



Light efficiency:

87 Lumen/Watt

Light quality:

CRI: 93,3

Color temperature:

6758 K

Output: 837 lm

Peak: 2166 cd

Power: 9,6 W

PF: 1,0



Product name:

**Pegasus-5\_0510\_965\_Inlay-Lens-15-Grad**

Item number:

**FL/L2C/09E/0510/965/IL1F**

Date and time:

**25.08.2025 15:58:46**

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:**

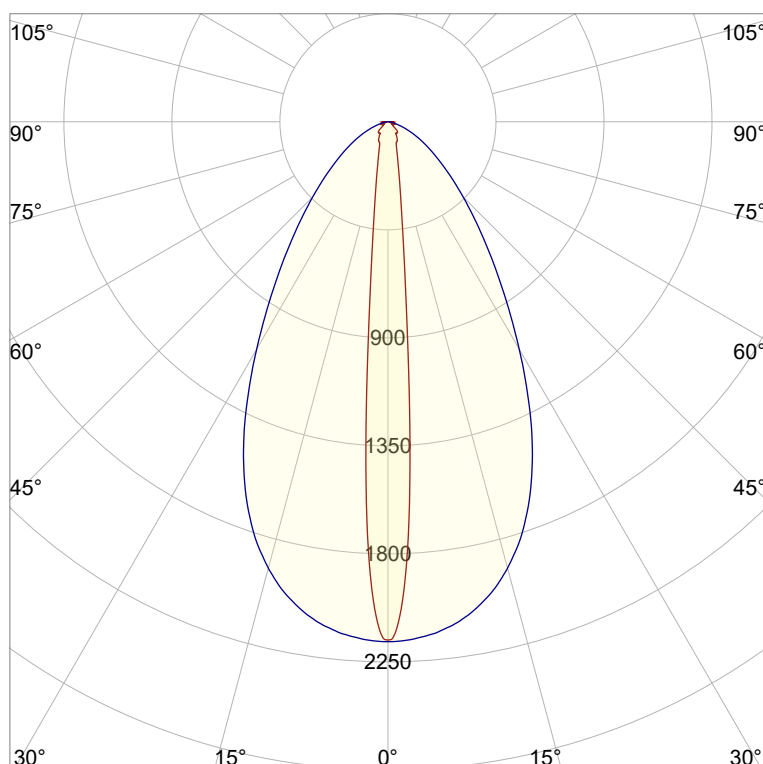
**Peter Ulrich**

**Test Site:**

**Lichtlabor**

**Gaustrasse 13**

**55411 Bingen am Rhein**

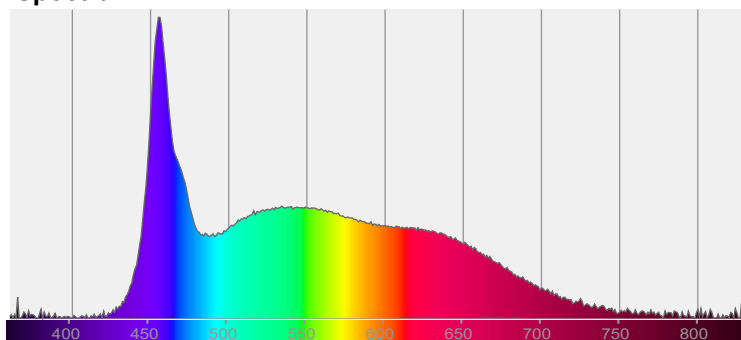


CIE 1931

x: 0,309

y: 0,324

Spectra



Power

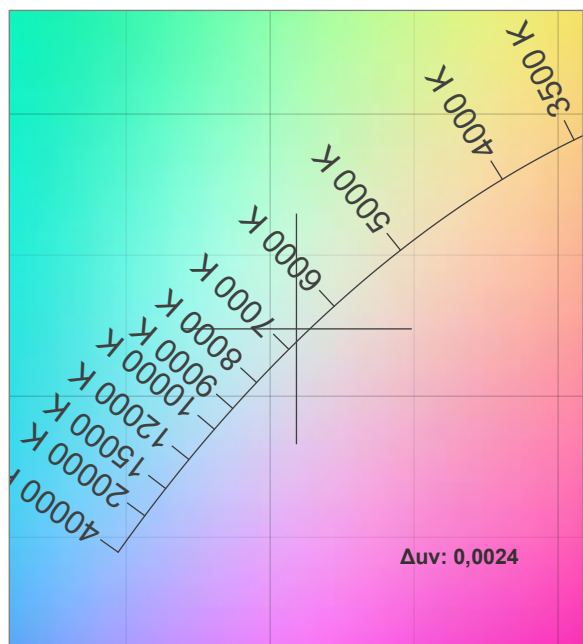
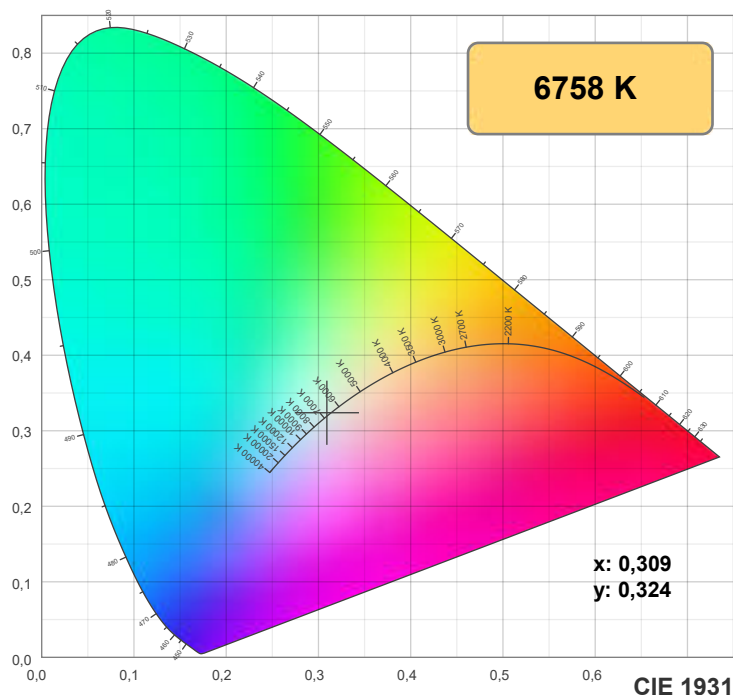
Voltage: 48,0 V

Current: 0,200 A

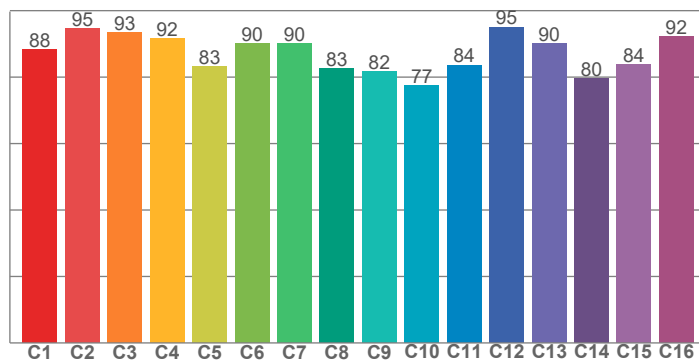
Frequency: 0 Hz



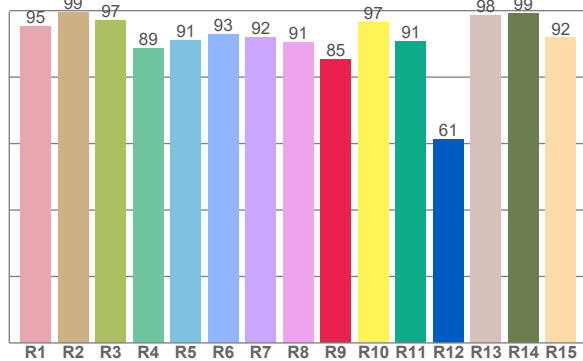
Color details



**TM30: 87,2**



**CRI: 93,3 (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
95,3	99,5	97,2	88,5	91,0	92,7	92,0	90,5	85,4	96,5	90,7	61,3	98,5	99,2	91,8

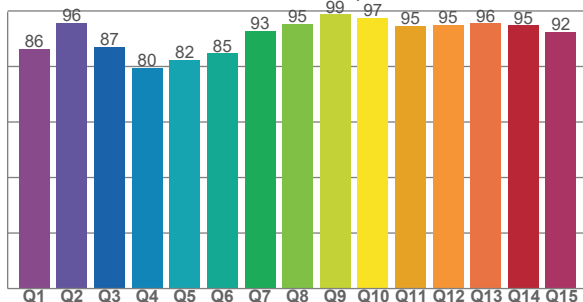
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,2	94,6	93,5	91,7	83,2	90,0	90,1	82,5	81,7	77,4	83,7	95,1	90,1	79,7	83,9	92,3

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86,3	95,6	87,0	79,6	82,4	84,7	92,7	95,4	98,8	97,4	94,6	95,0	95,5	94,8	92,4

**CQS: 89,7**



## 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	Δuv
6758 K	93,3	85,4	87,2	95,8	89,7	0,309	0,324	0,197	0,310	0,0024



## TM30 details



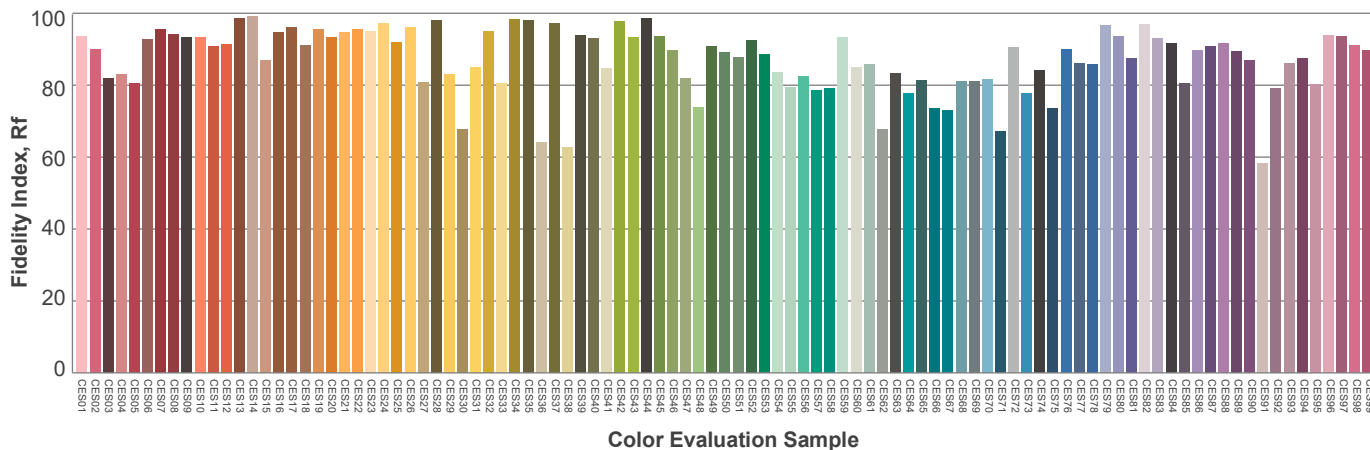
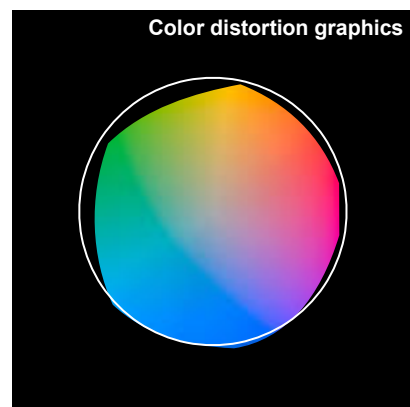
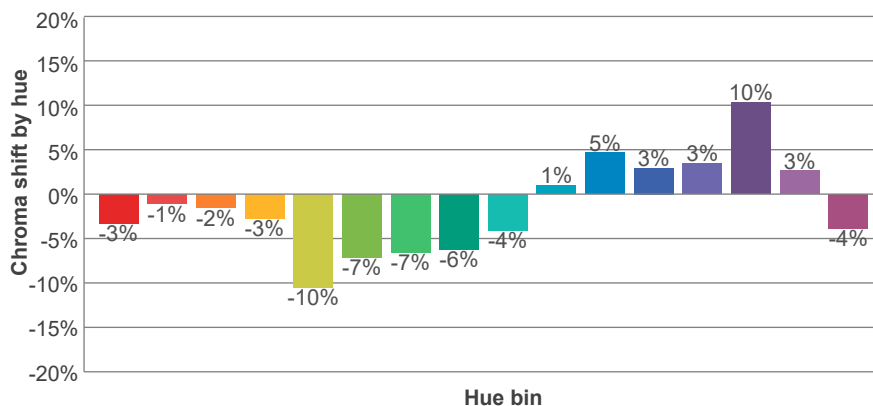
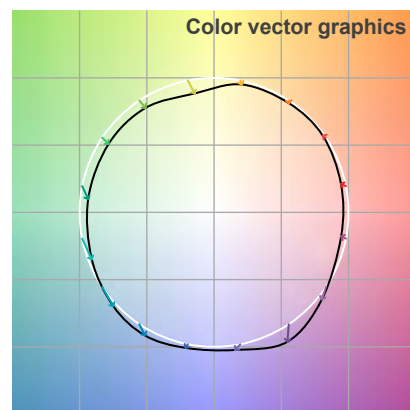
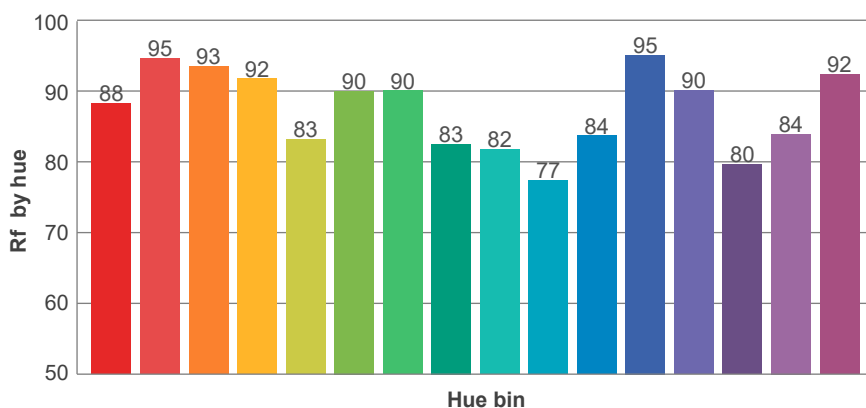
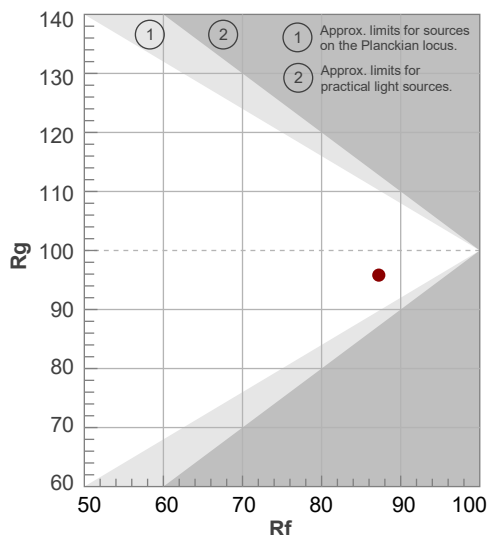
**Rf 87,2**

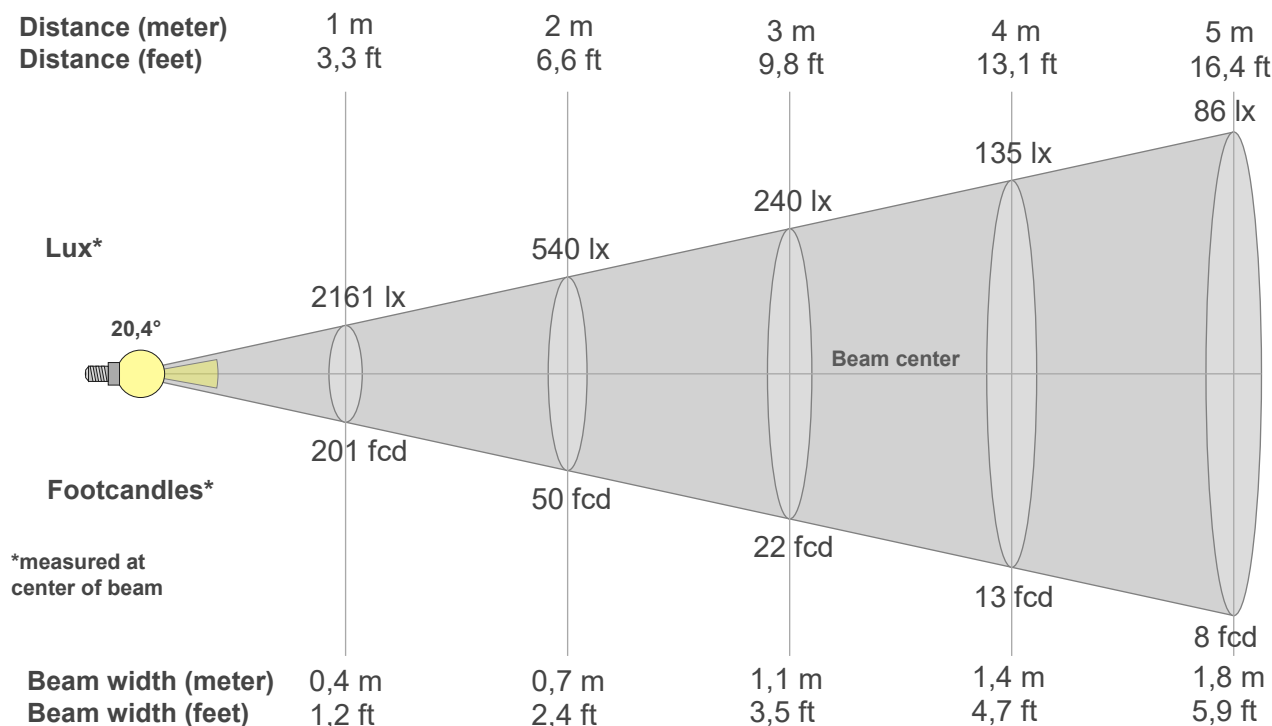
Fidelity index Rf

**Rg 95,8**

Gammut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	88	-3%	2%
2	95	-1%	2%
3	93	-2%	-1%
4	92	-3%	-2%
5	83	-10%	-3%
6	90	-7%	-1%
7	90	-7%	1%
8	83	-6%	9%
9	82	-4%	16%
10	77	1%	16%
11	84	5%	8%
12	95	3%	-1%
13	90	3%	-4%
14	80	10%	-8%
15	84	3%	-9%
16	92	-4%	1%





## 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
2161lx	540lx	240lx	135lx	86lx	60lx	44lx	34lx	27lx	22lx	18lx	15lx	13lx	11lx	10lx	8lx	7lx	7lx	6lx	5lx
200,8fcd	50,2fcd	22,3fcd	12,5fcd	8fcd	5,6fcd	4,1fcd	3,1fcd	2,5fcd	2fcd	1,7fcd	1,4fcd	1,2fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,6fcd	0,5fcd

## 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°
2161	1939	1313	704	431	298	221	173	141	117	101	94	90	89	82	74	65	59	59	59
100%	90%	61%	33%	20%	14%	10%	8%	7%	5%	5%	4%	4%	4%	4%	3%	3%	3%	3%	3%

## 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°
2161	2161	2149	2131	2104	2066	2019	1959	1887	1805	1708	1598	1478	1351	1221	1094	975	866	769	681
100%	100%	99%	99%	97%	96%	93%	91%	87%	84%	79%	74%	68%	63%	56%	51%	45%	40%	36%	31%

## Intensities in 180° c-plane

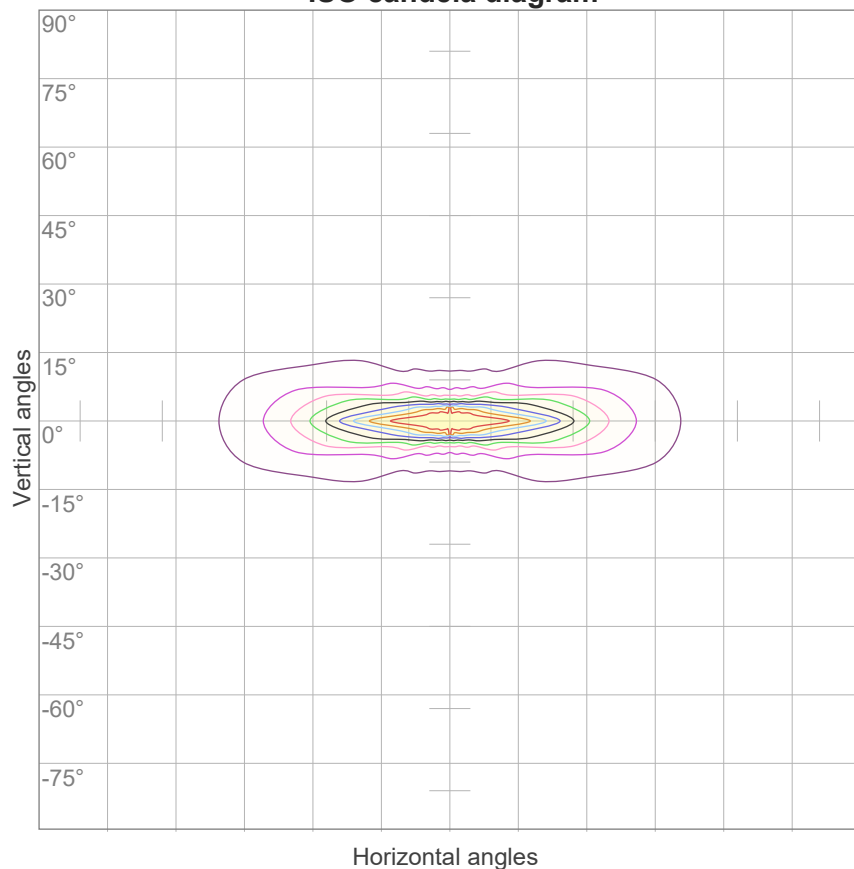
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2161	1939	1313	704	431	298	221	173	141	117	101	94	90	89	82	74	65	59	59	59
100%	90%	61%	33%	20%	14%	10%	8%	7%	5%	5%	4%	4%	4%	4%	3%	3%	3%	3%	3%

## 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°
2161	2161	2149	2131	2104	2066	2019	1959	1887	1805	1708	1598	1478	1351	1221	1094	975	866	769	681
100%	100%	99%	99%	97%	96%	93%	91%	87%	84%	79%	74%	68%	63%	56%	51%	45%	40%	36%	31%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
20,4°	50,2°	111,4°	87,7%	73,3%

## ISO candela diagram



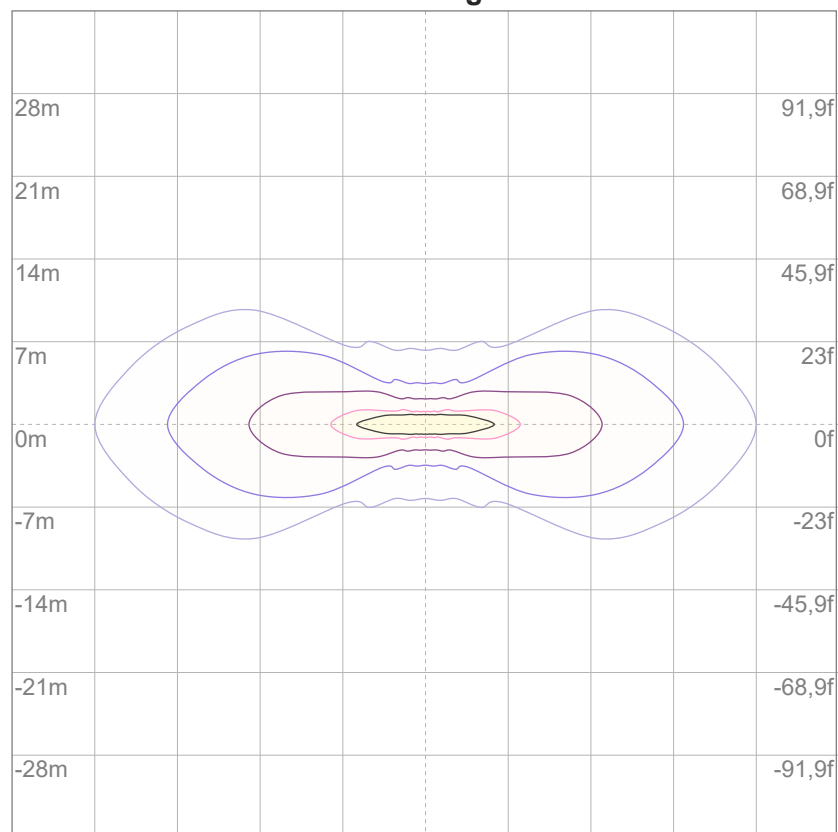
10%	216 cd
20%	432 cd
30%	648 cd
40%	864 cd
50%	1081 cd
60%	1297 cd
70%	1513 cd
80%	1729 cd
90%	1945 cd

### Conditions:

Number of c-planes: 16

Candela at center: 2161 cd

## ISO lux diagram



3%	0,648 lx
5%	1,08 lx
10%	2,16 lx
30%	6,48 lx
50%	10,8 lx

### Conditions:

Number of c-planes: 16

Lux at center: 21,6 lx

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

### Glare Evaluation According to UGR

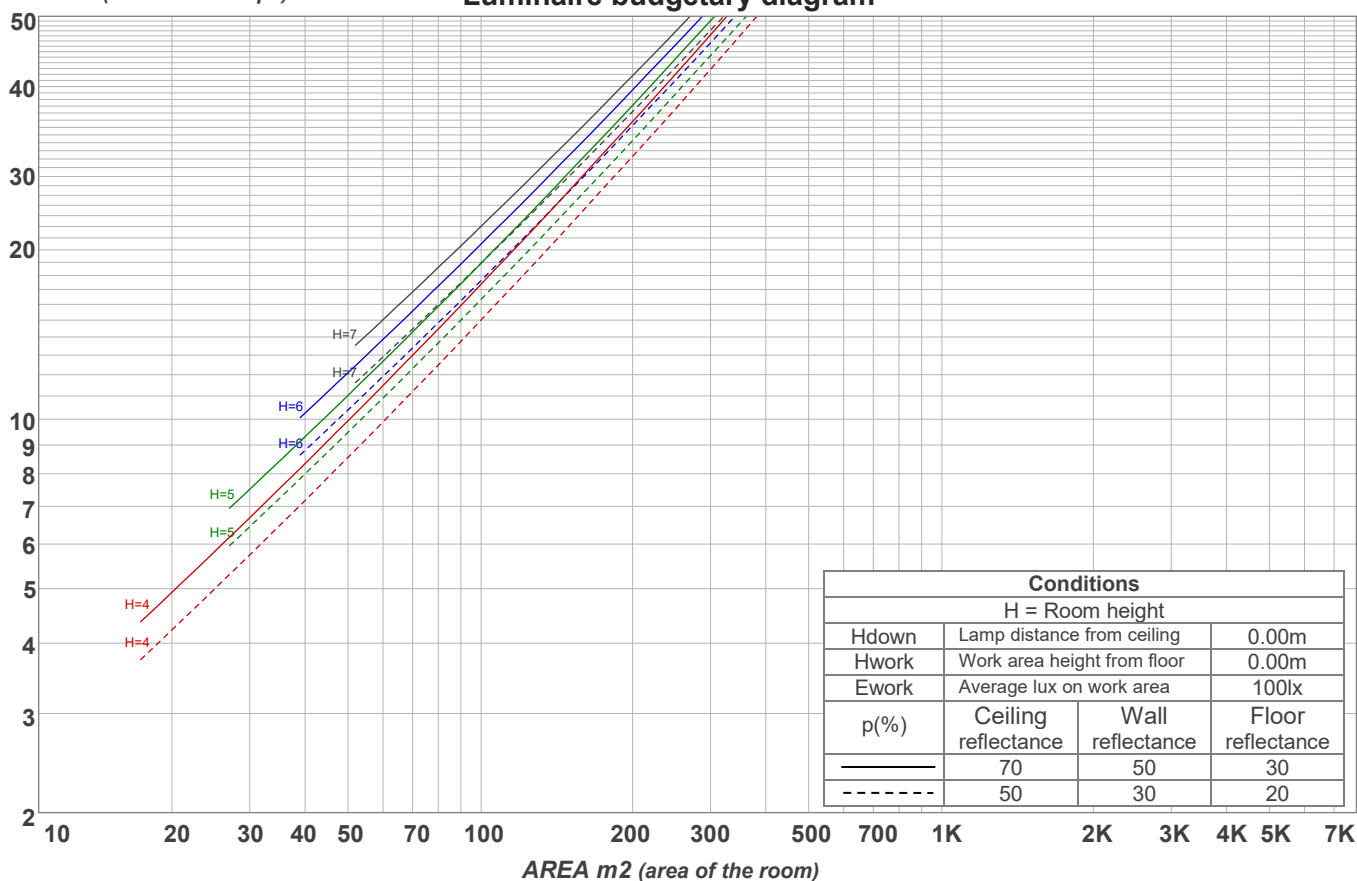
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	11,7	12,6	11,9	12,9	13,1	23,6	24,5	23,8	24,8	25,0
	3H	12,9	13,8	13,3	14,1	14,3	24,3	25,3	24,7	25,5	25,7
	4H	14,0	14,9	14,4	15,2	15,4	24,5	25,5	24,9	25,7	26,0
	6H	15,5	16,3	15,8	16,6	16,9	24,7	25,5	25,0	25,8	26,1
	8H	16,2	17,0	16,5	17,3	17,7	24,7	25,5	25,0	25,8	26,2
	12H	16,9	17,7	17,3	18,0	18,4	24,7	25,4	25,0	25,8	26,2
4H	2H	13,5	14,4	13,9	14,7	14,9	23,3	24,3	23,7	24,5	24,8
	3H	14,8	15,6	15,2	15,9	16,3	24,3	25,0	24,6	25,4	25,8
	4H	15,8	16,5	16,2	16,9	17,5	24,5	25,2	24,9	25,6	26,1
	6H	17,2	17,9	17,7	18,3	18,6	24,7	25,4	25,2	25,7	26,1
	8H	18,0	18,6	18,5	19,0	19,3	24,7	25,4	25,2	25,7	26,1
	12H	18,7	19,2	19,2	19,6	20,1	24,7	25,3	25,2	25,7	26,1
8H	4H	16,5	17,2	17,0	17,5	17,9	24,4	25,1	24,9	25,4	25,8
	6H	18,2	18,6	18,7	19,1	19,6	24,7	25,2	25,2	25,6	26,2
	8H	19,1	19,5	19,6	20,0	20,7	24,8	25,2	25,3	25,7	26,3
	12H	20,0	20,4	20,6	20,9	21,5	24,9	25,2	25,4	25,7	26,3
12H	4H	16,6	17,2	17,1	17,6	18,0	24,4	24,9	24,9	25,3	25,8
	6H	18,4	18,8	18,9	19,3	20,0	24,7	25,1	25,2	25,6	26,3
	8H	19,4	19,7	20,0	20,2	20,9	24,8	25,1	25,4	25,7	26,3
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					1,1 / -1,1				
S = 1.5H		0,3 / -0,2					2,4 / -2,2				
S = 2.0H		0,5 / -0,4					3,7 / -3,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 837 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	105	105	105	101	101	101	99
1	111	107	103	100	108	105	101	99	100	98	95	96	94	92	92	91	89	87
2	103	97	92	87	101	95	90	86	91	87	84	88	85	82	85	82	80	78
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	91	81	74	69	89	80	74	69	77	72	68	75	70	67	73	69	66	64
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	68	64	60	58
6	80	70	63	58	79	69	62	57	67	61	57	65	60	56	64	59	56	54
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	55	52	50
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	69	58	51	47	67	57	51	46	56	50	46	55	50	46	54	49	46	44
10	65	55	48	44	64	54	48	44	53	47	44	52	47	43	51	47	43	42

LAMPS (number of lamps)

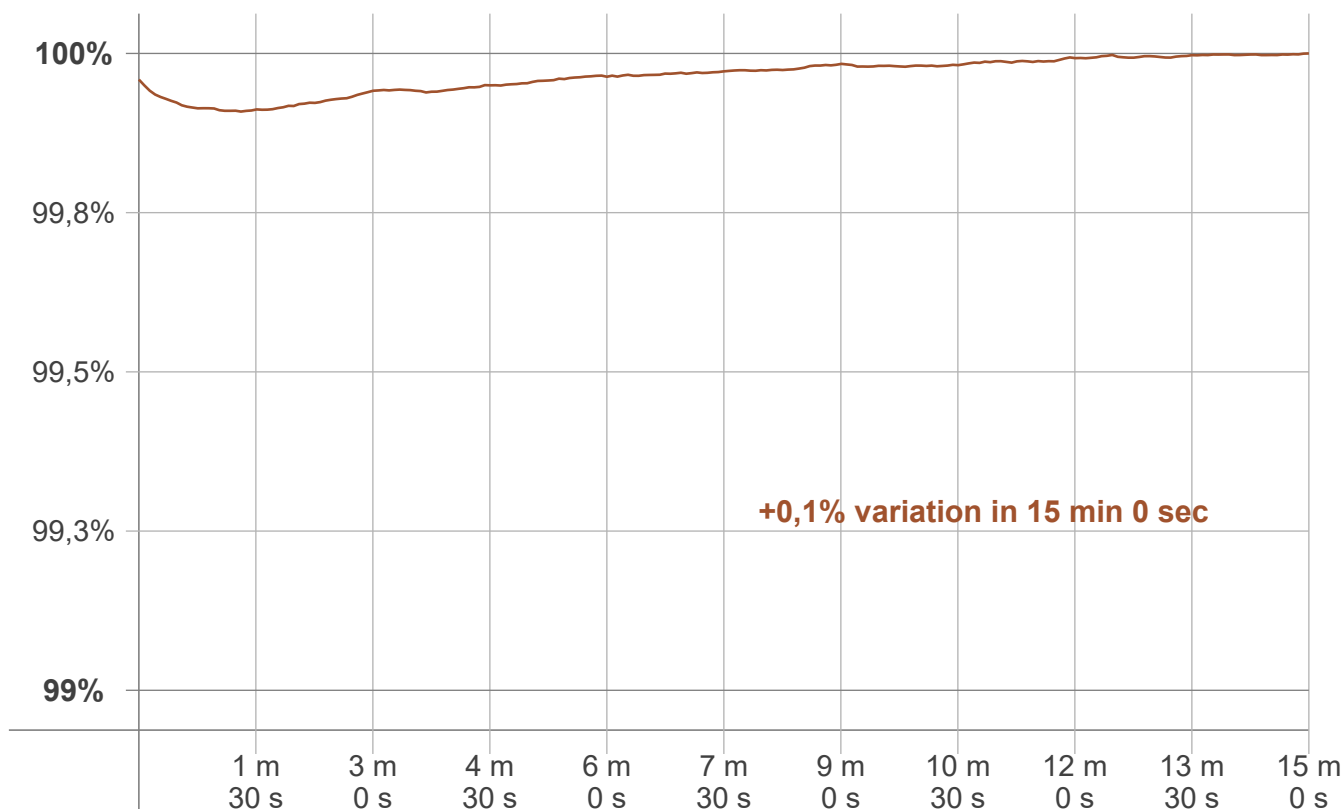
## Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
121 lm	159 lm	151 lm	128 lm	102 lm	72,3 lm	45,9 lm	27,6 lm	17,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4,68 lm	1,66 lm	1,39 lm	1,26 lm	1,09 lm	0,882 lm	0,650 lm	0,398 lm	0,134 lm

## Warmup curve



## Warmup result

Warmup time:	Lamp stabilized in 15 min 0 sec
Warmup variation	+0,1%

## Warmup conditions

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

## Color temperature change

CCT start	CCT change	CCT end
6758 K	0 K	6758 K

## Output change

Output start	Output change	Output end
837 lm	+ lm	837 lm