

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: P937367

Luminaire Tested: SQ4-FB-075U-125D-93050-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

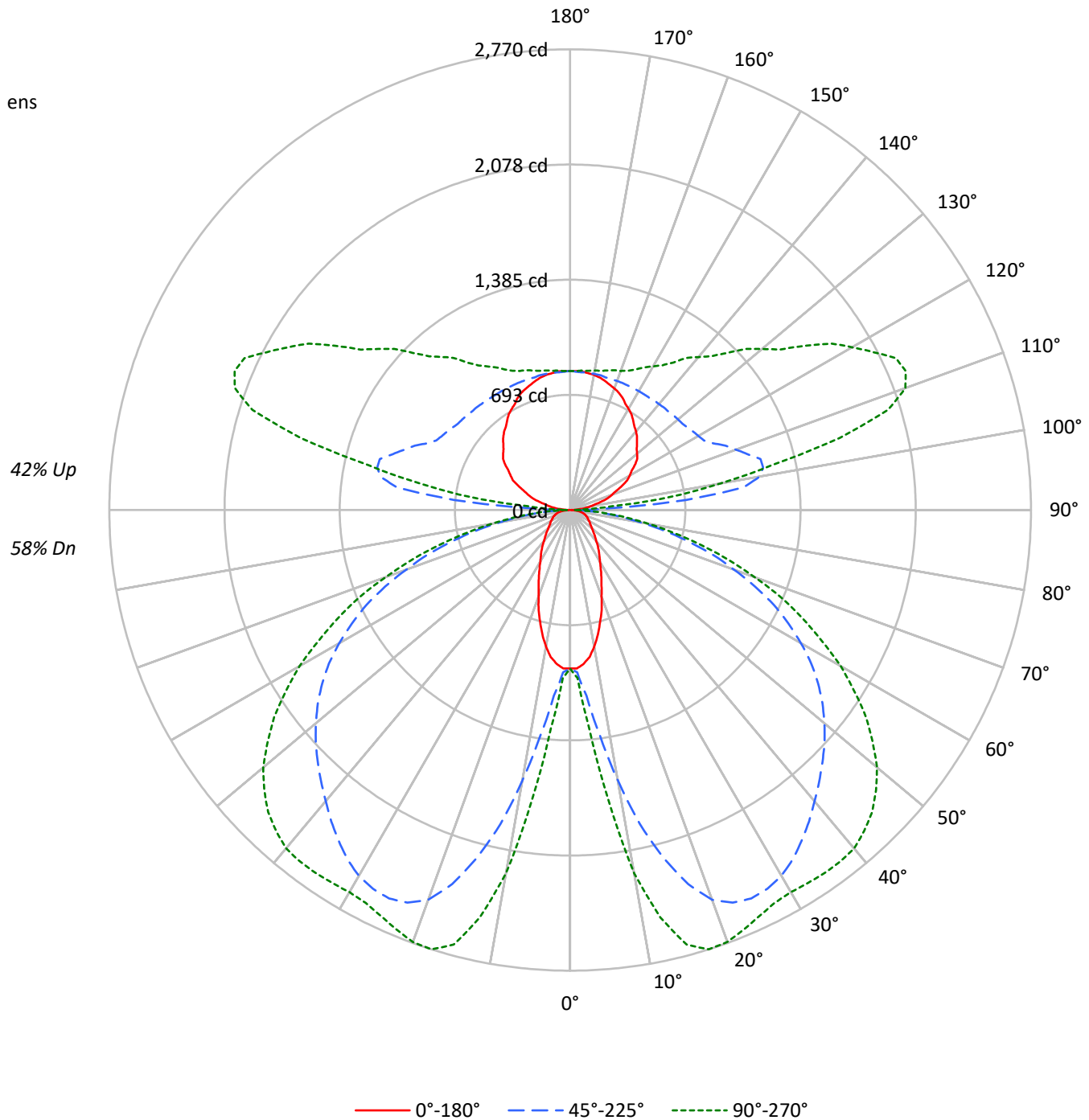
Test Method: LM-79-2019  
Report Number: P937367  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-93050-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12794.5 lumens  
Efficiency: N/A  
Efficacy: 103.2 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 (A<sub>in</sub>): 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	0
RCR																					
0	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

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

	0°	45°	90°
0°	4421	4421	4421
5°	4318	5109	5942
10°	3917	7448	9851
15°	3329	9730	11895
20°	2710	11276	12122
25°	2261	11800	11876
30°	1906	11874	11854
35°	1686	11677	12160
40°	1469	11420	12477
45°	1330	11233	12526
50°	1220	11064	12319
55°	1169	10817	11772
60°	1196	10341	10910
65°	1245	9619	9726
70°	1326	8389	8216
75°	1470	6840	6412
80°	1607	4743	4320
85°	1425	2517	2212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12526 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.2	1.0
10°-20°	546.2	4.3
20°-30°	955.5	7.5
30°-40°	1229.9	9.6
40°-50°	1373.8	10.7
50°-60°	1315.8	10.3
60°-70°	1042.8	8.2
70°-80°	613.2	4.8
80°-90°	173.5	1.4
90°-100°	407.6	3.2
100°-110°	1071.6	8.4
110°-120°	1111.1	8.7
120°-130°	891.2	7.0
130°-140°	699.3	5.5
140°-150°	536.7	4.2
150°-160°	386.5	3.0
160°-170°	236.5	1.8
170°-180°	79.9	0.6
0°-30°	1624.9	12.7
0°-40°	2854.9	22.3
0°-60°	5544.4	43.3
0°-90°	7373.9	57.6
90°-120°	2590.3	20.2
90°-150°	4717.6	36.9
90°-180°	5421.0	42.4
0°-180°	12794.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	928	996	1121	1268	1314	86
15°	695	1284	2163	2622	2705	194
25°	444	1455	2576	2690	2693	205
35°	300	1391	2426	2564	2665	187
45°	205	1109	2144	2457	2567	159
55°	147	705	1820	2114	2172	134
65°	116	374	1351	1520	1541	115
75°	86	230	741	815	818	90
85°	31	70	184	202	205	33
90°	6	16	43	21	21	7
95°	54	211	702	362	246	60
105°	193	292	1185	1799	1678	205
115°	343	416	949	1893	2160	339
125°	477	535	863	1458	1721	423
135°	568	626	836	1177	1335	440
145°	659	702	826	1004	1083	413
155°	745	766	826	906	933	342
165°	804	815	826	858	869	227
175°	836	836	831	842	842	79
180°	836	836	836	836	836	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8
2.5°	952.8	952.8	958.9	962.0	968.1	971.1	977.3	983.5	1001.8	1004.9	1011.0
5°	928.2	940.6	980.4	995.7	1038.6	1096.8	1121.3	1161.1	1243.8	1268.3	1283.6
7.5°	891.5	919.1	1017.1	1041.7	1148.8	1302.1	1366.3	1452.1	1583.9	1648.2	1700.3
10°	833.3	891.5	1066.1	1124.3	1299.0	1531.8	1651.3	1770.8	1969.9	2058.8	2092.5
12.5°	768.9	864.0	1118.2	1197.9	1449.1	1789.1	1933.2	2064.9	2291.6	2411.1	2429.5
15°	695.4	824.1	1167.2	1283.6	1608.4	2003.6	2162.9	2325.3	2536.7	2622.4	2643.9
17.5°	631.1	793.5	1213.2	1335.7	1730.9	2196.6	2358.9	2493.8	2665.3	2723.5	2738.8
20°	551.4	744.5	1243.8	1403.1	1859.7	2337.6	2493.8	2597.9	2714.4	2751.1	2757.2
22.5°	493.2	692.4	1262.2	1427.6	1945.4	2423.3	2555.1	2637.7	2717.4	2729.7	2732.8
25°	444.3	634.2	1259.2	1455.2	2019.0	2475.4	2576.5	2637.7	2683.7	2689.9	2689.9
27.5°	398.3	569.8	1246.9	1461.4	2074.1	2487.7	2567.3	2610.2	2631.7	2643.9	2643.9
30°	358.4	508.5	1216.3	1449.1	2098.6	2475.4	2539.7	2561.2	2582.6	2601.0	2610.2
32.5°	327.8	450.3	1170.3	1424.5	2101.6	2444.7	2490.7	2503.0	2533.6	2576.5	2591.8
35°	300.2	392.1	1118.2	1390.9	2083.2	2395.8	2426.4	2438.6	2499.9	2564.2	2585.7
37.5°	272.6	349.2	1050.8	1332.7	2055.7	2337.6	2358.9	2380.4	2475.4	2552.0	2576.5
40°	245.1	312.5	971.1	1268.3	2012.8	2267.1	2285.4	2319.1	2444.7	2533.6	2558.1
42.5°	223.7	281.9	885.4	1201.0	1957.7	2187.4	2215.0	2264.0	2408.0	2503.0	2530.6
45°	205.3	251.2	793.5	1109.0	1887.2	2104.7	2144.5	2211.9	2365.1	2457.1	2481.5
47.5°	186.9	229.7	698.5	1014.1	1810.6	2021.9	2074.1	2150.7	2306.9	2395.8	2417.2
50°	171.5	208.4	603.6	912.9	1727.9	1933.2	1994.4	2074.1	2233.4	2316.1	2343.6
52.5°	159.3	189.9	514.7	811.8	1632.9	1841.2	1911.7	1994.4	2144.5	2224.2	2242.5
55°	147.1	174.6	438.1	704.7	1534.9	1743.2	1819.8	1899.5	2046.5	2113.9	2126.1
57.5°	140.9	162.4	373.7	603.6	1430.7	1632.9	1718.7	1792.2	1930.1	1982.1	1994.4
60°	131.7	153.2	324.8	517.8	1317.4	1528.7	1602.2	1675.8	1792.2	1835.1	1844.3
62.5°	122.6	147.1	288.0	435.0	1201.0	1406.2	1479.8	1547.1	1645.1	1675.8	1688.0
65°	116.4	140.9	260.4	373.7	1081.5	1277.5	1351.0	1409.2	1488.9	1519.6	1525.6
67.5°	110.2	134.8	239.0	321.7	962.0	1148.8	1204.0	1259.2	1320.4	1351.0	1354.1
70°	101.1	128.7	220.6	284.9	839.4	1001.8	1047.7	1105.9	1155.0	1170.3	1179.5
72.5°	95.0	119.5	208.4	257.3	713.8	860.9	903.8	937.5	980.4	995.7	995.7
75°	85.8	107.3	196.1	229.7	585.2	704.7	741.4	775.1	808.8	814.9	805.8
77.5°	76.6	95.0	168.5	193.0	456.5	557.6	588.2	606.6	634.2	640.3	643.4
80°	64.4	82.7	131.7	150.1	330.8	410.5	431.9	447.3	471.8	471.8	477.9
82.5°	49.1	64.4	95.0	107.3	223.7	281.9	300.2	309.4	324.8	324.8	324.8
85°	30.6	39.8	61.3	70.4	134.8	171.5	183.8	186.9	199.1	202.2	202.2
87.5°	15.3	21.5	39.8	42.9	70.4	88.9	88.9	95.0	95.0	91.9	88.9
90°	5.6	10.1	14.7	15.7	24.7	36.7	42.6	37.9	28.4	21.4	21.4
92.5°	22.4	60.6	98.8	108.3	152.3	210.9	240.2	210.5	151.2	106.6	102.4
95°	53.9	123.7	193.5	211.0	374.6	592.9	702.0	626.5	475.3	362.0	349.1
97.5°	93.1	154.8	216.4	231.8	504.7	868.6	1050.5	1002.7	907.2	835.6	811.2
100°	123.5	179.3	235.3	249.2	552.1	955.9	1157.7	1161.2	1168.2	1173.5	1144.3
102.5°	149.3	201.4	253.5	266.6	573.7	983.3	1188.0	1248.9	1370.6	1461.9	1436.9
105°	193.1	237.2	281.3	292.4	589.8	986.4	1184.7	1321.1	1593.9	1798.6	1785.2
107.5°	238.0	279.2	320.2	330.6	592.8	942.5	1117.3	1307.6	1688.2	1973.7	1977.0
110°	268.3	305.4	342.5	351.8	588.3	903.5	1061.2	1273.9	1699.4	2018.6	2032.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	298.0	333.4	368.8	377.6	588.4	869.6	1010.2	1227.9	1663.4	1990.0	2011.4
115°	342.9	375.6	408.2	416.4	593.9	830.6	949.0	1158.7	1578.2	1892.9	1922.7
117.5°	387.2	416.9	446.6	454.0	605.0	806.2	906.9	1096.1	1474.8	1758.7	1791.7
120°	413.0	440.9	468.9	475.8	613.9	798.0	890.0	1063.0	1409.0	1668.4	1700.4
122.5°	438.3	466.5	494.7	501.7	626.8	793.6	877.1	1032.9	1344.4	1578.1	1609.6
125°	477.0	502.7	528.3	534.8	644.2	790.1	863.1	995.4	1260.0	1458.5	1487.6
127.5°	508.4	534.4	560.3	566.8	661.7	788.1	851.3	964.9	1192.1	1362.5	1387.1
130°	525.3	553.1	581.1	588.1	674.3	789.4	846.9	948.0	1150.3	1302.0	1324.7
132.5°	542.6	570.6	598.6	605.6	684.7	790.1	842.9	933.4	1114.5	1250.3	1270.7
135°	568.4	593.9	619.4	625.7	695.9	789.4	836.2	912.0	1063.7	1177.3	1194.9
137.5°	594.9	620.0	645.2	651.5	712.7	794.3	835.0	899.1	1027.4	1123.5	1137.8
140°	616.8	639.9	663.1	668.9	723.0	795.1	831.1	886.5	997.2	1080.3	1093.7
142.5°	633.6	655.1	676.5	681.9	731.6	798.0	831.1	879.7	977.0	1050.0	1061.5
145°	659.4	678.1	696.8	701.5	742.9	798.0	825.5	865.3	944.9	1004.5	1013.2
147.5°	685.2	703.4	721.7	726.2	759.3	803.4	825.5	856.8	919.4	966.3	973.6
150°	702.0	718.5	735.0	739.1	767.8	806.3	825.5	851.9	904.8	944.4	950.3
152.5°	719.4	731.9	744.4	747.5	773.5	808.1	825.5	848.0	893.2	927.1	931.5
155°	745.2	754.5	763.7	766.0	785.9	812.3	825.5	843.4	879.4	906.3	909.2
157.5°	764.3	773.3	782.2	784.5	798.2	816.4	825.5	839.4	867.4	888.3	890.4
160°	777.3	784.2	791.2	792.9	803.8	818.3	825.5	837.5	861.4	879.4	880.5
162.5°	790.1	795.4	800.6	802.0	809.8	820.3	825.5	835.6	855.8	870.9	872.0
165°	804.1	808.9	813.6	814.8	818.4	823.2	825.5	832.7	847.2	858.1	859.3
167.5°	817.1	819.4	821.6	822.2	825.1	829.1	831.1	835.8	845.3	852.5	852.9
170°	825.5	827.8	830.0	830.6	830.8	831.0	831.1	835.8	845.3	852.5	852.5
172.5°	830.0	830.5	831.0	831.1	831.1	831.1	831.1	834.8	842.3	848.0	847.5
175°	836.2	836.2	836.2	836.2	834.5	832.2	831.1	833.5	838.3	841.8	841.8
177.5°	836.2	836.2	836.2	836.2	834.8	833.1	832.2	834.1	837.8	840.6	840.2
180°	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2	836.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	952.8	952.8
2.5°	1017.1	1011.0
5°	1308.1	1314.3
7.5°	1761.5	1758.5
10°	2190.5	2218.1
12.5°	2503.0	2509.1
15°	2692.9	2705.2
17.5°	2766.4	2769.5
20°	2769.5	2763.4
22.5°	2735.8	2729.7
25°	2696.0	2692.9
27.5°	2659.2	2662.3
30°	2643.9	2653.1
32.5°	2643.9	2659.2
35°	2650.0	2665.3
37.5°	2647.0	2665.3
40°	2634.7	2656.2
42.5°	2601.0	2616.4
45°	2548.9	2567.3
47.5°	2481.5	2493.8
50°	2395.8	2408.0
52.5°	2288.5	2291.6
55°	2159.8	2172.1
57.5°	2021.9	2025.0
60°	1868.8	1878.0
62.5°	1706.4	1706.4
65°	1534.9	1541.0
67.5°	1357.2	1372.5
70°	1176.4	1179.5
72.5°	998.8	998.8
75°	814.9	818.0
77.5°	640.3	640.3
80°	474.8	477.9
82.5°	327.8	333.9
85°	205.3	205.3
87.5°	95.0	85.8
90°	21.4	21.4
92.5°	85.4	68.4
95°	297.8	246.4
97.5°	713.4	615.6
100°	1027.9	911.4
102.5°	1337.2	1237.4
105°	1731.5	1677.9
107.5°	1989.9	2002.8
110°	2088.5	2144.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2097.2	2183.0
115°	2041.6	2160.5
117.5°	1923.6	2055.6
120°	1828.7	1956.9
122.5°	1736.1	1862.5
125°	1604.1	1720.6
127.5°	1485.4	1583.7
130°	1415.4	1506.2
132.5°	1351.9	1433.2
135°	1265.0	1335.0
137.5°	1195.2	1252.6
140°	1147.4	1201.0
142.5°	1107.6	1153.8
145°	1048.2	1083.1
147.5°	1002.5	1031.4
150°	973.8	997.2
152.5°	949.2	966.9
155°	921.0	932.7
157.5°	898.6	906.9
160°	885.3	890.0
162.5°	876.6	881.1
165°	864.0	868.7
167.5°	854.9	856.9
170°	852.5	852.5
172.5°	845.8	844.1
175°	841.8	841.8
177.5°	838.2	836.2
180°	836.2	836.2



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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	6.84	7.82	7.72	8.72	9.88	20.01	20.99	20.89	21.90	23.06
	3H	7.55	8.43	8.44	9.35	10.53	21.86	22.75	22.75	23.66	24.84
	4H	7.85	8.69	8.76	9.61	10.80	22.51	23.35	23.42	24.27	25.46
	6H	8.11	8.88	9.03	9.81	11.01	22.95	23.72	23.87	24.65	25.85
	8H	8.18	8.92	9.11	9.86	11.07	23.07	23.81	24.00	24.76	25.96
	12H	8.20	8.91	9.14	9.85	11.07	23.15	23.85	24.08	24.79	26.02
4H	2H	14.07	14.90	14.98	15.82	17.01	20.30	21.14	21.22	22.06	23.25
	3H	15.64	16.34	16.57	17.30	18.50	22.36	23.06	23.28	24.01	25.22
	4H	15.74	16.38	16.68	17.33	18.56	23.13	23.77	24.07	24.72	25.95
	6H	15.76	16.32	16.71	17.29	18.52	23.68	24.23	24.63	25.20	26.43
	8H	15.74	16.26	16.69	17.23	18.47	23.84	24.36	24.79	25.33	26.57
	12H	15.70	16.17	16.68	17.16	18.40	23.94	24.41	24.91	25.39	26.64
8H	4H	17.20	17.72	18.15	18.68	19.93	23.20	23.72	24.15	24.69	25.93
	6H	17.45	17.88	18.42	18.88	20.13	23.84	24.27	24.81	25.27	26.52
	8H	17.47	17.85	18.45	18.84	20.10	24.06	24.44	25.05	25.43	26.69
	12H	17.44	17.78	18.43	18.77	20.07	24.21	24.54	25.20	25.53	26.84
12H	4H	17.35	17.82	18.32	18.80	20.05	23.16	23.63	24.13	24.61	25.86
	6H	17.71	18.09	18.69	19.08	20.34	23.82	24.20	24.81	25.20	26.46
	8H	17.78	18.12	18.77	19.11	20.41	24.06	24.39	25.05	25.38	26.69