

Light efficiency:

87 Lumen/Watt

Light quality:

CRI: 82,2

Color temperature:

2243 K

Output: 1048 lm

Peak: 434 cd

Power: 12,0 W

PF: 1,0



Product name:

Pegasus-3-Gold-0508-822-L9T

Item number:

FLNP-L-16A-0508-822-L9T

Date and time:

16.03.2021 12:56:58

Description:

Rank: M1A4T

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Grad K

CRI +/-0,7

Angular Resolution 1 Grad step

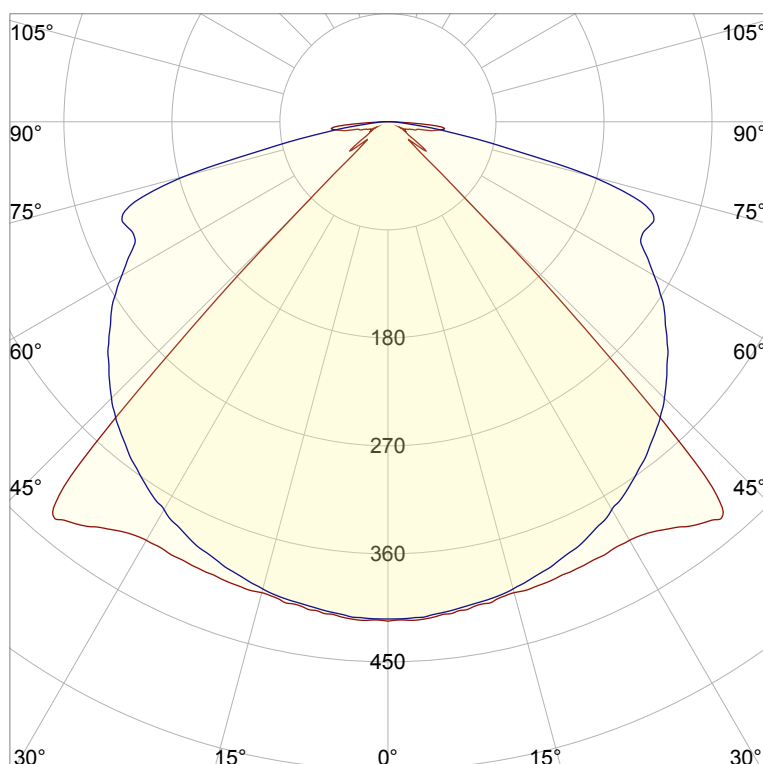
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse13-15

55411 Bingen am Rhein

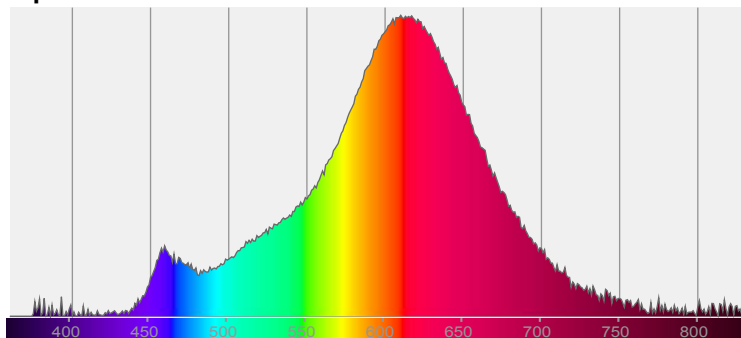


CIE 1931

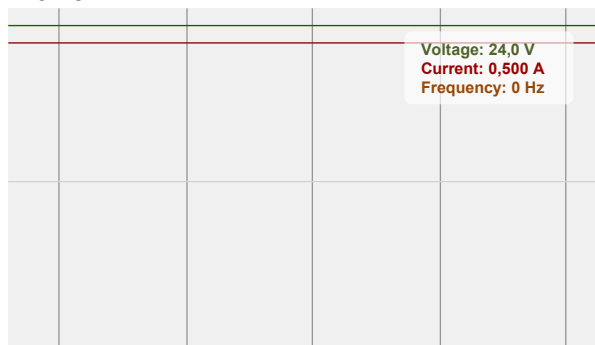
x: 0,499

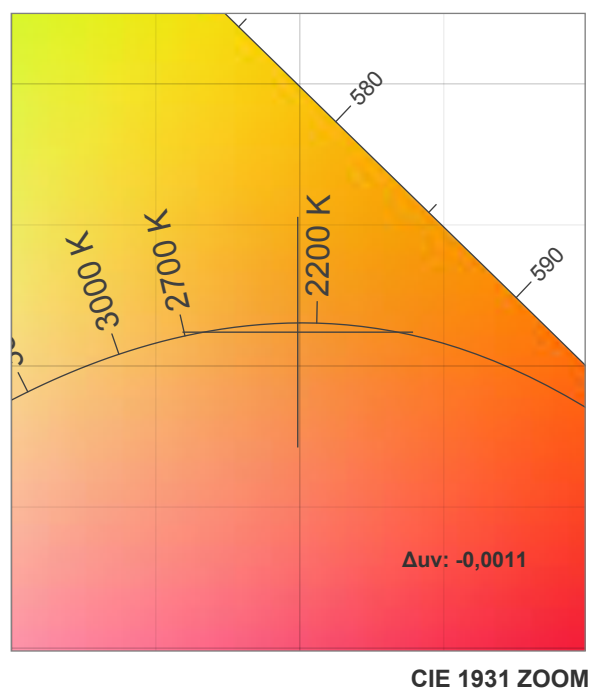
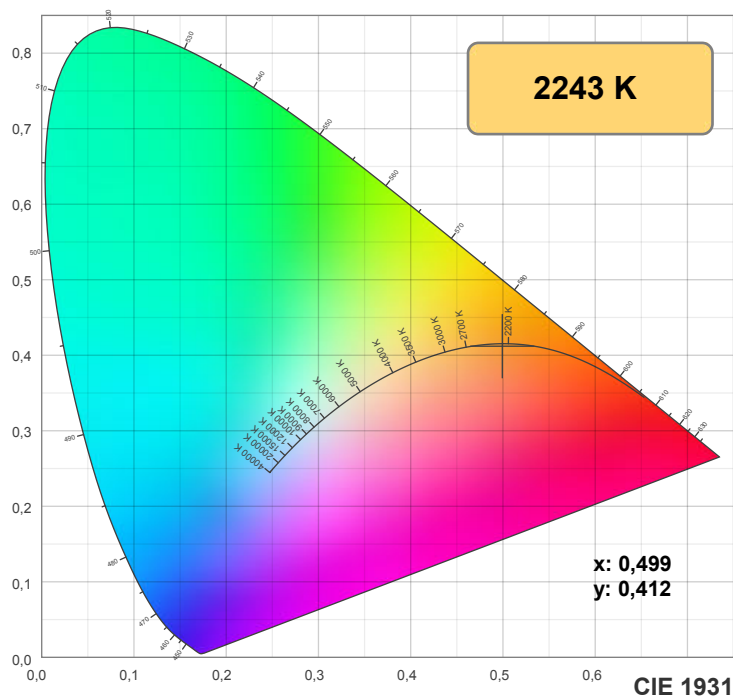
y: 0,412

Spectra

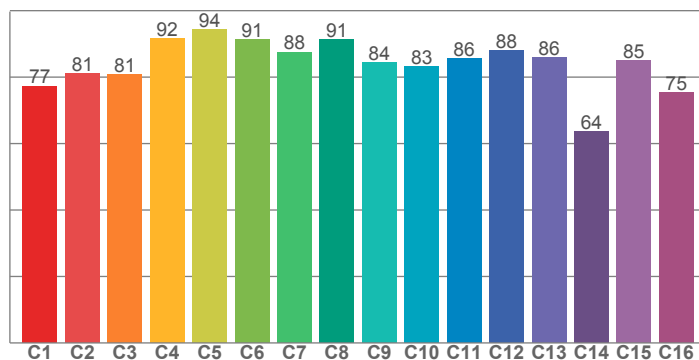


Power

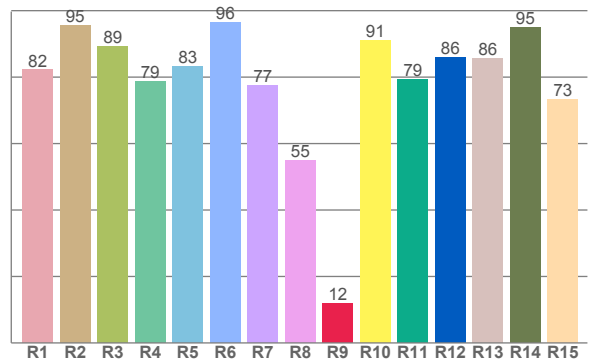




TM30: 84,5



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
82,2	95,4	89,1	78,7	83,2	96,5	77,4	54,8	12,0	91,0	79,4	85,9	85,6	94,8	73,2

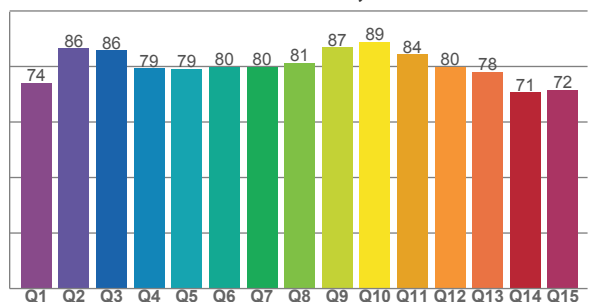
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
77,3	81,0	80,7	91,7	94,4	91,3	87,5	91,2	84,5	83,1	85,5	88,0	86,0	63,7	85,0	75,3

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
74,0	86,5	85,8	79,3	79,0	79,8	79,7	81,3	86,9	88,8	84,4	79,8	78,0	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	Δuv
2243 K	82,2	12,0	84,5	94,0	79,3	0,499	0,412	0,288	0,356	-0,0011

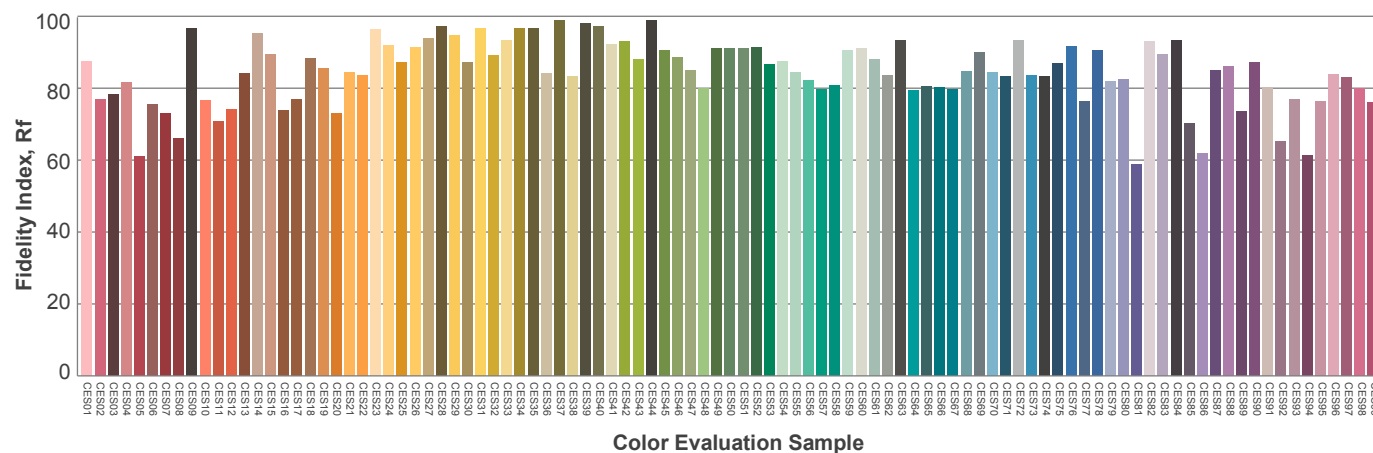
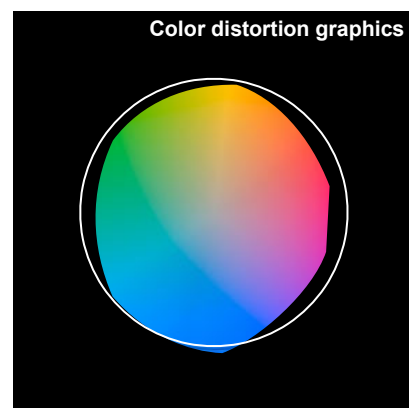
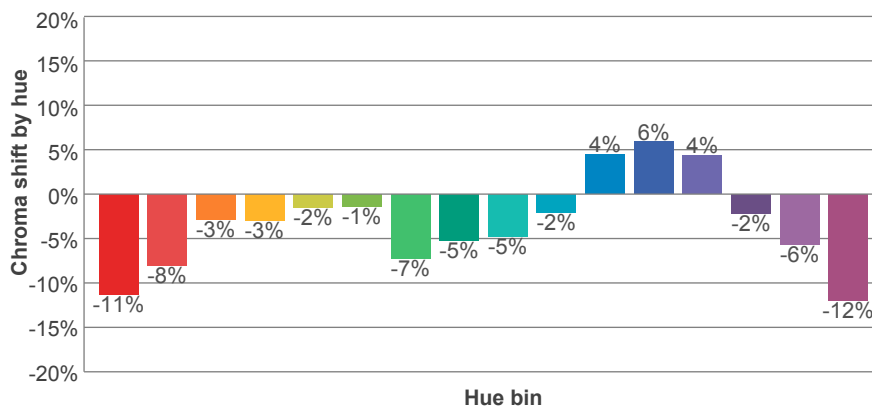
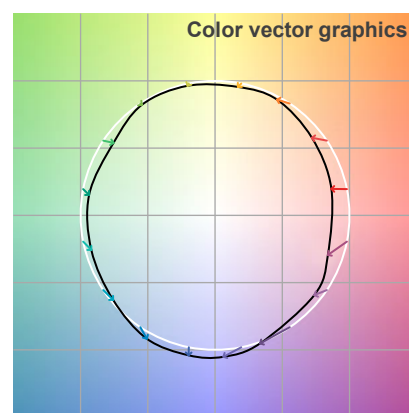
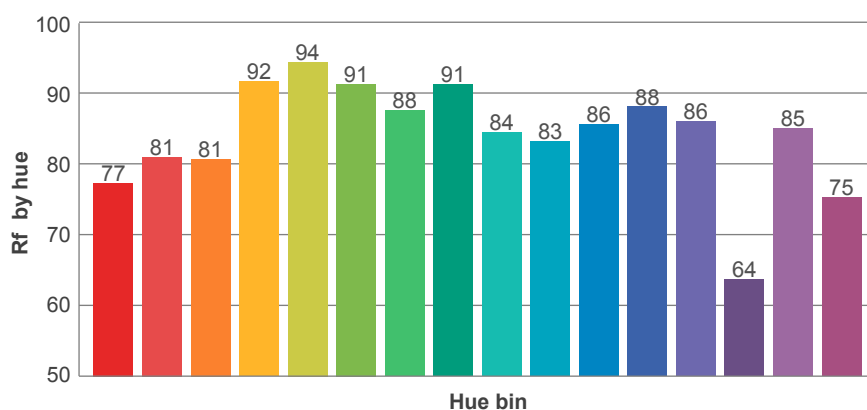
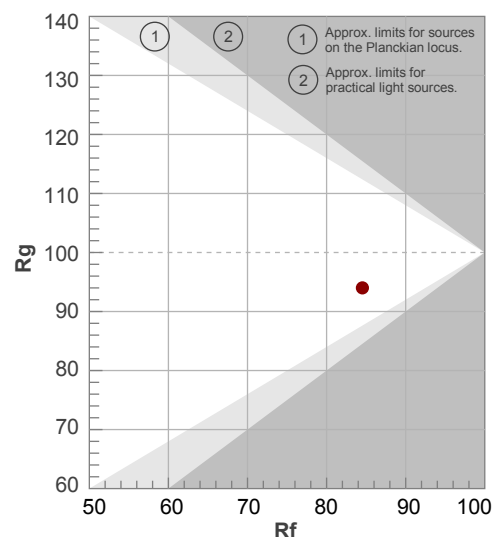
Rf 84,5

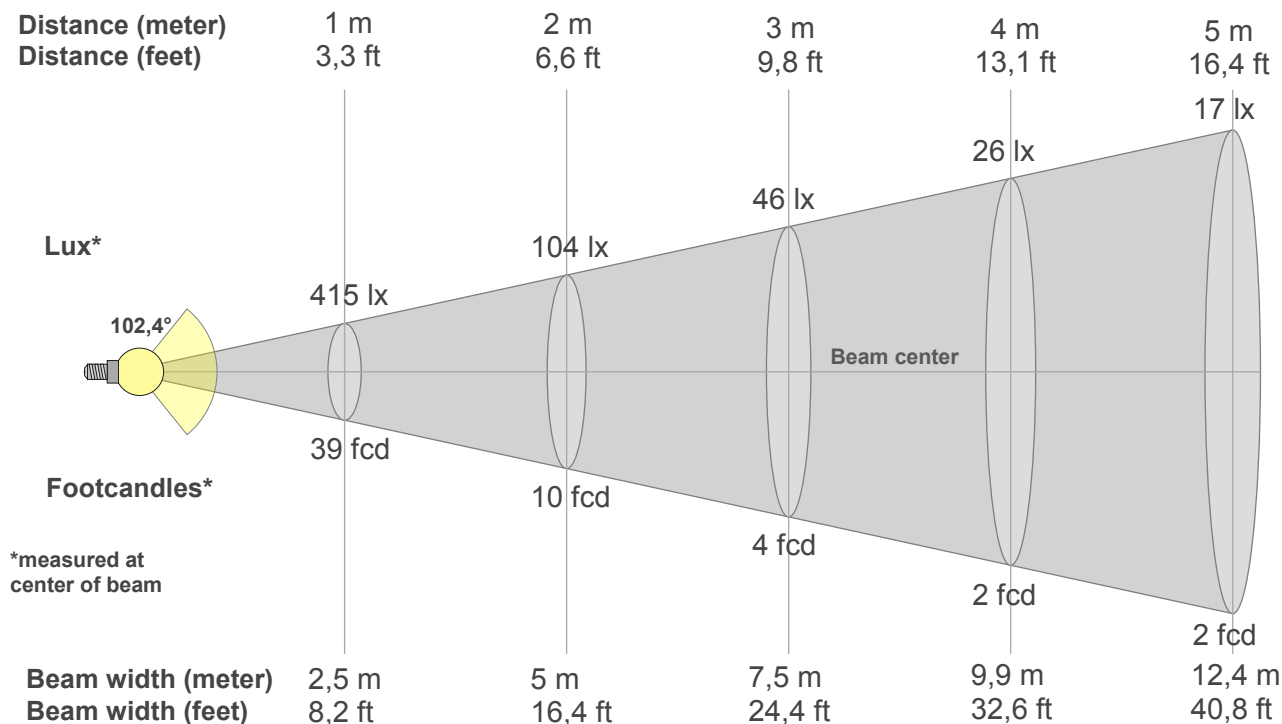
Fidelity index Rf

Rg 94,0

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	77	-11%	2%
2	81	-8%	8%
3	81	-3%	9%
4	92	-3%	2%
5	94	-2%	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%	-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
415lx	104lx	46lx	26lx	17lx	12lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
38,5fcd	9,6fcd	4,3fcd	2,4fcd	1,5fcd	1,1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	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°
415	415	410	406	405	403	403	413	431	120	26	29	17	12	18	25	41	41	1	1
100%	100%	99%	98%	98%	97%	97%	100%	104%	29%	6%	7%	4%	3%	4%	6%	10%	10%	0%	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°
415	413	408	403	395	386	373	360	344	326	304	282	256	233	235	175	58	13	1	0
100%	99%	98%	97%	95%	93%	90%	87%	83%	79%	73%	68%	62%	56%	57%	42%	14%	3%	0%	0%

Intensities in 180° c-plane

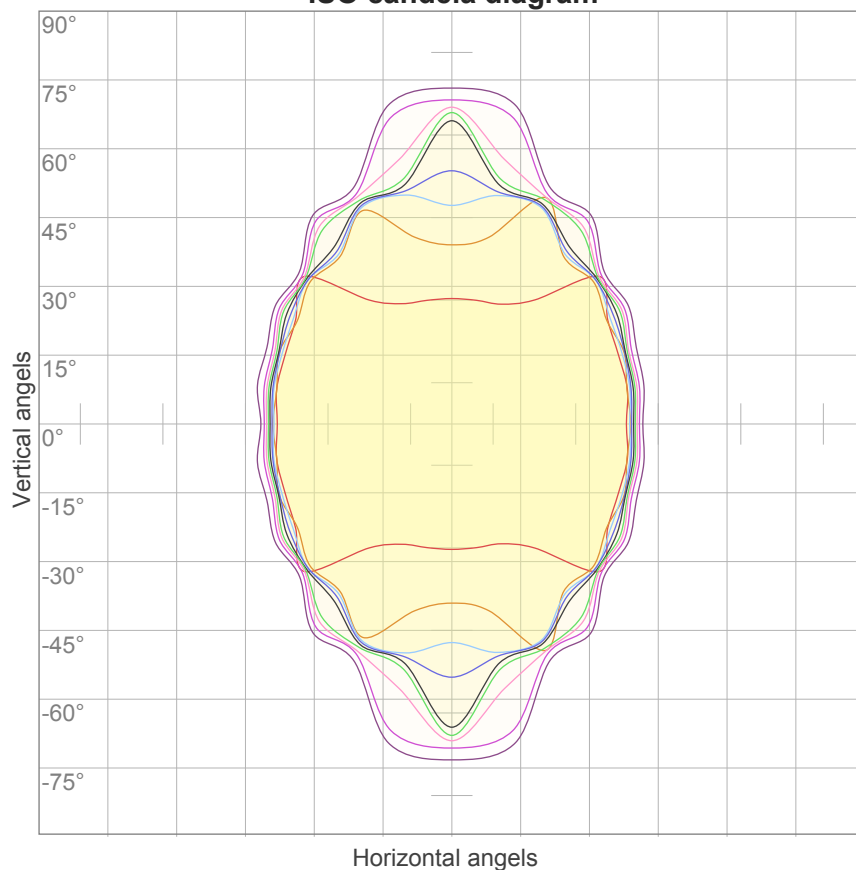
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
415	415	410	406	405	403	403	413	431	120	26	29	17	12	18	25	41	41	1	1
100%	100%	99%	98%	98%	97%	97%	100%	104%	29%	6%	7%	4%	3%	4%	6%	10%	10%	0%	0%

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°
415	413	408	403	395	386	373	360	344	326	304	282	256	233	235	175	58	13	1	0
100%	99%	98%	97%	95%	93%	90%	87%	83%	79%	73%	68%	62%	56%	57%	42%	14%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
102,4°	122,6°	182,9°	88,5%	67,7%

ISO candela diagram



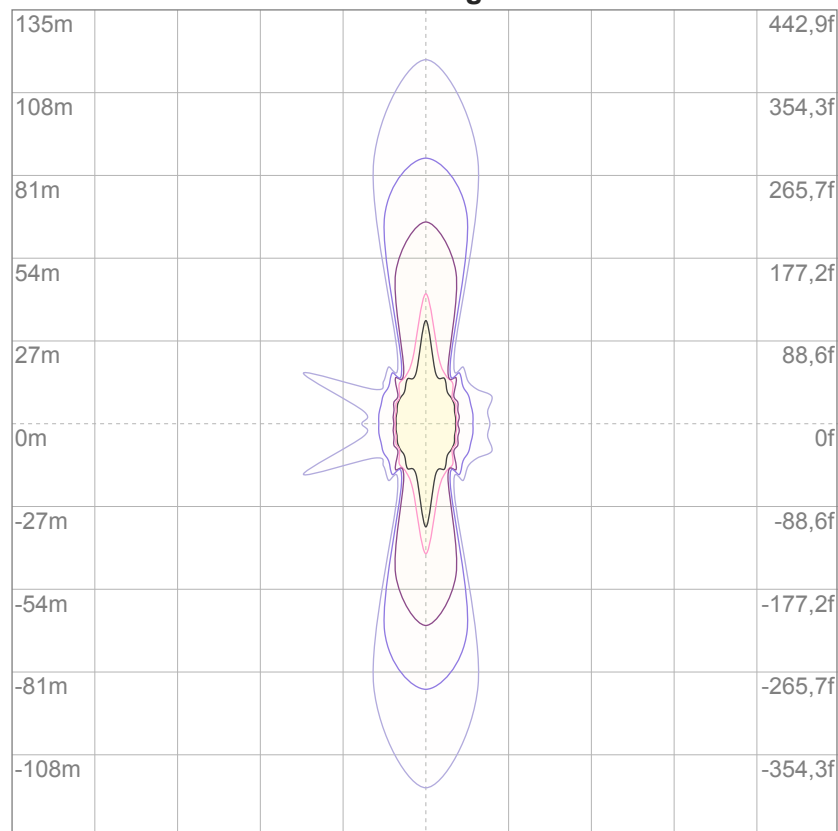
10%	41 cd
20%	83 cd
30%	124 cd
40%	166 cd
50%	207 cd
60%	249 cd
70%	290 cd
80%	332 cd
90%	373 cd

Conditions:

Number of c-planes: 16

Candela at center: 415 cd

ISO lux diagram



3%	0,124 lx
5%	0,207 lx
10%	0,415 lx
30%	1,24 lx
50%	2,07 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,15 lx

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

Glare Evaluation According to UGR

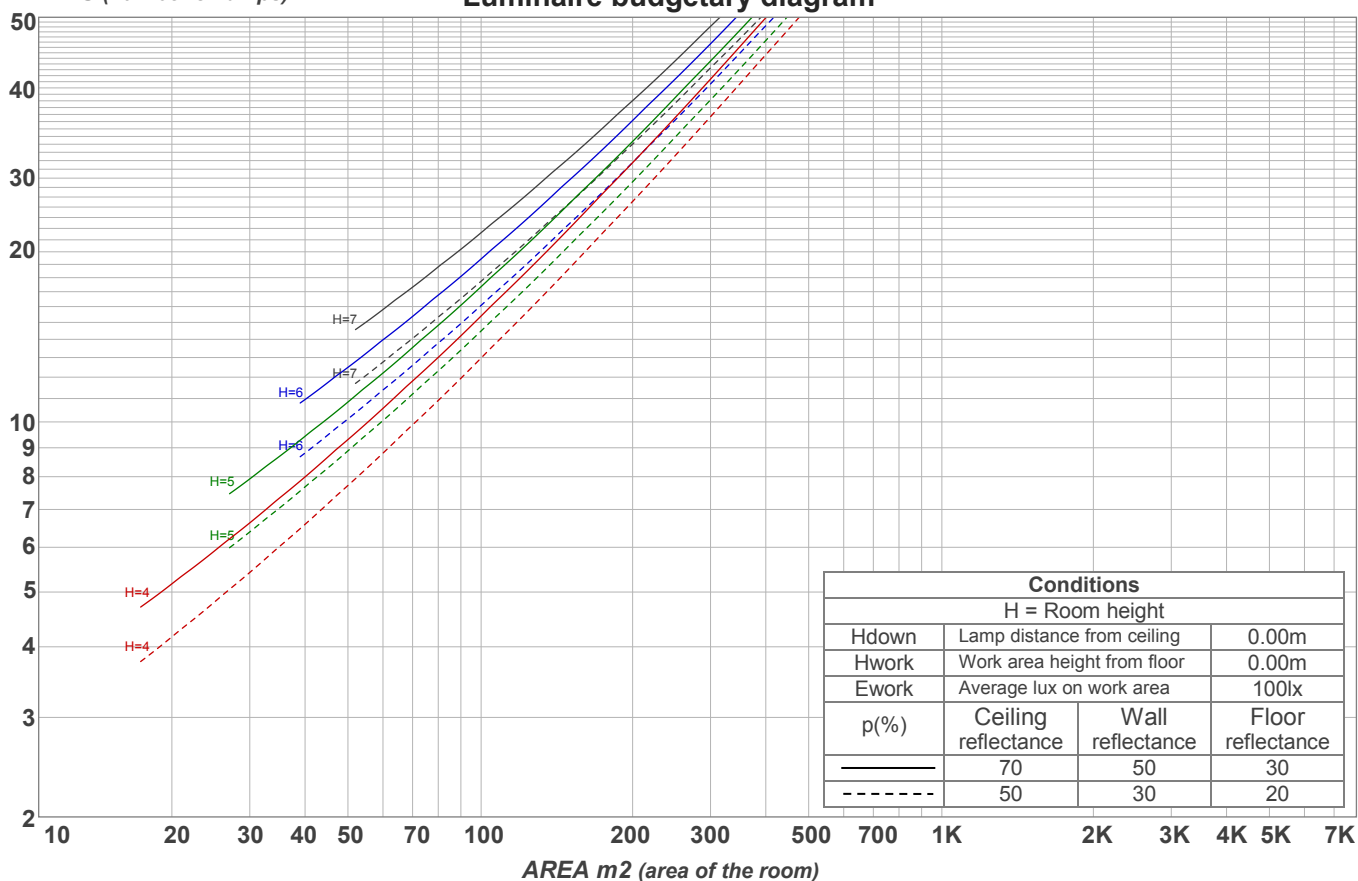
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19,9	21,0	20,1	21,3	21,5	25,5	26,6	25,7	26,8	27,1
	3H	19,7	20,8	20,1	21,1	21,3	27,0	28,1	27,4	28,4	28,6
	4H	19,8	20,9	20,2	21,1	21,4	28,2	29,2	28,6	29,5	29,7
	6H	20,4	21,3	20,7	21,6	22,0	28,7	29,6	29,0	29,9	30,2
	8H	20,9	21,8	21,2	22,1	22,5	28,7	29,6	29,0	29,9	30,3
	12H	21,5	22,3	21,8	22,7	23,1	28,7	29,5	29,0	29,9	30,3
4H	2H	19,9	21,0	20,3	21,2	21,5	25,2	26,2	25,6	26,5	26,7
	3H	19,9	20,8	20,3	21,1	21,6	26,9	27,7	27,2	28,1	28,5
	4H	20,0	20,8	20,4	21,2	21,7	27,9	28,7	28,4	29,1	29,7
	6H	20,7	21,5	21,2	21,9	22,2	28,4	29,2	28,9	29,5	29,9
	8H	21,5	22,2	22,0	22,6	22,9	28,5	29,2	29,0	29,5	29,9
	12H	22,3	22,9	22,8	23,3	23,8	28,5	29,0	29,0	29,5	29,9
8H	4H	19,9	20,7	20,5	21,0	21,4	27,8	28,5	28,3	28,9	29,3
	6H	20,9	21,4	21,4	21,9	22,4	28,3	28,8	28,8	29,3	29,8
	8H	22,0	22,4	22,5	22,9	23,6	28,4	28,8	28,9	29,4	30,0
	12H	23,1	23,5	23,7	24,0	24,6	28,4	28,8	29,0	29,3	29,9
12H	4H	19,9	20,5	20,4	20,9	21,4	27,8	28,3	28,3	28,8	29,2
	6H	20,9	21,4	21,5	21,9	22,5	28,3	28,7	28,8	29,3	29,9
	8H	22,0	22,4	22,6	22,9	23,5	28,4	28,7	28,9	29,2	29,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		1,1 / -1,0					0,5 / -0,9				
S = 1.5H		2,4 / -1,1					1,7 / -3,4				
S = 2.0H		3,7 / -1,3					2,9 / -6,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1048 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	98	107	103	100	97	99	96	93	94	92	90	91	89	87	85
2	101	94	88	83	99	92	87	82	88	84	80	85	81	78	82	78	76	74
3	93	84	77	71	91	82	76	70	79	74	69	76	71	67	74	70	66	64
4	86	75	68	62	84	74	67	61	71	65	60	69	63	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	62	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	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	37	33	31
10	56	44	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

LAMPS (number of lamps)

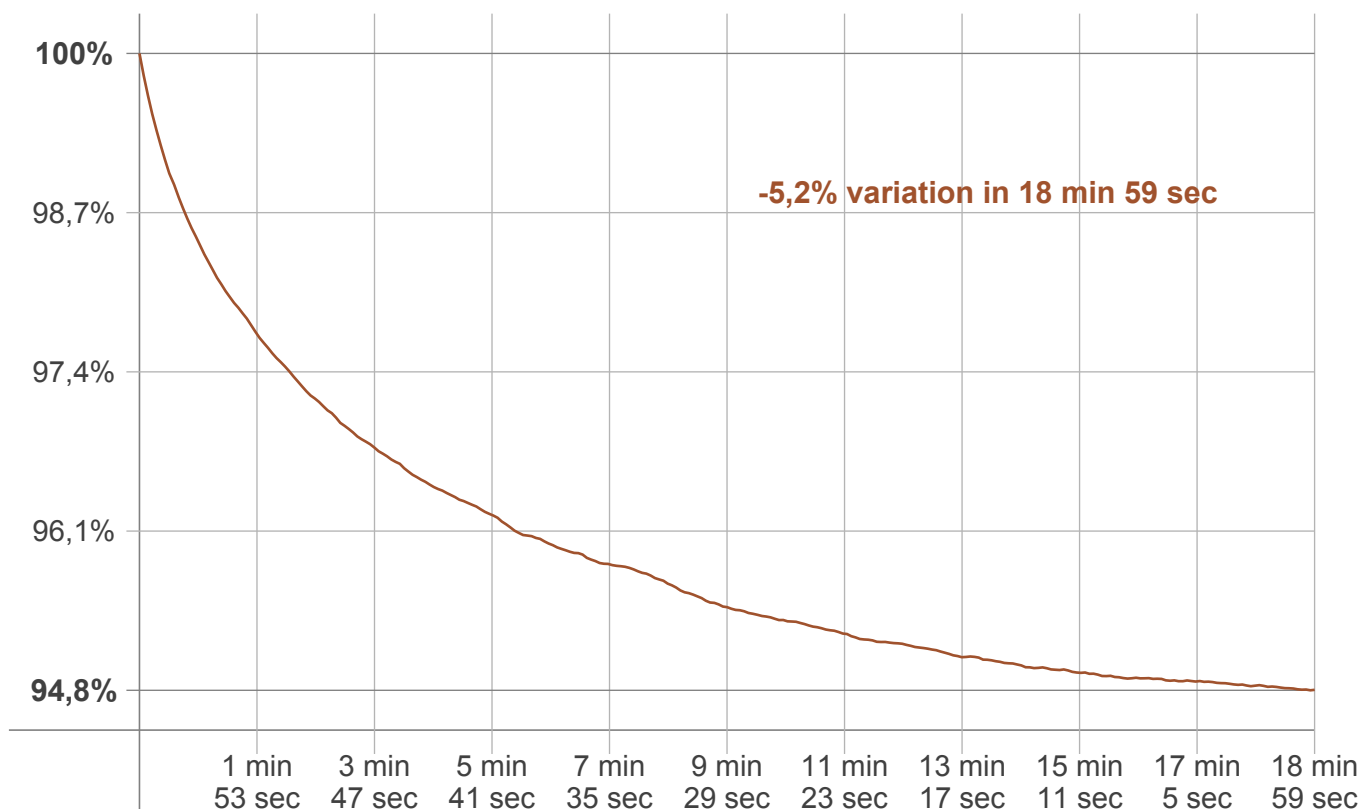
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
38,6 lm	113 lm	184 lm	239 lm	228 lm	125 lm	45,6 lm	34,4 lm	20,8 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7,22 lm	2,92 lm	2,18 lm	1,97 lm	1,65 lm	1,30 lm	0,958 lm	0,587 lm	1,00 lm

Warmup curve



Warmup result

Warmup time:	18 min 59 sec
Warmup variation	-5,2%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2240 K	+3 K	2243 K

Output change

Output start	Output change	Output end
1098 lm	-51 lm	1048 lm