

Light efficiency:

48 Lumen/Watt

Output: 1093 lm

Light quality:

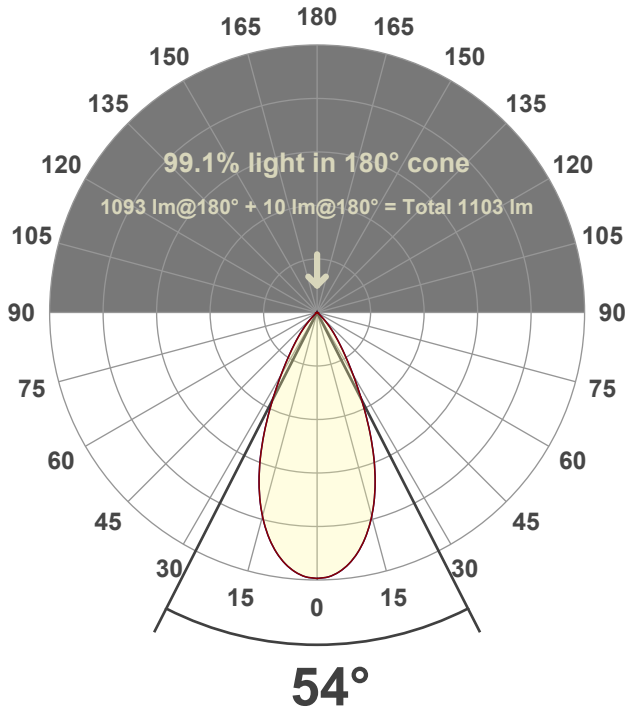
CRI: 92.3

Peak: 1691 cd

Power: 22.7 W



Beam angle



Test number:

CR4D-RA-SH-C20-30K-Wide

Luminaire Model:

Core 4" Round Deep Regress C20-30K-Wide

Date and time:

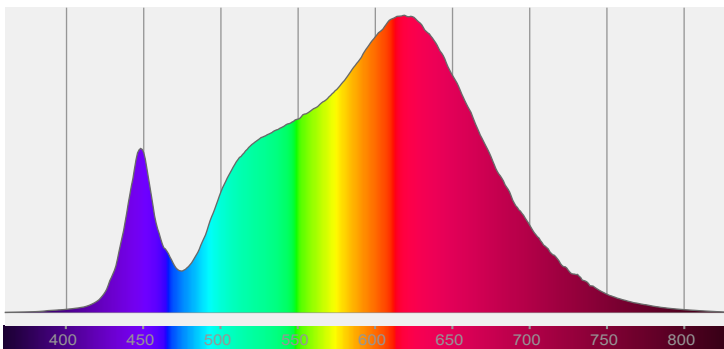
6/2/2025 10:59:46 AM

LUM: 1093

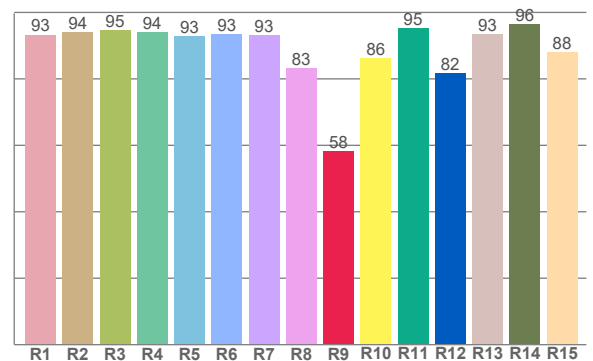
Glare Value: 20.1

3089 K

Spectra



CRI: 92.3 (R1-R8)



Color parameters

	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
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.3	58.3	91.1	101.9	90.6	0.432	0.405	0.247	0.347	0.0011

R_f 91.1

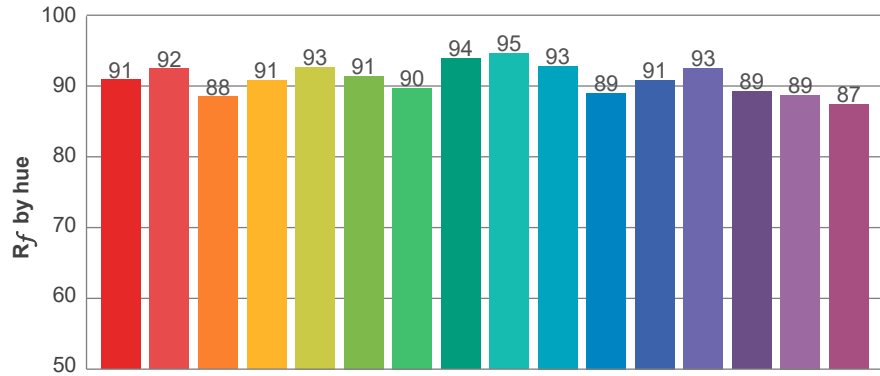
Fidelity index R_f

R_g 101.9

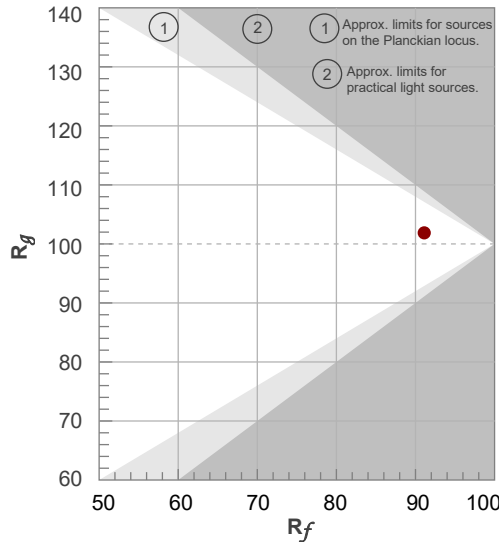
Gammut index R_g

TM30: 91.1

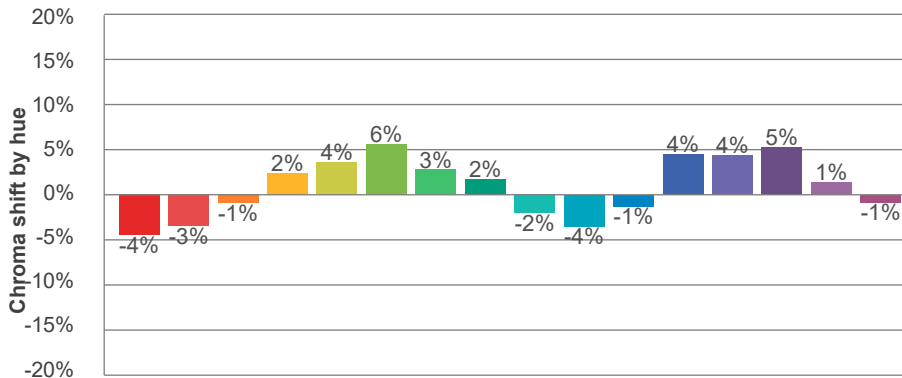
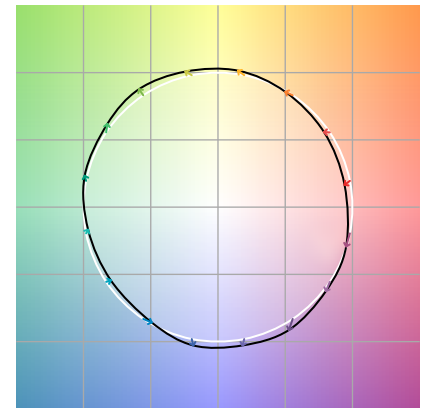
TM-30Color



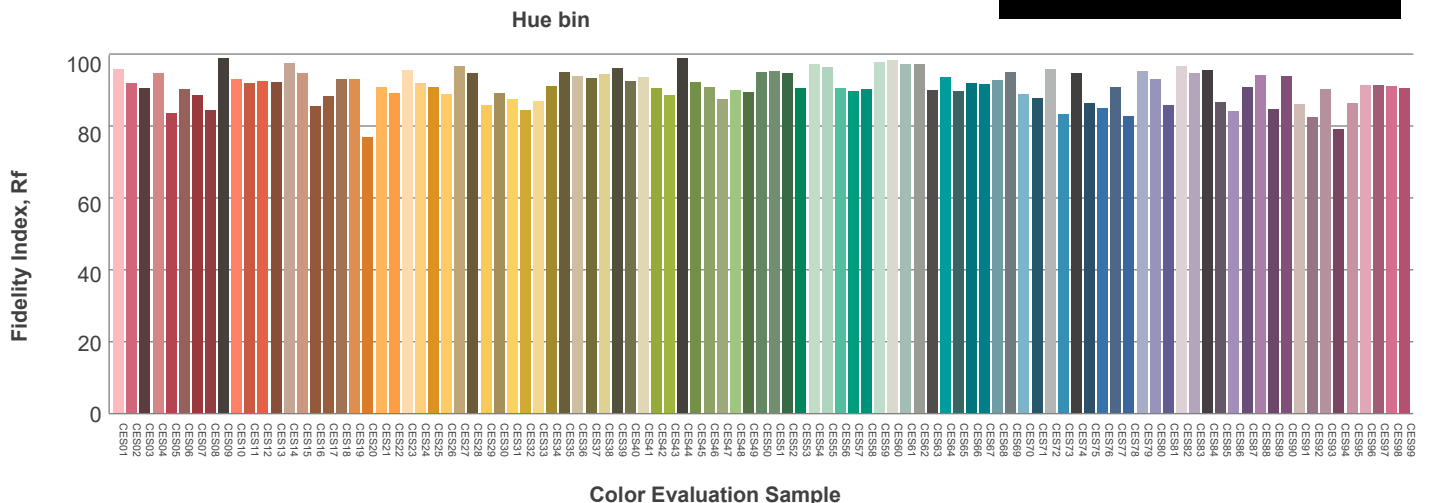
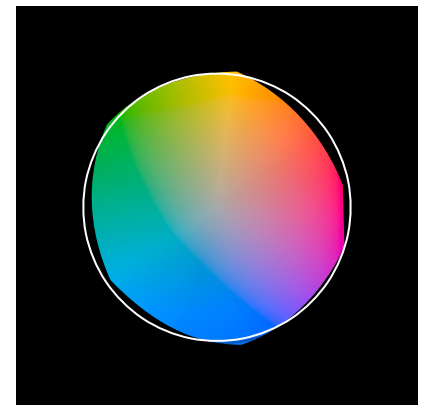
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	92	-3%	3%
3	88	-1%	6%
4	91	2%	5%
5	93	4%	4%
6	91	6%	0%
7	90	3%	-6%
8	94	2%	-4%
9	95	-2%	-2%
10	93	-4%	1%
11	89	-1%	7%
12	91	4%	2%
13	93	4%	-2%
14	89	5%	-7%
15	89	1%	-7%
16	87	-1%	-10%



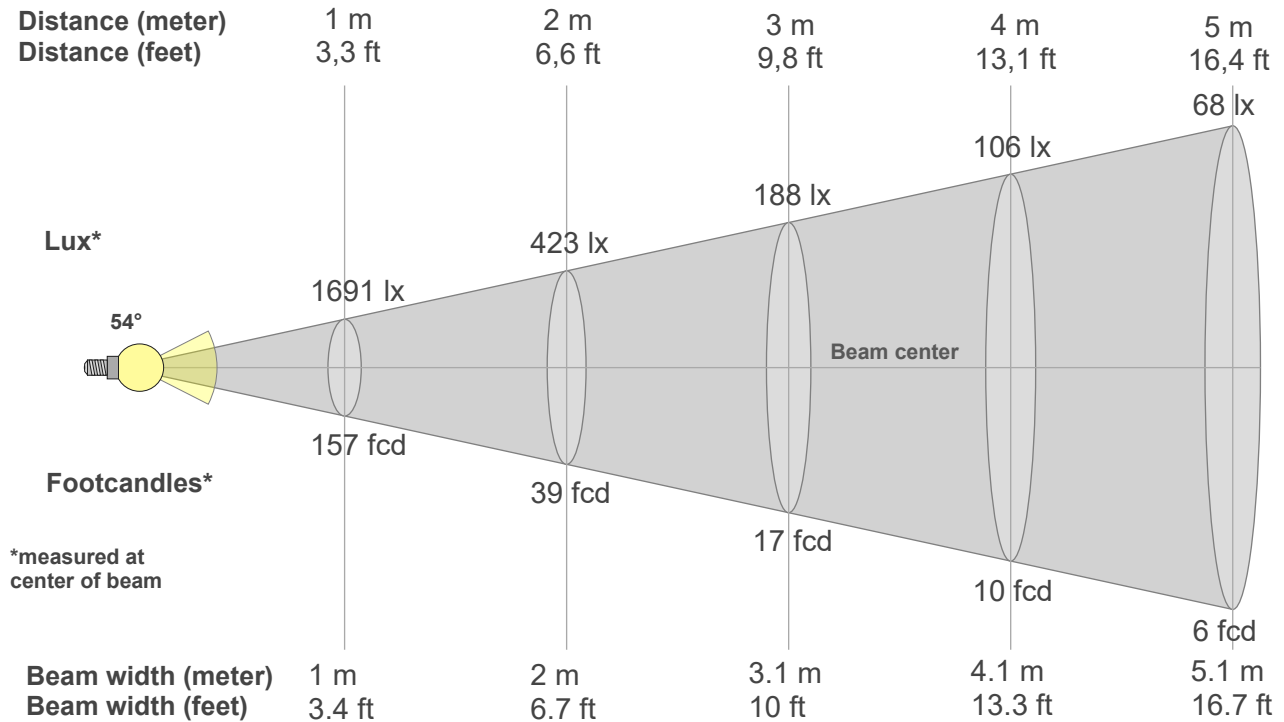
Color vector graphics



Color distortion



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
1691lx	423lx	188lx	106lx	68lx	47lx	35lx	26lx	21lx	17lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx
157.1fcd	39.3fcd	17.5fcd	9.8fcd	6.3fcd	4.4fcd	3.2fcd	2.5fcd	1.9fcd	1.6fcd	1.3fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd

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°
1691	1684	1666	1634	1591	1535	1467	1386	1293	1188	1073	948	817	686	565	460	370	297	237	186
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	41%	33%	27%	22%	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°
1691	1684	1666	1634	1591	1535	1467	1386	1293	1188	1073	948	817	686	565	460	370	297	237	186
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	41%	33%	27%	22%	18%	14%	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°
1691	1684	1666	1634	1591	1535	1467	1386	1293	1188	1073	948	817	686	565	460	370	297	237	186
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	41%	33%	27%	22%	18%	14%	11%

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°
1691	1684	1666	1634	1591	1535	1467	1386	1293	1188	1073	948	817	686	565	460	370	297	237	186
100%	100%	98%	97%	94%	91%	87%	82%	76%	70%	63%	56%	48%	41%	33%	27%	22%	18%	14%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
54°	77.6°	92.1°	99.3%	97.9%

Light Planning – UGR table

Uncorrected, comprehensive UGR table according to 117-1995

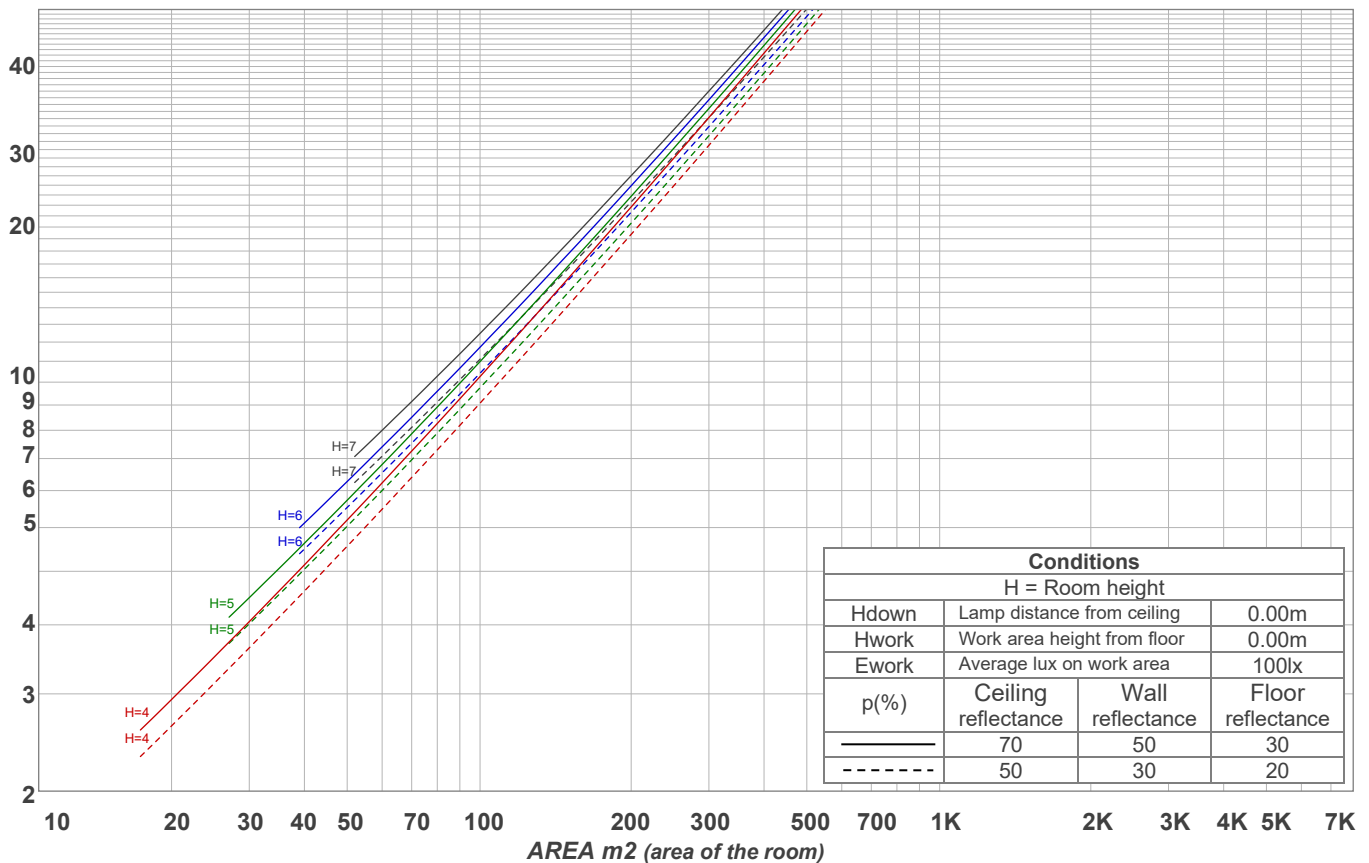
Reflectances		70	70	50	50	30	70	70	50	50	30
ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20
Room size		Viewed Crosswise					Viewed Endwise				
H = mounting height above eye level		(Viewing direction orthogonal to lamp length axis)					(Viewing direction parallel to lamp length axis)				
X	Y										
2H	2H	20.4	20.9	20.5	21.2	21.4	20.4	20.9	20.5	21.2	21.4
	3H	20.1	20.8	20.4	21.0	21.2	20.1	20.8	20.4	21.0	21.2
	4H	20.0	20.7	20.4	20.9	21.2	20.0	20.7	20.4	20.9	21.2
	6H	20.1	20.6	20.3	20.9	21.3	20.1	20.6	20.3	20.9	21.3
	8H	20.0	20.6	20.4	20.9	21.3	20.0	20.6	20.4	20.9	21.3
	12H	20.1	20.6	20.4	21.0	21.4	20.1	20.6	20.4	21.0	21.4
4H	2H	20.0	20.7	20.4	20.9	21.1	20.0	20.7	20.4	20.9	21.1
	3H	19.9	20.4	20.2	20.8	21.2	19.9	20.4	20.2	20.8	21.2
	4H	19.8	20.3	20.2	20.7	21.2	19.8	20.3	20.2	20.7	21.2
	6H	19.8	20.3	20.3	20.6	21.0	19.8	20.3	20.3	20.6	21.0
	8H	19.8	20.3	20.3	20.6	21.0	19.8	20.3	20.3	20.6	21.0
	12H	19.9	20.3	20.4	20.7	21.1	19.9	20.3	20.4	20.7	21.1
8H	4H	19.7	20.2	20.2	20.5	20.9	19.7	20.2	20.2	20.5	20.9
	6H	19.7	20.1	20.2	20.5	21.0	19.7	20.1	20.2	20.5	21.0
	8H	19.9	20.1	20.4	20.6	21.2	19.9	20.1	20.4	20.6	21.2
	12H	20.0	20.2	20.6	20.7	21.3	20.0	20.2	20.6	20.7	21.3
12H	4H	19.6	20.0	20.1	20.4	20.9	19.6	20.0	20.1	20.4	20.9
	6H	19.8	20.0	20.3	20.5	21.1	19.8	20.0	20.3	20.5	21.1
	8H	19.8	20.1	20.4	20.6	21.2	19.8	20.1	20.4	20.6	21.2
Variations with the observer position for the luminaire spacings, S:											
S = 1.0H		4.2 / -4.9					4.2 / -4.9				
S = 1.5H		6.7 / -5.2					6.7 / -5.2				
S = 2.0H		8.7 / -5.4					8.7 / -5.4				

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 Lumen delivered to the task surface																	
0	119	119	119	119	116	116	116	116	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	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74
6	90	82	76	72	89	81	76	72	80	75	72	78	74	71	77	74	71	69
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	73	70	67	66
8	82	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	63	62
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59
10	76	67	61	58	75	66	61	58	65	61	57	65	60	57	64	60	57	56

LAMPS (number of lamps)
50

Light planning Luminaire budgetary diagram



Luminaire budgetary diagram AREA m2 (area of the room) 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	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	92	90	88
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	80	78
5	94	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74
6	90	82	76	72	89	81	76	72	80	75	72	78	74	71	77	74	71	69
7	86	78	72	68	85	77	72	68	76	71	68	75	70	67	73	70	67	66
8	82	74	68	64	81	73	68	64	72	67	64	71	67	64	70	66	63	62
9	79	70	65	61	78	70	64	61	69	64	61	68	63	60	67	63	60	59
10	76	67	61	58	75	66	61	58	65	61	57	65	60	57	64	60	57	56

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
154 lm	371 lm	340 lm	169 lm	46.9 lm	4.35 lm	2.62 lm	2.21 lm	2.64 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm

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