

Light efficiency:

102 Lumen/Watt

Light quality:

CRI: 92,4

Color temperature:

5450 K

Output: 1031 lm

Peak: 339 cd

Power: 10,1 W

PF: 1,0



Product name:

**Pegasus-4-0508-956-CRF**

Item number:

**FLNP/L/09D0508/956/CRF**

Date and time:

**06.04.2021 11:28:54**

Description:

**Rank: G7-2G0**

**Toleranzen:**

**Lumen +/-4%**

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

**Colour Temp +/-35 K**

**CRI +/-0,7**

**Angular Resolution 1 Grad step**

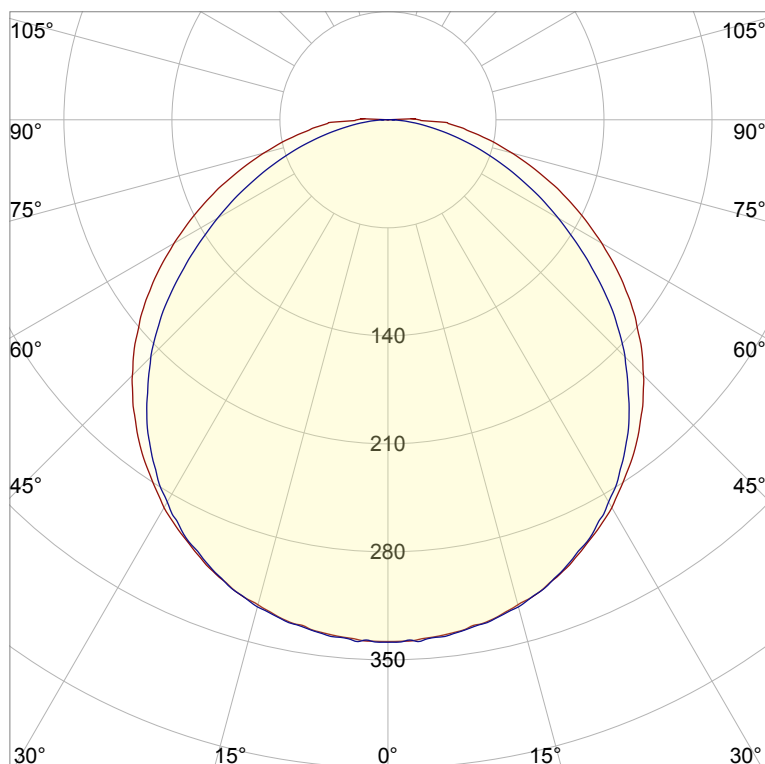
**Last Calibration 20-05-2020**

**Pruefer: Peter Ulrich**

**Pruefort: Lichtlabor**

**Gaustrasse 13**

**55411 Bingen am Rhein**

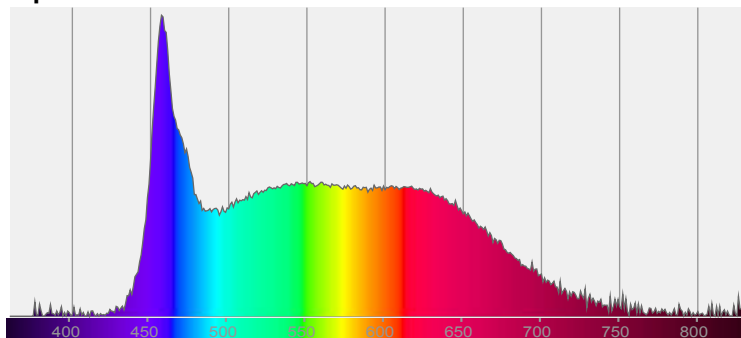


CIE 1931

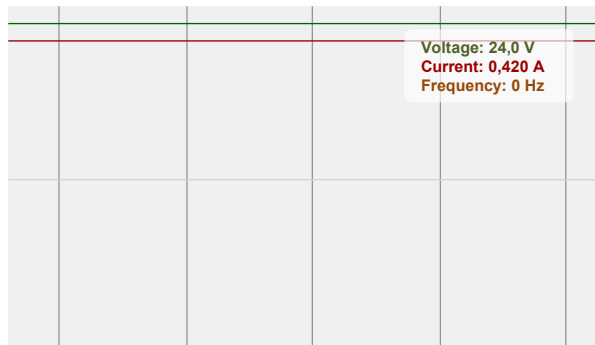
x: 0,334

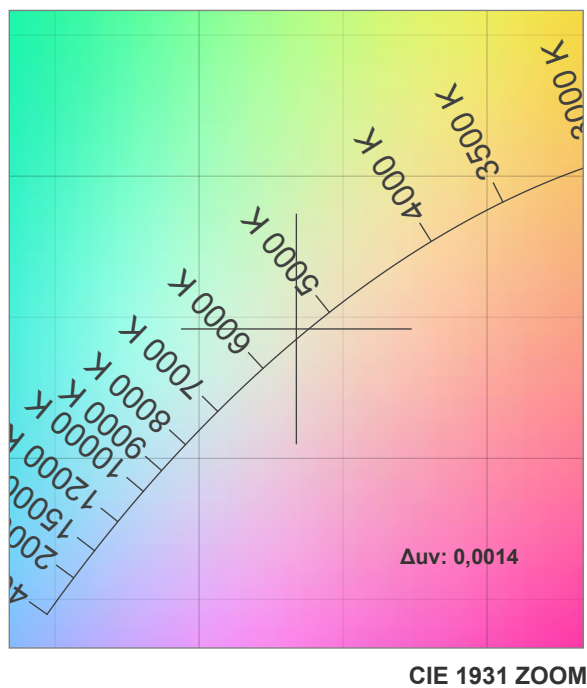
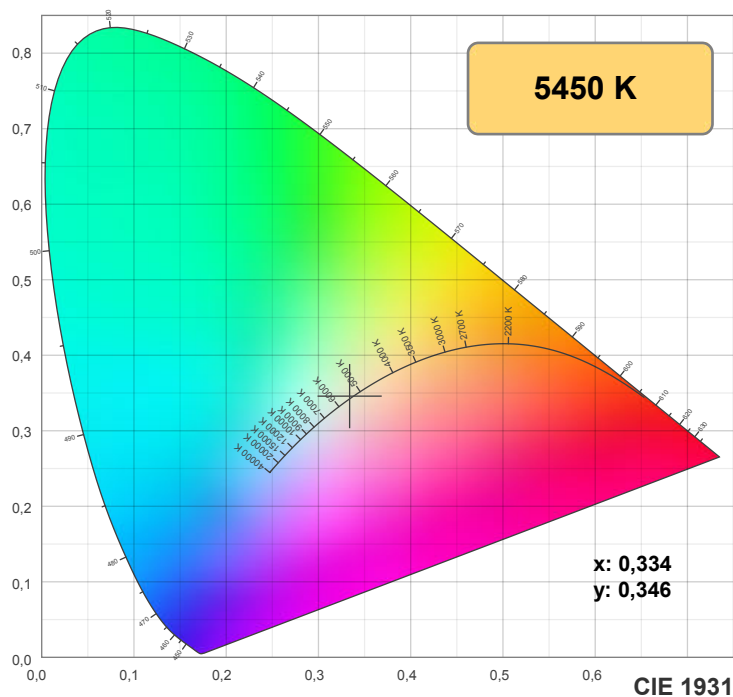
y: 0,346

Spectra

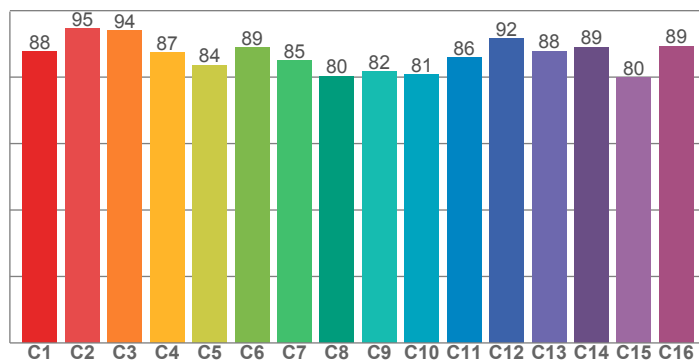


Power

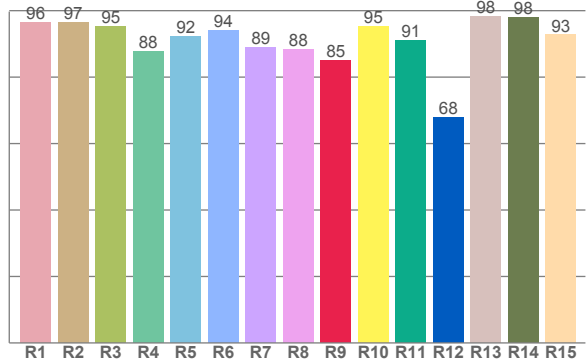




**TM30: 86,7**



**CRI: 92,4 (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
96,4	96,6	95,2	87,8	92,2	94,1	88,8	88,3	84,9	95,3	91,0	67,8	98,4	98,0	92,7

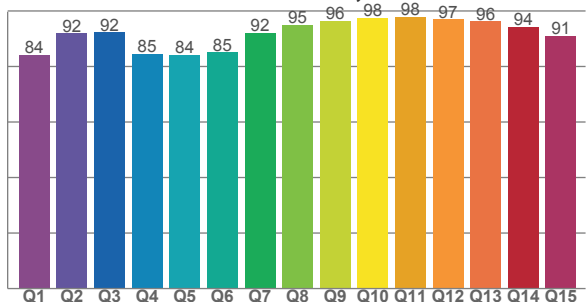
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87,6	94,5	94,0	87,5	83,6	89,0	84,9	80,3	81,6	80,8	85,9	91,5	87,9	89,0	79,9	89,4

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84,2	91,9	92,2	84,6	84,2	85,0	92,1	94,8	96,4	97,6	97,9	96,9	96,2	94,3	91,0

**CQS: 90,6**



## 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	Δuv
5450 K	92,4	84,9	86,7	94,5	90,6	0,334	0,346	0,206	0,320	0,0014

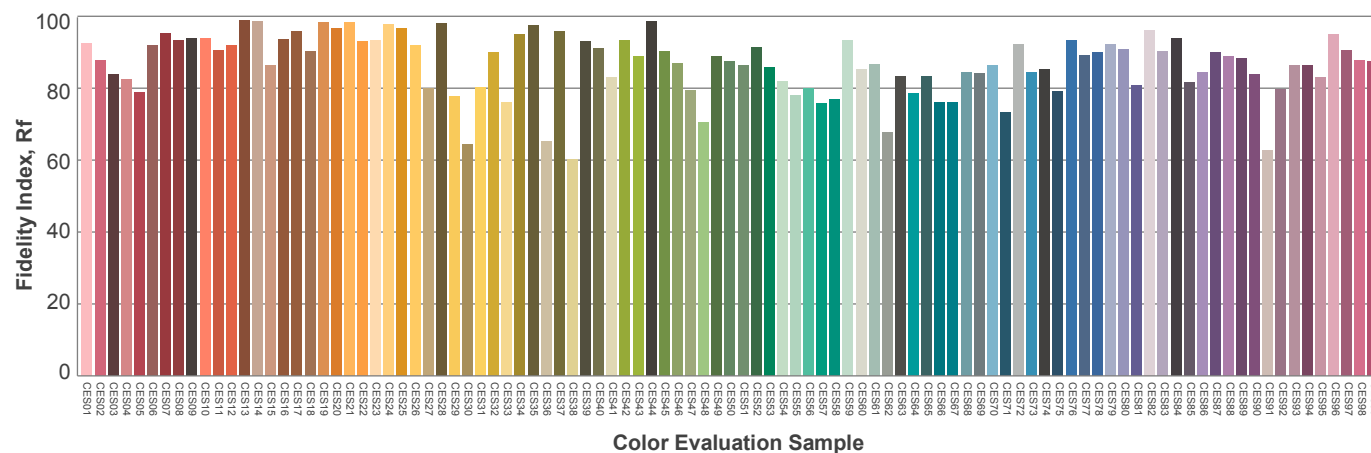
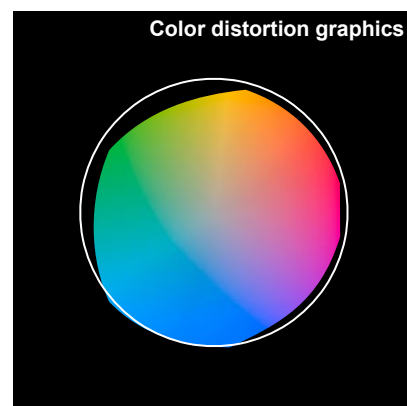
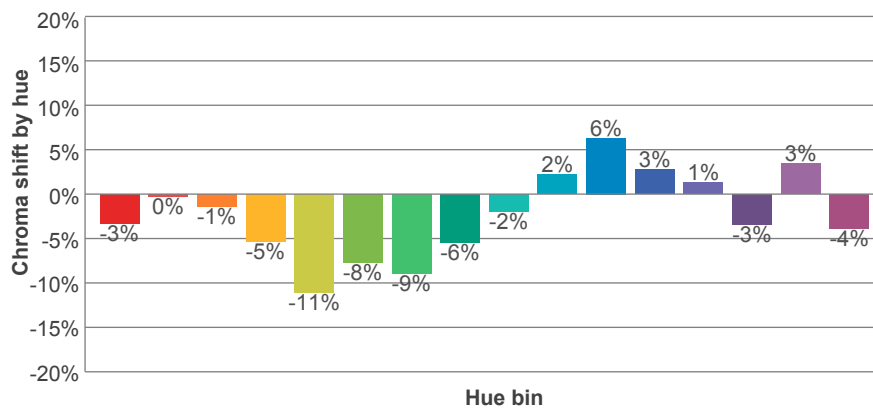
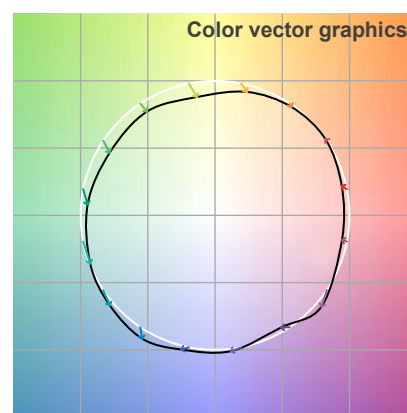
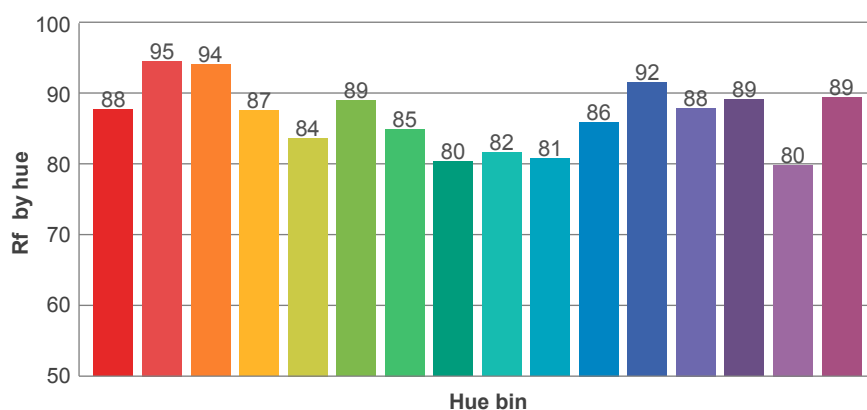
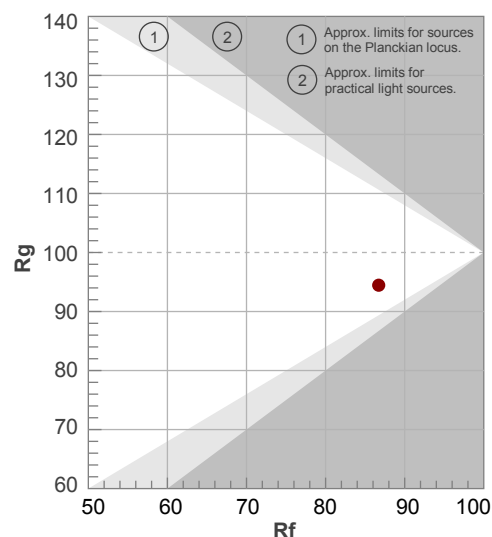
**Rf 86,7**

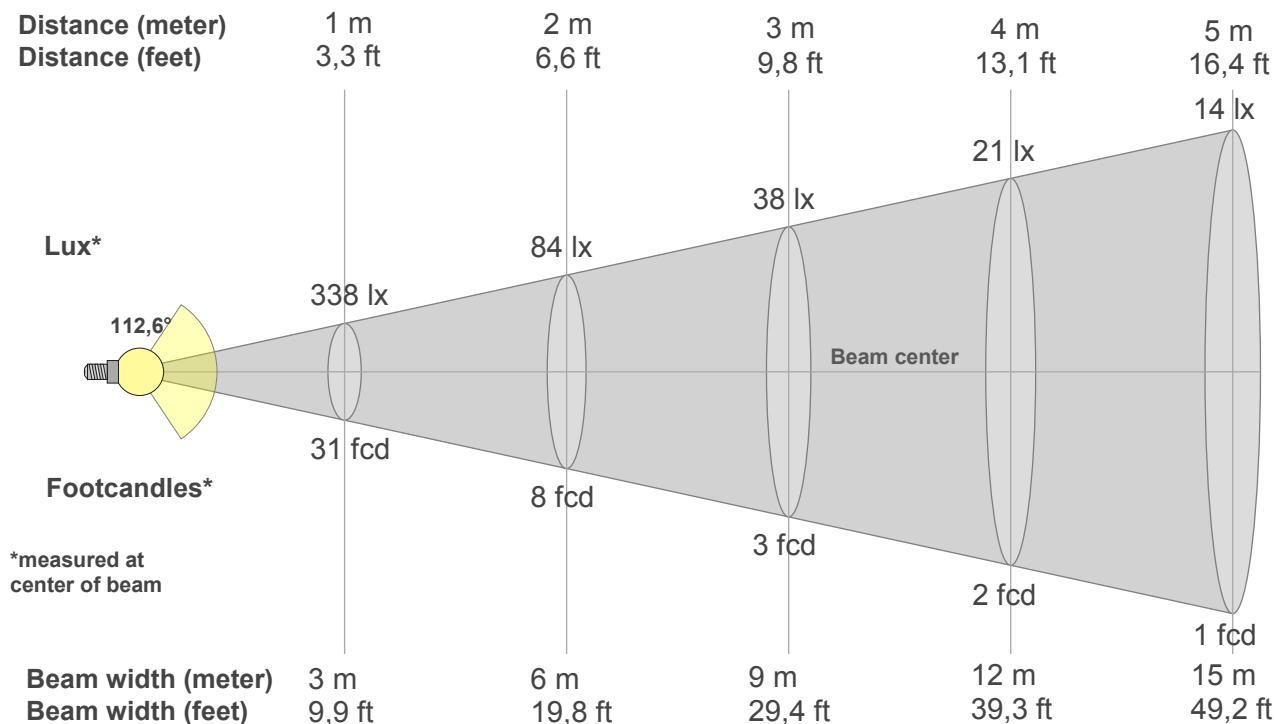
### Fidelity index Rf

## Rg 94,5

## Gammut index Rg

		Graphic shifts (%)	
Hue Bin	$R_f$	Chroma	Hue
1	88	-3%	3%
2	95	0%	2%
3	94	-1%	-2%
4	87	-5%	-5%
5	84	-11%	-4%
6	89	-8%	-1%
7	85	-9%	5%
8	80	-6%	11%
9	82	-2%	17%
10	81	2%	12%
11	86	6%	6%
12	92	3%	-5%
13	88	1%	-8%
14	89	-3%	-5%
15	80	3%	-12%
16	89	-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
338lx	84lx	38lx	21lx	14lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
31,4fcd	7,9fcd	3,5fcd	2fcd	1,3fcd	0,9fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	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°
338	336	332	325	316	304	290	273	255	234	211	187	160	133	107	83	61	44	20	0
100%	100%	98%	96%	94%	90%	86%	81%	75%	69%	62%	55%	47%	39%	32%	25%	18%	13%	6%	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°
338	337	333	327	316	303	286	266	243	217	189	158	127	99	73	49	28	12	2	2
100%	100%	98%	97%	93%	90%	85%	79%	72%	64%	56%	47%	38%	29%	22%	14%	8%	4%	1%	1%

## Intensities in 180° c-plane

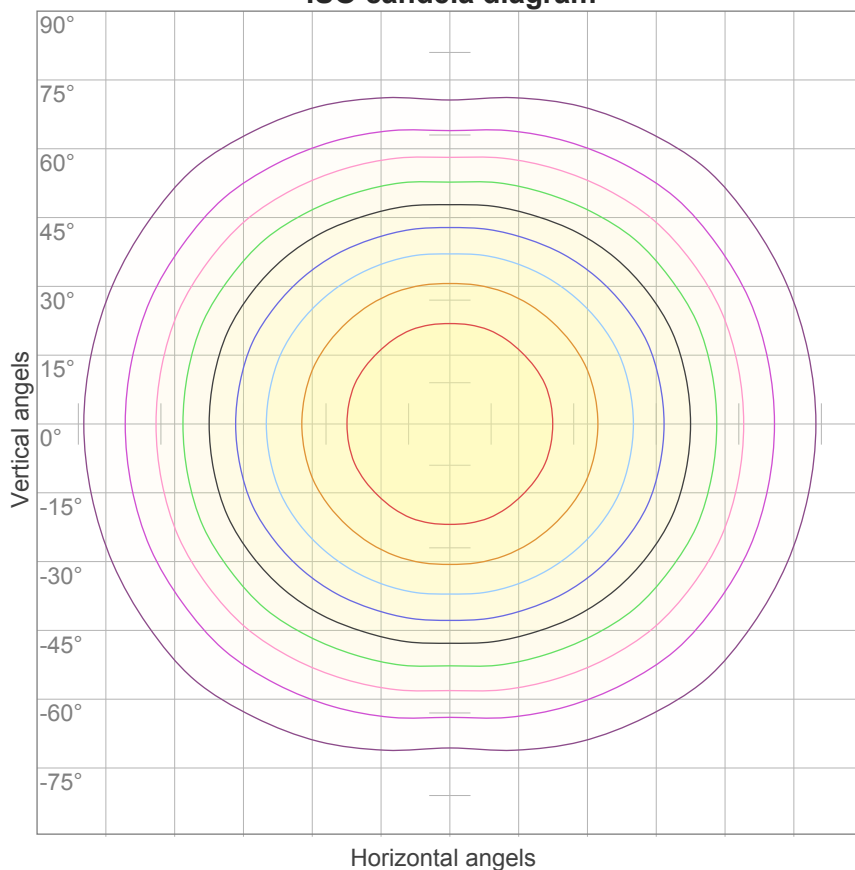
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
338	336	332	325	316	304	290	273	255	234	211	187	160	133	107	83	61	44	20	0
100%	100%	98%	96%	94%	90%	86%	81%	75%	69%	62%	55%	47%	39%	32%	25%	18%	13%	6%	0%

## 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°
338	337	333	327	316	303	286	266	243	217	189	158	127	99	73	49	28	12	2	2
100%	100%	98%	97%	93%	90%	85%	79%	72%	64%	56%	47%	38%	29%	22%	14%	8%	4%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
112,6°	170,8°	208,1°	74,3%	50,6%

### ISO candela diagram



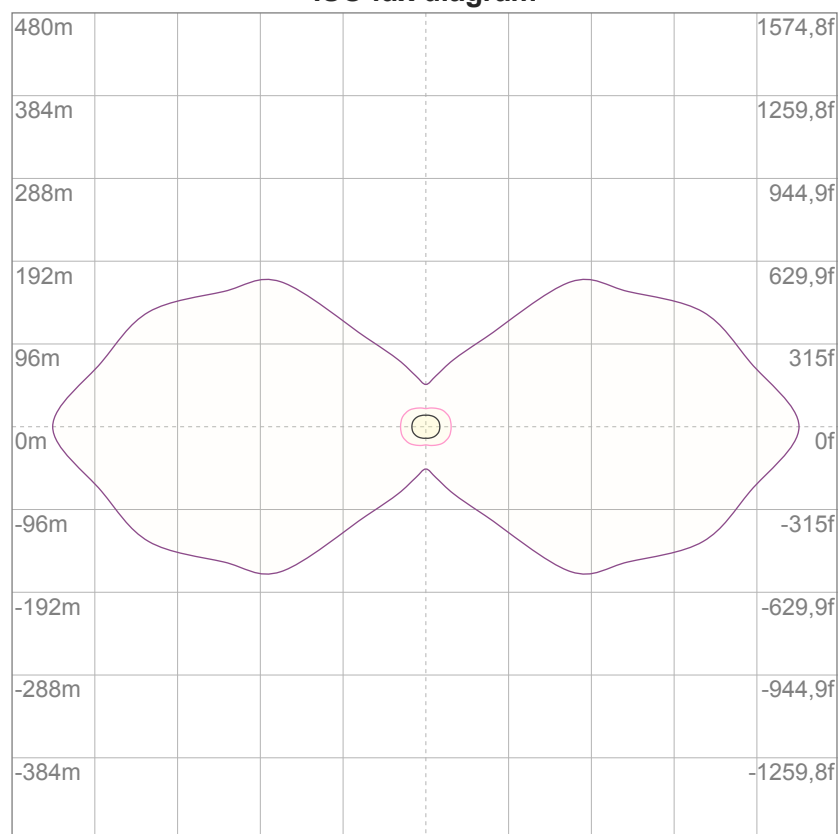
10%	34 cd
20%	68 cd
30%	101 cd
40%	135 cd
50%	169 cd
60%	203 cd
70%	237 cd
80%	270 cd
90%	304 cd

#### Conditions:

Number of c-planes: 16

Candela at center: 338 cd

### ISO lux diagram



3%	0,101 lx
5%	0,169 lx
10%	0,338 lx
30%	1,01 lx
50%	1,69 lx

#### Conditions:

Number of c-planes: 16

Lux at center: 3,38 lx

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

### Glare Evaluation According to UGR

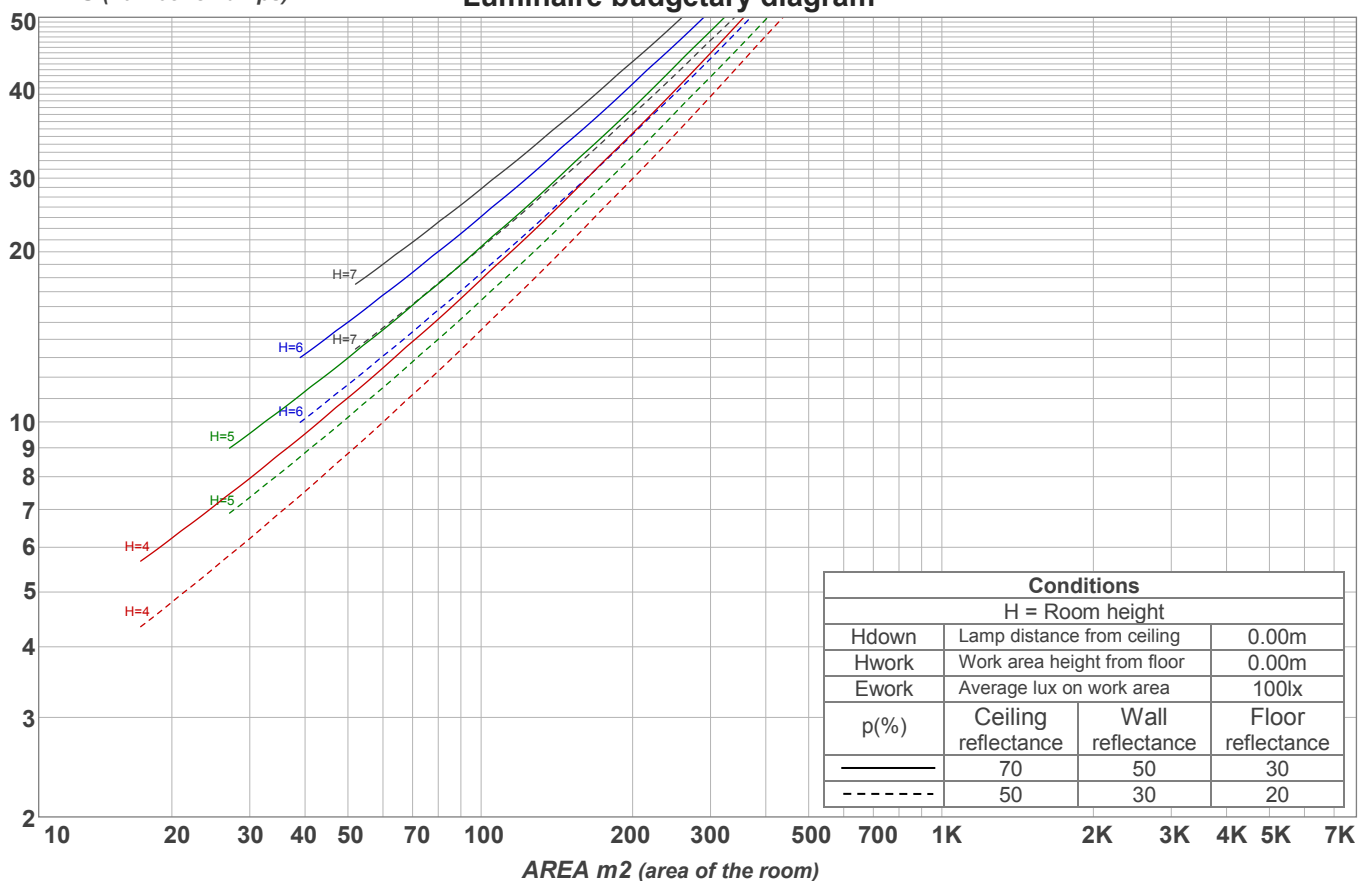
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	22,5	23,7	22,7	24,0	24,3	22,7	24,0	23,0	24,3	24,5
	3H	23,8	25,1	24,2	25,4	25,6	23,9	25,2	24,3	25,5	25,7
	4H	24,3	25,6	24,7	25,9	26,1	24,4	25,7	24,8	25,9	26,2
	6H	24,9	26,0	25,2	26,2	26,6	24,8	25,9	25,2	26,2	26,6
	8H	25,0	26,1	25,4	26,4	26,8	24,9	26,0	25,3	26,3	26,7
	12H	25,2	26,2	25,5	26,5	27,0	25,0	26,0	25,4	26,4	26,8
4H	2H	23,0	24,3	23,4	24,5	24,8	23,2	24,5	23,6	24,7	25,0
	3H	24,6	25,7	25,0	26,0	26,5	24,7	25,8	25,1	26,1	26,6
	4H	25,3	26,2	25,7	26,6	27,2	25,3	26,2	25,7	26,7	27,2
	6H	25,8	26,8	26,3	27,1	27,5	25,8	26,7	26,3	27,0	27,4
	8H	26,1	26,9	26,6	27,3	27,7	25,9	26,8	26,4	27,1	27,5
	12H	26,3	27,0	26,8	27,4	27,9	26,0	26,7	26,5	27,2	27,6
8H	4H	25,5	26,4	26,1	26,8	27,1	25,6	26,4	26,1	26,8	27,2
	6H	26,3	27,0	26,8	27,4	28,0	26,2	26,9	26,7	27,3	27,9
	8H	26,7	27,2	27,2	27,8	28,4	26,5	27,1	27,0	27,6	28,2
	12H	27,0	27,5	27,6	28,0	28,6	26,7	27,2	27,3	27,7	28,3
12H	4H	25,6	26,3	26,1	26,7	27,2	25,6	26,3	26,1	26,7	27,2
	6H	26,4	27,0	26,9	27,5	28,1	26,3	26,9	26,8	27,4	28,1
	8H	26,8	27,3	27,4	27,8	28,4	26,6	27,1	27,2	27,6	28,2
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,1					0,1 / -0,1				
S = 1.5H		0,1 / -0,3					0,2 / -0,3				
S = 2.0H		0,4 / -0,5					0,5 / -0,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1031 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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	107	102	98	93	104	100	95	92	95	91	88	90	88	85	86	84	82	80
2	97	89	82	76	94	87	80	74	82	77	72	79	74	70	75	72	68	66
3	89	78	69	63	86	76	68	62	72	66	60	69	64	59	66	62	58	55
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49	47
5	74	61	52	45	72	60	51	45	58	50	44	55	49	44	53	47	43	41
6	69	55	46	40	67	54	46	39	52	44	39	50	43	38	48	42	38	35
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

LAMPS (number of lamps)

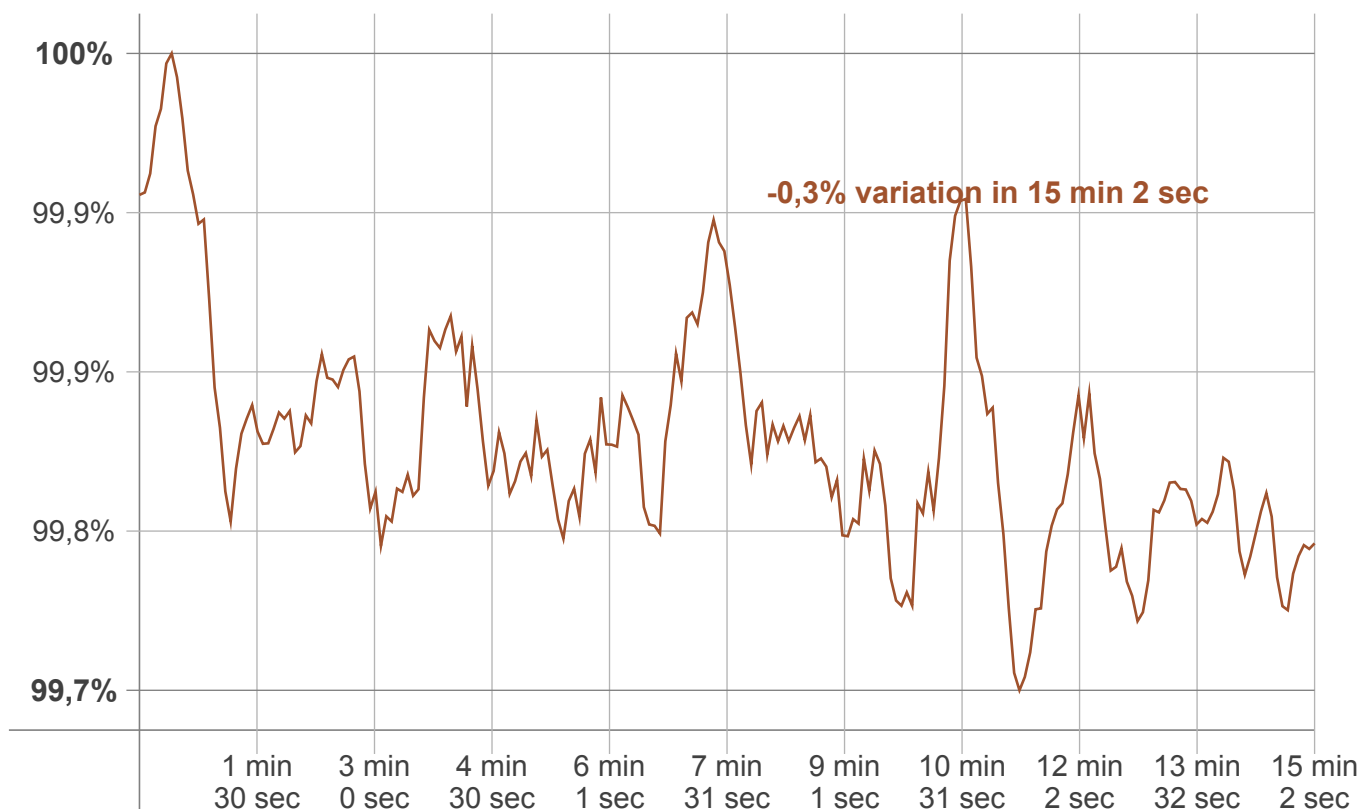
## Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
32,0 lm	92,0 lm	140 lm	169 lm	175 lm	157 lm	121 lm	77,0 lm	37,4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
11,1 lm	4,34 lm	3,67 lm	3,32 lm	2,76 lm	2,18 lm	1,61 lm	0,984 lm	0,331 lm

### Warmup curve



### Warmup result

Warmup time:	15 min 2 sec
Warmup variation	-0,3%

### Warmup conditions

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

### Color temperature change

CCT start	CCT change	CCT end
5447 K	+3 K	5450 K

### Output change

Output start	Output change	Output end
1032 lm	-1 lm	1031 lm