

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: P936713

Luminaire Tested: SQ4-FB-050U-075D-835-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936713
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

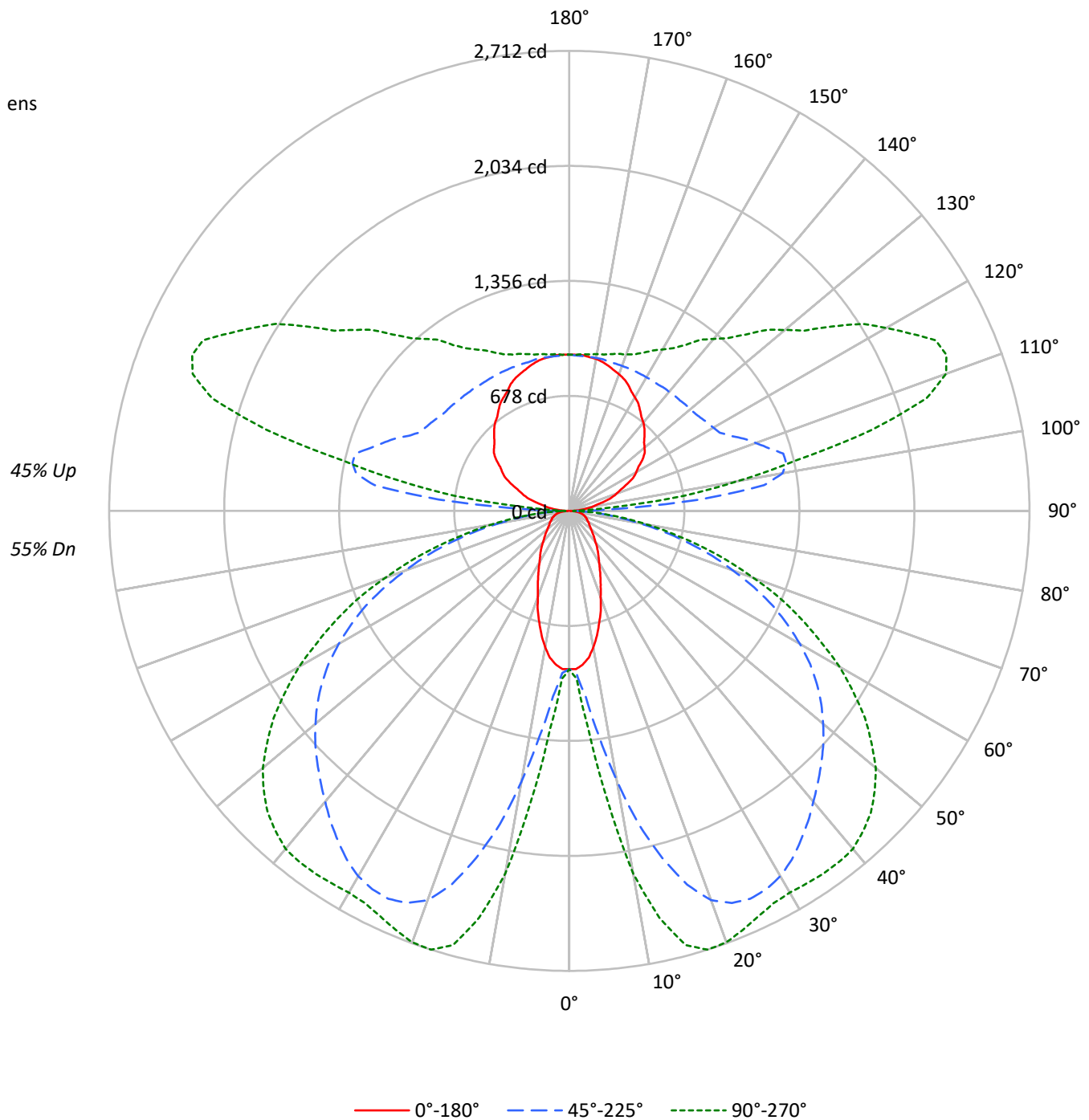
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13193.9 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (A_{in}): 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	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2886	2886	2886
5°	2820	3336	3879
10°	2559	4865	6431
15°	2176	6357	7765
20°	1772	7369	7914
25°	1479	7713	7753
30°	1248	7764	7739
35°	1104	7637	7939
40°	962	7471	8146
45°	872	7351	8178
50°	800	7243	8042
55°	767	7084	7686
60°	787	6776	7123
65°	820	6306	6350
70°	875	5503	5364
75°	974	4491	4186
80°	1072	3118	2820
85°	972	1657	1444

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8178 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.7	0.9
10°-20°	534.9	4.1
20°-30°	935.6	7.1
30°-40°	1204.5	9.1
40°-50°	1345.3	10.2
50°-60°	1288.5	9.8
60°-70°	1021.2	7.7
70°-80°	600.4	4.6
80°-90°	170.3	1.3
90°-100°	449.1	3.4
100°-110°	1180.7	8.9
110°-120°	1224.2	9.3
120°-130°	982.0	7.4
130°-140°	770.5	5.8
140°-150°	591.4	4.5
150°-160°	425.9	3.2
160°-170°	260.6	2.0
170°-180°	88.0	0.7
0°-30°	1591.3	12.1
0°-40°	2795.7	21.2
0°-60°	5429.6	41.2
0°-90°	7221.5	54.7
90°-120°	2854.0	21.6
90°-150°	5197.9	39.4
90°-180°	5972.0	45.3
0°-180°	13193.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	909	975	1098	1242	1287	84
15°	681	1257	2118	2568	2649	190
25°	435	1425	2523	2634	2637	200
35°	294	1362	2376	2511	2610	184
45°	201	1086	2100	2406	2514	155
55°	144	690	1782	2070	2127	131
65°	114	366	1323	1488	1509	113
75°	84	225	726	798	801	88
85°	30	69	180	198	201	32
90°	6	17	47	24	24	7
95°	59	232	774	399	271	66
105°	213	322	1305	1982	1849	226
115°	378	459	1046	2086	2381	373
125°	526	589	951	1607	1896	467
135°	626	689	921	1297	1471	485
145°	726	773	910	1107	1193	455
155°	821	844	910	999	1028	377
165°	886	898	910	945	957	250
175°	921	921	916	928	928	87
180°	921	921	921	921	921	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0	933.0
2.5°	933.0	933.0	939.0	942.0	948.0	951.0	957.0	963.0	981.0	984.0	990.0
5°	909.0	921.0	960.0	975.0	1017.0	1074.0	1098.0	1137.1	1218.1	1242.1	1257.1
7.5°	873.0	900.0	996.0	1020.0	1125.0	1275.1	1338.1	1422.1	1551.1	1614.1	1665.1
10°	816.0	873.0	1044.0	1101.0	1272.1	1500.1	1617.1	1734.1	1929.1	2016.1	2049.1
12.5°	753.0	846.0	1095.0	1173.1	1419.1	1752.1	1893.1	2022.1	2244.1	2361.1	2379.1
15°	681.0	807.0	1143.1	1257.1	1575.1	1962.1	2118.1	2277.1	2484.1	2568.1	2589.1
17.5°	618.0	777.0	1188.1	1308.1	1695.1	2151.1	2310.1	2442.1	2610.1	2667.1	2682.1
20°	540.0	729.0	1218.1	1374.1	1821.1	2289.1	2442.1	2544.1	2658.1	2694.1	2700.1
22.5°	483.0	678.0	1236.1	1398.1	1905.1	2373.1	2502.1	2583.1	2661.1	2673.1	2676.1
25°	435.0	621.0	1233.1	1425.1	1977.1	2424.1	2523.1	2583.1	2628.1	2634.1	2634.1
27.5°	390.0	558.0	1221.1	1431.1	2031.1	2436.1	2514.1	2556.1	2577.1	2589.1	2589.1
30°	351.0	498.0	1191.1	1419.1	2055.1	2424.1	2487.1	2508.1	2529.1	2547.1	2556.1
32.5°	321.0	441.0	1146.1	1395.1	2058.1	2394.1	2439.1	2451.1	2481.1	2523.1	2538.1
35°	294.0	384.0	1095.0	1362.1	2040.1	2346.1	2376.1	2388.1	2448.1	2511.1	2532.1
37.5°	267.0	342.0	1029.0	1305.1	2013.1	2289.1	2310.1	2331.1	2424.1	2499.1	2523.1
40°	240.0	306.0	951.0	1242.1	1971.1	2220.1	2238.1	2271.1	2394.1	2481.1	2505.1
42.5°	219.0	276.0	867.0	1176.1	1917.1	2142.1	2169.1	2217.1	2358.1	2451.1	2478.1
45°	201.0	246.0	777.0	1086.0	1848.1	2061.1	2100.1	2166.1	2316.1	2406.1	2430.1
47.5°	183.0	225.0	684.0	993.0	1773.1	1980.1	2031.1	2106.1	2259.1	2346.1	2367.1
50°	168.0	204.0	591.0	894.0	1692.1	1893.1	1953.1	2031.1	2187.1	2268.1	2295.1
52.5°	156.0	186.0	504.0	795.0	1599.1	1803.1	1872.1	1953.1	2100.1	2178.1	2196.1
55°	144.0	171.0	429.0	690.0	1503.1	1707.1	1782.1	1860.1	2004.1	2070.1	2082.1
57.5°	138.0	159.0	366.0	591.0	1401.1	1599.1	1683.1	1755.1	1890.1	1941.1	1953.1
60°	129.0	150.0	318.0	507.0	1290.1	1497.1	1569.1	1641.1	1755.1	1797.1	1806.1
62.5°	120.0	144.0	282.0	426.0	1176.1	1377.1	1449.1	1515.1	1611.1	1641.1	1653.1
65°	114.0	138.0	255.0	366.0	1059.0	1251.1	1323.1	1380.1	1458.1	1488.1	1494.1
67.5°	108.0	132.0	234.0	315.0	942.0	1125.0	1179.1	1233.1	1293.1	1323.1	1326.1
70°	99.0	126.0	216.0	279.0	822.0	981.0	1026.0	1083.0	1131.0	1146.1	1155.1
72.5°	93.0	117.0	204.0	252.0	699.0	843.0	885.0	918.0	960.0	975.0	975.0
75°	84.0	105.0	192.0	225.0	573.0	690.0	726.0	759.0	792.0	798.0	789.0
77.5°	75.0	93.0	165.0	189.0	447.0	546.0	576.0	594.0	621.0	627.0	630.0
80°	63.0	81.0	129.0	147.0	324.0	402.0	423.0	438.0	462.0	462.0	468.0
82.5°	48.0	63.0	93.0	105.0	219.0	276.0	294.0	303.0	318.0	318.0	318.0
85°	30.0	39.0	60.0	69.0	132.0	168.0	180.0	183.0	195.0	198.0	198.0
87.5°	15.0	21.0	39.0	42.0	69.0	87.0	87.0	93.0	93.0	90.0	87.0
90°	6.2	11.1	16.1	17.3	27.2	40.4	47.0	41.8	31.3	23.5	23.5
92.5°	24.7	66.7	108.8	119.3	167.7	232.3	264.6	231.9	166.5	117.5	112.8
95°	59.4	136.3	213.3	232.5	412.8	653.3	773.5	690.2	523.7	398.8	384.6
97.5°	102.6	170.5	238.4	255.4	556.1	957.0	1157.5	1104.9	999.6	920.7	893.8
100°	136.0	197.6	259.1	274.5	608.2	1053.1	1275.6	1279.4	1287.1	1292.9	1260.8
102.5°	164.5	221.9	279.3	293.7	632.1	1083.4	1309.0	1376.0	1510.1	1610.7	1583.2
105°	212.7	261.3	309.9	322.1	649.8	1086.8	1305.3	1455.6	1756.2	1981.7	1966.9
107.5°	262.2	307.5	352.9	364.2	653.2	1038.5	1231.1	1440.8	1860.2	2174.7	2178.3
110°	295.6	336.5	377.5	387.7	648.2	995.6	1169.3	1403.7	1872.5	2224.1	2239.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	328.3	367.3	406.3	416.1	648.4	958.1	1113.0	1352.9	1832.7	2192.6	2216.2
115°	377.8	413.8	449.8	458.8	654.4	915.2	1045.6	1276.7	1738.9	2085.6	2118.4
117.5°	426.6	459.3	492.0	500.2	666.5	888.3	999.2	1207.8	1624.9	1937.8	1974.1
120°	455.1	485.9	516.6	524.3	676.4	879.3	980.7	1171.3	1552.4	1838.3	1873.6
122.5°	482.9	514.0	545.0	552.8	690.7	874.5	966.4	1138.0	1481.3	1738.7	1773.5
125°	525.6	553.9	582.2	589.3	709.9	870.6	951.0	1096.8	1388.3	1607.0	1639.1
127.5°	560.2	588.8	617.4	624.5	729.0	868.3	938.0	1063.2	1313.5	1501.3	1528.4
130°	578.8	609.6	640.3	648.0	743.0	869.7	933.1	1044.5	1267.4	1434.5	1459.5
132.5°	597.9	628.7	659.5	667.2	754.4	870.6	928.7	1028.5	1228.0	1377.6	1400.0
135°	626.4	654.4	682.4	689.4	766.7	869.8	921.3	1004.9	1172.0	1297.3	1316.6
137.5°	655.4	683.2	711.0	717.9	785.3	875.2	920.1	990.7	1132.0	1237.9	1253.7
140°	679.5	705.1	730.6	737.0	796.6	876.0	915.7	976.7	1098.8	1190.3	1205.1
142.5°	698.1	721.7	745.4	751.3	806.1	879.2	915.7	969.3	1076.5	1156.9	1169.6
145°	726.5	747.1	767.7	772.9	818.5	879.2	909.6	953.4	1041.1	1106.8	1116.4
147.5°	755.0	775.0	795.1	800.1	836.6	885.3	909.6	944.1	1013.1	1064.8	1072.8
150°	773.5	791.6	809.8	814.3	846.1	888.4	909.6	938.7	996.9	1040.6	1047.1
152.5°	792.7	806.4	820.2	823.6	852.3	890.5	909.6	934.5	984.2	1021.5	1026.4
155°	821.1	831.3	841.5	844.0	865.9	895.0	909.6	929.4	968.9	998.6	1001.8
157.5°	842.2	852.1	861.9	864.4	879.5	899.6	909.6	925.0	955.7	978.8	981.1
160°	856.4	864.1	871.8	873.7	885.7	901.6	909.6	922.8	949.1	968.9	970.2
162.5°	870.6	876.4	882.2	883.6	892.3	903.8	909.6	920.7	942.9	959.6	960.8
165°	886.1	891.3	896.5	897.8	901.7	907.0	909.6	917.6	933.5	945.4	946.7
167.5°	900.3	902.7	905.2	905.8	909.1	913.5	915.7	920.9	931.4	939.2	939.8
170°	909.6	912.0	914.5	915.1	915.3	915.6	915.7	920.9	931.4	939.2	939.2
172.5°	914.5	915.0	915.6	915.7	915.7	915.7	915.7	919.8	928.1	934.3	933.8
175°	921.3	921.3	921.3	921.3	919.4	916.9	915.7	918.3	923.6	927.5	927.5
177.5°	921.3	921.3	921.3	921.3	919.9	918.0	917.0	919.1	923.2	926.3	925.7
180°	921.3	921.3	921.3	921.3	921.3	921.3	921.3	921.3	921.3	921.3	921.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	933.0	933.0
2.5°	996.0	990.0
5°	1281.1	1287.1
7.5°	1725.1	1722.1
10°	2145.1	2172.1
12.5°	2451.1	2457.1
15°	2637.1	2649.1
17.5°	2709.1	2712.1
20°	2712.1	2706.1
22.5°	2679.1	2673.1
25°	2640.1	2637.1
27.5°	2604.1	2607.1
30°	2589.1	2598.1
32.5°	2589.1	2604.1
35°	2595.1	2610.1
37.5°	2592.1	2610.1
40°	2580.1	2601.1
42.5°	2547.1	2562.1
45°	2496.1	2514.1
47.5°	2430.1	2442.1
50°	2346.1	2358.1
52.5°	2241.1	2244.1
55°	2115.1	2127.1
57.5°	1980.1	1983.1
60°	1830.1	1839.1
62.5°	1671.1	1671.1
65°	1503.1	1509.1
67.5°	1329.1	1344.1
70°	1152.1	1155.1
72.5°	978.0	978.0
75°	798.0	801.0
77.5°	627.0	627.0
80°	465.0	468.0
82.5°	321.0	327.0
85°	201.0	201.0
87.5°	93.0	84.0
90°	23.5	23.5
92.5°	94.1	75.4
95°	328.0	271.4
97.5°	786.0	678.3
100°	1132.5	1004.2
102.5°	1473.3	1363.4
105°	1907.9	1848.8
107.5°	2192.5	2206.8
110°	2301.0	2362.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2310.8	2405.3
115°	2249.5	2380.6
117.5°	2119.5	2264.9
120°	2014.9	2156.1
122.5°	1912.9	2052.2
125°	1767.4	1895.8
127.5°	1636.6	1744.9
130°	1559.6	1659.6
132.5°	1489.6	1579.2
135°	1393.8	1471.0
137.5°	1316.9	1380.1
140°	1264.1	1323.2
142.5°	1220.5	1271.3
145°	1154.9	1193.4
147.5°	1104.6	1136.5
150°	1072.9	1098.8
152.5°	1045.9	1065.4
155°	1014.8	1027.7
157.5°	990.1	999.2
160°	975.5	980.7
162.5°	965.8	970.8
165°	952.0	957.2
167.5°	942.0	944.2
170°	939.2	939.2
172.5°	931.9	930.0
175°	927.5	927.5
177.5°	923.5	921.3
180°	921.3	921.3



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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	5.11	6.06	6.02	6.99	8.19	18.31	19.25	19.21	20.19	21.38
	3H	5.82	6.68	6.74	7.62	8.84	20.16	21.01	21.08	21.95	23.17
	4H	6.13	6.94	7.06	7.88	9.11	20.81	21.62	21.74	22.56	23.80
	6H	6.38	7.13	7.33	8.08	9.33	21.25	22.00	22.19	22.95	24.19
	8H	6.45	7.16	7.40	8.13	9.38	21.37	22.09	22.33	23.06	24.30
	12H	6.47	7.15	7.43	8.11	9.38	21.45	22.13	22.41	23.09	24.36
4H	2H	12.35	13.16	13.29	14.10	15.33	18.59	19.40	19.53	20.34	21.58
	3H	13.92	14.60	14.87	15.58	16.82	20.65	21.33	21.60	22.30	23.55
	4H	14.02	14.64	14.98	15.61	16.88	21.42	22.04	22.38	23.01	24.28
	6H	14.04	14.57	15.01	15.57	16.84	21.97	22.51	22.94	23.50	24.77
	8H	14.02	14.52	14.99	15.50	16.79	22.14	22.64	23.11	23.63	24.91
	12H	13.98	14.43	14.97	15.43	16.72	22.24	22.69	23.23	23.70	24.99
8H	4H	15.48	15.98	16.45	16.97	18.25	21.49	21.99	22.47	22.98	24.26
	6H	15.72	16.14	16.72	17.17	18.45	22.13	22.54	23.13	23.57	24.86
	8H	15.74	16.11	16.75	17.13	18.43	22.35	22.72	23.36	23.74	25.04
	12H	15.71	16.04	16.73	17.05	18.39	22.50	22.83	23.52	23.84	25.18
12H	4H	15.63	16.08	16.62	17.08	18.37	21.45	21.90	22.44	22.90	24.19
	6H	15.98	16.35	16.99	17.37	18.67	22.11	22.48	23.12	23.50	24.80
	8H	16.06	16.38	17.07	17.39	18.74	22.35	22.67	23.36	23.68	25.03