Light efficiency:

89 Lumen/Watt

Light quality:

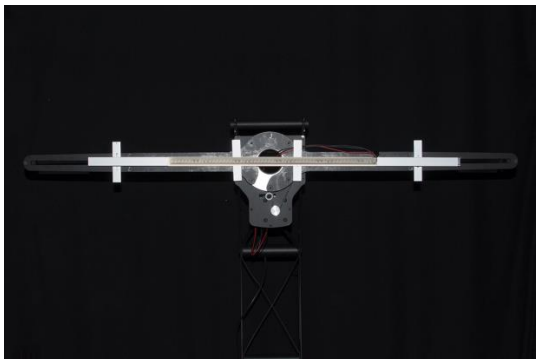
CRI: 94,5

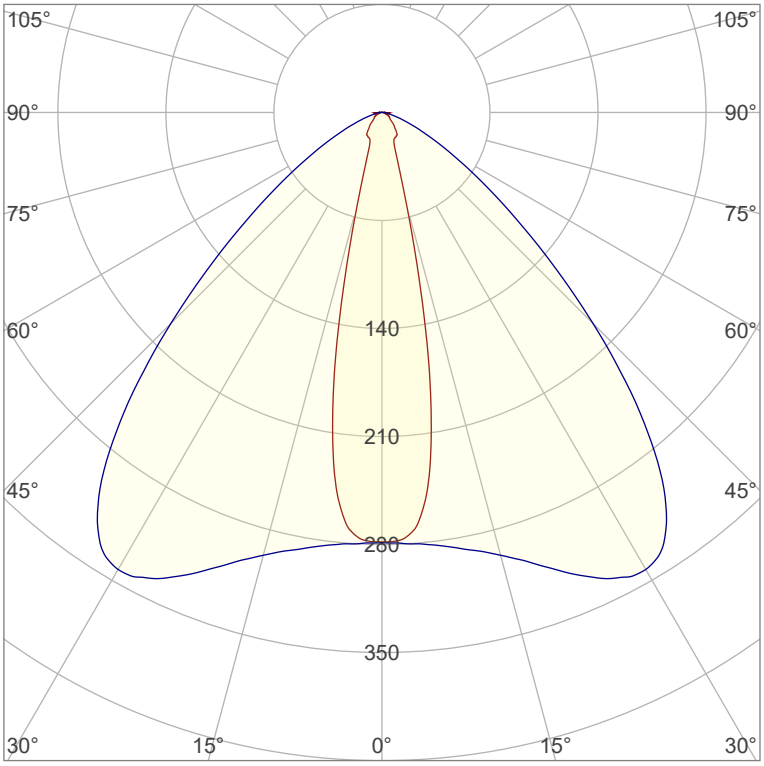
Color temperature:

2700 K

Output: 213 lm
Peak: 342 cd

Power: 2,4 W
PF: 1,0





Product name:
Sta-Maria-6_510mm_927_Inlay-Lens-30°

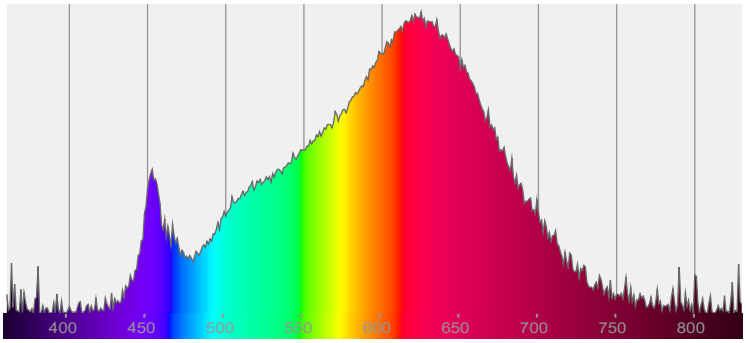
Item number:
NP/L1C/01E/0510/927/IL3F

Date and time:
17.07.2025 14:51:06

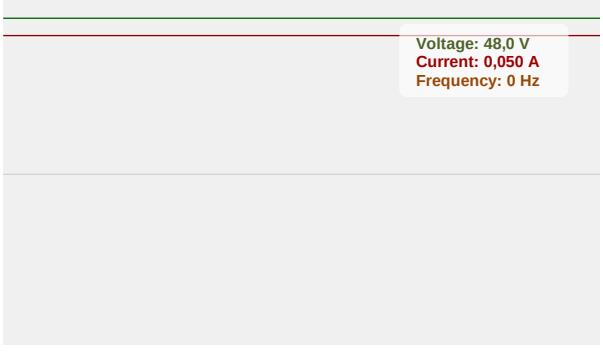
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 13.10.2023
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

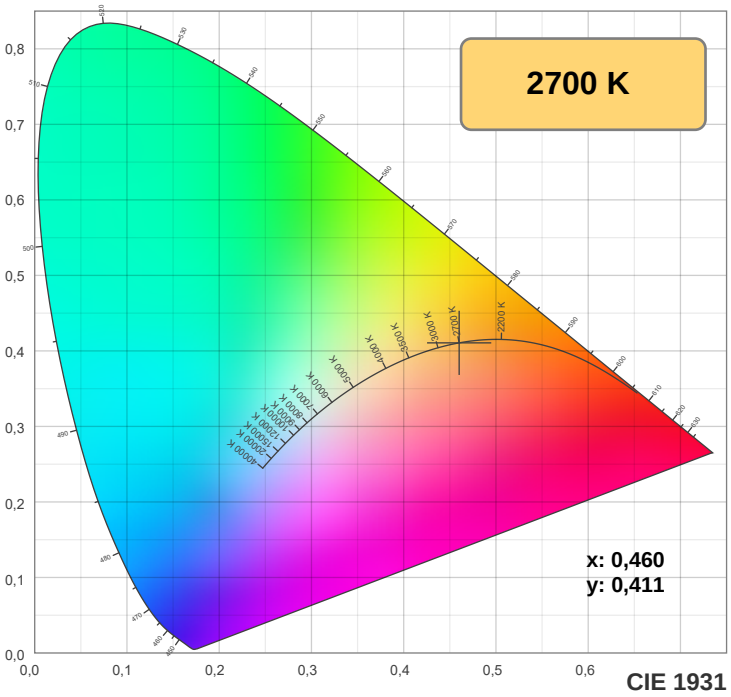
Spectra



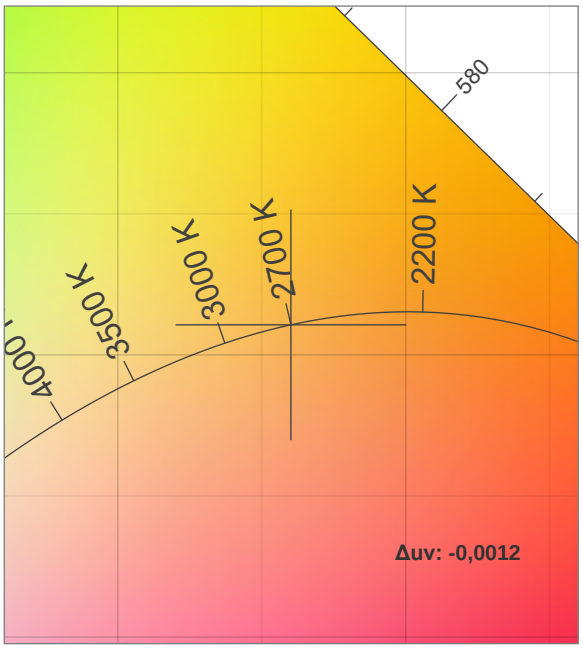
Power



Color details

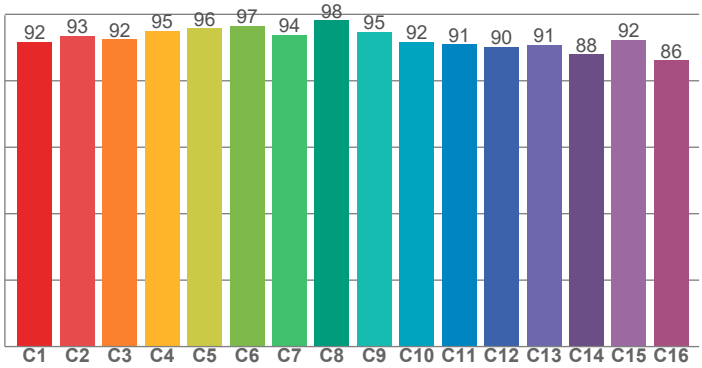


CIE 1931

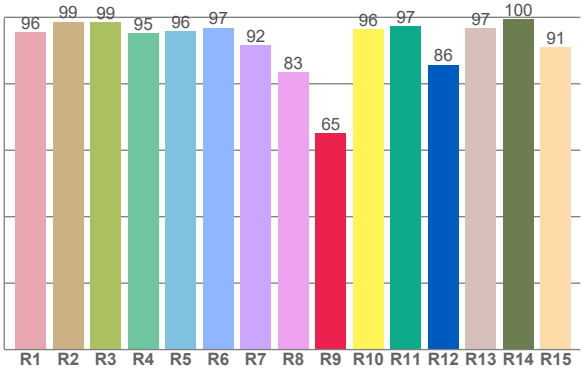


CIE 1931 ZOOM

TM30: 92,7



CRI: 94,5 (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
95,5	98,7	98,6	95,3	95,7	96,9	91,6	83,4	65,0	96,4	97,2	85,8	96,7	99,5	91,1

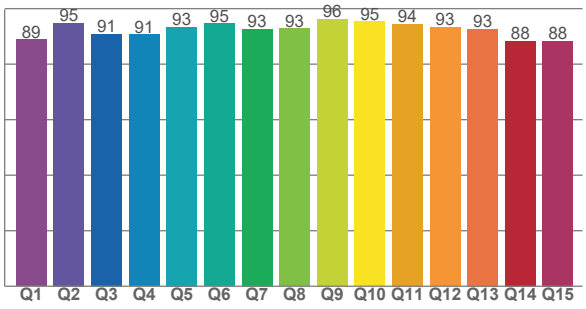
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,7	93,5	92,4	95,1	95,7	96,5	93,8	98,1	94,7	91,8	91,0	90,2	90,9	87,9	92,3	86,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
88,9	94,8	90,9	90,6	93,4	94,6	92,7	92,8	96,3	95,4	94,5	93,3	92,7	88,4	88,4

CQS: 92,0



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
2700 K	94,5	65,0	92,7	99,4	92,0	0,460	0,411	0,263	0,352	-0,0012

TM30 details

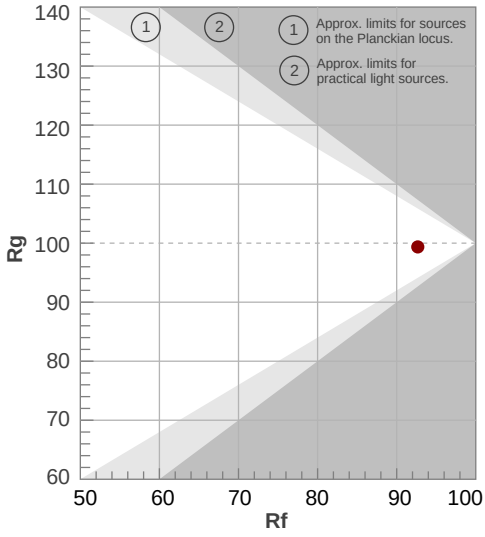
Rf 92,7

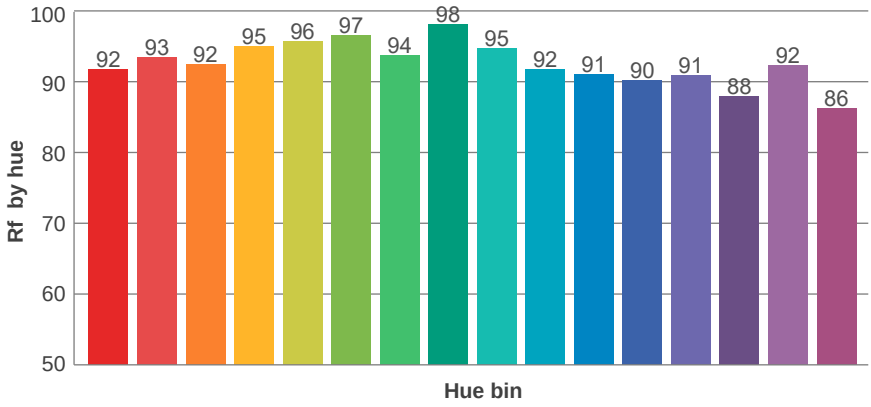
Fidelity index Rf

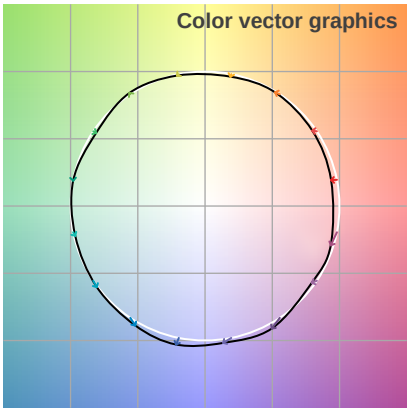
Rg 99,4

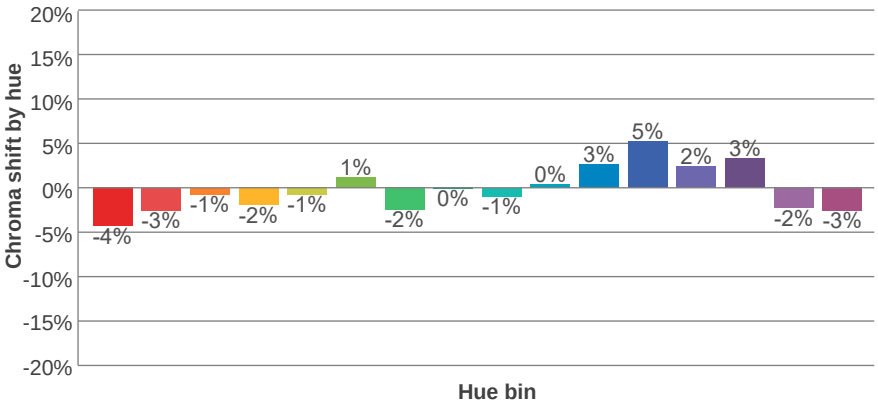
Gammut index Rg

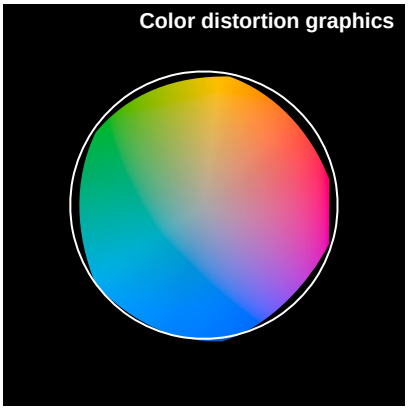
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	92	-4%	1%
2	93	-3%	2%
3	92	-1%	4%
4	95	-2%	0%
5	96	-1%	2%
6	97	1%	0%
7	94	-2%	0%
8	98	0%	1%
9	95	-1%	3%
10	92	0%	5%
11	91	3%	6%
12	90	5%	-1%
13	91	2%	-7%
14	88	3%	-9%
15	92	-2%	-3%
16	86	-3%	-10%

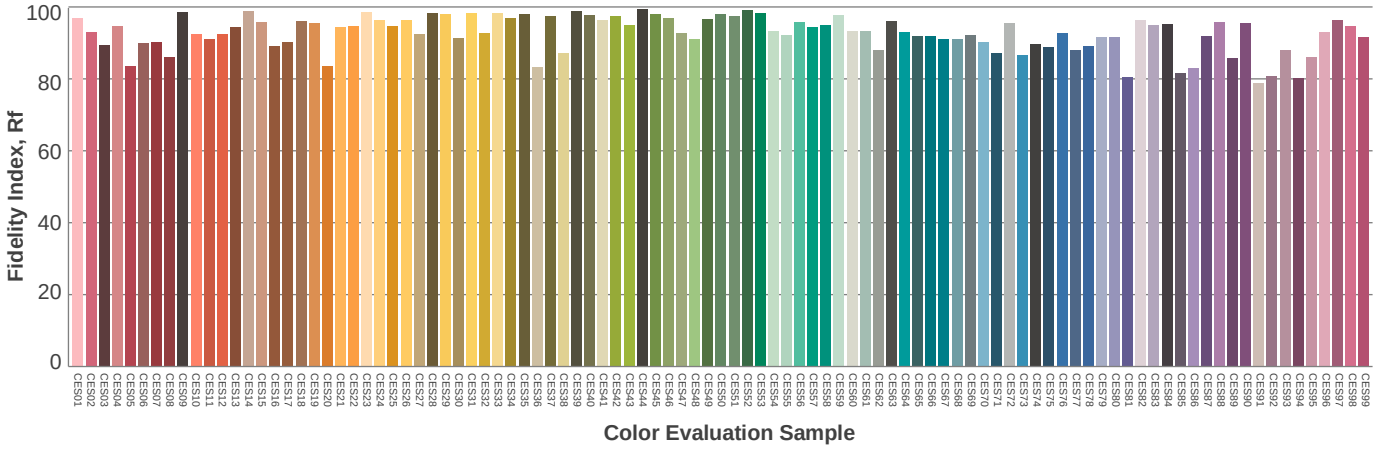




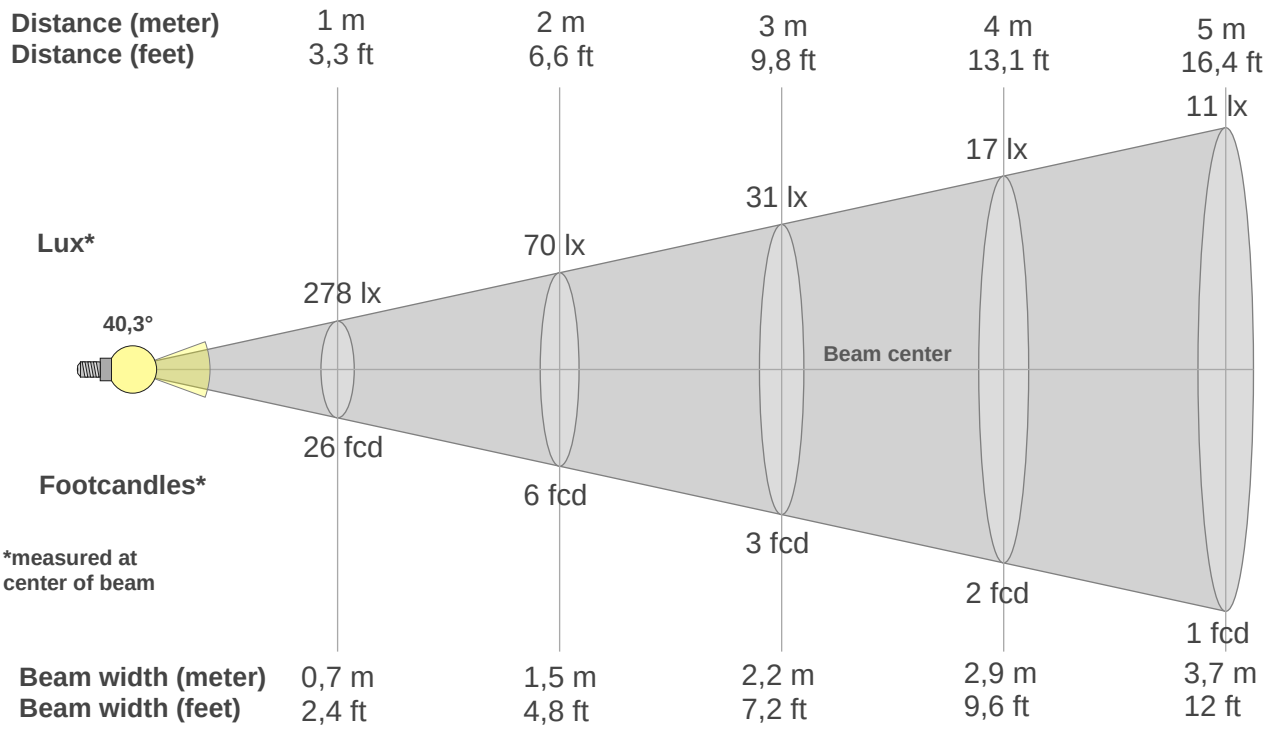








Beam details



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
278lx	70lx	31lx	17lx	11lx	8lx	6lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
25,9fcd	6,5fcd	2,9fcd	1,6fcd	1fcd	0,7fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	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°
278	278	273	257	226	180	126	79	49	33	24	21	19	19	18	18	18	18	16	15
100%	100%	98%	92%	81%	65%	45%	28%	17%	12%	9%	7%	7%	7%	7%	7%	6%	6%	6%	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°
278	279	280	282	284	287	290	295	300	306	314	322	329	336	341	342	339	329	313	292
100%	100%	101%	101%	102%	103%	104%	106%	108%	110%	113%	116%	118%	121%	122%	123%	122%	118%	112%	105%

Intensities in 180° c-plane

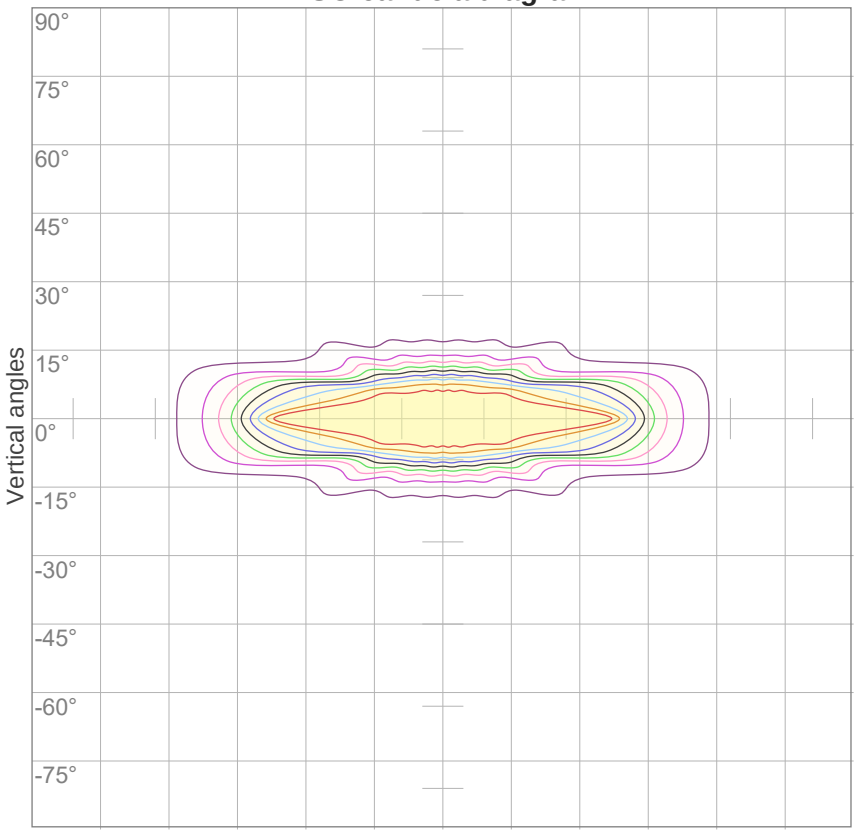
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
278	278	273	257	226	180	126	79	49	33	24	21	19	19	18	18	18	18	16	15
100%	100%	98%	92%	81%	65%	45%	28%	17%	12%	9%	7%	7%	7%	7%	7%	6%	6%	6%	5%

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°
278	279	280	282	284	287	290	295	300	306	314	322	329	336	341	342	339	329	313	292
100%	100%	101%	101%	102%	103%	104%	106%	108%	110%	113%	116%	118%	121%	122%	123%	122%	118%	112%	105%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40,3°	**61,7°**	**125,7°**	**90,2%**	**76,5%**

ISO candela diagram



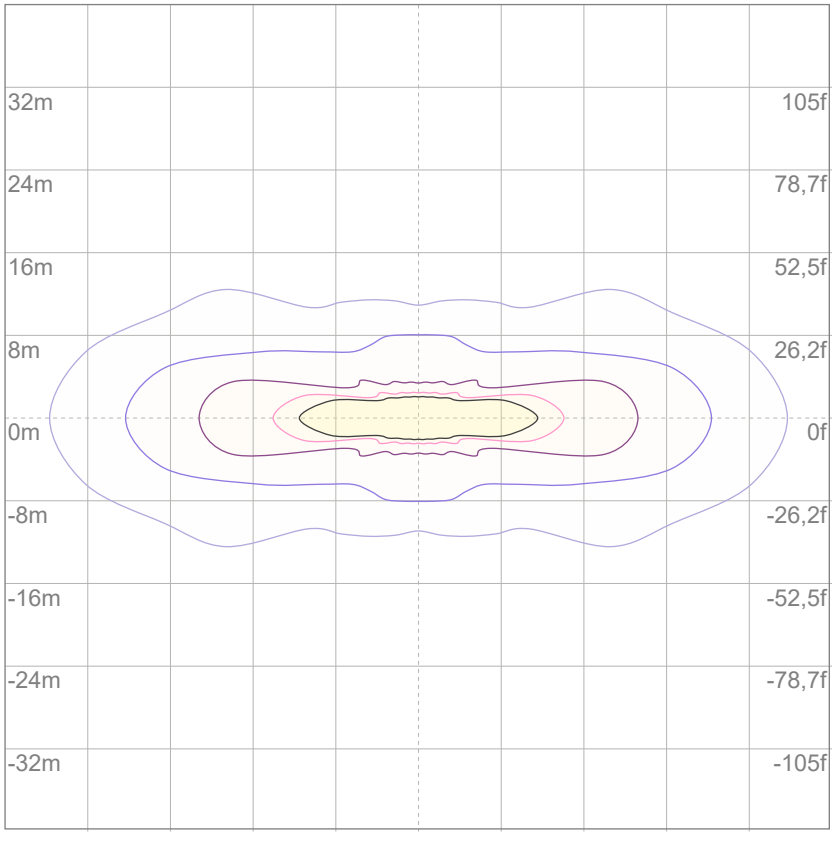
10%	28 cd
20%	56 cd
30%	83 cd
40%	111 cd
50%	139 cd
60%	167 cd
70%	195 cd
80%	223 cd
90%	250 cd

Conditions:

Number of c-planes: 16

Candela at center: 278 cd

ISO lux diagram



3%	83,5m lx
5%	0,139 lx
10%	0,278 lx
30%	0,835 lx
50%	1,39 lx

Conditions:

Number of c-planes: 16

Lux at center: 2,78 lx

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

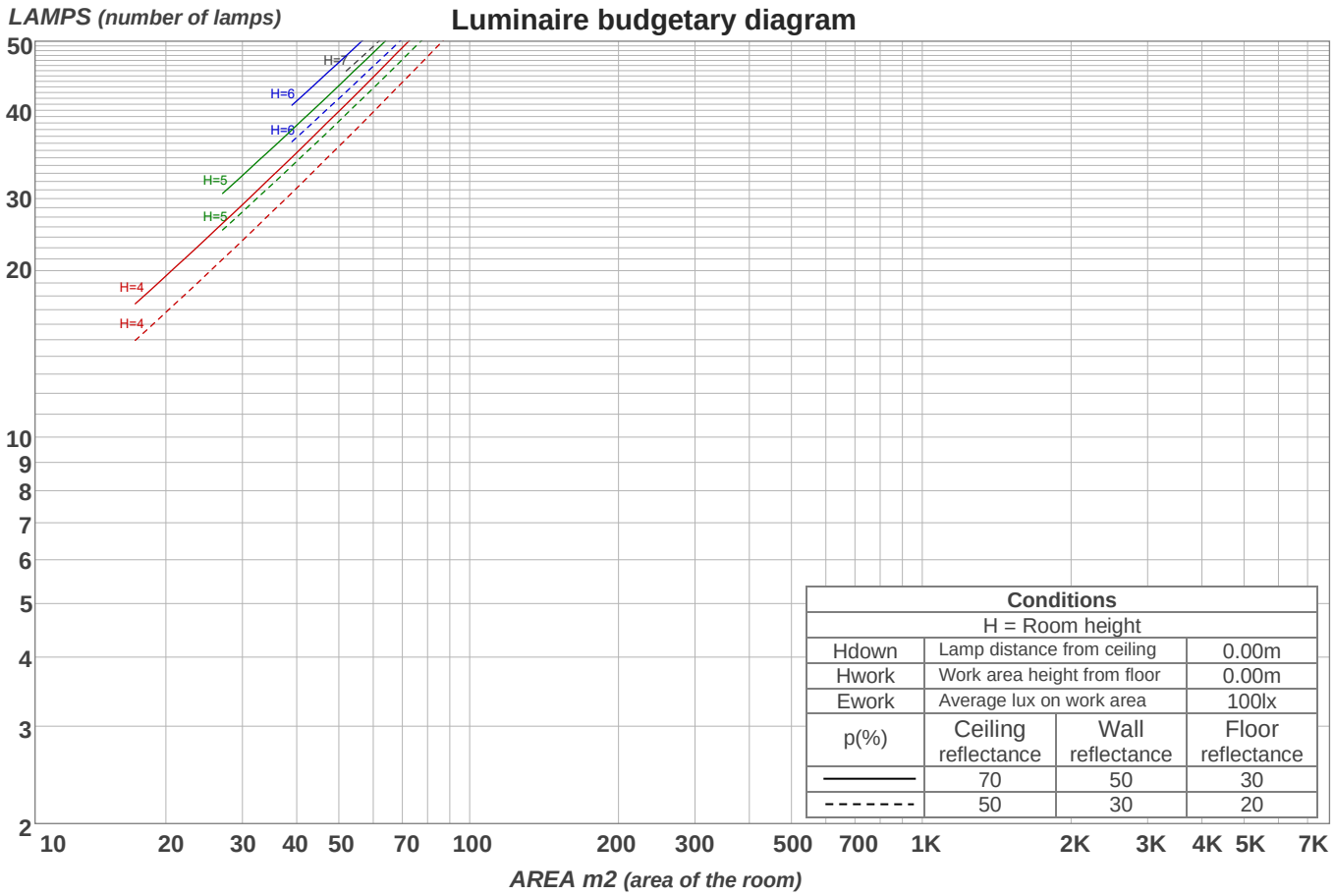
Glare Evaluation According to UGR

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	5,9	6,7	6,0	7,0	7,2	19,9	20,8	20,1	21,1	21,3
	3H	6,6	7,6	7,0	7,8	8,0	20,2	21,2	20,6	21,4	21,6
	4H	7,3	8,2	7,7	8,4	8,7	20,3	21,2	20,7	21,5	21,7
	6H	8,3	9,1	8,6	9,4	9,8	20,4	21,2	20,7	21,5	21,8
	8H	9,0	9,7	9,3	10,0	10,4	20,4	21,2	20,7	21,5	21,9
	12H	9,7	10,4	10,0	10,8	11,2	20,4	21,1	20,7	21,4	21,9
4H	2H	7,1	8,0	7,5	8,3	8,5	19,6	20,5	20,0	20,8	21,0
	3H	8,2	8,9	8,5	9,2	9,7	20,1	20,8	20,5	21,2	21,6
	4H	8,8	9,5	9,2	9,9	10,4	20,2	20,8	20,6	21,3	21,8
	6H	9,8	10,5	10,3	10,9	11,2	20,2	20,9	20,7	21,3	21,6
	8H	10,5	11,2	11,0	11,5	11,9	20,3	20,9	20,8	21,2	21,6
	12H	11,3	11,8	11,8	12,2	12,7	20,2	20,8	20,7	21,2	21,6
8H	4H	9,5	10,1	10,0	10,5	10,9	20,1	20,7	20,6	21,1	21,4
	6H	10,8	11,2	11,3	11,7	12,2	20,2	20,7	20,7	21,1	21,7
	8H	11,6	12,0	12,2	12,5	13,2	20,3	20,7	20,8	21,2	21,8
	12H	12,6	12,9	13,2	13,4	14,0	20,3	20,6	20,9	21,1	21,7
12H	4H	9,6	10,1	10,1	10,6	11,0	20,0	20,5	20,5	20,9	21,4
	6H	11,1	11,4	11,6	12,0	12,6	20,2	20,6	20,7	21,1	21,7
	8H	12,0	12,3	12,5	12,8	13,4	20,3	20,6	20,8	21,1	21,7
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					2,3 / -3,0				
S = 1.5H		0,3 / -0,3					4,4 / -4,2				
S = 2.0H		0,3 / -0,5					6,1 / -5,1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 213 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	101	101	101	99
1	111	108	104	101	108	105	102	100	101	98	96	97	95	93	93	92	90	88
2	104	98	93	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	71
4	91	82	75	70	89	81	75	70	78	73	69	76	71	68	74	70	67	65
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	59
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	56	55
7	76	66	59	54	75	65	58	54	63	57	53	62	57	53	61	56	52	51
8	72	62	55	50	71	61	54	50	60	54	49	58	53	49	57	52	49	47
9	69	58	51	47	67	57	51	47	56	50	46	55	50	46	54	49	46	44
10	65	55	48	44	64	54	48	44	53	47	43	52	47	43	51	47	43	42

Luminaire budgetary diagram

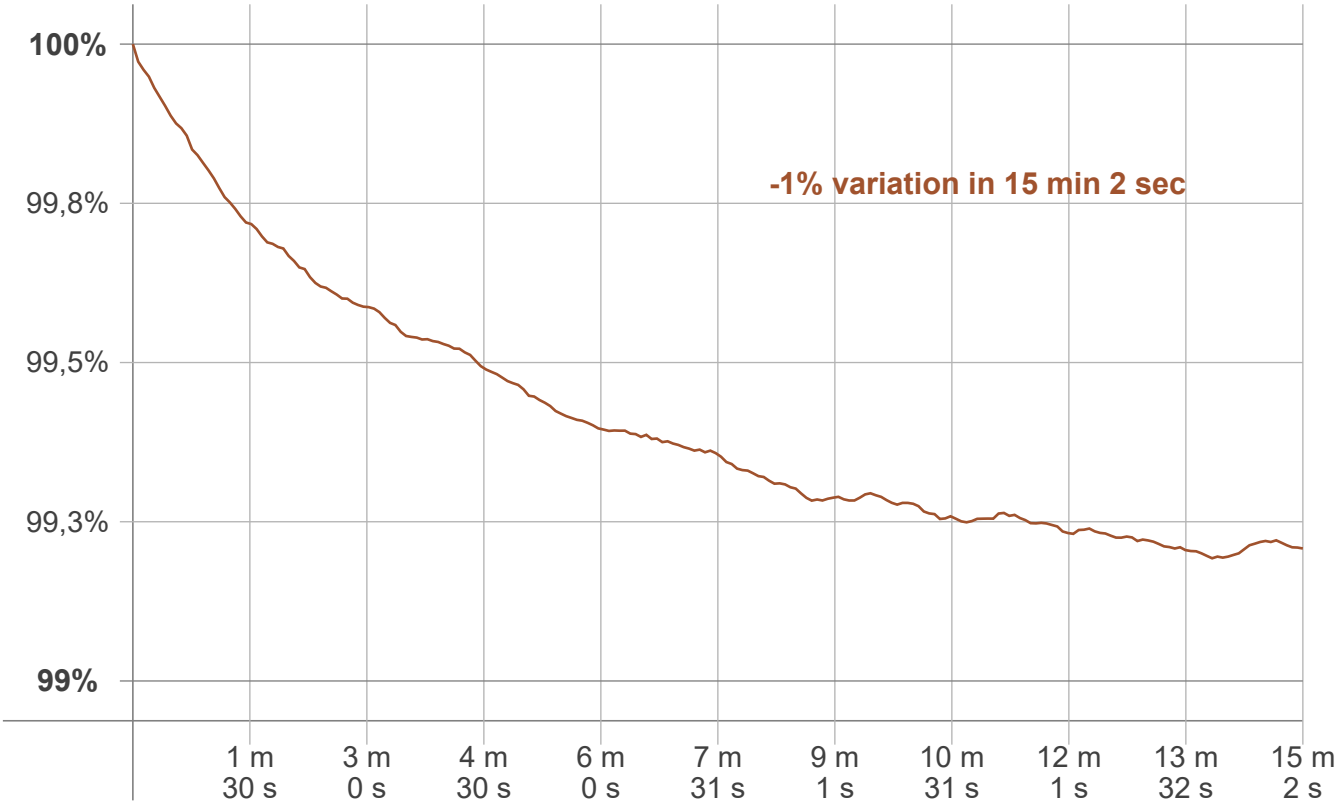


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
25,1 lm	46,1 lm	39,7 lm	36,6 lm	27,9 lm	16,8 lm	9,48 lm	5,16 lm	3,33 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,34 lm	0,321 lm	0,283 lm	0,256 lm	0,221 lm	0,179 lm	0,132 lm	0,081 lm	0,027 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 2 sec**
Warmup variation	**-1,0%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2700 K	0 K	2700 K

Output change

Output start	Output change	Output end
215 lm	-2 lm	213 lm