

PHOTOMETRIC TEST REPORT

ELBA CEILING BASE 410 CE DALI

astro

LIGHT EFFICIENCY:



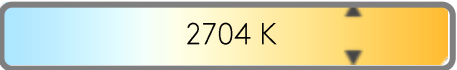
OUTPUT: 2095 lm

LIGHT QUALITY:



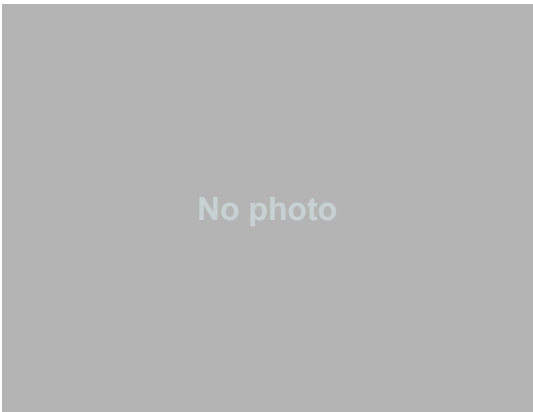
PEAK: 683 cd

COLOR TEMPERATURE:



POWER: 20.8 W

PF: 0.91



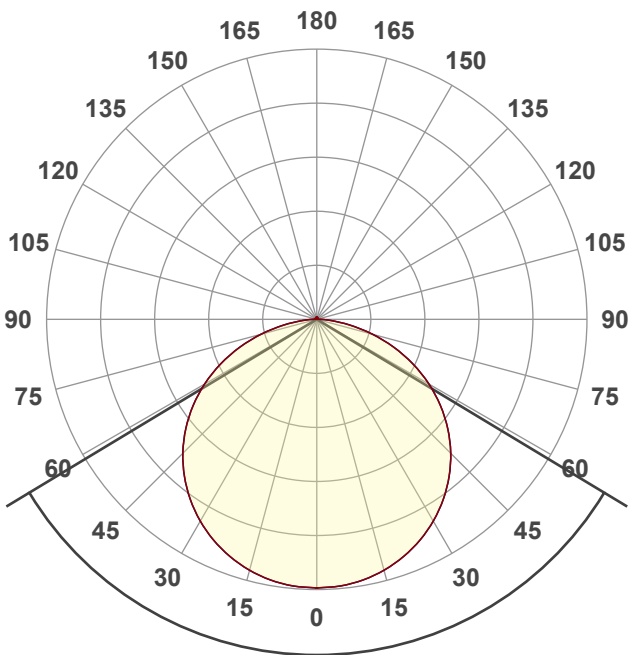
Tracking number: [n/a](#)

Product name:
Elba Ceiling Base 410 CE Dali

Item number:
1462018

Date and time:
15/12/2025 11:30:25

Description:

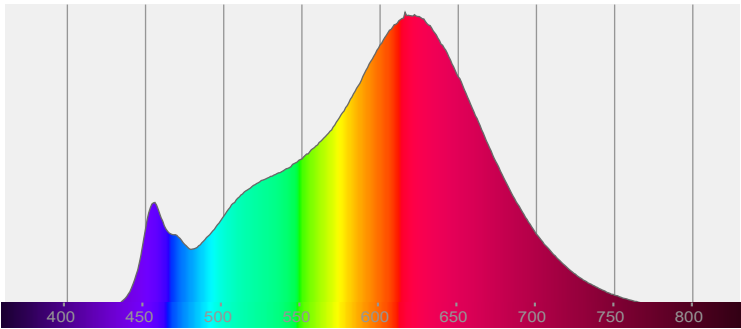


117.8°

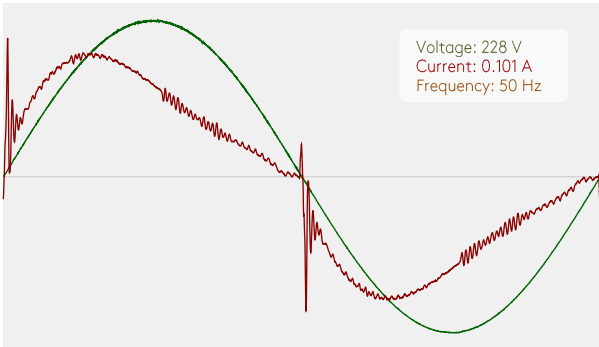


CIE 1931
x: 0.460
y: 0.410

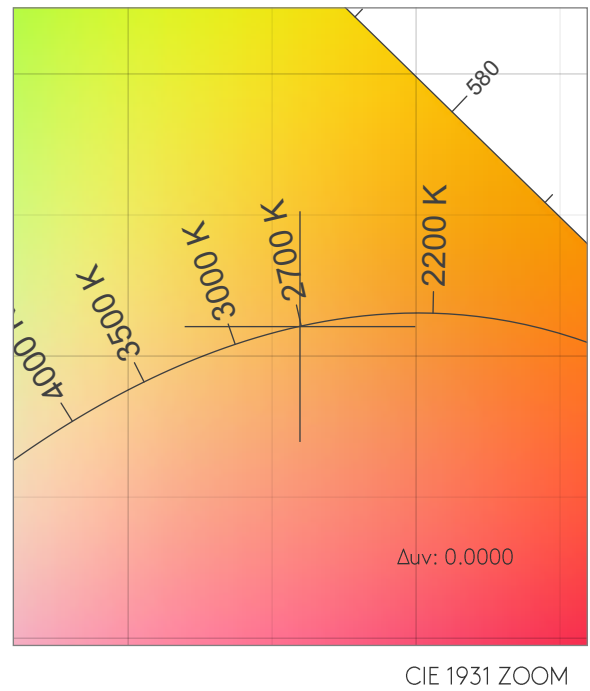
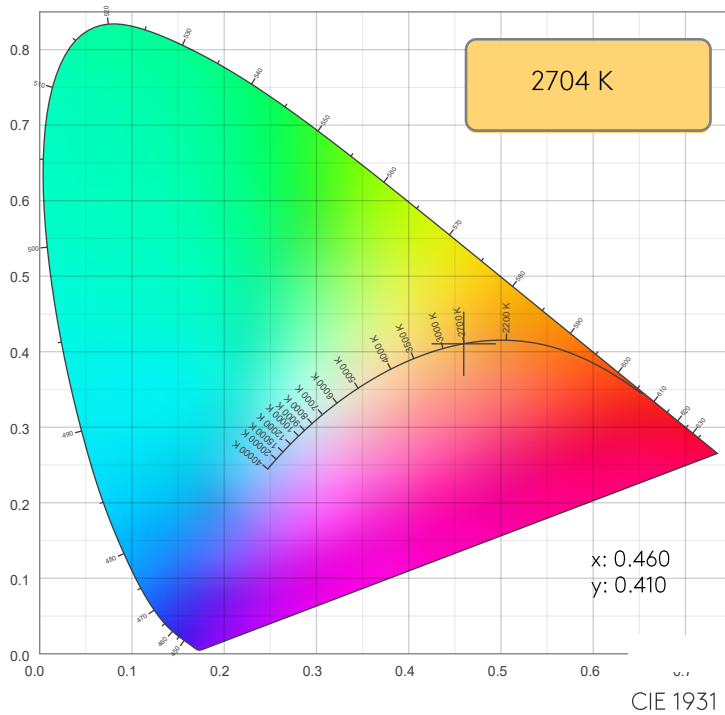
SPECTRA



POWER

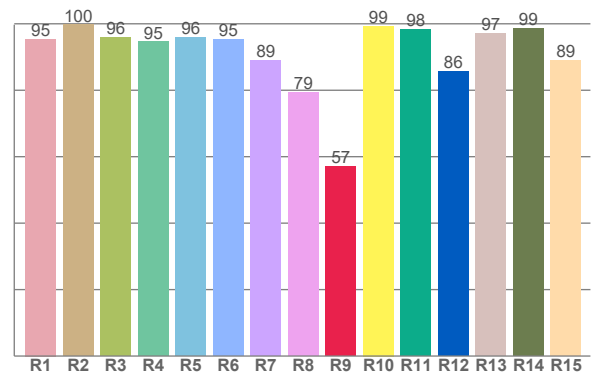
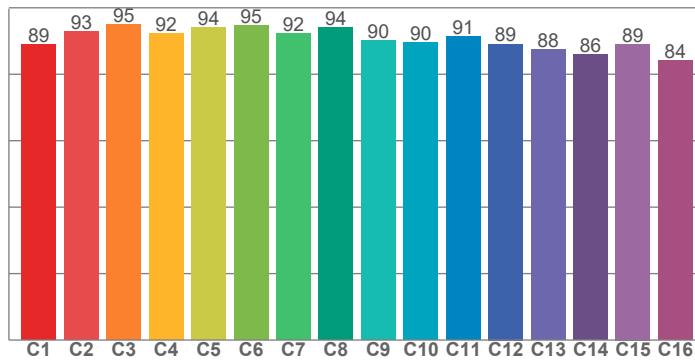


COLOR DETAILS



TM30: 90.7

CRI: 93.1 (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
95.4	99.7	95.9	94.6	95.9	95.3	89.0	79.2	57.1	99.3	98.2	85.7	97.2	98.6	88.9

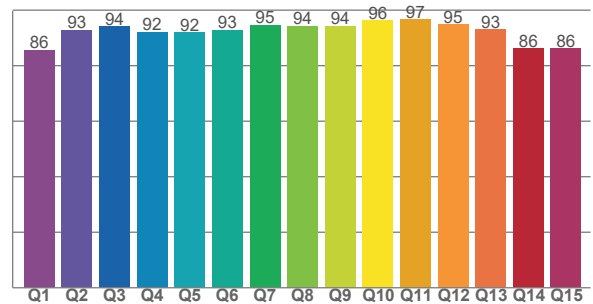
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88.9	92.8	94.8	92.2	94.0	94.5	92.3	94.0	90.1	89.7	91.5	89.1	87.5	85.8	89.1	84.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85.6	92.9	94.1	92.0	91.9	92.9	94.7	94.3	94.2	96.3	96.7	94.8	93.0	86.2	86.1

CQS: 91.3



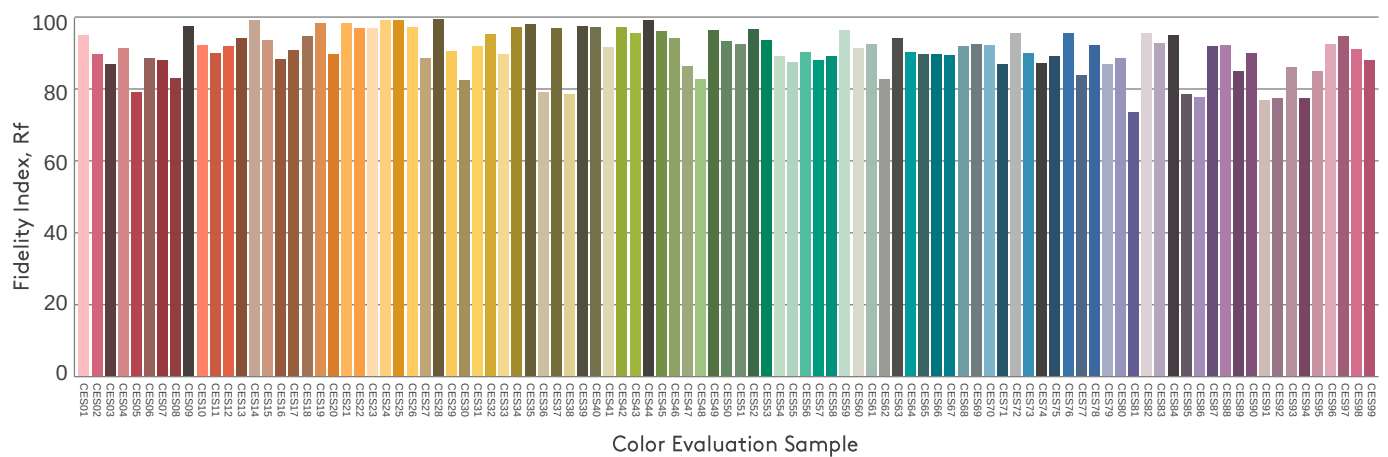
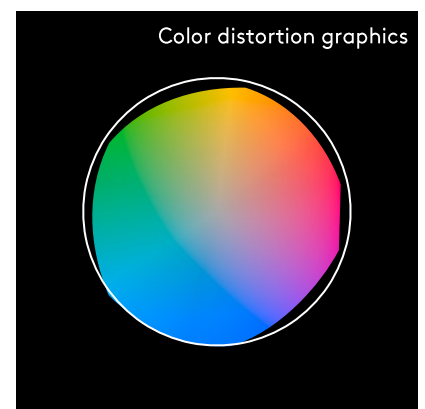
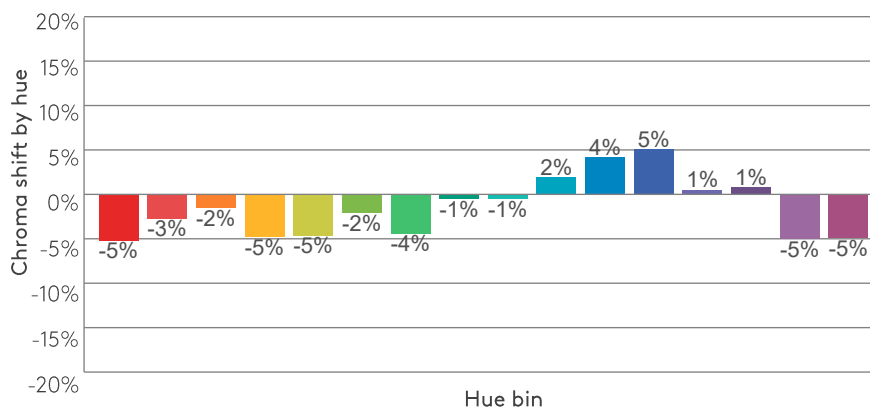
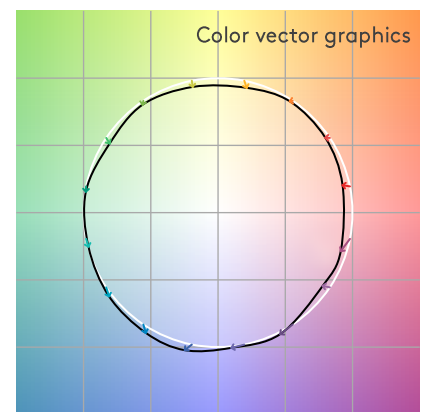
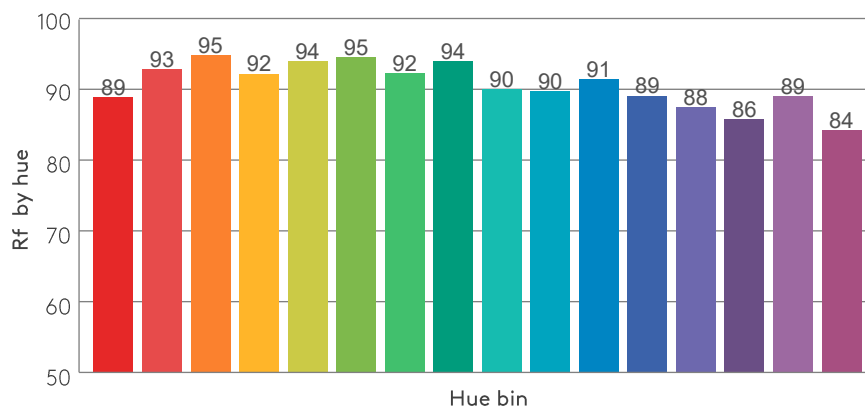
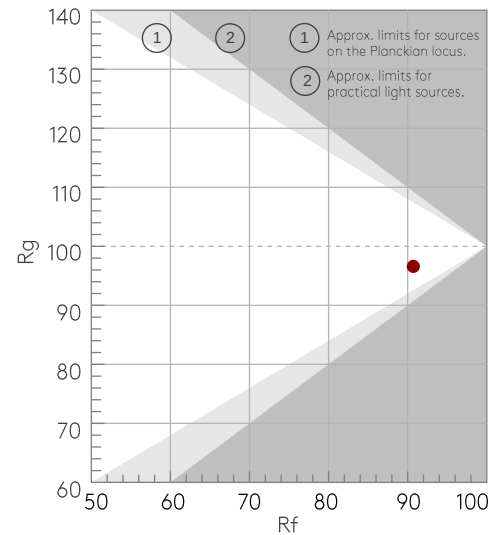
COLOR PARAMETERS

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
2704 K	93.1	57.1	90.7	96.6	91.3	0.460	0.410	0.262	0.352	0.0000

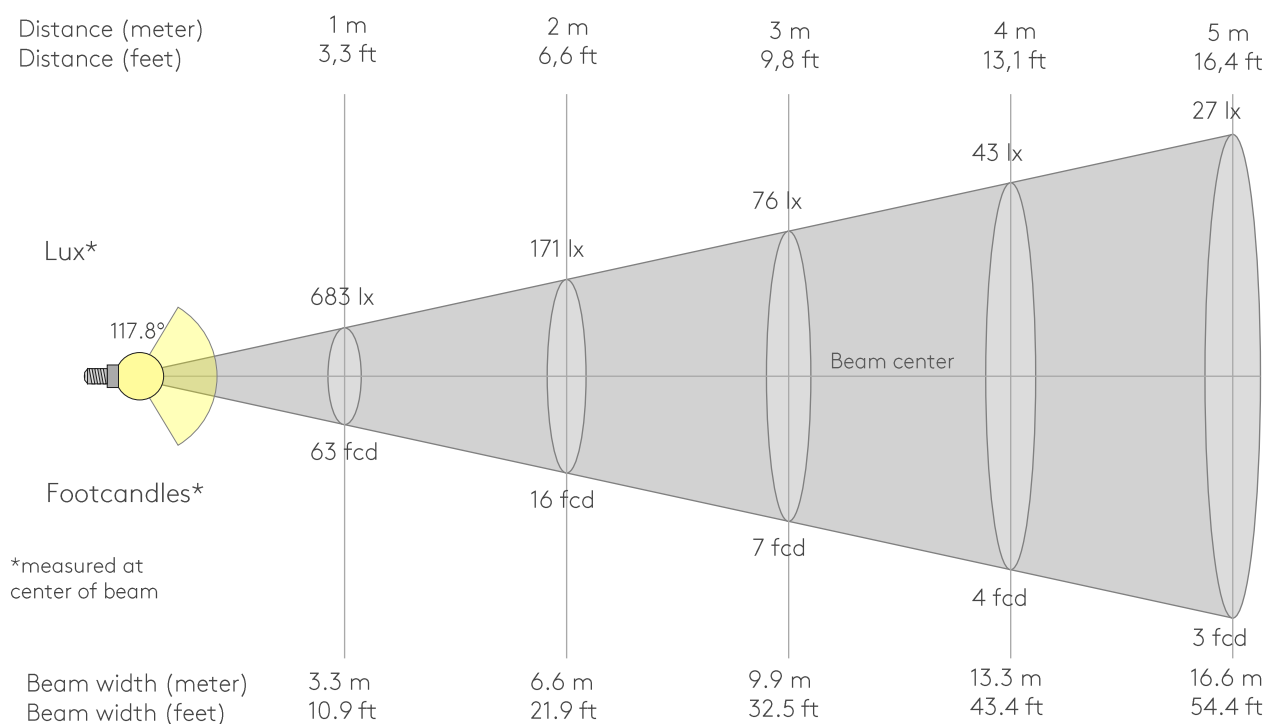
Rf 90.7
Fidelity index Rf

Rg 96.6
Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-5%	2%
2	93	-3%	2%
3	95	-2%	2%
4	92	-5%	-3%
5	94	-5%	0%
6	95	-2%	2%
7	92	-4%	2%
8	94	-1%	4%
9	90	-1%	6%
10	90	2%	7%
11	91	4%	5%
12	89	5%	-4%
13	88	1%	-10%
14	86	1%	-12%
15	89	-5%	-2%
16	84	-5%	-10%



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
683lx	171lx	76lx	43lx	27lx	19lx	14lx	11lx	8lx	7lx	6lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx	2lx
63.4fcd	15.9fcd	7fcd	4fcd	2.5fcd	1.8fcd	1.3fcd	1fcd	0.8fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	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°
683	680	673	660	642	620	592	560	523	481	435	384	329	271	209	147	87	38	9	3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	56%	48%	40%	31%	22%	13%	6%	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°
683	680	673	660	642	620	592	560	523	481	435	384	329	271	209	147	87	38	9	3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	56%	48%	40%	31%	22%	13%	6%	1%	0%

Intensities in 180° c-plane

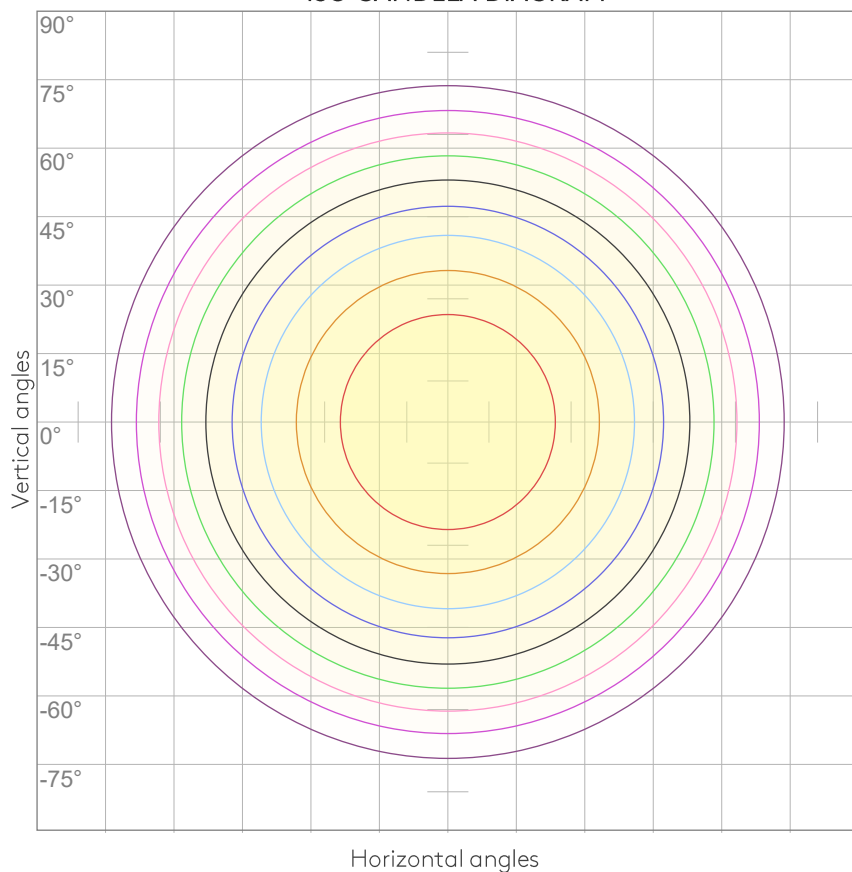
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
683	680	673	660	642	620	592	560	523	481	435	384	329	271	209	147	87	38	9	3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	56%	48%	40%	31%	22%	13%	6%	1%	0%

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°
683	680	673	660	642	620	592	560	523	481	435	384	329	271	209	147	87	38	9	3
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	64%	56%	48%	40%	31%	22%	13%	6%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
117.8°	163.8°	177°	76.4%	51.2%

ISO CANDELA DIAGRAM



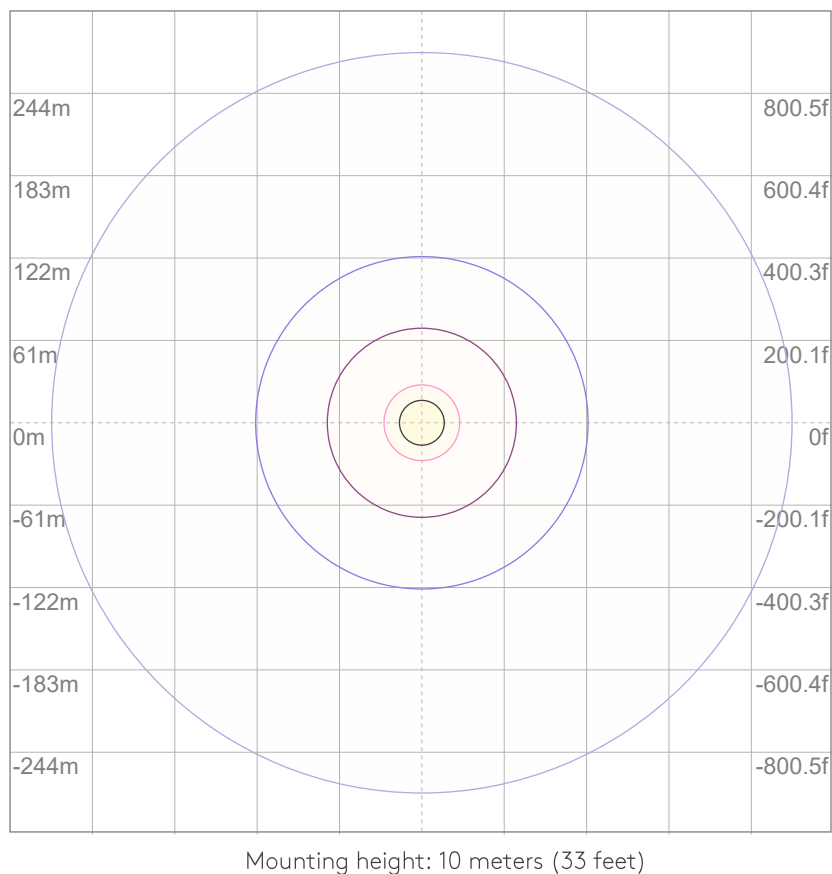
10%	68 cd
20%	137 cd
30%	205 cd
40%	273 cd
50%	341 cd
60%	410 cd
70%	478 cd
80%	546 cd
90%	614 cd

Conditions:

Number of c-planes: 8

Candela at center: 683 cd

ISO LUX DIAGRAM



3%	0.205 lx
5%	0.341 lx
10%	0.683 lx
30%	2.05 lx
50%	{LUX_10M50} lx

Conditions:

Number of c-planes: 8

Lux at center: 6.83 lx

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

UGR

GLARE EVALUATION ACCORDING TO UGR

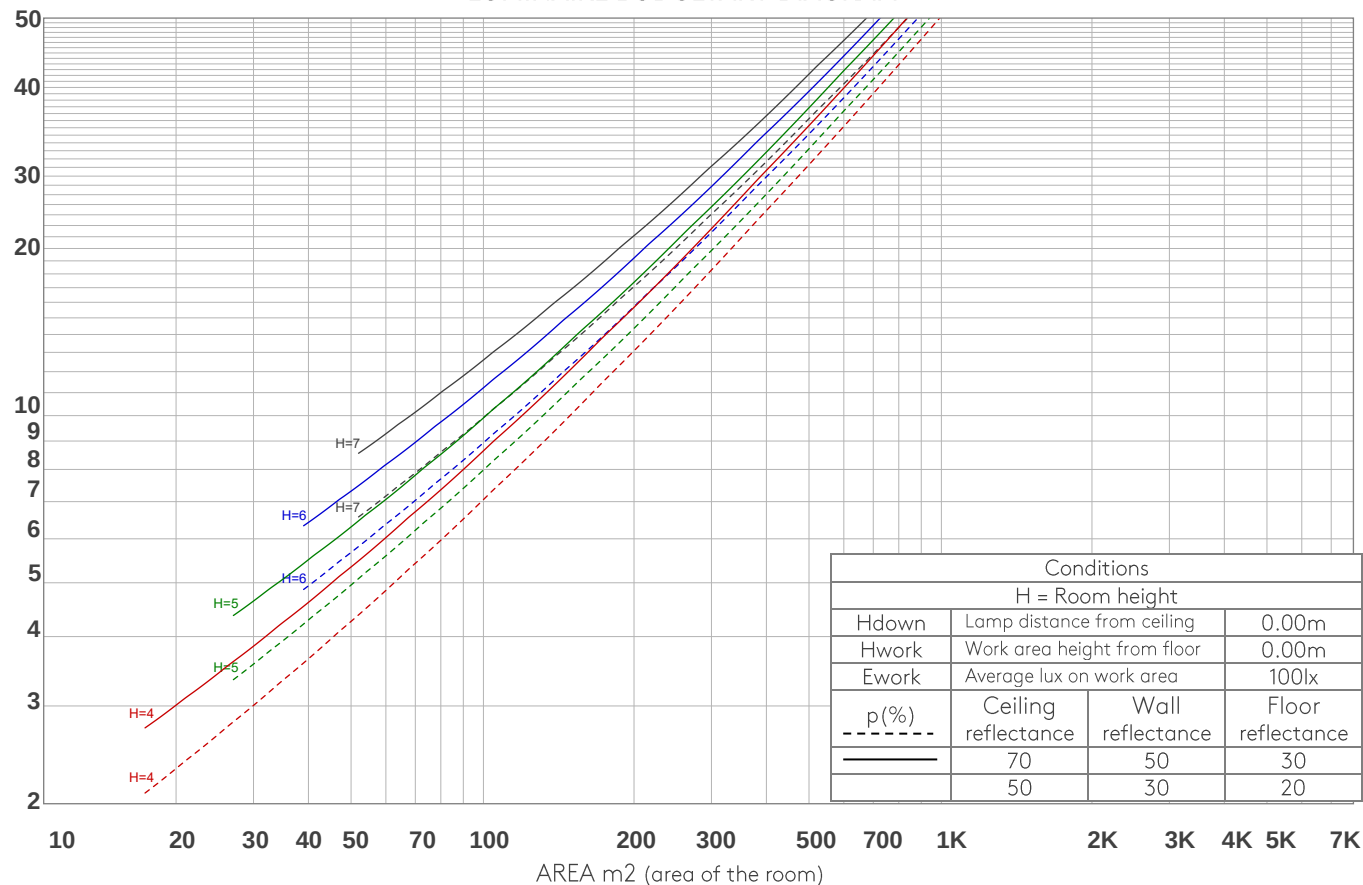
p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	20.3	21.6	20.6	21.9	22.1	20.3	21.6	20.6	21.9	22.1
	3H	21.9	23.2	22.3	23.5	23.7	21.9	23.2	22.3	23.5	23.7
	4H	22.5	23.8	23.0	24.1	24.3	22.5	23.8	23.0	24.1	24.3
	6H	23.1	24.2	23.4	24.5	24.9	23.1	24.2	23.4	24.5	24.9
	8H	23.2	24.3	23.6	24.6	25.0	23.2	24.3	23.6	24.6	25.0
	12H	23.3	24.3	23.7	24.7	25.2	23.3	24.3	23.7	24.7	25.2
4H	2H	21.0	22.2	21.4	22.5	22.8	21.0	22.2	21.4	22.5	22.8
	3H	22.8	23.8	23.2	24.2	24.7	22.8	23.8	23.2	24.2	24.7
	4H	23.5	24.5	24.0	24.9	25.5	23.5	24.5	24.0	24.9	25.5
	6H	24.1	25.0	24.6	25.4	25.8	24.1	25.0	24.6	25.4	25.8
	8H	24.3	25.1	24.9	25.5	25.9	24.3	25.1	24.9	25.5	25.9
	12H	24.5	25.1	25.0	25.6	26.1	24.5	25.1	25.0	25.6	26.1
8H	4H	23.8	24.6	24.4	25.0	25.4	23.8	24.6	24.4	25.0	25.4
	6H	24.6	25.2	25.1	25.7	26.3	24.6	25.2	25.1	25.7	26.3
	8H	24.9	25.4	25.4	26.0	26.6	24.9	25.4	25.4	26.0	26.6
	12H	25.1	25.6	25.7	26.1	26.7	25.1	25.6	25.7	26.1	26.7
12H	4H	23.9	24.5	24.4	25.0	25.5	23.9	24.5	24.4	25.0	25.5
	6H	24.7	25.2	25.2	25.8	26.4	24.7	25.2	25.2	25.8	26.4
	8H	25.0	25.5	25.6	26.0	26.6	25.0	25.5	25.6	26.0	26.6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / -0.1					0.1 / -0.1				
S = 1.5H		0.1 / -0.2					0.1 / -0.2				
S = 2.0H		0.4 / -0.4					0.4 / -0.4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 2095 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	101	101	101	99
1	108	103	99	95	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	90	83	77	95	88	81	76	84	78	74	80	76	72	77	73	70	68
3	89	78	70	63	87	77	69	63	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	60	52	45	58	51	45	56	49	44	54	48	44	41
6	69	55	46	40	67	54	46	40	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	38	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

LAMPS (number of lamps)

LUMINAIRE BUDGETARY DIAGRAM

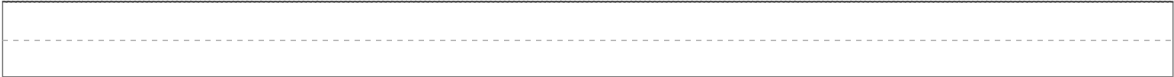


ZONAL LUMEN SUMMARY

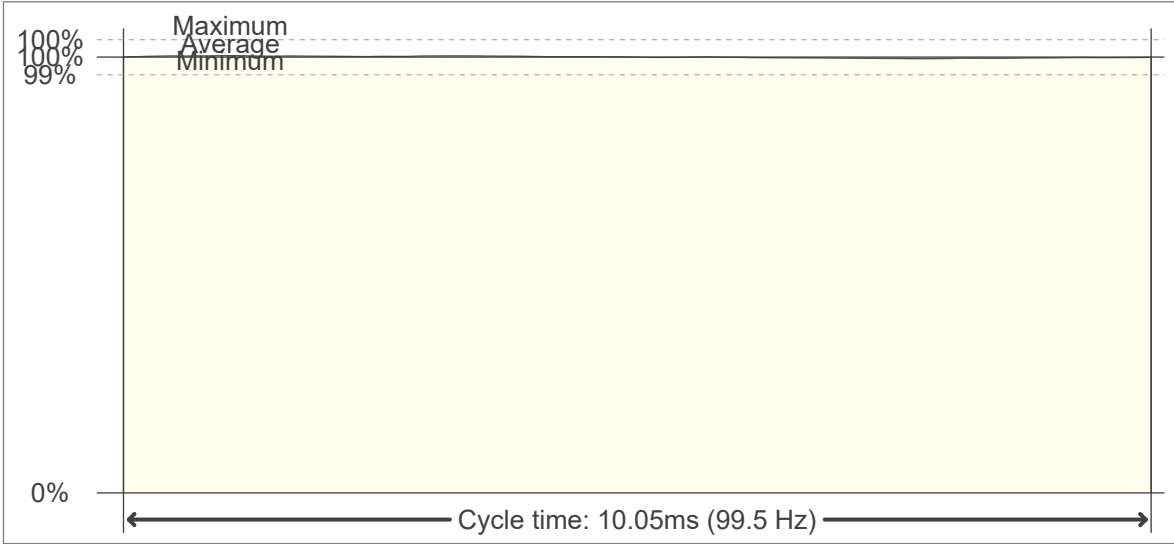
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
64.6 lm	186 lm	285 lm	350 lm	371 lm	343 lm	267 lm	156 lm	46.3 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4.34 lm	3.27 lm	3.60 lm	3.67 lm	3.47 lm	3.09 lm	2.44 lm	1.57 lm	0.549 lm

FLICKER

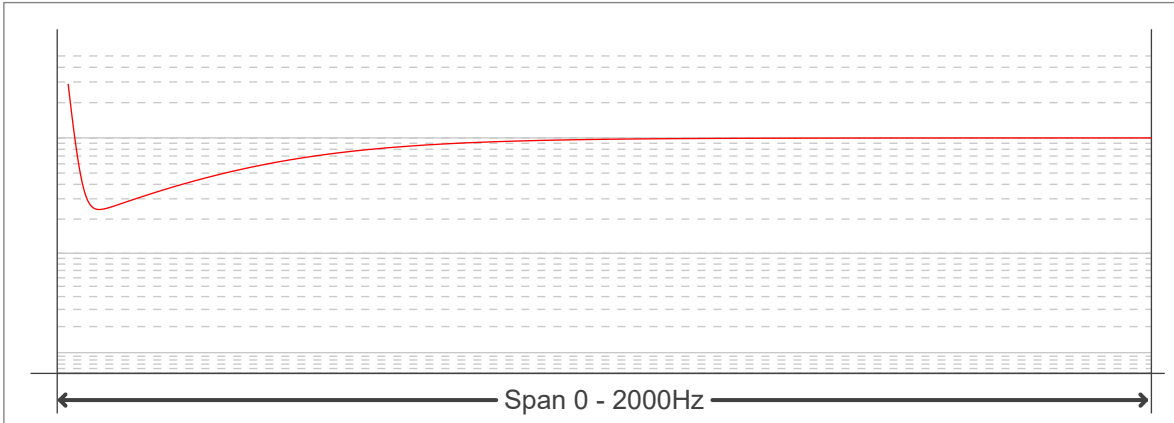
FLICKER CURVE (COMPLETE SAMPLED)



FLICKER FRAME (FRAME OF ONE FLICKER)



FLICKER FFT (FREQUENCY SCOPE OF FLICKER)



FLICKER RESULTS:

Flicker frequency:	99.5 Hz
Flicker index:	0
Flicker percentage:	0.43 %
SVM: (Visual flicker)	0.01

FLICKER CONDITIONS:

Sample rate:	20000 samples/second
--------------	----------------------