

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: P937848

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-6500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937848
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-92765-1D-UNV-STD-W-8-6500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

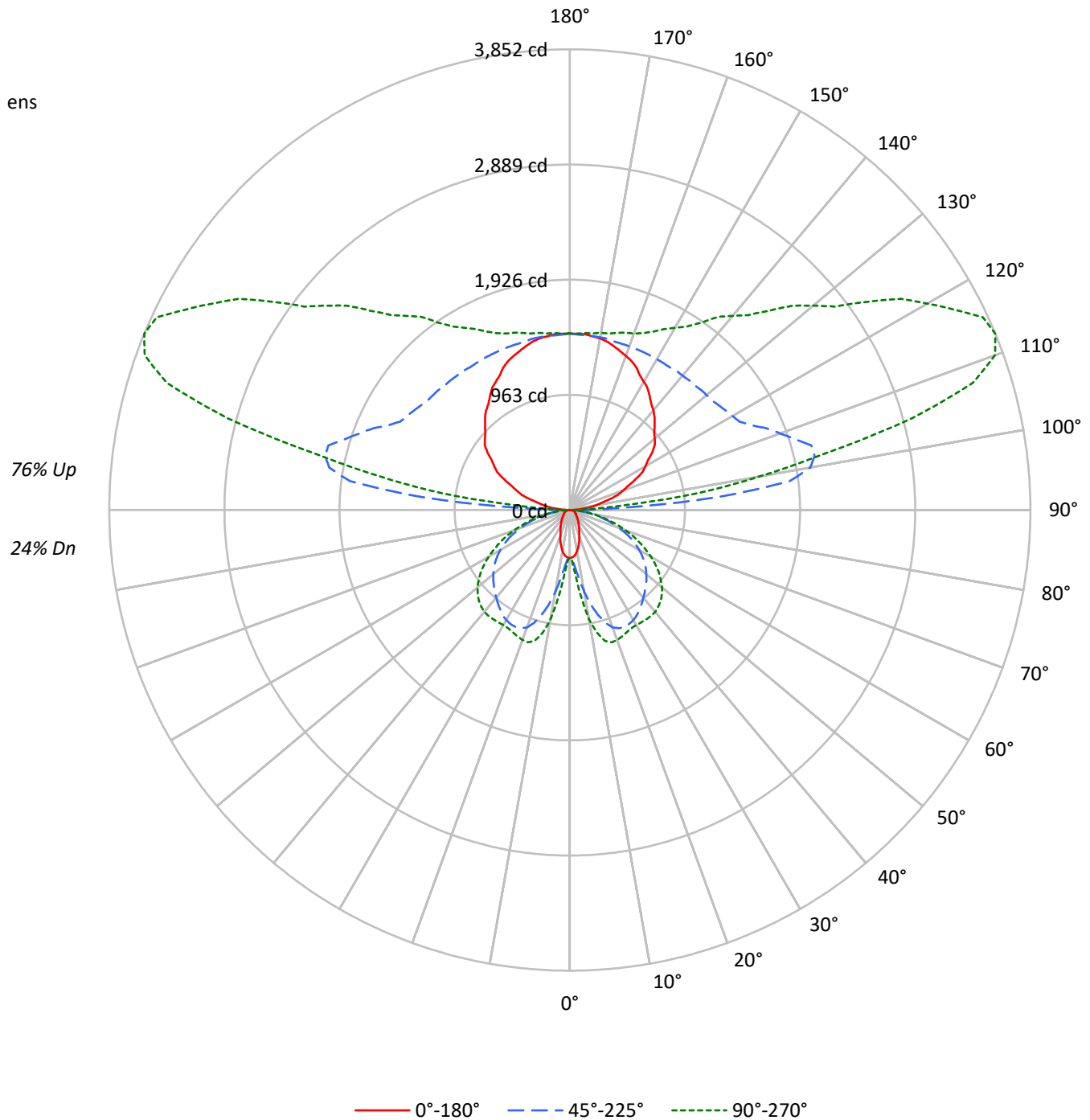
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12655.2 lumens
Efficiency: N/A
Efficacy: 132.9 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_{in}): 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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CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-6500K

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1850	1850	1850
5°	1808	2139	2487
10°	1640	3118	4124
15°	1394	4074	4980
20°	1134	4721	5075
25°	947	4940	4972
30°	798	4971	4962
35°	705	4889	5091
40°	615	4781	5224
45°	557	4703	5244
50°	511	4632	5157
55°	490	4528	4928
60°	501	4330	4567
65°	522	4027	4071
70°	556	3512	3440
75°	617	2864	2684
80°	674	1986	1808
85°	596	1054	926

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5244 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	0.4
10°-20°	228.7	1.8
20°-30°	400.0	3.2
30°-40°	514.9	4.1
40°-50°	575.1	4.5
50°-60°	550.8	4.4
60°-70°	436.5	3.4
70°-80°	256.7	2.0
80°-90°	76.9	0.6
90°-100°	719.2	5.7
100°-110°	1890.7	14.9
110°-120°	1960.4	15.5
120°-130°	1572.5	12.4
130°-140°	1233.8	9.7
140°-150°	947.0	7.5
150°-160°	682.0	5.4
160°-170°	417.3	3.3
170°-180°	141.0	1.1
0°-30°	680.2	5.4
0°-40°	1195.1	9.4
0°-60°	2321.1	18.3
0°-90°	3091.3	24.4
90°-120°	4570.3	36.1
90°-150°	8323.6	65.8
90°-180°	9564.0	75.6
0°-180°	12655.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	389	417	469	531	550	36
15°	291	537	906	1098	1132	81
25°	186	609	1079	1126	1127	86
35°	126	582	1016	1074	1116	78
45°	86	464	898	1029	1075	66
55°	62	295	762	885	909	56
65°	49	156	566	636	645	48
75°	36	96	310	341	342	38
85°	13	30	77	85	86	14
90°	10	28	75	38	38	9
95°	95	372	1239	639	435	106
105°	341	516	2090	3173	2961	361
115°	605	735	1674	3340	3812	598
125°	842	944	1523	2573	3036	747
135°	1003	1104	1475	2077	2356	776
145°	1163	1238	1456	1772	1911	729
155°	1315	1352	1456	1599	1646	604
165°	1419	1438	1456	1514	1533	400
175°	1475	1475	1466	1485	1485	140
180°	1475	1475	1475	1475	1475	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8	398.8
2.5°	398.8	398.8	401.4	402.7	405.2	406.6	409.2	411.7	419.4	420.6	423.2
5°	388.6	393.8	410.4	416.8	434.8	459.2	469.4	486.0	520.7	531.0	537.4
7.5°	373.2	384.8	425.8	436.0	481.0	545.0	572.0	607.9	663.0	690.0	711.8
10°	348.8	373.2	446.4	470.7	543.8	641.2	691.3	741.3	824.6	861.8	876.0
12.5°	322.0	361.6	468.2	501.4	606.6	749.0	809.3	864.4	959.3	1009.4	1017.0
15°	291.2	345.0	488.6	537.4	673.4	838.8	905.5	973.4	1061.9	1097.8	1106.8
17.5°	264.2	332.2	507.9	559.2	724.6	919.6	987.6	1044.0	1115.8	1140.2	1146.6
20°	230.8	311.6	520.7	587.4	778.5	978.6	1044.0	1087.6	1136.3	1151.7	1154.3
22.5°	206.4	289.8	528.4	597.6	814.4	1014.5	1069.6	1104.3	1137.6	1142.7	1144.0
25°	186.0	265.4	527.1	609.2	845.2	1036.3	1078.6	1104.3	1123.5	1126.1	1126.1
27.5°	166.8	238.6	522.0	611.8	868.3	1041.4	1074.8	1092.7	1101.7	1106.8	1106.8
30°	150.0	212.9	509.2	606.6	878.6	1036.3	1063.2	1072.2	1081.2	1088.9	1092.7
32.5°	137.2	188.6	490.0	596.4	879.8	1023.4	1042.7	1047.8	1060.6	1078.6	1085.0
35°	125.6	164.2	468.2	582.2	872.1	1003.0	1015.8	1020.9	1046.6	1073.5	1082.4
37.5°	114.2	146.2	439.9	557.9	860.6	978.6	987.6	996.5	1036.3	1068.4	1078.6
40°	102.6	130.8	406.6	531.0	842.6	949.1	956.8	970.9	1023.4	1060.6	1070.9
42.5°	93.6	118.0	370.6	502.8	819.6	915.7	927.3	947.8	1008.1	1047.8	1059.4
45°	86.0	105.2	332.2	464.2	790.0	881.1	897.8	926.0	990.1	1028.6	1038.8
47.5°	78.2	96.2	292.4	424.5	758.0	846.5	868.3	900.4	965.8	1003.0	1011.9
50°	71.8	87.2	252.6	382.2	723.4	809.3	834.9	868.3	935.0	969.6	981.1
52.5°	66.6	79.6	215.4	339.8	683.6	770.8	800.3	834.9	897.8	931.1	938.8
55°	61.6	73.1	183.4	295.0	642.6	729.8	761.8	795.2	856.7	885.0	890.1
57.5°	59.0	68.0	156.4	252.6	599.0	683.6	719.5	750.3	808.0	829.8	834.9
60°	55.2	64.2	136.0	216.8	551.5	640.0	670.8	701.6	750.3	768.2	772.1
62.5°	51.3	61.6	120.6	182.2	502.8	588.7	619.4	647.7	688.7	701.6	706.7
65°	48.8	59.0	109.0	156.4	452.8	534.8	565.6	590.0	623.3	636.2	638.7
67.5°	46.2	56.4	100.0	134.6	402.7	481.0	504.0	527.1	552.8	565.6	566.8
70°	42.4	53.8	92.4	119.2	351.4	419.4	438.6	463.0	483.5	490.0	493.8
72.5°	39.8	50.0	87.2	107.8	298.8	360.4	378.4	392.4	410.4	416.8	416.8
75°	36.0	44.8	82.0	96.2	245.0	295.0	310.4	324.4	338.6	341.2	337.3
77.5°	32.0	39.8	70.6	80.8	191.1	233.4	246.2	254.0	265.4	268.0	269.4
80°	27.0	34.6	55.2	62.8	138.6	171.8	180.8	187.2	197.5	197.5	200.0
82.5°	20.6	27.0	39.8	44.8	93.6	118.0	125.6	129.6	136.0	136.0	136.0
85°	12.8	16.6	25.6	29.5	56.4	71.8	77.0	78.2	83.4	84.6	84.6
87.5°	6.4	9.0	16.6	18.0	29.5	37.2	37.2	39.8	39.8	38.4	37.2
90°	9.9	17.9	25.7	27.7	43.6	64.7	75.3	66.8	50.1	37.6	37.6
92.5°	39.6	106.9	174.3	191.1	268.7	372.1	423.8	371.4	266.7	188.1	180.6
95°	95.0	218.3	341.6	372.3	661.1	1046.2	1238.7	1105.4	838.7	638.6	616.0
97.5°	164.4	273.1	381.8	409.0	890.5	1532.6	1853.6	1769.3	1600.8	1474.4	1431.2
100°	217.8	316.4	415.0	439.7	974.0	1686.4	2042.7	2048.8	2061.2	2070.4	2019.1
102.5°	263.3	355.3	447.3	470.4	1012.3	1734.9	2096.2	2203.5	2418.3	2579.3	2535.3
105°	340.6	418.5	496.4	515.9	1040.6	1740.4	2090.2	2330.9	2812.4	3173.4	3149.8
107.5°	419.9	492.4	565.0	583.2	1045.9	1662.9	1971.4	2307.2	2978.7	3482.4	3488.1
110°	473.3	538.9	604.5	620.9	1038.0	1594.3	1872.4	2247.8	2998.5	3561.5	3586.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	525.8	588.2	650.8	666.4	1038.3	1534.3	1782.2	2166.4	2934.7	3511.0	3548.9
115°	605.0	662.6	720.2	734.6	1047.9	1465.6	1674.4	2044.4	2784.6	3339.8	3392.3
117.5°	683.2	735.6	787.9	801.0	1067.4	1422.5	1600.1	1934.1	2602.1	3103.1	3161.4
120°	728.7	778.1	827.3	839.6	1083.2	1408.0	1570.4	1875.6	2485.9	2943.7	3000.2
122.5°	773.3	823.0	872.7	885.1	1105.9	1400.3	1547.6	1822.4	2372.1	2784.3	2840.1
125°	841.6	887.0	932.3	943.6	1136.6	1394.1	1522.8	1756.3	2223.2	2573.4	2624.7
127.5°	897.1	942.9	988.6	1000.1	1167.4	1390.5	1502.1	1702.5	2103.4	2404.1	2447.4
130°	926.7	976.1	1025.3	1037.7	1189.8	1392.7	1494.1	1672.6	2029.5	2297.2	2337.2
132.5°	957.4	1006.8	1056.0	1068.4	1208.0	1394.1	1487.2	1646.9	1966.4	2206.0	2241.9
135°	1003.0	1047.9	1092.8	1104.0	1227.8	1392.8	1475.3	1609.1	1876.6	2077.3	2108.2
137.5°	1049.5	1094.0	1138.4	1149.5	1257.5	1401.4	1473.3	1586.4	1812.7	1982.3	2007.6
140°	1088.1	1129.1	1170.0	1180.2	1275.7	1402.8	1466.4	1564.1	1759.5	1906.1	1929.7
142.5°	1117.9	1155.8	1193.5	1203.0	1290.8	1407.9	1466.4	1552.2	1723.8	1852.5	1872.9
145°	1163.4	1196.4	1229.5	1237.7	1310.7	1407.9	1456.5	1526.7	1667.1	1772.4	1787.8
147.5°	1209.0	1241.1	1273.3	1281.3	1339.7	1417.6	1456.5	1511.7	1622.2	1705.1	1717.8
150°	1238.7	1267.7	1296.8	1304.1	1354.8	1422.6	1456.5	1503.1	1596.5	1666.5	1676.8
152.5°	1269.3	1291.3	1313.3	1318.9	1364.8	1425.9	1456.5	1496.3	1576.0	1635.8	1643.6
155°	1315.0	1331.2	1347.5	1351.6	1386.6	1433.1	1456.5	1488.2	1551.6	1599.1	1604.3
157.5°	1348.6	1364.4	1380.3	1384.2	1408.3	1440.4	1456.5	1481.1	1530.4	1567.4	1571.0
160°	1371.4	1383.7	1396.0	1399.1	1418.2	1443.8	1456.5	1477.6	1519.9	1551.5	1553.6
162.5°	1394.1	1403.3	1412.6	1414.9	1428.7	1447.2	1456.5	1474.3	1509.9	1536.7	1538.7
165°	1418.9	1427.3	1435.6	1437.7	1443.9	1452.3	1456.5	1469.3	1494.8	1513.9	1516.0
167.5°	1441.7	1445.6	1449.6	1450.5	1455.8	1462.9	1466.4	1474.7	1491.5	1504.0	1504.9
170°	1456.5	1460.5	1464.5	1465.5	1465.7	1466.2	1466.4	1474.7	1491.5	1504.0	1504.0
172.5°	1464.4	1465.3	1466.2	1466.4	1466.4	1466.4	1466.4	1473.0	1486.2	1496.2	1495.4
175°	1475.3	1475.3	1475.3	1475.3	1472.3	1468.4	1466.4	1470.6	1478.9	1485.3	1485.3
177.5°	1475.3	1475.3	1475.3	1475.3	1473.0	1470.0	1468.4	1471.7	1478.3	1483.2	1482.4
180°	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3	1475.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.8	398.8
2.5°	425.8	423.2
5°	547.6	550.2
7.5°	737.4	736.2
10°	917.0	928.6
12.5°	1047.8	1050.4
15°	1127.4	1132.5
17.5°	1158.1	1159.4
20°	1159.4	1156.8
22.5°	1145.3	1142.7
25°	1128.6	1127.4
27.5°	1113.2	1114.5
30°	1106.8	1110.7
32.5°	1106.8	1113.2
35°	1109.4	1115.8
37.5°	1108.1	1115.8
40°	1103.0	1112.0
42.5°	1088.9	1095.3
45°	1067.1	1074.8
47.5°	1038.8	1044.0
50°	1003.0	1008.1
52.5°	958.0	959.3
55°	904.2	909.3
57.5°	846.5	847.8
60°	782.4	786.2
62.5°	714.4	714.4
65°	642.6	645.1
67.5°	568.2	574.6
70°	492.5	493.8
72.5°	418.1	418.1
75°	341.2	342.4
77.5°	268.0	268.0
80°	198.8	200.0
82.5°	137.2	139.8
85°	86.0	86.0
87.5°	39.8	36.0
90°	37.6	37.6
92.5°	150.7	120.8
95°	525.3	434.7
97.5°	1258.7	1086.2
100°	1813.5	1608.0
102.5°	2359.3	2183.3
105°	3055.1	2960.6
107.5°	3510.9	3533.8
110°	3684.8	3783.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3700.3	3851.6
115°	3602.2	3812.1
117.5°	3394.1	3626.9
120°	3226.5	3452.6
122.5°	3063.3	3286.3
125°	2830.3	3035.8
127.5°	2620.8	2794.2
130°	2497.4	2657.5
132.5°	2385.4	2528.8
135°	2231.9	2355.6
137.5°	2108.8	2210.0
140°	2024.4	2118.9
142.5°	1954.3	2035.7
145°	1849.4	1911.0
147.5°	1768.9	1819.9
150°	1718.2	1759.5
152.5°	1674.8	1706.0
155°	1625.0	1645.6
157.5°	1585.6	1600.1
160°	1561.9	1570.4
162.5°	1546.6	1554.6
165°	1524.4	1532.8
167.5°	1508.4	1511.9
170°	1504.0	1504.0
172.5°	1492.2	1489.2
175°	1485.3	1485.3
177.5°	1478.8	1475.3
180°	1475.3	1475.3



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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	0.13	0.81	1.27	1.95	3.54	13.31	13.99	14.45	15.13	16.72
	3H	0.82	1.43	1.97	2.58	4.19	15.13	15.75	16.29	16.89	18.50
	4H	1.11	1.69	2.27	2.84	4.45	15.77	16.36	16.93	17.50	19.11
	6H	1.35	1.89	2.52	3.04	4.66	16.19	16.73	17.36	17.88	19.50
	8H	1.41	1.93	2.58	3.09	4.70	16.31	16.82	17.48	17.98	19.60
	12H	1.42	1.91	2.60	3.07	4.71	16.37	16.86	17.55	18.01	19.65
4H	2H	7.32	7.91	8.49	9.05	10.67	13.56	14.15	14.73	15.29	16.90
	3H	8.87	9.36	10.05	10.53	12.16	15.59	16.08	16.76	17.25	18.87
	4H	8.96	9.41	10.14	10.57	12.21	16.35	16.80	17.53	17.96	19.60
	6H	8.96	9.35	10.14	10.53	12.16	16.88	17.26	18.06	18.45	20.08
	8H	8.93	9.29	10.11	10.47	12.12	17.03	17.40	18.21	18.57	20.22
	12H	8.88	9.21	10.08	10.39	12.05	17.12	17.45	18.32	18.63	20.29
8H	4H	10.39	10.75	11.57	11.92	13.57	16.39	16.75	17.57	17.93	19.58
	6H	10.62	10.92	11.82	12.14	13.78	17.01	17.31	18.21	18.53	20.17
	8H	10.64	10.90	11.84	12.09	13.76	17.23	17.49	18.44	18.68	20.35
	12H	10.60	10.83	11.81	12.02	13.72	17.37	17.60	18.58	18.79	20.49
12H	4H	10.52	10.85	11.72	12.04	13.69	16.34	16.67	17.53	17.85	19.50
	6H	10.88	11.14	12.09	12.33	14.00	17.00	17.26	18.20	18.45	20.12
	8H	10.94	11.17	12.15	12.36	14.06	17.22	17.44	18.43	18.64	20.33