

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: P937867

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

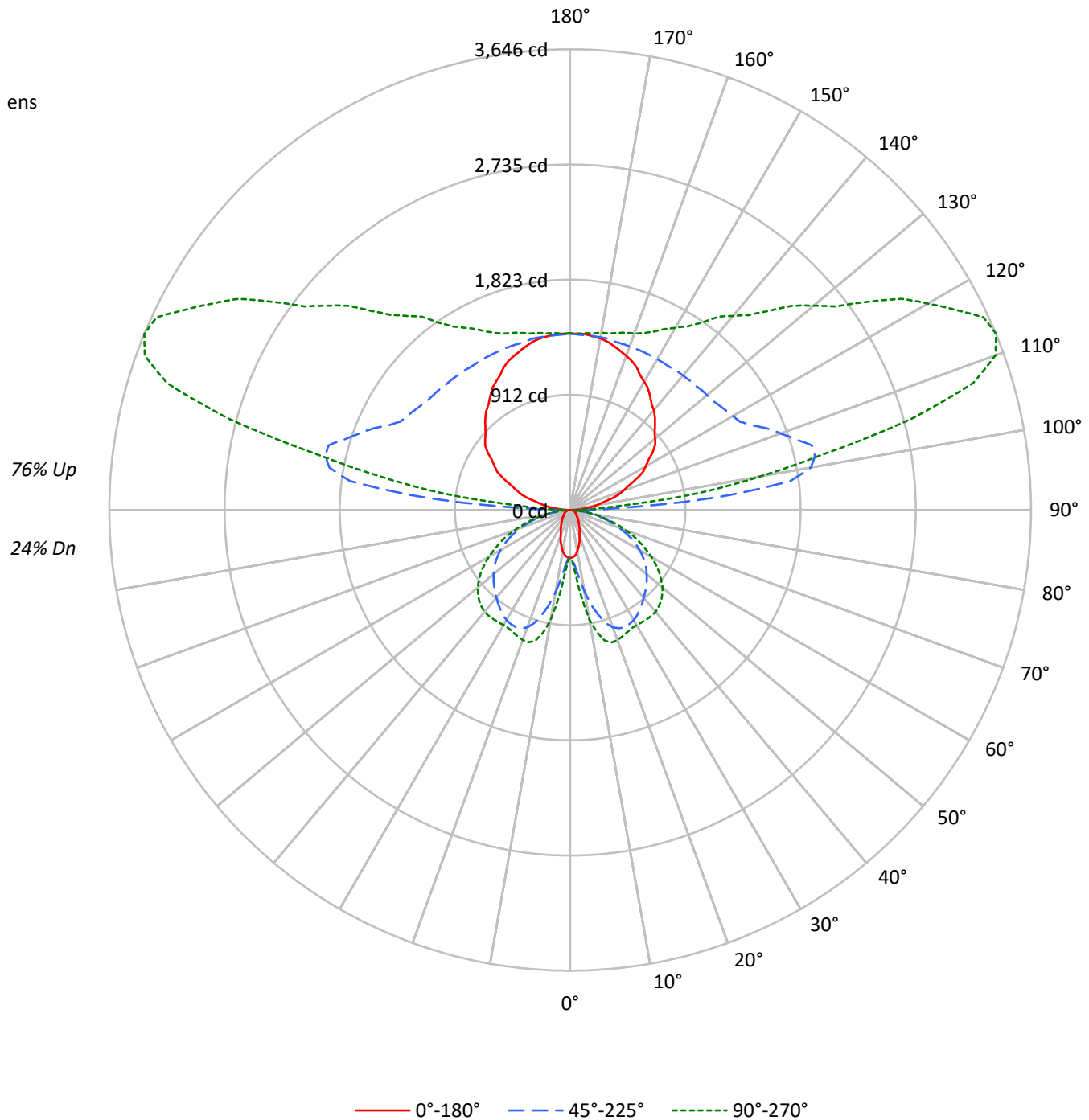
Test Method: LM-79-2019  
Report Number: P937867  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11979.8 lumens  
Efficiency: N/A  
Efficacy: 125.8 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: Semi-Indirect  
  
Input Watts (W): 95.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

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

	0°	45°	90°
0°	1751	1751	1751
5°	1712	2025	2355
10°	1552	2952	3904
15°	1319	3856	4714
20°	1074	4469	4804
25°	896	4676	4706
30°	755	4705	4698
35°	668	4628	4819
40°	582	4526	4945
45°	528	4452	4964
50°	484	4385	4882
55°	463	4286	4665
60°	474	4099	4323
65°	494	3812	3854
70°	526	3324	3256
75°	582	2711	2540
80°	636	1880	1712
85°	564	998	877

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4964 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	0.4
10°-20°	216.5	1.8
20°-30°	378.6	3.2
30°-40°	487.4	4.1
40°-50°	544.4	4.5
50°-60°	521.4	4.4
60°-70°	413.2	3.4
70°-80°	243.0	2.0
80°-90°	72.8	0.6
90°-100°	680.8	5.7
100°-110°	1789.8	14.9
110°-120°	1855.8	15.5
120°-130°	1488.6	12.4
130°-140°	1168.0	9.7
140°-150°	896.5	7.5
150°-160°	645.6	5.4
160°-170°	395.0	3.3
170°-180°	133.5	1.1
0°-30°	643.9	5.4
0°-40°	1131.4	9.4
0°-60°	2197.2	18.3
0°-90°	2926.3	24.4
90°-120°	4326.4	36.1
90°-150°	7879.4	65.8
90°-180°	9054.0	75.6
0°-180°	11979.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	378	378	378	378	378	
5°	368	395	444	503	521	34
15°	276	509	857	1039	1072	77
25°	176	577	1021	1066	1067	81
35°	119	551	962	1016	1056	74
45°	81	440	850	974	1017	63
55°	58	279	721	838	861	53
65°	46	148	535	602	611	46
75°	34	91	294	323	324	36
85°	12	28	73	80	81	13
90°	9	26	71	36	36	9
95°	90	352	1172	605	412	100
105°	322	488	1979	3004	2803	342
115°	573	695	1585	3162	3609	566
125°	797	893	1442	2436	2874	707
135°	950	1045	1397	1966	2230	735
145°	1101	1172	1379	1678	1809	690
155°	1245	1279	1379	1514	1558	572
165°	1343	1361	1379	1433	1451	379
175°	1397	1397	1388	1406	1406	133
180°	1397	1397	1397	1397	1397	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5	377.5
2.5°	377.5	377.5	380.0	381.3	383.6	384.9	387.3	389.8	397.0	398.2	400.6
5°	367.9	372.7	388.5	394.6	411.6	434.7	444.3	460.1	493.0	502.6	508.7
7.5°	353.3	364.2	403.1	412.8	455.3	515.9	541.5	575.5	627.6	653.2	673.8
10°	330.2	353.3	422.5	445.6	514.8	607.0	654.4	701.8	780.6	815.8	829.2
12.5°	304.8	342.3	443.2	474.7	574.2	709.0	766.1	818.3	908.1	955.5	962.7
15°	275.6	326.6	462.5	508.7	637.4	794.0	857.2	921.5	1005.3	1039.2	1047.7
17.5°	250.1	314.5	480.8	529.3	685.9	870.5	934.9	988.3	1056.2	1079.3	1085.4
20°	218.5	295.0	493.0	556.0	737.0	926.3	988.3	1029.5	1075.7	1090.3	1092.7
22.5°	195.4	274.4	500.2	565.7	770.9	960.4	1012.5	1045.4	1076.9	1081.8	1082.9
25°	176.1	251.3	499.0	576.7	800.1	981.0	1021.0	1045.4	1063.6	1066.0	1066.0
27.5°	157.9	225.8	494.1	579.1	822.0	985.8	1017.4	1034.4	1042.9	1047.7	1047.7
30°	142.0	201.6	482.0	574.2	831.7	981.0	1006.4	1015.0	1023.5	1030.8	1034.4
32.5°	129.9	178.5	463.8	564.5	832.8	968.8	987.1	991.9	1004.0	1021.0	1027.1
35°	118.9	155.4	443.2	551.2	825.6	949.4	961.6	966.4	990.7	1016.2	1024.6
37.5°	108.1	138.4	416.5	528.2	814.6	926.3	934.9	943.4	981.0	1011.3	1021.0
40°	97.1	123.8	384.9	502.6	797.6	898.5	905.7	919.1	968.8	1004.0	1013.8
42.5°	88.6	111.7	350.8	475.9	775.8	866.9	877.8	897.2	954.3	991.9	1002.8
45°	81.4	99.6	314.5	439.5	747.8	834.1	849.9	876.6	937.3	973.7	983.4
47.5°	74.0	91.1	276.8	401.9	717.5	801.3	822.0	852.3	914.2	949.4	957.9
50°	68.0	82.6	239.1	361.8	684.8	766.1	790.4	822.0	885.1	917.8	928.8
52.5°	63.1	75.3	203.9	321.7	647.1	729.7	757.6	790.4	849.9	881.4	888.7
55°	58.3	69.2	173.6	279.2	608.3	690.8	721.1	752.7	811.0	837.7	842.6
57.5°	55.8	64.4	148.1	239.1	567.0	647.1	681.1	710.3	764.9	785.5	790.4
60°	52.2	60.7	128.7	205.2	522.1	605.8	635.0	664.1	710.3	727.2	730.9
62.5°	48.6	58.3	114.1	172.4	475.9	557.3	586.4	613.2	652.0	664.1	669.0
65°	46.2	55.8	103.2	148.1	428.6	506.3	535.4	558.5	590.1	602.2	604.6
67.5°	43.7	53.4	94.7	127.4	381.3	455.3	477.1	499.0	523.3	535.4	536.6
70°	40.1	51.0	87.4	112.9	332.6	397.0	415.2	438.3	457.7	463.8	467.4
72.5°	37.7	47.3	82.6	102.0	282.9	341.2	358.2	371.5	388.5	394.6	394.6
75°	34.0	42.5	77.7	91.1	231.9	279.2	293.8	307.1	320.5	323.0	319.3
77.5°	30.3	37.7	66.8	76.5	180.9	220.9	233.1	240.4	251.3	253.7	255.0
80°	25.5	32.8	52.2	59.5	131.2	162.7	171.2	177.2	187.0	187.0	189.4
82.5°	19.5	25.5	37.7	42.5	88.6	111.7	118.9	122.6	128.7	128.7	128.7
85°	12.1	15.7	24.3	27.9	53.4	68.0	72.9	74.0	78.9	80.1	80.1
87.5°	6.1	8.5	15.7	17.0	27.9	35.2	35.2	37.7	37.7	36.4	35.2
90°	9.4	16.9	24.3	26.2	41.3	61.3	71.2	63.3	47.4	35.6	35.6
92.5°	37.5	101.2	165.0	180.9	254.4	352.2	401.2	351.6	252.4	178.0	171.0
95°	90.0	206.6	323.3	352.5	625.8	990.3	1172.5	1046.4	793.9	604.6	583.1
97.5°	155.6	258.5	361.4	387.1	843.0	1450.8	1754.7	1674.9	1515.3	1395.7	1354.8
100°	206.2	299.5	392.8	416.2	922.0	1596.4	1933.7	1939.5	1951.2	1959.9	1911.3
102.5°	249.3	336.4	423.4	445.2	958.3	1642.3	1984.3	2085.9	2289.2	2441.7	2400.0
105°	322.4	396.2	469.9	488.3	985.1	1647.5	1978.7	2206.5	2662.3	3004.0	2981.7
107.5°	397.5	466.2	534.9	552.1	990.1	1574.2	1866.2	2184.1	2819.8	3296.5	3301.9
110°	448.1	510.1	572.2	587.7	982.6	1509.2	1772.5	2127.9	2838.5	3371.5	3394.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	497.7	556.9	616.1	630.8	982.9	1452.4	1687.1	2050.8	2778.1	3323.7	3359.5
115°	572.7	627.3	681.8	695.4	992.0	1387.3	1585.0	1935.3	2636.0	3161.5	3211.2
117.5°	646.7	696.3	745.9	758.3	1010.4	1346.6	1514.7	1830.9	2463.2	2937.5	2992.6
120°	689.8	736.5	783.1	794.8	1025.4	1332.8	1486.5	1775.5	2353.2	2786.6	2840.1
122.5°	732.0	779.1	826.1	837.9	1046.9	1325.6	1465.0	1725.1	2245.5	2635.7	2688.5
125°	796.7	839.6	882.5	893.2	1076.0	1319.7	1441.6	1662.6	2104.6	2436.1	2484.7
127.5°	849.2	892.6	935.8	946.7	1105.1	1316.3	1421.9	1611.6	1991.2	2275.8	2316.8
130°	877.3	924.0	970.6	982.3	1126.3	1318.4	1414.4	1583.3	1921.2	2174.6	2212.5
132.5°	906.3	953.0	999.7	1011.3	1143.5	1319.7	1407.8	1559.0	1861.5	2088.3	2122.2
135°	949.5	992.0	1034.5	1045.1	1162.2	1318.5	1396.6	1523.2	1776.5	1966.5	1995.7
137.5°	993.5	1035.6	1077.7	1088.2	1190.4	1326.6	1394.7	1501.8	1715.9	1876.5	1900.5
140°	1030.1	1068.8	1107.6	1117.2	1207.6	1328.0	1388.2	1480.7	1665.6	1804.3	1826.7
142.5°	1058.2	1094.1	1129.8	1138.8	1221.9	1332.8	1388.2	1469.3	1631.8	1753.7	1772.9
145°	1101.3	1132.5	1163.9	1171.6	1240.7	1332.8	1378.7	1445.2	1578.1	1677.8	1692.4
147.5°	1144.5	1174.9	1205.3	1212.9	1268.2	1341.9	1378.7	1431.1	1535.6	1614.1	1626.1
150°	1172.5	1200.1	1227.6	1234.5	1282.5	1346.7	1378.7	1422.9	1511.3	1577.5	1587.3
152.5°	1201.6	1222.4	1243.2	1248.5	1291.9	1349.8	1378.7	1416.5	1491.9	1548.5	1555.9
155°	1244.8	1260.2	1275.6	1279.4	1312.6	1356.7	1378.7	1408.8	1468.8	1513.8	1518.7
157.5°	1276.6	1291.6	1306.6	1310.3	1333.1	1363.5	1378.7	1402.1	1448.7	1483.7	1487.2
160°	1298.2	1309.9	1321.5	1324.4	1342.5	1366.7	1378.7	1398.7	1438.8	1468.7	1470.7
162.5°	1319.7	1328.4	1337.2	1339.4	1352.5	1370.0	1378.7	1395.6	1429.3	1454.7	1456.6
165°	1343.2	1351.1	1359.0	1361.0	1366.9	1374.8	1378.7	1390.9	1415.0	1433.1	1435.1
167.5°	1364.7	1368.4	1372.2	1373.1	1378.1	1384.8	1388.2	1396.0	1411.9	1423.7	1424.5
170°	1378.7	1382.5	1386.3	1387.2	1387.5	1388.0	1388.2	1396.0	1411.9	1423.7	1423.7
172.5°	1386.3	1387.1	1388.0	1388.2	1388.2	1388.2	1388.2	1394.4	1406.9	1416.3	1415.6
175°	1396.6	1396.6	1396.6	1396.6	1393.8	1390.1	1388.2	1392.1	1400.0	1406.0	1406.0
177.5°	1396.6	1396.6	1396.6	1396.6	1394.4	1391.5	1390.1	1393.1	1399.4	1404.1	1403.3
180°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	377.5	377.5
2.5°	403.1	400.6
5°	518.4	520.8
7.5°	698.1	696.9
10°	868.0	879.0
12.5°	991.9	994.3
15°	1067.2	1072.1
17.5°	1096.3	1097.5
20°	1097.5	1095.1
22.5°	1084.2	1081.8
25°	1068.4	1067.2
27.5°	1053.8	1055.1
30°	1047.7	1051.4
32.5°	1047.7	1053.8
35°	1050.2	1056.2
37.5°	1049.0	1056.2
40°	1044.1	1052.6
42.5°	1030.8	1036.9
45°	1010.2	1017.4
47.5°	983.4	988.3
50°	949.4	954.3
52.5°	906.9	908.1
55°	855.9	860.8
57.5°	801.3	802.5
60°	740.6	744.2
62.5°	676.2	676.2
65°	608.3	610.7
67.5°	537.8	543.9
70°	466.2	467.4
72.5°	395.8	395.8
75°	323.0	324.1
77.5°	253.7	253.7
80°	188.2	189.4
82.5°	129.9	132.3
85°	81.4	81.4
87.5°	37.7	34.0
90°	35.6	35.6
92.5°	142.7	114.3
95°	497.3	411.5
97.5°	1191.6	1028.3
100°	1716.7	1522.2
102.5°	2233.4	2066.8
105°	2892.1	2802.6
107.5°	3323.6	3345.2
110°	3488.1	3581.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3502.8	3646.1
115°	3409.9	3608.6
117.5°	3213.0	3433.4
120°	3054.3	3268.4
122.5°	2899.8	3110.9
125°	2679.3	2873.8
127.5°	2481.0	2645.1
130°	2364.1	2515.7
132.5°	2258.1	2393.9
135°	2112.8	2229.9
137.5°	1996.2	2092.1
140°	1916.3	2005.8
142.5°	1850.0	1927.1
145°	1750.7	1809.0
147.5°	1674.5	1722.8
150°	1626.5	1665.6
152.5°	1585.4	1615.0
155°	1538.2	1557.8
157.5°	1500.9	1514.7
160°	1478.6	1486.5
162.5°	1464.1	1471.6
165°	1443.0	1451.0
167.5°	1427.9	1431.2
170°	1423.7	1423.7
172.5°	1412.6	1409.7
175°	1406.0	1406.0
177.5°	1399.9	1396.6
180°	1396.6	1396.6



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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	0.00	0.63	1.08	1.76	3.36	13.12	13.80	14.26	14.94	16.53
	3H	0.63	1.25	1.78	2.39	4.00	14.94	15.56	16.10	16.70	18.31
	4H	0.92	1.51	2.08	2.65	4.26	15.58	16.17	16.74	17.31	18.92
	6H	1.16	1.70	2.33	2.85	4.47	16.00	16.54	17.17	17.69	19.31
	8H	1.22	1.74	2.40	2.90	4.52	16.12	16.63	17.29	17.79	19.41
	12H	1.24	1.72	2.41	2.88	4.52	16.18	16.67	17.35	17.82	19.46
4H	2H	7.13	7.72	8.30	8.86	10.48	13.37	13.96	14.54	15.10	16.71
	3H	8.68	9.17	9.86	10.34	11.97	15.40	15.89	16.57	17.06	18.68
	4H	8.77	9.22	9.95	10.38	12.02	16.16	16.61	17.33	17.77	19.41
	6H	8.77	9.16	9.95	10.34	11.97	16.69	17.07	17.87	18.26	19.89
	8H	8.74	9.10	9.92	10.28	11.93	16.84	17.20	18.02	18.38	20.03
	12H	8.69	9.02	9.89	10.20	11.86	16.93	17.26	18.13	18.44	20.10
8H	4H	10.20	10.56	11.38	11.73	13.38	16.20	16.56	17.38	17.74	19.39
	6H	10.43	10.73	11.63	11.95	13.59	16.82	17.12	18.02	18.34	19.98
	8H	10.45	10.71	11.65	11.90	13.57	17.04	17.30	18.25	18.49	20.16
	12H	10.41	10.64	11.62	11.83	13.53	17.18	17.41	18.39	18.60	20.29
12H	4H	10.33	10.66	11.53	11.85	13.50	16.15	16.47	17.34	17.66	19.31
	6H	10.69	10.95	11.90	12.14	13.81	16.81	17.06	18.01	18.26	19.92
	8H	10.75	10.98	11.96	12.17	13.87	17.03	17.25	18.24	18.44	20.14