

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: P937368

Luminaire Tested: SQ4-FB-075U-125D-93050-1D-UNV-STD-W-8-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937368
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-93050-1D-UNV-STD-W-8-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

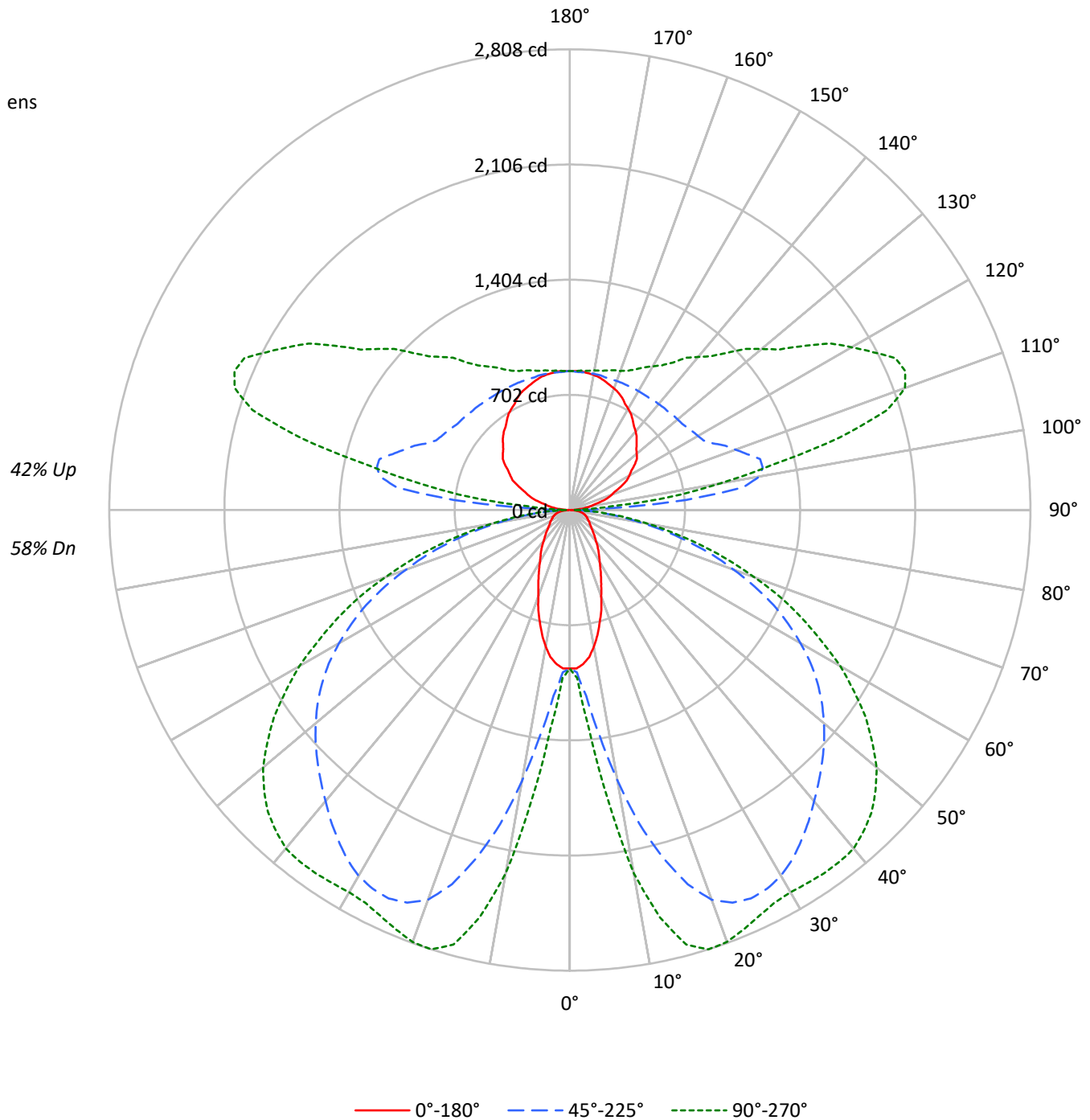
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12971.6 lumens
Efficiency: N/A
Efficacy: 104.6 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°	4482	4482	4482
5°	4378	5180	6024
10°	3971	7551	9987
15°	3375	9865	12059
20°	2748	11432	12290
25°	2292	11963	12041
30°	1933	12039	12018
35°	1709	11839	12328
40°	1489	11579	12650
45°	1349	11388	12700
50°	1237	11217	12489
55°	1185	10967	11936
60°	1213	10485	11061
65°	1262	9753	9861
70°	1344	8505	8330
75°	1490	6935	6501
80°	1627	4809	4380
85°	1444	2552	2242

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12700 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	1.0
10°-20°	553.8	4.3
20°-30°	968.7	7.5
30°-40°	1247.0	9.6
40°-50°	1392.8	10.7
50°-60°	1334.0	10.3
60°-70°	1057.2	8.2
70°-80°	621.7	4.8
80°-90°	175.9	1.4
90°-100°	413.2	3.2
100°-110°	1086.4	8.4
110°-120°	1126.5	8.7
120°-130°	903.6	7.0
130°-140°	709.0	5.5
140°-150°	544.2	4.2
150°-160°	391.9	3.0
160°-170°	239.8	1.8
170°-180°	81.0	0.6
0°-30°	1647.4	12.7
0°-40°	2894.4	22.3
0°-60°	5621.2	43.3
0°-90°	7476.0	57.6
90°-120°	2626.1	20.2
90°-150°	4782.9	36.9
90°-180°	5496.0	42.4
0°-180°	12971.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	966	966	966	966	966	
5°	941	1010	1137	1286	1332	87
15°	705	1301	2193	2659	2743	196
25°	450	1475	2612	2727	2730	207
35°	304	1410	2460	2600	2702	190
45°	208	1124	2174	2491	2603	161
55°	149	714	1845	2143	2202	136
65°	118	379	1370	1541	1562	117
75°	87	233	752	826	829	91
85°	31	71	186	205	208	33
90°	6	16	43	22	22	7
95°	55	214	712	367	250	61
105°	196	296	1201	1824	1701	207
115°	348	422	962	1919	2190	343
125°	484	542	875	1479	1744	429
135°	576	634	848	1194	1354	446
145°	668	711	837	1018	1098	419
155°	756	777	837	919	946	347
165°	815	826	837	870	881	230
175°	848	848	843	854	854	80
180°	848	848	848	848	848	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0	966.0
2.5°	966.0	966.0	972.2	975.3	981.5	984.6	990.8	997.1	1015.7	1018.8	1025.0
5°	941.1	953.6	994.0	1009.5	1053.0	1112.0	1136.8	1177.2	1261.0	1285.9	1301.4
7.5°	903.8	931.8	1031.2	1056.1	1164.7	1320.1	1385.3	1472.3	1605.8	1671.0	1723.9
10°	844.8	903.8	1080.9	1139.9	1317.0	1553.0	1674.2	1795.3	1997.2	2087.3	2121.4
12.5°	779.6	875.9	1133.7	1214.5	1469.1	1813.9	1959.9	2093.4	2323.3	2444.5	2463.1
15°	705.1	835.6	1183.4	1301.4	1630.7	2031.3	2192.8	2357.5	2571.8	2658.7	2680.5
17.5°	639.8	804.5	1230.0	1354.2	1754.9	2227.1	2391.6	2528.3	2702.2	2761.3	2776.8
20°	559.1	754.8	1261.0	1422.5	1885.4	2369.9	2528.3	2633.9	2752.0	2789.2	2795.4
22.5°	500.1	701.9	1279.7	1447.4	1972.3	2456.9	2590.5	2674.3	2755.0	2767.5	2770.6
25°	450.4	642.9	1276.6	1475.4	2046.9	2509.7	2612.2	2674.3	2720.9	2727.1	2727.1
27.5°	403.8	577.7	1264.1	1481.6	2102.8	2522.1	2602.9	2646.4	2668.1	2680.5	2680.5
30°	363.4	515.6	1233.1	1469.1	2127.7	2509.7	2574.9	2596.6	2618.4	2637.0	2646.4
32.5°	332.4	456.6	1186.5	1444.3	2130.7	2478.6	2525.2	2537.6	2568.7	2612.2	2627.7
35°	304.4	397.5	1133.7	1410.1	2112.1	2429.0	2460.0	2472.4	2534.5	2599.7	2621.5
37.5°	276.4	354.0	1065.4	1351.1	2084.2	2369.9	2391.6	2413.4	2509.7	2587.3	2612.2
40°	248.5	316.8	984.6	1285.9	2040.7	2298.5	2317.1	2351.2	2478.6	2568.7	2593.5
42.5°	226.8	285.8	897.7	1217.6	1984.8	2217.7	2245.7	2295.3	2441.3	2537.6	2565.6
45°	208.1	254.7	804.5	1124.4	1913.3	2133.8	2174.2	2242.6	2397.8	2491.1	2515.9
47.5°	189.5	232.9	708.2	1028.1	1835.7	2049.9	2102.8	2180.4	2338.8	2429.0	2450.7
50°	173.9	211.3	611.9	925.6	1751.8	1959.9	2022.0	2102.8	2264.3	2348.2	2376.1
52.5°	161.5	192.5	521.8	823.1	1655.5	1866.7	1938.2	2022.0	2174.2	2255.0	2273.6
55°	149.1	177.0	444.2	714.4	1556.1	1767.3	1845.0	1925.8	2074.8	2143.2	2155.6
57.5°	142.9	164.6	378.9	611.9	1450.5	1655.5	1742.5	1817.0	1956.8	2009.6	2022.0
60°	133.5	155.3	329.3	524.9	1335.6	1549.9	1624.4	1699.0	1817.0	1860.5	1869.8
62.5°	124.3	149.1	292.0	441.0	1217.6	1425.6	1500.2	1568.5	1667.9	1699.0	1711.4
65°	118.0	142.9	264.0	378.9	1096.5	1295.2	1369.8	1428.8	1509.5	1540.6	1546.8
67.5°	111.8	136.6	242.3	326.1	975.3	1164.7	1220.6	1276.6	1338.7	1369.8	1372.9
70°	102.5	130.5	223.6	288.9	851.1	1015.7	1062.2	1121.2	1171.0	1186.5	1195.8
72.5°	96.3	121.1	211.3	260.9	723.7	872.8	916.3	950.5	994.0	1009.5	1009.5
75°	87.0	108.7	198.8	232.9	593.3	714.4	751.7	785.8	820.0	826.2	816.9
77.5°	77.6	96.3	170.9	195.7	462.8	565.3	596.3	615.0	642.9	649.2	652.3
80°	65.2	83.9	133.5	152.2	335.4	416.2	437.9	453.5	478.3	478.3	484.5
82.5°	49.7	65.2	96.3	108.7	226.8	285.8	304.4	313.7	329.3	329.3	329.3
85°	31.0	40.4	62.1	71.4	136.6	173.9	186.4	189.5	201.9	205.0	205.0
87.5°	15.5	21.7	40.4	43.5	71.4	90.1	90.1	96.3	96.3	93.1	90.1
90°	5.7	10.3	14.9	16.0	25.1	37.2	43.2	38.5	28.8	21.7	21.7
92.5°	22.8	61.5	100.2	109.8	154.4	213.8	243.6	213.5	153.3	108.1	103.8
95°	54.6	125.4	196.2	213.9	379.8	601.1	711.8	635.1	481.9	367.0	354.0
97.5°	94.4	156.9	219.4	235.0	511.7	880.6	1065.1	1016.6	919.8	847.2	822.4
100°	125.2	181.8	238.5	252.6	559.7	969.1	1173.7	1177.3	1184.4	1189.7	1160.2
102.5°	151.3	204.2	257.0	270.3	581.6	996.9	1204.5	1266.1	1389.6	1482.2	1456.8
105°	195.7	240.5	285.2	296.4	598.0	1000.0	1201.1	1339.4	1616.0	1823.5	1809.9
107.5°	241.3	283.0	324.7	335.1	601.0	955.5	1132.8	1325.7	1711.6	2001.0	2004.3
110°	272.0	309.6	347.3	356.7	596.4	916.0	1075.9	1291.6	1723.0	2046.6	2060.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	302.1	338.0	373.9	382.9	596.6	881.6	1024.1	1244.9	1686.4	2017.6	2039.3
115°	347.6	380.8	413.9	422.1	602.1	842.1	962.1	1174.7	1600.1	1919.1	1949.3
117.5°	392.6	422.7	452.8	460.3	613.4	817.4	919.4	1111.3	1495.2	1783.1	1816.5
120°	418.7	447.0	475.4	482.4	622.4	809.0	902.4	1077.7	1428.5	1691.5	1724.0
122.5°	444.3	473.0	501.5	508.7	635.5	804.6	889.2	1047.2	1363.1	1599.9	1631.9
125°	483.6	509.7	535.7	542.2	653.1	801.1	875.0	1009.2	1277.4	1478.7	1508.2
127.5°	515.5	541.8	568.1	574.7	670.8	799.0	863.1	978.3	1208.6	1381.4	1406.3
130°	532.5	560.8	589.2	596.2	683.7	800.3	858.6	961.1	1166.2	1320.0	1343.0
132.5°	550.2	578.5	606.9	613.9	694.1	801.1	854.6	946.3	1130.0	1267.6	1288.3
135°	576.3	602.1	628.0	634.4	705.5	800.3	847.8	924.7	1078.4	1193.6	1211.4
137.5°	603.1	628.6	654.1	660.6	722.6	805.3	846.6	911.5	1041.6	1139.0	1153.5
140°	625.3	648.8	672.3	678.2	733.0	806.1	842.6	898.8	1011.0	1095.3	1108.9
142.5°	642.4	664.1	685.9	691.3	741.8	809.0	842.6	891.9	990.6	1064.5	1076.2
145°	668.5	687.5	706.4	711.2	753.2	809.0	836.9	877.3	958.0	1018.5	1027.3
147.5°	694.7	713.1	731.7	736.3	769.9	814.5	836.9	868.7	932.1	979.7	987.1
150°	711.8	728.5	745.2	749.3	778.5	817.5	836.9	863.7	917.3	957.5	963.5
152.5°	729.4	742.0	754.7	757.8	784.2	819.3	836.9	859.8	905.6	939.9	944.4
155°	755.5	764.9	774.3	776.6	796.7	823.5	836.9	855.1	891.5	918.9	921.8
157.5°	774.9	784.0	793.1	795.4	809.2	827.7	836.9	851.1	879.4	900.6	902.7
160°	788.0	795.1	802.2	803.9	814.9	829.6	836.9	849.1	873.4	891.5	892.7
162.5°	801.1	806.4	811.7	813.1	821.1	831.6	836.9	847.2	867.7	883.0	884.1
165°	815.3	820.1	824.9	826.1	829.7	834.6	836.9	844.3	859.0	870.0	871.2
167.5°	828.4	830.7	833.0	833.5	836.6	840.6	842.6	847.4	857.0	864.3	864.7
170°	836.9	839.2	841.5	842.1	842.3	842.5	842.6	847.4	857.0	864.3	864.3
172.5°	841.5	842.0	842.5	842.6	842.6	842.6	842.6	846.4	854.0	859.7	859.2
175°	847.8	847.8	847.8	847.8	846.0	843.7	842.6	845.0	849.9	853.5	853.5
177.5°	847.8	847.8	847.8	847.8	846.4	844.6	843.7	845.7	849.4	852.3	851.8
180°	847.8	847.8	847.8	847.8	847.8	847.8	847.8	847.8	847.8	847.8	847.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	966.0	966.0
2.5°	1031.2	1025.0
5°	1326.3	1332.5
7.5°	1785.9	1782.9
10°	2220.8	2248.8
12.5°	2537.6	2543.9
15°	2730.2	2742.6
17.5°	2804.8	2807.9
20°	2807.9	2801.6
22.5°	2773.7	2767.5
25°	2733.4	2730.2
27.5°	2696.0	2699.1
30°	2680.5	2689.9
32.5°	2680.5	2696.0
35°	2686.7	2702.2
37.5°	2683.6	2702.2
40°	2671.2	2693.0
42.5°	2637.0	2652.6
45°	2584.2	2602.9
47.5°	2515.9	2528.3
50°	2429.0	2441.3
52.5°	2320.2	2323.3
55°	2189.7	2202.2
57.5°	2049.9	2053.1
60°	1894.7	1904.0
62.5°	1730.0	1730.0
65°	1556.1	1562.4
67.5°	1376.0	1391.5
70°	1192.7	1195.8
72.5°	1012.6	1012.6
75°	826.2	829.3
77.5°	649.2	649.2
80°	481.4	484.5
82.5°	332.4	338.5
85°	208.1	208.1
87.5°	96.3	87.0
90°	21.7	21.7
92.5°	86.6	69.4
95°	301.9	249.8
97.5°	723.2	624.1
100°	1042.1	924.0
102.5°	1355.7	1254.6
105°	1755.5	1701.1
107.5°	2017.5	2030.6
110°	2117.4	2174.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2126.2	2213.2
115°	2069.9	2190.4
117.5°	1950.3	2084.1
120°	1854.0	1984.0
122.5°	1760.1	1888.3
125°	1626.3	1744.4
127.5°	1505.9	1605.6
130°	1435.0	1527.0
132.5°	1370.7	1453.1
135°	1282.5	1353.5
137.5°	1211.7	1269.9
140°	1163.3	1217.6
142.5°	1123.0	1169.8
145°	1062.7	1098.1
147.5°	1016.3	1045.7
150°	987.3	1011.0
152.5°	962.3	980.3
155°	933.8	945.6
157.5°	911.1	919.4
160°	897.6	902.4
162.5°	888.7	893.3
165°	875.9	880.7
167.5°	866.8	868.8
170°	864.3	864.3
172.5°	857.5	855.8
175°	853.5	853.5
177.5°	849.8	847.8
180°	847.8	847.8



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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	6.88	7.86	7.76	8.77	9.93	20.06	21.04	20.94	21.95	23.10
	3H	7.60	8.48	8.49	9.40	10.58	21.91	22.79	22.80	23.71	24.89
	4H	7.90	8.74	8.81	9.66	10.85	22.56	23.40	23.47	24.32	25.51
	6H	8.16	8.93	9.08	9.86	11.06	23.00	23.77	23.92	24.70	25.90
	8H	8.23	8.97	9.16	9.91	11.11	23.12	23.86	24.05	24.80	26.01
	12H	8.25	8.95	9.18	9.89	11.12	23.19	23.90	24.13	24.84	26.06
4H	2H	14.11	14.95	15.03	15.87	17.06	20.35	21.19	21.26	22.11	23.30
	3H	15.69	16.39	16.62	17.34	18.55	22.41	23.11	23.33	24.06	25.26
	4H	15.79	16.43	16.73	17.38	18.61	23.18	23.82	24.11	24.77	26.00
	6H	15.81	16.36	16.76	17.34	18.56	23.73	24.28	24.67	25.25	26.48
	8H	15.79	16.31	16.74	17.27	18.52	23.89	24.41	24.84	25.37	26.62
	12H	15.75	16.22	16.72	17.20	18.45	23.99	24.46	24.96	25.44	26.69
8H	4H	17.25	17.77	18.20	18.73	19.97	23.25	23.77	24.20	24.73	25.98
	6H	17.49	17.92	18.47	18.93	20.17	23.89	24.32	24.86	25.32	26.56
	8H	17.51	17.90	18.50	18.89	20.15	24.11	24.49	25.09	25.48	26.74
	12H	17.49	17.82	18.48	18.81	20.12	24.26	24.59	25.25	25.58	26.89
12H	4H	17.40	17.86	18.37	18.85	20.10	23.21	23.68	24.18	24.66	25.91
	6H	17.76	18.14	18.74	19.13	20.39	23.87	24.25	24.86	25.25	26.51
	8H	17.83	18.17	18.82	19.16	20.46	24.11	24.44	25.10	25.43	26.74