

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: P937872

Luminaire Tested: SQ4-FB-125U-050D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

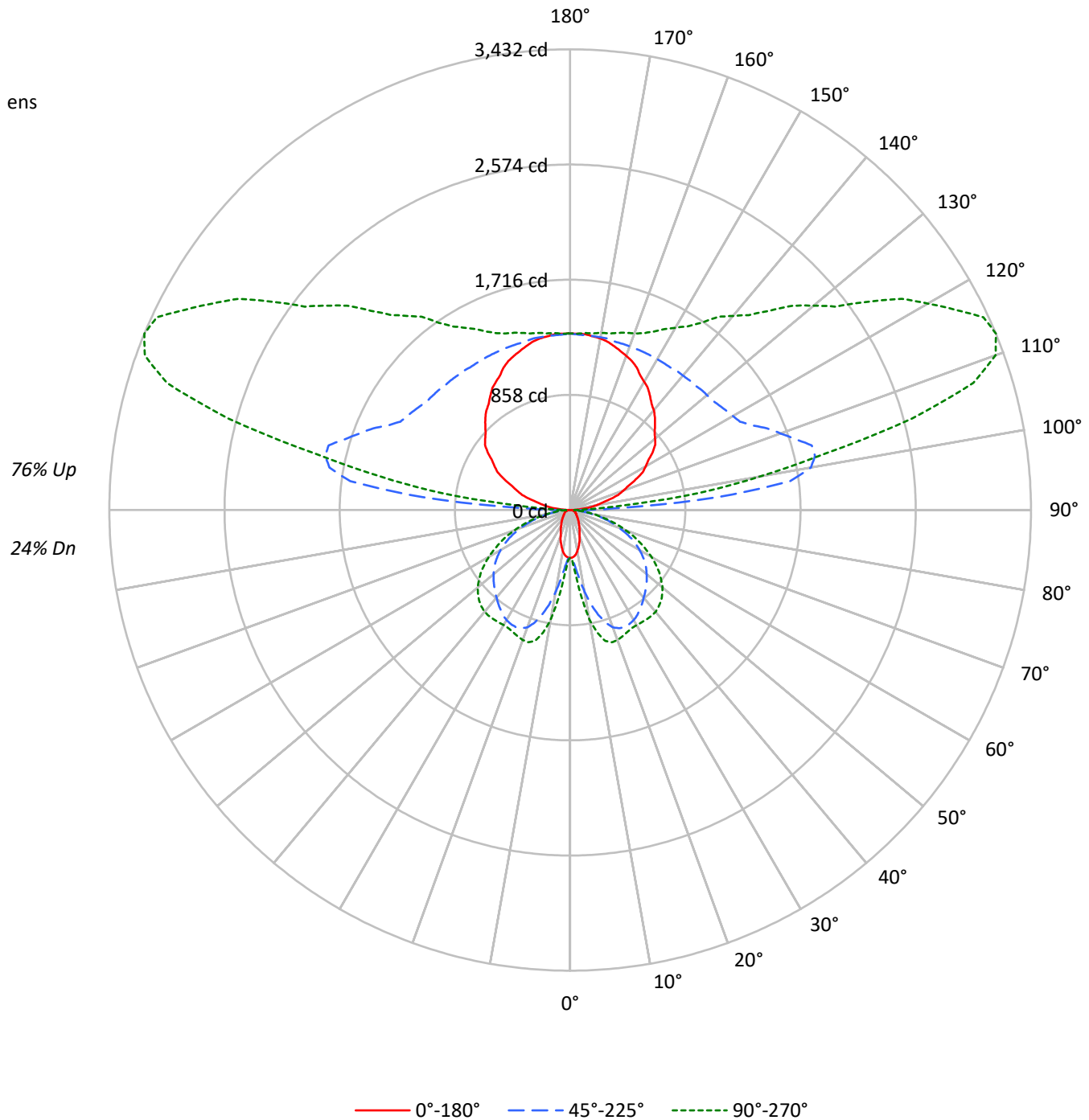
Test Method: LM-79-2019  
Report Number: P937872  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11276.2 lumens  
Efficiency: N/A  
Efficacy: 118.4 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: Semi-Indirect  
  
Input Watts (W): 95.2  
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5			5

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

	0°	45°	90°
0°	1649	1649	1649
5°	1611	1906	2216
10°	1461	2778	3675
15°	1242	3630	4437
20°	1011	4206	4521
25°	843	4402	4430
30°	711	4429	4422
35°	629	4356	4536
40°	548	4260	4654
45°	496	4190	4672
50°	455	4127	4595
55°	436	4035	4392
60°	447	3858	4070
65°	465	3589	3628
70°	494	3129	3065
75°	548	2552	2392
80°	599	1769	1611
85°	531	939	825

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4672 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	0.4
10°-20°	203.8	1.8
20°-30°	356.4	3.2
30°-40°	458.8	4.1
40°-50°	512.4	4.5
50°-60°	490.8	4.4
60°-70°	389.0	3.4
70°-80°	228.7	2.0
80°-90°	68.6	0.6
90°-100°	640.8	5.7
100°-110°	1684.7	14.9
110°-120°	1746.8	15.5
120°-130°	1401.1	12.4
130°-140°	1099.4	9.7
140°-150°	843.8	7.5
150°-160°	607.7	5.4
160°-170°	371.8	3.3
170°-180°	125.6	1.1
0°-30°	606.1	5.4
0°-40°	1064.9	9.4
0°-60°	2068.2	18.3
0°-90°	2754.4	24.4
90°-120°	4072.3	36.1
90°-150°	7416.7	65.8
90°-180°	8522.0	75.6
0°-180°	11276.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	355	355	355	355	355	
5°	346	371	418	473	490	32
15°	259	479	807	978	1009	72
25°	166	543	961	1003	1004	76
35°	112	519	905	956	994	70
45°	77	414	800	916	958	59
55°	55	263	679	788	810	50
65°	44	139	504	567	575	43
75°	32	86	277	304	305	33
85°	11	26	69	75	77	12
90°	9	25	67	34	34	8
95°	85	332	1104	569	387	94
105°	304	460	1862	2828	2638	322
115°	539	655	1492	2976	3397	532
125°	750	841	1357	2293	2705	666
135°	894	984	1315	1851	2099	691
145°	1037	1103	1298	1579	1703	649
155°	1172	1204	1298	1425	1466	538
165°	1264	1281	1298	1349	1366	357
175°	1315	1315	1307	1323	1323	125
180°	1315	1315	1315	1315	1315	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4	355.4
2.5°	355.4	355.4	357.7	358.9	361.1	362.3	364.6	366.9	373.7	374.8	377.1
5°	346.3	350.9	365.7	371.4	387.4	409.1	418.2	433.1	464.0	473.1	478.8
7.5°	332.5	342.8	379.4	388.5	428.6	485.6	509.7	541.7	590.8	614.8	634.2
10°	310.8	332.5	397.7	419.4	484.5	571.4	616.0	660.6	734.8	767.9	780.5
12.5°	286.9	322.2	417.1	446.8	540.5	667.4	721.1	770.2	854.8	899.4	906.2
15°	259.4	307.4	435.4	478.8	600.0	747.4	806.8	867.3	946.2	978.2	986.2
17.5°	235.4	296.0	452.6	498.2	645.6	819.4	879.9	930.2	994.2	1015.9	1021.6
20°	205.7	277.7	464.0	523.4	693.7	871.9	930.2	969.1	1012.5	1026.2	1028.5
22.5°	183.9	258.2	470.8	532.5	725.6	904.0	953.0	984.0	1013.6	1018.2	1019.3
25°	165.7	236.5	469.7	542.8	753.1	923.4	961.1	984.0	1001.1	1003.4	1003.4
27.5°	148.6	212.6	465.1	545.1	773.7	927.9	957.6	973.7	981.7	986.2	986.2
30°	133.7	189.7	453.7	540.5	782.8	923.4	947.3	955.3	963.4	970.3	973.7
32.5°	122.3	168.0	436.6	531.4	783.9	911.9	929.1	933.6	945.0	961.1	966.8
35°	112.0	146.3	417.1	518.8	777.1	893.7	905.1	909.7	932.5	956.5	964.5
37.5°	101.7	130.3	392.0	497.1	766.8	871.9	879.9	888.0	923.4	951.9	961.1
40°	91.4	116.6	362.3	473.1	750.8	845.7	852.5	865.1	911.9	945.0	954.2
42.5°	83.4	105.1	330.2	448.0	730.2	816.0	826.3	844.5	898.3	933.6	943.9
45°	76.6	93.7	296.0	413.6	703.9	785.1	799.9	825.1	882.2	916.5	925.6
47.5°	69.7	85.7	260.5	378.3	675.4	754.3	773.7	802.2	860.5	893.7	901.7
50°	64.0	77.7	225.1	340.5	644.5	721.1	744.0	773.7	833.1	863.9	874.2
52.5°	59.4	70.9	192.0	302.8	609.1	686.8	713.1	744.0	799.9	829.7	836.5
55°	54.9	65.2	163.4	262.8	572.5	650.2	678.8	708.5	763.4	788.5	793.1
57.5°	52.6	60.6	139.4	225.1	533.7	609.1	641.1	668.6	719.9	739.4	744.0
60°	49.2	57.2	121.2	193.1	491.4	570.2	597.7	625.1	668.6	684.5	688.0
62.5°	45.8	54.9	107.4	162.3	448.0	524.6	551.9	577.1	613.7	625.1	629.7
65°	43.5	52.6	97.1	139.4	403.4	476.5	504.0	525.7	555.4	566.8	569.1
67.5°	41.2	50.3	89.1	120.0	358.9	428.6	449.1	469.7	492.5	504.0	505.1
70°	37.7	48.0	82.3	106.2	313.1	373.7	390.8	412.5	430.9	436.6	440.0
72.5°	35.4	44.6	77.7	96.0	266.2	321.1	337.1	349.7	365.7	371.4	371.4
75°	32.0	40.0	73.1	85.7	218.3	262.8	276.6	289.1	301.7	304.0	300.6
77.5°	28.5	35.4	62.9	72.0	170.3	208.0	219.4	226.3	236.5	238.8	240.0
80°	24.0	30.8	49.2	56.0	123.5	153.1	161.1	166.8	176.0	176.0	178.2
82.5°	18.3	24.0	35.4	40.0	83.4	105.1	112.0	115.4	121.2	121.2	121.2
85°	11.4	14.8	22.8	26.2	50.3	64.0	68.6	69.7	74.3	75.4	75.4
87.5°	5.7	8.0	14.8	16.0	26.2	33.1	33.1	35.4	35.4	34.3	33.1
90°	8.9	15.9	22.9	24.7	38.9	57.7	67.1	59.6	44.6	33.5	33.5
92.5°	35.3	95.3	155.3	170.3	239.4	331.5	377.6	330.9	237.6	167.6	160.9
95°	84.7	194.5	304.3	331.8	589.1	932.2	1103.7	984.9	747.3	569.1	548.9
97.5°	146.5	243.3	340.2	364.4	793.5	1365.6	1651.6	1576.5	1426.3	1313.7	1275.3
100°	194.1	281.9	369.8	391.7	867.8	1502.7	1820.1	1825.6	1836.6	1844.8	1799.1
102.5°	234.6	316.6	398.6	419.1	902.0	1545.9	1867.8	1963.4	2154.8	2298.3	2259.1
105°	303.5	372.9	442.3	459.7	927.2	1550.7	1862.5	2076.9	2505.9	2827.6	2806.6
107.5°	374.1	438.8	503.4	519.6	931.9	1481.7	1756.6	2055.8	2654.2	3102.9	3108.0
110°	421.7	480.2	538.6	553.2	924.9	1420.5	1668.4	2002.9	2671.8	3173.4	3195.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	468.5	524.2	579.9	593.8	925.2	1367.1	1588.0	1930.4	2615.0	3128.5	3162.2
115°	539.1	590.4	641.7	654.6	933.7	1305.9	1491.9	1821.7	2481.2	2975.9	3022.6
117.5°	608.8	655.4	702.0	713.7	951.1	1267.5	1425.7	1723.3	2318.5	2765.0	2816.9
120°	649.3	693.3	737.2	748.1	965.1	1254.6	1399.2	1671.2	2215.0	2623.0	2673.3
122.5°	689.0	733.3	777.6	788.7	985.4	1247.8	1379.0	1623.8	2113.6	2480.9	2530.6
125°	749.9	790.3	830.7	840.8	1012.8	1242.2	1356.9	1565.0	1981.0	2293.0	2338.7
127.5°	799.3	840.2	880.9	891.1	1040.2	1239.0	1338.4	1517.0	1874.2	2142.1	2180.7
130°	825.8	869.7	913.6	924.6	1060.1	1240.9	1331.3	1490.3	1808.4	2046.8	2082.5
132.5°	853.1	897.1	940.9	951.9	1076.3	1242.2	1325.1	1467.5	1752.1	1965.6	1997.6
135°	893.7	933.7	973.8	983.7	1094.0	1241.0	1314.6	1433.7	1672.1	1851.0	1878.5
137.5°	935.2	974.8	1014.4	1024.3	1120.5	1248.7	1312.8	1413.6	1615.1	1766.3	1788.9
140°	969.6	1006.0	1042.5	1051.6	1136.7	1250.0	1306.6	1393.7	1567.8	1698.4	1719.4
142.5°	996.1	1029.8	1063.5	1071.9	1150.1	1254.5	1306.6	1383.1	1536.0	1650.7	1668.8
145°	1036.6	1066.0	1095.5	1102.8	1167.8	1254.5	1297.8	1360.3	1485.5	1579.3	1593.0
147.5°	1077.3	1105.9	1134.5	1141.7	1193.7	1263.1	1297.8	1347.0	1445.4	1519.3	1530.6
150°	1103.7	1129.6	1155.5	1162.0	1207.2	1267.6	1297.8	1339.3	1422.5	1484.9	1494.1
152.5°	1131.0	1150.6	1170.2	1175.2	1216.1	1270.5	1297.8	1333.3	1404.3	1457.5	1464.5
155°	1171.7	1186.2	1200.6	1204.3	1235.5	1277.0	1297.8	1326.1	1382.5	1424.9	1429.5
157.5°	1201.7	1215.7	1229.9	1233.4	1254.8	1283.5	1297.8	1319.7	1363.6	1396.6	1399.8
160°	1221.9	1232.9	1243.9	1246.6	1263.7	1286.4	1297.8	1316.6	1354.3	1382.5	1384.3
162.5°	1242.2	1250.4	1258.7	1260.7	1273.1	1289.5	1297.8	1313.6	1345.4	1369.2	1371.0
165°	1264.3	1271.8	1279.2	1281.1	1286.6	1294.0	1297.8	1309.2	1331.9	1349.0	1350.8
167.5°	1284.6	1288.1	1291.6	1292.5	1297.2	1303.5	1306.6	1314.0	1328.9	1340.1	1340.9
170°	1297.8	1301.3	1304.9	1305.8	1306.0	1306.5	1306.6	1314.0	1328.9	1340.1	1340.1
172.5°	1304.8	1305.6	1306.5	1306.6	1306.6	1306.6	1306.6	1312.5	1324.3	1333.1	1332.4
175°	1314.6	1314.6	1314.6	1314.6	1311.9	1308.4	1306.6	1310.4	1317.8	1323.4	1323.4
177.5°	1314.6	1314.6	1314.6	1314.6	1312.5	1309.8	1308.4	1311.3	1317.2	1321.6	1320.9
180°	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6	1314.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	355.4	355.4
2.5°	379.4	377.1
5°	487.9	490.2
7.5°	657.1	656.0
10°	817.1	827.4
12.5°	933.6	935.9
15°	1004.5	1009.1
17.5°	1031.9	1033.0
20°	1033.0	1030.7
22.5°	1020.5	1018.2
25°	1005.6	1004.5
27.5°	991.9	993.1
30°	986.2	989.7
32.5°	986.2	991.9
35°	988.5	994.2
37.5°	987.4	994.2
40°	982.8	990.8
42.5°	970.3	976.0
45°	950.8	957.6
47.5°	925.6	930.2
50°	893.7	898.3
52.5°	853.6	854.8
55°	805.7	810.3
57.5°	754.3	755.4
60°	697.1	700.5
62.5°	636.5	636.5
65°	572.5	574.8
67.5°	506.3	512.0
70°	438.9	440.0
72.5°	372.6	372.6
75°	304.0	305.1
77.5°	238.8	238.8
80°	177.1	178.2
82.5°	122.3	124.6
85°	76.6	76.6
87.5°	35.4	32.0
90°	33.5	33.5
92.5°	134.3	107.6
95°	468.1	387.3
97.5°	1121.6	967.9
100°	1615.9	1432.8
102.5°	2102.2	1945.4
105°	2722.2	2638.0
107.5°	3128.4	3148.7
110°	3283.3	3371.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3297.1	3431.9
115°	3209.7	3396.7
117.5°	3024.3	3231.7
120°	2874.9	3076.4
122.5°	2729.5	2928.2
125°	2521.9	2705.0
127.5°	2335.2	2489.7
130°	2225.3	2368.0
132.5°	2125.5	2253.3
135°	1988.7	2098.9
137.5°	1879.0	1969.2
140°	1803.8	1888.0
142.5°	1741.3	1813.9
145°	1647.9	1702.7
147.5°	1576.1	1621.6
150°	1531.0	1567.8
152.5°	1492.3	1520.1
155°	1447.9	1466.3
157.5°	1412.8	1425.7
160°	1391.7	1399.2
162.5°	1378.1	1385.2
165°	1358.3	1365.8
167.5°	1344.0	1347.2
170°	1340.1	1340.1
172.5°	1329.6	1326.9
175°	1323.4	1323.4
177.5°	1317.7	1314.6
180°	1314.6	1314.6



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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	0.00	0.42	0.87	1.55	3.15	12.91	13.59	14.05	14.73	16.32
	3H	0.42	1.04	1.57	2.18	3.79	14.73	15.35	15.89	16.49	18.10
	4H	0.71	1.30	1.87	2.44	4.05	15.37	15.96	16.53	17.10	18.71
	6H	0.95	1.49	2.12	2.64	4.26	15.79	16.33	16.96	17.48	19.10
	8H	1.01	1.53	2.19	2.69	4.31	15.91	16.42	17.08	17.58	19.20
	12H	1.02	1.51	2.20	2.67	4.31	15.97	16.46	17.15	17.61	19.25
4H	2H	6.92	7.51	8.09	8.65	10.27	13.16	13.75	14.33	14.89	16.50
	3H	8.47	8.96	9.65	10.13	11.76	15.19	15.68	16.36	16.85	18.47
	4H	8.56	9.01	9.74	10.17	11.81	15.95	16.40	17.12	17.56	19.20
	6H	8.56	8.95	9.74	10.13	11.76	16.48	16.86	17.66	18.04	19.68
	8H	8.53	8.89	9.71	10.07	11.72	16.63	16.99	17.81	18.17	19.82
	12H	8.48	8.81	9.68	9.99	11.65	16.72	17.05	17.92	18.23	19.89
8H	4H	9.99	10.35	11.17	11.52	13.17	15.99	16.35	17.17	17.53	19.18
	6H	10.22	10.52	11.42	11.74	13.38	16.61	16.91	17.81	18.13	19.77
	8H	10.24	10.50	11.44	11.69	13.36	16.83	17.09	18.04	18.28	19.95
	12H	10.20	10.43	11.41	11.62	13.32	16.97	17.20	18.18	18.39	20.08
12H	4H	10.12	10.45	11.32	11.64	13.29	15.94	16.26	17.13	17.45	19.10
	6H	10.48	10.74	11.68	11.93	13.60	16.59	16.85	17.80	18.05	19.71
	8H	10.54	10.77	11.75	11.96	13.66	16.82	17.04	18.03	18.23	19.93