

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: P938364

Luminaire Tested: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938364
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-93050-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

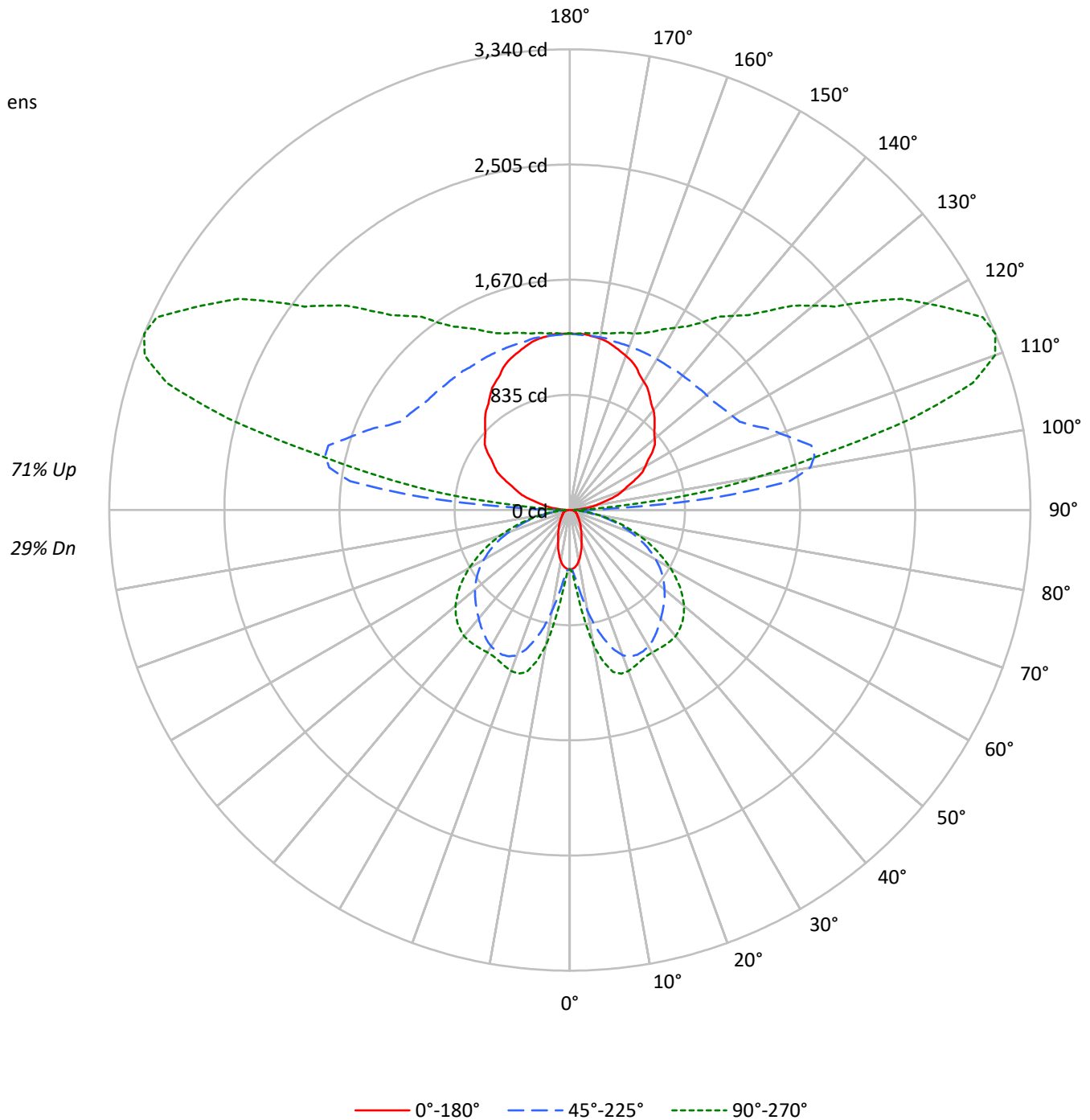
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11609.7 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.4
Input Voltage (V): NR
Input Current (A_{in}): 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	6			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	6			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2648	2648	2648
5°	2586	3060	3559
10°	2345	4460	5901
15°	1992	5825	7127
20°	1621	6749	7263
25°	1352	7061	7116
30°	1140	7103	7102
35°	1007	6984	7286
40°	877	6828	7476
45°	793	6714	7505
50°	728	6610	7381
55°	696	6461	7053
60°	712	6174	6536
65°	739	5740	5827
70°	785	5002	4923
75°	866	4075	3841
80°	941	2823	2588
85°	823	1495	1324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7505 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	0.5
10°-20°	245.4	2.1
20°-30°	429.3	3.7
30°-40°	552.7	4.8
40°-50°	617.3	5.3
50°-60°	591.2	5.1
60°-70°	468.5	4.0
70°-80°	275.5	2.4
80°-90°	81.4	0.7
90°-100°	623.6	5.4
100°-110°	1639.4	14.1
110°-120°	1699.9	14.6
120°-130°	1363.5	11.7
130°-140°	1069.9	9.2
140°-150°	821.2	7.1
150°-160°	591.4	5.1
160°-170°	361.8	3.1
170°-180°	122.2	1.1
0°-30°	730.1	6.3
0°-40°	1282.8	11.0
0°-60°	2491.3	21.5
0°-90°	3316.8	28.6
90°-120°	3962.9	34.1
90°-150°	7217.5	62.2
90°-180°	8293.0	71.4
0°-180°	11609.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	417	447	504	570	590	38
15°	312	577	972	1178	1216	87
25°	200	654	1158	1209	1210	92
35°	135	625	1090	1152	1198	84
45°	92	498	964	1104	1154	71
55°	66	317	818	950	976	60
65°	52	168	607	683	692	52
75°	38	103	333	366	368	40
85°	14	32	83	91	92	15
90°	9	24	65	33	33	8
95°	82	323	1074	554	377	91
105°	295	447	1812	2752	2567	313
115°	525	637	1452	2896	3305	518
125°	730	818	1320	2231	2632	648
135°	870	957	1279	1801	2042	673
145°	1009	1073	1263	1537	1657	632
155°	1140	1172	1263	1386	1427	524
165°	1230	1247	1263	1313	1329	347
175°	1279	1279	1272	1288	1288	121
180°	1279	1279	1279	1279	1279	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1	428.1
2.5°	428.1	428.1	430.9	432.2	435.0	436.4	439.1	441.9	450.1	451.5	454.3
5°	417.1	422.6	440.5	447.4	466.6	492.8	503.8	521.7	558.9	569.9	576.8
7.5°	400.6	413.0	457.0	468.0	516.2	585.0	613.9	652.5	711.7	740.6	764.0
10°	374.4	400.6	479.0	505.2	583.7	688.3	742.0	795.6	885.1	925.0	940.2
12.5°	345.5	388.2	502.4	538.2	651.1	803.9	868.6	927.8	1029.7	1083.4	1091.7
15°	312.5	370.3	524.5	576.8	722.7	900.3	971.8	1044.9	1139.9	1178.4	1188.0
17.5°	283.6	356.5	545.1	600.2	777.7	987.0	1060.0	1120.6	1197.7	1223.8	1230.7
20°	247.8	334.5	558.9	630.5	835.6	1050.4	1120.6	1167.4	1219.7	1236.2	1239.0
22.5°	221.6	311.1	567.1	641.5	874.1	1088.9	1148.1	1185.3	1221.1	1226.6	1228.0
25°	199.6	284.9	565.8	653.9	907.1	1112.3	1157.8	1185.3	1205.9	1208.7	1208.7
27.5°	179.0	256.0	560.3	656.6	931.9	1117.8	1153.6	1172.9	1182.5	1188.0	1188.0
30°	161.1	228.5	546.5	651.1	942.9	1112.3	1141.2	1150.9	1160.5	1168.8	1172.9
32.5°	147.3	202.4	525.8	640.1	944.3	1098.6	1119.2	1124.7	1138.5	1157.8	1164.6
35°	134.9	176.2	502.4	625.0	936.0	1076.5	1090.3	1095.8	1123.4	1152.3	1161.9
37.5°	122.5	156.9	472.2	598.8	923.7	1050.4	1060.0	1069.7	1112.3	1146.8	1157.8
40°	110.1	140.4	436.4	569.9	904.4	1018.6	1026.9	1042.0	1098.6	1138.5	1149.5
42.5°	100.5	126.6	397.8	539.6	879.6	982.9	995.2	1017.3	1082.1	1124.7	1137.1
45°	92.2	112.9	356.5	498.3	848.0	945.7	963.6	993.9	1062.8	1104.1	1115.1
47.5°	84.0	103.2	313.9	455.6	813.5	908.5	931.9	966.3	1036.5	1076.5	1086.2
50°	77.1	93.6	271.2	410.2	776.4	868.6	896.1	931.9	1003.5	1040.7	1053.1
52.5°	71.6	85.3	231.3	364.8	733.7	827.3	859.0	896.1	963.6	999.4	1007.6
55°	66.1	78.5	196.8	316.6	689.6	783.3	817.7	853.5	919.5	949.8	955.3
57.5°	63.3	73.0	167.9	271.2	642.8	733.7	772.2	805.3	867.2	890.6	896.1
60°	59.2	68.8	145.9	232.6	591.9	686.9	719.9	753.0	805.3	824.5	828.7
62.5°	55.1	66.1	129.4	195.5	539.6	631.8	664.9	695.2	739.2	753.0	758.5
65°	52.3	63.3	117.0	167.9	485.9	574.0	607.1	633.2	669.0	682.8	685.5
67.5°	49.6	60.6	107.4	144.5	432.2	516.2	541.0	565.8	593.3	607.1	608.4
70°	45.4	57.8	99.1	128.0	377.2	450.1	470.8	496.9	519.0	525.8	530.0
72.5°	42.7	53.7	93.6	115.6	320.7	386.8	406.1	421.2	440.5	447.4	447.4
75°	38.5	48.2	88.1	103.2	262.9	316.6	333.1	348.3	363.4	366.2	362.0
77.5°	34.4	42.7	75.7	86.7	205.1	250.5	264.3	272.6	284.9	287.7	289.1
80°	28.9	37.2	59.2	67.5	148.7	184.5	194.1	201.0	212.0	212.0	214.7
82.5°	22.0	28.9	42.7	48.2	100.5	126.6	134.9	139.0	145.9	145.9	145.9
85°	13.8	17.9	27.5	31.7	60.6	77.1	82.6	84.0	89.5	90.9	90.9
87.5°	6.9	9.6	17.9	19.3	31.7	39.9	39.9	42.7	42.7	41.3	39.9
90°	8.6	15.5	22.3	24.0	37.8	56.1	65.2	58.0	43.5	32.7	32.7
92.5°	34.3	92.7	151.1	165.7	233.0	322.7	367.4	322.0	231.3	163.2	156.7
95°	82.4	189.2	296.1	322.8	573.3	907.1	1074.1	958.4	727.2	553.7	534.1
97.5°	142.5	236.8	331.0	354.6	772.1	1328.9	1607.3	1534.2	1388.0	1278.4	1241.0
100°	188.9	274.4	359.8	381.2	844.6	1462.3	1771.2	1776.6	1787.3	1795.3	1750.8
102.5°	228.4	308.2	387.9	407.8	877.8	1504.3	1817.6	1910.6	2096.8	2236.5	2198.3
105°	295.3	362.9	430.4	447.3	902.4	1509.1	1812.4	2021.1	2438.6	2751.7	2731.2
107.5°	364.0	427.0	490.0	505.6	906.9	1441.9	1709.4	2000.6	2582.9	3019.6	3024.5
110°	410.4	467.3	524.1	538.3	900.1	1382.3	1623.5	1949.0	2600.0	3088.2	3109.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	455.9	510.1	564.2	577.8	900.4	1330.4	1545.4	1878.5	2544.8	3044.5	3077.3
115°	524.6	574.6	624.6	637.1	908.6	1270.7	1451.8	1772.7	2414.5	2895.9	2941.4
117.5°	592.4	637.8	683.2	694.6	925.6	1233.5	1387.5	1677.1	2256.2	2690.7	2741.2
120°	631.9	674.7	717.5	728.1	939.3	1220.9	1361.7	1626.3	2155.6	2552.5	2601.5
122.5°	670.6	713.7	756.8	767.6	959.0	1214.3	1341.9	1580.3	2056.8	2414.3	2462.6
125°	729.8	769.0	808.4	818.2	985.6	1208.9	1320.5	1522.9	1927.7	2231.4	2275.9
127.5°	777.8	817.5	857.2	867.1	1012.2	1205.7	1302.4	1476.2	1823.8	2084.5	2122.2
130°	803.6	846.4	889.2	899.8	1031.8	1207.7	1295.6	1450.3	1759.8	1991.9	2026.5
132.5°	830.2	873.0	915.8	926.4	1047.5	1208.9	1289.5	1428.0	1705.1	1912.8	1944.0
135°	869.7	908.6	947.6	957.3	1064.6	1207.7	1279.3	1395.3	1627.3	1801.3	1828.0
137.5°	910.1	948.6	987.2	996.8	1090.4	1215.1	1277.5	1375.6	1571.7	1718.8	1740.8
140°	943.6	979.1	1014.5	1023.4	1106.1	1216.4	1271.6	1356.3	1525.7	1652.8	1673.2
142.5°	969.3	1002.1	1035.0	1043.1	1119.3	1220.8	1271.6	1346.0	1494.7	1606.3	1624.0
145°	1008.8	1037.5	1066.1	1073.2	1136.5	1220.8	1262.9	1323.8	1445.6	1536.9	1550.2
147.5°	1048.3	1076.2	1104.0	1111.0	1161.6	1229.2	1262.9	1310.8	1406.6	1478.4	1489.5
150°	1074.1	1099.2	1124.4	1130.7	1174.7	1233.6	1262.9	1303.4	1384.3	1444.9	1453.9
152.5°	1100.7	1119.8	1138.9	1143.6	1183.4	1236.4	1262.9	1297.4	1366.5	1418.3	1425.1
155°	1140.1	1154.3	1168.4	1171.9	1202.3	1242.7	1262.9	1290.4	1345.3	1386.5	1391.0
157.5°	1169.3	1183.1	1196.9	1200.3	1221.2	1249.0	1262.9	1284.3	1327.1	1359.1	1362.2
160°	1189.1	1199.8	1210.4	1213.1	1229.7	1251.8	1262.9	1281.3	1317.9	1345.3	1347.2
162.5°	1208.9	1216.9	1224.8	1226.9	1238.9	1254.9	1262.9	1278.3	1309.3	1332.5	1334.2
165°	1230.4	1237.6	1244.8	1246.6	1252.0	1259.3	1262.9	1274.0	1296.2	1312.8	1314.6
167.5°	1250.1	1253.5	1257.0	1257.8	1262.4	1268.5	1271.6	1278.8	1293.3	1304.1	1304.9
170°	1262.9	1266.3	1269.8	1270.6	1270.9	1271.4	1271.6	1278.8	1293.3	1304.1	1304.1
172.5°	1269.8	1270.5	1271.4	1271.6	1271.6	1271.6	1271.6	1277.2	1288.7	1297.3	1296.6
175°	1279.3	1279.3	1279.3	1279.3	1276.7	1273.3	1271.6	1275.1	1282.4	1287.8	1287.8
177.5°	1279.3	1279.3	1279.3	1279.3	1277.2	1274.6	1273.2	1276.1	1281.8	1286.1	1285.4
180°	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3	1279.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	428.1	428.1
2.5°	457.0	454.3
5°	587.8	590.5
7.5°	791.5	790.1
10°	984.2	996.6
12.5°	1124.7	1127.5
15°	1210.1	1215.6
17.5°	1243.1	1244.5
20°	1244.5	1241.7
22.5°	1229.3	1226.6
25°	1211.4	1210.1
27.5°	1194.9	1196.3
30°	1188.0	1192.2
32.5°	1188.0	1194.9
35°	1190.8	1197.7
37.5°	1189.4	1197.7
40°	1183.9	1193.6
42.5°	1168.8	1175.7
45°	1145.4	1153.6
47.5°	1115.1	1120.6
50°	1076.5	1082.1
52.5°	1028.3	1029.7
55°	970.5	976.0
57.5°	908.5	909.9
60°	839.7	843.8
62.5°	766.7	766.7
65°	689.6	692.4
67.5°	609.8	616.7
70°	528.6	530.0
72.5°	448.8	448.8
75°	366.2	367.5
77.5°	287.7	287.7
80°	213.4	214.7
82.5°	147.3	150.0
85°	92.2	92.2
87.5°	42.7	38.5
90°	32.7	32.7
92.5°	130.7	104.7
95°	455.5	376.9
97.5°	1091.4	941.8
100°	1572.6	1394.3
102.5°	2045.7	1893.1
105°	2649.1	2567.1
107.5°	3044.4	3064.2
110°	3195.0	3280.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3208.5	3339.8
115°	3123.4	3305.4
117.5°	2943.0	3144.9
120°	2797.7	2993.8
122.5°	2656.1	2849.5
125°	2454.1	2632.3
127.5°	2272.5	2422.9
130°	2165.5	2304.3
132.5°	2068.3	2192.7
135°	1935.3	2042.5
137.5°	1828.6	1916.3
140°	1755.3	1837.3
142.5°	1694.6	1765.2
145°	1603.6	1657.0
147.5°	1533.7	1578.1
150°	1489.8	1525.7
152.5°	1452.2	1479.3
155°	1408.9	1426.9
157.5°	1374.9	1387.5
160°	1354.4	1361.7
162.5°	1341.0	1347.9
165°	1321.8	1329.0
167.5°	1308.0	1311.0
170°	1304.1	1304.1
172.5°	1293.9	1291.3
175°	1287.8	1287.8
177.5°	1282.3	1279.3
180°	1279.3	1279.3



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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	1.99	2.71	3.11	3.82	5.37	15.16	15.88	16.28	16.99	18.54
	3H	2.69	3.33	3.81	4.45	6.01	16.98	17.63	18.11	18.75	20.31
	4H	2.98	3.59	4.11	4.71	6.28	17.62	18.23	18.75	19.35	20.92
	6H	3.22	3.79	4.37	4.91	6.49	18.04	18.60	19.18	19.72	21.30
	8H	3.29	3.82	4.43	4.96	6.53	18.15	18.69	19.30	19.83	21.40
	12H	3.30	3.81	4.45	4.94	6.54	18.21	18.72	19.36	19.85	21.45
4H	2H	9.18	9.79	10.33	10.92	12.48	15.42	16.03	16.56	17.15	18.72
	3H	10.74	11.25	11.89	12.40	13.98	17.44	17.95	18.59	19.10	20.68
	4H	10.83	11.30	11.98	12.43	14.03	18.20	18.67	19.35	19.81	21.41
	6H	10.83	11.23	11.99	12.39	13.98	18.73	19.13	19.88	20.29	21.88
	8H	10.80	11.18	11.96	12.33	13.94	18.88	19.26	20.04	20.41	22.02
	12H	10.75	11.09	11.92	12.26	13.87	18.97	19.31	20.14	20.47	22.08
8H	4H	12.26	12.63	13.41	13.78	15.39	18.25	18.62	19.40	19.78	21.38
	6H	12.49	12.80	13.67	14.00	15.60	18.87	19.18	20.04	20.37	21.97
	8H	12.51	12.78	13.69	13.95	15.57	19.08	19.35	20.26	20.53	22.15
	12H	12.47	12.71	13.65	13.88	15.53	19.22	19.45	20.40	20.62	22.28
12H	4H	12.39	12.73	13.56	13.90	15.51	18.19	18.54	19.37	19.70	21.31
	6H	12.75	13.02	13.93	14.19	15.81	18.85	19.12	20.03	20.29	21.92
	8H	12.81	13.05	14.00	14.22	15.87	19.07	19.31	20.25	20.48	22.13