Light efficiency:

115 Lumen/Watt

Light quality:

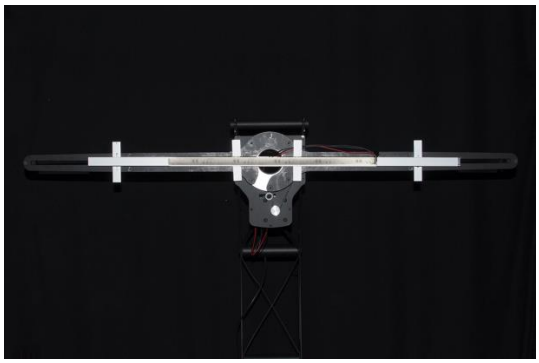
CRI: 94,2

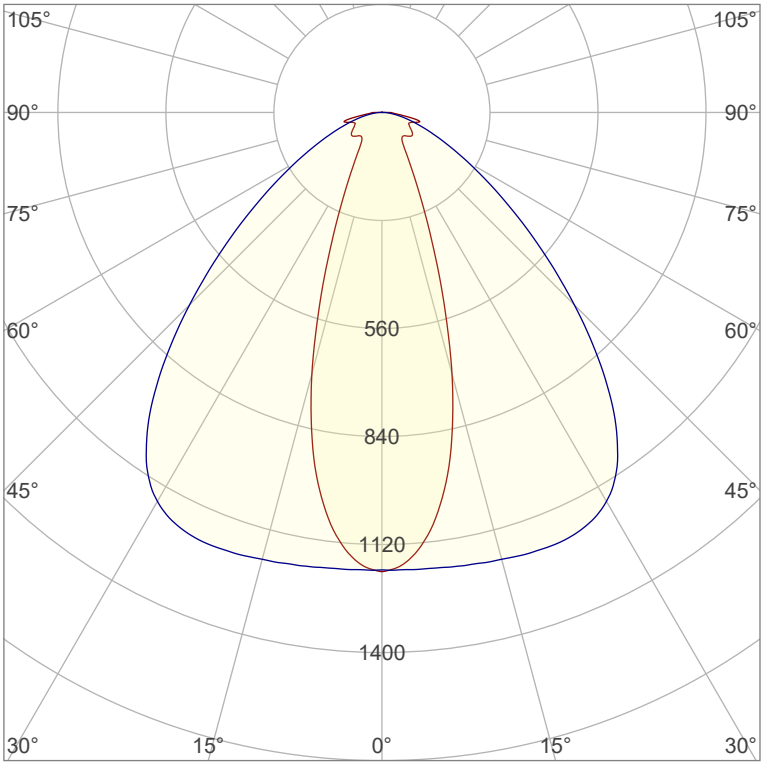
Color temperature:

2700 K

Output: 1326 lm
Peak: 1206 cd

Power: 11,5 W
PF: 1,0





Product name:
Jago-2_510mm_927_Lens-30°-Frosted

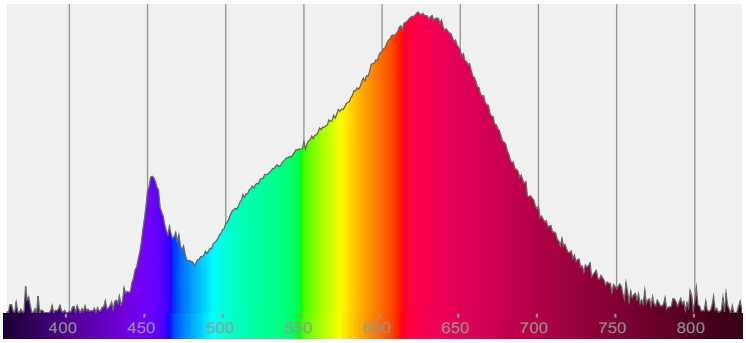
Item number:
NP/L1C/19B/0510/927/L3F

Date and time:
21.07.2022 12:56:59

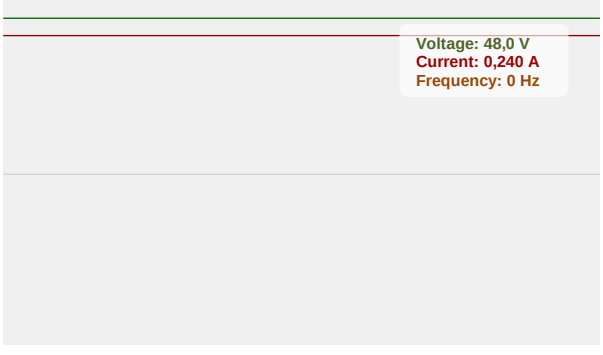
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 07.10.2025
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

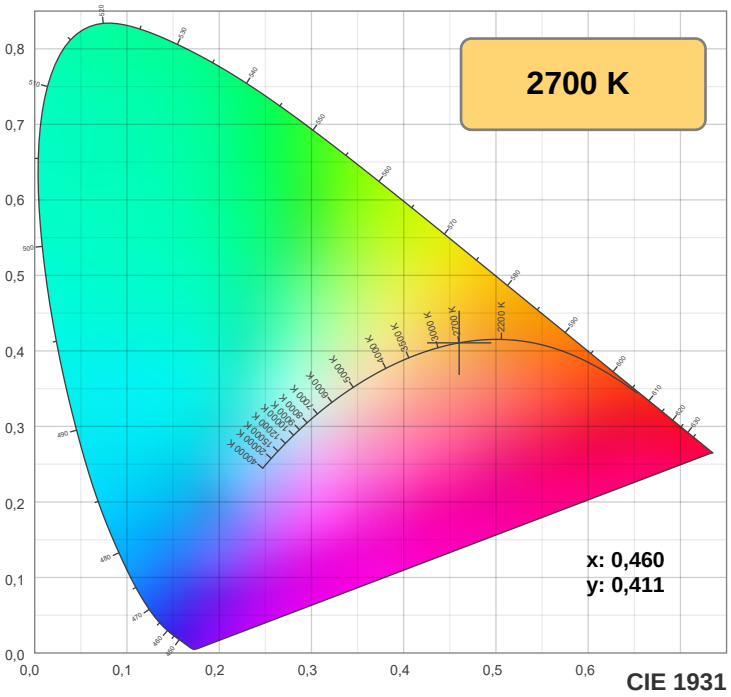
Spectra



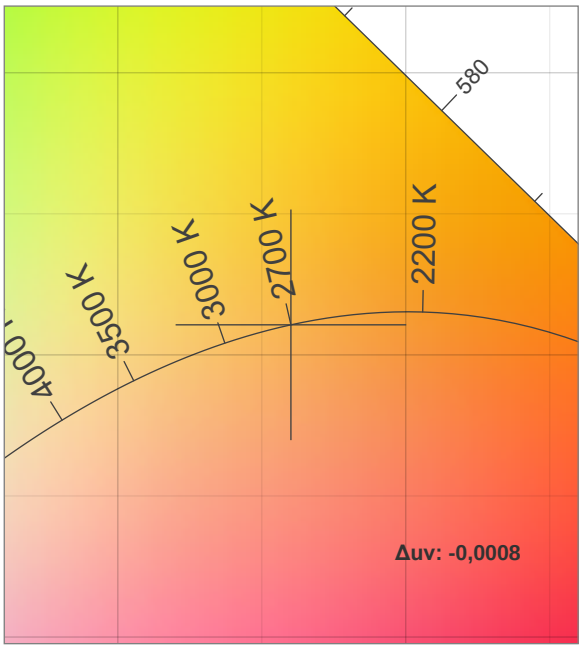
Power



Color details

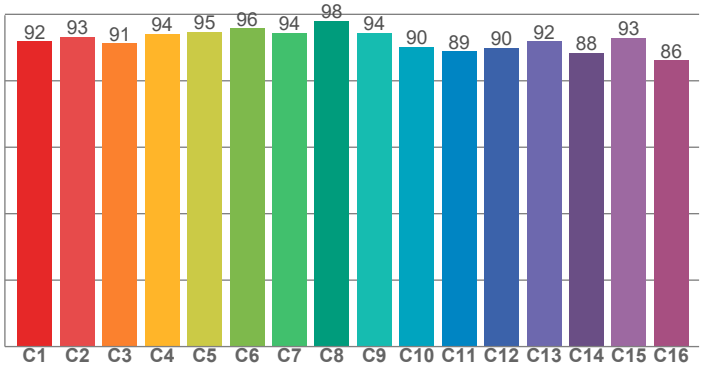


CIE 1931

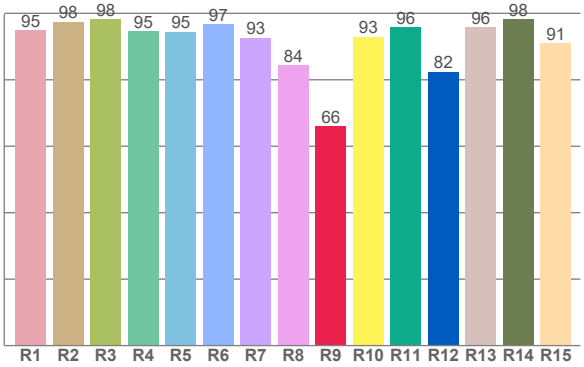


CIE 1931 ZOOM

TM30: 92,1



CRI: 94,2 (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
94,9	97,5	98,2	94,7	94,5	96,7	92,7	84,4	66,0	92,9	95,8	82,4	95,8	98,2	91,0

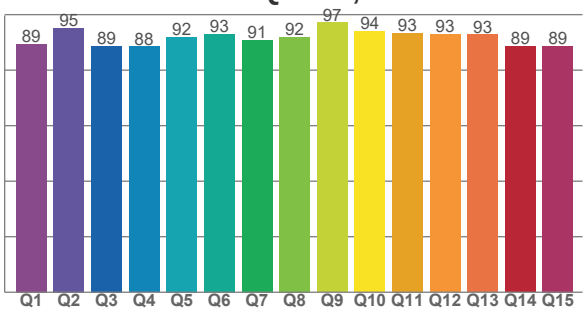
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,8	93,2	91,2	94,0	94,8	95,7	94,4	98,0	94,4	90,2	88,9	89,9	91,9	88,5	92,9	86,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,4	95,2	88,8	88,5	91,9	92,9	90,8	91,9	97,1	94,0	93,4	92,9	92,8	88,6	88,7

CQS: 91,3



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	94,2	66,0	92,1	99,8	91,3	0,460	0,411	0,263	0,352	-0,0008

TM30 details

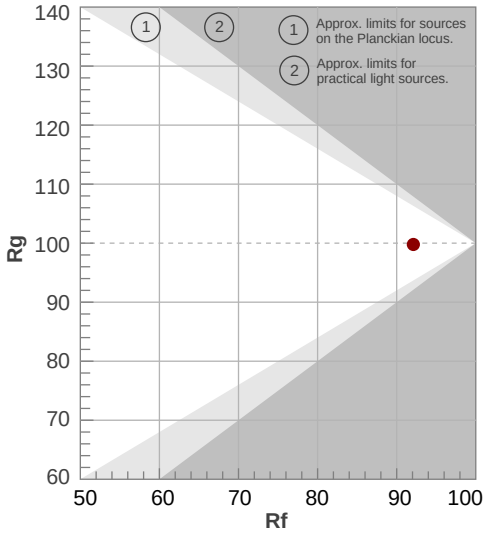
Rf 92,1

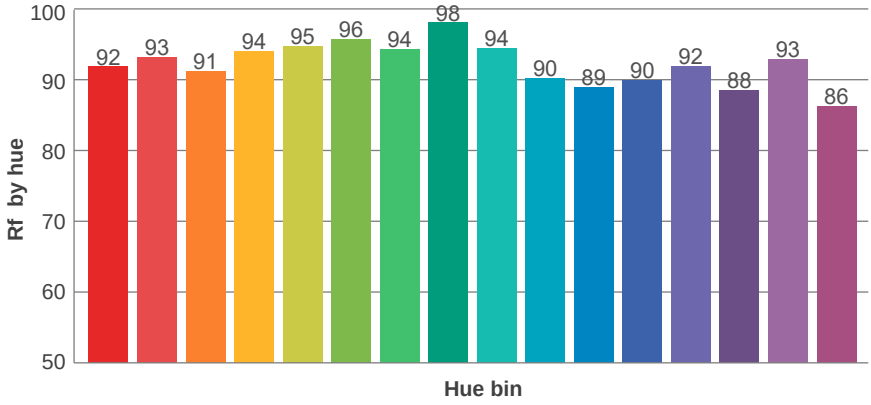
Fidelity index Rf

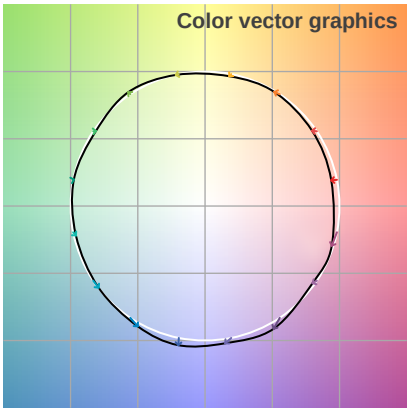
Rg 99,8

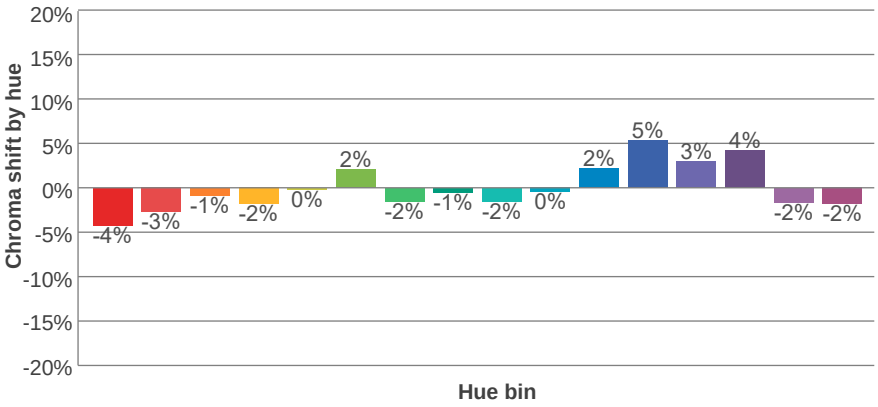
Gammut index Rg

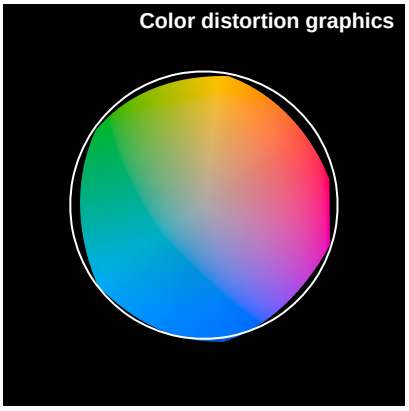
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	-1%	4%
4	94	-2%	1%
5	95	0%	2%
6	96	2%	0%
7	94	-2%	-1%
8	98	-1%	0%
9	94	-2%	3%
10	90	0%	6%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-8%
15	93	-2%	-3%
16	86	-2%	-11%

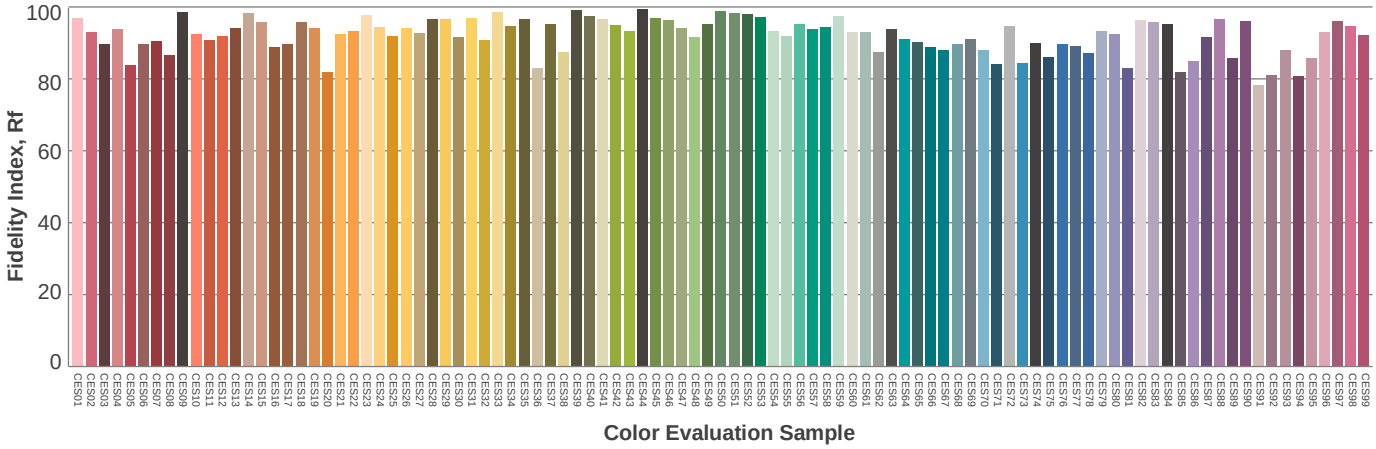




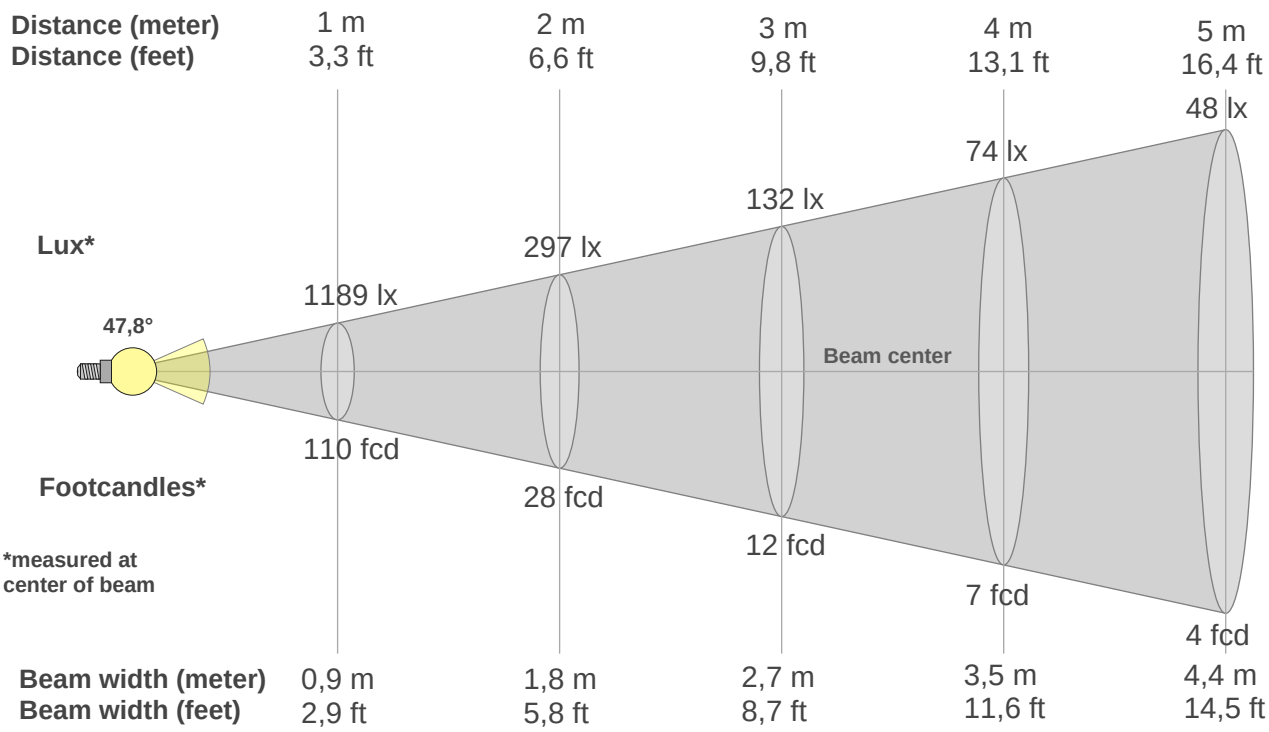








Beam details



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
1189lx	297lx	132lx	74lx	48lx	33lx	24lx	19lx	15lx	12lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
110,5fc	27,6fcd	12,3fcd	6,9fcd	4,4fcd	3,1fcd	2,3fcd	1,7fcd	1,4fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd

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°
1189	1180	1152	1107	1044	965	869	759	641	522	415	326	256	202	162	133	111	97	89	84
100%	99%	97%	93%	88%	81%	73%	64%	54%	44%	35%	27%	22%	17%	14%	11%	9%	8%	7%	7%

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°
1189	1187	1188	1188	1191	1193	1195	1198	1201	1204	1205	1206	1203	1196	1184	1164	1134	1092	1036	973
100%	100%	100%	100%	100%	100%	101%	101%	101%	101%	101%	101%	101%	101%	100%	98%	95%	92%	87%	82%

Intensities in 180° c-plane

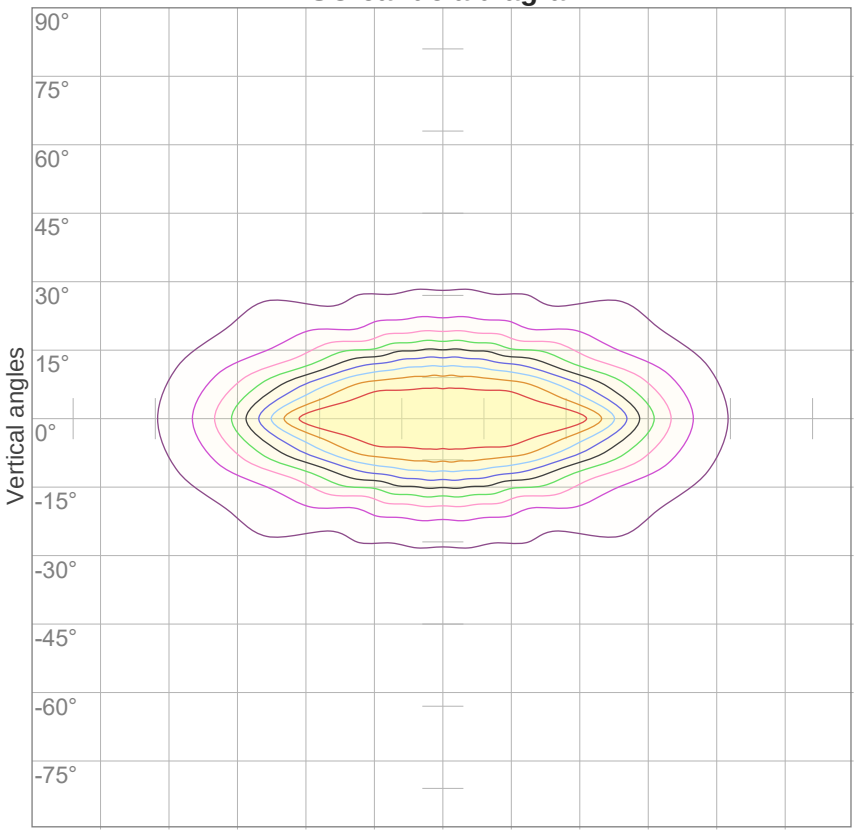
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1189	1180	1152	1107	1044	965	869	759	641	522	415	326	256	202	162	133	111	97	89	84
100%	99%	97%	93%	88%	81%	73%	64%	54%	44%	35%	27%	22%	17%	14%	11%	9%	8%	7%	7%

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°
1189	1187	1188	1188	1191	1193	1195	1198	1201	1204	1205	1206	1203	1196	1184	1164	1134	1092	1036	973
100%	100%	100%	100%	100%	100%	101%	101%	101%	101%	101%	101%	101%	101%	100%	98%	95%	92%	87%	82%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
47,8°	**81,3°**	**174,3°**	**83,5%**	**68,7%**

ISO candela diagram



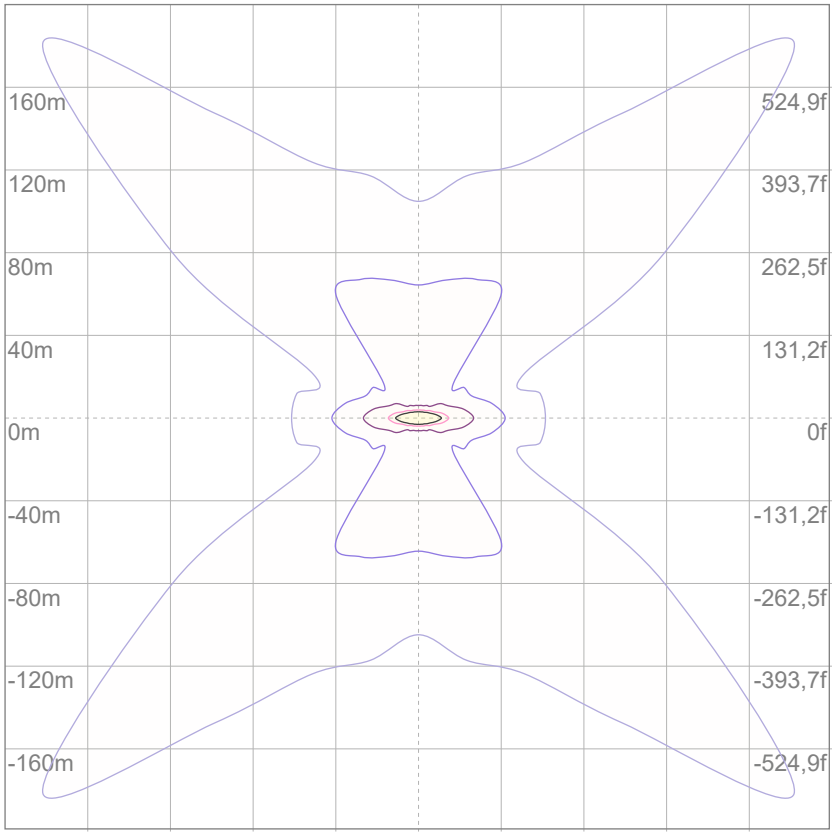
10%	119 cd
20%	238 cd
30%	357 cd
40%	476 cd
50%	594 cd
60%	713 cd
70%	832 cd
80%	951 cd
90%	1070 cd

Conditions:

Number of c-planes: 16

Candela at center: 1189 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,357 lx
5%	0,594 lx
10%	1,19 lx
30%	3,57 lx
50%	5,94 lx

Conditions:

Number of c-planes: 16

Lux at center: 11,9 lx

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

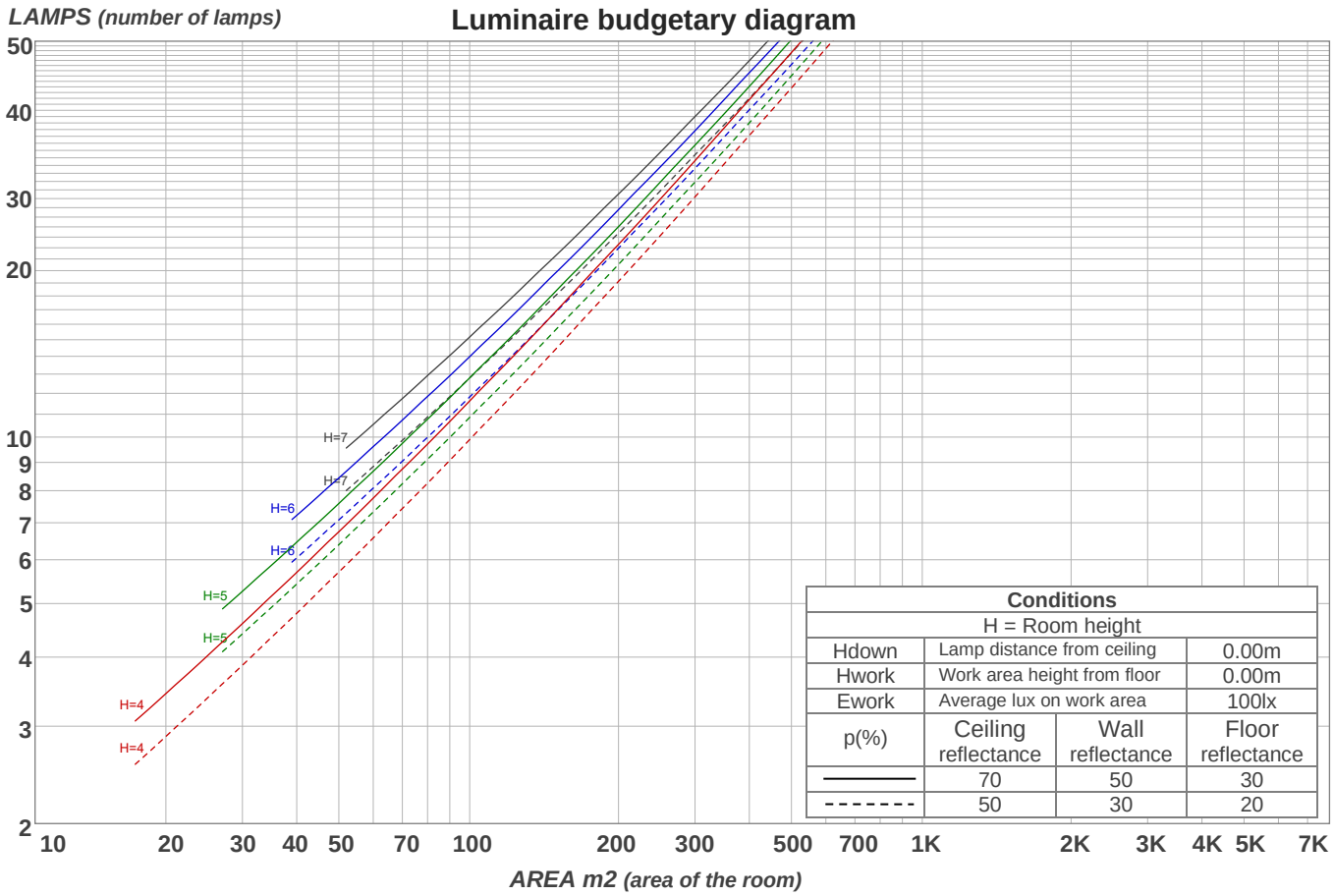
Glare Evaluation According to UGR

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	16,6	17,6	16,8	17,8	18,0	24,6	25,6	24,8	25,8	26,0
	3H	18,7	19,8	19,1	20,0	20,2	25,3	26,4	25,7	26,6	26,8
	4H	20,5	21,5	20,9	21,7	22,0	25,7	26,7	26,1	27,0	27,2
	6H	22,2	23,1	22,5	23,3	23,7	26,0	26,9	26,3	27,2	27,6
	8H	22,5	23,4	22,8	23,7	24,1	26,1	27,0	26,4	27,3	27,7
	12H	22,7	23,5	23,0	23,8	24,3	26,1	27,0	26,5	27,3	27,8
4H	2H	17,3	18,4	17,8	18,6	18,9	24,4	25,4	24,8	25,6	25,9
	3H	19,8	20,6	20,2	21,0	21,4	25,4	26,2	25,7	26,5	27,0
	4H	21,6	22,4	22,1	22,8	23,4	25,7	26,5	26,1	26,9	27,4
	6H	23,5	24,3	24,0	24,6	25,0	26,1	26,9	26,6	27,2	27,6
	8H	23,9	24,6	24,4	25,0	25,4	26,2	26,9	26,7	27,3	27,7
	12H	24,1	24,7	24,6	25,1	25,6	26,3	26,9	26,8	27,3	27,8
8H	4H	22,1	22,8	22,6	23,1	23,5	25,7	26,5	26,3	26,8	27,2
	6H	24,2	24,7	24,7	25,2	25,7	26,2	26,8	26,7	27,2	27,8
	8H	24,8	25,2	25,3	25,7	26,4	26,5	27,0	27,0	27,5	28,1
	12H	25,1	25,5	25,7	26,0	26,6	26,7	27,1	27,3	27,6	28,2
12H	4H	22,1	22,7	22,6	23,1	23,6	25,8	26,3	26,3	26,8	27,2
	6H	24,3	24,8	24,9	25,3	26,0	26,3	26,8	26,9	27,3	28,0
	8H	25,0	25,4	25,6	25,9	26,5	26,6	27,0	27,2	27,5	28,1
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / 0,0					1,0 / -0,9				
S = 1.5H		0,1 / -0,1					2,2 / -1,7				
S = 2.0H		0,2 / -0,1					3,5 / -2,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1326 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	105	101	98	107	103	99	96	98	95	93	94	92	90	90	88	87	85
2	101	94	88	84	99	92	87	82	89	84	80	85	81	78	82	79	76	74
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	75	71	68	66
4	88	78	70	65	86	76	69	64	74	68	63	71	66	62	69	65	61	59
5	82	71	64	58	80	70	63	58	68	62	57	66	60	56	64	59	55	54
6	77	66	58	53	75	65	58	52	63	57	52	61	56	51	60	55	51	49
7	73	61	54	48	71	60	53	48	59	52	48	57	51	47	56	51	47	45
8	69	57	50	44	67	56	49	44	55	48	44	54	48	44	52	47	43	42
9	65	53	46	41	64	53	46	41	51	45	41	50	45	41	49	44	40	39
10	62	50	43	38	60	49	43	38	48	42	38	47	42	38	46	41	38	36

Luminaire budgetary diagram

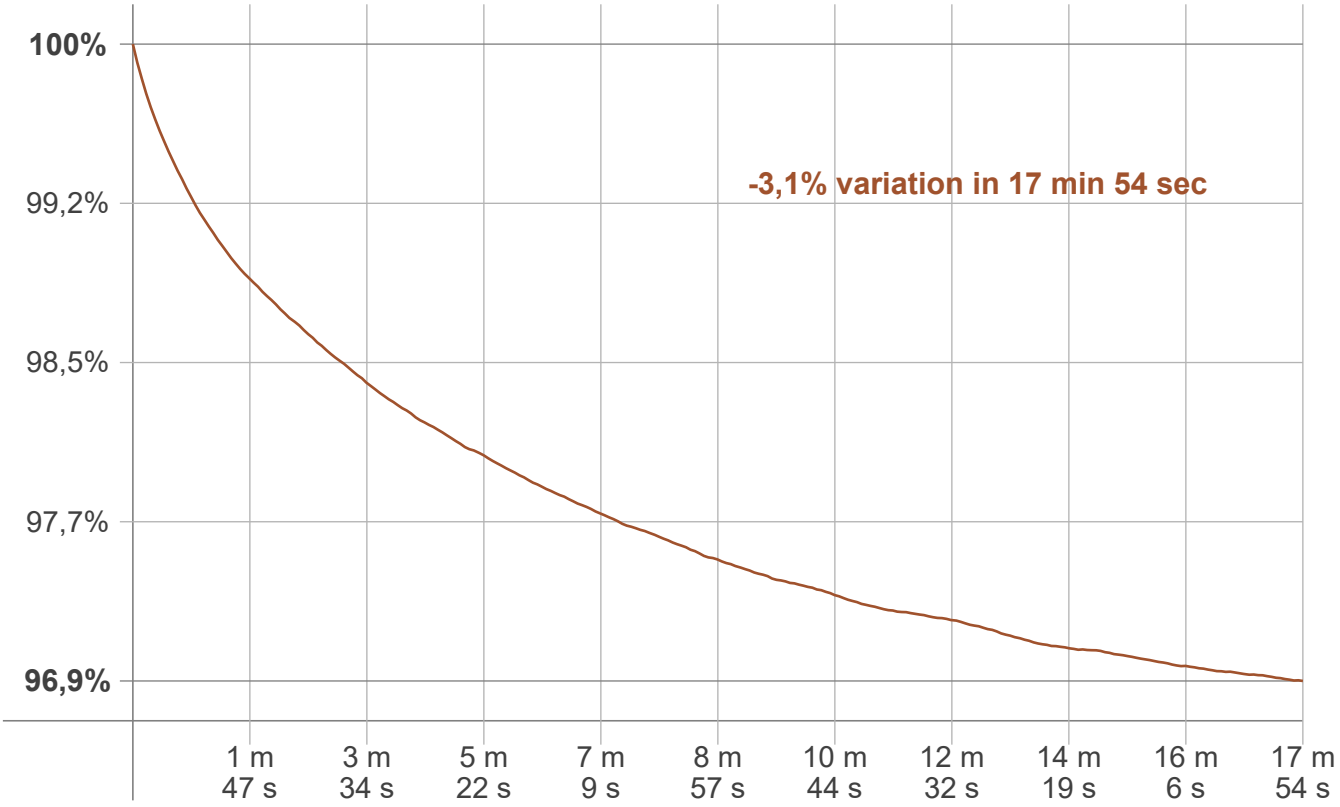


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
106 lm	255 lm	262 lm	207 lm	157 lm	120 lm	85,7 lm	68,8 lm	40,2 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5,83 lm	6,11 lm	3,57 lm	1,71 lm	0,655 lm	0,531 lm	0,391 lm	0,240 lm	5,00 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 17 min 54 sec**
Warmup variation	**-3,1%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2706 K	-6 K	2700 K

Output change

Output start	Output change	Output end
1372 lm	-46 lm	1326 lm