

Light efficiency:

130 Lumen/Watt

Light quality:

CRI: 83,4

Color temperature:

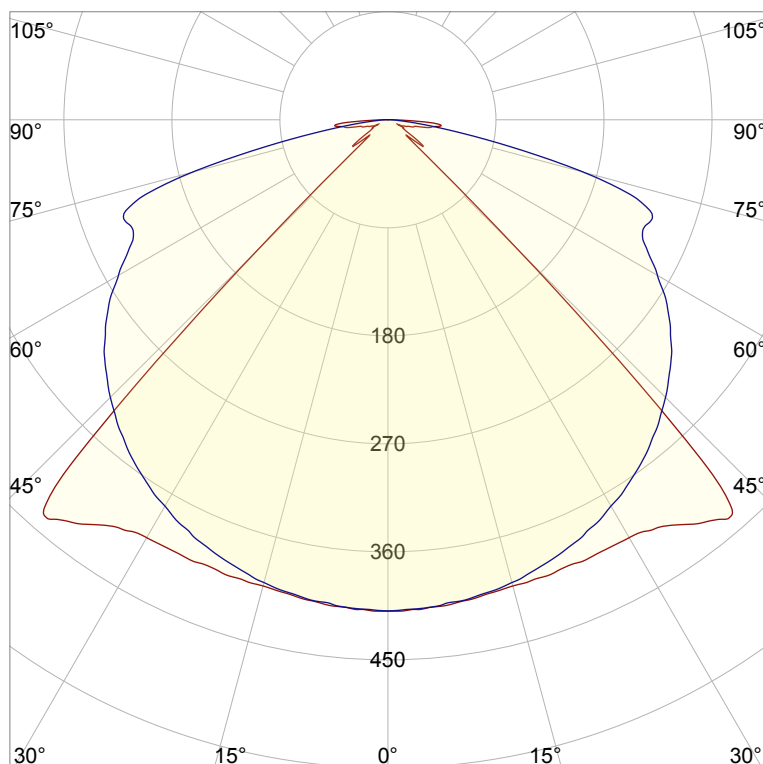
4071 K

Output: 1060 lm

Peak: 442 cd

Power: 8,2 W

PF: 1,0



Product name:

**Pegasus-3-Gold-0508-840-L9T**

Item number:

**FLNP-L-16A-0508-840-L9T**

Date and time:

**23.02.2021 10:53:14**

Description:

**Rank: S15ZT**

**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**

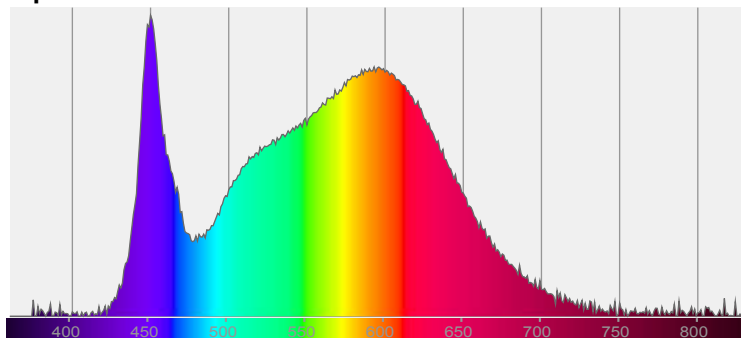


CIE 1931

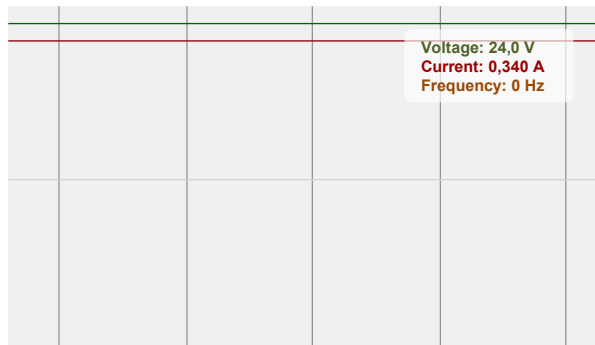
x: 0,378

y: 0,376

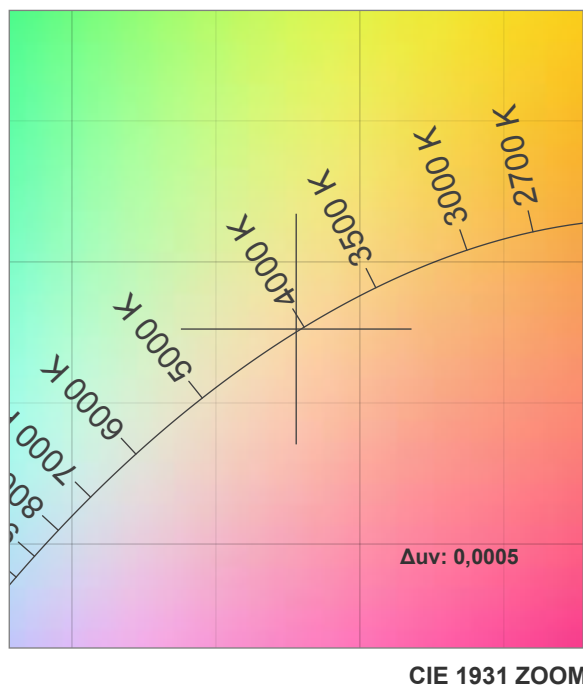
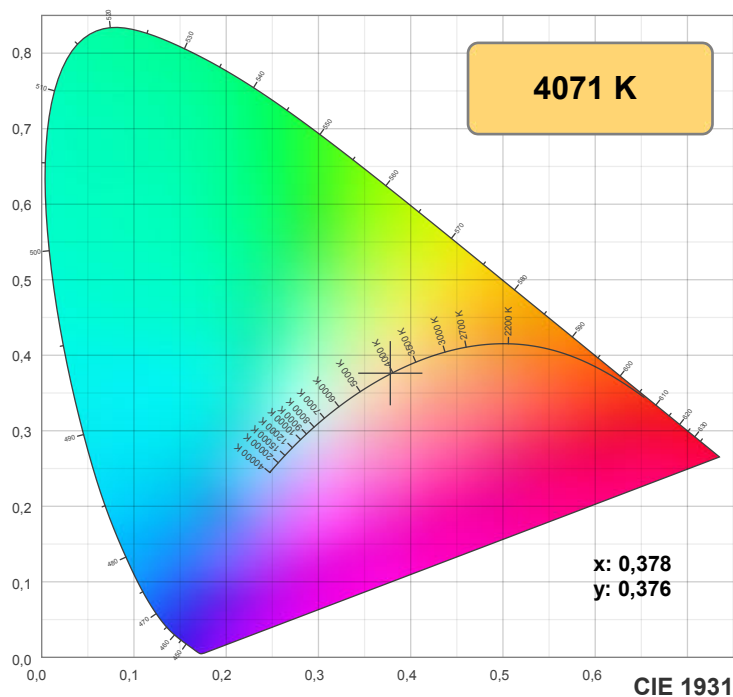
Spectra



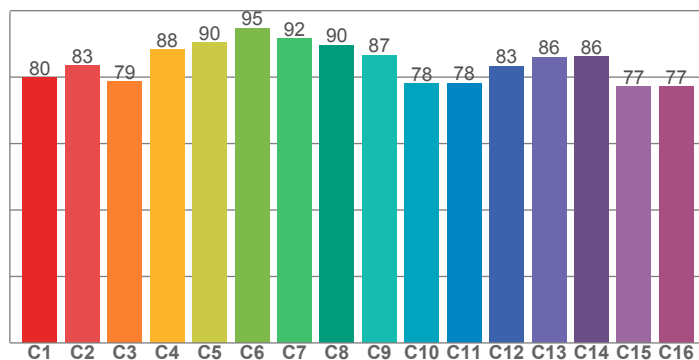
Power



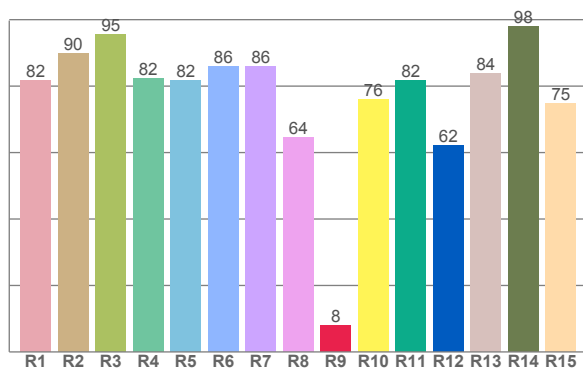
Voltage: 24,0 V  
Current: 0,340 A  
Frequency: 0 Hz



**TM30: 84,2**



**CRI: 83,4 (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
81,7	89,9	95,5	82,3	81,8	85,8	85,9	64,4	8,0	76,0	81,7	62,1	83,9	97,8	74,7

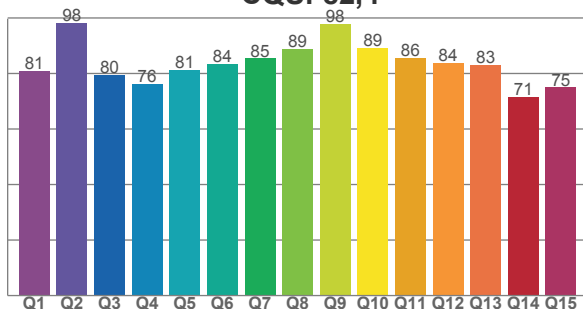
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79,8	83,4	78,6	88,3	90,5	94,8	91,6	89,6	86,7	78,2	78,2	83,3	86,0	86,3	77,2	77,2

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,0	98,2	79,5	76,2	81,4	83,5	85,4	88,9	97,7	89,3	85,5	83,8	83,1	71,5	75,0

**CQS: 82,4**



## 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
4071 K	83,4	8,0	84,2	95,1	82,4	0,378	0,376	0,224	0,334	0,0005

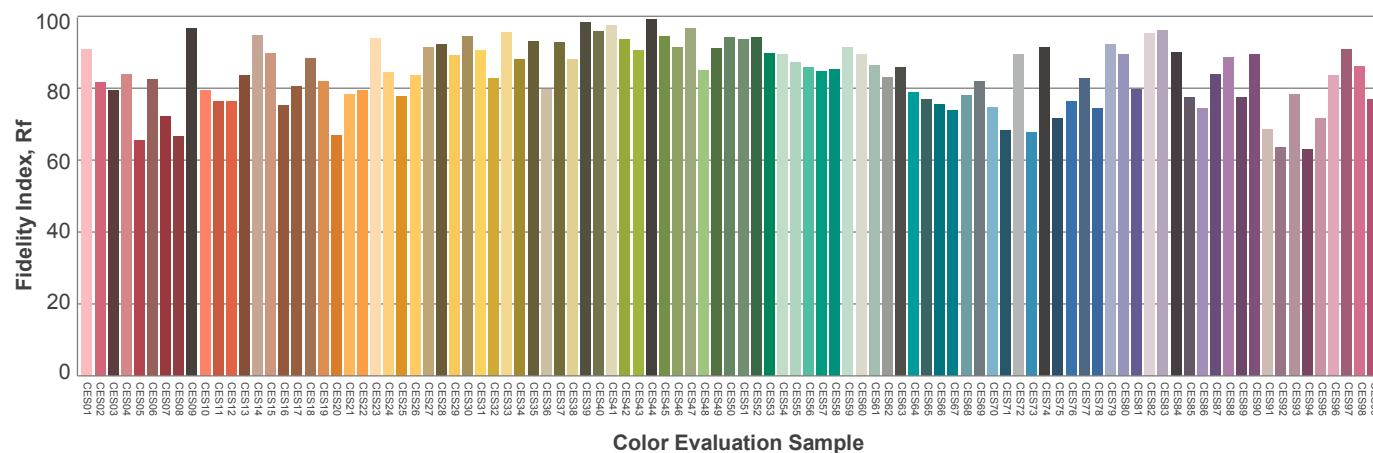
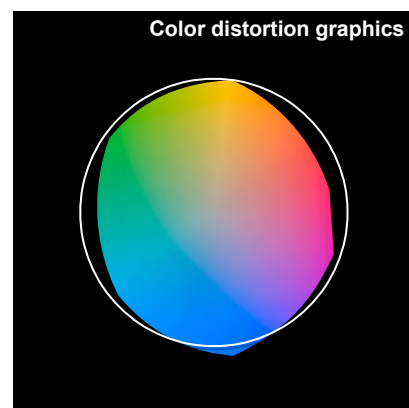
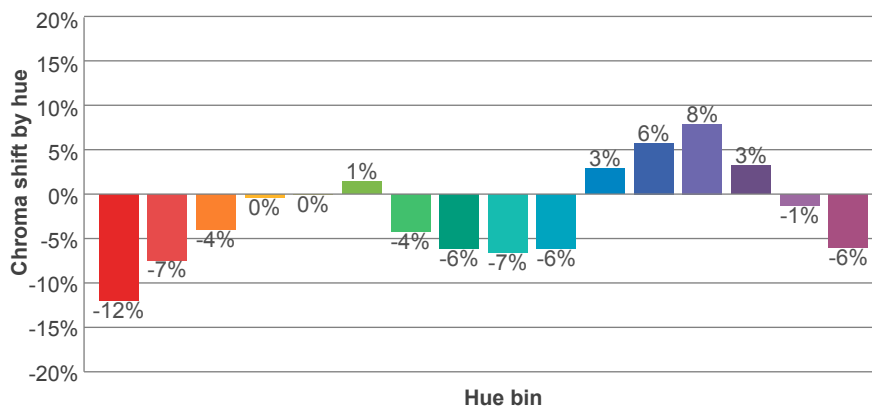
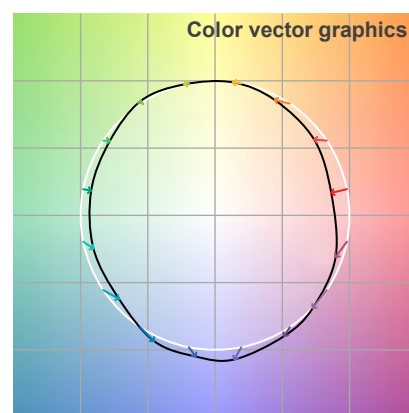
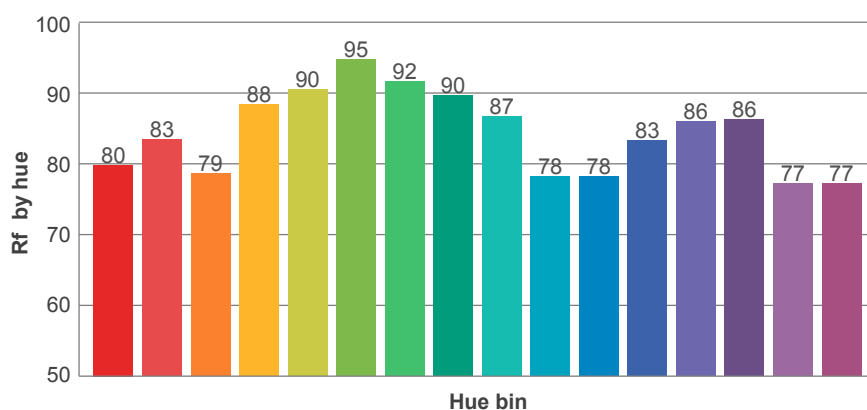
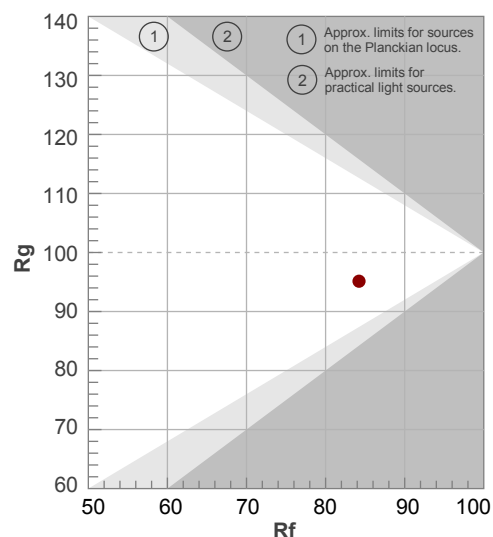
**Rf 84,2**

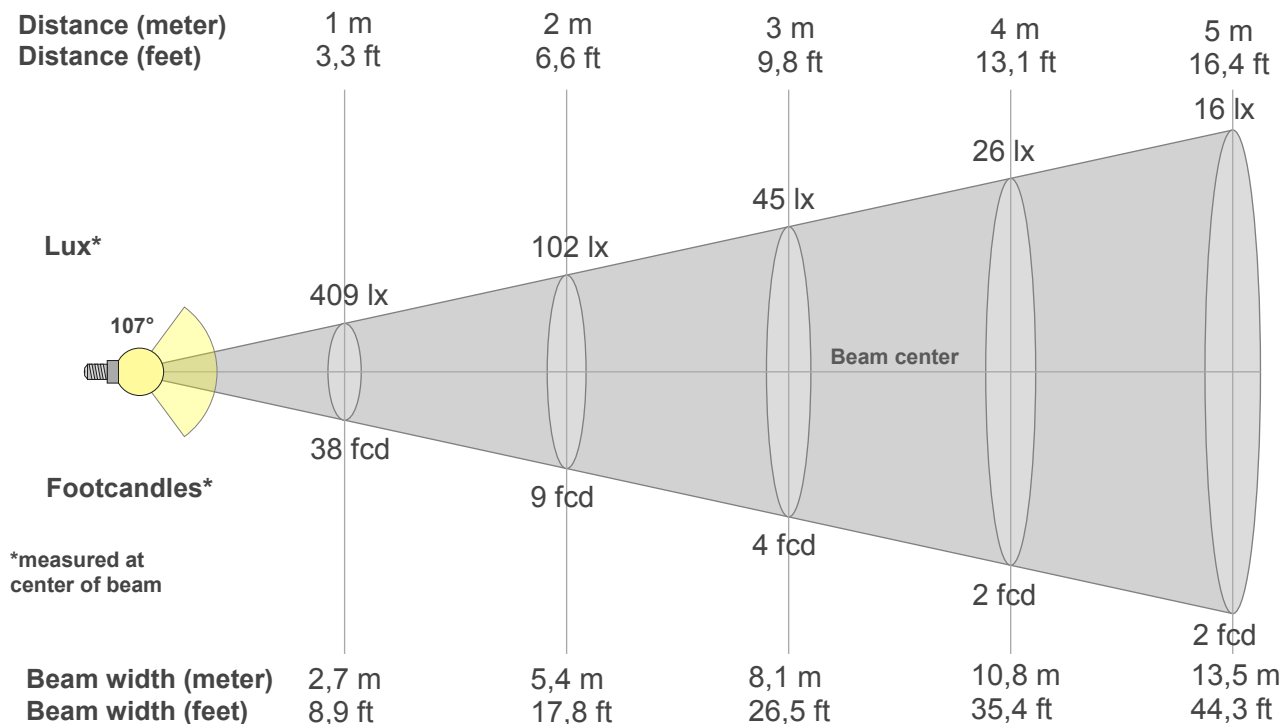
Fidelity index Rf

**Rg 95,1**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	80	-12%	0%
2	83	-7%	6%
3	79	-4%	11%
4	88	0%	6%
5	90	0%	3%
6	95	1%	-2%
7	92	-4%	-3%
8	90	-6%	0%
9	87	-7%	7%
10	78	-6%	12%
11	78	3%	14%
12	83	6%	6%
13	86	8%	-7%
14	86	3%	-7%
15	77	-1%	-17%
16	77	-6%	-13%





## 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
409lx	102lx	45lx	26lx	16lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
38fcd	9,5fcd	4,2fcd	2,4fcd	1,5fcd	1,1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	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°
409	408	405	402	402	402	402	412	434	160	21	30	15	9	16	22	36	42	2	2
100%	100%	99%	98%	98%	98%	98%	101%	106%	39%	5%	7%	4%	2%	4%	5%	9%	10%	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°
409	408	404	399	392	383	372	359	344	327	308	286	259	234	234	168	59	12	1	1
100%	100%	99%	98%	96%	94%	91%	88%	84%	80%	75%	70%	63%	57%	57%	41%	14%	3%	0%	0%

## Intensities in 180° c-plane

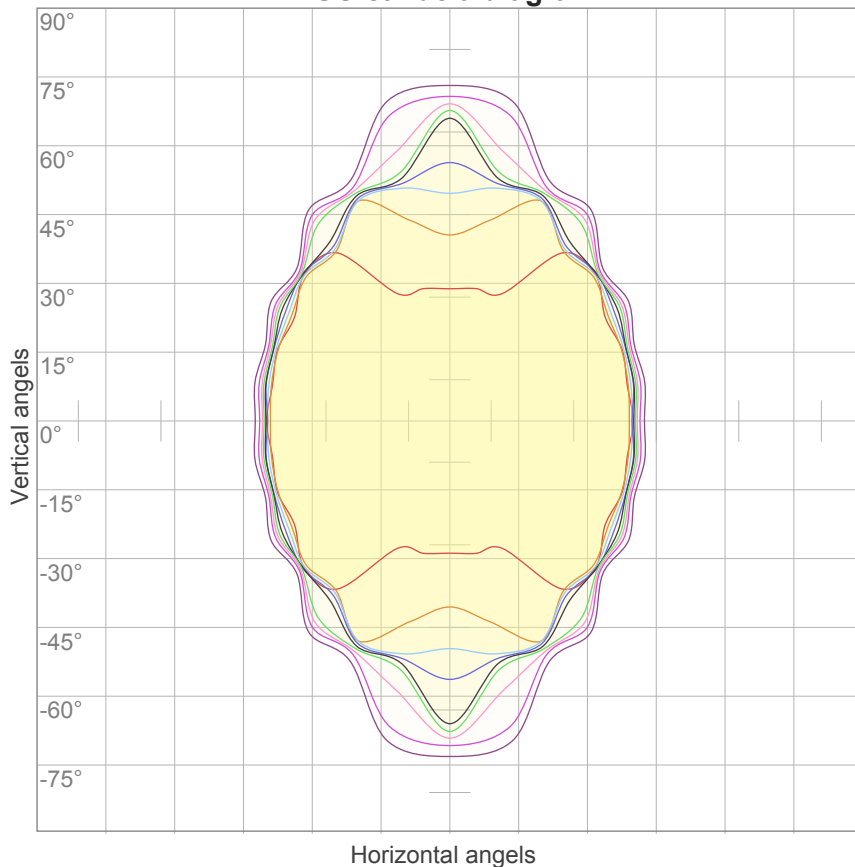
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
409	408	405	402	402	402	402	412	434	160	21	30	15	9	16	22	36	42	2	2
100%	100%	99%	98%	98%	98%	98%	101%	106%	39%	5%	7%	4%	2%	4%	5%	9%	10%	1%	1%

## 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°
409	408	404	399	392	383	372	359	344	327	308	286	259	234	234	168	59	12	1	1
100%	100%	99%	98%	96%	94%	91%	88%	84%	80%	75%	70%	63%	57%	57%	41%	14%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
107°	123,5°	170,4°	89,0%	67,4%

### ISO candela diagram



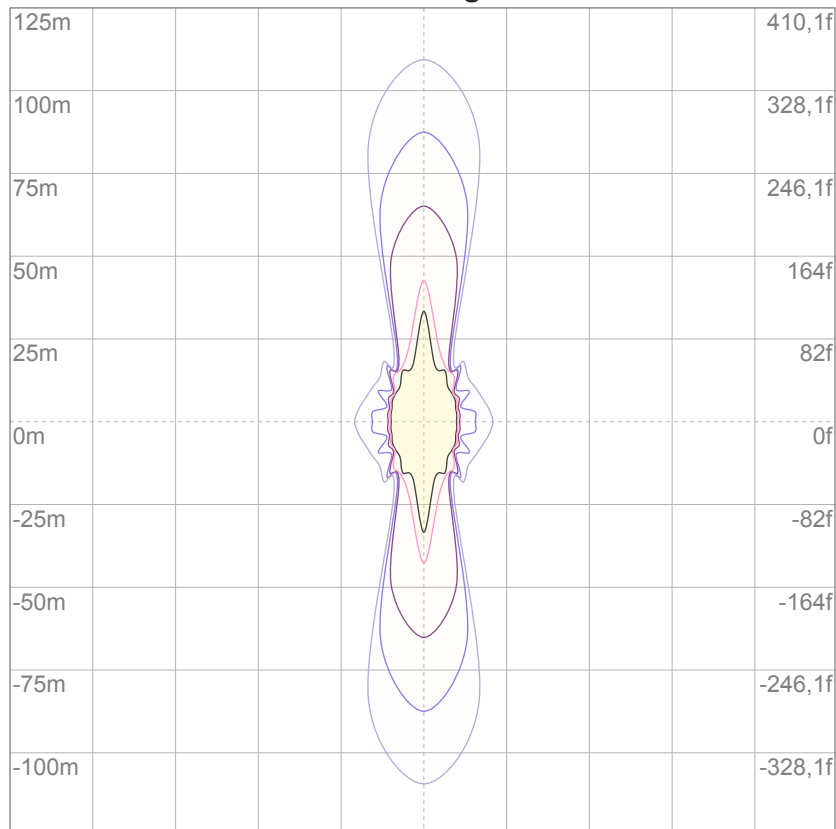
10%	41 cd
20%	82 cd
30%	123 cd
40%	163 cd
50%	204 cd
60%	245 cd
70%	286 cd
80%	327 cd
90%	368 cd

#### Conditions:

Number of c-planes: 16

Candela at center: 409 cd

### ISO lux diagram



3%	0,123 lx
5%	0,204 lx
10%	0,409 lx
30%	1,23 lx
50%	2,04 lx

#### Conditions:

Number of c-planes: 16

Lux at center: 4,09 lx

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

### Glare Evaluation According to UGR

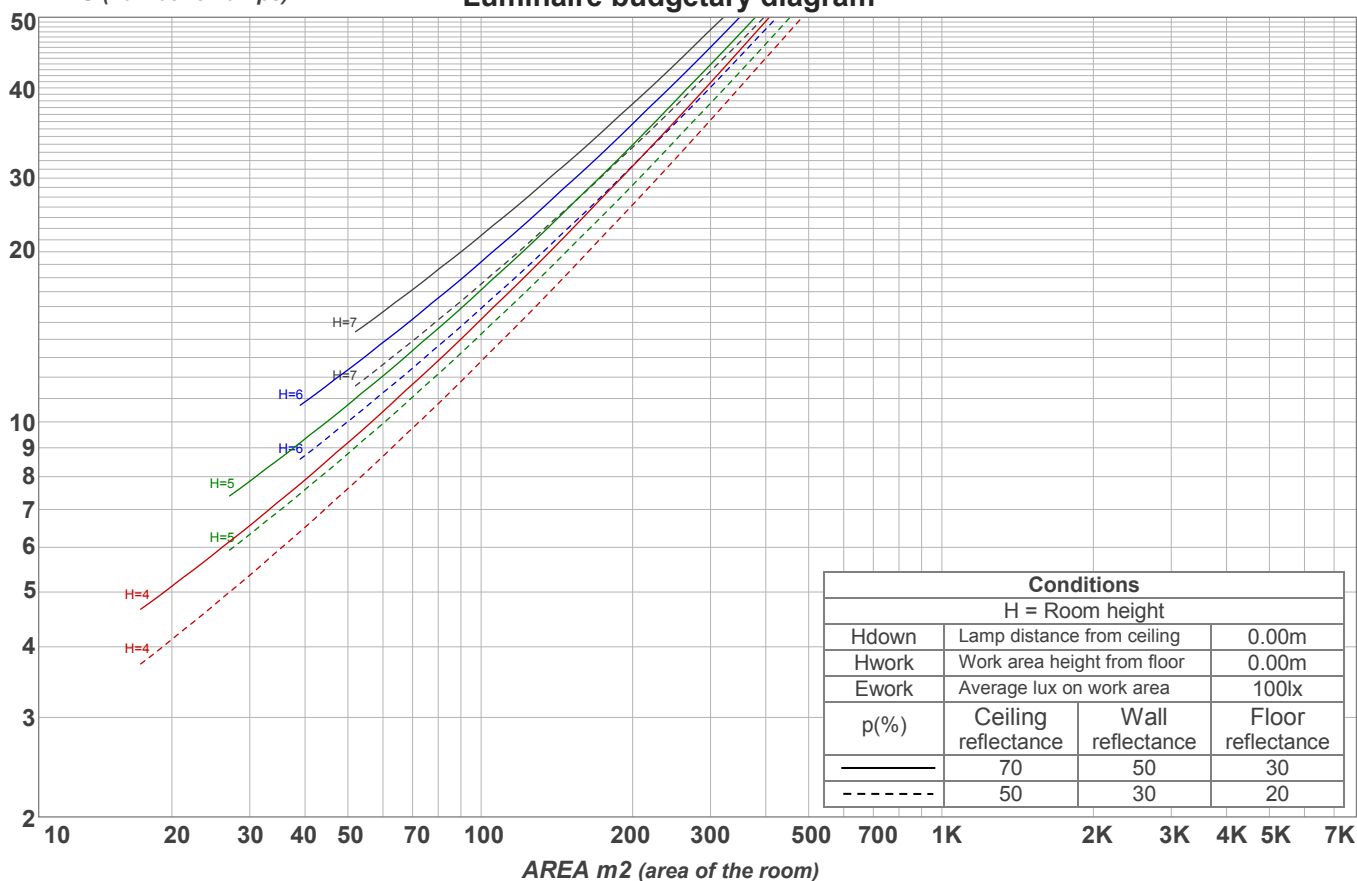
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X      Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	20,3	21,4	20,5	21,6	21,9	25,8	26,9	26,0	27,1	27,3
	3H	20,1	21,2	20,5	21,4	21,6	27,2	28,3	27,6	28,5	28,7
	4H	20,1	21,2	20,5	21,4	21,7	28,2	29,3	28,6	29,5	29,8
	6H	20,5	21,4	20,8	21,7	22,1	28,7	29,6	29,0	29,9	30,3
	8H	20,9	21,8	21,2	22,1	22,5	28,7	29,6	29,0	29,9	30,3
	12H	21,4	22,3	21,8	22,6	23,1	28,7	29,5	29,1	29,9	30,3
4H	2H	20,3	21,4	20,7	21,7	21,9	25,4	26,5	25,9	26,8	27,0
	3H	20,3	21,1	20,6	21,5	21,9	27,0	27,9	27,4	28,2	28,6
	4H	20,3	21,1	20,7	21,5	22,0	28,0	28,7	28,4	29,2	29,7
	6H	20,8	21,6	21,3	21,9	22,3	28,4	29,2	28,9	29,5	29,9
	8H	21,4	22,1	21,9	22,4	22,8	28,5	29,2	29,0	29,5	29,9
	12H	22,1	22,7	22,6	23,1	23,6	28,5	29,0	29,0	29,5	29,9
8H	4H	20,2	20,9	20,7	21,3	21,7	27,8	28,5	28,3	28,9	29,3
	6H	20,9	21,4	21,4	21,8	22,4	28,3	28,8	28,8	29,3	29,8
	8H	21,7	22,1	22,2	22,7	23,3	28,4	28,9	28,9	29,4	30,0
	12H	22,8	23,2	23,4	23,7	24,3	28,4	28,8	29,0	29,3	29,9
12H	4H	20,2	20,7	20,7	21,2	21,6	27,8	28,4	28,3	28,8	29,3
	6H	20,9	21,3	21,4	21,8	22,5	28,3	28,8	28,8	29,3	29,9
	8H	21,7	22,1	22,3	22,6	23,2	28,4	28,7	28,9	29,2	29,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		1,3 / -1,3					0,5 / -0,9				
S = 1.5H		2,7 / -1,4					1,7 / -3,5				
S = 2.0H		4,1 / -1,6					2,8 / -6,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1060 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	100	100	100	98
1	110	106	102	99	107	103	100	97	99	96	93	95	92	90	91	89	87	85
2	101	94	88	83	99	92	87	82	88	84	80	85	81	78	82	79	76	74
3	93	84	77	71	91	82	76	70	79	74	69	76	72	68	74	70	66	64
4	86	76	68	62	84	74	67	61	71	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	55	51	49
6	74	62	53	48	72	61	53	47	59	52	47	57	51	46	55	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	46	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	28

LAMPS (number of lamps)

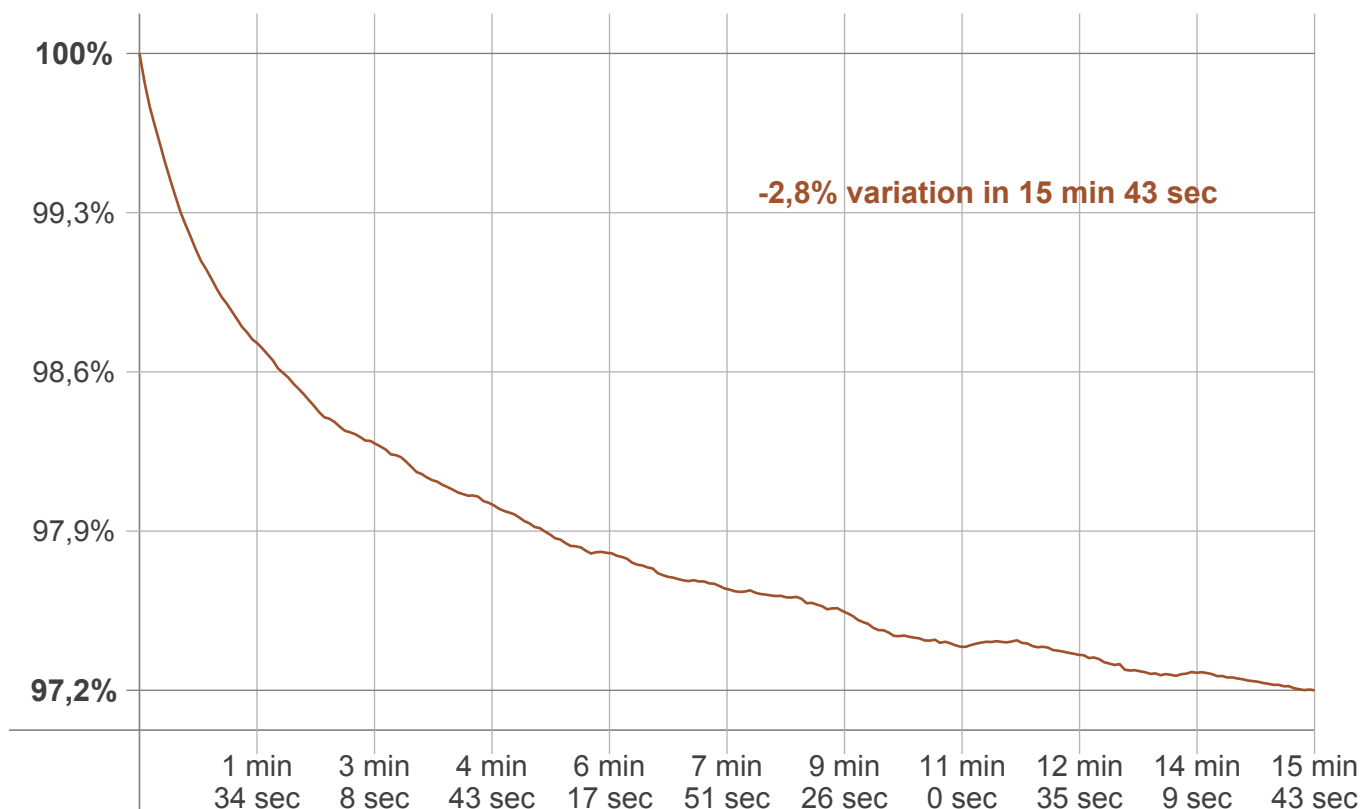
## Luminaire budgetary diagram



## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
38,8 lm	113 lm	181 lm	242 lm	246 lm	123 lm	45,3 lm	31,6 lm	19,5 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7,62 lm	2,93 lm	2,49 lm	2,25 lm	1,80 lm	1,34 lm	0,990 lm	0,606 lm	0,204 lm

### Warmup curve



### Warmup result

Warmup time:	15 min 43 sec
Warmup variation	-2,8%

### Warmup conditions

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

### Color temperature change

CCT start	CCT change	CCT end
4049 K	+22 K	4071 K

### Output change

Output start	Output change	Output end
1086 lm	-25 lm	1060 lm