

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: P936544

Luminaire Tested: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

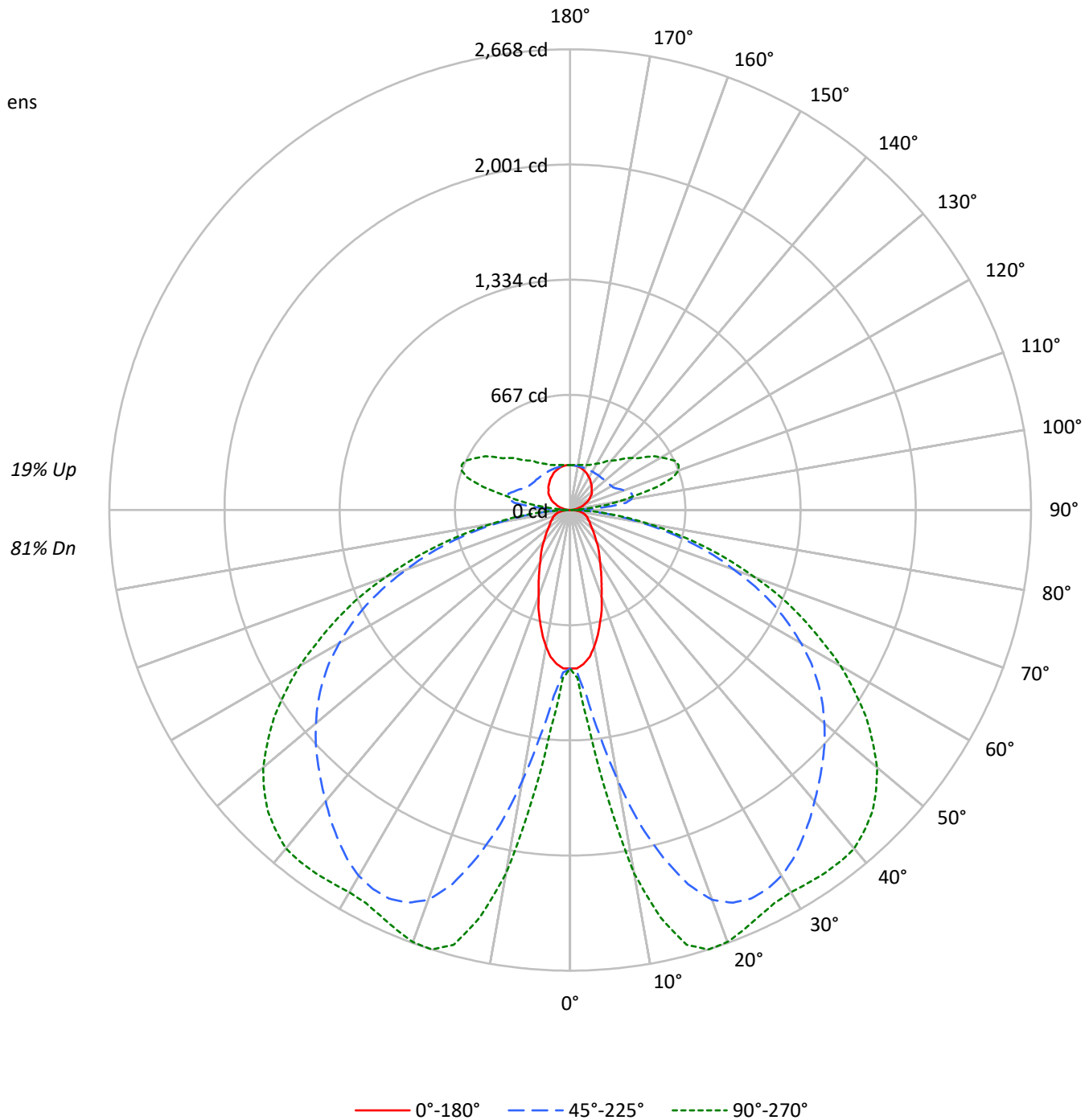
Test Method: LM-79-2019  
Report Number: P936544  
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8789.3 lumens  
Efficiency: N/A  
Efficacy: 88.6 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: Semi-Direct  
  
Input Watts (W): 99.2  
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	50	30	10	0
RCR																					
0	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

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

	0°	45°	90°
0°	4259	4259	4259
5°	4161	4923	5724
10°	3774	7175	9490
15°	3207	9374	11460
20°	2611	10863	11679
25°	2178	11368	11442
30°	1837	11440	11420
35°	1624	11250	11715
40°	1415	11003	12021
45°	1282	10822	12068
50°	1176	10659	11868
55°	1126	10421	11342
60°	1153	9963	10511
65°	1199	9268	9370
70°	1277	8082	7915
75°	1416	6590	6178
80°	1547	4570	4162
85°	1374	2425	2131

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12068 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.7	1.4
10°-20°	526.2	6.0
20°-30°	920.5	10.5
30°-40°	1184.9	13.5
40°-50°	1323.5	15.1
50°-60°	1267.6	14.4
60°-70°	1004.6	11.4
70°-80°	590.7	6.7
80°-90°	165.1	1.9
90°-100°	126.9	1.4
100°-110°	333.6	3.8
110°-120°	345.9	3.9
120°-130°	277.4	3.2
130°-140°	217.7	2.5
140°-150°	167.1	1.9
150°-160°	120.3	1.4
160°-170°	73.6	0.8
170°-180°	24.9	0.3
0°-30°	1565.5	17.8
0°-40°	2750.4	31.3
0°-60°	5341.5	60.8
0°-90°	7102.0	80.8
90°-120°	806.3	9.2
90°-150°	1468.5	16.7
90°-180°	1687.0	19.2
0°-180°	8789.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	894	959	1080	1222	1266	83
15°	670	1237	2084	2526	2606	186
25°	428	1402	2482	2591	2594	197
35°	289	1340	2338	2470	2568	181
45°	198	1068	2066	2367	2473	153
55°	142	679	1753	2036	2093	129
65°	112	360	1302	1464	1485	111
75°	83	221	714	785	788	87
85°	30	68	177	195	198	31
90°	2	5	13	7	7	3
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	416	137
145°	205	218	257	313	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9	917.9
2.5°	917.9	917.9	923.8	926.8	932.6	935.6	941.5	947.5	965.2	968.1	974.0
5°	894.3	906.1	944.5	959.2	1000.6	1056.6	1080.3	1118.6	1198.3	1221.9	1236.6
7.5°	858.9	885.5	979.9	1003.5	1106.8	1254.4	1316.3	1399.0	1525.9	1587.9	1638.1
10°	802.8	858.9	1027.1	1083.2	1251.5	1475.7	1590.9	1706.0	1897.8	1983.4	2015.9
12.5°	740.8	832.4	1077.3	1154.0	1396.0	1723.7	1862.4	1989.3	2207.7	2322.8	2340.5
15°	670.0	794.0	1124.5	1236.6	1549.5	1930.2	2083.7	2240.2	2443.9	2526.5	2547.1
17.5°	608.0	764.4	1168.8	1286.9	1667.6	2116.3	2272.6	2402.5	2567.8	2623.9	2638.6
20°	531.2	717.2	1198.3	1351.7	1791.6	2252.0	2402.5	2502.8	2615.1	2650.5	2656.3
22.5°	475.2	667.0	1216.1	1375.4	1874.2	2334.6	2461.6	2541.2	2617.9	2629.8	2632.8
25°	428.0	610.9	1213.1	1402.0	1945.1	2384.8	2482.2	2541.2	2585.5	2591.4	2591.4
27.5°	383.7	548.9	1201.2	1407.9	1998.2	2396.6	2473.4	2514.7	2535.4	2547.1	2547.1
30°	345.3	489.9	1171.8	1396.0	2021.8	2384.8	2446.8	2467.4	2488.1	2505.8	2514.7
32.5°	315.9	433.8	1127.5	1372.4	2024.7	2355.3	2399.6	2411.3	2440.9	2482.2	2497.0
35°	289.3	377.8	1077.3	1340.0	2007.0	2308.1	2337.6	2349.3	2408.4	2470.4	2491.1
37.5°	262.7	336.4	1012.3	1283.9	1980.5	2252.0	2272.6	2293.3	2384.8	2458.6	2482.2
40°	236.1	301.0	935.6	1221.9	1939.1	2184.1	2201.8	2234.2	2355.3	2440.9	2464.5
42.5°	215.5	271.6	853.0	1157.0	1886.0	2107.4	2134.0	2181.1	2319.9	2411.3	2437.9
45°	197.8	242.0	764.4	1068.4	1818.1	2027.7	2066.0	2131.0	2278.5	2367.1	2390.7
47.5°	180.1	221.3	672.9	976.9	1744.3	1947.9	1998.2	2072.0	2222.5	2308.1	2328.8
50°	165.3	200.7	581.5	879.5	1664.6	1862.4	1921.4	1998.2	2151.7	2231.4	2257.9
52.5°	153.5	183.0	495.8	782.1	1573.1	1773.8	1841.7	1921.4	2066.0	2142.8	2160.5
55°	141.7	168.2	422.1	678.9	1478.7	1679.4	1753.2	1830.0	1971.6	2036.5	2048.3
57.5°	135.8	156.4	360.1	581.5	1378.3	1573.1	1655.8	1726.6	1859.4	1909.6	1921.4
60°	126.9	147.5	312.9	498.8	1269.2	1472.8	1543.6	1614.5	1726.6	1768.0	1776.8
62.5°	118.1	141.7	277.5	419.1	1157.0	1354.7	1425.6	1490.5	1584.9	1614.5	1626.3
65°	112.1	135.8	250.9	360.1	1041.9	1230.8	1301.6	1357.7	1434.4	1464.0	1469.8
67.5°	106.2	129.8	230.2	309.9	926.8	1106.8	1159.9	1213.1	1272.1	1301.6	1304.6
70°	97.4	124.0	212.5	274.5	808.7	965.2	1009.4	1065.5	1112.7	1127.5	1136.3
72.5°	91.5	115.1	200.7	247.9	687.7	829.4	870.7	903.2	944.5	959.2	959.2
75°	82.7	103.3	188.9	221.3	563.8	678.9	714.3	746.7	779.2	785.1	776.3
77.5°	73.8	91.5	162.4	185.9	439.8	537.2	566.6	584.4	610.9	616.9	619.8
80°	62.0	79.7	126.9	144.6	318.7	395.5	416.1	431.0	454.5	454.5	460.4
82.5°	47.3	62.0	91.5	103.3	215.5	271.6	289.3	298.1	312.9	312.9	312.9
85°	29.5	38.4	59.0	67.8	129.8	165.3	177.1	180.1	191.8	194.8	194.8
87.5°	14.7	20.7	38.4	41.3	67.8	85.6	85.6	91.5	91.5	88.5	85.6
90°	1.7	3.1	4.5	4.9	7.7	11.4	13.3	11.8	8.8	6.6	6.6
92.5°	7.0	18.8	30.8	33.7	47.4	65.7	74.7	65.5	47.1	33.2	31.9
95°	16.7	38.5	60.3	65.7	116.6	184.5	218.5	195.0	148.0	112.7	108.7
97.5°	29.0	48.2	67.3	72.1	157.1	270.3	327.0	312.2	282.5	260.1	252.5
100°	38.5	55.8	73.2	77.5	171.8	297.5	360.3	361.5	363.6	365.3	356.2
102.5°	46.5	62.7	78.9	82.9	178.6	306.1	369.8	388.8	426.6	455.0	447.3
105°	60.1	73.9	87.6	91.0	183.7	307.0	368.8	411.3	496.2	559.8	555.7
107.5°	74.0	86.9	99.7	102.9	184.5	293.4	347.8	407.0	525.5	614.3	615.4
110°	83.5	95.1	106.6	109.5	183.1	281.2	330.3	396.5	529.0	628.3	632.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	92.8	103.8	114.8	117.6	183.2	270.7	314.5	382.2	517.7	619.4	626.1
115°	106.7	116.9	127.1	129.6	184.9	258.6	295.4	360.7	491.3	589.2	598.5
117.5°	120.5	129.8	139.0	141.4	188.4	251.0	282.3	341.2	459.0	547.5	557.8
120°	128.5	137.3	146.0	148.2	191.1	248.4	277.0	330.8	438.5	519.3	529.2
122.5°	136.4	145.2	154.0	156.2	195.2	247.0	273.0	321.5	418.5	491.2	501.1
125°	148.5	156.5	164.5	166.5	200.6	246.0	268.7	309.8	392.2	454.0	463.1
127.5°	158.3	166.3	174.4	176.4	206.0	245.3	265.0	300.4	371.1	424.2	431.8
130°	163.5	172.2	180.9	183.0	209.9	245.7	263.6	295.1	358.1	405.2	412.3
132.5°	168.9	177.6	186.3	188.4	213.1	246.0	262.4	290.6	346.9	389.2	395.6
135°	176.9	184.9	192.8	194.8	216.6	245.7	260.3	283.9	331.1	366.5	371.9
137.5°	185.1	193.0	200.8	202.8	221.8	247.2	260.0	279.9	319.8	349.7	354.1
140°	191.9	199.2	206.4	208.2	225.1	247.5	258.7	276.0	310.4	336.3	340.4
142.5°	197.3	203.9	210.6	212.3	227.8	248.4	258.7	273.9	304.2	326.8	330.4
145°	205.3	211.1	216.9	218.4	231.3	248.4	257.0	269.4	294.1	312.7	315.4
147.5°	213.3	219.0	224.6	226.0	236.3	250.1	257.0	266.8	286.2	300.8	303.0
150°	218.5	223.7	228.7	230.0	239.0	251.0	257.0	265.2	281.7	294.0	295.8
152.5°	223.9	227.8	231.7	232.7	240.8	251.6	257.0	264.0	278.0	288.6	290.0
155°	232.0	234.8	237.7	238.4	244.6	252.9	257.0	262.6	273.7	282.1	283.0
157.5°	237.9	240.7	243.5	244.2	248.4	254.1	257.0	261.3	270.0	276.5	277.1
160°	241.9	244.1	246.3	246.8	250.2	254.7	257.0	260.7	268.2	273.7	274.1
162.5°	245.9	247.6	249.1	249.6	252.0	255.3	257.0	260.1	266.4	271.1	271.5
165°	250.4	251.8	253.3	253.7	254.8	256.3	257.0	259.3	263.7	267.1	267.5
167.5°	254.4	255.1	255.8	255.9	256.9	258.1	258.7	260.2	263.2	265.4	265.5
170°	257.0	257.7	258.4	258.6	258.6	258.7	258.7	260.2	263.2	265.4	265.4
172.5°	258.4	258.6	258.7	258.7	258.7	258.7	258.7	259.9	262.2	264.0	263.8
175°	260.3	260.3	260.3	260.3	259.8	259.1	258.7	259.4	260.9	262.0	262.0
177.5°	260.3	260.3	260.3	260.3	259.9	259.3	259.1	259.7	260.8	261.7	261.5
180°	260.3	260.3	260.3	260.3	260.3	260.3	260.3	260.3	260.3	260.3	260.3



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	917.9	917.9
2.5°	979.9	974.0
5°	1260.3	1266.2
7.5°	1697.1	1694.2
10°	2110.3	2136.9
12.5°	2411.3	2417.3
15°	2594.4	2606.2
17.5°	2665.2	2668.2
20°	2668.2	2662.2
22.5°	2635.7	2629.8
25°	2597.4	2594.4
27.5°	2561.9	2564.8
30°	2547.1	2556.0
32.5°	2547.1	2561.9
35°	2553.1	2567.8
37.5°	2550.1	2567.8
40°	2538.3	2559.0
42.5°	2505.8	2520.6
45°	2455.6	2473.4
47.5°	2390.7	2402.5
50°	2308.1	2319.9
52.5°	2204.8	2207.7
55°	2080.8	2092.6
57.5°	1947.9	1950.9
60°	1800.4	1809.3
62.5°	1644.0	1644.0
65°	1478.7	1484.6
67.5°	1307.5	1322.3
70°	1133.4	1136.3
72.5°	962.2	962.2
75°	785.1	788.1
77.5°	616.9	616.9
80°	457.5	460.4
82.5°	315.9	321.7
85°	197.8	197.8
87.5°	91.5	82.7
90°	6.6	6.6
92.5°	26.6	21.3
95°	92.7	76.7
97.5°	222.0	191.6
100°	319.9	283.7
102.5°	416.2	385.2
105°	539.0	522.3
107.5°	619.4	623.4
110°	650.0	667.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	652.8	679.5
115°	635.5	672.5
117.5°	598.8	639.9
120°	569.2	609.1
122.5°	540.4	579.7
125°	499.3	535.6
127.5°	462.4	493.0
130°	440.6	468.8
132.5°	420.8	446.1
135°	393.7	415.5
137.5°	372.0	389.9
140°	357.1	373.8
142.5°	344.8	359.1
145°	326.3	337.1
147.5°	312.0	321.1
150°	303.1	310.4
152.5°	295.4	300.9
155°	286.6	290.3
157.5°	279.7	282.3
160°	275.6	277.0
162.5°	272.9	274.3
165°	268.9	270.4
167.5°	266.1	266.8
170°	265.4	265.4
172.5°	263.3	262.7
175°	262.0	262.0
177.5°	260.9	260.3
180°	260.3	260.3



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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	8.46	9.77	9.10	10.42	11.16	21.64	22.94	22.27	23.60	24.34
	3H	9.20	10.38	9.84	11.04	11.82	23.51	24.69	24.16	25.35	26.13
	4H	9.52	10.63	10.18	11.30	12.10	24.18	25.29	24.84	25.96	26.76
	6H	9.79	10.82	10.47	11.51	12.32	24.63	25.66	25.31	26.34	27.15
	8H	9.87	10.86	10.56	11.56	12.37	24.76	25.75	25.45	26.45	27.27
	12H	9.91	10.85	10.60	11.54	12.39	24.85	25.79	25.54	26.49	27.33
4H	2H	15.73	16.84	16.40	17.52	18.31	21.97	23.08	22.63	23.75	24.55
	3H	17.34	18.27	18.02	18.98	19.80	24.05	24.99	24.73	25.70	26.51
	4H	17.45	18.30	18.15	19.02	19.86	24.84	25.69	25.54	26.40	27.25
	6H	17.49	18.23	18.20	18.97	19.82	25.40	26.15	26.12	26.88	27.74
	8H	17.48	18.17	18.20	18.91	19.77	25.58	26.27	26.30	27.01	27.87
	12H	17.45	18.08	18.20	18.84	19.71	25.69	26.32	26.44	27.08	27.95
8H	4H	18.93	19.63	19.65	20.36	21.23	24.94	25.63	25.66	26.37	27.23
	6H	19.20	19.77	19.95	20.55	21.42	25.59	26.16	26.34	26.94	27.81
	8H	19.22	19.74	19.98	20.52	21.40	25.81	26.33	26.58	27.11	27.99
	12H	19.21	19.67	19.98	20.43	21.38	25.98	26.43	26.75	27.20	28.15
12H	4H	19.10	19.73	19.84	20.49	21.36	24.91	25.54	25.65	26.30	27.17
	6H	19.46	19.98	20.22	20.76	21.64	25.58	26.09	26.34	26.87	27.75
	8H	19.55	20.01	20.32	20.78	21.72	25.83	26.28	26.59	27.05	28.00