Light efficiency:

107 Lumen/Watt

Light quality:

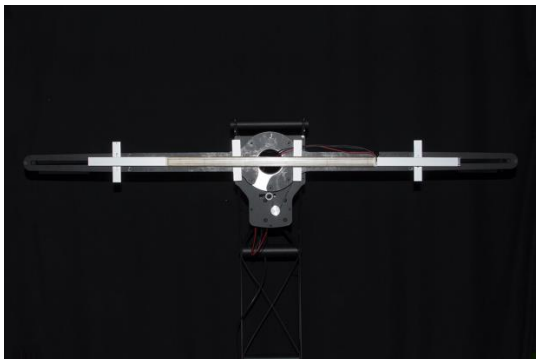
CRI: 82,3

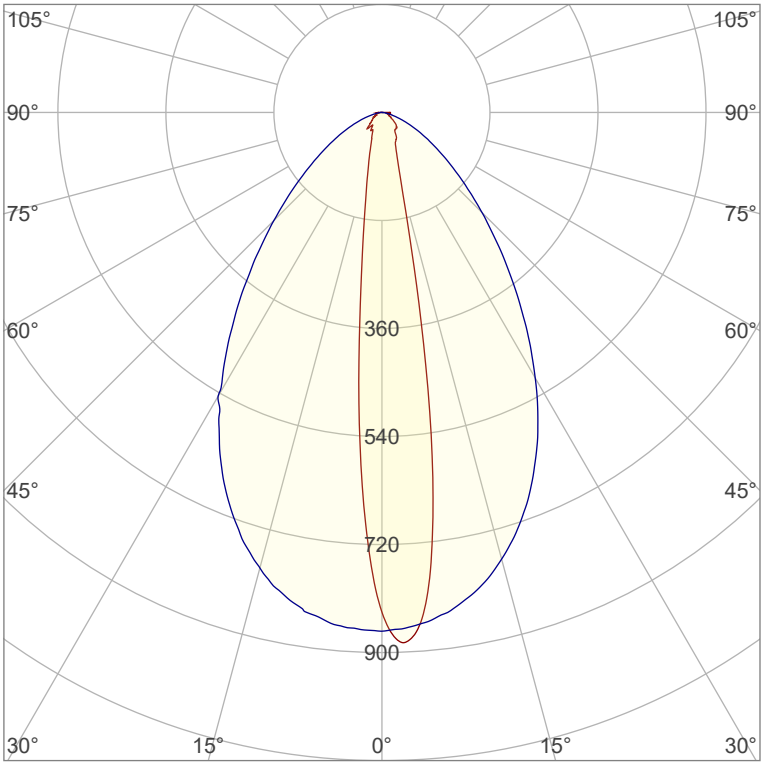
Color temperature:

2700 K

Output: 464 lm
Peak: 884 cd

Power: 4,3 W
PF: 1,0





Product name:
Navigator-3_510mm_827_Inlay-Lens-Wallwasher

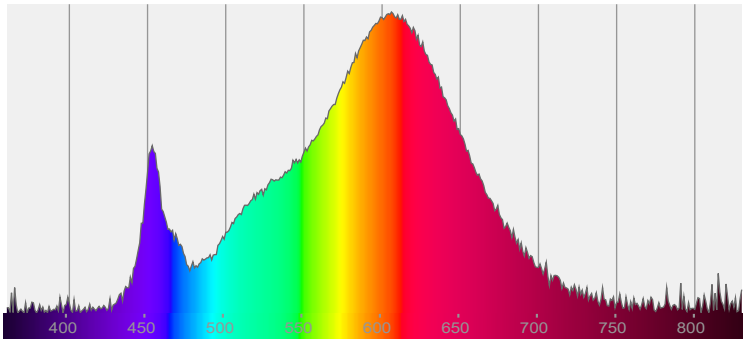
Item number:
NP/L1C/14C/0510/827/ILWW

Date and time:
15.08.2025 12:15:14

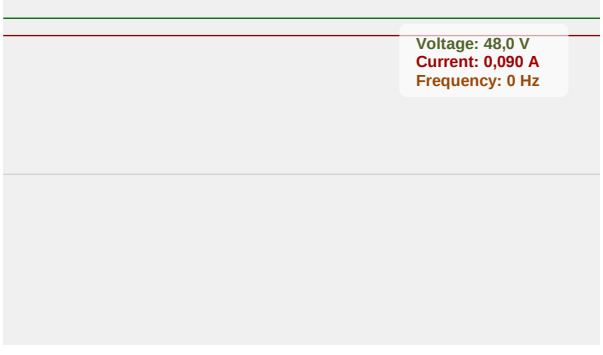
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 13.10.2023
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

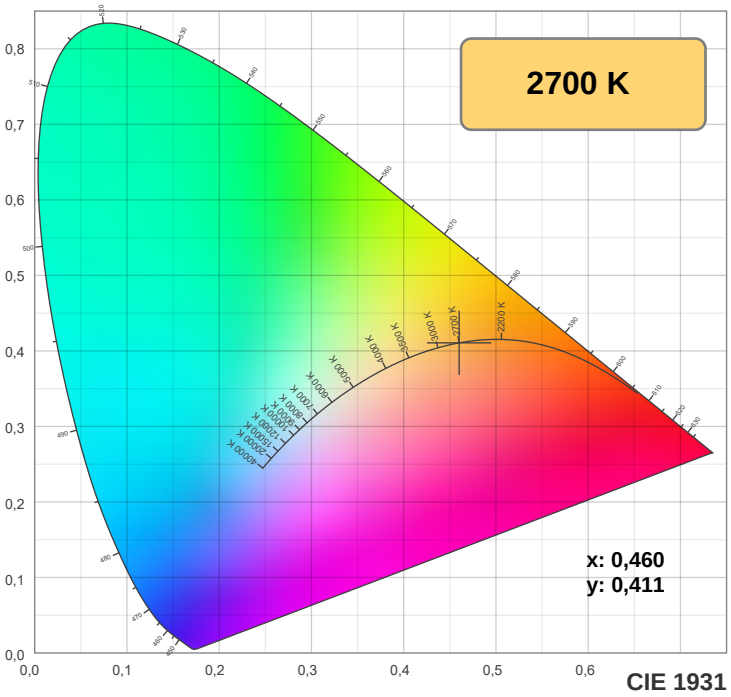
Spectra



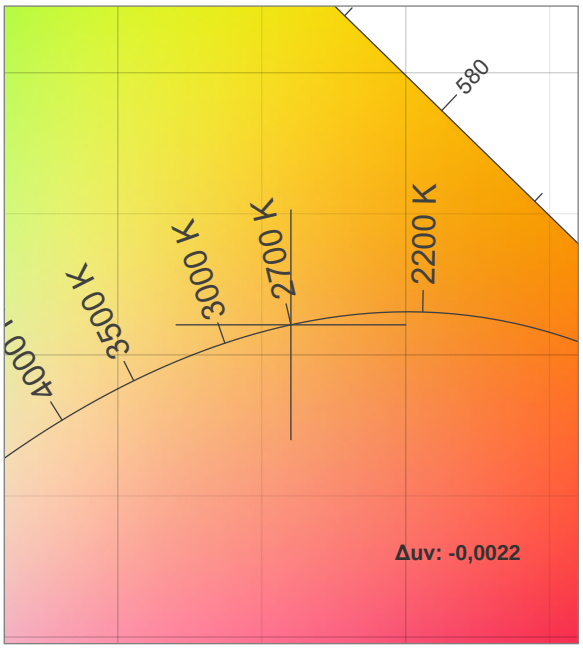
Power



Color details

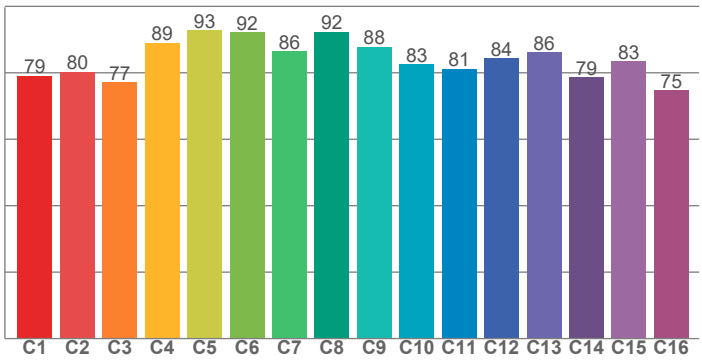


CIE 1931

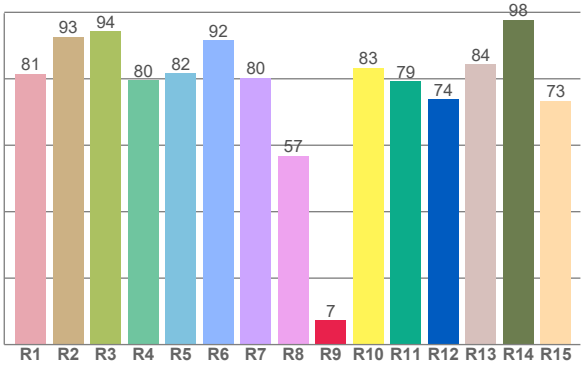


CIE 1931 ZOOM

TM30: 84,0



CRI: 82,3 (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
81,5	92,6	94,3	79,6	81,7	91,5	80,3	56,8	7,4	83,3	79,3	73,8	84,4	97,8	73,4

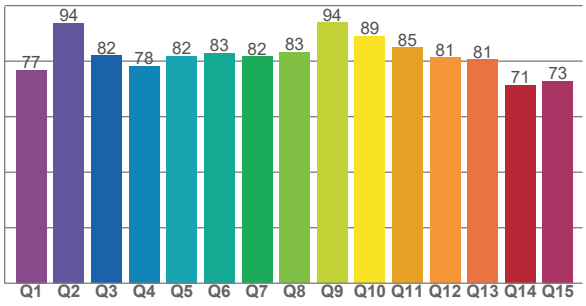
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79,1	80,2	77,1	89,0	92,8	92,1	86,5	92,3	87,8	82,5	81,3	84,4	86,2	78,6	83,5	74,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76,9	93,8	82,0	78,2	81,9	83,0	81,6	83,2	93,9	89,1	84,9	81,3	80,5	71,3	72,9

CQS: 81,1



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	82,3	7,4	84,0	96,1	81,1	0,460	0,411	0,263	0,352	-0,0022

TM30 details

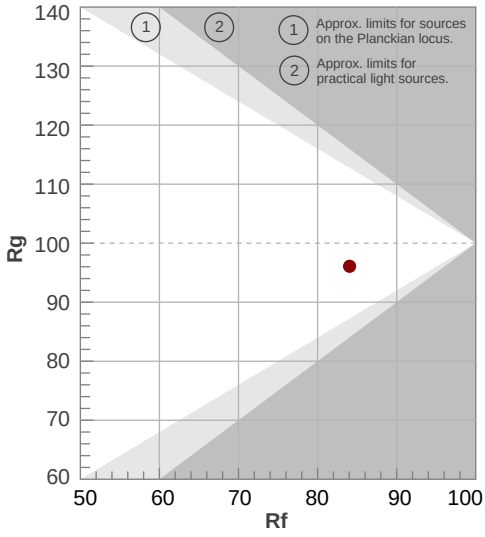
Rf 84,0

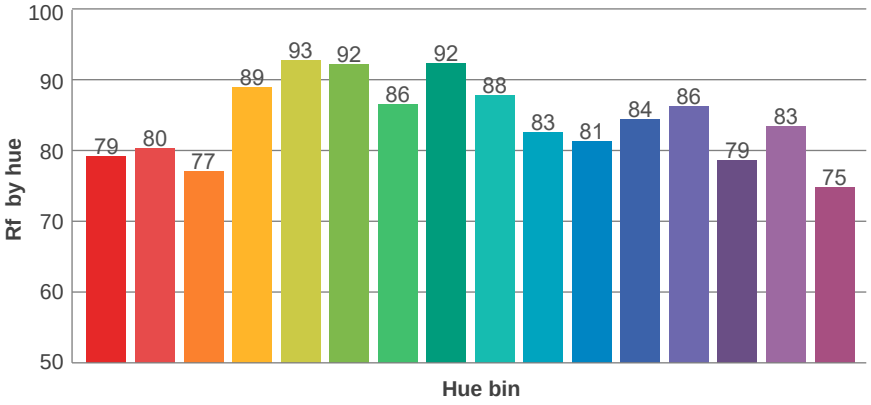
Fidelity index Rf

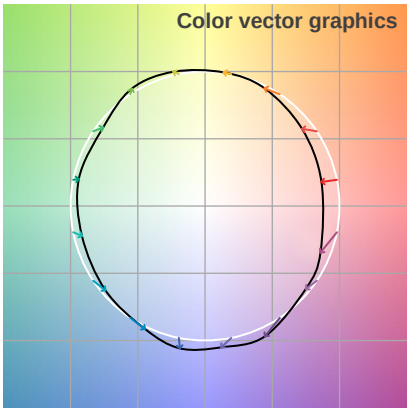
Rg 96,1

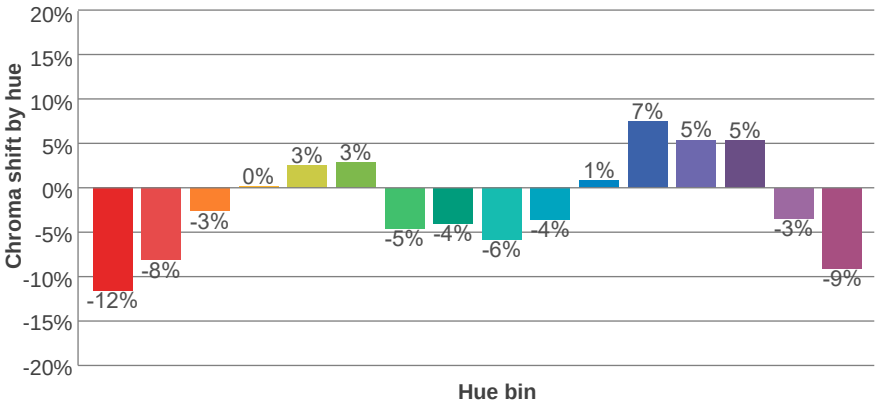
Gammut index Rg

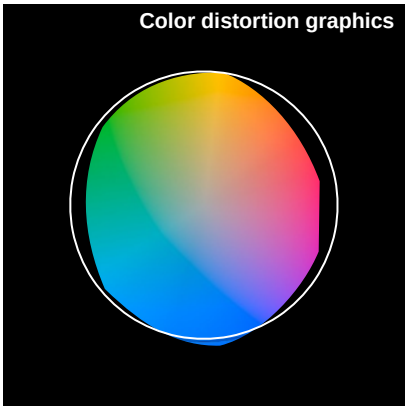
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-12%	1%
2	80	-8%	8%
3	77	-3%	12%
4	89	0%	6%
5	93	3%	4%
6	92	3%	-3%
7	86	-5%	-6%
8	92	-4%	-1%
9	88	-6%	4%
10	83	-4%	11%
11	81	1%	14%
12	84	7%	2%
13	86	5%	-9%
14	79	5%	-17%
15	83	-3%	-10%
16	75	-9%	-17%

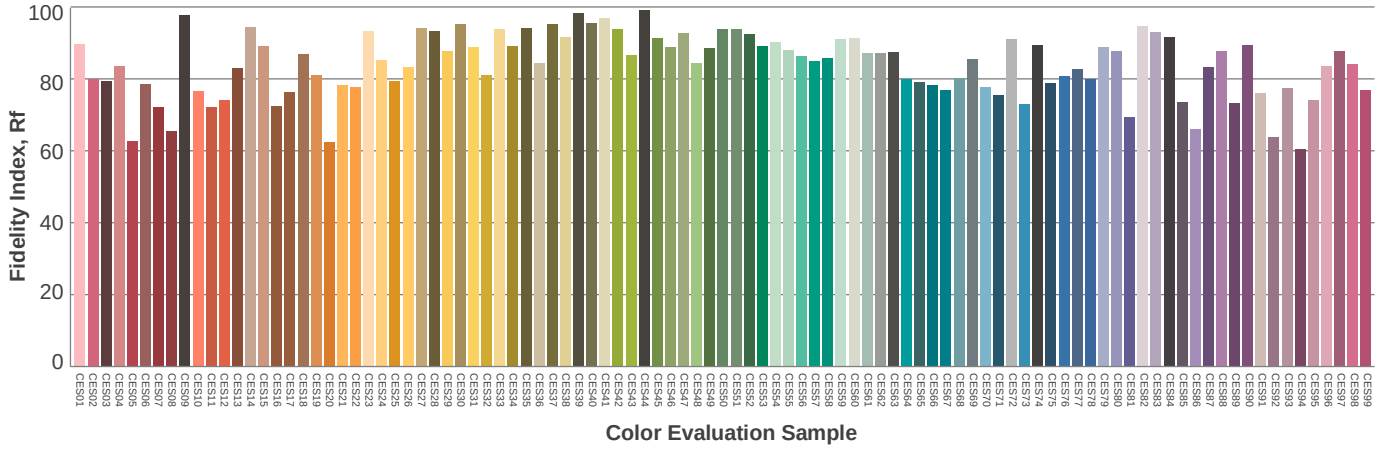




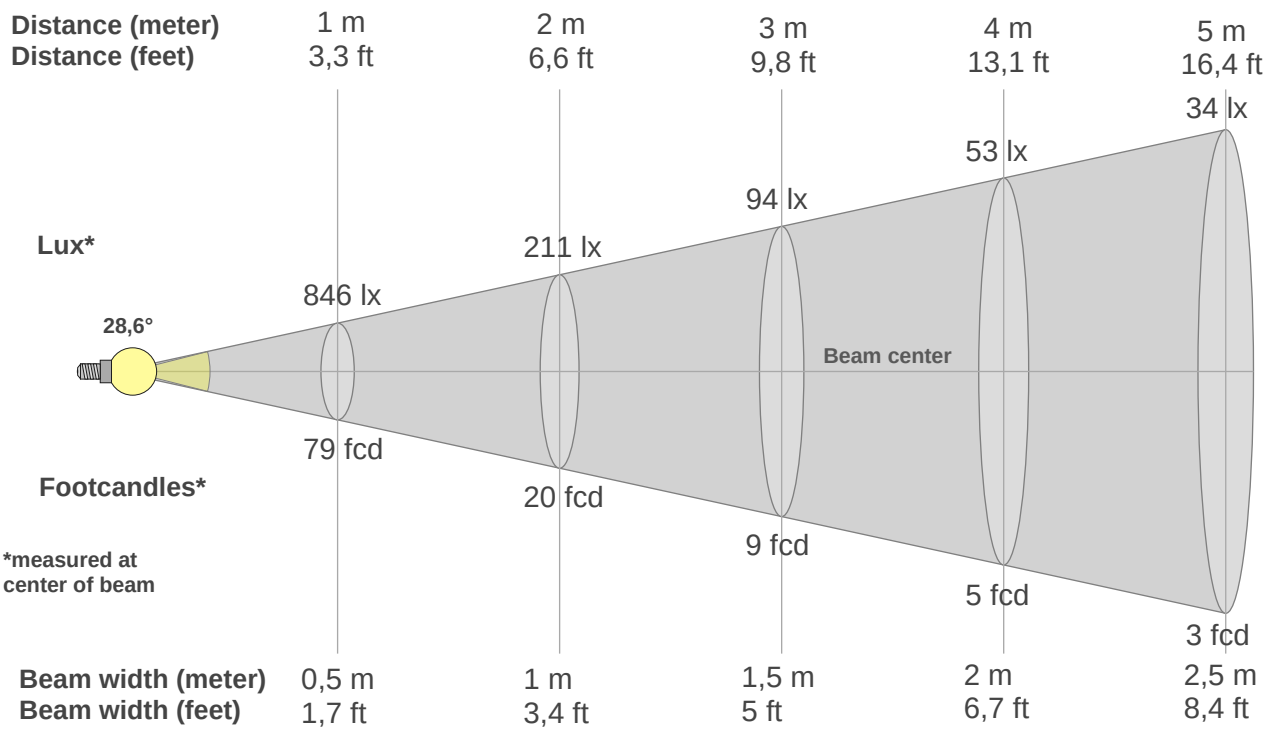








Beam details



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
846lx	211lx	94lx	53lx	34lx	23lx	17lx	13lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx
78,6fcd	19,6fcd	8,7fcd	4,9fcd	3,1fcd	2,2fcd	1,6fcd	1,2fcd	1fcd	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°
846	882	861	770	607	412	246	154	110	86	71	61	55	53	51	48	44	39	37	36
100%	104%	102%	91%	72%	49%	29%	18%	13%	10%	8%	7%	7%	6%	6%	6%	5%	5%	4%	4%

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°
846	861	856	847	837	822	804	783	758	731	700	666	630	592	552	511	470	429	389	351
100%	102%	101%	100%	99%	97%	95%	93%	90%	86%	83%	79%	74%	70%	65%	60%	56%	51%	46%	41%

Intensities in 180° c-plane

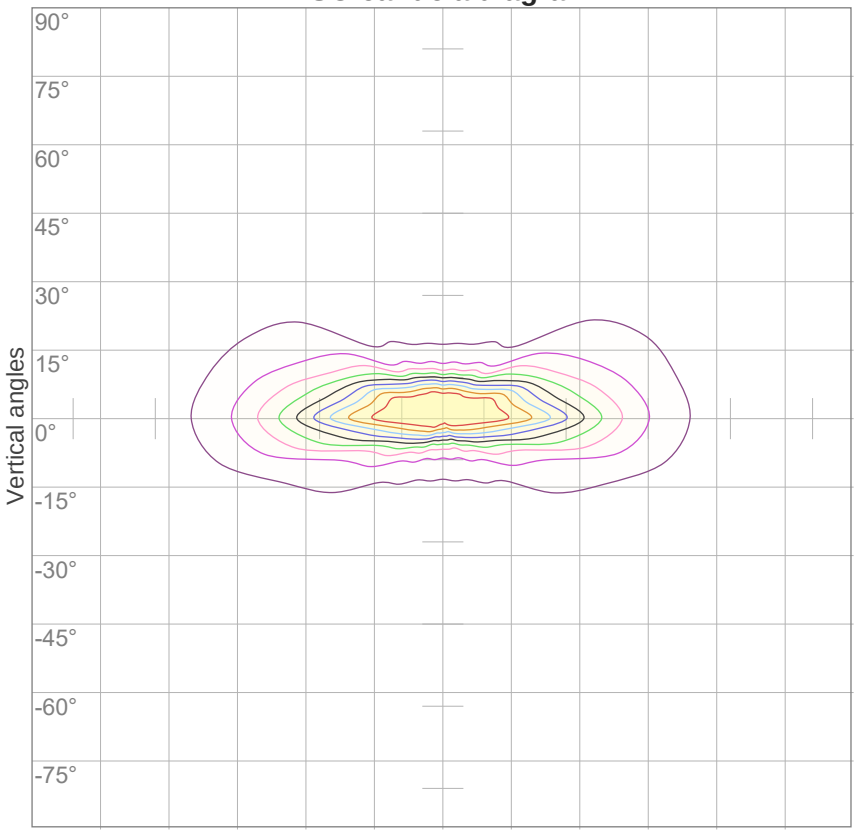
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
846	707	534	354	233	162	122	94	76	61	51	46	40	35	32	35	35	29	26	28
100%	84%	63%	42%	28%	19%	14%	11%	9%	7%	6%	5%	5%	4%	4%	4%	4%	3%	3%	3%

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°
846	863	860	854	844	832	816	797	775	750	720	689	655	618	579	544	496	456	415	376
100%	102%	102%	101%	100%	98%	96%	94%	92%	89%	85%	81%	77%	73%	68%	64%	59%	54%	49%	44%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
28,6°	**62,3°**	**121,5°**	**89,0%**	**74,5%**

ISO candela diagram



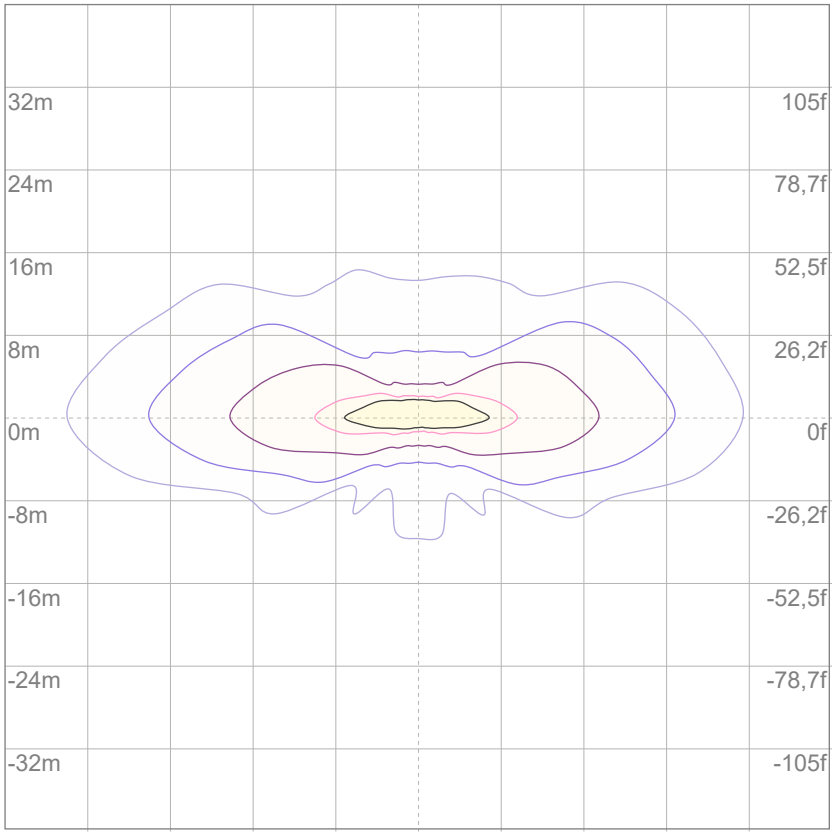
10%	85 cd
20%	169 cd
30%	254 cd
40%	338 cd
50%	423 cd
60%	507 cd
70%	592 cd
80%	677 cd
90%	761 cd

Conditions:

Number of c-planes: 16

Candela at center: 846 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,254 lx
5%	0,423 lx
10%	0,846 lx
30%	2,54 lx
50%	4,23 lx

Conditions:

Number of c-planes: 16

Lux at center: 8,46 lx

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

Glare Evaluation According to UGR

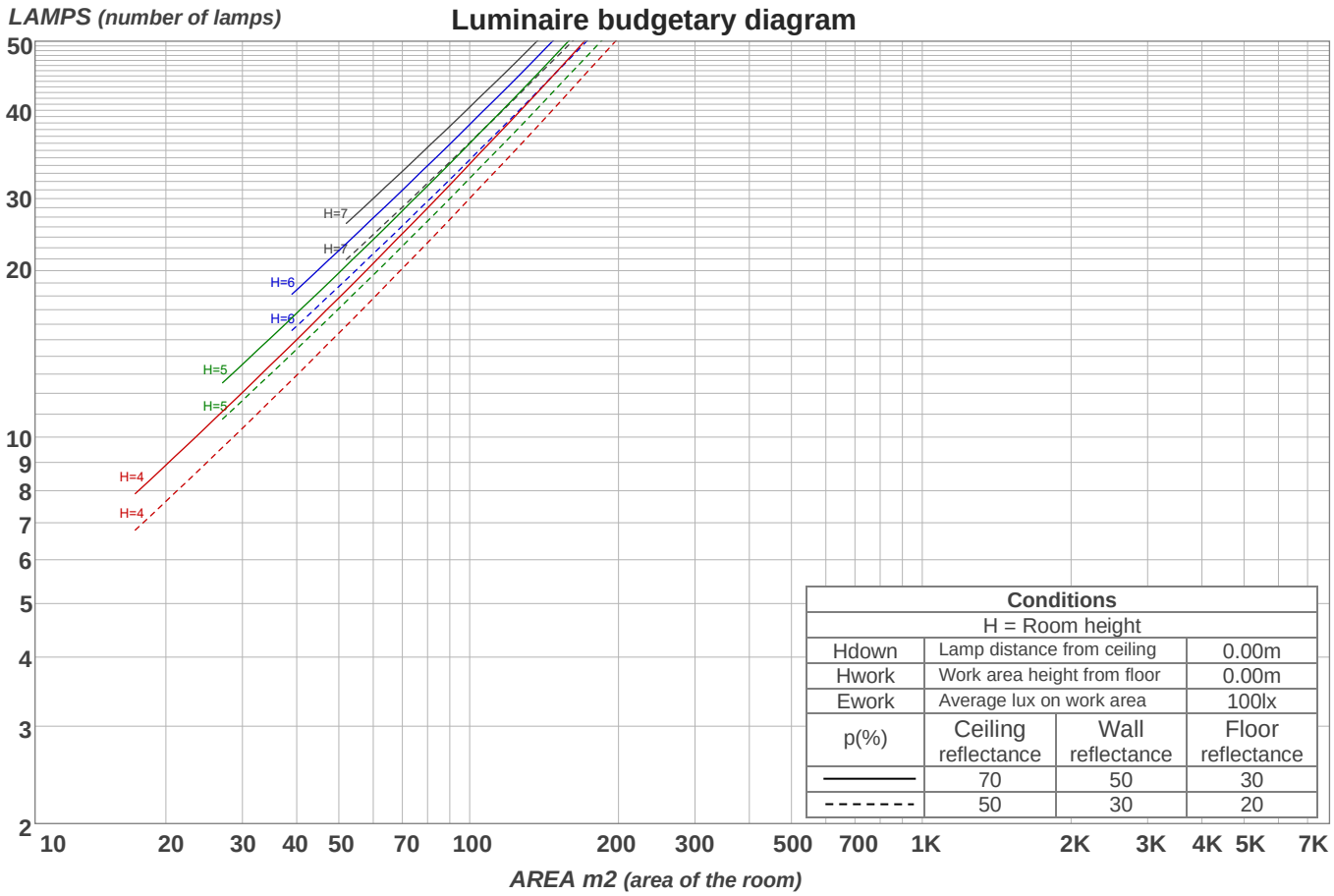
p Ceiling	70	70	50	50	30	70	70	50	50	30
p Walls	50	30	50	30	30	50	30	50	30	30
p Floor	20	20	20	20	20	20	20	20	20	20
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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
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 464 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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47
9	69	58	51	47	68	57	51	47	56	51	46	55	50	46	55	50	46	45
10	66	55	48	44	65	54	48	44	53	48	44	53	47	44	52	47	43	42

Luminaire budgetary diagram

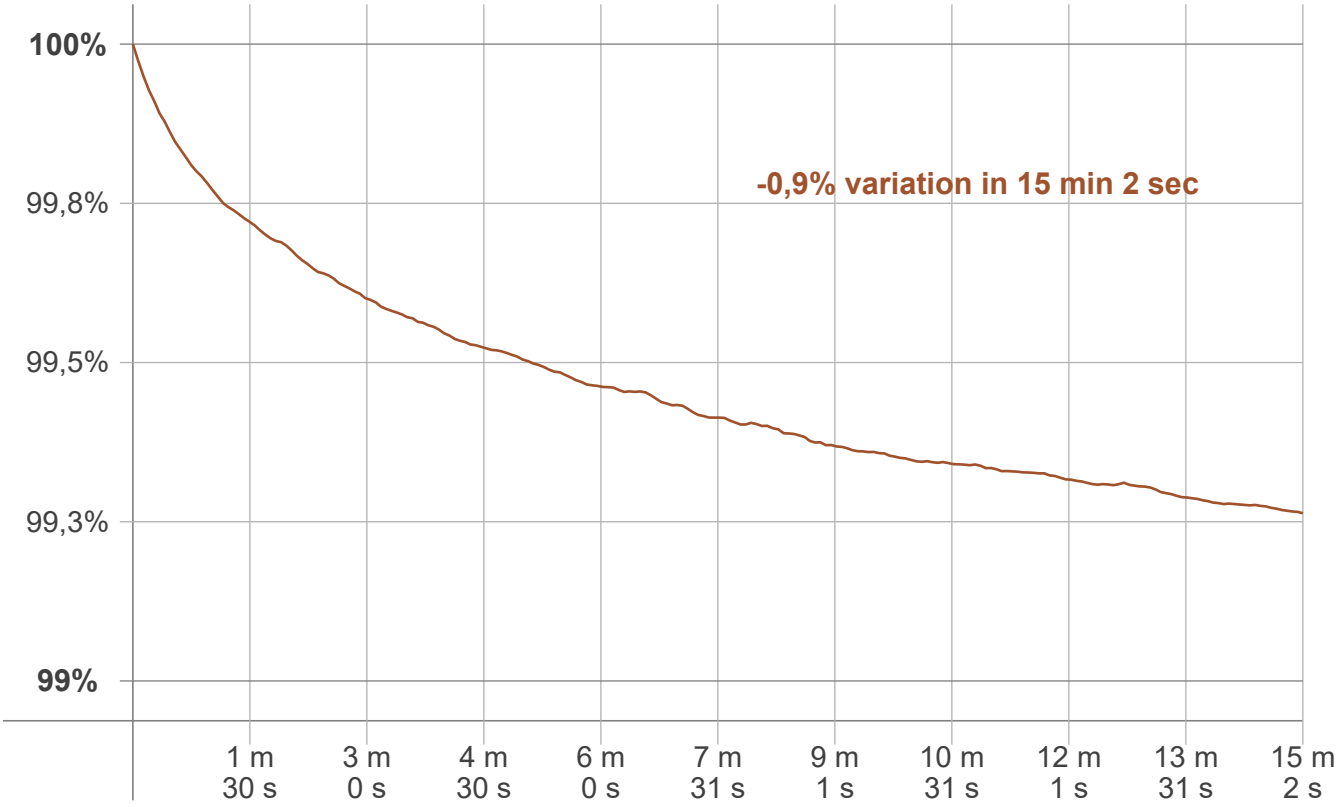


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
63,1 lm	95,5 lm	84,7 lm	72,0 lm	57,5 lm	40,5 lm	24,5 lm	15,3 lm	11,0 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,037 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 2 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
2698 K	+2 K	2700 K

Output change

Output start	Output change	Output end
468 lm	-4 lm	464 lm