

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: P937741

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

**Test Information**

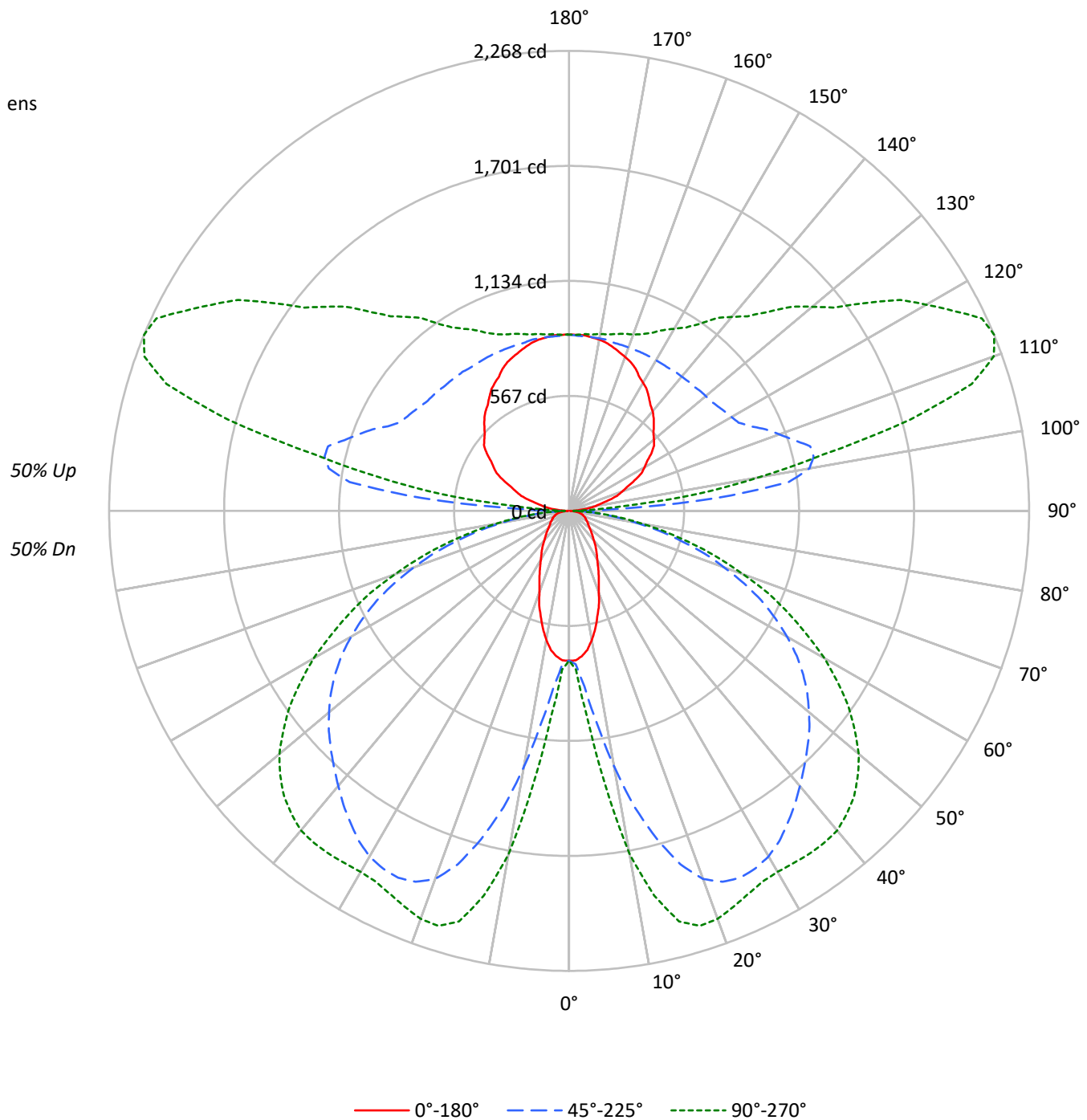
Test Method: LM-79-2019  
Report Number: P937741  
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-6-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11344.5 lumens  
Efficiency: N/A  
Efficacy: 109.9 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: General Diffuse  
  
Input Watts (W): 103.2  
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	0
RCR																		
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	10

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

	0°	45°	90°
0°	4565	4565	4565
5°	4458	5274	6136
10°	4042	7687	10172
15°	3434	10040	12283
20°	2795	11632	12518
25°	2331	12169	12263
30°	1964	12243	12240
35°	1736	12036	12557
40°	1512	11769	12883
45°	1368	11572	12934
50°	1253	11394	12720
55°	1199	11135	12156
60°	1227	10641	11266
65°	1275	9893	10042
70°	1354	8621	8484
75°	1496	7024	6621
80°	1621	4865	4461
85°	1413	2577	2284

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12934 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.4	0.8
10°-20°	423.0	3.7
20°-30°	739.9	6.5
30°-40°	952.5	8.4
40°-50°	1063.9	9.4
50°-60°	1019.0	9.0
60°-70°	807.6	7.1
70°-80°	474.9	4.2
80°-90°	135.2	1.2
90°-100°	423.6	3.7
100°-110°	1113.6	9.8
110°-120°	1154.6	10.2
120°-130°	926.2	8.2
130°-140°	726.7	6.4
140°-150°	557.8	4.9
150°-160°	401.7	3.5
160°-170°	245.8	2.2
170°-180°	83.0	0.7
0°-30°	1258.4	11.1
0°-40°	2211.0	19.5
0°-60°	4293.9	37.8
0°-90°	5711.6	50.3
90°-120°	2691.8	23.7
90°-150°	4902.4	43.2
90°-180°	5633.0	49.7
0°-180°	11344.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	719	771	868	982	1018	66
15°	539	994	1675	2031	2095	150
25°	344	1127	1995	2083	2086	158
35°	233	1077	1879	1986	2064	145
45°	159	859	1661	1903	1988	123
55°	114	546	1409	1637	1682	104
65°	90	290	1046	1177	1193	89
75°	66	178	574	631	634	70
85°	24	55	142	157	159	25
90°	6	16	44	22	22	6
95°	56	219	730	376	256	62
105°	201	304	1231	1869	1744	213
115°	356	433	986	1967	2245	352
125°	496	556	897	1516	1788	440
135°	591	650	869	1224	1387	457
145°	685	729	858	1044	1126	429
155°	774	796	858	942	969	356
165°	836	847	858	892	903	236
175°	869	869	864	875	875	82
180°	869	869	869	869	869	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	737.9	737.9	737.9	737.9	737.9	737.9	737.9	737.9	737.9	737.9	737.9
2.5°	737.9	737.9	742.6	745.0	749.7	752.2	756.8	761.6	775.8	778.2	783.0
5°	718.9	728.4	759.3	771.1	804.3	849.4	868.3	899.2	963.3	982.3	994.2
7.5°	690.5	711.8	787.7	806.7	889.7	1008.4	1058.2	1124.6	1226.6	1276.4	1316.8
10°	645.3	690.5	825.6	870.8	1006.0	1186.3	1278.9	1371.4	1525.6	1594.4	1620.5
12.5°	595.5	669.1	866.0	927.7	1122.2	1385.6	1497.1	1599.1	1774.7	1867.3	1881.5
15°	538.6	638.2	904.0	994.2	1245.6	1551.7	1675.1	1800.8	1964.6	2030.9	2047.6
17.5°	488.8	614.5	939.6	1034.4	1340.6	1701.2	1826.9	1931.3	2064.2	2109.3	2121.1
20°	427.1	576.5	963.3	1086.7	1440.2	1810.3	1931.3	2012.0	2102.2	2130.6	2135.3
22.5°	382.0	536.2	977.5	1105.7	1506.7	1876.7	1978.8	2042.8	2104.5	2114.0	2116.4
25°	344.1	491.1	975.2	1127.0	1563.6	1917.1	1995.4	2042.8	2078.4	2083.2	2083.2
27.5°	308.5	441.3	965.6	1131.7	1606.3	1926.5	1988.2	2021.5	2038.0	2047.6	2047.6
30°	277.6	393.9	941.9	1122.2	1625.3	1917.1	1966.9	1983.5	2000.1	2014.4	2021.5
32.5°	253.9	348.7	906.3	1103.2	1627.6	1893.3	1929.0	1938.4	1962.1	1995.4	2007.2
35°	232.6	303.7	866.0	1077.2	1613.4	1855.4	1879.1	1888.6	1936.1	1985.9	2002.5
37.5°	211.2	270.5	813.8	1032.1	1592.0	1810.3	1826.9	1843.5	1917.1	1976.3	1995.4
40°	189.8	242.0	752.2	982.3	1558.8	1755.8	1770.0	1796.0	1893.3	1962.1	1981.1
42.5°	173.2	218.3	685.7	930.0	1516.1	1694.1	1715.4	1753.3	1864.8	1938.4	1959.8
45°	159.0	194.5	614.5	858.9	1461.5	1629.9	1660.8	1713.0	1831.6	1902.9	1921.8
47.5°	144.7	178.0	540.9	785.3	1402.2	1565.9	1606.3	1665.6	1786.6	1855.4	1872.0
50°	132.8	161.3	467.4	707.0	1338.1	1497.1	1544.6	1606.3	1729.7	1793.7	1815.0
52.5°	123.4	147.1	398.6	628.8	1264.6	1425.9	1480.5	1544.6	1660.8	1722.5	1736.8
55°	113.8	135.3	339.3	545.7	1188.7	1350.0	1409.3	1471.0	1584.9	1637.1	1646.6
57.5°	109.2	125.7	289.5	467.4	1108.0	1264.6	1331.0	1387.9	1494.8	1535.1	1544.6
60°	102.0	118.6	251.5	401.0	1020.2	1183.9	1240.9	1297.8	1387.9	1421.2	1428.3
62.5°	94.9	113.8	223.0	336.9	930.0	1089.0	1145.9	1198.2	1274.1	1297.8	1307.3
65°	90.2	109.2	201.7	289.5	837.5	989.4	1046.3	1091.4	1153.1	1176.8	1181.6
67.5°	85.4	104.4	185.1	249.1	745.0	889.7	932.5	975.2	1022.6	1046.3	1048.7
70°	78.3	99.6	170.9	220.7	650.1	775.8	811.4	856.5	894.5	906.3	913.5
72.5°	73.6	92.5	161.3	199.3	552.8	666.7	699.9	726.0	759.3	771.1	771.1
75°	66.5	83.0	151.9	178.0	453.1	545.7	574.2	600.3	626.3	631.1	624.0
77.5°	59.4	73.6	130.5	149.5	353.5	431.8	455.6	469.8	491.1	495.9	498.3
80°	49.8	64.0	102.0	116.3	256.2	317.9	334.5	346.4	365.4	365.4	370.1
82.5°	37.9	49.8	73.6	83.0	173.2	218.3	232.6	239.7	251.5	251.5	251.5
85°	23.7	30.8	47.5	54.6	104.4	132.8	142.4	144.7	154.2	156.6	156.6
87.5°	11.9	16.6	30.8	33.2	54.6	68.8	68.8	73.6	73.6	71.2	68.8
90°	5.8	10.5	15.1	16.4	25.7	38.1	44.3	39.4	29.5	22.2	22.2
92.5°	23.4	63.0	102.6	112.5	158.2	219.1	249.6	218.7	157.0	110.8	106.4
95°	56.0	128.5	201.1	219.3	389.4	616.2	729.5	651.0	493.9	376.1	362.8
97.5°	96.8	160.9	224.9	240.9	524.5	902.6	1091.7	1042.1	942.8	868.3	842.9
100°	128.3	186.4	244.4	258.9	573.6	993.2	1203.1	1206.7	1214.0	1219.4	1189.1
102.5°	155.2	209.4	263.5	277.0	596.2	1021.8	1234.6	1297.8	1424.3	1519.2	1493.3
105°	200.6	246.5	292.4	303.9	613.0	1025.1	1231.1	1372.9	1656.4	1869.0	1855.1
107.5°	247.2	290.0	332.8	343.5	616.1	979.4	1161.1	1358.9	1754.3	2051.0	2054.4
110°	278.7	317.3	356.0	365.7	611.4	939.0	1102.8	1323.8	1766.0	2097.7	2112.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.7	346.5	383.3	392.5	611.6	903.7	1049.7	1276.0	1728.6	2067.9	2090.2
115°	356.3	390.2	424.2	432.7	617.2	863.1	986.1	1204.1	1640.1	1967.1	1998.0
117.5°	402.4	433.2	464.1	471.7	628.6	837.8	942.4	1139.1	1532.5	1827.6	1861.9
120°	429.2	458.3	487.3	494.6	638.0	829.3	924.9	1104.6	1464.1	1733.8	1767.1
122.5°	455.5	484.7	514.1	521.4	651.4	824.8	911.5	1073.4	1397.1	1639.8	1672.7
125°	495.7	522.4	549.1	555.8	669.5	821.1	896.9	1034.4	1309.4	1515.7	1546.0
127.5°	528.4	555.3	582.3	589.1	687.6	819.0	884.7	1002.8	1238.9	1416.0	1441.5
130°	545.9	574.9	603.9	611.2	700.8	820.3	880.0	985.1	1195.3	1353.0	1376.5
132.5°	563.9	593.0	622.0	629.2	711.5	821.1	875.9	970.0	1158.2	1299.3	1320.5
135°	590.7	617.2	643.6	650.3	723.2	820.3	868.9	947.7	1105.3	1223.5	1241.8
137.5°	618.1	644.3	670.6	677.1	740.7	825.4	867.8	934.4	1067.6	1167.5	1182.4
140°	640.9	665.0	689.2	695.1	751.3	826.2	863.7	921.2	1036.3	1122.6	1136.5
142.5°	658.4	680.7	703.0	708.6	760.3	829.2	863.7	914.2	1015.3	1091.1	1103.0
145°	685.2	704.7	724.1	729.0	772.0	829.3	857.9	899.2	981.9	1043.9	1052.9
147.5°	712.1	730.9	749.8	754.6	789.0	834.9	857.9	890.4	955.5	1004.2	1011.7
150°	729.5	746.6	763.7	768.0	798.0	837.9	857.9	885.4	940.2	981.4	987.5
152.5°	747.7	760.7	773.6	776.8	803.8	839.8	857.9	881.3	928.3	963.4	968.0
155°	774.5	784.0	793.6	796.0	816.7	844.1	857.9	876.6	913.9	941.8	944.9
157.5°	794.3	803.7	812.9	815.3	829.5	848.4	857.9	872.4	901.4	923.2	925.4
160°	807.7	815.0	822.3	824.0	835.3	850.4	857.9	870.3	895.2	913.9	915.1
162.5°	821.1	826.6	832.0	833.4	841.5	852.5	857.9	868.3	889.4	905.1	906.2
165°	835.7	840.6	845.5	846.8	850.5	855.4	857.9	865.4	880.4	891.7	892.9
167.5°	849.1	851.4	853.8	854.3	857.4	861.6	863.7	868.6	878.4	885.8	886.4
170°	857.9	860.2	862.5	863.1	863.3	863.6	863.7	868.6	878.4	885.8	885.8
172.5°	862.5	863.0	863.6	863.7	863.7	863.7	863.7	867.6	875.4	881.1	880.7
175°	868.9	868.9	868.9	868.9	867.1	864.8	863.7	866.1	871.1	874.8	874.8
177.5°	868.9	868.9	868.9	868.9	867.6	865.8	864.9	866.8	870.7	873.6	873.0
180°	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9	868.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	737.9	737.9
2.5°	787.7	783.0
5°	1013.1	1017.9
7.5°	1364.3	1361.9
10°	1696.4	1717.8
12.5°	1938.4	1943.2
15°	2085.5	2095.1
17.5°	2142.4	2144.9
20°	2144.9	2140.1
22.5°	2118.7	2114.0
25°	2087.9	2085.5
27.5°	2059.4	2061.8
30°	2047.6	2054.7
32.5°	2047.6	2059.4
35°	2052.3	2064.2
37.5°	2049.9	2064.2
40°	2040.5	2057.0
42.5°	2014.4	2026.3
45°	1974.0	1988.2
47.5°	1921.8	1931.3
50°	1855.4	1864.8
52.5°	1772.3	1774.7
55°	1672.7	1682.2
57.5°	1565.9	1568.2
60°	1447.3	1454.4
62.5°	1321.6	1321.6
65°	1188.7	1193.4
67.5°	1051.1	1062.9
70°	911.1	913.5
72.5°	773.5	773.5
75°	631.1	633.5
77.5°	495.9	495.9
80°	367.7	370.1
82.5°	253.9	258.6
85°	159.0	159.0
87.5°	73.6	66.5
90°	22.2	22.2
92.5°	88.7	71.1
95°	309.4	256.0
97.5°	741.3	639.7
100°	1068.1	947.0
102.5°	1389.5	1285.9
105°	1799.4	1743.7
107.5°	2067.9	2081.4
110°	2170.3	2228.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2179.4	2268.5
115°	2121.6	2245.3
117.5°	1999.1	2136.2
120°	1900.4	2033.5
122.5°	1804.2	1935.6
125°	1667.0	1788.0
127.5°	1543.7	1645.7
130°	1470.9	1565.3
132.5°	1405.0	1489.5
135°	1314.6	1387.4
137.5°	1242.0	1301.7
140°	1192.3	1248.0
142.5°	1151.1	1199.0
145°	1089.3	1125.6
147.5°	1041.8	1071.9
150°	1011.9	1036.3
152.5°	986.4	1004.8
155°	957.0	969.2
157.5°	933.9	942.4
160°	920.0	924.9
162.5°	910.9	915.5
165°	897.9	902.7
167.5°	888.4	890.5
170°	885.8	885.8
172.5°	878.9	877.1
175°	874.8	874.8
177.5°	871.0	868.9
180°	868.9	868.9



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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	6.31	7.21	7.25	8.18	9.44	19.47	20.38	20.42	21.34	22.61
	3H	7.02	7.83	7.97	8.81	10.09	21.31	22.12	22.27	23.10	24.38
	4H	7.32	8.09	8.29	9.07	10.36	21.95	22.72	22.93	23.70	25.00
	6H	7.57	8.28	8.55	9.27	10.57	22.38	23.09	23.37	24.08	25.39
	8H	7.64	8.32	8.63	9.32	10.62	22.50	23.18	23.49	24.18	25.49
	12H	7.66	8.30	8.65	9.30	10.63	22.57	23.21	23.56	24.21	25.54
4H	2H	13.52	14.29	14.50	15.27	16.56	19.75	20.52	20.73	21.50	22.80
	3H	15.09	15.74	16.08	16.75	18.06	21.80	22.44	22.78	23.45	24.76
	4H	15.19	15.78	16.18	16.78	18.11	22.56	23.15	23.56	24.16	25.49
	6H	15.20	15.71	16.21	16.74	18.07	23.10	23.61	24.11	24.64	25.97
	8H	15.18	15.66	16.19	16.68	18.02	23.26	23.74	24.27	24.76	26.10
	12H	15.14	15.57	16.17	16.61	17.96	23.35	23.78	24.38	24.82	26.17
8H	4H	16.63	17.11	17.64	18.13	19.47	22.63	23.10	23.64	24.12	25.47
	6H	16.88	17.27	17.91	18.33	19.68	23.25	23.65	24.29	24.71	26.05
	8H	16.90	17.25	17.94	18.29	19.65	23.47	23.82	24.51	24.87	26.23
	12H	16.87	17.17	17.91	18.22	19.62	23.62	23.92	24.66	24.96	26.37
12H	4H	16.78	17.21	17.81	18.24	19.59	22.58	23.01	23.61	24.05	25.40
	6H	17.14	17.49	18.18	18.53	19.89	23.24	23.59	24.28	24.63	25.99
	8H	17.21	17.51	18.25	18.56	19.96	23.47	23.77	24.51	24.82	26.22