

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: P937866

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937866  
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-93050-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

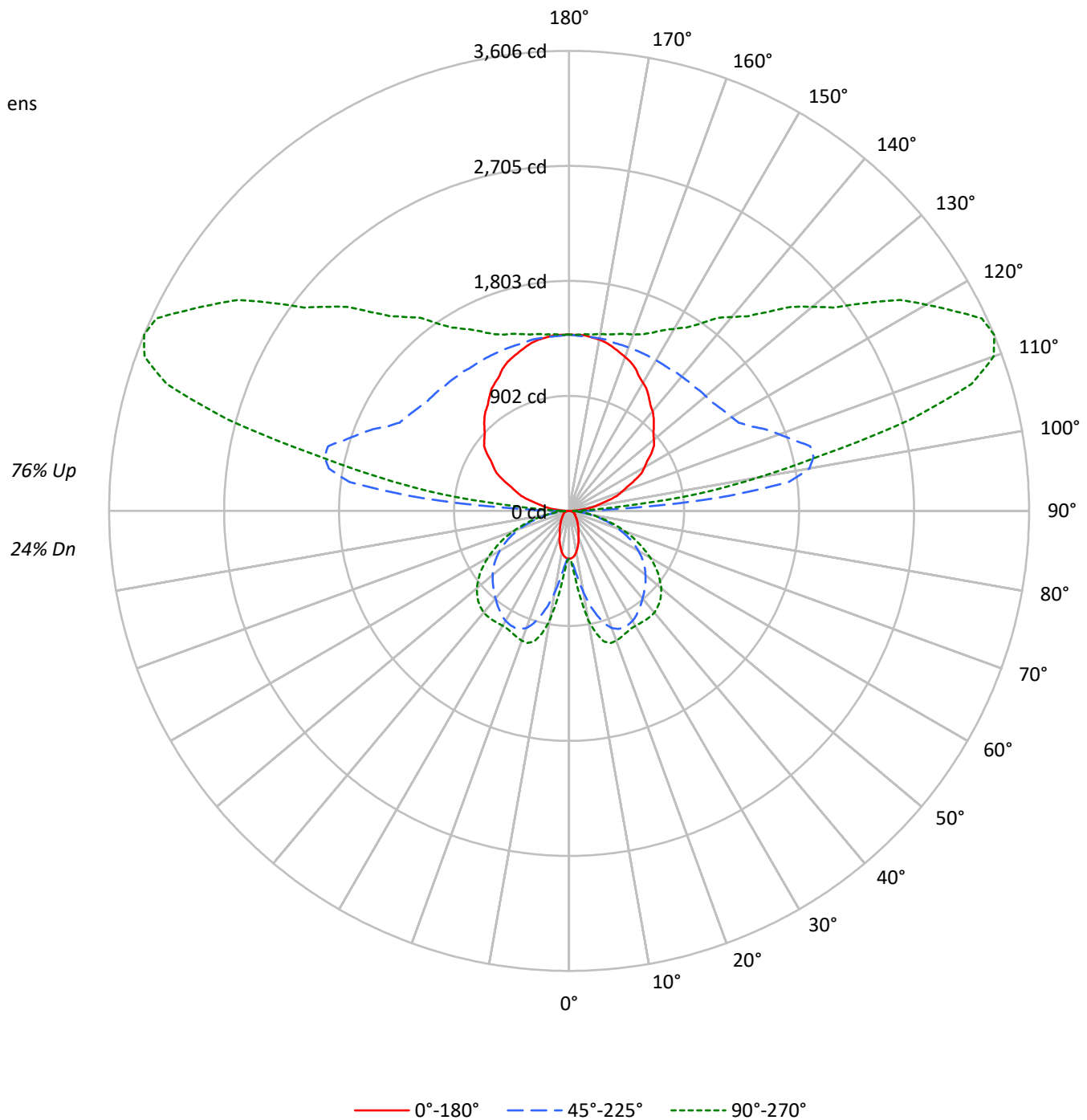
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11849.5 lumens  
Efficiency: N/A  
Efficacy: 124.5 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: Semi-Indirect

Input Watts (W): 95.2  
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

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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°	1732	1732	1732
5°	1693	2003	2329
10°	1535	2919	3861
15°	1305	3814	4663
20°	1062	4420	4751
25°	886	4625	4655
30°	747	4654	4647
35°	660	4577	4766
40°	576	4476	4891
45°	522	4403	4910
50°	478	4337	4829
55°	459	4240	4614
60°	470	4054	4276
65°	489	3771	3813
70°	521	3288	3220
75°	577	2681	2513
80°	629	1859	1693
85°	559	987	867

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4910 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	0.4
10°-20°	214.1	1.8
20°-30°	374.5	3.2
30°-40°	482.1	4.1
40°-50°	538.5	4.5
50°-60°	515.8	4.4
60°-70°	408.8	3.4
70°-80°	240.3	2.0
80°-90°	72.0	0.6
90°-100°	673.4	5.7
100°-110°	1770.3	14.9
110°-120°	1835.6	15.5
120°-130°	1472.4	12.4
130°-140°	1155.3	9.7
140°-150°	886.7	7.5
150°-160°	638.6	5.4
160°-170°	390.7	3.3
170°-180°	132.0	1.1
0°-30°	636.9	5.4
0°-40°	1119.0	9.4
0°-60°	2173.3	18.3
0°-90°	2894.5	24.4
90°-120°	4279.3	36.1
90°-150°	7793.7	65.8
90°-180°	8955.0	75.6
0°-180°	11849.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	364	390	440	497	515	34
15°	273	503	848	1028	1060	76
25°	174	570	1010	1054	1056	80
35°	118	545	951	1005	1045	73
45°	80	435	841	963	1006	62
55°	58	276	713	829	851	53
65°	46	146	530	596	604	45
75°	34	90	291	319	321	35
85°	12	28	72	79	80	13
90°	9	26	70	35	35	8
95°	89	349	1160	598	407	99
105°	319	483	1957	2971	2772	338
115°	566	688	1568	3127	3569	559
125°	788	884	1426	2410	2842	700
135°	939	1034	1381	1945	2206	727
145°	1089	1159	1364	1660	1789	682
155°	1231	1266	1364	1497	1541	566
165°	1329	1346	1364	1418	1435	375
175°	1381	1381	1373	1391	1391	131
180°	1381	1381	1381	1381	1381	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	373.4	373.4	375.9	377.1	379.4	380.7	383.1	385.5	392.7	393.8	396.3
5°	363.9	368.7	384.3	390.3	407.1	429.9	439.5	455.1	487.6	497.2	503.2
7.5°	349.4	360.3	398.7	408.3	450.3	510.3	535.6	569.2	620.8	646.1	666.5
10°	326.6	349.4	417.9	440.8	509.2	600.4	647.3	694.1	772.1	806.9	820.2
12.5°	301.5	338.6	438.3	469.5	568.0	701.3	757.8	809.4	898.3	945.1	952.3
15°	272.6	323.0	457.5	503.2	630.5	785.4	847.9	911.4	994.3	1027.9	1036.3
17.5°	247.4	311.0	475.6	523.6	678.5	861.0	924.7	977.5	1044.7	1067.6	1073.6
20°	216.1	291.8	487.6	550.0	729.0	916.3	977.5	1018.3	1064.0	1078.4	1080.8
22.5°	193.3	271.4	494.7	559.6	762.5	949.9	1001.5	1034.0	1065.2	1070.0	1071.2
25°	174.1	248.5	493.6	570.4	791.4	970.3	1009.9	1034.0	1052.0	1054.4	1054.4
27.5°	156.1	223.4	488.8	572.8	813.0	975.1	1006.3	1023.2	1031.6	1036.3	1036.3
30°	140.5	199.4	476.8	568.0	822.6	970.3	995.5	1003.9	1012.3	1019.6	1023.2
32.5°	128.5	176.6	458.8	558.4	823.8	958.3	976.3	981.1	993.1	1009.9	1015.9
35°	117.6	153.7	438.3	545.2	816.6	939.1	951.1	955.9	979.9	1005.2	1013.5
37.5°	106.9	136.9	411.9	522.4	805.8	916.3	924.7	933.1	970.3	1000.3	1009.9
40°	96.1	122.5	380.7	497.2	788.9	888.7	895.8	909.1	958.3	993.1	1002.7
42.5°	87.7	110.5	347.0	470.8	767.4	857.4	868.3	887.4	943.9	981.1	991.9
45°	80.5	98.5	311.0	434.7	739.7	825.0	840.6	867.0	927.1	963.1	972.7
47.5°	73.2	90.1	273.8	397.5	709.7	792.6	813.0	843.0	904.3	939.1	947.5
50°	67.2	81.7	236.5	357.9	677.3	757.8	781.8	813.0	875.4	907.8	918.7
52.5°	62.4	74.5	201.7	318.2	640.1	721.7	749.4	781.8	840.6	871.9	879.0
55°	57.7	68.5	171.7	276.2	601.6	683.3	713.3	744.5	802.2	828.6	833.4
57.5°	55.2	63.7	146.5	236.5	560.8	640.1	673.7	702.6	756.5	777.0	781.8
60°	51.7	60.1	127.3	203.0	516.4	599.2	628.1	656.9	702.6	719.3	723.0
62.5°	48.1	57.7	112.9	170.6	470.8	551.2	580.0	606.5	644.9	656.9	661.7
65°	45.7	55.2	102.1	146.5	423.9	500.7	529.6	552.4	583.7	595.7	598.1
67.5°	43.2	52.8	93.6	126.1	377.1	450.3	471.9	493.6	517.6	529.6	530.7
70°	39.7	50.4	86.5	111.6	329.0	392.7	410.7	433.5	452.8	458.8	462.3
72.5°	37.2	46.8	81.7	100.9	279.8	337.4	354.3	367.4	384.3	390.3	390.3
75°	33.7	42.0	76.8	90.1	229.4	276.2	290.6	303.8	317.0	319.4	315.9
77.5°	30.0	37.2	66.1	75.7	179.0	218.5	230.5	237.8	248.5	251.0	252.2
80°	25.2	32.4	51.7	58.8	129.7	160.9	169.3	175.3	185.0	185.0	187.3
82.5°	19.2	25.2	37.2	42.0	87.7	110.5	117.6	121.3	127.3	127.3	127.3
85°	12.0	15.6	24.0	27.6	52.8	67.2	72.1	73.2	78.1	79.2	79.2
87.5°	6.0	8.4	15.6	16.8	27.6	34.8	34.8	37.2	37.2	36.0	34.8
90°	9.3	16.7	24.1	26.0	40.8	60.6	70.5	62.6	46.9	35.2	35.2
92.5°	37.1	100.1	163.2	179.0	251.6	348.4	396.8	347.7	249.7	176.1	169.1
95°	89.0	204.4	319.8	348.6	619.0	979.6	1159.8	1035.0	785.3	598.0	576.8
97.5°	153.9	255.7	357.5	382.9	833.8	1435.0	1735.6	1656.7	1498.8	1380.5	1340.1
100°	204.0	296.3	388.6	411.7	912.0	1579.1	1912.7	1918.4	1929.9	1938.6	1890.5
102.5°	246.6	332.7	418.8	440.4	947.9	1624.5	1962.7	2063.2	2264.3	2415.1	2373.9
105°	318.9	391.9	464.8	483.0	974.4	1629.6	1957.2	2182.5	2633.3	2971.4	2949.2
107.5°	393.1	461.1	529.0	546.1	979.3	1557.0	1845.9	2160.3	2789.1	3260.6	3266.0
110°	443.2	504.6	566.0	581.3	972.0	1492.8	1753.2	2104.7	2807.6	3334.8	3357.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	492.3	550.8	609.3	623.9	972.2	1436.6	1668.8	2028.5	2747.9	3287.5	3323.0
115°	566.5	620.5	674.3	687.9	981.2	1372.2	1567.8	1914.3	2607.3	3127.1	3176.3
117.5°	639.7	688.8	737.7	750.0	999.4	1332.0	1498.2	1810.9	2436.4	2905.6	2960.1
120°	682.3	728.5	774.6	786.2	1014.2	1318.3	1470.4	1756.2	2327.6	2756.3	2809.2
122.5°	724.0	770.6	817.2	828.8	1035.5	1311.2	1449.1	1706.4	2221.1	2607.1	2659.3
125°	788.1	830.5	872.9	883.5	1064.3	1305.4	1425.9	1644.5	2081.7	2409.6	2457.6
127.5°	840.0	882.9	925.7	936.4	1093.1	1302.0	1406.4	1594.1	1969.5	2251.0	2291.6
130°	867.7	913.9	960.0	971.6	1114.0	1304.0	1399.0	1566.1	1900.3	2150.9	2188.4
132.5°	896.5	942.7	988.8	1000.3	1131.0	1305.4	1392.5	1542.1	1841.2	2065.6	2099.1
135°	939.2	981.2	1023.3	1033.7	1149.6	1304.1	1381.4	1506.6	1757.1	1945.1	1974.0
137.5°	982.7	1024.3	1066.0	1076.3	1177.4	1312.2	1379.5	1485.4	1697.2	1856.1	1879.8
140°	1018.9	1057.2	1095.5	1105.1	1194.4	1313.5	1373.1	1464.6	1647.5	1784.7	1806.8
142.5°	1046.7	1082.2	1117.5	1126.4	1208.6	1318.3	1373.1	1453.4	1614.1	1734.6	1753.6
145°	1089.3	1120.2	1151.2	1158.9	1227.2	1318.3	1363.7	1429.5	1561.0	1659.6	1674.0
147.5°	1132.0	1162.1	1192.2	1199.7	1254.4	1327.3	1363.7	1415.5	1518.9	1596.5	1608.4
150°	1159.8	1187.0	1214.2	1221.0	1268.6	1332.0	1363.7	1407.4	1494.8	1560.3	1570.0
152.5°	1188.5	1209.1	1229.7	1234.9	1277.9	1335.1	1363.7	1401.1	1475.7	1531.6	1539.0
155°	1231.2	1246.5	1261.7	1265.5	1298.3	1341.9	1363.7	1393.5	1452.8	1497.3	1502.2
157.5°	1262.7	1277.5	1292.4	1296.1	1318.6	1348.7	1363.7	1386.8	1432.9	1467.6	1471.0
160°	1284.1	1295.6	1307.2	1310.0	1327.9	1351.8	1363.7	1383.5	1423.1	1452.7	1454.7
162.5°	1305.4	1314.0	1322.6	1324.8	1337.8	1355.1	1363.7	1380.4	1413.8	1438.9	1440.7
165°	1328.6	1336.4	1344.2	1346.2	1352.0	1359.8	1363.7	1375.7	1399.6	1417.5	1419.5
167.5°	1349.9	1353.5	1357.3	1358.2	1363.1	1369.7	1373.1	1380.8	1396.5	1408.2	1409.0
170°	1363.7	1367.5	1371.3	1372.2	1372.4	1372.9	1373.1	1380.8	1396.5	1408.2	1408.2
172.5°	1371.2	1372.0	1372.9	1373.1	1373.1	1373.1	1373.1	1379.2	1391.6	1400.9	1400.2
175°	1381.4	1381.4	1381.4	1381.4	1378.6	1374.9	1373.1	1377.0	1384.8	1390.7	1390.7
177.5°	1381.4	1381.4	1381.4	1381.4	1379.2	1376.4	1374.9	1378.0	1384.2	1388.8	1388.0
180°	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4	1381.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	373.4	373.4
2.5°	398.7	396.3
5°	512.7	515.2
7.5°	690.5	689.3
10°	858.6	869.4
12.5°	981.1	983.5
15°	1055.6	1060.4
17.5°	1084.4	1085.6
20°	1085.6	1083.1
22.5°	1072.4	1070.0
25°	1056.7	1055.6
27.5°	1042.3	1043.6
30°	1036.3	1040.0
32.5°	1036.3	1042.3
35°	1038.7	1044.7
37.5°	1037.6	1044.7
40°	1032.7	1041.2
42.5°	1019.6	1025.6
45°	999.2	1006.3
47.5°	972.7	977.5
50°	939.1	943.9
52.5°	897.0	898.3
55°	846.6	851.4
57.5°	792.6	793.8
60°	732.5	736.1
62.5°	668.9	668.9
65°	601.6	604.1
67.5°	532.0	538.0
70°	461.2	462.3
72.5°	391.5	391.5
75°	319.4	320.6
77.5°	251.0	251.0
80°	186.1	187.3
82.5°	128.5	130.9
85°	80.5	80.5
87.5°	37.2	33.7
90°	35.2	35.2
92.5°	141.1	113.1
95°	491.9	407.0
97.5°	1178.6	1017.1
100°	1698.0	1505.6
102.5°	2209.1	2044.3
105°	2860.6	2772.1
107.5°	3287.4	3308.8
110°	3450.2	3542.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3464.7	3606.4
115°	3372.8	3569.3
117.5°	3178.0	3396.0
120°	3021.1	3232.8
122.5°	2868.2	3077.1
125°	2650.1	2842.5
127.5°	2454.0	2616.3
130°	2338.4	2488.3
132.5°	2233.5	2367.8
135°	2089.8	2205.6
137.5°	1974.5	2069.3
140°	1895.5	1984.0
142.5°	1829.8	1906.1
145°	1731.6	1789.3
147.5°	1656.2	1704.0
150°	1608.8	1647.5
152.5°	1568.1	1597.4
155°	1521.5	1540.8
157.5°	1484.6	1498.2
160°	1462.5	1470.4
162.5°	1448.2	1455.6
165°	1427.3	1435.2
167.5°	1412.4	1415.7
170°	1408.2	1408.2
172.5°	1397.2	1394.4
175°	1390.7	1390.7
177.5°	1384.7	1381.4
180°	1381.4	1381.4



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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	0.59	1.05	1.72	3.32	13.08	13.77	14.22	14.90	16.50
	3H	0.59	1.21	1.74	2.35	3.96	14.91	15.52	16.06	16.67	18.27
	4H	0.88	1.47	2.04	2.61	4.23	15.54	16.13	16.70	17.27	18.89
	6H	1.12	1.66	2.29	2.81	4.43	15.96	16.50	17.13	17.65	19.27
	8H	1.18	1.70	2.36	2.86	4.48	16.08	16.59	17.25	17.75	19.37
	12H	1.20	1.68	2.37	2.84	4.48	16.14	16.63	17.32	17.78	19.42
4H	2H	7.09	7.68	8.26	8.83	10.44	13.33	13.92	14.50	15.06	16.68
	3H	8.65	9.13	9.82	10.31	11.93	15.36	15.85	16.54	17.02	18.65
	4H	8.73	9.18	9.91	10.34	11.99	16.12	16.57	17.30	17.73	19.37
	6H	8.73	9.12	9.91	10.30	11.93	16.65	17.04	17.83	18.22	19.85
	8H	8.70	9.07	9.88	10.24	11.89	16.81	17.17	17.99	18.34	19.99
	12H	8.65	8.98	9.85	10.16	11.82	16.89	17.22	18.09	18.40	20.06
8H	4H	10.16	10.52	11.34	11.70	13.35	16.17	16.53	17.35	17.70	19.35
	6H	10.40	10.69	11.60	11.91	13.56	16.79	17.08	17.99	18.30	19.95
	8H	10.41	10.67	11.62	11.86	13.53	17.00	17.26	18.21	18.46	20.12
	12H	10.37	10.60	11.58	11.79	13.49	17.14	17.37	18.35	18.56	20.26
12H	4H	10.30	10.62	11.49	11.81	13.46	16.11	16.44	17.31	17.62	19.28
	6H	10.65	10.91	11.86	12.10	13.77	16.77	17.03	17.97	18.22	19.89
	8H	10.71	10.94	11.92	12.13	13.83	16.99	17.22	18.20	18.41	20.11