

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: P937265

Luminaire Tested: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

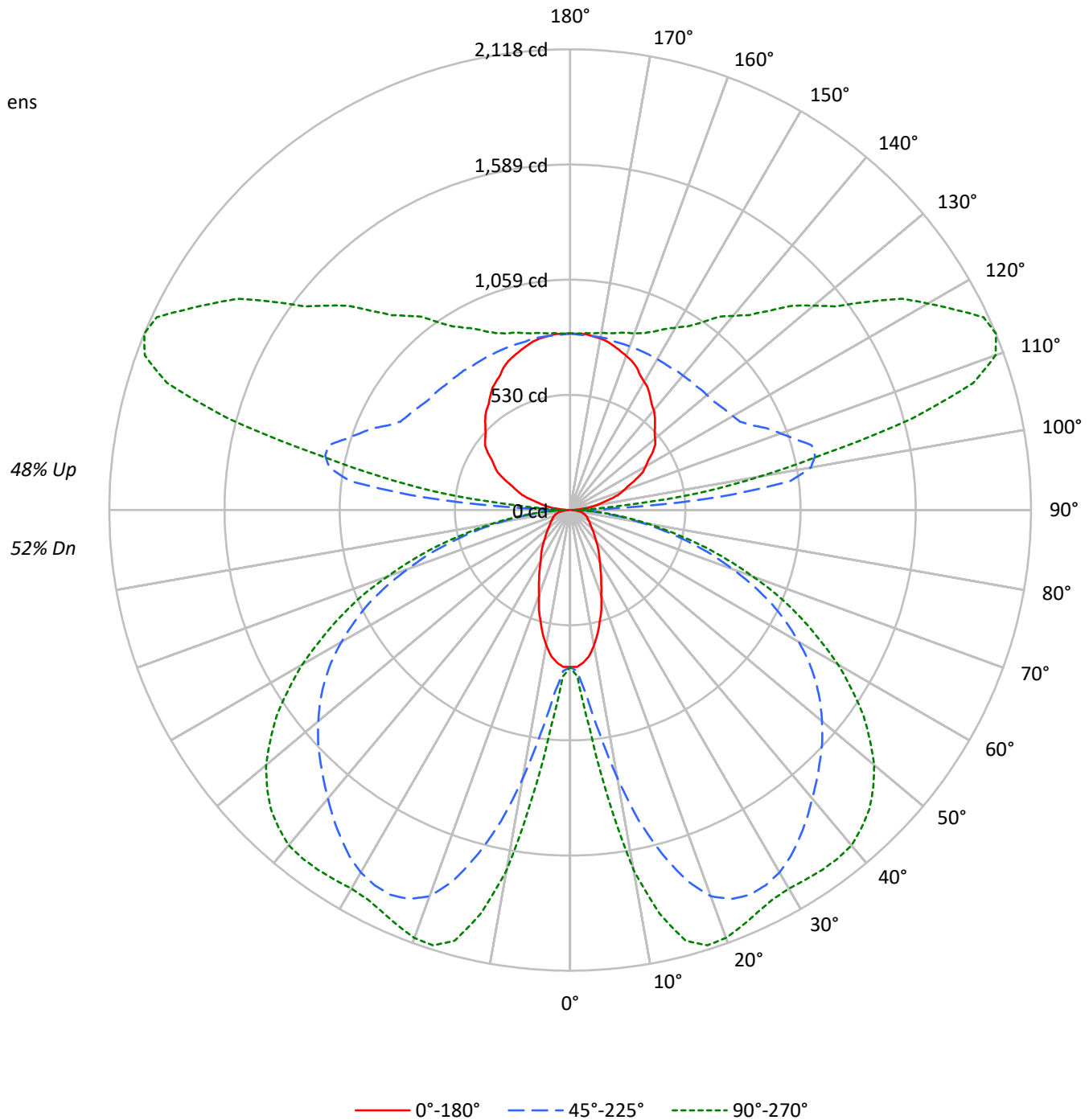
Test Method: LM-79-2019  
Report Number: P937265  
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-93050-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10847.0 lumens  
Efficiency: N/A  
Efficacy: 105.9 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): 102.4  
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52				
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42				
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34				
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28				
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24				
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20				
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17				
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15				
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13				
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12				
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10				

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

	0°	45°	90°
0°	3349	3349	3349
5°	3272	3871	4502
10°	2968	5643	7463
15°	2522	7372	9012
20°	2053	8543	9184
25°	1713	8940	8998
30°	1445	8996	8981
35°	1277	8847	9213
40°	1113	8653	9453
45°	1008	8511	9490
50°	925	8382	9333
55°	885	8195	8919
60°	906	7835	8266
65°	943	7288	7368
70°	1005	6356	6225
75°	1113	5182	4858
80°	1215	3594	3273
85°	1081	1907	1675

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9490 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.4	0.9
10°-20°	413.8	3.8
20°-30°	723.9	6.7
30°-40°	931.8	8.6
40°-50°	1040.8	9.6
50°-60°	996.9	9.2
60°-70°	790.0	7.3
70°-80°	464.6	4.3
80°-90°	132.2	1.2
90°-100°	395.5	3.6
100°-110°	1039.8	9.6
110°-120°	1078.1	9.9
120°-130°	864.8	8.0
130°-140°	678.6	6.3
140°-150°	520.8	4.8
150°-160°	375.1	3.5
160°-170°	229.5	2.1
170°-180°	77.5	0.7
0°-30°	1231.1	11.3
0°-40°	2162.9	19.9
0°-60°	4200.6	38.7
0°-90°	5587.3	51.5
90°-120°	2513.4	23.2
90°-150°	4577.6	42.2
90°-180°	5260.0	48.5
0°-180°	10847.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	703	754	850	961	996	65
15°	527	972	1639	1987	2050	147
25°	337	1102	1952	2038	2040	155
35°	228	1054	1838	1943	2019	142
45°	156	840	1625	1862	1945	120
55°	111	534	1379	1602	1646	102
65°	88	283	1024	1151	1168	87
75°	65	174	562	617	620	68
85°	23	53	139	153	156	25
90°	5	15	41	21	21	6
95°	52	205	681	351	239	58
105°	187	284	1150	1745	1628	199
115°	333	404	921	1837	2096	329
125°	463	519	838	1415	1670	411
135°	552	607	811	1142	1295	427
145°	640	681	801	975	1051	401
155°	723	743	801	879	905	332
165°	780	791	801	833	843	220
175°	811	811	806	817	817	77
180°	811	811	811	811	811	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9	721.9
2.5°	721.9	721.9	726.5	728.8	733.5	735.8	740.4	745.1	759.0	761.3	766.0
5°	703.3	712.6	742.8	754.4	786.9	831.0	849.5	879.7	942.3	960.9	972.5
7.5°	675.4	696.3	770.6	789.2	870.4	986.4	1035.2	1100.2	1200.0	1248.8	1288.2
10°	631.3	675.4	807.8	851.9	984.1	1160.5	1251.1	1341.6	1492.4	1559.8	1585.2
12.5°	582.6	654.5	847.2	907.5	1097.9	1355.5	1464.6	1564.4	1736.1	1826.7	1840.6
15°	526.9	624.4	884.4	972.5	1218.6	1518.0	1638.6	1761.7	1921.8	1986.8	2003.1
17.5°	478.1	601.2	919.1	1012.0	1311.4	1664.2	1787.3	1889.3	2019.3	2063.4	2075.1
20°	417.8	564.0	942.3	1063.0	1408.9	1771.0	1889.3	1968.3	2056.5	2084.3	2089.0
22.5°	373.7	524.5	956.3	1081.6	1473.9	1836.0	1935.8	1998.4	2058.8	2068.0	2070.4
25°	336.6	480.4	953.9	1102.5	1529.6	1875.4	1952.0	1998.4	2033.3	2037.9	2037.9
27.5°	301.7	431.7	944.7	1107.2	1571.4	1884.7	1945.1	1977.6	1993.8	2003.1	2003.1
30°	271.6	385.3	921.4	1097.9	1589.9	1875.4	1924.2	1940.4	1956.7	1970.6	1977.6
32.5°	248.4	341.2	886.6	1079.3	1592.3	1852.2	1887.0	1896.3	1919.5	1952.0	1963.6
35°	227.5	297.1	847.2	1053.8	1578.3	1815.1	1838.3	1847.6	1894.0	1942.7	1959.0
37.5°	206.6	264.6	796.1	1009.7	1557.4	1771.0	1787.3	1803.5	1875.4	1933.4	1952.0
40°	185.7	236.8	735.8	960.9	1524.9	1717.6	1731.5	1757.0	1852.2	1919.5	1938.1
42.5°	169.4	213.5	670.8	909.8	1483.2	1657.3	1678.2	1715.2	1824.3	1896.3	1917.2
45°	155.5	190.3	601.2	840.2	1429.8	1594.6	1624.8	1675.8	1791.8	1861.5	1880.1
47.5°	141.6	174.1	529.2	768.2	1371.7	1531.9	1571.4	1629.4	1747.7	1815.1	1831.3
50°	130.0	157.8	457.2	691.7	1309.1	1464.6	1511.0	1571.4	1692.0	1754.8	1775.6
52.5°	120.7	143.9	390.0	615.1	1237.1	1394.9	1448.3	1511.0	1624.8	1685.1	1699.0
55°	111.4	132.3	331.9	533.8	1162.9	1320.7	1378.7	1439.1	1550.5	1601.5	1610.8
57.5°	106.8	123.0	283.2	457.2	1083.9	1237.1	1302.1	1357.9	1462.3	1501.7	1511.0
60°	99.8	116.0	246.0	392.2	998.1	1158.2	1213.9	1269.6	1357.9	1390.4	1397.3
62.5°	92.8	111.4	218.2	329.6	909.8	1065.4	1121.1	1172.2	1246.4	1269.6	1278.9
65°	88.2	106.8	197.3	283.2	819.4	967.9	1023.6	1067.7	1128.0	1151.3	1155.9
67.5°	83.5	102.1	181.0	243.7	728.8	870.4	912.2	953.9	1000.4	1023.6	1025.9
70°	76.6	97.5	167.1	215.9	636.0	759.0	793.8	837.9	875.1	886.6	893.6
72.5°	71.9	90.6	157.8	195.0	540.8	652.2	684.7	710.3	742.8	754.4	754.4
75°	65.0	81.2	148.5	174.1	443.4	533.8	561.7	587.2	612.8	617.4	610.4
77.5°	58.1	71.9	127.6	146.2	345.9	422.5	445.6	459.5	480.4	485.1	487.5
80°	48.7	62.7	99.8	113.7	250.7	311.0	327.3	338.8	357.5	357.5	362.1
82.5°	37.2	48.7	71.9	81.2	169.4	213.5	227.5	234.4	246.0	246.0	246.0
85°	23.2	30.2	46.5	53.4	102.1	130.0	139.3	141.6	150.9	153.2	153.2
87.5°	11.6	16.2	30.2	32.5	53.4	67.3	67.3	71.9	71.9	69.6	67.3
90°	5.4	9.8	14.2	15.3	24.0	35.6	41.4	36.8	27.6	20.7	20.7
92.5°	21.8	58.8	95.9	105.1	147.8	204.6	233.1	204.3	146.7	103.5	99.3
95°	52.3	120.1	187.8	204.7	363.5	575.3	681.2	607.9	461.2	351.2	338.8
97.5°	90.4	150.2	210.0	224.9	489.7	842.8	1019.4	973.0	880.3	810.8	787.1
100°	119.8	174.0	228.3	241.8	535.7	927.5	1123.3	1126.8	1133.5	1138.6	1110.3
102.5°	144.8	195.4	246.0	258.7	556.7	954.1	1152.8	1211.8	1329.9	1418.5	1394.3
105°	187.3	230.2	273.0	283.7	572.3	957.1	1149.5	1281.9	1546.6	1745.2	1732.2
107.5°	230.9	270.9	310.7	320.8	575.2	914.5	1084.2	1268.8	1638.1	1915.1	1918.3
110°	260.3	296.3	332.3	341.4	570.8	876.7	1029.7	1236.1	1649.0	1958.7	1972.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	289.1	323.5	357.8	366.4	571.0	843.8	980.2	1191.5	1614.1	1930.9	1951.8
115°	332.7	364.4	396.1	404.0	576.3	805.9	920.8	1124.3	1531.4	1836.7	1865.6
117.5°	375.7	404.5	433.4	440.6	587.1	782.3	880.0	1063.6	1431.0	1706.5	1738.5
120°	400.8	427.8	455.0	461.7	595.7	774.3	863.6	1031.5	1367.2	1618.9	1650.0
122.5°	425.3	452.7	480.0	486.8	608.2	770.1	851.1	1002.2	1304.5	1531.2	1561.9
125°	462.9	487.8	512.7	518.9	625.1	766.7	837.5	965.9	1222.6	1415.2	1443.5
127.5°	493.3	518.5	543.7	550.0	642.0	764.7	826.0	936.3	1156.7	1322.1	1345.9
130°	509.7	536.7	563.9	570.6	654.3	766.0	821.7	919.8	1116.1	1263.3	1285.4
132.5°	526.5	553.7	580.8	587.6	664.3	766.7	817.9	905.7	1081.5	1213.2	1233.0
135°	551.6	576.3	601.0	607.2	675.2	766.0	811.4	885.0	1032.1	1142.4	1159.4
137.5°	577.2	601.6	626.1	632.2	691.6	770.7	810.2	872.4	996.9	1090.1	1104.0
140°	598.5	621.0	643.4	649.1	701.5	771.5	806.5	860.2	967.6	1048.3	1061.3
142.5°	614.8	635.6	656.4	661.6	709.9	774.3	806.5	853.6	948.0	1018.8	1030.0
145°	639.8	658.0	676.1	680.7	720.8	774.3	801.0	839.7	916.9	974.7	983.2
147.5°	664.9	682.5	700.3	704.7	736.8	779.6	801.0	831.4	892.1	937.7	944.7
150°	681.2	697.2	713.2	717.1	745.1	782.4	801.0	826.7	877.9	916.4	922.1
152.5°	698.1	710.2	722.3	725.3	750.5	784.1	801.0	822.9	866.7	899.6	903.9
155°	723.1	732.1	741.0	743.3	762.5	788.2	801.0	818.4	853.3	879.4	882.3
157.5°	741.6	750.3	759.0	761.2	774.5	792.1	801.0	814.5	841.7	862.0	864.0
160°	754.2	761.0	767.7	769.4	779.9	794.0	801.0	812.6	835.9	853.3	854.4
162.5°	766.7	771.8	776.9	778.2	785.8	795.9	801.0	810.8	830.4	845.1	846.2
165°	780.3	784.8	789.5	790.6	794.1	798.7	801.0	808.0	822.1	832.6	833.8
167.5°	792.8	795.0	797.2	797.8	800.7	804.5	806.5	811.0	820.2	827.2	827.6
170°	801.0	803.2	805.4	805.9	806.1	806.4	806.5	811.0	820.2	827.2	827.2
172.5°	805.4	805.8	806.4	806.5	806.5	806.5	806.5	810.1	817.3	822.8	822.4
175°	811.4	811.4	811.4	811.4	809.7	807.5	806.5	808.7	813.4	816.8	816.8
177.5°	811.4	811.4	811.4	811.4	810.1	808.4	807.5	809.4	813.0	815.7	815.2
180°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	721.9	721.9
2.5°	770.6	766.0
5°	991.1	995.7
7.5°	1334.6	1332.3
10°	1659.5	1680.5
12.5°	1896.3	1901.0
15°	2040.2	2049.5
17.5°	2095.9	2098.3
20°	2098.3	2093.6
22.5°	2072.7	2068.0
25°	2042.6	2040.2
27.5°	2014.6	2017.0
30°	2003.1	2010.1
32.5°	2003.1	2014.6
35°	2007.7	2019.3
37.5°	2005.4	2019.3
40°	1996.1	2012.4
42.5°	1970.6	1982.1
45°	1931.1	1945.1
47.5°	1880.1	1889.3
50°	1815.1	1824.3
52.5°	1733.9	1736.1
55°	1636.4	1645.7
57.5°	1531.9	1534.2
60°	1415.8	1422.8
62.5°	1292.9	1292.9
65°	1162.9	1167.5
67.5°	1028.2	1039.8
70°	891.3	893.6
72.5°	756.7	756.7
75°	617.4	619.7
77.5°	485.1	485.1
80°	359.8	362.1
82.5°	248.4	253.0
85°	155.5	155.5
87.5°	71.9	65.0
90°	20.7	20.7
92.5°	82.9	66.4
95°	289.0	239.1
97.5°	692.2	597.3
100°	997.4	884.4
102.5°	1297.5	1200.7
105°	1680.1	1628.1
107.5°	1930.9	1943.4
110°	2026.5	2080.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2034.9	2118.2
115°	1981.0	2096.4
117.5°	1866.6	1994.6
120°	1774.4	1898.8
122.5°	1684.6	1807.3
125°	1556.5	1669.6
127.5°	1441.3	1536.7
130°	1373.4	1461.5
132.5°	1311.8	1390.7
135°	1227.4	1295.4
137.5°	1159.7	1215.4
140°	1113.3	1165.3
142.5°	1074.8	1119.6
145°	1017.1	1051.0
147.5°	972.7	1000.8
150°	944.9	967.6
152.5°	921.0	938.2
155°	893.7	905.0
157.5°	872.0	880.0
160°	859.1	863.6
162.5°	850.5	854.9
165°	838.3	842.9
167.5°	829.6	831.5
170°	827.2	827.2
172.5°	820.7	819.0
175°	816.8	816.8
177.5°	813.3	811.4
180°	811.4	811.4



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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	5.34	6.26	6.28	7.22	8.46	18.52	19.44	19.46	20.39	21.64
	3H	6.05	6.87	7.00	7.84	9.11	20.36	21.19	21.31	22.15	23.42
	4H	6.35	7.13	7.31	8.10	9.38	21.01	21.79	21.97	22.76	24.04
	6H	6.61	7.33	7.58	8.30	9.59	21.45	22.16	22.42	23.14	24.43
	8H	6.68	7.36	7.65	8.36	9.64	21.57	22.25	22.55	23.25	24.54
	12H	6.69	7.35	7.68	8.34	9.65	21.64	22.29	22.62	23.28	24.59
4H	2H	12.56	13.34	13.53	14.32	15.59	18.80	19.58	19.77	20.55	21.83
	3H	14.14	14.79	15.11	15.79	17.08	20.85	21.50	21.83	22.51	23.80
	4H	14.23	14.83	15.22	15.83	17.14	21.62	22.22	22.61	23.21	24.53
	6H	14.25	14.76	15.25	15.78	17.10	22.16	22.68	23.16	23.70	25.01
	8H	14.23	14.71	15.23	15.72	17.05	22.33	22.81	23.33	23.82	25.15
	12H	14.19	14.62	15.21	15.65	16.98	22.42	22.86	23.44	23.89	25.22
8H	4H	15.68	16.17	16.68	17.18	18.51	21.69	22.17	22.69	23.18	24.51
	6H	15.93	16.33	16.95	17.38	18.71	22.32	22.72	23.34	23.77	25.10
	8H	15.95	16.30	16.98	17.34	18.68	22.54	22.89	23.57	23.93	25.28
	12H	15.92	16.23	16.96	17.26	18.65	22.69	23.00	23.72	24.03	25.42
12H	4H	15.83	16.27	16.85	17.29	18.63	21.64	22.08	22.66	23.11	24.44
	6H	16.19	16.54	17.22	17.58	18.93	22.30	22.66	23.34	23.70	25.04
	8H	16.26	16.57	17.30	17.60	18.99	22.53	22.85	23.57	23.88	25.27