

### Light efficiency:

**47 Lumen/Watt**

### Light quality:

**CRI: 92,7**

### Color temperature:

**5125 K**

**Output: 470 lm**

**Peak: 120 cd**

**Power: 10,1 W**

**PF: 1,0**



### Product name:

**Pegasus-4-0508-956-CRW**

### Item number:

**FLNP/L/09D0508/956/CRW**

### Date and time:

**06.04.2021 14:32:56**

### Description:

**Rank: G7-2G0**

**Toleranzen:**

**Lumen +/-4%**

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

**Colour Temp +/-35 K**

**CRI +/-0,7**

**Angular Resolution 1 Grad step**

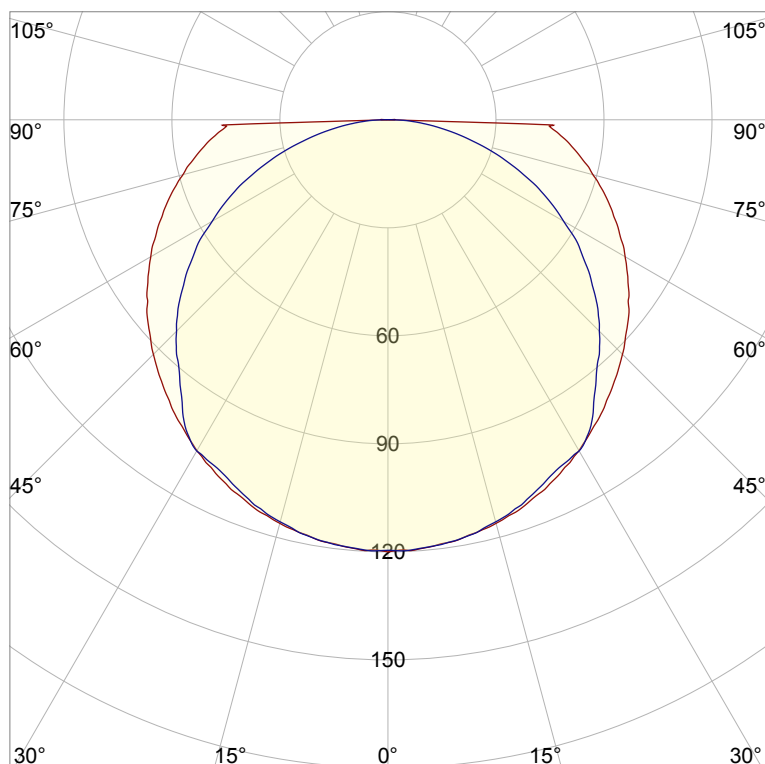
**Last Calibration 20-05-2020**

**Pruefer: Peter Ulrich**

**Pruefort: Lichtlabor**

**Gaustrasse 13**

**55411 Bingen am Rhein**

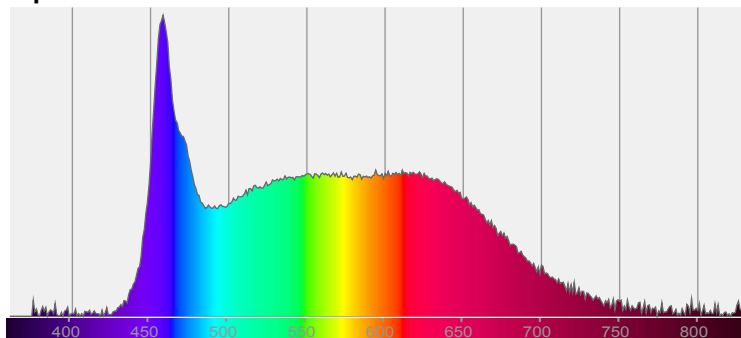


**CIE 1931**

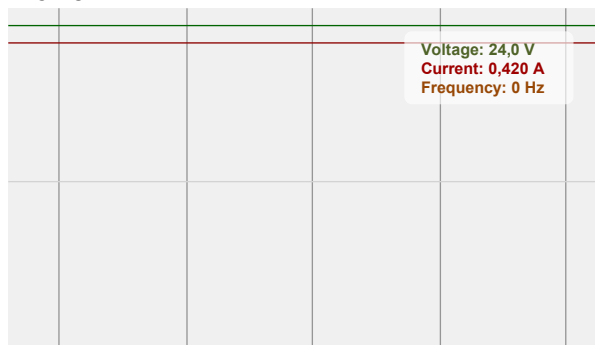
**x: 0,342**

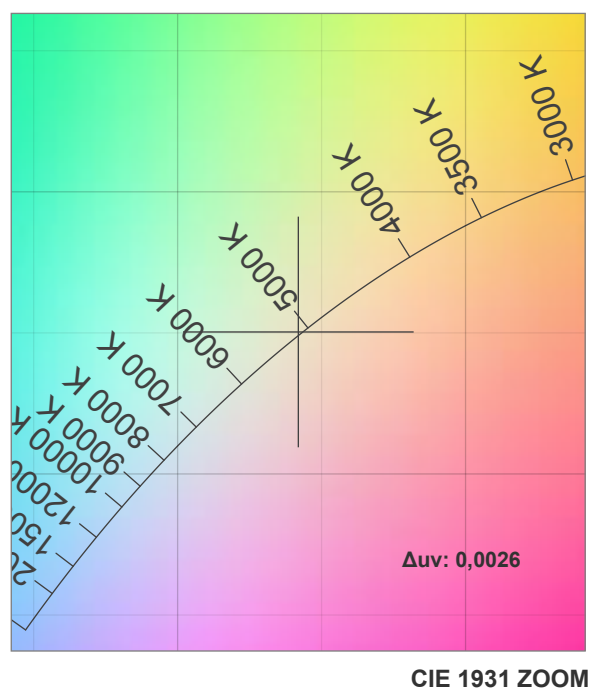
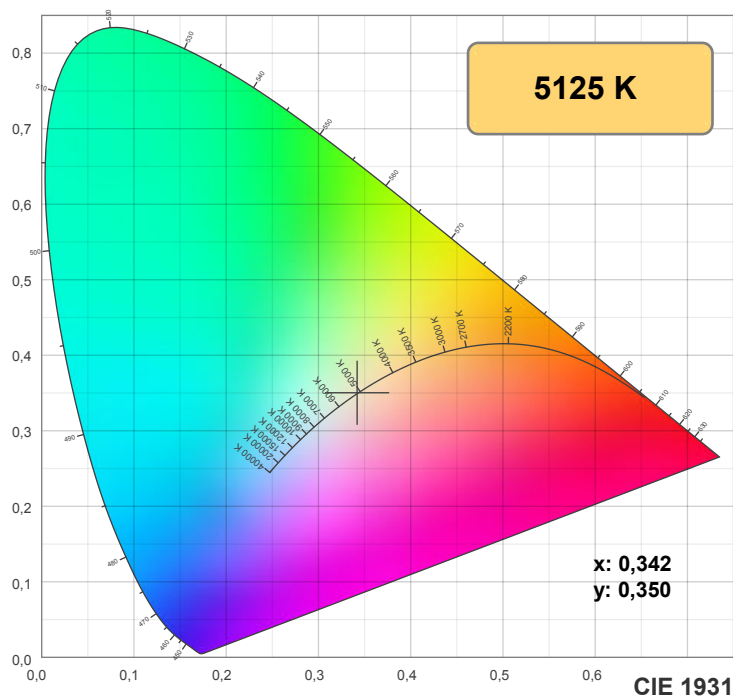
**y: 0,350**

### Spectra

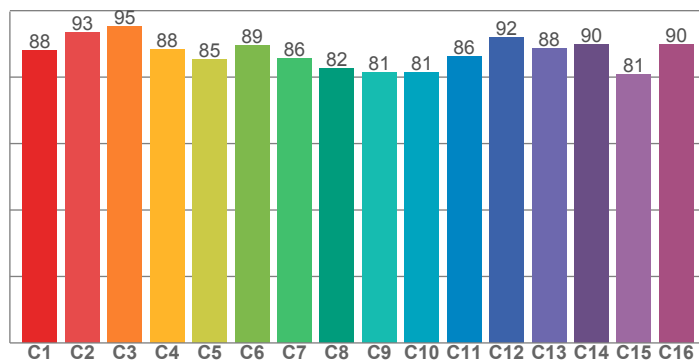


### Power

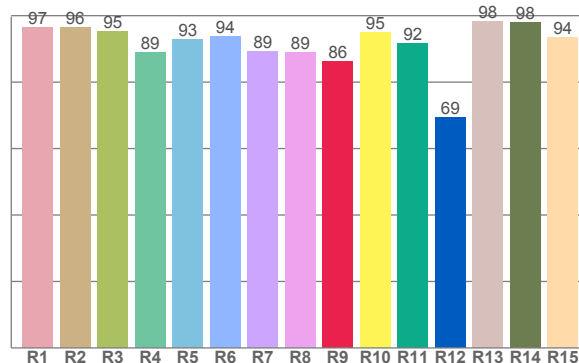




**TM30: 87,3**



**CRI: 92,7 (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
96,5	96,4	95,2	88,8	92,7	93,7	89,3	89,0	86,2	94,9	91,7	69,5	98,1	98,1	93,6

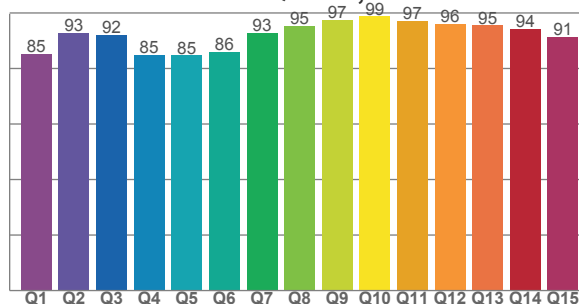
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,0	93,4	95,3	88,3	85,4	89,4	85,6	82,5	81,4	81,4	86,3	91,9	88,5	89,8	80,7	89,7

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,3	92,7	92,0	84,8	84,7	85,8	92,9	95,4	97,4	98,7	97,3	96,1	95,5	94,3	91,5

**CQS: 91,0**



## 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
5125 K	92,7	86,2	87,3	94,9	91,0	0,342	0,350	0,210	0,322	0,0026

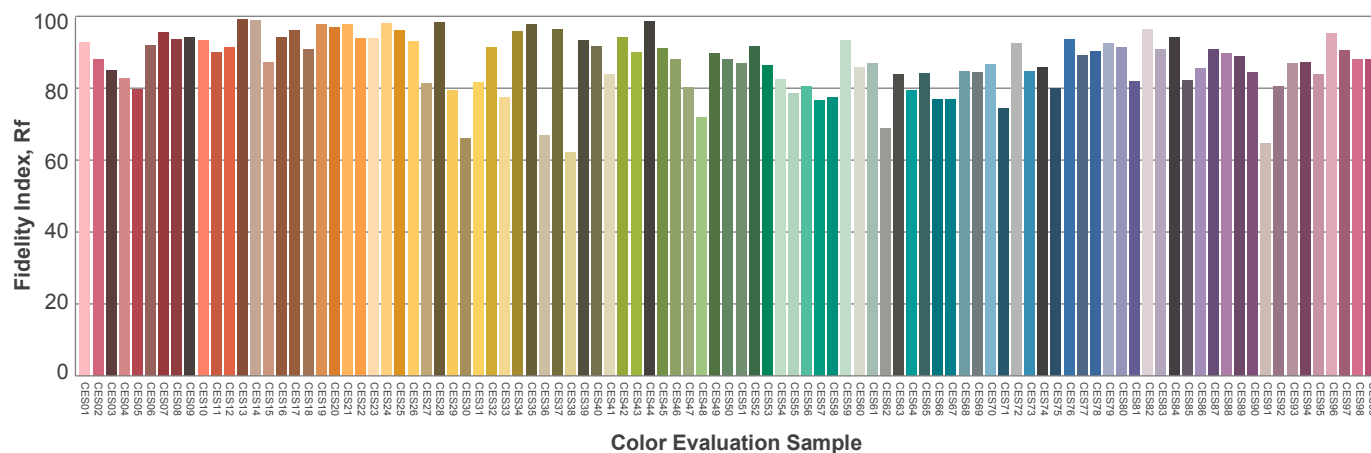
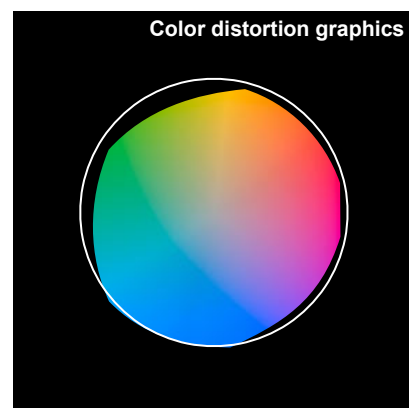
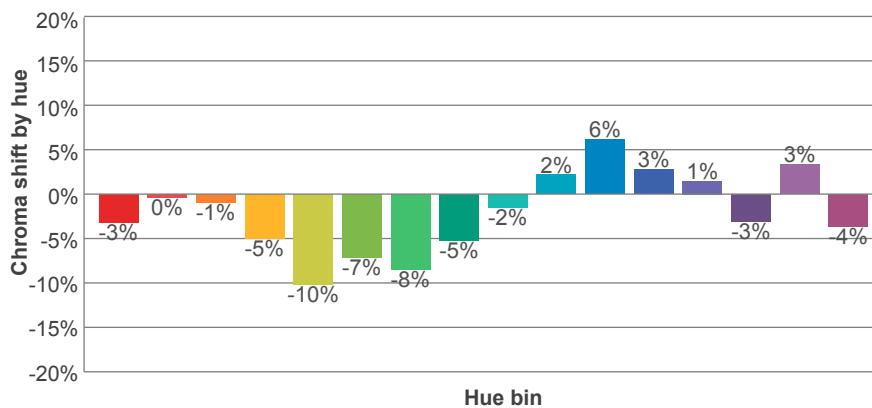
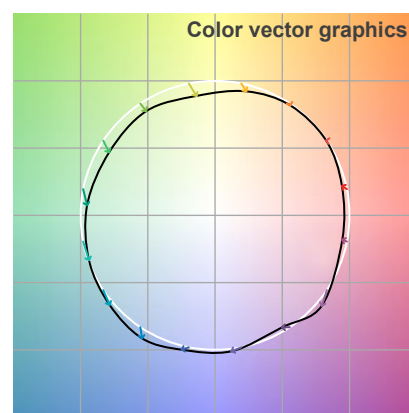
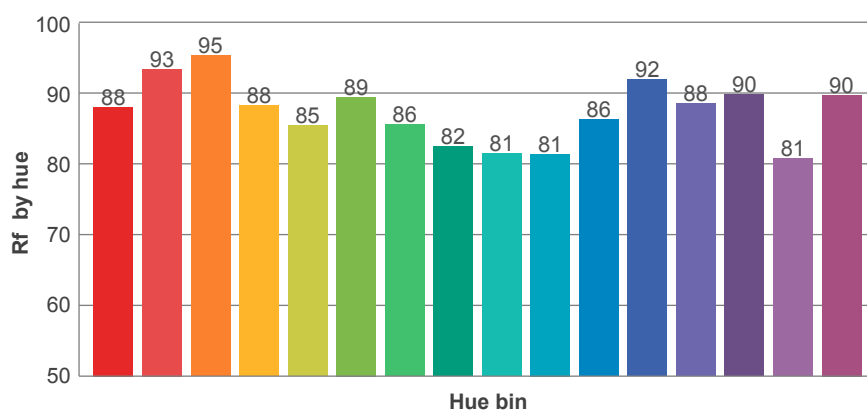
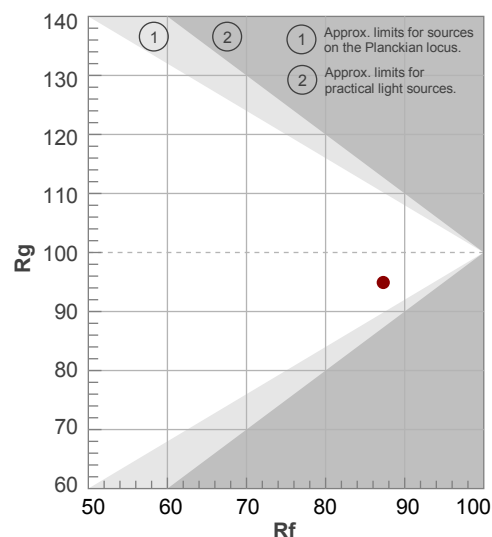
**Rf 87,3**

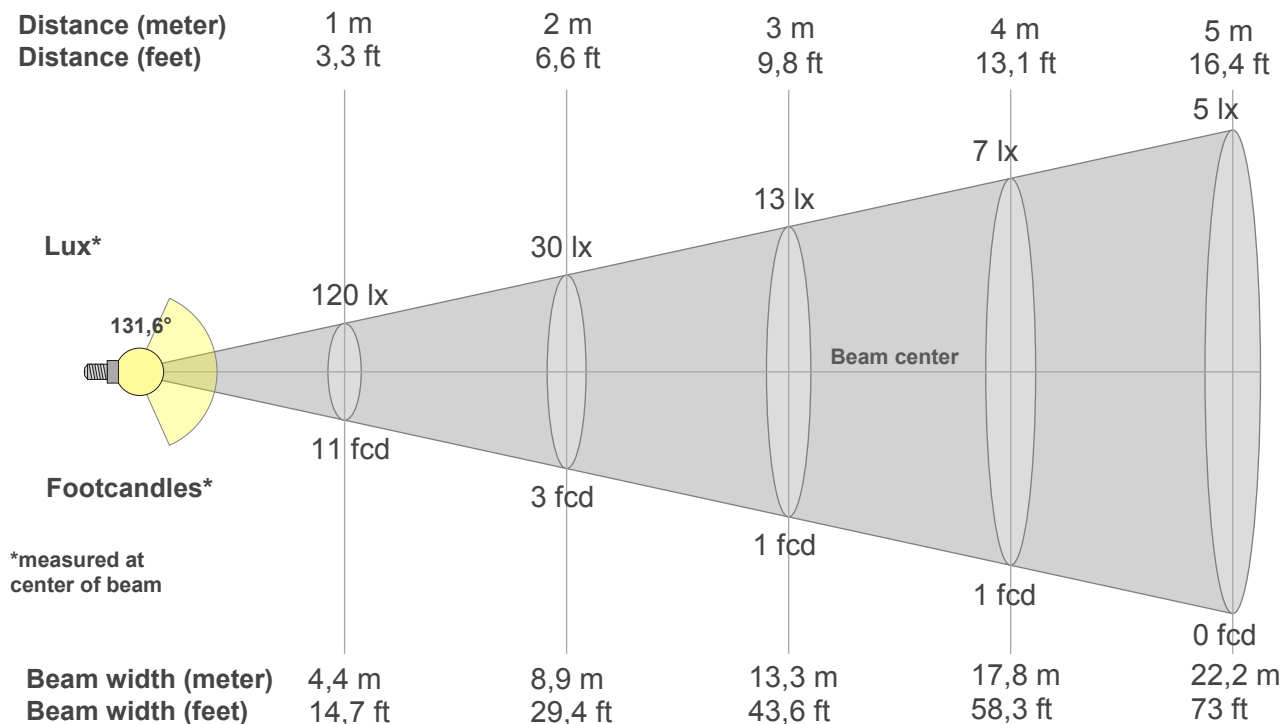
Fidelity index Rf

**Rg 94,9**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	88	-3%	3%
2	93	0%	0%
3	95	-1%	-1%
4	88	-5%	-5%
5	85	-10%	-4%
6	89	-7%	0%
7	86	-8%	5%
8	82	-5%	11%
9	81	-2%	14%
10	81	2%	12%
11	86	6%	6%
12	92	3%	-5%
13	88	1%	-8%
14	90	-3%	-5%
15	81	3%	-12%
16	90	-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
120lx	30lx	13lx	7lx	5lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx
11,1fcd	2,8fcd	1,2fcd	0,7fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

## Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
120	118	115	108	101	92	83	73	63	52	24	21	19	16	14	12	9	7	4	2
100%	99%	96%	90%	84%	77%	69%	61%	52%	44%	20%	18%	16%	14%	12%	10%	8%	6%	4%	2%

## Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
120	118	114	107	97	83	68	51	32	15	1	0	0	0	0	0	0	0	0	0
100%	99%	95%	90%	81%	69%	57%	42%	27%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

## Intensities in 180° c-plane

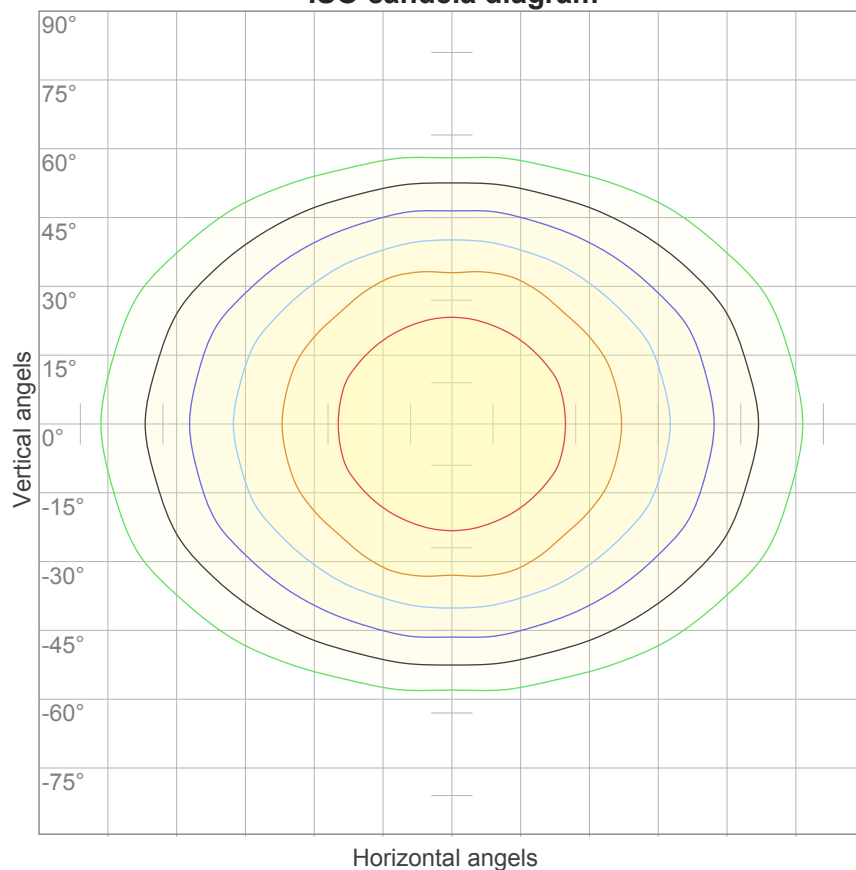
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
120	118	115	108	101	92	83	73	63	52	24	21	19	16	14	12	9	7	4	2
100%	99%	96%	90%	84%	77%	69%	61%	52%	44%	20%	18%	16%	14%	12%	10%	8%	6%	4%	2%

## Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
120	118	114	107	97	83	68	51	32	15	1	0	0	0	0	0	0	0	0	0
100%	99%	95%	90%	81%	69%	57%	42%	27%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
131,6°	193,3°	211,7°	61,9%	40,6%

ISO candela diagram



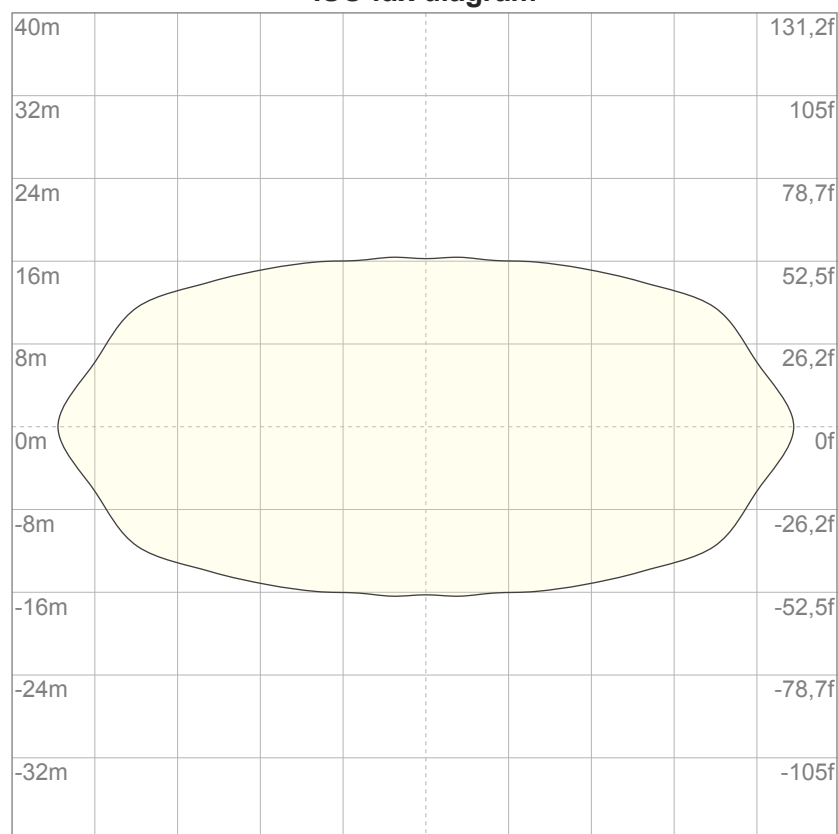
10%	12 cd
20%	24 cd
30%	36 cd
40%	48 cd
50%	60 cd
60%	72 cd
70%	84 cd
80%	96 cd
90%	108 cd

Conditions:

Number of c-planes: 16

Candela at center: 120 cd

ISO lux diagram



3%	35,9m lx
5%	59,9m lx
10%	0,120 lx
30%	0,359 lx
50%	0,599 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,20 lx

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

### Glare Evaluation According to UGR

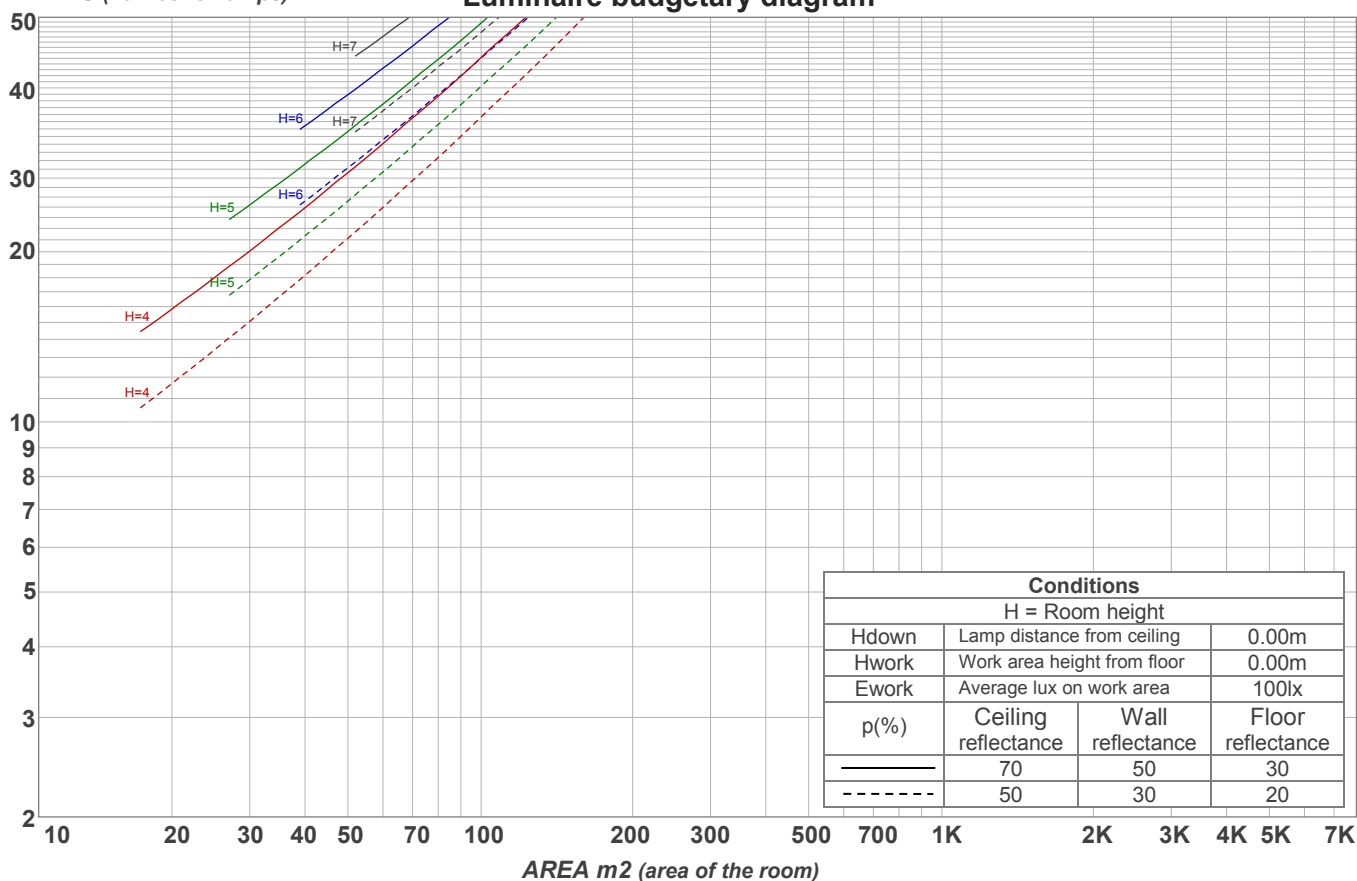
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19,4	20,8	19,7	21,1	21,4	19,3	20,7	19,6	21,0	21,3
	3H	21,5	22,9	21,9	23,2	23,4	20,9	22,4	21,4	22,7	22,9
	4H	22,5	23,9	22,9	24,2	24,4	21,7	23,0	22,1	23,3	23,6
	6H	23,7	24,9	24,0	25,1	25,5	22,3	23,5	22,6	23,8	24,2
	8H	24,1	25,3	24,5	25,6	26,0	22,5	23,7	22,9	24,0	24,4
	12H	24,6	25,8	25,0	26,1	26,6	22,6	23,8	23,0	24,1	24,6
4H	2H	20,1	21,5	20,5	21,7	22,0	20,0	21,4	20,4	21,7	21,9
	3H	22,5	23,6	22,8	24,0	24,4	22,0	23,1	22,3	23,4	23,9
	4H	23,6	24,7	24,1	25,1	25,7	22,7	23,8	23,2	24,2	24,8
	6H	24,9	25,9	25,4	26,2	26,6	23,5	24,5	24,0	24,8	25,2
	8H	25,5	26,4	26,0	26,8	27,2	23,7	24,7	24,2	25,1	25,4
	12H	26,0	26,9	26,5	27,3	27,8	24,0	24,8	24,4	25,2	25,7
8H	4H	24,0	25,0	24,5	25,3	25,7	23,3	24,2	23,8	24,6	25,0
	6H	25,5	26,3	26,0	26,7	27,3	24,2	25,0	24,7	25,4	26,0
	8H	26,3	27,0	26,8	27,5	28,1	24,6	25,3	25,2	25,8	26,5
	12H	27,1	27,6	27,6	28,1	28,8	25,0	25,6	25,6	26,1	26,7
12H	4H	24,1	24,9	24,5	25,3	25,8	23,4	24,2	23,9	24,6	25,1
	6H	25,6	26,3	26,2	26,8	27,5	24,4	25,1	25,0	25,6	26,3
	8H	26,5	27,1	27,1	27,6	28,2	24,9	25,5	25,5	26,0	26,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / 0,0					0,0 / -0,1				
S = 1.5H		0,1 / -0,1					0,1 / -0,1				
S = 2.0H		0,2 / -0,2					0,3 / -0,3				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 470 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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	104	98	93	88	100	95	90	86	89	85	81	84	80	77	78	76	74	71
2	93	84	76	69	90	81	74	68	76	70	65	72	67	62	67	63	60	57
3	85	73	64	57	81	71	62	55	66	59	53	62	56	51	59	54	49	47
4	77	64	54	47	74	62	53	46	58	51	45	55	48	43	52	46	42	39
5	71	57	47	40	68	55	46	40	52	44	38	49	42	37	46	41	36	33
6	65	51	42	35	63	50	41	34	47	39	33	44	37	32	42	36	31	29
7	60	46	37	30	58	45	36	30	42	35	29	40	33	28	38	32	28	25
8	56	42	33	27	54	41	32	27	39	31	26	37	30	25	35	29	25	22
9	52	38	30	24	50	37	29	24	36	28	23	34	27	23	32	26	22	20
10	49	35	27	22	47	34	27	21	33	26	21	31	25	20	30	24	20	18

LAMPS (number of lamps)

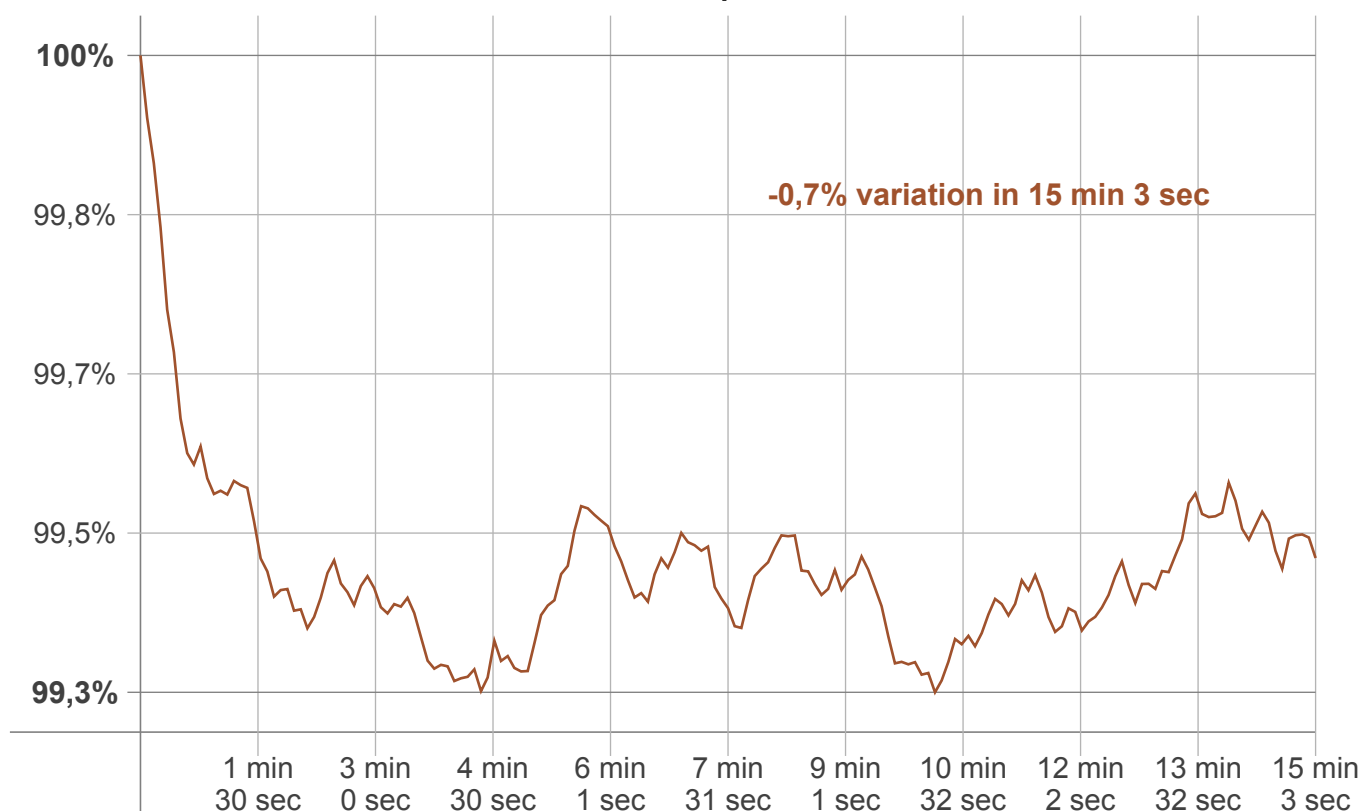
Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
11,3 lm	32,7 lm	50,4 lm	62,7 lm	67,7 lm	66,3 lm	59,0 lm	47,5 lm	32,3 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
15,0 lm	6,62 lm	5,94 lm	5,37 lm	3,09 lm	1,87 lm	1,38 lm	0,844 lm	0,284 lm

## Warmup curve



## Warmup result

Warmup time:	15 min 3 sec
Warmup variation	-0,7%

## Warmup conditions

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

## Color temperature change

CCT start	CCT change	CCT end
5121 K	+4 K	5125 K

## Output change

Output start	Output change	Output end
472 lm	-2 lm	470 lm