

Light efficiency:

109 Lumen/Watt

Light quality:

CRI: 84,3

Color temperature:

3100 K

Output: 1200 lm

Peak: 399 cd

Power: 11,0 W

PF: 0,91



Product name:

Demo panel explorer 3

Item number:

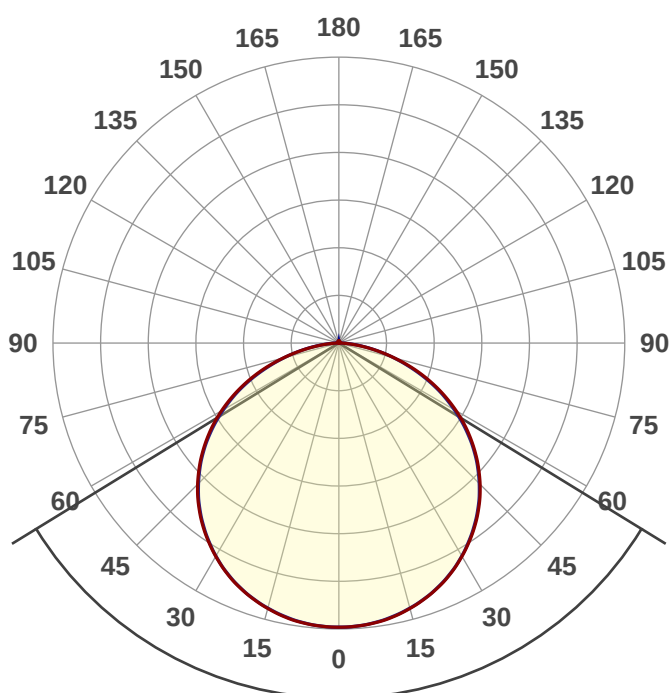
PO130035

Date and time:

14-01-2016 13:36:22

Description:

Has been measured from new shipping batch.



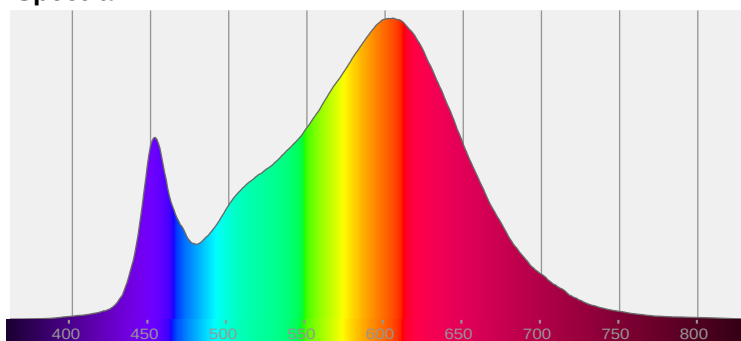
Beam angle

116,9°

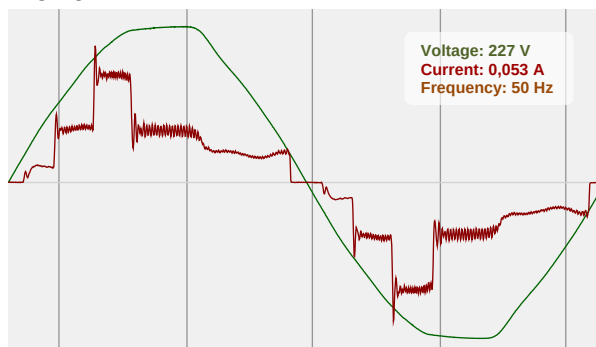


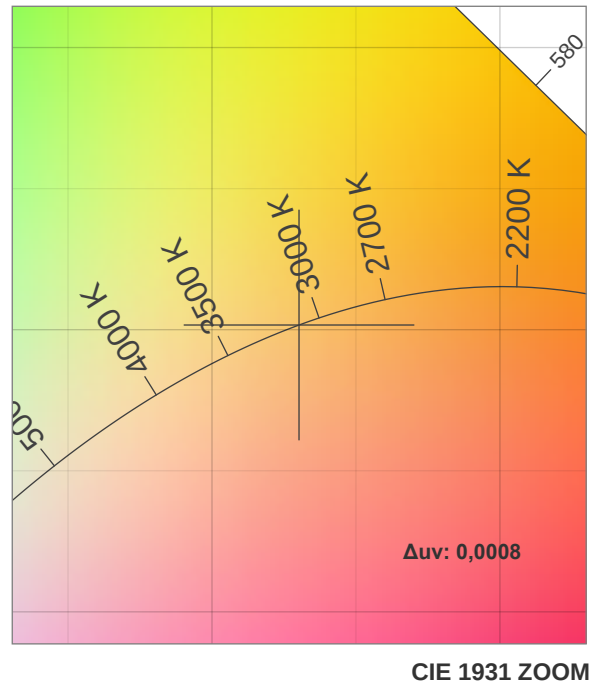
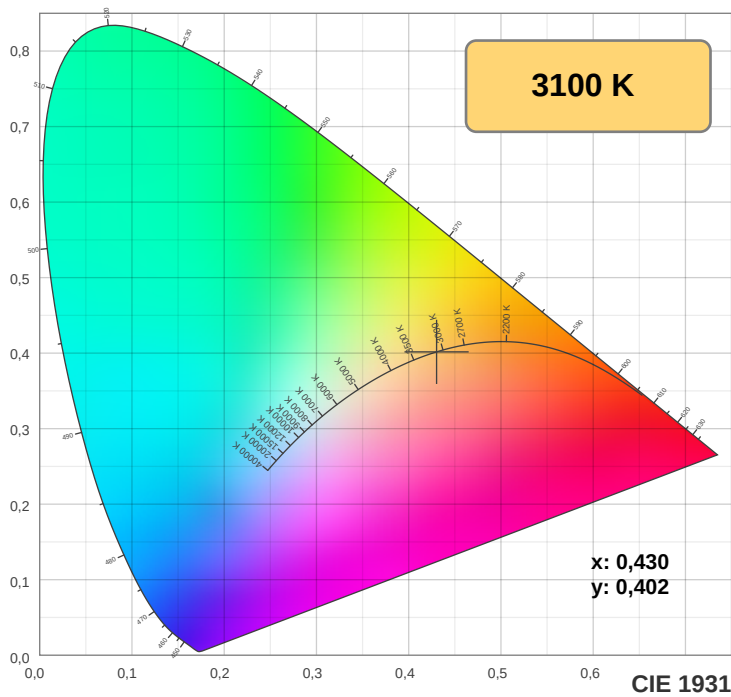
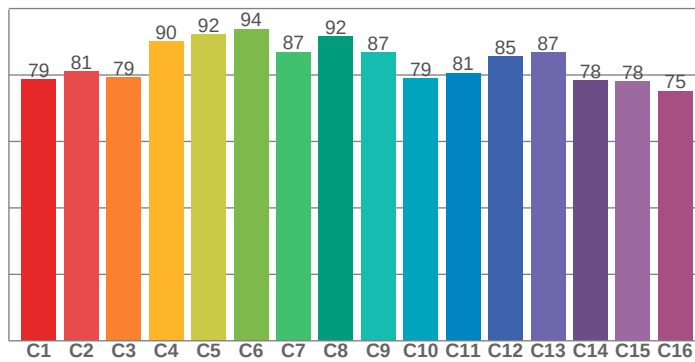
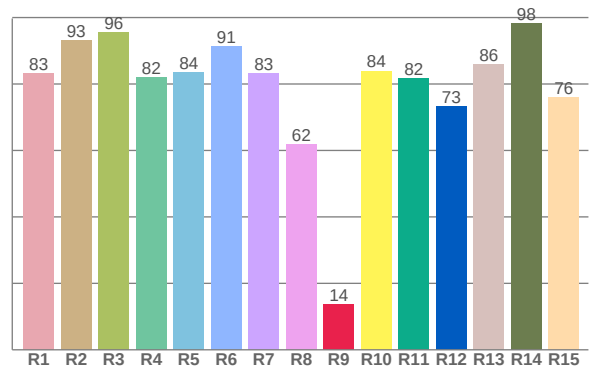
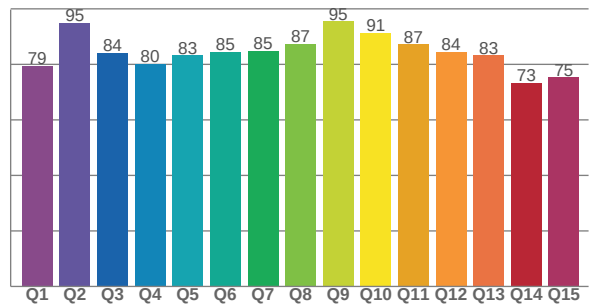
CIE 1931
x: 0,430
y: 0,402

Spectra



Power




TM30: 84,1

CRI: 84,3 (R1-R8)

CQS: 83,3

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
83,3	93,1	95,6	82,1	83,5	91,3	83,3	61,9	13,8	84,0	81,6	73,2	85,9	98,3	75,9

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
78,6	81,1	79,2	90,0	92,2	93,9	87,0	91,6	86,8	78,9	80,6	85,5	86,8	78,4	78,0	75,1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79,4	95,0	84,1	80,2	83,2	84,6	85,0	87,4	95,5	91,2	87,2	84,4	83,2	73,2	75,3

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
3100 K	84,3	13,8	84,1	95,4	83,3	0,430	0,402	0,246	0,345	0,0008

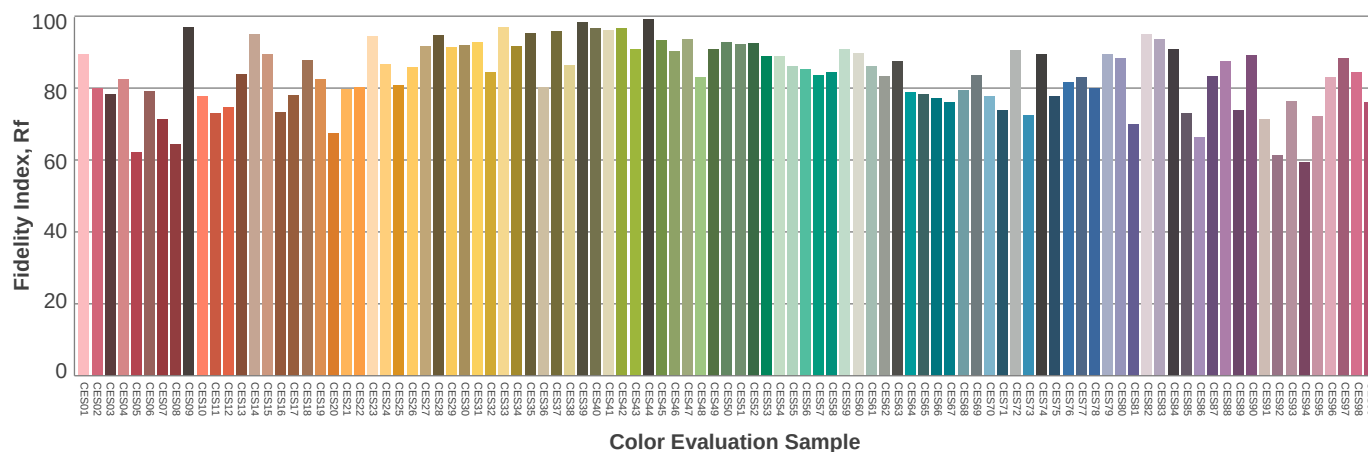
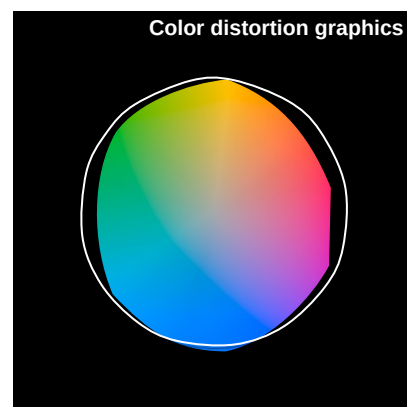
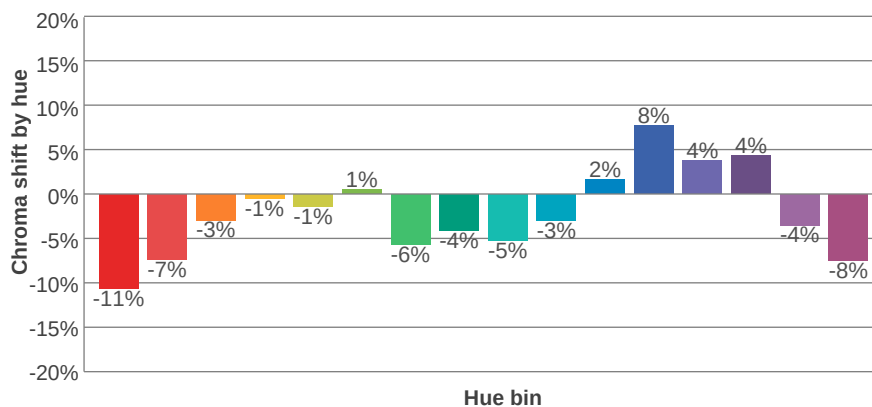
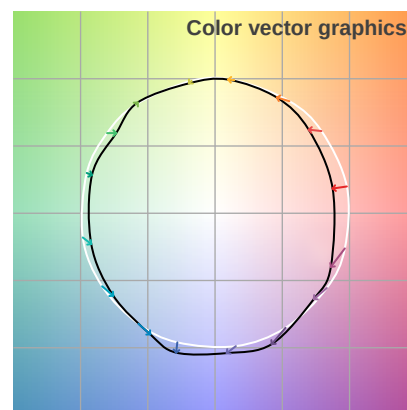
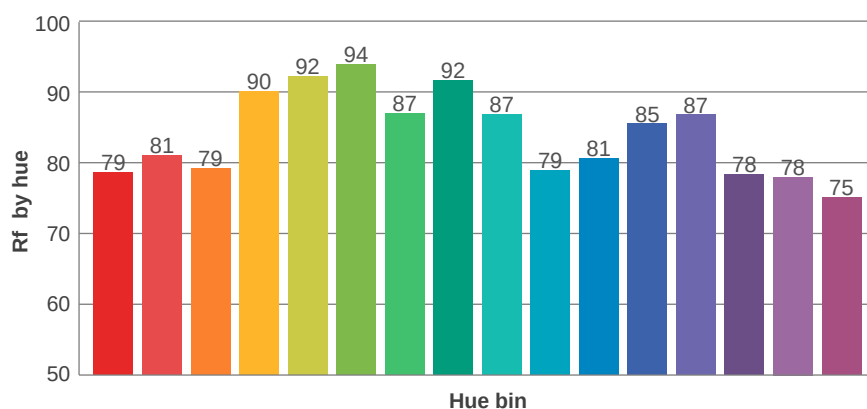
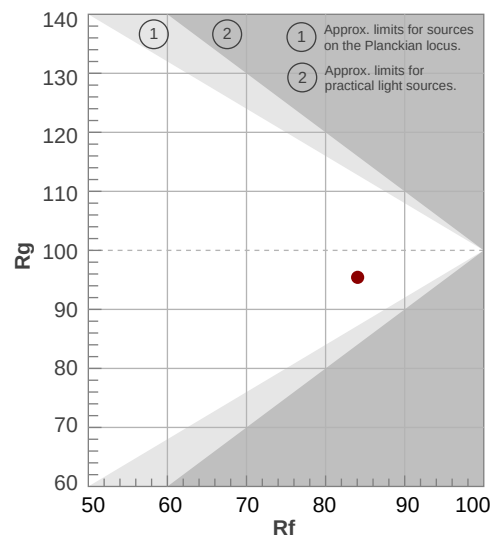
Rf 84,1

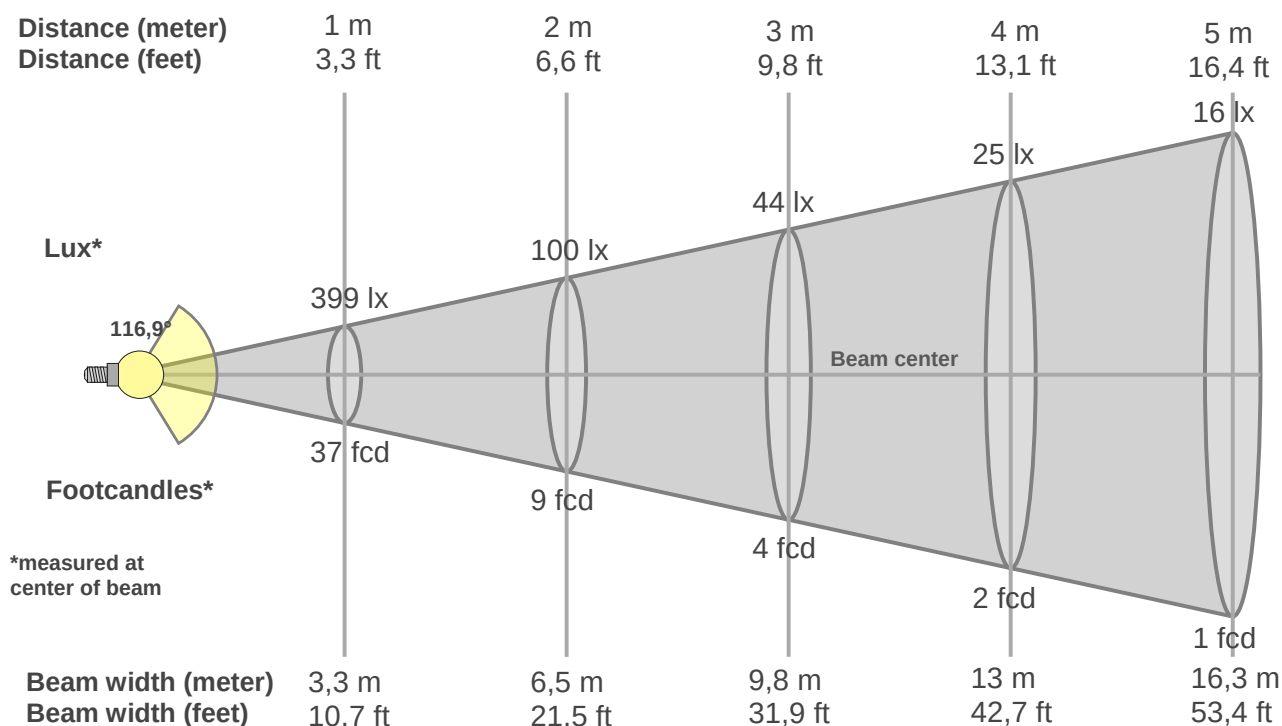
Fidelity index Rf

Rg 95,4

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	79	-11%	1%
2	81	-7%	6%
3	79	-3%	9%
4	90	-1%	5%
5	92	-1%	2%
6	94	1%	-2%
7	87	-6%	-4%
8	92	-4%	1%
9	87	-5%	6%
10	79	-3%	10%
11	81	2%	12%
12	85	8%	1%
13	87	4%	-8%
14	78	4%	-15%
15	78	-4%	-12%
16	75	-8%	-16%




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
399lx	100lx	44lx	25lx	16lx	11lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx
37,1fcd	9,3fcd	4,1fcd	2,3fcd	1,5fcd	1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	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°
399	398	394	386	376	363	346	327	305	281	253	223	190	155	119	81	46	17	2	1
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	39%	30%	20%	11%	4%	1%	0%

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°
399	398	393	385	375	362	345	326	304	279	251	220	187	152	115	79	47	19	2	1
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	55%	47%	38%	29%	20%	12%	5%	1%	0%

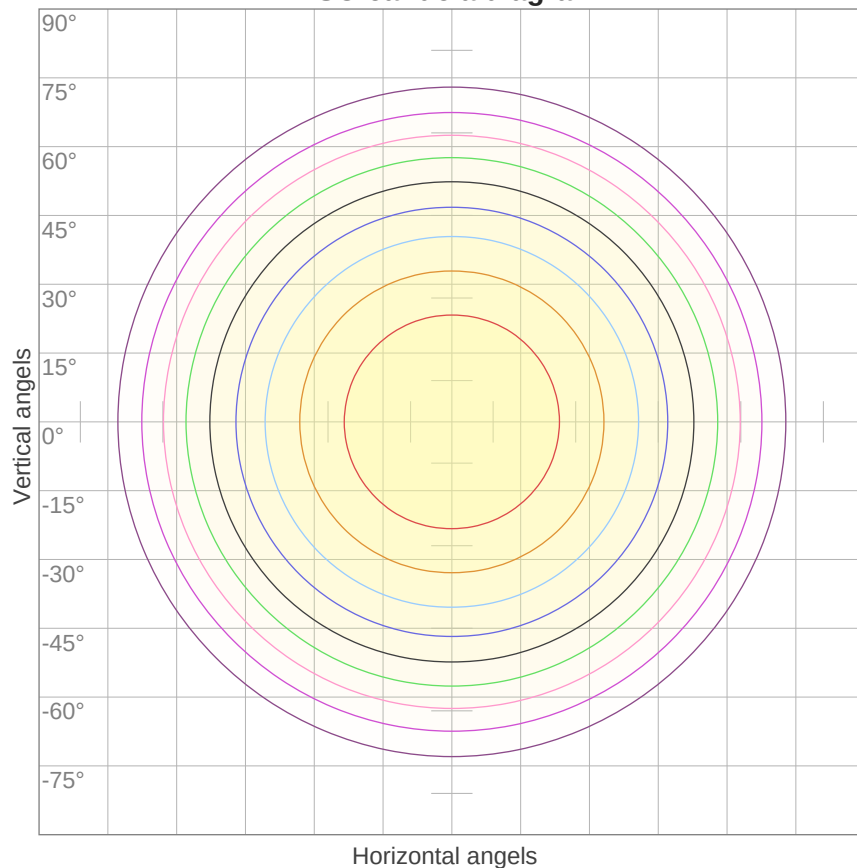
Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
399	398	394	386	376	363	346	327	305	281	253	223	190	155	119	81	46	17	2	1
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	39%	30%	20%	11%	4%	1%	0%

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°
399	398	393	385	375	362	345	326	304	279	251	220	187	152	115	79	47	19	2	1
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	55%	47%	38%	29%	20%	12%	5%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116,9°	161,9°	174°	77,7%	52,2%

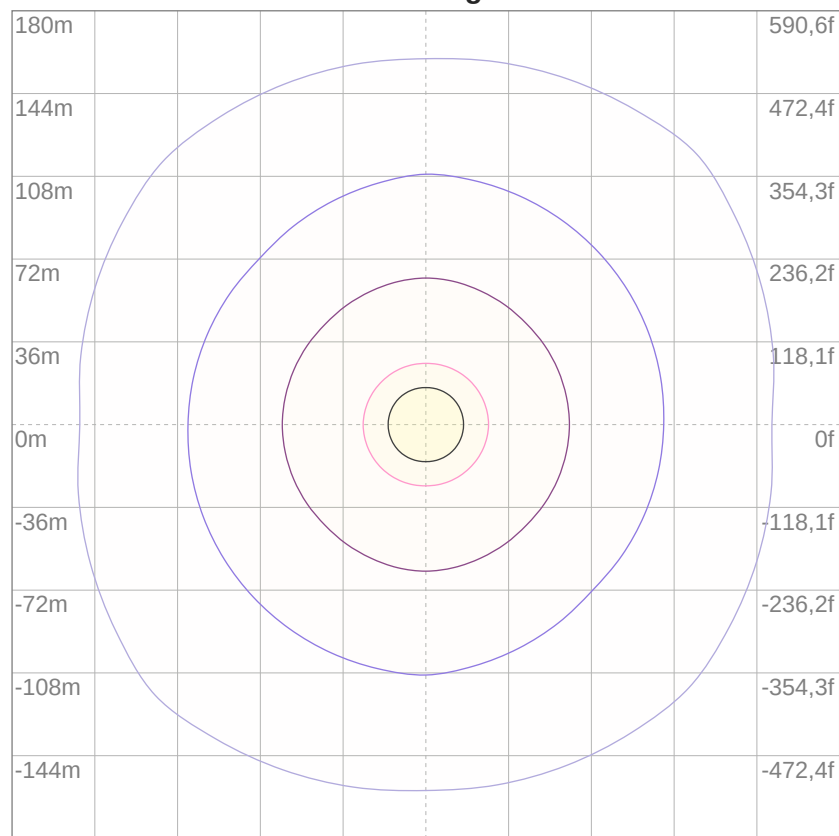
ISO candela diagram


10%	40 cd
20%	80 cd
30%	120 cd
40%	160 cd
50%	200 cd
60%	240 cd
70%	279 cd
80%	319 cd
90%	359 cd

Conditions:

Number of c-planes: 8

Candela at center: 399 cd

ISO lux diagram


3%	0,120 lx
5%	0,200 lx
10%	0,399 lx
30%	1,20 lx
50%	2,00 lx

Conditions:

Number of c-planes: 8

Lux at center: 3,99 lx

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

Glare Evaluation According to UGR

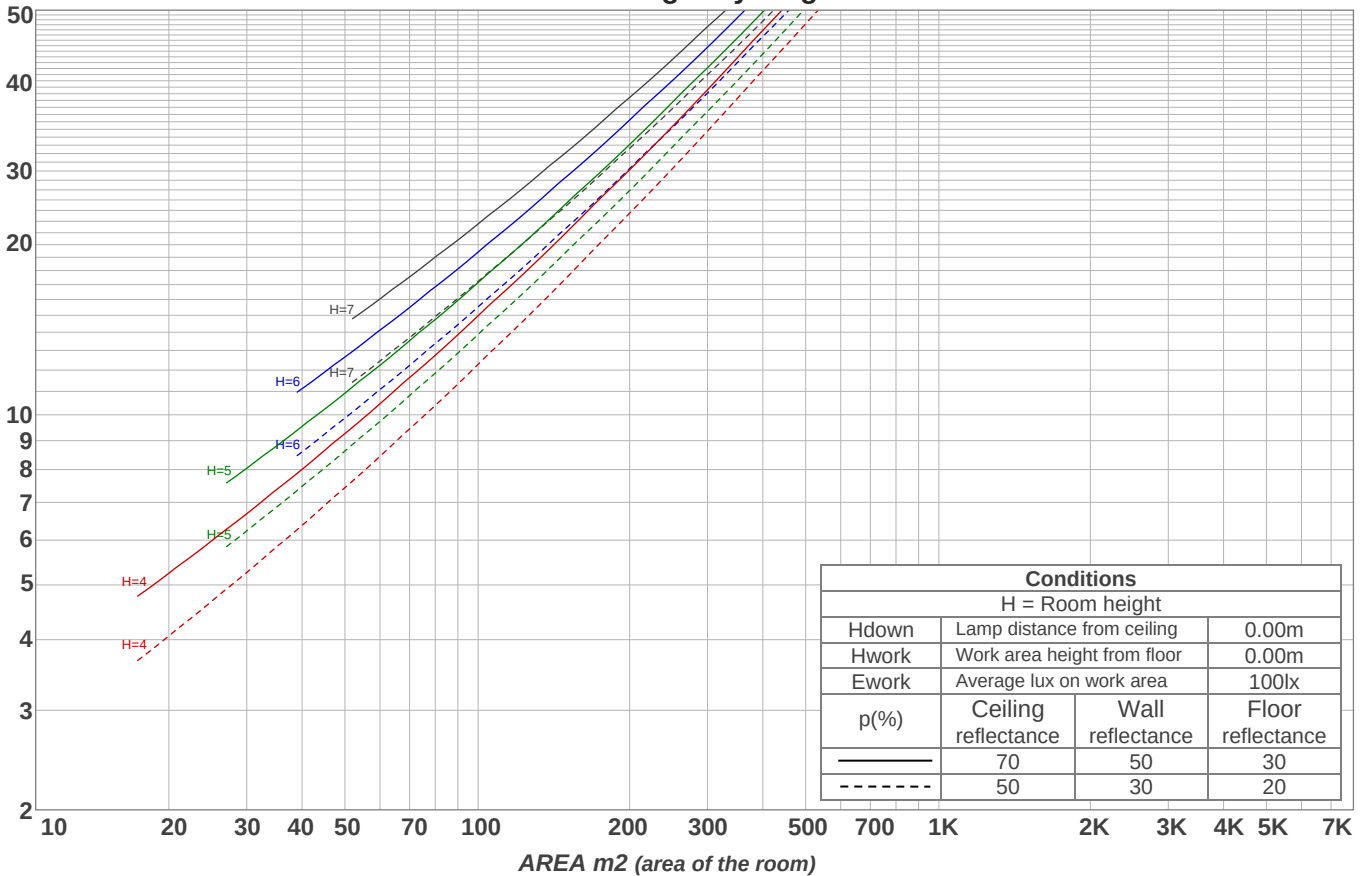
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	15,8	17,1	16,1	17,3	17,6	15,8	17,1	16,1	17,3	17,6
	3H	17,4	18,6	17,7	18,8	19,1	17,4	18,6	17,7	18,8	19,1
	4H	18,0	19,1	18,3	19,4	19,7	18,0	19,1	18,3	19,4	19,7
	6H	18,4	19,4	18,7	19,7	20,1	18,4	19,4	18,7	19,7	20,1
	8H	18,5	19,5	18,9	19,8	20,2	18,5	19,5	18,9	19,8	20,2
	12H	18,5	19,5	18,9	19,9	20,2	18,5	19,5	18,9	19,9	20,2
4H	2H	16,5	17,6	16,8	17,9	18,2	16,5	17,6	16,8	17,9	18,2
	3H	18,2	19,2	18,6	19,6	19,9	18,2	19,2	18,6	19,6	19,9
	4H	19,0	19,8	19,4	20,2	20,6	19,0	19,8	19,4	20,2	20,6
	6H	19,5	20,2	19,9	20,6	21,0	19,5	20,2	19,9	20,6	21,0
	8H	19,6	20,3	20,1	20,7	21,2	19,6	20,3	20,1	20,7	21,2
	12H	19,7	20,4	20,2	20,8	21,2	19,7	20,4	20,2	20,8	21,2
8H	4H	19,3	19,9	19,7	20,4	20,8	19,3	19,9	19,7	20,4	20,8
	6H	19,9	20,5	20,4	20,9	21,4	19,9	20,5	20,4	20,9	21,4
	8H	20,1	20,6	20,6	21,1	21,6	20,1	20,6	20,6	21,1	21,6
	12H	20,3	20,7	20,8	21,2	21,7	20,3	20,7	20,8	21,2	21,7
12H	4H	19,3	19,9	19,7	20,3	20,8	19,3	19,9	19,7	20,3	20,8
	6H	19,9	20,4	20,4	20,9	21,4	19,9	20,4	20,4	20,9	21,4
	8H	20,2	20,6	20,7	21,1	21,6	20,2	20,6	20,7	21,1	21,6
Variation of the observer position for the luminaire distance S											
S = 1,0H		+0,1 / -0,1					+0,1 / -0,1				
S = 1,5H		+0,2 / -0,3					+0,2 / -0,3				
S = 2,0H		+0,4 / -0,7					+0,4 / -0,7				
Standard table		BK06					BK06				
Correction summand		3,0					3,0				
Corrected glare indices referring to 1200 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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	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

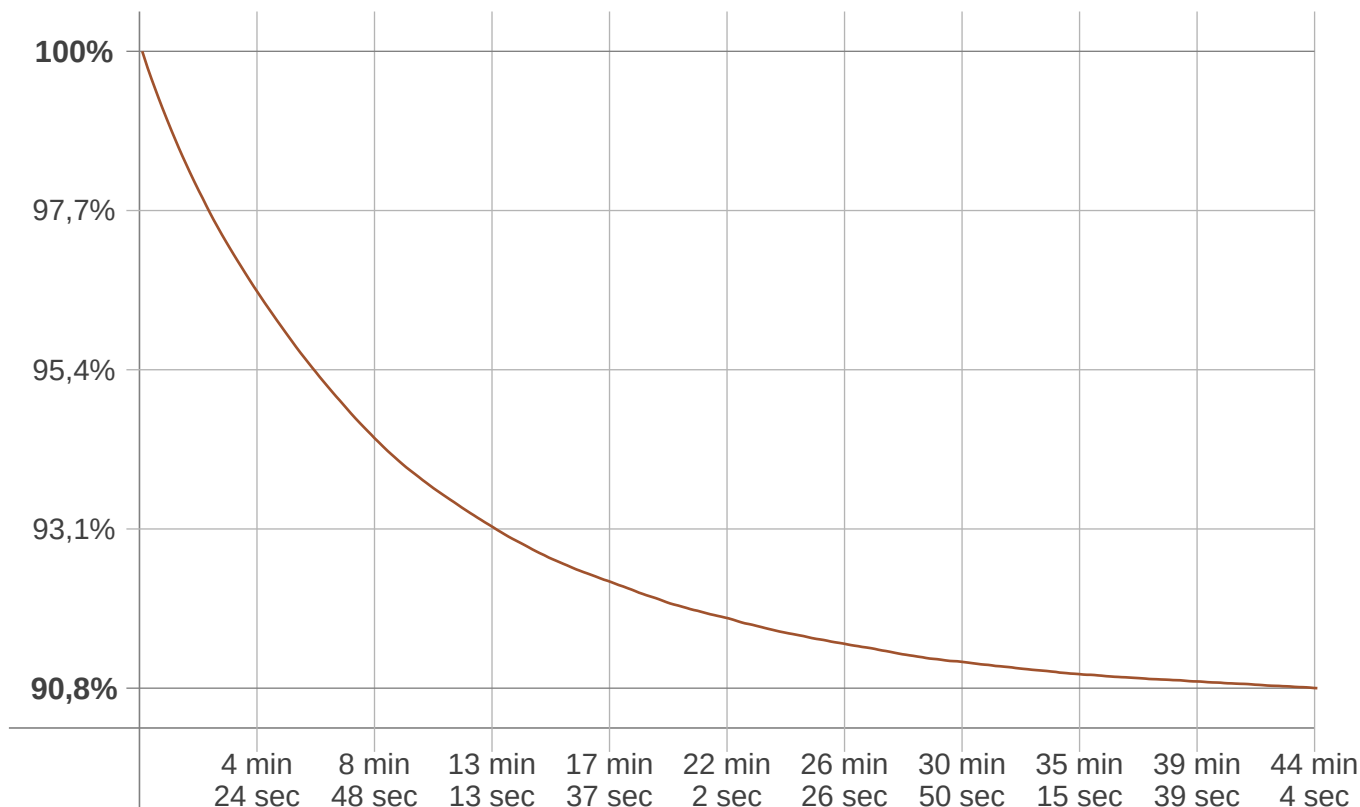
LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
37,8 lm	109 lm	167 lm	204 lm	216 lm	198 lm	152 lm	84,7 lm	21,9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,13 lm	1,09 lm	1,29 lm	1,42 lm	1,43 lm	1,35 lm	1,06 lm	0,688 lm	0,239 lm

Warmup curve

Warmup result

Warmup time:	44 min 12 sec
Warmup variation	-9,3%

Warmup conditions

Stable period:	15 min
Stable change max:	0,5%
Minimum time:	30 min

Color temperature change

CCT start	CCT change	CCT end
3017 K	+83 K	3100 K

Output change

Output start	Output change	Output end
1318 lm	-118 lm	1200 lm