

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: P937294

Luminaire Tested: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937294
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

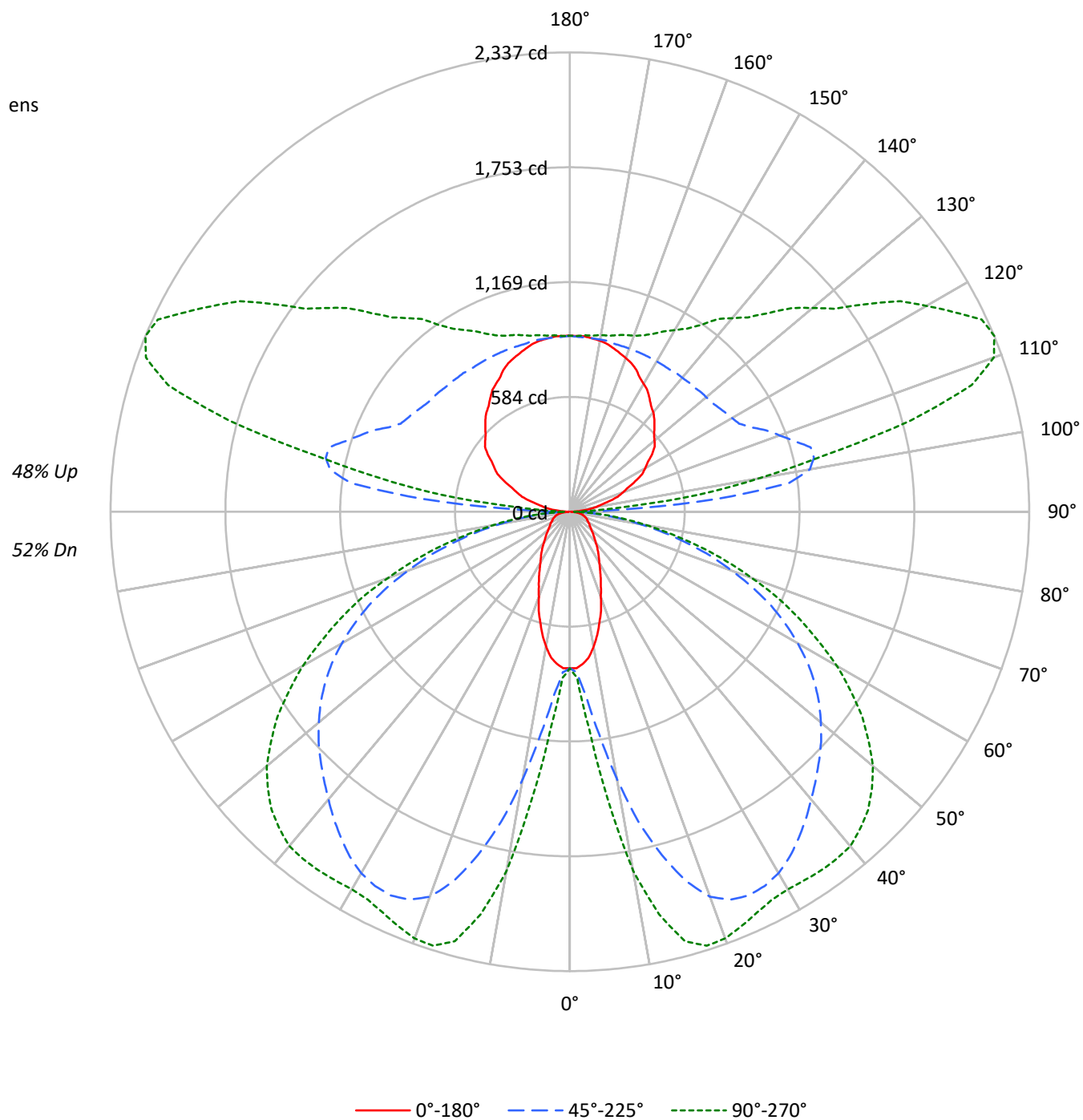
Lumens per Lamp: N/A
Luminaire Lumens: 11967.2 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 102.4
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

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	108	108	108	108	99	99	99	99		84	84	84		70	70	70		58	58	58
1	98	93	89	85	90	86	82	79		73	70	68		61	59	57		50	49	47
2	88	80	74	69	81	74	69	64		63	59	55		53	50	47		43	41	39
3	80	70	62	56	74	65	58	53		55	50	46		46	42	39		38	35	32
4	73	62	53	47	67	57	50	44		49	43	38		41	36	33		33	30	27
5	67	55	46	40	61	51	43	37		43	37	33		36	32	28		30	26	23
6	61	49	40	34	56	45	38	32		39	33	28		32	28	24		27	23	20
7	56	44	35	30	52	41	33	28		35	29	24		29	25	21		24	20	18
8	52	39	31	26	48	37	29	24		31	26	21		27	22	19		22	18	16
9	49	36	28	23	45	33	26	22		29	23	19		24	20	16		20	17	14
10	45	33	25	20	42	31	24	19		26	21	17		22	18	15		19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3610	4270	4967
10°	3274	6225	8234
15°	2783	8133	9943
20°	2266	9425	10133
25°	1890	9863	9927
30°	1594	9925	9908
35°	1409	9760	10164
40°	1228	9546	10429
45°	1112	9390	10470
50°	1020	9248	10296
55°	977	9041	9840
60°	1000	8645	9120
65°	1040	8041	8129
70°	1108	7012	6868
75°	1228	5717	5359
80°	1342	3964	3611
85°	1192	2104	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	0.9
10°-20°	456.6	3.8
20°-30°	798.6	6.7
30°-40°	1028.1	8.6
40°-50°	1148.3	9.6
50°-60°	1099.8	9.2
60°-70°	871.6	7.3
70°-80°	512.5	4.3
80°-90°	145.8	1.2
90°-100°	436.4	3.6
100°-110°	1147.2	9.6
110°-120°	1189.5	9.9
120°-130°	954.1	8.0
130°-140°	748.6	6.3
140°-150°	574.6	4.8
150°-160°	413.8	3.5
160°-170°	253.2	2.1
170°-180°	85.5	0.7
0°-30°	1358.2	11.3
0°-40°	2386.3	19.9
0°-60°	4634.4	38.7
0°-90°	6164.3	51.5
90°-120°	2773.0	23.2
90°-150°	5050.3	42.2
90°-180°	5803.0	48.5
0°-180°	11967.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	776	832	937	1060	1099	72
15°	581	1073	1808	2192	2261	162
25°	371	1216	2154	2248	2251	171
35°	251	1163	2028	2143	2228	157
45°	172	927	1793	2054	2146	133
55°	123	589	1521	1767	1816	112
65°	97	312	1129	1270	1288	96
75°	72	192	620	681	684	75
85°	26	59	154	169	172	27
90°	6	17	46	23	23	7
95°	58	226	752	388	264	64
105°	207	313	1268	1925	1796	219
115°	367	446	1016	2026	2313	363
125°	511	572	924	1561	1842	453
135°	608	670	895	1260	1429	471
145°	706	751	884	1075	1160	442
155°	798	820	884	970	998	367
165°	861	872	884	919	930	243
175°	895	895	890	901	901	85
180°	895	895	895	895	895	

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4
2.5°	796.4	796.4	801.6	804.1	809.2	811.7	816.9	822.0	837.4	839.9	845.1
5°	775.9	786.1	819.5	832.3	868.1	916.8	937.2	970.6	1039.6	1060.2	1073.0
7.5°	745.2	768.2	850.2	870.6	960.3	1088.3	1142.1	1213.8	1323.9	1377.7	1421.2
10°	696.5	745.2	891.2	939.8	1085.8	1280.3	1380.2	1480.1	1646.5	1720.8	1748.9
12.5°	642.7	722.1	934.7	1001.3	1211.2	1495.5	1615.8	1726.0	1915.4	2015.3	2030.6
15°	581.3	688.9	975.7	1073.0	1344.4	1674.7	1807.9	1943.6	2120.3	2192.0	2209.9
17.5°	527.5	663.3	1014.1	1116.5	1446.8	1836.1	1971.8	2084.4	2227.8	2276.5	2289.4
20°	461.0	622.3	1039.6	1172.8	1554.4	1953.9	2084.4	2171.5	2268.8	2299.5	2304.7
22.5°	412.3	578.7	1055.0	1193.3	1626.1	2025.6	2135.7	2204.8	2271.4	2281.6	2284.2
25°	371.3	530.0	1052.4	1216.4	1687.5	2069.1	2153.6	2204.8	2243.2	2248.4	2248.4
27.5°	332.9	476.3	1042.3	1221.5	1733.6	2079.4	2145.9	2181.8	2199.7	2209.9	2209.9
30°	299.6	425.1	1016.6	1211.2	1754.1	2069.1	2122.9	2140.8	2158.7	2174.0	2181.8
32.5°	274.0	376.5	978.2	1190.7	1756.7	2043.5	2081.9	2092.2	2117.7	2153.6	2166.4
35°	251.0	327.8	934.7	1162.6	1741.3	2002.5	2028.1	2038.4	2089.6	2143.3	2161.3
37.5°	227.9	292.0	878.3	1114.0	1718.2	1953.9	1971.8	1989.7	2069.1	2133.1	2153.6
40°	204.8	261.2	811.7	1060.2	1682.4	1895.0	1910.3	1938.5	2043.5	2117.7	2138.2
42.5°	186.9	235.6	740.0	1003.8	1636.4	1828.4	1851.5	1892.4	2012.7	2092.2	2115.2
45°	171.6	210.0	663.3	926.9	1577.4	1759.2	1792.6	1848.9	1976.9	2053.7	2074.2
47.5°	156.2	192.1	583.8	847.6	1513.4	1690.1	1733.6	1797.7	1928.2	2002.5	2020.5
50°	143.4	174.1	504.5	763.1	1444.3	1615.8	1667.1	1733.6	1866.8	1936.0	1958.9
52.5°	133.1	158.7	430.2	678.6	1364.8	1539.0	1597.9	1667.1	1792.6	1859.1	1874.4
55°	122.9	145.9	366.2	589.0	1283.0	1457.1	1521.0	1587.7	1710.6	1766.9	1777.1
57.5°	117.8	135.8	312.4	504.5	1195.8	1364.8	1436.5	1498.1	1613.3	1656.8	1667.1
60°	110.1	128.0	271.4	432.8	1101.2	1277.8	1339.3	1400.7	1498.1	1533.9	1541.6
62.5°	102.4	122.9	240.7	363.7	1003.8	1175.4	1236.8	1293.2	1375.1	1400.7	1411.0
65°	97.3	117.8	217.6	312.4	904.0	1067.8	1129.3	1177.9	1244.5	1270.2	1275.3
67.5°	92.2	112.7	199.7	268.9	804.1	960.3	1006.4	1052.4	1103.7	1129.3	1131.9
70°	84.5	107.6	184.4	238.2	701.7	837.4	875.8	924.4	965.4	978.2	985.9
72.5°	79.4	99.9	174.1	215.1	596.6	719.6	755.4	783.6	819.5	832.3	832.3
75°	71.7	89.6	163.9	192.1	489.2	589.0	619.7	647.9	676.1	681.2	673.5
77.5°	64.1	79.4	140.8	161.3	381.6	466.1	491.7	507.0	530.0	535.2	537.8
80°	53.8	69.2	110.1	125.5	276.6	343.1	361.0	373.8	394.4	394.4	399.5
82.5°	41.0	53.8	79.4	89.6	186.9	235.6	251.0	258.6	271.4	271.4	271.4
85°	25.6	33.3	51.3	58.9	112.7	143.4	153.7	156.2	166.5	169.0	169.0
87.5°	12.8	17.9	33.3	35.9	58.9	74.2	74.2	79.4	79.4	76.8	74.2
90°	6.0	10.9	15.7	16.9	26.5	39.2	45.6	40.6	30.4	22.9	22.9
92.5°	24.0	64.9	105.8	116.0	163.1	225.8	257.2	225.4	161.8	114.1	109.6
95°	57.7	132.5	207.2	225.9	401.1	634.7	751.6	670.6	508.8	387.5	373.7
97.5°	99.7	165.7	231.7	248.2	540.3	929.9	1124.6	1073.5	971.2	894.6	868.4
100°	132.2	192.0	251.8	266.8	591.0	1023.3	1239.4	1243.1	1250.6	1256.2	1225.0
102.5°	159.8	215.6	271.4	285.4	614.2	1052.6	1271.8	1336.9	1467.3	1565.0	1538.3
105°	206.7	254.0	301.2	313.0	631.4	1055.9	1268.2	1414.3	1706.3	1925.4	1911.1
107.5°	254.8	298.8	342.8	353.9	634.6	1008.9	1196.1	1399.8	1807.3	2112.9	2116.4
110°	287.2	326.9	366.7	376.7	629.8	967.3	1136.1	1363.8	1819.3	2161.0	2175.9

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	319.0	356.9	394.8	404.3	629.9	930.9	1081.4	1314.5	1780.7	2130.3	2153.3
115°	367.1	402.0	437.0	445.7	635.8	889.2	1015.9	1240.4	1689.5	2026.4	2058.3
117.5°	414.5	446.3	478.1	486.1	647.7	863.1	970.8	1173.5	1578.8	1882.8	1918.0
120°	442.2	472.0	501.9	509.4	657.2	854.3	952.8	1138.0	1508.3	1786.1	1820.4
122.5°	469.2	499.4	529.6	537.1	671.0	849.6	939.0	1105.7	1439.3	1689.4	1723.2
125°	510.7	538.2	565.6	572.5	689.6	845.8	923.9	1065.6	1348.8	1561.3	1592.6
127.5°	544.3	572.1	599.8	606.8	708.3	843.7	911.3	1033.0	1276.2	1458.6	1484.9
130°	562.3	592.2	622.1	629.6	721.9	845.1	906.6	1014.8	1231.4	1393.8	1418.1
132.5°	580.9	610.9	640.8	648.3	733.0	845.8	902.3	999.2	1193.1	1338.5	1360.3
135°	608.5	635.8	663.1	669.9	745.0	845.1	895.2	976.4	1138.7	1260.4	1279.2
137.5°	636.8	663.8	690.7	697.5	763.0	850.3	893.9	962.5	1099.8	1202.7	1218.0
140°	660.3	685.1	709.9	716.1	773.9	851.2	889.7	949.0	1067.5	1156.5	1170.8
142.5°	678.3	701.3	724.2	729.9	783.2	854.3	889.7	941.8	1045.9	1124.0	1136.3
145°	705.9	726.0	745.9	751.0	795.3	854.3	883.7	926.4	1011.5	1075.4	1084.7
147.5°	733.5	753.0	772.6	777.4	812.9	860.1	883.7	917.3	984.2	1034.5	1042.3
150°	751.6	769.2	786.8	791.2	822.0	863.2	883.7	912.0	968.6	1011.1	1017.4
152.5°	770.2	783.5	796.9	800.2	828.0	865.1	883.7	907.9	956.2	992.4	997.2
155°	797.8	807.7	817.5	820.1	841.3	869.6	883.7	902.9	941.4	970.3	973.4
157.5°	818.2	827.8	837.4	839.8	854.5	873.9	883.7	898.7	928.6	951.0	953.2
160°	832.1	839.5	847.0	848.8	860.5	876.0	883.7	896.5	922.2	941.4	942.6
162.5°	845.8	851.5	857.1	858.5	867.0	878.1	883.7	894.6	916.2	932.4	933.5
165°	860.9	865.9	871.0	872.3	876.1	881.2	883.7	891.5	907.0	918.6	919.9
167.5°	874.7	877.1	879.6	880.1	883.3	887.6	889.7	894.8	904.9	912.6	913.1
170°	883.7	886.2	888.6	889.2	889.3	889.6	889.7	894.8	904.9	912.6	912.6
172.5°	888.6	889.1	889.6	889.7	889.7	889.7	889.7	893.7	901.8	907.8	907.3
175°	895.2	895.2	895.2	895.2	893.3	890.9	889.7	892.3	897.4	901.2	901.2
177.5°	895.2	895.2	895.2	895.2	893.7	891.9	890.9	892.9	896.9	899.9	899.4
180°	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2	895.2

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.4	796.4
2.5°	850.2	845.1
5°	1093.4	1098.6
7.5°	1472.4	1469.9
10°	1830.9	1854.0
12.5°	2092.2	2097.3
15°	2250.9	2261.2
17.5°	2312.3	2314.9
20°	2314.9	2309.8
22.5°	2286.7	2281.6
25°	2253.5	2250.9
27.5°	2222.7	2225.3
30°	2209.9	2217.7
32.5°	2209.9	2222.7
35°	2215.0	2227.8
37.5°	2212.5	2227.8
40°	2202.2	2220.2
42.5°	2174.0	2186.8
45°	2130.5	2145.9
47.5°	2074.2	2084.4
50°	2002.5	2012.7
52.5°	1912.9	1915.4
55°	1805.3	1815.6
57.5°	1690.1	1692.6
60°	1562.0	1569.8
62.5°	1426.4	1426.4
65°	1283.0	1288.1
67.5°	1134.4	1147.2
70°	983.3	985.9
72.5°	834.8	834.8
75°	681.2	683.7
77.5°	535.2	535.2
80°	396.9	399.5
82.5°	274.0	279.2
85°	171.6	171.6
87.5°	79.4	71.7
90°	22.9	22.9
92.5°	91.5	73.3
95°	318.8	263.8
97.5°	763.7	659.0
100°	1100.4	975.7
102.5°	1431.5	1324.7
105°	1853.6	1796.2
107.5°	2130.2	2144.1
110°	2235.8	2295.6



TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2245.1	2336.9
115°	2185.6	2312.9
117.5°	2059.3	2200.6
120°	1957.7	2094.9
122.5°	1858.5	1993.9
125°	1717.3	1842.0
127.5°	1590.1	1695.4
130°	1515.2	1612.4
132.5°	1447.3	1534.3
135°	1354.2	1429.2
137.5°	1279.5	1340.9
140°	1228.3	1285.7
142.5°	1185.8	1235.2
145°	1122.1	1159.5
147.5°	1073.2	1104.2
150°	1042.5	1067.5
152.5°	1016.1	1035.1
155°	986.0	998.5
157.5°	962.0	970.8
160°	947.8	952.8
162.5°	938.4	943.2
165°	924.9	929.9
167.5°	915.2	917.4
170°	912.6	912.6
172.5°	905.4	903.6
175°	901.2	901.2
177.5°	897.3	895.2
180°	895.2	895.2

TEST NUMBER: P937294

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-8-3500K

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	5.68	6.60	6.62	7.56	8.80	18.86	19.78	19.80	20.74	21.98
	3H	6.39	7.22	7.34	8.18	9.45	20.71	21.53	21.65	22.50	23.76
	4H	6.69	7.47	7.66	8.45	9.72	21.35	22.13	22.31	23.11	24.38
	6H	6.95	7.67	7.92	8.64	9.94	21.79	22.51	22.76	23.48	24.77
	8H	7.02	7.70	8.00	8.70	9.99	21.91	22.59	22.89	23.59	24.88
	12H	7.04	7.69	8.02	8.68	9.99	21.98	22.63	22.96	23.62	24.93
4H	2H	12.91	13.68	13.87	14.66	15.93	19.14	19.92	20.11	20.89	22.17
	3H	14.48	15.13	15.46	16.13	17.42	21.19	21.85	22.17	22.85	24.14
	4H	14.57	15.17	15.56	16.17	17.48	21.96	22.56	22.95	23.56	24.87
	6H	14.59	15.11	15.59	16.12	17.44	22.51	23.02	23.50	24.04	25.35
	8H	14.57	15.05	15.57	16.06	17.39	22.67	23.15	23.67	24.16	25.49
	12H	14.53	14.96	15.55	15.99	17.33	22.77	23.20	23.79	24.23	25.56
8H	4H	16.02	16.51	17.03	17.52	18.85	22.03	22.51	23.03	23.52	24.85
	6H	16.27	16.67	17.29	17.72	19.05	22.66	23.06	23.69	24.11	25.44
	8H	16.29	16.64	17.32	17.68	19.03	22.88	23.23	23.91	24.27	25.62
	12H	16.26	16.57	17.30	17.60	18.99	23.03	23.34	24.07	24.37	25.76
12H	4H	16.17	16.61	17.19	17.63	18.97	21.98	22.42	23.00	23.45	24.78
	6H	16.53	16.88	17.56	17.92	19.27	22.64	23.00	23.68	24.04	25.38
	8H	16.60	16.91	17.64	17.95	19.33	22.88	23.19	23.91	24.22	25.61