

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: P937852

Luminaire Tested: SQ4-FB-125U-050D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937852  
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-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

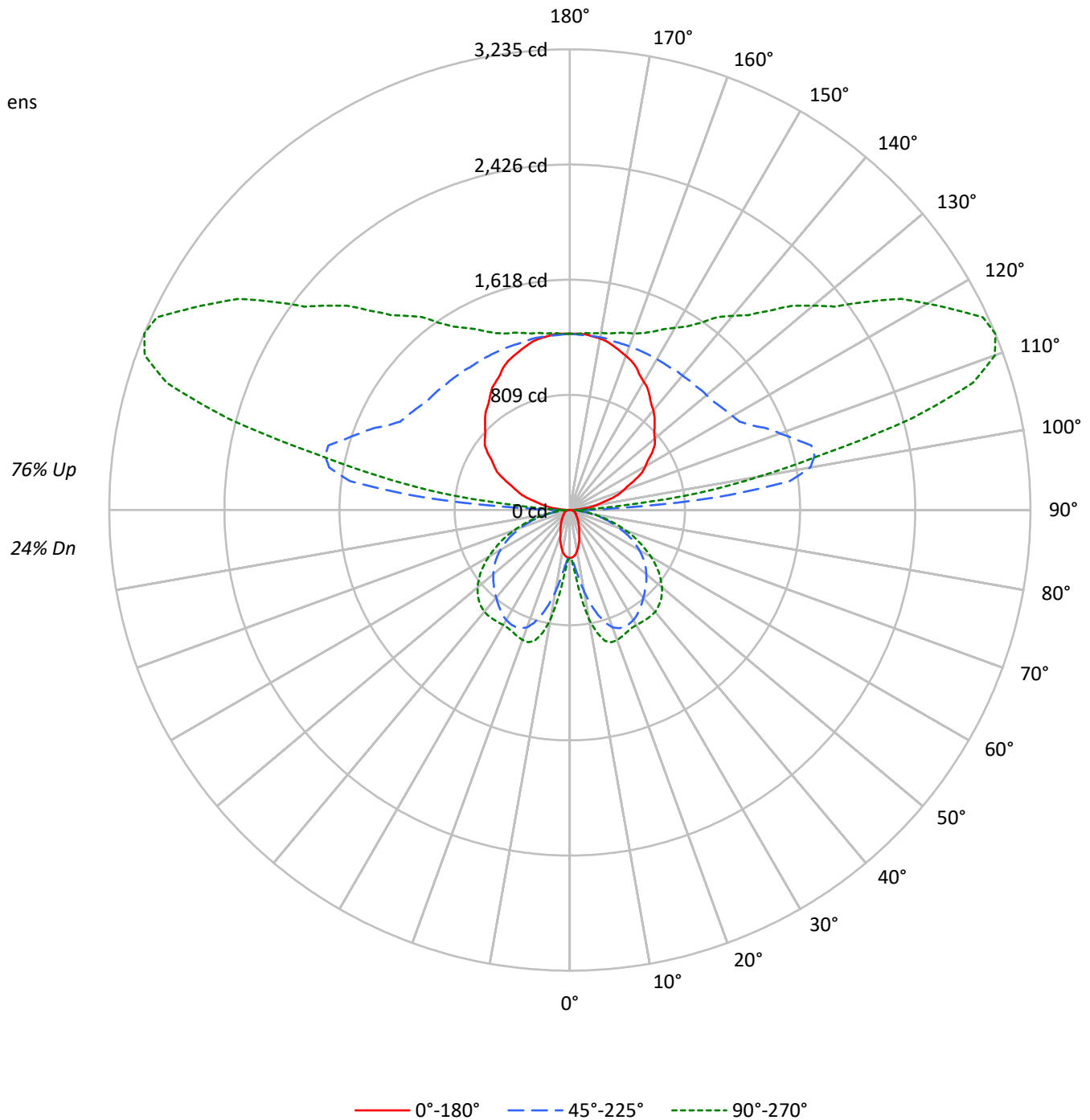
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10627.7 lumens  
Efficiency: N/A  
Efficacy: 111.6 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				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°	1554	1554	1554
5°	1518	1796	2089
10°	1377	2619	3463
15°	1170	3421	4182
20°	953	3964	4262
25°	795	4148	4175
30°	670	4175	4168
35°	592	4105	4275
40°	517	4015	4386
45°	468	3949	4404
50°	429	3890	4331
55°	411	3803	4139
60°	421	3636	3835
65°	438	3382	3419
70°	467	2949	2889
75°	517	2405	2254
80°	564	1667	1519
85°	503	884	778

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4404 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	0.4
10°-20°	192.0	1.8
20°-30°	335.9	3.2
30°-40°	432.4	4.1
40°-50°	483.0	4.5
50°-60°	462.6	4.4
60°-70°	366.6	3.4
70°-80°	215.6	2.0
80°-90°	64.6	0.6
90°-100°	603.9	5.7
100°-110°	1587.8	14.9
110°-120°	1646.3	15.5
120°-130°	1320.6	12.4
130°-140°	1036.2	9.7
140°-150°	795.3	7.5
150°-160°	572.7	5.4
160°-170°	350.4	3.3
170°-180°	118.4	1.1
0°-30°	571.3	5.4
0°-40°	1003.7	9.4
0°-60°	1949.2	18.3
0°-90°	2596.0	24.4
90°-120°	3838.1	36.1
90°-150°	6990.1	65.8
90°-180°	8032.0	75.6
0°-180°	10627.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	335	335	335	335	335	
5°	326	350	394	446	462	30
15°	244	451	760	922	951	68
25°	156	512	906	946	947	72
35°	106	489	853	902	937	66
45°	72	390	754	864	903	56
55°	52	248	640	743	764	47
65°	41	131	475	534	542	41
75°	30	81	261	286	288	32
85°	11	25	65	71	72	11
90°	8	23	63	32	32	8
95°	80	313	1040	536	365	89
105°	286	433	1755	2665	2486	303
115°	508	617	1406	2805	3201	502
125°	707	792	1279	2161	2549	628
135°	842	927	1239	1744	1978	652
145°	977	1039	1223	1488	1605	612
155°	1104	1135	1223	1343	1382	507
165°	1192	1207	1223	1271	1287	336
175°	1239	1239	1232	1247	1247	118
180°	1239	1239	1239	1239	1239	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9	334.9
2.5°	334.9	334.9	337.1	338.2	340.3	341.4	343.6	345.8	352.2	353.2	355.4
5°	326.3	330.7	344.6	350.0	365.1	385.6	394.2	408.2	437.3	445.9	451.3
7.5°	313.4	323.1	357.6	366.2	403.9	457.7	480.4	510.5	556.8	579.4	597.8
10°	292.9	313.4	374.8	395.3	456.7	538.5	580.6	622.6	692.5	723.7	735.6
12.5°	270.4	303.7	393.1	421.1	509.4	629.0	679.7	725.9	805.6	847.6	854.1
15°	244.5	289.7	410.3	451.3	565.5	704.4	760.4	817.5	891.8	921.9	929.5
17.5°	221.9	279.0	426.6	469.6	608.5	772.2	829.3	876.7	937.0	957.5	962.9
20°	193.8	261.7	437.3	493.3	653.8	821.8	876.7	913.3	954.3	967.2	969.4
22.5°	173.4	243.4	443.7	501.9	683.9	852.0	898.2	927.4	955.3	959.7	960.7
25°	156.2	222.9	442.7	511.6	709.8	870.3	905.8	927.4	943.5	945.7	945.7
27.5°	140.0	200.3	438.4	513.8	729.2	874.5	902.6	917.7	925.2	929.5	929.5
30°	126.0	178.8	427.6	509.4	737.8	870.3	892.9	900.4	908.0	914.5	917.7
32.5°	115.2	158.4	411.5	500.8	738.8	859.5	875.7	879.9	890.7	905.8	911.2
35°	105.5	137.9	393.1	488.9	732.4	842.3	853.0	857.4	878.9	901.5	909.0
37.5°	95.9	122.8	369.5	468.6	722.7	821.8	829.3	836.9	870.3	897.2	905.8
40°	86.2	109.9	341.4	445.9	707.6	797.1	803.5	815.4	859.5	890.7	899.4
42.5°	78.6	99.1	311.2	422.2	688.3	769.0	778.7	795.9	846.6	879.9	889.6
45°	72.2	88.3	279.0	389.9	663.4	740.0	753.9	777.6	831.5	863.8	872.4
47.5°	65.7	80.8	245.6	356.5	636.5	710.9	729.2	756.1	811.0	842.3	849.8
50°	60.3	73.2	212.2	321.0	607.5	679.7	701.2	729.2	785.2	814.2	824.0
52.5°	56.0	66.8	180.9	285.4	574.1	647.3	672.1	701.2	753.9	782.0	788.4
55°	51.7	61.4	154.0	247.7	539.6	612.8	639.8	667.8	719.5	743.2	747.5
57.5°	49.5	57.1	131.4	212.2	503.0	574.1	604.3	630.1	678.5	696.8	701.2
60°	46.3	53.9	114.2	182.0	463.2	537.4	563.3	589.2	630.1	645.1	648.4
62.5°	43.1	51.7	101.3	153.0	422.2	494.4	520.2	544.0	578.4	589.2	593.5
65°	41.0	49.5	91.5	131.4	380.2	449.1	475.0	495.5	523.5	534.2	536.4
67.5°	38.8	47.4	84.0	113.1	338.2	403.9	423.3	442.7	464.2	475.0	476.0
70°	35.6	45.2	77.6	100.1	295.1	352.2	368.3	388.8	406.1	411.5	414.7
72.5°	33.4	42.0	73.2	90.5	250.9	302.7	317.7	329.6	344.6	350.0	350.0
75°	30.2	37.7	68.9	80.8	205.7	247.7	260.7	272.5	284.3	286.5	283.3
77.5°	26.9	33.4	59.3	67.9	160.5	196.0	206.8	213.3	222.9	225.1	226.2
80°	22.6	29.1	46.3	52.8	116.4	144.3	151.8	157.2	165.9	165.9	168.0
82.5°	17.3	22.6	33.4	37.7	78.6	99.1	105.5	108.8	114.2	114.2	114.2
85°	10.8	14.0	21.5	24.7	47.4	60.3	64.6	65.7	70.0	71.1	71.1
87.5°	5.4	7.5	14.0	15.1	24.7	31.2	31.2	33.4	33.4	32.3	31.2
90°	8.4	15.0	21.6	23.3	36.6	54.4	63.2	56.1	42.1	31.6	31.6
92.5°	33.2	89.8	146.4	160.5	225.6	312.4	355.9	311.9	224.0	158.0	151.7
95°	79.8	183.3	286.8	312.7	555.2	878.6	1040.2	928.3	704.3	536.3	517.3
97.5°	138.0	229.3	320.6	343.4	747.8	1287.0	1556.6	1485.9	1344.3	1238.1	1201.9
100°	182.9	265.7	348.5	369.2	817.9	1416.3	1715.4	1720.6	1730.9	1738.7	1695.6
102.5°	221.1	298.4	375.6	395.0	850.1	1457.0	1760.3	1850.5	2030.9	2166.1	2129.2
105°	286.0	351.5	416.8	433.2	873.9	1461.5	1755.4	1957.5	2361.8	2665.0	2645.2
107.5°	352.6	413.5	474.5	489.7	878.3	1396.5	1655.5	1937.6	2501.5	2924.4	2929.3
110°	397.5	452.6	507.7	521.4	871.7	1338.8	1572.4	1887.7	2518.1	2990.9	3011.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	441.6	494.0	546.5	559.6	872.0	1288.5	1496.7	1819.4	2464.6	2948.5	2980.3
115°	508.1	556.5	604.8	616.9	880.0	1230.8	1406.1	1716.9	2338.5	2804.7	2848.8
117.5°	573.7	617.7	661.7	672.7	896.4	1194.6	1343.7	1624.2	2185.2	2606.0	2654.9
120°	612.0	653.4	694.8	705.1	909.6	1182.4	1318.8	1575.1	2087.6	2472.1	2519.6
122.5°	649.4	691.1	732.9	743.3	928.7	1176.0	1299.7	1530.4	1992.1	2338.3	2385.1
125°	706.8	744.9	782.9	792.4	954.5	1170.8	1278.9	1475.0	1867.1	2161.1	2204.2
127.5°	753.4	791.8	830.2	839.9	980.4	1167.7	1261.4	1429.7	1766.4	2018.9	2055.3
130°	778.3	819.7	861.1	871.4	999.2	1169.6	1254.8	1404.6	1704.4	1929.1	1962.8
132.5°	804.0	845.5	886.8	897.2	1014.4	1170.8	1248.9	1383.1	1651.4	1852.6	1882.7
135°	842.3	880.0	917.7	927.1	1031.1	1169.6	1238.9	1351.3	1576.0	1744.5	1770.5
137.5°	881.4	918.7	956.1	965.4	1056.0	1176.9	1237.3	1332.3	1522.2	1664.7	1686.0
140°	913.8	948.2	982.6	991.1	1071.3	1178.1	1231.5	1313.5	1477.6	1600.7	1620.5
142.5°	938.8	970.6	1002.3	1010.3	1084.0	1182.3	1231.5	1303.5	1447.6	1555.7	1572.8
145°	977.0	1004.7	1032.5	1039.4	1100.7	1182.3	1223.1	1282.1	1400.0	1488.4	1501.4
147.5°	1015.3	1042.3	1069.3	1076.0	1125.1	1190.4	1223.1	1269.5	1362.3	1431.9	1442.6
150°	1040.2	1064.6	1089.0	1095.1	1137.8	1194.7	1223.1	1262.3	1340.7	1399.5	1408.1
152.5°	1066.0	1084.5	1102.9	1107.6	1146.1	1197.4	1223.1	1256.6	1323.5	1373.7	1380.3
155°	1104.3	1117.9	1131.6	1135.0	1164.4	1203.5	1223.1	1249.8	1303.0	1342.9	1347.3
157.5°	1132.6	1145.8	1159.1	1162.4	1182.7	1209.6	1223.1	1243.8	1285.2	1316.3	1319.3
160°	1151.7	1162.0	1172.4	1174.9	1191.0	1212.4	1223.1	1240.9	1276.4	1302.9	1304.7
162.5°	1170.8	1178.5	1186.3	1188.2	1199.8	1215.3	1223.1	1238.1	1268.0	1290.5	1292.2
165°	1191.6	1198.6	1205.6	1207.4	1212.6	1219.6	1223.1	1233.9	1255.3	1271.4	1273.2
167.5°	1210.7	1214.0	1217.3	1218.2	1222.6	1228.5	1231.5	1238.5	1252.5	1263.0	1263.8
170°	1223.1	1226.5	1229.9	1230.7	1230.9	1231.3	1231.5	1238.5	1252.5	1263.0	1263.0
172.5°	1229.8	1230.5	1231.3	1231.5	1231.5	1231.5	1231.5	1237.0	1248.1	1256.5	1255.8
175°	1238.9	1238.9	1238.9	1238.9	1236.5	1233.2	1231.5	1235.0	1242.0	1247.3	1247.3
177.5°	1238.9	1238.9	1238.9	1238.9	1237.0	1234.5	1233.2	1235.9	1241.4	1245.6	1244.9
180°	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9	1238.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	334.9	334.9
2.5°	357.6	355.4
5°	459.9	462.0
7.5°	619.3	618.2
10°	770.1	779.8
12.5°	879.9	882.1
15°	946.7	951.1
17.5°	972.6	973.6
20°	973.6	971.5
22.5°	961.8	959.7
25°	947.8	946.7
27.5°	934.9	936.0
30°	929.5	932.8
32.5°	929.5	934.9
35°	931.6	937.0
37.5°	930.6	937.0
40°	926.3	933.8
42.5°	914.5	919.8
45°	896.1	902.6
47.5°	872.4	876.7
50°	842.3	846.6
52.5°	804.5	805.6
55°	759.3	763.7
57.5°	710.9	711.9
60°	657.0	660.2
62.5°	599.9	599.9
65°	539.6	541.8
67.5°	477.1	482.5
70°	413.6	414.7
72.5°	351.2	351.2
75°	286.5	287.6
77.5°	225.1	225.1
80°	166.9	168.0
82.5°	115.2	117.4
85°	72.2	72.2
87.5°	33.4	30.2
90°	31.6	31.6
92.5°	126.6	101.4
95°	441.2	365.0
97.5°	1057.1	912.2
100°	1523.0	1350.4
102.5°	1981.3	1833.5
105°	2565.7	2486.2
107.5°	2948.5	2967.6
110°	3094.4	3177.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3107.4	3234.6
115°	3025.1	3201.3
117.5°	2850.3	3045.9
120°	2709.6	2899.5
122.5°	2572.5	2759.8
125°	2376.9	2549.4
127.5°	2200.9	2346.5
130°	2097.3	2231.8
132.5°	2003.2	2123.7
135°	1874.4	1978.2
137.5°	1770.9	1856.0
140°	1700.0	1779.4
142.5°	1641.2	1709.6
145°	1553.1	1604.8
147.5°	1485.5	1528.3
150°	1442.9	1477.6
152.5°	1406.5	1432.7
155°	1364.6	1382.0
157.5°	1331.5	1343.7
160°	1311.7	1318.8
162.5°	1298.9	1305.5
165°	1280.1	1287.2
167.5°	1266.7	1269.7
170°	1263.0	1263.0
172.5°	1253.2	1250.6
175°	1247.3	1247.3
177.5°	1241.9	1238.9
180°	1238.9	1238.9



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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	0.21	0.67	1.35	2.94	12.70	13.39	13.85	14.52	16.12
	3H	0.21	0.83	1.37	1.98	3.58	14.53	15.14	15.68	16.29	17.90
	4H	0.50	1.09	1.67	2.24	3.85	15.16	15.75	16.33	16.90	18.51
	6H	0.75	1.28	1.92	2.43	4.06	15.59	16.12	16.76	17.27	18.90
	8H	0.81	1.32	1.98	2.48	4.10	15.70	16.21	16.87	17.38	18.99
	12H	0.82	1.31	2.00	2.46	4.10	15.76	16.25	16.94	17.41	19.05
4H	2H	6.72	7.30	7.89	8.45	10.06	12.95	13.54	14.12	14.68	16.30
	3H	8.27	8.76	9.44	9.93	11.55	14.98	15.47	16.16	16.64	18.27
	4H	8.35	8.81	9.53	9.96	11.61	15.74	16.19	16.92	17.35	19.00
	6H	8.35	8.74	9.54	9.92	11.56	16.27	16.66	17.45	17.84	19.47
	8H	8.33	8.69	9.51	9.86	11.51	16.43	16.79	17.61	17.96	19.61
	12H	8.27	8.60	9.47	9.79	11.44	16.51	16.84	17.71	18.02	19.68
8H	4H	9.78	10.14	10.96	11.32	12.97	15.79	16.15	16.97	17.32	18.97
	6H	10.02	10.32	11.22	11.53	13.18	16.41	16.71	17.61	17.92	19.57
	8H	10.03	10.29	11.24	11.49	13.15	16.63	16.88	17.83	18.08	19.75
	12H	9.99	10.22	11.20	11.41	13.11	16.76	16.99	17.97	18.18	19.88
12H	4H	9.92	10.25	11.11	11.43	13.09	15.73	16.06	16.93	17.24	18.90
	6H	10.27	10.53	11.48	11.73	13.39	16.39	16.65	17.59	17.84	19.51
	8H	10.33	10.56	11.54	11.75	13.45	16.61	16.84	17.82	18.03	19.73