

### Light efficiency:

88 Lumen/Watt

### Light quality:

CRI: 82,2

### Color temperature:

2241 K

Output: 1061 lm

Peak: 361 cd

Power: 12,0 W

PF: 1,0



### Product name:

**Pegasus-3-Gold-0508-822-CRT**

### Item number:

**FLNP-L-16A-0508-822-CRT**

### Date and time:

**17.03.2021 12:04:51**

### Description:

**Rank: M1A4T**

**Toleranzen:**

**Lumen +/-4%**

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

**Colour Temp +/-35 Grad K**

**CRI +/-0,7**

**Angular Resolution 1 Grad step**

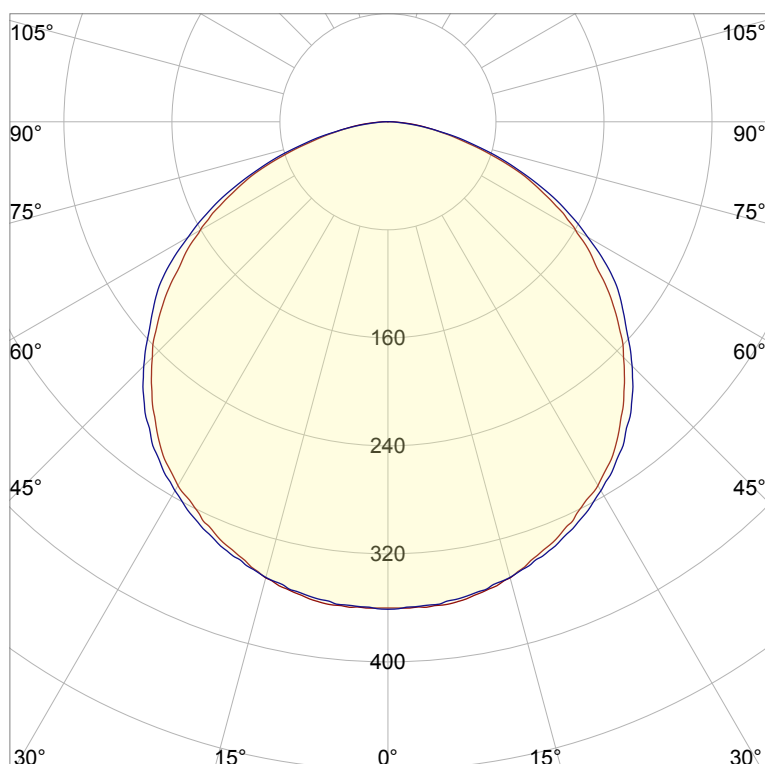
**Last Calibration 20-05-2020**

**Pruefer: Peter Ulrich**

**Pruefort: Lichtlabor**

**Gaustrasse13-15**

**55411 Bingen am Rhein**

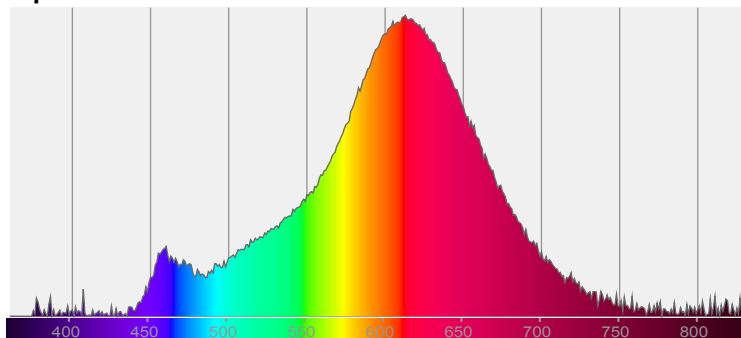


CIE 1931

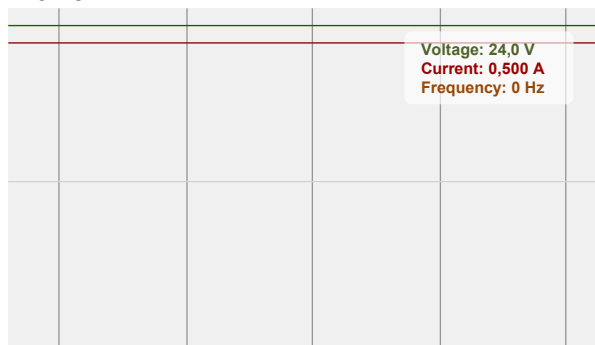
x: 0,500

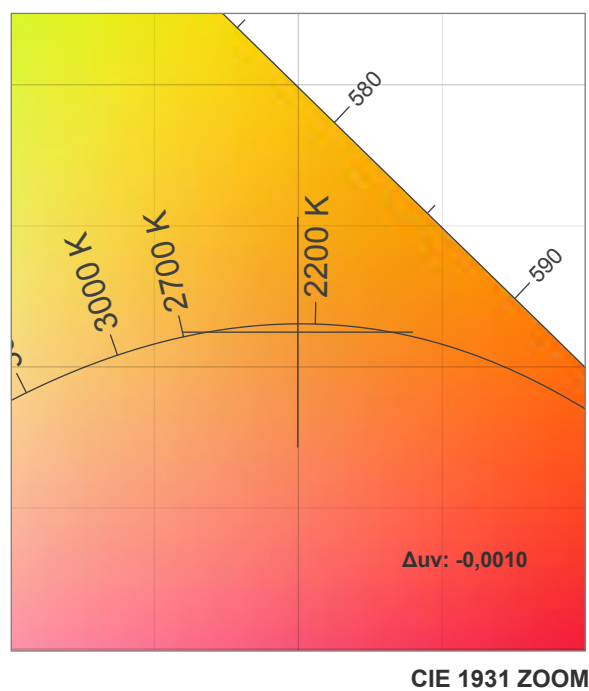
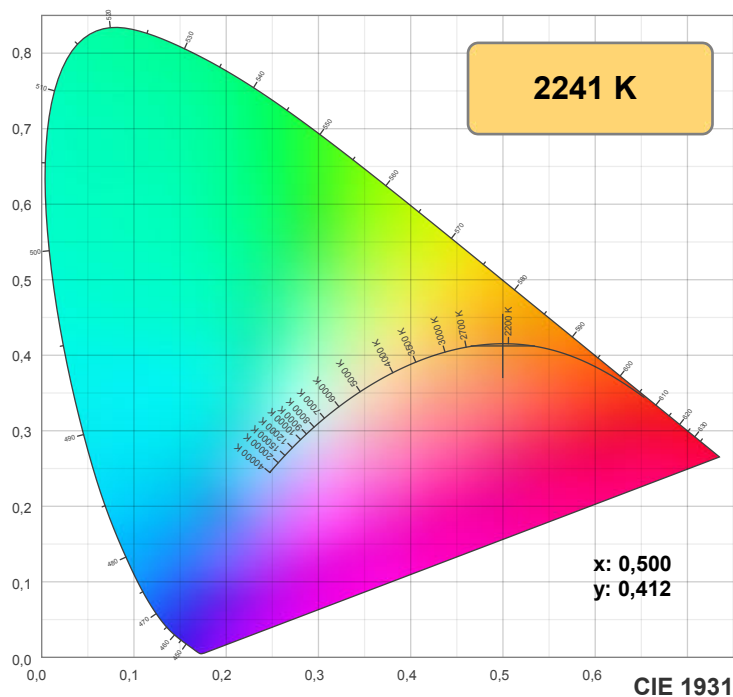
y: 0,412

### Spectra

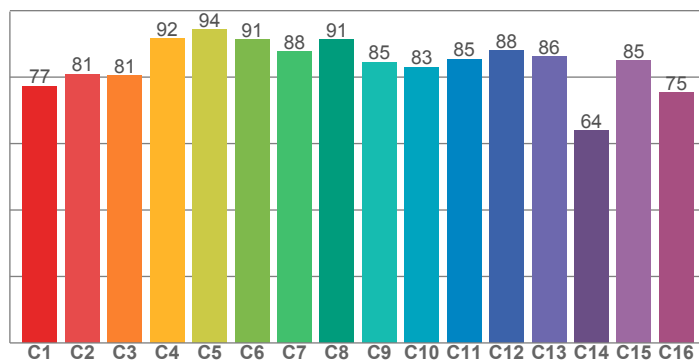


### Power

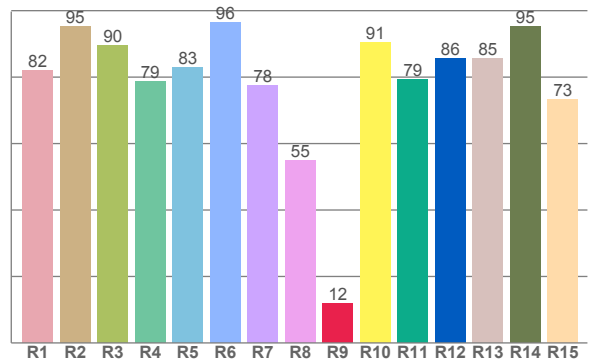




**TM30: 84,5**



**CRI: 82,2 (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
82,1	95,3	89,6	78,7	83,0	96,4	77,6	54,9	11,9	90,5	79,2	85,5	85,5	95,1	73,2

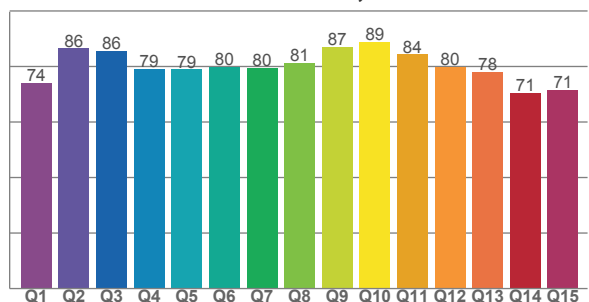
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77,3	81,0	80,6	91,6	94,4	91,4	87,6	91,2	84,5	83,0	85,4	88,0	86,1	63,8	85,1	75,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
74,0	86,5	85,5	79,1	78,9	79,7	79,6	81,4	87,0	88,7	84,3	80,0	78,1	70,6	71,5

**CQS: 79,3**



## 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	$\Delta uv$
2241 K	82,2	11,9	84,5	94,0	79,3	0,500	0,412	0,288	0,356	-0,0010

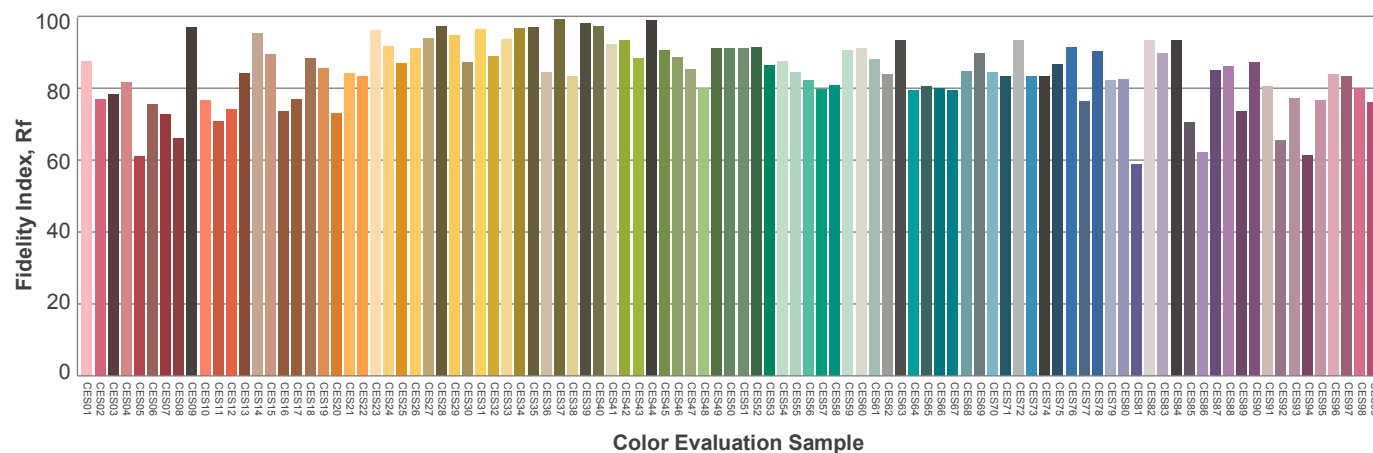
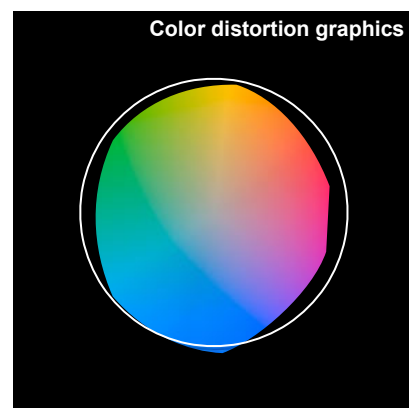
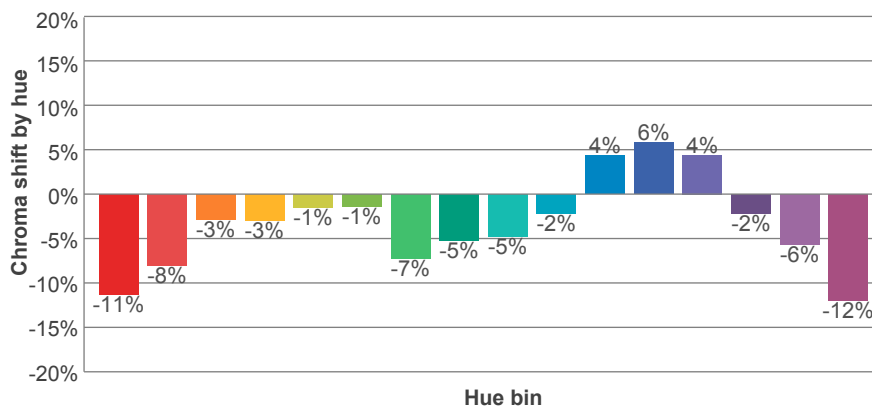
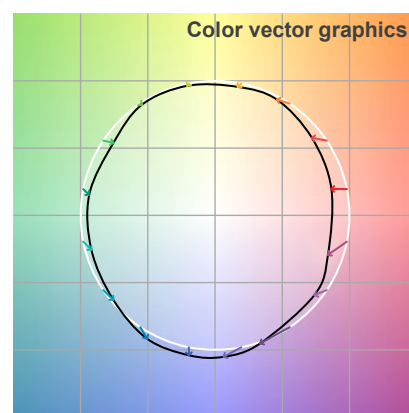
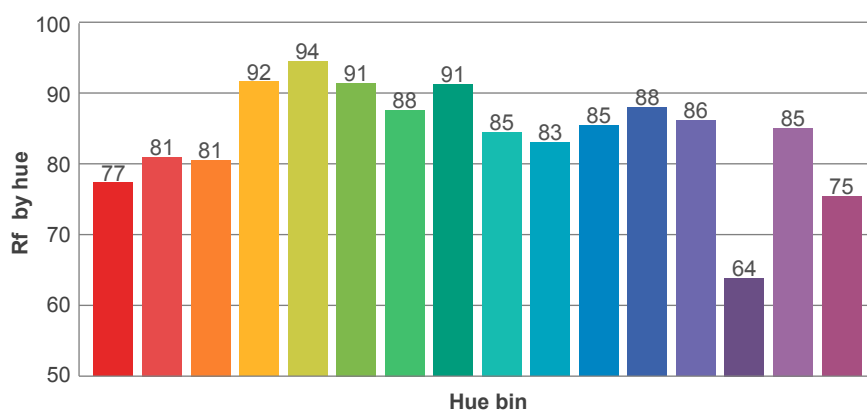
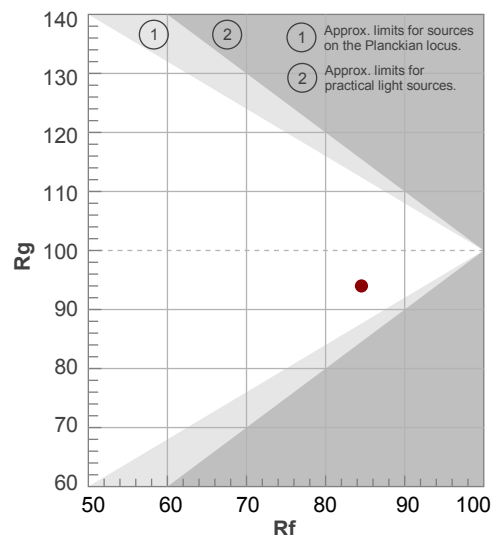
**Rf 84,5**

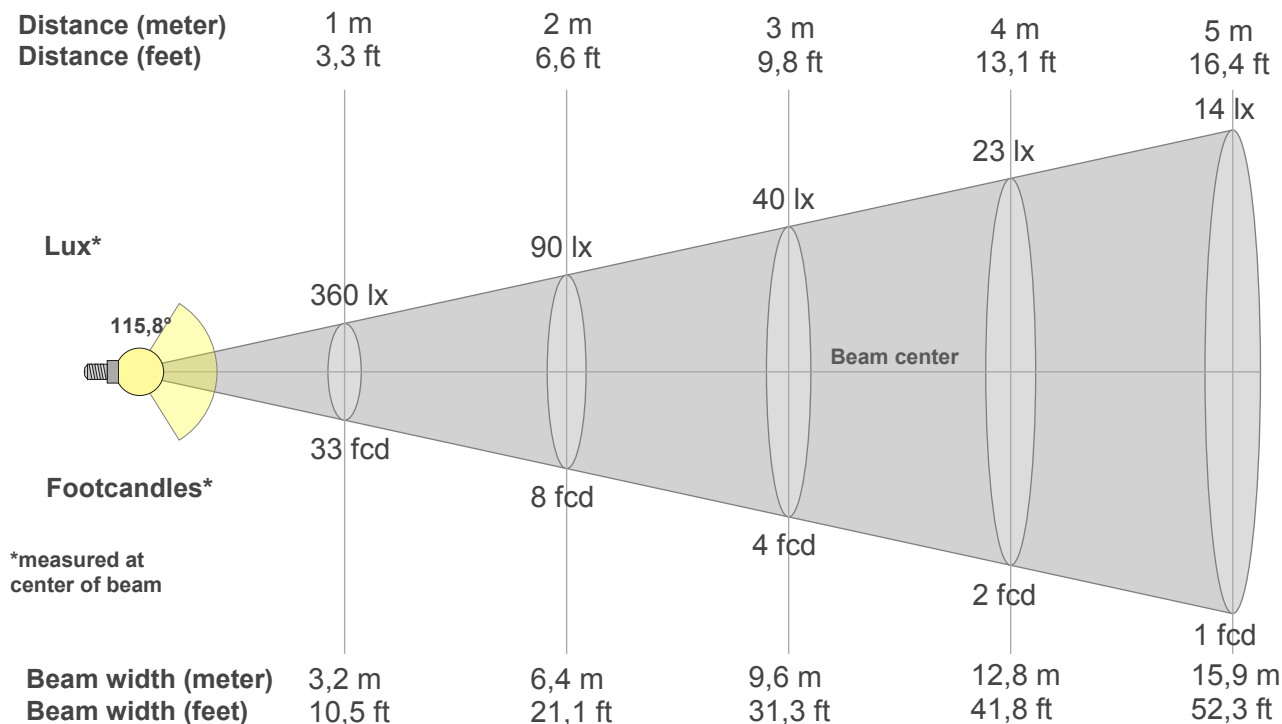
Fidelity index Rf

**Rg 94,0**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	77	-11%	2%
2	81	-8%	8%
3	81	-3%	10%
4	92	-3%	2%
5	94	-1%	1%
6	91	-1%	-1%
7	88	-7%	-3%
8	91	-5%	3%
9	85	-5%	7%
10	83	-2%	10%
11	85	4%	9%
12	88	6%	1%
13	86	4%	-14%
14	64	-2%	-25%
15	85	-6%	-8%
16	75	-12%	-12%





## 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
360lx	90lx	40lx	23lx	14lx	10lx	7lx	6lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
33,5fcd	8,4fcd	3,7fcd	2,1fcd	1,3fcd	0,9fcd	0,7fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	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°
360	360	357	350	337	325	311	294	271	247	220	189	160	129	97	61	35	15	3	3
100%	100%	99%	97%	94%	90%	86%	81%	75%	68%	61%	52%	45%	36%	27%	17%	10%	4%	1%	1%

## 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°
360	359	355	349	341	329	315	299	280	256	229	204	171	138	101	66	35	12	1	0
100%	100%	99%	97%	94%	91%	88%	83%	78%	71%	64%	57%	47%	38%	28%	18%	10%	3%	0%	0%

## Intensities in 180° c-plane

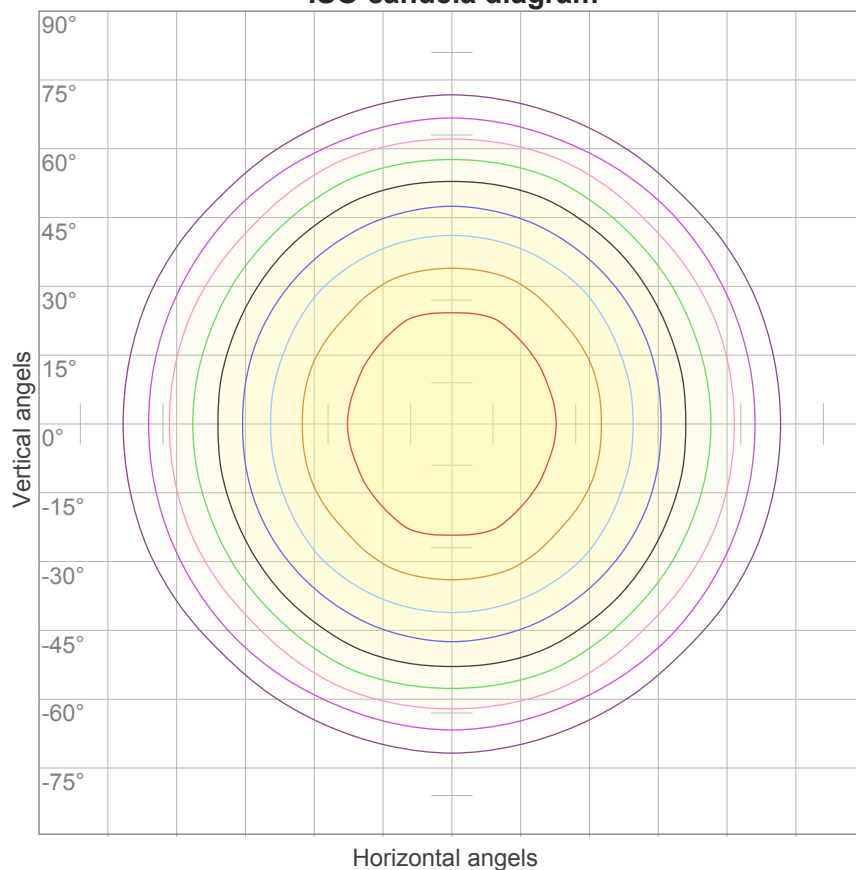
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
360	360	357	350	337	325	311	294	271	247	220	189	160	129	97	61	35	15	3	3
100%	100%	99%	97%	94%	90%	86%	81%	75%	68%	61%	52%	45%	36%	27%	17%	10%	4%	1%	1%

## 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°
360	359	355	349	341	329	315	299	280	256	229	204	171	138	101	66	35	12	1	0
100%	100%	99%	97%	94%	91%	88%	83%	78%	71%	64%	57%	47%	38%	28%	18%	10%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
115,8°	158,7°	172,4°	79,2%	53,4%

ISO candela diagram



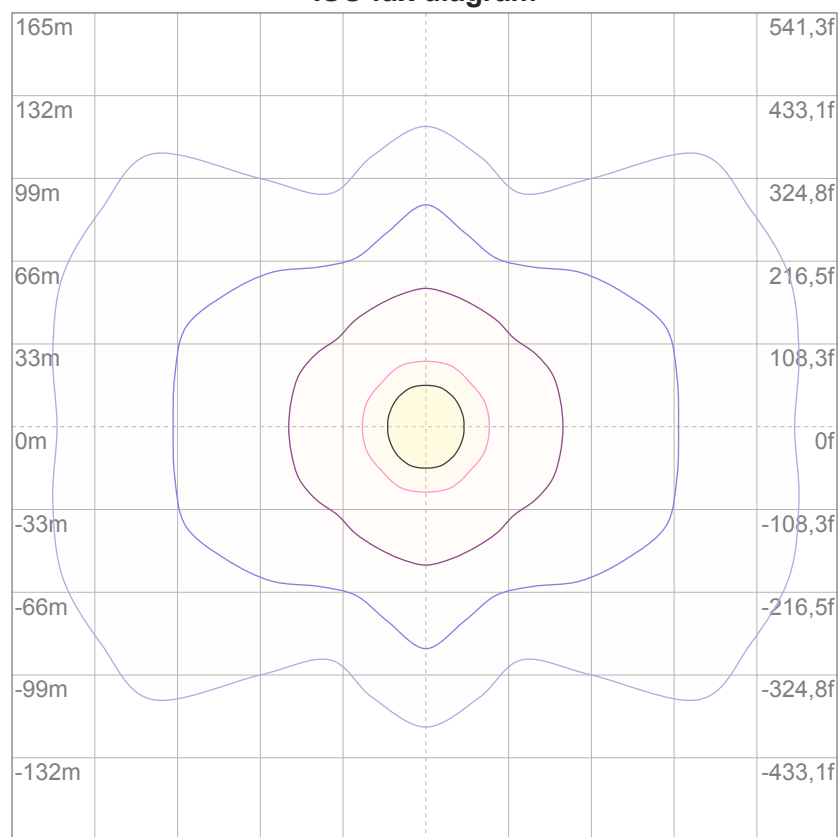
10%	36 cd
20%	72 cd
30%	108 cd
40%	144 cd
50%	180 cd
60%	216 cd
70%	252 cd
80%	288 cd
90%	324 cd

Conditions:

Number of c-planes: 16

Candela at center: 360 cd

ISO lux diagram



3%	0,108 lx
5%	0,180 lx
10%	0,360 lx
30%	1,08 lx
50%	1,80 lx

Conditions:

Number of c-planes: 16

Lux at center: 3,60 lx

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

### Glare Evaluation According to UGR

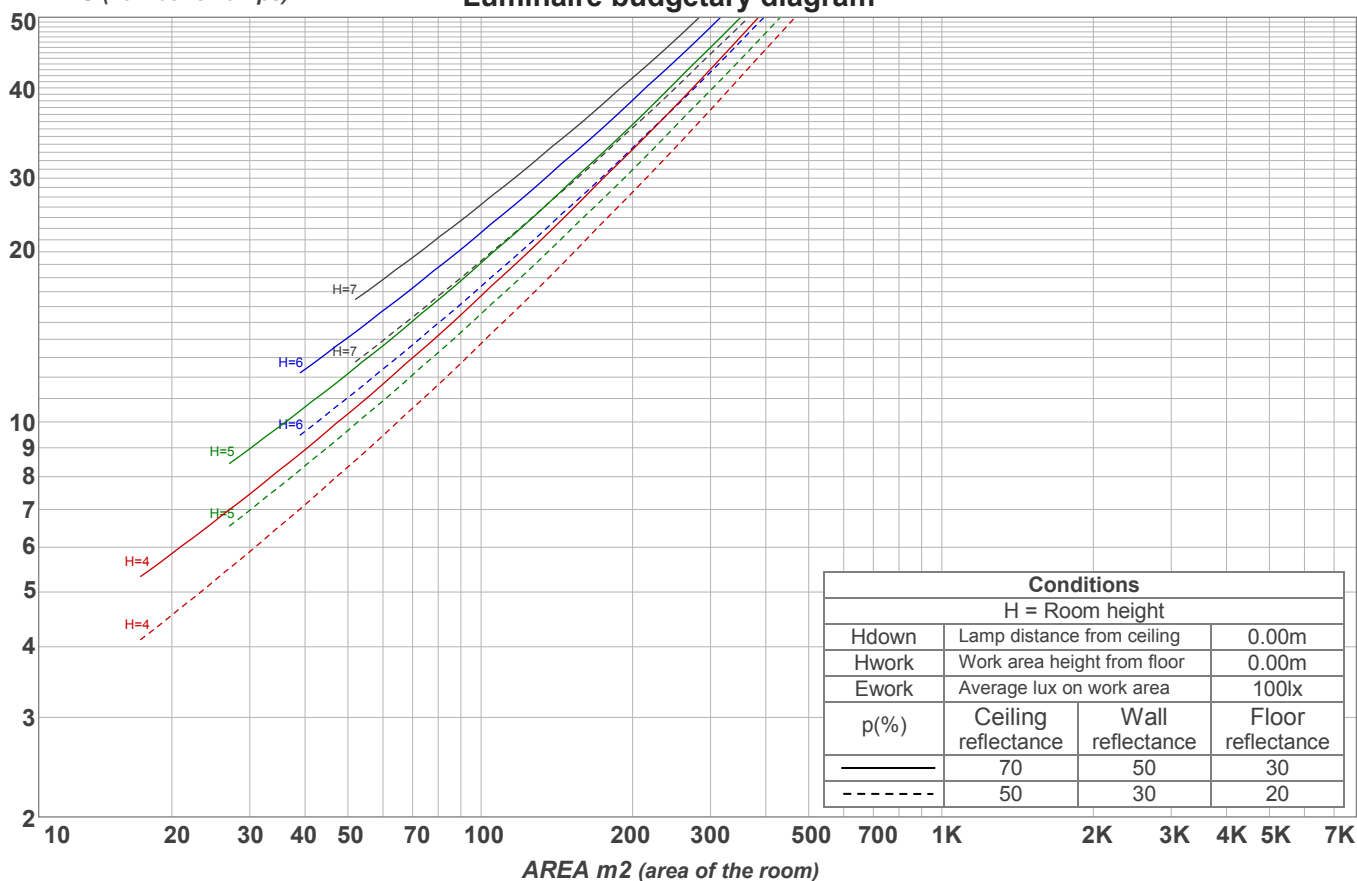
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	22,6	23,9	22,9	24,2	24,4	24,0	25,2	24,2	25,5	25,7
	3H	23,7	24,9	24,1	25,2	25,4	25,3	26,6	25,8	26,9	27,1
	4H	24,0	25,2	24,4	25,5	25,7	25,8	27,1	26,3	27,3	27,6
	6H	24,2	25,3	24,5	25,6	25,9	26,2	27,3	26,5	27,5	27,9
	8H	24,2	25,3	24,6	25,6	26,0	26,3	27,3	26,6	27,6	28,0
	12H	24,2	25,2	24,6	25,6	26,0	26,3	27,2	26,6	27,6	28,0
4H	2H	23,2	24,4	23,6	24,7	25,0	24,3	25,5	24,7	25,8	26,1
	3H	24,5	25,5	24,9	25,9	26,3	25,9	26,9	26,3	27,3	27,7
	4H	24,9	25,8	25,3	26,2	26,7	26,4	27,3	26,9	27,7	28,3
	6H	25,1	26,0	25,6	26,3	26,7	26,8	27,6	27,3	28,0	28,4
	8H	25,1	25,9	25,6	26,3	26,7	26,9	27,6	27,4	28,0	28,4
	12H	25,1	25,8	25,6	26,2	26,7	26,9	27,5	27,4	28,0	28,4
8H	4H	25,1	25,8	25,6	26,2	26,6	26,5	27,3	27,0	27,7	28,0
	6H	25,4	26,0	25,9	26,4	27,0	26,9	27,5	27,4	28,0	28,5
	8H	25,5	26,0	26,0	26,5	27,1	27,0	27,6	27,5	28,1	28,7
	12H	25,5	25,9	26,1	26,4	27,1	27,1	27,5	27,7	28,0	28,6
12H	4H	25,0	25,7	25,5	26,1	26,6	26,5	27,1	27,0	27,5	28,0
	6H	25,4	25,9	25,9	26,4	27,1	26,9	27,4	27,4	28,0	28,6
	8H	25,5	25,9	26,1	26,4	27,0	27,0	27,5	27,6	28,0	28,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					0,0 / -0,1				
S = 1.5H		0,4 / -0,6					0,3 / -0,4				
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 1061 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	101	101	101	99
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	62	55	80	69	61	54	66	59	54	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

LAMPS (number of lamps)

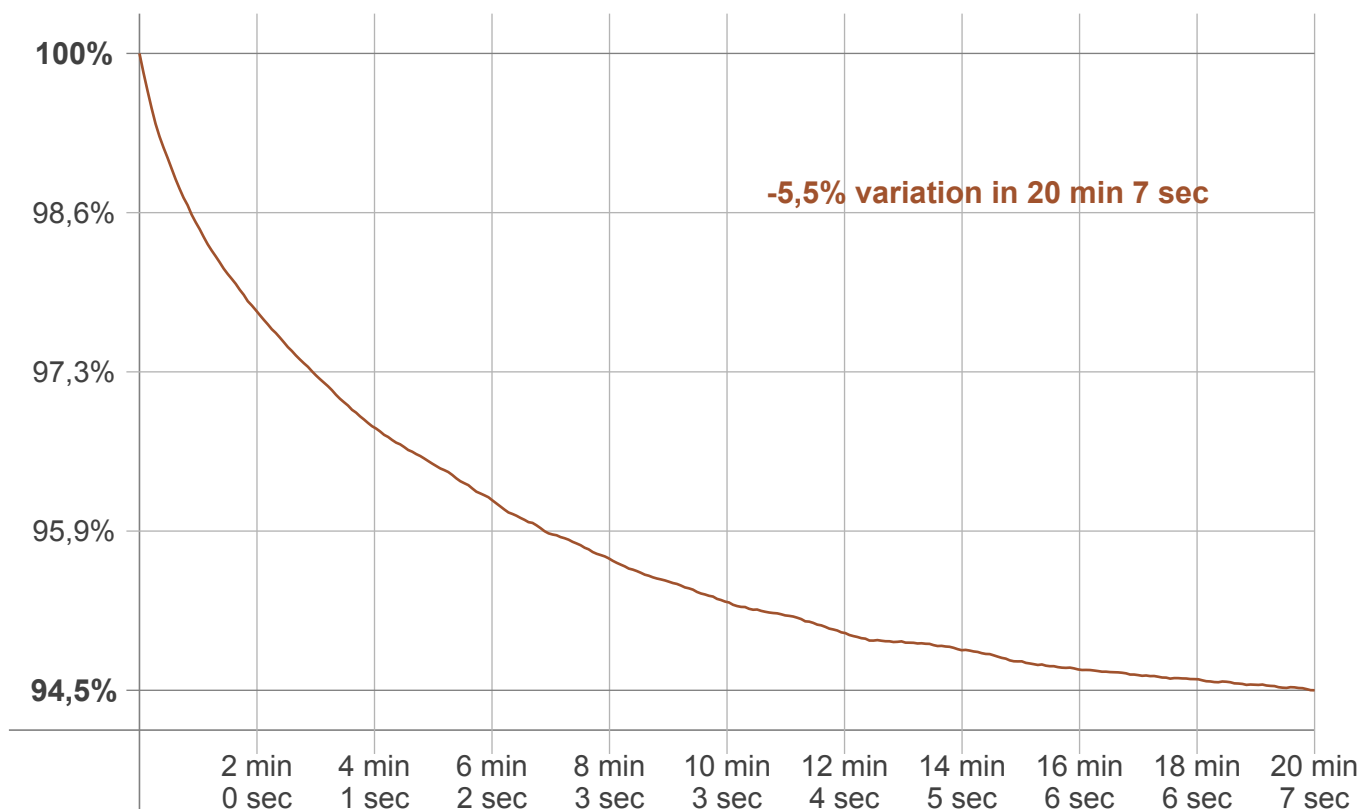
## Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
34,2 lm	98,6 lm	151 lm	185 lm	195 lm	177 lm	132 lm	67,1 lm	15,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,23 lm	1,43 lm	1,04 lm	0,889 lm	0,574 lm	0,341 lm	0,251 lm	0,154 lm	0,052 lm

### Warmup curve



### Warmup result

Warmup time:	20 min 7 sec
Warmup variation	-5,5%

### Warmup conditions

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

### Color temperature change

CCT start	CCT change	CCT end
2241 K	+0 K	2241 K

### Output change

Output start	Output change	Output end
1117 lm	-56 lm	1061 lm