

Light efficiency:

81 Lumen/Watt

Light quality:

CRI: 82,0

Color temperature:

2237 K

Output: 967 lm

Peak: 1435 cd

Power: 12,0 W

PF: 1,0



Product name:

**Pegasus-3-Gold-0508-822-L1F**

Item number:

**FLNP-L-16A-0508-822-L1F**

Date and time:

**17.03.2021 10:18:53**

Description:

**Rank: M1A4T**

**Toleranzen:**

**Lumen +/-4%**

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

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

**CRI +/-0,7**

**Angular Resolution 1 Grad step**

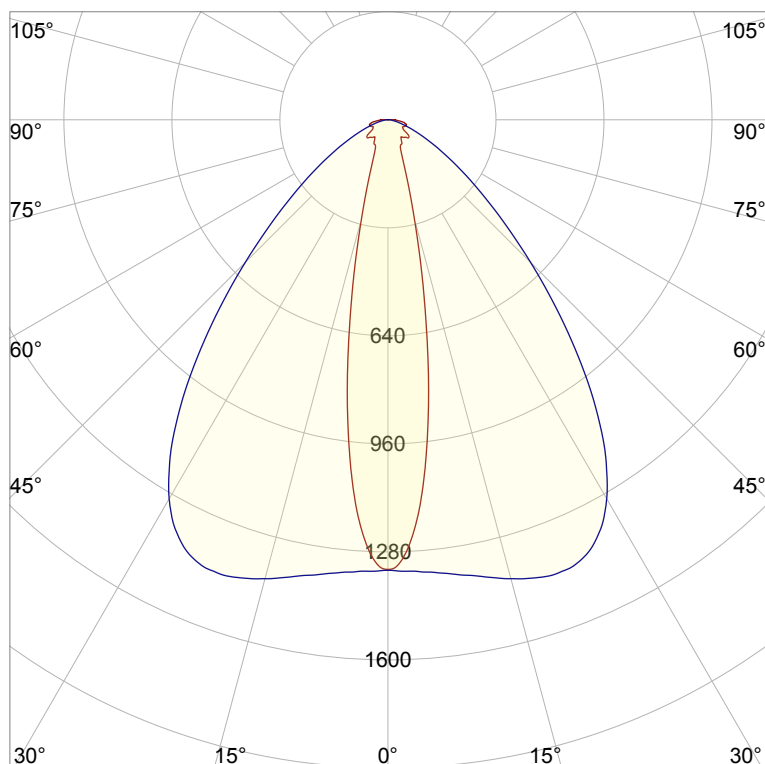
**Last Calibration 20-05-2020**

**Pruefer: Peter Ulrich**

**Pruefort: Lichtlabor**

**Gaustrasse13-15**

**55411 Bingen am Rhein**

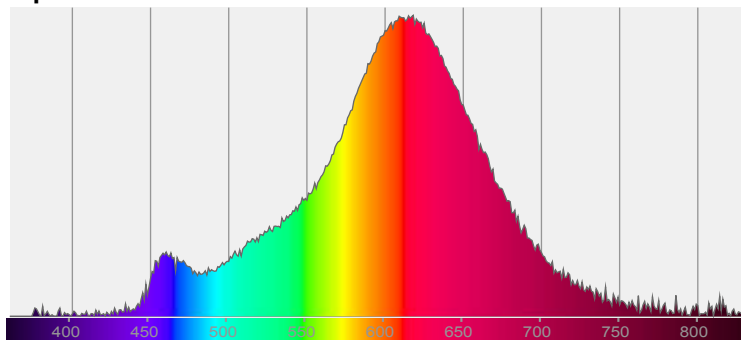


CIE 1931

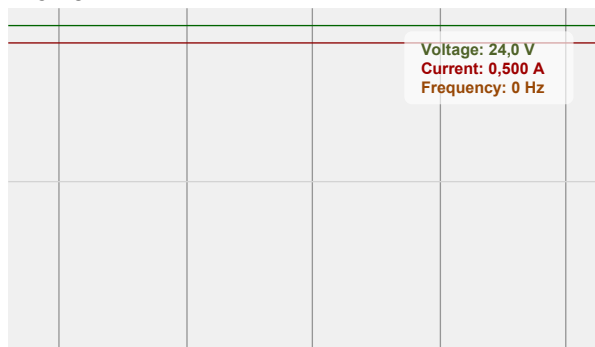
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y: 0,413

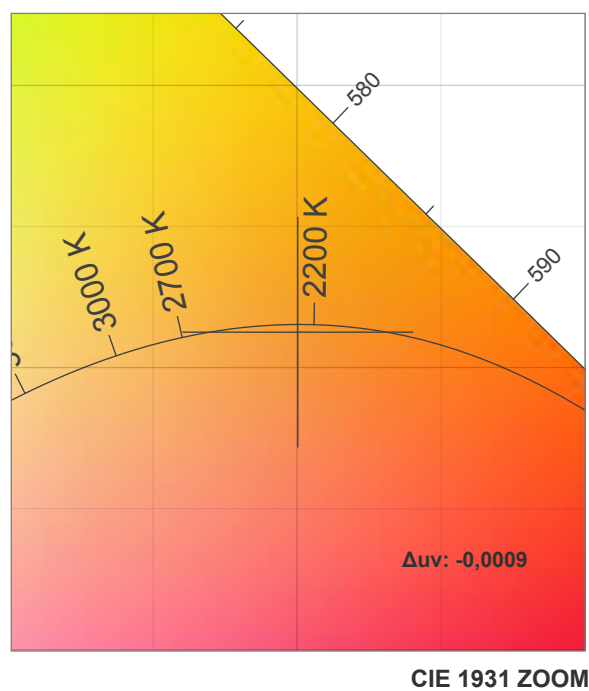
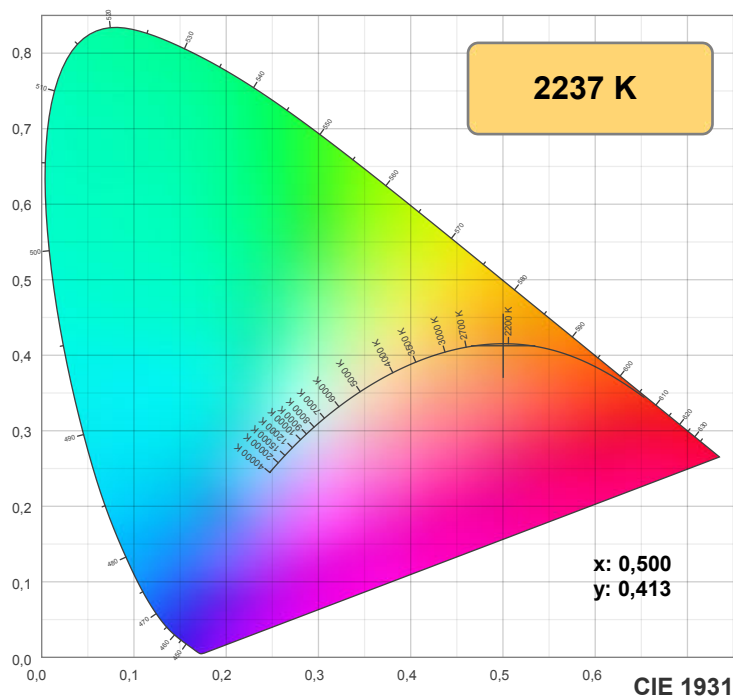
Spectra



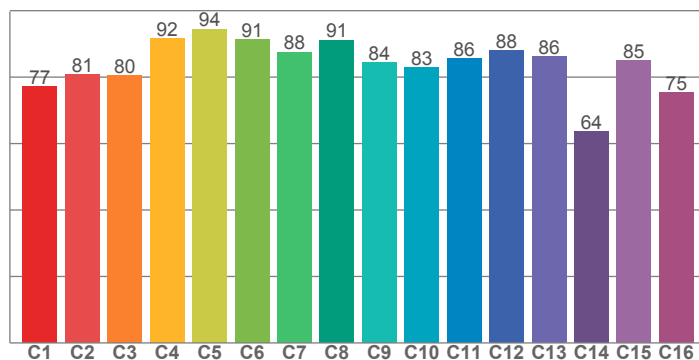
Power



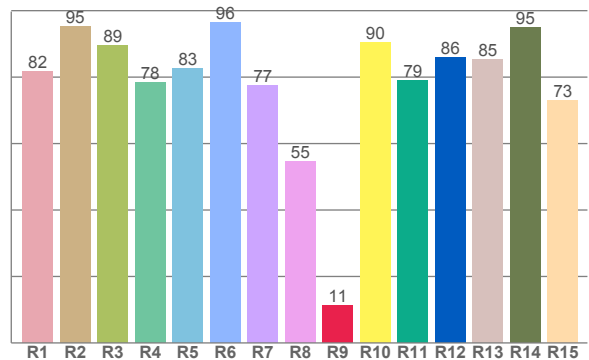




**TM30: 84,5**



**CRI: 82,0 (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
81,8	95,1	89,4	78,4	82,8	96,4	77,5	54,6	11,3	90,3	79,0	85,9	85,2	95,0	72,9

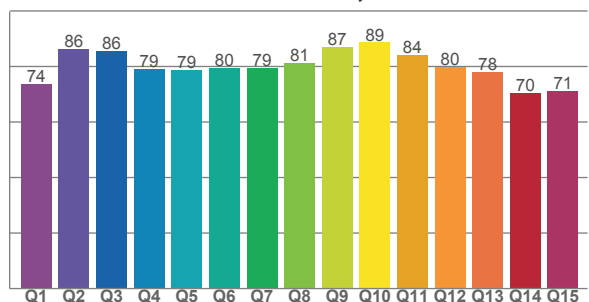
**TM30 C values, 16 binned values out of total of 99 C values**

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77,2	80,8	80,5	91,7	94,5	91,4	87,5	91,2	84,4	83,0	85,5	88,0	86,1	63,7	85,0	75,3

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
73,8	86,4	85,6	79,1	78,9	79,5	79,4	81,3	86,9	88,7	84,3	79,8	78,0	70,3	71,2

**CQS: 79,1**



## 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
2237 K	82,0	11,3	84,5	93,9	79,1	0,500	0,413	0,288	0,356	-0,0009



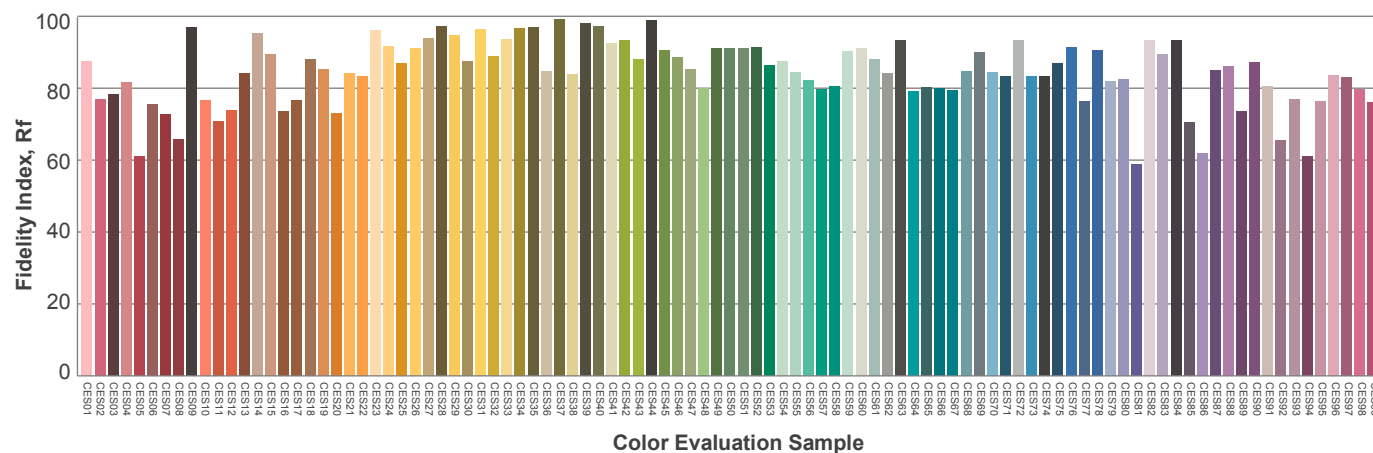
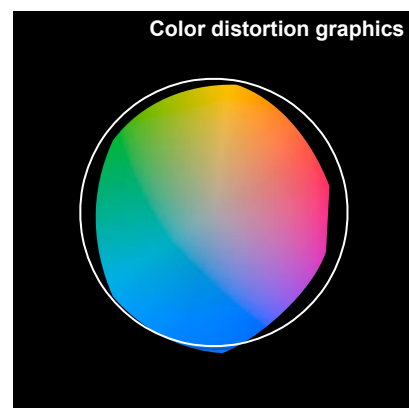
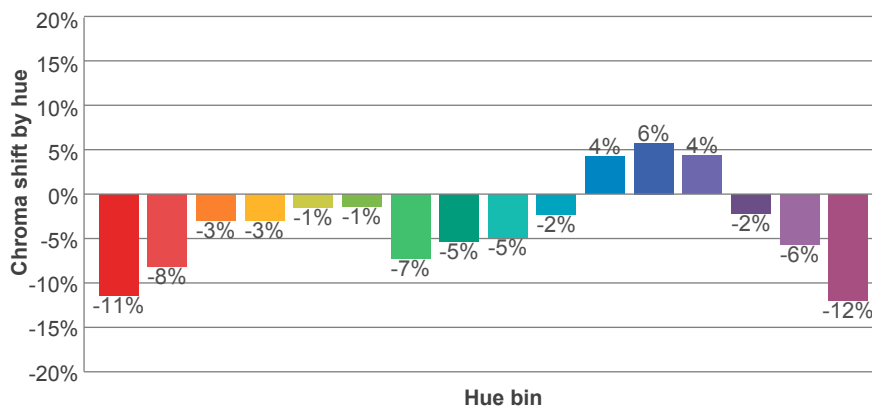
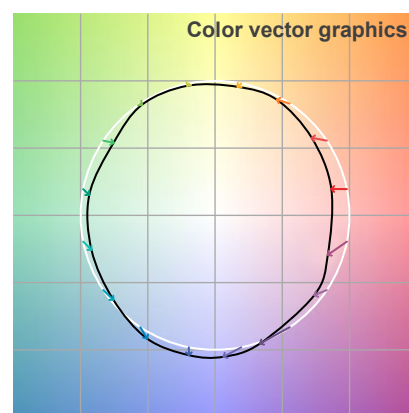
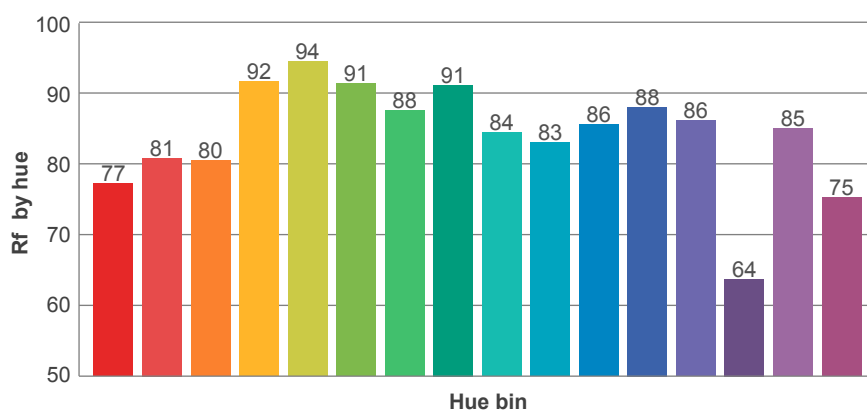
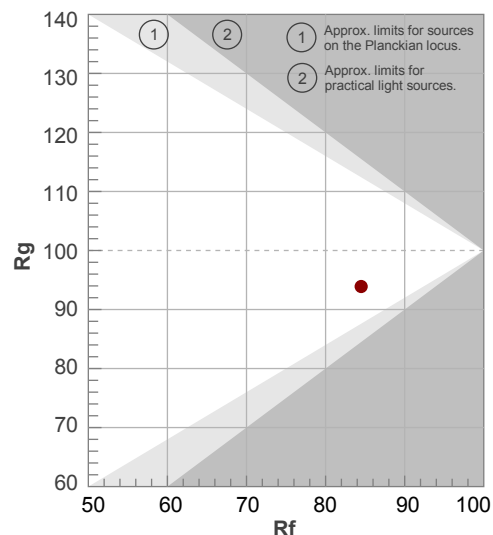
**Rf 84,5**

Fidelity index Rf

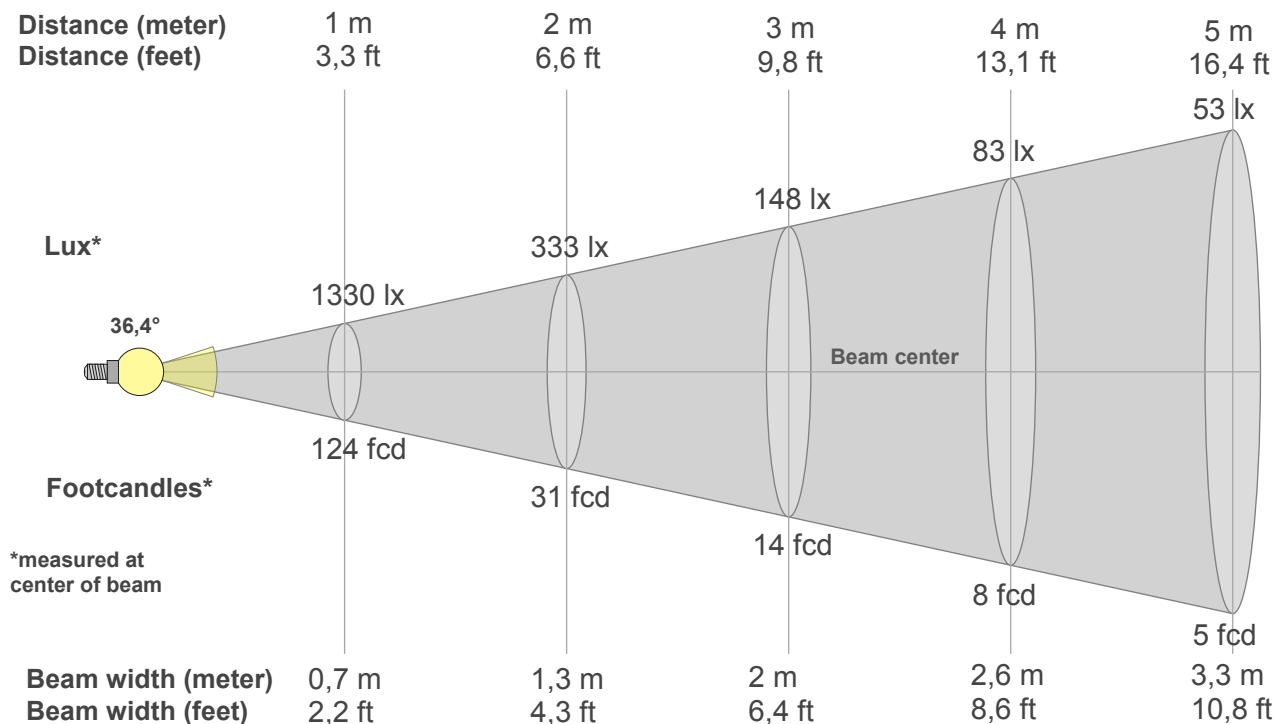
**Rg 93,9**

Gamut index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	77	-11%	2%
2	81	-8%	8%
3	80	-3%	10%
4	92	-3%	2%
5	94	-1%	1%
6	91	-1%	-1%
7	88	-7%	-3%
8	91	-5%	3%
9	84	-5%	7%
10	83	-2%	10%
11	86	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
1330lx	333lx	148lx	83lx	53lx	37lx	27lx	21lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
123,6fcd	30,9fcd	13,7fcd	7,7fcd	4,9fcd	3,4fcd	2,5fcd	1,9fcd	1,5fcd	1,2fcd	1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd

## 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°
1330	1296	1196	1044	861	671	500	358	254	182	135	107	91	85	83	82	77	70	65	64
100%	97%	90%	78%	65%	50%	38%	27%	19%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%

## 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°
1330	1338	1342	1349	1359	1370	1384	1400	1414	1426	1434	1433	1421	1395	1354	1296	1222	1139	1043	941
100%	101%	101%	101%	102%	103%	104%	105%	106%	107%	108%	108%	107%	105%	102%	97%	92%	86%	78%	71%

## 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°
1330	1296	1196	1044	861	671	500	358	254	182	135	107	91	85	83	82	77	70	65	64
100%	97%	90%	78%	65%	50%	38%	27%	19%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%

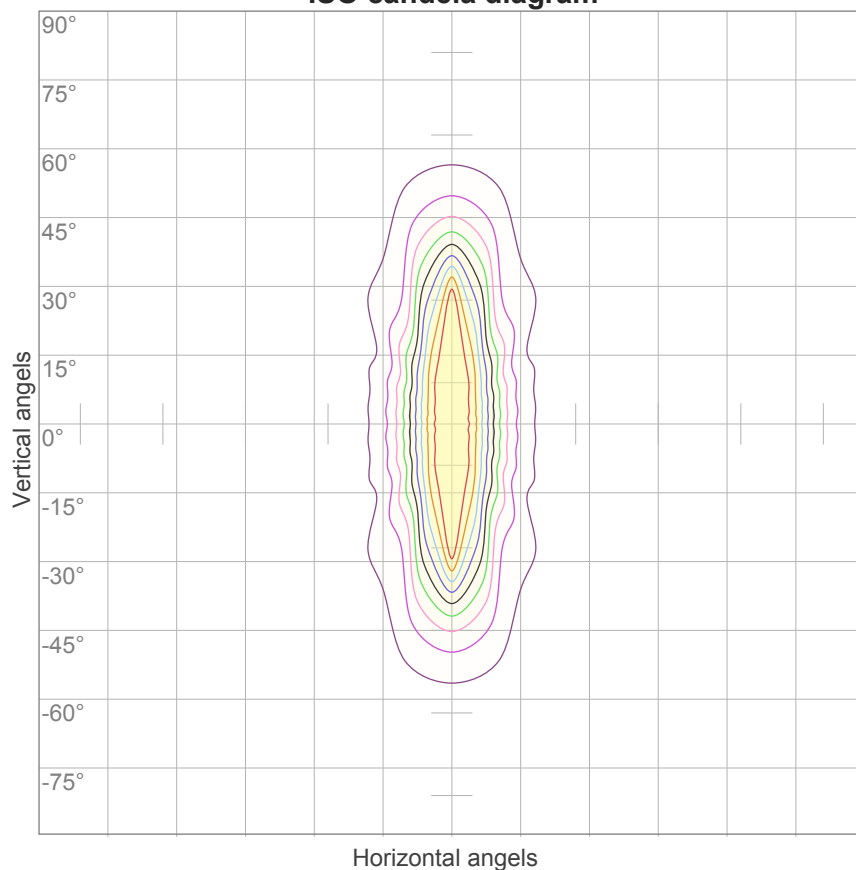
## Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1330	1338	1342	1349	1359	1370	1384	1400	1414	1426	1434	1433	1421	1395	1354	1296	1222	1139	1043	941
100%	101%	101%	101%	102%	103%	104%	105%	106%	107%	108%	108%	107%	105%	102%	97%	92%	86%	78%	71%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
36,4°	66°	157,7°	85,0%	71,1%



### ISO candela diagram



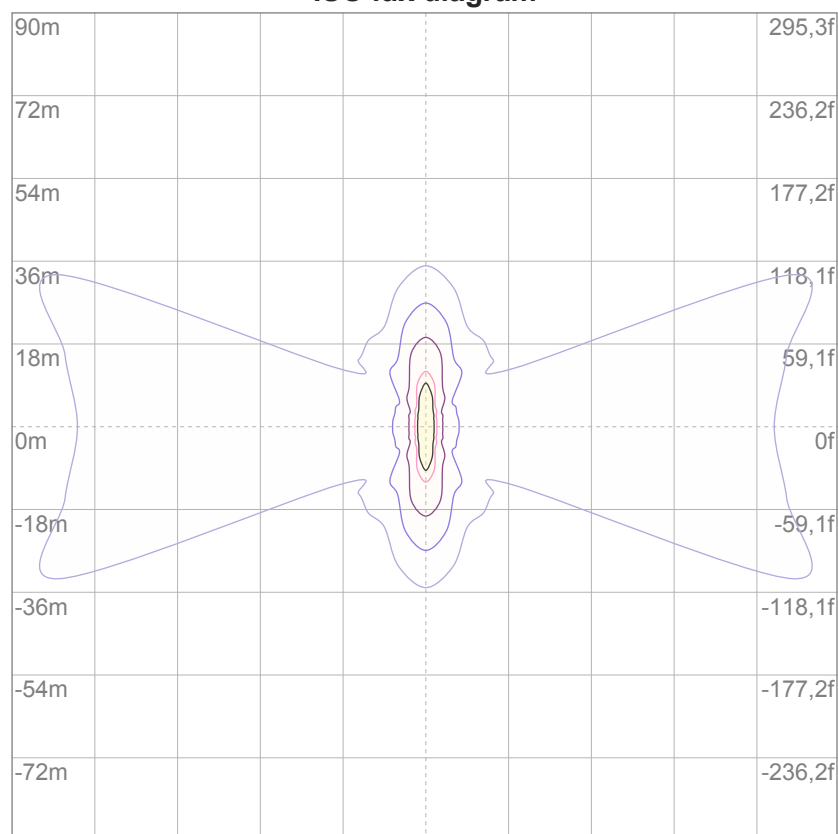
10%	133 cd
20%	266 cd
30%	399 cd
40%	532 cd
50%	665 cd
60%	798 cd
70%	931 cd
80%	1064 cd
90%	1197 cd

#### Conditions:

Number of c-planes: 16

Candela at center: 1330 cd

### ISO lux diagram



3%	0,399 lx
5%	0,665 lx
10%	1,33 lx
30%	3,99 lx
50%	6,65 lx

#### Conditions:

Number of c-planes: 16

Lux at center: 13,3 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	14,6	15,5	14,8	15,8	16,0	23,4	24,3	23,6	24,6	24,8
	3H	16,6	17,6	17,0	17,9	18,0	23,8	24,8	24,2	25,1	25,3
	4H	18,1	19,0	18,5	19,3	19,5	24,0	25,0	24,4	25,2	25,4
	6H	19,5	20,3	19,8	20,6	21,0	24,1	25,0	24,4	25,3	25,6
	8H	19,9	20,8	20,3	21,1	21,5	24,1	25,0	24,5	25,3	25,7
	12H	20,3	21,0	20,6	21,4	21,8	24,1	24,9	24,5	25,3	25,7
4H	2H	15,2	16,1	15,6	16,4	16,6	23,1	24,1	23,5	24,4	24,6
	3H	17,6	18,4	17,9	18,7	19,2	23,8	24,6	24,1	24,9	25,3
	4H	19,2	19,9	19,6	20,3	20,8	23,9	24,6	24,3	25,1	25,6
	6H	20,7	21,4	21,2	21,8	22,1	24,1	24,8	24,6	25,1	25,5
	8H	21,3	21,9	21,8	22,3	22,7	24,1	24,8	24,6	25,1	25,5
	12H	21,7	22,2	22,2	22,6	23,1	24,1	24,7	24,6	25,1	25,6
8H	4H	19,5	20,2	20,0	20,6	20,9	23,9	24,6	24,4	24,9	25,3
	6H	21,3	21,8	21,8	22,3	22,8	24,2	24,7	24,7	25,1	25,7
	8H	22,1	22,5	22,6	23,0	23,7	24,3	24,7	24,8	25,2	25,9
	12H	22,7	23,0	23,2	23,5	24,1	24,4	24,7	25,0	25,2	25,8
12H	4H	19,5	20,1	20,0	20,5	21,0	23,9	24,4	24,4	24,9	25,3
	6H	21,4	21,9	21,9	22,4	23,0	24,2	24,6	24,7	25,2	25,8
	8H	22,3	22,6	22,8	23,1	23,7	24,3	24,7	24,9	25,2	25,8
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,7 / -1,9				
S = 1.5H		0,1 / -0,1					3,5 / -2,9				
S = 2.0H		0,3 / -0,2					5,1 / -3,6				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 967 lm total luminous flux											

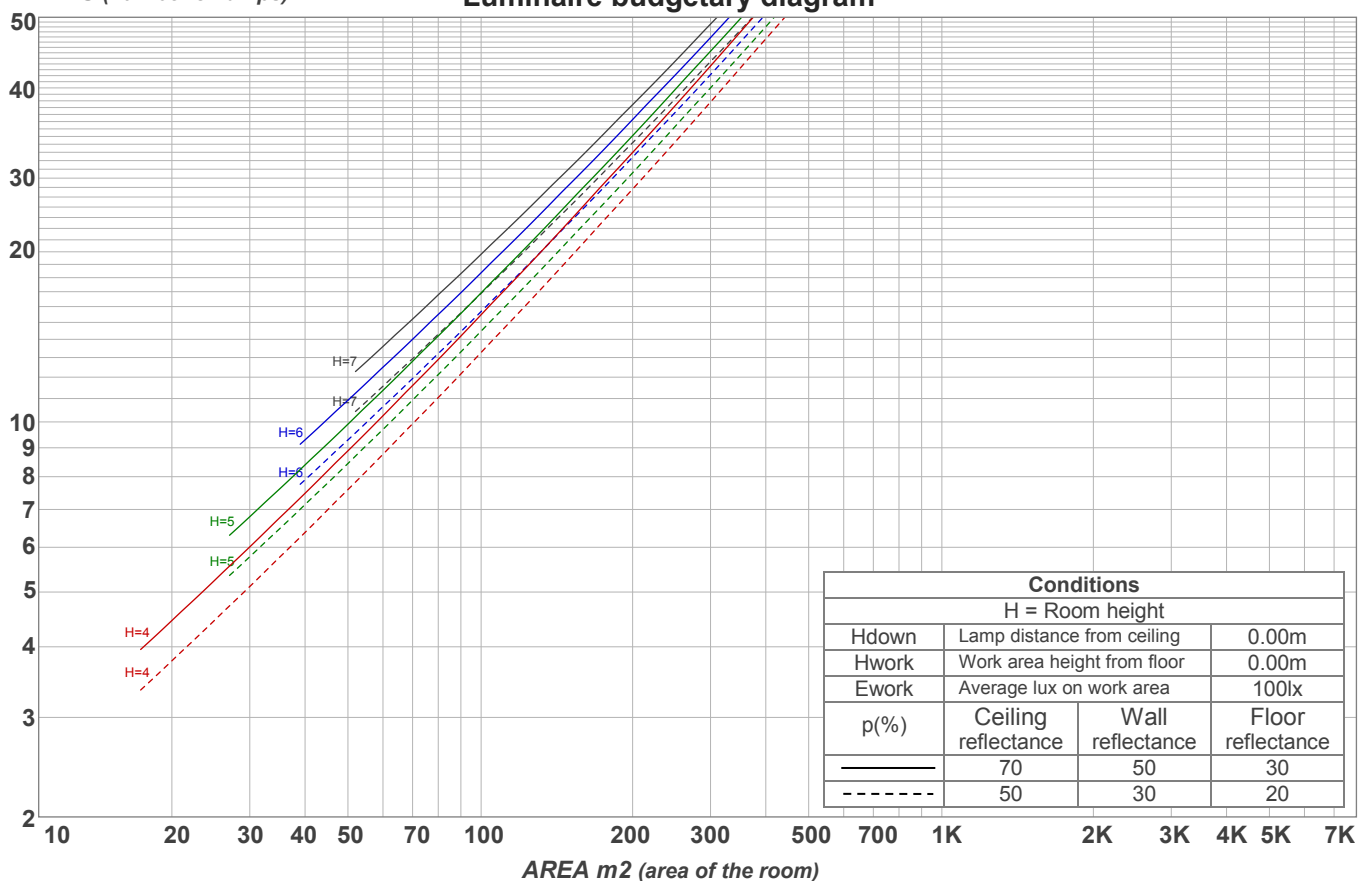


## Coefficients of Utilization

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	110	110	110	104	104	104	100	100	100	97
1	110	106	102	99	107	103	100	97	99	96	94	94	92	90	90	89	87	85
2	102	96	90	85	100	94	88	84	90	85	82	86	83	80	83	80	78	75
3	95	87	80	75	93	85	79	74	82	77	73	79	75	71	76	73	70	68
4	89	80	73	67	87	78	72	66	76	70	65	73	68	64	71	67	63	61
5	84	73	66	61	82	72	65	60	70	64	59	68	63	59	66	61	58	56
6	79	68	61	56	77	67	60	55	65	59	55	63	58	54	62	57	53	52
7	75	63	56	51	73	63	56	51	61	55	50	59	54	50	58	53	49	48
8	71	59	52	48	69	59	52	47	57	51	47	56	51	47	55	50	46	45
9	67	56	49	44	66	55	49	44	54	48	44	53	47	44	52	47	43	42
10	64	53	46	42	63	52	46	41	51	45	41	50	45	41	49	44	41	39

LAMPS (number of lamps)

## Luminaire budgetary diagram

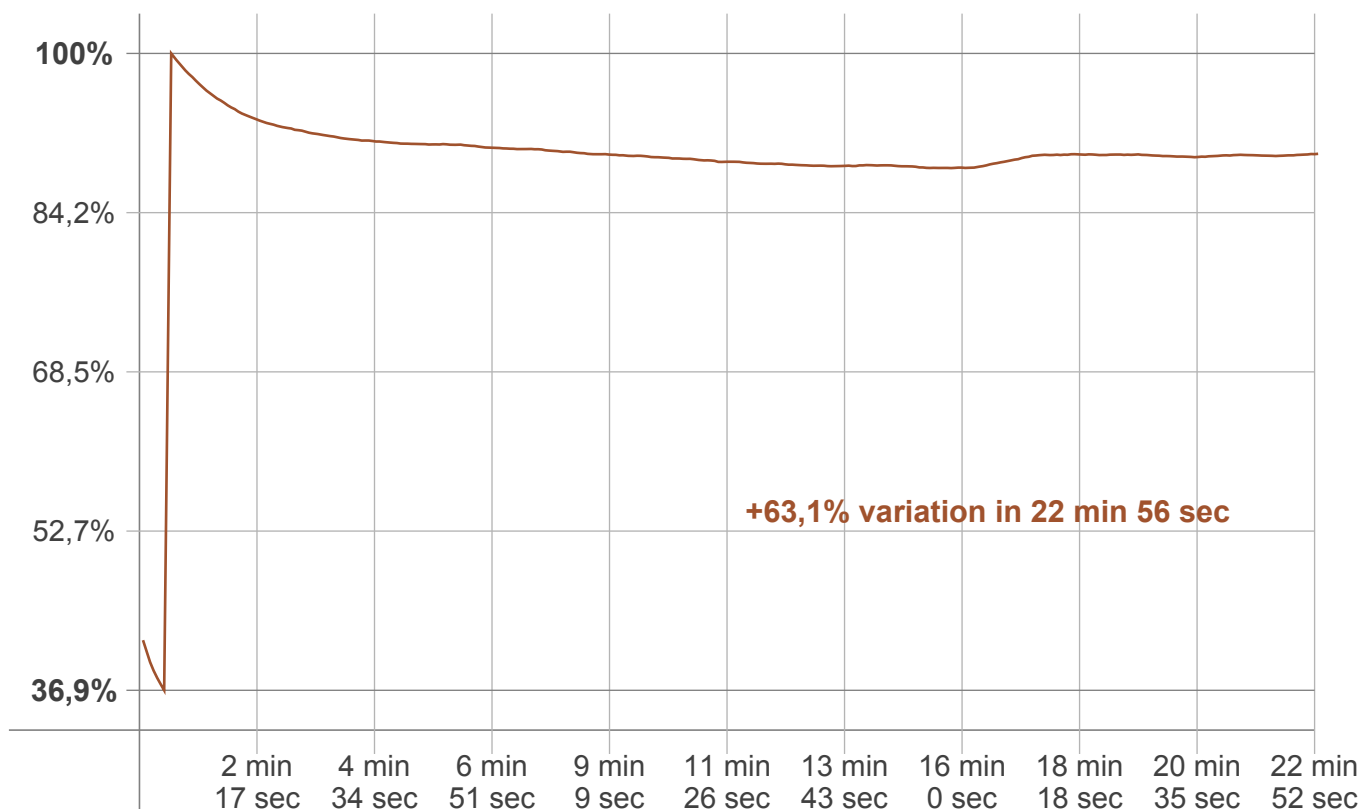


## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
109 lm	196 lm	174 lm	147 lm	113 lm	82,1 lm	52,5 lm	40,4 lm	26,4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
9,24 lm	4,24 lm	3,62 lm	3,27 lm	2,19 lm	1,31 lm	0,965 lm	0,591 lm	0,199 lm



## Warmup curve



## Warmup result

Warmup time:	22 min 56 sec
Warmup variation	+63,1%

## Warmup conditions

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

## Color temperature change

CCT start	CCT change	CCT end
2236 K	+1 K	2237 K

## Output change

Output start	Output change	Output end
997 lm	-30 lm	967 lm