

Light efficiency:

98 Lumen/Watt

Light quality:

CRI: 92,2

Color temperature:

5597 K

Output: 990 lm

Peak: 1376 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-4-0508-956-L1F

Item number:

FLNP/L/09D0508/956/L1F

Date and time:

09.04.2021 09:32:15

Description:

Rank: G7-2G0

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

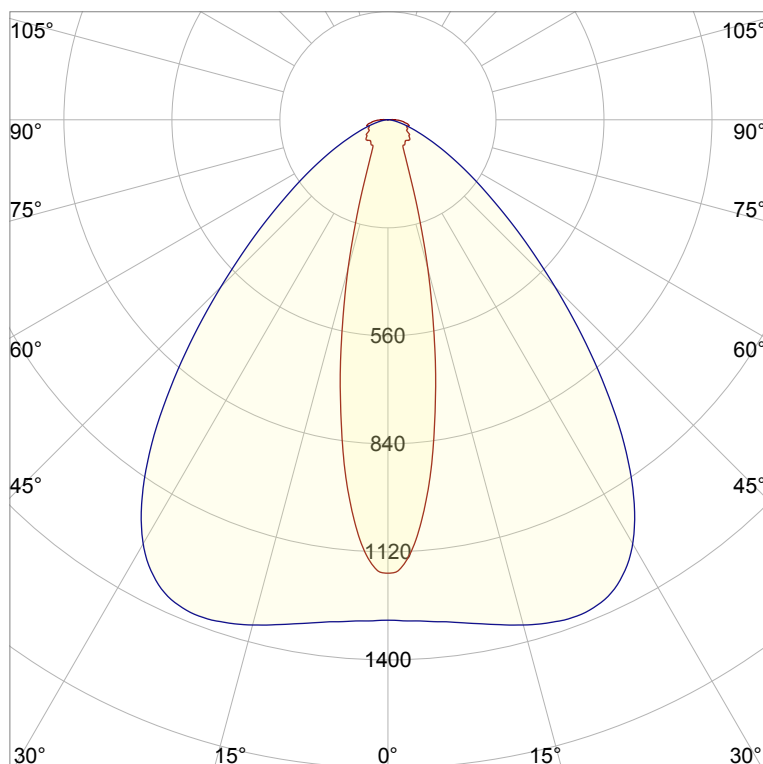
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

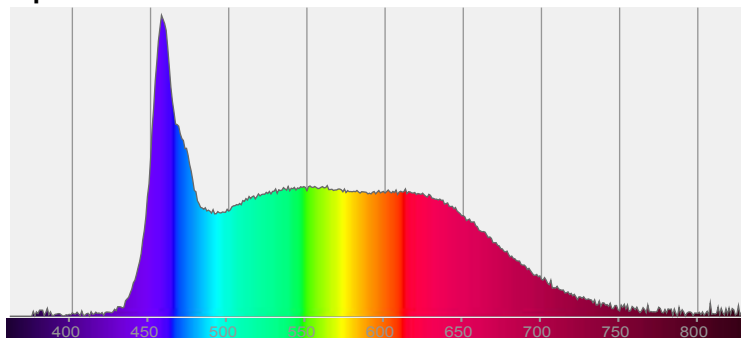


CIE 1931

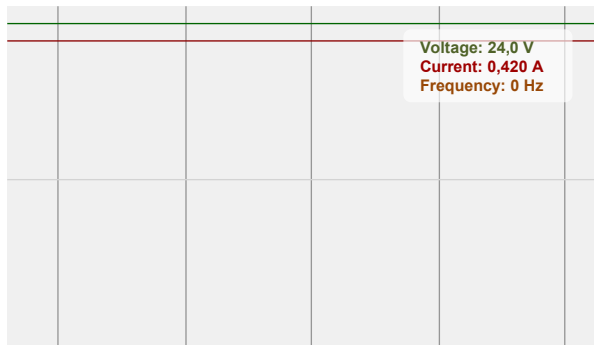
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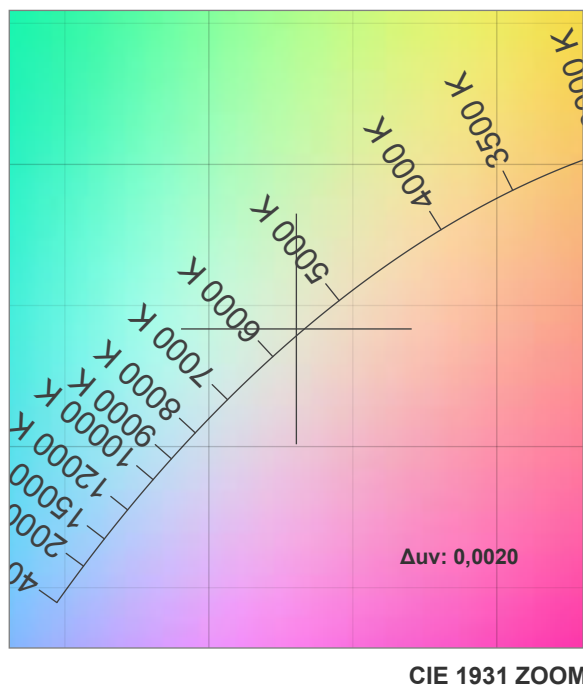
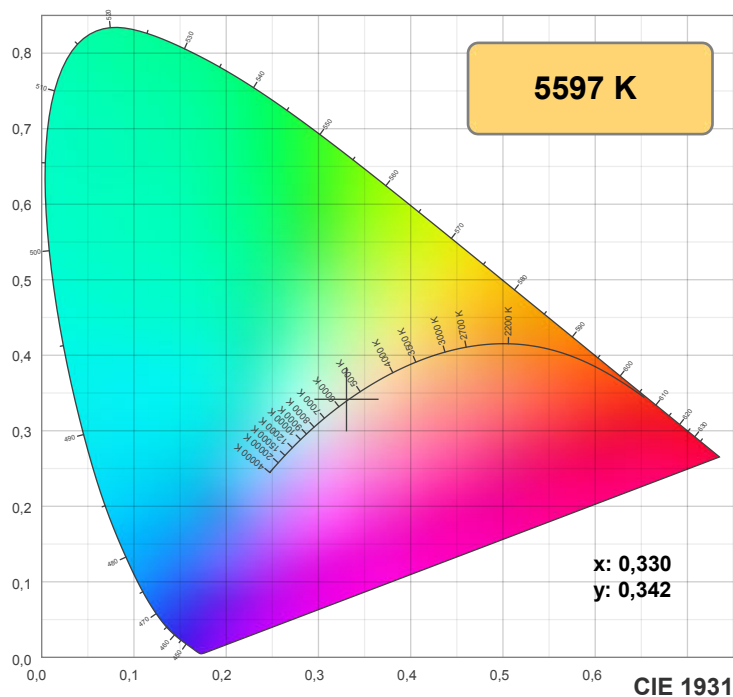
y: 0,342

Spectra

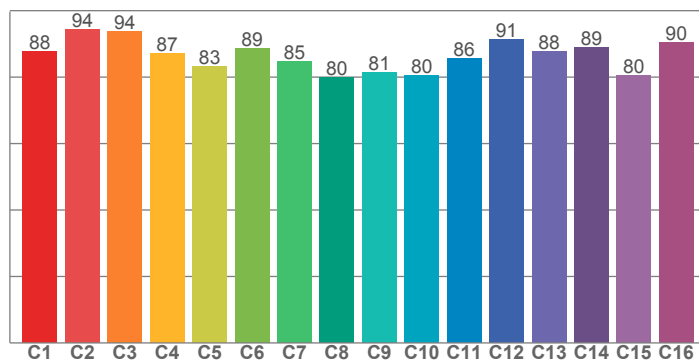


Power

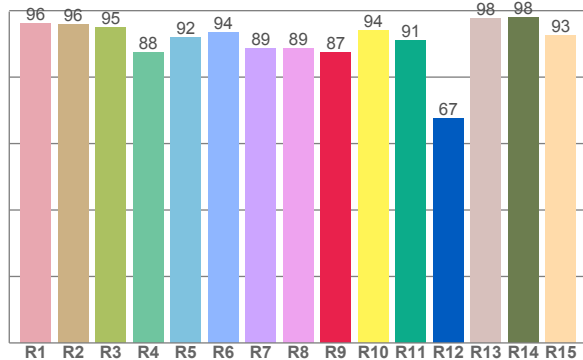




TM30: 86,5



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
96,2	96,0	94,8	87,5	92,0	93,5	88,5	88,6	87,4	94,1	91,0	67,4	97,7	97,8	92,6

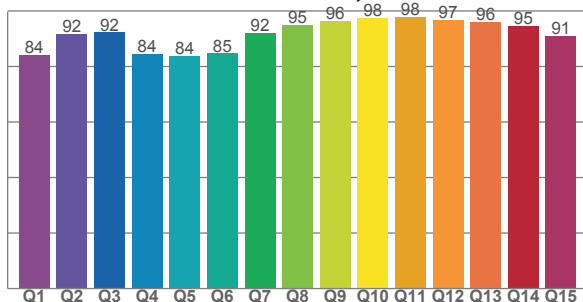
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
87,7	94,3	93,8	87,2	83,3	88,7	84,6	79,9	81,3	80,5	85,7	91,3	87,8	89,0	80,4	90,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
84,0	91,7	92,2	84,4	83,8	84,7	92,1	94,9	96,4	97,6	97,9	96,8	96,0	94,6	91,1

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
5597 K	92,2	87,4	86,5	94,4	90,4	0,330	0,342	0,205	0,318	0,0020

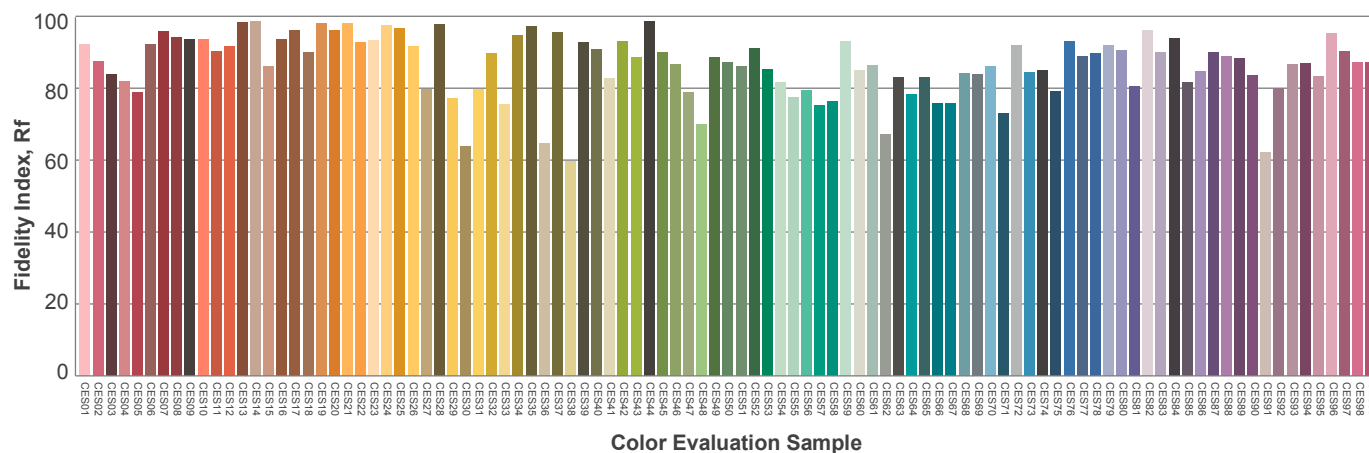
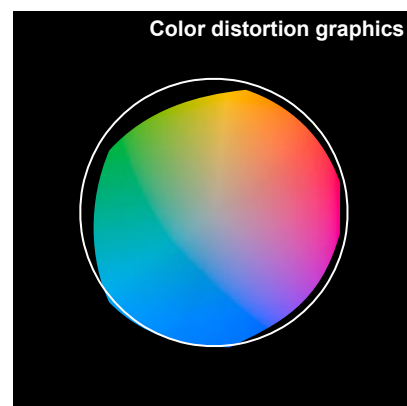
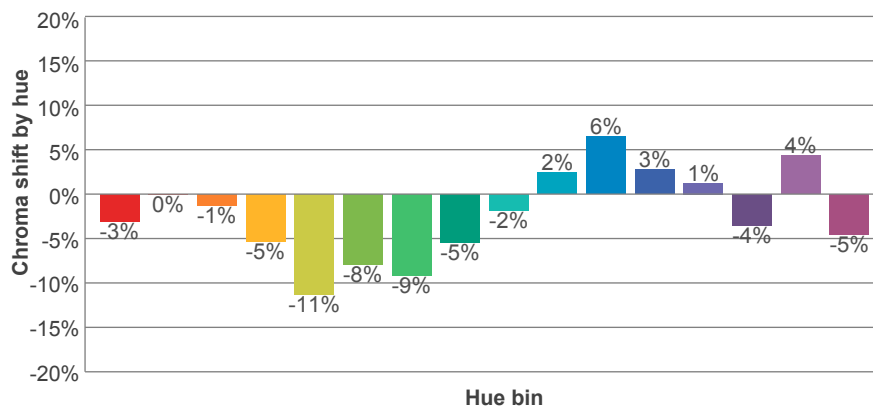
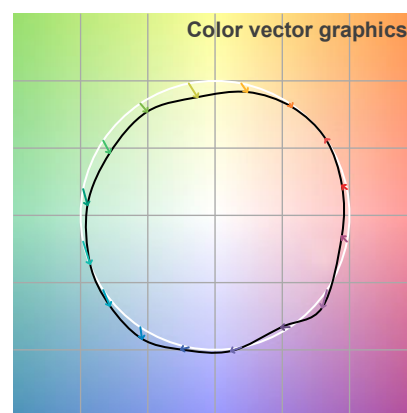
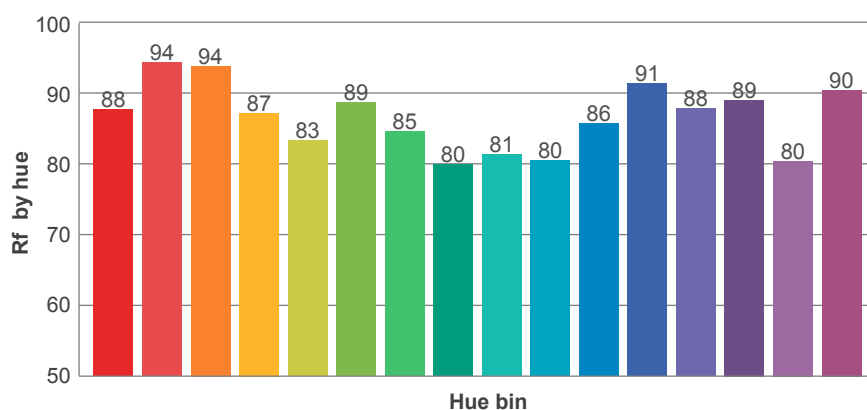
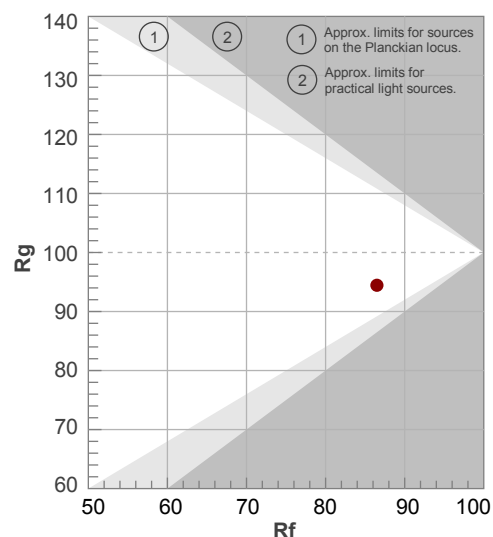
Rf 86,5

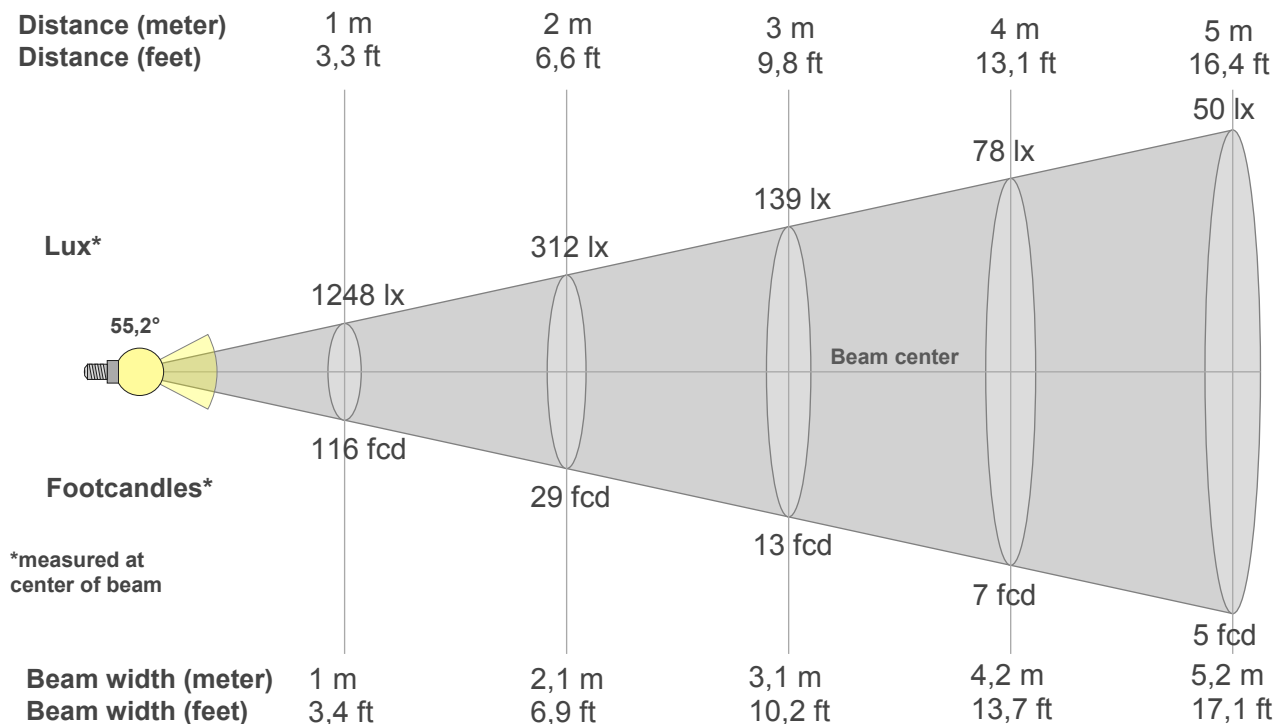
Fidelity index Rf

Rg 94,4

Gammut index Rg

		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	88	-3%	3%
2	94	0%	2%
3	94	-1%	-3%
4	87	-5%	-6%
5	83	-11%	-4%
6	89	-8%	-1%
7	85	-9%	5%
8	80	-5%	11%
9	81	-2%	17%
10	80	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
1248lx	312lx	139lx	78lx	50lx	35lx	25lx	19lx	15lx	12lx	10lx	9lx	7lx	6lx	6lx	5lx	4lx	4lx	3lx	3lx
115,9fcd	29fcd	12,9fcd	7,2fcd	4,6fcd	3,2fcd	2,4fcd	1,8fcd	1,4fcd	1,2fcd	1fcd	0,8fcd	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°
1248	1153	1082	975	847	711	577	455	346	258	192	147	118	99	85	78	77	78	75	72
100%	92%	87%	78%	68%	57%	46%	36%	28%	21%	15%	12%	9%	8%	7%	6%	6%	6%	6%	6%

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°
1248	1300	1303	1308	1316	1326	1337	1350	1361	1370	1376	1375	1366	1347	1315	1268	1207	1130	1043	947
100%	104%	104%	105%	105%	106%	107%	108%	109%	110%	110%	110%	110%	108%	105%	102%	97%	91%	84%	76%

Intensities in 180° c-plane

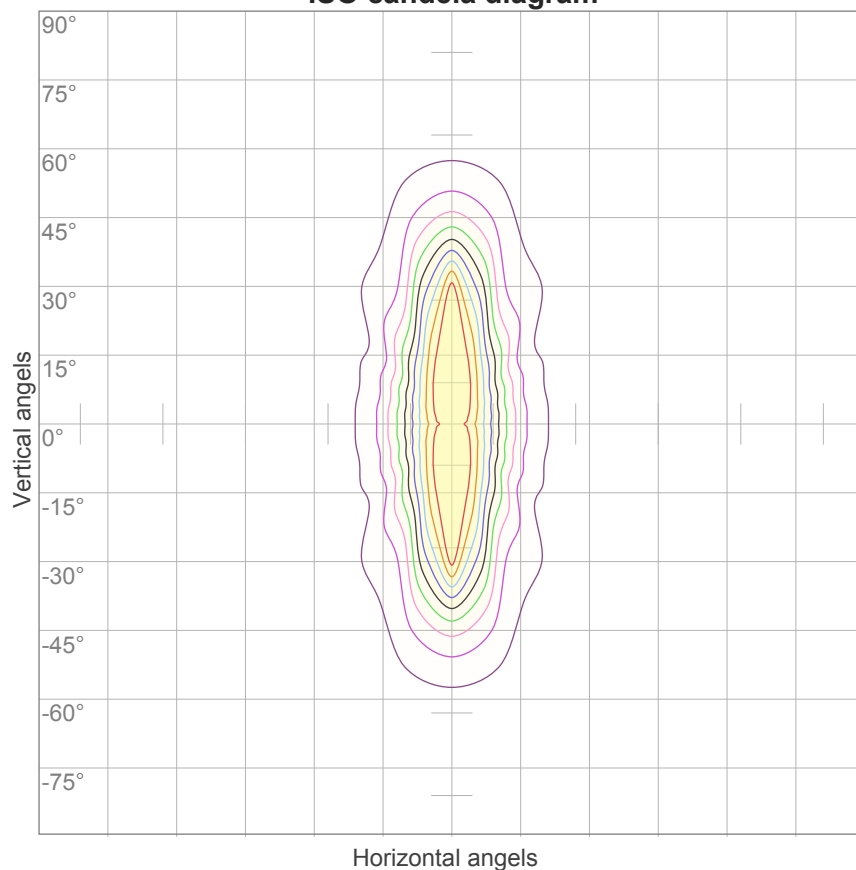
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1248	1153	1082	975	847	711	577	455	346	258	192	147	118	99	85	78	77	78	75	72
100%	92%	87%	78%	68%	57%	46%	36%	28%	21%	15%	12%	9%	8%	7%	6%	6%	6%	6%	6%

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°
1248	1300	1303	1308	1316	1326	1337	1350	1361	1370	1376	1375	1366	1347	1315	1268	1207	1130	1043	947
100%	104%	104%	105%	105%	106%	107%	108%	109%	110%	110%	110%	110%	108%	105%	102%	97%	91%	84%	76%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,2°	87°	161,7°	85,4%	71,3%

ISO candela diagram



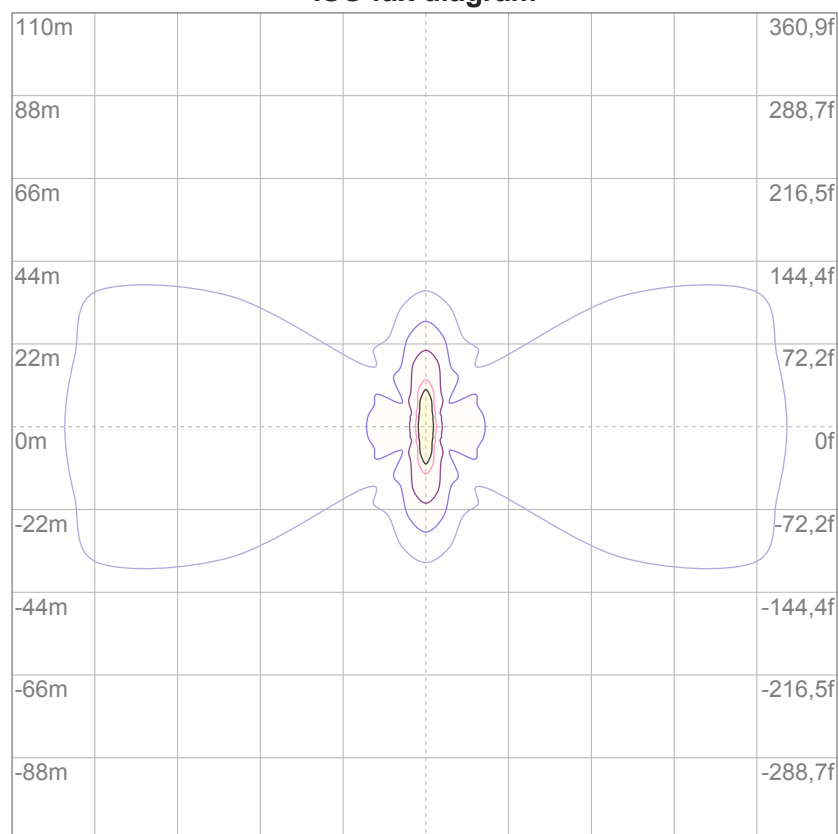
10%	125 cd
20%	250 cd
30%	374 cd
40%	499 cd
50%	624 cd
60%	749 cd
70%	873 cd
80%	998 cd
90%	1123 cd

Conditions:

Number of c-planes: 16

Candela at center: 1248 cd

ISO lux diagram



3%	0,374 lx
5%	0,624 lx
10%	1,25 lx
30%	3,74 lx
50%	6,24 lx

Conditions:

Number of c-planes: 16

Lux at center: 12,5 lx

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

Glare Evaluation According to UGR

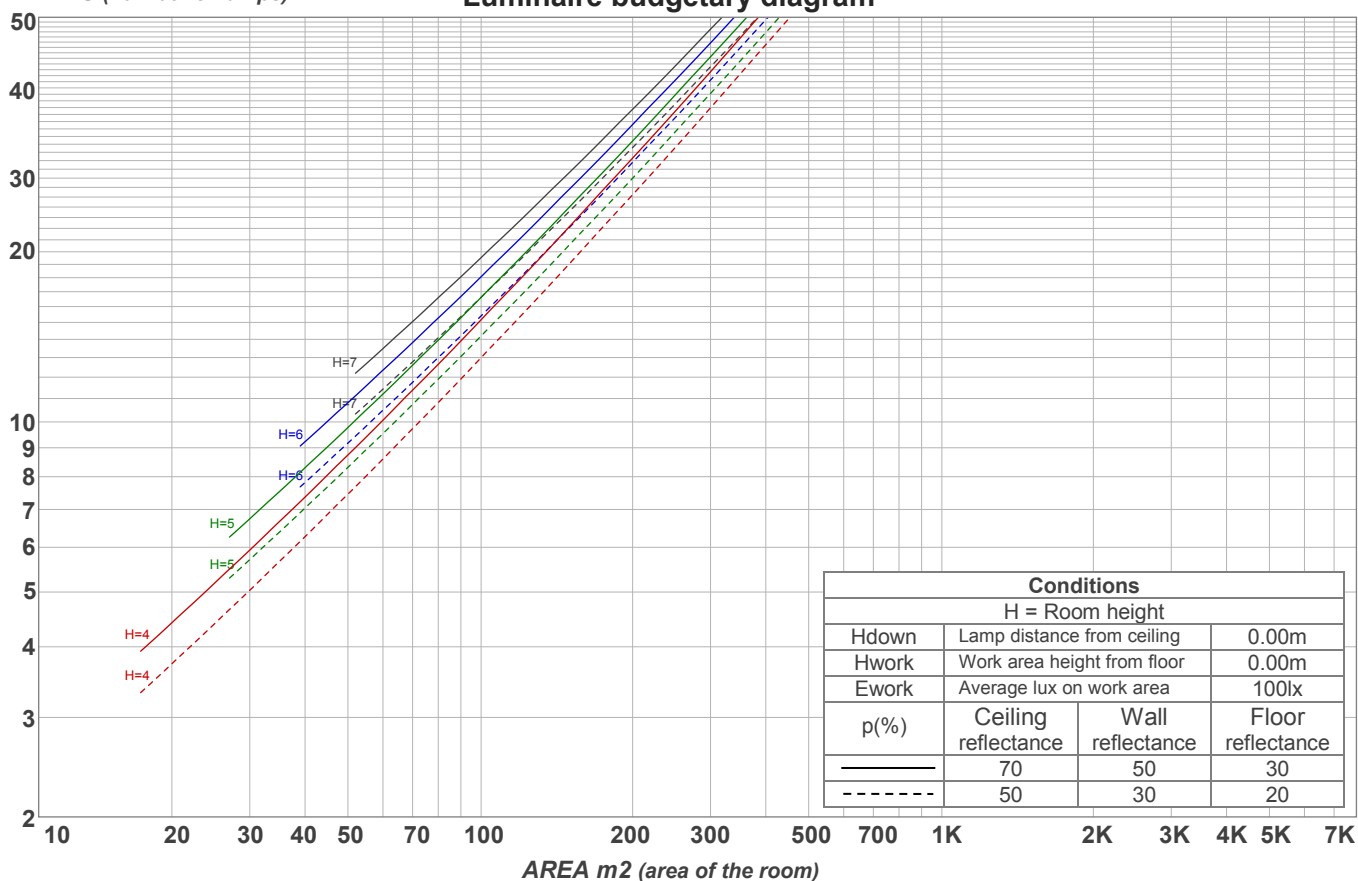
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	14,7	15,6	14,9	15,9	16,1	23,6	24,5	23,7	24,8	25,0
	3H	16,7	17,7	17,1	17,9	18,1	24,0	25,0	24,4	25,2	25,4
	4H	18,1	19,1	18,5	19,3	19,6	24,1	25,1	24,5	25,4	25,6
	6H	19,4	20,2	19,7	20,5	20,9	24,3	25,1	24,6	25,4	25,8
	8H	19,9	20,7	20,2	21,0	21,4	24,3	25,1	24,6	25,4	25,8
	12H	20,2	21,0	20,6	21,4	21,8	24,3	25,1	24,6	25,4	25,8
4H	2H	15,3	16,3	15,7	16,5	16,8	23,3	24,3	23,7	24,5	24,8
	3H	17,7	18,5	18,0	18,8	19,2	23,9	24,7	24,3	25,1	25,5
	4H	19,2	19,9	19,6	20,3	20,8	24,1	24,8	24,5	25,2	25,7
	6H	20,6	21,3	21,1	21,7	22,1	24,2	25,0	24,7	25,3	25,7
	8H	21,2	21,8	21,7	22,2	22,6	24,3	24,9	24,8	25,3	25,7
	12H	21,6	22,2	22,1	22,6	23,1	24,3	24,8	24,8	25,2	25,7
8H	4H	19,5	20,2	20,0	20,6	20,9	24,0	24,7	24,6	25,1	25,5
	6H	21,2	21,7	21,7	22,2	22,7	24,3	24,8	24,8	25,3	25,8
	8H	22,0	22,4	22,5	22,9	23,6	24,4	24,9	24,9	25,4	26,0
	12H	22,6	23,0	23,2	23,5	24,1	24,5	24,9	25,1	25,4	26,0
12H	4H	19,5	20,1	20,0	20,5	21,0	24,0	24,6	24,5	25,0	25,5
	6H	21,4	21,8	21,9	22,3	22,9	24,4	24,8	24,9	25,3	25,9
	8H	22,2	22,5	22,7	23,0	23,6	24,5	24,8	25,1	25,4	26,0
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,7 / -1,9				
S = 1.5H		0,0 / -0,1					3,5 / -2,9				
S = 2.0H		0,3 / -0,2					5,1 / -3,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 990 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	105	105	105	100	100	100	98
1	110	106	102	99	107	103	100	97	99	96	94	95	92	90	91	89	87	85
2	102	96	90	85	100	94	88	84	90	85	82	86	83	80	83	80	78	76
3	95	87	80	75	93	85	79	74	82	77	73	79	75	71	76	73	70	68
4	89	79	72	67	87	78	71	66	75	70	65	73	68	64	71	66	63	61
5	84	73	66	60	82	72	65	60	70	64	59	68	62	58	66	61	58	56
6	79	68	60	55	77	67	60	55	65	59	54	63	58	53	61	57	53	51
7	74	63	56	51	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	70	59	52	47	69	58	51	47	57	51	46	55	50	46	54	49	46	44
9	67	55	48	44	65	55	48	43	53	47	43	52	47	43	51	46	43	41
10	63	52	45	41	62	51	45	41	50	44	40	49	44	40	48	43	40	38

LAMPS (number of lamps)

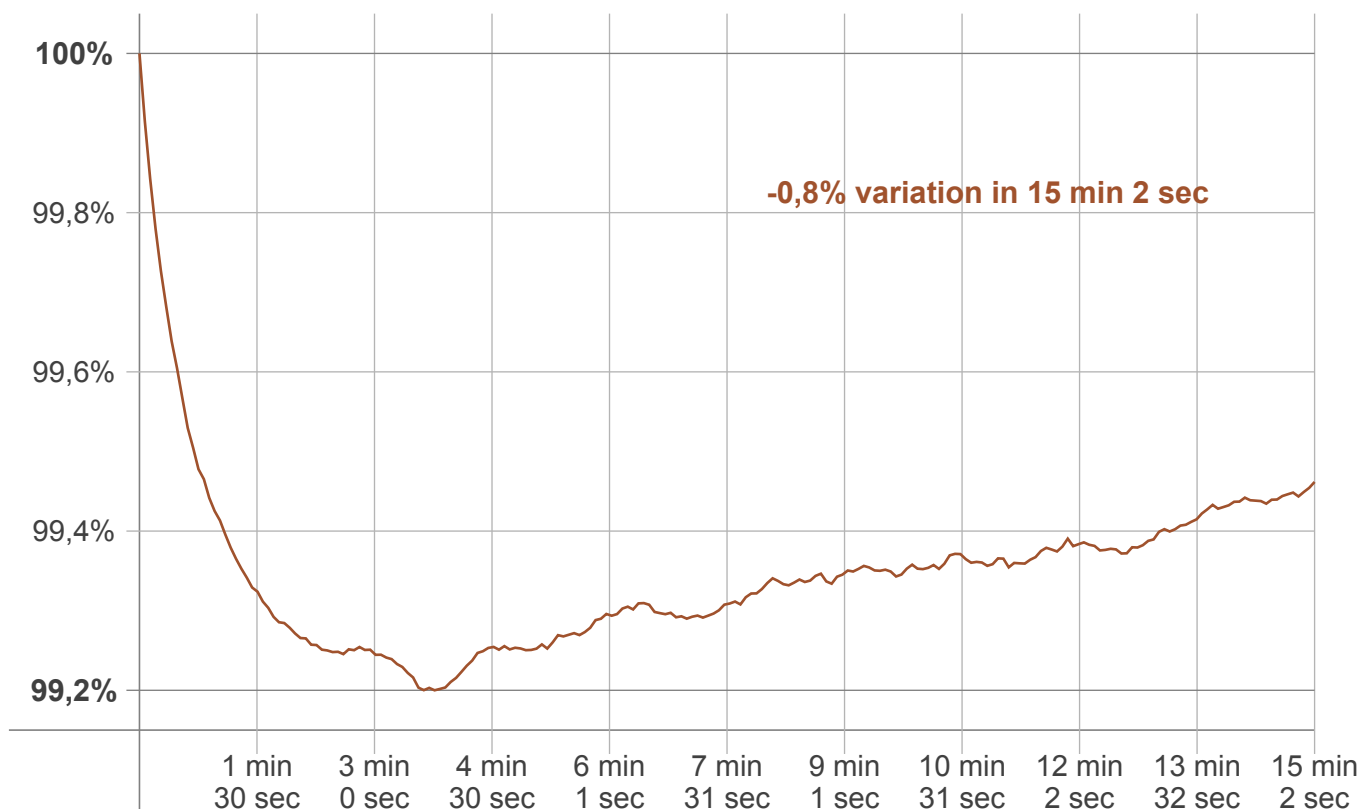
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
95,5 lm	203 lm	193 lm	153 lm	116 lm	86,1 lm	54,3 lm	40,2 lm	25,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,70 lm	8,01 lm	0,113 lm	0,102 lm	0,037 lm	0,000 lm	0,000 lm	0,000 lm	13,3 lm

Warmup curve



Warmup result

Warmup time:	15 min 2 sec
Warmup variation	-0,8%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5594 K	+3 K	5597 K

Output change

Output start	Output change	Output end
995 lm	-5 lm	990 lm