

Light efficiency:

114 Lumen/Watt

Light quality:

CRI: 94,9

Color temperature:

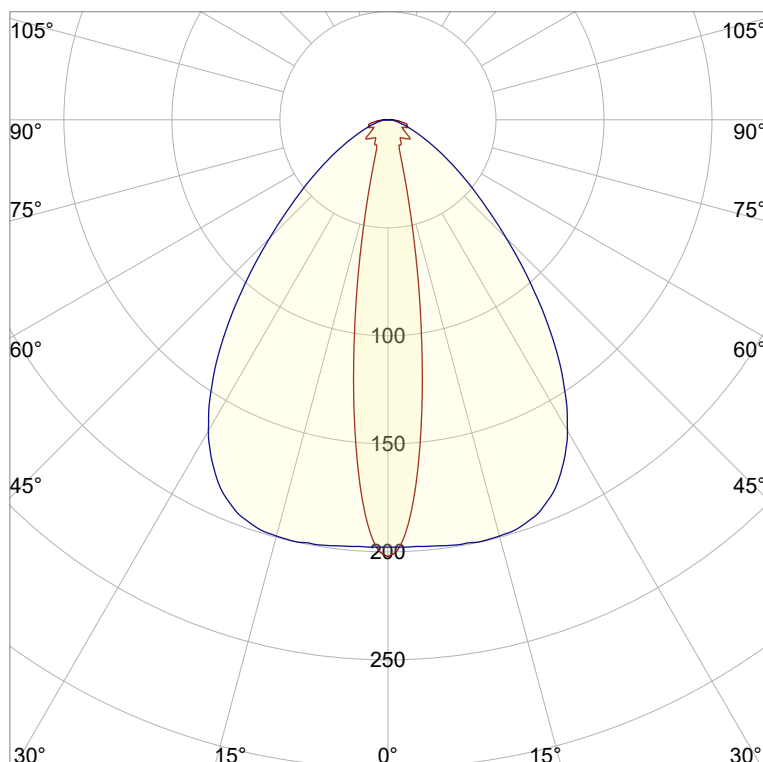
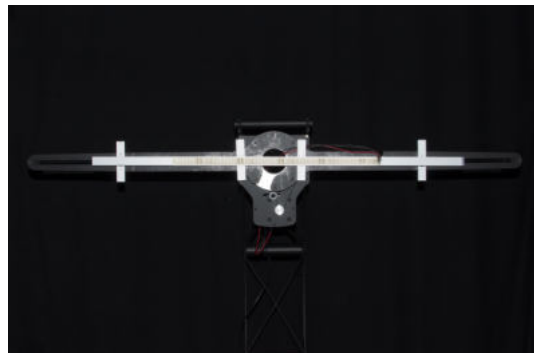
2762 K

Output: 136 lm

Peak: 202 cd

Power: 1,2 W

PF: 1,0



Product name:

Mayflower-3_510mm_927_Lens-15°-Frosted

Item number:

NP/L1C/10C/G1/L1C/0510/927/L1F

Date and time:

13.06.2022 13:28:59

Description:

Rank: C80-AD-8GB

Tolerances:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Kelvin

CRI +/-0,7

Angular Resolution: 1 Degree Step

Last Calibration 20-09-2021

Tester: Peter Ulrich

Test Site: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

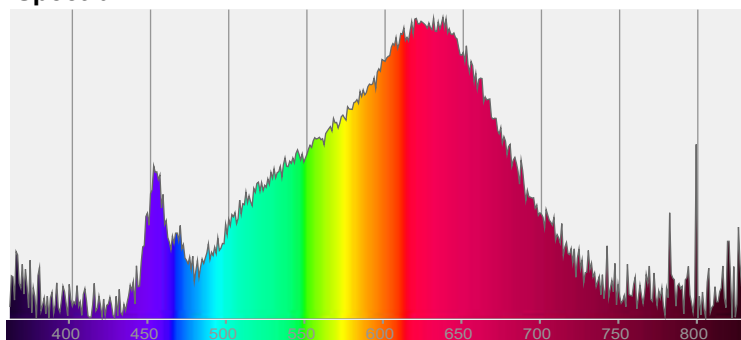


CIE 1931

x: 0,453

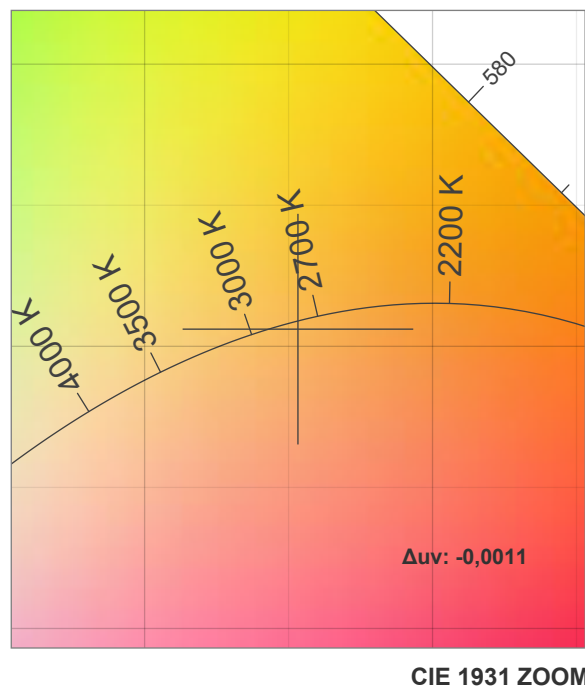
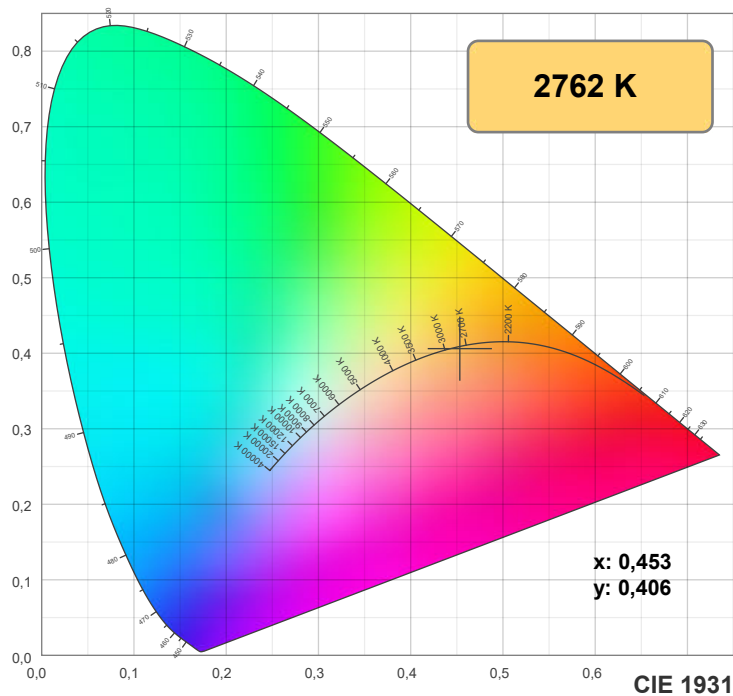
y: 0,406

Spectra

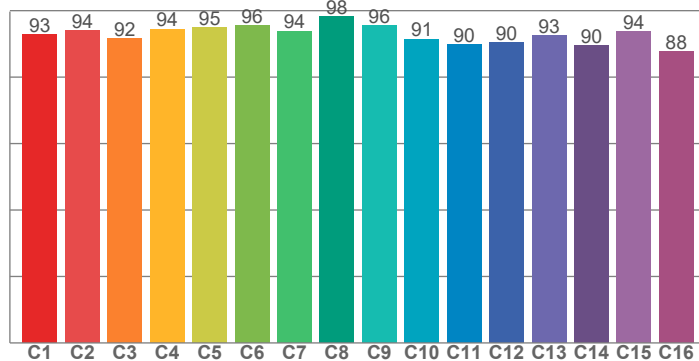


Power

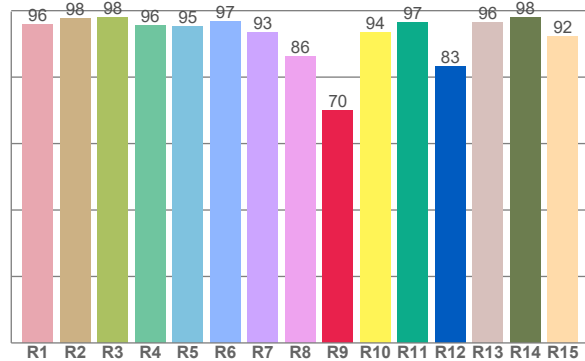
Voltage: 24,0 V
Current: 0,050 A
Frequency: 0 Hz



TM30: 92,8



CRI: 94,9 (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
95,8	97,8	97,9	95,5	95,4	96,9	93,5	86,3	70,0	93,5	96,5	83,3	96,5	97,9	92,3

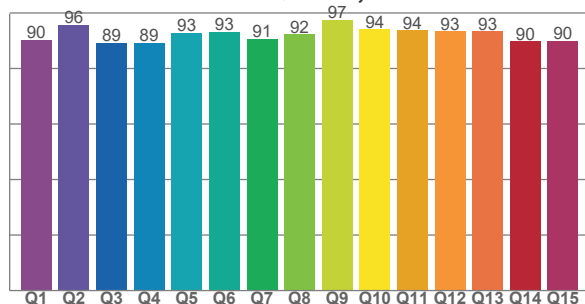
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,9	93,9	91,5	94,4	94,9	95,5	93,9	98,2	95,6	91,5	89,8	90,5	92,6	89,6	93,7	87,6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90,3	95,6	89,0	89,3	92,8	93,3	90,7	92,3	97,3	94,1	93,7	93,3	93,3	89,7	89,8

CQS: 91,8



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
2762 K	94,9	70,0	92,8	100,2	91,8	0,453	0,406	0,260	0,350	-0,0011

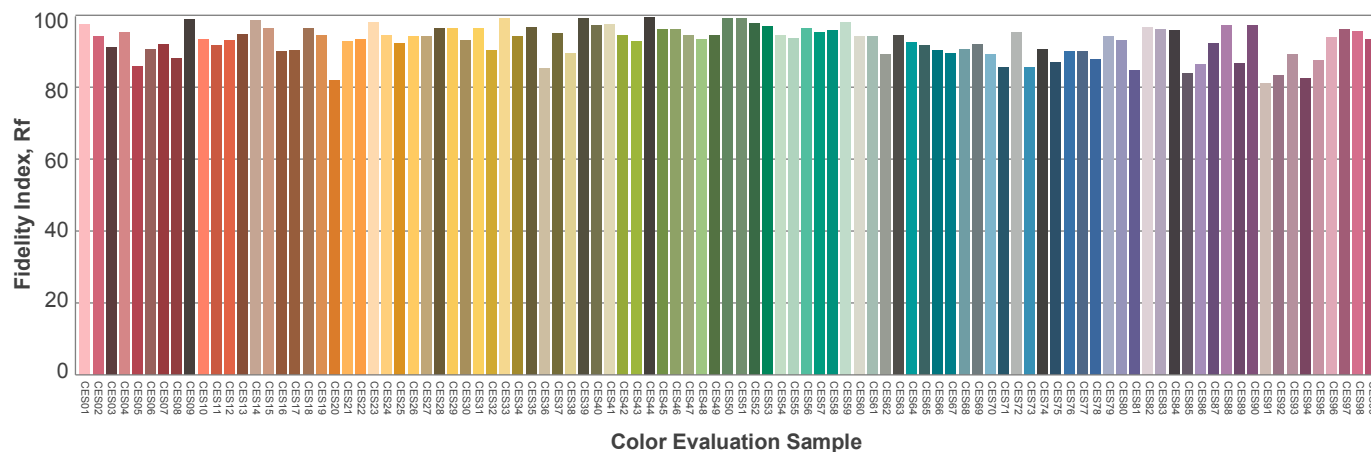
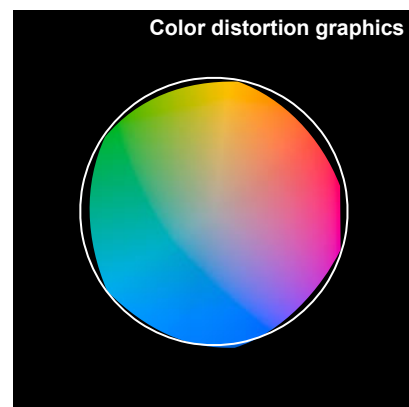
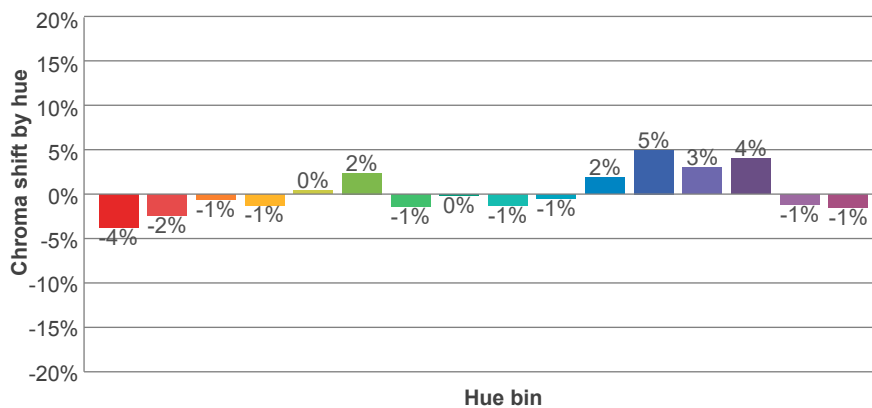
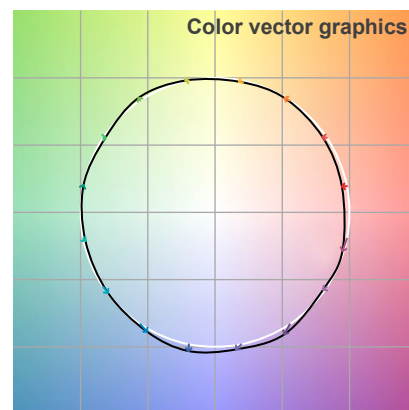
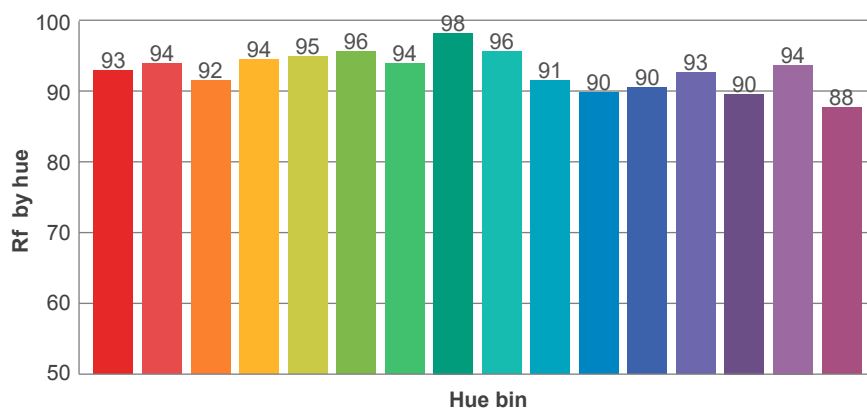
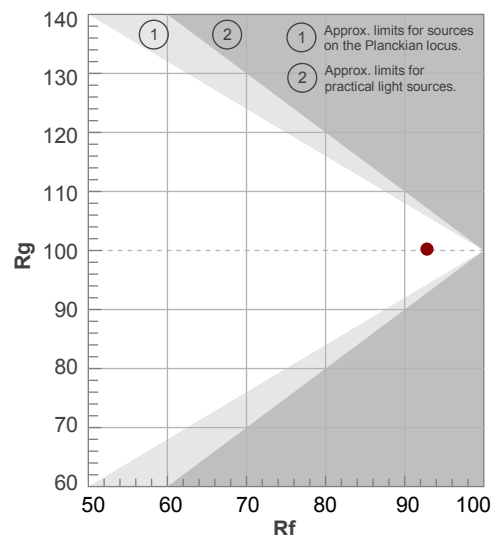
Rf 92,8

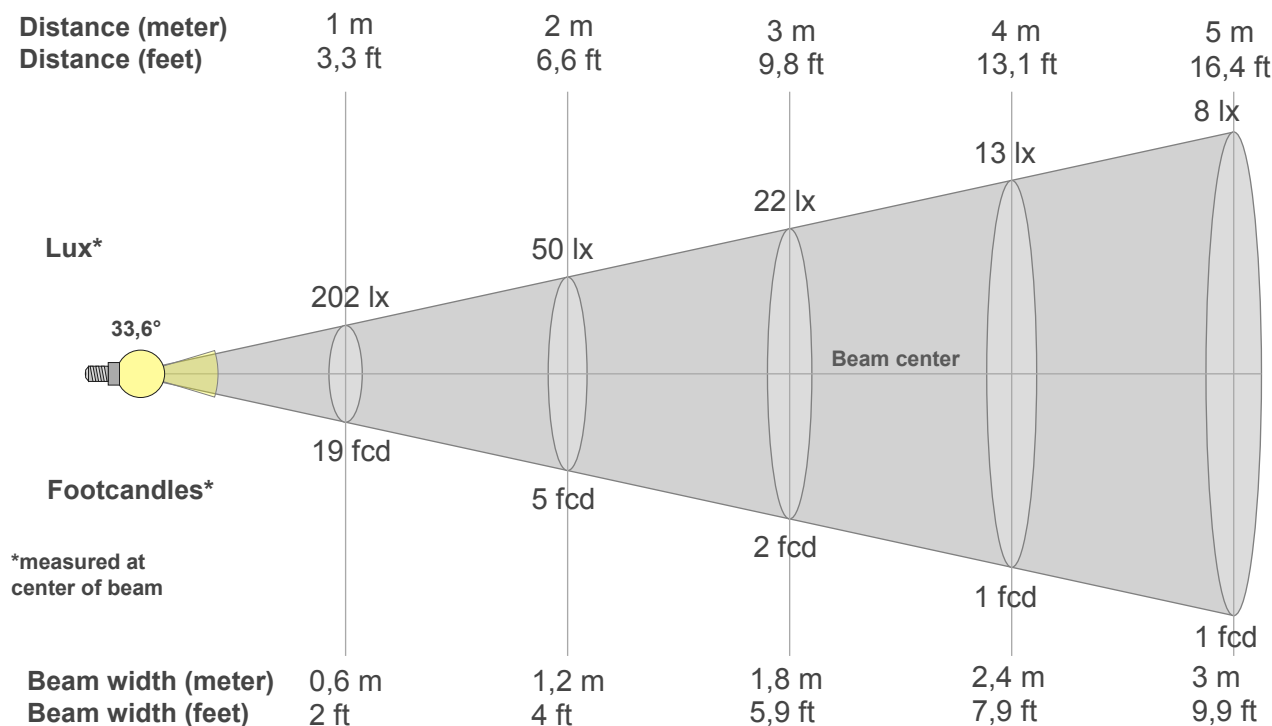
Fidelity index Rf

Rg 100,2

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-4%	0%
2	94	-2%	2%
3	92	-1%	4%
4	94	-1%	1%
5	95	0%	2%
6	96	2%	0%
7	94	-1%	-1%
8	98	0%	-1%
9	96	-1%	2%
10	91	-1%	6%
11	90	2%	7%
12	90	5%	1%
13	93	3%	-5%
14	90	4%	-7%
15	94	-1%	-3%
16	88	-1%	-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
202lx	50lx	22lx	13lx	8lx	6lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
18,7fcd	4,7fcd	2,1fcd	1,2fcd	0,7fcd	0,5fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd

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°
202	195	174	145	114	84	59	41	29	21	16	14	13	13	13	12	11	10	10	11
100%	97%	86%	72%	56%	42%	29%	20%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%	5%

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°
202	198	198	198	199	199	200	200	199	198	196	193	188	182	175	166	156	145	133	120
100%	98%	98%	98%	99%	99%	99%	99%	99%	98%	97%	96%	93%	90%	87%	82%	77%	72%	66%	60%

Intensities in 180° c-plane

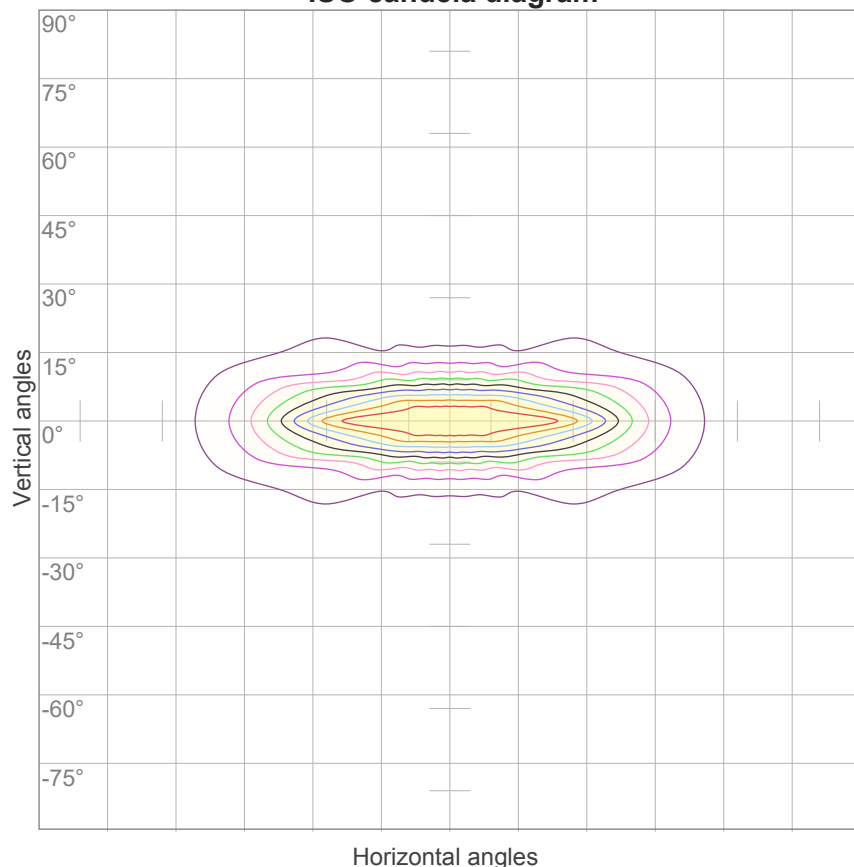
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
202	195	174	145	114	84	59	41	29	21	16	14	13	13	13	12	11	10	10	11
100%	97%	86%	72%	56%	42%	29%	20%	14%	10%	8%	7%	6%	6%	6%	6%	5%	5%	5%	5%

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°
202	198	198	198	199	199	200	200	199	198	196	193	188	182	175	166	156	145	133	120
100%	98%	98%	98%	99%	99%	99%	99%	99%	98%	97%	96%	93%	90%	87%	82%	77%	72%	66%	60%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
33,6°	64°	160,9°	83,4%	68,7%

ISO candela diagram



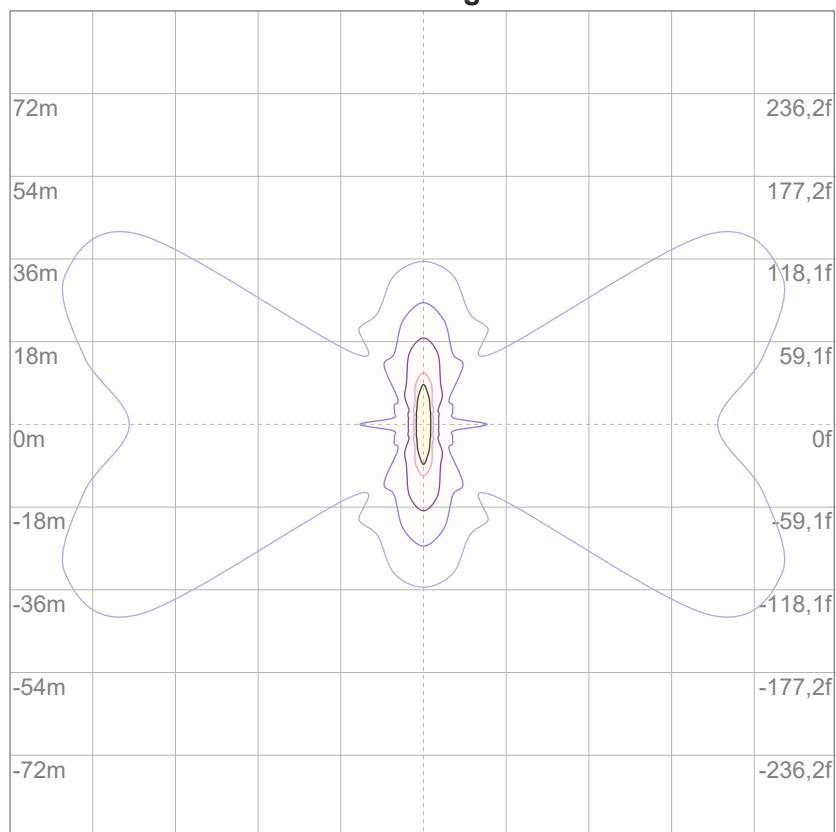
10%	20 cd
20%	40 cd
30%	60 cd
40%	81 cd
50%	101 cd
60%	121 cd
70%	141 cd
80%	161 cd
90%	181 cd

Conditions:

Number of c-planes: 16

Candela at center: 202 cd

ISO lux diagram



3%	60,5m lx
5%	0,101 lx
10%	0,202 lx
30%	0,605 lx
50%	1,01 lx

Conditions:

Number of c-planes: 16

Lux at center: 2,02 lx

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

Glare Evaluation According to UGR

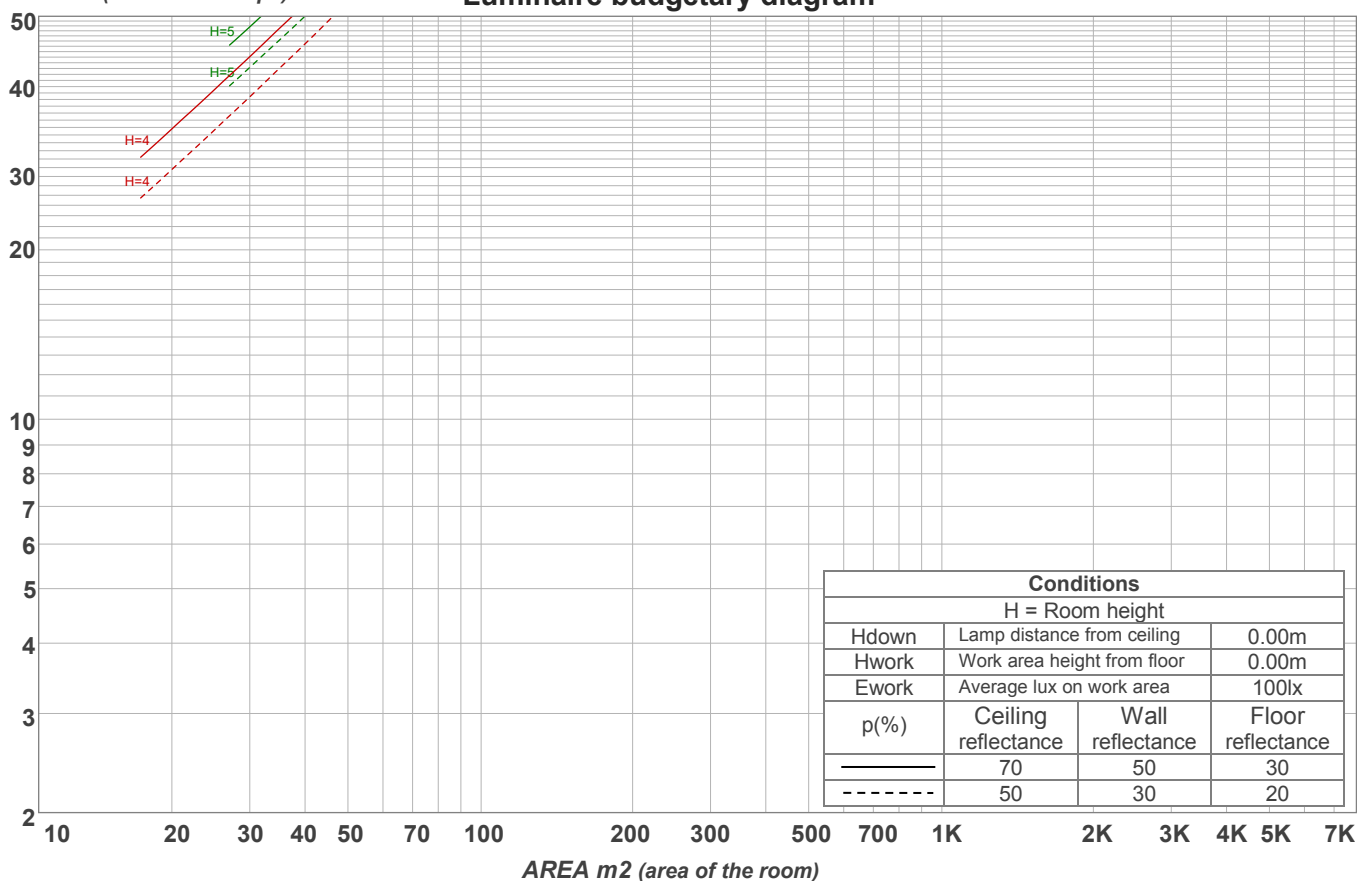
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	8,5	9,4	8,6	9,7	9,9	16,4	17,4	16,6	17,6	17,8
	3H	10,9	11,9	11,3	12,2	12,4	16,9	18,0	17,3	18,2	18,4
	4H	12,3	13,3	12,7	13,6	13,8	17,2	18,2	17,6	18,4	18,7
	6H	13,6	14,5	13,9	14,7	15,1	17,4	18,3	17,7	18,6	19,0
	8H	14,0	14,8	14,3	15,1	15,5	17,5	18,4	17,9	18,7	19,1
	12H	14,2	15,0	14,5	15,3	15,8	17,6	18,4	17,9	18,7	19,2
4H	2H	9,1	10,1	9,5	10,4	10,6	16,2	17,2	16,6	17,4	17,7
	3H	11,9	12,7	12,3	13,1	13,5	16,9	17,8	17,3	18,1	18,5
	4H	13,4	14,2	13,9	14,6	15,2	17,2	17,9	17,6	18,4	18,9
	6H	14,8	15,6	15,3	16,0	16,3	17,5	18,2	18,0	18,6	19,0
	8H	15,3	16,0	15,8	16,4	16,7	17,6	18,3	18,1	18,7	19,1
	12H	15,6	16,2	16,1	16,6	17,1	17,7	18,3	18,2	18,7	19,2
8H	4H	13,8	14,5	14,3	14,9	15,3	17,2	17,9	17,8	18,3	18,7
	6H	15,5	16,0	16,0	16,5	17,0	17,7	18,2	18,2	18,6	19,2
	8H	16,2	16,6	16,7	17,1	17,8	17,9	18,4	18,4	18,9	19,5
	12H	16,6	17,0	17,2	17,5	18,1	18,0	18,4	18,6	18,9	19,5
12H	4H	13,9	14,5	14,4	14,9	15,3	17,2	17,8	17,7	18,2	18,7
	6H	15,7	16,1	16,2	16,6	17,3	17,8	18,2	18,3	18,7	19,4
	8H	16,4	16,7	16,9	17,2	17,9	18,0	18,4	18,6	18,9	19,5
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / 0,0					1,3 / -1,3				
S = 1.5H		0,2 / -0,2					2,9 / -2,1				
S = 2.0H		0,3 / -0,2					4,3 / -2,7				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 136 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	104	104	104	99	99	99	97
1	110	105	102	98	107	103	100	97	98	96	93	94	92	90	90	88	87	84
2	102	95	89	84	99	93	88	83	89	85	81	85	82	79	82	79	76	74
3	95	86	79	74	92	84	78	73	81	76	71	78	74	70	75	72	68	66
4	89	79	71	66	86	77	70	65	75	69	64	72	67	63	70	65	62	60
5	83	72	65	59	81	71	64	59	69	63	58	67	61	57	65	60	57	55
6	78	67	60	54	76	66	59	54	64	58	53	62	57	53	61	56	52	50
7	74	62	55	50	72	62	55	50	60	54	49	58	53	49	57	52	48	46
8	70	58	51	46	68	58	51	46	56	50	46	55	49	45	54	49	45	43
9	66	55	48	43	65	54	48	43	53	47	43	52	46	42	51	46	42	41
10	63	52	45	41	62	51	45	40	50	44	40	49	44	40	48	43	40	38

LAMPS (number of lamps)

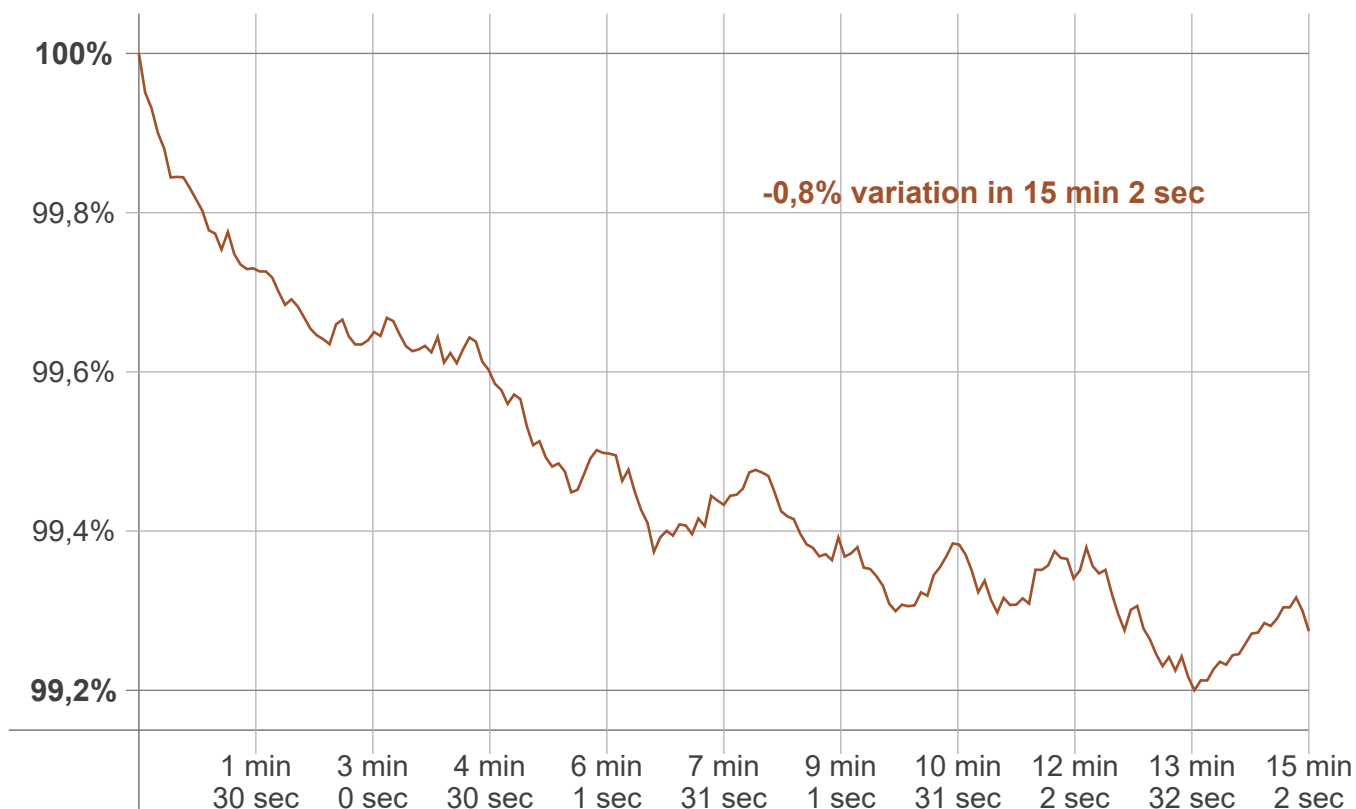
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
15,7 lm	26,1 lm	23,1 lm	20,1 lm	16,4 lm	12,3 lm	8,31 lm	6,83 lm	3,65 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,47 lm	0,486 lm	0,456 lm	0,412 lm	0,356 lm	0,289 lm	0,213 lm	0,130 lm	0,044 lm

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 2 sec
Warmup variation	-0,8%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2760 K	+2 K	2762 K

Output change

Output start	Output change	Output end
137 lm	-1 lm	136 lm