

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: P938338

Luminaire Tested: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P938338  
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-075D-92765-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

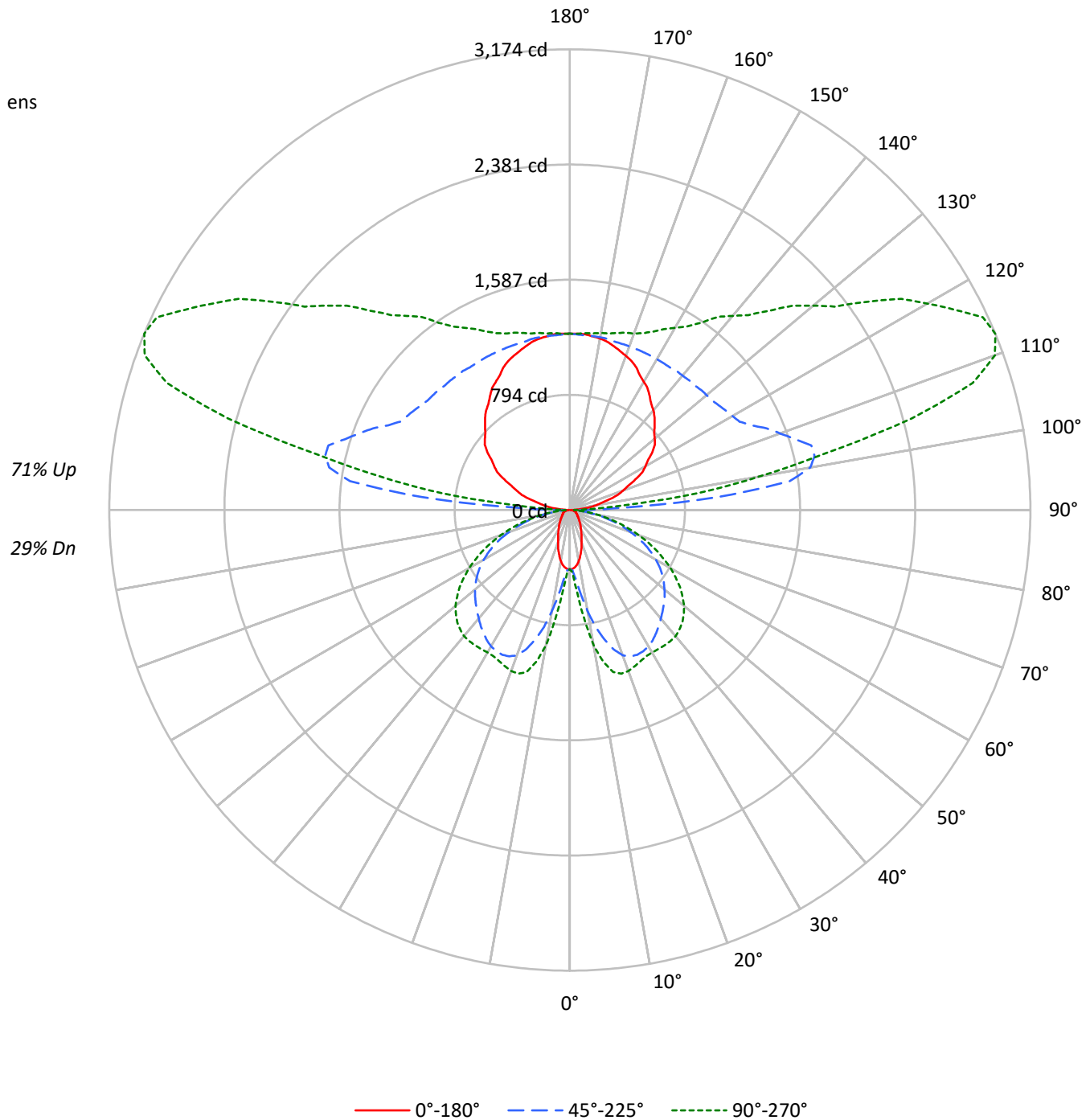
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11032.0 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 95.4  
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

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

	0°	45°	90°
0°	2517	2517	2517
5°	2457	2908	3383
10°	2228	4238	5608
15°	1893	5535	6772
20°	1540	6413	6901
25°	1285	6710	6762
30°	1082	6751	6749
35°	957	6637	6923
40°	833	6488	7104
45°	754	6379	7131
50°	692	6281	7013
55°	662	6139	6702
60°	676	5867	6211
65°	702	5455	5536
70°	747	4754	4677
75°	824	3872	3650
80°	895	2682	2460
85°	781	1421	1258

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7131 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	0.5
10°-20°	233.2	2.1
20°-30°	408.0	3.7
30°-40°	525.2	4.8
40°-50°	586.6	5.3
50°-60°	561.8	5.1
60°-70°	445.2	4.0
70°-80°	261.8	2.4
80°-90°	77.4	0.7
90°-100°	592.6	5.4
100°-110°	1557.8	14.1
110°-120°	1615.3	14.6
120°-130°	1295.7	11.7
130°-140°	1016.6	9.2
140°-150°	780.3	7.1
150°-160°	561.9	5.1
160°-170°	343.8	3.1
170°-180°	116.2	1.1
0°-30°	693.8	6.3
0°-40°	1219.0	11.0
0°-60°	2367.4	21.5
0°-90°	3151.8	28.6
90°-120°	3765.7	34.1
90°-150°	6858.3	62.2
90°-180°	7880.0	71.4
0°-180°	11032.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	407	407	407	407	407	
5°	396	425	479	542	561	37
15°	297	548	924	1120	1155	83
25°	190	621	1100	1149	1150	87
35°	128	594	1036	1095	1138	80
45°	88	474	916	1049	1096	68
55°	63	301	777	903	927	57
65°	50	160	577	649	658	49
75°	37	98	316	348	349	38
85°	13	30	78	86	88	14
90°	8	23	62	31	31	8
95°	78	307	1021	526	358	87
105°	281	425	1722	2615	2439	298
115°	498	605	1380	2752	3141	492
125°	693	778	1255	2120	2501	616
135°	826	910	1216	1712	1941	639
145°	959	1020	1200	1460	1574	601
155°	1083	1114	1200	1318	1356	498
165°	1169	1185	1200	1247	1263	330
175°	1216	1216	1208	1224	1224	115
180°	1216	1216	1216	1216	1216	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8	406.8
2.5°	406.8	406.8	409.4	410.7	413.3	414.7	417.3	419.9	427.7	429.0	431.7
5°	396.3	401.6	418.6	425.1	443.4	468.3	478.7	495.8	531.1	541.5	548.1
7.5°	380.6	392.4	434.3	444.7	490.5	555.9	583.4	620.0	676.3	703.7	726.0
10°	355.8	380.6	455.2	480.1	554.6	654.0	705.0	756.1	841.1	879.0	893.4
12.5°	328.3	368.9	477.4	511.4	618.7	763.9	825.4	881.6	978.4	1029.5	1037.4
15°	296.9	351.9	498.4	548.1	686.7	855.5	923.5	992.9	1083.2	1119.8	1128.9
17.5°	269.5	338.8	518.0	570.3	739.0	937.9	1007.3	1064.8	1138.1	1162.9	1169.5
20°	235.4	317.9	531.1	599.1	794.0	998.1	1064.8	1109.3	1159.0	1174.7	1177.3
22.5°	210.6	295.6	538.9	609.6	830.6	1034.8	1091.0	1126.3	1160.3	1165.6	1166.9
25°	189.7	270.8	537.6	621.3	862.0	1057.0	1100.2	1126.3	1145.9	1148.6	1148.6
27.5°	170.0	243.3	532.4	623.9	885.6	1062.2	1096.2	1114.5	1123.7	1128.9	1128.9
30°	153.0	217.1	519.3	618.7	896.0	1057.0	1084.5	1093.6	1102.8	1110.6	1114.5
32.5°	140.0	192.3	499.7	608.2	897.3	1043.9	1063.5	1068.8	1081.8	1100.2	1106.7
35°	128.2	167.4	477.4	593.9	889.5	1023.0	1036.1	1041.3	1067.5	1094.9	1104.1
37.5°	116.4	149.1	448.7	569.0	877.7	998.1	1007.3	1016.4	1057.0	1089.7	1100.2
40°	104.6	133.4	414.7	541.5	859.4	968.0	975.8	990.2	1043.9	1081.8	1092.3
42.5°	95.5	120.3	378.0	512.8	835.8	933.9	945.7	966.6	1028.2	1068.8	1080.5
45°	87.6	107.3	338.8	473.5	805.8	898.6	915.6	944.4	1009.9	1049.1	1059.6
47.5°	79.8	98.1	298.2	433.0	773.1	863.3	885.6	918.3	985.0	1023.0	1032.1
50°	73.3	88.9	257.7	389.8	737.7	825.4	851.5	885.6	953.6	988.9	1000.7
52.5°	68.0	81.1	219.8	346.6	697.2	786.1	816.2	851.5	915.6	949.6	957.5
55°	62.8	74.6	187.1	300.9	655.3	744.3	777.0	811.0	873.8	902.6	907.8
57.5°	60.2	69.3	159.6	257.7	610.9	697.2	733.8	765.2	824.1	846.3	851.5
60°	56.2	65.4	138.7	221.1	562.5	652.7	684.1	715.5	765.2	783.5	787.4
62.5°	52.3	62.8	123.0	185.7	512.8	600.4	631.8	660.6	702.4	715.5	720.7
65°	49.7	60.2	111.2	159.6	461.7	545.5	576.9	601.7	635.7	648.8	651.4
67.5°	47.1	57.6	102.0	137.3	410.7	490.5	514.1	537.6	563.8	576.9	578.2
70°	43.2	54.9	94.2	121.6	358.4	427.7	447.4	472.2	493.1	499.7	503.6
72.5°	40.5	51.0	88.9	109.9	304.8	367.6	385.9	400.3	418.6	425.1	425.1
75°	36.6	45.8	83.7	98.1	249.8	300.9	316.5	330.9	345.3	347.9	344.0
77.5°	32.7	40.5	71.9	82.4	194.9	238.1	251.1	259.0	270.8	273.4	274.7
80°	27.5	35.3	56.2	64.1	141.3	175.3	184.4	191.0	201.4	201.4	204.1
82.5°	20.9	27.5	40.5	45.8	95.5	120.3	128.2	132.1	138.7	138.7	138.7
85°	13.1	17.0	26.2	30.1	57.6	73.3	78.5	79.8	85.0	86.3	86.3
87.5°	6.5	9.2	17.0	18.3	30.1	37.9	37.9	40.5	40.5	39.2	37.9
90°	8.2	14.7	21.2	22.8	35.9	53.3	62.0	55.1	41.3	31.0	31.0
92.5°	32.6	88.1	143.6	157.5	221.4	306.6	349.2	306.0	219.8	155.0	148.9
95°	78.3	179.8	281.4	306.8	544.8	862.0	1020.6	910.8	691.0	526.2	507.5
97.5°	135.4	225.0	314.5	337.0	733.7	1262.8	1527.3	1457.9	1319.0	1214.8	1179.3
100°	179.5	260.7	341.9	362.2	802.5	1389.6	1683.1	1688.2	1698.4	1706.0	1663.7
102.5°	217.0	292.8	368.6	387.5	834.1	1429.4	1727.2	1815.6	1992.5	2125.2	2089.0
105°	280.6	344.8	409.0	425.0	857.5	1434.0	1722.3	1920.6	2317.3	2614.8	2595.3
107.5°	345.9	405.8	465.6	480.5	861.7	1370.1	1624.3	1901.0	2454.3	2869.3	2874.0
110°	390.0	444.0	498.0	511.5	855.3	1313.5	1542.7	1852.0	2470.6	2934.6	2954.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	433.2	484.7	536.1	549.0	855.6	1264.2	1468.5	1785.1	2418.2	2893.0	2924.2
115°	498.5	546.0	593.5	605.4	863.4	1207.5	1379.6	1684.5	2294.4	2751.8	2795.0
117.5°	562.9	606.1	649.2	660.0	879.5	1172.1	1318.4	1593.6	2144.0	2556.8	2604.8
120°	600.5	641.1	681.8	691.9	892.5	1160.2	1293.9	1545.4	2048.3	2425.5	2472.0
122.5°	637.2	678.2	719.2	729.4	911.3	1153.9	1275.2	1501.6	1954.5	2294.1	2340.1
125°	693.4	730.8	768.2	777.5	936.6	1148.7	1254.8	1447.1	1831.8	2120.4	2162.6
127.5°	739.1	776.8	814.6	824.0	961.9	1145.7	1237.6	1402.8	1733.1	1980.8	2016.6
130°	763.6	804.3	844.9	855.0	980.4	1147.6	1231.1	1378.2	1672.2	1892.7	1925.7
132.5°	788.9	829.6	870.2	880.3	995.3	1148.7	1225.4	1357.0	1620.2	1817.7	1847.2
135°	826.4	863.4	900.5	909.7	1011.6	1147.6	1215.6	1325.8	1546.3	1711.6	1737.1
137.5°	864.8	901.4	938.0	947.2	1036.2	1154.7	1214.0	1307.2	1493.5	1633.3	1654.2
140°	896.6	930.4	964.0	972.5	1051.1	1155.9	1208.3	1288.8	1449.8	1570.5	1590.0
142.5°	921.0	952.3	983.5	991.2	1063.6	1160.1	1208.3	1279.0	1420.4	1526.4	1543.2
145°	958.6	985.8	1013.0	1019.8	1079.9	1160.1	1200.1	1257.9	1373.6	1460.4	1473.0
147.5°	996.1	1022.6	1049.1	1055.7	1103.8	1168.0	1200.1	1245.6	1336.6	1404.8	1415.4
150°	1020.6	1044.5	1068.4	1074.4	1116.3	1172.2	1200.1	1238.5	1315.4	1373.0	1381.6
152.5°	1045.9	1064.1	1082.2	1086.7	1124.5	1174.9	1200.1	1232.9	1298.5	1347.7	1354.2
155°	1083.4	1096.8	1110.3	1113.6	1142.5	1180.9	1200.1	1226.2	1278.4	1317.6	1321.8
157.5°	1111.1	1124.2	1137.3	1140.5	1160.4	1186.8	1200.1	1220.4	1261.0	1291.5	1294.4
160°	1130.0	1140.1	1150.2	1152.7	1168.5	1189.5	1200.1	1217.5	1252.3	1278.4	1280.1
162.5°	1148.7	1156.3	1163.9	1165.8	1177.2	1192.5	1200.1	1214.7	1244.1	1266.2	1267.9
165°	1169.1	1176.0	1182.8	1184.6	1189.7	1196.6	1200.1	1210.6	1231.7	1247.4	1249.2
167.5°	1187.9	1191.1	1194.4	1195.2	1199.6	1205.4	1208.3	1215.2	1229.0	1239.2	1239.9
170°	1200.1	1203.3	1206.6	1207.4	1207.7	1208.1	1208.3	1215.2	1229.0	1239.2	1239.2
172.5°	1206.6	1207.3	1208.1	1208.3	1208.3	1208.3	1208.3	1213.7	1224.6	1232.7	1232.1
175°	1215.6	1215.6	1215.6	1215.6	1213.2	1209.9	1208.3	1211.7	1218.6	1223.7	1223.7
177.5°	1215.6	1215.6	1215.6	1215.6	1213.7	1211.2	1209.9	1212.6	1218.1	1222.2	1221.5
180°	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6	1215.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	406.8	406.8
2.5°	434.3	431.7
5°	558.5	561.2
7.5°	752.1	750.8
10°	935.3	947.0
12.5°	1068.8	1071.4
15°	1149.9	1155.1
17.5°	1181.3	1182.6
20°	1182.6	1179.9
22.5°	1168.2	1165.6
25°	1151.2	1149.9
27.5°	1135.5	1136.8
30°	1128.9	1132.9
32.5°	1128.9	1135.5
35°	1131.6	1138.1
37.5°	1130.2	1138.1
40°	1125.0	1134.2
42.5°	1110.6	1117.2
45°	1088.4	1096.2
47.5°	1059.6	1064.8
50°	1023.0	1028.2
52.5°	977.1	978.4
55°	922.2	927.4
57.5°	863.3	864.6
60°	797.9	801.8
62.5°	728.6	728.6
65°	655.3	657.9
67.5°	579.5	586.0
70°	502.3	503.6
72.5°	426.4	426.4
75°	347.9	349.2
77.5°	273.4	273.4
80°	202.7	204.1
82.5°	140.0	142.6
85°	87.6	87.6
87.5°	40.5	36.6
90°	31.0	31.0
92.5°	124.2	99.5
95°	432.8	358.1
97.5°	1037.1	895.0
100°	1494.3	1325.0
102.5°	1943.9	1798.9
105°	2517.3	2439.3
107.5°	2892.9	2911.7
110°	3036.1	3117.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3048.9	3173.6
115°	2968.0	3141.0
117.5°	2796.6	2988.5
120°	2658.5	2844.8
122.5°	2523.9	2707.8
125°	2332.0	2501.3
127.5°	2159.4	2302.3
130°	2057.7	2189.7
132.5°	1965.4	2083.6
135°	1839.0	1940.9
137.5°	1737.6	1821.0
140°	1667.9	1745.9
142.5°	1610.3	1677.4
145°	1523.8	1574.5
147.5°	1457.4	1499.5
150°	1415.7	1449.8
152.5°	1379.9	1405.7
155°	1338.8	1355.9
157.5°	1306.5	1318.4
160°	1287.0	1293.9
162.5°	1274.3	1280.8
165°	1256.0	1262.9
167.5°	1242.9	1245.8
170°	1239.2	1239.2
172.5°	1229.6	1227.0
175°	1223.7	1223.7
177.5°	1218.5	1215.6
180°	1215.6	1215.6



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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	1.82	2.53	2.93	3.65	5.19	14.98	15.70	16.10	16.81	18.36
	3H	2.51	3.15	3.64	4.28	5.84	16.81	17.45	17.93	18.57	20.13
	4H	2.80	3.41	3.94	4.54	6.10	17.44	18.05	18.57	19.17	20.74
	6H	3.05	3.61	4.19	4.73	6.31	17.86	18.42	19.00	19.55	21.13
	8H	3.11	3.65	4.26	4.79	6.36	17.97	18.51	19.12	19.65	21.22
	12H	3.12	3.63	4.27	4.77	6.36	18.03	18.54	19.18	19.68	21.27
4H	2H	9.01	9.62	10.15	10.74	12.31	15.24	15.85	16.38	16.97	18.54
	3H	10.56	11.07	11.71	12.22	13.80	17.27	17.78	18.41	18.93	20.50
	4H	10.65	11.12	11.80	12.26	13.86	18.02	18.49	19.17	19.63	21.23
	6H	10.65	11.05	11.81	12.22	13.80	18.55	18.95	19.71	20.11	21.70
	8H	10.62	11.00	11.78	12.15	13.76	18.71	19.08	19.86	20.23	21.84
	12H	10.57	10.92	11.75	12.08	13.69	18.79	19.13	19.96	20.29	21.90
8H	4H	12.08	12.45	13.23	13.61	15.21	18.07	18.45	19.23	19.60	21.21
	6H	12.31	12.62	13.49	13.82	15.42	18.69	19.00	19.87	20.19	21.80
	8H	12.33	12.60	13.51	13.77	15.40	18.90	19.18	20.09	20.35	21.97
	12H	12.29	12.53	13.48	13.70	15.36	19.04	19.28	20.23	20.45	22.10
12H	4H	12.21	12.55	13.39	13.72	15.33	18.02	18.36	19.19	19.52	21.13
	6H	12.57	12.84	13.75	14.01	15.64	18.67	18.94	19.85	20.11	21.74
	8H	12.63	12.87	13.82	14.04	15.70	18.89	19.13	20.08	20.30	21.96