

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P936925

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936925
REPORT IS A COMBINATION OF REPORTS P933464 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

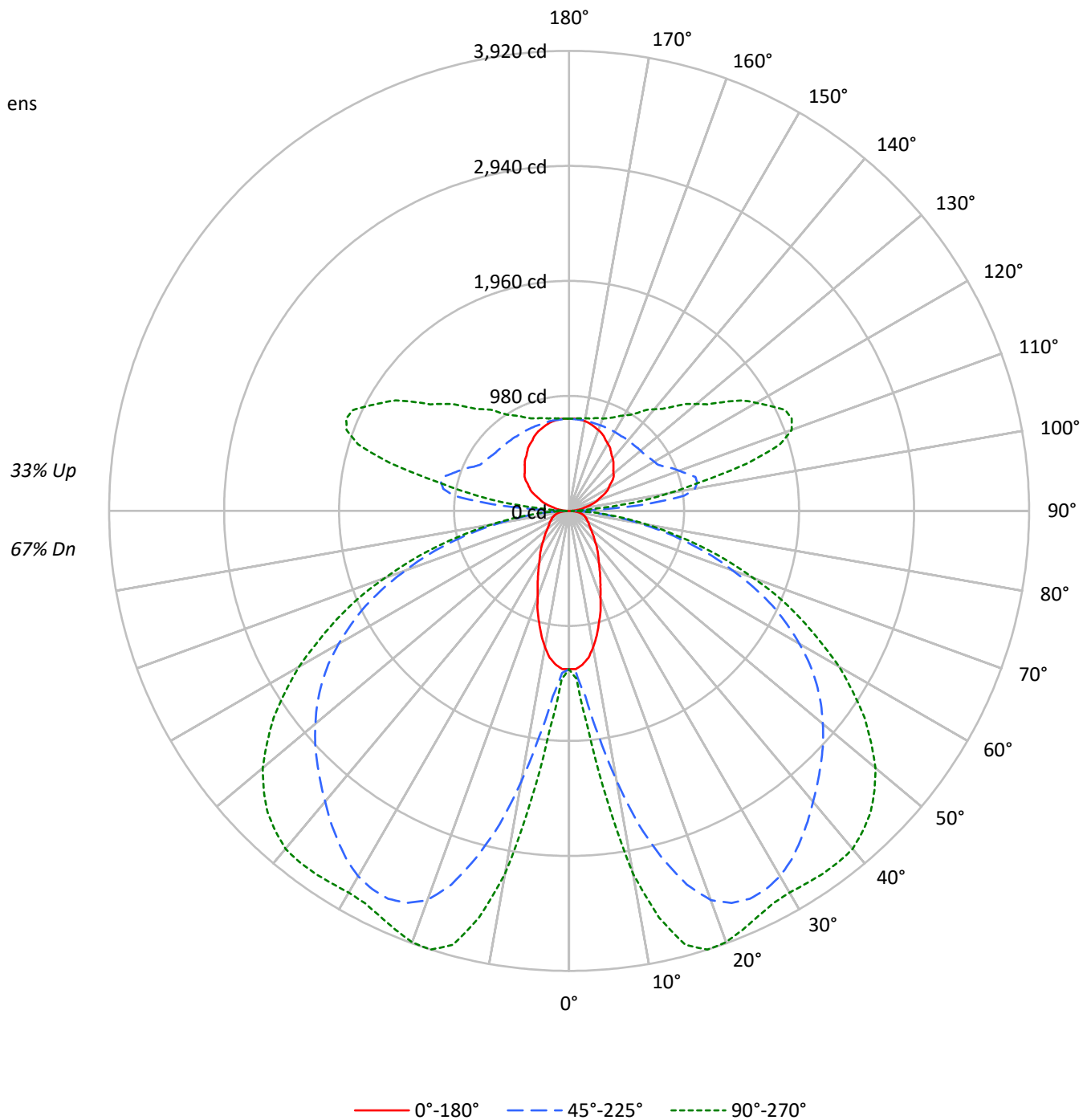
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15536.5 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 168
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P936925
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-12-2700K

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4171	4171	4171
5°	4076	4822	5607
10°	3699	7031	9295
15°	3145	9188	11224
20°	2561	10650	11438
25°	2137	11147	11206
30°	1804	11221	11185
35°	1595	11037	11474
40°	1391	10799	11773
45°	1260	10624	11819
50°	1157	10468	11624
55°	1110	10238	11108
60°	1137	9793	10294
65°	1185	9114	9177
70°	1265	7954	7753
75°	1407	6491	6050
80°	1549	4507	4077
85°	1406	2396	2086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11819 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.4	1.1
10°-20°	773.1	5.0
20°-30°	1352.3	8.7
30°-40°	1740.8	11.2
40°-50°	1944.4	12.5
50°-60°	1862.3	12.0
60°-70°	1475.9	9.5
70°-80°	867.9	5.6
80°-90°	244.1	1.6
90°-100°	383.6	2.5
100°-110°	1008.4	6.5
110°-120°	1045.6	6.7
120°-130°	838.7	5.4
130°-140°	658.1	4.2
140°-150°	505.1	3.3
150°-160°	363.8	2.3
160°-170°	222.6	1.4
170°-180°	75.2	0.5
0°-30°	2299.9	14.8
0°-40°	4040.7	26.0
0°-60°	7847.5	50.5
0°-90°	10435.3	67.2
90°-120°	2437.7	15.7
90°-150°	4439.6	28.6
90°-180°	5101.0	32.8
0°-180°	15536.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1314	1409	1587	1795	1860	121
15°	984	1817	3061	3712	3829	274
25°	629	2060	3647	3807	3812	290
35°	425	1969	3434	3629	3772	265
45°	290	1570	3035	3478	3634	225
55°	208	997	2576	2992	3074	190
65°	165	529	1912	2151	2181	163
75°	121	325	1049	1153	1158	127
85°	43	100	260	286	290	46
90°	5	15	40	20	20	7
95°	51	199	661	341	232	56
105°	182	275	1115	1693	1579	193
115°	323	392	893	1781	2033	319
125°	449	503	812	1373	1619	399
135°	535	589	787	1108	1256	414
145°	620	660	777	945	1019	389
155°	701	721	777	853	878	322
165°	757	767	777	808	818	214
175°	787	787	782	792	792	75
180°	787	787	787	787	787	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1348.6	1348.6	1357.2	1361.6	1370.2	1374.5	1383.3	1391.9	1417.9	1422.3	1430.9
5°	1313.8	1331.2	1387.5	1409.2	1470.0	1552.4	1587.1	1643.4	1760.4	1795.2	1816.8
7.5°	1261.8	1300.8	1439.6	1474.3	1626.1	1842.9	1933.9	2055.4	2241.8	2332.9	2406.6
10°	1179.5	1261.8	1509.0	1591.3	1838.5	2168.0	2337.2	2506.3	2788.1	2913.9	2961.6
12.5°	1088.4	1222.8	1582.7	1695.4	2051.0	2532.3	2736.1	2922.6	3243.5	3412.6	3438.5
15°	984.3	1166.4	1652.1	1816.8	2276.5	2835.9	3061.3	3291.1	3590.3	3711.8	3742.1
17.5°	893.2	1123.1	1717.1	1890.5	2449.9	3109.0	3338.9	3529.6	3772.4	3854.9	3876.5
20°	780.5	1053.7	1760.4	1985.9	2632.1	3308.5	3529.6	3677.0	3841.9	3893.9	3902.5
22.5°	698.1	979.9	1786.5	2020.6	2753.5	3429.9	3616.4	3733.4	3846.1	3863.5	3867.8
25°	628.7	897.6	1782.1	2059.6	2857.5	3503.6	3646.7	3733.4	3798.5	3807.1	3807.1
27.5°	563.7	806.6	1764.8	2068.4	2935.6	3521.0	3633.7	3694.4	3724.8	3742.1	3742.1
30°	507.4	719.8	1721.4	2051.0	2970.2	3503.6	3594.7	3625.0	3655.4	3681.4	3694.4
32.5°	464.0	637.4	1656.4	2016.3	2974.6	3460.2	3525.3	3542.7	3586.0	3646.7	3668.4
35°	424.9	555.0	1582.7	1968.6	2948.6	3390.9	3434.2	3451.6	3538.3	3629.4	3659.7
37.5°	385.9	494.3	1487.3	1886.3	2909.6	3308.5	3338.9	3369.2	3503.6	3612.0	3646.7
40°	346.9	442.3	1374.5	1795.2	2848.9	3208.8	3234.8	3282.5	3460.2	3586.0	3620.6
42.5°	316.5	399.0	1253.2	1699.8	2770.8	3096.0	3135.1	3204.4	3408.2	3542.7	3581.7
45°	290.5	355.6	1123.1	1569.7	2671.0	2978.9	3035.3	3130.7	3347.5	3477.6	3512.3
47.5°	264.5	325.3	988.7	1435.3	2562.6	2861.8	2935.6	3043.9	3265.2	3390.9	3421.2
50°	242.8	294.8	854.2	1292.2	2445.6	2736.1	2822.8	2935.6	3161.0	3278.1	3317.2
52.5°	225.5	268.9	728.5	1149.1	2311.2	2606.0	2705.8	2822.8	3035.3	3148.1	3174.0
55°	208.2	247.2	620.1	997.3	2172.4	2467.2	2575.7	2688.5	2896.5	2991.9	3009.3
57.5°	199.4	229.8	529.0	854.2	2025.0	2311.2	2432.6	2536.7	2731.8	2805.5	2822.8
60°	186.5	216.8	459.6	732.8	1864.6	2163.8	2267.8	2371.9	2536.7	2597.3	2610.4
62.5°	173.5	208.2	407.6	615.7	1699.8	1990.3	2094.3	2189.7	2328.5	2371.9	2389.3
65°	164.8	199.4	368.6	529.0	1530.7	1808.2	1912.2	1994.6	2107.4	2150.7	2159.4
67.5°	156.1	190.8	338.2	455.3	1361.6	1626.1	1704.1	1782.1	1868.9	1912.2	1916.6
70°	143.1	182.1	312.2	403.2	1188.1	1417.9	1482.9	1565.4	1634.7	1656.4	1669.4
72.5°	134.4	169.1	294.8	364.2	1010.3	1218.5	1279.1	1326.9	1387.5	1409.2	1409.2
75°	121.4	151.8	277.5	325.3	828.2	997.3	1049.4	1097.0	1144.7	1153.4	1140.4
77.5°	108.4	134.4	238.5	273.2	646.1	789.2	832.5	858.6	897.6	906.2	910.6
80°	91.1	117.1	186.5	212.5	468.3	581.1	611.4	633.1	667.8	667.8	676.5
82.5°	69.4	91.1	134.4	151.8	316.5	399.0	424.9	437.9	459.6	459.6	459.6
85°	43.4	56.4	86.7	99.8	190.8	242.8	260.2	264.5	281.9	286.2	286.2
87.5°	21.7	30.3	56.4	60.7	99.8	125.7	125.7	134.4	134.4	130.1	125.7
90°	5.3	9.5	13.8	14.8	23.2	34.5	40.1	35.7	26.7	20.1	20.1
92.5°	21.1	57.0	92.9	101.9	143.2	198.4	226.0	198.1	142.2	100.4	96.3
95°	50.7	116.4	182.2	198.6	352.6	558.0	660.7	589.5	447.3	340.6	328.5
97.5°	87.6	145.6	203.6	218.1	475.0	817.4	988.7	943.7	853.8	786.4	763.4
100°	116.2	168.8	221.3	234.5	519.5	899.5	1089.5	1092.8	1099.3	1104.3	1076.9
102.5°	140.5	189.5	238.6	250.9	539.9	925.4	1118.1	1175.3	1289.8	1375.7	1352.3
105°	181.7	223.2	264.7	275.1	555.0	928.3	1114.9	1243.3	1500.0	1692.6	1680.0
107.5°	224.0	262.6	301.4	311.1	557.9	887.0	1051.5	1230.6	1588.8	1857.5	1860.5
110°	252.5	287.4	322.4	331.1	553.6	850.4	998.7	1198.9	1599.4	1899.7	1912.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	280.4	313.7	347.0	355.4	553.8	818.3	950.6	1155.5	1565.4	1872.8	1892.9
115°	322.7	353.4	384.2	391.9	558.9	781.7	893.1	1090.5	1485.2	1781.4	1809.4
117.5°	364.4	392.3	420.2	427.2	569.3	758.7	853.4	1031.6	1387.9	1655.1	1686.1
120°	388.7	415.0	441.2	447.8	577.7	751.0	837.6	1000.4	1325.9	1570.1	1600.3
122.5°	412.5	439.0	465.5	472.2	589.9	746.9	825.4	972.0	1265.2	1485.1	1514.8
125°	448.9	473.1	497.3	503.3	606.3	743.6	812.3	936.8	1185.8	1372.6	1400.0
127.5°	478.5	502.9	527.3	533.4	622.7	741.6	801.2	908.1	1121.9	1282.3	1305.4
130°	494.4	520.7	546.9	553.5	634.6	742.8	797.0	892.1	1082.5	1225.2	1246.6
132.5°	510.7	537.0	563.3	569.9	644.4	743.6	793.2	878.5	1048.9	1176.6	1195.8
135°	535.0	558.9	582.9	588.8	654.9	742.9	786.9	858.3	1001.0	1108.1	1124.5
137.5°	559.8	583.5	607.3	613.2	670.7	747.5	785.9	846.2	966.9	1057.3	1070.8
140°	580.4	602.2	624.0	629.5	680.4	748.2	782.1	834.2	938.5	1016.7	1029.3
142.5°	596.3	616.4	636.7	641.7	688.5	750.9	782.1	827.9	919.5	988.1	999.0
145°	620.5	638.1	655.7	660.2	699.1	750.9	776.9	814.3	889.2	945.3	953.5
147.5°	644.9	661.9	679.1	683.4	714.6	756.2	776.9	806.4	865.3	909.5	916.3
150°	660.7	676.1	691.7	695.5	722.7	758.8	776.9	801.8	851.5	888.8	894.4
152.5°	677.1	688.8	700.6	703.5	728.0	760.6	776.9	798.2	840.6	872.5	876.7
155°	701.3	710.0	718.7	720.9	739.6	764.4	776.9	793.8	827.6	852.9	855.7
157.5°	719.3	727.8	736.2	738.3	751.2	768.4	776.9	790.1	816.3	836.0	838.0
160°	731.5	738.1	744.6	746.3	756.5	770.1	776.9	788.2	810.7	827.6	828.7
162.5°	743.6	748.6	753.5	754.7	762.1	772.0	776.9	786.4	805.4	819.6	820.6
165°	756.8	761.3	765.7	766.8	770.2	774.7	776.9	783.7	797.3	807.5	808.6
167.5°	769.0	771.0	773.2	773.7	776.5	780.2	782.1	786.6	795.5	802.2	802.7
170°	776.9	779.0	781.1	781.6	781.8	782.0	782.1	786.6	795.5	802.2	802.2
172.5°	781.1	781.5	782.0	782.1	782.1	782.1	782.1	785.6	792.7	798.0	797.6
175°	786.9	786.9	786.9	786.9	785.3	783.1	782.1	784.3	788.9	792.2	792.2
177.5°	786.9	786.9	786.9	786.9	785.7	784.1	783.2	785.0	788.5	791.2	790.7
180°	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9	786.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1348.6	1348.6
2.5°	1439.6	1430.9
5°	1851.6	1860.2
7.5°	2493.3	2488.9
10°	3100.3	3139.3
12.5°	3542.7	3551.3
15°	3811.5	3828.8
17.5°	3915.6	3919.8
20°	3919.8	3911.2
22.5°	3872.2	3863.5
25°	3815.8	3811.5
27.5°	3763.8	3768.2
30°	3742.1	3755.1
32.5°	3742.1	3763.8
35°	3750.7	3772.4
37.5°	3746.5	3772.4
40°	3729.1	3759.4
42.5°	3681.4	3703.1
45°	3607.7	3633.7
47.5°	3512.3	3529.6
50°	3390.9	3408.2
52.5°	3239.1	3243.5
55°	3057.0	3074.3
57.5°	2861.8	2866.2
60°	2645.1	2658.0
62.5°	2415.2	2415.2
65°	2172.4	2181.1
67.5°	1920.9	1942.6
70°	1665.1	1669.4
72.5°	1413.6	1413.6
75°	1153.4	1157.8
77.5°	906.2	906.2
80°	672.1	676.5
82.5°	464.0	472.7
85°	290.5	290.5
87.5°	134.4	121.4
90°	20.1	20.1
92.5°	80.4	64.4
95°	280.2	231.8
97.5°	671.3	579.4
100°	967.3	857.7
102.5°	1258.4	1164.5
105°	1629.6	1579.1
107.5°	1872.7	1884.9
110°	1965.3	2018.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1973.7	2054.4
115°	1921.4	2033.3
117.5°	1810.3	1934.5
120°	1721.0	1841.6
122.5°	1633.9	1752.8
125°	1509.6	1619.3
127.5°	1397.9	1490.4
130°	1332.1	1417.5
132.5°	1272.3	1348.8
135°	1190.5	1256.4
137.5°	1124.8	1178.8
140°	1079.7	1130.2
142.5°	1042.5	1085.9
145°	986.4	1019.3
147.5°	943.5	970.7
150°	916.4	938.5
152.5°	893.3	910.0
155°	866.8	877.8
157.5°	845.7	853.4
160°	833.2	837.6
162.5°	824.9	829.2
165°	813.1	817.6
167.5°	804.6	806.5
170°	802.2	802.2
172.5°	796.0	794.3
175°	792.2	792.2
177.5°	788.8	786.9
180°	786.9	786.9



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	7.40	8.50	8.18	9.31	10.31	20.59	21.69	21.38	22.50	23.50
	3H	8.12	9.11	8.92	9.93	10.96	22.45	23.44	23.25	24.27	25.29
	4H	8.43	9.37	9.25	10.20	11.24	23.11	24.05	23.93	24.88	25.92
	6H	8.69	9.56	9.52	10.40	11.45	23.56	24.42	24.39	25.26	26.32
	8H	8.77	9.59	9.61	10.45	11.51	23.69	24.52	24.53	25.37	26.43
	12H	8.79	9.58	9.64	10.43	11.52	23.77	24.56	24.61	25.41	26.49
4H	2H	14.65	15.59	15.47	16.42	17.46	20.89	21.83	21.71	22.66	23.70
	3H	16.24	17.02	17.07	17.89	18.94	22.96	23.75	23.80	24.61	25.67
	4H	16.34	17.06	17.19	17.92	19.01	23.75	24.46	24.59	25.32	26.41
	6H	16.37	16.99	17.23	17.88	18.96	24.30	24.93	25.17	25.81	26.90
	8H	16.35	16.93	17.22	17.82	18.92	24.47	25.06	25.34	25.94	27.04
	12H	16.32	16.84	17.21	17.75	18.85	24.58	25.11	25.47	26.01	27.12
8H	4H	17.81	18.39	18.68	19.28	20.38	23.83	24.41	24.69	25.29	26.39
	6H	18.07	18.55	18.96	19.47	20.57	24.47	24.95	25.36	25.88	26.98
	8H	18.09	18.52	18.99	19.43	20.55	24.70	25.13	25.60	26.04	27.16
	12H	18.07	18.44	18.97	19.35	20.52	24.86	25.23	25.76	26.14	27.31
12H	4H	17.97	18.49	18.86	19.40	20.50	23.79	24.32	24.68	25.22	26.32
	6H	18.33	18.76	19.23	19.68	20.79	24.46	24.89	25.36	25.80	26.92
	8H	18.41	18.79	19.32	19.70	20.87	24.70	25.08	25.61	25.99	27.16