

Light efficiency:

43 Lumen/Watt

Light quality:

CRI: 82,1

Color temperature:

2186 K

Output: 512 lm

Peak: 165 cd

Power: 12,0 W

PF: 1,0



Product name:

Pegasus-3-Gold-0508-822-CFW

Item number:

FLNP-L-16A-0508-822-CFW

Date and time:

18.03.2021 09:04:28

Description:

Rank: M1A4T

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Grad K

CRI +/-0,7

Angular Resolution 1 Grad step

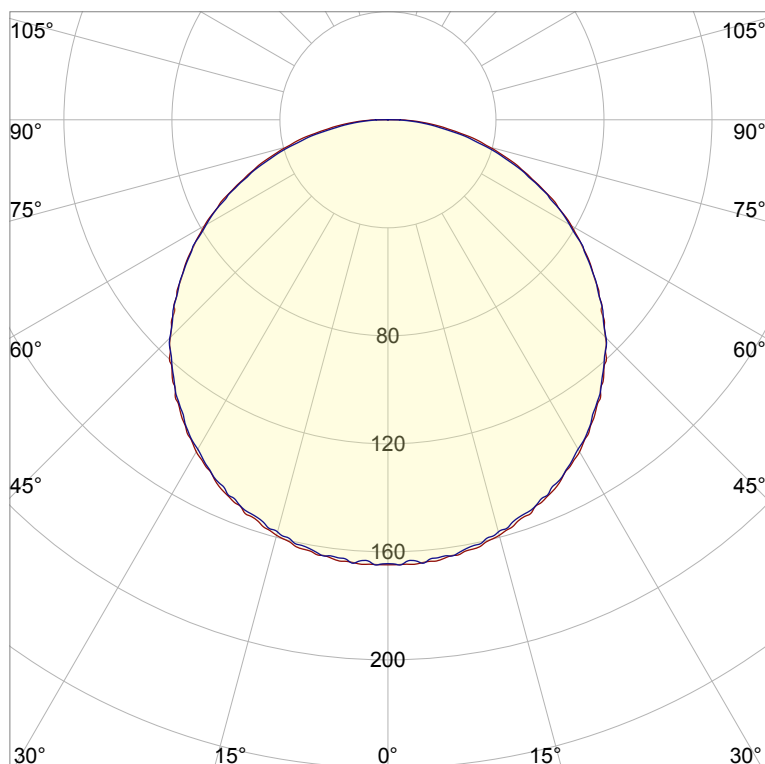
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse13-15

55411 Bingen am Rhein

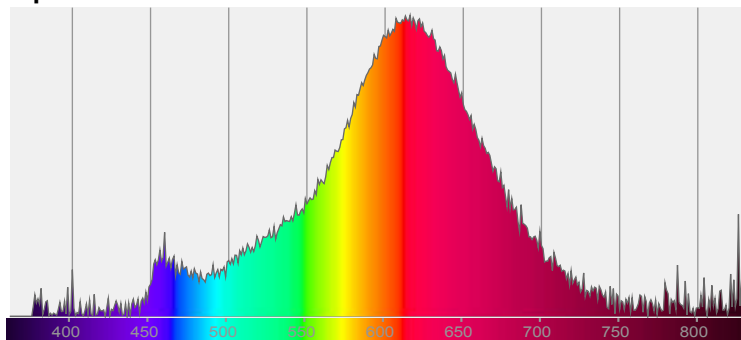


CIE 1931

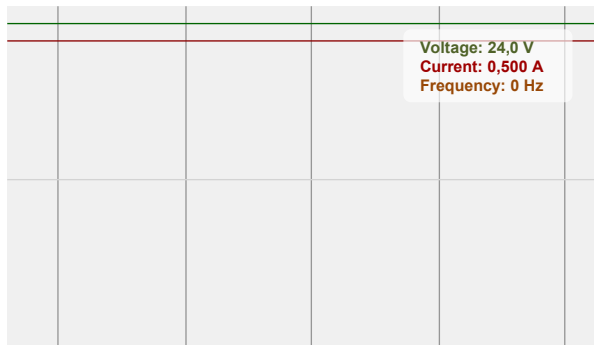
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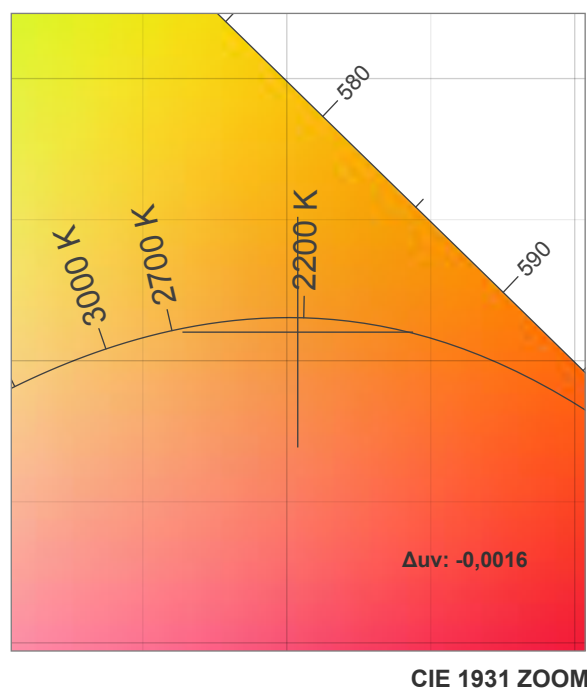
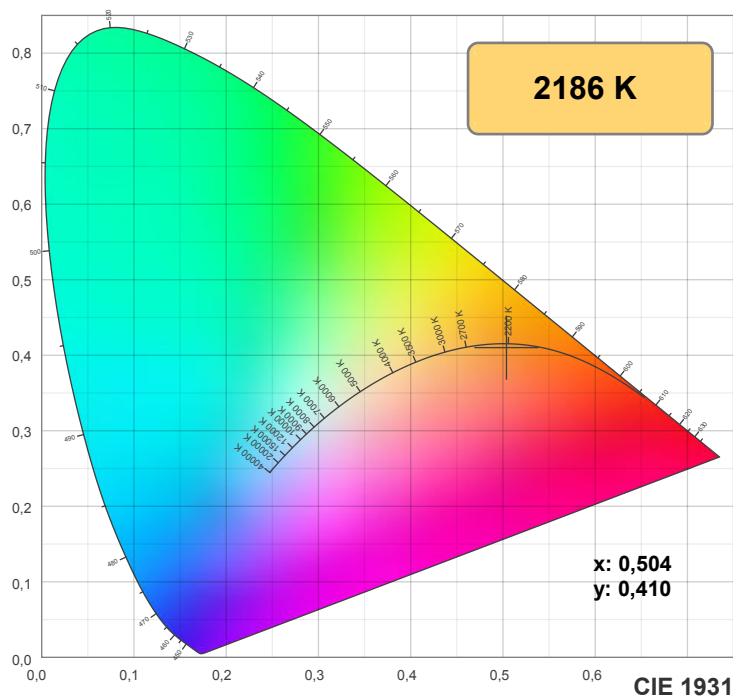
y: 0,410

Spectra

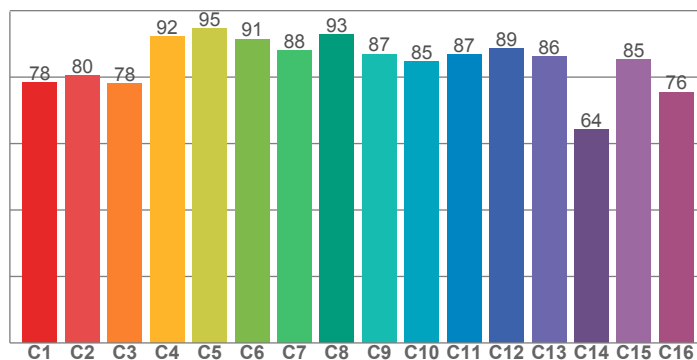


Power

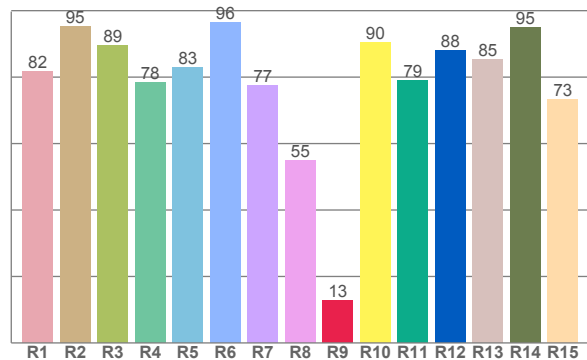




TM30: 85,0



CRI: 82,1 (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
81,9	95,1	89,5	78,4	82,8	96,4	77,4	54,9	12,9	90,4	78,9	87,9	85,2	95,1	73,3

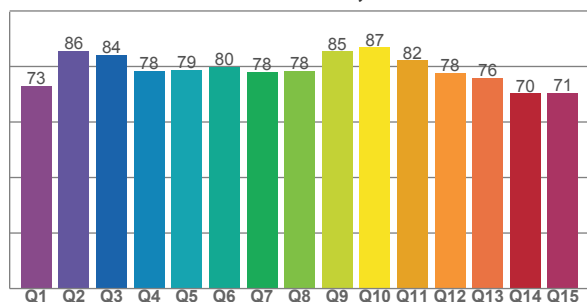
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78,4	80,4	78,1	92,1	94,6	91,5	87,9	92,7	86,9	84,8	86,8	88,5	86,1	64,2	85,2	75,5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
72,8	85,5	84,2	78,4	78,9	79,7	78,2	78,4	85,4	86,8	82,2	77,6	75,9	70,3	70,6

CQS: 78,0



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
2186 K	82,1	12,9	85,0	95,4	78,0	0,504	0,410	0,291	0,356	-0,0016

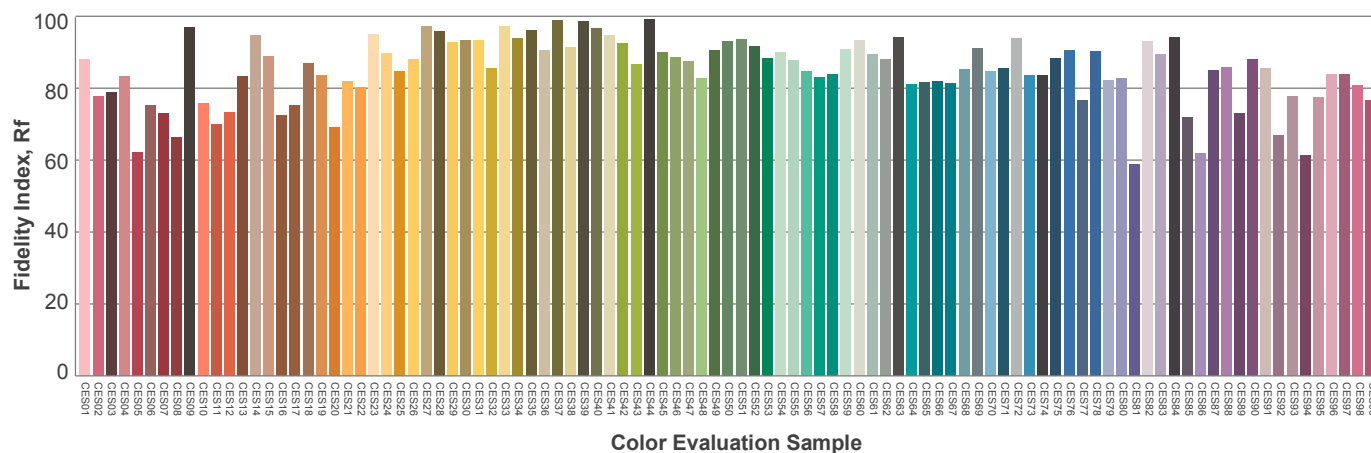
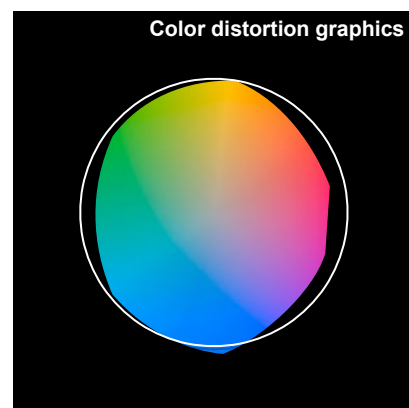
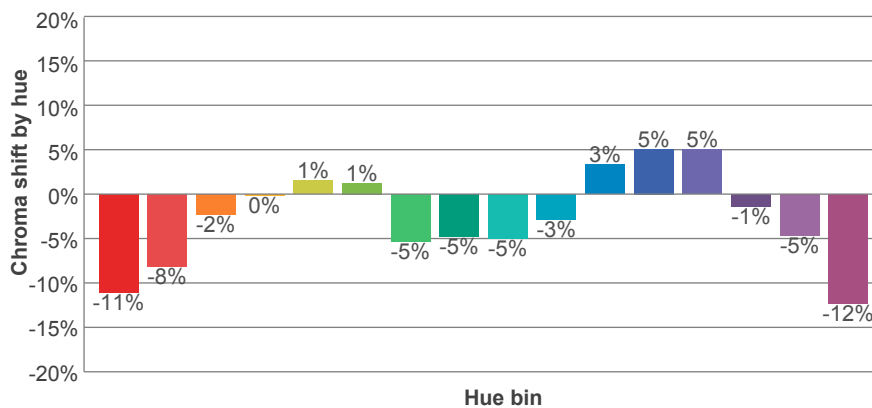
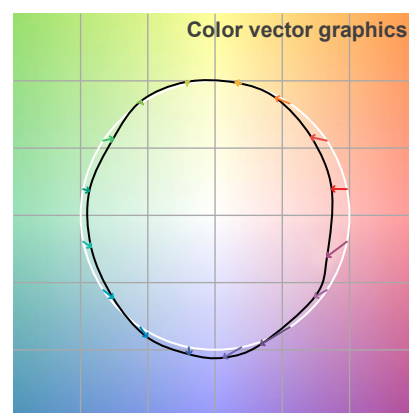
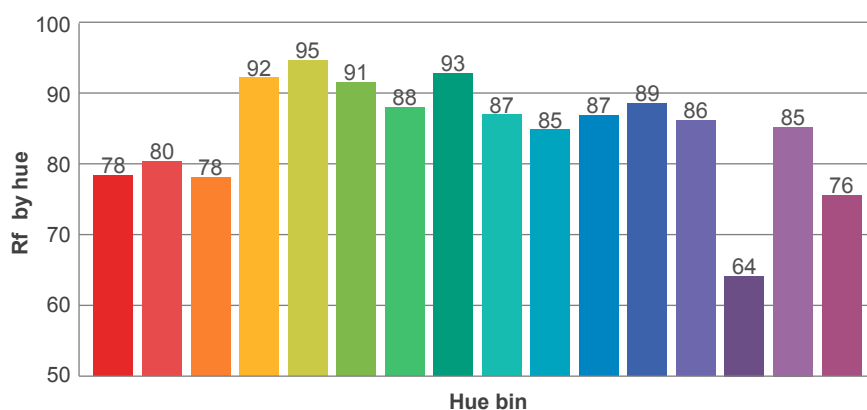
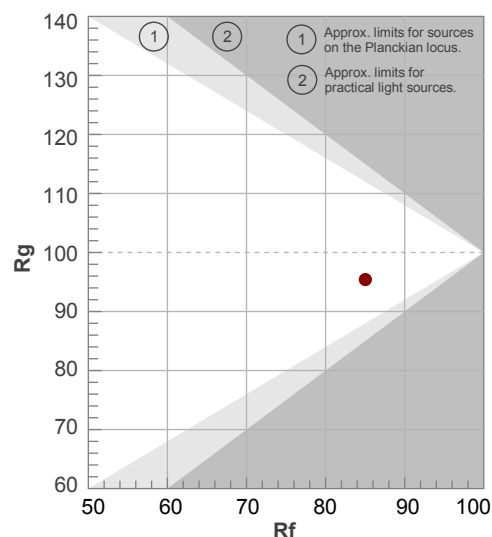
Rf 85,0

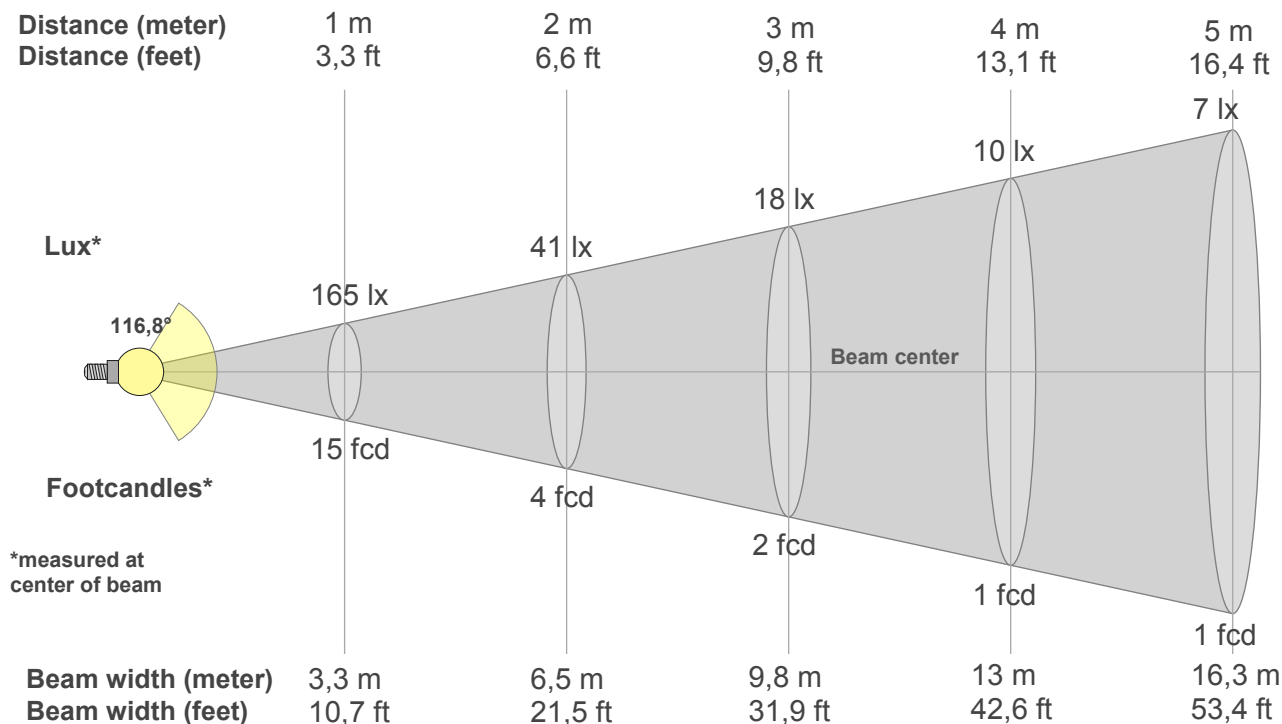
Fidelity index Rf

Rg 95,4

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	78	-11%	2%
2	80	-8%	9%
3	78	-2%	11%
4	92	0%	4%
5	95	1%	2%
6	91	1%	-2%
7	88	-5%	-5%
8	93	-5%	0%
9	87	-5%	5%
10	85	-3%	9%
11	87	3%	8%
12	89	5%	1%
13	86	5%	-14%
14	64	-1%	-25%
15	85	-5%	-9%
16	76	-12%	-14%





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
165lx	41lx	18lx	10lx	7lx	5lx	3lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx
15,3fcd	3,8fcd	1,7fcd	1fcd	0,6fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd	0fcd	0fcd

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°
165	164	162	159	155	149	142	133	124	114	102	91	78	65	52	39	26	14	5	4
100%	100%	99%	97%	94%	91%	86%	81%	75%	69%	62%	55%	48%	40%	32%	24%	16%	9%	3%	3%

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°
165	164	162	158	154	148	141	133	124	114	102	90	78	65	51	37	23	12	2	2
100%	100%	98%	96%	94%	90%	86%	81%	75%	69%	62%	55%	47%	39%	31%	22%	14%	7%	1%	1%

Intensities in 180° c-plane

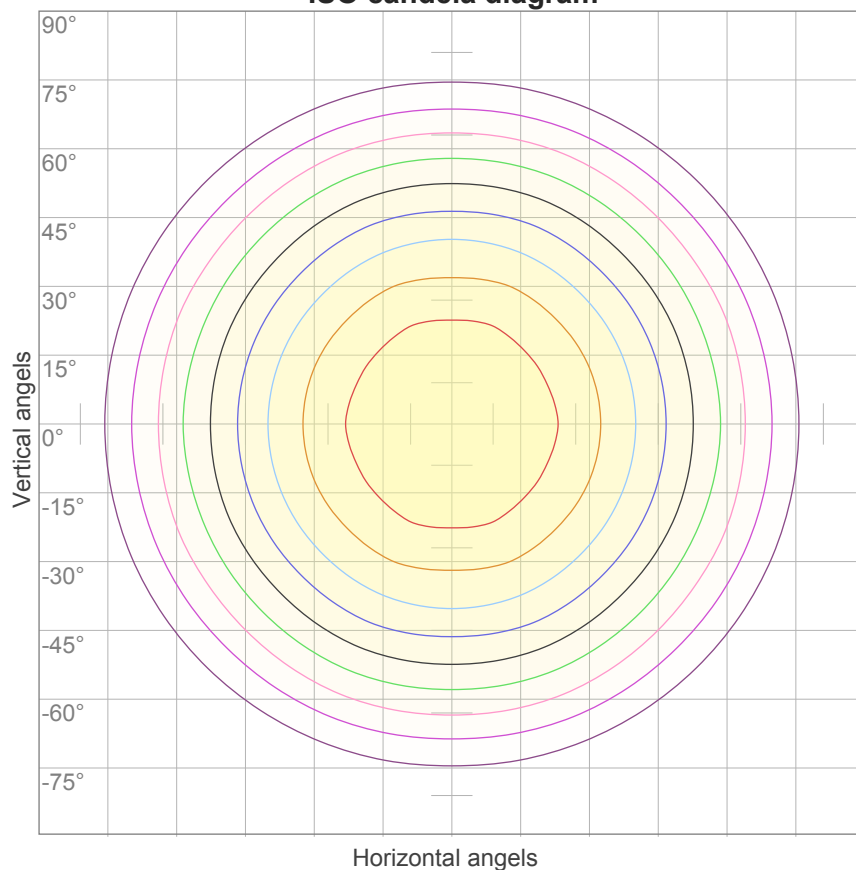
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
165	164	162	159	155	149	142	133	124	114	102	91	78	65	52	39	26	14	5	4
100%	100%	99%	97%	94%	91%	86%	81%	75%	69%	62%	55%	48%	40%	32%	24%	16%	9%	3%	3%

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°
165	164	162	158	154	148	141	133	124	114	102	90	78	65	51	37	23	12	2	2
100%	100%	98%	96%	94%	90%	86%	81%	75%	69%	62%	55%	47%	39%	31%	22%	14%	7%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116,8°	167,2°	181,9°	74,5%	50,1%

ISO candela diagram



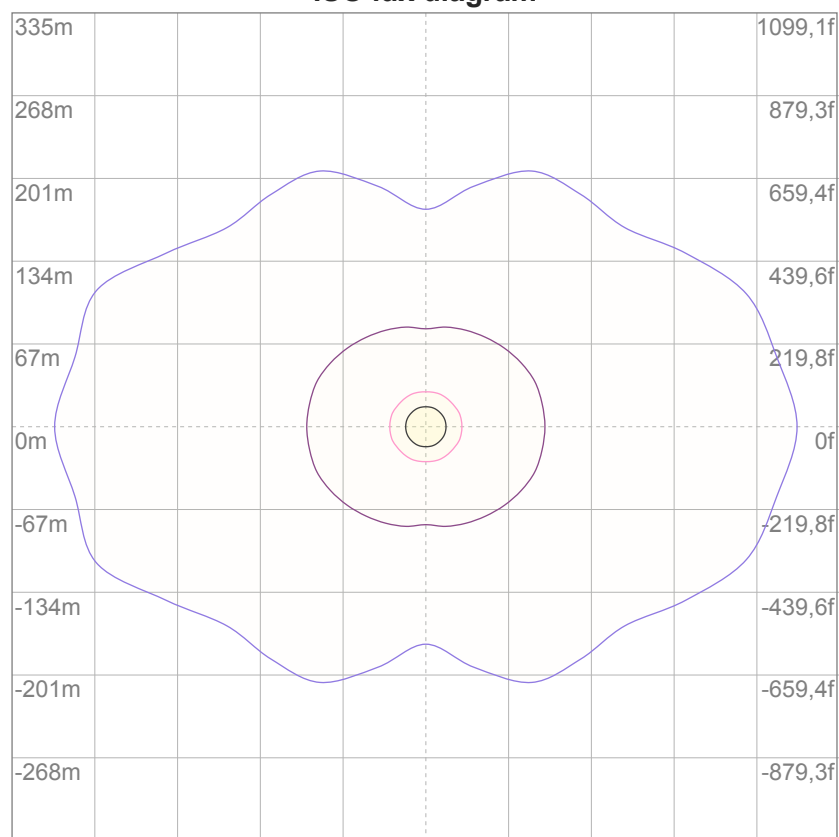
10%	16 cd
20%	33 cd
30%	49 cd
40%	66 cd
50%	82 cd
60%	99 cd
70%	115 cd
80%	132 cd
90%	148 cd

Conditions:

Number of c-planes: 16

Candela at center: 165 cd

ISO lux diagram



3%	49,4m lx
5%	82,3m lx
10%	0,165 lx
30%	0,494 lx
50%	0,823 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,65 lx

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

Glare Evaluation According to UGR

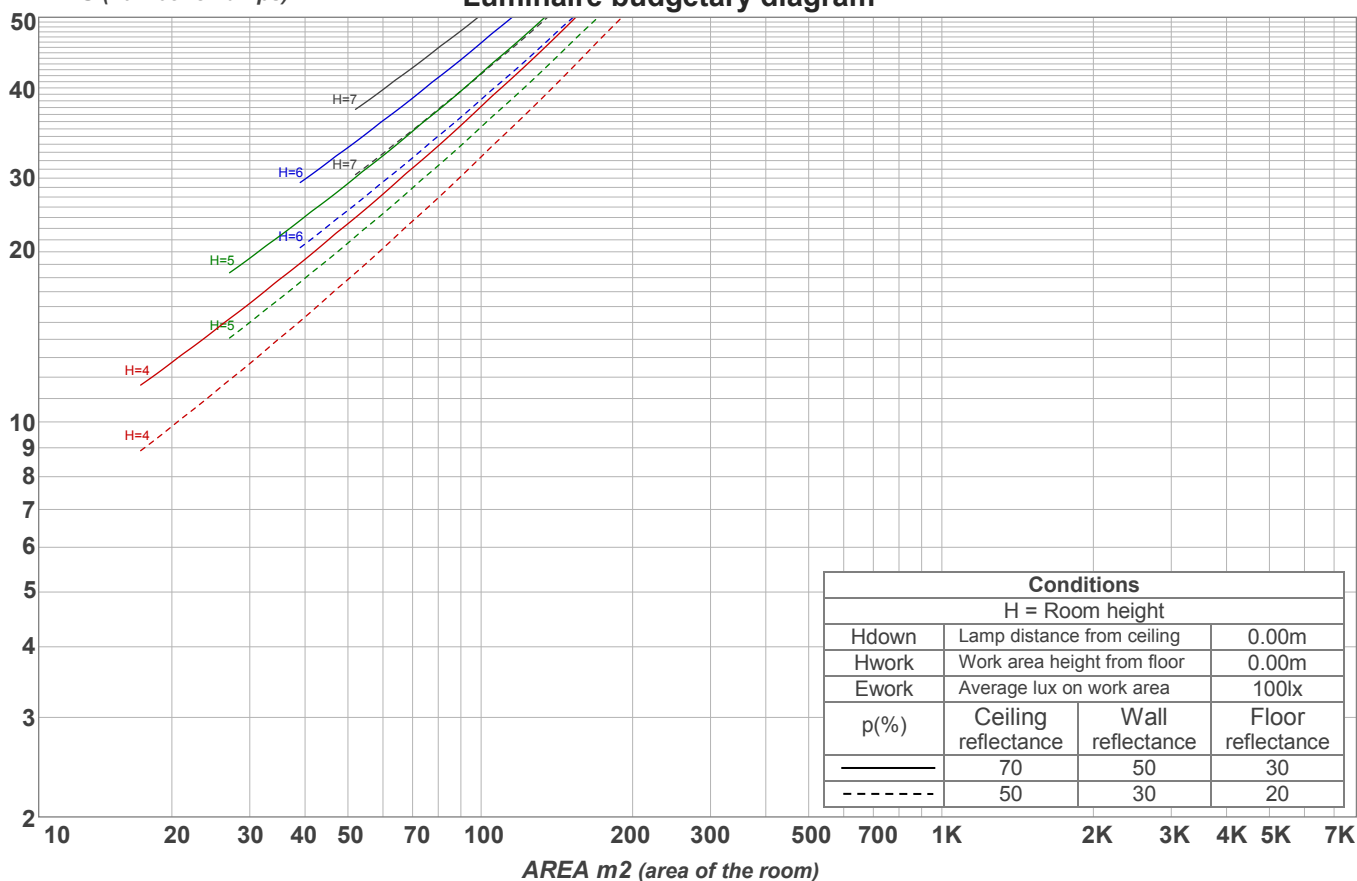
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	20,9	22,2	21,1	22,5	22,7	21,4	22,7	21,7	23,0	23,2
	3H	22,3	23,6	22,7	23,9	24,1	23,0	24,3	23,4	24,6	24,8
	4H	22,9	24,2	23,3	24,5	24,7	23,7	25,0	24,2	25,3	25,5
	6H	23,5	24,6	23,8	24,8	25,2	24,4	25,5	24,7	25,7	26,1
	8H	23,6	24,7	23,9	25,0	25,4	24,5	25,6	24,9	25,9	26,3
	12H	23,7	24,7	24,0	25,0	25,5	24,7	25,7	25,0	26,0	26,5
4H	2H	21,5	22,8	21,9	23,1	23,3	22,0	23,2	22,4	23,5	23,7
	3H	23,3	24,3	23,6	24,6	25,1	23,9	24,9	24,2	25,2	25,7
	4H	23,9	24,9	24,4	25,3	25,9	24,6	25,6	25,1	26,0	26,5
	6H	24,5	25,4	25,0	25,8	26,2	25,3	26,2	25,8	26,6	26,9
	8H	24,7	25,5	25,2	25,9	26,3	25,5	26,4	26,0	26,7	27,1
	12H	24,8	25,5	25,3	26,0	26,4	25,7	26,4	26,2	26,8	27,3
8H	4H	24,3	25,1	24,8	25,5	25,8	24,9	25,7	25,4	26,1	26,4
	6H	25,0	25,6	25,5	26,1	26,6	25,7	26,3	26,2	26,8	27,3
	8H	25,3	25,8	25,8	26,4	27,0	26,0	26,6	26,5	27,1	27,8
	12H	25,5	26,0	26,1	26,5	27,1	26,3	26,8	26,9	27,3	27,9
12H	4H	24,3	25,0	24,8	25,4	25,9	24,9	25,6	25,4	26,0	26,5
	6H	25,1	25,6	25,6	26,2	26,8	25,7	26,3	26,3	26,8	27,5
	8H	25,4	25,9	26,0	26,4	27,0	26,1	26,6	26,7	27,1	27,7
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					0,1 / -0,2				
S = 2.0H		0,4 / -0,5					0,4 / -0,5				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 512 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	110	110	110	105	105	105	100	100	100	98
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80
2	97	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69	66
3	89	78	69	62	86	76	68	62	73	66	60	69	64	59	67	62	58	55
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49	47
5	74	61	52	45	72	60	51	45	57	50	44	55	49	43	53	47	43	40
6	69	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	64	50	41	35	62	49	40	34	47	39	34	45	39	34	44	38	33	31
8	59	45	37	31	57	45	36	31	43	36	30	42	35	30	40	34	30	28
9	55	42	33	28	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	25	35	29	24	34	28	24	22

LAMPS (number of lamps)

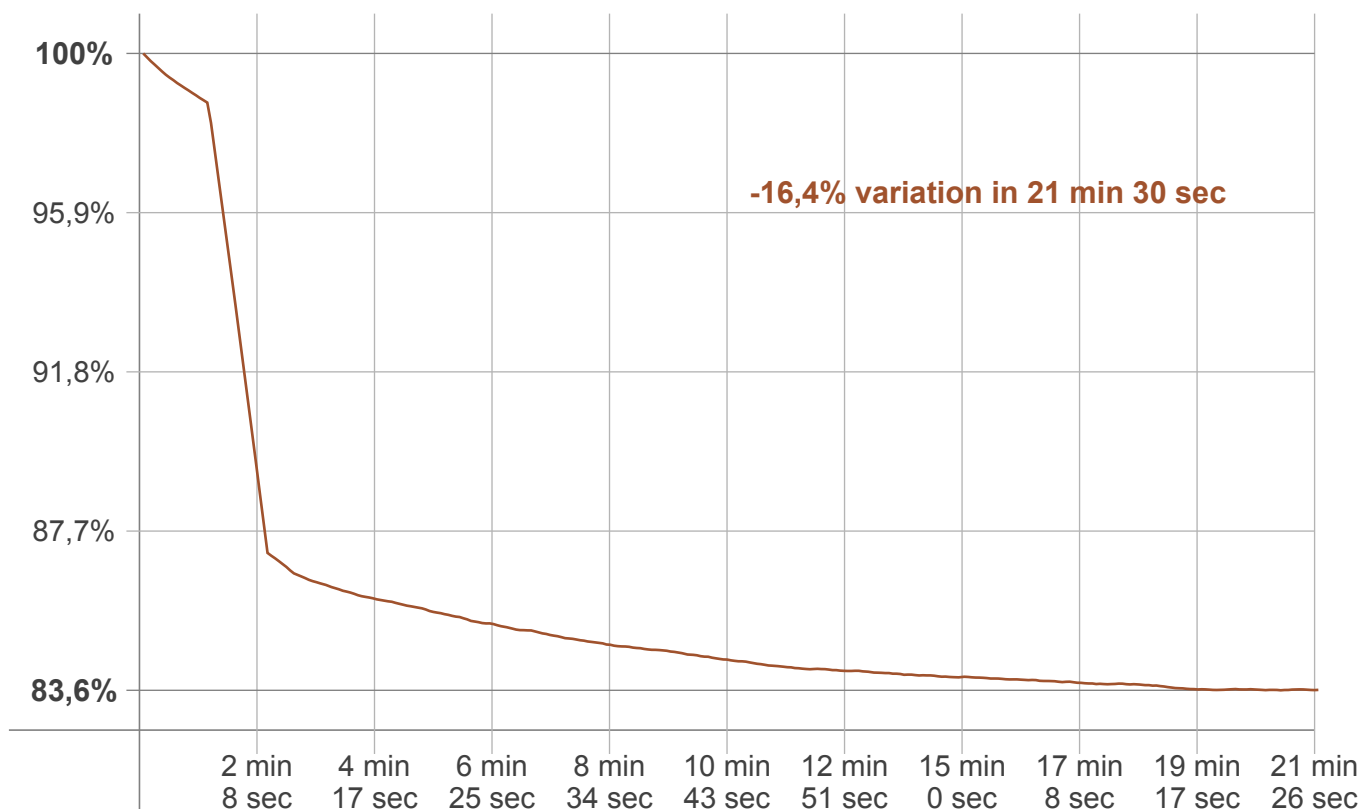
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
15,6 lm	44,8 lm	68,4 lm	83,3 lm	87,8 lm	81,2 lm	64,4 lm	40,3 lm	14,8 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
3,66 lm	1,96 lm	1,73 lm	1,56 lm	0,957 lm	0,542 lm	0,399 lm	0,245 lm	0,082 lm

Warmup curve



Warmup result

Warmup time:	21 min 30 sec
Warmup variation	-16,5%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2301 K	-115 K	2186 K

Output change

Output start	Output change	Output end
610 lm	-98 lm	512 lm