

Light efficiency:

131 Lumen/Watt

Light quality:

CRI: 83,7

Color temperature:

4072 K

Output: 1098 lm

Peak: 364 cd

Power: 8,4 W

PF: 1,0



Product name:

Pegasus-3-Gold-0508-840-CRT

Item number:

FLNP-L-16A-0508-840-CRT

Date and time:

18.02.2021 12:09:38

Description:

Rank: S15ZT

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Grad K

CRI +/-0,7

Angular Resolution 1 Grad step

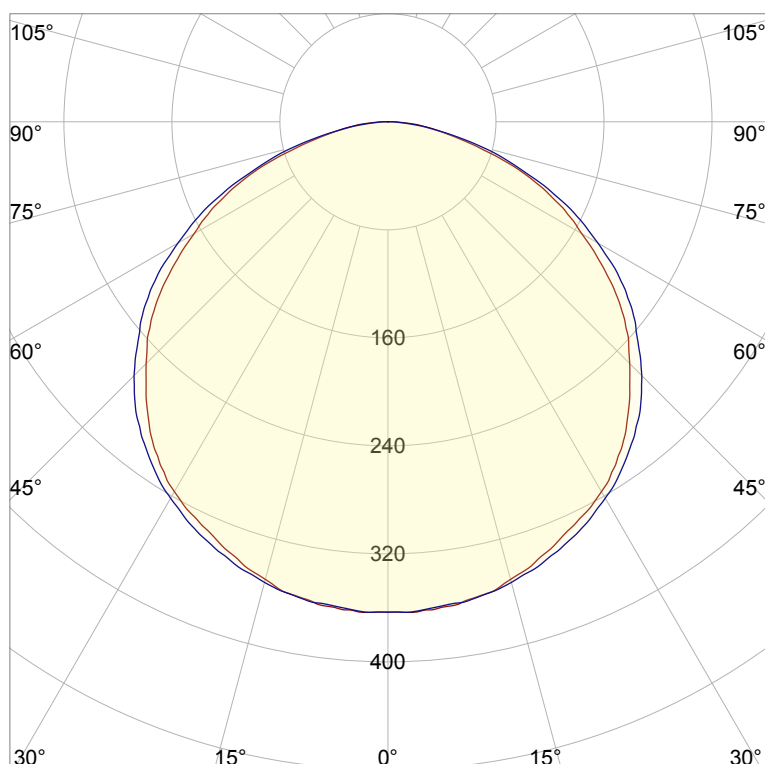
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse13-15

55411 Bingen am Rhein

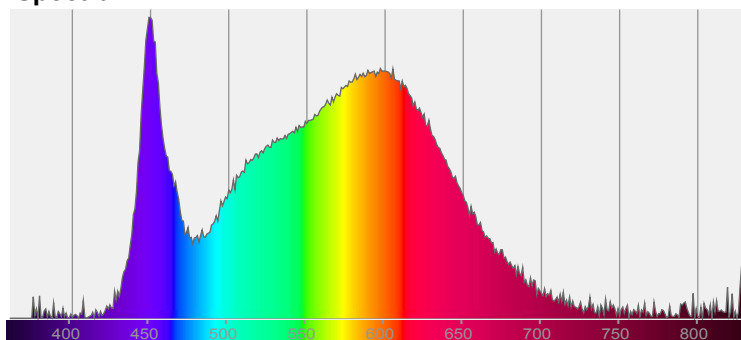


CIE 1931

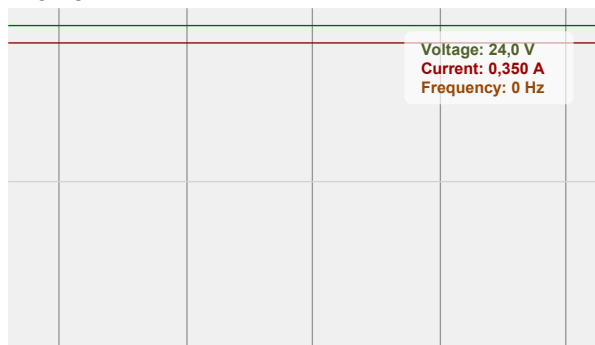
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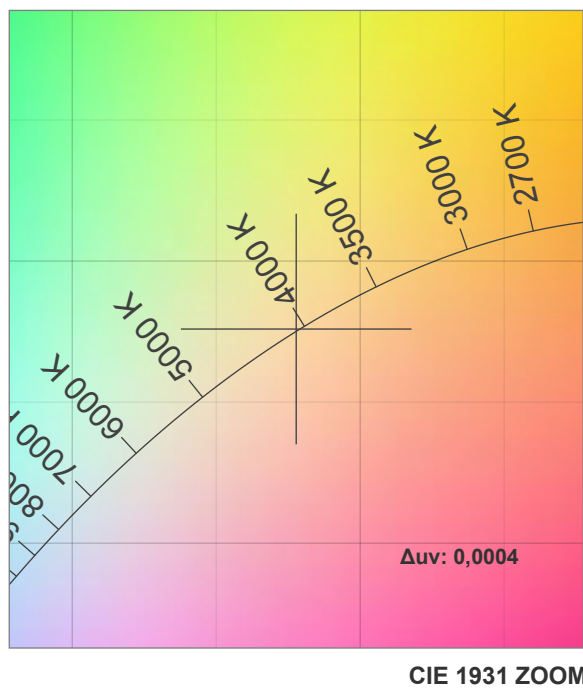
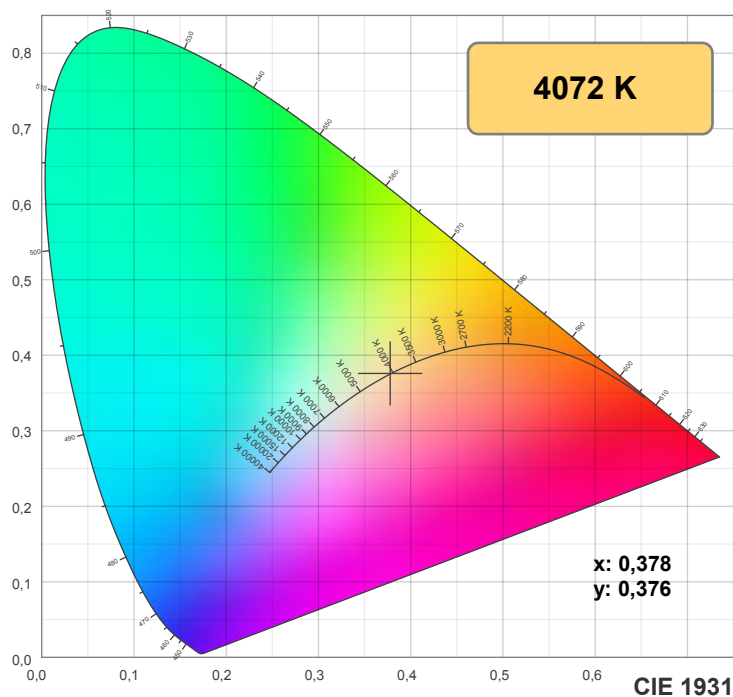
y: 0,376

Spectra

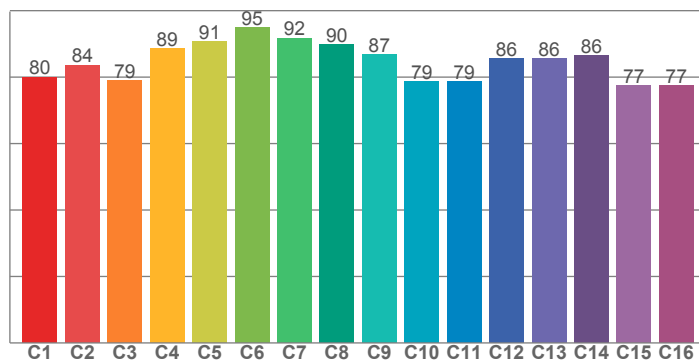


Power

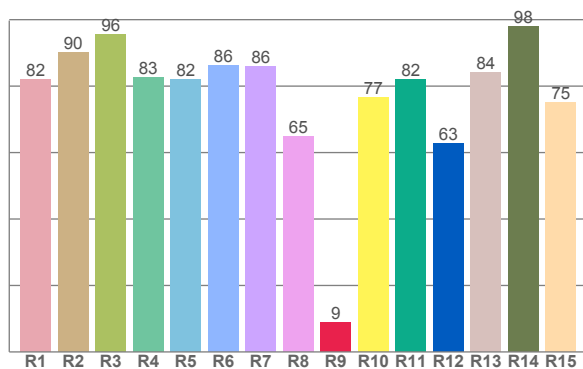




TM30: 84,5



CRI: 83,7 (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
82,0	90,2	95,6	82,6	82,2	86,2	85,9	64,7	8,9	76,6	82,0	62,8	84,2	97,9	75,1

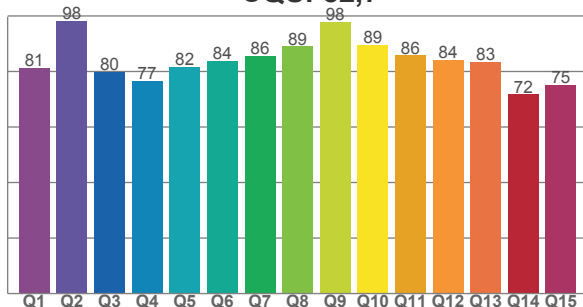
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80,1	83,6	78,9	88,6	90,6	94,8	91,8	89,8	86,9	78,6	78,6	85,5	85,5	86,5	77,4	77,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81,2	98,2	79,9	76,6	81,7	83,8	85,7	89,0	97,8	89,5	85,8	84,0	83,3	71,7	75,2

CQS: 82,7



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
4072 K	83,7	8,9	84,5	95,3	82,7	0,378	0,376	0,224	0,334	0,0004

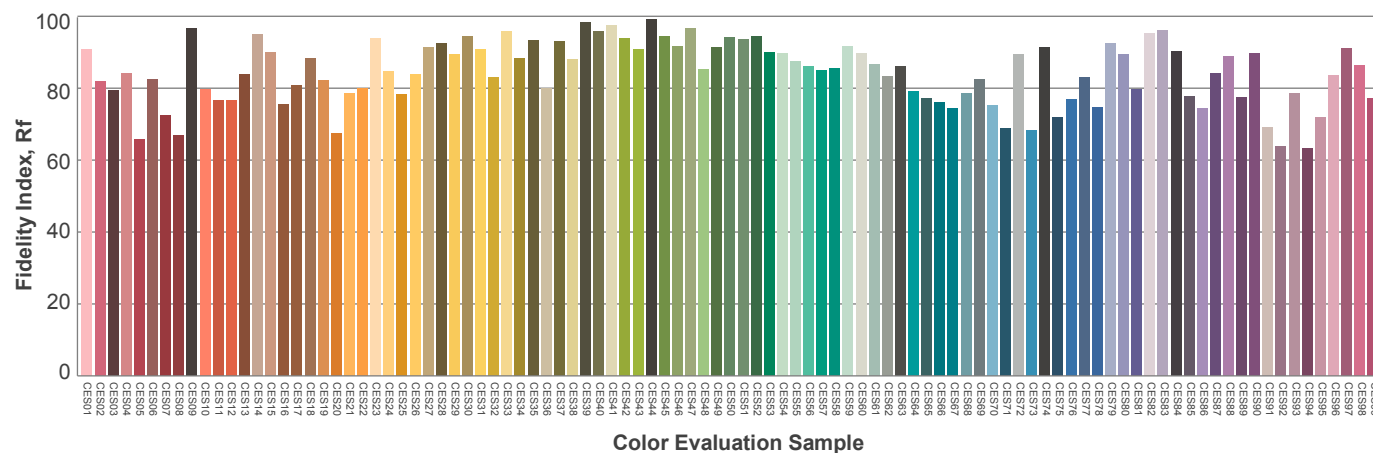
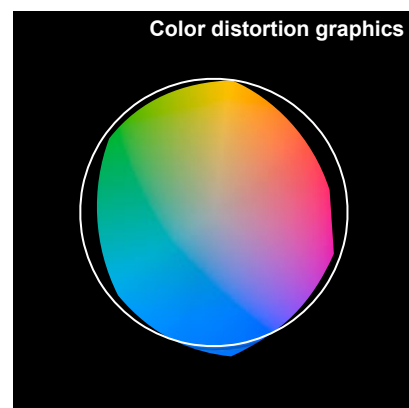
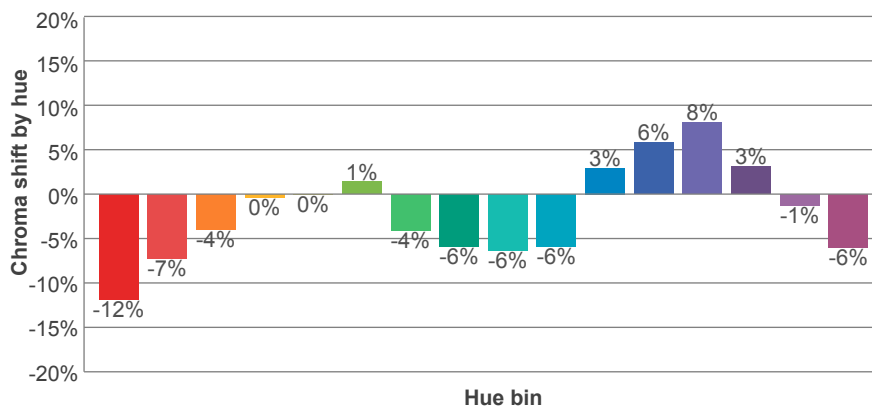
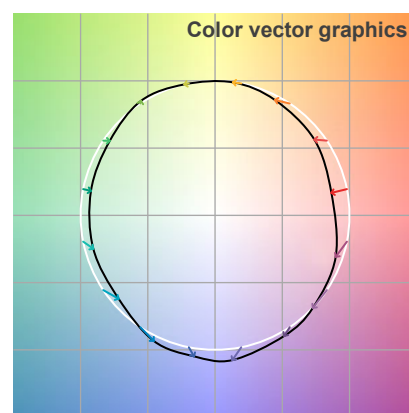
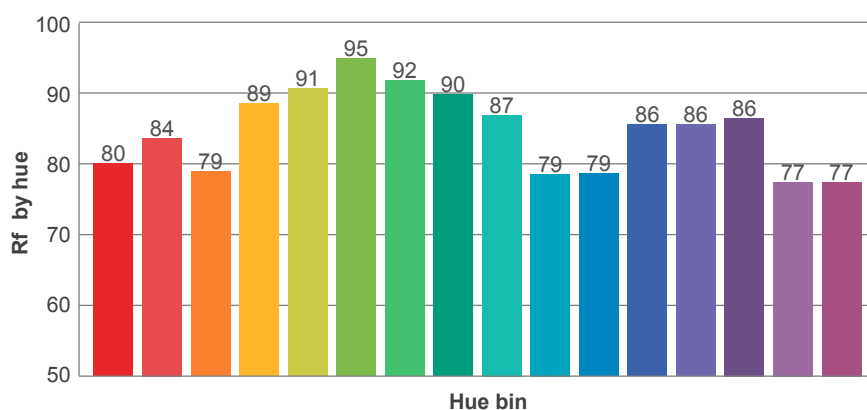
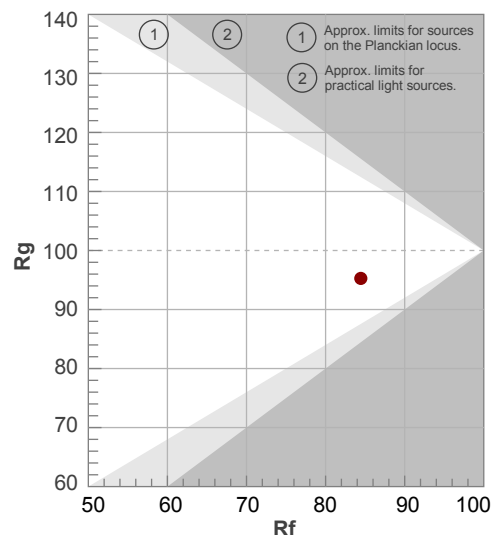
Rf 84,5

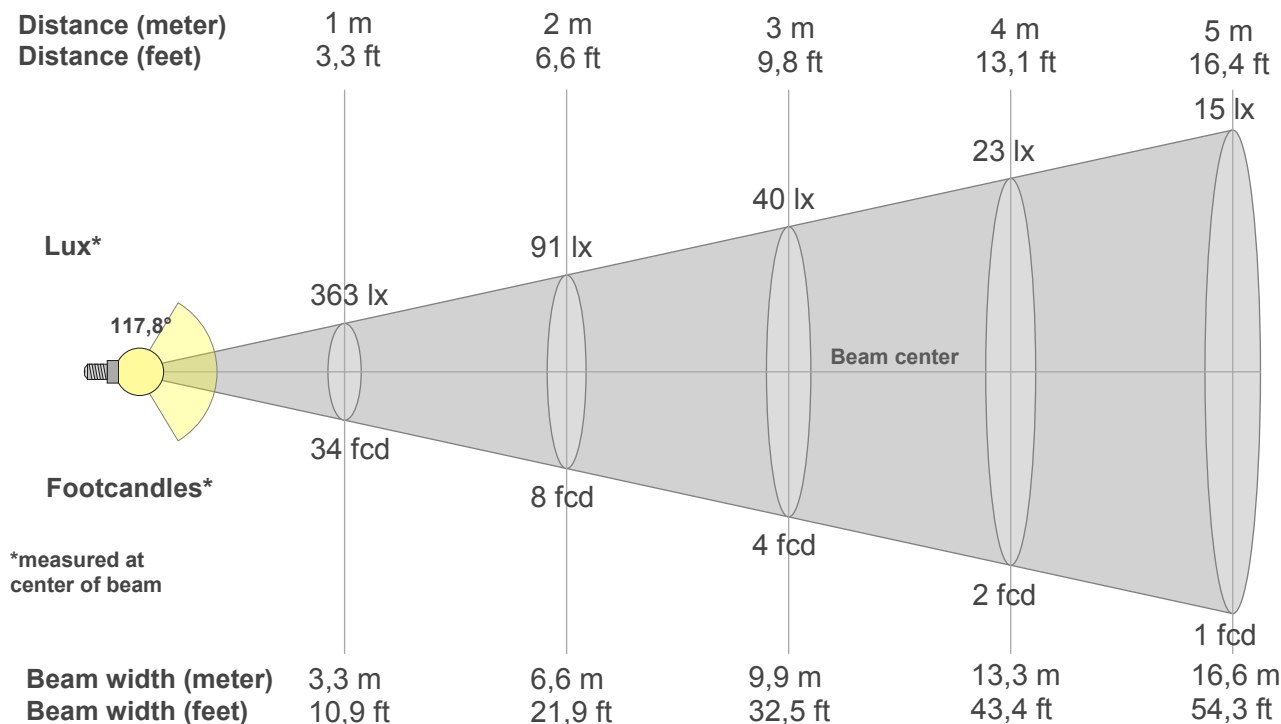
Fidelity index Rf

Rg 95,3

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-12%	0%
2	84	-7%	6%
3	79	-4%	11%
4	89	0%	6%
5	91	0%	3%
6	95	1%	-2%
7	92	-4%	-3%
8	90	-6%	0%
9	87	-6%	7%
10	79	-6%	12%
11	79	3%	14%
12	86	6%	5%
13	86	8%	-8%
14	86	3%	-7%
15	77	-1%	-17%
16	77	-6%	-13%





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
363lx	91lx	40lx	23lx	15lx	10lx	7lx	6lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
33,7fcd	8,4fcd	3,7fcd	2,1fcd	1,3fcd	0,9fcd	0,7fcd	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°
363	363	359	351	340	328	316	299	277	253	229	198	166	136	102	65	38	18	5	5
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	55%	46%	37%	28%	18%	10%	5%	1%	1%

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°
363	362	359	353	345	335	322	306	288	266	240	213	179	146	107	72	37	14	2	2
100%	100%	99%	97%	95%	92%	89%	84%	79%	73%	66%	59%	49%	40%	29%	20%	10%	4%	1%	1%

Intensities in 180° c-plane

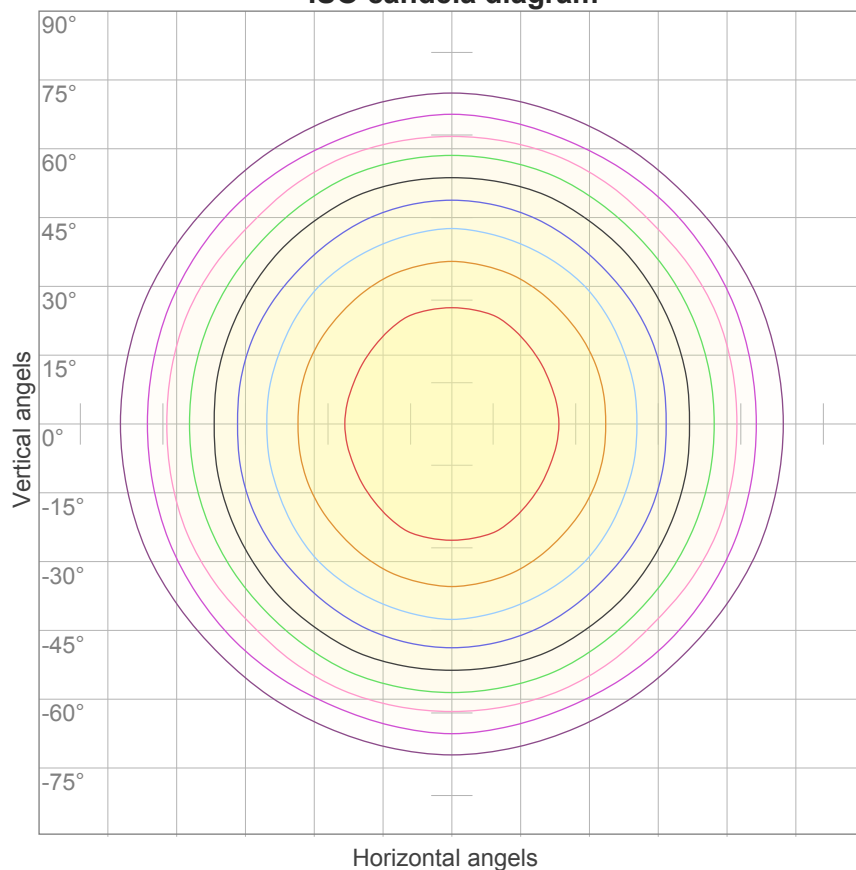
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
363	363	359	351	340	328	316	299	277	253	229	198	166	136	102	65	38	18	5	5
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	55%	46%	37%	28%	18%	10%	5%	1%	1%

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°
363	362	359	353	345	335	322	306	288	266	240	213	179	146	107	72	37	14	2	2
100%	100%	99%	97%	95%	92%	89%	84%	79%	73%	66%	59%	49%	40%	29%	20%	10%	4%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
117,8°	159,5°	173,7°	78,2%	52,4%

ISO candela diagram



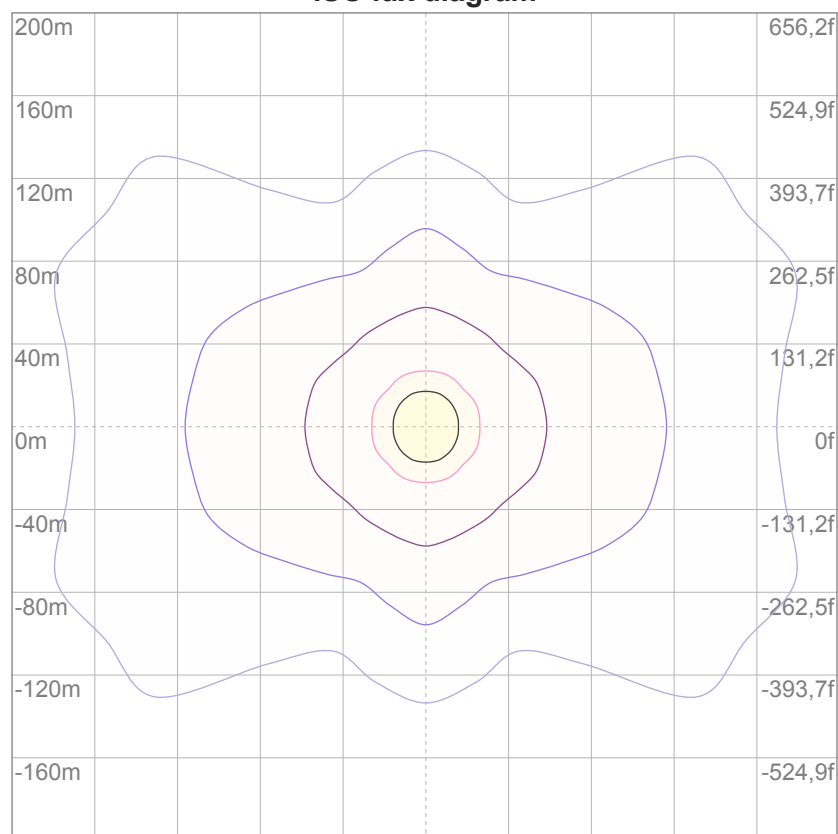
10%	36 cd
20%	73 cd
30%	109 cd
40%	145 cd
50%	181 cd
60%	218 cd
70%	254 cd
80%	290 cd
90%	327 cd

Conditions:

Number of c-planes: 16

Candela at center: 363 cd

ISO lux diagram



3%	0,109 lx
5%	0,181 lx
10%	0,363 lx
30%	1,09 lx
50%	1,81 lx

Conditions:

Number of c-planes: 16

Lux at center: 3,63 lx

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

Glare Evaluation According to UGR

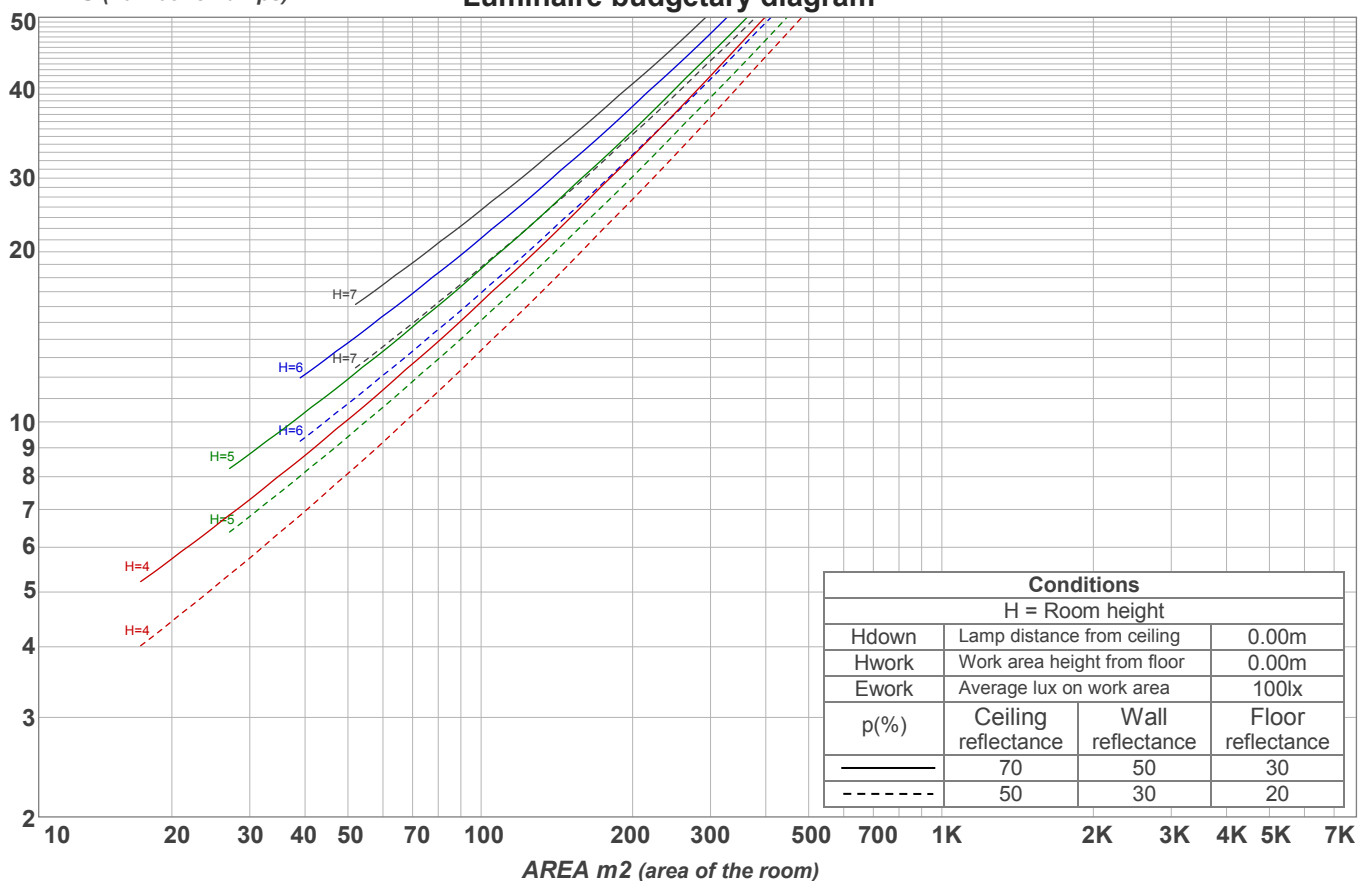
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	22,8	24,0	23,0	24,3	24,5	24,1	25,4	24,4	25,7	25,9
	3H	23,8	25,1	24,3	25,4	25,6	25,5	26,8	25,9	27,1	27,3
	4H	24,2	25,4	24,6	25,7	25,9	26,1	27,3	26,5	27,5	27,8
	6H	24,4	25,5	24,7	25,8	26,1	26,4	27,5	26,7	27,8	28,1
	8H	24,4	25,5	24,8	25,8	26,2	26,5	27,5	26,8	27,8	28,2
	12H	24,4	25,4	24,8	25,8	26,2	26,5	27,5	26,9	27,8	28,3
4H	2H	23,4	24,6	23,8	24,9	25,1	24,5	25,7	24,9	26,0	26,2
	3H	24,7	25,7	25,1	26,1	26,5	26,1	27,1	26,5	27,5	27,9
	4H	25,1	26,0	25,5	26,4	26,9	26,6	27,6	27,1	28,0	28,5
	6H	25,3	26,2	25,8	26,5	26,9	27,0	27,9	27,5	28,2	28,6
	8H	25,3	26,1	25,9	26,5	26,9	27,1	27,9	27,6	28,3	28,7
	12H	25,4	26,0	25,9	26,5	26,9	27,1	27,8	27,6	28,2	28,7
8H	4H	25,3	26,1	25,8	26,4	26,8	26,7	27,5	27,2	27,9	28,3
	6H	25,6	26,2	26,1	26,6	27,2	27,2	27,8	27,7	28,2	28,8
	8H	25,7	26,2	26,2	26,7	27,4	27,3	27,8	27,8	28,3	29,0
	12H	25,7	26,2	26,3	26,7	27,3	27,4	27,8	27,9	28,3	28,9
12H	4H	25,2	25,9	25,7	26,3	26,8	26,7	27,4	27,2	27,8	28,3
	6H	25,6	26,1	26,1	26,7	27,3	27,2	27,7	27,7	28,2	28,9
	8H	25,7	26,2	26,3	26,7	27,3	27,3	27,7	27,9	28,2	28,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,2					0,1 / -0,1				
S = 1.5H		0,3 / -0,6					0,3 / -0,4				
S = 2.0H		0,7 / -1,0					0,9 / -1,0				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1098 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	111	111	111	106	106	106	101	101	101	99
1	109	104	100	96	106	101	98	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	44	42
6	69	56	47	41	67	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

LAMPS (number of lamps)

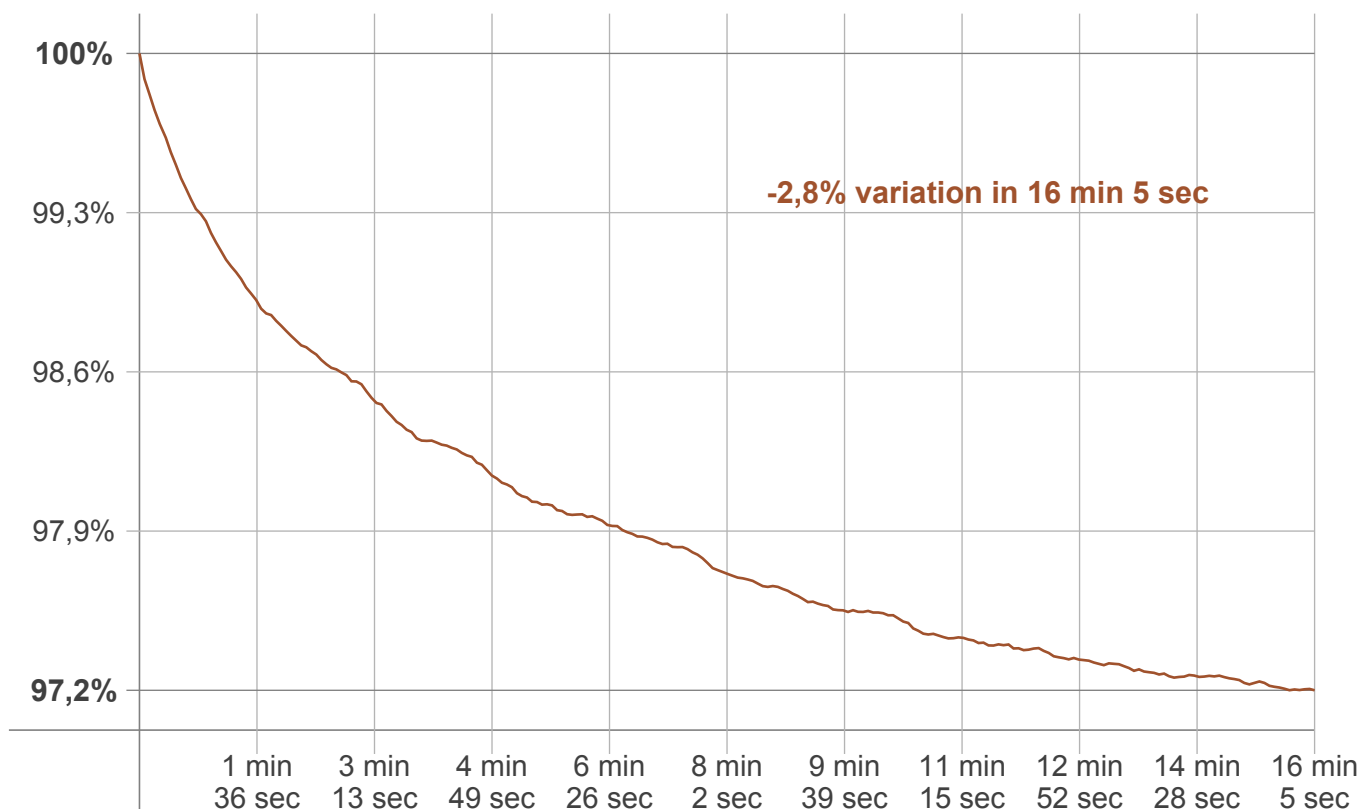
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
34,4 lm	99,4 lm	153 lm	189 lm	200 lm	183 lm	138 lm	71,5 lm	17,6 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3,88 lm	2,03 lm	1,82 lm	1,65 lm	1,03 lm	0,615 lm	0,453 lm	0,278 lm	0,094 lm

Warmup curve



Warmup result

Warmup time:	16 min 5 sec
Warmup variation	-2,8%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
4049 K	+23 K	4072 K

Output change

Output start	Output change	Output end
1125 lm	-26 lm	1098 lm