

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: P937320

Luminaire Tested: SQ4-FB-075U-125D-840-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937320  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

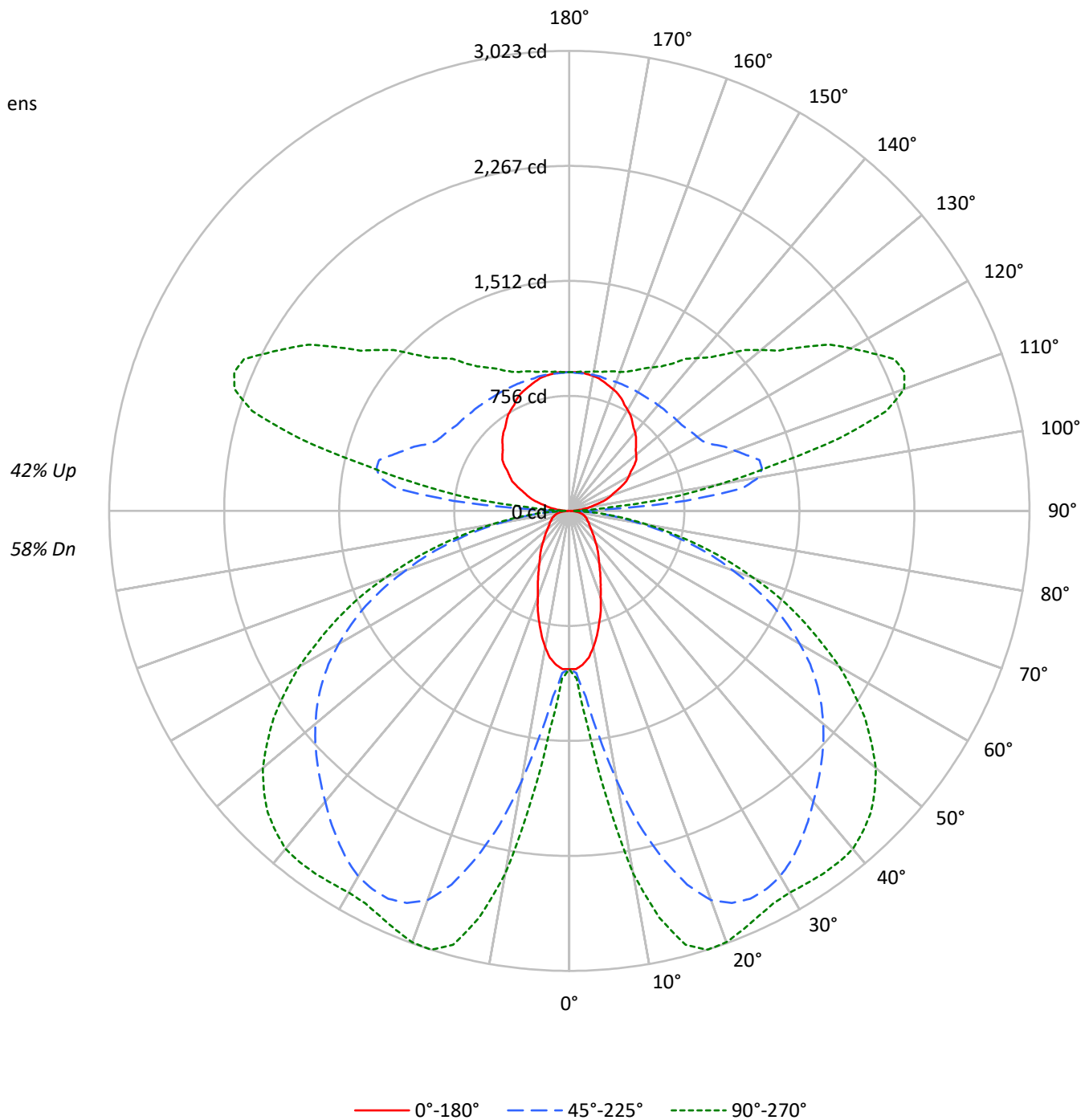
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13965.4 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 124  
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

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### 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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4825	4825	4825
5°	4714	5577	6486
10°	4276	8129	10752
15°	3634	10621	12983
20°	2958	12308	13232
25°	2468	12879	12963
30°	2081	12961	12939
35°	1840	12745	13273
40°	1604	12466	13619
45°	1452	12261	13672
50°	1331	12077	13446
55°	1276	11807	12850
60°	1306	11288	11909
65°	1359	10500	10616
70°	1448	9157	8969
75°	1605	7467	6999
80°	1751	5178	4716
85°	1556	2748	2414

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13672 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.5	1.0
10°-20°	596.2	4.3
20°-30°	1042.9	7.5
30°-40°	1342.5	9.6
40°-50°	1499.5	10.7
50°-60°	1436.2	10.3
60°-70°	1138.2	8.2
70°-80°	669.3	4.8
80°-90°	189.4	1.4
90°-100°	444.9	3.2
100°-110°	1169.6	8.4
110°-120°	1212.8	8.7
120°-130°	972.8	7.0
130°-140°	763.3	5.5
140°-150°	585.9	4.2
150°-160°	421.9	3.0
160°-170°	258.2	1.8
170°-180°	87.2	0.6
0°-30°	1773.6	12.7
0°-40°	3116.1	22.3
0°-60°	6051.9	43.3
0°-90°	8048.8	57.6
90°-120°	2827.3	20.2
90°-150°	5149.3	36.9
90°-180°	5917.0	42.4
0°-180°	13965.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1013	1087	1224	1384	1435	94
15°	759	1401	2361	2862	2953	211
25°	485	1588	2812	2936	2939	223
35°	328	1518	2648	2799	2909	205
45°	224	1210	2341	2682	2802	173
55°	161	769	1986	2307	2371	146
65°	127	408	1475	1659	1682	126
75°	94	251	809	890	893	98
85°	33	77	201	221	224	35
90°	6	17	46	23	23	7
95°	59	230	766	395	269	65
105°	211	319	1293	1963	1832	223
115°	374	454	1036	2066	2358	370
125°	521	584	942	1592	1878	462
135°	620	683	913	1285	1457	480
145°	720	766	901	1096	1182	451
155°	813	836	901	989	1018	374
165°	878	889	901	937	948	248
175°	913	913	907	919	919	87
180°	913	913	913	913	913	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0	1040.0
2.5°	1040.0	1040.0	1046.7	1050.0	1056.7	1060.0	1066.7	1073.5	1093.5	1096.9	1103.5
5°	1013.2	1026.6	1070.1	1086.8	1133.6	1197.2	1223.9	1267.4	1357.6	1384.4	1401.1
7.5°	973.1	1003.2	1110.2	1137.0	1254.0	1421.2	1491.4	1585.0	1728.8	1799.0	1856.0
10°	909.6	973.1	1163.7	1227.2	1417.9	1672.0	1802.4	1932.8	2150.2	2247.2	2284.0
12.5°	839.3	943.0	1220.6	1307.5	1581.7	1952.9	2110.1	2253.8	2501.3	2631.7	2651.8
15°	759.1	899.6	1274.0	1401.1	1755.6	2186.9	2360.8	2538.1	2768.9	2862.4	2885.8
17.5°	688.8	866.1	1324.2	1458.0	1889.4	2397.7	2574.8	2722.0	2909.3	2972.8	2989.5
20°	601.9	812.6	1357.6	1531.5	2029.8	2551.5	2722.0	2835.7	2962.8	3002.9	3009.5
22.5°	538.4	755.7	1377.8	1558.3	2123.4	2645.1	2788.9	2879.1	2966.1	2979.5	2982.9
25°	484.9	692.2	1374.4	1588.4	2203.7	2702.0	2812.3	2879.1	2929.3	2936.0	2936.0
27.5°	434.7	621.9	1361.0	1595.1	2263.9	2715.3	2802.3	2849.1	2872.5	2885.8	2885.8
30°	391.2	555.1	1327.6	1581.7	2290.7	2702.0	2772.1	2795.5	2819.0	2839.0	2849.1
32.5°	357.9	491.5	1277.4	1554.9	2293.9	2668.5	2718.7	2732.0	2765.5	2812.3	2829.0
35°	327.7	428.0	1220.6	1518.2	2273.9	2615.0	2648.4	2661.8	2728.7	2798.9	2822.3
37.5°	297.6	381.2	1147.0	1454.6	2243.8	2551.5	2574.8	2598.2	2702.0	2785.6	2812.3
40°	267.6	341.1	1060.0	1384.4	2197.0	2474.5	2494.6	2531.4	2668.5	2765.5	2792.2
42.5°	244.1	307.7	966.5	1310.9	2136.8	2387.6	2417.7	2471.2	2628.4	2732.0	2762.2
45°	224.1	274.2	866.1	1210.5	2059.9	2297.3	2340.8	2414.4	2581.5	2681.9	2708.6
47.5°	204.0	250.8	762.4	1106.9	1976.3	2207.0	2263.9	2347.5	2518.0	2615.0	2638.5
50°	187.2	227.4	658.8	996.5	1886.0	2110.1	2177.0	2263.9	2437.8	2528.1	2558.1
52.5°	173.9	207.3	561.8	886.1	1782.4	2009.7	2086.7	2177.0	2340.8	2427.7	2447.8
55°	160.6	190.6	478.2	769.2	1675.4	1902.7	1986.4	2073.3	2233.8	2307.4	2320.7
57.5°	153.8	177.2	407.9	658.8	1561.6	1782.4	1876.0	1956.2	2106.7	2163.5	2177.0
60°	143.8	167.2	354.5	565.1	1437.9	1668.6	1748.9	1829.2	1956.2	2003.1	2013.0
62.5°	133.8	160.6	314.4	474.8	1310.9	1534.9	1615.2	1688.7	1795.7	1829.2	1842.5
65°	127.1	153.8	284.2	407.9	1180.5	1394.5	1474.7	1538.2	1625.2	1658.7	1665.3
67.5°	120.3	147.1	260.8	351.1	1050.0	1254.0	1314.1	1374.4	1441.3	1474.7	1478.0
70°	110.4	140.5	240.8	311.0	916.3	1093.5	1143.6	1207.1	1260.7	1277.4	1287.5
72.5°	103.6	130.4	227.4	280.9	779.1	939.7	986.5	1023.3	1070.1	1086.8	1086.8
75°	93.7	117.1	214.0	250.8	638.7	769.2	809.3	846.0	882.8	889.5	879.5
77.5°	83.6	103.6	184.0	210.6	498.2	608.6	642.0	662.2	692.2	698.9	702.3
80°	70.2	90.3	143.8	163.8	361.1	448.1	471.5	488.3	514.9	514.9	521.7
82.5°	53.5	70.2	103.6	117.1	244.1	307.7	327.7	337.7	354.5	354.5	354.5
85°	33.4	43.5	66.9	76.9	147.1	187.2	200.7	204.0	217.4	220.7	220.7
87.5°	16.7	23.4	43.5	46.8	76.9	97.0	97.0	103.6	103.6	100.3	97.0
90°	6.1	11.1	16.0	17.2	27.0	40.0	46.5	41.4	31.0	23.3	23.3
92.5°	24.5	66.2	107.9	118.3	166.3	230.2	262.2	229.8	165.0	116.4	111.7
95°	58.8	135.1	211.2	230.3	408.9	647.1	766.3	683.8	518.8	395.1	381.1
97.5°	101.7	168.9	236.2	253.0	550.9	948.1	1146.7	1094.5	990.3	912.1	885.4
100°	134.8	195.7	256.8	272.0	602.6	1043.3	1263.7	1267.5	1275.1	1280.8	1249.0
102.5°	162.9	219.8	276.7	291.0	626.2	1073.3	1296.8	1363.1	1496.0	1595.7	1568.4
105°	210.7	259.0	307.1	319.1	643.8	1076.6	1293.1	1442.0	1739.8	1963.2	1948.5
107.5°	259.7	304.7	349.6	360.8	647.0	1028.7	1219.6	1427.3	1842.7	2154.3	2157.9
110°	292.8	333.4	373.9	384.0	642.1	986.2	1158.3	1390.5	1855.0	2203.3	2218.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	325.2	363.9	402.5	412.2	642.3	949.2	1102.6	1340.3	1815.6	2172.1	2195.5
115°	374.3	409.9	445.6	454.5	648.2	906.6	1035.8	1264.7	1722.7	2066.1	2098.6
117.5°	422.7	455.1	487.5	495.6	660.4	880.0	989.9	1196.5	1609.7	1919.7	1955.6
120°	450.8	481.3	511.8	519.4	670.1	871.0	971.5	1160.3	1537.9	1821.1	1856.1
122.5°	478.4	509.2	539.9	547.6	684.2	866.3	957.4	1127.4	1467.5	1722.5	1757.0
125°	520.7	548.7	576.7	583.7	703.2	862.4	942.1	1086.5	1375.3	1592.0	1623.8
127.5°	555.0	583.3	611.6	618.7	722.2	860.3	929.2	1053.2	1301.2	1487.2	1514.0
130°	573.3	603.8	634.3	641.9	736.1	861.6	924.4	1034.7	1255.6	1421.1	1445.9
132.5°	592.3	622.8	653.4	661.0	747.3	862.4	920.0	1018.8	1216.5	1364.7	1387.0
135°	620.5	648.2	676.1	683.0	759.6	861.6	912.7	995.5	1161.0	1285.1	1304.3
137.5°	649.3	676.8	704.2	711.2	778.0	867.0	911.4	981.4	1121.4	1226.3	1241.9
140°	673.2	698.5	723.8	730.1	789.1	867.9	907.2	967.6	1088.5	1179.2	1193.8
142.5°	691.6	715.0	738.4	744.3	798.6	871.0	907.2	960.2	1066.4	1146.1	1158.6
145°	719.8	740.2	760.6	765.7	810.9	871.0	901.1	944.5	1031.4	1096.5	1106.0
147.5°	747.9	767.8	787.7	792.7	828.8	876.9	901.1	935.2	1003.5	1054.8	1062.7
150°	766.3	784.3	802.3	806.7	838.1	880.1	901.1	929.9	987.6	1030.9	1037.3
152.5°	785.3	798.9	812.5	815.9	844.2	882.1	901.1	925.7	975.0	1011.9	1016.8
155°	813.4	823.5	833.6	836.1	857.8	886.6	901.1	920.6	959.8	989.3	992.4
157.5°	834.3	844.0	853.8	856.3	871.2	891.1	901.1	916.3	946.8	969.6	971.9
160°	848.4	856.0	863.6	865.5	877.3	893.2	901.1	914.1	940.3	959.8	961.1
162.5°	862.4	868.2	873.9	875.4	884.0	895.3	901.1	912.1	934.2	950.7	951.8
165°	877.7	882.9	888.1	889.4	893.3	898.5	901.1	909.0	924.8	936.6	937.9
167.5°	891.9	894.3	896.8	897.4	900.7	905.0	907.2	912.3	922.7	930.5	931.0
170°	901.1	903.5	906.0	906.6	906.8	907.1	907.2	912.3	922.7	930.5	930.5
172.5°	906.0	906.5	907.1	907.2	907.2	907.2	907.2	911.2	919.4	925.6	925.1
175°	912.7	912.7	912.7	912.7	910.8	908.4	907.2	909.8	915.0	918.8	918.8
177.5°	912.7	912.7	912.7	912.7	911.2	909.4	908.4	910.4	914.5	917.6	917.1
180°	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7	912.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1040.0	1040.0
2.5°	1110.2	1103.5
5°	1427.9	1434.6
7.5°	1922.7	1919.5
10°	2391.0	2421.1
12.5°	2732.0	2738.7
15°	2939.4	2952.7
17.5°	3019.6	3023.0
20°	3023.0	3016.3
22.5°	2986.2	2979.5
25°	2942.8	2939.4
27.5°	2902.5	2905.9
30°	2885.8	2895.9
32.5°	2885.8	2902.5
35°	2892.6	2909.3
37.5°	2889.2	2909.3
40°	2875.9	2899.3
42.5°	2839.0	2855.8
45°	2782.2	2802.3
47.5°	2708.6	2722.0
50°	2615.0	2628.4
52.5°	2498.0	2501.3
55°	2357.5	2370.9
57.5°	2207.0	2210.4
60°	2039.8	2049.9
62.5°	1862.6	1862.6
65°	1675.4	1682.1
67.5°	1481.4	1498.1
70°	1284.1	1287.5
72.5°	1090.2	1090.2
75°	889.5	892.9
77.5°	698.9	698.9
80°	518.3	521.7
82.5°	357.9	364.5
85°	224.1	224.1
87.5°	103.6	93.7
90°	23.3	23.3
92.5°	93.3	74.7
95°	325.1	268.9
97.5°	778.6	671.9
100°	1122.0	994.8
102.5°	1459.6	1350.7
105°	1889.9	1831.5
107.5°	2172.0	2186.1
110°	2279.6	2340.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2289.1	2382.8
115°	2228.4	2358.3
117.5°	2099.7	2243.7
120°	1996.1	2136.0
122.5°	1895.0	2033.0
125°	1750.9	1878.1
127.5°	1621.3	1728.6
130°	1544.9	1644.0
132.5°	1475.7	1564.4
135°	1380.7	1457.2
137.5°	1304.6	1367.2
140°	1252.4	1310.9
142.5°	1209.0	1259.4
145°	1144.1	1182.2
147.5°	1094.2	1125.8
150°	1062.9	1088.5
152.5°	1036.0	1055.4
155°	1005.3	1018.0
157.5°	980.9	989.9
160°	966.4	971.5
162.5°	956.8	961.7
165°	943.0	948.2
167.5°	933.2	935.3
170°	930.5	930.5
172.5°	923.2	921.3
175°	918.8	918.8
177.5°	914.9	912.7
180°	912.7	912.7



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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	7.14	8.12	8.02	9.03	10.18	20.32	21.30	21.20	22.21	23.36
	3H	7.85	8.74	8.75	9.65	10.83	22.17	23.05	23.06	23.97	25.15
	4H	8.16	8.99	9.07	9.92	11.10	22.82	23.65	23.73	24.58	25.76
	6H	8.41	9.19	9.33	10.11	11.32	23.25	24.03	24.17	24.95	26.16
	8H	8.49	9.22	9.41	10.17	11.37	23.38	24.11	24.31	25.06	26.26
	12H	8.51	9.21	9.44	10.15	11.38	23.45	24.15	24.38	25.09	26.32
4H	2H	14.37	15.21	15.28	16.13	17.32	20.61	21.44	21.52	22.37	23.55
	3H	15.95	16.65	16.87	17.60	18.81	22.66	23.36	23.59	24.32	25.52
	4H	16.05	16.69	16.98	17.64	18.86	23.44	24.08	24.37	25.02	26.25
	6H	16.07	16.62	17.01	17.59	18.82	23.98	24.54	24.93	25.51	26.74
	8H	16.05	16.56	17.00	17.53	18.77	24.15	24.67	25.10	25.63	26.88
	12H	16.01	16.48	16.98	17.46	18.71	24.25	24.72	25.22	25.70	26.95
8H	4H	17.50	18.02	18.45	18.99	20.23	23.51	24.02	24.46	24.99	26.23
	6H	17.75	18.18	18.73	19.19	20.43	24.14	24.57	25.12	25.58	26.82
	8H	17.77	18.15	18.76	19.15	20.41	24.36	24.74	25.35	25.74	27.00
	12H	17.75	18.08	18.74	19.07	20.38	24.51	24.85	25.50	25.84	27.14
12H	4H	17.65	18.12	18.62	19.10	20.35	23.47	23.93	24.44	24.92	26.17
	6H	18.01	18.39	19.00	19.39	20.65	24.13	24.51	25.11	25.50	26.76
	8H	18.09	18.42	19.08	19.41	20.72	24.36	24.70	25.35	25.69	26.99