

Light efficiency:

96 Lumen/Watt

Light quality:

CRI: 92,4

Color temperature:

5493 K

Output: 963 lm

Peak: 336 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-4-0508-956-CSF

Item number:

FLNP/L/09D0508/956/CSF

Date and time:

07.04.2021 09:50:56

Description:

Rank: G7-2G0

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

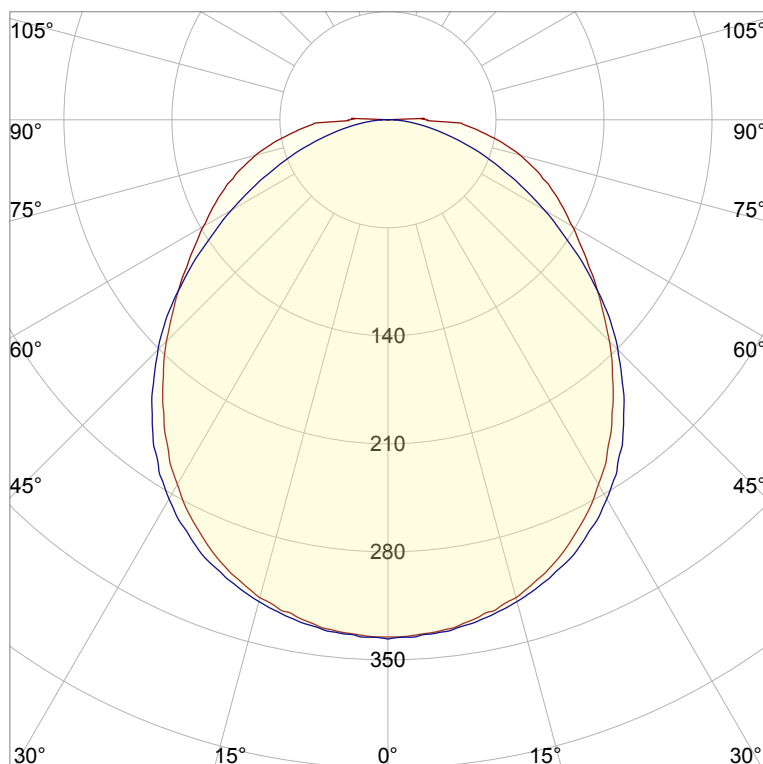
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

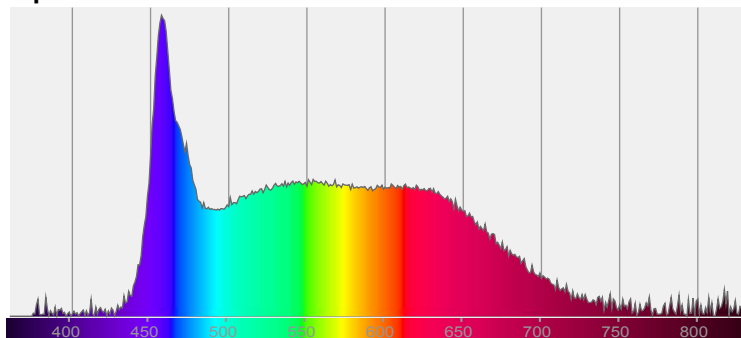


CIE 1931

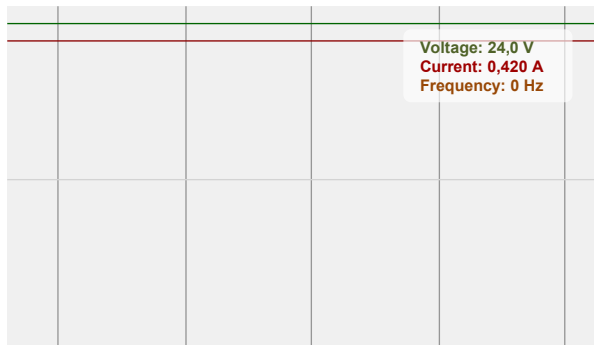
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y: 0,345

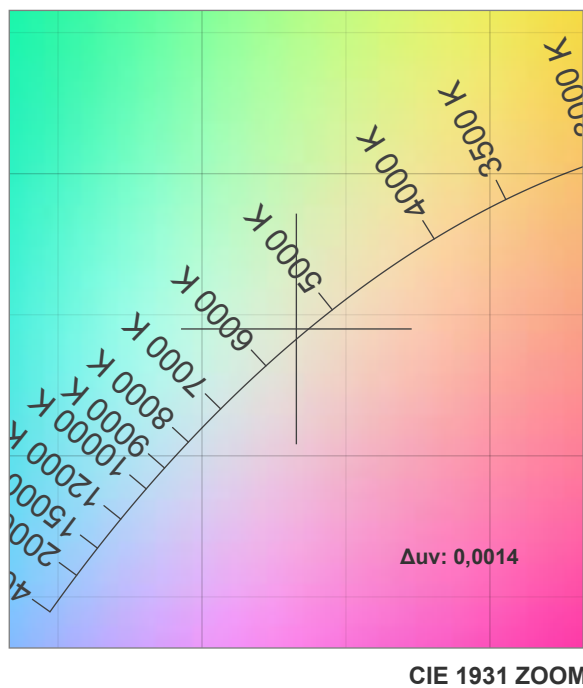
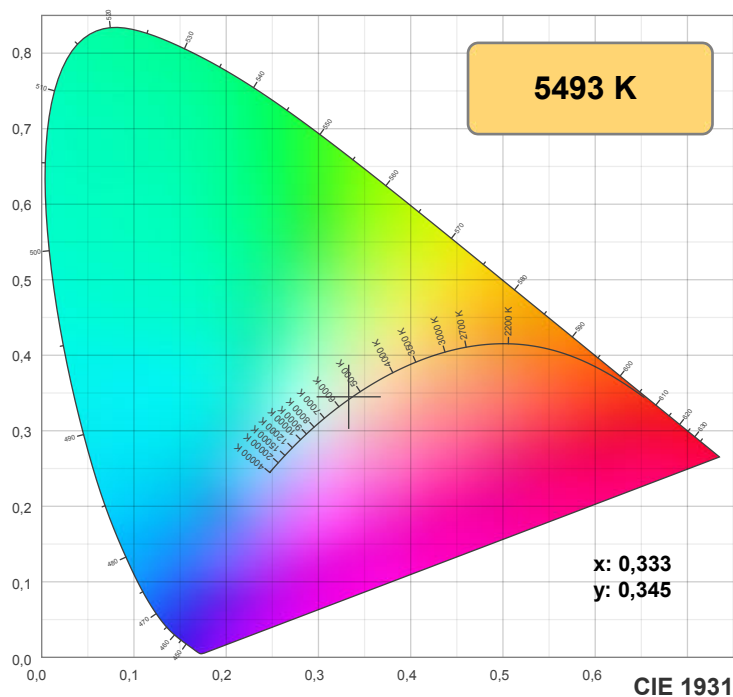
Spectra



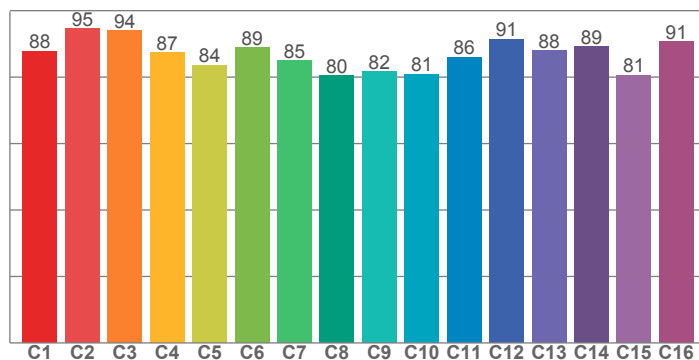
Power



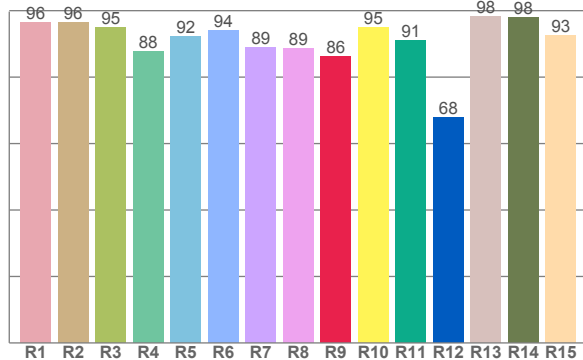
Voltage: 24,0 V
Current: 0,420 A
Frequency: 0 Hz



TM30: 86,8



CRI: 92,4 (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
96,4	96,5	95,1	87,8	92,2	94,0	88,8	88,6	86,2	94,9	91,1	67,9	98,2	97,9	92,7

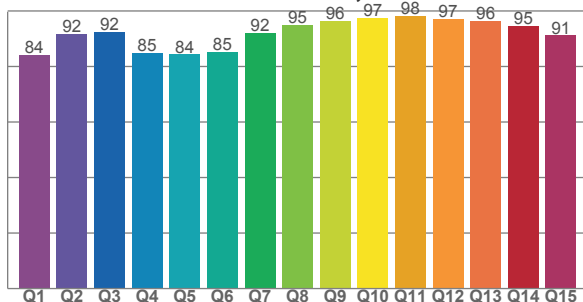
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87,9	94,6	94,0	87,4	83,6	88,9	84,9	80,4	81,7	81,0	86,0	91,5	87,9	89,1	80,6	90,7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84,2	91,7	92,4	84,8	84,3	85,1	92,2	94,8	96,3	97,4	98,1	97,1	96,3	94,6	91,2

CQS: 90,6



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
5493 K	92,4	86,2	86,8	94,4	90,6	0,333	0,345	0,206	0,320	0,0014

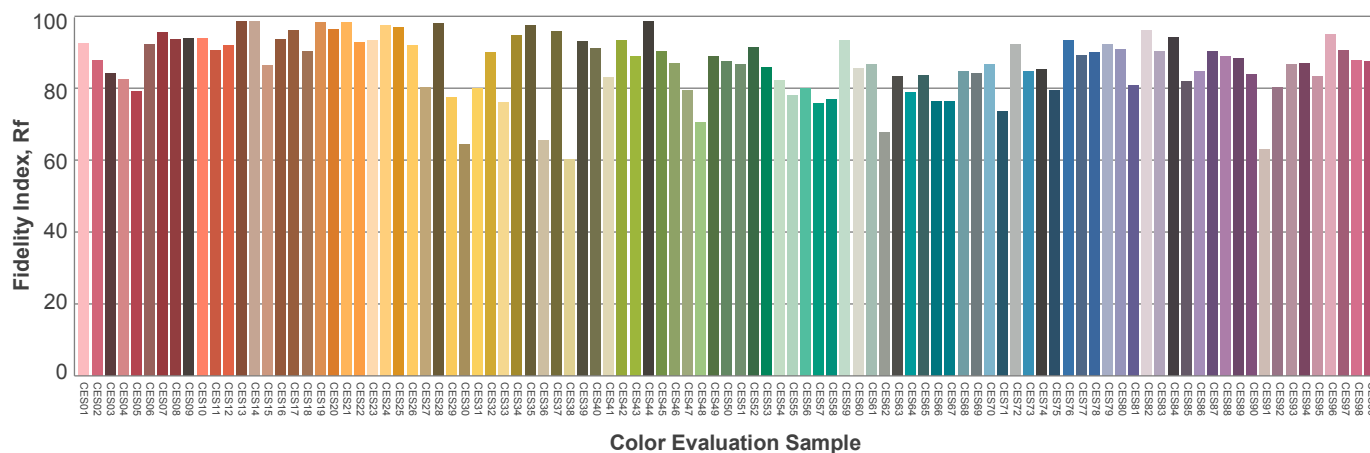
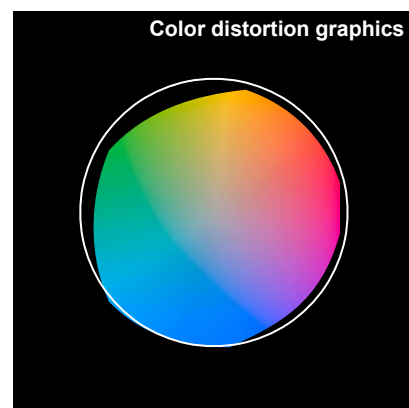
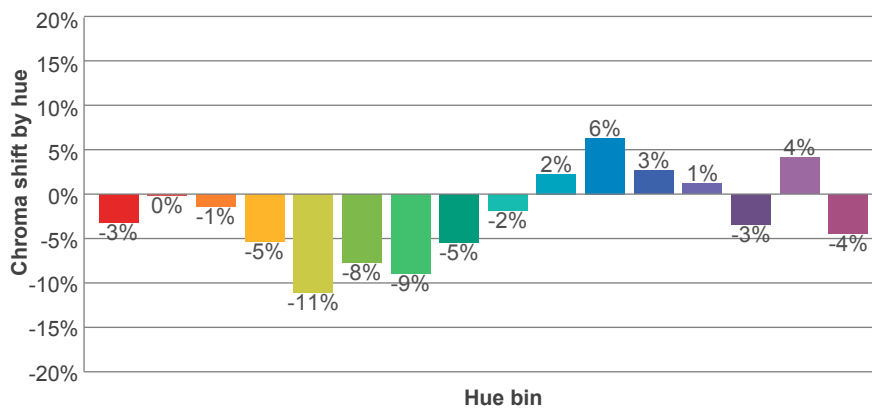
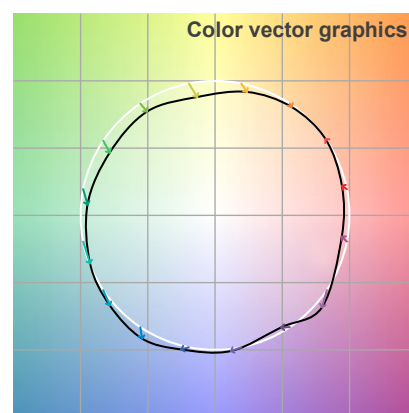
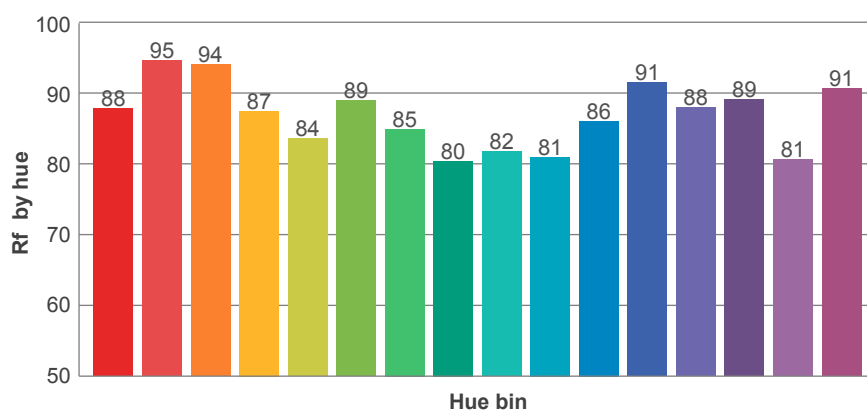
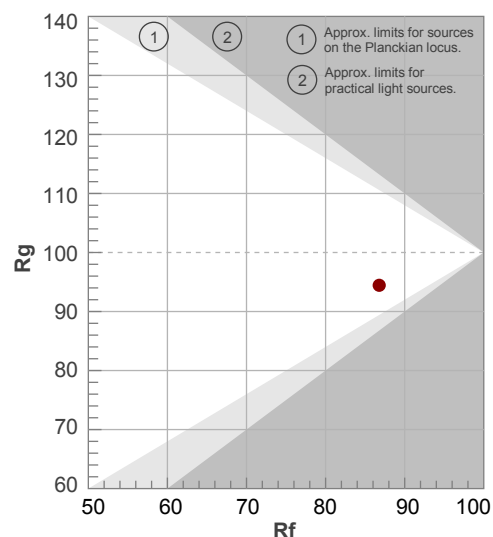
Rf 86,8

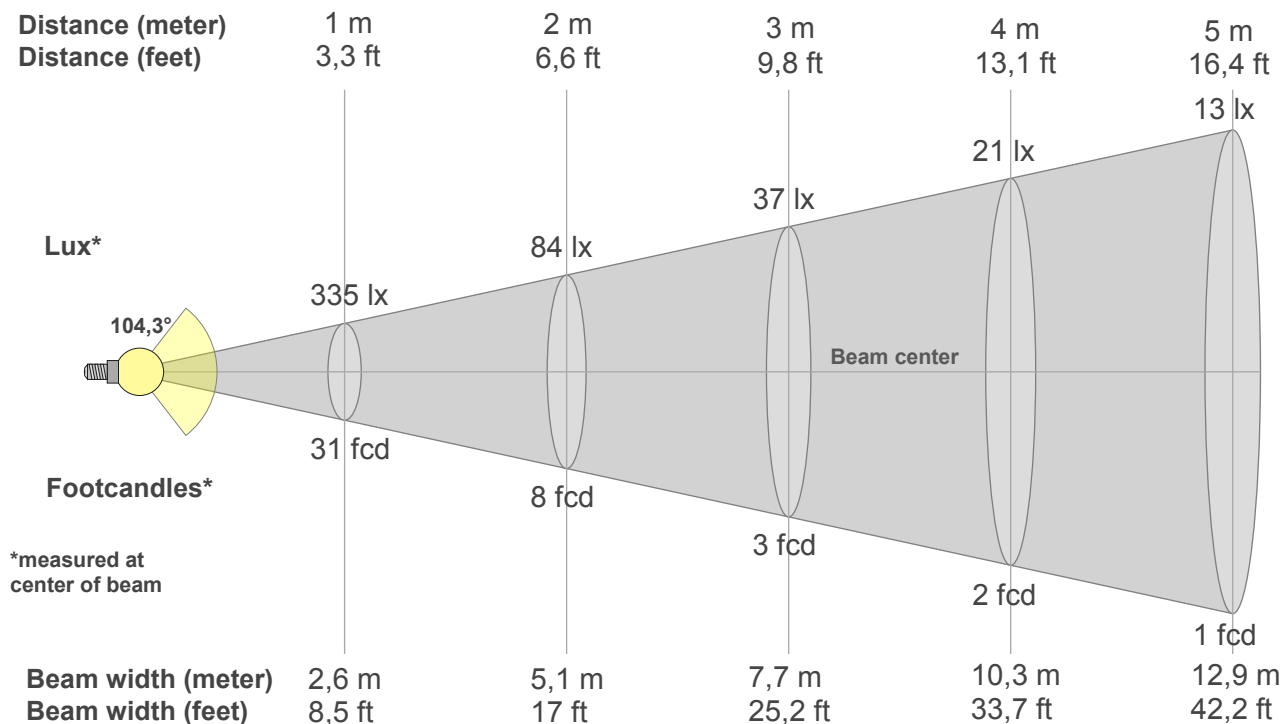
Fidelity index Rf

Rg 94,4

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-3%	3%
2	95	0%	2%
3	94	-1%	-2%
4	87	-5%	-5%
5	84	-11%	-4%
6	89	-8%	-1%
7	85	-9%	5%
8	80	-5%	11%
9	82	-2%	17%
10	81	2%	12%
11	86	6%	6%
12	91	3%	-5%
13	88	1%	-8%
14	89	-3%	-5%
15	81	4%	-13%
16	91	-4%	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
335lx	84lx	37lx	21lx	13lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx
31,2fcd	7,8fcd	3,5fcd	1,9fcd	1,2fcd	0,9fcd	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	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°
335	333	328	321	308	292	273	251	227	203	179	157	138	122	105	89	70	53	25	0
100%	99%	98%	96%	92%	87%	81%	75%	68%	61%	53%	47%	41%	36%	31%	26%	21%	16%	7%	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°
335	334	330	323	313	300	284	263	238	211	181	148	117	89	65	42	25	11	2	2
100%	100%	98%	96%	93%	90%	85%	78%	71%	63%	54%	44%	35%	27%	19%	13%	7%	3%	1%	1%

Intensities in 180° c-plane

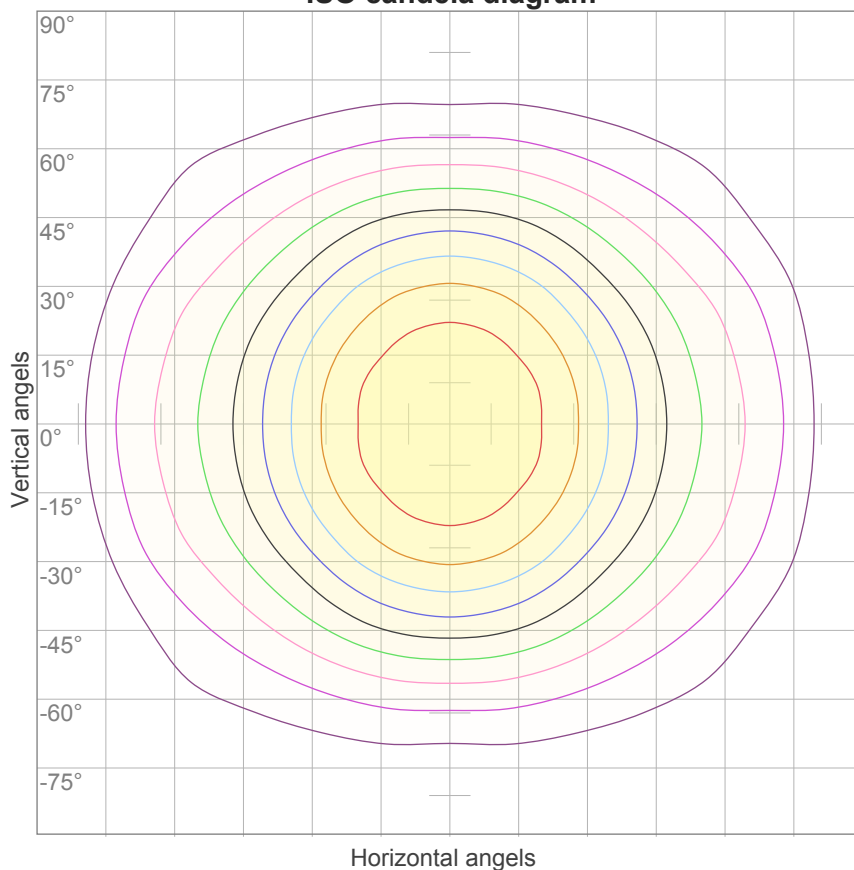
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
335	333	328	321	308	292	273	251	227	203	179	157	138	122	105	89	70	53	25	0
100%	99%	98%	96%	92%	87%	81%	75%	68%	61%	53%	47%	41%	36%	31%	26%	21%	16%	7%	0%

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°
335	334	330	323	313	300	284	263	238	211	181	148	117	89	65	42	25	11	2	2
100%	100%	98%	96%	93%	90%	85%	78%	71%	63%	54%	44%	35%	27%	19%	13%	7%	3%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
104,3°	169,9°	207,8°	74,3%	52,1%

ISO candela diagram



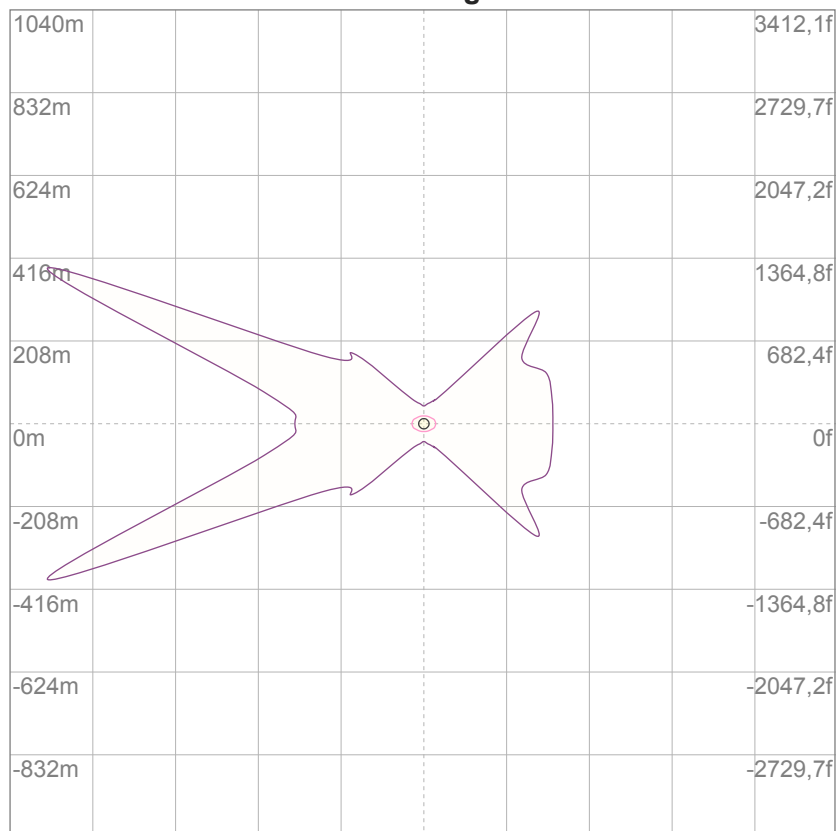
10%	34 cd
20%	67 cd
30%	101 cd
40%	134 cd
50%	168 cd
60%	201 cd
70%	235 cd
80%	268 cd
90%	302 cd

Conditions:

Number of c-planes: 16

Candela at center: 335 cd

ISO lux diagram



3%	0,101 lx
5%	0,168 lx
10%	0,335 lx
30%	1,01 lx
50%	1,68 lx

Conditions:

Number of c-planes: 16

Lux at center: 3,35 lx

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

Glare Evaluation According to UGR

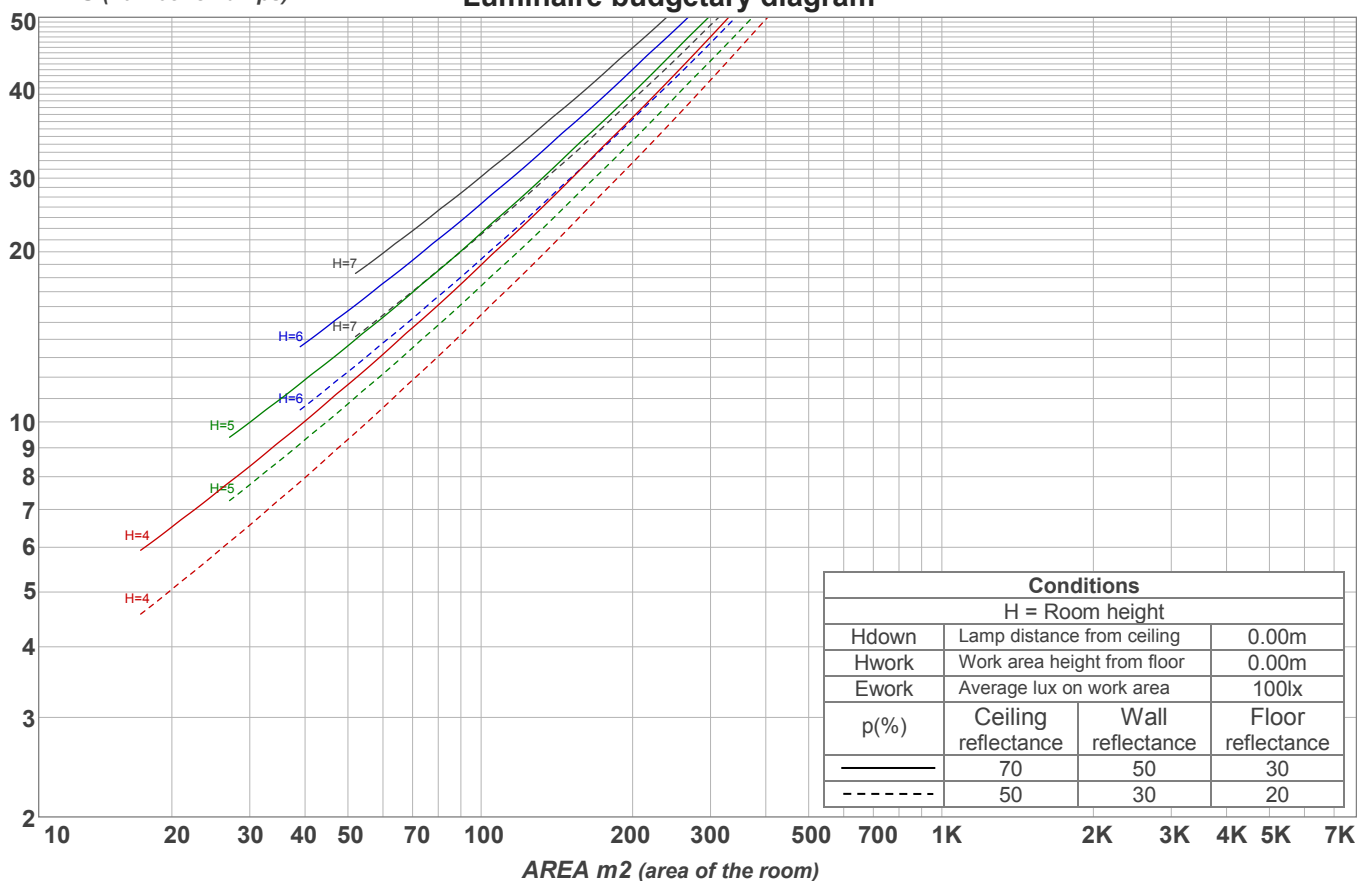
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	21,8	23,0	22,0	23,3	23,5	22,4	23,6	22,6	23,9	24,1
	3H	23,3	24,6	23,7	24,9	25,1	23,5	24,7	23,9	25,0	25,2
	4H	24,1	25,3	24,5	25,6	25,8	23,9	25,1	24,3	25,4	25,7
	6H	24,8	25,9	25,1	26,2	26,6	24,3	25,4	24,6	25,7	26,0
	8H	25,1	26,1	25,4	26,4	26,9	24,4	25,5	24,7	25,8	26,2
	12H	25,3	26,3	25,7	26,7	27,1	24,4	25,5	24,8	25,8	26,3
4H	2H	22,3	23,5	22,7	23,8	24,1	22,8	24,0	23,2	24,3	24,5
	3H	24,2	25,2	24,5	25,5	26,0	24,2	25,2	24,6	25,5	26,0
	4H	25,0	26,0	25,5	26,4	26,9	24,7	25,6	25,1	26,1	26,6
	6H	25,9	26,8	26,4	27,1	27,5	25,1	26,0	25,6	26,4	26,8
	8H	26,2	27,0	26,7	27,4	27,8	25,3	26,1	25,8	26,5	26,9
	12H	26,5	27,2	27,0	27,7	28,1	25,4	26,1	25,9	26,5	27,0
8H	4H	25,3	26,1	25,8	26,5	26,9	25,0	25,8	25,5	26,2	26,6
	6H	26,3	27,0	26,8	27,4	28,0	25,6	26,3	26,1	26,7	27,3
	8H	26,9	27,4	27,4	27,9	28,6	25,9	26,4	26,4	27,0	27,6
	12H	27,3	27,8	27,9	28,3	28,9	26,1	26,5	26,6	27,0	27,7
12H	4H	25,3	26,0	25,8	26,4	26,9	25,0	25,7	25,5	26,2	26,6
	6H	26,4	27,0	26,9	27,5	28,2	25,7	26,3	26,3	26,8	27,5
	8H	27,0	27,5	27,6	28,0	28,6	26,0	26,5	26,6	27,0	27,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,1					0,1 / -0,1				
S = 1.5H		0,1 / -0,2					0,3 / -0,4				
S = 2.0H		0,3 / -0,4					0,7 / -0,8				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 963 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	109	109	109	104	104	104	99	99	99	97
1	107	102	97	93	104	99	95	92	95	91	88	90	87	85	86	84	82	79
2	97	89	82	76	94	87	80	75	83	77	72	79	74	70	75	72	68	66
3	89	78	70	63	86	76	69	62	73	66	61	70	64	59	67	62	58	56
4	81	69	60	54	79	68	59	53	65	58	52	62	56	51	59	54	50	48
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	38	36
7	64	51	42	36	62	50	41	36	48	40	35	46	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	42	36	31	41	35	31	29
9	56	43	34	29	54	42	34	29	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	31	26	36	30	25	35	29	25	23

LAMPS (number of lamps)

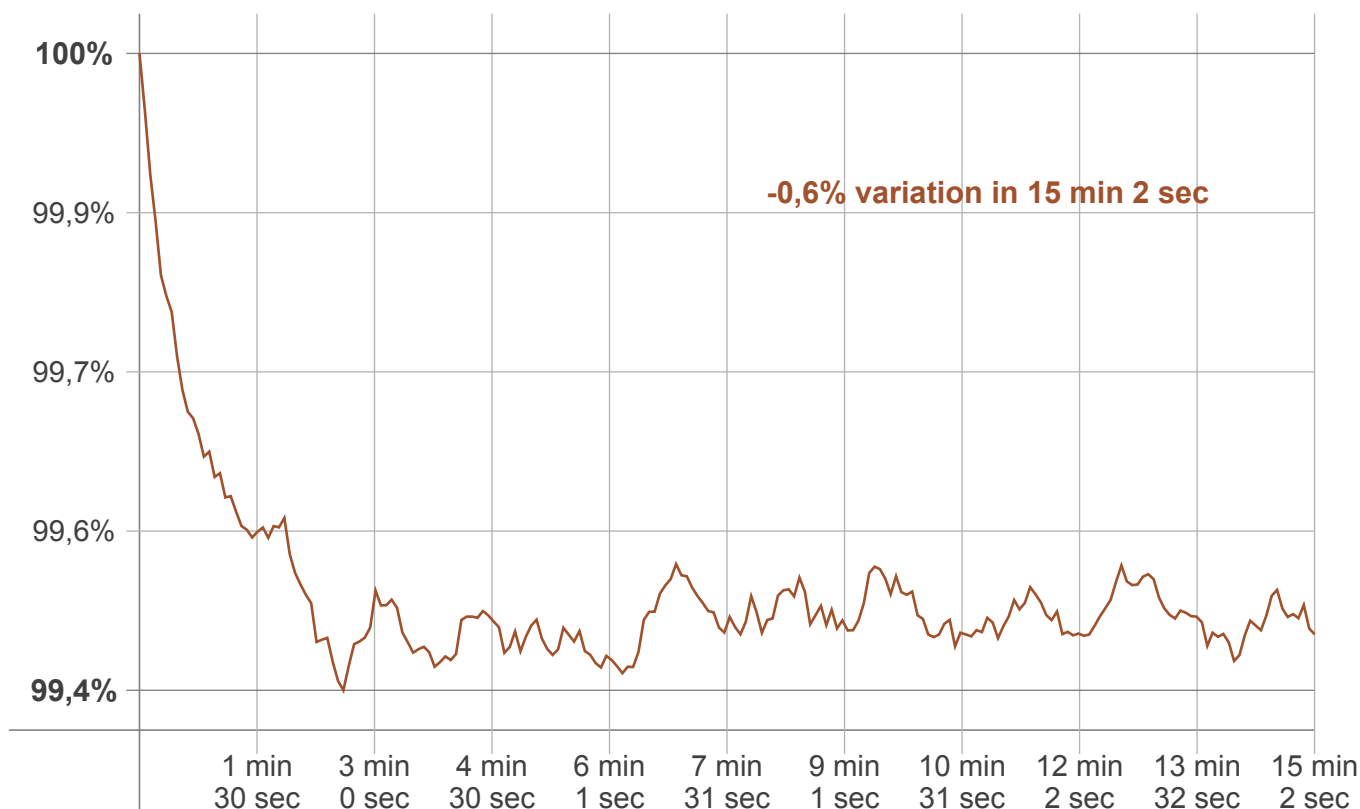
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
31,7 lm	90,8 lm	137 lm	161 lm	159 lm	137 lm	105 lm	71,9 lm	38,4 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
11,7 lm	4,48 lm	3,79 lm	3,43 lm	2,83 lm	2,24 lm	1,65 lm	1,01 lm	0,340 lm

Warmup curve



Warmup result

Warmup time:	15 min 2 sec
Warmup variation	-0,6%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5482 K	+11 K	5493 K

Output change

Output start	Output change	Output end
966 lm	-3 lm	963 lm