

Light efficiency:

94 Lumen/Watt

Light quality:

CRI: 83,5

Color temperature:

4027 K

Output: 3195 lm

Peak: 1037 cd

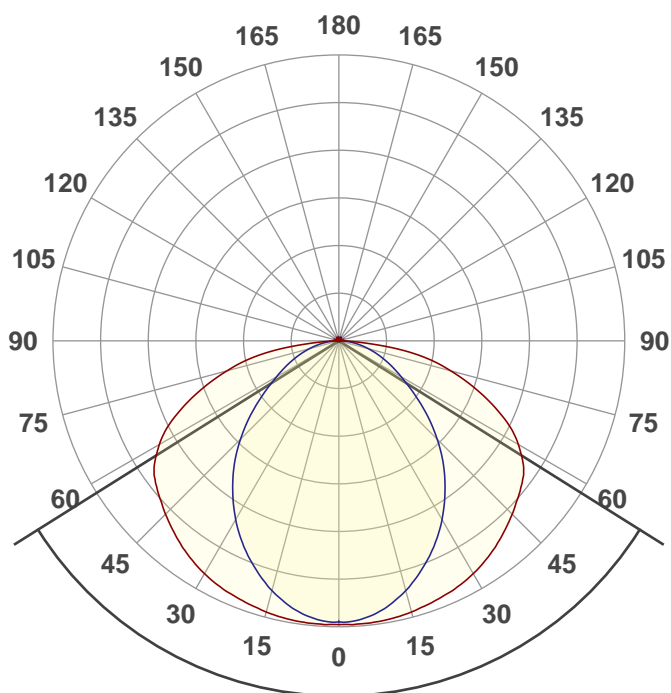
Power: 34,0 W

PF: 0,99



Product name:

E0095-MACERATA-2X18W-4K-PH



Beam angle

115,8°



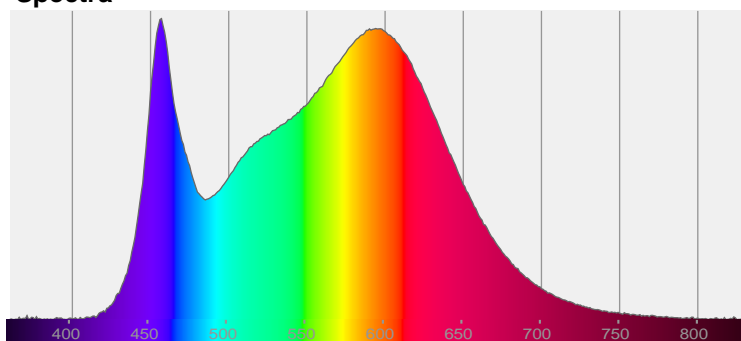
CIE 1931
x: 0,379
y: 0,376

THD Values:

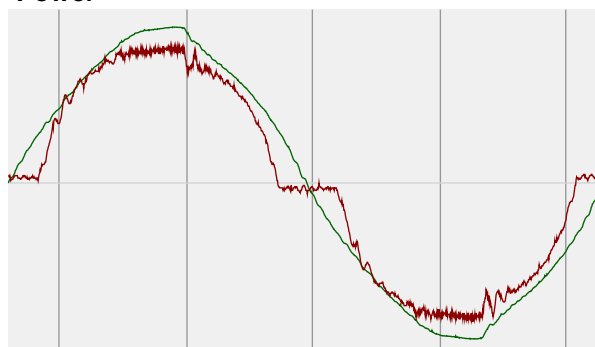
Voltage: 2,91%

Current: 14,4%

Spectra

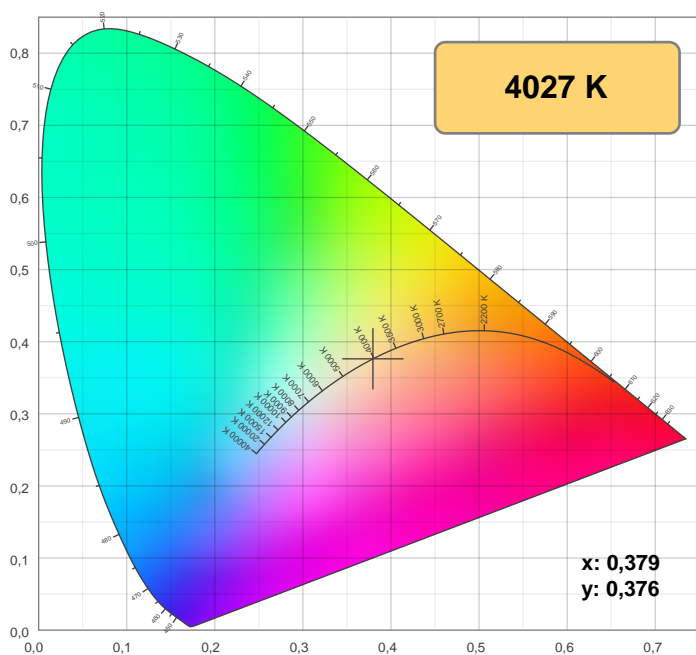


Power



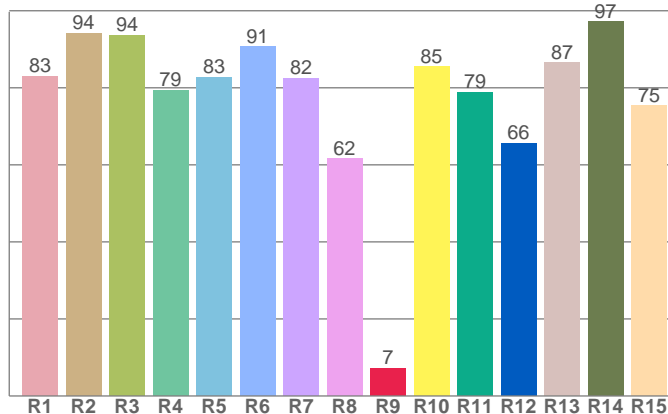
Voltage: 114 V
Current: 0,304 A
Frequency: 59,8 Hz

Color details



CIE 1931

CRI: 83,5 (R1-R8)

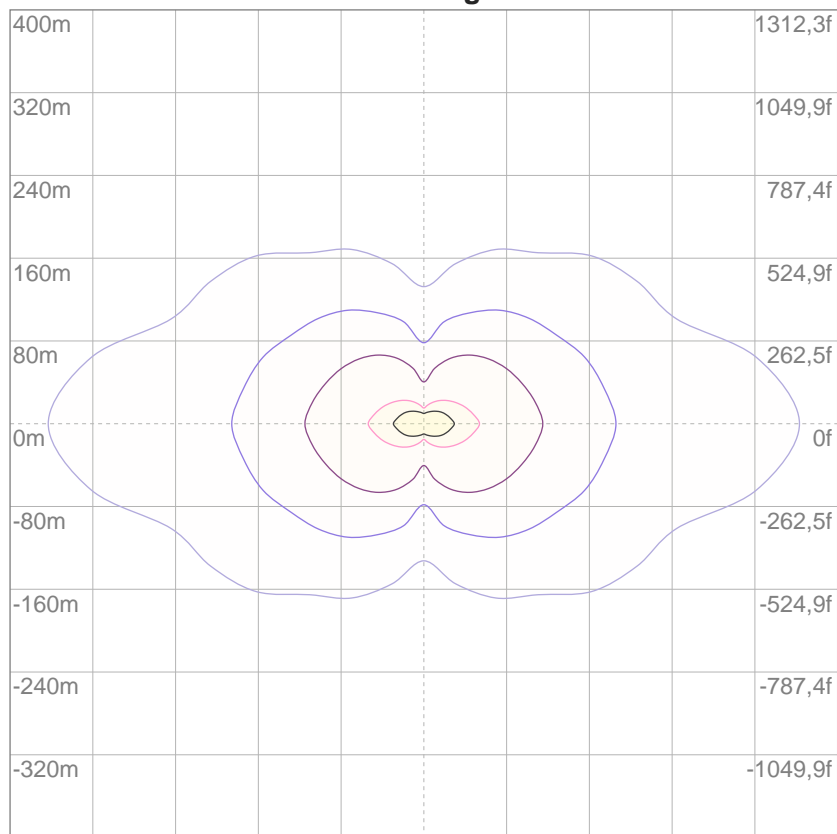


CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	9	R10	R11	R12	R13	R14	R15
83,0	94,2	93,7	79,4	82,7	90,7	82,5	61,7	7,2	85,5	78,9	65,7	86,6	97,1	75,4

ISO Diagrams

ISO lux diagram



3%	0,309 lx
5%	0,515 lx
10%	1,03 lx
30%	3,09 lx
50%	5,15 lx

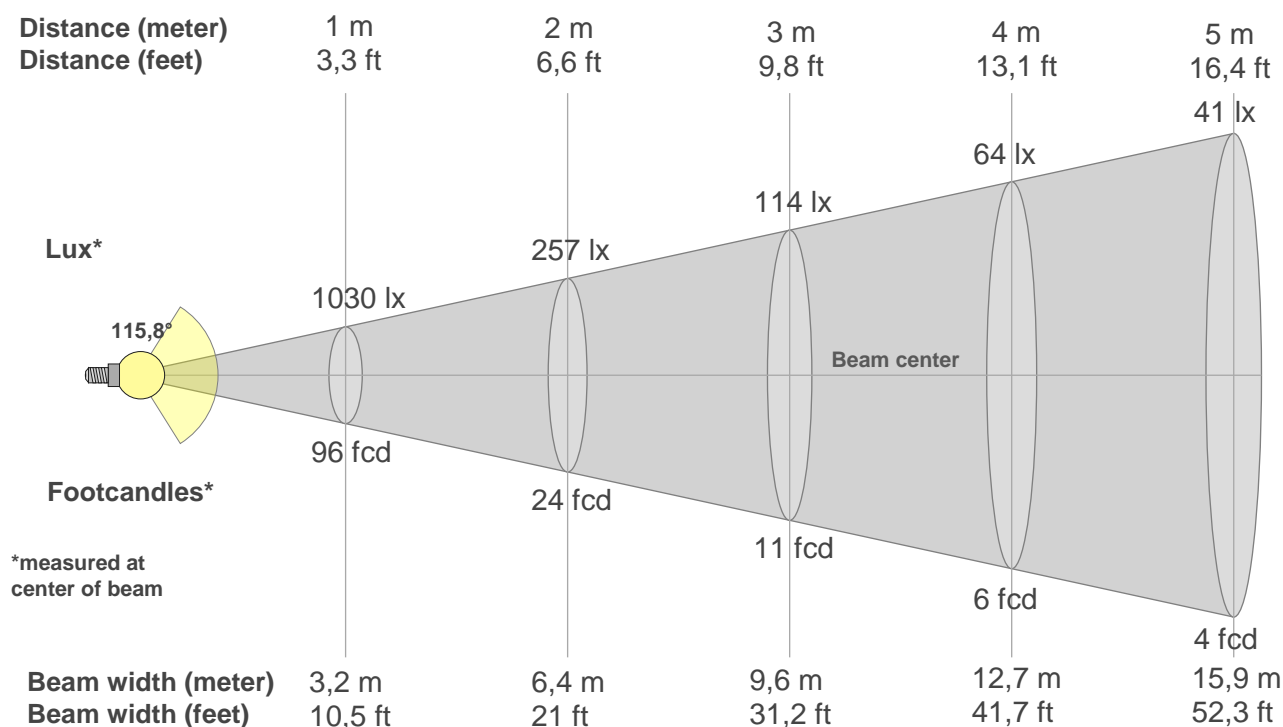
Conditions:

Number of c-planes: 4

Lux at center: 10,3 lx

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

Beam details



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
1030lx	257lx	114lx	64lx	41lx	29lx	21lx	16lx	13lx	10lx	9lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx	3lx
95,7fcd	23,9fcd	10,6fcd	6fcd	3,8fcd	2,7fcd	2fcd	1,5fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd

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°
1030	1035	1032	1024	1012	999	980	956	927	894	861	823	756	663	545	423	291	105	17	8
100%	101%	100%	99%	98%	97%	95%	93%	90%	87%	84%	80%	73%	64%	53%	41%	28%	10%	2%	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°
1030	1017	988	943	886	824	753	675	594	507	420	334	263	207	157	112	72	36	8	5
100%	99%	96%	92%	86%	80%	73%	66%	58%	49%	41%	32%	26%	20%	15%	11%	7%	3%	1%	0%

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°
1030	1035	1032	1024	1012	999	980	956	927	894	861	823	756	663	545	423	291	105	17	8
100%	101%	100%	99%	98%	97%	95%	93%	90%	87%	84%	80%	73%	64%	53%	41%	28%	10%	2%	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°
1030	1017	988	943	886	824	753	675	594	507	420	334	263	207	157	112	72	36	8	5
100%	99%	96%	92%	86%	80%	73%	66%	58%	49%	41%	32%	26%	20%	15%	11%	7%	3%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
115,8°	161,2°	175,5°	74,0%	49,3%

TM30 details

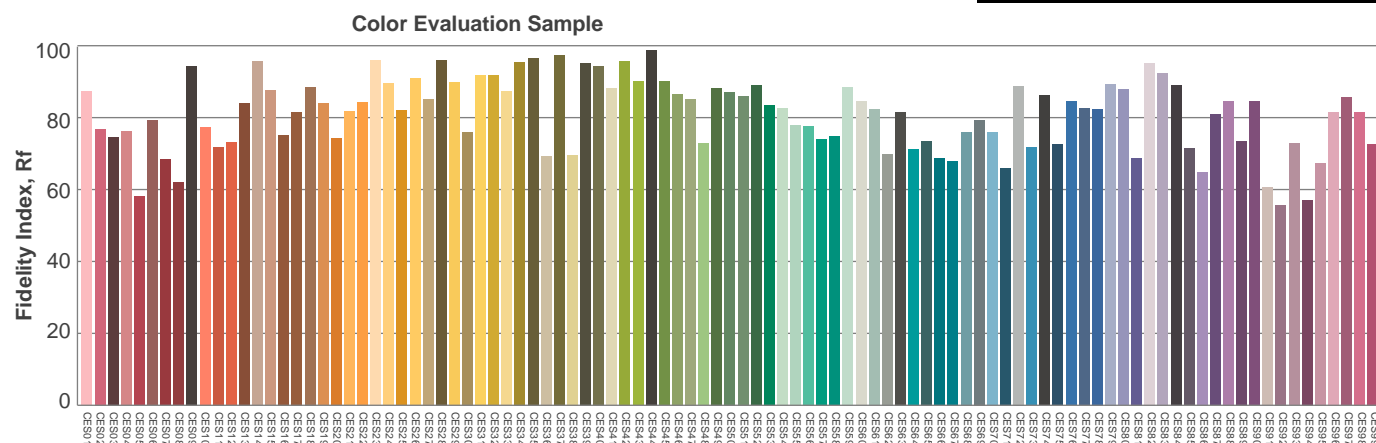
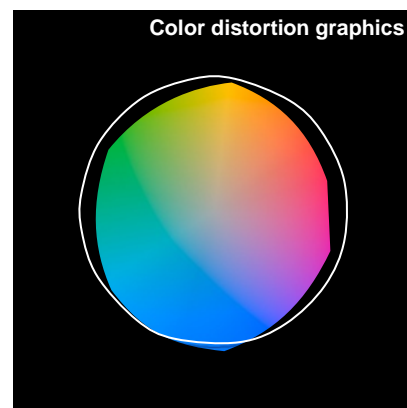
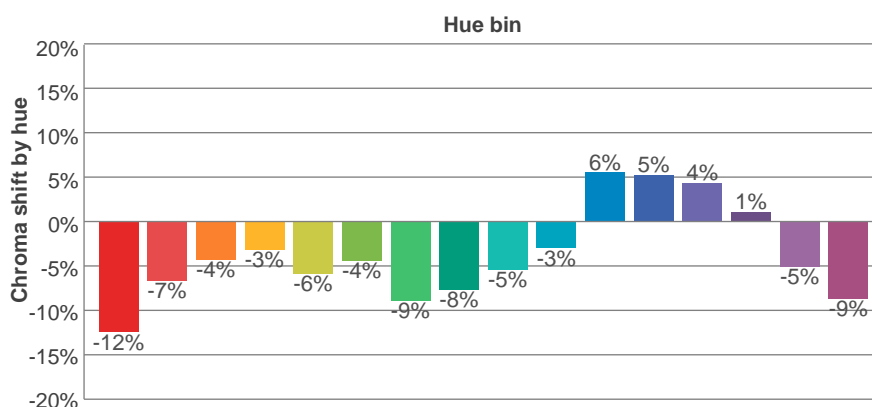
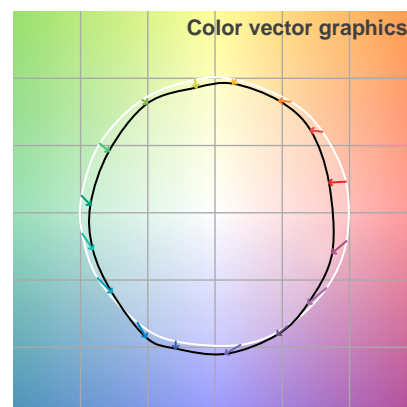
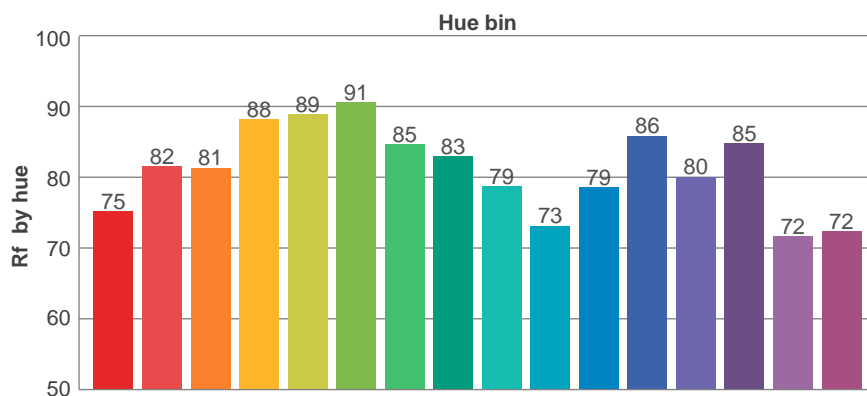
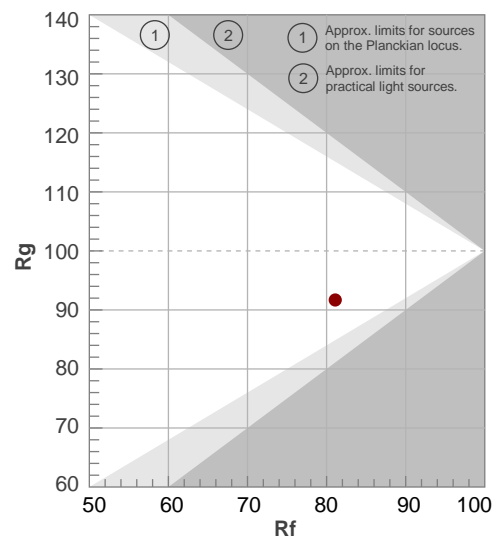
Rf 81,1

Fidelity index Rf

Rg 91,7

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	75	-12%	2%
2	82	-7%	6%
3	81	-4%	7%
4	88	-3%	2%
5	89	-6%	0%
6	91	-4%	-2%
7	85	-9%	1%
8	83	-8%	5%
9	79	-5%	13%
10	73	-3%	15%
11	79	6%	11%
12	86	5%	1%
13	80	4%	-12%
14	85	1%	-10%
15	72	-5%	-17%
16	72	-9%	-11%



UGR

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	17,8	19,1	18,1	19,4	19,6	14,3	15,6	14,6	15,9	16,1
	3H	20,0	21,3	20,4	21,6	21,9	15,5	16,7	15,8	17,0	17,3
	4H	21,1	22,2	21,4	22,5	22,8	16,0	17,2	16,3	17,5	17,8
	6H	21,9	23,0	22,3	23,4	23,7	16,3	17,4	16,7	17,8	18,1
	8H	22,3	23,3	22,6	23,6	24,0	16,5	17,5	16,9	17,9	18,2
	12H	22,4	23,4	22,8	23,8	24,1	16,5	17,6	16,9	17,9	18,3
4H	2H	18,2	19,4	18,6	19,7	20,0	15,6	16,8	16,0	17,1	17,4
	3H	20,7	21,7	21,1	22,0	22,4	17,1	18,1	17,5	18,5	18,8
	4H	21,9	22,8	22,3	23,1	23,5	17,8	18,7	18,2	19,0	19,4
	6H	22,9	23,7	23,4	24,1	24,6	18,3	19,1	18,7	19,5	19,9
	8H	23,3	24,1	23,8	24,5	24,9	18,4	19,2	18,9	19,6	20,0
	12H	23,6	24,2	24,0	24,6	25,1	18,6	19,2	19,0	19,6	20,1
8H	4H	22,1	22,8	22,5	23,2	23,7	18,6	19,3	19,1	19,8	20,2
	6H	23,3	23,9	23,8	24,4	24,8	19,3	19,9	19,8	20,4	20,9
	8H	23,8	24,3	24,3	24,8	25,3	19,6	20,1	20,1	20,6	21,1
	12H	24,1	24,6	24,6	25,0	25,6	19,8	20,2	20,3	20,7	21,2
12H	4H	22,1	22,8	22,6	23,2	23,6	18,8	19,4	19,3	19,9	20,3
	6H	23,4	23,9	23,9	24,4	24,9	19,6	20,1	20,1	20,6	21,1
	8H	23,9	24,3	24,4	24,8	25,3	19,9	20,4	20,4	20,9	21,4
Variation of the observer position for the luminaire distance S											
S = 1,0H		+0,1 / -0,0					+0,1 / -0,1				
S = 1,5H		+0,1 / -0,1					+0,3 / -0,5				
S = 2,0H		+0,3 / -0,2					+0,6 / -1,0				
Standard table		BK08					BK14				
Correction summand		7,2					2,9				
Corrected glare indices referring to 3195 lm total luminous flux											

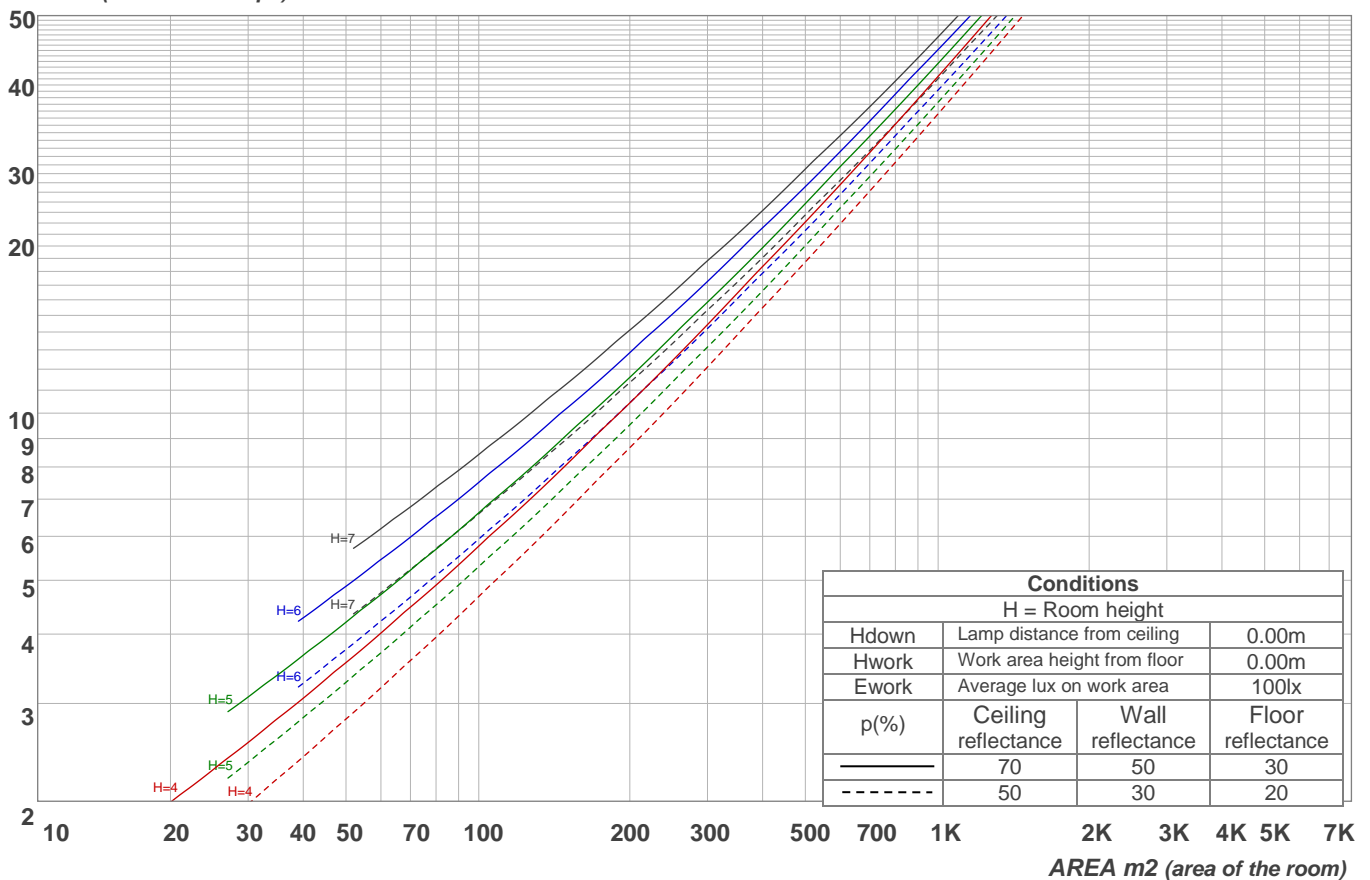
Light planning

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	108	102	98	94	105	100	96	92	96	92	89	91	89	86	88	85	83	81
2	97	89	81	75	95	87	80	74	83	77	72	79	75	70	76	72	69	66
3	88	77	69	62	86	76	68	61	72	66	60	69	64	59	67	62	58	55
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	59	54	49	47
5	74	61	51	44	72	59	51	44	57	49	44	55	48	43	53	47	42	40
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26	25
10	51	38	30	25	50	37	30	24	36	29	24	35	29	24	34	28	24	22

LAMPS (number of lamps)

Luminaire budgetary diagram

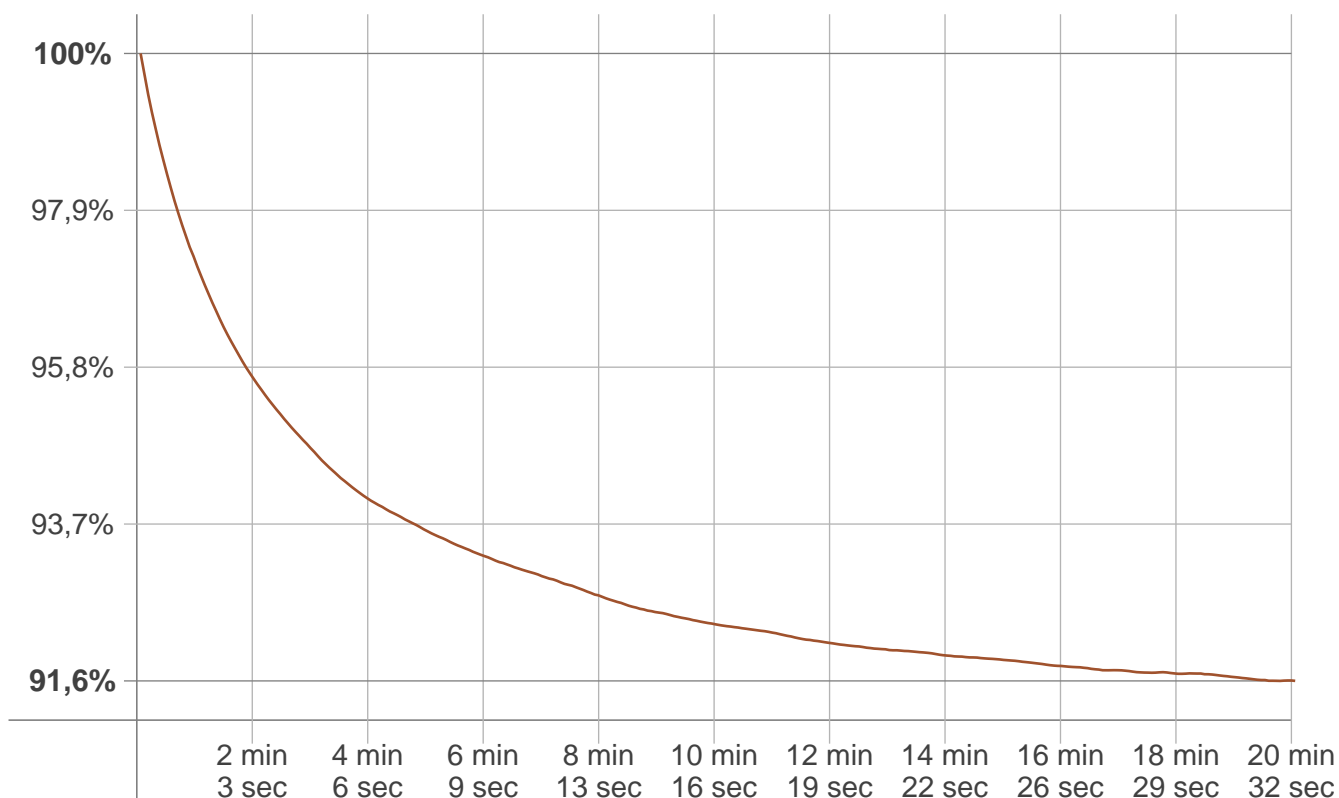


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
97,5 lm	277 lm	420 lm	511 lm	541 lm	516 lm	429 lm	283 lm	88,0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7,26 lm	4,67 lm	4,32 lm	4,12 lm	3,75 lm	3,26 lm	2,51 lm	1,60 lm	0,559 lm

Stabilization

Warmup curve



Warmup result

Warmup time:	20 min 36 sec
Warmup variation	-8,7%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
3980 K	+47 K	4027 K

Output change

Output start	Output change	Output end
3468 lm	-273 lm	3195 lm