

Light efficiency:

54 Lumen/Watt

Light quality:

CRI: 92,8

Color temperature:

5294 K

Output: 539 lm

Peak: 145 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-4-0508-956-CSW

Item number:

FLNP/L/09D0508/956/CSW

Date and time:

07.04.2021 10:23:19

Description:

Rank: G7-2G0

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

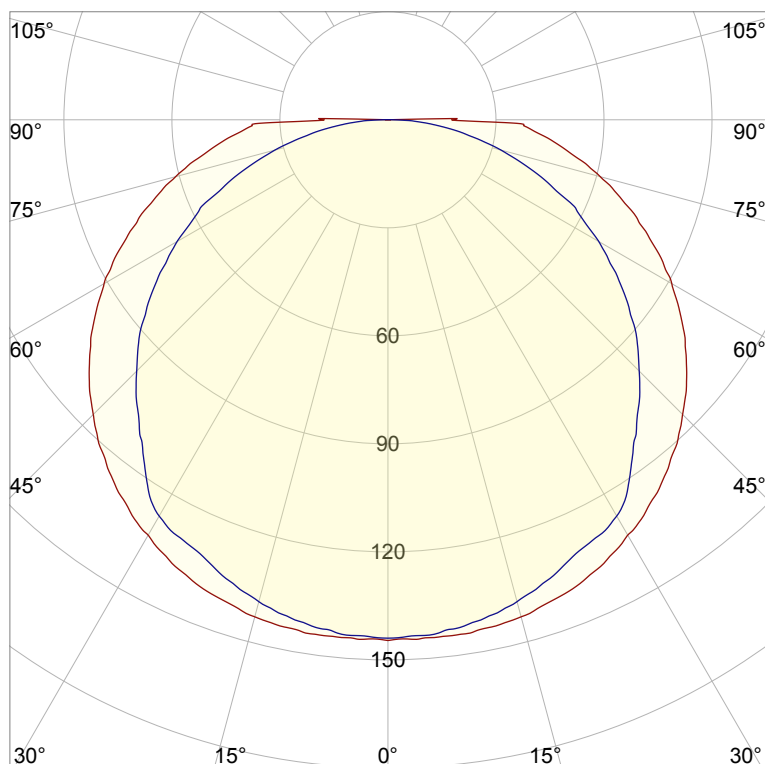
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

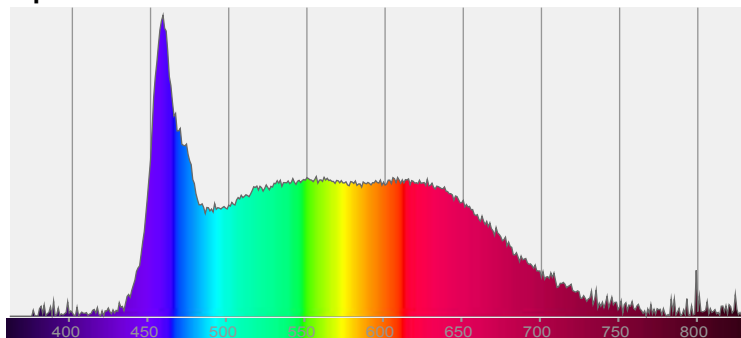


CIE 1931

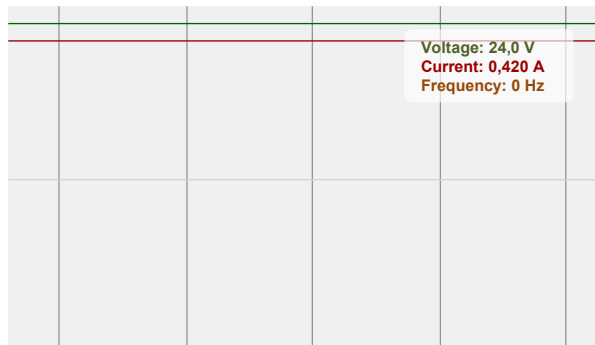
x: 0,338

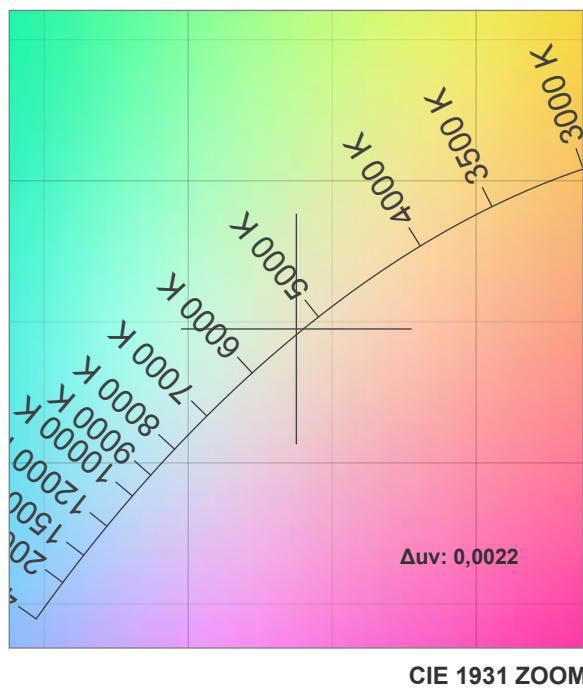
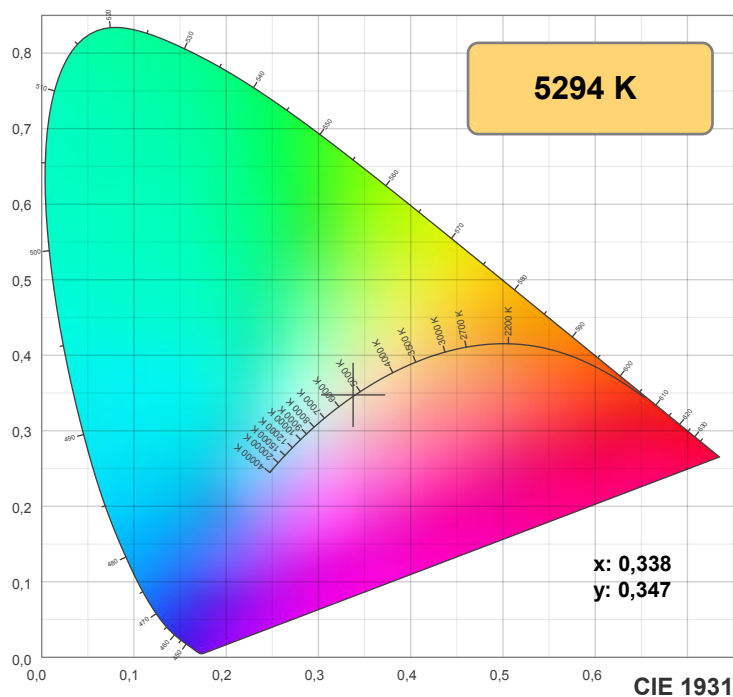
y: 0,347

Spectra

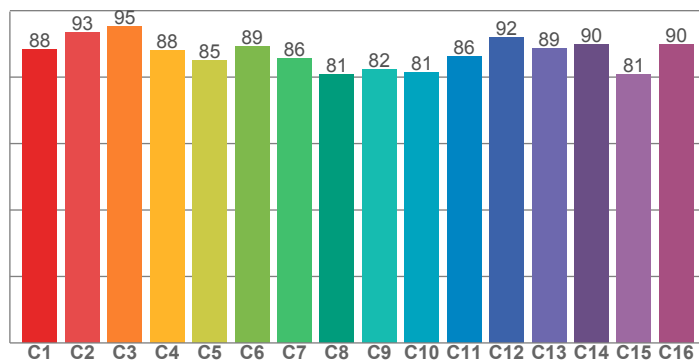


Power

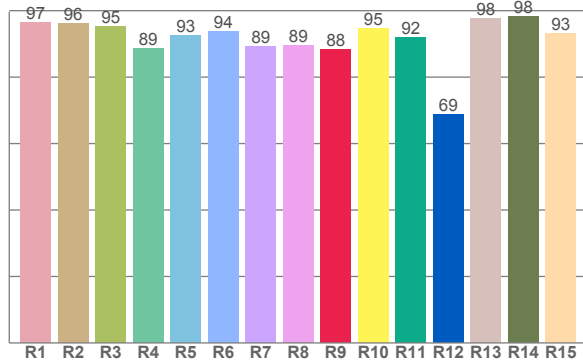




TM30: 87,2



CRI: 92,8 (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
96,5	96,2	95,3	88,8	92,7	93,8	89,3	89,4	88,3	94,6	92,0	68,9	97,8	98,1	93,3

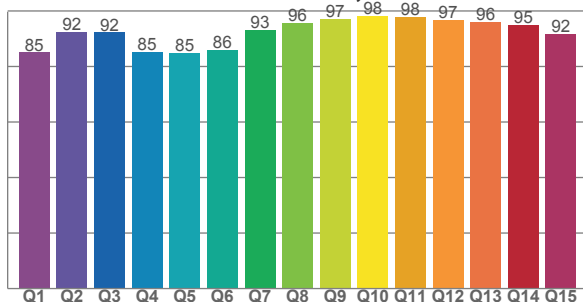
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,3	93,5	95,2	87,9	85,0	89,3	85,5	80,9	82,2	81,4	86,3	91,9	86,5	89,9	80,8	89,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,1	92,4	92,2	85,1	84,8	85,9	93,1	95,6	97,0	98,1	97,8	96,8	96,1	94,9	91,7

CQS: 91,1



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
5294 K	92,8	88,3	87,2	95,0	91,1	0,338	0,347	0,208	0,321	0,0022

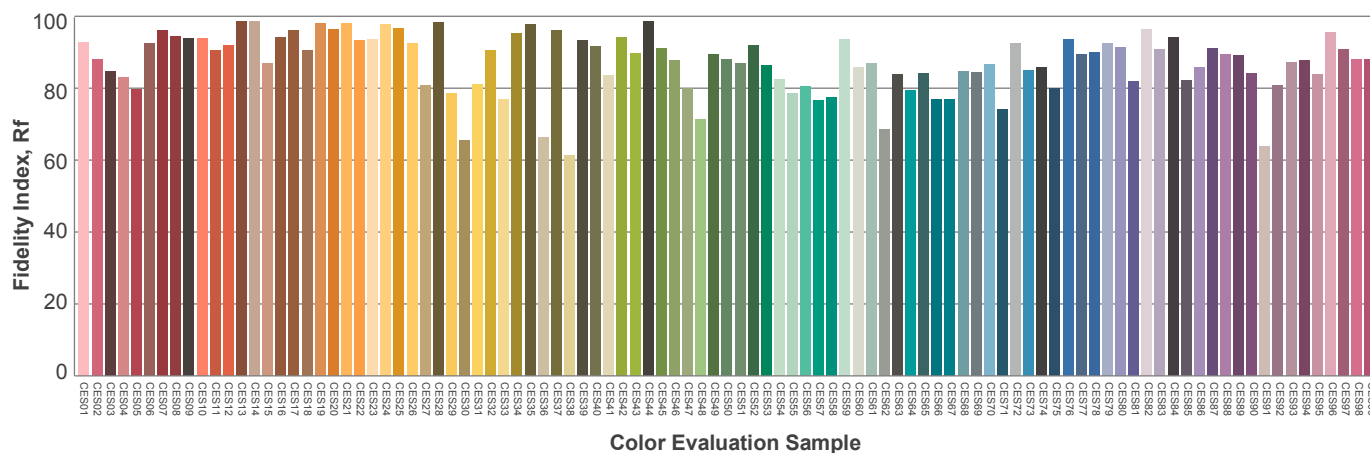
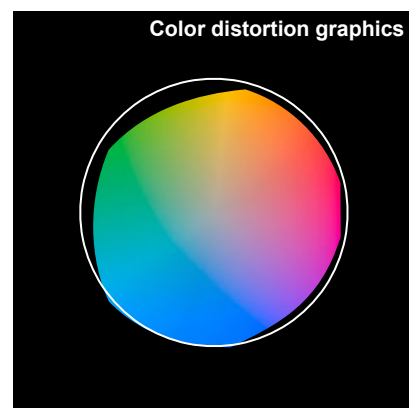
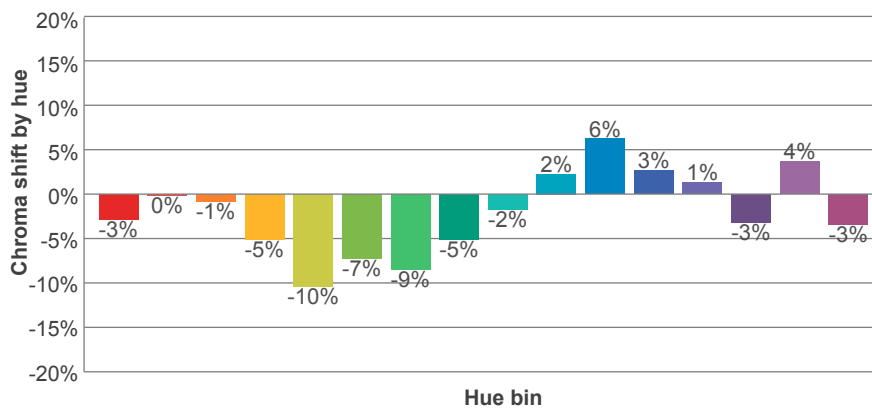
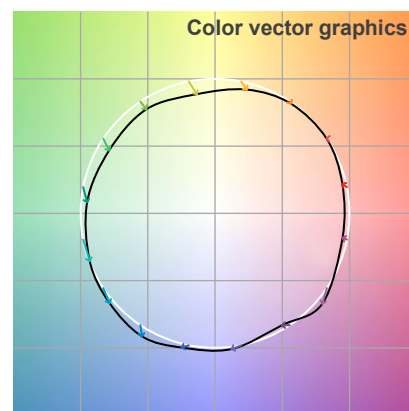
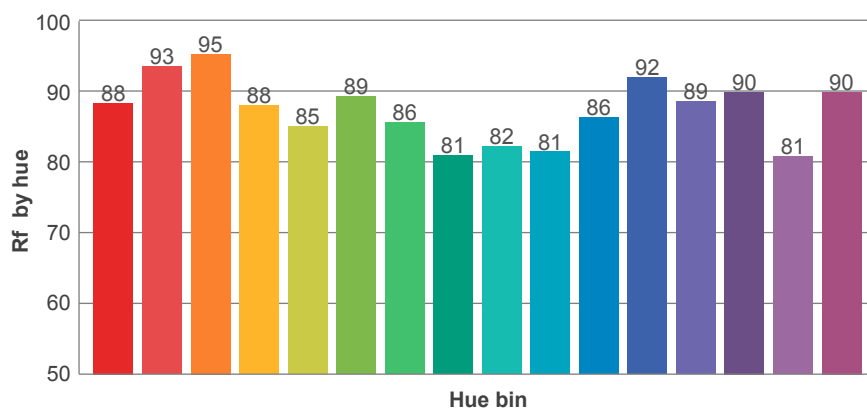
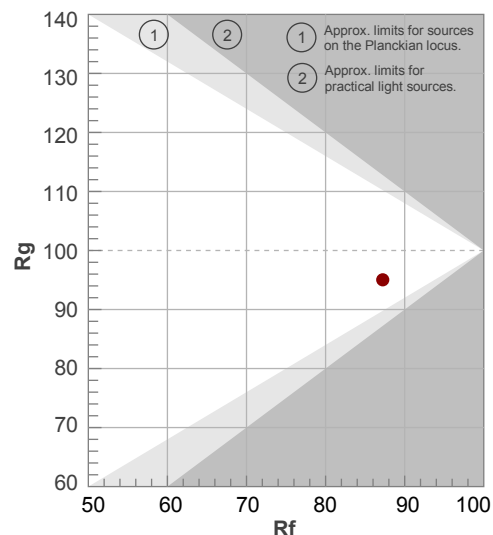
Rf 87,2

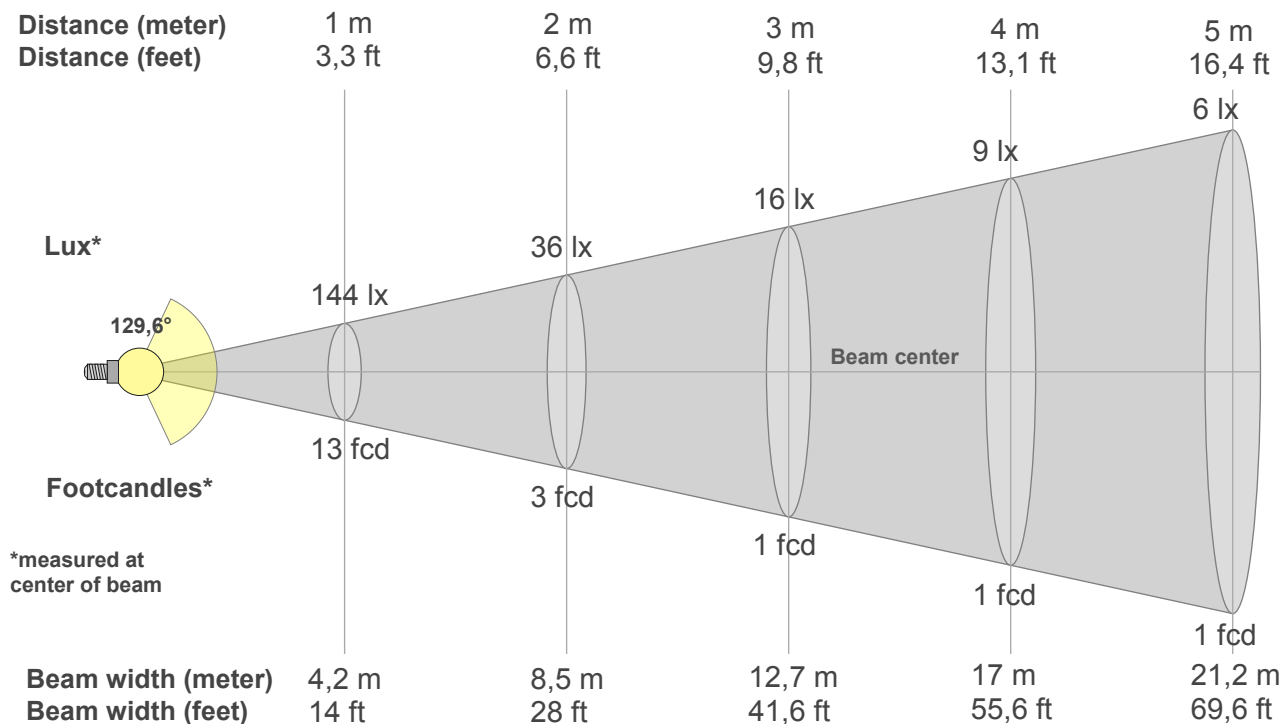
Fidelity index Rf

Rg 95,0

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-3%	3%
2	93	0%	0%
3	95	-1%	-2%
4	88	-5%	-5%
5	85	-10%	-4%
6	89	-7%	0%
7	86	-9%	5%
8	81	-5%	10%
9	82	-2%	16%
10	81	2%	12%
11	86	6%	6%
12	92	3%	-5%
13	89	1%	-8%
14	90	-3%	-5%
15	81	4%	-12%
16	90	-3%	1%





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
144lx	36lx	16lx	9lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx
13,4fcd	3,3fcd	1,5fcd	0,8fcd	0,5fcd	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

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°
144	144	141	136	128	116	102	85	67	49	19	0	0	0	0	0	0	0	0	0
100%	100%	98%	94%	89%	80%	71%	59%	47%	34%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%

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°
144	142	136	129	116	99	81	61	39	19	1	0	0	0	0	0	0	0	0	0
100%	99%	95%	90%	80%	69%	56%	42%	27%	13%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Intensities in 180° c-plane

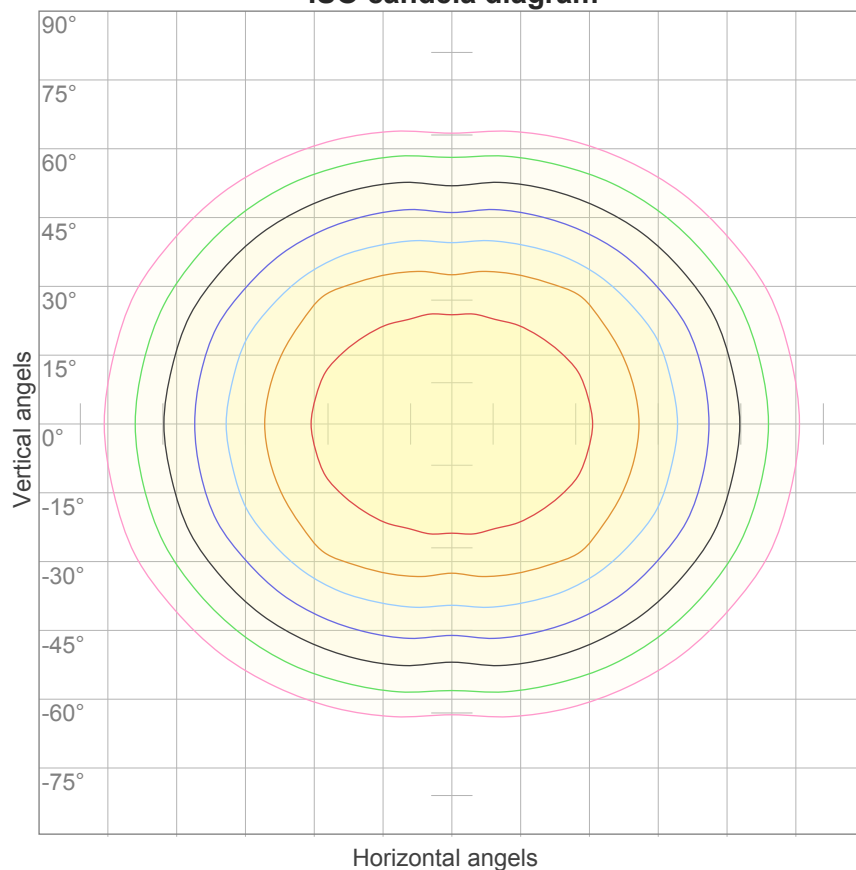
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
144	144	141	136	128	116	102	85	67	49	19	0	0	0	0	0	0	0	0	0
100%	100%	98%	94%	89%	80%	71%	59%	47%	34%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%

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°
144	142	136	129	116	99	81	61	39	19	1	0	0	0	0	0	0	0	0	0
100%	99%	95%	90%	80%	69%	56%	42%	27%	13%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
129,6°	202,4°	214,6°	66,7%	43,7%

ISO candela diagram



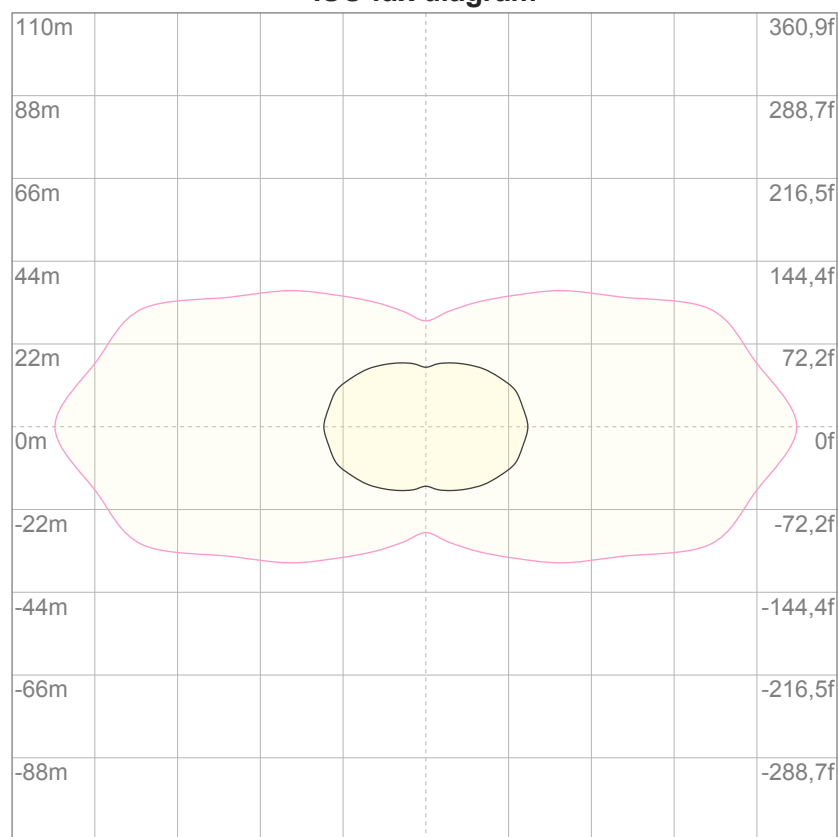
10%	14 cd
20%	29 cd
30%	43 cd
40%	58 cd
50%	72 cd
60%	86 cd
70%	101 cd
80%	115 cd
90%	130 cd

Conditions:

Number of c-planes: 16

Candela at center: 144 cd

ISO lux diagram



3%	43,2m lx
5%	72,0m lx
10%	0,144 lx
30%	0,432 lx
50%	0,720 lx

Conditions:

Number of c-planes: 16

Lux at center: 1,44 lx

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

Glare Evaluation According to UGR

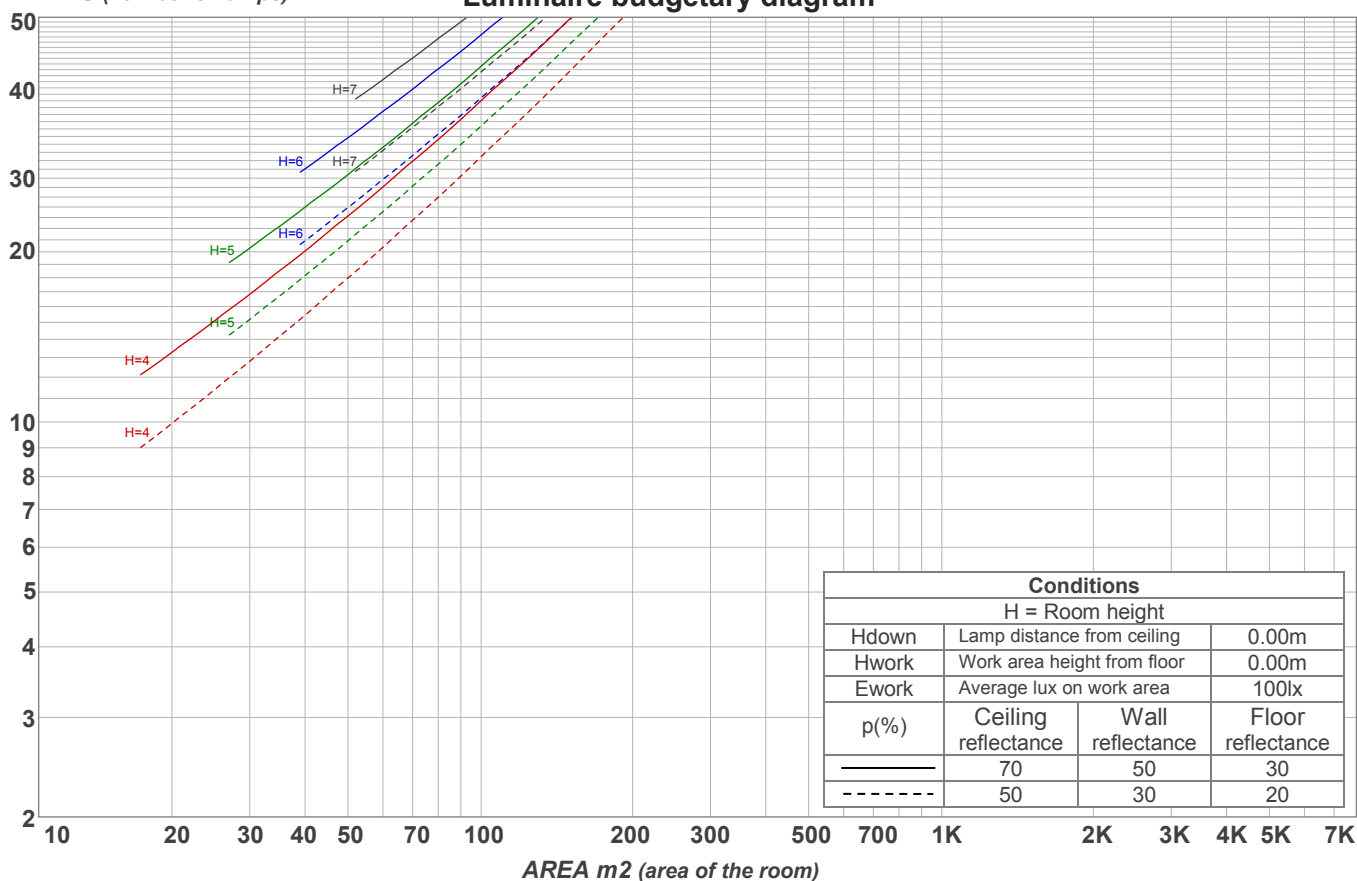
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	20,4	21,8	20,7	22,1	22,3	20,4	21,7	20,6	22,0	22,2
	3H	22,2	23,6	22,6	23,9	24,1	22,0	23,3	22,4	23,6	23,9
	4H	23,1	24,4	23,5	24,7	25,0	22,7	24,0	23,1	24,3	24,6
	6H	24,0	25,1	24,3	25,4	25,8	23,3	24,5	23,6	24,8	25,2
	8H	24,3	25,5	24,7	25,8	26,2	23,5	24,7	23,9	25,0	25,4
	12H	24,6	25,8	25,0	26,1	26,5	23,7	24,8	24,0	25,1	25,6
4H	2H	21,1	22,4	21,5	22,7	23,0	21,0	22,3	21,4	22,6	22,9
	3H	23,2	24,3	23,6	24,7	25,1	22,9	24,1	23,3	24,4	24,9
	4H	24,1	25,2	24,6	25,6	26,2	23,7	24,8	24,2	25,2	25,7
	6H	25,1	26,1	25,6	26,5	26,8	24,4	25,4	24,9	25,8	26,2
	8H	25,6	26,5	26,1	26,8	27,2	24,7	25,6	25,2	26,0	26,4
	12H	26,0	26,7	26,5	27,2	27,7	24,9	25,7	25,4	26,1	26,6
8H	4H	24,5	25,4	25,0	25,8	26,2	24,1	25,1	24,7	25,4	25,8
	6H	25,7	26,4	26,2	26,9	27,4	25,1	25,8	25,6	26,3	26,8
	8H	26,3	26,9	26,8	27,5	28,1	25,5	26,1	26,0	26,6	27,3
	12H	26,9	27,4	27,5	27,9	28,5	25,8	26,4	26,4	26,9	27,5
12H	4H	24,5	25,3	25,0	25,7	26,2	24,2	25,0	24,7	25,4	25,9
	6H	25,8	26,5	26,3	27,0	27,6	25,2	25,9	25,7	26,4	27,0
	8H	26,5	27,0	27,0	27,5	28,1	25,7	26,2	26,3	26,7	27,4
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 / -0,1					0,1 / -0,2				
S = 2.0H		0,2 / -0,3					0,3 / -0,3				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 539 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	108	108	108	103	103	103	98	98	98	95
1	105	100	95	90	102	97	92	88	92	88	84	87	84	81	82	80	78	75
2	95	86	78	71	92	83	76	70	79	73	68	75	70	65	71	67	63	61
3	86	74	65	58	83	72	64	57	69	61	56	65	59	54	62	57	53	50
4	78	65	56	49	76	64	55	48	60	53	47	57	51	46	55	49	44	42
5	72	58	48	41	69	57	48	41	54	46	40	51	44	39	49	43	38	36
6	66	52	43	36	64	51	42	35	48	41	35	46	39	34	44	38	33	31
7	61	47	38	31	59	46	37	31	44	36	30	42	35	30	40	34	29	27
8	57	43	34	28	55	42	33	28	40	32	27	38	32	27	37	31	26	24
9	53	39	31	25	51	38	30	25	37	29	24	35	29	24	34	28	23	22
10	50	36	28	22	48	35	27	22	34	27	22	33	26	22	31	26	21	19

LAMPS (number of lamps)

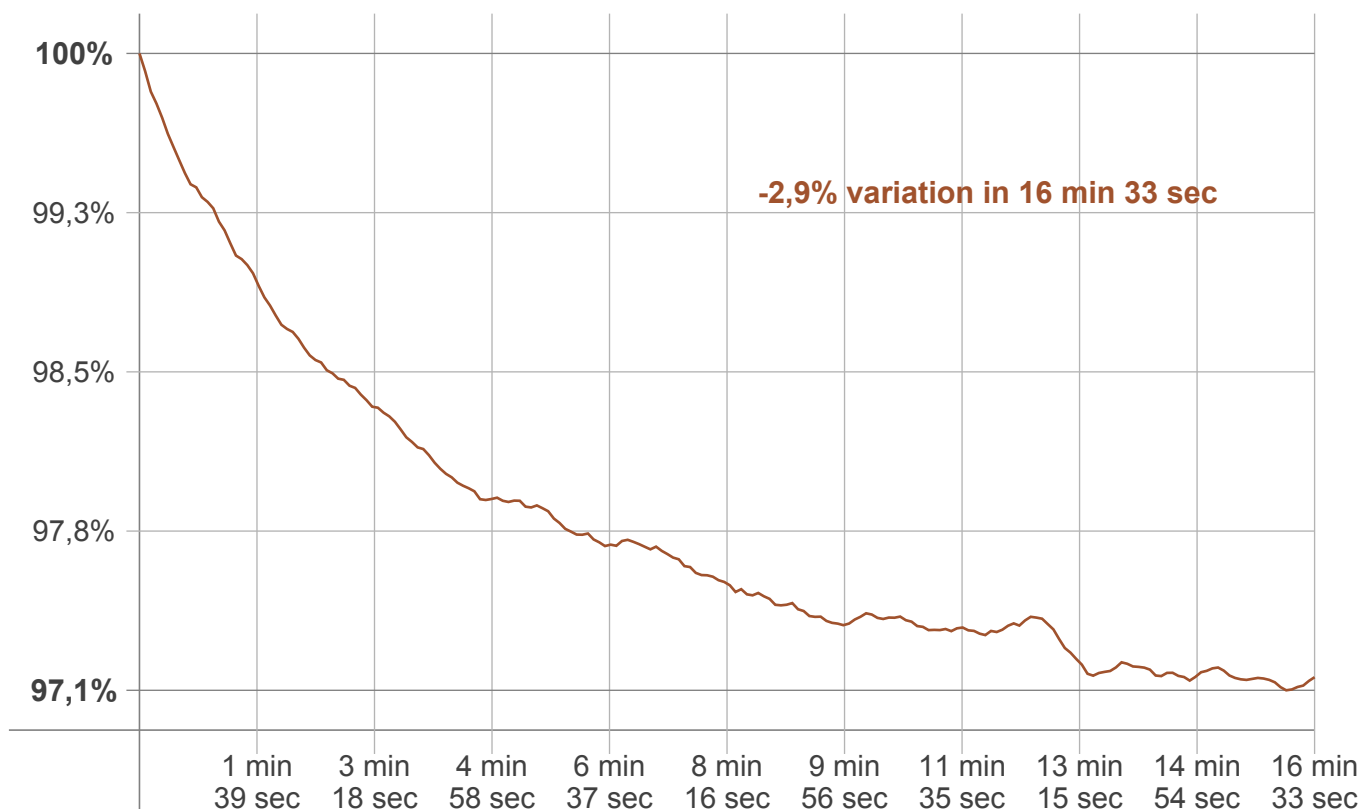
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
13,7 lm	39,8 lm	62,0 lm	78,1 lm	84,6 lm	81,8 lm	70,5 lm	52,5 lm	30,8 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
11,1 lm	3,12 lm	2,74 lm	2,48 lm	2,14 lm	1,74 lm	1,28 lm	0,783 lm	0,264 lm

Warmup curve



Warmup result

Warmup time:	16 min 33 sec
Warmup variation	-2,9%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5270 K	+24 K	5294 K

Output change

Output start	Output change	Output end
554 lm	-15 lm	539 lm