

Light efficiency:

89 Lumen/Watt

Light quality:

CRI: 92,9

Color temperature:

2691 K

Output: 977 lm

Peak: 1412 cd

Power: 11,0 W

PF: 1,0



Product name:

Pegasus-4-0508-927-L1F

Item number:

FLNP/L/09D0508/927/L1F

Date and time:

09.04.2021 09:02:21

Description:

Rank: F9-8GA

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

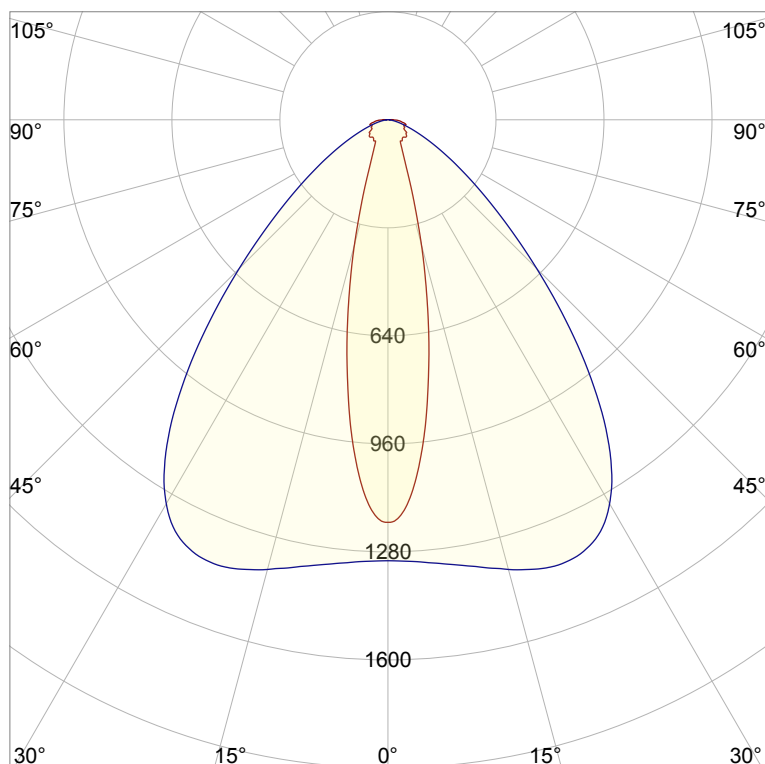
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

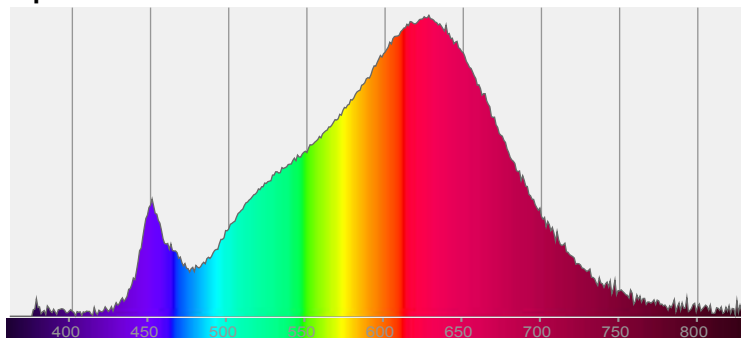


CIE 1931

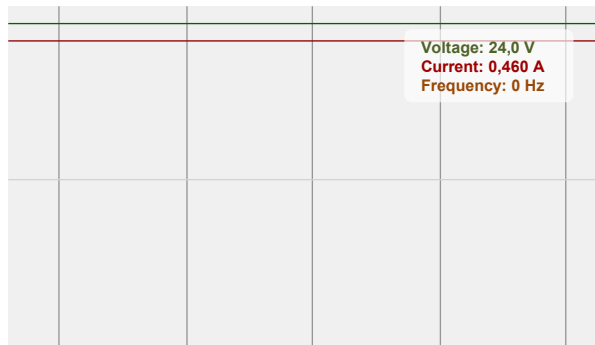
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y: 0,411

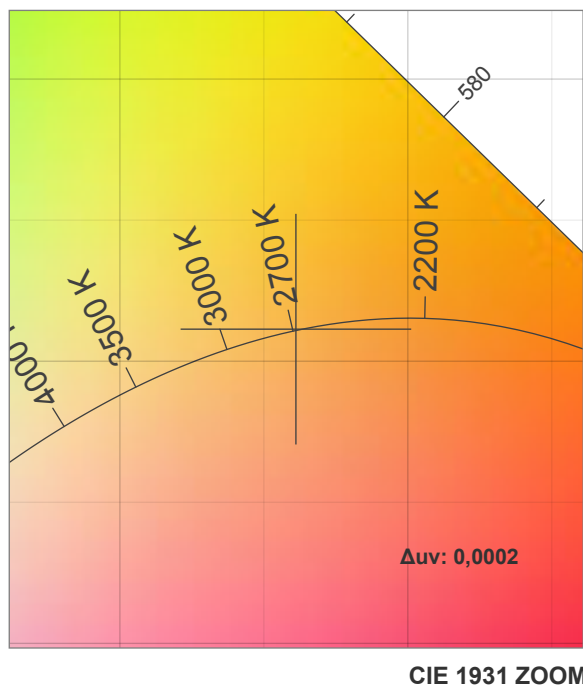
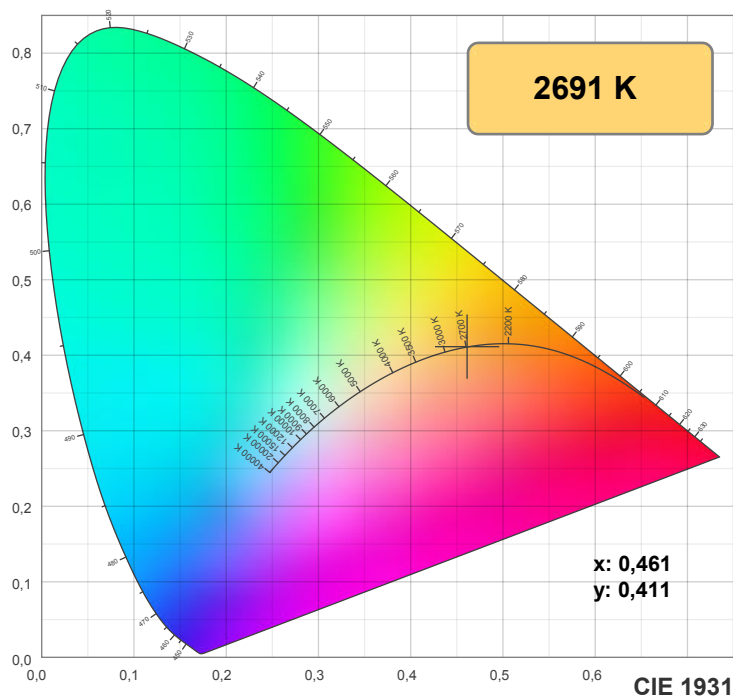
Spectra



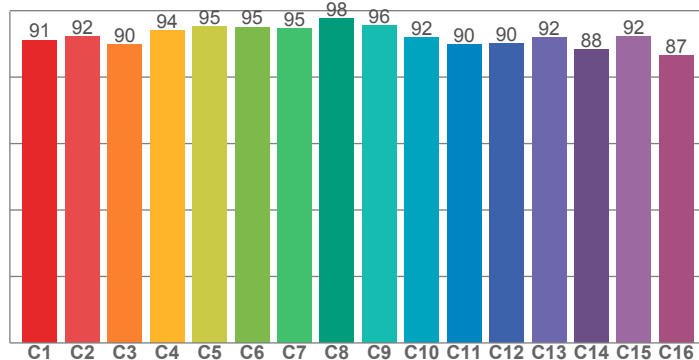
Power



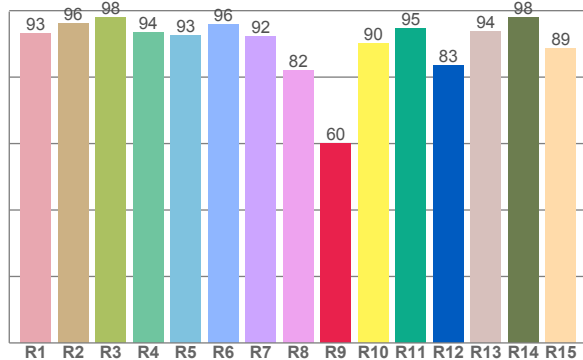
Voltage: 24,0 V
Current: 0,460 A
Frequency: 0 Hz



TM30: 92,2



CRI: 92,9 (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
93,0	96,1	97,8	93,5	92,7	95,7	92,3	82,0	60,1	90,0	94,7	83,5	93,8	97,9	88,6

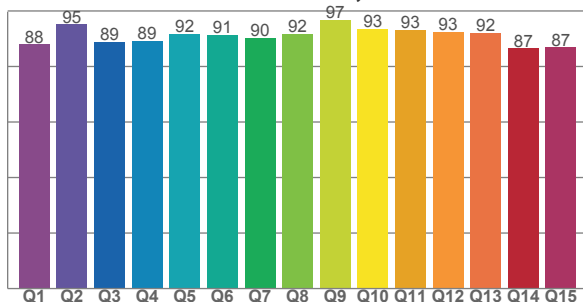
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91,1	92,3	89,9	94,1	95,2	95,1	94,6	97,7	95,5	92,0	89,8	90,0	91,9	88,4	92,3	86,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
87,9	95,1	89,0	89,2	91,6	91,2	90,4	91,9	96,8	93,4	93,1	92,5	92,1	86,5	86,8

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
2691 K	92,9	60,1	92,2	99,8	90,6	0,461	0,411	0,263	0,352	0,0002

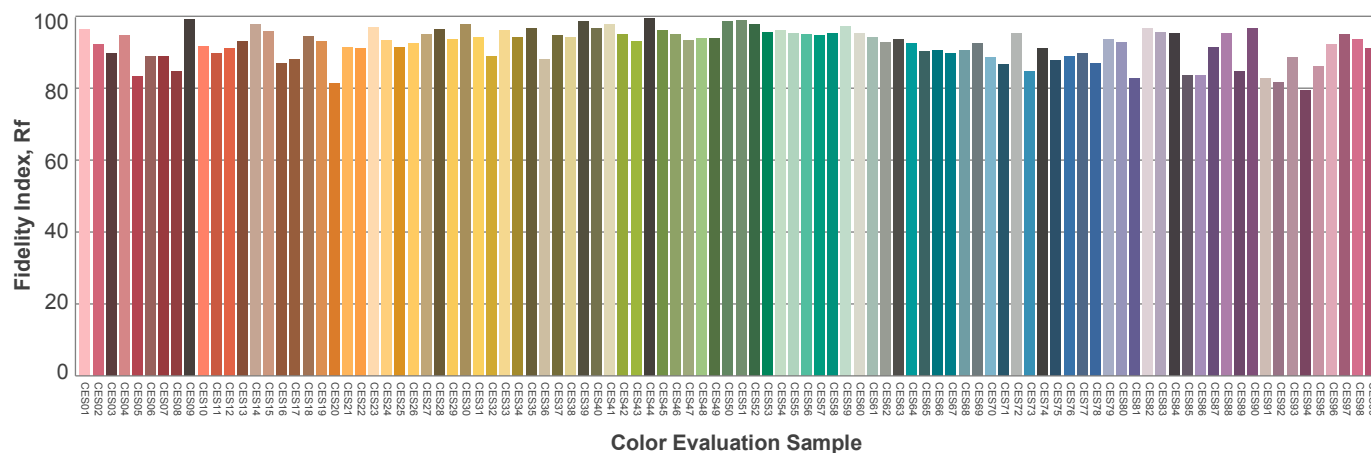
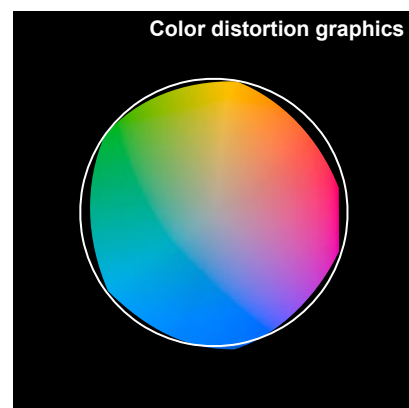
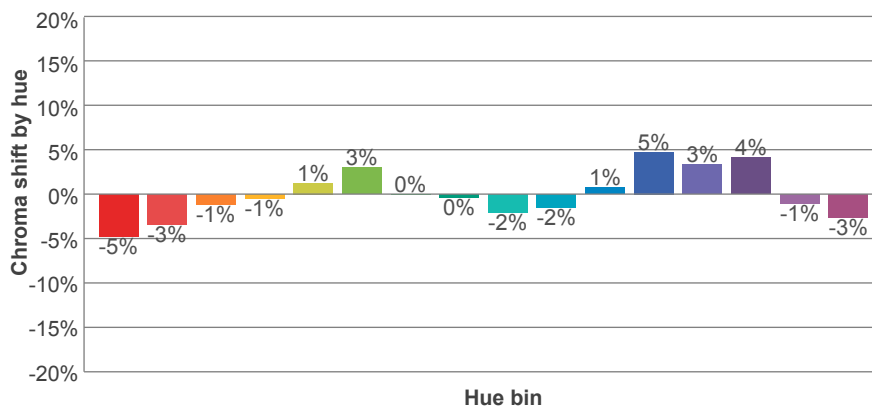
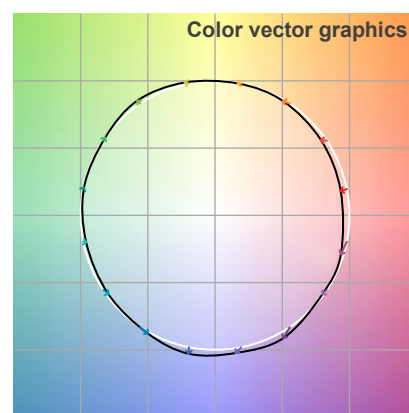
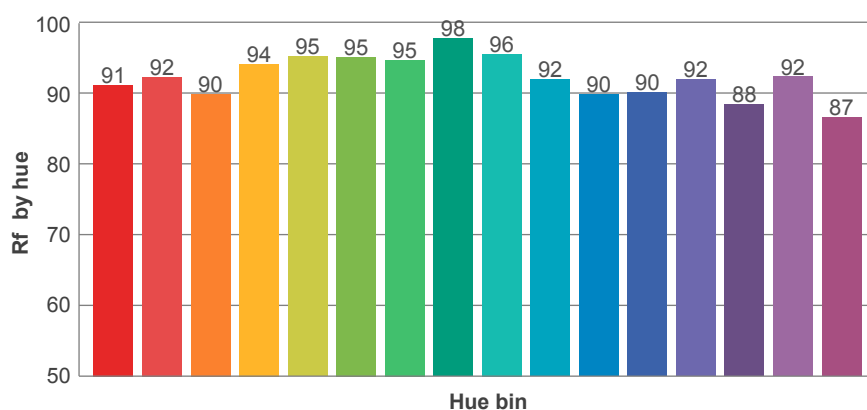
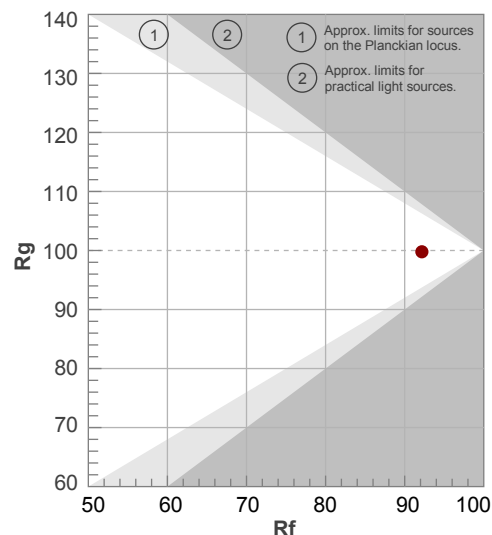
Rf 92,2

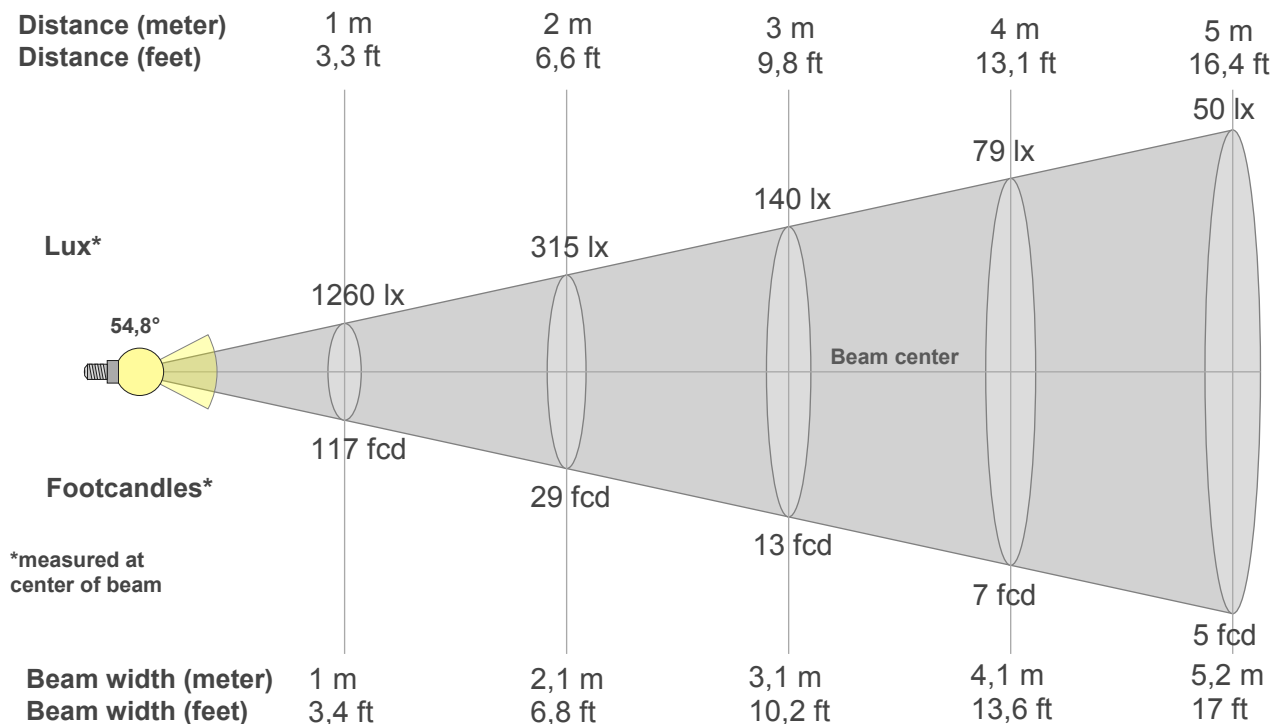
Fidelity index Rf

Rg 99,8

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	0%
2	92	-3%	3%
3	90	-1%	5%
4	94	-1%	3%
5	95	1%	3%
6	95	3%	1%
7	95	0%	-3%
8	98	0%	-1%
9	96	-2%	1%
10	92	-2%	5%
11	90	1%	7%
12	90	5%	1%
13	92	3%	-5%
14	88	4%	-8%
15	92	-1%	-5%
16	87	-3%	-10%





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
1260lx	315lx	140lx	79lx	50lx	35lx	26lx	20lx	16lx	13lx	10lx	9lx	7lx	6lx	6lx	5lx	4lx	4lx	3lx	3lx
117,1fcd	29,3fcd	13fcd	7,3fcd	4,7fcd	3,3fcd	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°
1260	1167	1090	975	839	699	563	440	329	242	178	136	111	93	81	73	74	75	72	70
100%	93%	86%	77%	67%	55%	45%	35%	26%	19%	14%	11%	9%	7%	6%	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°
1260	1308	1313	1320	1330	1342	1356	1370	1387	1400	1410	1412	1406	1389	1360	1313	1251	1173	1082	981
100%	104%	104%	105%	106%	106%	108%	109%	110%	111%	112%	112%	112%	110%	108%	104%	99%	93%	86%	78%

Intensities in 180° c-plane

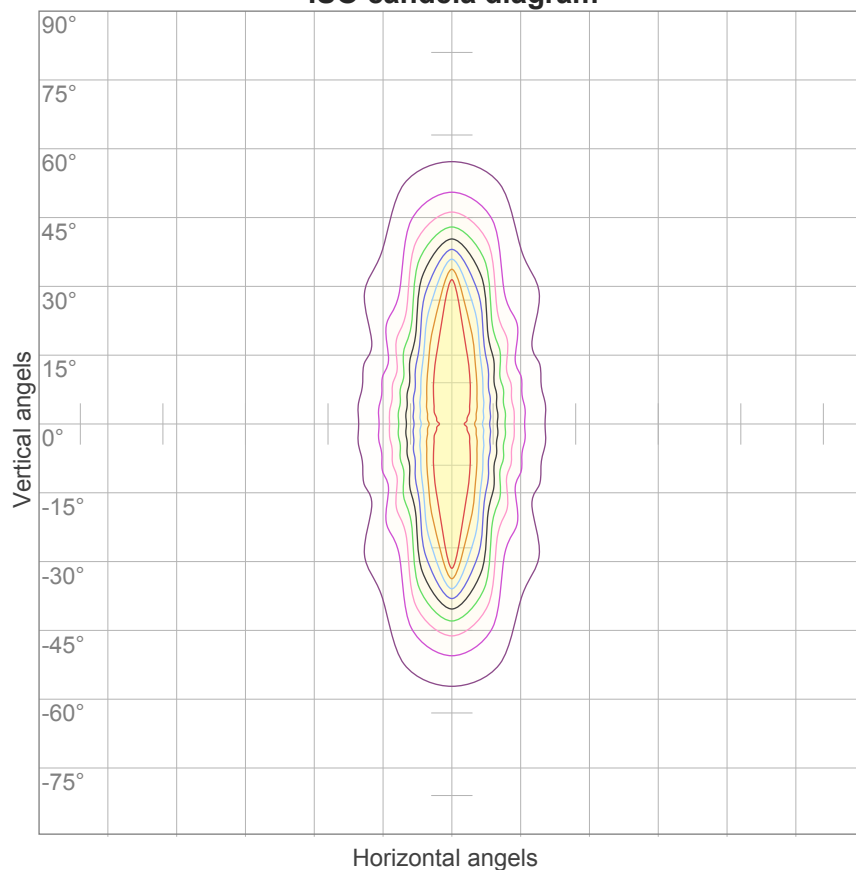
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1260	1167	1090	975	839	699	563	440	329	242	178	136	111	93	81	73	74	75	72	70
100%	93%	86%	77%	67%	55%	45%	35%	26%	19%	14%	11%	9%	7%	6%	6%	6%	6%	6%	6%

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°
1260	1308	1313	1320	1330	1342	1356	1370	1387	1400	1410	1412	1406	1389	1360	1313	1251	1173	1082	981
100%	104%	104%	105%	106%	106%	108%	109%	110%	111%	112%	112%	112%	110%	108%	104%	99%	93%	86%	78%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54,8°	85,7°	161,1°	85,6%	71,7%

ISO candela diagram



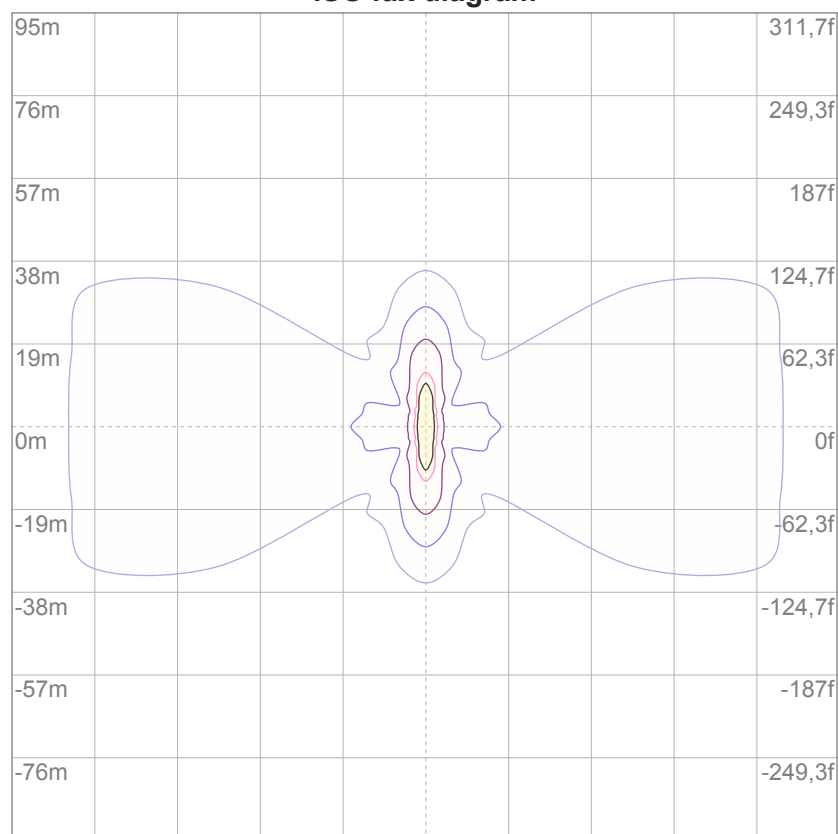
10%	126 cd
20%	252 cd
30%	378 cd
40%	504 cd
50%	630 cd
60%	756 cd
70%	882 cd
80%	1008 cd
90%	1134 cd

Conditions:

Number of c-planes: 16

Candela at center: 1260 cd

ISO lux diagram



3%	0,378 lx
5%	0,630 lx
10%	1,26 lx
30%	3,78 lx
50%	6,30 lx

Conditions:

Number of c-planes: 16

Lux at center: 12,6 lx

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

Glare Evaluation According to UGR

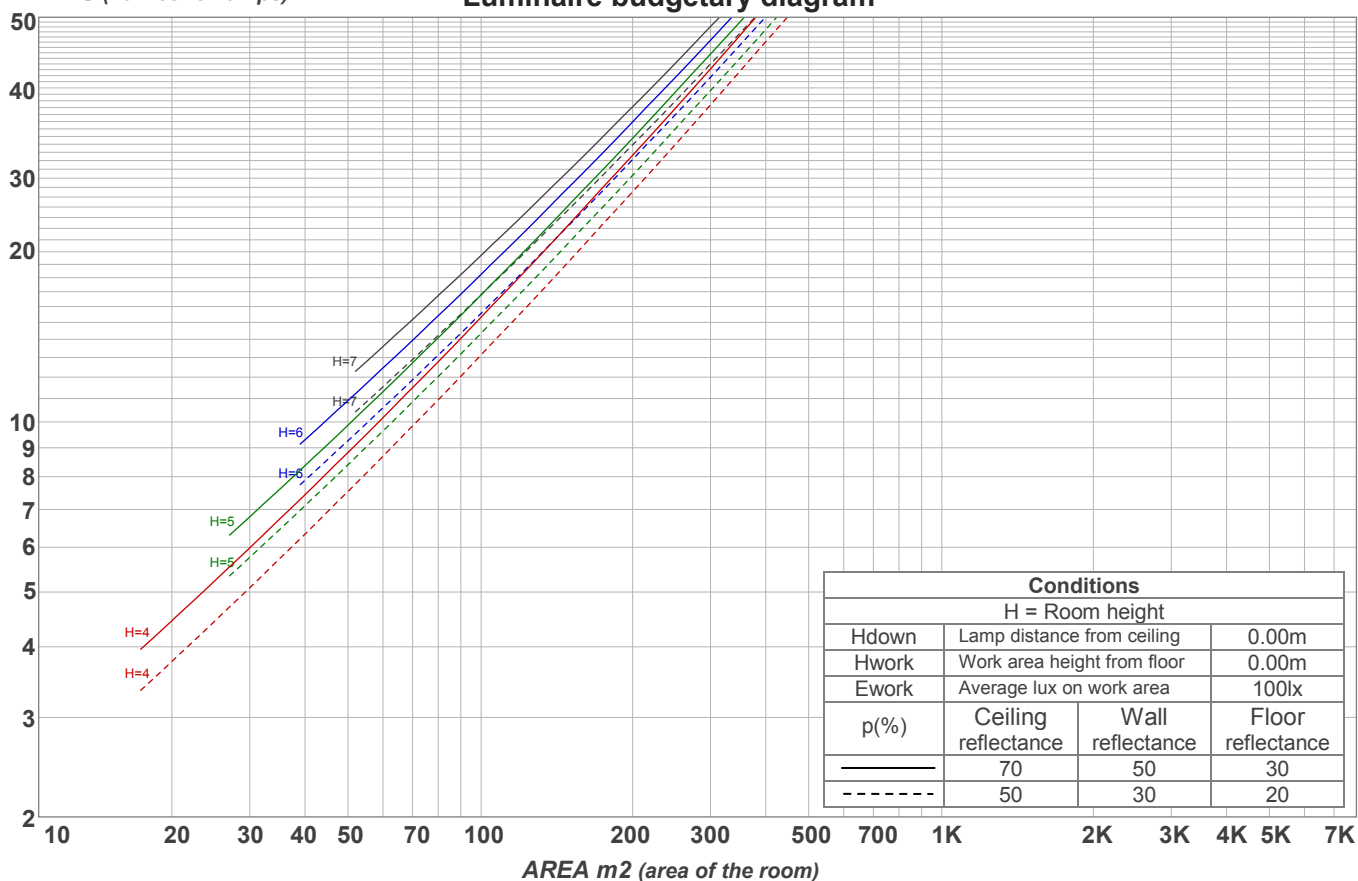
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	14,5	15,4	14,7	15,7	15,9	23,6	24,5	23,7	24,8	25,0
	3H	16,5	17,5	16,9	17,8	17,9	23,9	25,0	24,3	25,2	25,4
	4H	17,9	18,9	18,3	19,1	19,4	24,1	25,1	24,5	25,3	25,6
	6H	19,2	20,0	19,5	20,3	20,7	24,2	25,1	24,6	25,4	25,7
	8H	19,7	20,5	20,0	20,8	21,2	24,2	25,1	24,6	25,4	25,8
	12H	20,0	20,8	20,4	21,2	21,6	24,2	25,0	24,6	25,4	25,8
4H	2H	15,1	16,1	15,5	16,4	16,6	23,3	24,3	23,7	24,5	24,8
	3H	17,5	18,3	17,8	18,6	19,0	23,9	24,7	24,2	25,0	25,5
	4H	19,0	19,7	19,4	20,1	20,7	24,0	24,8	24,5	25,2	25,7
	6H	20,4	21,2	20,9	21,5	21,9	24,2	24,9	24,7	25,2	25,6
	8H	21,0	21,6	21,5	22,0	22,4	24,2	24,9	24,7	25,2	25,6
	12H	21,4	22,0	21,9	22,4	22,9	24,2	24,8	24,7	25,2	25,7
8H	4H	19,3	20,0	19,8	20,4	20,7	24,0	24,7	24,5	25,0	25,4
	6H	21,1	21,5	21,6	22,0	22,5	24,2	24,7	24,7	25,2	25,7
	8H	21,8	22,2	22,3	22,7	23,4	24,4	24,8	24,9	25,3	25,9
	12H	22,4	22,8	23,0	23,3	23,9	24,4	24,8	25,0	25,3	25,9
12H	4H	19,4	19,9	19,9	20,3	20,8	24,0	24,5	24,5	25,0	25,4
	6H	21,2	21,6	21,7	22,1	22,8	24,3	24,7	24,8	25,3	25,9
	8H	22,0	22,3	22,6	22,8	23,5	24,4	24,8	25,0	25,3	25,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,8 / -2,0				
S = 1.5H		0,0 / -0,1					3,6 / -3,0				
S = 2.0H		0,3 / -0,2					5,2 / -3,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 977 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	104	100	97	99	96	94	95	93	91	91	89	88	85
2	102	96	90	85	100	94	89	84	90	86	82	86	83	80	83	80	78	76
3	96	87	80	75	93	85	79	74	82	77	73	79	75	71	77	73	70	68
4	89	80	72	67	87	78	72	66	76	70	65	73	68	64	71	67	63	61
5	84	73	66	61	82	72	65	60	70	64	59	68	63	59	66	61	58	56
6	79	68	61	55	77	67	60	55	65	59	54	63	58	54	62	57	53	51
7	74	63	56	51	73	62	55	51	61	55	50	59	54	50	58	53	49	47
8	70	59	52	47	69	58	52	47	57	51	47	56	50	46	54	49	46	44
9	67	55	49	44	65	55	48	44	54	48	43	52	47	43	51	46	43	41
10	63	52	46	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

LAMPS (number of lamps)

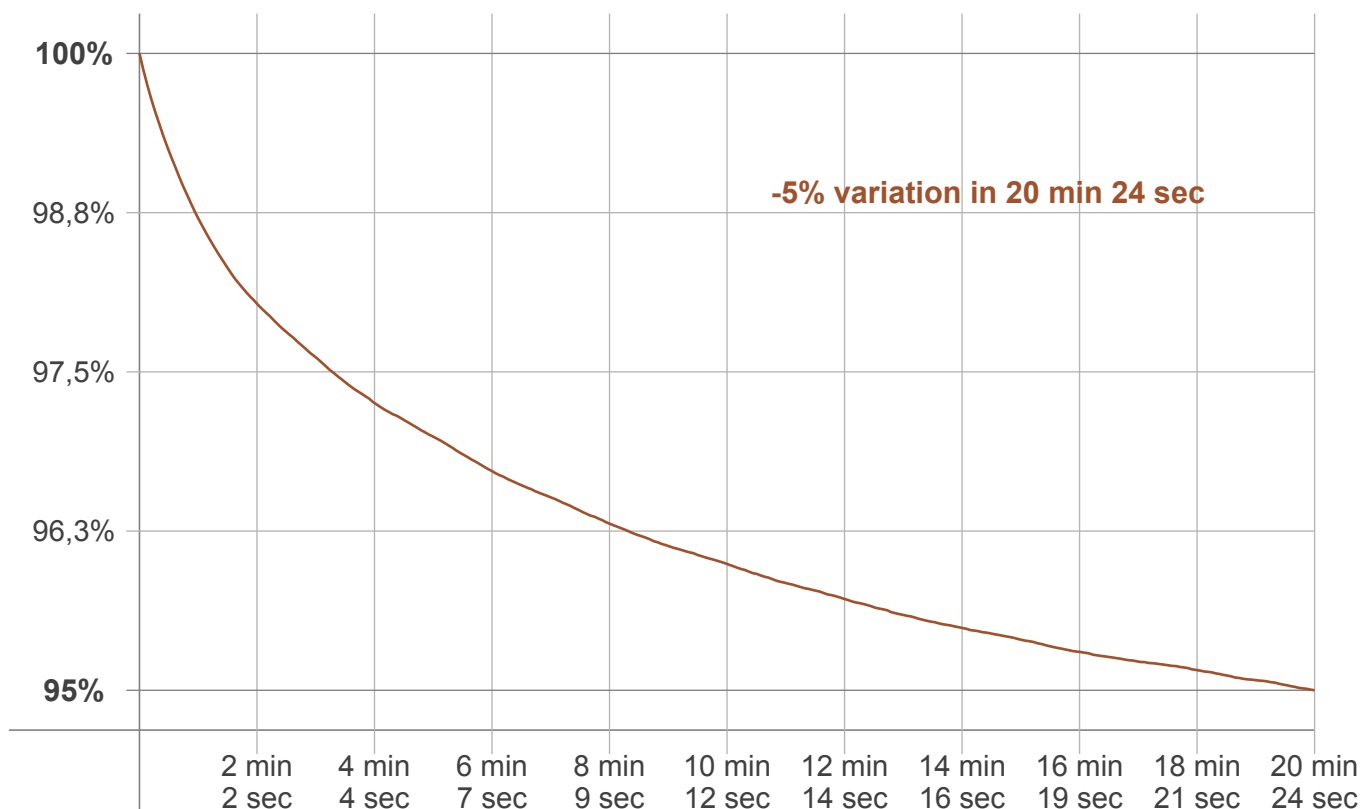
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
98,6 lm	199 lm	186 lm	153 lm	117 lm	83,5 lm	53,4 lm	38,8 lm	25,0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2,62 lm	7,81 lm	0,155 lm	0,140 lm	0,046 lm	0,000 lm	0,000 lm	0,000 lm	12,5 lm

Warmup curve



Warmup result

Warmup time:	20 min 24 sec
Warmup variation	-5,0%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2702 K	-11 K	2691 K

Output change

Output start	Output change	Output end
1024 lm	-47 lm	977 lm