Light efficiency:

115 Lumen/Watt

Light quality:

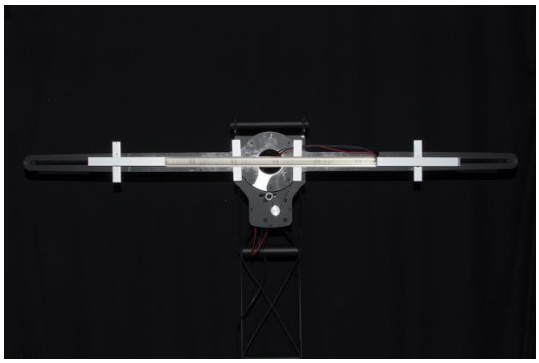
CRI: 94,0

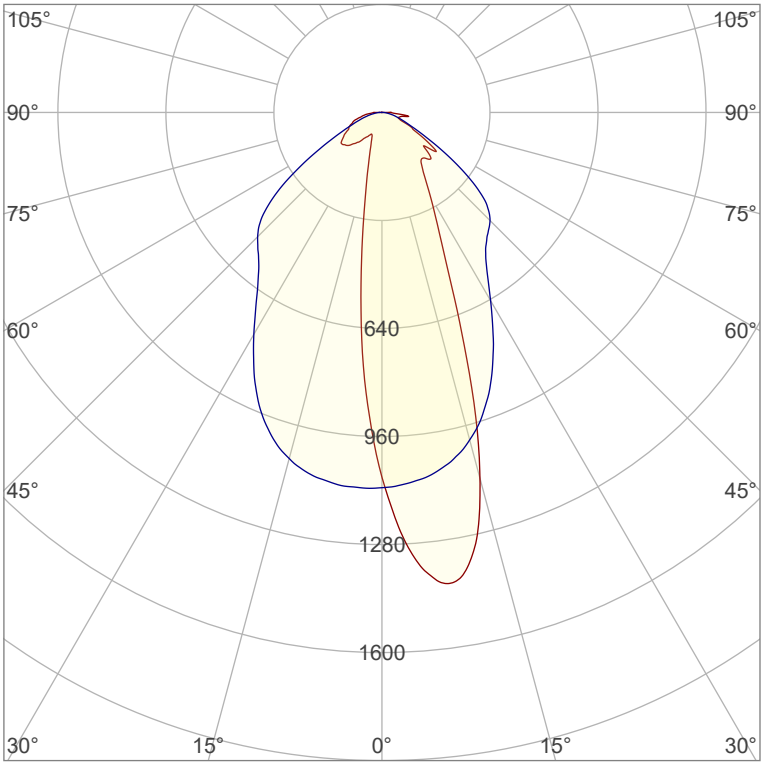
Color temperature:

2700 K

Output: 1326 lm
Peak: 1492 cd

Power: 11,5 W
PF: 1,0





Product name:
Jago-2_510mm_927_Lens-Asymmetric-Frosted-2

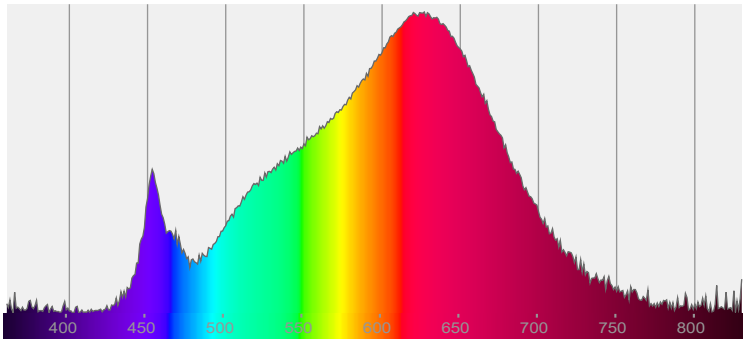
Item number:
NP/L1C/19B/0510/927/LAF-2

Date and time:
25.07.2022 09:37:12

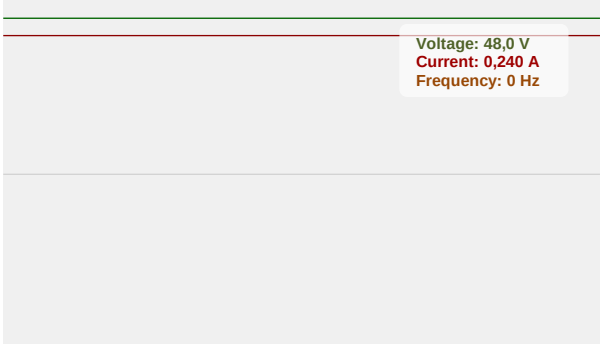
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 07.10.2025
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

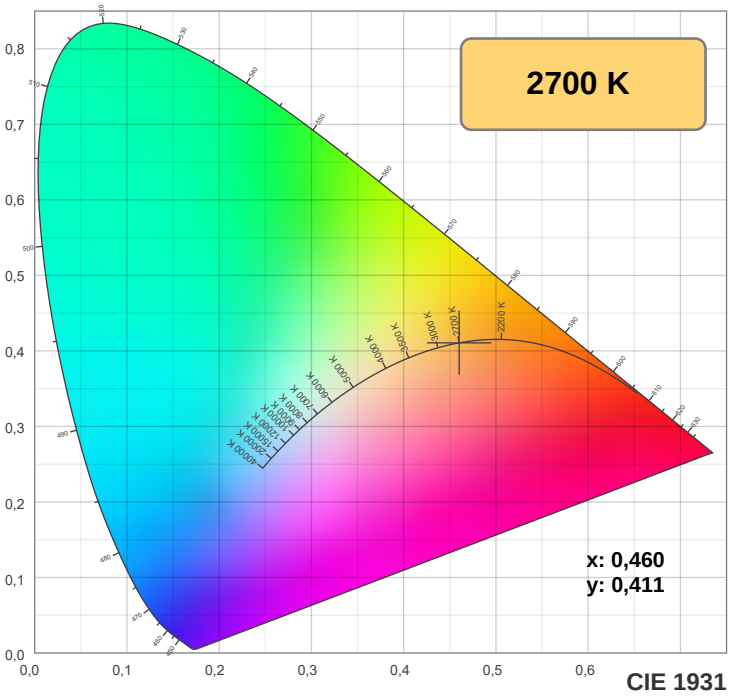
Spectra

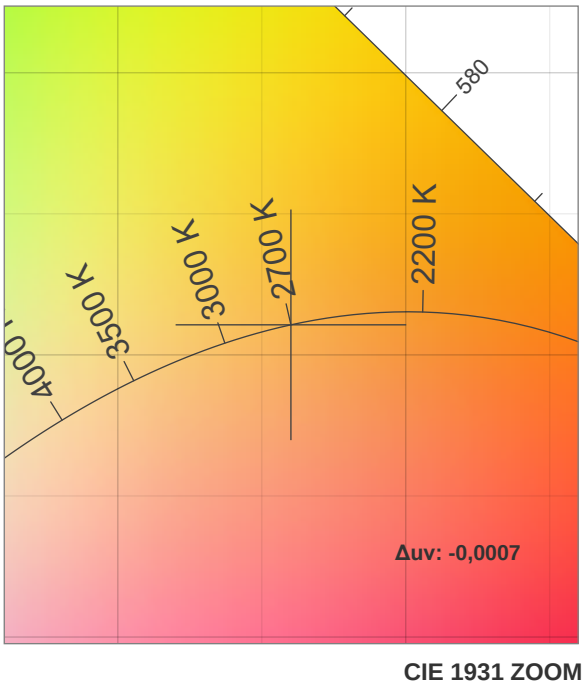


Power

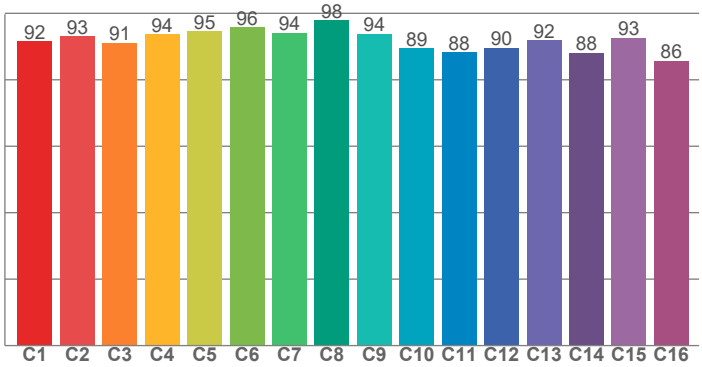


Color details

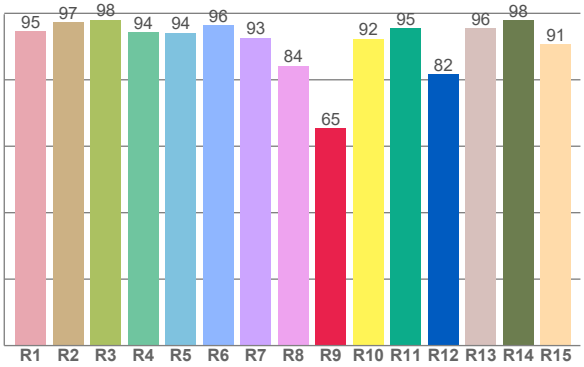




TM30: 91,8



CRI: 94,0 (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
94,7	97,3	98,0	94,4	94,1	96,4	92,6	84,2	65,5	92,4	95,4	81,6	95,5	98,0	90,8

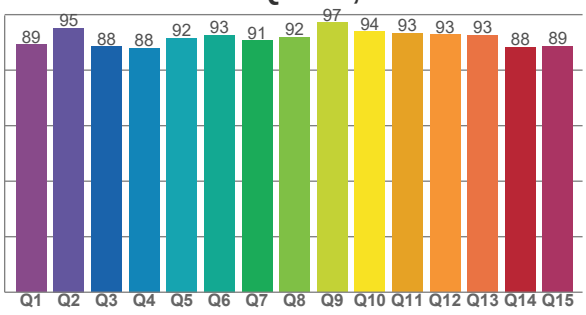
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,5	93,0	91,1	93,7	94,6	95,8	94,2	97,8	93,9	89,5	88,2	89,6	91,8	88,1	92,6	85,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,3	95,1	88,4	88,0	91,5	92,7	90,7	91,8	97,1	93,8	93,3	92,8	92,7	88,4	88,6

CQS: 91,1



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	94,0	65,5	91,8	99,7	91,1	0,460	0,411	0,263	0,352	-0,0007

TM30 details

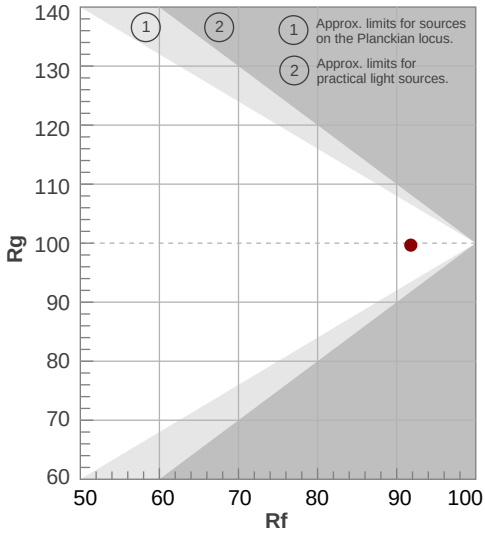
Rf 91,8

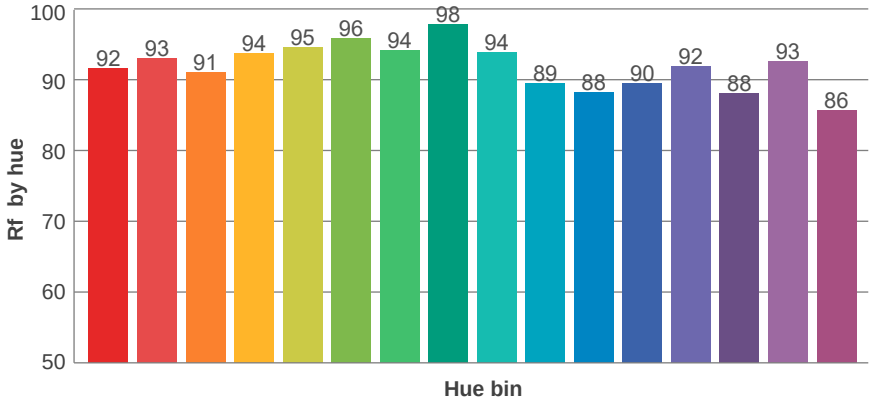
Fidelity index Rf

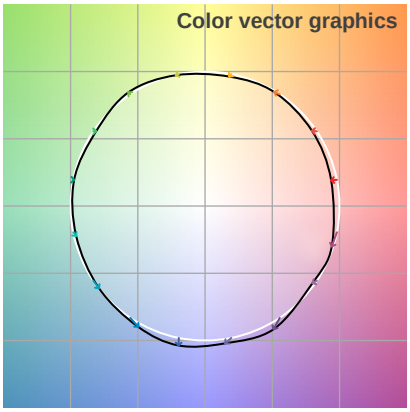
Rg 99,7

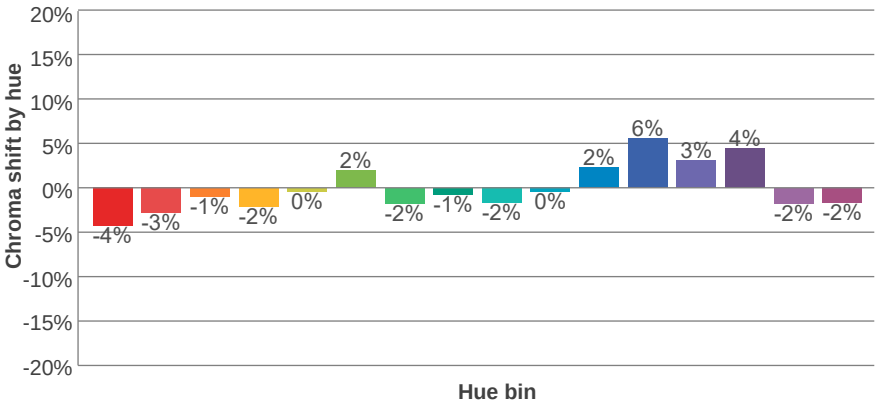
Gammut index Rg

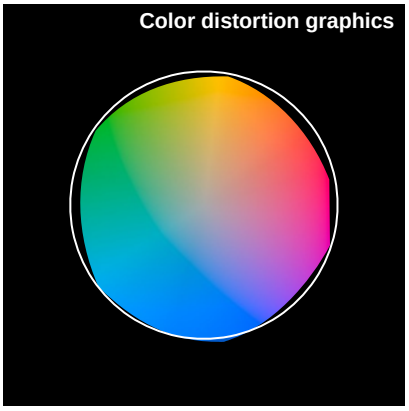
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	92	-4%	0%
2	93	-3%	2%
3	91	-1%	4%
4	94	-2%	1%
5	95	0%	2%
6	96	2%	0%
7	94	-2%	-1%
8	98	-1%	0%
9	94	-2%	3%
10	89	0%	7%
11	88	2%	9%
12	90	6%	1%
13	92	3%	-5%
14	88	4%	-8%
15	93	-2%	-3%
16	86	-2%	-11%

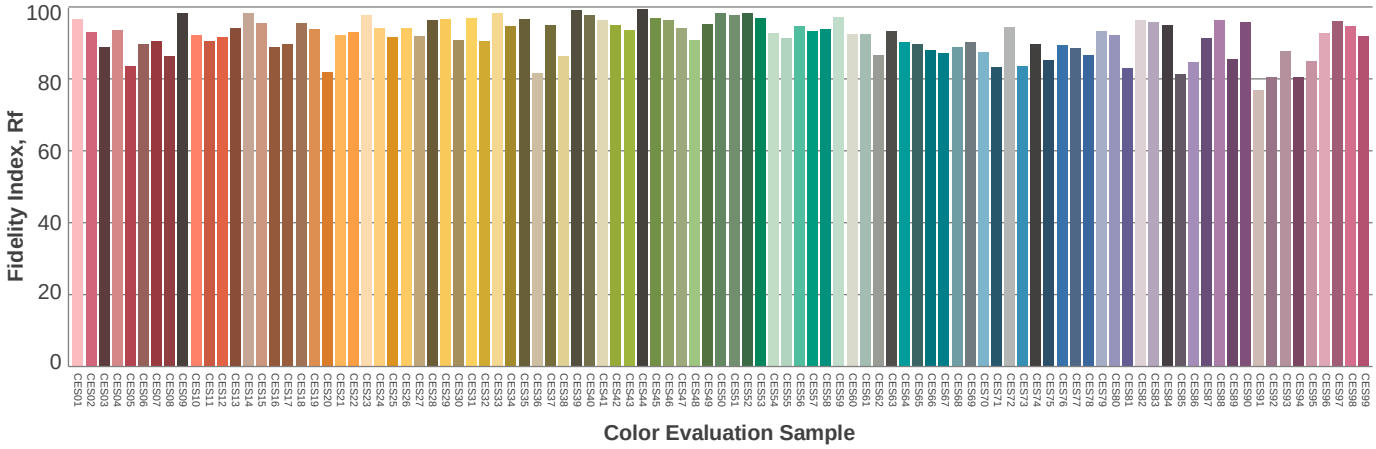




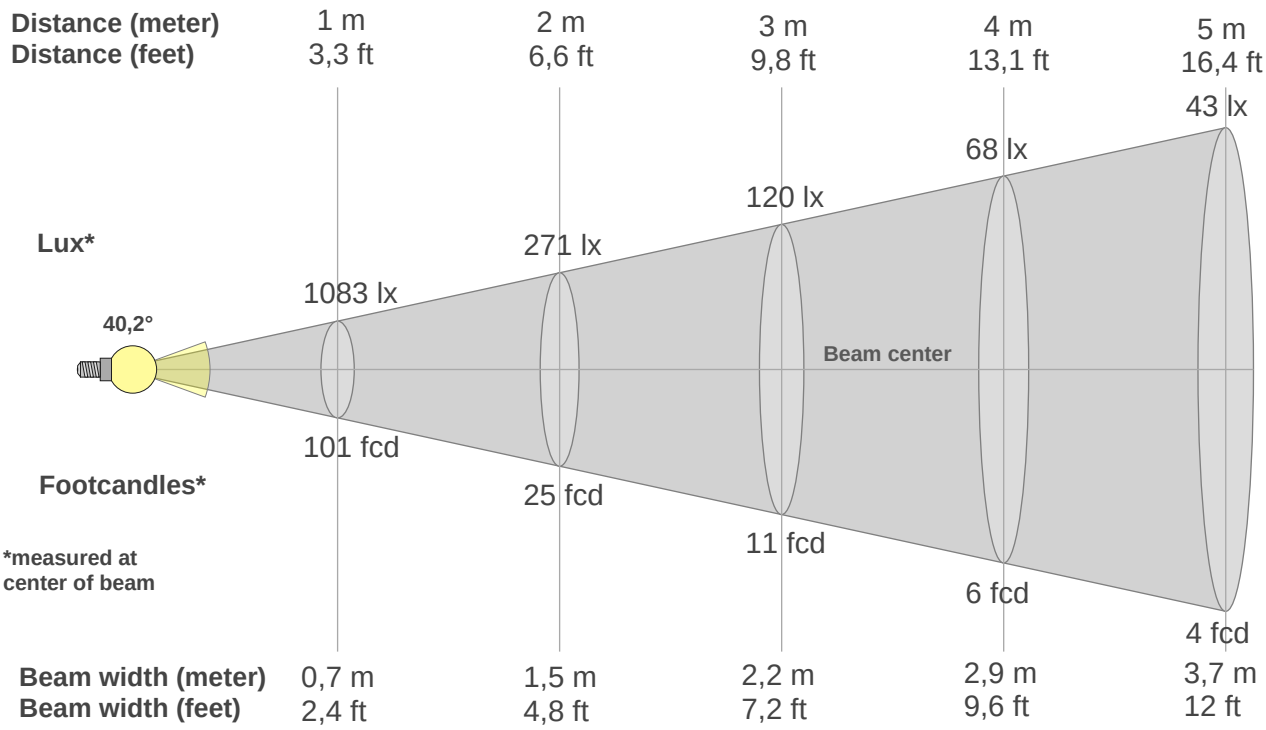








Beam details



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
1083lx	271lx	120lx	68lx	43lx	30lx	22lx	17lx	13lx	11lx	9lx	8lx	6lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx
100,6fc	25,1fcd	11,2fcd	6,3fcd	4fcd	2,8fcd	2,1fcd	1,6fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	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°
1083	1210	1314	1379	1409	1388	1318	1197	1041	863	688	547	448	380	329	287	252	224	204	189
100%	112%	121%	127%	130%	128%	122%	111%	96%	80%	64%	51%	41%	35%	30%	27%	23%	21%	19%	17%

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°
1083	1108	1101	1093	1081	1065	1044	1020	989	953	909	861	808	753	697	644	596	555	523	501
100%	102%	102%	101%	100%	98%	96%	94%	91%	88%	84%	80%	75%	70%	64%	59%	55%	51%	48%	46%

Intensities in 180° c-plane

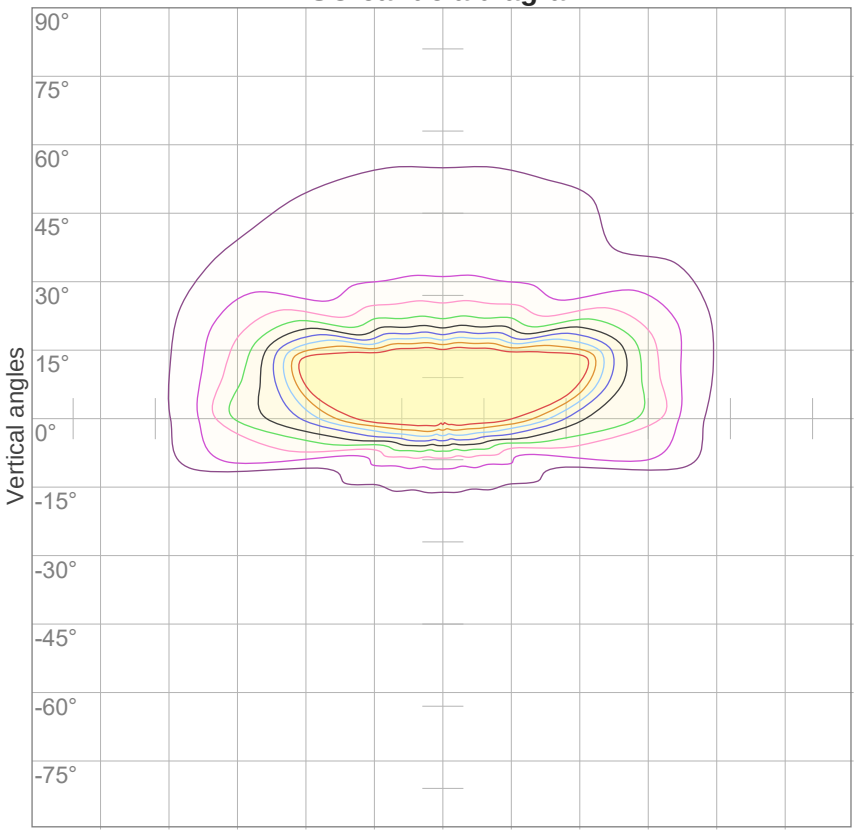
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1083	929	769	592	432	308	225	171	134	108	92	79	73	71	76	81	86	92	101	111
100%	86%	71%	55%	40%	28%	21%	16%	12%	10%	8%	7%	7%	7%	7%	8%	8%	8%	9%	10%

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°
1083	1114	1113	1112	1106	1099	1087	1072	1051	1025	993	956	912	863	810	759	709	664	625	593
100%	103%	103%	103%	102%	101%	100%	99%	97%	95%	92%	88%	84%	80%	75%	70%	65%	61%	58%	55%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40,2°	**92,8°**	**172,2°**	**83,9%**	**65,8%**

ISO candela diagram



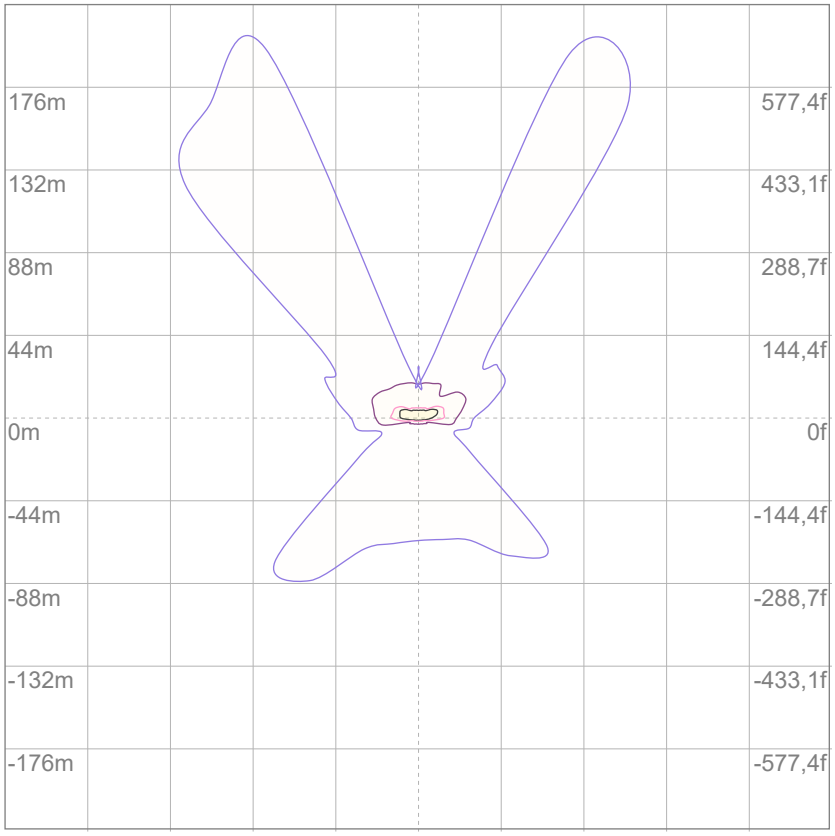
10%	108 cd
20%	217 cd
30%	325 cd
40%	433 cd
50%	541 cd
60%	650 cd
70%	758 cd
80%	866 cd
90%	974 cd

Conditions:

Number of c-planes: 16

Candela at center: 1083 cd

ISO lux diagram



3%	0,325 lx
5%	0,541 lx
10%	1,08 lx
30%	3,25 lx
50%	5,41 lx

Conditions:

Number of c-planes: 16

Lux at center: 10,8 lx

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

Glare Evaluation According to UGR

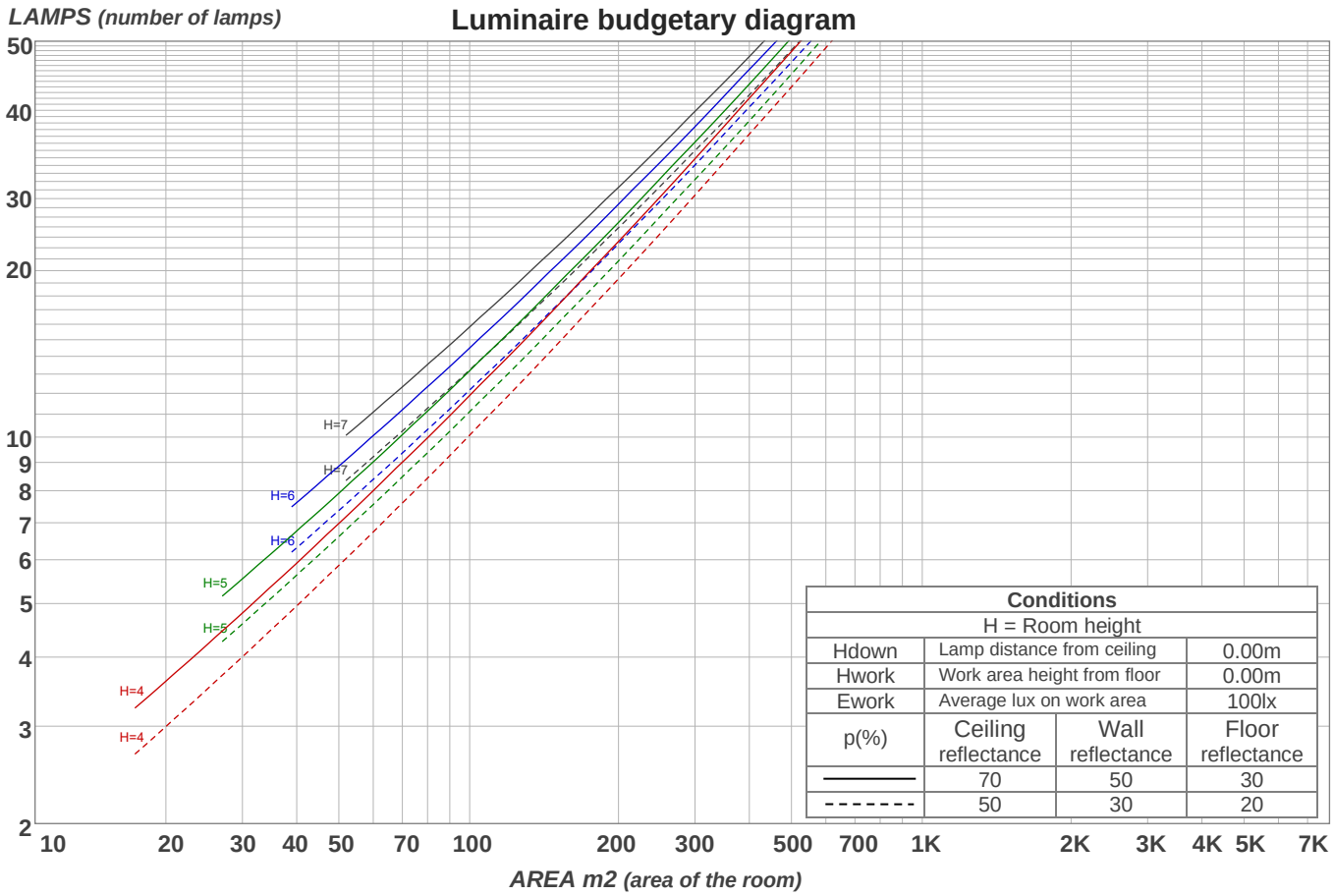
p Ceiling	70	70	50	50	30	70	70	50	50	30
p Walls	50	30	50	30	30	50	30	50	30	30
p Floor	20	20	20	20	20	20	20	20	20	20
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 1326 lm total luminous flux										

UGR data could not be calculated due to missing/wrong symmetry. Go to Edit -> Photometric -> Corrections and select Correct asymmetry (UGR not defined for asymmetrical distributions)..

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	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	94	88	82	99	92	86	81	88	84	80	85	81	78	82	79	76	74
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	70	62	56	79	69	61	55	67	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	70	58	51	46	57	50	45	55	49	45	54	49	45	43
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	39
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	48	41	36	59	47	41	36	46	40	36	46	40	36	45	39	35	34

Luminaire budgetary diagram

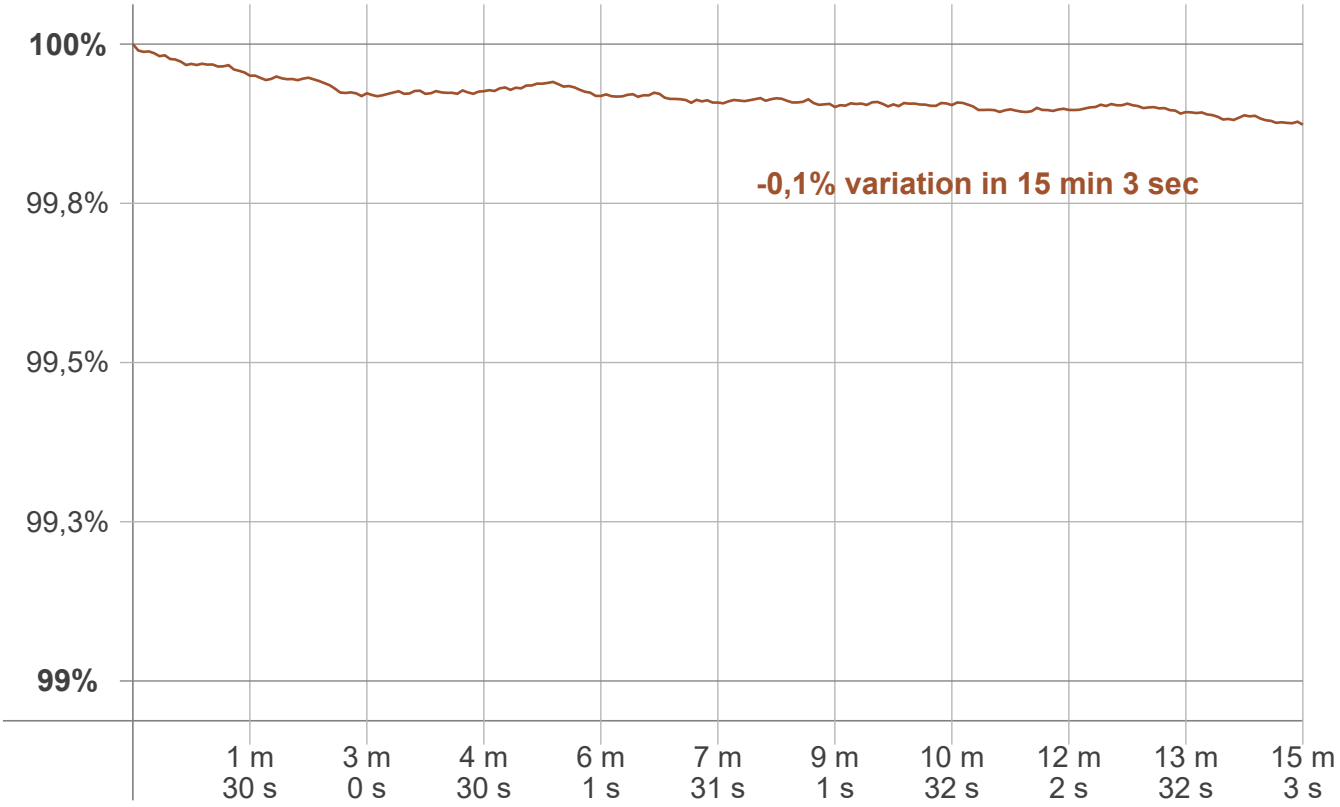


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
97,0 lm	228 lm	243 lm	212 lm	182 lm	151 lm	102 lm	66,0 lm	46,4 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,061 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm	0,000 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 3 sec**
Warmup variation	**-0,1%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2701 K	-1 K	2700 K

Output change

Output start	Output change	Output end
1328 lm	-2 lm	1326 lm