

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: P938471

Luminaire Tested: SQ4-FB-150U-100D-935-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938471
REPORT IS A COMBINATION OF REPORTS P933639 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

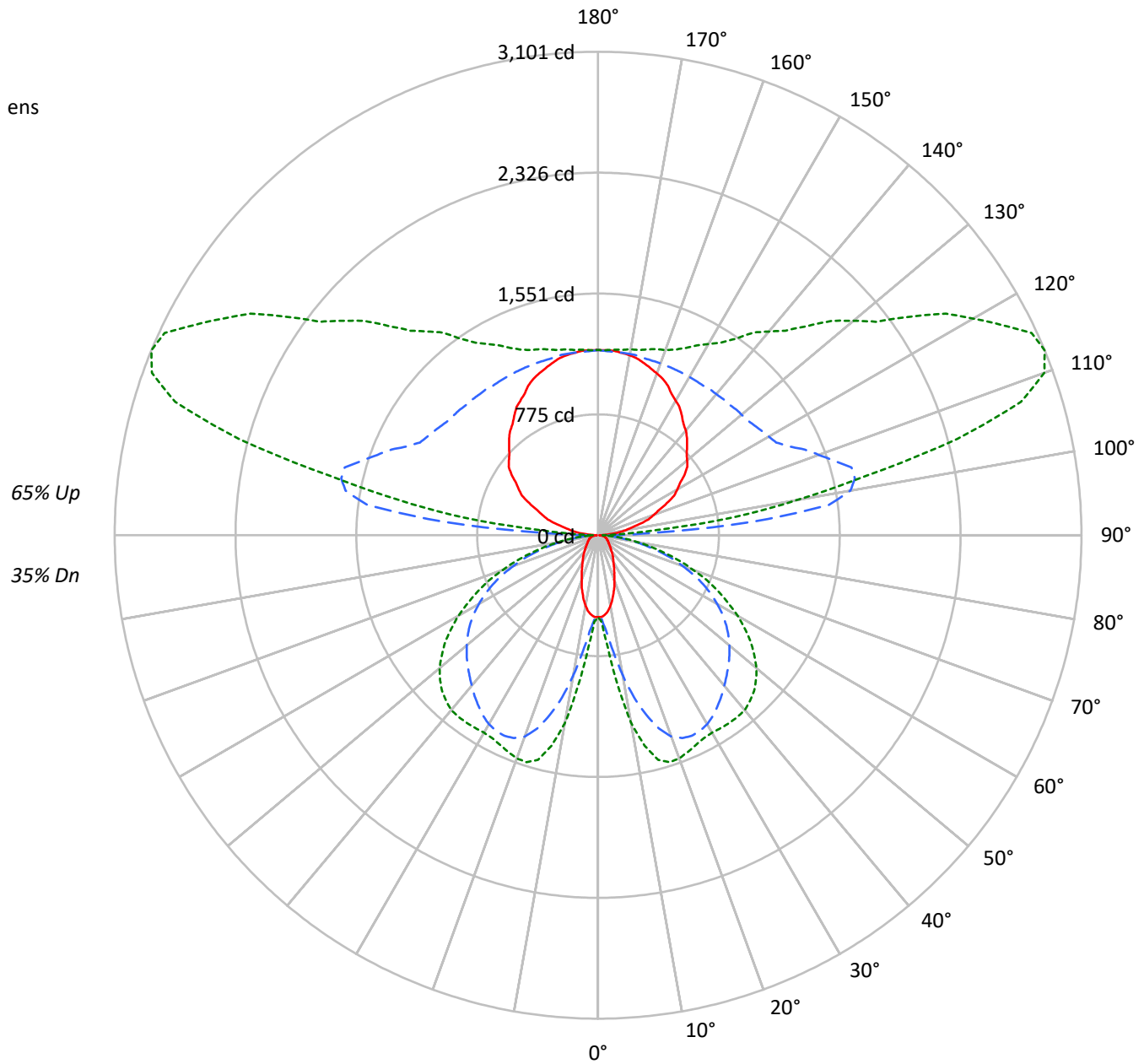
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11766.1 lumens
Efficiency: N/A
Efficacy: 108.3 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): 108.6
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



— 0°-180° - - 45°-225° - - - 90°-270°



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	42	42	42	35
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35	36	35	35	28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29	32	30	29	23
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24	28	26	24	19
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	24	22	20	16
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	22	19	17	14
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15	19	17	15	12
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	18	15	13	10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11	16	13	11	9
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10	15	12	10	8
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3248	3248	3248
5°	3172	3754	4367
10°	2876	5470	7238
15°	2444	7145	8741
20°	1989	8278	8908
25°	1659	8660	8727
30°	1398	8713	8711
35°	1235	8566	8936
40°	1075	8375	9169
45°	973	8236	9204
50°	893	8109	9053
55°	853	7925	8651
60°	873	7573	8017
65°	907	7040	7147
70°	963	6136	6038
75°	1064	4998	4711
80°	1152	3461	3175
85°	1008	1833	1625

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9204 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	0.6
10°-20°	301.1	2.6
20°-30°	526.6	4.5
30°-40°	677.9	5.8
40°-50°	757.2	6.4
50°-60°	725.2	6.2
60°-70°	574.7	4.9
70°-80°	338.0	2.9
80°-90°	98.4	0.8
90°-100°	578.9	4.9
100°-110°	1522.0	12.9
110°-120°	1578.2	13.4
120°-130°	1265.9	10.8
130°-140°	993.3	8.4
140°-150°	762.4	6.5
150°-160°	549.0	4.7
160°-170°	335.9	2.9
170°-180°	113.5	1.0
0°-30°	895.6	7.6
0°-40°	1573.4	13.4
0°-60°	3055.8	26.0
0°-90°	4066.9	34.6
90°-120°	3679.2	31.3
90°-150°	6700.8	56.9
90°-180°	7699.0	65.4
0°-180°	11766.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	525	525	525	525	525	
5°	512	549	618	699	724	47
15°	383	708	1192	1445	1491	107
25°	245	802	1420	1482	1484	113
35°	166	766	1337	1413	1469	103
45°	113	611	1182	1354	1415	88
55°	81	388	1003	1165	1197	74
65°	64	206	745	838	849	64
75°	47	127	409	449	451	49
85°	17	39	101	111	113	18
90°	8	22	61	30	30	8
95°	76	300	997	514	350	85
105°	274	415	1683	2555	2383	291
115°	487	592	1348	2689	3069	481
125°	678	760	1226	2072	2444	602
135°	807	889	1188	1672	1896	625
145°	937	996	1172	1427	1538	587
155°	1058	1088	1172	1287	1325	486
165°	1142	1157	1172	1219	1234	322
175°	1188	1188	1180	1196	1196	113
180°	1188	1188	1188	1188	1188	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1	525.1
2.5°	525.1	525.1	528.5	530.2	533.5	535.2	538.6	542.0	552.1	553.8	557.2
5°	511.6	518.4	540.3	548.8	572.4	604.5	618.0	639.9	685.5	699.1	707.5
7.5°	491.3	506.5	560.6	574.1	633.2	717.6	753.1	800.4	873.0	908.4	937.1
10°	459.2	491.3	587.6	619.7	715.9	844.2	910.1	976.0	1085.7	1134.7	1153.3
12.5°	423.8	476.2	616.3	660.2	798.7	986.1	1065.4	1138.0	1263.0	1328.9	1339.0
15°	383.3	454.2	643.3	707.5	886.4	1104.3	1192.1	1281.6	1398.0	1445.3	1457.2
17.5°	347.9	437.3	668.6	736.2	954.0	1210.7	1300.2	1374.4	1469.0	1501.1	1509.5
20°	303.9	410.3	685.5	773.4	1025.0	1288.3	1374.4	1431.9	1496.0	1516.3	1519.6
22.5°	271.9	381.6	695.7	786.8	1072.2	1335.6	1408.2	1453.8	1497.7	1504.5	1506.2
25°	244.9	349.5	694.0	802.1	1112.7	1364.3	1420.0	1453.8	1479.2	1482.5	1482.5
27.5°	219.5	314.0	687.2	805.4	1143.1	1371.0	1414.9	1438.6	1450.4	1457.2	1457.2
30°	197.6	280.3	670.4	798.7	1156.6	1364.3	1399.8	1411.6	1423.4	1433.5	1438.6
32.5°	180.7	248.2	645.0	785.1	1158.3	1347.4	1372.7	1379.5	1396.3	1420.0	1428.5
35°	165.5	216.2	616.3	766.5	1148.2	1320.4	1337.3	1344.0	1377.8	1413.3	1425.1
37.5°	150.3	192.5	579.2	734.5	1133.0	1288.3	1300.2	1312.0	1364.3	1406.5	1420.0
40°	135.0	172.2	535.2	699.1	1109.3	1249.5	1259.6	1278.2	1347.4	1396.3	1409.9
42.5°	123.3	155.3	487.9	661.9	1079.0	1205.6	1220.7	1247.8	1327.2	1379.5	1394.7
45°	113.1	138.4	437.3	611.2	1040.1	1160.0	1182.0	1219.1	1303.5	1354.2	1367.7
47.5°	103.0	126.6	385.0	558.9	997.9	1114.4	1143.1	1185.3	1271.4	1320.4	1332.2
50°	94.6	114.8	332.6	503.2	952.3	1065.4	1099.3	1143.1	1230.9	1276.5	1291.7
52.5°	87.8	104.7	283.6	447.5	900.0	1014.8	1053.6	1099.3	1182.0	1225.9	1236.0
55°	81.0	96.3	241.5	388.3	846.0	960.7	1003.0	1046.9	1127.9	1165.0	1171.8
57.5°	77.7	89.5	206.0	332.6	788.5	900.0	947.3	987.8	1063.7	1092.4	1099.3
60°	72.6	84.4	179.0	285.3	726.1	842.5	883.1	923.6	987.8	1011.4	1016.4
62.5°	67.6	81.0	158.7	239.8	661.9	775.0	815.5	852.7	906.7	923.6	930.4
65°	64.2	77.7	143.6	206.0	596.1	704.1	744.6	776.7	820.6	837.5	840.8
67.5°	60.7	74.3	131.7	177.3	530.2	633.2	663.5	694.0	727.8	744.6	746.4
70°	55.7	70.9	121.6	157.0	462.6	552.1	577.5	609.5	636.5	645.0	650.1
72.5°	52.3	65.9	114.8	141.9	393.5	474.5	498.1	516.7	540.3	548.8	548.8
75°	47.3	59.1	108.0	126.6	322.5	388.3	408.6	427.2	445.8	449.2	444.1
77.5°	42.2	52.3	92.9	106.4	251.6	307.3	324.2	334.3	349.5	352.9	354.6
80°	35.4	45.6	72.6	82.7	182.3	226.3	238.0	246.5	260.0	260.0	263.4
82.5°	27.0	35.4	52.3	59.1	123.3	155.3	165.5	170.6	179.0	179.0	179.0
85°	16.9	22.0	33.7	38.9	74.3	94.6	101.3	103.0	109.7	111.4	111.4
87.5°	8.4	11.8	22.0	23.6	38.9	49.0	49.0	52.3	52.3	50.7	49.0
90°	8.0	14.4	20.7	22.3	35.1	52.1	60.6	53.8	40.4	30.3	30.3
92.5°	31.9	86.1	140.3	153.9	216.3	299.6	341.1	299.0	214.7	151.5	145.4
95°	76.5	175.7	274.9	299.7	532.2	842.2	997.2	889.8	675.1	514.1	495.9
97.5°	132.3	219.8	307.3	329.2	716.9	1233.8	1492.2	1424.4	1288.6	1186.9	1152.2
100°	175.3	254.7	334.1	353.9	784.1	1357.7	1644.4	1649.4	1659.4	1666.8	1625.4
102.5°	212.1	286.1	360.1	378.6	814.9	1396.6	1687.5	1773.9	1946.7	2076.4	2041.0
105°	274.2	336.9	399.6	415.3	837.8	1401.0	1682.7	1876.4	2264.0	2554.7	2535.6
107.5°	338.0	396.4	454.9	469.5	841.9	1338.7	1587.0	1857.4	2398.0	2803.4	2808.0
110°	381.0	433.8	486.6	499.8	835.6	1283.4	1507.3	1809.5	2413.9	2867.2	2887.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	423.3	473.5	523.8	536.4	835.9	1235.1	1434.8	1744.0	2362.6	2826.5	2857.0
115°	487.0	533.4	579.9	591.5	843.6	1179.8	1347.9	1645.8	2241.7	2688.6	2730.8
117.5°	550.0	592.1	634.3	644.9	859.3	1145.2	1288.1	1557.0	2094.7	2498.1	2544.9
120°	586.7	626.4	666.1	676.0	872.0	1133.5	1264.2	1509.9	2001.3	2369.8	2415.2
122.5°	622.6	662.6	702.6	712.6	890.3	1127.4	1245.9	1467.1	1909.6	2241.4	2286.3
125°	677.5	714.0	750.5	759.6	915.0	1122.3	1225.9	1413.9	1789.7	2071.6	2113.0
127.5°	722.2	759.0	795.9	805.1	939.8	1119.4	1209.2	1370.5	1693.3	1935.3	1970.2
130°	746.1	785.8	825.5	835.4	957.9	1121.2	1202.9	1346.5	1633.8	1849.3	1881.5
132.5°	770.8	810.5	850.2	860.1	972.5	1122.3	1197.2	1325.8	1583.0	1775.9	1804.8
135°	807.4	843.6	879.8	888.8	988.4	1121.2	1187.7	1295.4	1510.8	1672.3	1697.2
137.5°	844.9	880.7	916.5	925.4	1012.3	1128.1	1186.1	1277.1	1459.2	1595.8	1616.2
140°	876.0	909.0	941.9	950.2	1026.9	1129.3	1180.5	1259.2	1416.4	1534.5	1553.5
142.5°	899.9	930.4	960.9	968.5	1039.2	1133.4	1180.5	1249.6	1387.7	1491.3	1507.7
145°	936.6	963.2	989.8	996.4	1055.1	1133.4	1172.5	1229.0	1342.1	1426.8	1439.2
147.5°	973.2	999.1	1025.0	1031.4	1078.5	1141.2	1172.5	1217.0	1305.9	1372.6	1382.9
150°	997.2	1020.5	1043.9	1049.7	1090.6	1145.3	1172.5	1210.1	1285.2	1341.5	1349.8
152.5°	1021.9	1039.6	1057.3	1061.8	1098.7	1147.9	1172.5	1204.6	1268.7	1316.8	1323.1
155°	1058.5	1071.6	1084.8	1088.0	1116.2	1153.8	1172.5	1198.0	1249.0	1287.3	1291.5
157.5°	1085.6	1098.4	1111.2	1114.3	1133.8	1159.6	1172.5	1192.4	1232.1	1261.8	1264.7
160°	1104.0	1113.9	1123.8	1126.3	1141.7	1162.2	1172.5	1189.6	1223.6	1249.0	1250.7
162.5°	1122.3	1129.8	1137.2	1139.0	1150.2	1165.1	1172.5	1186.8	1215.5	1237.1	1238.7
165°	1142.3	1149.0	1155.7	1157.4	1162.4	1169.1	1172.5	1182.8	1203.4	1218.8	1220.5
167.5°	1160.6	1163.7	1167.0	1167.8	1172.0	1177.7	1180.5	1187.3	1200.7	1210.8	1211.5
170°	1172.5	1175.7	1178.9	1179.7	1179.9	1180.4	1180.5	1187.3	1200.7	1210.8	1210.8
172.5°	1178.9	1179.6	1180.4	1180.5	1180.5	1180.5	1180.5	1185.8	1196.5	1204.4	1203.8
175°	1187.7	1187.7	1187.7	1187.7	1185.3	1182.1	1180.5	1183.9	1190.6	1195.6	1195.6
177.5°	1187.7	1187.7	1187.7	1187.7	1185.8	1183.3	1182.1	1184.7	1190.1	1194.1	1193.4
180°	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7	1187.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	525.1	525.1
2.5°	560.6	557.2
5°	721.0	724.4
7.5°	970.9	969.2
10°	1207.3	1222.4
12.5°	1379.5	1382.9
15°	1484.2	1490.9
17.5°	1524.7	1526.4
20°	1526.4	1523.0
22.5°	1507.8	1504.5
25°	1485.9	1484.2
27.5°	1465.6	1467.3
30°	1457.2	1462.2
32.5°	1457.2	1465.6
35°	1460.6	1469.0
37.5°	1458.9	1469.0
40°	1452.1	1463.9
42.5°	1433.5	1442.0
45°	1404.9	1414.9
47.5°	1367.7	1374.4
50°	1320.4	1327.2
52.5°	1261.3	1263.0
55°	1190.4	1197.1
57.5°	1114.4	1116.1
60°	1030.0	1035.0
62.5°	940.5	940.5
65°	846.0	849.3
67.5°	748.0	756.4
70°	648.4	650.1
72.5°	550.5	550.5
75°	449.2	450.8
77.5°	352.9	352.9
80°	261.7	263.4
82.5°	180.7	184.0
85°	113.1	113.1
87.5°	52.3	47.3
90°	30.3	30.3
92.5°	121.3	97.2
95°	422.8	349.9
97.5°	1013.3	874.4
100°	1460.0	1294.5
102.5°	1899.3	1757.6
105°	2459.5	2383.3
107.5°	2826.4	2844.8
110°	2966.3	3045.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2978.8	3100.7
115°	2899.8	3068.8
117.5°	2732.4	2919.8
120°	2597.4	2779.5
122.5°	2465.9	2645.5
125°	2278.4	2443.9
127.5°	2109.8	2249.5
130°	2010.5	2139.4
132.5°	1920.2	2035.8
135°	1796.8	1896.3
137.5°	1697.7	1779.1
140°	1629.6	1705.8
142.5°	1573.3	1638.8
145°	1488.8	1538.4
147.5°	1423.9	1465.1
150°	1383.1	1416.4
152.5°	1348.2	1373.4
155°	1308.1	1324.8
157.5°	1276.5	1288.1
160°	1257.5	1264.2
162.5°	1245.0	1251.4
165°	1227.1	1233.9
167.5°	1214.4	1217.2
170°	1210.8	1210.8
172.5°	1201.3	1198.8
175°	1195.6	1195.6
177.5°	1190.5	1187.7
180°	1187.7	1187.7



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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	3.49	4.25	4.56	5.33	6.80	16.65	17.41	17.72	18.49	19.96
	3H	4.18	4.87	5.27	5.95	7.45	18.48	19.16	19.56	20.25	21.74
	4H	4.48	5.13	5.57	6.22	7.71	19.11	19.76	20.21	20.85	22.35
	6H	4.72	5.32	5.83	6.41	7.92	19.54	20.13	20.64	21.23	22.74
	8H	4.79	5.36	5.89	6.46	7.97	19.65	20.22	20.76	21.33	22.83
	12H	4.80	5.34	5.91	6.44	7.97	19.71	20.25	20.82	21.36	22.88
4H	2H	10.68	11.33	11.78	12.42	13.91	16.91	17.56	18.01	18.65	20.15
	3H	12.24	12.78	13.35	13.90	15.41	18.94	19.49	20.05	20.60	22.11
	4H	12.33	12.83	13.44	13.93	15.46	19.70	20.20	20.82	21.31	22.84
	6H	12.33	12.76	13.45	13.89	15.41	20.23	20.66	21.35	21.79	23.31
	8H	12.31	12.71	13.43	13.83	15.37	20.39	20.79	21.51	21.91	23.45
	12H	12.26	12.62	13.40	13.76	15.30	20.48	20.84	21.61	21.97	23.52
8H	4H	13.76	14.16	14.88	15.28	16.82	19.76	20.16	20.88	21.28	22.82
	6H	14.00	14.33	15.14	15.49	17.03	20.38	20.71	21.52	21.87	23.41
	8H	14.02	14.31	15.16	15.45	17.00	20.59	20.88	21.74	22.02	23.58
	12H	13.98	14.24	15.13	15.37	16.97	20.73	20.98	21.88	22.12	23.71
12H	4H	13.90	14.26	15.04	15.40	16.94	19.70	20.07	20.84	21.20	22.74
	6H	14.26	14.55	15.40	15.69	17.24	20.36	20.65	21.51	21.79	23.35
	8H	14.32	14.58	15.47	15.71	17.31	20.58	20.84	21.73	21.97	23.57