

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: P937738

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937738
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

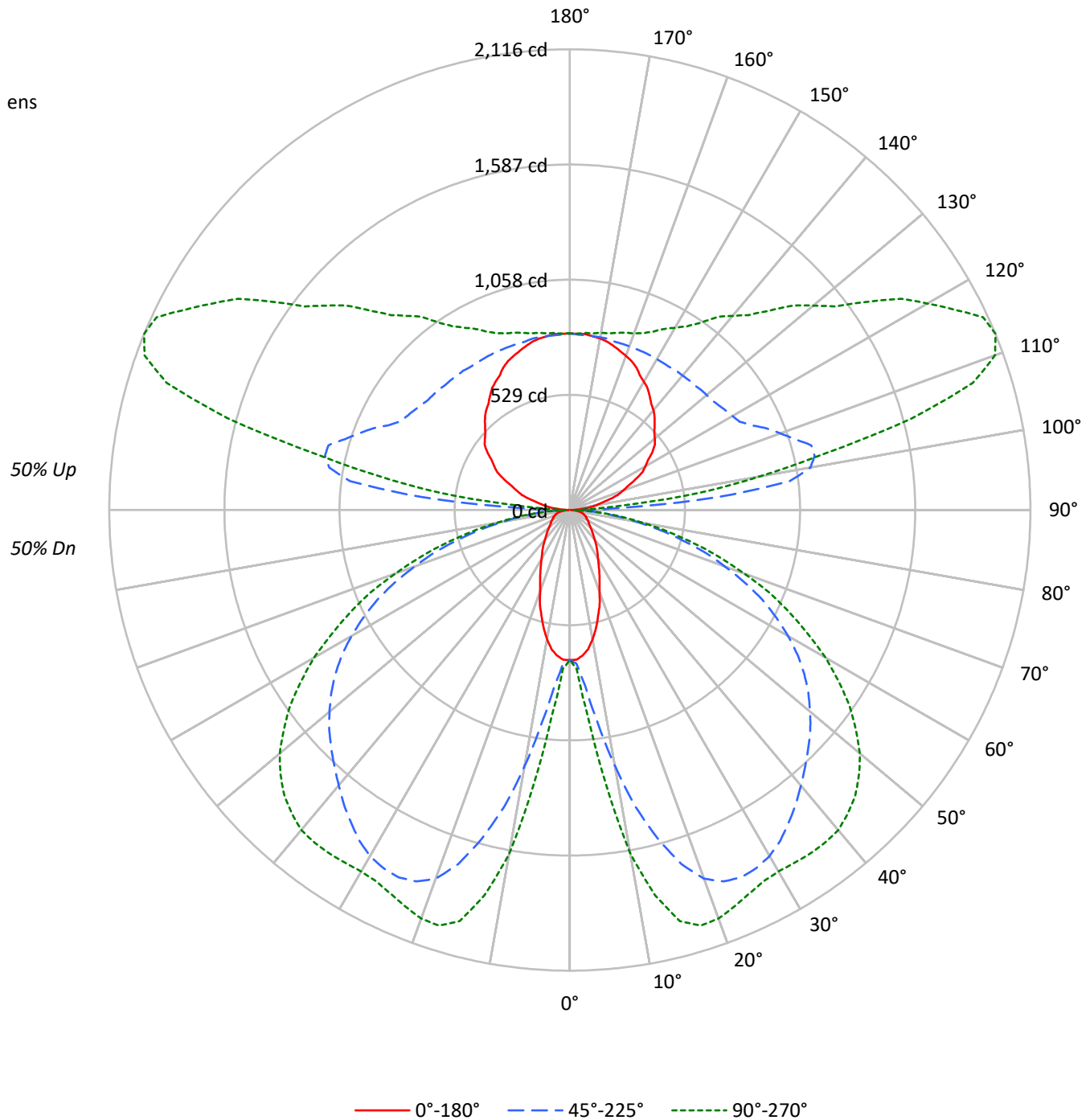
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10583.9 lumens
Efficiency: N/A
Efficacy: 102.6 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: General Diffuse

Input Watts (W): 103.2
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

TEST NUMBER: P937738
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4259	4259	4259
5°	4159	4921	5724
10°	3771	7171	9490
15°	3204	9367	11459
20°	2607	10852	11678
25°	2174	11353	11441
30°	1832	11422	11419
35°	1620	11229	11715
40°	1410	10980	12020
45°	1276	10796	12067
50°	1169	10630	11867
55°	1119	10389	11341
60°	1144	9928	10511
65°	1190	9230	9369
70°	1264	8043	7915
75°	1395	6553	6177
80°	1513	4539	4162
85°	1318	2404	2130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12067 cd/sqm



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	0.8
10°-20°	394.7	3.7
20°-30°	690.3	6.5
30°-40°	888.7	8.4
40°-50°	992.6	9.4
50°-60°	950.7	9.0
60°-70°	753.4	7.1
70°-80°	443.0	4.2
80°-90°	126.2	1.2
90°-100°	395.2	3.7
100°-110°	1038.9	9.8
110°-120°	1077.2	10.2
120°-130°	864.1	8.2
130°-140°	678.0	6.4
140°-150°	520.4	4.9
150°-160°	374.8	3.5
160°-170°	229.3	2.2
170°-180°	77.5	0.7
0°-30°	1174.1	11.1
0°-40°	2062.7	19.5
0°-60°	4006.0	37.8
0°-90°	5328.6	50.3
90°-120°	2511.3	23.7
90°-150°	4573.8	43.2
90°-180°	5255.0	49.7
0°-180°	10583.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	671	719	810	916	950	62
15°	502	928	1563	1895	1955	140
25°	321	1051	1862	1944	1946	148
35°	217	1005	1753	1853	1926	135
45°	148	801	1549	1775	1855	115
55°	106	509	1315	1527	1569	97
65°	84	270	976	1098	1113	83
75°	62	166	536	589	591	65
85°	22	51	133	146	148	23
90°	5	15	41	21	21	6
95°	52	205	681	351	239	58
105°	187	284	1149	1744	1627	198
115°	332	404	920	1835	2095	328
125°	462	518	837	1414	1668	411
135°	551	607	811	1142	1294	426
145°	639	680	800	974	1050	401
155°	723	743	800	879	904	332
165°	780	790	800	832	842	220
175°	811	811	806	816	816	77
180°	811	811	811	811	811	



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4
2.5°	688.4	688.4	692.8	695.0	699.5	701.7	706.1	710.5	723.8	726.1	730.5
5°	670.7	679.6	708.4	719.4	750.4	792.4	810.1	838.9	898.7	916.4	927.5
7.5°	644.2	664.1	734.9	752.6	830.1	940.8	987.2	1049.2	1144.4	1190.8	1228.5
10°	602.1	644.2	770.3	812.4	938.6	1106.8	1193.1	1279.4	1423.3	1487.5	1511.8
12.5°	555.6	624.2	807.9	865.5	1047.0	1292.7	1396.7	1491.9	1655.7	1742.1	1755.3
15°	502.5	595.4	843.3	927.5	1162.1	1447.7	1562.8	1680.1	1832.8	1894.8	1910.3
17.5°	456.0	573.3	876.6	965.1	1250.7	1587.1	1704.4	1801.8	1925.8	1967.8	1978.9
20°	398.4	537.9	898.7	1013.8	1343.6	1689.0	1801.8	1877.1	1961.2	1987.7	1992.2
22.5°	356.4	500.3	912.0	1031.5	1405.6	1750.9	1846.1	1905.8	1963.4	1972.3	1974.5
25°	321.0	458.2	909.8	1051.4	1458.7	1788.5	1861.6	1905.8	1939.1	1943.5	1943.5
27.5°	287.8	411.7	900.9	1055.9	1498.6	1797.3	1854.9	1885.9	1901.4	1910.3	1910.3
30°	259.0	367.5	878.7	1047.0	1516.3	1788.5	1835.0	1850.5	1866.0	1879.3	1885.9
32.5°	236.8	325.4	845.5	1029.3	1518.5	1766.4	1799.6	1808.4	1830.6	1861.6	1872.6
35°	217.0	283.3	807.9	1004.9	1505.2	1731.0	1753.1	1761.9	1806.2	1852.7	1868.2
37.5°	197.0	252.4	759.3	962.9	1485.2	1689.0	1704.4	1719.9	1788.5	1843.8	1861.6
40°	177.1	225.8	701.7	916.4	1454.3	1638.0	1651.3	1675.6	1766.4	1830.6	1848.3
42.5°	161.6	203.6	639.7	867.7	1414.4	1580.5	1600.4	1635.8	1739.8	1808.4	1828.4
45°	148.3	181.5	573.3	801.3	1363.5	1520.7	1549.4	1598.2	1708.8	1775.3	1793.0
47.5°	135.0	166.0	504.6	732.7	1308.2	1460.9	1498.6	1553.9	1666.8	1731.0	1746.5
50°	123.9	150.5	436.1	659.6	1248.4	1396.7	1441.0	1498.6	1613.7	1673.4	1693.3
52.5°	115.1	137.3	371.8	586.6	1179.8	1330.3	1381.2	1441.0	1549.4	1607.0	1620.3
55°	106.2	126.2	316.5	509.1	1109.0	1259.5	1314.9	1372.4	1478.6	1527.4	1536.2
57.5°	101.9	117.3	270.1	436.1	1033.7	1179.8	1241.8	1294.9	1394.6	1432.1	1441.0
60°	95.1	110.7	234.7	374.1	951.8	1104.5	1157.7	1210.8	1294.9	1325.9	1332.6
62.5°	88.5	106.2	208.1	314.3	867.7	1016.0	1069.1	1117.9	1188.7	1210.8	1219.6
65°	84.2	101.9	188.2	270.1	781.3	923.0	976.2	1018.2	1075.7	1097.9	1102.3
67.5°	79.7	97.4	172.7	232.4	695.0	830.1	869.9	909.8	954.0	976.2	978.4
70°	73.1	93.0	159.4	205.9	606.5	723.8	757.0	799.0	834.5	845.5	852.2
72.5°	68.6	86.3	150.5	185.9	515.7	622.0	653.0	677.3	708.4	719.4	719.4
75°	62.0	77.4	141.7	166.0	422.8	509.1	535.7	560.0	584.3	588.8	582.2
77.5°	55.4	68.6	121.7	139.4	329.8	402.9	425.0	438.3	458.2	462.6	464.9
80°	46.5	59.7	95.1	108.5	239.0	296.6	312.1	323.2	340.9	340.9	345.3
82.5°	35.4	46.5	68.6	77.4	161.6	203.6	217.0	223.6	234.7	234.7	234.7
85°	22.1	28.8	44.3	50.9	97.4	123.9	132.8	135.0	143.9	146.1	146.1
87.5°	11.1	15.5	28.8	31.0	50.9	64.2	64.2	68.6	68.6	66.4	64.2
90°	5.4	9.8	14.1	15.3	24.0	35.6	41.3	36.7	27.6	20.7	20.7
92.5°	21.8	58.8	95.7	105.0	147.6	204.4	232.8	204.1	146.5	103.3	99.2
95°	52.2	119.9	187.7	204.6	363.3	574.8	680.6	607.4	460.8	350.9	338.4
97.5°	90.3	150.1	209.8	224.7	489.3	842.1	1018.5	972.2	879.6	810.1	786.4
100°	119.7	173.9	228.0	241.6	535.2	926.6	1122.4	1125.8	1132.6	1137.7	1109.4
102.5°	144.8	195.3	245.8	258.5	556.3	953.3	1151.8	1210.8	1328.8	1417.3	1393.2
105°	187.1	230.0	272.8	283.5	571.9	956.4	1148.6	1280.8	1545.3	1743.7	1730.7
107.5°	230.7	270.6	310.5	320.5	574.8	913.7	1083.2	1267.8	1636.7	1913.5	1916.6
110°	260.0	296.1	332.2	341.1	570.4	876.0	1028.8	1235.1	1647.6	1957.0	1970.5



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	288.9	323.3	357.6	366.2	570.6	843.1	979.3	1190.4	1612.7	1929.3	1950.0
115°	332.4	364.1	395.7	403.7	575.8	805.2	920.0	1123.4	1530.2	1835.2	1864.1
117.5°	375.4	404.2	433.0	440.1	586.4	781.6	879.2	1062.7	1429.8	1705.1	1737.1
120°	400.4	427.6	454.6	461.4	595.3	773.7	862.9	1030.6	1366.0	1617.5	1648.6
122.5°	424.9	452.2	479.6	486.4	607.7	769.5	850.4	1001.4	1303.4	1529.9	1560.6
125°	462.4	487.4	512.3	518.5	624.6	766.1	836.8	965.1	1221.6	1414.1	1442.3
127.5°	493.0	518.1	543.3	549.6	641.5	764.1	825.4	935.5	1155.8	1321.0	1344.9
130°	509.3	536.4	563.4	570.2	653.9	765.3	821.0	919.0	1115.2	1262.3	1284.2
132.5°	526.1	553.2	580.3	587.1	663.8	766.1	817.2	905.0	1080.5	1212.2	1231.9
135°	551.1	575.8	600.5	606.7	674.7	765.3	810.6	884.2	1031.2	1141.5	1158.5
137.5°	576.7	601.1	625.6	631.7	691.0	770.1	809.6	871.8	996.0	1089.3	1103.1
140°	598.0	620.5	643.0	648.5	700.9	770.8	805.8	859.5	966.8	1047.3	1060.3
142.5°	614.3	635.1	655.9	661.1	709.3	773.6	805.8	852.9	947.2	1017.9	1029.1
145°	639.3	657.4	675.6	680.1	720.2	773.7	800.4	838.9	916.1	973.9	982.3
147.5°	664.3	681.9	699.5	704.0	736.1	778.9	800.4	830.7	891.4	936.9	943.9
150°	680.6	696.6	712.5	716.6	744.5	781.7	800.4	826.0	877.2	915.6	921.3
152.5°	697.5	709.7	721.7	724.7	749.9	783.5	800.4	822.2	866.0	898.8	903.1
155°	722.6	731.5	740.4	742.6	761.9	787.5	800.4	817.8	852.6	878.7	881.5
157.5°	741.1	749.8	758.4	760.6	773.8	791.5	800.4	813.9	841.0	861.3	863.3
160°	753.5	760.3	767.1	768.8	779.3	793.4	800.4	812.0	835.1	852.6	853.7
162.5°	766.1	771.1	776.2	777.5	785.1	795.3	800.4	810.1	829.7	844.4	845.4
165°	779.7	784.2	788.8	790.0	793.5	798.1	800.4	807.3	821.4	831.9	833.1
167.5°	792.2	794.3	796.5	797.0	799.9	803.8	805.8	810.4	819.5	826.4	826.9
170°	800.4	802.5	804.7	805.2	805.4	805.7	805.8	810.4	819.5	826.4	826.4
172.5°	804.7	805.1	805.7	805.8	805.8	805.8	805.8	809.4	816.7	822.1	821.6
175°	810.6	810.6	810.6	810.6	809.0	806.8	805.8	808.0	812.6	816.1	816.1
177.5°	810.6	810.6	810.6	810.6	809.4	807.8	806.9	808.7	812.3	815.0	814.5
180°	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6	810.6



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	688.4	688.4
2.5°	734.9	730.5
5°	945.2	949.6
7.5°	1272.8	1270.6
10°	1582.7	1602.6
12.5°	1808.4	1812.9
15°	1945.7	1954.6
17.5°	1998.8	2001.1
20°	2001.1	1996.6
22.5°	1976.6	1972.3
25°	1947.9	1945.7
27.5°	1921.4	1923.5
30°	1910.3	1916.9
32.5°	1910.3	1921.4
35°	1914.7	1925.8
37.5°	1912.5	1925.8
40°	1903.7	1919.1
42.5°	1879.3	1890.4
45°	1841.6	1854.9
47.5°	1793.0	1801.8
50°	1731.0	1739.8
52.5°	1653.5	1655.7
55°	1560.5	1569.4
57.5°	1460.9	1463.1
60°	1350.3	1356.9
62.5°	1233.0	1233.0
65°	1109.0	1113.4
67.5°	980.6	991.7
70°	850.0	852.2
72.5°	721.6	721.6
75°	588.8	591.0
77.5°	462.6	462.6
80°	343.1	345.3
82.5°	236.8	241.3
85°	148.3	148.3
87.5°	68.6	62.0
90°	20.7	20.7
92.5°	82.8	66.4
95°	288.6	238.9
97.5°	691.6	596.8
100°	996.5	883.5
102.5°	1296.4	1199.7
105°	1678.8	1626.8
107.5°	1929.3	1941.8
110°	2024.8	2078.9



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2033.2	2116.4
115°	1979.3	2094.7
117.5°	1865.0	1992.9
120°	1772.9	1897.2
122.5°	1683.2	1805.8
125°	1555.2	1668.1
127.5°	1440.2	1535.4
130°	1372.3	1460.3
132.5°	1310.8	1389.6
135°	1226.4	1294.4
137.5°	1158.8	1214.4
140°	1112.4	1164.3
142.5°	1073.9	1118.6
145°	1016.3	1050.1
147.5°	972.0	1000.0
150°	944.1	966.8
152.5°	920.3	937.4
155°	892.9	904.2
157.5°	871.2	879.2
160°	858.3	862.9
162.5°	849.8	854.2
165°	837.7	842.2
167.5°	828.9	830.8
170°	826.4	826.4
172.5°	820.0	818.3
175°	816.1	816.1
177.5°	812.6	810.6
180°	810.6	810.6



TEST NUMBER: P937738

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-3000K

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	6.07	6.97	7.01	7.94	9.20	19.23	20.13	20.18	21.10	22.37
	3H	6.78	7.59	7.73	8.57	9.85	21.07	21.88	22.03	22.86	24.14
	4H	7.08	7.85	8.05	8.83	10.12	21.71	22.48	22.68	23.46	24.76
	6H	7.33	8.04	8.31	9.03	10.33	22.14	22.85	23.12	23.84	25.14
	8H	7.40	8.08	8.39	9.08	10.38	22.26	22.94	23.25	23.94	25.25
	12H	7.42	8.06	8.41	9.06	10.39	22.33	22.97	23.32	23.97	25.30
4H	2H	13.28	14.05	14.26	15.03	16.32	19.51	20.28	20.49	21.26	22.56
	3H	14.85	15.50	15.84	16.51	17.81	21.56	22.20	22.54	23.21	24.52
	4H	14.95	15.54	15.94	16.54	17.87	22.32	22.91	23.32	23.91	25.25
	6H	14.96	15.47	15.97	16.50	17.83	22.86	23.37	23.87	24.40	25.72
	8H	14.94	15.42	15.95	16.44	17.78	23.02	23.50	24.03	24.52	25.86
	12H	14.90	15.33	15.93	16.36	17.71	23.11	23.54	24.14	24.58	25.93
8H	4H	16.39	16.87	17.40	17.89	19.23	22.39	22.86	23.40	23.88	25.23
	6H	16.64	17.03	17.67	18.09	19.44	23.01	23.41	24.05	24.47	25.81
	8H	16.66	17.00	17.70	18.05	19.41	23.23	23.58	24.27	24.63	25.99
	12H	16.63	16.93	17.67	17.98	19.38	23.37	23.68	24.42	24.72	26.13
12H	4H	16.54	16.97	17.57	18.00	19.35	22.34	22.77	23.37	23.81	25.16
	6H	16.90	17.24	17.94	18.29	19.65	23.00	23.35	24.04	24.39	25.75
	8H	16.97	17.27	18.01	18.32	19.72	23.23	23.53	24.27	24.58	25.98