

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: P937246

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

**Test Information**

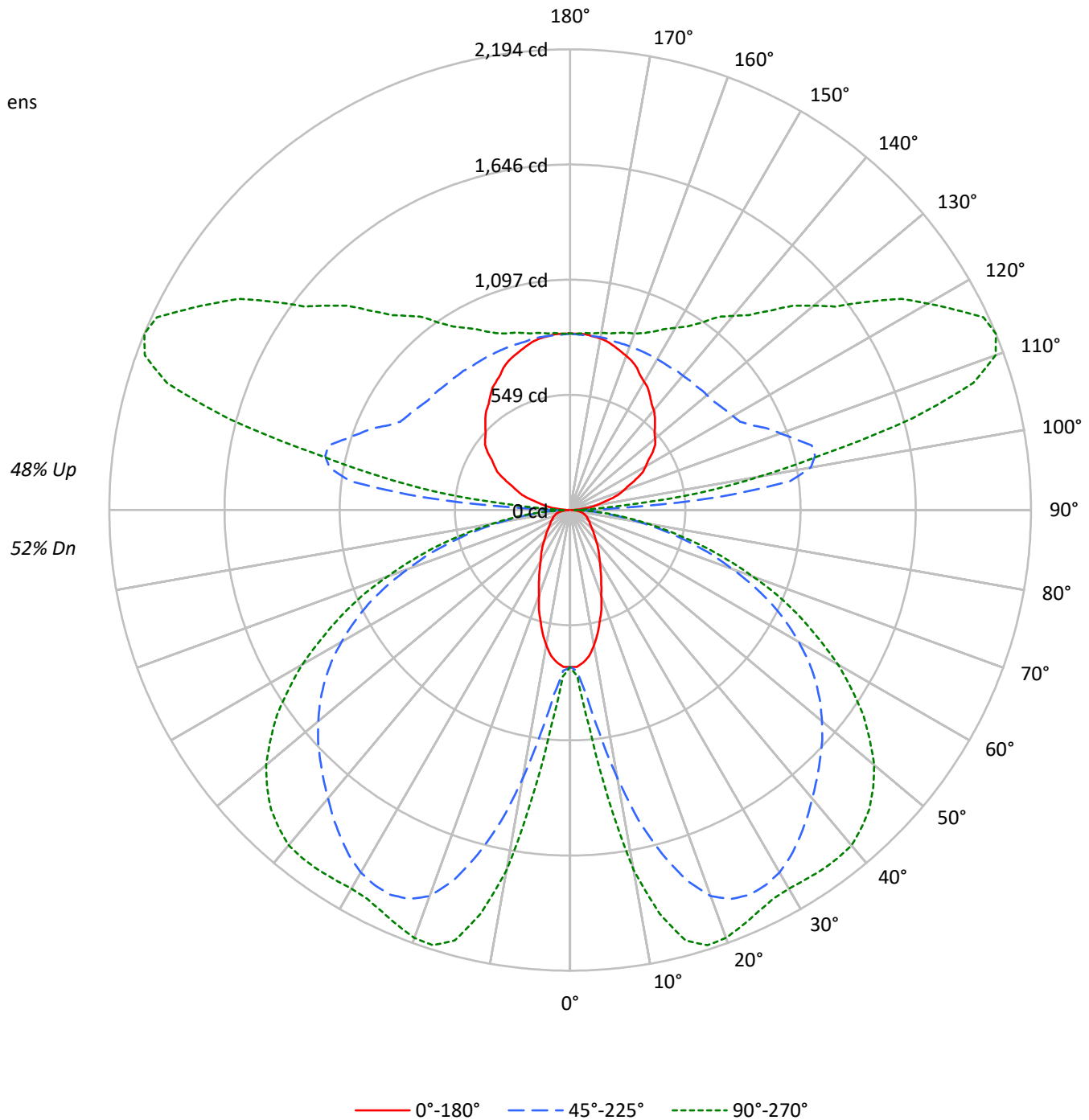
Test Method: LM-79-2019  
Report Number: P937246  
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-8-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11234.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 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 (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	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°	3469	3469	3469
5°	3388	4009	4662
10°	3073	5844	7729
15°	2612	7635	9333
20°	2127	8847	9512
25°	1774	9259	9319
30°	1496	9317	9301
35°	1323	9163	9541
40°	1153	8961	9790
45°	1044	8814	9829
50°	957	8681	9666
55°	916	8487	9238
60°	938	8115	8561
65°	976	7548	7632
70°	1040	6582	6447
75°	1153	5367	5031
80°	1260	3722	3390
85°	1118	1976	1736

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9829 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	0.9
10°-20°	428.6	3.8
20°-30°	749.7	6.7
30°-40°	965.1	8.6
40°-50°	1078.0	9.6
50°-60°	1032.4	9.2
60°-70°	818.2	7.3
70°-80°	481.1	4.3
80°-90°	136.9	1.2
90°-100°	409.6	3.6
100°-110°	1076.9	9.6
110°-120°	1116.6	9.9
120°-130°	895.6	8.0
130°-140°	702.8	6.3
140°-150°	539.4	4.8
150°-160°	388.5	3.5
160°-170°	237.7	2.1
170°-180°	80.3	0.7
0°-30°	1275.0	11.3
0°-40°	2240.1	19.9
0°-60°	4350.5	38.7
0°-90°	5786.7	51.5
90°-120°	2603.1	23.2
90°-150°	4740.9	42.2
90°-180°	5447.0	48.5
0°-180°	11234.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	728	781	880	995	1031	67
15°	546	1007	1697	2058	2123	152
25°	349	1142	2022	2111	2113	161
35°	236	1091	1904	2012	2091	147
45°	161	870	1683	1928	2014	125
55°	115	553	1428	1659	1704	105
65°	91	293	1060	1192	1209	90
75°	67	180	582	640	642	70
85°	24	55	144	159	161	25
90°	6	16	43	22	22	6
95°	54	212	706	364	248	60
105°	194	294	1190	1807	1686	206
115°	345	418	954	1902	2171	340
125°	479	537	867	1466	1729	426
135°	571	629	840	1183	1342	442
145°	663	705	830	1010	1088	415
155°	749	770	830	911	937	344
165°	808	819	830	862	873	228
175°	840	840	835	846	846	80
180°	840	840	840	840	840	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6
2.5°	747.6	747.6	752.5	754.8	759.6	762.0	766.8	771.6	786.1	788.5	793.3
5°	728.3	738.0	769.3	781.3	814.9	860.6	879.8	911.1	975.9	995.2	1007.2
7.5°	699.5	721.2	798.1	817.3	901.5	1021.6	1072.1	1139.4	1242.8	1293.3	1334.2
10°	653.8	699.5	836.6	882.3	1019.2	1201.9	1295.7	1389.5	1545.7	1615.4	1641.8
12.5°	603.4	677.9	877.4	939.9	1137.0	1403.8	1516.8	1620.2	1798.1	1891.9	1906.2
15°	545.7	646.7	915.9	1007.2	1262.0	1572.1	1697.1	1824.5	1990.4	2057.7	2074.5
17.5°	495.2	622.6	951.9	1048.1	1358.2	1723.6	1851.0	1956.7	2091.3	2137.0	2149.1
20°	432.7	584.2	975.9	1100.9	1459.1	1834.2	1956.7	2038.5	2129.8	2158.7	2163.5
22.5°	387.1	543.2	990.4	1120.2	1526.5	1901.5	2004.8	2069.7	2132.3	2141.8	2144.3
25°	348.6	497.6	988.0	1141.9	1584.1	1942.3	2021.7	2069.7	2105.8	2110.6	2110.6
27.5°	312.5	447.1	978.4	1146.7	1627.4	1952.0	2014.5	2048.1	2065.0	2074.5	2074.5
30°	281.3	399.1	954.3	1137.0	1646.6	1942.3	1992.8	2009.7	2026.5	2040.9	2048.1
32.5°	257.2	353.4	918.3	1117.8	1649.1	1918.3	1954.4	1964.0	1988.0	2021.7	2033.7
35°	235.6	307.7	877.4	1091.4	1634.6	1879.9	1903.9	1913.5	1961.5	2012.0	2028.9
37.5°	213.9	274.1	824.5	1045.7	1613.0	1834.2	1851.0	1867.8	1942.3	2002.4	2021.7
40°	192.3	245.2	762.0	995.2	1579.3	1778.9	1793.3	1819.7	1918.3	1988.0	2007.2
42.5°	175.5	221.1	694.7	942.3	1536.1	1716.4	1738.0	1776.4	1889.4	1964.0	1985.6
45°	161.1	197.1	622.6	870.2	1480.8	1651.4	1682.7	1735.6	1855.8	1927.9	1947.2
47.5°	146.6	180.3	548.1	795.7	1420.7	1586.6	1627.4	1687.6	1810.1	1879.9	1896.7
50°	134.6	163.5	473.6	716.3	1355.8	1516.8	1564.9	1627.4	1752.4	1817.4	1838.9
52.5°	125.0	149.0	403.9	637.0	1281.2	1444.7	1500.0	1564.9	1682.7	1745.2	1759.6
55°	115.3	137.0	343.8	552.9	1204.4	1367.8	1427.9	1490.4	1605.8	1658.6	1668.3
57.5°	110.6	127.4	293.3	473.6	1122.6	1281.2	1348.5	1406.3	1514.5	1555.3	1564.9
60°	103.3	120.2	254.8	406.2	1033.7	1199.5	1257.2	1314.9	1406.3	1440.0	1447.1
62.5°	96.1	115.3	226.0	341.4	942.3	1103.4	1161.1	1214.0	1290.9	1314.9	1324.5
65°	91.3	110.6	204.3	293.3	848.6	1002.4	1060.1	1105.8	1168.2	1192.4	1197.2
67.5°	86.5	105.8	187.5	252.4	754.8	901.5	944.7	988.0	1036.1	1060.1	1062.5
70°	79.3	101.0	173.1	223.6	658.7	786.1	822.1	867.8	906.3	918.3	925.5
72.5°	74.5	93.8	163.5	201.9	560.1	675.5	709.2	735.6	769.3	781.3	781.3
75°	67.3	84.1	153.8	180.3	459.2	552.9	581.7	608.2	634.7	639.5	632.2
77.5°	60.1	74.5	132.2	151.5	358.2	437.5	461.5	475.9	497.6	502.4	504.8
80°	50.5	64.9	103.3	117.8	259.6	322.1	338.9	350.9	370.2	370.2	375.0
82.5°	38.5	50.5	74.5	84.1	175.5	221.1	235.6	242.8	254.8	254.8	254.8
85°	24.0	31.3	48.1	55.3	105.8	134.6	144.3	146.6	156.3	158.6	158.6
87.5°	12.0	16.8	31.3	33.7	55.3	69.7	69.7	74.5	74.5	72.1	69.7
90°	5.6	10.2	14.7	15.8	24.8	36.8	42.8	38.1	28.6	21.5	21.5
92.5°	22.6	60.9	99.3	108.9	153.1	211.9	241.4	211.6	151.9	107.2	102.9
95°	54.1	124.3	194.5	212.0	376.5	595.8	705.5	629.6	477.7	363.8	350.8
97.5°	93.6	155.5	217.5	233.0	507.2	872.9	1055.7	1007.7	911.7	839.8	815.2
100°	124.1	180.2	236.4	250.4	554.8	960.6	1163.4	1167.0	1174.0	1179.3	1150.0
102.5°	150.0	202.4	254.8	267.9	576.5	988.1	1193.9	1255.0	1377.4	1469.2	1444.0
105°	194.0	238.4	282.7	293.8	592.7	991.2	1190.5	1327.6	1601.8	1807.4	1794.0
107.5°	239.1	280.5	321.8	332.2	595.7	947.1	1122.9	1314.1	1696.6	1983.5	1986.7
110°	269.6	306.9	344.2	353.6	591.2	908.0	1066.5	1280.2	1707.8	2028.6	2042.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.5	335.0	370.6	379.5	591.4	873.9	1015.2	1234.0	1671.6	1999.8	2021.4
115°	344.6	377.4	410.2	418.4	596.8	834.7	953.7	1164.4	1586.0	1902.2	1932.2
117.5°	389.1	419.0	448.8	456.3	608.0	810.2	911.4	1101.6	1482.1	1767.4	1800.5
120°	415.1	443.1	471.2	478.2	616.9	801.9	894.4	1068.3	1415.9	1676.6	1708.8
122.5°	440.4	468.8	497.1	504.2	629.9	797.6	881.4	1038.0	1351.1	1585.9	1617.6
125°	479.4	505.2	531.0	537.4	647.4	794.0	867.3	1000.3	1266.2	1465.7	1495.0
127.5°	510.9	537.0	563.1	569.6	664.9	792.0	855.5	969.7	1198.0	1369.3	1393.9
130°	527.9	555.9	584.0	591.0	677.7	793.3	851.1	952.7	1156.0	1308.4	1331.3
132.5°	545.3	573.4	601.5	608.5	688.0	794.0	847.1	938.0	1120.0	1256.5	1276.9
135°	571.3	596.8	622.5	628.8	699.3	793.3	840.3	916.6	1068.9	1183.2	1200.8
137.5°	597.8	623.1	648.4	654.8	716.2	798.2	839.1	903.5	1032.4	1129.0	1143.4
140°	619.8	643.1	666.4	672.2	726.5	799.0	835.2	890.9	1002.1	1085.7	1099.1
142.5°	636.7	658.3	679.9	685.2	735.3	801.9	835.2	884.1	981.9	1055.2	1066.7
145°	662.7	681.5	700.2	705.0	746.5	801.9	829.6	869.6	949.6	1009.5	1018.2
147.5°	688.6	706.9	725.3	729.8	763.1	807.4	829.6	861.1	923.9	971.1	978.4
150°	705.5	722.1	738.6	742.7	771.6	810.3	829.6	856.2	909.3	949.1	955.0
152.5°	723.0	735.5	748.1	751.2	777.3	812.1	829.6	852.2	897.6	931.7	936.1
155°	748.9	758.2	767.5	769.8	789.7	816.3	829.6	847.6	883.7	910.8	913.7
157.5°	768.1	777.1	786.1	788.4	802.1	820.4	829.6	843.6	871.7	892.7	894.8
160°	781.1	788.1	795.1	796.8	807.8	822.3	829.6	841.6	865.7	883.7	884.9
162.5°	794.0	799.3	804.6	805.9	813.9	824.3	829.6	839.8	860.1	875.3	876.3
165°	808.1	812.9	817.7	818.9	822.4	827.2	829.6	836.9	851.4	862.3	863.5
167.5°	821.1	823.4	825.7	826.2	829.2	833.2	835.2	840.0	849.5	856.7	857.2
170°	829.6	831.9	834.1	834.7	834.9	835.1	835.2	840.0	849.5	856.7	856.7
172.5°	834.1	834.6	835.1	835.2	835.2	835.2	835.2	839.0	846.5	852.1	851.7
175°	840.3	840.3	840.3	840.3	838.6	836.3	835.2	837.6	842.4	846.0	846.0
177.5°	840.3	840.3	840.3	840.3	839.0	837.2	836.3	838.2	842.0	844.8	844.3
180°	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3	840.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	747.6	747.6
2.5°	798.1	793.3
5°	1026.4	1031.3
7.5°	1382.2	1379.8
10°	1718.8	1740.4
12.5°	1964.0	1968.8
15°	2113.0	2122.6
17.5°	2170.7	2173.1
20°	2173.1	2168.3
22.5°	2146.7	2141.8
25°	2115.5	2113.0
27.5°	2086.5	2089.0
30°	2074.5	2081.8
32.5°	2074.5	2086.5
35°	2079.3	2091.3
37.5°	2077.0	2091.3
40°	2067.3	2084.2
42.5°	2040.9	2052.9
45°	2000.0	2014.5
47.5°	1947.2	1956.7
50°	1879.9	1889.4
52.5°	1795.7	1798.1
55°	1694.7	1704.4
57.5°	1586.6	1589.0
60°	1466.3	1473.6
62.5°	1339.0	1339.0
65°	1204.4	1209.2
67.5°	1064.9	1076.9
70°	923.1	925.5
72.5°	783.7	783.7
75°	639.5	641.8
77.5°	502.4	502.4
80°	372.6	375.0
82.5°	257.2	262.1
85°	161.1	161.1
87.5°	74.5	67.3
90°	21.5	21.5
92.5°	85.9	68.8
95°	299.3	247.6
97.5°	716.9	618.6
100°	1033.0	915.9
102.5°	1343.8	1243.6
105°	1740.0	1686.2
107.5°	1999.7	2012.8
110°	2098.8	2154.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2107.5	2193.8
115°	2051.7	2171.2
117.5°	1933.2	2065.8
120°	1837.7	1966.5
122.5°	1744.7	1871.8
125°	1612.1	1729.1
127.5°	1492.7	1591.5
130°	1422.4	1513.6
132.5°	1358.6	1440.3
135°	1271.2	1341.6
137.5°	1201.1	1258.8
140°	1153.1	1206.9
142.5°	1113.1	1159.5
145°	1053.4	1088.5
147.5°	1007.4	1036.5
150°	978.6	1002.1
152.5°	953.8	971.7
155°	925.6	937.3
157.5°	903.1	911.4
160°	889.7	894.4
162.5°	880.9	885.4
165°	868.2	873.0
167.5°	859.2	861.2
170°	856.7	856.7
172.5°	850.0	848.2
175°	846.0	846.0
177.5°	842.3	840.3
180°	840.3	840.3



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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	5.46	6.38	6.40	7.34	8.58	18.64	19.56	19.58	20.52	21.76
	3H	6.17	7.00	7.12	7.96	9.23	20.49	21.31	21.43	22.28	23.55
	4H	6.47	7.25	7.44	8.23	9.50	21.13	21.91	22.09	22.89	24.16
	6H	6.73	7.45	7.70	8.42	9.72	21.57	22.29	22.54	23.26	24.55
	8H	6.80	7.48	7.78	8.48	9.77	21.69	22.38	22.67	23.37	24.66
	12H	6.82	7.47	7.80	8.46	9.77	21.76	22.41	22.74	23.40	24.72
4H	2H	12.69	13.47	13.65	14.44	15.71	18.92	19.70	19.89	20.67	21.95
	3H	14.26	14.91	15.24	15.91	17.21	20.97	21.63	21.95	22.63	23.92
	4H	14.36	14.95	15.34	15.95	17.26	21.74	22.34	22.73	23.34	24.65
	6H	14.37	14.89	15.37	15.90	17.22	22.29	22.80	23.28	23.82	25.13
	8H	14.35	14.83	15.35	15.84	17.17	22.45	22.93	23.45	23.94	25.27
	12H	14.31	14.74	15.33	15.77	17.11	22.55	22.98	23.57	24.01	25.34
8H	4H	15.81	16.29	16.81	17.30	18.63	21.81	22.29	22.81	23.30	24.63
	6H	16.05	16.45	17.08	17.50	18.83	22.44	22.84	23.47	23.89	25.22
	8H	16.07	16.42	17.10	17.46	18.81	22.66	23.01	23.69	24.05	25.40
	12H	16.04	16.35	17.08	17.38	18.77	22.81	23.12	23.85	24.15	25.54
12H	4H	15.95	16.39	16.97	17.42	18.75	21.76	22.20	22.78	23.23	24.56
	6H	16.31	16.66	17.34	17.70	19.05	22.42	22.78	23.46	23.82	25.16
	8H	16.38	16.69	17.42	17.73	19.11	22.66	22.97	23.70	24.00	25.39