

Light efficiency:

69 Lumen/Watt

Output: 1565 lm

Light quality:

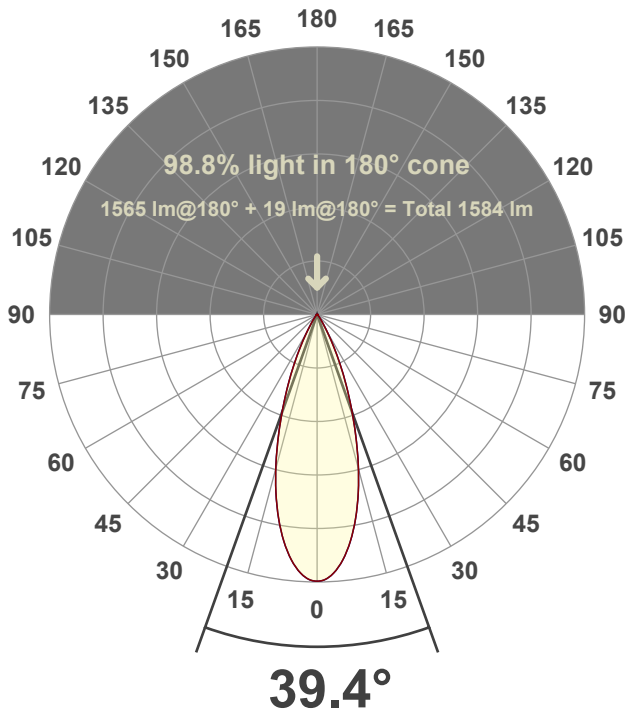
CRI: 92.8

Peak: 4239 cd

Power: 22.7 W



Beam angle



Test number:

CR4D-RA-SH-C20-30K-Flood

Luminaire Model:

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

Date and time:

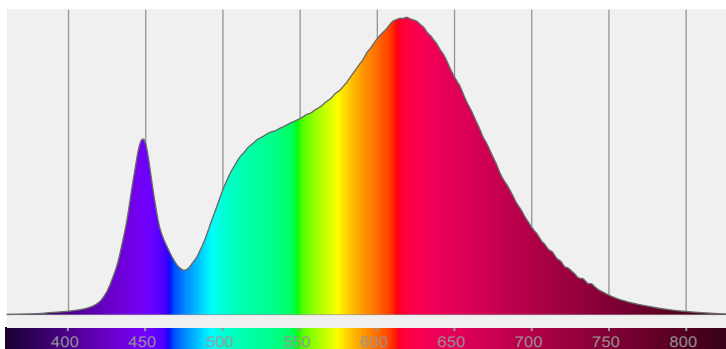
6/2/2025 10:56:11 AM

LUM: 1565

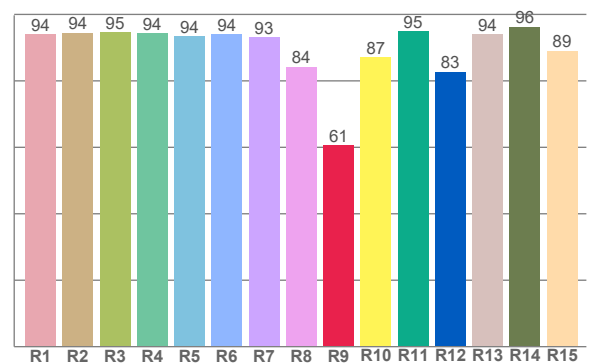
Glare Value: 16.4

3144 K

Spectra



CRI: 92.8 (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
	92.8	60.7	91.2	102.3	90.9	0.428	0.402	0.246	0.346	0.0006

R_f 91.2

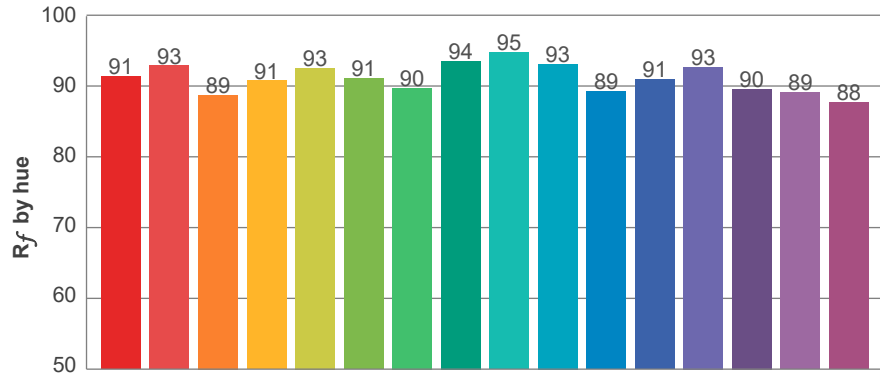
Fidelity index R_f

R_g 102.3

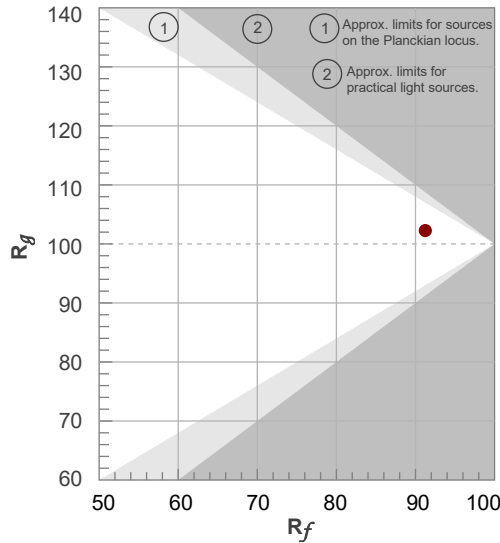
Gammut index R_g

TM30: 91.2

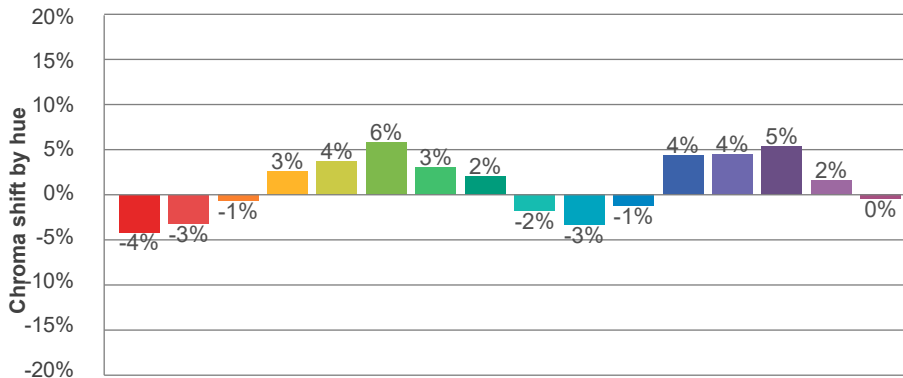
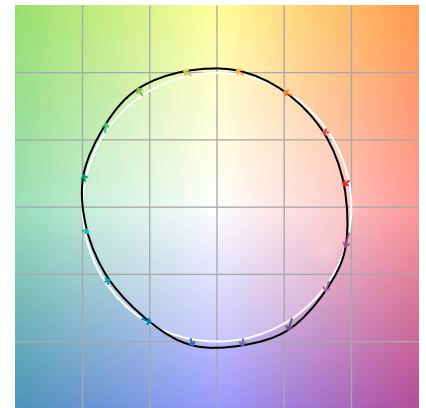
TM-30Color



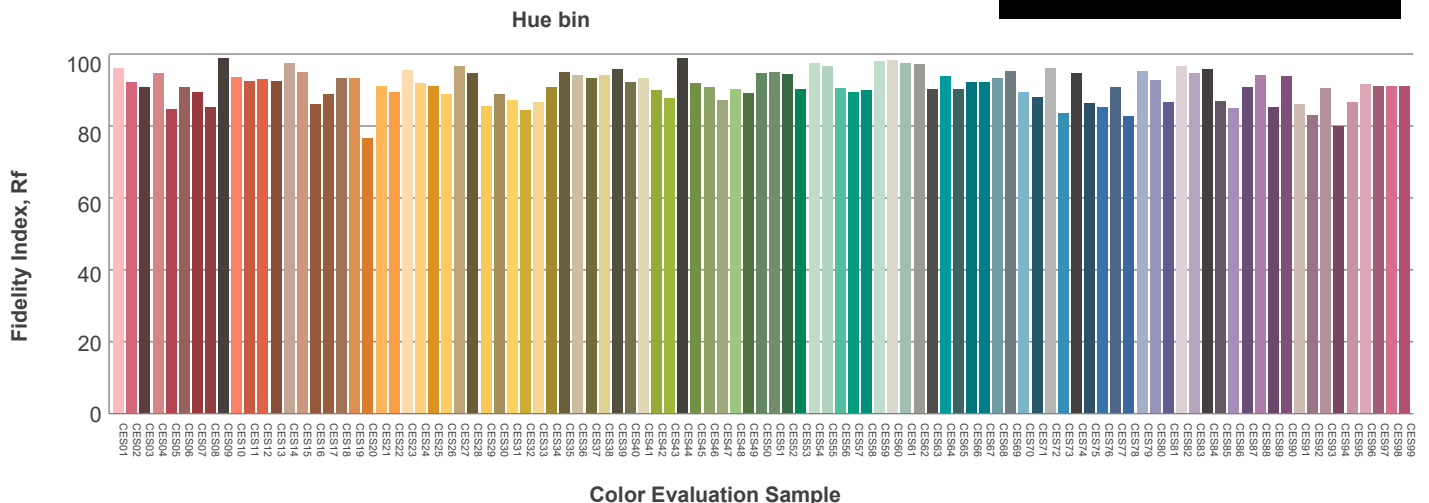
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-4%	-2%
2	93	-3%	3%
3	89	-1%	6%
4	91	3%	5%
5	93	4%	4%
6	91	6%	0%
7	90	3%	-6%
8	94	2%	-4%
9	95	-2%	-3%
10	93	-3%	1%
11	89	-1%	7%
12	91	4%	2%
13	93	4%	-2%
14	90	5%	-6%
15	89	2%	-7%
16	88	0%	-10%



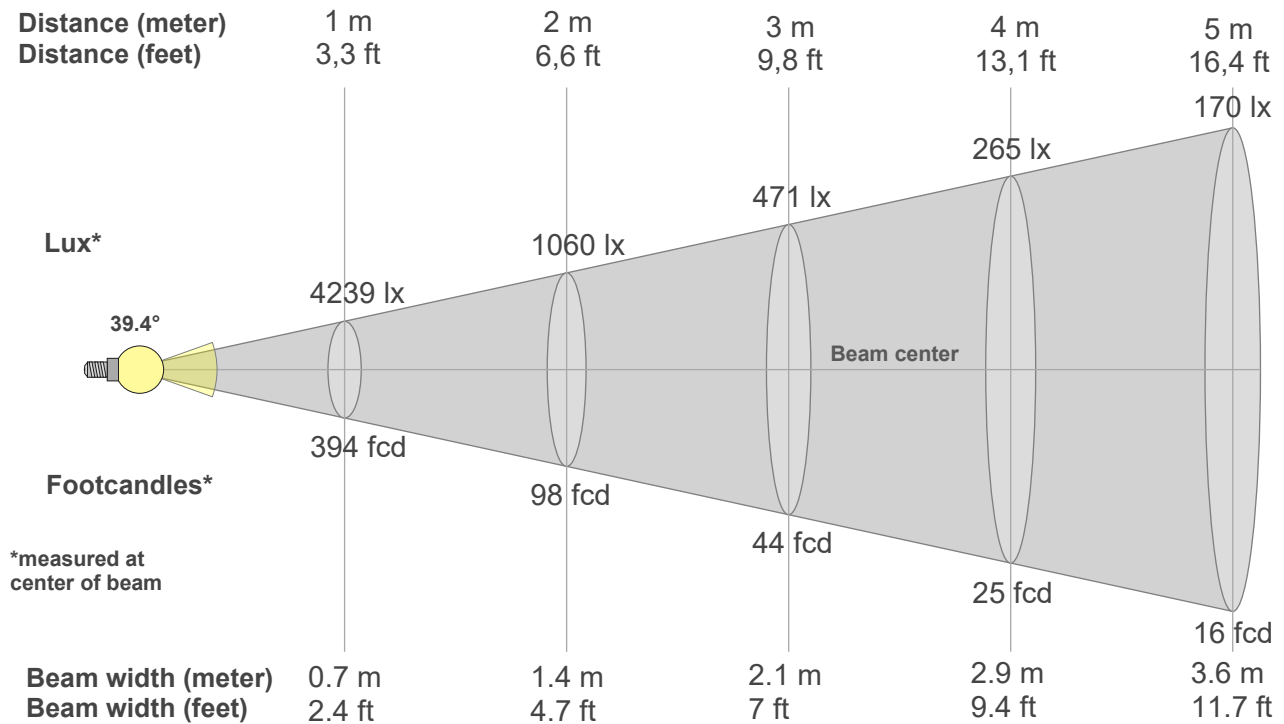
Color vector graphics



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
4239lx	1060lx	471lx	265lx	170lx	118lx	87lx	66lx	52lx	42lx	35lx	29lx	25lx	22lx	19lx	17lx	15lx	13lx	12lx	11lx
393.8fcd	98.5fcd	43.8fcd	24.6fcd	15.8fcd	10.9fcd	8fcd	6.2fcd	4.9fcd	3.9fcd	3.3fcd	2.7fcd	2.3fcd	2fcd	1.8fcd	1.5fcd	1.4fcd	1.2fcd	1.1fcd	1fcd

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°
4239	4207	4102	3933	3695	3411	3086	2731	2354	1970	1605	1280	985	725	508	340	220	146	102	73
100%	99%	97%	93%	87%	80%	73%	64%	56%	46%	38%	30%	23%	17%	12%	8%	5%	3%	2%	2%

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°
4239	4207	4102	3933	3695	3411	3086	2731	2354	1970	1605	1280	985	725	508	340	220	146	102	73
100%	99%	97%	93%	87%	80%	73%	64%	56%	46%	38%	30%	23%	17%	12%	8%	5%	3%	2%	2%

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°
4239	4207	4102	3933	3695	3411	3086	2731	2354	1970	1605	1280	985	725	508	340	220	146	102	73
100%	99%	97%	93%	87%	80%	73%	64%	56%	46%	38%	30%	23%	17%	12%	8%	5%	3%	2%	2%

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°
4239	4207	4102	3933	3695	3411	3086	2731	2354	1970	1605	1280	985	725	508	340	220	146	102	73
100%	99%	97%	93%	87%	80%	73%	64%	56%	46%	38%	30%	23%	17%	12%	8%	5%	3%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39.4°	57.8°	71.7°	99.2%	98.7%

Light Planning – UGR table

Uncorrected, comprehensive UGR table according to 117-1995

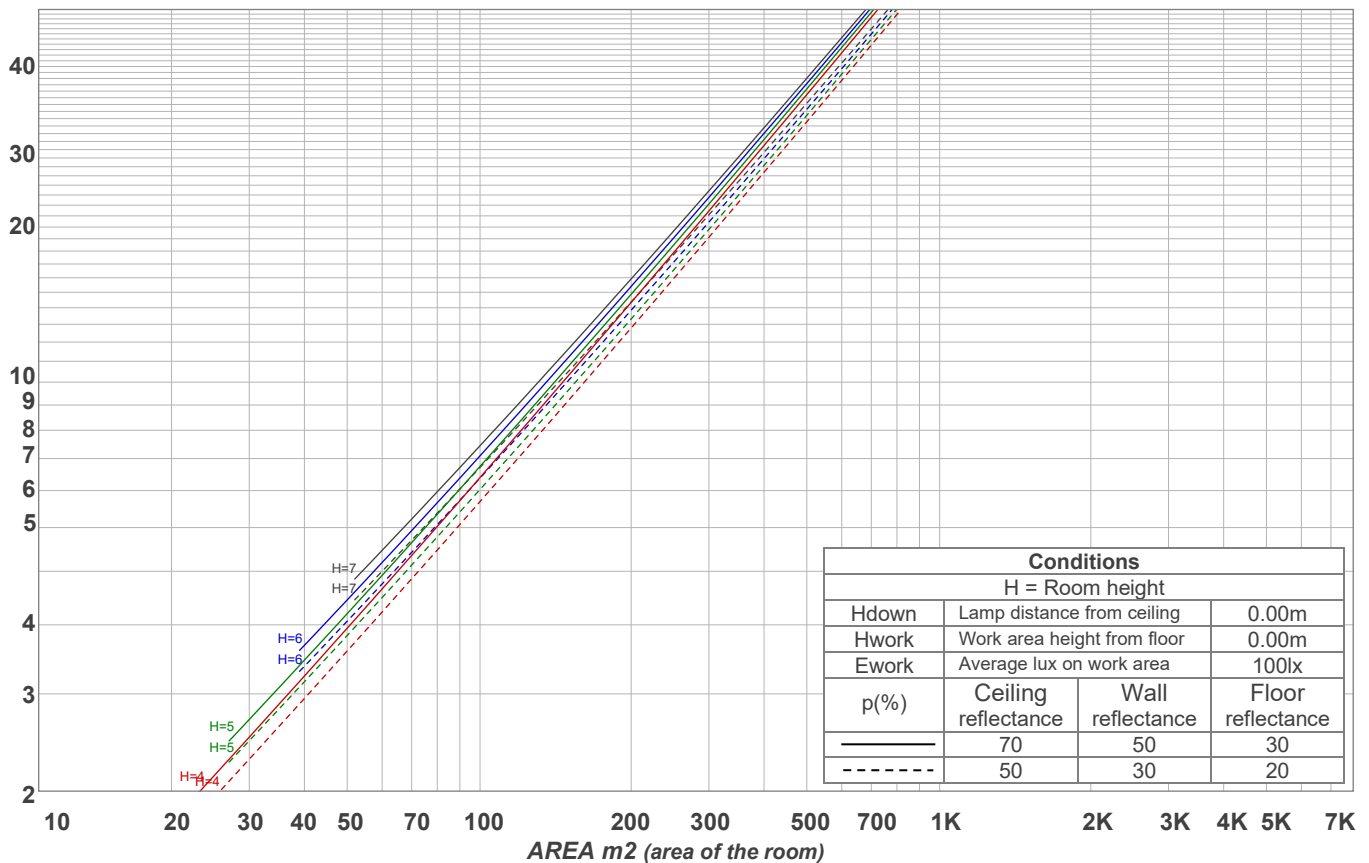
Reflectances		70	70	50	50	30	70	70	50	50	30
ρ Ceiling		70	70	50	50	30	70	70	50	50	30
ρ Walls		50	30	50	30	30	50	30	50	30	30
ρ Floor		20	20	20	20	20	20	20	20	20	20
Room size		Viewed Crosswise					Viewed Endwise				
H = mounting height above eye level		(Viewing direction orthogonal to lamp length axis)					(Viewing direction parallel to lamp length axis)				
X	Y										
2H	2H	14.3	14.7	14.3	14.9	15.1	14.3	14.7	14.3	14.9	15.1
	3H	14.1	14.7	14.5	14.9	15.1	14.1	14.7	14.5	14.9	15.1
	4H	14.2	14.8	14.6	15.1	15.3	14.2	14.8	14.6	15.1	15.3
	6H	14.7	15.2	15.0	15.5	15.8	14.7	15.2	15.0	15.5	15.8
	8H	15.0	15.5	15.3	15.8	16.2	15.0	15.5	15.3	15.8	16.2
	12H	15.6	16.0	15.9	16.4	16.8	15.6	16.0	15.9	16.4	16.8
4H	2H	13.9	14.5	14.3	14.7	15.0	13.9	14.5	14.3	14.7	15.0
	3H	14.1	14.5	14.4	14.9	15.3	14.1	14.5	14.4	14.9	15.3
	4H	14.2	14.7	14.7	15.1	15.6	14.2	14.7	14.7	15.1	15.6
	6H	14.9	15.4	15.4	15.7	16.1	14.9	15.4	15.4	15.7	16.1
	8H	15.5	15.9	16.0	16.3	16.6	15.5	15.9	16.0	16.3	16.6
	12H	16.3	16.6	16.8	17.0	17.5	16.3	16.6	16.8	17.0	17.5
8H	4H	14.3	14.8	14.9	15.1	15.5	14.3	14.8	14.9	15.1	15.5
	6H	15.3	15.6	15.8	16.0	16.6	15.3	15.6	15.8	16.0	16.6
	8H	16.2	16.4	16.7	16.9	17.5	16.2	16.4	16.7	16.9	17.5
	12H	17.3	17.5	17.9	18.0	18.6	17.3	17.5	17.9	18.0	18.6
12H	4H	14.4	14.7	14.9	15.1	15.6	14.4	14.7	14.9	15.1	15.6
	6H	15.5	15.7	16.0	16.3	16.9	15.5	15.7	16.0	16.3	16.9
	8H	16.4	16.6	17.0	17.1	17.7	16.4	16.6	17.0	17.1	17.7
Variations with the observer position for the luminaire spacings, S:											
S = 1.0H		2.3 / -0.9					2.3 / -0.9				
S = 1.5H		4.2 / -1.0					4.2 / -1.0				
S = 2.0H		5.9 / -1.1					5.9 / -1.1				

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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91
3	106	101	97	94	104	99	96	93	97	94	91	95	92	90	92	90	89	87
4	102	96	92	88	101	95	91	88	93	89	87	91	88	86	89	87	85	84
5	98	92	87	84	97	91	87	83	89	86	83	88	85	82	86	84	81	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	83	80	78	77
7	92	84	80	76	91	84	79	76	83	79	76	82	78	75	81	77	75	74
8	89	81	76	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	70	69
10	83	75	71	68	82	75	71	68	74	70	67	74	70	67	73	70	67	66

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	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91
3	106	101	97	94	104	99	96	93	97	94	91	95	92	90	92	90	89	87
4	102	96	92	88	101	95	91	88	93	89	87	91	88	86	89	87	85	84
5	98	92	87	84	97	91	87	83	89	86	83	88	85	82	86	84	81	80
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	83	80	78	77
7	92	84	80	76	91	84	79	76	83	79	76	82	78	75	81	77	75	74
8	89	81	76	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	70	69
10	83	75	71	68	82	75	71	68	74	70	67	74	70	67	73	70	67	66

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
364 lm	688 lm	393 lm	88.3 lm	15.1 lm	3.63 lm	3.48 lm	3.75 lm	4.75 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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