

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: P937572

Luminaire Tested: SQ4-FB-100U-075D-935-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937572
REPORT IS A COMBINATION OF REPORTS P933582 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

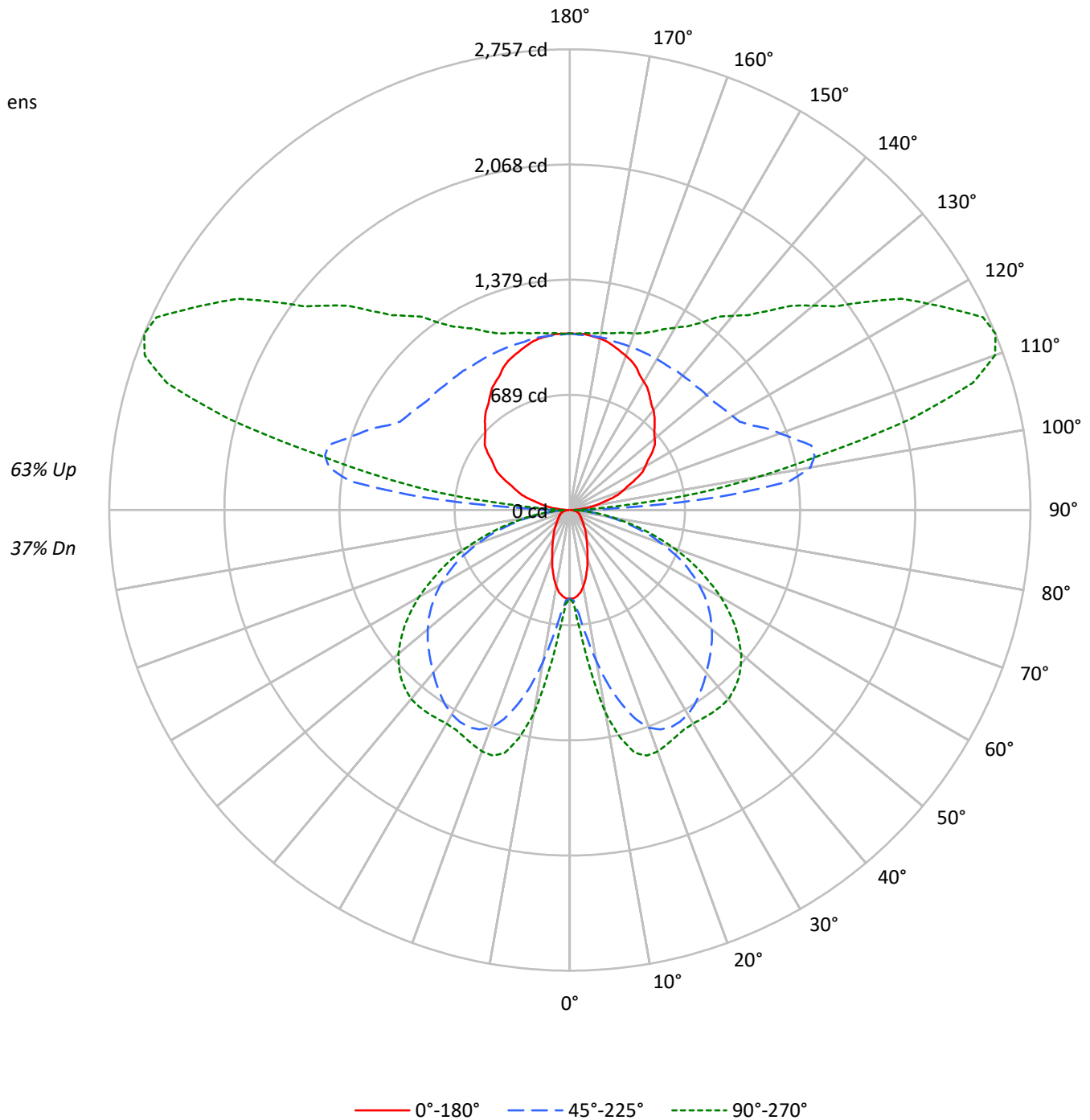
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10949.9 lumens
Efficiency: N/A
Efficacy: 111.3 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): 98.4
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2459	2459	2459
5°	2402	2842	3305
10°	2179	4143	5480
15°	1852	5412	6616
20°	1507	6272	6743
25°	1258	6563	6606
30°	1061	6605	6593
35°	938	6495	6764
40°	817	6353	6940
45°	740	6248	6967
50°	678	6154	6852
55°	650	6017	6548
60°	666	5752	6069
65°	693	5351	5409
70°	737	4666	4570
75°	817	3805	3567
80°	893	2639	2403
85°	792	1399	1230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6967 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	0.6
10°-20°	303.8	2.8
20°-30°	531.4	4.9
30°-40°	684.1	6.2
40°-50°	764.2	7.0
50°-60°	731.9	6.7
60°-70°	580.0	5.3
70°-80°	341.0	3.1
80°-90°	98.8	0.9
90°-100°	514.8	4.7
100°-110°	1353.4	12.4
110°-120°	1403.3	12.8
120°-130°	1125.6	10.3
130°-140°	883.2	8.1
140°-150°	677.9	6.2
150°-160°	488.2	4.5
160°-170°	298.7	2.7
170°-180°	100.9	0.9
0°-30°	903.8	8.3
0°-40°	1588.0	14.5
0°-60°	3084.0	28.2
0°-90°	4103.8	37.5
90°-120°	3271.5	29.9
90°-150°	5958.2	54.4
90°-180°	6846.0	62.5
0°-180°	10949.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	516	554	624	706	731	48
15°	387	714	1203	1459	1505	108
25°	247	809	1433	1496	1498	114
35°	167	774	1350	1426	1483	104
45°	114	617	1193	1367	1428	88
55°	82	392	1012	1176	1208	75
65°	65	208	752	845	857	64
75°	48	128	412	453	455	50
85°	17	39	102	112	114	18
90°	7	20	54	27	27	7
95°	68	266	887	457	311	76
105°	244	369	1496	2272	2119	258
115°	433	526	1198	2391	2729	428
125°	602	676	1090	1842	2173	535
135°	718	790	1056	1487	1686	555
145°	833	886	1043	1269	1368	522
155°	941	967	1043	1145	1178	432
165°	1016	1029	1043	1084	1097	287
175°	1056	1056	1050	1063	1063	100
180°	1056	1056	1056	1056	1056	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9	529.9
2.5°	529.9	529.9	533.4	535.1	538.5	540.2	543.6	547.0	557.2	558.9	562.3
5°	516.3	523.1	545.3	553.8	577.7	610.0	623.7	645.8	691.8	705.5	714.0
7.5°	495.9	511.2	565.7	579.4	639.0	724.2	760.0	807.7	881.0	916.8	945.7
10°	463.5	495.9	593.0	625.4	722.5	852.0	918.5	985.0	1095.8	1145.2	1163.9
12.5°	427.7	480.5	622.0	666.3	806.0	995.2	1075.3	1148.6	1274.7	1341.1	1351.4
15°	386.8	458.4	649.2	714.0	894.6	1114.5	1203.1	1293.4	1411.0	1458.7	1470.6
17.5°	351.0	441.3	674.8	742.9	962.8	1221.9	1312.2	1387.1	1482.6	1514.9	1523.5
20°	306.7	414.1	691.8	780.4	1034.4	1300.2	1387.1	1445.1	1509.8	1530.3	1533.7
22.5°	274.3	385.1	702.0	794.1	1082.1	1347.9	1421.2	1467.2	1511.5	1518.3	1520.1
25°	247.1	352.7	700.3	809.4	1123.0	1376.9	1433.1	1467.2	1492.8	1496.2	1496.2
27.5°	221.5	316.9	693.5	812.8	1153.7	1383.7	1428.0	1451.9	1463.8	1470.6	1470.6
30°	199.4	282.9	676.5	806.0	1167.3	1376.9	1412.7	1424.6	1436.6	1446.8	1451.9
32.5°	182.3	250.5	650.9	792.4	1169.0	1359.9	1385.4	1392.3	1409.3	1433.1	1441.7
35°	167.0	218.1	622.0	773.6	1158.8	1332.6	1349.7	1356.5	1390.5	1426.3	1438.3
37.5°	151.7	194.3	584.5	741.2	1143.5	1300.2	1312.2	1324.1	1376.9	1419.5	1433.1
40°	136.3	173.8	540.2	705.5	1119.6	1261.0	1271.3	1290.0	1359.9	1409.3	1422.9
42.5°	124.4	156.8	492.5	668.0	1088.9	1216.7	1232.1	1259.3	1339.4	1392.3	1407.6
45°	114.2	139.7	441.3	616.8	1049.7	1170.7	1192.9	1230.4	1315.6	1366.7	1380.3
47.5°	103.9	127.8	388.5	564.0	1007.1	1124.7	1153.7	1196.3	1283.2	1332.6	1344.5
50°	95.4	115.9	335.7	507.8	961.1	1075.3	1109.4	1153.7	1242.3	1288.3	1303.6
52.5°	88.6	105.6	286.3	451.6	908.2	1024.2	1063.4	1109.4	1192.9	1237.2	1247.4
55°	81.8	97.1	243.7	391.9	853.7	969.7	1012.3	1056.6	1138.4	1175.8	1182.7
57.5°	78.4	90.3	207.9	335.7	795.8	908.2	955.9	996.9	1073.6	1102.6	1109.4
60°	73.3	85.2	180.6	288.0	732.7	850.3	891.2	932.1	996.9	1020.8	1025.9
62.5°	68.2	81.8	160.2	242.0	668.0	782.1	823.0	860.5	915.0	932.1	938.9
65°	64.8	78.4	144.8	207.9	601.5	710.6	751.5	783.8	828.1	845.2	848.6
67.5°	61.3	75.0	132.9	178.9	535.1	639.0	669.7	700.3	734.4	751.5	753.2
70°	56.2	71.6	122.7	158.5	466.9	557.2	582.8	615.1	642.4	650.9	656.0
72.5°	52.8	66.5	115.9	143.1	397.0	478.8	502.7	521.4	545.3	553.8	553.8
75°	47.7	59.6	109.1	127.8	325.5	391.9	412.4	431.1	449.9	453.3	448.2
77.5°	42.6	52.8	93.7	107.4	253.9	310.1	327.2	337.4	352.7	356.1	357.8
80°	35.8	46.0	73.3	83.5	184.0	228.3	240.3	248.8	262.4	262.4	265.8
82.5°	27.3	35.8	52.8	59.6	124.4	156.8	167.0	172.1	180.6	180.6	180.6
85°	17.0	22.2	34.1	39.2	75.0	95.4	102.2	103.9	110.8	112.5	112.5
87.5°	8.5	11.9	22.2	23.9	39.2	49.4	49.4	52.8	52.8	51.1	49.4
90°	7.1	12.8	18.4	19.9	31.2	46.3	53.8	47.9	35.9	26.9	26.9
92.5°	28.4	76.6	124.8	136.8	192.3	266.3	303.3	265.8	190.9	134.7	129.3
95°	68.1	156.3	244.4	266.5	473.2	748.8	886.7	791.3	600.3	457.2	441.0
97.5°	117.7	195.4	273.3	292.7	637.5	1097.0	1326.8	1266.5	1145.9	1055.4	1024.5
100°	155.9	226.5	297.1	314.7	697.2	1207.2	1462.2	1466.6	1475.4	1482.1	1445.2
102.5°	188.5	254.3	320.2	336.6	724.5	1241.8	1500.5	1577.3	1731.1	1846.4	1814.8
105°	243.8	299.6	355.3	369.3	744.9	1245.8	1496.2	1668.5	2013.1	2271.6	2254.6
107.5°	300.5	352.5	404.4	417.5	748.7	1190.3	1411.2	1651.5	2132.2	2492.7	2496.8
110°	338.8	385.7	432.6	444.4	743.0	1141.2	1340.3	1609.0	2146.4	2549.4	2567.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	376.3	421.1	465.9	477.0	743.3	1098.3	1275.8	1550.8	2100.8	2513.3	2540.4
115°	433.1	474.3	515.6	525.9	750.1	1049.1	1198.5	1463.5	1993.3	2390.7	2428.3
117.5°	489.0	526.5	564.0	573.4	764.1	1018.2	1145.3	1384.4	1862.6	2221.2	2262.9
120°	521.7	557.0	592.2	601.0	775.4	1007.9	1124.1	1342.6	1779.5	2107.2	2147.6
122.5°	553.5	589.2	624.8	633.6	791.7	1002.4	1107.8	1304.5	1698.0	1993.1	2033.0
125°	602.4	634.9	667.4	675.5	813.7	997.9	1090.0	1257.2	1591.5	1842.1	1878.9
127.5°	642.2	674.9	707.7	715.9	835.6	995.4	1075.2	1218.7	1505.7	1720.9	1751.9
130°	663.4	698.6	733.9	742.8	851.7	996.9	1069.5	1197.2	1452.7	1644.4	1673.0
132.5°	685.3	720.6	755.9	764.8	864.7	997.9	1064.6	1178.9	1407.6	1579.1	1604.7
135°	718.0	750.1	782.3	790.3	878.9	997.0	1056.1	1151.8	1343.3	1487.0	1509.1
137.5°	751.3	783.1	814.9	822.9	900.1	1003.1	1054.6	1135.5	1297.5	1418.9	1437.1
140°	778.9	808.2	837.5	844.8	913.1	1004.2	1049.7	1119.6	1259.5	1364.4	1381.3
142.5°	800.2	827.3	854.4	861.1	924.0	1007.7	1049.7	1111.1	1234.0	1326.1	1340.7
145°	832.8	856.4	880.1	886.0	938.2	1007.8	1042.6	1092.9	1193.3	1268.7	1279.7
147.5°	865.4	888.4	911.4	917.2	959.0	1014.7	1042.6	1082.1	1161.2	1220.5	1229.6
150°	886.7	907.5	928.3	933.5	969.8	1018.3	1042.6	1076.0	1142.8	1192.9	1200.3
152.5°	908.7	924.4	940.2	944.1	976.9	1020.7	1042.6	1071.1	1128.1	1170.9	1176.5
155°	941.2	952.9	964.5	967.4	992.5	1025.9	1042.6	1065.3	1110.7	1144.7	1148.3
157.5°	965.3	976.6	988.1	990.9	1008.1	1031.1	1042.6	1060.2	1095.5	1122.0	1124.6
160°	981.7	990.5	999.3	1001.5	1015.2	1033.5	1042.6	1057.8	1088.0	1110.7	1112.2
162.5°	997.9	1004.6	1011.2	1012.9	1022.7	1035.9	1042.6	1055.4	1080.8	1100.0	1101.5
165°	1015.7	1021.6	1027.6	1029.1	1033.6	1039.6	1042.6	1051.7	1070.0	1083.7	1085.3
167.5°	1031.9	1034.8	1037.7	1038.3	1042.1	1047.1	1049.7	1055.6	1067.6	1076.6	1077.2
170°	1042.6	1045.4	1048.3	1049.0	1049.2	1049.5	1049.7	1055.6	1067.6	1076.6	1076.6
172.5°	1048.3	1048.9	1049.5	1049.7	1049.7	1049.7	1049.7	1054.4	1063.9	1071.0	1070.5
175°	1056.1	1056.1	1056.1	1056.1	1053.9	1051.1	1049.7	1052.6	1058.6	1063.1	1063.1
177.5°	1056.1	1056.1	1056.1	1056.1	1054.4	1052.2	1051.1	1053.5	1058.2	1061.8	1061.2
180°	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1	1056.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	529.9	529.9
2.5°	565.7	562.3
5°	727.6	731.0
7.5°	979.9	978.2
10°	1218.4	1233.8
12.5°	1392.3	1395.7
15°	1497.9	1504.7
17.5°	1538.8	1540.5
20°	1540.5	1537.1
22.5°	1521.8	1518.3
25°	1499.6	1497.9
27.5°	1479.2	1480.9
30°	1470.6	1475.7
32.5°	1470.6	1479.2
35°	1474.0	1482.6
37.5°	1472.3	1482.6
40°	1465.5	1477.5
42.5°	1446.8	1455.3
45°	1417.8	1428.0
47.5°	1380.3	1387.1
50°	1332.6	1339.4
52.5°	1273.0	1274.7
55°	1201.4	1208.2
57.5°	1124.7	1126.4
60°	1039.5	1044.6
62.5°	949.1	949.1
65°	853.7	857.1
67.5°	754.9	763.4
70°	654.3	656.0
72.5°	555.5	555.5
75°	453.3	455.0
77.5°	356.1	356.1
80°	264.1	265.8
82.5°	182.3	185.7
85°	114.2	114.2
87.5°	52.8	47.7
90°	26.9	26.9
92.5°	107.9	86.5
95°	376.1	311.2
97.5°	901.0	777.5
100°	1298.2	1151.1
102.5°	1688.8	1562.8
105°	2186.9	2119.2
107.5°	2513.2	2529.6
110°	2637.6	2708.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2648.7	2757.1
115°	2578.5	2728.8
117.5°	2429.6	2596.2
120°	2309.6	2471.5
122.5°	2192.7	2352.4
125°	2026.0	2173.1
127.5°	1876.0	2000.2
130°	1787.7	1902.3
132.5°	1707.5	1810.2
135°	1597.7	1686.2
137.5°	1509.5	1582.0
140°	1449.0	1516.7
142.5°	1399.0	1457.3
145°	1323.8	1367.9
147.5°	1266.2	1302.7
150°	1229.9	1259.5
152.5°	1198.8	1221.2
155°	1163.2	1178.0
157.5°	1134.9	1145.3
160°	1118.2	1124.1
162.5°	1107.1	1112.8
165°	1091.2	1097.2
167.5°	1079.7	1082.3
170°	1076.6	1076.6
172.5°	1068.2	1066.0
175°	1063.1	1063.1
177.5°	1058.6	1056.1
180°	1056.1	1056.1



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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	2.86	3.65	3.91	4.71	6.15	16.04	16.83	17.09	17.89	19.32
	3H	3.56	4.27	4.62	5.34	6.79	17.88	18.58	18.94	19.65	21.10
	4H	3.86	4.53	4.93	5.60	7.06	18.52	19.19	19.59	20.26	21.72
	6H	4.10	4.72	5.19	5.79	7.27	18.94	19.56	20.03	20.63	22.11
	8H	4.17	4.76	5.26	5.85	7.32	19.06	19.65	20.15	20.74	22.21
	12H	4.19	4.74	5.28	5.83	7.32	19.13	19.69	20.22	20.77	22.26
4H	2H	10.07	10.74	11.15	11.81	13.27	16.31	16.98	17.39	18.05	19.51
	3H	11.63	12.19	12.72	13.29	14.76	18.35	18.91	19.43	20.00	21.48
	4H	11.72	12.24	12.81	13.32	14.82	19.11	19.62	20.20	20.71	22.21
	6H	11.73	12.17	12.83	13.28	14.77	19.64	20.09	20.74	21.20	22.69
	8H	11.70	12.12	12.80	13.22	14.72	19.80	20.22	20.90	21.32	22.83
	12H	11.65	12.03	12.77	13.15	14.66	19.89	20.27	21.01	21.38	22.89
8H	4H	13.16	13.57	14.26	14.68	16.18	19.16	19.58	20.26	20.68	22.18
	6H	13.40	13.74	14.52	14.88	16.39	19.79	20.13	20.91	21.28	22.78
	8H	13.41	13.71	14.54	14.84	16.36	20.01	20.31	21.14	21.43	22.96
	12H	13.38	13.64	14.51	14.77	16.32	20.15	20.41	21.28	21.53	23.09
12H	4H	13.30	13.67	14.42	14.79	16.30	19.11	19.49	20.23	20.60	22.11
	6H	13.66	13.96	14.78	15.08	16.60	19.77	20.07	20.90	21.20	22.72
	8H	13.72	13.99	14.86	15.11	16.67	20.00	20.26	21.13	21.38	22.94