

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: P937352

Luminaire Tested: SQ4-FB-075U-125D-930-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937352  
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-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

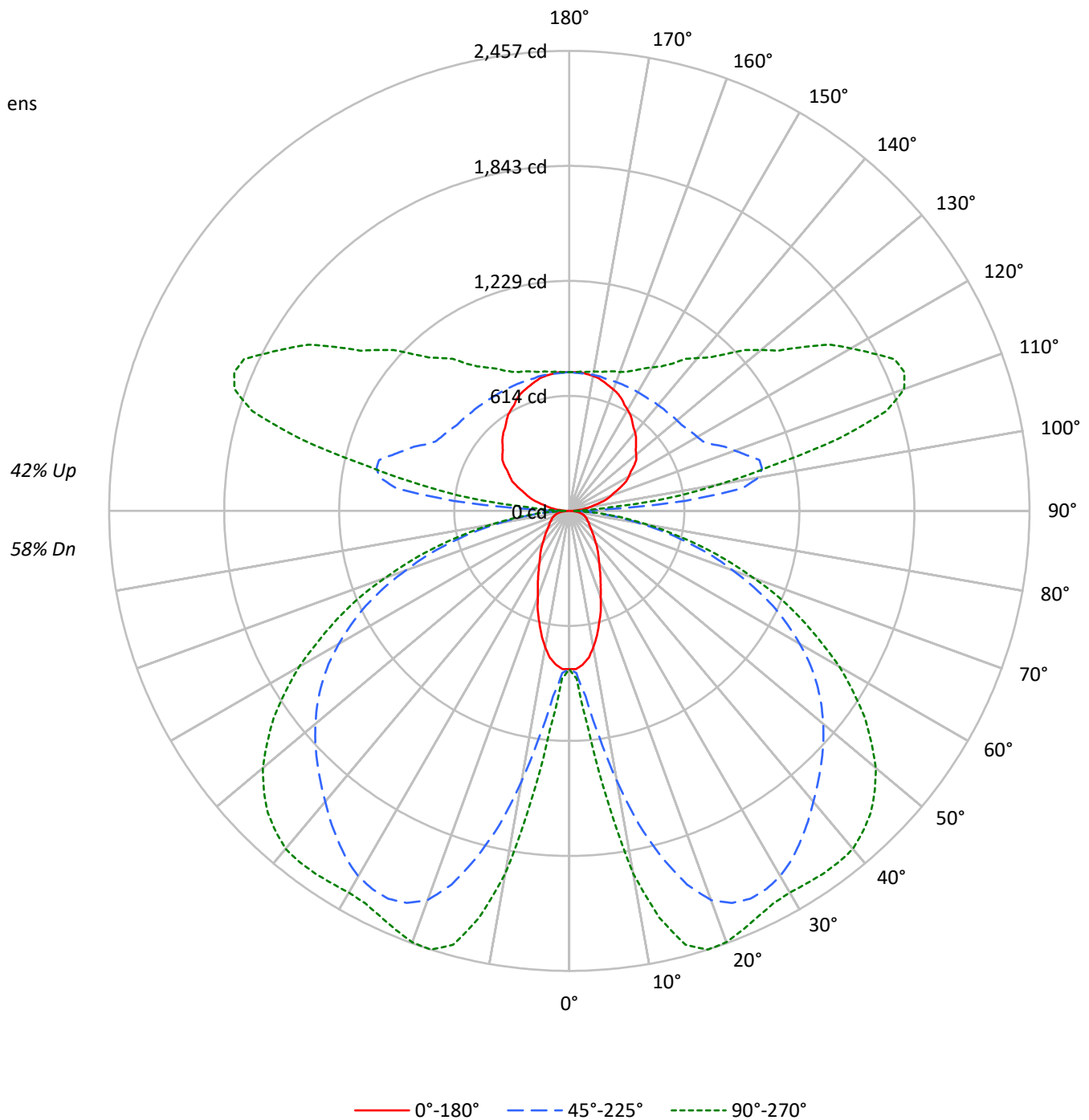
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11350.4 lumens  
Efficiency: N/A  
Efficacy: 91.5 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

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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	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°	3921	3921	3921
5°	3831	4533	5271
10°	3475	6607	8739
15°	2953	8632	10552
20°	2404	10003	10754
25°	2006	10468	10536
30°	1691	10534	10516
35°	1496	10359	10788
40°	1304	10132	11069
45°	1180	9965	11112
50°	1082	9815	10928
55°	1037	9596	10444
60°	1061	9174	9679
65°	1104	8534	8628
70°	1176	7442	7289
75°	1303	6068	5688
80°	1425	4208	3833
85°	1262	2233	1962

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11112 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.3	1.0
10°-20°	484.6	4.3
20°-30°	847.6	7.5
30°-40°	1091.1	9.6
40°-50°	1218.7	10.7
50°-60°	1167.3	10.3
60°-70°	925.1	8.2
70°-80°	544.0	4.8
80°-90°	154.0	1.4
90°-100°	361.6	3.2
100°-110°	950.6	8.4
110°-120°	985.7	8.7
120°-130°	790.7	7.0
130°-140°	620.4	5.5
140°-150°	476.2	4.2
150°-160°	342.9	3.0
160°-170°	209.8	1.8
170°-180°	70.9	0.6
0°-30°	1441.5	12.7
0°-40°	2532.6	22.3
0°-60°	4918.7	43.3
0°-90°	6541.7	57.6
90°-120°	2297.9	20.2
90°-150°	4185.1	36.9
90°-180°	4809.0	42.4
0°-180°	11350.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	824	883	995	1125	1166	76
15°	617	1139	1919	2326	2400	172
25°	394	1291	2286	2386	2389	182
35°	266	1234	2152	2275	2364	166
45°	182	984	1902	2180	2278	141
55°	130	625	1614	1875	1927	119
65°	103	332	1199	1348	1367	102
75°	76	204	658	723	726	80
85°	27	62	163	179	182	29
90°	5	14	38	19	19	6
95°	48	187	623	321	219	53
105°	171	259	1051	1596	1488	182
115°	304	369	842	1679	1917	300
125°	423	474	766	1294	1526	376
135°	504	555	742	1044	1184	390
145°	585	622	732	891	961	366
155°	661	680	732	804	827	304
165°	713	723	732	761	771	201
175°	742	742	737	747	747	70
180°	742	742	742	742	742	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2	845.2
2.5°	845.2	845.2	850.7	853.4	858.8	861.5	867.0	872.5	888.8	891.5	896.9
5°	823.5	834.4	869.7	883.3	921.4	973.0	994.8	1030.1	1103.4	1125.2	1138.7
7.5°	790.9	815.4	902.3	924.1	1019.2	1155.1	1212.1	1288.3	1405.1	1462.2	1508.4
10°	739.2	790.9	945.8	997.4	1152.4	1358.9	1464.9	1570.9	1747.6	1826.4	1856.3
12.5°	682.1	766.5	992.0	1062.7	1285.5	1587.2	1715.0	1831.8	2033.0	2139.0	2155.3
15°	616.9	731.1	1035.5	1138.7	1426.9	1777.4	1918.8	2062.8	2250.4	2326.5	2345.5
17.5°	559.9	703.9	1076.3	1185.0	1535.6	1948.7	2092.7	2212.3	2364.5	2416.1	2429.7
20°	489.2	660.5	1103.4	1244.7	1649.8	2073.7	2212.3	2304.7	2408.0	2440.6	2446.0
22.5°	437.6	614.2	1119.8	1266.5	1725.8	2149.8	2266.7	2340.0	2410.7	2421.6	2424.3
25°	394.1	562.6	1117.1	1291.0	1791.1	2196.0	2285.7	2340.0	2380.8	2386.3	2386.3
27.5°	353.3	505.5	1106.1	1296.4	1840.0	2206.9	2277.5	2315.6	2334.6	2345.5	2345.5
30°	318.0	451.1	1079.0	1285.5	1861.8	2196.0	2253.1	2272.1	2291.1	2307.4	2315.6
32.5°	290.8	399.5	1038.2	1263.8	1864.4	2168.8	2209.6	2220.5	2247.7	2285.7	2299.3
35°	266.4	347.9	992.0	1233.9	1848.1	2125.4	2152.5	2163.4	2217.7	2274.8	2293.8
37.5°	241.9	309.8	932.2	1182.3	1823.7	2073.7	2092.7	2111.7	2196.0	2264.0	2285.7
40°	217.5	277.2	861.5	1125.2	1785.6	2011.2	2027.5	2057.4	2168.8	2247.7	2269.4
42.5°	198.4	250.1	785.5	1065.4	1736.7	1940.5	1965.0	2008.5	2136.2	2220.5	2244.9
45°	182.1	222.8	703.9	983.8	1674.2	1867.1	1902.5	1962.3	2098.2	2179.7	2201.4
47.5°	165.8	203.8	619.7	899.6	1606.2	1793.7	1840.0	1907.9	2046.5	2125.4	2144.4
50°	152.2	184.9	535.4	809.9	1532.8	1715.0	1769.3	1840.0	1981.3	2054.7	2079.1
52.5°	141.3	168.5	456.6	720.2	1448.6	1633.4	1695.9	1769.3	1902.5	1973.1	1989.4
55°	130.5	154.9	388.7	625.1	1361.6	1546.4	1614.4	1685.1	1815.5	1875.3	1886.2
57.5°	125.0	144.1	331.6	535.4	1269.2	1448.6	1524.7	1589.9	1712.2	1758.4	1769.3
60°	116.8	135.9	288.1	459.3	1168.7	1356.2	1421.4	1486.7	1589.9	1628.0	1636.1
62.5°	108.7	130.5	255.5	385.9	1065.4	1247.5	1312.7	1372.5	1459.5	1486.7	1497.5
65°	103.3	125.0	231.0	331.6	959.4	1133.4	1198.6	1250.2	1320.9	1348.1	1353.5
67.5°	97.8	119.6	212.0	285.4	853.4	1019.2	1068.1	1117.1	1171.4	1198.6	1201.3
70°	89.7	114.2	195.7	252.8	744.7	888.8	929.5	981.1	1024.6	1038.2	1046.4
72.5°	84.2	106.0	184.9	228.3	633.2	763.7	801.8	831.7	869.7	883.3	883.3
75°	76.1	95.2	173.9	203.8	519.1	625.1	657.7	687.6	717.5	722.9	714.8
77.5°	67.9	84.2	149.5	171.2	405.0	494.6	521.8	538.2	562.6	568.0	570.8
80°	57.1	73.4	116.8	133.1	293.5	364.2	383.2	396.8	418.5	418.5	424.0
82.5°	43.5	57.1	84.2	95.2	198.4	250.1	266.4	274.5	288.1	288.1	288.1
85°	27.1	35.3	54.4	62.5	119.6	152.2	163.1	165.8	176.7	179.4	179.4
87.5°	13.6	19.0	35.3	38.1	62.5	78.9	78.9	84.2	84.2	81.5	78.9
90°	5.0	9.0	13.0	14.0	21.9	32.5	37.8	33.6	25.2	19.0	19.0
92.5°	19.9	53.8	87.7	96.1	135.1	187.1	213.1	186.8	134.1	94.6	90.8
95°	47.8	109.8	171.7	187.2	332.4	526.0	622.8	555.8	421.7	321.1	309.7
97.5°	82.6	137.3	192.0	205.6	447.8	770.6	932.0	889.6	804.8	741.3	719.6
100°	109.5	159.1	208.7	221.1	489.7	848.0	1027.0	1030.2	1036.4	1041.0	1015.2
102.5°	132.4	178.7	224.9	236.5	508.9	872.3	1053.9	1107.9	1215.9	1296.9	1274.8
105°	171.3	210.5	249.6	259.4	523.2	875.0	1051.0	1172.0	1414.0	1595.6	1583.7
107.5°	211.1	247.6	284.1	293.3	525.9	836.1	991.2	1160.0	1497.7	1750.9	1753.8
110°	238.0	270.9	303.9	312.1	521.9	801.6	941.4	1130.1	1507.6	1790.8	1803.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	264.3	295.7	327.1	335.0	522.0	771.4	896.1	1089.3	1475.7	1765.4	1784.4
115°	304.2	333.2	362.2	369.4	526.8	736.8	841.9	1027.9	1400.1	1679.2	1705.7
117.5°	343.5	369.9	396.2	402.8	536.7	715.2	804.5	972.4	1308.3	1560.2	1589.5
120°	366.4	391.1	416.0	422.1	544.6	707.9	789.6	943.0	1249.9	1480.1	1508.5
122.5°	388.8	413.9	438.8	445.1	556.1	704.1	778.1	916.3	1192.7	1400.0	1428.0
125°	423.2	446.0	468.7	474.4	571.5	700.9	765.7	883.1	1117.8	1293.9	1319.7
127.5°	451.0	474.1	497.1	502.8	587.0	699.2	755.2	856.0	1057.6	1208.8	1230.5
130°	466.0	490.7	515.5	521.7	598.2	700.3	751.3	841.0	1020.5	1155.0	1175.2
132.5°	481.4	506.2	531.0	537.2	607.4	700.9	747.8	828.1	988.7	1109.2	1127.3
135°	504.3	526.8	549.5	555.1	617.3	700.3	741.8	809.1	943.6	1044.5	1060.0
137.5°	527.7	550.1	572.4	578.0	632.3	704.6	740.8	797.6	911.4	996.7	1009.4
140°	547.2	567.7	588.3	593.4	641.4	705.4	737.3	786.5	884.7	958.4	970.3
142.5°	562.1	581.1	600.2	604.9	649.1	707.9	737.3	780.4	866.8	931.5	941.7
145°	585.0	601.6	618.1	622.3	659.0	707.9	732.3	767.7	838.3	891.2	898.9
147.5°	607.9	624.0	640.2	644.2	673.6	712.7	732.3	760.1	815.6	857.3	863.7
150°	622.8	637.4	652.0	655.6	681.2	715.3	732.3	755.8	802.7	837.9	843.1
152.5°	638.2	649.3	660.4	663.1	686.2	716.9	732.3	752.3	792.4	822.4	826.4
155°	661.1	669.3	677.5	679.6	697.2	720.6	732.3	748.2	780.1	804.0	806.6
157.5°	678.1	686.0	694.0	696.0	708.1	724.2	732.3	744.7	769.5	788.1	789.9
160°	689.5	695.7	701.9	703.4	713.1	725.9	732.3	742.9	764.2	780.1	781.2
162.5°	700.9	705.6	710.3	711.5	718.4	727.7	732.3	741.3	759.2	772.6	773.6
165°	713.4	717.6	721.8	722.9	726.0	730.2	732.3	738.8	751.6	761.2	762.3
167.5°	724.9	726.9	728.9	729.4	732.0	735.5	737.3	741.5	749.9	756.3	756.7
170°	732.3	734.3	736.4	736.8	737.0	737.2	737.3	741.5	749.9	756.3	756.3
172.5°	736.4	736.8	737.2	737.3	737.3	737.3	737.3	740.6	747.3	752.3	751.8
175°	741.8	741.8	741.8	741.8	740.3	738.3	737.3	739.4	743.7	746.8	746.8
177.5°	741.8	741.8	741.8	741.8	740.6	739.1	738.3	740.0	743.3	745.7	745.3
180°	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8	741.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	845.2	845.2
2.5°	902.3	896.9
5°	1160.5	1166.0
7.5°	1562.7	1560.1
10°	1943.3	1967.8
12.5°	2220.5	2225.9
15°	2389.0	2399.8
17.5°	2454.2	2456.9
20°	2456.9	2451.5
22.5°	2427.1	2421.6
25°	2391.7	2389.0
27.5°	2359.1	2361.8
30°	2345.5	2353.7
32.5°	2345.5	2359.1
35°	2350.9	2364.5
37.5°	2348.2	2364.5
40°	2337.4	2356.4
42.5°	2307.4	2321.1
45°	2261.2	2277.5
47.5°	2201.4	2212.3
50°	2125.4	2136.2
52.5°	2030.2	2033.0
55°	1916.0	1927.0
57.5°	1793.7	1796.5
60°	1657.9	1666.1
62.5°	1513.8	1513.8
65°	1361.6	1367.1
67.5°	1204.0	1217.6
70°	1043.7	1046.4
72.5°	886.0	886.0
75°	722.9	725.7
77.5°	568.0	568.0
80°	421.3	424.0
82.5°	290.8	296.2
85°	182.1	182.1
87.5°	84.2	76.1
90°	19.0	19.0
92.5°	75.8	60.7
95°	264.2	218.6
97.5°	632.8	546.1
100°	911.9	808.5
102.5°	1186.3	1097.8
105°	1536.1	1488.5
107.5°	1765.3	1776.8
110°	1852.8	1902.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1860.5	1936.6
115°	1811.2	1916.7
117.5°	1706.5	1823.6
120°	1622.3	1736.0
122.5°	1540.2	1652.3
125°	1423.1	1526.4
127.5°	1317.7	1404.9
130°	1255.7	1336.2
132.5°	1199.4	1271.5
135°	1122.2	1184.3
137.5°	1060.3	1111.2
140°	1017.9	1065.4
142.5°	982.6	1023.6
145°	929.9	960.9
147.5°	889.3	915.0
150°	863.9	884.7
152.5°	842.0	857.8
155°	817.1	827.4
157.5°	797.2	804.5
160°	785.4	789.6
162.5°	777.6	781.6
165°	766.5	770.6
167.5°	758.4	760.2
170°	756.3	756.3
172.5°	750.3	748.8
175°	746.8	746.8
177.5°	743.6	741.8
180°	741.8	741.8



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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	6.42	7.40	7.30	8.31	9.46	19.60	20.58	20.48	21.49	22.64
	3H	7.14	8.02	8.03	8.93	10.11	21.45	22.33	22.34	23.25	24.42
	4H	7.44	8.27	8.35	9.20	10.39	22.10	22.93	23.00	23.85	25.04
	6H	7.70	8.47	8.62	9.40	10.60	22.53	23.31	23.45	24.23	25.44
	8H	7.77	8.50	8.69	9.45	10.65	22.66	23.39	23.59	24.34	25.54
	12H	7.79	8.49	8.72	9.43	10.66	22.73	23.43	23.66	24.37	25.60
4H	2H	13.65	14.49	14.56	15.41	16.60	19.89	20.72	20.80	21.64	22.83
	3H	15.23	15.93	16.15	16.88	18.09	21.94	22.64	22.87	23.60	24.80
	4H	15.33	15.97	16.26	16.92	18.14	22.72	23.36	23.65	24.30	25.53
	6H	15.35	15.90	16.29	16.87	18.10	23.26	23.82	24.21	24.79	26.02
	8H	15.33	15.84	16.28	16.81	18.05	23.43	23.95	24.38	24.91	26.15
	12H	15.29	15.76	16.26	16.74	17.99	23.53	24.00	24.50	24.98	26.23
8H	4H	16.78	17.30	17.73	18.27	19.51	22.79	23.30	23.74	24.27	25.51
	6H	17.03	17.46	18.01	18.47	19.71	23.42	23.85	24.40	24.86	26.10
	8H	17.05	17.43	18.04	18.43	19.69	23.64	24.02	24.63	25.02	26.28
	12H	17.02	17.36	18.02	18.35	19.66	23.79	24.13	24.78	25.12	26.42
12H	4H	16.93	17.40	17.90	18.38	19.63	22.75	23.21	23.72	24.20	25.45
	6H	17.29	17.67	18.28	18.67	19.93	23.41	23.79	24.39	24.78	26.04
	8H	17.37	17.70	18.36	18.69	20.00	23.64	23.98	24.63	24.97	26.27