

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: P937843

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-2700K

Issue Date: 12/17/2024

**Test Information**

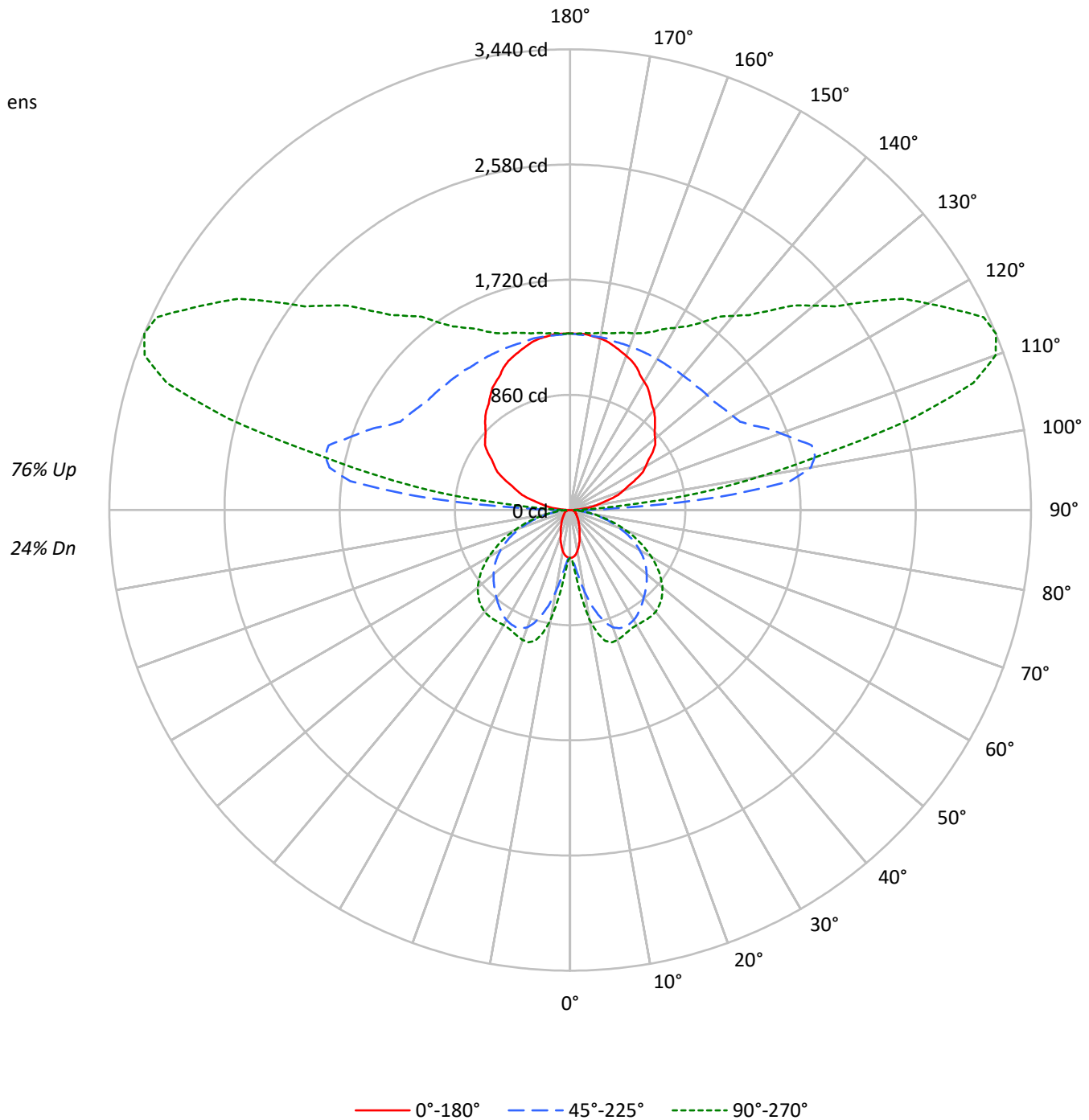
Test Method: LM-79-2019  
Report Number: P937843  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11304.4 lumens  
Efficiency: N/A  
Efficacy: 118.7 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						
RC	80					70					50					30						
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10		
RCR	0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33				24
	1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27				20
	2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22				16
	3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19				13
	4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16				11
	5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13				10
	6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12				8
	7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10				7
	8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9				6
	9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8				6
	10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7				5

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

	0°	45°	90°
0°	1653	1653	1653
5°	1615	1911	2222
10°	1465	2785	3683
15°	1245	3639	4448
20°	1013	4216	4533
25°	845	4413	4441
30°	713	4440	4433
35°	630	4366	4547
40°	549	4271	4666
45°	498	4200	4684
50°	456	4137	4607
55°	437	4045	4403
60°	448	3868	4080
65°	466	3597	3637
70°	496	3137	3073
75°	550	2557	2398
80°	601	1774	1615
85°	531	942	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4684 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	0.4
10°-20°	204.3	1.8
20°-30°	357.3	3.2
30°-40°	459.9	4.1
40°-50°	513.7	4.5
50°-60°	492.0	4.4
60°-70°	390.0	3.4
70°-80°	229.3	2.0
80°-90°	68.7	0.6
90°-100°	642.4	5.7
100°-110°	1688.9	14.9
110°-120°	1751.2	15.5
120°-130°	1404.7	12.4
130°-140°	1102.1	9.7
140°-150°	845.9	7.5
150°-160°	609.2	5.4
160°-170°	372.8	3.3
170°-180°	125.9	1.1
0°-30°	607.6	5.4
0°-40°	1067.6	9.4
0°-60°	2073.3	18.3
0°-90°	2761.3	24.4
90°-120°	4082.4	36.1
90°-150°	7435.2	65.8
90°-180°	8543.0	75.6
0°-180°	11304.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	356	356	356	356	356	
5°	347	372	419	474	492	32
15°	260	480	809	981	1012	72
25°	166	544	964	1006	1007	77
35°	112	520	907	959	997	70
45°	77	415	802	919	960	59
55°	55	264	680	790	812	50
65°	44	140	505	568	576	43
75°	32	86	277	305	306	34
85°	11	26	69	76	77	12
90°	9	25	67	34	34	8
95°	85	333	1106	570	388	94
105°	304	461	1867	2835	2645	323
115°	540	656	1496	2983	3405	534
125°	752	843	1360	2299	2712	667
135°	896	986	1318	1856	2104	693
145°	1039	1106	1301	1583	1707	651
155°	1175	1207	1301	1428	1470	540
165°	1267	1284	1301	1352	1369	358
175°	1318	1318	1310	1327	1327	125
180°	1318	1318	1318	1318	1318	



TEST NUMBER: P937843

CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-8-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3	356.3
2.5°	356.3	356.3	358.6	359.8	362.0	363.2	365.5	367.8	374.6	375.7	378.0
5°	347.1	351.7	366.6	372.3	388.4	410.2	419.3	434.2	465.2	474.3	480.0
7.5°	333.4	343.7	380.3	389.5	429.6	486.9	510.9	543.1	592.3	616.3	635.8
10°	311.6	333.4	398.7	420.5	485.7	572.8	617.5	662.2	736.6	769.8	782.5
12.5°	287.6	323.0	418.2	447.9	541.9	669.0	722.9	772.1	856.9	901.6	908.5
15°	260.1	308.2	436.5	480.0	601.5	749.2	808.9	869.5	948.6	980.6	988.7
17.5°	236.0	296.7	453.7	499.5	647.3	821.4	882.1	932.5	996.7	1018.5	1024.2
20°	206.2	278.4	465.2	524.7	695.4	874.1	932.5	971.5	1015.0	1028.8	1031.1
22.5°	184.4	258.9	472.0	533.8	727.5	906.2	955.4	986.4	1016.2	1020.8	1021.9
25°	166.1	237.1	470.9	544.2	755.0	925.7	963.5	986.4	1003.6	1005.9	1005.9
27.5°	149.0	213.1	466.3	546.5	775.6	930.2	960.0	976.1	984.1	988.7	988.7
30°	134.0	190.2	454.8	541.9	784.8	925.7	949.7	957.7	965.8	972.7	976.1
32.5°	122.6	168.4	437.7	532.7	785.9	914.2	931.4	936.0	947.4	963.5	969.2
35°	112.2	146.7	418.2	520.1	779.1	895.9	907.3	912.0	934.8	958.9	966.9
37.5°	102.0	130.6	393.0	498.4	768.7	874.1	882.1	890.2	925.7	954.3	963.5
40°	91.6	116.8	363.2	474.3	752.7	847.8	854.6	867.3	914.2	947.4	956.6
42.5°	83.6	105.4	331.1	449.1	732.1	818.0	828.3	846.6	900.5	936.0	946.3
45°	76.8	94.0	296.7	414.7	705.7	787.1	801.9	827.1	884.4	918.8	927.9
47.5°	69.9	85.9	261.2	379.2	677.1	756.2	775.6	804.2	862.7	895.9	903.9
50°	64.1	77.9	225.7	341.4	646.1	722.9	745.8	775.6	835.2	866.1	876.4
52.5°	59.5	71.1	192.4	303.6	610.6	688.5	714.9	745.8	801.9	831.7	838.6
55°	55.0	65.3	163.8	263.5	574.0	651.9	680.5	710.3	765.3	790.5	795.1
57.5°	52.7	60.7	139.7	225.7	535.0	610.6	642.7	670.2	721.7	741.2	745.8
60°	49.3	57.3	121.5	193.6	492.7	571.7	599.2	626.7	670.2	686.2	689.7
62.5°	45.9	55.0	107.7	162.7	449.1	525.9	553.3	578.6	615.2	626.7	631.3
65°	43.6	52.7	97.4	139.7	404.4	477.7	505.2	527.0	556.8	568.3	570.6
67.5°	41.3	50.4	89.3	120.3	359.8	429.6	450.2	470.9	493.8	505.2	506.3
70°	37.8	48.1	82.5	106.5	313.9	374.6	391.8	413.6	431.9	437.7	441.1
72.5°	35.5	44.7	77.9	96.3	266.9	321.9	338.0	350.5	366.6	372.3	372.3
75°	32.1	40.1	73.3	85.9	218.8	263.5	277.2	289.8	302.4	304.8	301.3
77.5°	28.6	35.5	63.0	72.2	170.7	208.5	219.9	226.9	237.1	239.4	240.6
80°	24.1	30.9	49.3	56.1	123.8	153.5	161.5	167.2	176.5	176.5	178.7
82.5°	18.4	24.1	35.5	40.1	83.6	105.4	112.2	115.7	121.5	121.5	121.5
85°	11.4	14.9	22.9	26.3	50.4	64.1	68.8	69.9	74.5	75.6	75.6
87.5°	5.7	8.0	14.9	16.1	26.3	33.2	33.2	35.5	35.5	34.3	33.2
90°	8.9	16.0	23.0	24.8	38.9	57.8	67.2	59.7	44.8	33.6	33.6
92.5°	35.4	95.5	155.7	170.7	240.0	332.3	378.5	331.7	238.2	168.0	161.3
95°	84.9	195.0	305.1	332.6	590.5	934.5	1106.4	987.4	749.2	570.5	550.2
97.5°	146.8	243.9	341.1	365.3	795.4	1369.0	1655.7	1580.5	1429.9	1317.0	1278.5
100°	194.6	282.6	370.7	392.7	870.0	1506.4	1824.7	1830.1	1841.2	1849.4	1803.6
102.5°	235.2	317.4	399.6	420.1	904.3	1549.7	1872.4	1968.3	2160.2	2304.0	2264.7
105°	304.2	373.9	443.4	460.8	929.5	1554.6	1867.1	2082.1	2512.2	2834.7	2813.6
107.5°	375.0	439.9	504.7	520.9	934.2	1485.4	1761.0	2060.9	2660.8	3110.6	3115.8
110°	422.8	481.4	540.0	554.6	927.2	1424.1	1672.6	2007.9	2678.5	3181.4	3203.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	469.7	525.5	581.3	595.2	927.5	1370.5	1592.0	1935.2	2621.5	3136.3	3170.1
115°	540.4	591.9	643.3	656.2	936.0	1309.1	1495.7	1826.2	2487.4	2983.3	3030.2
117.5°	610.3	657.1	703.8	715.5	953.5	1270.7	1429.3	1727.6	2324.3	2771.9	2823.9
120°	650.9	695.0	739.0	750.0	967.6	1257.7	1402.7	1675.4	2220.6	2629.5	2680.0
122.5°	690.7	735.1	779.6	790.7	987.9	1250.9	1382.4	1627.9	2118.9	2487.1	2536.9
125°	751.8	792.3	832.8	842.9	1015.3	1245.3	1360.3	1568.9	1985.9	2298.7	2344.6
127.5°	801.3	842.3	883.1	893.3	1042.8	1242.1	1341.7	1520.8	1878.9	2147.4	2186.1
130°	827.8	871.9	915.9	926.9	1062.8	1244.0	1334.7	1494.0	1812.9	2052.0	2087.7
132.5°	855.2	899.3	943.3	954.3	1079.0	1245.3	1328.4	1471.2	1756.5	1970.6	2002.6
135°	896.0	936.0	976.2	986.2	1096.7	1244.1	1317.8	1437.3	1676.3	1855.6	1883.2
137.5°	937.5	977.2	1016.9	1026.8	1123.3	1251.8	1316.0	1417.1	1619.2	1770.7	1793.3
140°	972.0	1008.6	1045.1	1054.3	1139.5	1253.1	1309.9	1397.2	1571.7	1702.6	1723.7
142.5°	998.6	1032.4	1066.1	1074.6	1153.0	1257.6	1309.9	1386.5	1539.8	1654.8	1673.0
145°	1039.2	1068.7	1098.2	1105.6	1170.8	1257.6	1301.0	1363.7	1489.2	1583.2	1597.0
147.5°	1080.0	1108.7	1137.4	1144.5	1196.7	1266.2	1301.0	1350.4	1449.0	1523.1	1534.4
150°	1106.4	1132.4	1158.4	1164.9	1210.2	1270.8	1301.0	1342.7	1426.1	1488.6	1497.8
152.5°	1133.9	1153.5	1173.1	1178.1	1219.1	1273.7	1301.0	1336.6	1407.8	1461.2	1468.2
155°	1174.6	1189.1	1203.6	1207.3	1238.6	1280.2	1301.0	1329.4	1386.0	1428.4	1433.1
157.5°	1204.7	1218.8	1232.9	1236.4	1258.0	1286.7	1301.0	1323.0	1367.0	1400.1	1403.3
160°	1225.0	1236.0	1247.0	1249.8	1266.8	1289.6	1301.0	1319.9	1357.6	1385.9	1387.8
162.5°	1245.3	1253.5	1261.8	1263.9	1276.2	1292.7	1301.0	1316.9	1348.8	1372.7	1374.5
165°	1267.4	1275.0	1282.4	1284.3	1289.8	1297.2	1301.0	1312.5	1335.3	1352.3	1354.2
167.5°	1287.8	1291.3	1294.9	1295.7	1300.4	1306.7	1309.9	1317.3	1332.3	1343.5	1344.2
170°	1301.0	1304.6	1308.2	1309.0	1309.3	1309.7	1309.9	1317.3	1332.3	1343.5	1343.5
172.5°	1308.1	1308.9	1309.7	1309.9	1309.9	1309.9	1309.9	1315.8	1327.6	1336.5	1335.8
175°	1317.8	1317.8	1317.8	1317.8	1315.2	1311.7	1309.9	1313.6	1321.1	1326.7	1326.7
177.5°	1317.8	1317.8	1317.8	1317.8	1315.8	1313.1	1311.7	1314.6	1320.5	1324.9	1324.2
180°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8	1317.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	356.3	356.3
2.5°	380.3	378.0
5°	489.2	491.5
7.5°	658.7	657.6
10°	819.1	829.4
12.5°	936.0	938.3
15°	1007.0	1011.6
17.5°	1034.5	1035.6
20°	1035.6	1033.3
22.5°	1023.1	1020.8
25°	1008.1	1007.0
27.5°	994.4	995.6
30°	988.7	992.2
32.5°	988.7	994.4
35°	991.0	996.7
37.5°	989.8	996.7
40°	985.2	993.3
42.5°	972.7	978.4
45°	953.2	960.0
47.5°	927.9	932.5
50°	895.9	900.5
52.5°	855.8	856.9
55°	807.7	812.3
57.5°	756.2	757.3
60°	698.8	702.3
62.5°	638.1	638.1
65°	574.0	576.3
67.5°	507.5	513.2
70°	440.0	441.1
72.5°	373.5	373.5
75°	304.8	305.9
77.5°	239.4	239.4
80°	177.6	178.7
82.5°	122.6	124.9
85°	76.8	76.8
87.5°	35.5	32.1
90°	33.6	33.6
92.5°	134.6	107.9
95°	469.3	388.3
97.5°	1124.4	970.3
100°	1619.9	1436.4
102.5°	2107.5	1950.2
105°	2729.0	2644.6
107.5°	3136.2	3156.6
110°	3291.5	3379.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3305.3	3440.5
115°	3217.7	3405.2
117.5°	3031.8	3239.8
120°	2882.1	3084.1
122.5°	2736.3	2935.6
125°	2528.2	2711.8
127.5°	2341.1	2495.9
130°	2230.8	2373.9
132.5°	2130.8	2258.9
135°	1993.7	2104.1
137.5°	1883.7	1974.1
140°	1808.3	1892.7
142.5°	1745.7	1818.4
145°	1652.0	1707.0
147.5°	1580.1	1625.7
150°	1534.8	1571.7
152.5°	1496.0	1523.9
155°	1451.5	1470.0
157.5°	1416.3	1429.3
160°	1395.2	1402.7
162.5°	1381.6	1388.6
165°	1361.7	1369.2
167.5°	1347.4	1350.5
170°	1343.5	1343.5
172.5°	1333.0	1330.2
175°	1326.7	1326.7
177.5°	1321.0	1317.8
180°	1317.8	1317.8



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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	0.88	1.56	3.15	12.92	13.60	14.06	14.74	16.33
	3H	0.43	1.04	1.58	2.19	3.80	14.74	15.36	15.89	16.50	18.11
	4H	0.72	1.30	1.88	2.45	4.06	15.38	15.96	16.54	17.11	18.72
	6H	0.96	1.50	2.13	2.64	4.27	15.80	16.34	16.97	17.49	19.11
	8H	1.02	1.53	2.19	2.70	4.31	15.92	16.43	17.09	17.59	19.21
	12H	1.03	1.52	2.21	2.68	4.32	15.98	16.46	17.15	17.62	19.26
4H	2H	6.93	7.52	8.10	8.66	10.27	13.17	13.75	14.34	14.90	16.51
	3H	8.48	8.97	9.66	10.14	11.77	15.20	15.69	16.37	16.86	18.48
	4H	8.57	9.02	9.74	10.18	11.82	15.96	16.41	17.13	17.57	19.21
	6H	8.57	8.95	9.75	10.14	11.77	16.49	16.87	17.67	18.05	19.69
	8H	8.54	8.90	9.72	10.07	11.72	16.64	17.00	17.82	18.18	19.83
	12H	8.49	8.82	9.68	10.00	11.65	16.73	17.06	17.92	18.24	19.89
8H	4H	10.00	10.36	11.18	11.53	13.18	16.00	16.36	17.18	17.54	19.19
	6H	10.23	10.53	11.43	11.74	13.39	16.62	16.92	17.82	18.14	19.78
	8H	10.25	10.51	11.45	11.70	13.37	16.84	17.10	18.05	18.29	19.96
	12H	10.21	10.43	11.42	11.63	13.32	16.98	17.20	18.19	18.39	20.09
12H	4H	10.13	10.46	11.33	11.64	13.30	15.95	16.27	17.14	17.46	19.11
	6H	10.49	10.75	11.69	11.94	13.61	16.60	16.86	17.81	18.06	19.72
	8H	10.55	10.78	11.76	11.97	13.67	16.82	17.05	18.03	18.24	19.94