

Light efficiency:

42 Lumen/Watt

Light quality:

CRI: 93,0

Color temperature:

2565 K

Output: 459 lm

Peak: 118 cd

Power: 11,0 W

PF: 1,0



Product name:

Pegasus-4-0508-927-CRW

Item number:

FLNP/L/09D0508/927/CRW

Date and time:

15.04.2021 11:29:53

Description:

Rank: F9-8GA

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

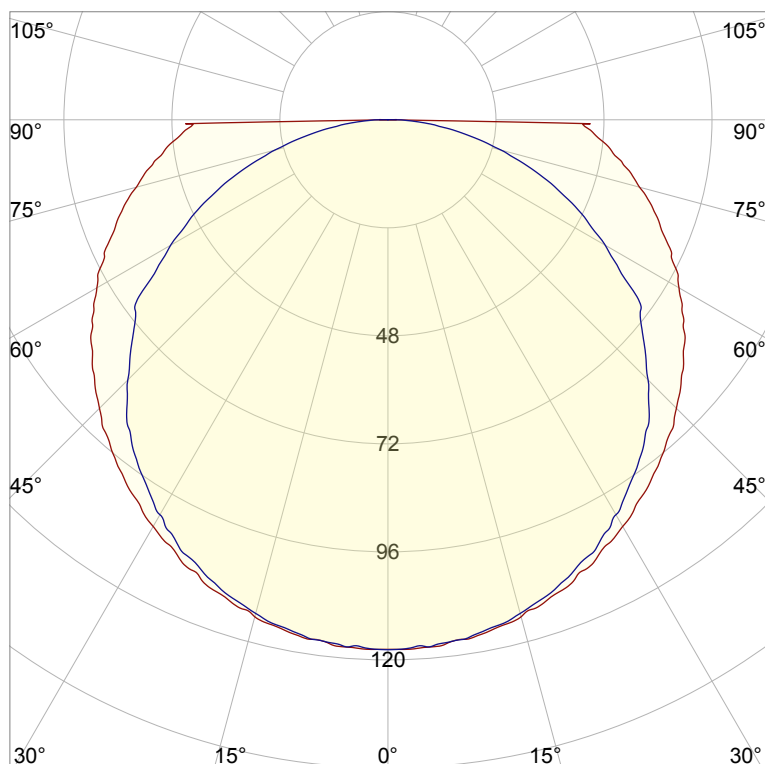
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

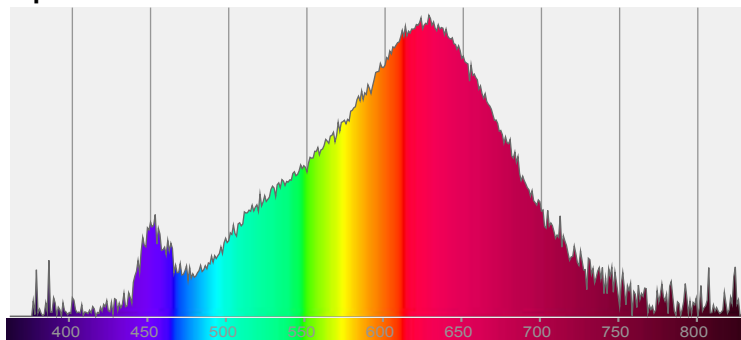


CIE 1931

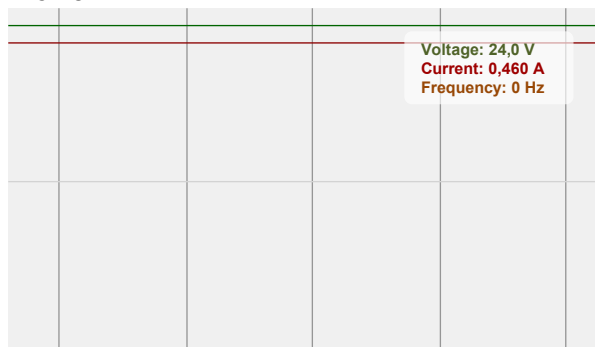
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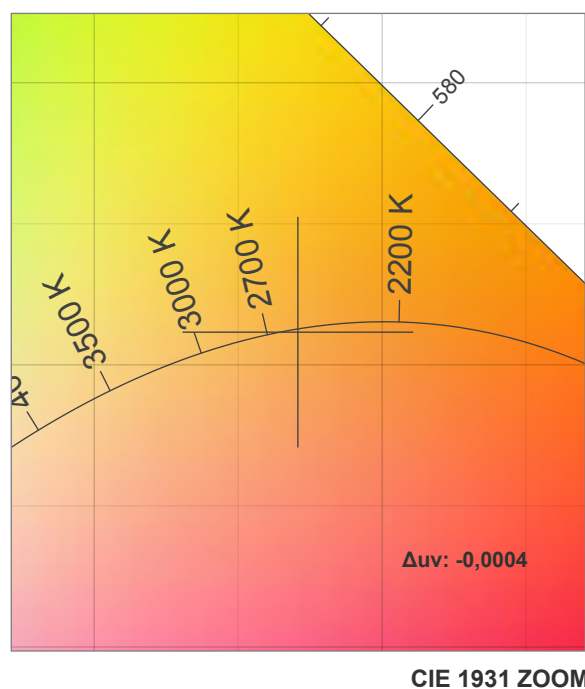
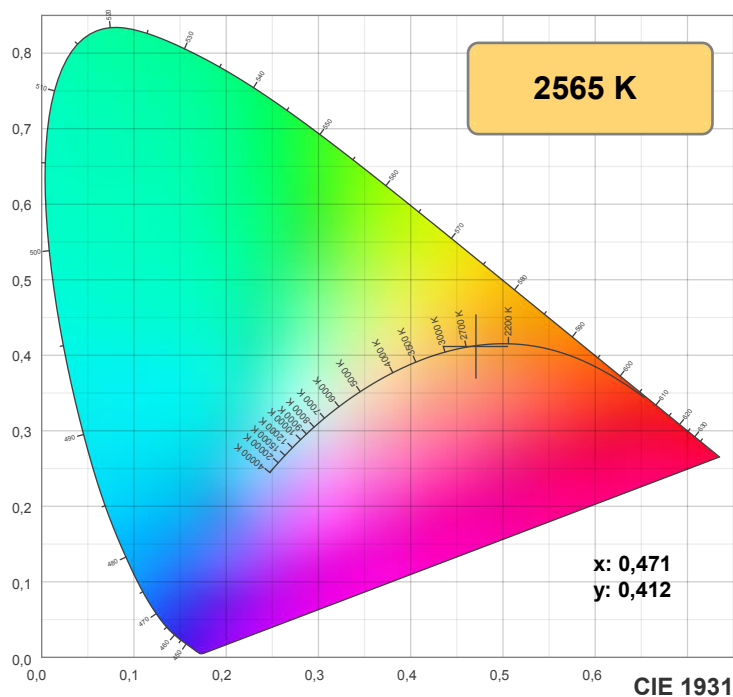
y: 0,412

Spectra

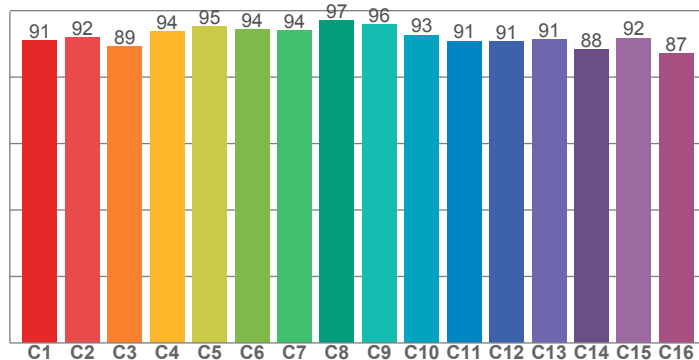


Power

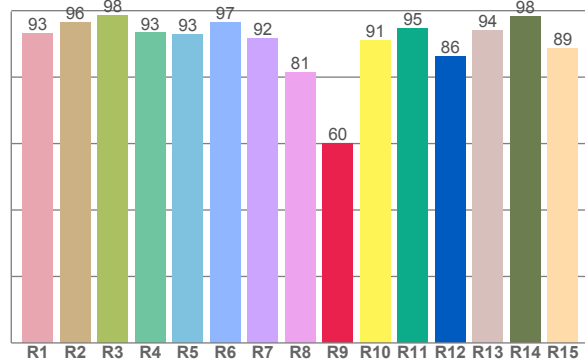




TM30: 92,2



CRI: 93,0 (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
93,1	96,5	98,4	93,3	92,9	96,5	91,6	81,4	60,2	91,2	94,7	86,2	94,0	98,3	88,7

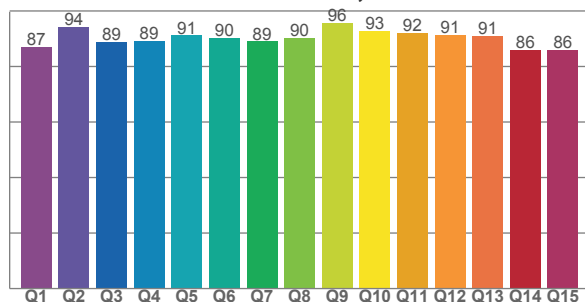
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,1	92,0	89,2	93,7	95,3	94,4	93,9	97,0	95,8	92,6	90,9	90,6	91,2	88,3	91,8	87,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
86,9	94,1	88,9	89,1	91,2	90,3	89,0	90,4	95,8	92,7	92,1	91,3	91,0	86,1	86,1

CQS: 89,8



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
2565 K	93,0	60,2	92,2	100,3	89,8	0,471	0,412	0,269	0,353	-0,0004

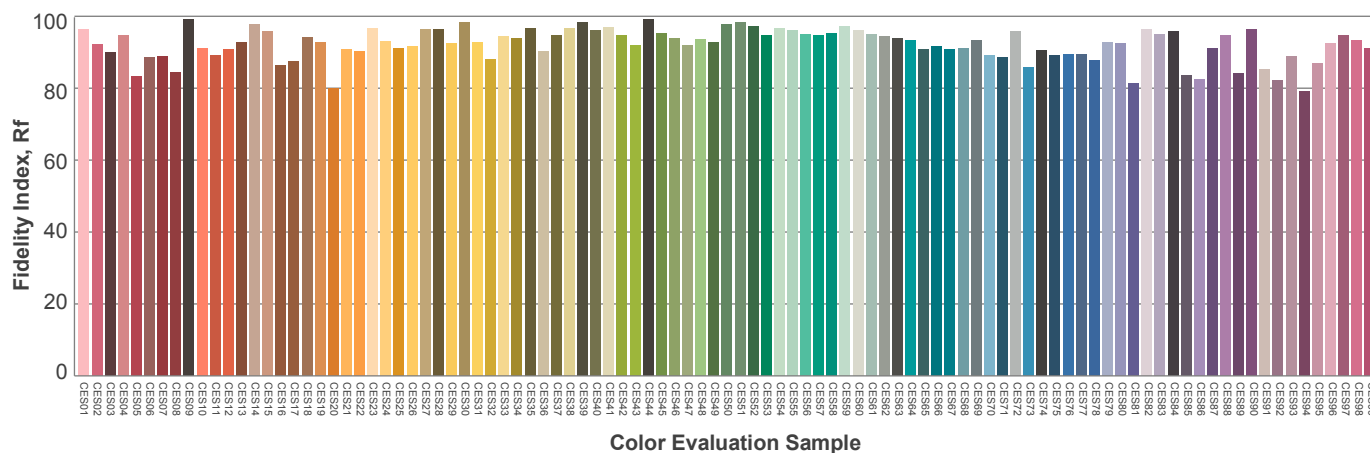
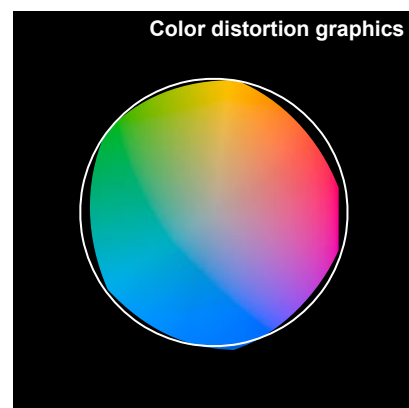
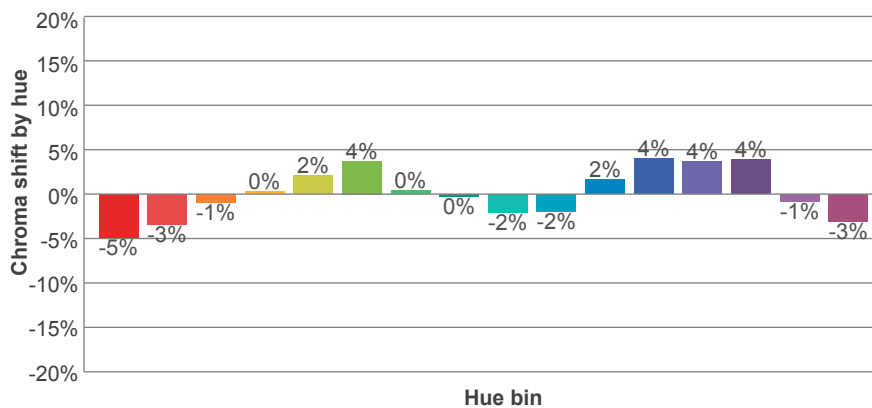
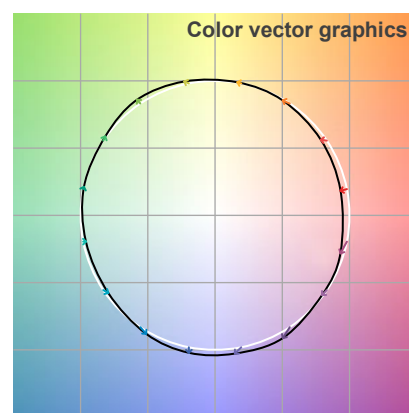
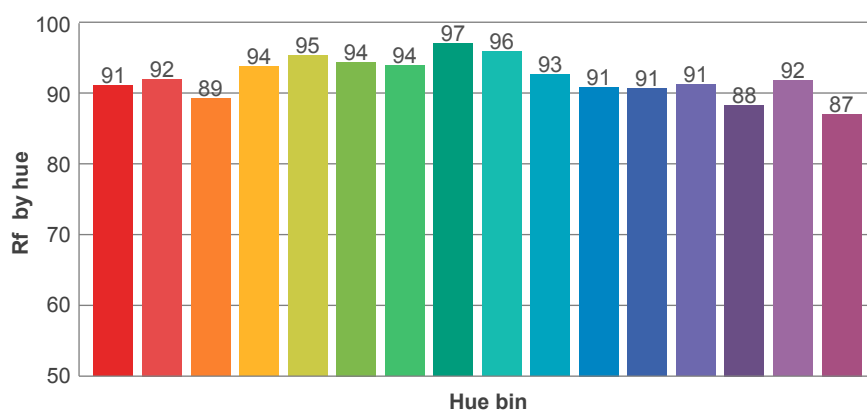
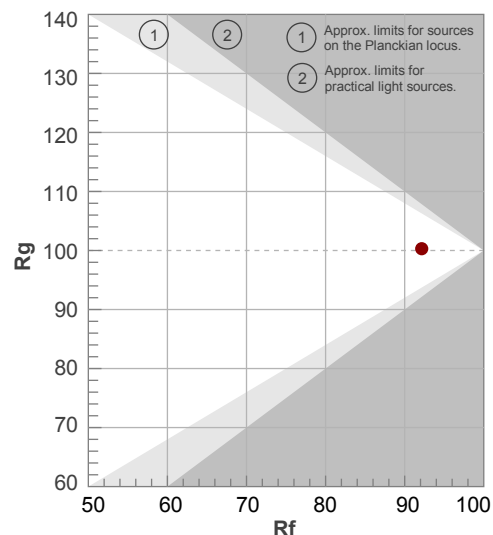
Rf 92,2

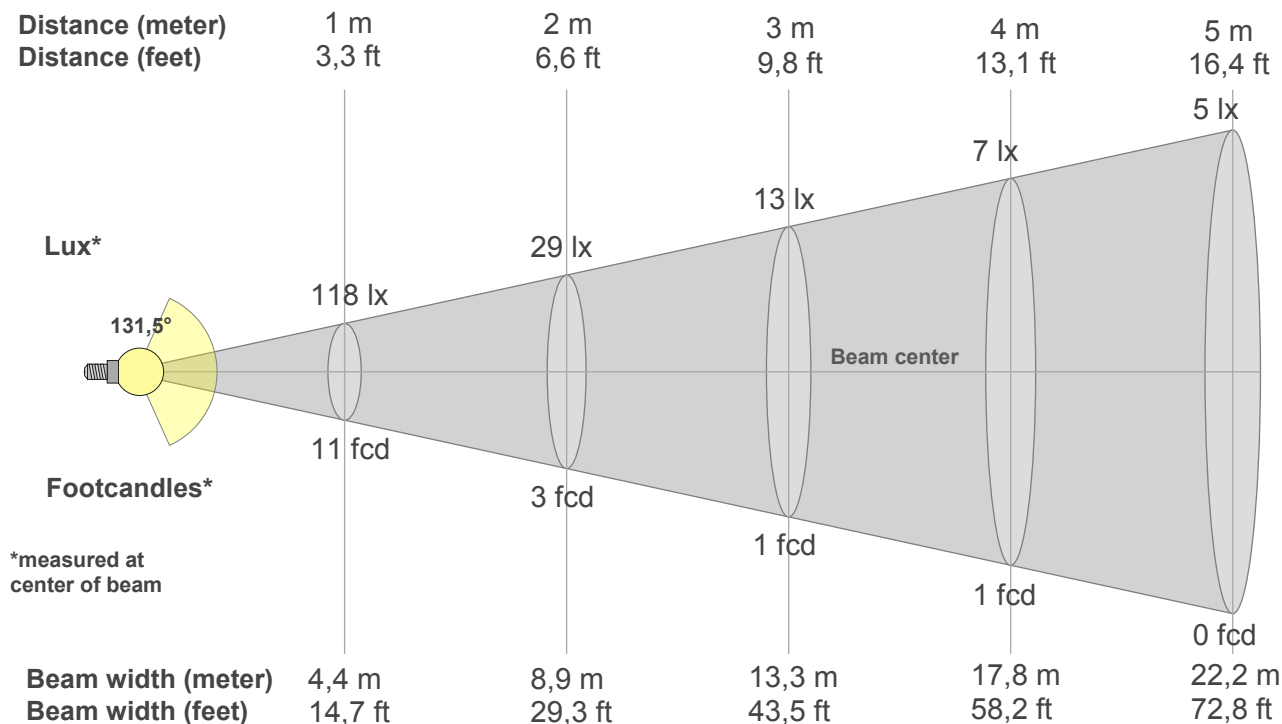
Fidelity index Rf

Rg 100,3

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	92	-3%	3%
3	89	-1%	6%
4	94	0%	3%
5	95	2%	3%
6	94	4%	0%
7	94	0%	-3%
8	97	0%	-2%
9	96	-2%	0%
10	93	-2%	4%
11	91	2%	6%
12	91	4%	1%
13	91	4%	-6%
14	88	4%	-9%
15	92	-1%	-5%
16	87	-3%	-9%





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
118lx	29lx	13lx	7lx	5lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx
10,9fcd	2,7fcd	1,2fcd	0,7fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd	0fcd	0fcd	0fcd	0fcd

Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
118	117	113	106	99	91	82	71	62	51	22	20	18	16	13	11	9	7	4	2
100%	99%	96%	90%	84%	77%	69%	61%	52%	43%	19%	17%	15%	13%	11%	9%	7%	6%	4%	2%

Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
118	116	112	104	95	82	69	50	32	15	1	1	1	1	1	1	1	0	0	0
100%	99%	95%	89%	80%	69%	59%	42%	27%	13%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%

Intensities in 180° c-plane

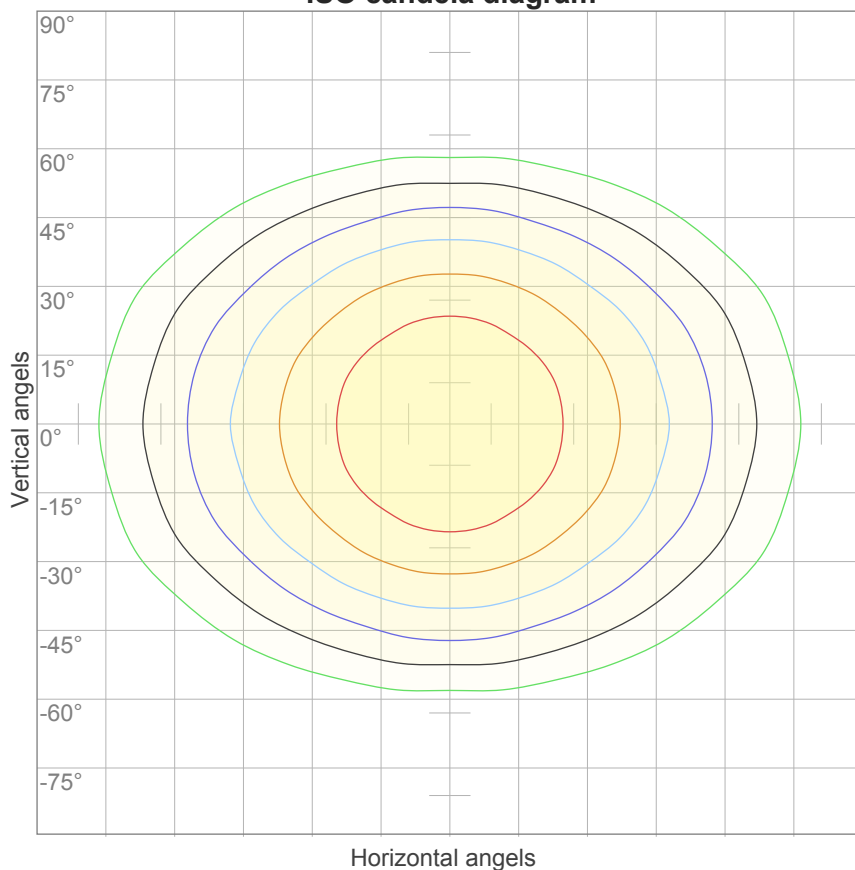
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
118	117	113	106	99	91	82	71	62	51	22	20	18	16	13	11	9	7	4	2
100%	99%	96%	90%	84%	77%	69%	61%	52%	43%	19%	17%	15%	13%	11%	9%	7%	6%	4%	2%

Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
118	116	112	104	95	82	69	50	32	15	1	1	1	1	1	1	1	0	0	0
100%	99%	95%	89%	80%	69%	59%	42%	27%	13%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
131,5°	191,1°	211,5°	62,2%	40,7%

ISO candela diagram



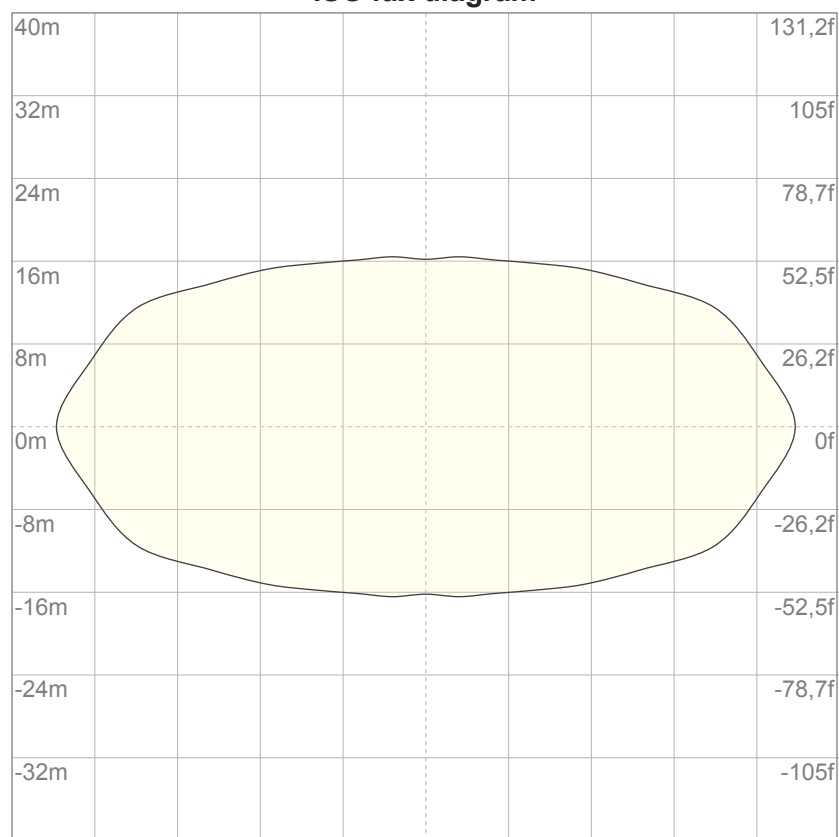
10%	12 cd
20%	24 cd
30%	35 cd
40%	47 cd
50%	59 cd
60%	71 cd
70%	82 cd
80%	94 cd
90%	106 cd

Conditions:

Number of c-planes: 16

Candela at center: 118 cd

ISO lux diagram



3%	35,3m lx
5%	58,9m lx
10%	0,118 lx
30%	0,353 lx
50%	0,589 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,18 lx

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

Glare Evaluation According to UGR

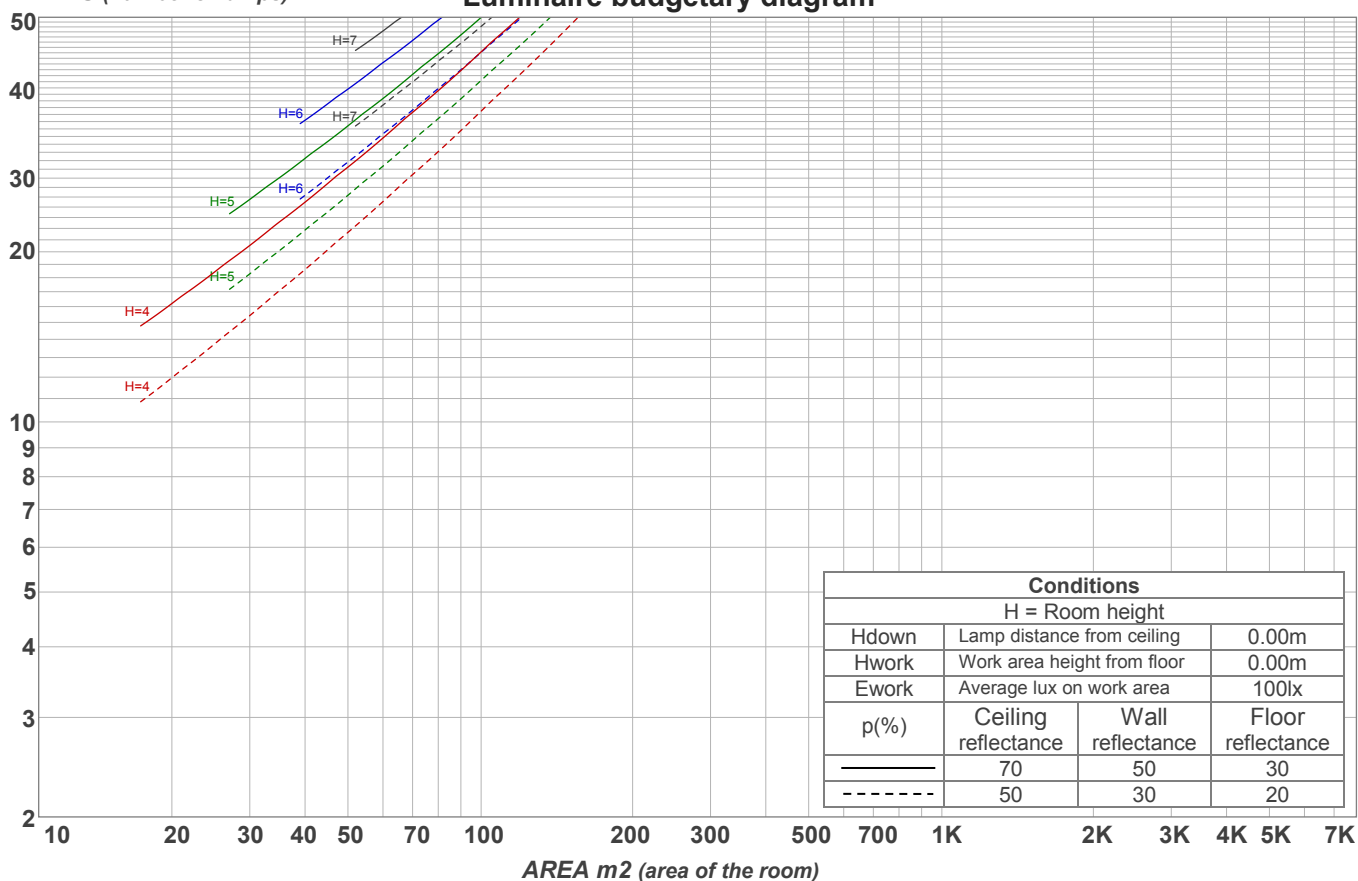
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	19,4	20,8	19,7	21,1	21,3	19,3	20,7	19,6	21,0	21,2
	3H	21,4	22,8	21,8	23,1	23,3	20,9	22,3	21,4	22,7	22,9
	4H	22,5	23,8	22,9	24,1	24,4	21,7	23,0	22,1	23,3	23,6
	6H	23,6	24,8	23,9	25,1	25,5	22,3	23,5	22,6	23,8	24,2
	8H	24,1	25,3	24,4	25,6	26,0	22,5	23,7	22,8	24,0	24,4
	12H	24,6	25,7	24,9	26,1	26,5	22,6	23,8	23,0	24,1	24,6
4H	2H	20,1	21,4	20,5	21,7	22,0	20,0	21,3	20,4	21,6	21,9
	3H	22,4	23,6	22,8	23,9	24,4	21,9	23,1	22,3	23,4	23,9
	4H	23,6	24,7	24,0	25,1	25,6	22,7	23,8	23,2	24,2	24,8
	6H	24,8	25,8	25,3	26,2	26,6	23,4	24,5	23,9	24,8	25,2
	8H	25,4	26,3	25,9	26,7	27,1	23,7	24,7	24,2	25,0	25,4
	12H	26,0	26,8	26,5	27,2	27,7	23,9	24,8	24,4	25,2	25,7
8H	4H	24,0	24,9	24,5	25,3	25,7	23,2	24,2	23,7	24,6	24,9
	6H	25,5	26,2	26,0	26,7	27,2	24,2	24,9	24,7	25,4	26,0
	8H	26,2	26,9	26,7	27,4	28,1	24,6	25,3	25,1	25,8	26,5
	12H	27,0	27,6	27,6	28,1	28,7	25,0	25,6	25,5	26,1	26,7
12H	4H	24,0	24,8	24,5	25,3	25,7	23,3	24,1	23,8	24,6	25,1
	6H	25,6	26,3	26,1	26,8	27,4	24,4	25,1	24,9	25,6	26,3
	8H	26,4	27,0	27,0	27,5	28,1	24,9	25,5	25,5	26,0	26,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / 0,0					0,0 / 0,0				
S = 1.5H		0,1 / -0,1					0,1 / -0,1				
S = 2.0H		0,2 / -0,2					0,3 / -0,3				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 459 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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	104	98	93	88	100	95	90	86	89	85	82	84	81	78	79	76	74	71
2	94	84	76	69	90	81	74	68	76	70	65	72	67	62	68	63	60	57
3	85	73	64	56	81	71	62	55	66	59	53	63	56	51	59	54	50	47
4	77	64	54	47	74	62	53	46	59	51	45	55	49	43	52	47	42	39
5	71	57	47	40	68	55	46	39	52	44	38	49	42	37	47	41	36	34
6	65	51	41	35	63	50	41	34	47	39	33	44	38	32	42	36	31	29
7	60	46	37	30	58	45	36	30	43	35	29	40	34	28	38	32	28	25
8	56	42	33	27	54	41	32	27	39	31	26	37	30	25	35	29	25	23
9	52	38	30	24	50	37	29	24	36	28	23	34	27	23	32	27	22	20
10	49	35	27	22	47	34	27	21	33	26	21	31	25	21	30	24	20	18

LAMPS (number of lamps)

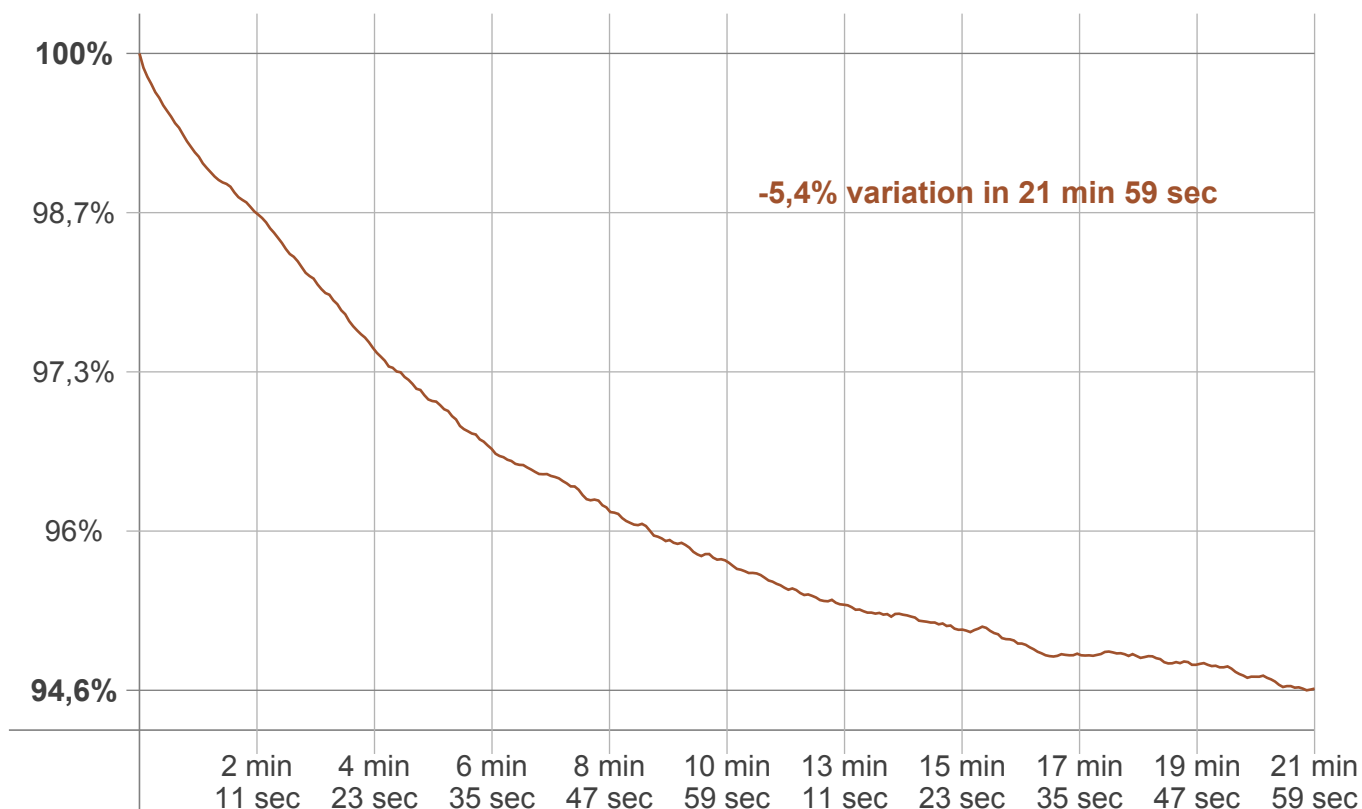
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
11,2 lm	32,2 lm	49,4 lm	61,2 lm	66,5 lm	65,2 lm	58,0 lm	46,7 lm	32,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
11,9 lm	6,54 lm	5,63 lm	5,09 lm	3,03 lm	1,68 lm	1,24 lm	0,760 lm	0,256 lm

Warmup curve



Warmup result

Warmup time:	21 min 59 sec
Warmup variation	-5,4%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2573 K	-8 K	2565 K

Output change

Output start	Output change	Output end
481 lm	-22 lm	459 lm