Light efficiency:

152 Lumen/Watt

Light quality:

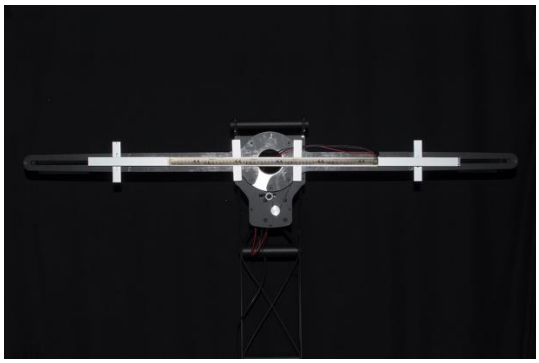
CRI: 81,9

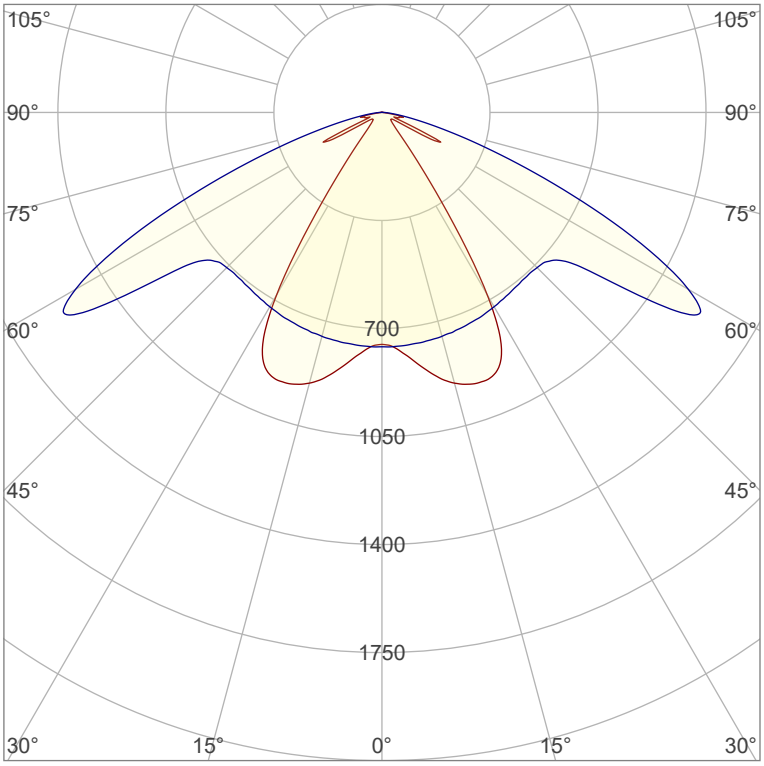
Color temperature:

2700 K

Output: 1754 lm
Peak: 1218 cd

Power: 11,5 W
PF: 1,0





Product name:
Nova-6_510mm_827_Lens-60°-Transparent

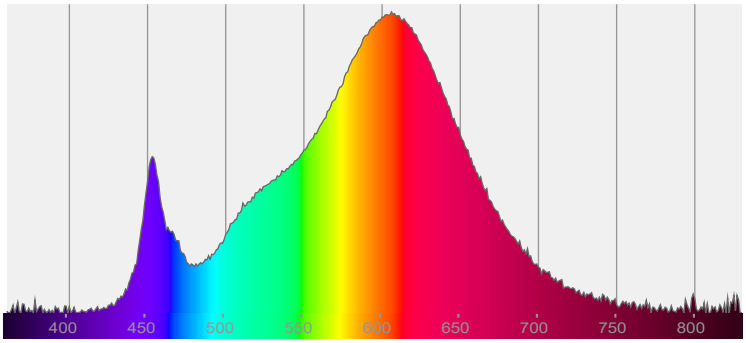
Item number:
NP/L1C/06F/0510/827/L6T

Date and time:
18.07.2022 16:41:45

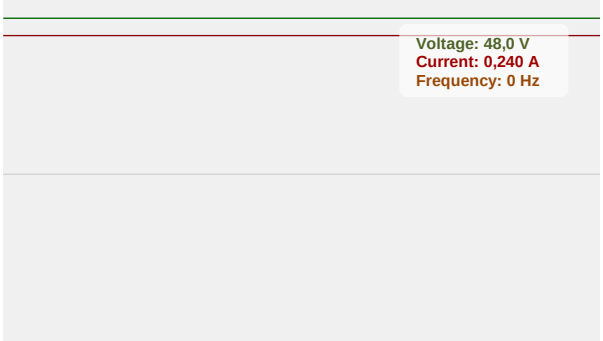
Description:
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 20-09-2021
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

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

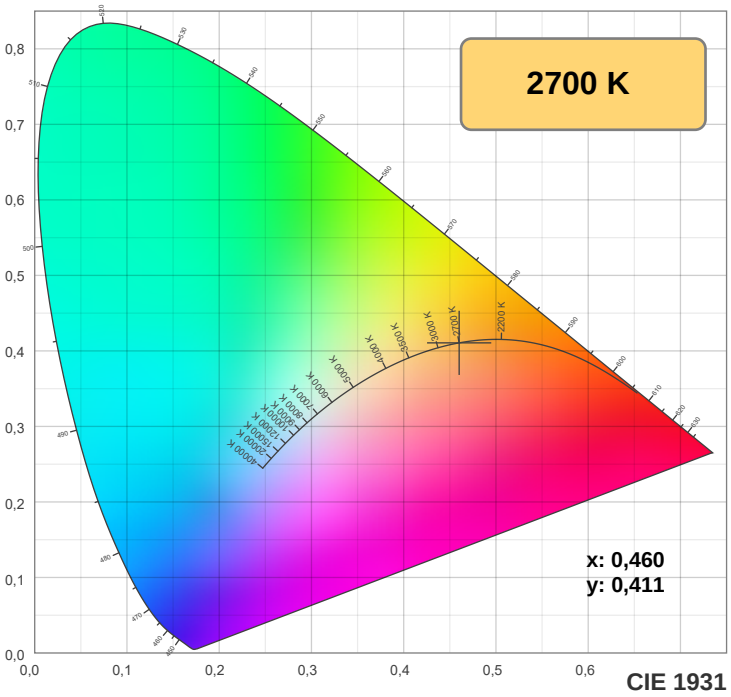
Spectra



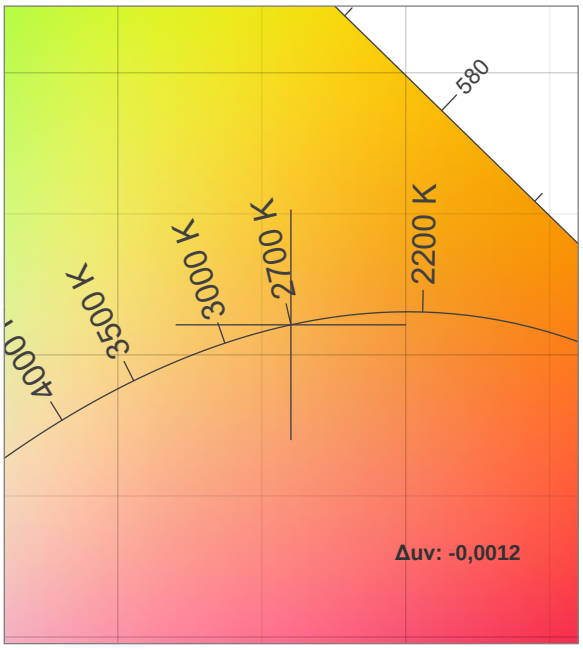
Power



Color details

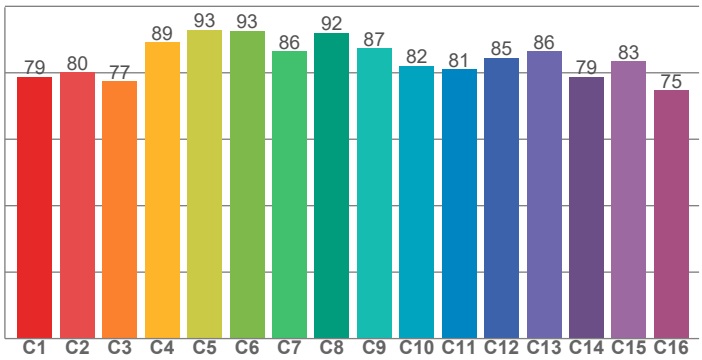


CIE 1931

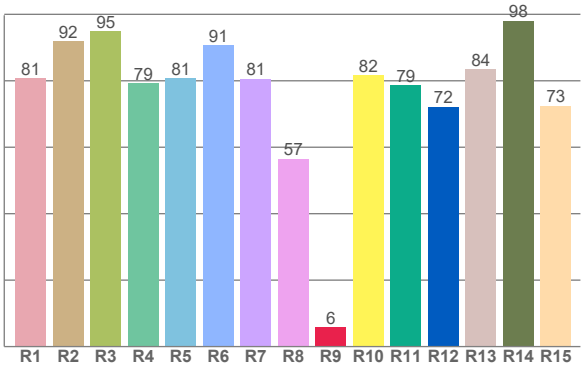


CIE 1931 ZOOM

TM30: 84,0



CRI: 81,9 (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
80,8	91,9	94,9	79,2	80,8	90,7	80,7	56,5	5,9	81,8	78,7	72,2	83,6	98,1	72,5

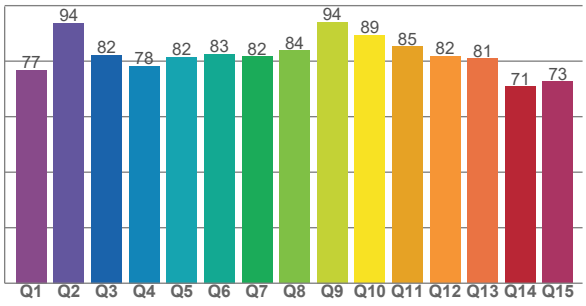
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78,8	80,2	77,4	89,2	92,9	92,7	86,5	92,1	87,3	82,1	81,1	84,5	86,4	78,7	83,4	74,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76,8	93,7	82,2	78,2	81,5	82,5	81,7	83,8	94,1	89,3	85,3	81,9	80,9	70,8	72,6

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	81,9	5,9	84,0	95,5	81,1	0,460	0,411	0,263	0,352	-0,0012

TM30 details

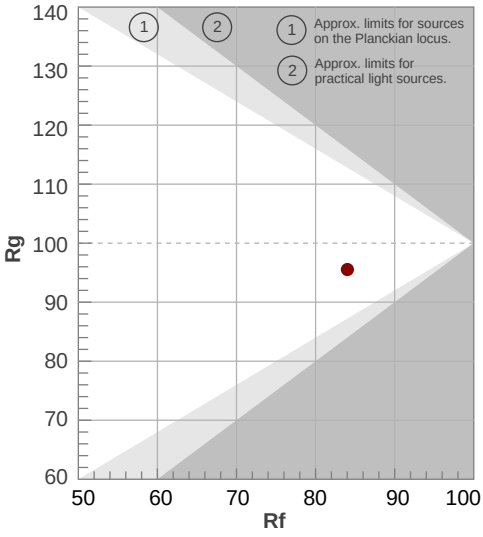
Rf 84,0

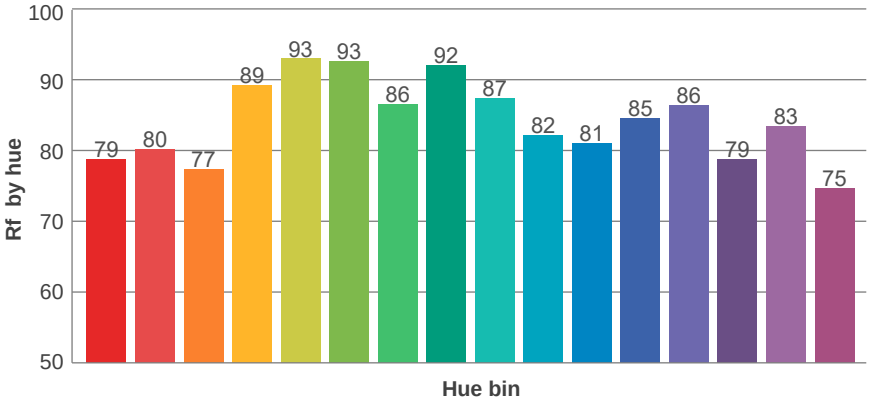
Fidelity index Rf

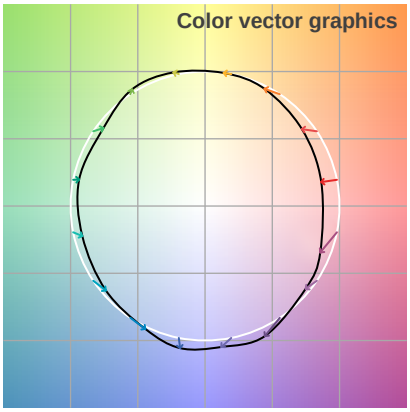
Rg 95,5

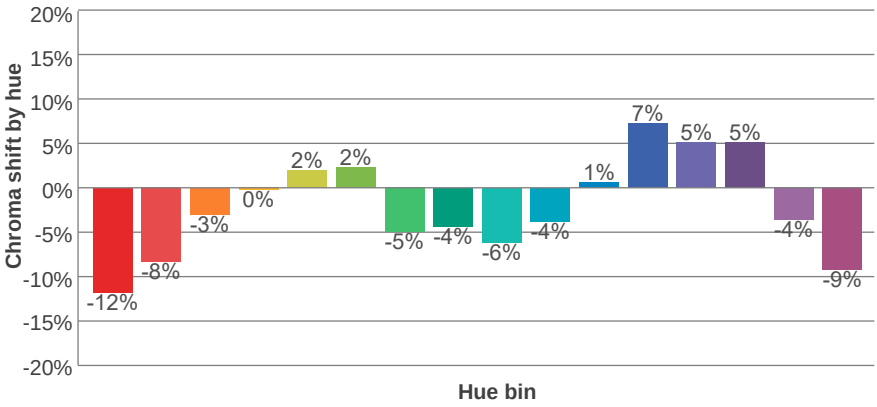
Gammut index Rg

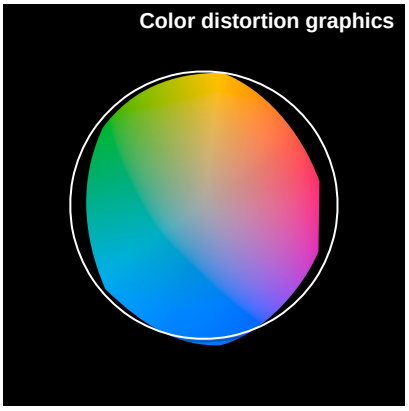
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-12%	1%
2	80	-8%	8%
3	77	-3%	12%
4	89	0%	6%
5	93	2%	4%
6	93	2%	-3%
7	86	-5%	-6%
8	92	-4%	-1%
9	87	-6%	4%
10	82	-4%	11%
11	81	1%	14%
12	85	7%	2%
13	86	5%	-9%
14	79	5%	-17%
15	83	-4%	-10%
16	75	-9%	-17%

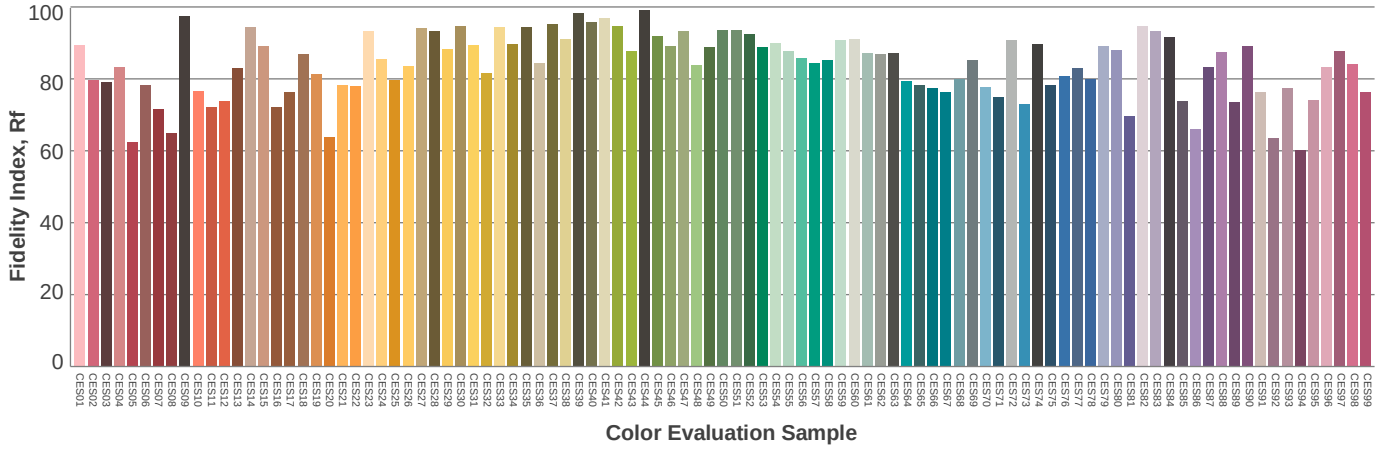




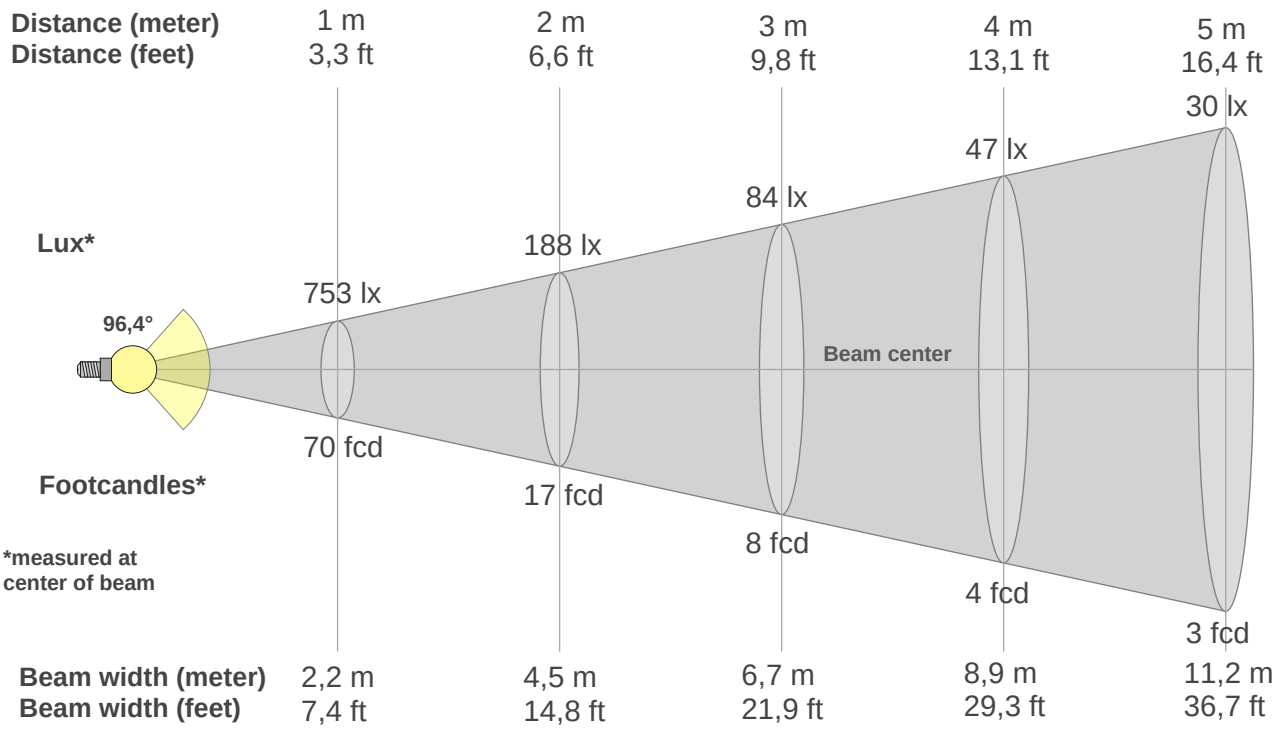








Beam details



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
753lx	188lx	84lx	47lx	30lx	21lx	15lx	12lx	9lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx
70fcd	17,5fcd	7,8fcd	4,4fcd	2,8fcd	1,9fcd	1,4fcd	1,1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd

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°
753	783	850	908	930	902	681	255	80	47	37	38	92	127	46	59	44	13	5	0
100%	104%	113%	120%	123%	120%	90%	34%	11%	6%	5%	5%	12%	17%	6%	8%	6%	2%	1%	0%

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°
753	759	756	751	744	737	727	717	709	711	746	1066	1146	795	430	194	75	25	3	0
100%	101%	100%	100%	99%	98%	96%	95%	94%	94%	99%	141%	152%	105%	57%	26%	10%	3%	0%	0%

Intensities in 180° c-plane

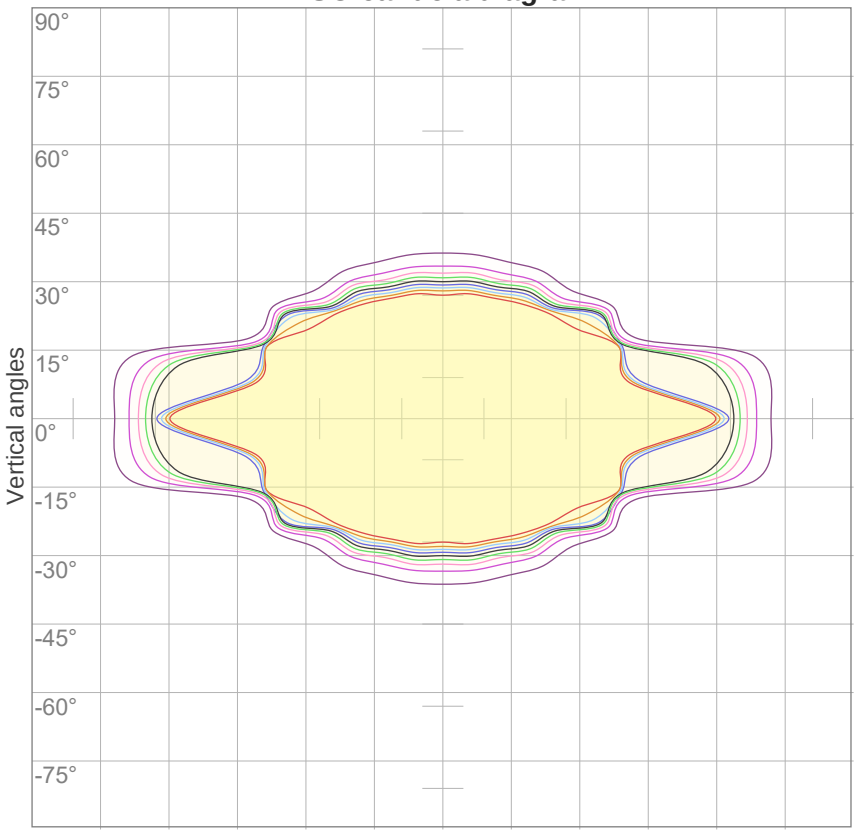
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
753	783	850	908	930	902	681	255	80	47	37	38	92	127	46	59	44	13	5	0
100%	104%	113%	120%	123%	120%	90%	34%	11%	6%	5%	5%	12%	17%	6%	8%	6%	2%	1%	0%

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°
753	759	756	751	744	737	727	717	709	711	746	1066	1146	795	430	194	75	25	3	0
100%	101%	100%	100%	99%	98%	96%	95%	94%	94%	99%	141%	152%	105%	57%	26%	10%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
96,4°	**121,6°**	**164,1°**	**85,3%**	**72,1%**

ISO candela diagram



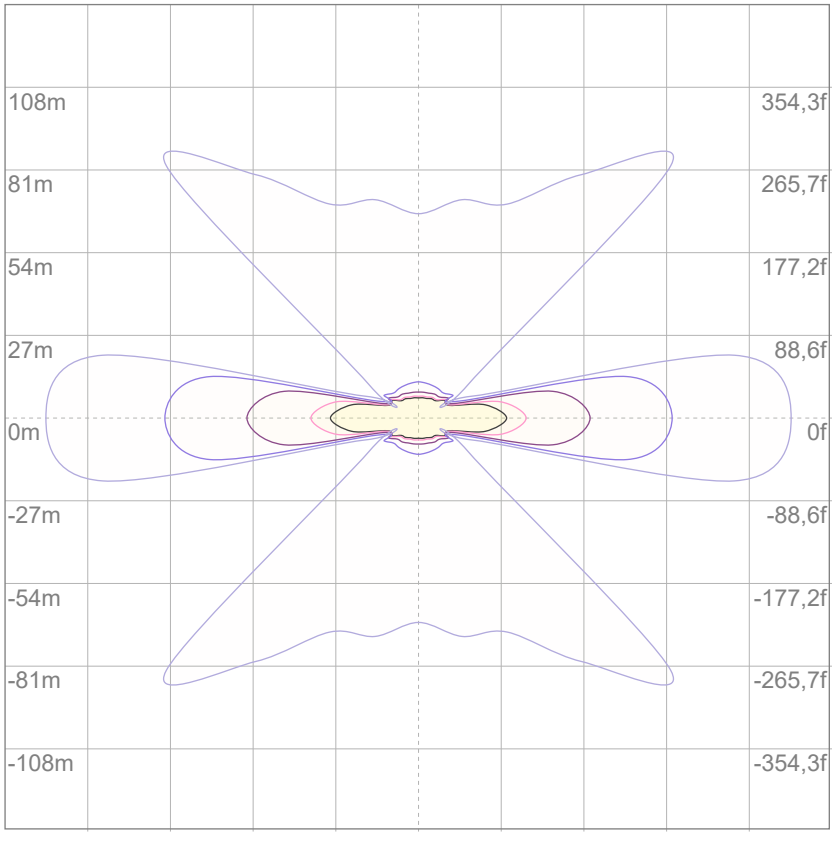
10%	75 cd
20%	151 cd
30%	226 cd
40%	301 cd
50%	377 cd
60%	452 cd
70%	527 cd
80%	603 cd
90%	678 cd

Conditions:

Number of c-planes: 16

Candela at center: 753 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,226 lx
5%	0,377 lx
10%	0,753 lx
30%	2,26 lx
50%	3,77 lx

Conditions:

Number of c-planes: 16

Lux at center: 7,53 lx

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

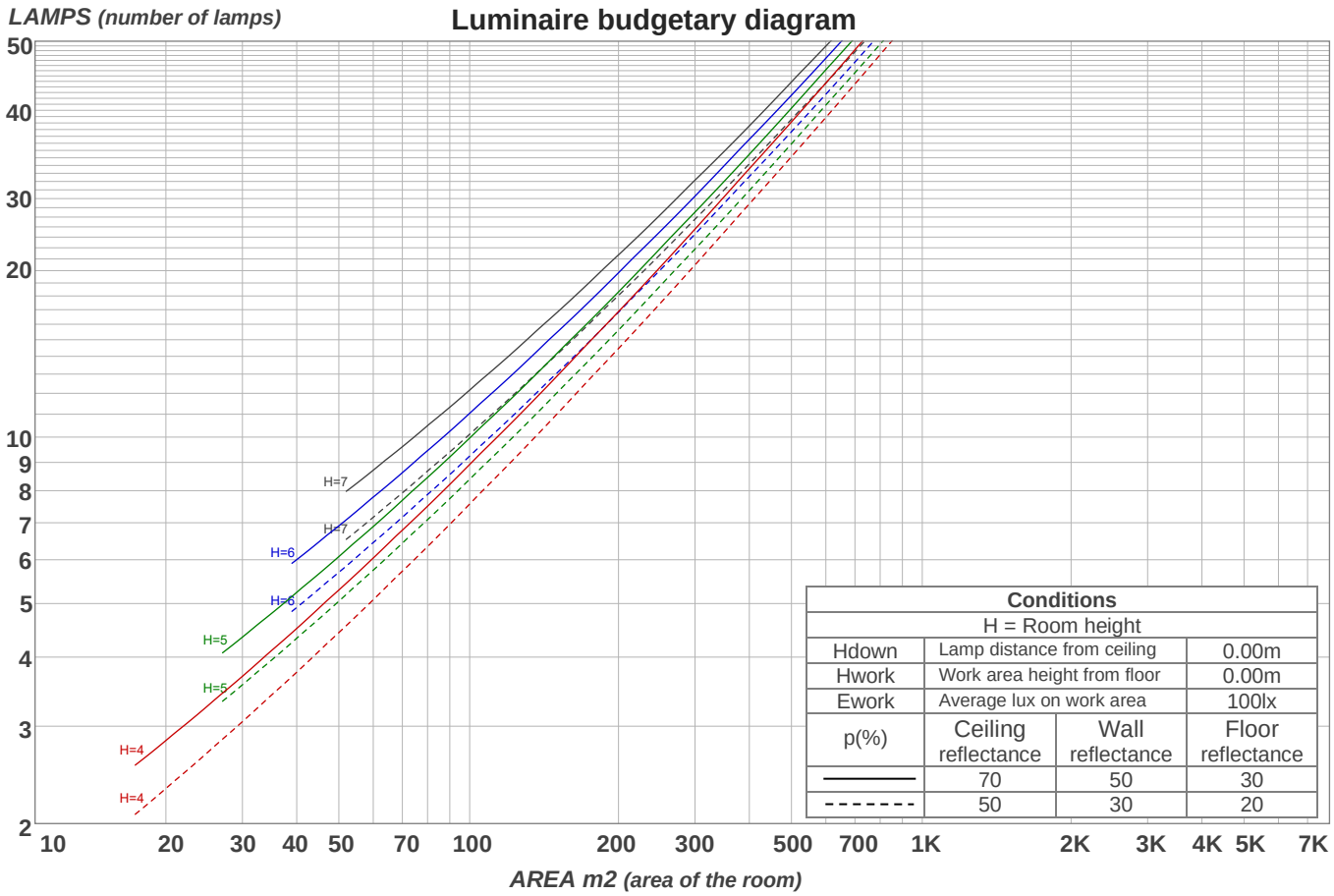
Glare Evaluation According to UGR

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	17,9	18,9	18,1	19,2	19,4	29,5	30,5	29,7	30,8	31,0
	3H	19,4	20,5	19,8	20,7	20,9	31,1	32,2	31,5	32,4	32,6
	4H	19,9	20,9	20,3	21,2	21,4	31,4	32,4	31,8	32,7	32,9
	6H	20,7	21,6	21,0	21,9	22,3	31,6	32,5	31,9	32,7	33,1
	8H	20,8	21,6	21,1	21,9	22,4	31,6	32,4	31,9	32,7	33,1
	12H	20,7	21,6	21,1	21,9	22,4	31,5	32,4	31,9	32,7	33,2
4H	2H	18,1	19,1	18,5	19,4	19,7	29,2	30,2	29,6	30,5	30,7
	3H	20,0	20,8	20,3	21,2	21,6	30,9	31,7	31,3	32,1	32,5
	4H	20,6	21,3	21,0	21,8	22,3	31,1	31,9	31,6	32,3	32,9
	6H	21,6	22,3	22,1	22,7	23,1	31,3	32,1	31,8	32,4	32,8
	8H	21,7	22,4	22,2	22,7	23,1	31,3	32,0	31,8	32,4	32,7
	12H	21,7	22,3	22,2	22,7	23,1	31,3	31,9	31,8	32,3	32,8
8H	4H	20,8	21,5	21,3	21,8	22,2	31,0	31,7	31,5	32,1	32,5
	6H	22,0	22,5	22,5	23,0	23,5	31,2	31,7	31,7	32,2	32,7
	8H	22,2	22,6	22,7	23,2	23,8	31,3	31,7	31,8	32,2	32,9
	12H	22,2	22,6	22,8	23,1	23,7	31,3	31,7	31,9	32,2	32,8
12H	4H	20,8	21,3	21,3	21,7	22,2	31,0	31,6	31,5	32,0	32,5
	6H	22,1	22,5	22,6	23,1	23,7	31,2	31,6	31,7	32,2	32,8
	8H	22,3	22,7	22,9	23,2	23,8	31,2	31,6	31,8	32,1	32,7
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,6 / -1,2					1,5 / -2,3				
S = 1.5H		2,5 / -1,6					3,3 / -5,4				
S = 2.0H		2,2 / -1,7					4,9 / -7,6				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1754 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	111	111	111	106	106	106	101	101	101	99
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	88	86
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	72	80	75	70	78	73	69	75	71	68	66
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	68	64	60	58
5	81	70	62	56	79	69	61	56	66	60	55	65	59	54	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	52	48	46
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40	51	44	40	49	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	33	32

Luminaire budgetary diagram

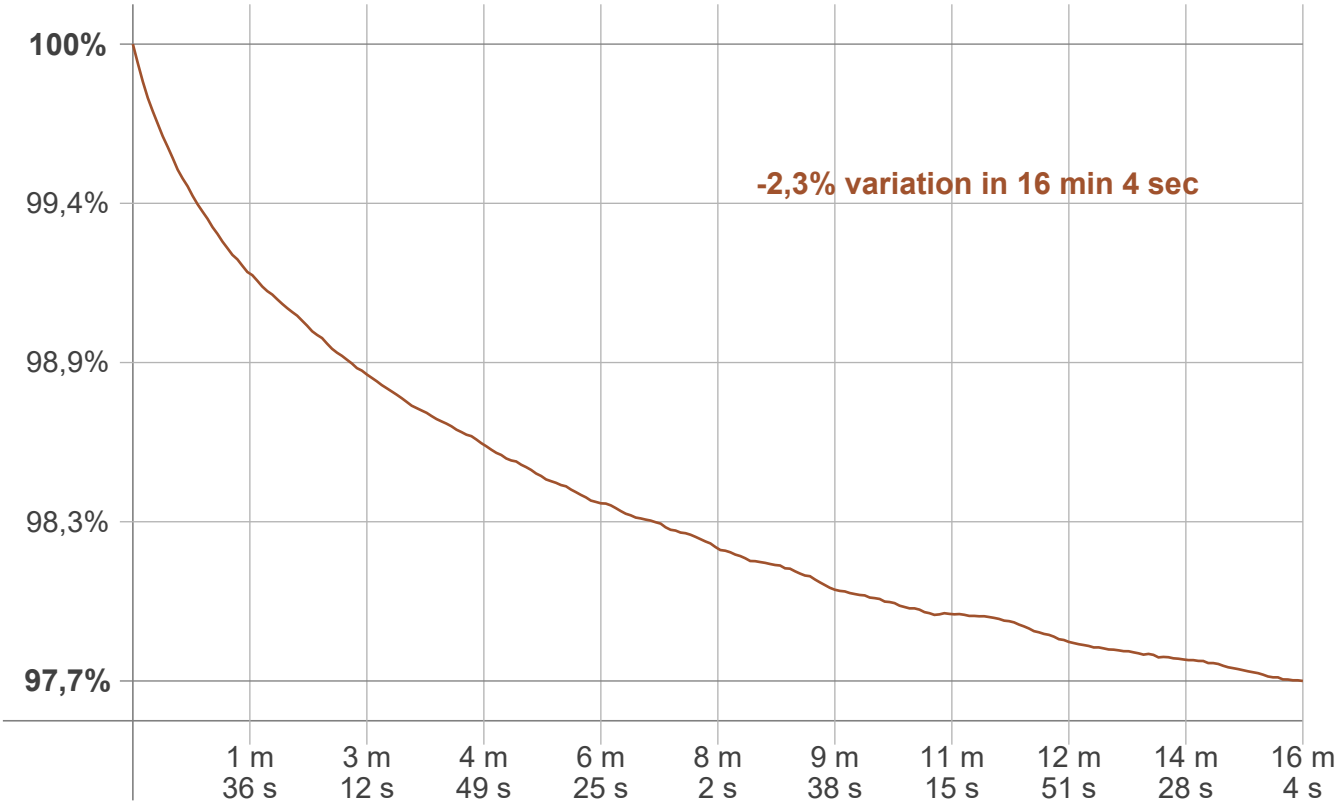


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
69,4 lm	234 lm	400 lm	412 lm	237 lm	144 lm	154 lm	69,7 lm	22,6 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4,62 lm	0,521 lm	0,489 lm	0,442 lm	0,381 lm	0,309 lm	0,228 lm	0,140 lm	5,39 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 16 min 4 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
2695 K	+5 K	2700 K

Output change

Output start	Output change	Output end
1798 lm	-44 lm	1754 lm