

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: P937376

Luminaire Tested: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937376
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-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

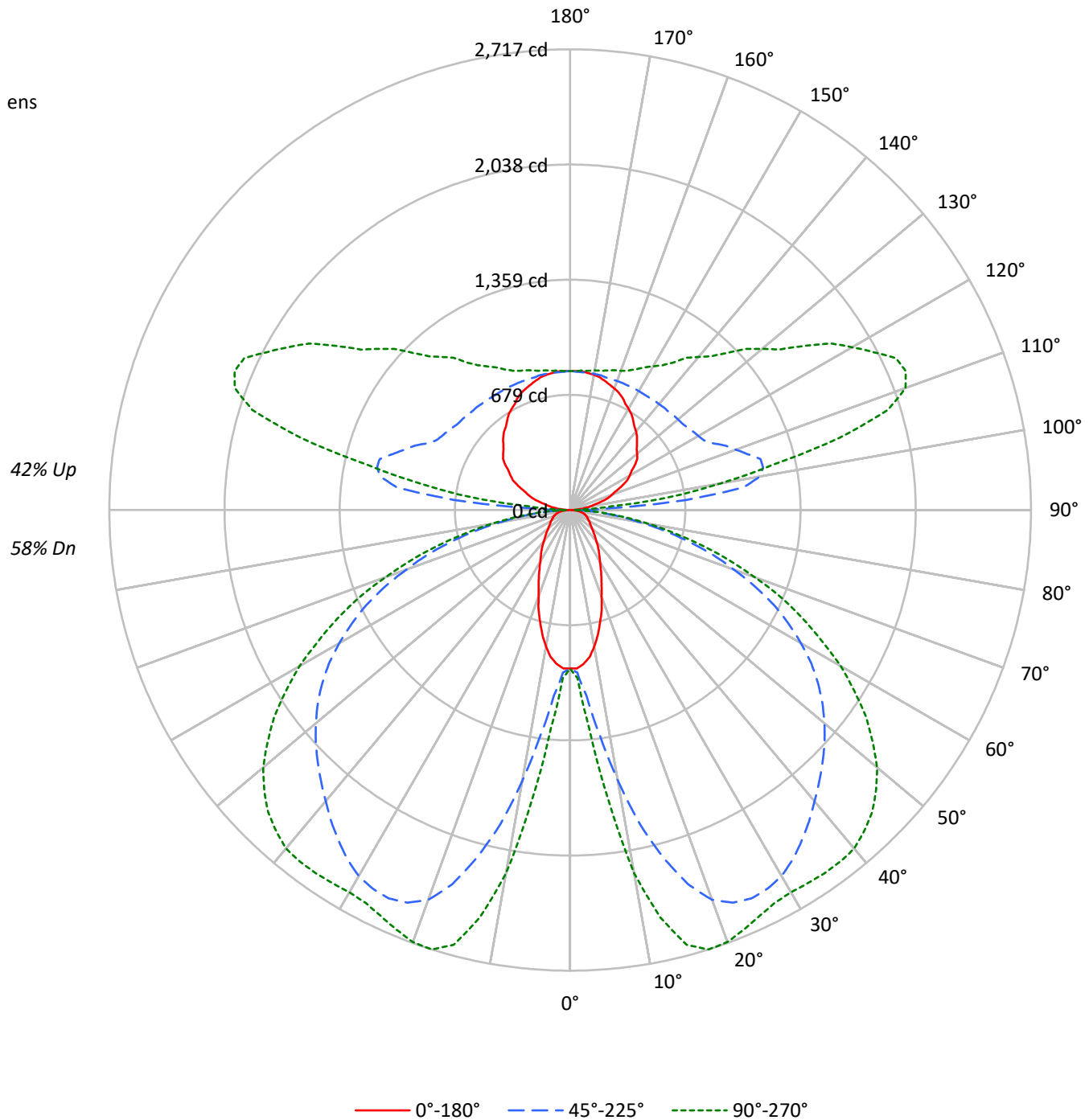
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12551.9 lumens
Efficiency: N/A
Efficacy: 101.2 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 (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

TEST NUMBER: P937376
CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

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°	4337	4337	4337
5°	4236	5013	5829
10°	3843	7307	9664
15°	3266	9546	11669
20°	2659	11062	11893
25°	2218	11576	11651
30°	1870	11649	11629
35°	1654	11456	11930
40°	1441	11204	12241
45°	1305	11020	12288
50°	1197	10854	12085
55°	1147	10612	11549
60°	1173	10145	10703
65°	1221	9437	9541
70°	1301	8230	8061
75°	1442	6711	6290
80°	1574	4654	4239
85°	1397	2470	2170

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12288 cd/sqm



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	1.0
10°-20°	535.9	4.3
20°-30°	937.3	7.5
30°-40°	1206.6	9.6
40°-50°	1347.8	10.7
50°-60°	1290.8	10.3
60°-70°	1023.0	8.2
70°-80°	601.6	4.8
80°-90°	170.3	1.4
90°-100°	399.9	3.2
100°-110°	1051.3	8.4
110°-120°	1090.0	8.7
120°-130°	874.3	7.0
130°-140°	686.1	5.5
140°-150°	526.6	4.2
150°-160°	379.2	3.0
160°-170°	232.0	1.8
170°-180°	78.4	0.6
0°-30°	1594.1	12.7
0°-40°	2800.7	22.3
0°-60°	5439.3	43.3
0°-90°	7234.1	57.6
90°-120°	2541.2	20.2
90°-150°	4628.1	36.9
90°-180°	5318.0	42.4
0°-180°	12551.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	911	977	1100	1244	1289	84
15°	682	1259	2122	2573	2654	190
25°	436	1428	2528	2639	2642	201
35°	294	1364	2380	2516	2615	184
45°	201	1088	2104	2410	2519	156
55°	144	691	1785	2074	2131	131
65°	114	367	1325	1491	1512	113
75°	84	225	727	800	802	88
85°	30	69	180	198	201	32
90°	6	16	42	21	21	7
95°	53	207	689	355	242	59
105°	189	287	1162	1764	1646	201
115°	336	408	931	1857	2120	332
125°	468	525	847	1431	1688	415
135°	558	614	820	1155	1310	432
145°	647	688	810	986	1063	405
155°	731	752	810	889	915	336
165°	789	799	810	842	852	223
175°	820	820	815	826	826	78
180°	820	820	820	820	820	



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7	934.7
2.5°	934.7	934.7	940.7	943.8	949.7	952.7	958.8	964.8	982.8	985.9	991.8
5°	910.6	922.7	961.8	976.8	1018.9	1076.0	1100.1	1139.1	1220.2	1244.3	1259.3
7.5°	874.6	901.7	997.8	1021.9	1127.0	1277.4	1340.4	1424.6	1553.8	1617.0	1668.1
10°	817.5	874.6	1045.9	1103.0	1274.4	1502.8	1620.0	1737.2	1932.6	2019.8	2052.8
12.5°	754.4	847.6	1097.0	1175.2	1421.6	1755.2	1896.5	2025.7	2248.1	2365.4	2383.4
15°	682.3	808.5	1145.1	1259.3	1577.9	1965.6	2121.9	2281.2	2488.6	2572.7	2593.8
17.5°	619.1	778.4	1190.2	1310.4	1698.1	2155.0	2314.2	2446.5	2614.8	2671.9	2686.9
20°	541.0	730.4	1220.2	1376.5	1824.4	2293.3	2446.5	2548.6	2662.9	2699.0	2704.9
22.5°	483.9	679.2	1238.3	1400.6	1908.5	2377.4	2506.6	2587.7	2665.9	2677.9	2681.0
25°	435.8	622.1	1235.3	1427.6	1980.7	2428.5	2527.7	2587.7	2632.8	2638.9	2638.9
27.5°	390.7	559.0	1223.2	1433.7	2034.8	2440.5	2518.6	2560.7	2581.8	2593.8	2593.8
30°	351.6	498.9	1193.2	1421.6	2058.8	2428.5	2491.6	2512.6	2533.6	2551.7	2560.7
32.5°	321.6	441.8	1148.1	1397.5	2061.8	2398.4	2443.5	2455.5	2485.6	2527.7	2542.7
35°	294.5	384.7	1097.0	1364.5	2043.7	2350.4	2380.4	2392.4	2452.5	2515.6	2536.7
37.5°	267.5	342.6	1030.9	1307.4	2016.7	2293.3	2314.2	2335.3	2428.5	2503.6	2527.7
40°	240.5	306.5	952.7	1244.3	1974.6	2224.1	2242.1	2275.1	2398.4	2485.6	2509.6
42.5°	219.4	276.5	868.6	1178.2	1920.6	2145.9	2173.0	2221.1	2362.3	2455.5	2482.6
45°	201.4	246.4	778.4	1088.0	1851.4	2064.8	2103.8	2170.0	2320.3	2410.5	2434.5
47.5°	183.4	225.4	685.3	994.8	1776.3	1983.6	2034.8	2109.9	2263.2	2350.4	2371.4
50°	168.3	204.4	592.1	895.6	1695.1	1896.5	1956.6	2034.8	2191.1	2272.2	2299.2
52.5°	156.3	186.3	504.9	796.4	1602.0	1806.3	1875.5	1956.6	2103.8	2182.0	2200.0
55°	144.3	171.3	429.8	691.3	1505.8	1710.1	1785.3	1863.5	2007.7	2073.8	2085.8
57.5°	138.3	159.3	366.7	592.1	1403.6	1602.0	1686.1	1758.2	1893.5	1944.5	1956.6
60°	129.2	150.2	318.6	507.9	1292.4	1499.7	1571.8	1644.0	1758.2	1800.3	1809.3
62.5°	120.2	144.3	282.6	426.8	1178.2	1379.5	1451.7	1517.8	1613.9	1644.0	1656.0
65°	114.2	138.3	255.5	366.7	1061.0	1253.3	1325.4	1382.5	1460.7	1490.8	1496.7
67.5°	108.2	132.2	234.4	315.6	943.8	1127.0	1181.1	1235.3	1295.4	1325.4	1328.4
70°	99.2	126.3	216.4	279.5	823.5	982.8	1027.9	1085.0	1133.1	1148.1	1157.2
72.5°	93.2	117.2	204.4	252.5	700.3	844.6	886.7	919.7	961.8	976.8	976.8
75°	84.2	105.2	192.3	225.4	574.1	691.3	727.4	760.4	793.4	799.5	790.5
77.5°	75.1	93.2	165.3	189.3	447.8	547.0	577.0	595.1	622.1	628.2	631.2
80°	63.1	81.2	129.2	147.2	324.6	402.7	423.8	438.8	462.8	462.8	468.9
82.5°	48.1	63.1	93.2	105.2	219.4	276.5	294.5	303.5	318.6	318.6	318.6
85°	30.0	39.1	60.1	69.1	132.2	168.3	180.4	183.4	195.4	198.4	198.4
87.5°	15.0	21.0	39.1	42.1	69.1	87.2	87.2	93.2	93.2	90.1	87.2
90°	5.5	9.9	14.4	15.5	24.2	36.0	41.8	37.2	27.9	21.0	21.0
92.5°	22.0	59.5	97.0	106.3	149.5	206.9	235.7	206.5	148.3	104.6	100.4
95°	52.8	121.4	189.9	207.0	367.5	581.6	688.7	614.6	466.3	355.1	342.5
97.5°	91.4	151.8	212.3	227.4	495.1	852.1	1030.6	983.7	890.0	819.8	795.8
100°	121.1	175.9	230.8	244.5	541.6	937.7	1135.8	1139.2	1146.1	1151.2	1122.6
102.5°	146.4	197.6	248.7	261.5	562.8	964.6	1165.5	1225.2	1344.6	1434.2	1409.7
105°	189.4	232.7	276.0	286.8	578.6	967.7	1162.2	1296.0	1563.7	1764.5	1751.3
107.5°	233.5	273.9	314.2	324.3	581.6	924.6	1096.1	1282.8	1656.2	1936.3	1939.5
110°	263.2	299.6	336.0	345.2	577.1	886.4	1041.1	1249.8	1667.2	1980.3	1994.0



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	292.3	327.1	361.8	370.5	577.3	853.1	991.0	1204.7	1631.9	1952.3	1973.3
115°	336.4	368.4	400.5	408.5	582.6	814.8	931.0	1136.7	1548.3	1857.0	1886.2
117.5°	379.9	409.0	438.1	445.4	593.5	790.9	889.7	1075.4	1446.8	1725.4	1757.7
120°	405.2	432.5	460.0	466.8	602.2	782.9	873.2	1042.9	1382.3	1636.8	1668.2
122.5°	430.0	457.7	485.3	492.2	614.9	778.6	860.5	1013.3	1318.9	1548.1	1579.1
125°	468.0	493.2	518.3	524.6	632.0	775.1	846.7	976.5	1236.1	1430.8	1459.4
127.5°	498.8	524.3	549.7	556.1	649.1	773.2	835.2	946.6	1169.5	1336.7	1360.8
130°	515.3	542.7	570.1	576.9	661.6	774.4	830.8	930.0	1128.5	1277.3	1299.6
132.5°	532.4	559.8	587.2	594.1	671.7	775.1	826.9	915.7	1093.4	1226.6	1246.6
135°	557.7	582.6	607.7	613.9	682.7	774.4	820.3	894.7	1043.5	1155.0	1172.2
137.5°	583.6	608.3	633.0	639.2	699.2	779.2	819.2	882.1	1007.9	1102.2	1116.2
140°	605.1	627.8	650.5	656.2	709.2	780.0	815.4	869.7	978.3	1059.8	1073.0
142.5°	621.6	642.6	663.7	668.9	717.8	782.9	815.4	863.0	958.5	1030.1	1041.4
145°	646.9	665.3	683.6	688.2	728.8	782.9	809.9	848.9	927.0	985.5	994.0
147.5°	672.2	690.1	708.0	712.4	744.9	788.2	809.9	840.6	901.9	948.0	955.1
150°	688.7	704.9	721.1	725.1	753.3	791.0	809.9	835.8	887.6	926.5	932.3
152.5°	705.8	718.0	730.3	733.3	758.8	792.8	809.9	832.0	876.3	909.5	913.8
155°	731.1	740.1	749.2	751.5	771.0	796.9	809.9	827.4	862.7	889.2	892.0
157.5°	749.8	758.6	767.4	769.6	783.0	800.9	809.9	823.5	851.0	871.5	873.5
160°	762.5	769.4	776.2	777.9	788.5	802.8	809.9	821.6	845.1	862.7	863.8
162.5°	775.1	780.3	785.4	786.8	794.5	804.7	809.9	819.8	839.6	854.4	855.5
165°	788.9	793.5	798.2	799.4	802.8	807.5	809.9	817.0	831.2	841.8	843.0
167.5°	801.6	803.8	806.0	806.6	809.5	813.4	815.4	820.0	829.3	836.3	836.8
170°	809.9	812.1	814.3	814.8	815.0	815.3	815.4	820.0	829.3	836.3	836.3
172.5°	814.3	814.7	815.3	815.4	815.4	815.4	815.4	819.0	826.4	831.9	831.4
175°	820.3	820.3	820.3	820.3	818.6	816.4	815.4	817.7	822.4	825.8	825.8
177.5°	820.3	820.3	820.3	820.3	819.0	817.3	816.4	818.3	821.9	824.7	824.2
180°	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3	820.3



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	934.7	934.7
2.5°	997.8	991.8
5°	1283.3	1289.4
7.5°	1728.1	1725.2
10°	2149.0	2176.0
12.5°	2455.5	2461.5
15°	2641.9	2653.9
17.5°	2714.0	2717.0
20°	2717.0	2711.0
22.5°	2684.0	2677.9
25°	2644.9	2641.9
27.5°	2608.8	2611.8
30°	2593.8	2602.8
32.5°	2593.8	2608.8
35°	2599.8	2614.8
37.5°	2596.8	2614.8
40°	2584.8	2605.8
42.5°	2551.7	2566.8
45°	2500.6	2518.6
47.5°	2434.5	2446.5
50°	2350.4	2362.3
52.5°	2245.1	2248.1
55°	2118.9	2130.9
57.5°	1983.6	1986.6
60°	1833.4	1842.4
62.5°	1674.1	1674.1
65°	1505.8	1511.8
67.5°	1331.5	1346.5
70°	1154.1	1157.2
72.5°	979.8	979.8
75°	799.5	802.5
77.5°	628.2	628.2
80°	465.8	468.9
82.5°	321.6	327.6
85°	201.4	201.4
87.5°	93.2	84.2
90°	21.0	21.0
92.5°	83.8	67.1
95°	292.2	241.7
97.5°	699.8	603.9
100°	1008.4	894.1
102.5°	1311.8	1214.0
105°	1698.7	1646.1
107.5°	1952.2	1964.9
110°	2048.9	2103.7



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2057.4	2141.6
115°	2002.9	2119.6
117.5°	1887.2	2016.6
120°	1794.0	1919.8
122.5°	1703.2	1827.2
125°	1573.7	1688.0
127.5°	1457.2	1553.6
130°	1388.6	1477.6
132.5°	1326.3	1406.1
135°	1241.0	1309.7
137.5°	1172.5	1228.8
140°	1125.6	1178.2
142.5°	1086.6	1131.9
145°	1028.3	1062.6
147.5°	983.5	1011.9
150°	955.3	978.3
152.5°	931.2	948.6
155°	903.5	915.0
157.5°	881.6	889.7
160°	868.6	873.2
162.5°	859.9	864.4
165°	847.6	852.2
167.5°	838.7	840.7
170°	836.3	836.3
172.5°	829.7	828.1
175°	825.8	825.8
177.5°	822.3	820.3
180°	820.3	820.3



TEST NUMBER: P937376

CATALOG NUMBER: SQ4-FB-075U-125D-940-1D-UNV-STD-W-8

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	6.77	7.75	7.65	8.66	9.81	19.95	20.93	20.83	21.84	22.99
	3H	7.48	8.37	8.38	9.28	10.46	21.80	22.68	22.69	23.59	24.77
	4H	7.79	8.62	8.70	9.55	10.73	22.45	23.28	23.35	24.20	25.39
	6H	8.04	8.82	8.96	9.74	10.95	22.88	23.66	23.80	24.58	25.79
	8H	8.12	8.85	9.04	9.80	11.00	23.01	23.74	23.94	24.69	25.89
	12H	8.14	8.84	9.07	9.78	11.01	23.08	23.78	24.01	24.72	25.95
4H	2H	14.00	14.83	14.91	15.76	16.95	20.24	21.07	21.15	21.99	23.18
	3H	15.58	16.28	16.50	17.23	18.43	22.29	22.99	23.22	23.95	25.15
	4H	15.68	16.32	16.61	17.27	18.49	23.07	23.71	24.00	24.65	25.88
	6H	15.70	16.25	16.64	17.22	18.45	23.61	24.17	24.56	25.14	26.37
	8H	15.68	16.19	16.63	17.16	18.40	23.78	24.30	24.73	25.26	26.50
	12H	15.64	16.11	16.61	17.09	18.34	23.88	24.35	24.85	25.33	26.58
8H	4H	17.13	17.65	18.08	18.62	19.86	23.14	23.65	24.09	24.62	25.86
	6H	17.38	17.81	18.36	18.82	20.06	23.77	24.20	24.75	25.21	26.45
	8H	17.40	17.78	18.39	18.78	20.04	23.99	24.37	24.98	25.37	26.63
	12H	17.37	17.71	18.37	18.70	20.01	24.14	24.48	25.13	25.47	26.77
12H	4H	17.28	17.75	18.25	18.73	19.98	23.09	23.56	24.07	24.55	25.79
	6H	17.64	18.02	18.63	19.02	20.28	23.76	24.14	24.74	25.13	26.39
	8H	17.72	18.05	18.71	19.04	20.35	23.99	24.33	24.98	25.32	26.62