

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: P937394

Luminaire Tested: SQ4-FB-075U-125D-B2750-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

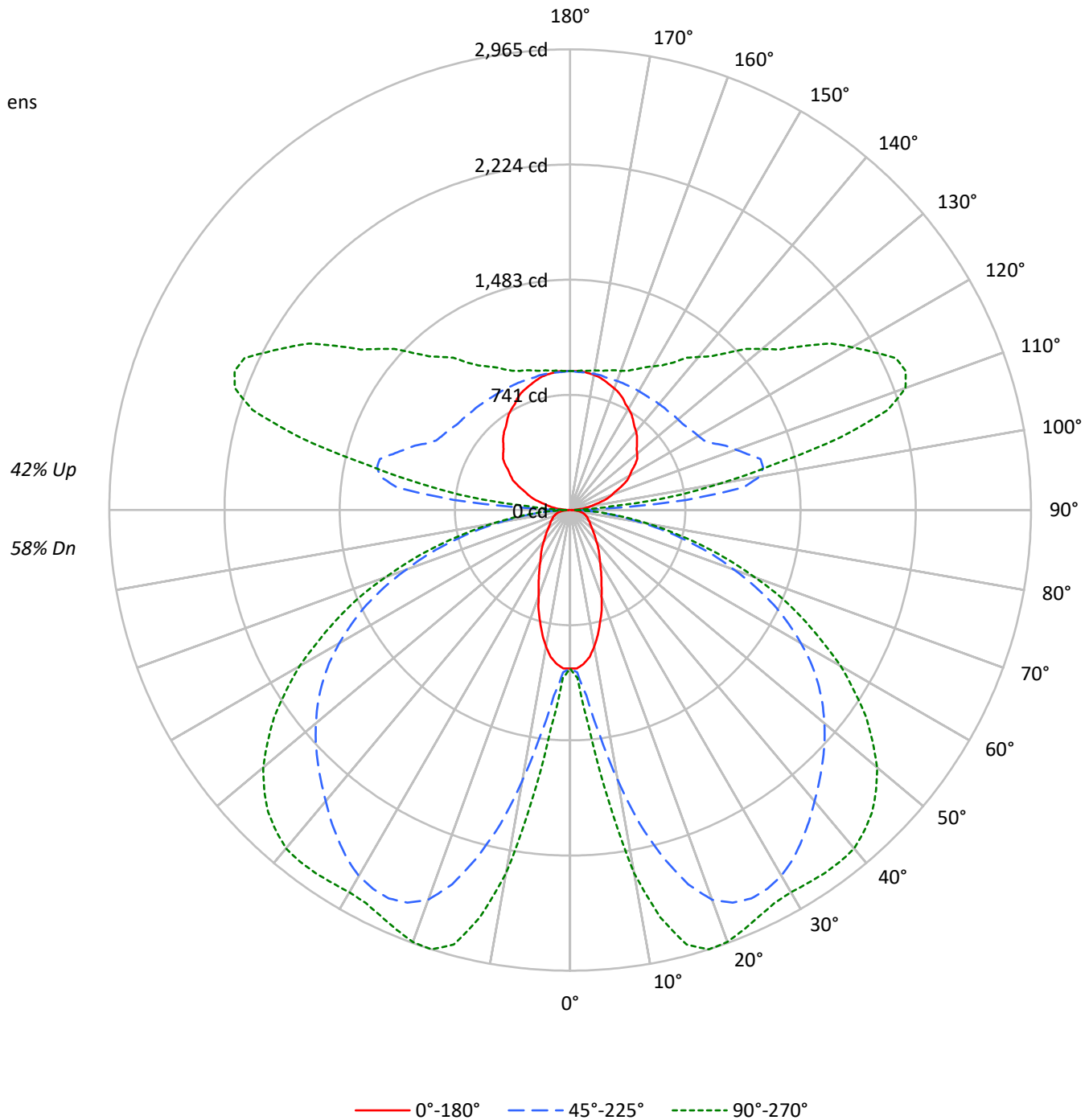
Test Method: LM-79-2019  
Report Number: P937394  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-B2750-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13696.9 lumens  
Efficiency: N/A  
Efficacy: 110.5 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): 124  
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

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### 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	50	30	10
RCR																				
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58		
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47		
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38		
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32		
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27		
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23		
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19		
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17		
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15		
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13		
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12		

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

	0°	45°	90°
0°	4732	4732	4732
5°	4623	5470	6361
10°	4194	7973	10546
15°	3564	10416	12734
20°	2901	12071	12977
25°	2421	12632	12714
30°	2041	12711	12690
35°	1805	12500	13018
40°	1573	12226	13357
45°	1424	12025	13409
50°	1306	11844	13187
55°	1252	11580	12603
60°	1281	11071	11680
65°	1332	10298	10412
70°	1419	8981	8796
75°	1574	7323	6864
80°	1719	5078	4625
85°	1528	2695	2368

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 13409 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.9	1.0
10°-20°	584.8	4.3
20°-30°	1022.8	7.5
30°-40°	1316.7	9.6
40°-50°	1470.7	10.7
50°-60°	1408.6	10.3
60°-70°	1116.3	8.2
70°-80°	656.4	4.8
80°-90°	185.8	1.4
90°-100°	436.4	3.2
100°-110°	1147.2	8.4
110°-120°	1189.5	8.7
120°-130°	954.1	7.0
130°-140°	748.6	5.5
140°-150°	574.6	4.2
150°-160°	413.8	3.0
160°-170°	253.2	1.8
170°-180°	85.5	0.6
0°-30°	1739.5	12.7
0°-40°	3056.2	22.3
0°-60°	5935.5	43.3
0°-90°	7894.0	57.6
90°-120°	2773.0	20.2
90°-150°	5050.3	36.9
90°-180°	5803.0	42.4
0°-180°	13696.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	994	1066	1200	1358	1407	92
15°	744	1374	2315	2807	2896	207
25°	476	1558	2758	2880	2883	219
35°	321	1489	2598	2745	2853	201
45°	220	1187	2296	2630	2748	170
55°	158	754	1948	2263	2325	143
65°	125	400	1446	1627	1650	123
75°	92	246	794	872	876	96
85°	33	75	197	216	220	35
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0
2.5°	1020.0	1020.0	1026.6	1029.9	1036.3	1039.6	1046.2	1052.8	1072.5	1075.8	1082.3
5°	993.7	1006.9	1049.5	1065.9	1111.8	1174.1	1200.4	1243.0	1331.5	1357.8	1374.1
7.5°	954.4	983.9	1088.9	1115.1	1229.9	1393.9	1462.7	1554.6	1695.6	1764.5	1820.3
10°	892.1	954.4	1141.3	1203.6	1390.6	1639.8	1767.7	1895.7	2108.8	2204.0	2240.0
12.5°	823.2	924.9	1197.1	1282.4	1551.3	1915.3	2069.5	2210.5	2453.2	2581.1	2600.8
15°	744.5	882.3	1249.5	1374.1	1721.8	2144.9	2315.4	2489.3	2715.6	2807.4	2830.4
17.5°	675.6	849.4	1298.8	1430.0	1853.0	2351.6	2525.3	2669.7	2853.3	2915.6	2932.0
20°	590.3	797.0	1331.5	1502.0	1990.8	2502.4	2669.7	2781.1	2905.8	2945.2	2951.7
22.5°	528.0	741.2	1351.3	1528.3	2082.6	2594.2	2735.3	2823.8	2909.0	2922.2	2925.5
25°	475.6	678.9	1348.0	1557.9	2161.4	2650.0	2758.3	2823.8	2873.0	2879.6	2879.6
27.5°	426.4	610.0	1334.8	1564.5	2220.4	2663.1	2748.4	2794.3	2817.3	2830.4	2830.4
30°	383.7	544.4	1302.0	1551.3	2246.6	2650.0	2718.8	2741.8	2764.8	2784.4	2794.3
32.5°	351.0	482.1	1252.8	1525.0	2249.8	2617.2	2666.4	2679.5	2712.3	2758.3	2774.6
35°	321.4	419.8	1197.1	1489.0	2230.2	2564.7	2597.5	2610.6	2676.2	2745.1	2768.0
37.5°	291.9	373.8	1124.9	1426.7	2200.7	2502.4	2525.3	2548.3	2650.0	2732.0	2758.3
40°	262.4	334.5	1039.6	1357.8	2154.8	2427.0	2446.6	2482.7	2617.2	2712.3	2738.5
42.5°	239.4	301.7	947.9	1285.7	2095.8	2341.7	2371.2	2423.7	2577.8	2679.5	2709.0
45°	219.8	268.9	849.4	1187.2	2020.3	2253.1	2295.8	2367.9	2531.9	2630.4	2656.5
47.5°	200.1	245.9	747.8	1085.6	1938.3	2164.6	2220.4	2302.3	2469.6	2564.7	2587.7
50°	183.6	223.1	646.1	977.3	1849.7	2069.5	2135.1	2220.4	2390.9	2479.5	2508.9
52.5°	170.5	203.3	551.0	869.1	1748.1	1971.0	2046.5	2135.1	2295.8	2381.0	2400.7
55°	157.5	186.9	469.0	754.4	1643.1	1866.1	1948.2	2033.4	2190.8	2263.0	2276.1
57.5°	150.9	173.8	400.1	646.1	1531.6	1748.1	1839.9	1918.6	2066.2	2121.9	2135.1
60°	141.0	164.0	347.7	554.3	1410.3	1636.5	1715.2	1794.0	1918.6	1964.6	1974.3
62.5°	131.2	157.5	308.3	465.7	1285.7	1505.3	1584.1	1656.2	1761.2	1794.0	1807.1
65°	124.6	150.9	278.8	400.1	1157.8	1367.6	1446.3	1508.6	1593.9	1626.8	1633.2
67.5°	118.0	144.3	255.8	344.4	1029.9	1229.9	1288.9	1348.0	1413.6	1446.3	1449.6
70°	108.2	137.8	236.1	305.0	898.7	1072.5	1121.6	1183.9	1236.4	1252.8	1262.7
72.5°	101.6	127.9	223.1	275.5	764.2	921.6	967.5	1003.6	1049.5	1065.9	1065.9
75°	91.9	114.8	209.9	245.9	626.5	754.4	793.7	829.8	865.8	872.4	862.6
77.5°	82.0	101.6	180.4	206.6	488.7	596.9	629.7	649.4	678.9	685.5	688.8
80°	68.9	88.6	141.0	160.7	354.2	439.4	462.4	478.9	505.0	505.0	511.6
82.5°	52.5	68.9	101.6	114.8	239.4	301.7	321.4	331.2	347.7	347.7	347.7
85°	32.8	42.6	65.6	75.4	144.3	183.6	196.8	200.1	213.2	216.5	216.5
87.5°	16.4	23.0	42.6	45.9	75.4	95.2	95.2	101.6	101.6	98.4	95.2
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



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**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



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1020.0	1020.0
2.5°	1088.9	1082.3
5°	1400.4	1407.0
7.5°	1885.8	1882.6
10°	2345.0	2374.5
12.5°	2679.5	2686.1
15°	2882.9	2896.0
17.5°	2961.6	2964.8
20°	2964.8	2958.3
22.5°	2928.8	2922.2
25°	2886.2	2882.9
27.5°	2846.7	2850.0
30°	2830.4	2840.2
32.5°	2830.4	2846.7
35°	2836.9	2853.3
37.5°	2833.6	2853.3
40°	2820.6	2843.5
42.5°	2784.4	2800.9
45°	2728.7	2748.4
47.5°	2656.5	2669.7
50°	2564.7	2577.8
52.5°	2449.9	2453.2
55°	2312.1	2325.3
57.5°	2164.6	2167.8
60°	2000.6	2010.5
62.5°	1826.8	1826.8
65°	1643.1	1649.7
67.5°	1452.9	1469.3
70°	1259.4	1262.7
72.5°	1069.2	1069.2
75°	872.4	875.7
77.5°	685.5	685.5
80°	508.3	511.6
82.5°	351.0	357.5
85°	219.8	219.8
87.5°	101.6	91.9
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





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**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



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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	7.07	8.05	7.95	8.96	10.11	20.25	21.23	21.13	22.14	23.29
	3H	7.79	8.67	8.68	9.59	10.76	22.10	22.98	22.99	23.90	25.08
	4H	8.09	8.93	9.00	9.85	11.04	22.75	23.59	23.66	24.51	25.70
	6H	8.35	9.12	9.27	10.05	11.25	23.19	23.96	24.11	24.89	26.09
	8H	8.42	9.15	9.35	10.10	11.30	23.31	24.05	24.24	24.99	26.19
	12H	8.44	9.14	9.37	10.08	11.31	23.38	24.08	24.32	25.03	26.25
4H	2H	14.30	15.14	15.21	16.06	17.25	20.54	21.38	21.45	22.30	23.49
	3H	15.88	16.58	16.80	17.53	18.74	22.60	23.30	23.52	24.25	25.45
	4H	15.98	16.62	16.92	17.57	18.80	23.37	24.01	24.30	24.96	26.19
	6H	16.00	16.55	16.95	17.52	18.75	23.92	24.47	24.86	25.44	26.67
	8H	15.98	16.50	16.93	17.46	18.71	24.08	24.60	25.03	25.56	26.81
	12H	15.94	16.41	16.91	17.39	18.64	24.18	24.65	25.15	25.63	26.88
8H	4H	17.44	17.95	18.39	18.92	20.16	23.44	23.96	24.39	24.92	26.17
	6H	17.68	18.11	18.66	19.12	20.36	24.07	24.50	25.05	25.51	26.75
	8H	17.70	18.08	18.69	19.08	20.34	24.30	24.68	25.28	25.67	26.93
	12H	17.68	18.01	18.67	19.00	20.31	24.45	24.78	25.44	25.77	27.08
12H	4H	17.59	18.05	18.56	19.04	20.29	23.40	23.87	24.37	24.85	26.10
	6H	17.94	18.33	18.93	19.32	20.58	24.06	24.44	25.05	25.44	26.70
	8H	18.02	18.35	19.01	19.34	20.65	24.30	24.63	25.29	25.62	26.93