Light efficiency:

110 Lumen/Watt

Light quality:

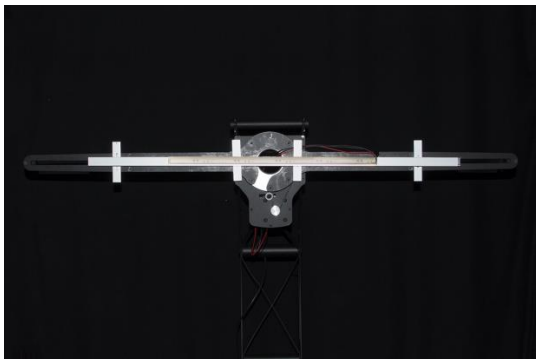
CRI: 94,1

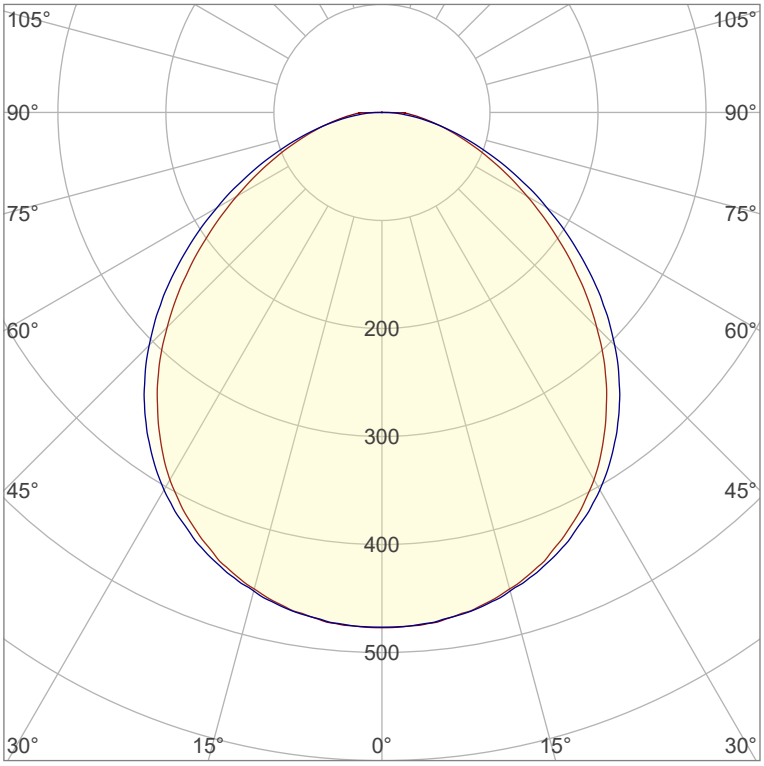
Color temperature:

2700 K

Output: 1263 lm
Peak: 477 cd

Power: 11,5 W
PF: 1,0





Product name:
Jago-2_510mm_927_Cover-Flat-Frosted

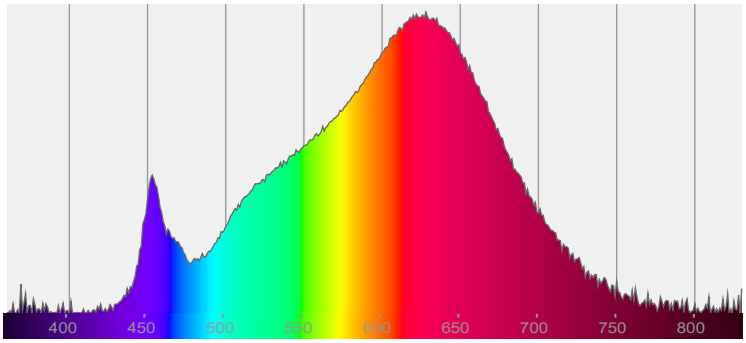
Item number:
NP/L1C/19B/0510/927/CFF

Date and time:
20.07.2022 15:43:03

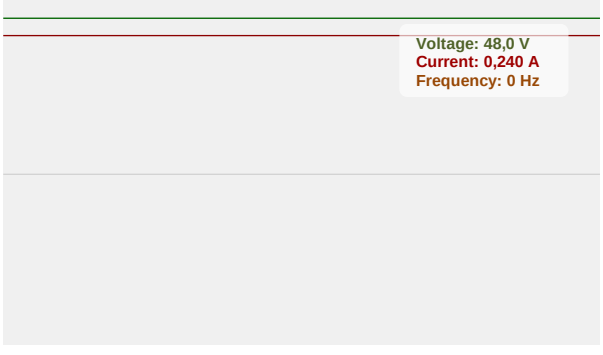
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 07.10.2025
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

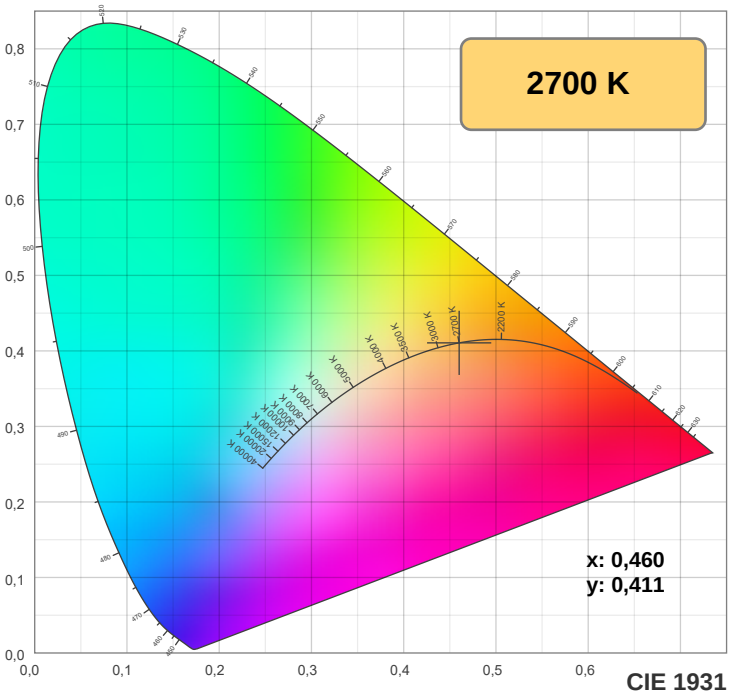
Spectra



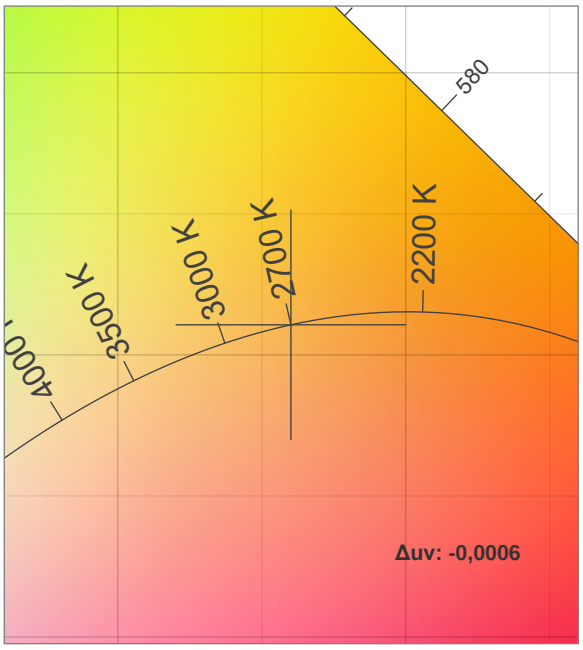
Power



Color details

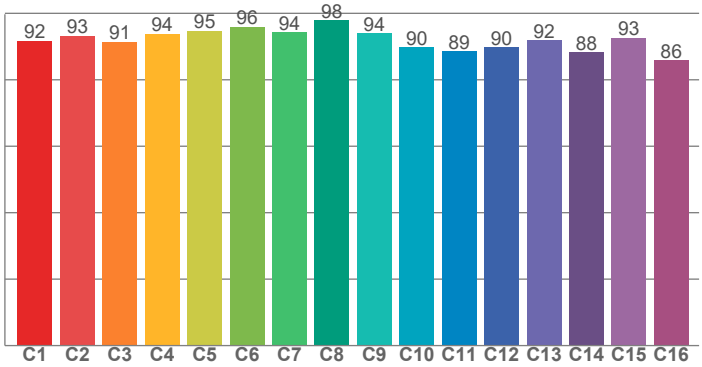


CIE 1931

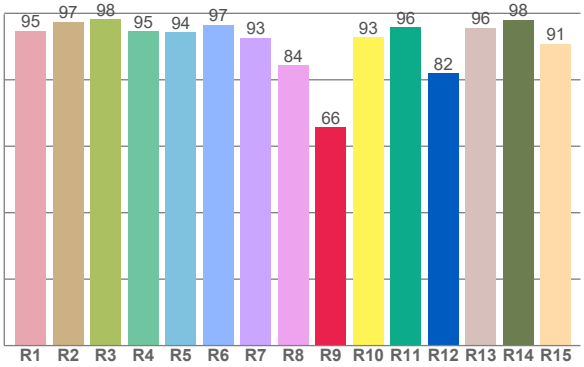


CIE 1931 ZOOM

TM30: 91,9



CRI: 94,1 (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
94,8	97,4	98,2	94,6	94,3	96,6	92,7	84,3	65,7	92,7	95,7	81,9	95,7	98,1	90,8

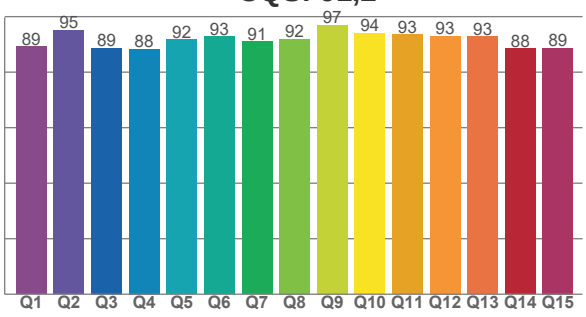
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,6	93,2	91,3	93,9	94,7	95,9	94,3	97,9	94,0	89,7	88,6	89,7	91,8	88,2	92,7	85,9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,3	95,1	88,7	88,3	91,7	92,9	91,0	92,0	97,1	94,0	93,5	93,0	92,8	88,5	88,6

CQS: 91,2



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	94,1	65,7	91,9	99,6	91,2	0,460	0,411	0,263	0,352	-0,0006

TM30 details

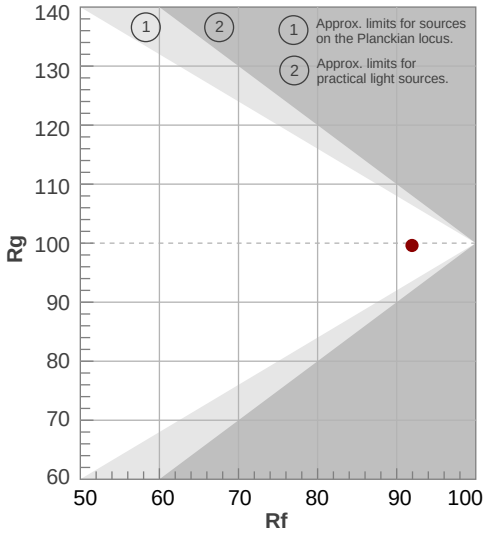
Rf 91,9

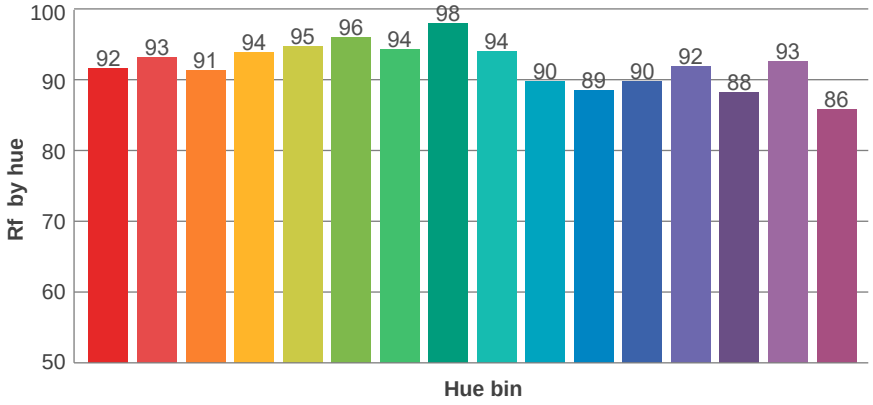
Fidelity index Rf

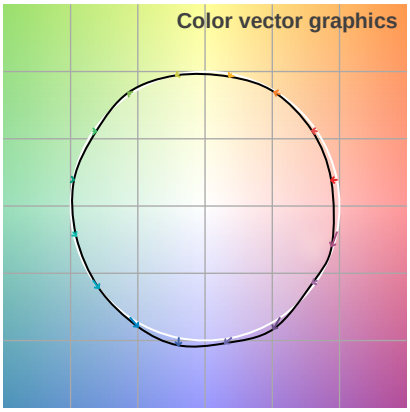
Rg 99,6

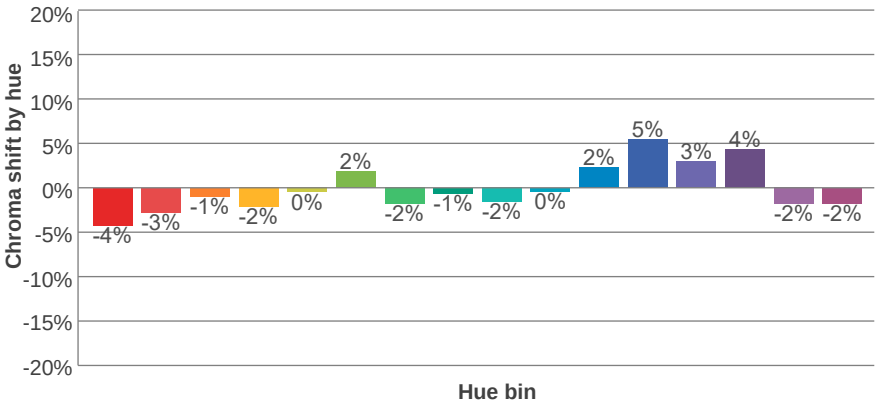
Gammut index Rg

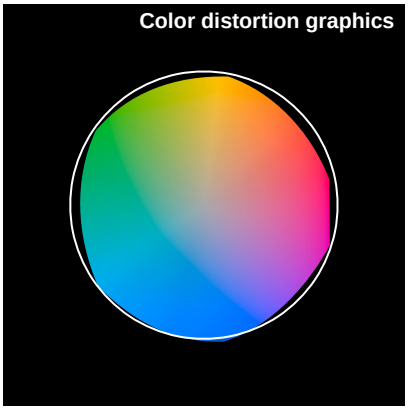
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	-1%	4%
4	94	-2%	1%
5	95	0%	2%
6	96	2%	1%
7	94	-2%	-1%
8	98	-1%	0%
9	94	-2%	3%
10	90	0%	7%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-8%
15	93	-2%	-3%
16	86	-2%	-11%

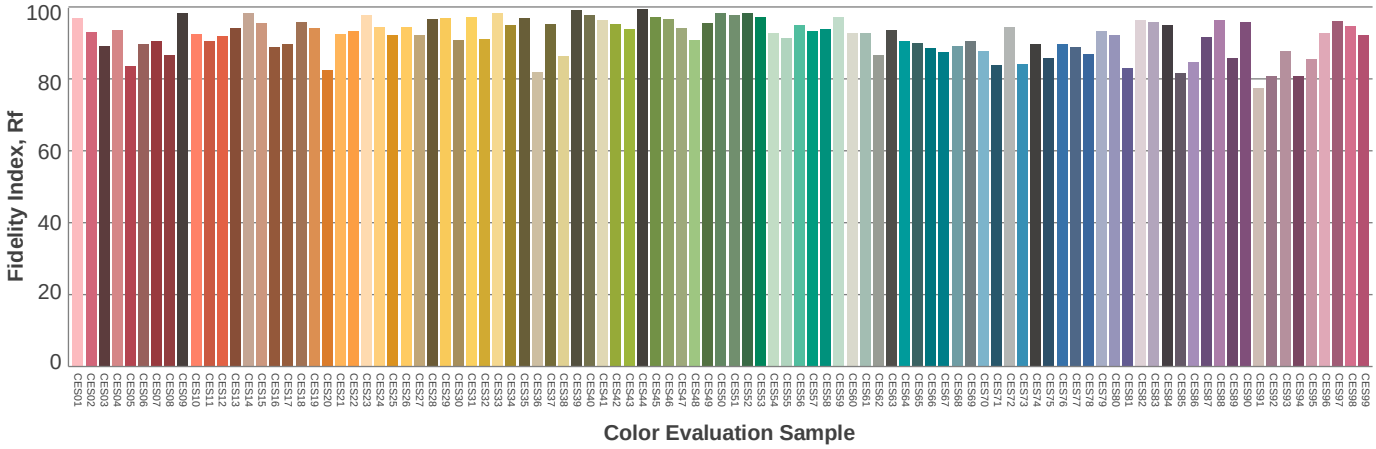




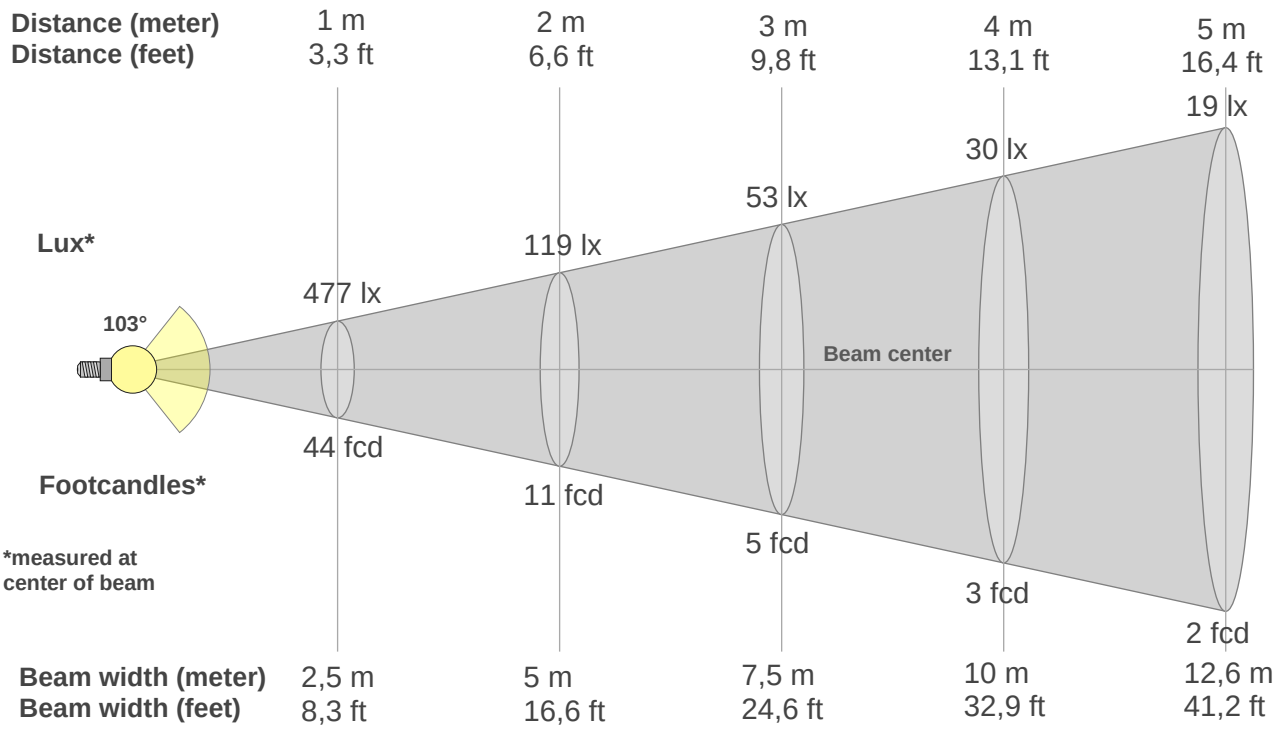








Beam details



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
477lx	119lx	53lx	30lx	19lx	13lx	10lx	7lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx
44,3fcd	11,1fcd	4,9fcd	2,8fcd	1,8fcd	1,2fcd	0,9fcd	0,7fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd

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°
477	475	469	457	441	419	393	360	323	281	238	195	155	120	89	64	44	29	10	9
100%	100%	98%	96%	93%	88%	82%	75%	68%	59%	50%	41%	33%	25%	19%	13%	9%	6%	2%	2%

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°
477	475	469	459	445	426	403	375	343	305	264	220	176	136	99	67	40	20	3	3
100%	100%	98%	96%	93%	89%	85%	79%	72%	64%	55%	46%	37%	28%	21%	14%	8%	4%	1%	1%

Intensities in 180° c-plane

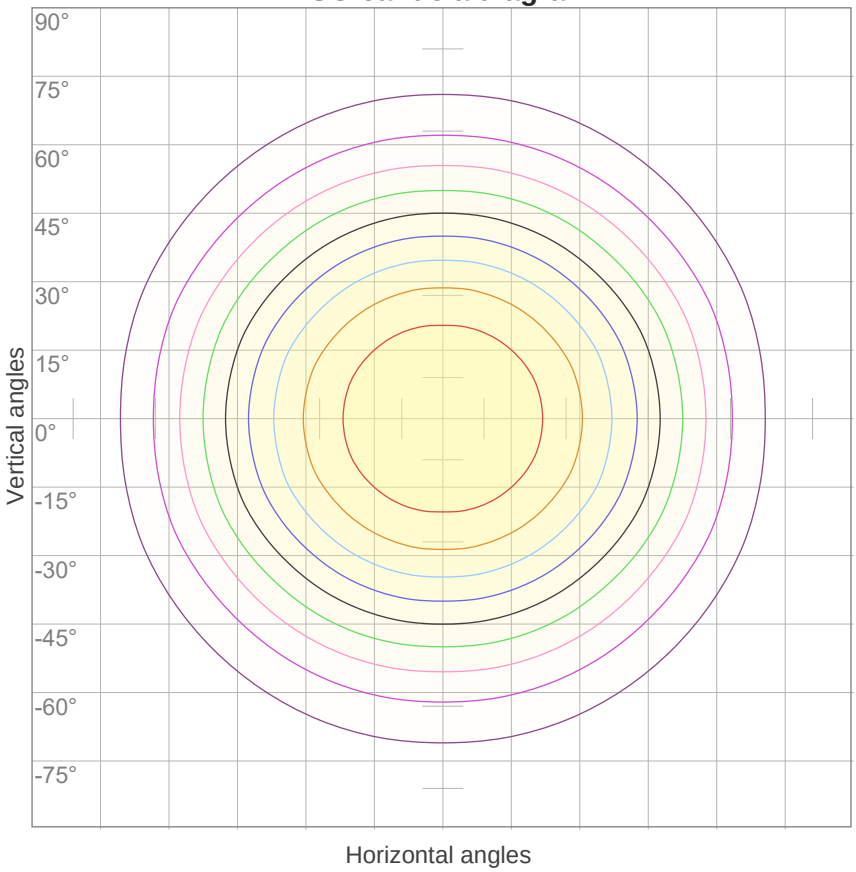
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
477	475	469	457	441	419	393	360	323	281	238	195	155	120	89	64	44	29	10	9
100%	100%	98%	96%	93%	88%	82%	75%	68%	59%	50%	41%	33%	25%	19%	13%	9%	6%	2%	2%

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°
477	475	469	459	445	426	403	375	343	305	264	220	176	136	99	67	40	20	3	3
100%	100%	98%	96%	93%	89%	85%	79%	72%	64%	55%	46%	37%	28%	21%	14%	8%	4%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
103°	**158,3°**	**179,7°**	**80,1%**	**56,6%**

ISO candela diagram



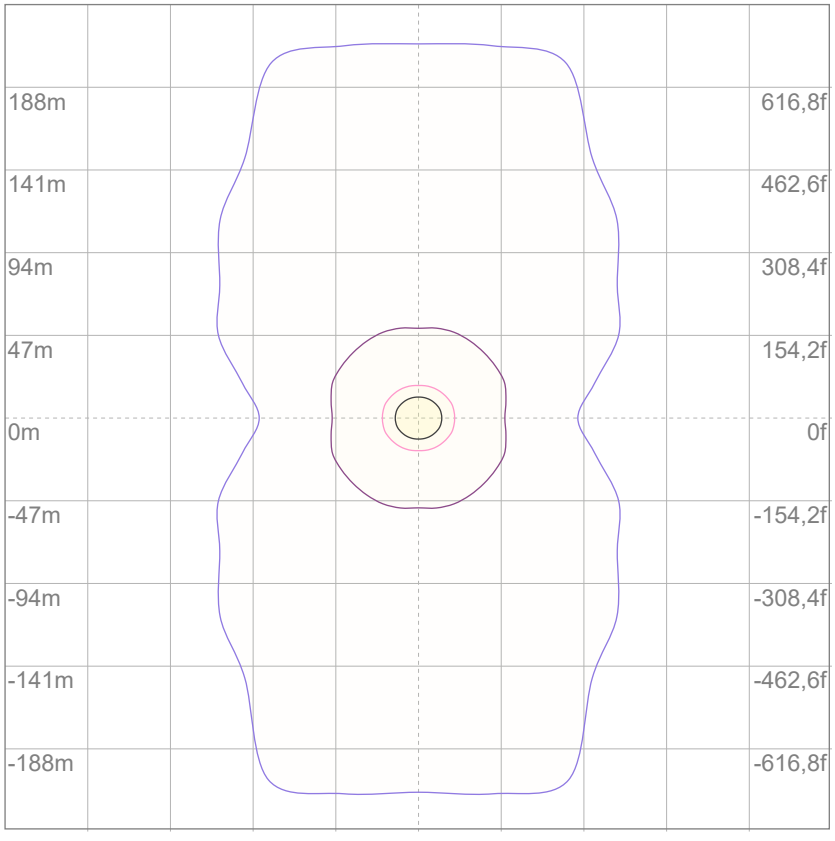
10%	48 cd
20%	95 cd
30%	143 cd
40%	191 cd
50%	238 cd
60%	286 cd
70%	334 cd
80%	381 cd
90%	429 cd

Conditions:

Number of c-planes: 16

Candela at center: 477 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,143 lx
5%	0,238 lx
10%	0,477 lx
30%	1,43 lx
50%	2,38 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,77 lx

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

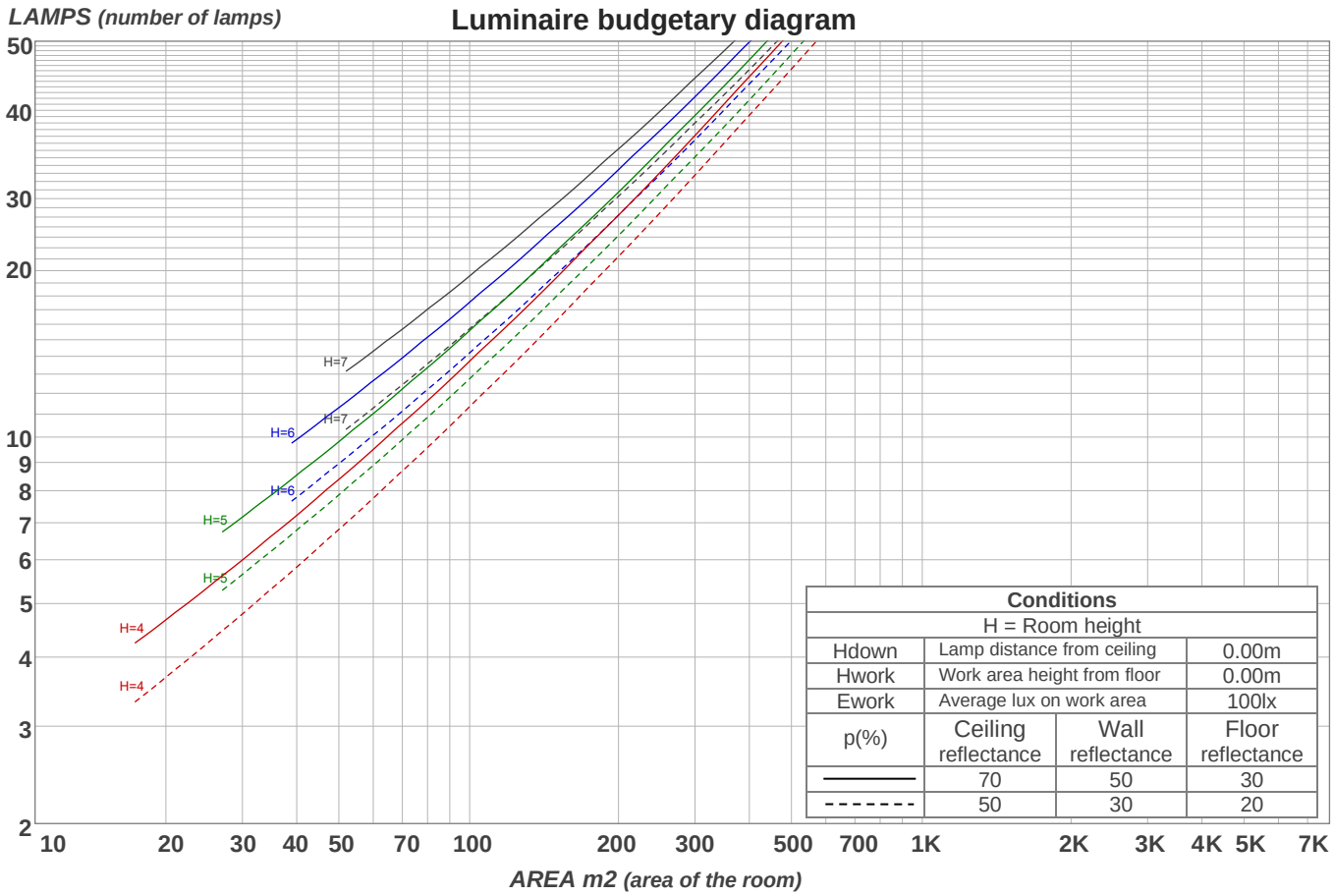
Glare Evaluation According to UGR

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	23,3	24,5	23,5	24,8	25,0	24,3	25,5	24,6	25,8	26,0
	3H	24,2	25,4	24,6	25,7	25,9	25,5	26,7	25,9	27,0	27,2
	4H	24,6	25,8	25,0	26,1	26,3	26,0	27,1	26,4	27,4	27,7
	6H	25,0	26,0	25,3	26,3	26,7	26,4	27,4	26,7	27,7	28,1
	8H	25,1	26,1	25,4	26,4	26,8	26,5	27,5	26,8	27,8	28,2
	12H	25,2	26,1	25,5	26,5	26,9	26,6	27,5	26,9	27,9	28,3
4H	2H	23,8	25,0	24,2	25,2	25,5	24,6	25,8	25,1	26,1	26,3
	3H	25,0	26,0	25,4	26,4	26,8	26,1	27,1	26,5	27,4	27,9
	4H	25,5	26,4	25,9	26,8	27,3	26,6	27,5	27,1	27,9	28,5
	6H	25,9	26,8	26,4	27,1	27,5	27,1	28,0	27,6	28,3	28,7
	8H	26,1	26,8	26,6	27,2	27,6	27,3	28,1	27,8	28,4	28,8
	12H	26,2	26,8	26,7	27,3	27,7	27,4	28,1	27,9	28,5	29,0
8H	4H	25,7	26,5	26,2	26,9	27,3	26,8	27,6	27,3	27,9	28,3
	6H	26,3	26,9	26,8	27,4	27,9	27,4	28,0	27,9	28,5	29,0
	8H	26,6	27,1	27,1	27,6	28,2	27,7	28,2	28,2	28,7	29,4
	12H	26,8	27,2	27,4	27,7	28,3	27,9	28,3	28,5	28,8	29,4
12H	4H	25,7	26,4	26,2	26,8	27,3	26,8	27,4	27,3	27,8	28,3
	6H	26,4	26,9	26,9	27,4	28,1	27,5	28,0	28,0	28,5	29,1
	8H	26,7	27,1	27,2	27,6	28,2	27,7	28,2	28,3	28,7	29,3
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					0,1 / -0,1				
S = 1.5H		0,3 / -0,5					0,2 / -0,3				
S = 2.0H		0,7 / -0,9					0,7 / -0,8				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1263 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	109	104	100	96	106	101	98	94	97	94	91	93	90	88	89	87	85	83
2	99	91	85	79	96	89	83	78	85	80	76	82	78	74	78	75	72	70
3	91	80	73	66	88	79	71	66	76	69	64	73	67	63	70	65	61	59
4	83	72	63	57	81	70	62	56	67	61	55	65	59	54	63	57	53	51
5	77	64	55	49	75	63	55	49	61	53	48	59	52	47	57	51	47	44
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	51	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	48	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	43	37	33	31
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	28	38	32	27	37	31	27	25

Luminaire budgetary diagram

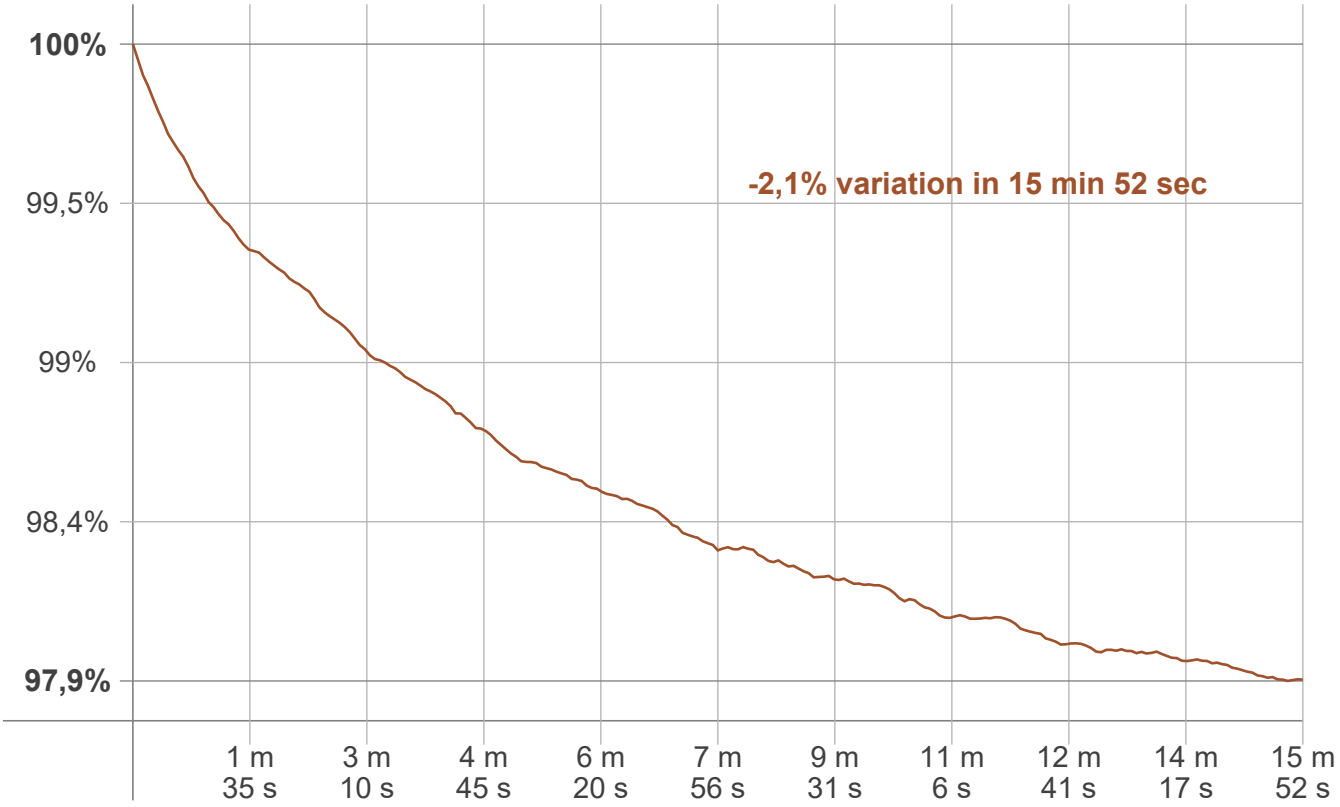


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
45,1 lm	129 lm	195 lm	230 lm	226 lm	186 lm	128 lm	71,6 lm	29,1 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
8,97 lm	3,78 lm	3,22 lm	2,91 lm	1,78 lm	0,999 lm	0,736 lm	0,451 lm	0,152 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 52 sec**
Warmup variation	**-2,1%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2704 K	-4 K	2700 K

Output change

Output start	Output change	Output end
1292 lm	-29 lm	1263 lm