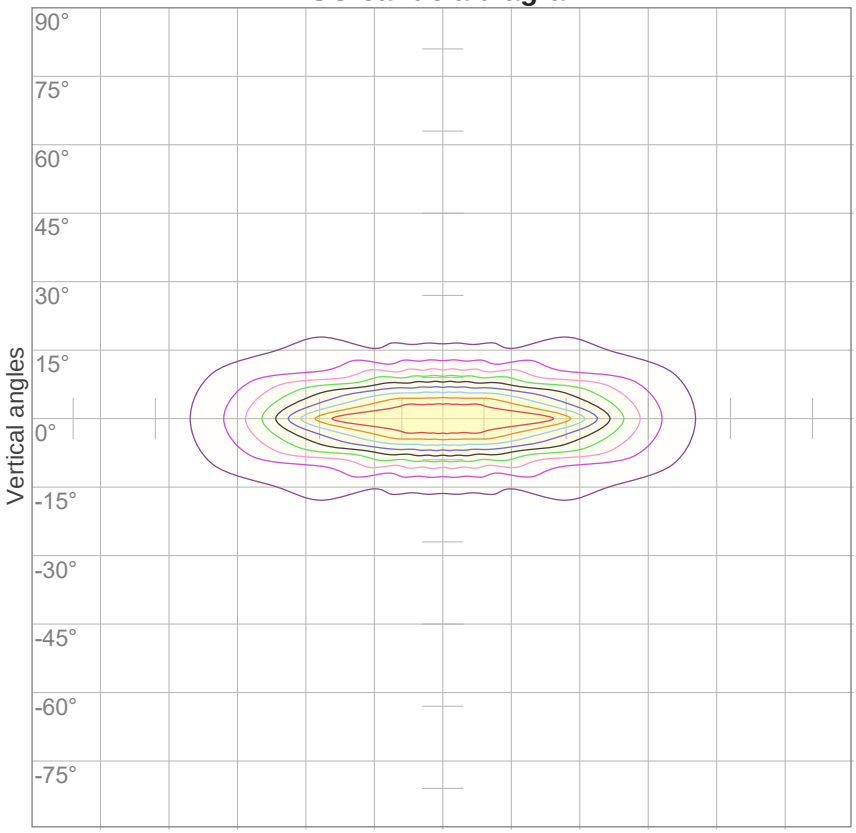
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
825	796	713	597	470	349	246	169	117	85	66	54	51	50	50	48	42	40	39	41
100%	96%	86%	72%	57%	42%	30%	20%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%	5%

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°
825	824	825	826	829	831	832	833	830	825	815	801	782	755	723	684	640	591	538	484
100%	100%	100%	100%	100%	101%	101%	101%	101%	100%	99%	97%	95%	92%	88%	83%	78%	72%	65%	59%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,1°	**55,8°**	**160,6°**	**84,8%**	**70,4%**

ISO candela diagram



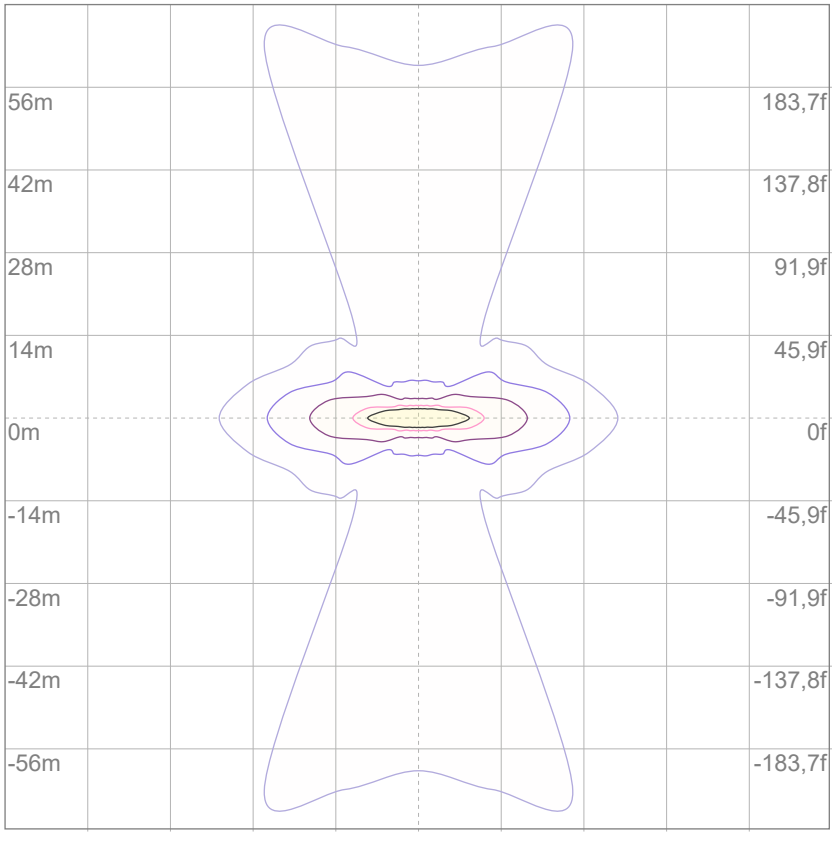
10%	83 cd
20%	165 cd
30%	248 cd
40%	330 cd
50%	413 cd
60%	495 cd
70%	578 cd
80%	660 cd
90%	743 cd

Conditions:

Number of c-planes: 16

Candela at center: 825 cd

ISO lux diagram



3%	0,248 lx
5%	0,413 lx
10%	0,825 lx
30%	2,48 lx
50%	4,13 lx

Conditions:

Number of c-planes: 16

Lux at center: 8,25 lx

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

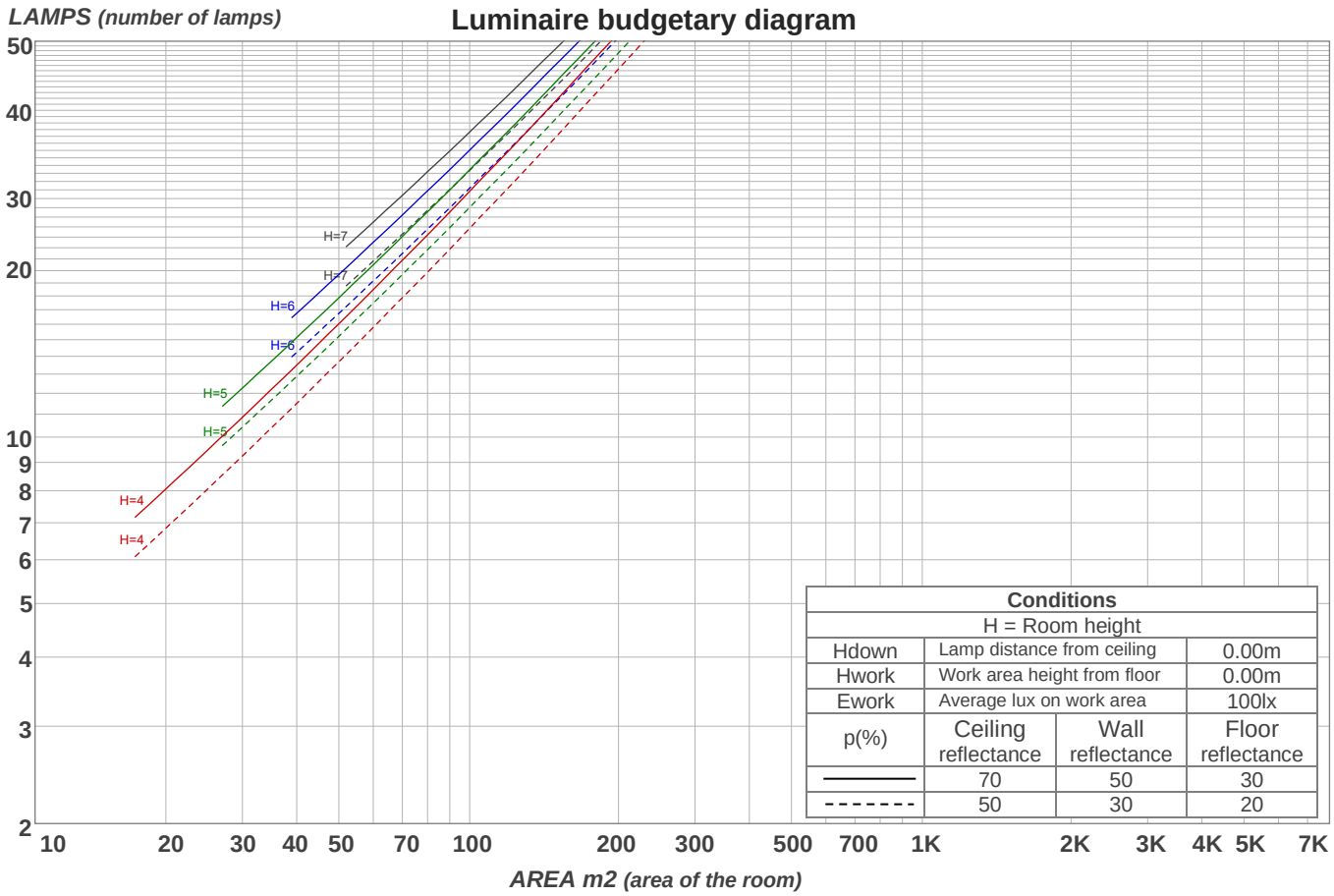
Glare Evaluation According to UGR

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	12,9	13,9	13,1	14,1	14,3	21,2	22,1	21,3	22,4	22,6
	3H	15,4	16,4	15,8	16,6	16,8	21,6	22,7	22,0	22,9	23,1
	4H	16,8	17,7	17,2	18,0	18,2	21,8	22,8	22,2	23,1	23,3
	6H	18,0	18,9	18,3	19,2	19,5	22,0	22,9	22,3	23,2	23,5
	8H	18,4	19,2	18,7	19,5	19,9	22,0	22,9	22,4	23,2	23,6
	12H	18,5	19,3	18,9	19,7	20,1	22,0	22,8	22,4	23,2	23,6
4H	2H	13,5	14,5	13,9	14,8	15,0	20,9	21,9	21,3	22,1	22,4
	3H	16,3	17,1	16,7	17,5	17,9	21,6	22,4	22,0	22,8	23,2
	4H	17,8	18,6	18,3	19,0	19,5	21,8	22,5	22,2	23,0	23,5
	6H	19,3	20,0	19,8	20,3	20,7	22,0	22,7	22,5	23,1	23,4
	8H	19,7	20,3	20,2	20,7	21,1	22,1	22,8	22,6	23,1	23,5
	12H	19,9	20,5	20,4	20,9	21,4	22,1	22,7	22,6	23,1	23,6
8H	4H	18,2	18,9	18,7	19,2	19,6	21,8	22,5	22,3	22,9	23,2
	6H	19,9	20,4	20,4	20,8	21,4	22,1	22,6	22,6	23,1	23,6
	8H	20,5	20,9	21,0	21,4	22,1	22,3	22,7	22,8	23,3	23,9
	12H	20,8	21,2	21,4	21,7	22,3	22,4	22,8	23,0	23,3	23,9
12H	4H	18,2	18,8	18,7	19,2	19,7	21,8	22,4	22,3	22,8	23,3
	6H	20,0	20,4	20,5	21,0	21,6	22,2	22,6	22,7	23,2	23,8
	8H	20,6	21,0	21,2	21,5	22,1	22,4	22,8	23,0	23,3	23,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,5 / -1,5				
S = 1.5H		0,2 / -0,2					3,1 / -2,3				
S = 2.0H		0,4 / -0,3					4,6 / -3,0				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 541 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	110	110	110	105	105	105	100	100	100	98
1	110	106	102	99	107	103	100	97	99	96	94	95	92	90	91	89	87	85
2	102	95	90	85	100	93	88	84	90	85	82	86	83	79	83	80	77	75
3	95	87	80	75	93	85	79	74	82	77	72	79	75	71	76	73	69	67
4	89	79	72	67	87	78	71	66	75	70	65	73	68	64	71	66	63	61
5	84	73	66	60	82	72	65	60	70	64	59	68	62	58	66	61	58	56
6	79	68	60	55	77	67	60	55	65	59	54	63	58	54	62	57	53	51
7	74	63	56	51	73	62	55	51	61	55	50	59	54	50	58	53	49	48
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	55	50	46	44
9	67	56	49	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	64	52	46	41	62	52	46	41	51	45	41	50	45	41	49	44	41	39

Luminaire budgetary diagram

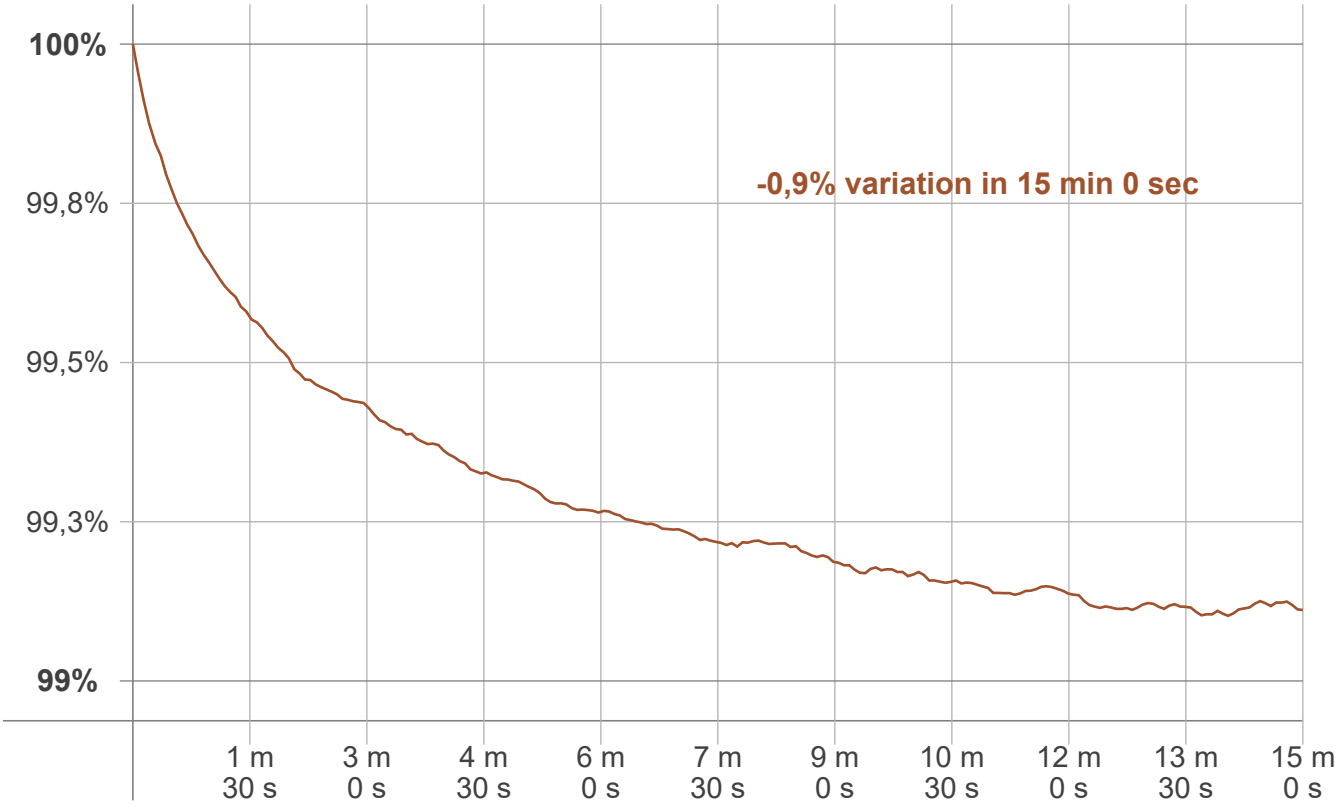


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
63,0 lm	107 lm	95,1 lm	80,8 lm	64,7 lm	47,7 lm	31,2 lm	24,9 lm	14,4 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3,41 lm	2,11 lm	1,03 lm	0,929 lm	0,802 lm	0,651 lm	0,480 lm	0,294 lm	2,20 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 0 sec**
Warmup variation	**-0,9%**

Warmup conditions

Stable period:	**15 min**
Stable change max:	**2,0%**
Minimum time:	**15 min**

Color temperature change

CCT start	CCT change	CCT end
2702 K	-2 K	2700 K

Output change

Output start	Output change	Output end
546 lm	-5 lm	541 lm