

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: P937715

Luminaire Tested: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937715
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-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

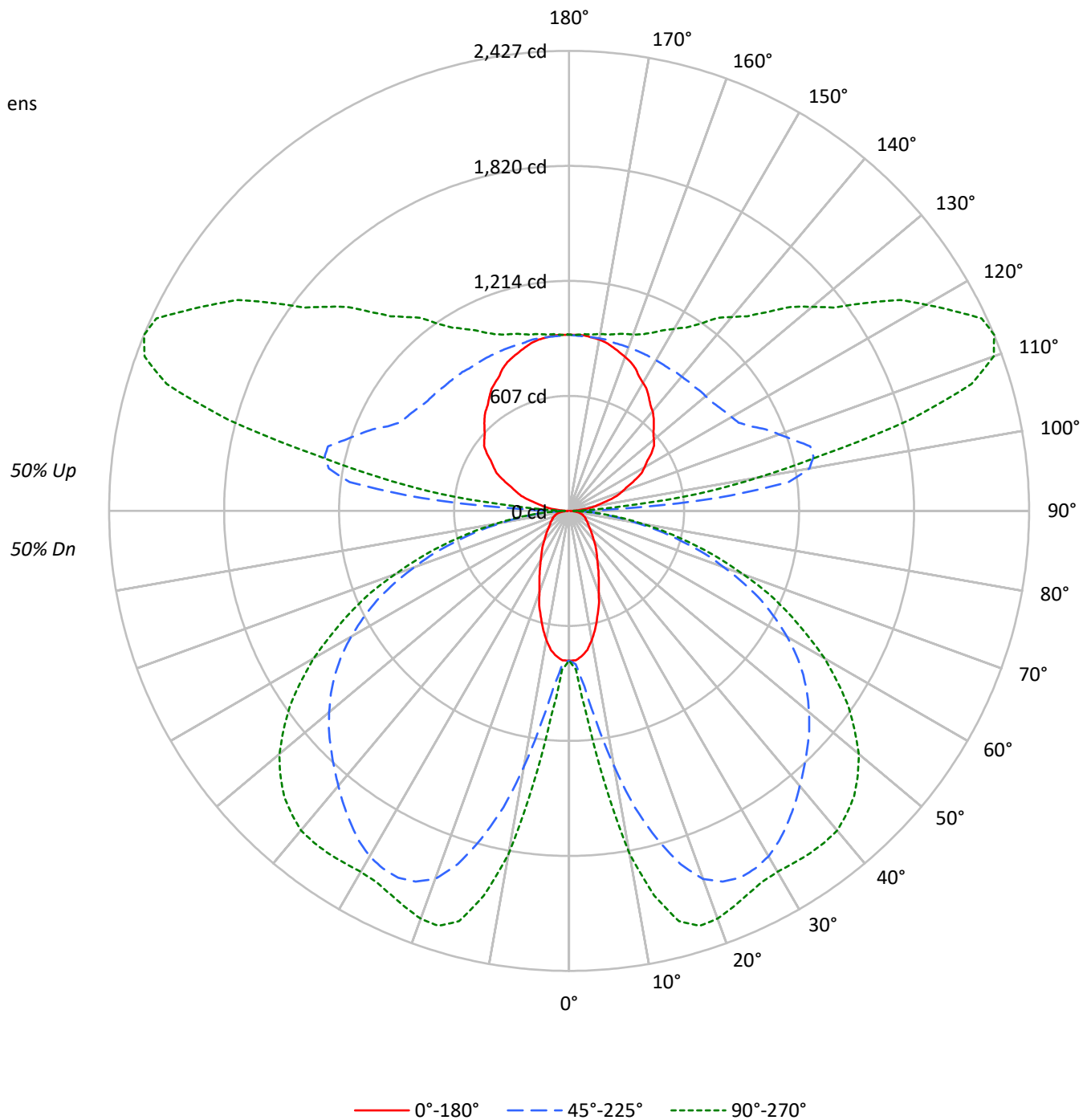
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12137.0 lumens
Efficiency: N/A
Efficacy: 117.6 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: P937715
CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P937715

CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	4883	4883	4883
5°	4769	5643	6564
10°	4324	8224	10883
15°	3674	10742	13141
20°	2990	12444	13392
25°	2493	13020	13120
30°	2101	13098	13095
35°	1857	12877	13434
40°	1618	12591	13783
45°	1464	12380	13837
50°	1341	12190	13608
55°	1283	11913	13005
60°	1312	11385	12053
65°	1364	10584	10744
70°	1449	9224	9077
75°	1600	7514	7083
80°	1735	5205	4773
85°	1514	2756	2443

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13837 cd/sqm



TEST NUMBER: P937715

CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	0.8
10°-20°	452.6	3.7
20°-30°	791.6	6.5
30°-40°	1019.1	8.4
40°-50°	1138.3	9.4
50°-60°	1090.2	9.0
60°-70°	864.0	7.1
70°-80°	508.0	4.2
80°-90°	144.7	1.2
90°-100°	453.1	3.7
100°-110°	1191.4	9.8
110°-120°	1235.3	10.2
120°-130°	990.9	8.2
130°-140°	777.5	6.4
140°-150°	596.7	4.9
150°-160°	429.8	3.5
160°-170°	263.0	2.2
170°-180°	88.8	0.7
0°-30°	1346.3	11.1
0°-40°	2365.4	19.5
0°-60°	4593.8	37.8
0°-90°	6110.5	50.3
90°-120°	2879.8	23.7
90°-150°	5244.9	43.2
90°-180°	6026.0	49.6
0°-180°	12137.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	789	789	789	789	789	
5°	769	825	929	1051	1089	71
15°	576	1064	1792	2173	2241	160
25°	368	1206	2135	2229	2231	170
35°	249	1152	2010	2125	2208	155
45°	170	919	1777	2036	2127	132
55°	122	584	1508	1752	1800	111
65°	96	310	1119	1259	1277	96
75°	71	190	614	675	678	74
85°	25	58	152	168	170	27
90°	6	18	47	24	24	7
95°	60	235	780	402	274	67
105°	215	325	1317	2000	1866	228
115°	381	463	1055	2104	2402	377
125°	530	595	960	1622	1913	471
135°	632	696	930	1309	1484	489
145°	733	780	918	1117	1204	459
155°	829	852	918	1008	1037	381
165°	894	906	918	954	966	252
175°	930	930	924	936	936	88
180°	930	930	930	930	930	



TEST NUMBER: P937715

CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4	789.4
2.5°	789.4	789.4	794.5	797.0	802.1	804.7	809.7	814.8	830.0	832.6	837.7
5°	769.1	779.3	812.3	825.0	860.5	908.7	929.0	962.0	1030.6	1050.9	1063.6
7.5°	738.7	761.5	842.7	863.0	951.9	1078.8	1132.1	1203.2	1312.3	1365.6	1408.8
10°	690.4	738.7	883.3	931.6	1076.3	1269.2	1368.2	1467.2	1632.2	1705.8	1733.7
12.5°	637.1	715.8	926.5	992.5	1200.6	1482.4	1601.7	1710.8	1898.7	1997.7	2012.9
15°	576.2	682.8	967.1	1063.6	1332.6	1660.1	1792.1	1926.6	2101.8	2172.8	2190.6
17.5°	522.9	657.4	1005.2	1106.7	1434.2	1820.0	1954.5	2066.2	2208.4	2256.6	2269.3
20°	456.9	616.8	1030.6	1162.6	1540.8	1936.8	2066.2	2152.5	2249.0	2279.4	2284.5
22.5°	408.7	573.7	1045.8	1182.9	1611.9	2007.8	2117.0	2185.5	2251.5	2261.7	2264.2
25°	368.1	525.4	1043.3	1205.7	1672.8	2051.0	2134.8	2185.5	2223.6	2228.7	2228.7
27.5°	330.0	472.1	1033.1	1210.8	1718.5	2061.1	2127.1	2162.7	2180.4	2190.6	2190.6
30°	297.0	421.4	1007.7	1200.6	1738.8	2051.0	2104.3	2122.1	2139.8	2155.1	2162.7
32.5°	271.6	373.1	969.6	1180.3	1741.3	2025.6	2063.7	2073.8	2099.2	2134.8	2147.4
35°	248.8	324.9	926.5	1152.4	1726.1	1985.0	2010.4	2020.5	2071.3	2124.6	2142.4
37.5°	225.9	289.4	870.7	1104.2	1703.2	1936.8	1954.5	1972.3	2051.0	2114.4	2134.8
40°	203.1	258.9	804.7	1050.9	1667.7	1878.4	1893.6	1921.5	2025.6	2099.2	2119.5
42.5°	185.3	233.5	733.6	995.0	1622.0	1812.4	1835.2	1875.8	1995.1	2073.8	2096.7
45°	170.1	208.1	657.4	918.9	1563.6	1743.8	1776.8	1832.7	1959.6	2035.8	2056.1
47.5°	154.8	190.4	578.7	840.2	1500.2	1675.3	1718.5	1781.9	1911.4	1985.0	2002.8
50°	142.1	172.6	500.1	756.4	1431.6	1601.7	1652.5	1718.5	1850.5	1919.0	1941.8
52.5°	132.0	157.4	426.4	672.7	1352.9	1525.5	1583.9	1652.5	1776.8	1842.8	1858.1
55°	121.8	144.7	363.0	583.8	1271.7	1444.3	1507.8	1573.8	1695.6	1751.5	1761.6
57.5°	116.8	134.5	309.7	500.1	1185.4	1352.9	1424.0	1484.9	1599.2	1642.3	1652.5
60°	109.1	126.9	269.1	429.0	1091.5	1266.6	1327.6	1388.5	1484.9	1520.5	1528.1
62.5°	101.5	121.8	238.6	360.4	995.0	1165.1	1226.0	1281.9	1363.1	1388.5	1398.6
65°	96.5	116.8	215.8	309.7	896.0	1058.5	1119.4	1167.6	1233.6	1259.0	1264.1
67.5°	91.4	111.7	198.0	266.5	797.0	951.9	997.6	1043.3	1094.0	1119.4	1122.0
70°	83.8	106.6	182.8	236.1	695.5	830.0	868.1	916.3	957.0	969.6	977.3
72.5°	78.7	99.0	172.6	213.2	591.4	713.3	748.8	776.7	812.3	825.0	825.0
75°	71.1	88.8	162.5	190.4	484.8	583.8	614.3	642.2	670.1	675.2	667.6
77.5°	63.5	78.7	139.6	159.9	378.2	462.0	487.4	502.6	525.4	530.5	533.1
80°	53.3	68.5	109.1	124.4	274.1	340.1	357.9	370.6	390.9	390.9	396.0
82.5°	40.6	53.3	78.7	88.8	185.3	233.5	248.8	256.4	269.1	269.1	269.1
85°	25.4	33.0	50.8	58.4	111.7	142.1	152.3	154.8	165.0	167.5	167.5
87.5°	12.7	17.8	33.0	35.5	58.4	73.6	73.6	78.7	78.7	76.2	73.6
90°	6.2	11.2	16.2	17.5	27.5	40.8	47.4	42.1	31.6	23.7	23.7
92.5°	25.0	67.4	109.8	120.4	169.3	234.4	267.0	234.0	168.0	118.5	113.8
95°	59.9	137.5	215.2	234.6	416.6	659.2	780.5	696.5	528.4	402.4	388.1
97.5°	103.6	172.1	240.6	257.7	561.1	965.7	1168.0	1114.9	1008.7	929.0	901.8
100°	137.3	199.4	261.5	277.0	613.7	1062.6	1287.1	1291.0	1298.8	1304.6	1272.2
102.5°	166.0	224.0	281.9	296.4	637.9	1093.2	1320.8	1388.5	1523.8	1625.3	1597.6
105°	214.6	263.7	312.8	325.1	655.8	1096.7	1317.1	1468.8	1772.1	1999.6	1984.7
107.5°	264.5	310.3	356.1	367.5	659.1	1047.8	1242.2	1453.8	1876.9	2194.3	2197.9
110°	298.2	339.5	380.9	391.2	654.1	1004.6	1179.8	1416.3	1889.4	2244.2	2259.7



TEST NUMBER: P937715

CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	331.3	370.7	410.1	419.9	654.3	966.8	1123.0	1365.1	1849.3	2212.4	2236.2
115°	381.2	417.5	453.8	462.9	660.3	923.4	1055.0	1288.2	1754.7	2104.5	2137.6
117.5°	430.5	463.5	496.5	504.7	672.5	896.3	1008.2	1218.7	1639.6	1955.3	1992.0
120°	459.2	490.3	521.3	529.1	682.6	887.2	989.5	1181.8	1566.4	1854.9	1890.5
122.5°	487.3	518.6	550.0	557.8	696.9	882.4	975.2	1148.4	1494.7	1754.4	1789.6
125°	530.3	558.9	587.5	594.6	716.3	878.5	959.6	1106.7	1400.9	1621.6	1654.0
127.5°	565.3	594.1	623.0	630.2	735.6	876.2	946.5	1072.8	1325.4	1514.9	1542.2
130°	584.0	615.1	646.1	653.9	749.8	877.6	941.5	1053.9	1278.8	1447.5	1472.7
132.5°	603.3	634.4	665.4	673.2	761.2	878.5	937.1	1037.8	1239.1	1390.1	1412.7
135°	632.0	660.3	688.6	695.7	773.7	877.6	929.6	1013.9	1182.5	1309.0	1328.5
137.5°	661.3	689.3	717.4	724.4	792.4	883.1	928.4	999.7	1142.2	1249.1	1265.0
140°	685.7	711.5	737.3	743.7	803.8	883.9	924.0	985.6	1108.7	1201.0	1215.9
142.5°	704.4	728.3	752.1	758.1	813.4	887.1	924.0	978.1	1086.2	1167.3	1180.1
145°	733.1	753.9	774.7	779.9	825.9	887.2	917.8	962.0	1050.5	1116.8	1126.5
147.5°	761.8	782.0	802.2	807.3	844.1	893.2	917.8	952.6	1022.2	1074.4	1082.4
150°	780.5	798.8	817.1	821.7	853.7	896.4	917.8	947.2	1005.9	1050.0	1056.5
152.5°	799.9	813.8	827.6	831.1	860.0	898.5	917.8	942.9	993.1	1030.7	1035.6
155°	828.6	838.8	849.0	851.6	873.7	903.1	917.8	937.8	977.7	1007.6	1010.9
157.5°	849.8	859.8	869.7	872.2	887.4	907.7	917.8	933.3	964.4	987.7	990.0
160°	864.1	871.9	879.7	881.6	893.7	909.8	917.8	931.1	957.7	977.7	979.0
162.5°	878.5	884.3	890.1	891.6	900.3	912.0	917.8	929.0	951.5	968.3	969.5
165°	894.1	899.3	904.6	905.9	909.9	915.2	917.8	925.8	941.9	954.0	955.3
167.5°	908.4	910.9	913.4	914.0	917.3	921.8	924.0	929.3	939.8	947.7	948.3
170°	917.8	920.3	922.8	923.4	923.6	923.9	924.0	929.3	939.8	947.7	947.7
172.5°	922.8	923.3	923.9	924.0	924.0	924.0	924.0	928.2	936.5	942.7	942.2
175°	929.6	929.6	929.6	929.6	927.7	925.2	924.0	926.6	931.9	935.9	935.9
177.5°	929.6	929.6	929.6	929.6	928.2	926.3	925.3	927.4	931.5	934.6	934.0
180°	929.6	929.6	929.6	929.6	929.6	929.6	929.6	929.6	929.6	929.6	929.6



TEST NUMBER: P937715

CATALOG NUMBER: SQ4-FB-100U-125D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	789.4	789.4
2.5°	842.7	837.7
5°	1083.9	1089.0
7.5°	1459.6	1457.0
10°	1814.9	1837.8
12.5°	2073.8	2078.9
15°	2231.2	2241.4
17.5°	2292.1	2294.7
20°	2294.7	2289.6
22.5°	2266.7	2261.7
25°	2233.7	2231.2
27.5°	2203.3	2205.8
30°	2190.6	2198.2
32.5°	2190.6	2203.3
35°	2195.7	2208.4
37.5°	2193.1	2208.4
40°	2183.0	2200.7
42.5°	2155.1	2167.8
45°	2111.9	2127.1
47.5°	2056.1	2066.2
50°	1985.0	1995.1
52.5°	1896.1	1898.7
55°	1789.5	1799.7
57.5°	1675.3	1677.8
60°	1548.4	1556.0
62.5°	1413.9	1413.9
65°	1271.7	1276.8
67.5°	1124.5	1137.2
70°	974.7	977.3
72.5°	827.5	827.5
75°	675.2	677.7
77.5°	530.5	530.5
80°	393.4	396.0
82.5°	271.6	276.7
85°	170.1	170.1
87.5°	78.7	71.1
90°	23.7	23.7
92.5°	94.9	76.1
95°	331.0	273.9
97.5°	793.1	684.4
100°	1142.7	1013.2
102.5°	1486.6	1375.7
105°	1925.1	1865.5
107.5°	2212.4	2226.8
110°	2321.9	2384.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2331.6	2427.0
115°	2269.8	2402.1
117.5°	2138.7	2285.4
120°	2033.1	2175.6
122.5°	1930.2	2070.8
125°	1783.4	1912.9
127.5°	1651.5	1760.7
130°	1573.7	1674.6
132.5°	1503.1	1593.5
135°	1406.4	1484.3
137.5°	1328.8	1392.6
140°	1275.6	1335.2
142.5°	1231.5	1282.8
145°	1165.4	1204.2
147.5°	1114.6	1146.8
150°	1082.6	1108.7
152.5°	1055.3	1075.0
155°	1023.9	1036.9
157.5°	999.1	1008.2
160°	984.3	989.5
162.5°	974.5	979.5
165°	960.6	965.8
167.5°	950.5	952.7
170°	947.7	947.7
172.5°	940.3	938.4
175°	935.9	935.9
177.5°	931.8	929.6
180°	929.6	929.6



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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	6.54	7.45	7.49	8.41	9.68	19.71	20.61	20.65	21.58	22.84
	3H	7.25	8.06	8.21	9.04	10.33	21.55	22.36	22.50	23.33	24.62
	4H	7.55	8.32	8.52	9.30	10.60	22.19	22.96	23.16	23.94	25.23
	6H	7.80	8.51	8.79	9.50	10.81	22.62	23.33	23.60	24.31	25.62
	8H	7.87	8.55	8.86	9.55	10.86	22.74	23.41	23.73	24.42	25.72
	12H	7.89	8.54	8.89	9.53	10.86	22.80	23.45	23.80	24.45	25.78
4H	2H	13.75	14.52	14.73	15.51	16.80	19.99	20.76	20.96	21.74	23.03
	3H	15.33	15.97	16.31	16.98	18.29	22.03	22.68	23.02	23.69	25.00
	4H	15.42	16.01	16.42	17.02	18.35	22.80	23.39	23.79	24.39	25.72
	6H	15.44	15.95	16.44	16.97	18.30	23.33	23.84	24.34	24.87	26.20
	8H	15.42	15.89	16.42	16.91	18.26	23.50	23.97	24.51	24.99	26.34
	12H	15.37	15.80	16.40	16.84	18.19	23.59	24.02	24.62	25.05	26.40
8H	4H	16.87	17.34	17.88	18.37	19.71	22.86	23.34	23.87	24.36	25.70
	6H	17.11	17.51	18.15	18.57	19.91	23.49	23.88	24.52	24.95	26.29
	8H	17.13	17.48	18.17	18.53	19.89	23.71	24.05	24.75	25.10	26.46
	12H	17.10	17.41	18.15	18.45	19.85	23.85	24.16	24.90	25.20	26.60
12H	4H	17.01	17.44	18.04	18.48	19.83	22.82	23.25	23.85	24.28	25.63
	6H	17.37	17.72	18.41	18.77	20.13	23.47	23.82	24.51	24.87	26.23
	8H	17.44	17.75	18.49	18.79	20.19	23.70	24.01	24.75	25.05	26.45