

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: P937942

Luminaire Tested: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-6-6500K

Issue Date: 12/17/2024

**Test Information**

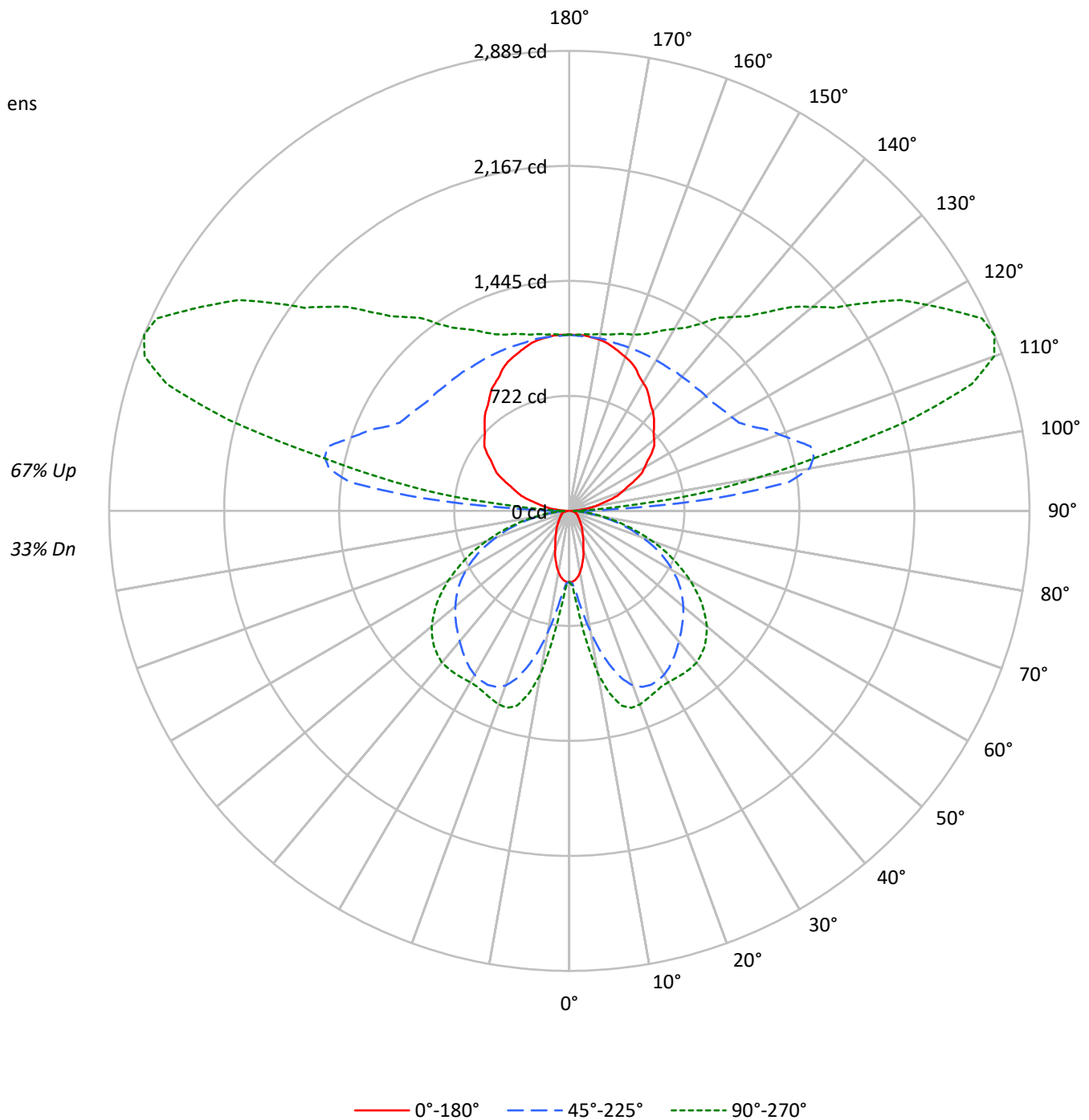
Test Method: LM-79-2019  
Report Number: P937942  
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-6-6500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10628.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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): 83.4  
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

TEST NUMBER: P937942  
CATALOG NUMBER: SQ4-FB-125U-075D-92765-1D-UNV-STD-W-6-6500K

### 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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7

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

	0°	45°	90°
0°	2760	2760	2760
5°	2695	3188	3709
10°	2443	4647	6149
15°	2076	6069	7426
20°	1690	7032	7568
25°	1409	7357	7414
30°	1187	7402	7400
35°	1050	7277	7591
40°	913	7115	7789
45°	827	6995	7819
50°	758	6888	7690
55°	725	6732	7349
60°	742	6433	6810
65°	770	5980	6071
70°	818	5212	5129
75°	905	4246	4003
80°	980	2941	2696
85°	853	1558	1380

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.7	0.5
10°-20°	255.7	2.4
20°-30°	447.3	4.2
30°-40°	575.9	5.4
40°-50°	643.2	6.1
50°-60°	616.0	5.8
60°-70°	488.2	4.6
70°-80°	287.1	2.7
80°-90°	84.0	0.8
90°-100°	539.4	5.1
100°-110°	1418.0	13.3
110°-120°	1470.3	13.8
120°-130°	1179.4	11.1
130°-140°	925.4	8.7
140°-150°	710.3	6.7
150°-160°	511.5	4.8
160°-170°	313.0	2.9
170°-180°	105.7	1.0
0°-30°	760.8	7.2
0°-40°	1336.6	12.6
0°-60°	2595.8	24.4
0°-90°	3455.1	32.5
90°-120°	3427.7	32.3
90°-150°	6242.7	58.7
90°-180°	7173.0	67.5
0°-180°	10628.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	435	466	525	594	615	40
15°	326	601	1013	1228	1267	91
25°	208	681	1206	1259	1261	96
35°	141	651	1136	1201	1248	88
45°	96	519	1004	1150	1202	74
55°	69	330	852	990	1017	63
65°	54	175	632	711	721	54
75°	40	108	347	382	383	42
85°	14	33	86	95	96	15
90°	8	21	56	28	28	7
95°	71	279	929	479	326	79
105°	256	387	1568	2380	2220	271
115°	454	551	1256	2505	2859	448
125°	631	708	1142	1930	2277	560
135°	752	828	1106	1558	1767	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1136	1150	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1	446.1
2.5°	446.1	446.1	448.9	450.4	453.2	454.7	457.5	460.4	469.0	470.4	473.3
5°	434.6	440.3	459.0	466.1	486.2	513.5	524.9	543.6	582.3	593.8	601.0
7.5°	417.4	430.3	476.2	487.7	537.9	609.6	639.7	679.9	741.5	771.6	796.0
10°	390.1	417.4	499.1	526.4	608.1	717.1	773.1	829.0	922.2	963.8	979.6
12.5°	360.0	404.5	523.5	560.8	678.4	837.6	905.0	966.7	1072.8	1128.9	1137.5
15°	325.6	385.8	546.5	601.0	753.0	938.0	1012.6	1088.7	1187.7	1227.8	1237.9
17.5°	295.5	371.5	568.0	625.4	810.4	1028.4	1104.5	1167.6	1247.9	1275.2	1282.4
20°	258.2	348.5	582.3	656.9	870.6	1094.5	1167.6	1216.4	1270.9	1288.1	1291.0
22.5°	230.9	324.1	590.9	668.4	910.8	1134.6	1196.3	1235.0	1272.3	1278.0	1279.5
25°	208.0	296.9	589.5	681.3	945.2	1159.0	1206.3	1235.0	1256.5	1259.4	1259.4
27.5°	186.5	266.8	583.8	684.2	971.0	1164.7	1202.0	1222.1	1232.2	1237.9	1237.9
30°	167.8	238.1	569.4	678.4	982.5	1159.0	1189.1	1199.2	1209.2	1217.8	1222.1
32.5°	153.5	210.8	547.9	666.9	983.9	1144.7	1166.2	1171.9	1186.3	1206.3	1213.5
35°	140.6	183.6	523.5	651.2	975.3	1121.7	1136.1	1141.8	1170.5	1200.6	1210.6
37.5°	127.7	163.5	492.0	623.9	962.4	1094.5	1104.5	1114.5	1159.0	1194.9	1206.3
40°	114.7	146.3	454.7	593.8	942.3	1061.4	1070.0	1085.8	1144.7	1186.3	1197.7
42.5°	104.7	132.0	414.5	562.2	916.5	1024.1	1037.0	1059.9	1127.4	1171.9	1184.8
45°	96.1	117.6	371.5	519.2	883.5	985.4	1004.0	1035.6	1107.4	1150.4	1161.9
47.5°	87.5	107.6	327.0	474.7	847.7	946.6	971.0	1006.9	1080.0	1121.7	1131.8
50°	80.3	97.5	282.6	427.4	808.9	905.0	933.7	971.0	1045.6	1084.3	1097.3
52.5°	74.6	88.9	241.0	380.1	764.5	862.0	895.0	933.7	1004.0	1041.3	1049.9
55°	68.8	81.8	205.1	329.9	718.6	816.1	852.0	889.3	958.1	989.7	995.4
57.5°	66.0	76.0	175.0	282.6	669.8	764.5	804.6	839.1	903.6	928.0	933.7
60°	61.7	71.7	152.0	242.4	616.7	715.7	750.1	784.6	839.1	859.1	863.4
62.5°	57.4	68.8	134.8	203.7	562.2	658.3	692.8	724.3	770.2	784.6	790.3
65°	54.5	66.0	121.9	175.0	506.3	598.1	632.5	659.8	697.1	711.4	714.3
67.5°	51.6	63.1	111.9	150.6	450.4	537.9	563.7	589.5	618.2	632.5	634.0
70°	47.3	60.2	103.3	133.4	393.0	469.0	490.5	517.8	540.7	547.9	552.2
72.5°	44.5	55.9	97.5	120.5	334.2	403.0	423.1	438.9	459.0	466.1	466.1
75°	40.2	50.2	91.8	107.6	273.9	329.9	347.1	362.9	378.7	381.5	377.2
77.5°	35.9	44.5	78.9	90.4	213.7	261.0	275.4	284.0	296.9	299.8	301.2
80°	30.1	38.7	61.7	70.3	154.9	192.2	202.2	209.4	220.9	220.9	223.7
82.5°	22.9	30.1	44.5	50.2	104.7	132.0	140.6	144.9	152.0	152.0	152.0
85°	14.3	18.6	28.7	33.0	63.1	80.3	86.1	87.5	93.2	94.7	94.7
87.5°	7.2	10.0	18.6	20.1	33.0	41.6	41.6	44.5	44.5	43.0	41.6
90°	7.5	13.4	19.3	20.7	32.6	48.5	56.4	50.1	37.6	28.2	28.2
92.5°	29.7	80.2	130.7	143.3	201.5	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.1	279.2	495.8	784.7	929.0	829.0	629.0	479.0	461.9
97.5°	123.3	204.7	286.3	306.7	667.8	1149.4	1390.2	1327.0	1200.6	1105.7	1073.4
100°	163.4	237.3	311.2	329.7	730.4	1264.9	1532.0	1536.6	1545.9	1552.8	1514.2
102.5°	197.5	266.5	335.5	352.7	759.2	1301.1	1572.1	1652.6	1813.7	1934.5	1901.5
105°	255.5	313.9	372.2	386.9	780.4	1305.3	1567.7	1748.2	2109.3	2380.1	2362.3
107.5°	314.9	369.3	423.8	437.4	784.5	1247.2	1478.6	1730.4	2234.0	2611.7	2616.0
110°	354.9	404.1	453.2	465.6	778.4	1195.6	1404.3	1685.8	2248.9	2671.2	2689.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.2	488.0	499.8	778.7	1150.7	1336.7	1624.8	2201.1	2633.3	2661.7
115°	453.7	496.9	540.2	551.1	786.0	1099.1	1255.8	1533.4	2088.5	2504.8	2544.2
117.5°	512.4	551.7	590.9	600.8	800.5	1066.8	1200.0	1450.5	1951.6	2327.4	2371.0
120°	546.6	583.6	620.5	629.7	812.4	1055.9	1177.7	1406.7	1864.4	2207.8	2250.2
122.5°	580.0	617.3	654.6	663.9	829.5	1050.3	1160.7	1366.9	1779.1	2088.2	2130.0
125°	631.2	665.2	699.2	707.7	852.5	1045.6	1142.2	1317.3	1667.4	1930.1	1968.6
127.5°	672.8	707.1	741.4	750.0	875.6	1042.9	1126.6	1276.9	1577.6	1803.1	1835.6
130°	695.1	732.1	769.0	778.2	892.3	1044.4	1120.6	1254.4	1522.1	1722.9	1752.9
132.5°	718.1	755.1	792.0	801.3	906.0	1045.6	1115.4	1235.2	1474.8	1654.5	1681.4
135°	752.2	785.9	819.6	828.0	920.8	1044.6	1106.5	1206.8	1407.5	1558.0	1581.2
137.5°	787.1	820.5	853.9	862.2	943.1	1051.0	1105.0	1189.8	1359.4	1486.7	1505.6
140°	816.1	846.8	877.5	885.1	956.7	1052.1	1099.8	1173.1	1319.6	1429.5	1447.3
142.5°	838.4	866.8	895.2	902.3	968.1	1055.9	1099.8	1164.2	1292.9	1389.4	1404.7
145°	872.5	897.3	922.1	928.3	983.0	1055.9	1092.4	1145.0	1250.3	1329.3	1340.9
147.5°	906.8	930.9	954.9	961.0	1004.8	1063.2	1092.4	1133.8	1216.7	1278.8	1288.4
150°	929.0	950.8	972.5	978.0	1016.1	1066.9	1092.4	1127.4	1197.3	1249.8	1257.6
152.5°	952.0	968.5	985.1	989.2	1023.6	1069.4	1092.4	1122.2	1182.0	1226.8	1232.6
155°	986.2	998.5	1010.6	1013.7	1039.9	1074.9	1092.4	1116.2	1163.7	1199.4	1203.3
157.5°	1011.5	1023.3	1035.2	1038.1	1056.2	1080.3	1092.4	1110.8	1147.8	1175.5	1178.2
160°	1028.5	1037.8	1047.0	1049.3	1063.7	1082.8	1092.4	1108.2	1139.9	1163.7	1165.2
162.5°	1045.6	1052.5	1059.5	1061.2	1071.6	1085.5	1092.4	1105.7	1132.4	1152.5	1154.0
165°	1064.1	1070.5	1076.8	1078.3	1083.0	1089.2	1092.4	1101.9	1121.1	1135.5	1137.0
167.5°	1081.3	1084.2	1087.2	1088.0	1091.9	1097.1	1099.8	1106.1	1118.7	1128.0	1128.7
170°	1092.4	1095.3	1098.3	1099.0	1099.3	1099.6	1099.8	1106.1	1118.7	1128.0	1128.0
172.5°	1098.3	1099.0	1099.6	1099.8	1099.8	1099.8	1099.8	1104.8	1114.6	1122.1	1121.5
175°	1106.5	1106.5	1106.5	1106.5	1104.3	1101.3	1099.8	1103.0	1109.3	1114.0	1114.0
177.5°	1106.5	1106.5	1106.5	1106.5	1104.8	1102.4	1101.2	1103.7	1108.7	1112.4	1111.8
180°	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5	1106.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	446.1	446.1
2.5°	476.2	473.3
5°	612.4	615.3
7.5°	824.7	823.3
10°	1025.5	1038.4
12.5°	1171.9	1174.8
15°	1260.8	1266.6
17.5°	1295.3	1296.7
20°	1296.7	1293.8
22.5°	1280.9	1278.0
25°	1262.3	1260.8
27.5°	1245.1	1246.5
30°	1237.9	1242.2
32.5°	1237.9	1245.1
35°	1240.8	1247.9
37.5°	1239.3	1247.9
40°	1233.6	1243.6
42.5°	1217.8	1225.0
45°	1193.4	1202.0
47.5°	1161.9	1167.6
50°	1121.7	1127.4
52.5°	1071.4	1072.8
55°	1011.2	1016.9
57.5°	946.6	948.1
60°	874.9	879.2
62.5°	798.9	798.9
65°	718.6	721.4
67.5°	635.4	642.6
70°	550.8	552.2
72.5°	467.6	467.6
75°	381.5	383.0
77.5°	299.8	299.8
80°	222.3	223.7
82.5°	153.5	156.3
85°	96.1	96.1
87.5°	44.5	40.2
90°	28.2	28.2
92.5°	113.0	90.6
95°	394.0	326.0
97.5°	944.0	814.7
100°	1360.2	1206.0
102.5°	1769.4	1637.5
105°	2291.3	2220.4
107.5°	2633.2	2650.4
110°	2763.6	2837.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2775.2	2888.8
115°	2701.6	2859.0
117.5°	2545.6	2720.2
120°	2419.8	2589.5
122.5°	2297.3	2464.7
125°	2122.7	2276.9
127.5°	1965.6	2095.7
130°	1873.1	1993.2
132.5°	1789.0	1896.6
135°	1673.9	1766.7
137.5°	1581.5	1657.5
140°	1518.2	1589.2
142.5°	1465.7	1526.8
145°	1387.1	1433.2
147.5°	1326.7	1365.0
150°	1288.7	1319.6
152.5°	1256.1	1279.5
155°	1218.8	1234.3
157.5°	1189.1	1200.0
160°	1171.5	1177.7
162.5°	1160.0	1165.9
165°	1143.3	1149.5
167.5°	1131.3	1133.9
170°	1128.0	1128.0
172.5°	1119.2	1116.9
175°	1114.0	1114.0
177.5°	1109.2	1106.5
180°	1106.5	1106.5



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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	2.67	3.41	3.75	4.50	6.00	15.83	16.58	16.92	17.67	19.16
	3H	3.36	4.03	4.46	5.13	6.65	17.66	18.32	18.75	19.42	20.94
	4H	3.65	4.29	4.76	5.39	6.91	18.29	18.93	19.40	20.03	21.55
	6H	3.90	4.48	5.02	5.59	7.12	18.71	19.30	19.83	20.40	21.93
	8H	3.96	4.52	5.08	5.64	7.17	18.83	19.38	19.95	20.50	22.03
	12H	3.98	4.51	5.10	5.62	7.17	18.89	19.42	20.01	20.53	22.08
4H	2H	9.86	10.49	10.97	11.59	13.11	16.09	16.73	17.20	17.83	19.35
	3H	11.41	11.95	12.54	13.07	14.61	18.12	18.65	19.24	19.78	21.31
	4H	11.50	11.99	12.63	13.11	14.66	18.88	19.37	20.00	20.48	22.04
	6H	11.51	11.93	12.64	13.07	14.61	19.41	19.83	20.54	20.97	22.51
	8H	11.48	11.87	12.61	13.01	14.57	19.56	19.95	20.69	21.09	22.65
	12H	11.43	11.79	12.58	12.93	14.50	19.65	20.00	20.80	21.15	22.71
8H	4H	12.94	13.33	14.07	14.46	16.02	18.93	19.32	20.06	20.45	22.01
	6H	13.17	13.50	14.33	14.67	16.23	19.55	19.87	20.70	21.05	22.60
	8H	13.19	13.47	14.35	14.63	16.20	19.76	20.05	20.92	21.20	22.78
	12H	13.15	13.40	14.32	14.55	16.16	19.90	20.15	21.06	21.30	22.91
12H	4H	13.07	13.43	14.22	14.57	16.14	18.88	19.23	20.03	20.37	21.94
	6H	13.43	13.71	14.59	14.86	16.44	19.53	19.81	20.69	20.97	22.55
	8H	13.49	13.74	14.66	14.89	16.51	19.75	20.00	20.92	21.15	22.76