

### Light efficiency:

**117 Lumen/Watt**

### Light quality:

**CRI: 94,5**

### Color temperature:

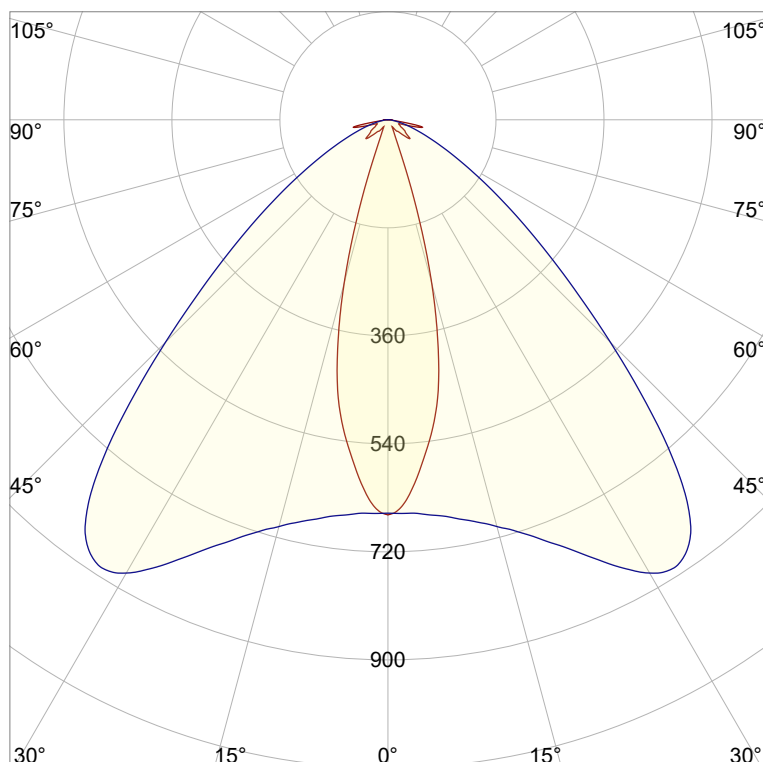
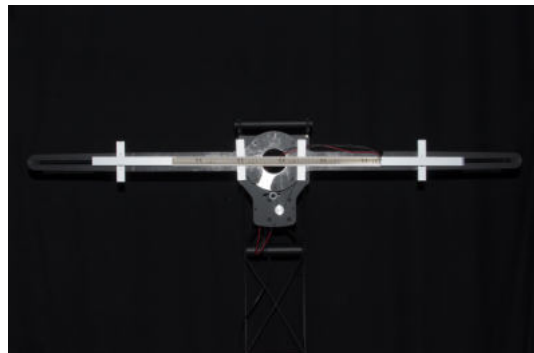
**2761 K**

**Output: 564 lm**

**Peak: 886 cd**

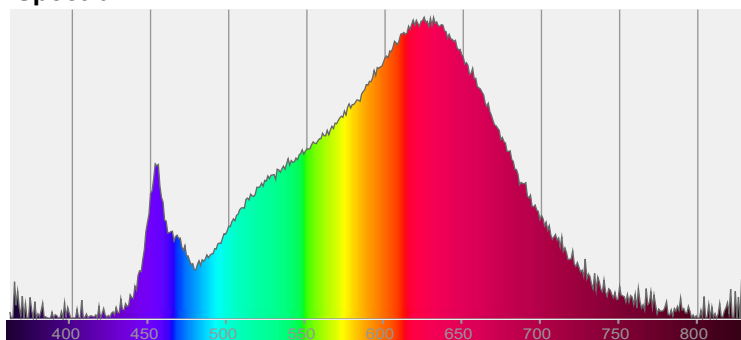
**Power: 4,8 W**

**PF: 1,0**



**CIE 1931**  
**x: 0,454**  
**y: 0,407**

### Spectra



### Power

**Voltage: 48,0 V**  
**Current: 0,100 A**  
**Frequency: 0 Hz**

### Product name:

**Victory-7\_510mm\_927\_Lens-30°-Transparent**

### Item number:

**NP/L1C/03F/G1/L1C/0510/927/L3T**

### Date and time:

**02.06.2022 15:54:43**

### Description:

**Rank: C80-AD-8GB**

**Tolerances:**

**Lumen +/-4%**

**Candela +/-2,5%**

**Colour Temp +/-35 Kelvin**

**CRI +/-0,7**

**Angular Resolution: 1 Degree Step**

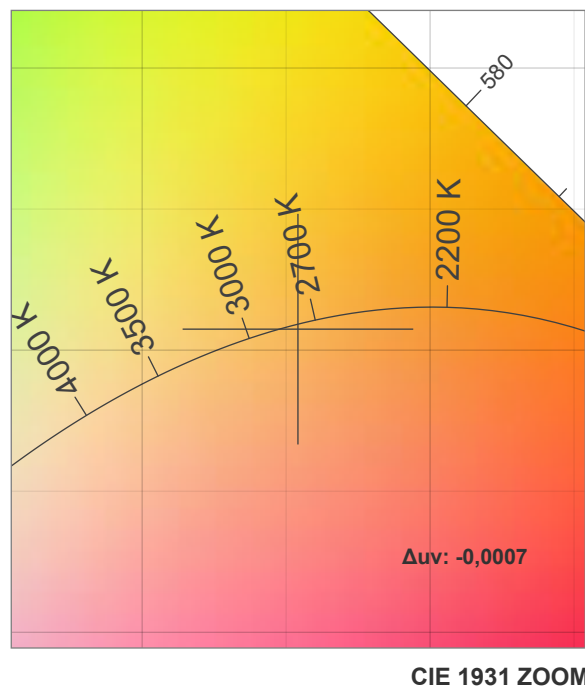
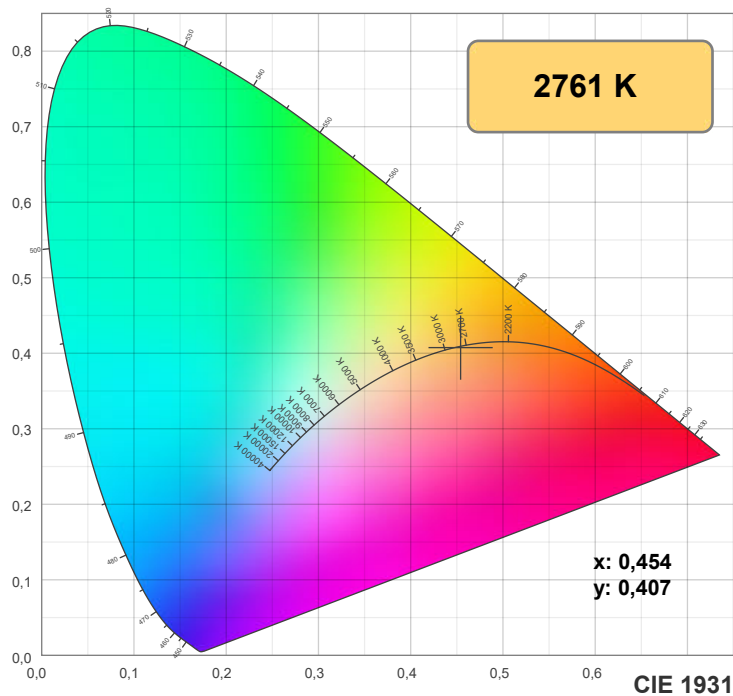
**Last Calibration 20-09-2021**

**Tester: Peter Ulrich**

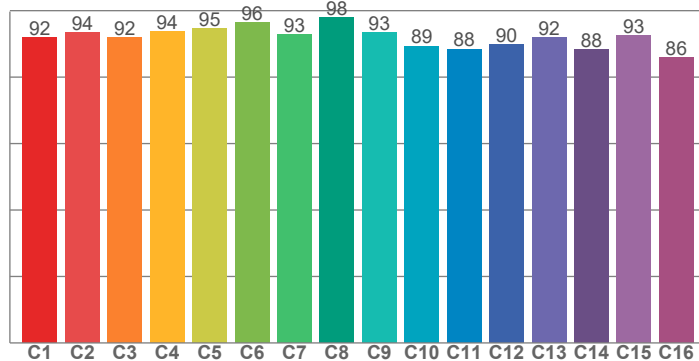
**Test Site: Lichtlabor**

**Gaustrasse 13**

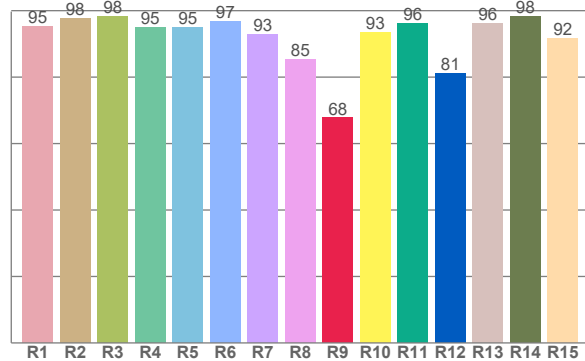
**55411 Bingen am Rhein**



**TM30: 92,0**



**CRI: 94,5 (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
95,3	97,8	98,3	95,0	94,8	96,7	93,0	85,2	67,7	93,4	96,2	81,2	96,2	98,2	91,5

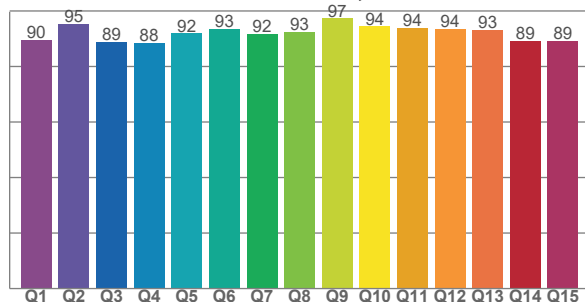
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,8	93,5	92,0	93,6	94,6	96,3	92,9	97,9	93,5	89,4	88,4	89,8	92,0	88,4	92,6	85,9

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,6	95,2	88,9	88,4	91,9	93,5	91,7	92,5	97,3	94,4	94,0	93,5	93,3	89,2	89,3

**CQS: 91,6**



## 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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
2761 K	94,5	67,7	92,0	99,4	91,6	0,454	0,407	0,260	0,350	-0,0007

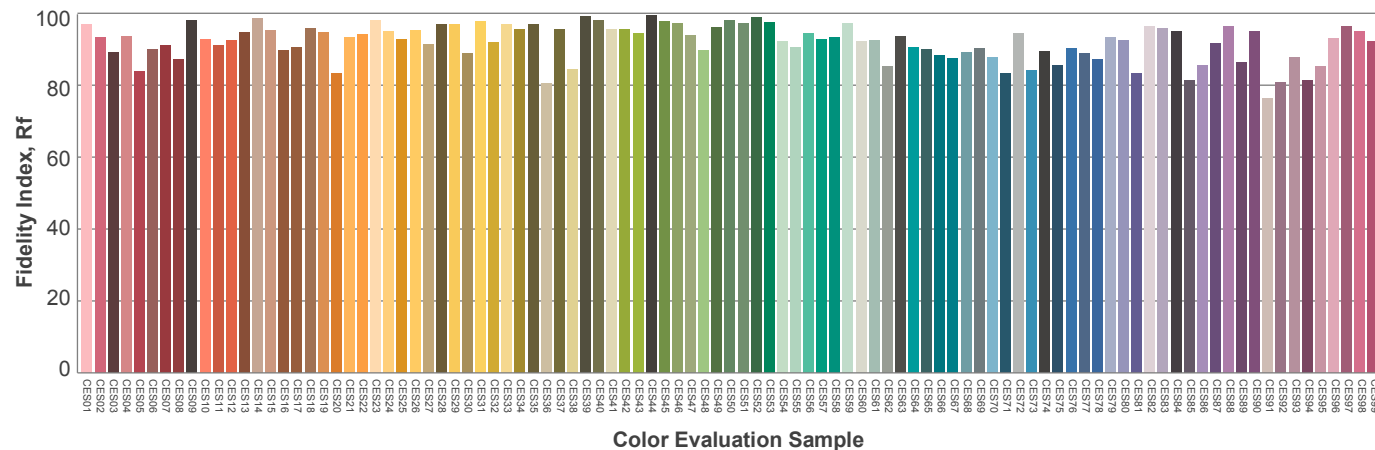
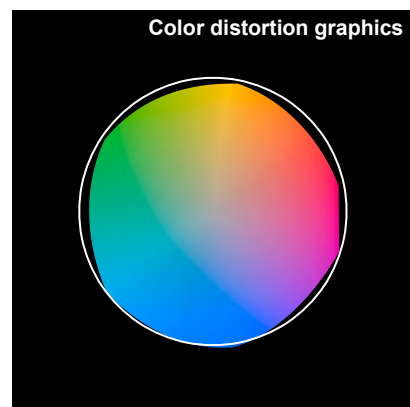
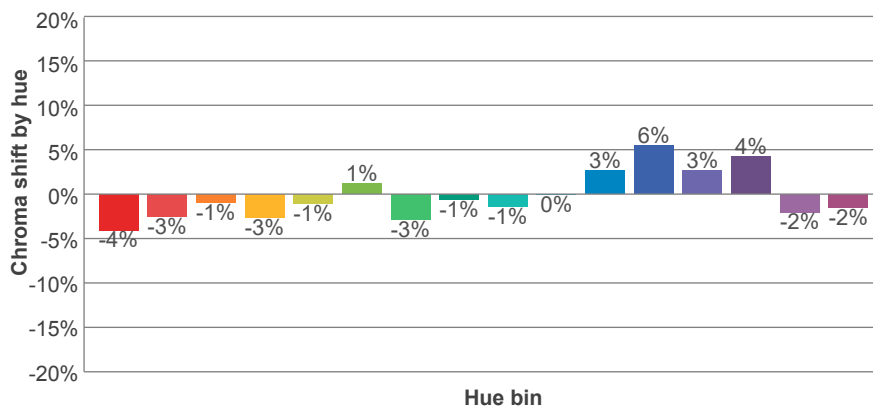
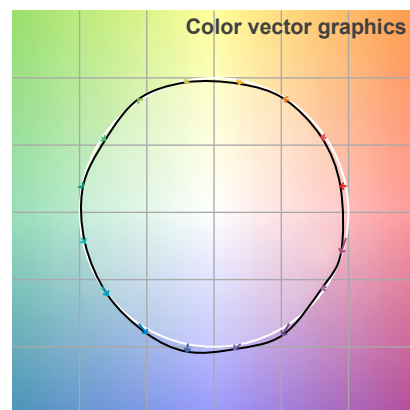
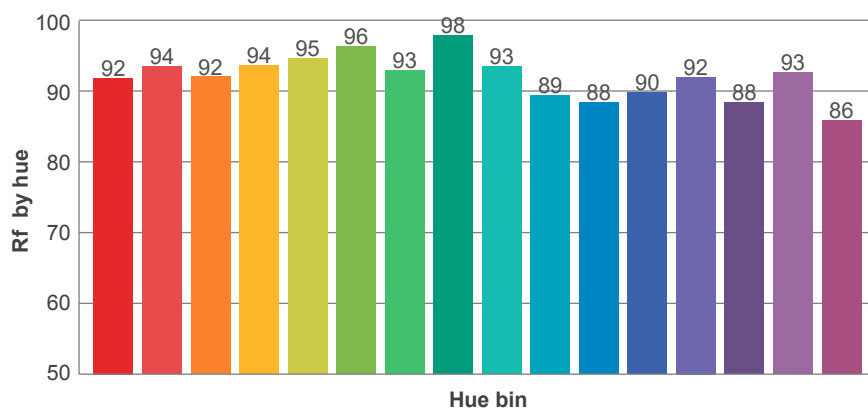
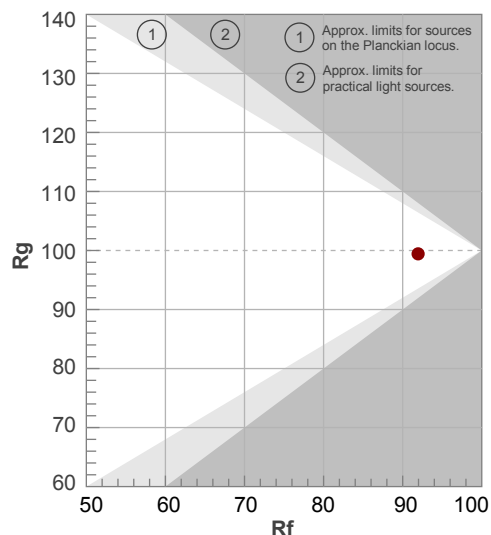
## Rf 92,0

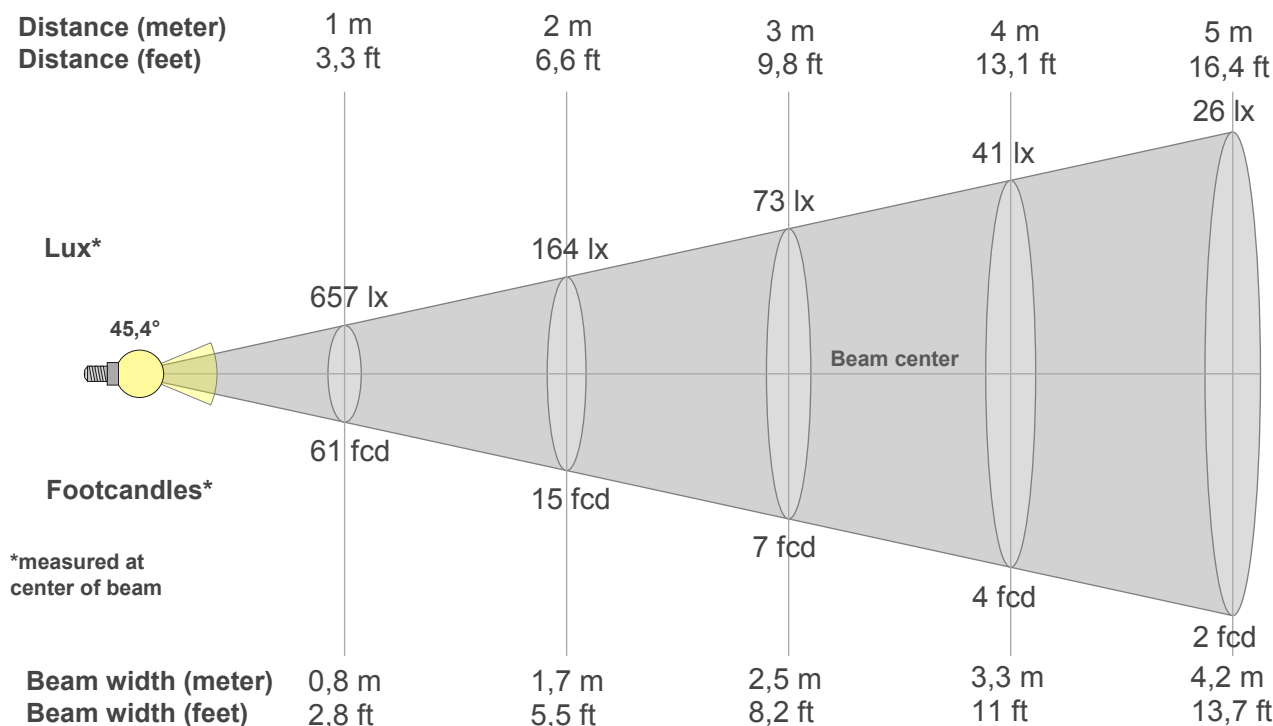
Fidelity index Rf

## Rg 99,4

Gammut index Rg

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





## 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
657lx	164lx	73lx	41lx	26lx	18lx	13lx	10lx	8lx	7lx	5lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx	2lx
61fcd	15,3fcd	6,8fcd	3,8fcd	2,4fcd	1,7fcd	1,2fcd	1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	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°
657	645	611	568	525	474	405	324	236	149	78	42	28	21	17	15	14	16	21	24
100%	98%	93%	86%	80%	72%	62%	49%	36%	23%	12%	6%	4%	3%	3%	2%	2%	2%	3%	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°
657	656	657	662	667	675	684	695	708	724	744	765	791	819	848	872	885	880	857	810
100%	100%	100%	101%	102%	103%	104%	106%	108%	110%	113%	116%	120%	125%	129%	133%	135%	134%	130%	123%

## Intensities in 180° c-plane

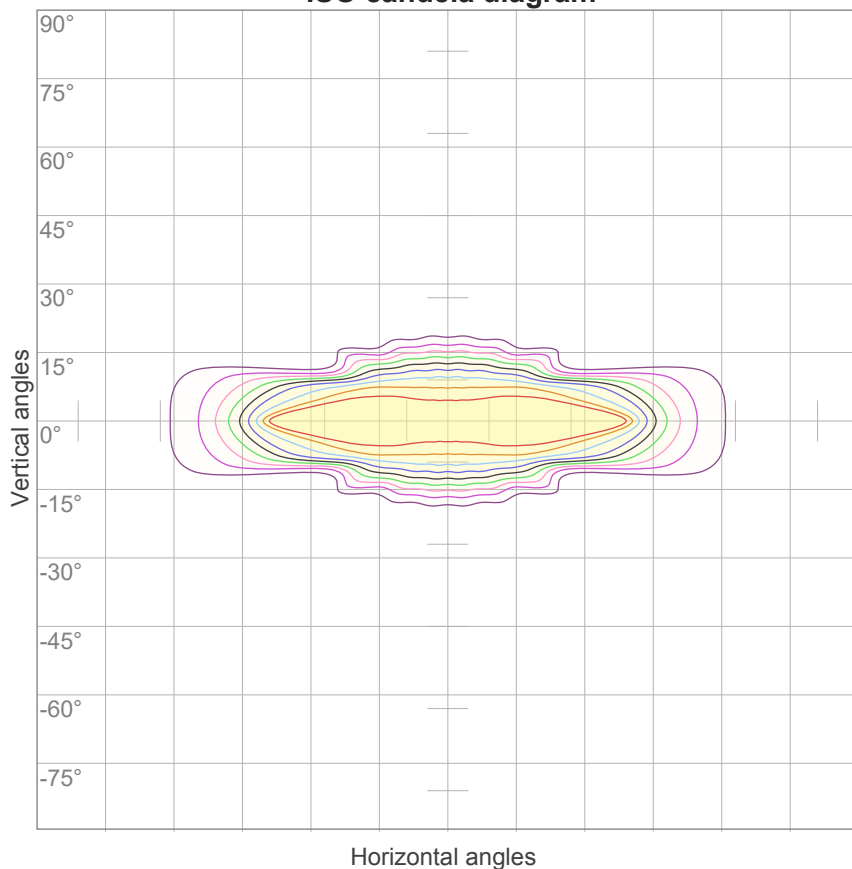
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
657	645	611	568	525	474	405	324	236	149	78	42	28	21	17	15	14	16	21	24
100%	98%	93%	86%	80%	72%	62%	49%	36%	23%	12%	6%	4%	3%	3%	2%	2%	2%	3%	4%

## 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°
657	656	657	662	667	675	684	695	708	724	744	765	791	819	848	872	885	880	857	810
100%	100%	100%	101%	102%	103%	104%	106%	108%	110%	113%	116%	120%	125%	129%	133%	135%	134%	130%	123%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
45,4°	64,2°	162,1°	87,3%	72,6%

### ISO candela diagram



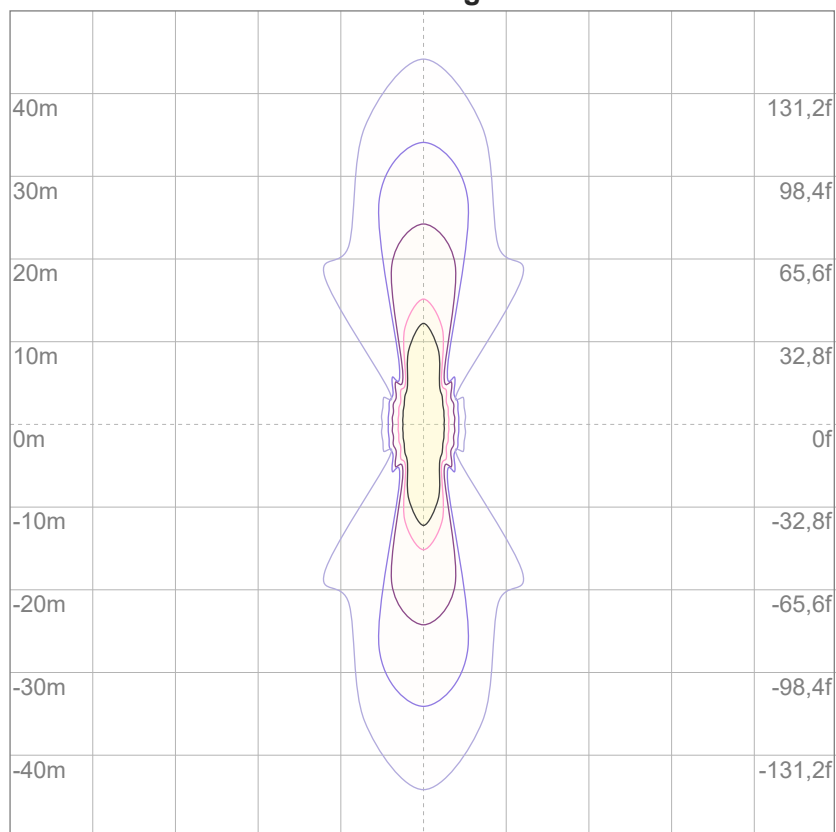
10%	66 cd
20%	131 cd
30%	197 cd
40%	263 cd
50%	329 cd
60%	394 cd
70%	460 cd
80%	526 cd
90%	591 cd

#### Conditions:

Number of c-planes: 16

Candela at center: 657 cd

### ISO lux diagram



3%	0,197 lx
5%	0,329 lx
10%	0,657 lx
30%	1,97 lx
50%	3,29 lx

#### Conditions:

Number of c-planes: 16

Lux at center: 6,57 lx

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

### Glare Evaluation According to UGR

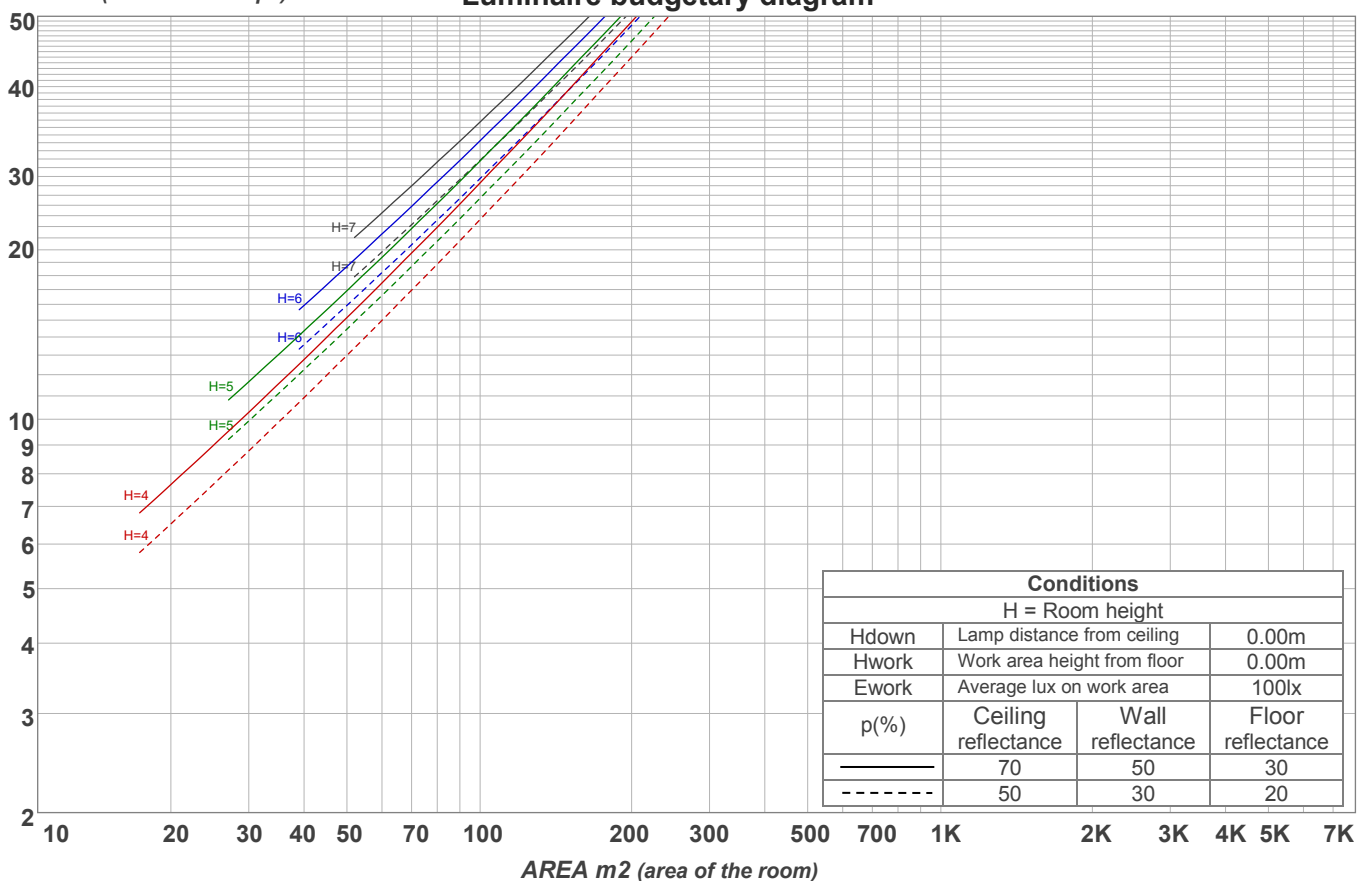
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	12,0	13,0	12,2	13,2	13,4	23,4	24,3	23,5	24,6	24,8
	3H	13,4	14,4	13,8	14,6	14,8	23,7	24,7	24,1	25,0	25,2
	4H	15,8	16,7	16,2	17,0	17,2	23,9	24,9	24,3	25,1	25,4
	6H	19,3	20,2	19,7	20,5	20,8	24,0	24,9	24,3	25,1	25,5
	8H	19,6	20,4	19,9	20,7	21,1	24,0	24,8	24,4	25,1	25,5
	12H	19,5	20,3	19,9	20,7	21,1	24,0	24,8	24,4	25,1	25,6
4H	2H	12,5	13,5	12,9	13,7	14,0	23,0	24,0	23,4	24,3	24,5
	3H	14,2	15,0	14,6	15,3	15,8	23,6	24,4	24,0	24,7	25,2
	4H	16,8	17,6	17,3	18,0	18,5	23,7	24,4	24,1	24,9	25,4
	6H	20,7	21,4	21,2	21,8	22,1	23,8	24,5	24,3	24,9	25,3
	8H	21,0	21,6	21,5	22,0	22,4	23,8	24,5	24,4	24,9	25,2
	12H	21,0	21,5	21,5	21,9	22,4	23,9	24,4	24,4	24,8	25,3
8H	4H	17,2	17,9	17,7	18,2	18,6	23,6	24,3	24,1	24,7	25,0
	6H	21,3	21,8	21,8	22,3	22,8	23,8	24,3	24,3	24,8	25,3
	8H	21,8	22,2	22,3	22,7	23,4	23,9	24,3	24,4	24,8	25,5
	12H	21,8	22,2	22,4	22,7	23,3	24,0	24,3	24,5	24,8	25,4
12H	4H	17,2	17,8	17,7	18,2	18,7	23,6	24,2	24,1	24,6	25,1
	6H	21,5	21,9	22,0	22,4	23,0	23,9	24,3	24,4	24,8	25,5
	8H	22,0	22,3	22,6	22,8	23,4	24,0	24,4	24,6	24,9	25,5
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,1					2,2 / -2,8				
S = 1.5H		0,1 / -0,1					4,2 / -4,1				
S = 2.0H		0,2 / -0,4					5,9 / -5,0				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 564 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	110	110	110	106	106	106	101	101	101	99
1	110	107	103	100	108	104	101	98	100	97	95	96	94	92	92	90	89	87
2	103	96	91	86	100	94	89	85	91	87	83	87	84	81	84	82	79	77
3	96	88	81	76	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	90	80	73	68	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	74	67	61	82	73	66	61	71	65	60	69	64	59	67	62	59	57
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	52
7	75	64	57	51	73	63	56	51	61	55	51	60	55	51	59	54	50	48
8	71	60	53	48	69	59	52	48	58	52	47	56	51	47	55	50	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	53	46	42	63	52	46	42	51	45	41	50	45	41	50	45	41	40

LAMPS (number of lamps)

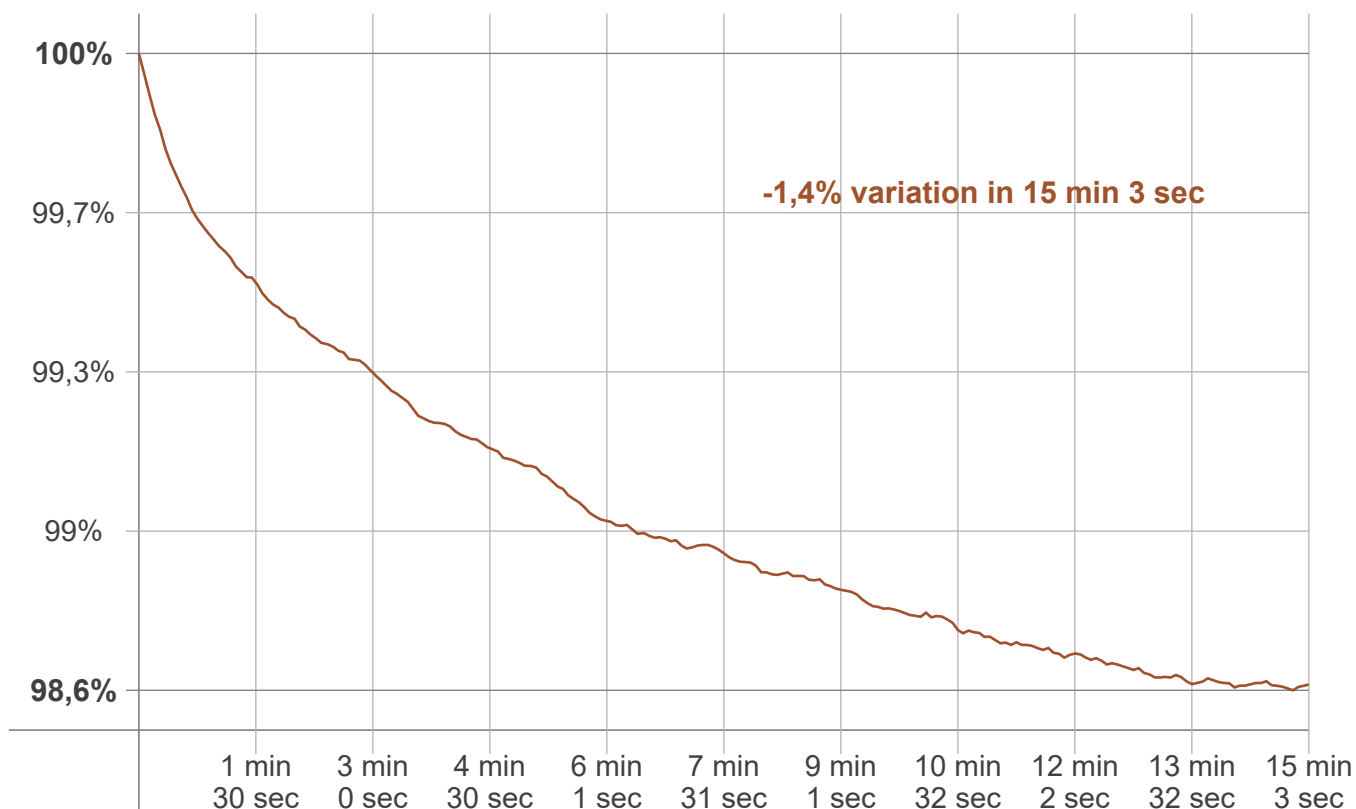
## Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
54,9 lm	125 lm	109 lm	83,6 lm	69,3 lm	50,7 lm	29,1 lm	23,3 lm	12,7 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,645 lm	1,65 lm	0,284 lm	0,257 lm	0,157 lm	0,091 lm	0,067 lm	0,041 lm	3,15 lm

### Warmup curve



### Warmup result

Warmup time:	Lamp stabilized in 15 min 3 sec
Warmup variation	-1,4%

### Warmup conditions

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

### Color temperature change

CCT start	CCT change	CCT end
2763 K	-2 K	2761 K

### Output change

Output start	Output change	Output end
570 lm	-7 lm	564 lm