Light efficiency:

156 Lumen/Watt

Light quality:

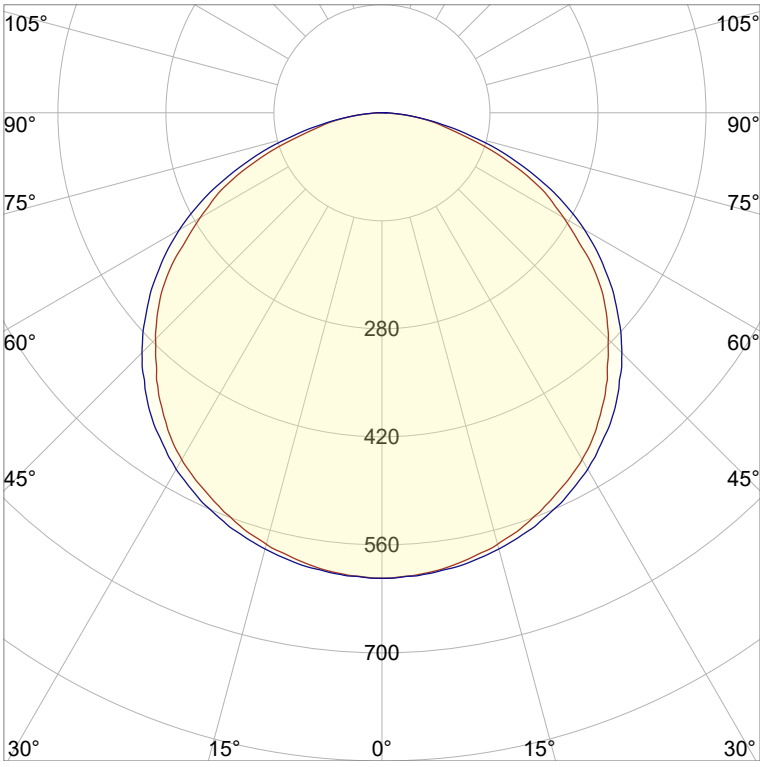
CRI: 82,1

Color temperature:

2761 K

Output: 1792 lm
Peak: 603 cd

Power: 11,5 W
PF: 1,0



Product name:
Nova-6_510mm_827_Cover-Round-Transparent

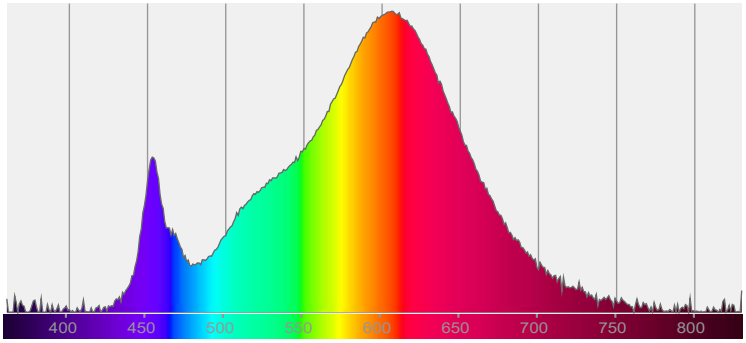
Item number:
NP/L1C/06F/G1/L1C/0510/827/CRT

Date and time:
14.07.2022 15:32:47

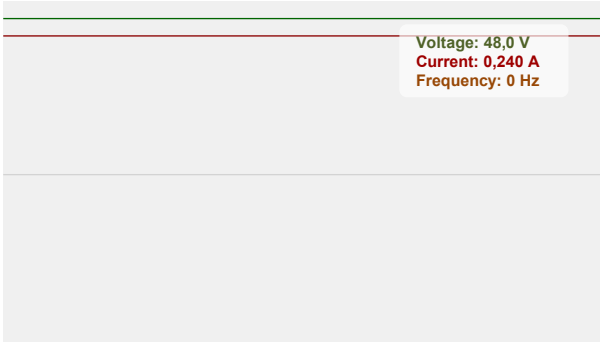
Description:
Rank: D60-AC-8GB
Tolerances:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 Kelvin
CRI +/-0,7
Angular Resolution: 1 Degree Step
Last Calibration 20-09-2021
Tester: Peter Ulrich
Test Site: Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

CIE 1931
x: 0,453
y: 0,406

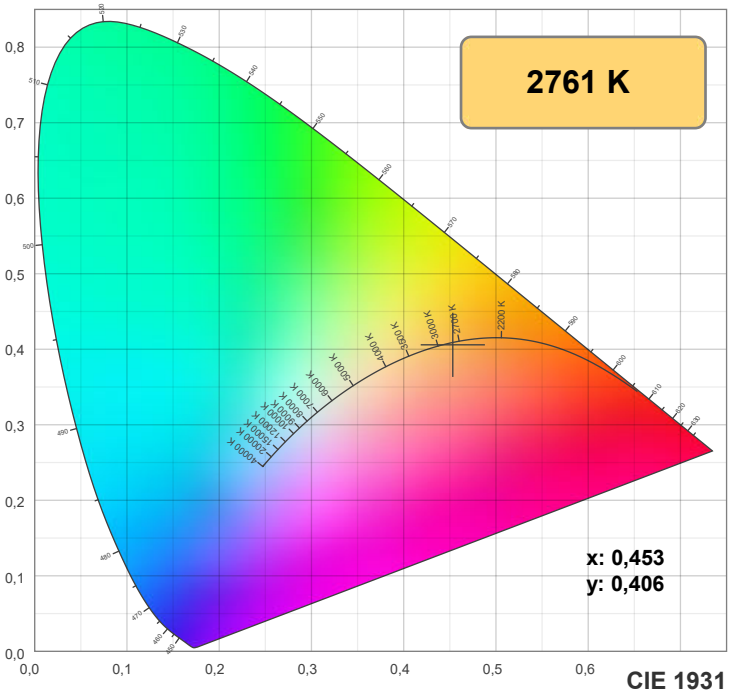
Spectra



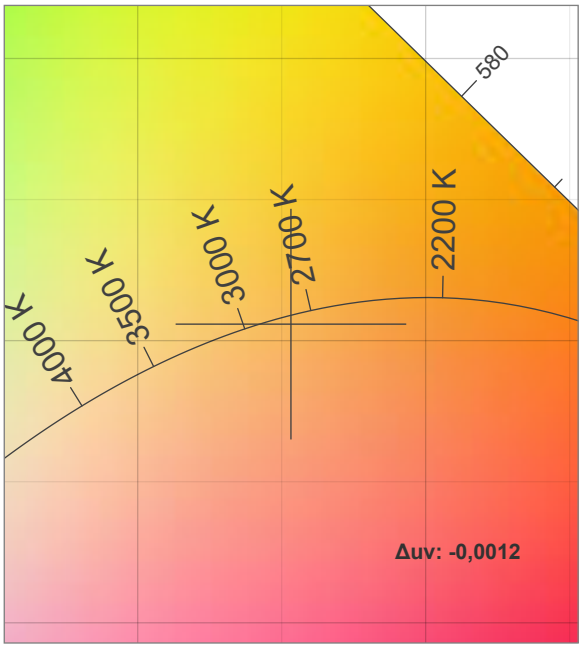
Power



Color details

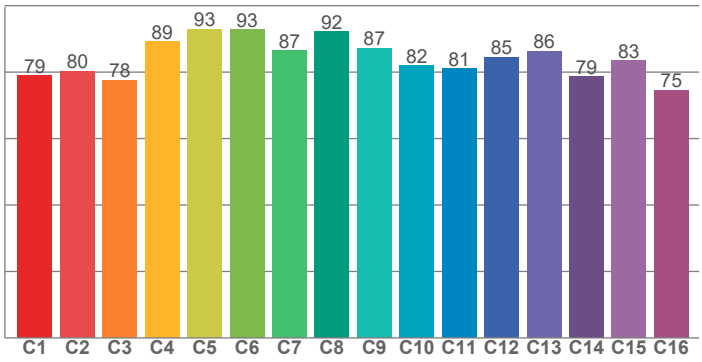


CIE 1931

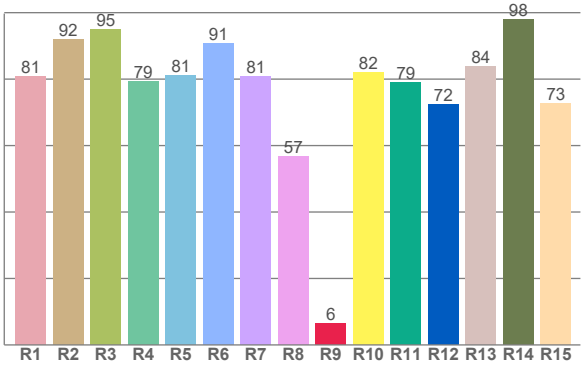


CIE 1931 ZOOM

TM30: 84,1



CRI: 82,1 (R1-R8)



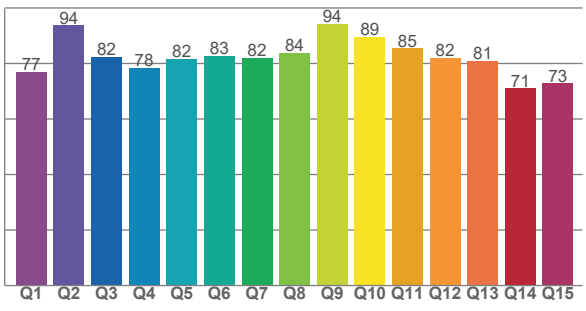
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80,9	92,1	94,8	79,4	81,0	90,9	80,7	56,7	6,4	82,1	78,9	72,3	83,7	98,0	72,7

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
78,9	80,3	77,6	89,3	93,0	92,7	86,5	92,1	87,3	82,0	81,1	84,5	86,4	78,7	83,5	74,6

CQS: 81,2



CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
76,9	93,7	82,3	78,3	81,6	82,7	81,8	83,8	94,1	89,4	85,4	82,0	81,0	71,0	72,8

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
2761 K	82,1	6,4	84,1	95,5	81,2	0,453	0,406	0,260	0,350	-0,0012

TM30 details

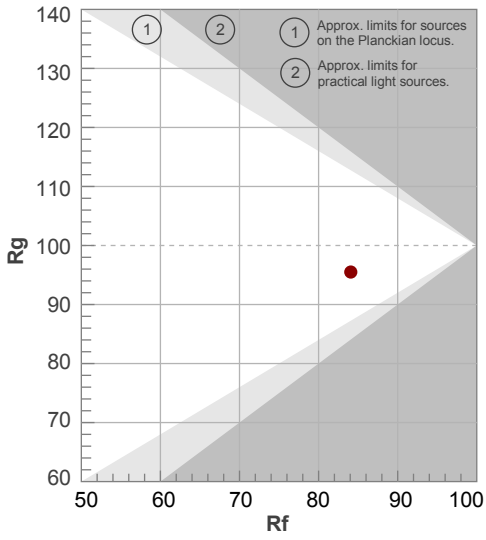
Rf 84,1

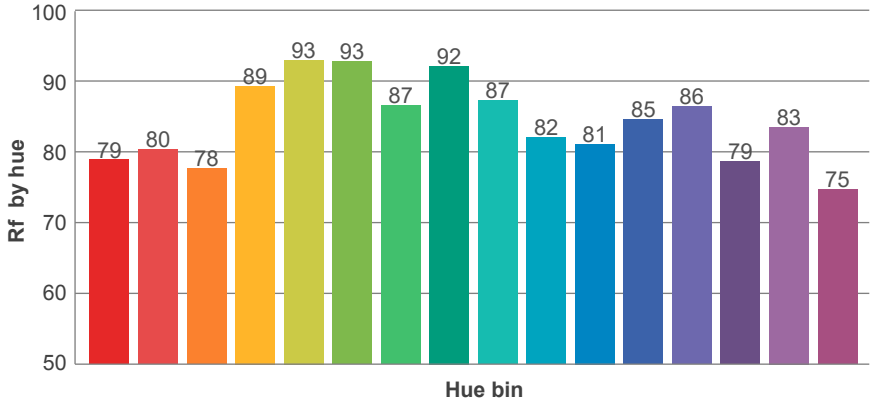
Fidelity index Rf

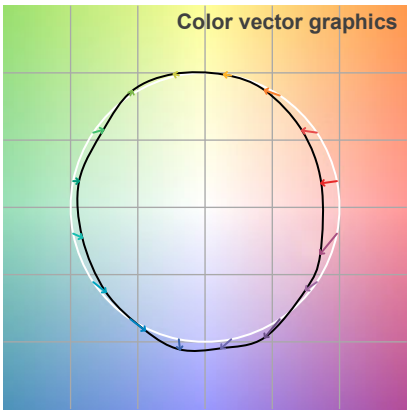
Rg 95,5

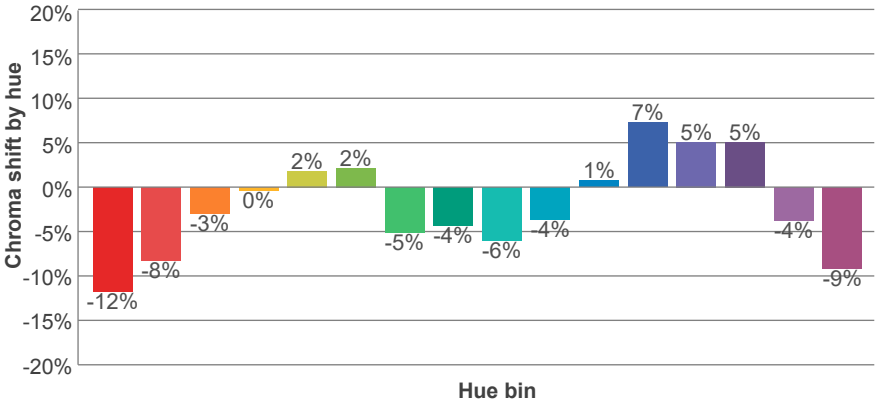
Gammut index Rg

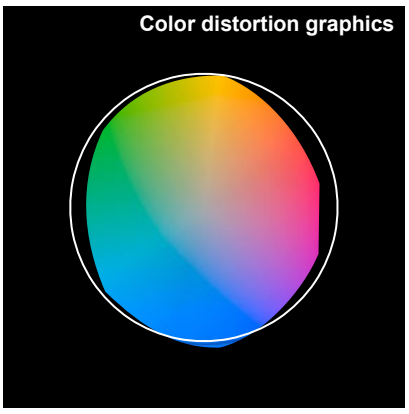
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-12%	1%
2	80	-8%	7%
3	78	-3%	11%
4	89	0%	6%
5	93	2%	4%
6	93	2%	-3%
7	87	-5%	-6%
8	92	-4%	-1%
9	87	-6%	4%
10	82	-4%	11%
11	81	1%	14%
12	85	7%	2%
13	86	5%	-9%
14	79	5%	-17%
15	83	-4%	-9%
16	75	-9%	-17%

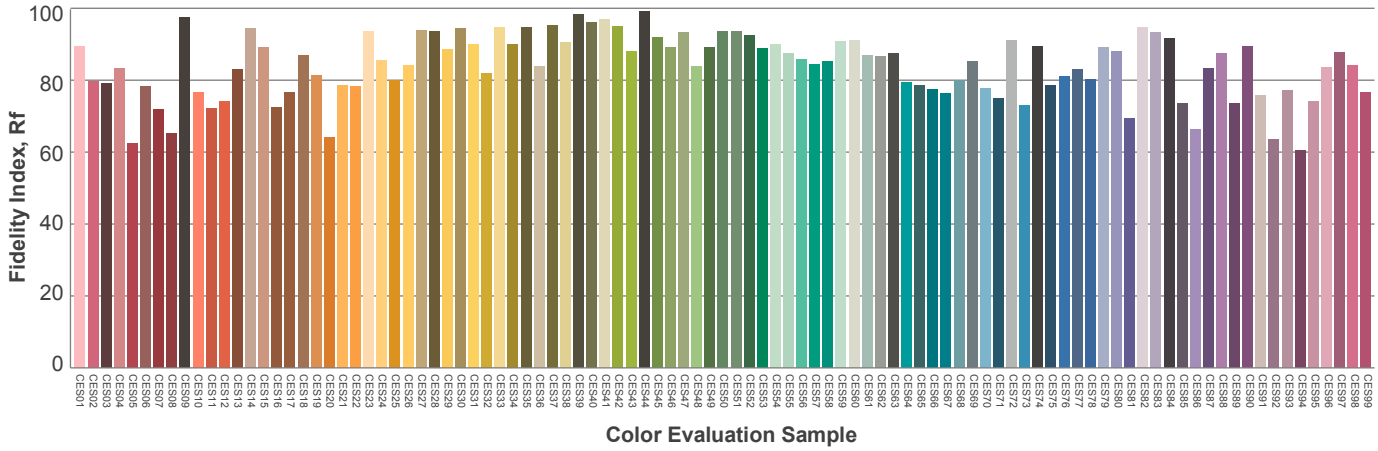




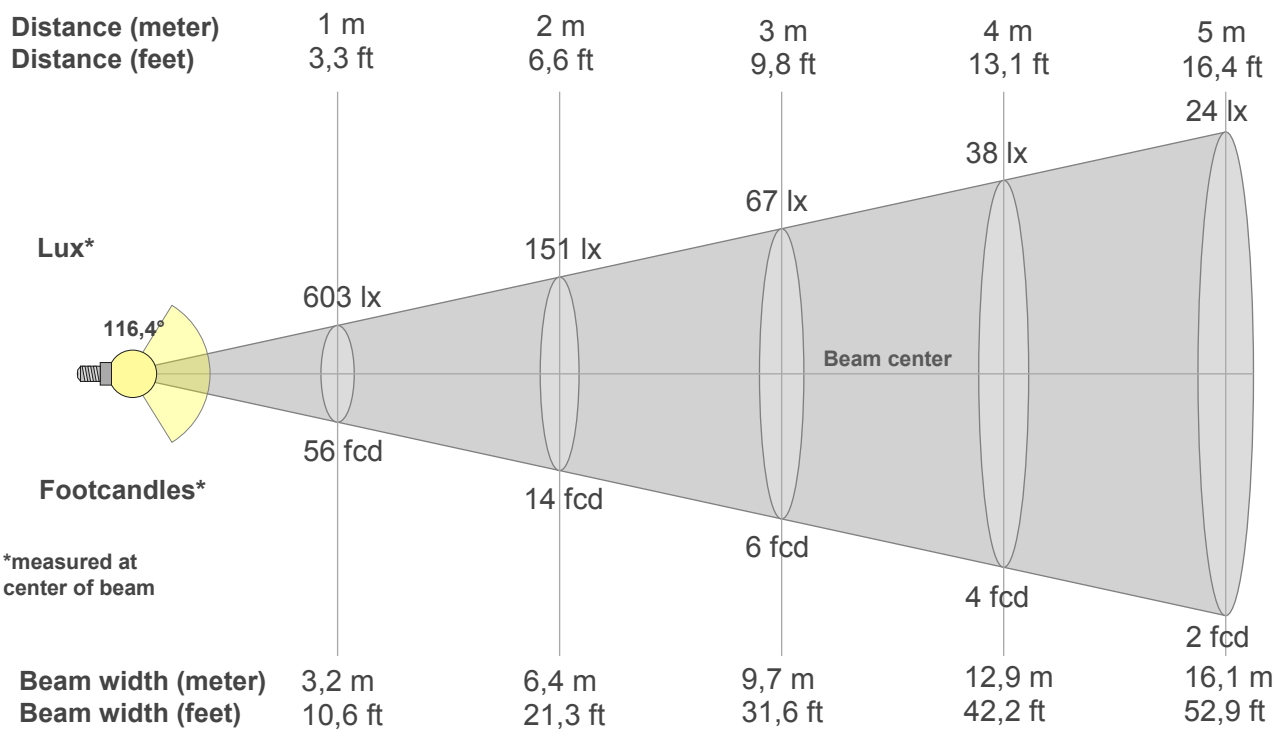








Beam details



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
603lx	151lx	67lx	38lx	24lx	17lx	12lx	9lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	2lx
56fcd	14fcd	6,2fcd	3,5fcd	2,2fcd	1,6fcd	1,1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd

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°
603	600	591	579	562	541	519	489	454	415	375	326	272	223	163	103	65	26	2	2
100%	99%	98%	96%	93%	90%	86%	81%	75%	69%	62%	54%	45%	37%	27%	17%	11%	4%	0%	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°
603	601	595	585	572	555	533	507	476	440	398	352	303	247	185	124	70	27	3	3
100%	100%	99%	97%	95%	92%	88%	84%	79%	73%	66%	58%	50%	41%	31%	21%	12%	4%	1%	0%

Intensities in 180° c-plane

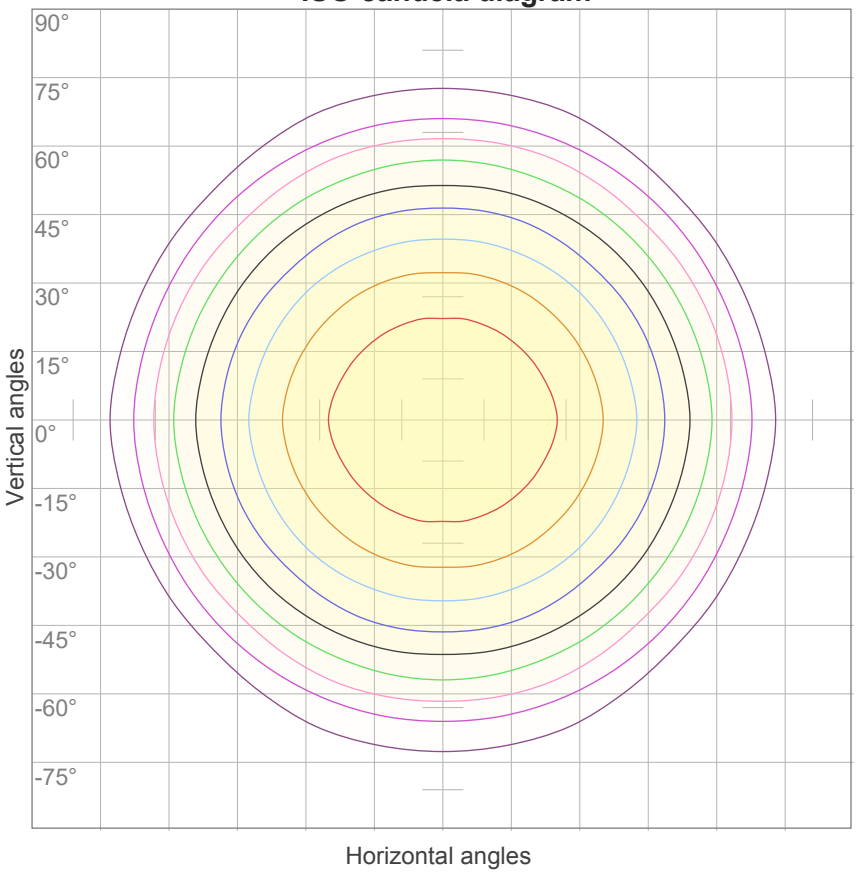
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
603	600	591	579	562	541	519	489	454	415	375	326	272	223	163	103	65	26	2	2
100%	99%	98%	96%	93%	90%	86%	81%	75%	69%	62%	54%	45%	37%	27%	17%	11%	4%	0%	0%

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°
603	601	595	585	572	555	533	507	476	440	398	352	303	247	185	124	70	27	3	3
100%	100%	99%	97%	95%	92%	88%	84%	79%	73%	66%	58%	50%	41%	31%	21%	12%	4%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116,4°	161,5°	173°	78,7%	52,6%

ISO candela diagram



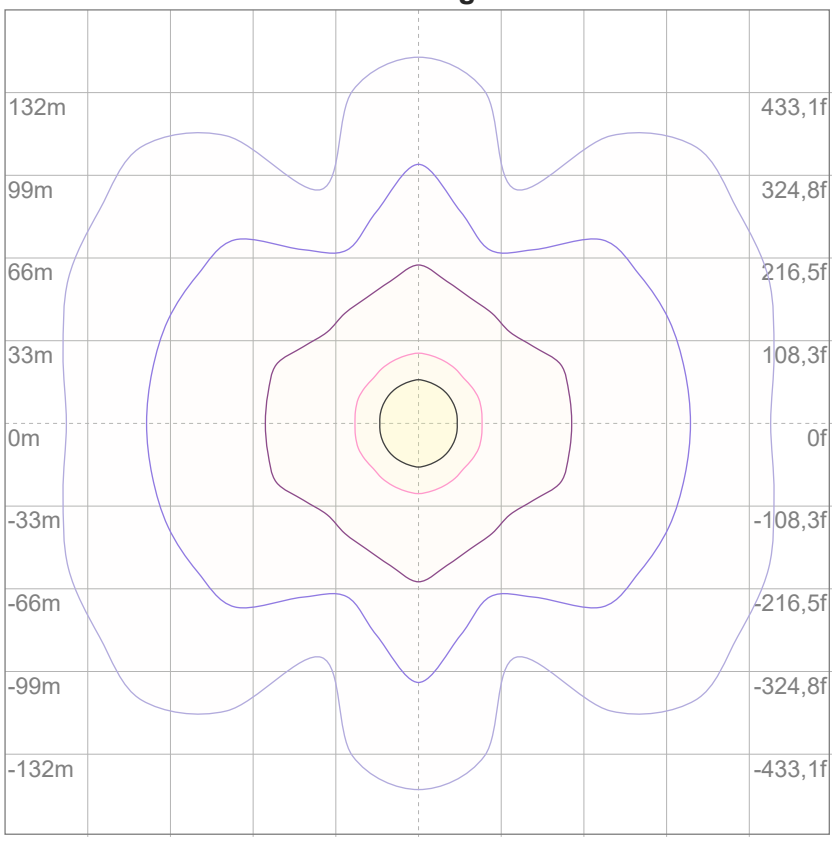
10%	60 cd
20%	121 cd
30%	181 cd
40%	241 cd
50%	301 cd
60%	362 cd
70%	422 cd
80%	482 cd
90%	543 cd

Conditions:

Number of c-planes: 16

Candela at center: 603 cd

ISO lux diagram



3%	0,181 lx
5%	0,301 lx
10%	0,603 lx
30%	1,81 lx
50%	3,01 lx

Conditions:

Number of c-planes: 16

Lux at center: 6,03 lx

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

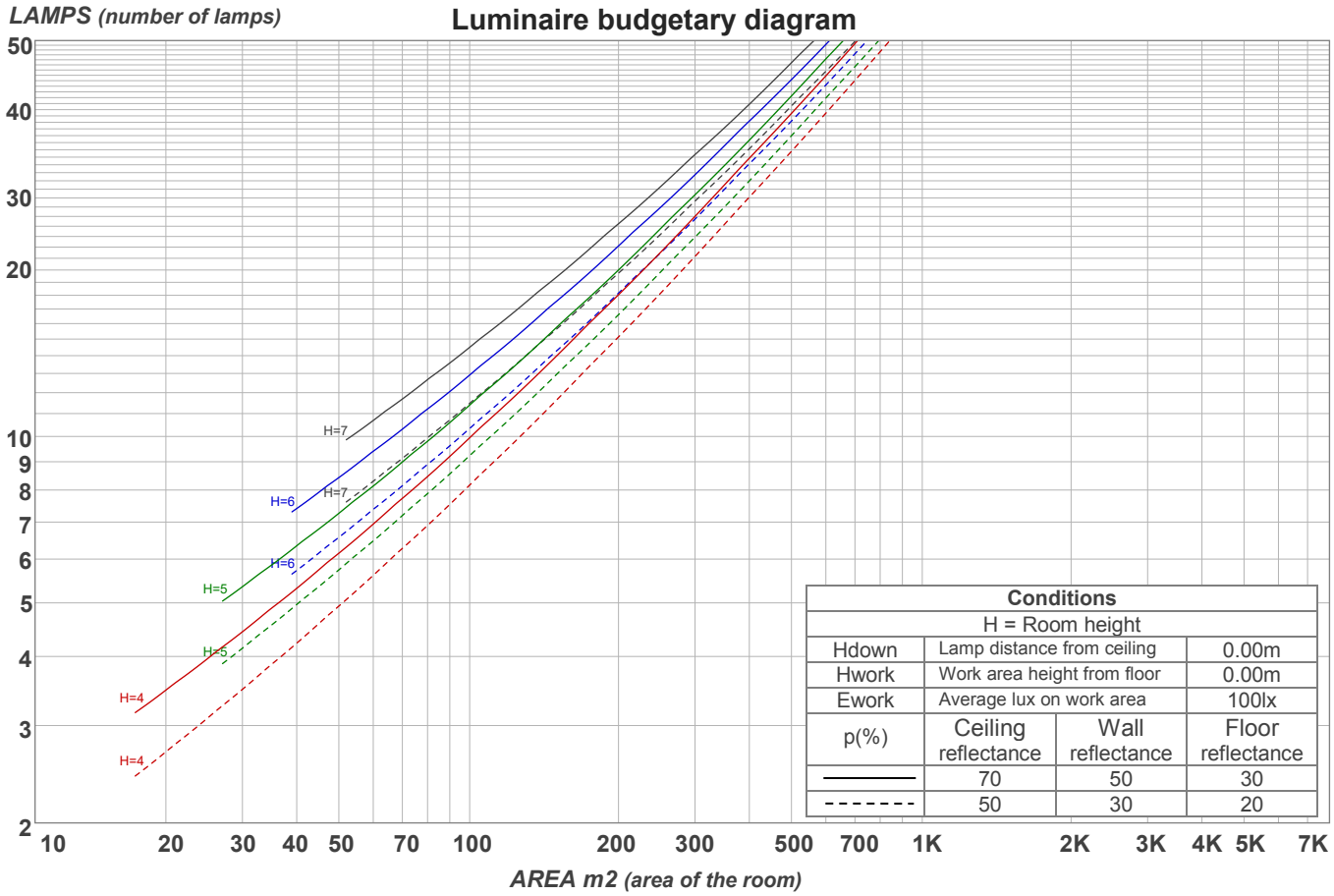
Glare Evaluation According to UGR

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	24,5	25,7	24,7	26,0	26,2	25,9	27,1	26,1	27,4	27,7
	3H	25,5	26,8	25,9	27,1	27,3	27,3	28,6	27,8	28,9	29,1
	4H	25,8	27,1	26,3	27,3	27,6	27,9	29,1	28,3	29,4	29,7
	6H	26,1	27,2	26,4	27,4	27,8	28,3	29,4	28,6	29,7	30,0
	8H	26,1	27,2	26,5	27,5	27,9	28,4	29,4	28,7	29,7	30,1
	12H	26,1	27,1	26,5	27,4	27,9	28,4	29,4	28,8	29,8	30,2
4H	2H	25,1	26,3	25,5	26,6	26,8	26,2	27,4	26,6	27,7	28,0
	3H	26,4	27,4	26,8	27,7	28,2	27,9	28,9	28,3	29,3	29,7
	4H	26,7	27,6	27,2	28,1	28,6	28,5	29,4	28,9	29,8	30,4
	6H	27,0	27,8	27,5	28,2	28,6	28,9	29,8	29,4	30,1	30,5
	8H	27,0	27,8	27,5	28,2	28,6	29,0	29,8	29,5	30,1	30,5
	12H	27,0	27,7	27,5	28,1	28,6	29,0	29,7	29,5	30,1	30,6
8H	4H	26,9	27,7	27,4	28,1	28,5	28,5	29,3	29,0	29,7	30,1
	6H	27,3	27,9	27,8	28,3	28,9	29,0	29,6	29,5	30,1	30,6
	8H	27,4	27,9	27,9	28,4	29,1	29,2	29,7	29,7	30,2	30,8
	12H	27,4	27,9	28,0	28,4	29,0	29,2	29,7	29,8	30,2	30,8
12H	4H	26,9	27,6	27,4	28,0	28,5	28,5	29,2	29,0	29,6	30,1
	6H	27,3	27,8	27,8	28,3	29,0	29,0	29,5	29,5	30,1	30,7
	8H	27,4	27,9	28,0	28,4	29,0	29,1	29,6	29,7	30,1	30,7
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					0,1 / -0,1				
S = 1.5H		0,3 / -0,6					0,3 / -0,5				
S = 2.0H		0,7 / -1,0					0,9 / -1,1				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1792 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	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	87	86	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	74	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

Luminaire budgetary diagram

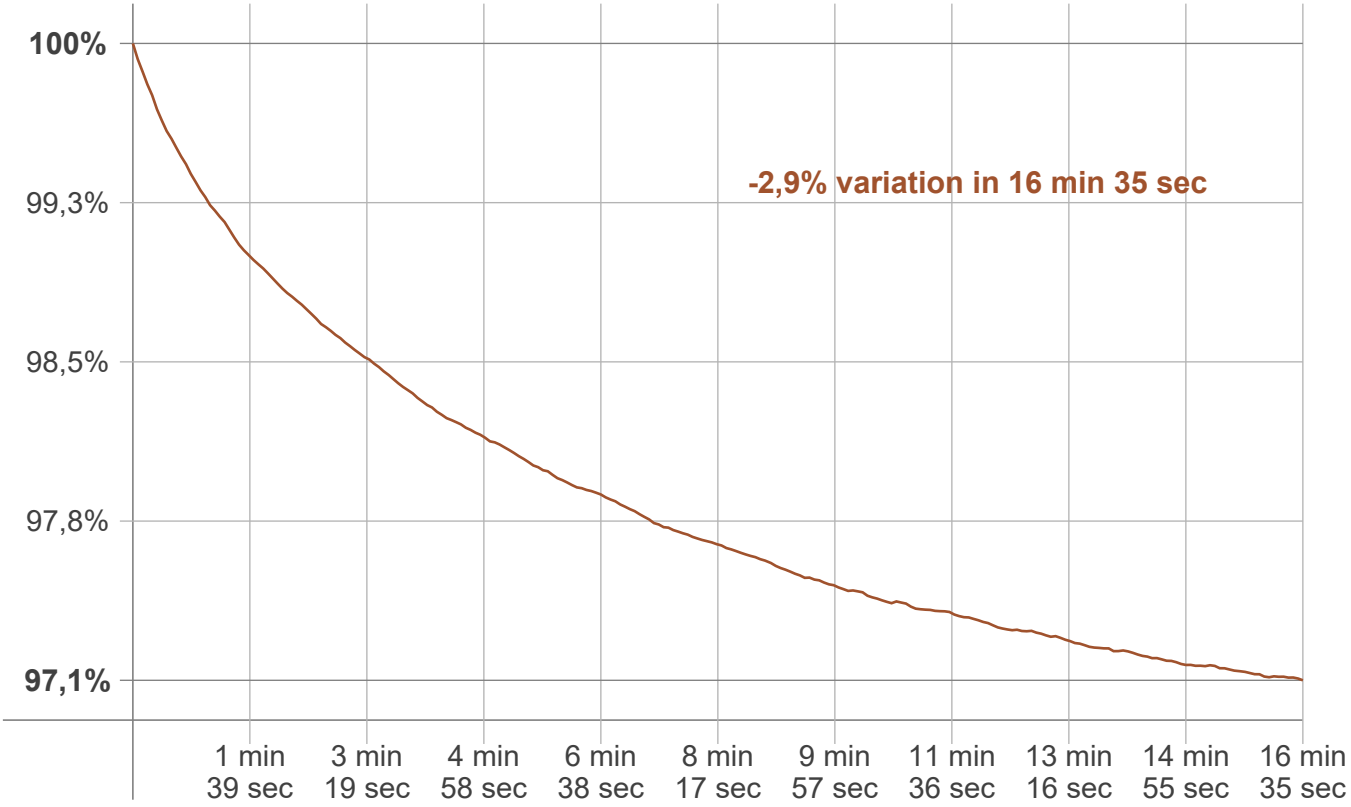


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
54,6 lm	164 lm	248 lm	313 lm	325 lm	306 lm	226 lm	121 lm	28,7 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,05 lm	1,79 lm	0,725 lm	0,655 lm	0,299 lm	0,086 lm	0,064 lm	0,039 lm	2,03 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 16 min 35 sec**
Warmup variation	**-2,9%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2756 K	+5 K	2761 K

Output change

Output start	Output change	Output end
1842 lm	-49 lm	1792 lm