

Light efficiency:

106 Lumen/Watt

Light quality:

CRI: 92,2

Color temperature:

5554 K

Output: 1068 lm

Peak: 420 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-4-0508-956-L9F

Item number:

FLNP/L/09D0508/956/L9F

Date and time:

08.04.2021 09:52:07

Description:

Rank: G7-2G0

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

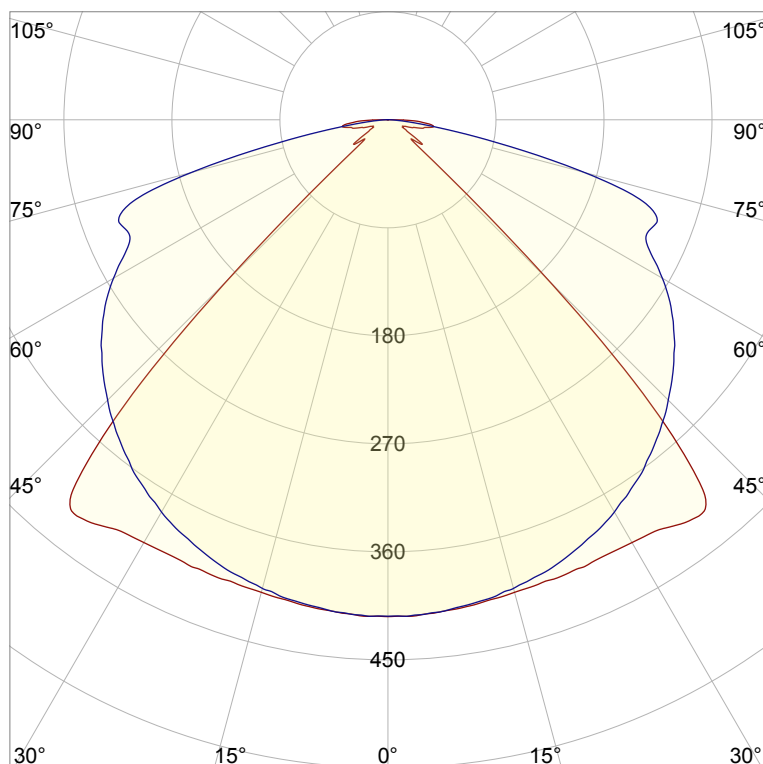
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

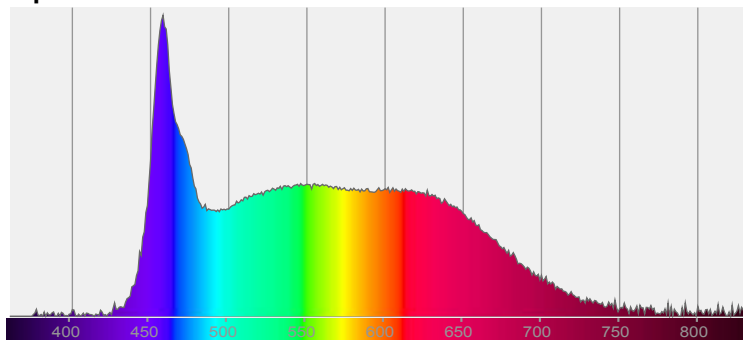


CIE 1931

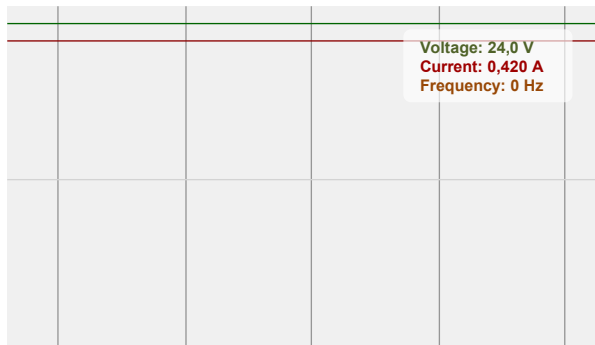
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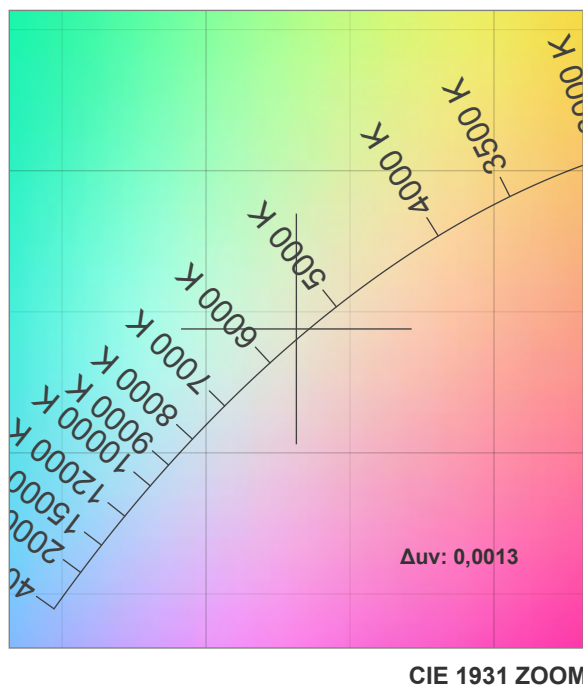
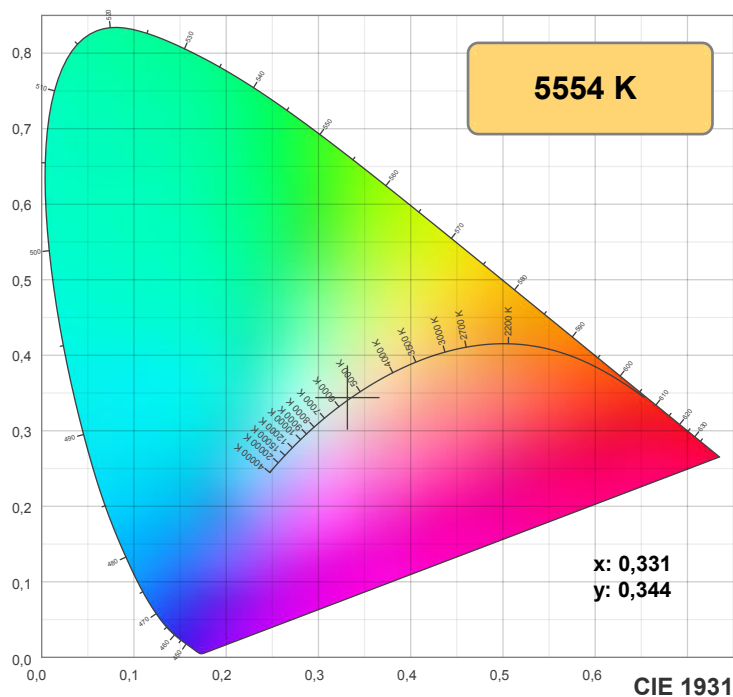
y: 0,344

Spectra

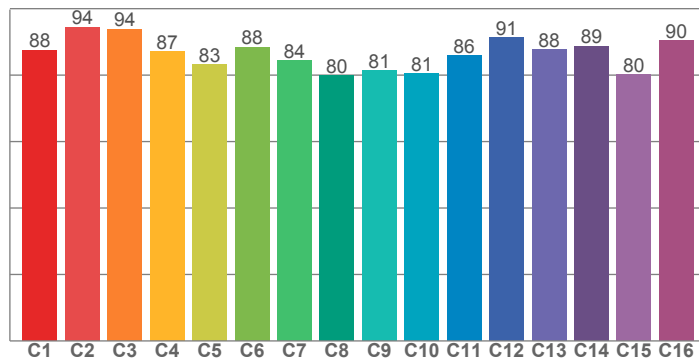


Power

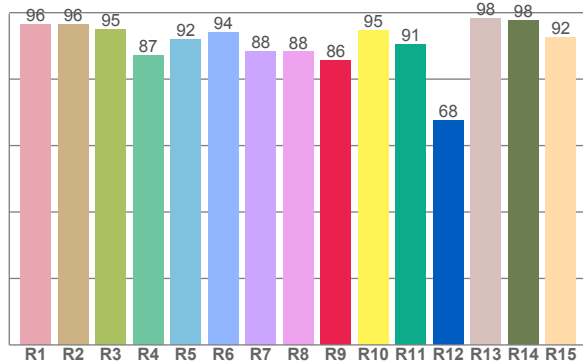




TM30: 86,4



CRI: 92,2 (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
96,3	96,3	94,8	87,2	92,0	94,0	88,4	88,2	85,7	94,7	90,6	67,5	98,2	97,8	92,4

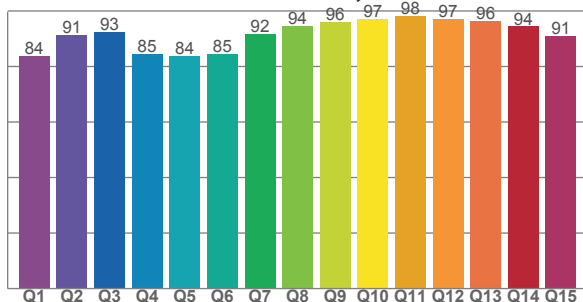
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87,5	94,4	93,8	87,1	83,1	88,5	84,4	79,8	81,3	80,6	85,8	91,2	87,7	88,7	80,3	90,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
83,8	91,4	92,5	84,6	83,9	84,5	91,7	94,5	96,0	97,1	98,1	97,1	96,3	94,4	91,0

CQS: 90,4



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
5554 K	92,2	85,7	86,4	94,2	90,4	0,331	0,344	0,205	0,319	0,0013

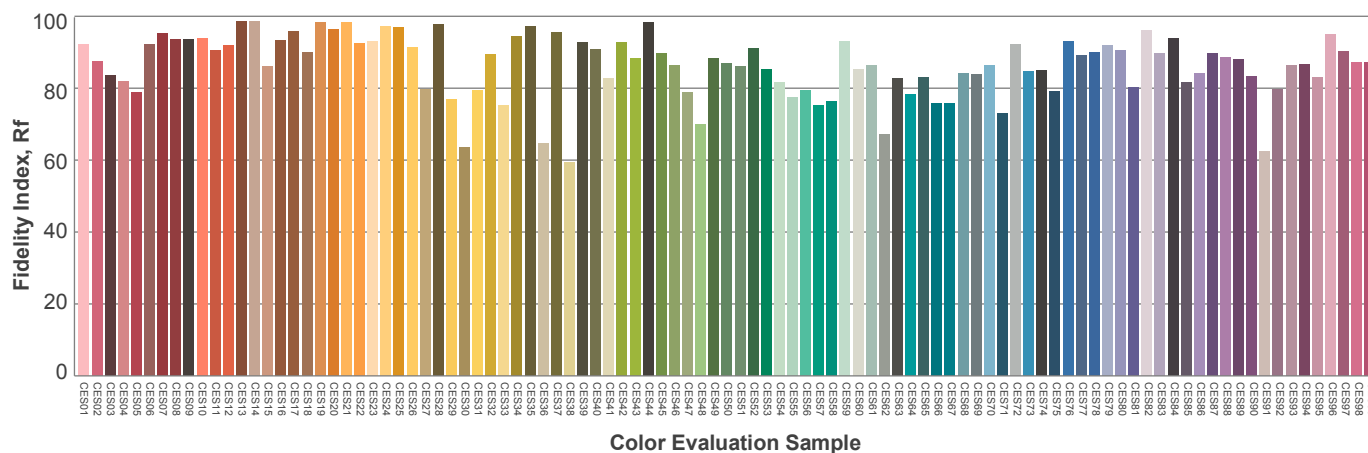
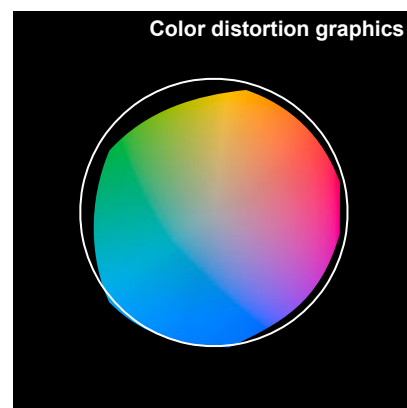
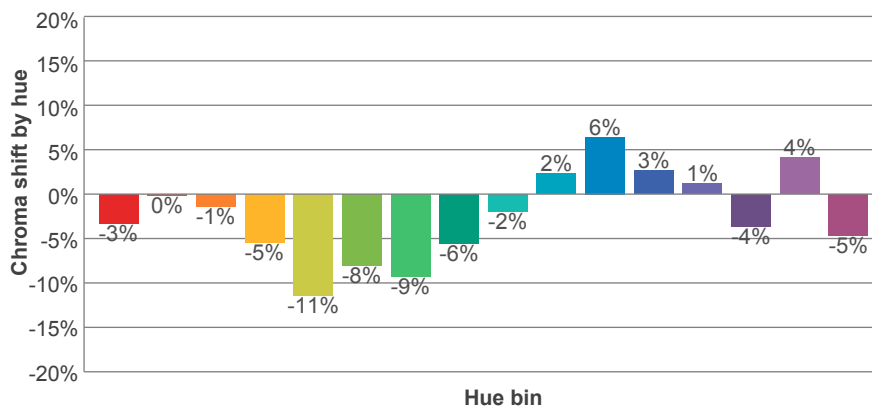
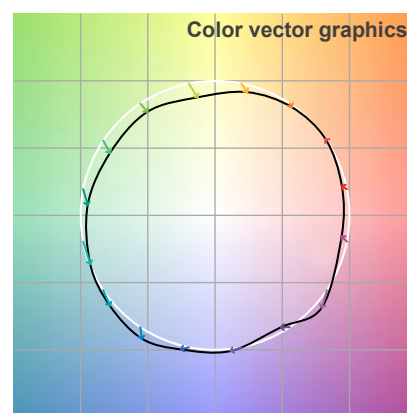
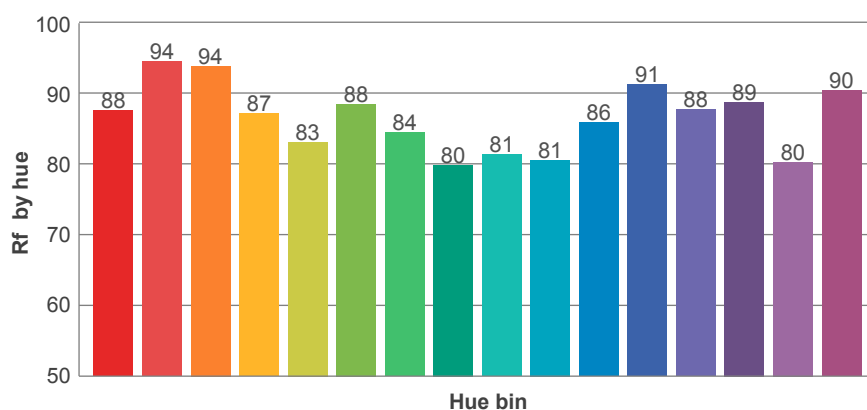
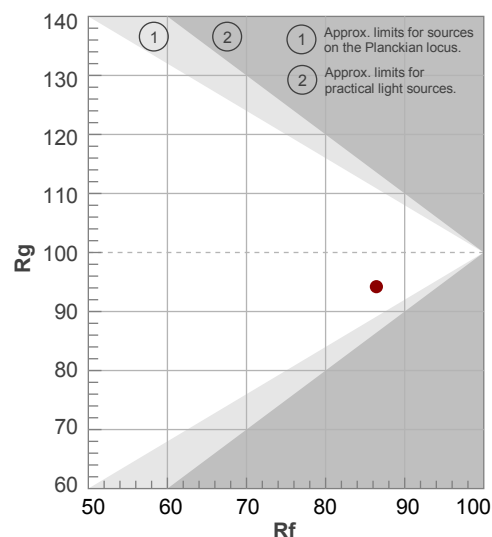
Rf 86,4

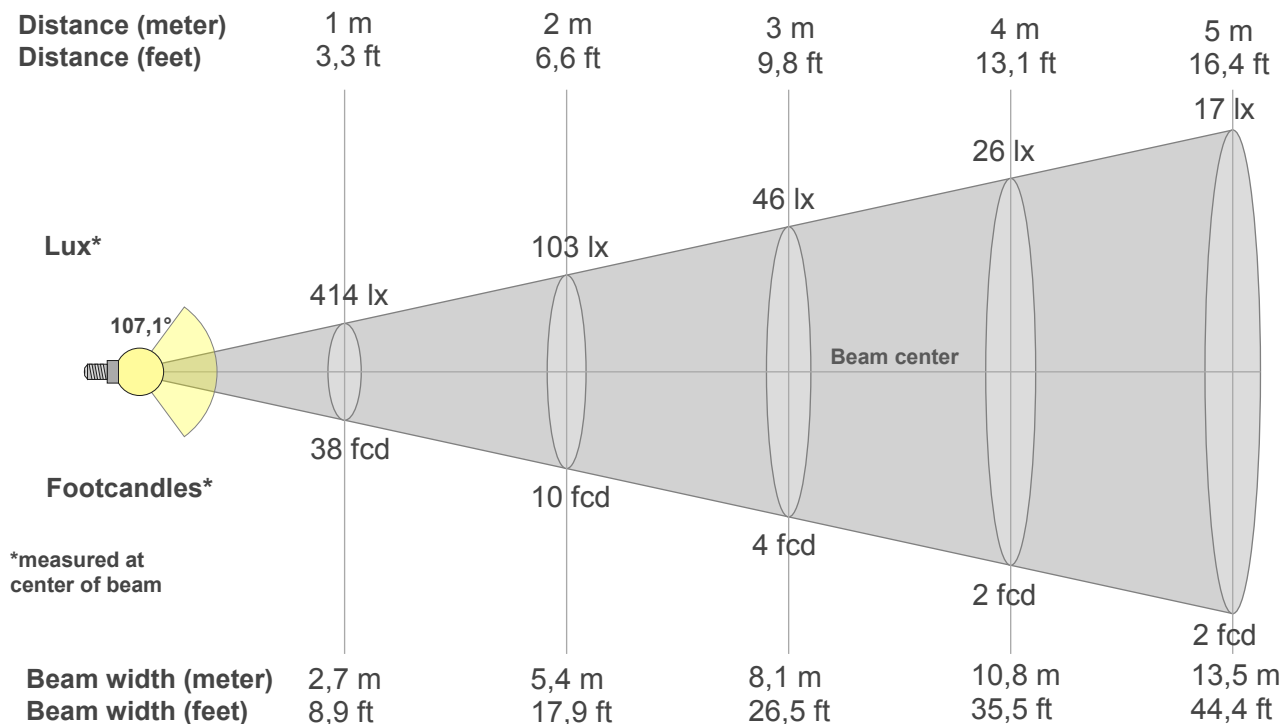
Fidelity index Rf

Rg 94,2

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-3%	3%
2	94	0%	2%
3	94	-1%	-3%
4	87	-5%	-6%
5	83	-11%	-4%
6	88	-8%	-1%
7	84	-9%	5%
8	80	-6%	11%
9	81	-2%	17%
10	81	2%	12%
11	86	6%	6%
12	91	3%	-5%
13	88	1%	-8%
14	89	-4%	-5%
15	80	4%	-13%
16	90	-5%	3%





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
414lx	103lx	46lx	26lx	17lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
38,4fcd	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°
414	413	410	408	407	406	407	413	410	189	25	34	18	14	17	26	36	31	11	10
100%	100%	99%	99%	98%	98%	98%	100%	99%	46%	6%	8%	4%	3%	4%	6%	9%	7%	3%	2%

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°
414	412	409	404	398	388	377	364	348	330	311	290	264	237	238	169	59	13	1	1
100%	100%	99%	98%	96%	94%	91%	88%	84%	80%	75%	70%	64%	57%	58%	41%	14%	3%	0%	0%

Intensities in 180° c-plane

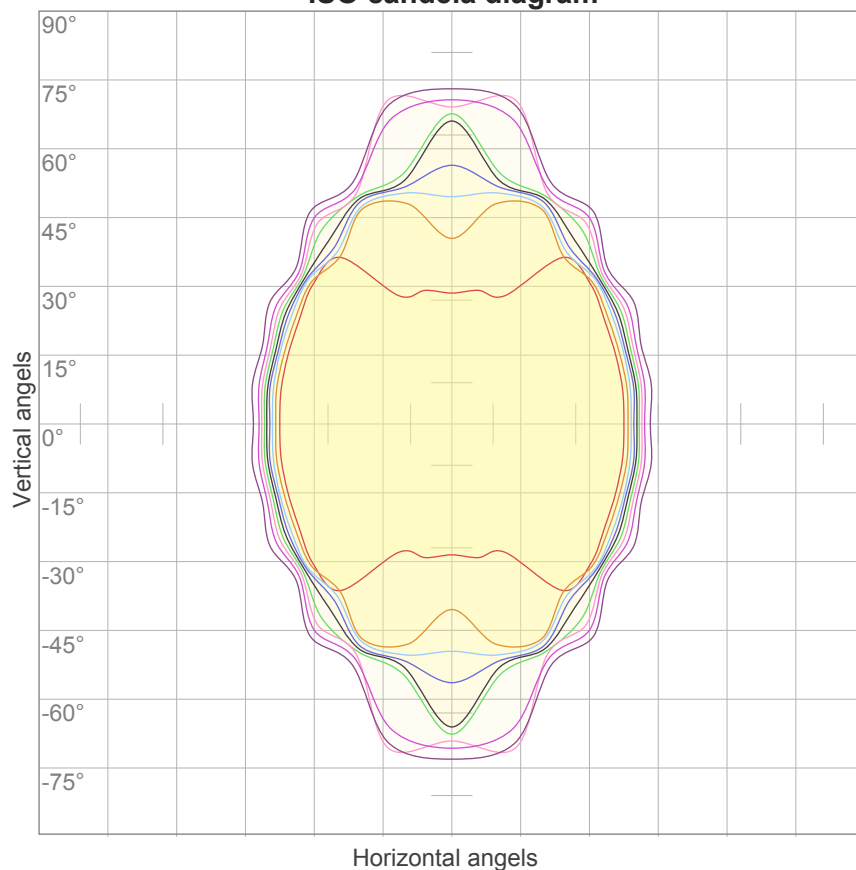
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
414	413	410	408	407	406	407	413	410	189	25	34	18	14	17	26	36	31	11	10
100%	100%	99%	99%	98%	98%	98%	100%	99%	46%	6%	8%	4%	3%	4%	6%	9%	7%	3%	2%

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°
414	412	409	404	398	388	377	364	348	330	311	290	264	237	238	169	59	13	1	1
100%	100%	99%	98%	96%	94%	91%	88%	84%	80%	75%	70%	64%	57%	58%	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
107,1°	115,6°	171°	88,5%	67,1%

ISO candela diagram



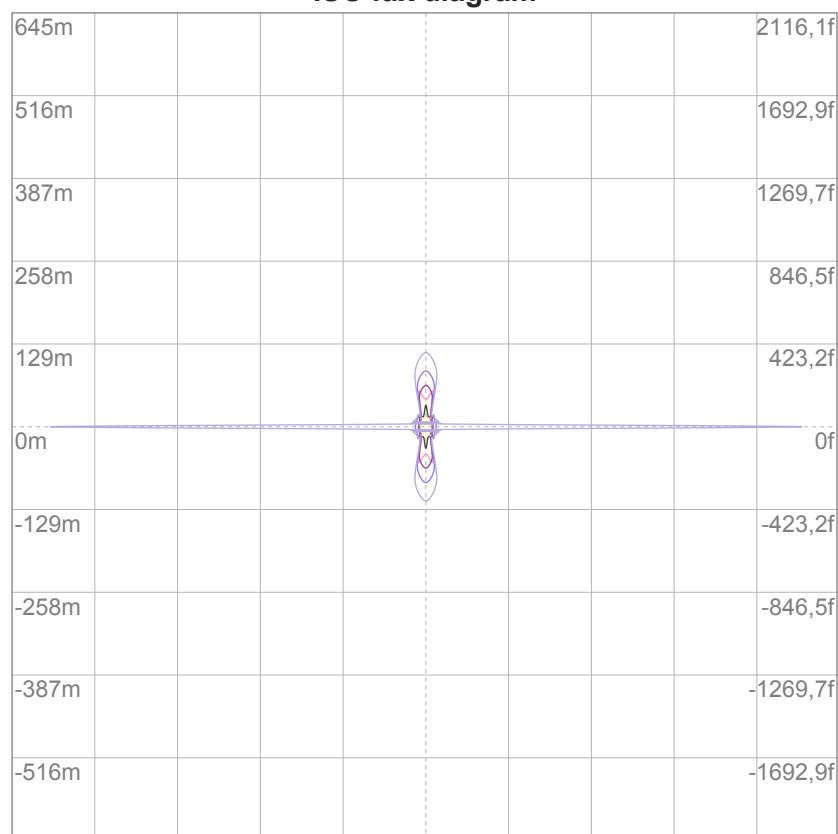
10%	41 cd
20%	83 cd
30%	124 cd
40%	165 cd
50%	207 cd
60%	248 cd
70%	290 cd
80%	331 cd
90%	372 cd

Conditions:

Number of c-planes: 16

Candela at center: 414 cd

ISO lux diagram



3%	0,124 lx
5%	0,207 lx
10%	0,414 lx
30%	1,24 lx
50%	2,07 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,14 lx

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

Glare Evaluation According to UGR

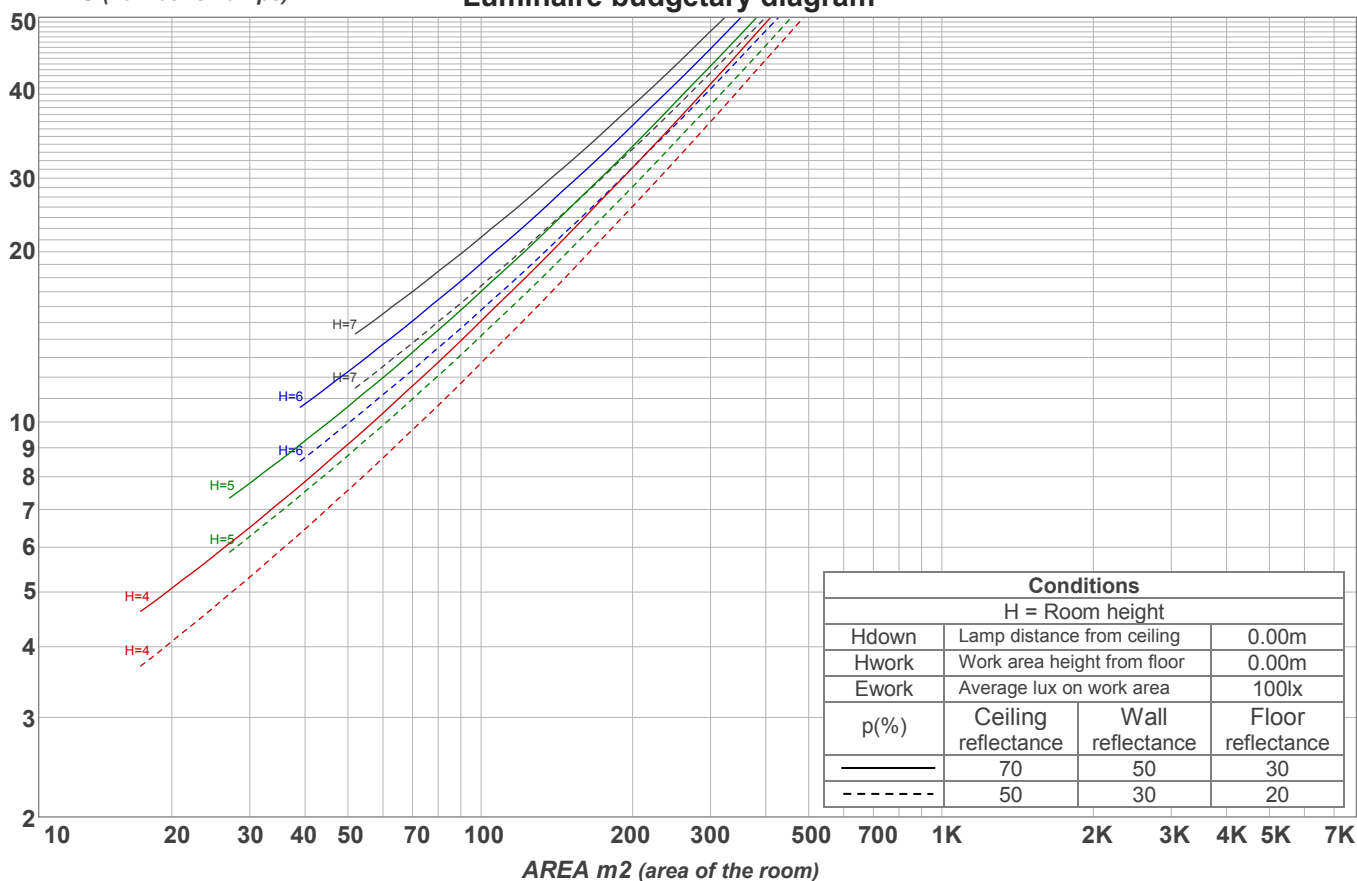
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19,9	20,9	20,1	21,2	21,4	25,7	26,8	25,9	27,1	27,3
	3H	19,7	20,8	20,1	21,0	21,2	27,2	28,3	27,6	28,6	28,8
	4H	19,8	20,8	20,2	21,1	21,3	28,2	29,3	28,6	29,6	29,8
	6H	20,3	21,2	20,6	21,5	21,8	28,7	29,6	29,0	29,9	30,3
	8H	20,6	21,5	21,0	21,8	22,2	28,7	29,6	29,1	29,9	30,4
	12H	21,0	21,8	21,4	22,2	22,6	28,7	29,6	29,1	29,9	30,4
4H	2H	19,9	21,0	20,3	21,3	21,5	25,4	26,5	25,8	26,7	27,0
	3H	19,9	20,8	20,3	21,1	21,6	27,0	27,9	27,4	28,2	28,7
	4H	20,0	20,8	20,4	21,2	21,8	28,0	28,8	28,4	29,2	29,7
	6H	20,6	21,4	21,1	21,8	22,1	28,5	29,2	28,9	29,6	29,9
	8H	21,2	21,9	21,7	22,3	22,6	28,5	29,2	29,0	29,6	29,9
	12H	21,7	22,3	22,2	22,7	23,2	28,5	29,1	29,0	29,5	30,0
8H	4H	19,9	20,7	20,5	21,0	21,4	27,9	28,6	28,4	28,9	29,3
	6H	20,8	21,3	21,3	21,8	22,3	28,4	28,9	28,9	29,3	29,9
	8H	21,6	22,0	22,1	22,6	23,2	28,4	28,9	29,0	29,4	30,0
	12H	22,4	22,8	23,0	23,3	23,9	28,4	28,8	29,0	29,3	29,9
12H	4H	19,9	20,5	20,4	20,9	21,4	27,8	28,4	28,3	28,8	29,3
	6H	20,8	21,3	21,3	21,8	22,4	28,4	28,8	28,9	29,3	30,0
	8H	21,6	22,0	22,2	22,5	23,1	28,4	28,8	29,0	29,3	29,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		1,1 / -1,3					0,5 / -0,8				
S = 1.5H		2,4 / -1,5					1,7 / -3,4				
S = 2.0H		3,8 / -1,7					2,8 / -6,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1068 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	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	72	68	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	60	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	50	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)

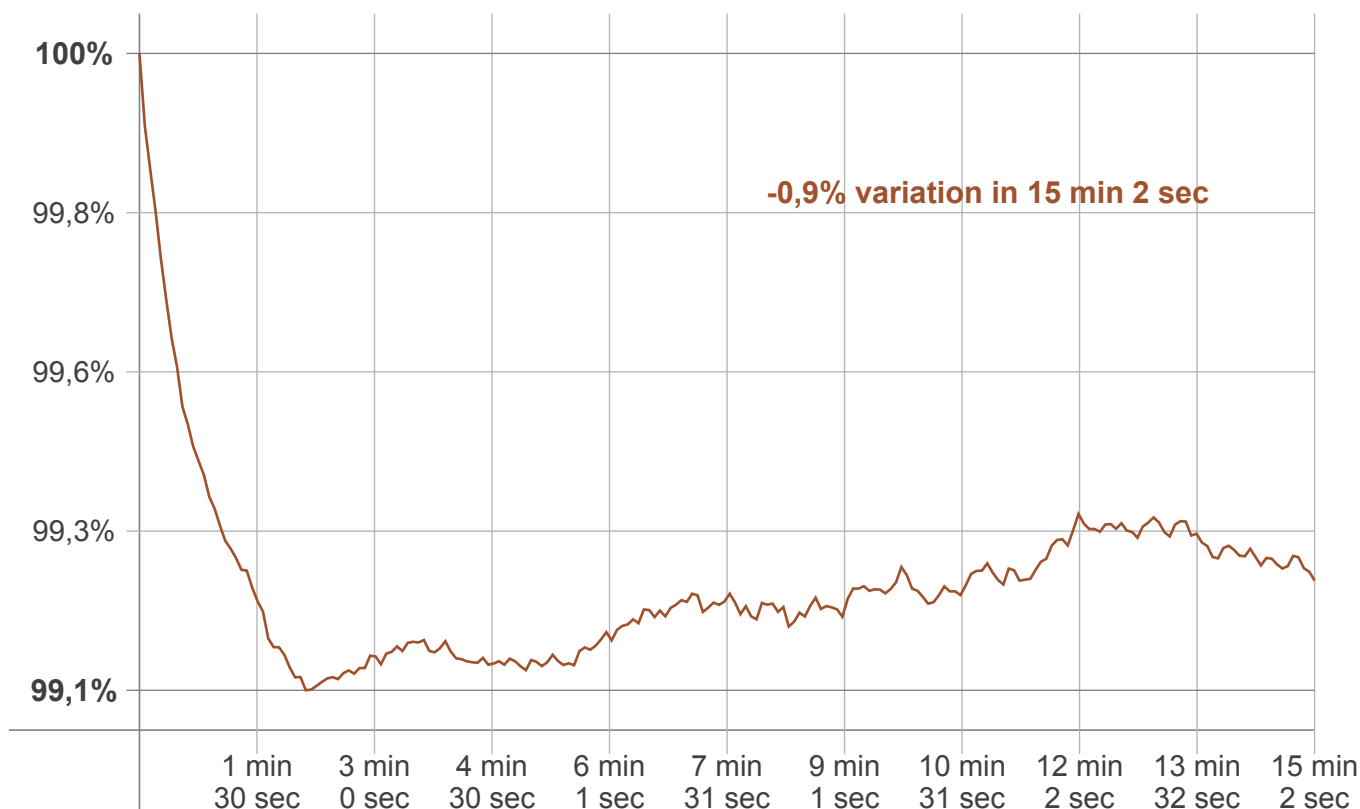
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
39,3 lm	115 lm	183 lm	244 lm	240 lm	124 lm	47,3 lm	33,6 lm	18,4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7,91 lm	3,81 lm	3,39 lm	3,07 lm	1,98 lm	1,20 lm	0,888 lm	0,544 lm	0,183 lm

Warmup curve



Warmup result

Warmup time:	15 min 2 sec
Warmup variation	-0,9%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5544 K	+10 K	5554 K

Output change

Output start	Output change	Output end
1074 lm	-5 lm	1068 lm