

Light efficiency:

71 Lumen/Watt

Light quality:

CRI: 93.2

Color temperature:

3140 K

Output: 1044 lm

Peak: 1480 cd

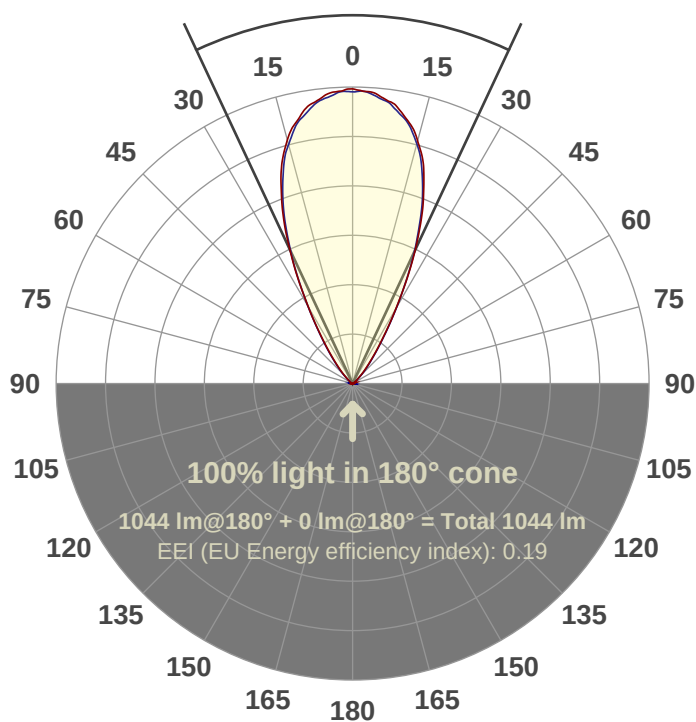
Power: 14.6 W

PF: 0.97



Beam angle

50.2°



Test number:

GR-CZ14-WF-RD-91A

Luminaire Model:

GR-CZ14-WF-RD-91A

Date and time:

7/5/2017 10:51:12 AM

Description:

350 mA V6

LUM: 1044

PPF: 17.7

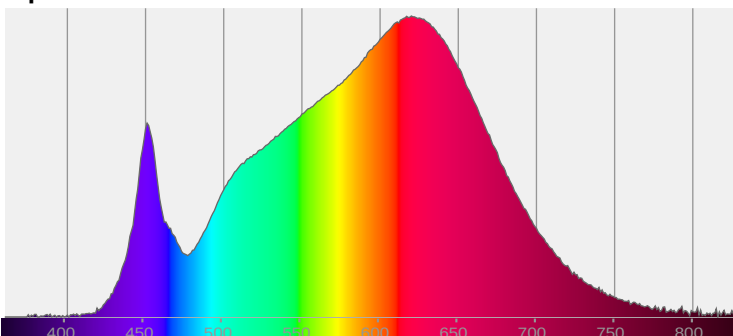


CIE 1931

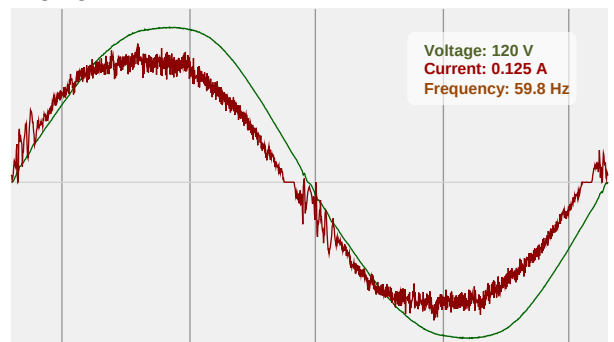
x: 0.427

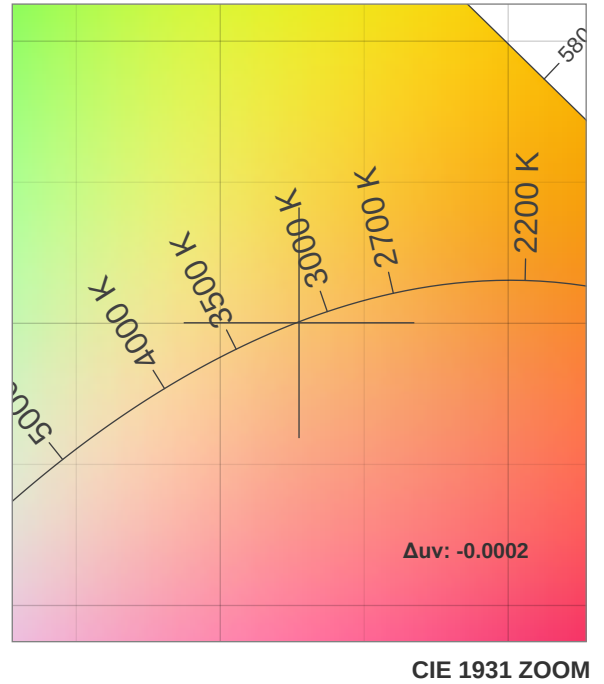
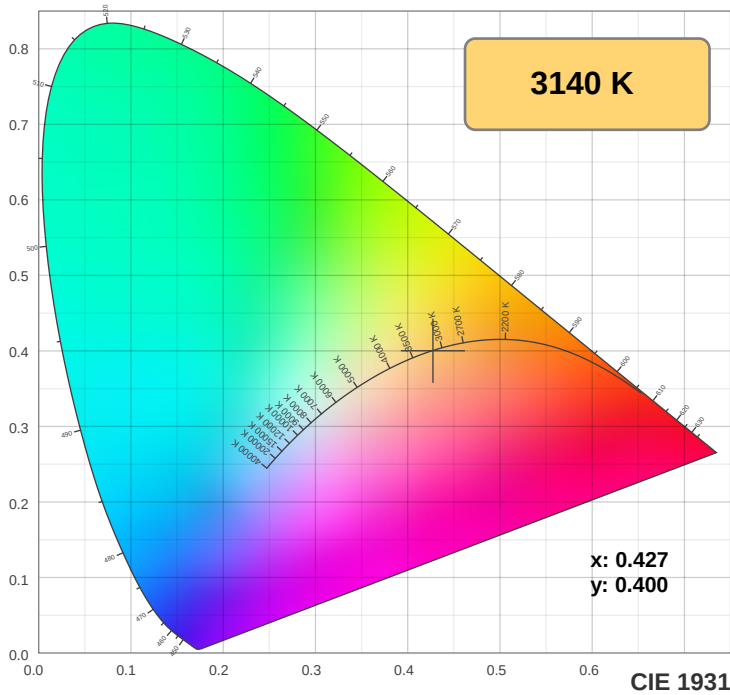
y: 0.400

Spectra

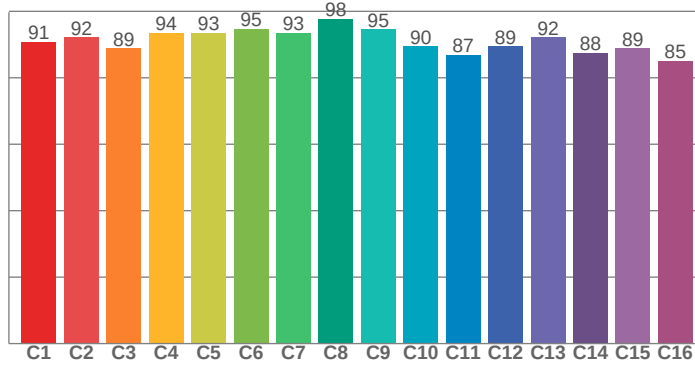


Power

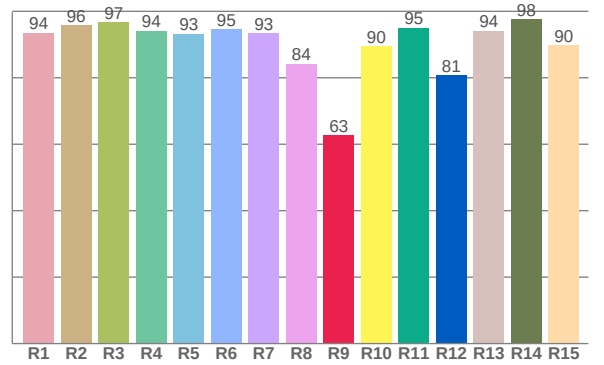




TM30: 91.2



CRI: 93.2 (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
93.6	95.8	96.8	94.1	93.2	94.6	93.4	84.2	62.8	89.5	95.0	80.7	94.2	97.6	89.9

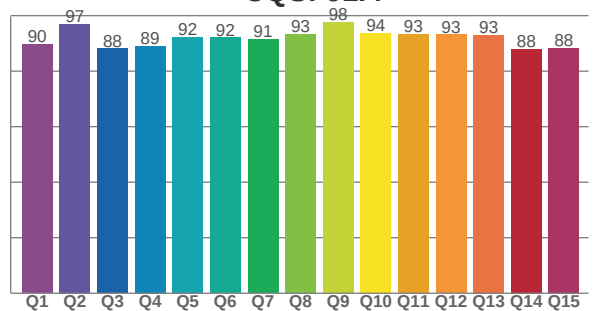
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90.8	92.1	88.8	93.5	93.5	94.7	93.4	97.8	94.5	89.5	86.9	89.4	92.1	87.5	88.9	85.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.7	97.0	88.1	89.1	92.3	92.2	91.5	93.4	97.8	93.8	93.4	93.2	93.1	87.9	88.4

CQS: 91.4



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
3140 K	93.2	62.8	91.2	100.3	91.4	0.427	0.400	0.246	0.346	-0.0002

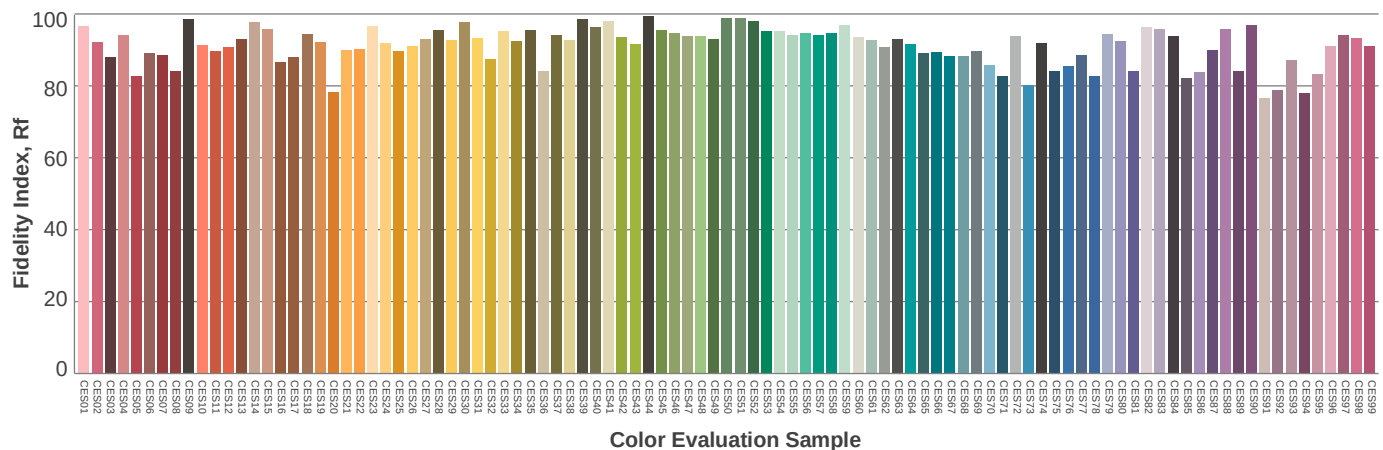
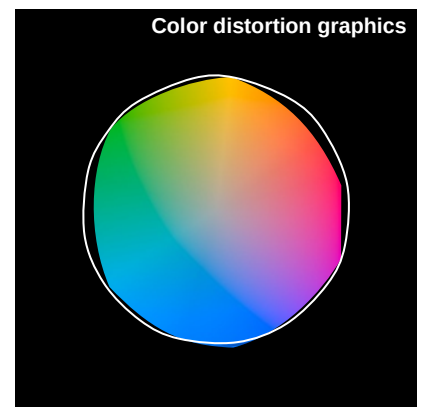
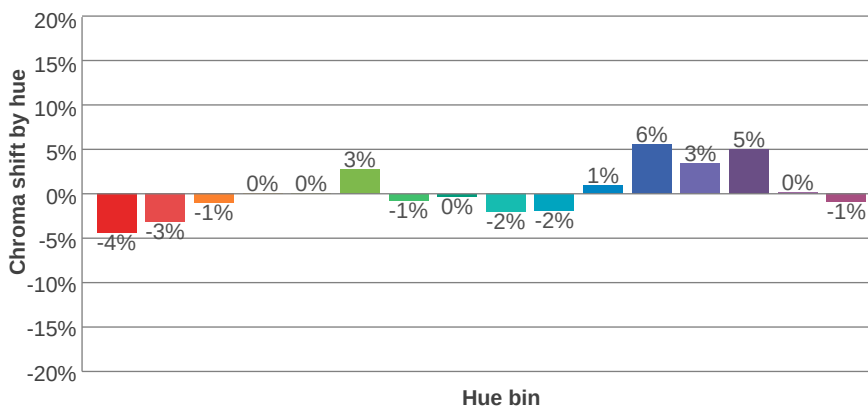
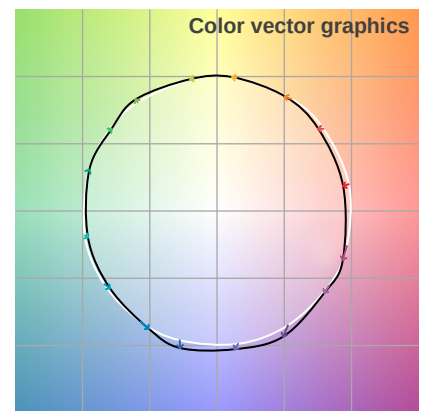
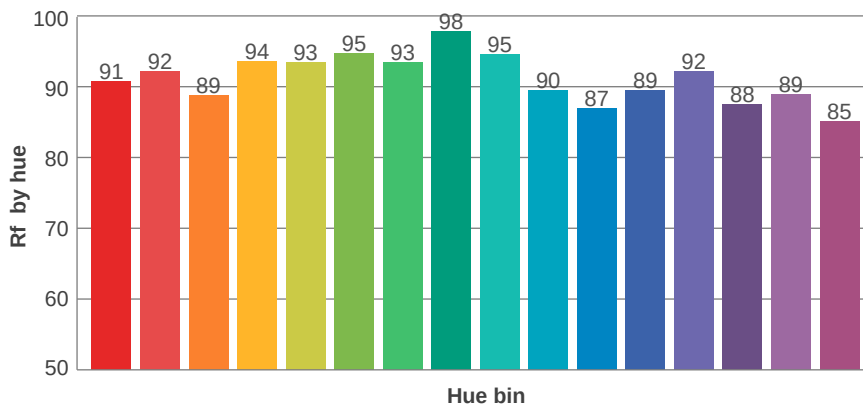
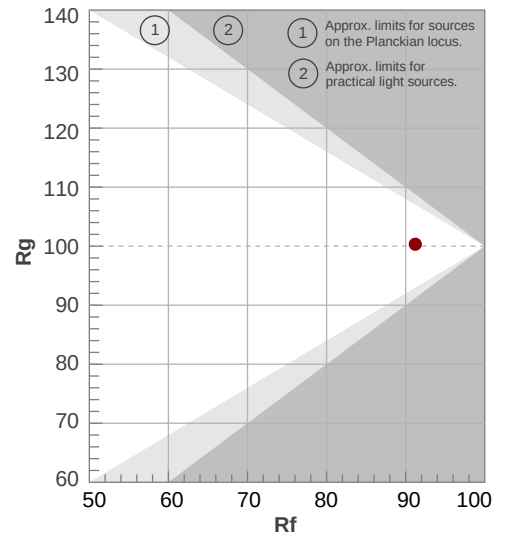
Rf 91.2

Fidelity index Rf

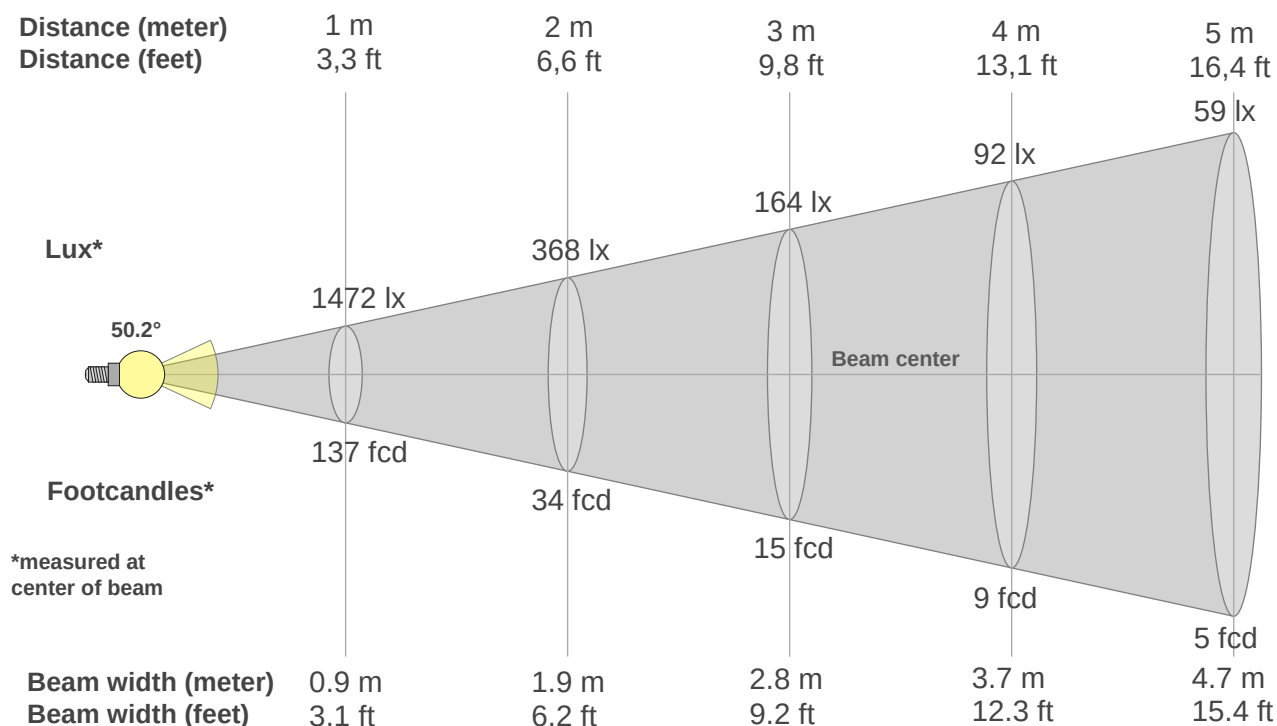
Rg 100.3

Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-1%
2	92	-3%	2%
3	89	-1%	5%
4	94	0%	3%
5	93	0%	2%
6	95	3%	0%
7	93	-1%	-2%
8	98	0%	-1%
9	95	-2%	2%
10	90	-2%	5%
11	87	1%	8%
12	89	6%	2%
13	92	3%	-3%
14	88	5%	-7%
15	89	0%	-6%
16	85	-1%	-11%



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
1472lx	368lx	164lx	92lx	59lx	41lx	30lx	23lx	18lx	15lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx
136.8fcd	34.2fcd	15.2fcd	8.5fcd	5.5fcd	3.8fcd	2.8fcd	2.1fcd	1.7fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd

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°
1472	1471	1466	1446	1423	1395	1347	1299	1230	1152	1049	940	817	687	562	446	350	270	209	159
100%	100%	100%	98%	97%	95%	91%	88%	84%	78%	71%	64%	55%	47%	38%	30%	24%	18%	14%	11%

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°
1472	1468	1451	1435	1410	1373	1336	1274	1212	1125	1026	919	798	679	556	447	353	276	217	168
100%	100%	99%	97%	96%	93%	91%	87%	82%	76%	70%	62%	54%	46%	38%	30%	24%	19%	15%	11%

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°
1472	1469	1465	1443	1424	1389	1346	1297	1228	1152	1045	937	811	685	556	438	341	261	201	153
100%	100%	100%	98%	97%	94%	91%	88%	83%	78%	71%	64%	55%	47%	38%	30%	23%	18%	14%	10%

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°
1472	1469	1454	1434	1411	1373	1336	1278	1213	1126	1028	917	795	676	551	442	347	268	209	161
100%	100%	99%	97%	96%	93%	91%	87%	82%	77%	70%	62%	54%	46%	37%	30%	24%	18%	14%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
50.2°	77.3°	96.3°	99.2%	96.3%

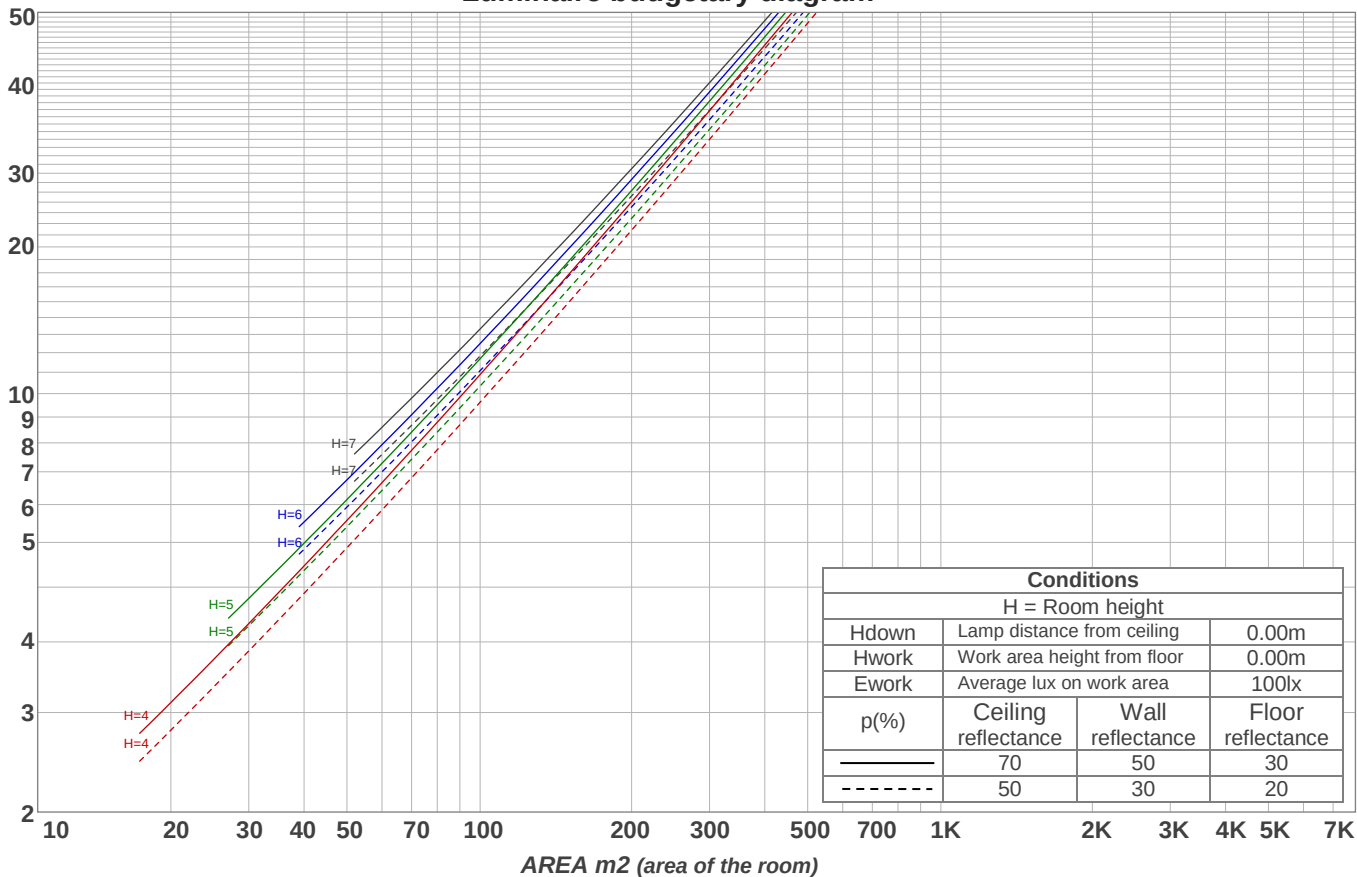
Light planning

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	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	93	96	94	92	93	91	90	88
3	103	97	92	89	101	96	91	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	78	73	70	76	73	70	68
7	86	77	71	67	84	76	71	67	75	70	67	74	69	66	73	69	66	65
8	82	73	67	63	81	72	67	63	71	66	63	70	66	63	69	65	62	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	56	64	60	56	64	59	56	63	59	56	55

LAMPS (number of lamps)

Luminaire budgetary diagram



Zonal Lumen Summary

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