Light efficiency:

136 Lumen/Watt

Light quality:

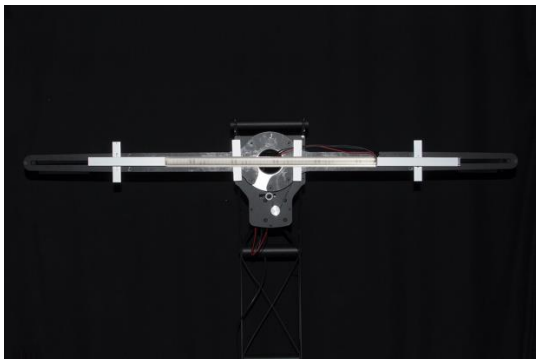
CRI: 81,8

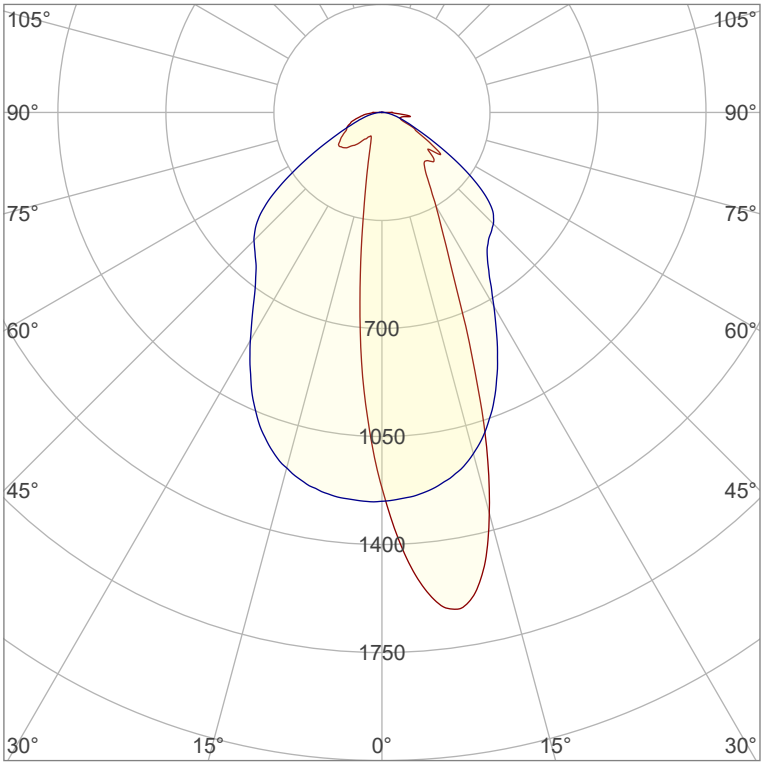
Color temperature:

2700 K

Output: 1567 lm
Peak: 1725 cd

Power: 11,5 W
PF: 1,0





Product name:
Nova-6_510mm_827_Lens-Asymmetric-Frosted-2

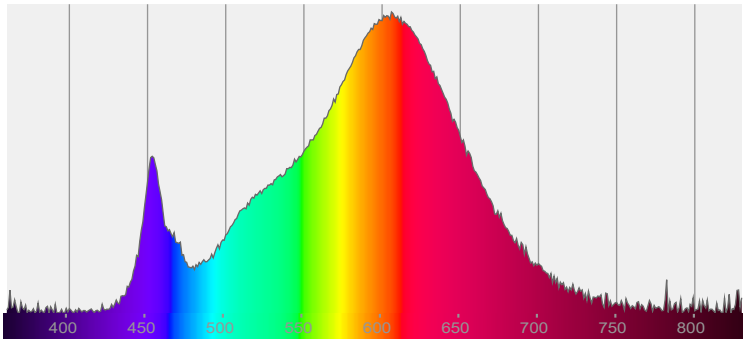
Item number:
NP/L1C/06F/0510/827/LAF-2

Date and time:
19.07.2022 11:41:54

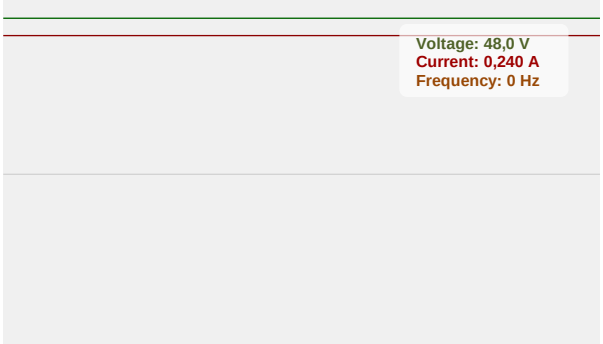
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 20-09-2021
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

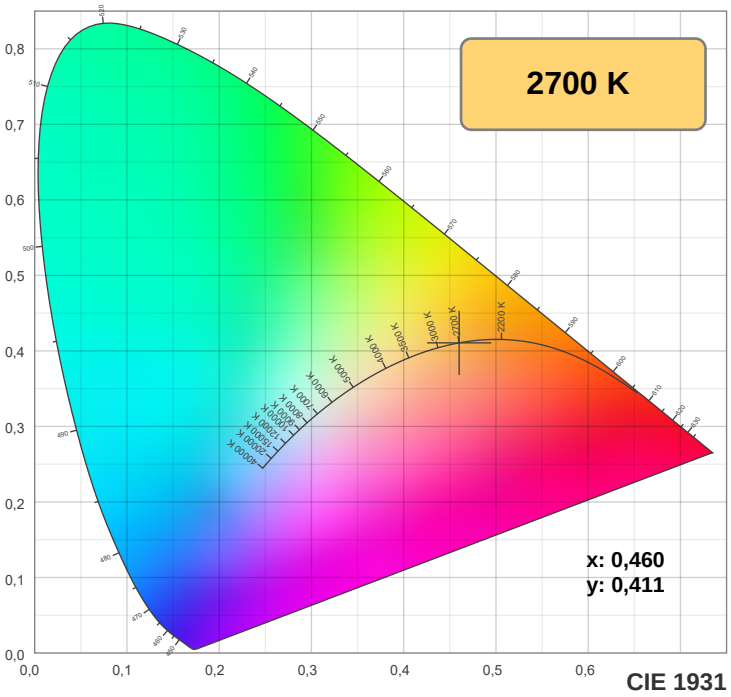
Spectra



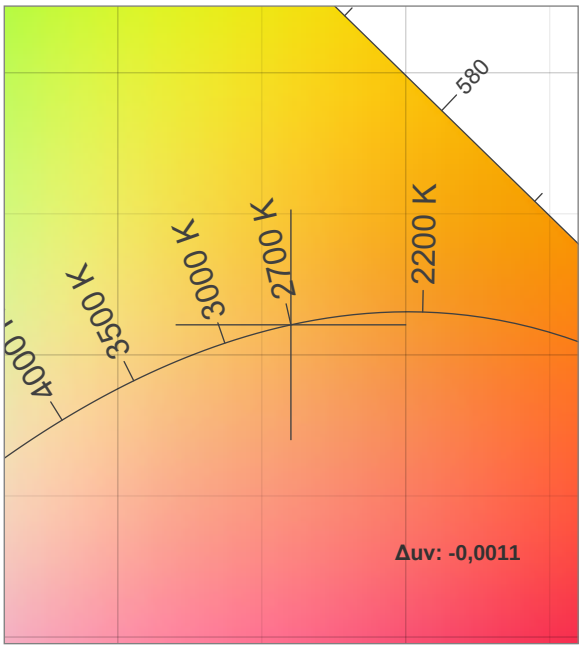
Power



Color details

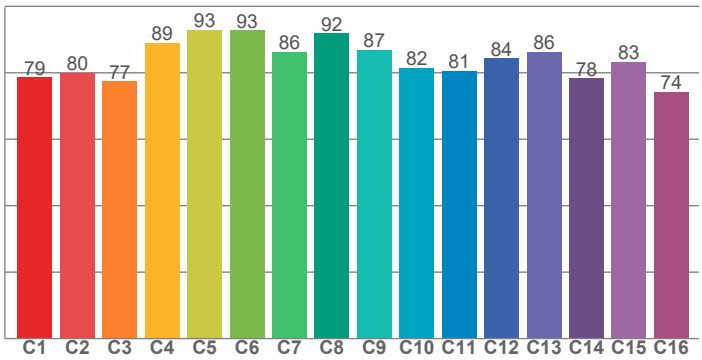


CIE 1931

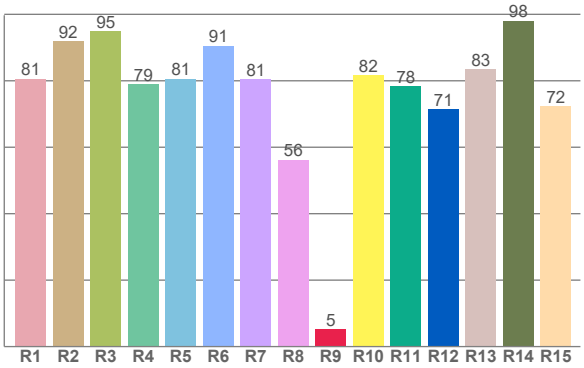


CIE 1931 ZOOM

TM30: 83,8



CRI: 81,8 (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
80,6	91,9	94,8	79,0	80,6	90,6	80,5	56,2	5,3	81,6	78,3	71,5	83,4	98,0	72,3

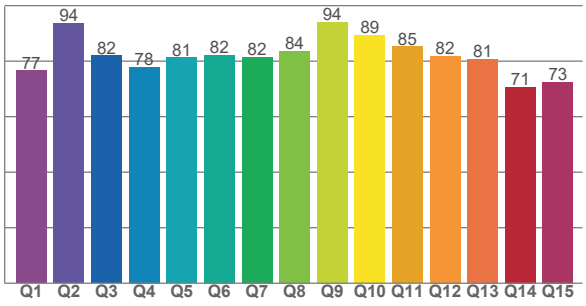
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78,6	80,1	77,4	89,1	92,9	92,7	86,3	91,9	86,9	81,5	80,7	84,3	86,3	78,4	83,3	74,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76,7	93,6	82,0	77,9	81,2	82,3	81,6	83,7	94,1	89,3	85,2	81,9	80,8	70,7	72,5

CQS: 81,0



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	81,8	5,3	83,8	95,4	81,0	0,460	0,411	0,263	0,352	-0,0011

TM30 details

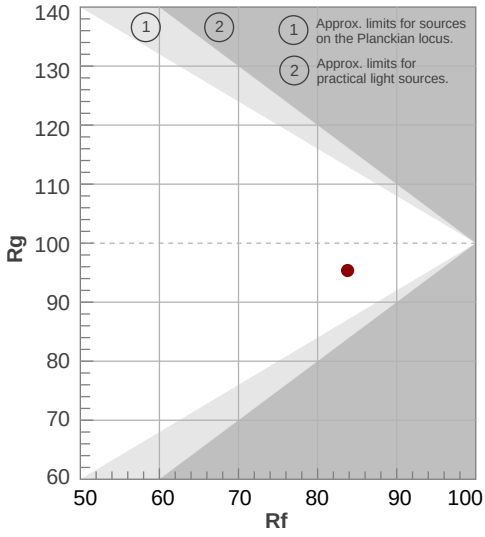
Rf 83,8

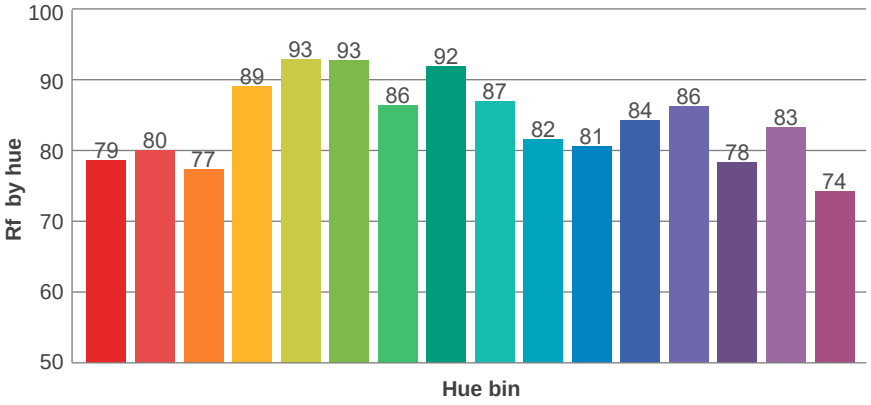
Fidelity index Rf

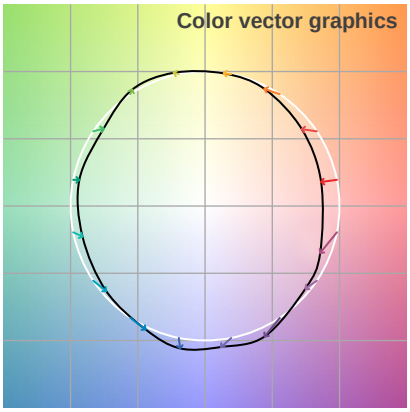
Rg 95,4

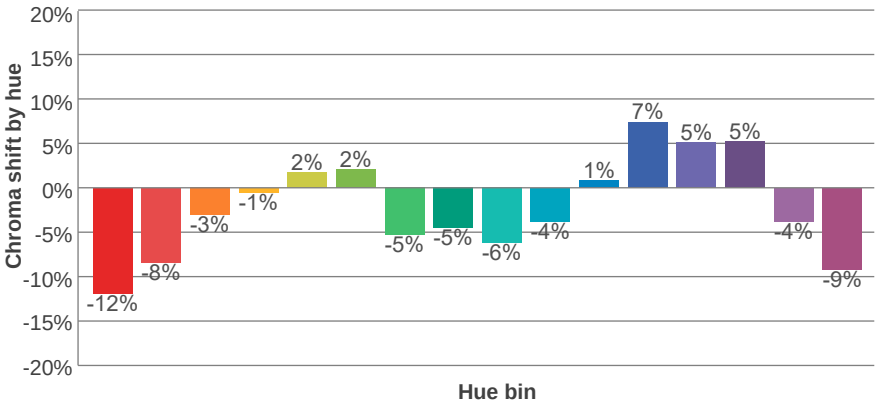
Gammut index Rg

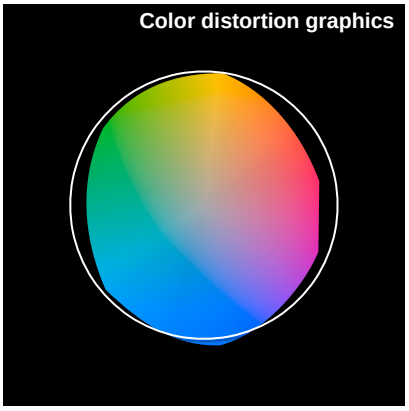
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-12%	1%
2	80	-8%	8%
3	77	-3%	12%
4	89	-1%	6%
5	93	2%	4%
6	93	2%	-3%
7	86	-5%	-6%
8	92	-5%	-1%
9	87	-6%	4%
10	82	-4%	12%
11	81	1%	14%
12	84	7%	2%
13	86	5%	-9%
14	78	5%	-17%
15	83	-4%	-10%
16	74	-9%	-18%

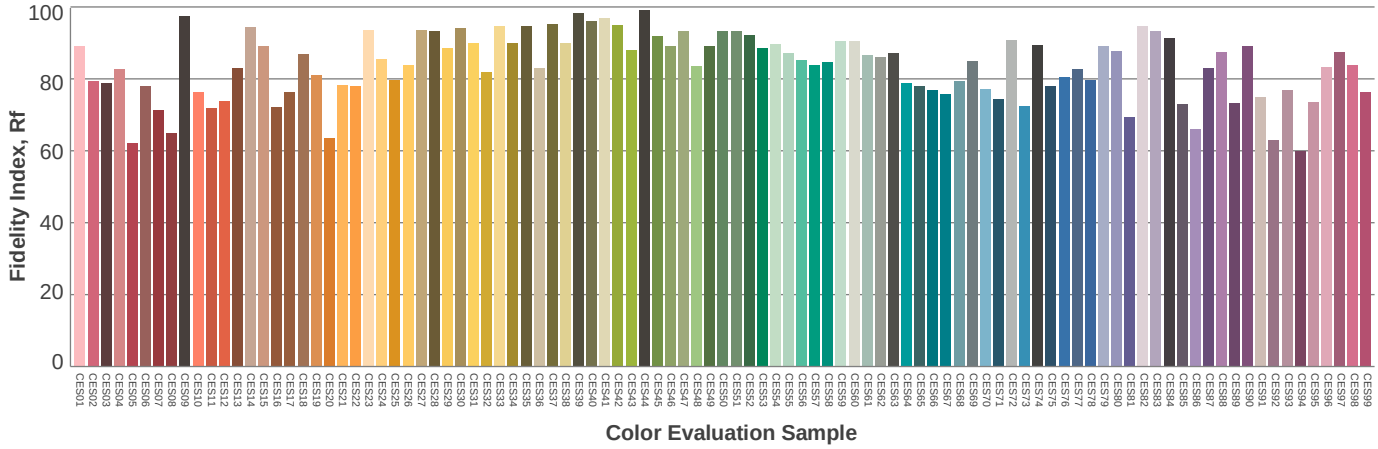




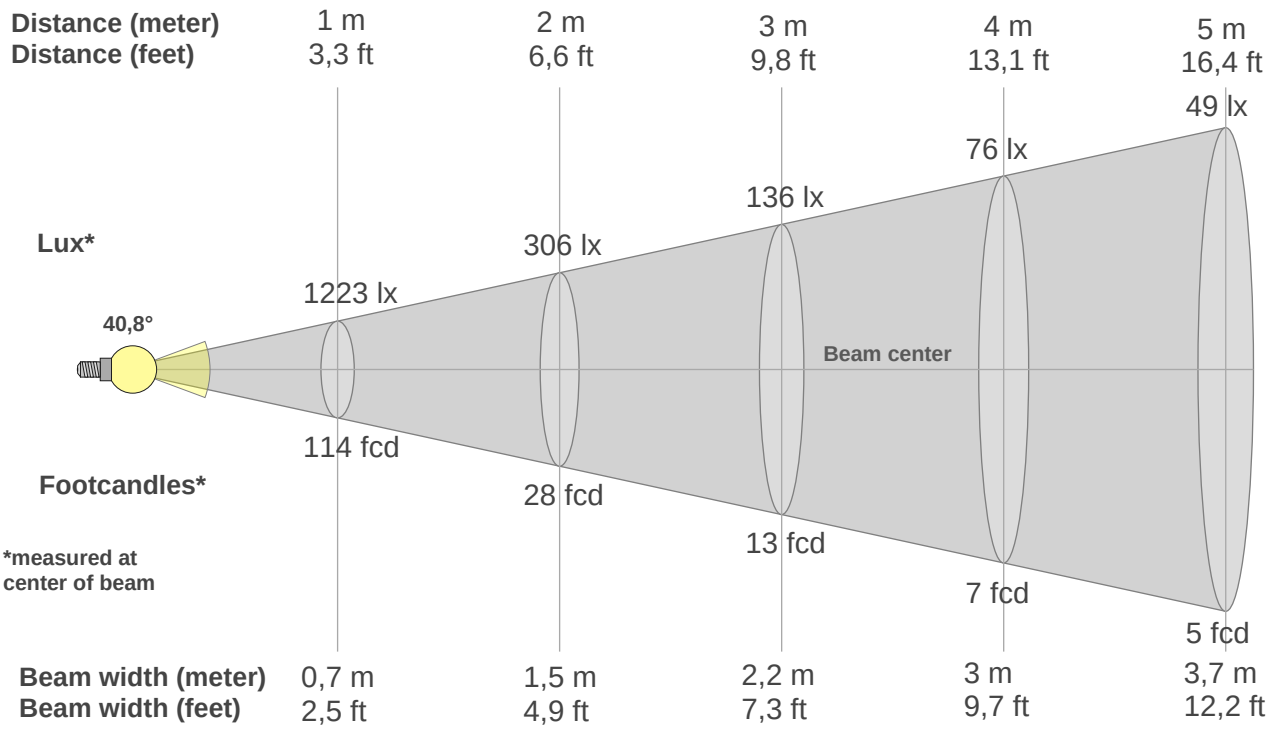








Beam details



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
1223lx	306lx	136lx	76lx	49lx	34lx	25lx	19lx	15lx	12lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
113,7fc	28,4fcd	12,6fcd	7,1fcd	4,5fcd	3,2fcd	2,3fcd	1,8fcd	1,4fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,4fcd	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°
1223	1368	1494	1583	1624	1612	1543	1422	1260	1073	874	692	557	468	401	350	305	270	242	225
100%	112%	122%	129%	133%	132%	126%	116%	103%	88%	71%	57%	46%	38%	33%	29%	25%	22%	20%	18%

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°
1223	1256	1250	1241	1228	1210	1189	1161	1126	1085	1036	980	919	854	788	725	669	620	581	555
100%	103%	102%	101%	100%	99%	97%	95%	92%	89%	85%	80%	75%	70%	64%	59%	55%	51%	48%	45%

Intensities in 180° c-plane

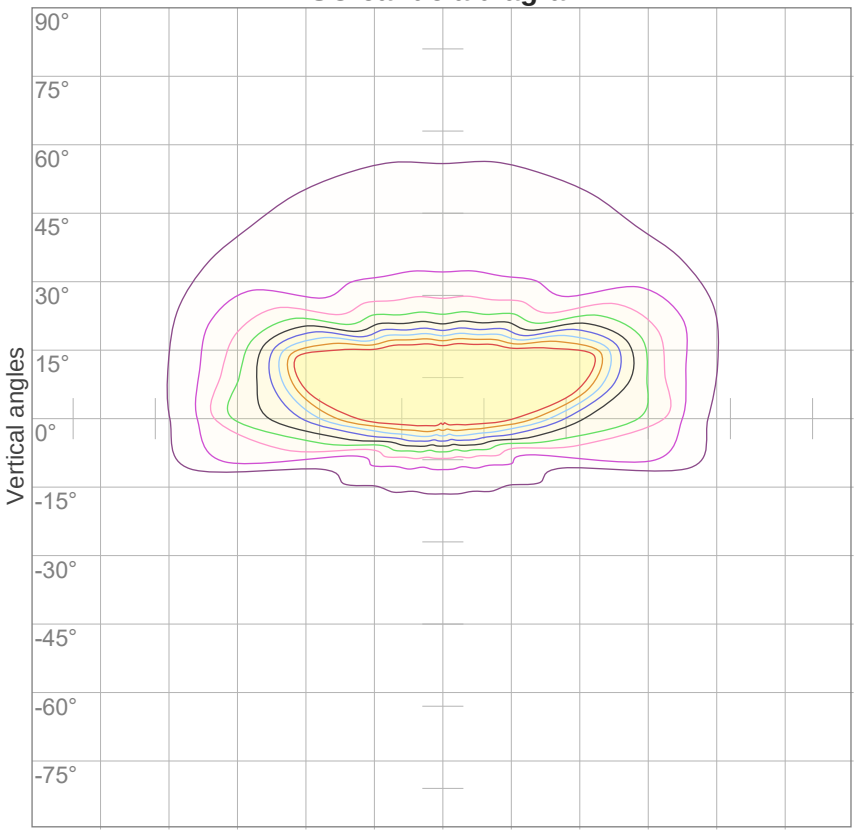
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1223	1051	874	679	497	353	260	197	156	126	107	94	86	85	89	96	101	108	119	130
100%	86%	71%	56%	41%	29%	21%	16%	13%	10%	9%	8%	7%	7%	7%	8%	8%	9%	10%	11%

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°
1223	1261	1259	1256	1248	1237	1223	1205	1182	1151	1115	1073	1024	968	911	853	795	744	699	664
100%	103%	103%	103%	102%	101%	100%	98%	97%	94%	91%	88%	84%	79%	74%	70%	65%	61%	57%	54%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40,8°	**94,3°**	**172,9°**	**83,7%**	**65,5%**

ISO candela diagram



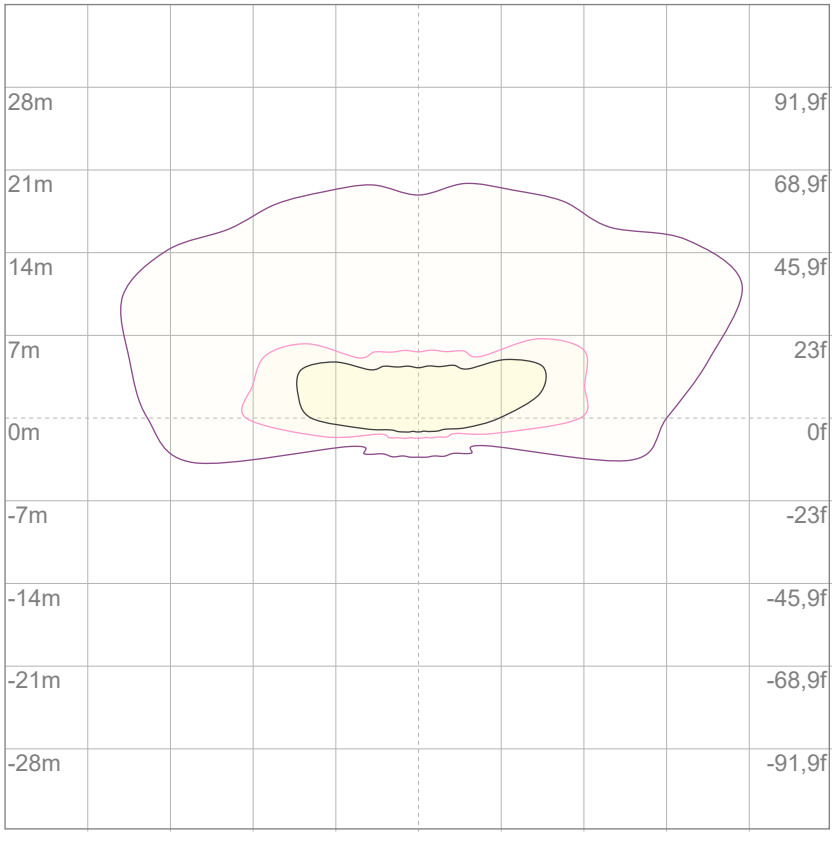
10%	122 cd
20%	245 cd
30%	367 cd
40%	489 cd
50%	612 cd
60%	734 cd
70%	856 cd
80%	979 cd
90%	1101 cd

Conditions:

Number of c-planes: 16

Candela at center: 1223 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,367 lx
5%	0,612 lx
10%	1,22 lx
30%	3,67 lx
50%	6,12 lx

Conditions:

Number of c-planes: 16

Lux at center: 12,2 lx

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

Glare Evaluation According to UGR

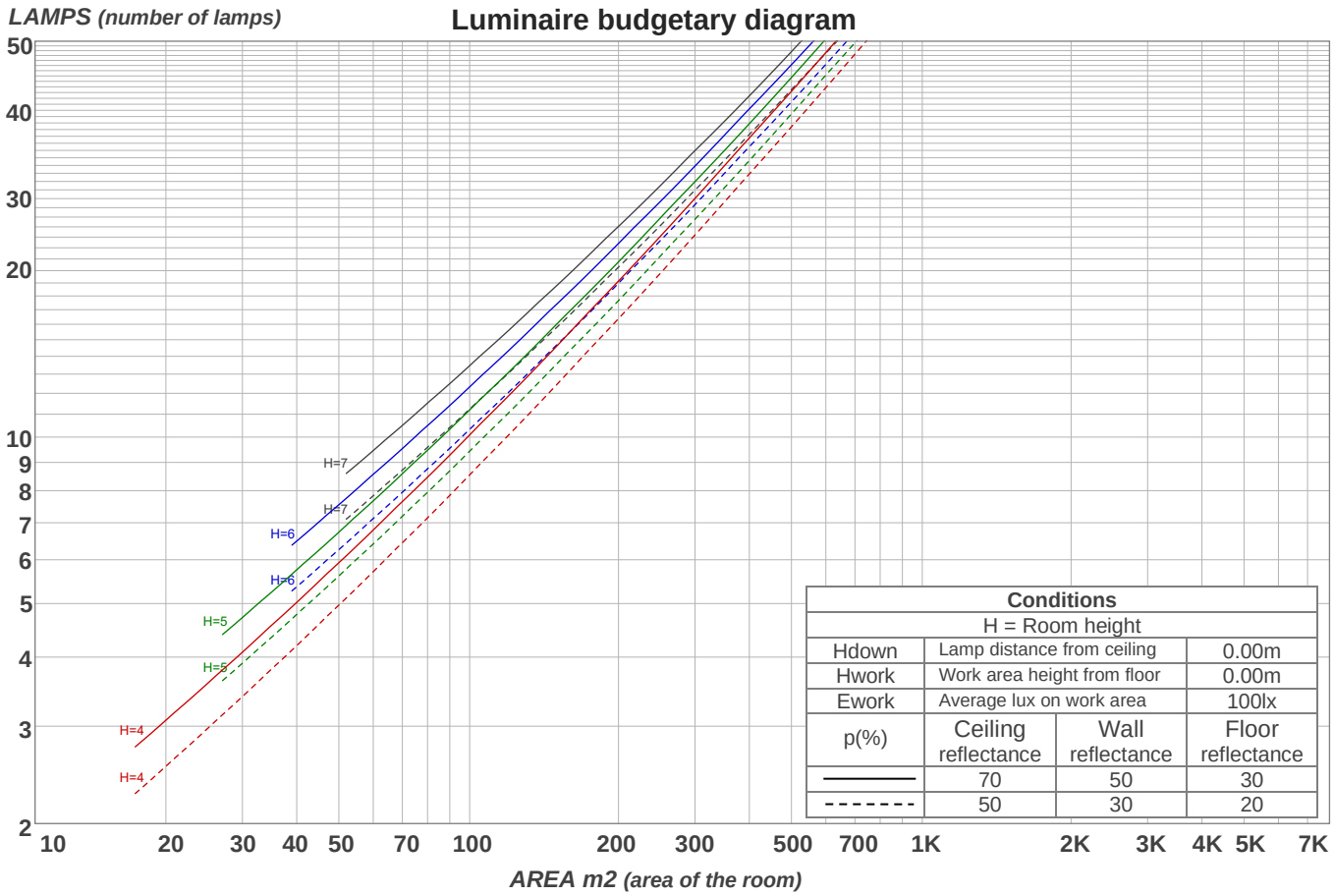
p Ceiling	70	70	50	50	30	70	70	50	50	30
p Walls	50	30	50	30	30	50	30	50	30	30
p Floor	20	20	20	20	20	20	20	20	20	20
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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 1567 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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	49	47
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34

Luminaire budgetary diagram

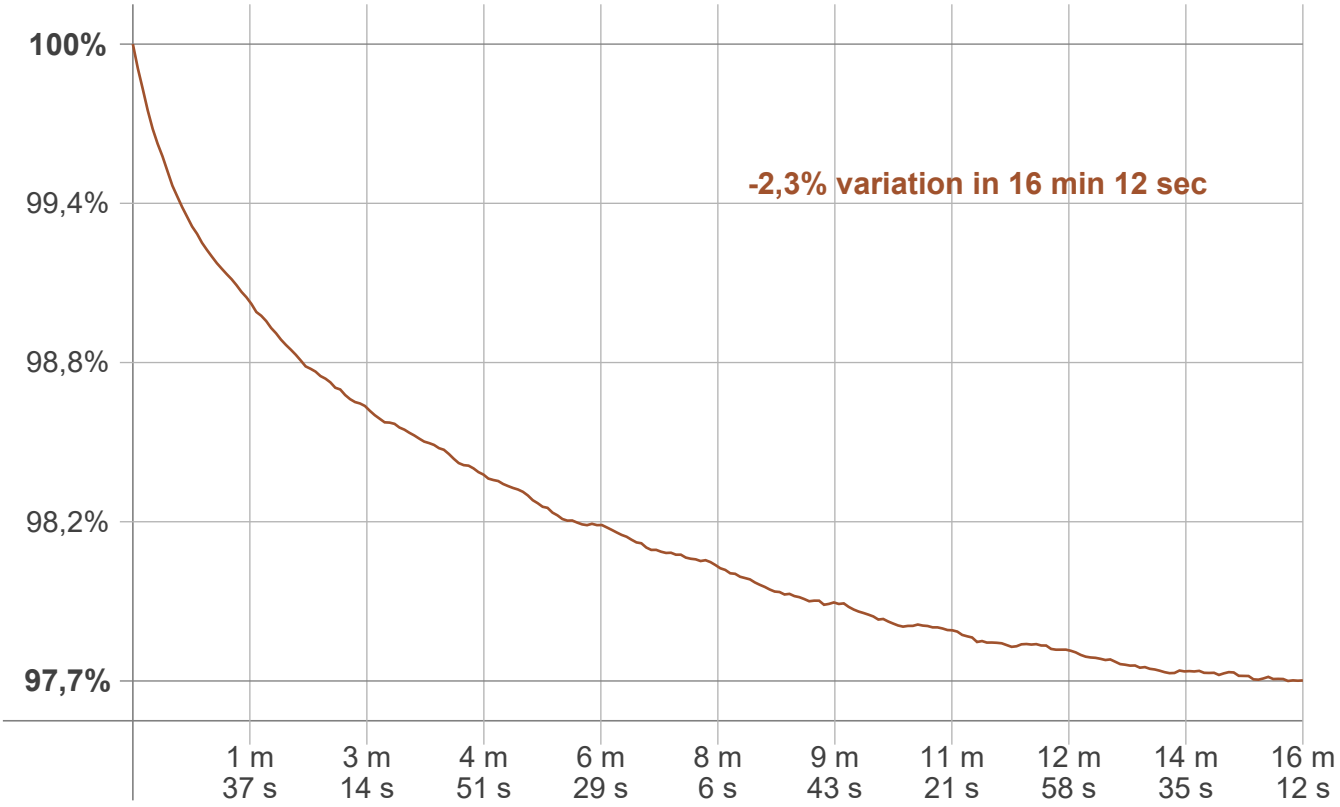


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
111 lm	265 lm	288 lm	252 lm	216 lm	180 lm	122 lm	78,4 lm	55,3 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,147 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 16 min 12 sec**
Warmup variation	**-2,3%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2693 K	+7 K	2700 K

Output change

Output start	Output change	Output end
1609 lm	-42 lm	1567 lm