

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: P937731

Luminaire Tested: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

**Test Information**

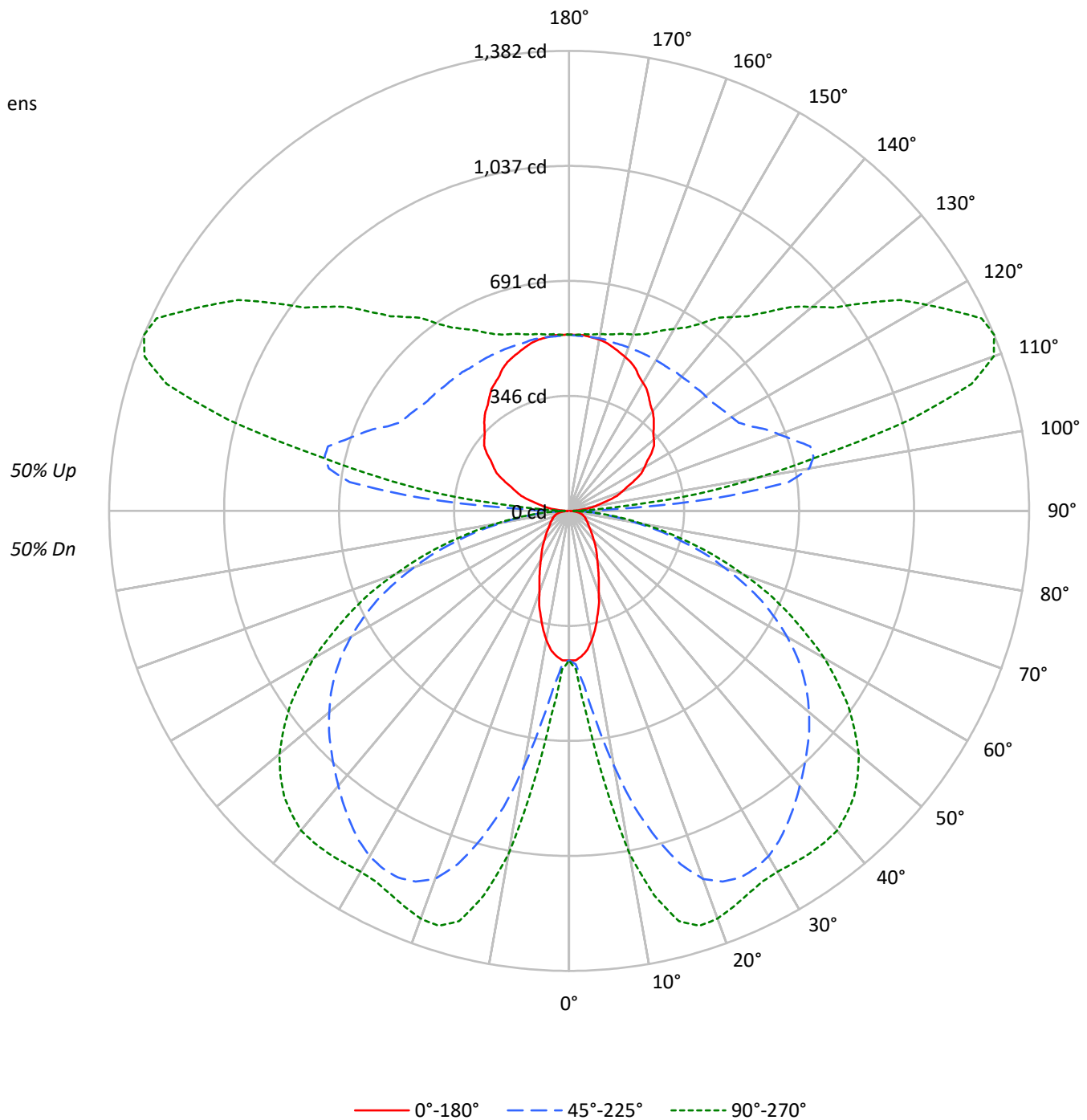
Test Method: LM-79-2019  
Report Number: P937731  
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6910.8 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')  
CIE Type: General Diffuse  
  
Input Watts (W): 68.8  
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

TEST NUMBER: P937731  
CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

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

	0°	45°	90°
0°	4170	4170	4170
5°	4070	4817	5606
10°	3688	7017	9294
15°	3131	9160	11223
20°	2546	10608	11438
25°	2121	11092	11205
30°	1786	11153	11184
35°	1576	10959	11473
40°	1372	10710	11772
45°	1241	10524	11819
50°	1135	10355	11623
55°	1084	10112	11107
60°	1106	9655	10294
65°	1144	8967	9175
70°	1211	7804	7753
75°	1328	6347	6050
80°	1418	4386	4077
85°	1192	2314	2088

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11819 cd/sqm



TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	0.8
10°-20°	257.7	3.7
20°-30°	450.7	6.5
30°-40°	580.2	8.4
40°-50°	648.1	9.4
50°-60°	620.7	9.0
60°-70°	491.9	7.1
70°-80°	289.3	4.2
80°-90°	82.4	1.2
90°-100°	258.0	3.7
100°-110°	678.4	9.8
110°-120°	703.4	10.2
120°-130°	564.2	8.2
130°-140°	442.7	6.4
140°-150°	339.8	4.9
150°-160°	244.7	3.5
160°-170°	149.7	2.2
170°-180°	50.6	0.7
0°-30°	766.6	11.1
0°-40°	1346.8	19.5
0°-60°	2615.6	37.8
0°-90°	3479.2	50.3
90°-120°	1639.8	23.7
90°-150°	2986.5	43.2
90°-180°	3432.0	49.7
0°-180°	6910.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	449	449	449	449	449	
5°	438	470	529	598	620	40
15°	328	606	1020	1237	1276	91
25°	210	686	1216	1269	1270	97
35°	142	656	1145	1210	1257	88
45°	97	523	1012	1159	1211	75
55°	69	332	858	997	1025	63
65°	55	176	637	717	727	54
75°	40	108	350	384	386	42
85°	14	33	87	95	97	15
90°	4	10	27	14	14	4
95°	34	134	444	229	156	38
105°	122	185	750	1139	1062	130
115°	217	264	601	1198	1368	214
125°	302	339	546	923	1089	268
135°	360	396	529	745	845	278
145°	417	444	523	636	686	262
155°	472	485	523	574	590	217
165°	509	516	523	543	550	144
175°	529	529	526	533	533	50
180°	529	529	529	529	529	



TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4	449.4
2.5°	449.4	449.4	452.3	453.8	456.7	458.2	461.1	464.0	472.6	474.0	476.9
5°	437.9	443.7	462.5	469.7	489.9	517.4	529.0	547.8	586.8	598.3	605.6
7.5°	420.6	433.6	479.8	491.4	541.9	614.2	644.6	685.1	747.2	777.5	802.1
10°	393.1	420.6	502.9	530.4	612.8	722.6	779.0	835.3	929.3	971.2	987.1
12.5°	362.7	407.6	527.5	565.1	683.6	844.0	912.0	974.1	1081.1	1137.4	1146.1
15°	328.1	388.8	550.7	605.6	758.7	945.2	1020.3	1097.0	1196.7	1237.1	1247.3
17.5°	297.7	374.4	572.4	630.2	816.5	1036.2	1112.8	1176.5	1257.4	1284.9	1292.0
20°	260.2	351.2	586.8	661.9	877.3	1102.8	1176.5	1225.6	1280.5	1297.8	1300.8
22.5°	232.7	326.6	595.4	673.5	917.8	1143.2	1205.3	1244.4	1282.0	1287.8	1289.1
25°	209.6	299.2	594.0	686.5	952.4	1167.8	1215.5	1244.4	1266.1	1269.0	1269.0
27.5°	187.9	268.8	588.2	689.4	978.4	1173.6	1211.2	1231.4	1241.5	1247.3	1247.3
30°	169.1	239.9	573.8	683.6	990.0	1167.8	1198.1	1208.2	1218.3	1227.0	1231.4
32.5°	154.7	212.4	552.1	672.0	991.5	1153.3	1175.0	1180.7	1195.3	1215.5	1222.7
35°	141.6	185.0	527.5	656.1	982.8	1130.2	1144.6	1150.4	1179.3	1209.7	1219.8
37.5°	128.6	164.8	495.7	628.7	969.8	1102.8	1112.8	1123.0	1167.8	1203.9	1215.5
40°	115.6	147.4	458.2	598.3	949.5	1069.5	1078.2	1094.1	1153.3	1195.3	1206.8
42.5°	105.5	133.0	417.7	566.5	923.5	1032.0	1044.9	1068.1	1136.0	1180.7	1193.8
45°	96.9	118.6	374.4	523.2	890.3	992.9	1011.7	1043.5	1115.7	1159.1	1170.7
47.5°	88.1	108.4	329.5	478.4	854.1	953.9	978.4	1014.6	1088.2	1130.2	1140.3
50°	81.0	98.3	284.7	430.7	815.1	912.0	940.9	978.4	1053.6	1092.6	1105.7
52.5°	75.2	89.6	242.8	383.0	770.3	868.6	901.9	940.9	1011.7	1049.3	1057.9
55°	69.4	82.3	206.7	332.4	724.0	822.4	858.5	896.1	965.4	997.2	1003.0
57.5°	66.5	76.6	176.3	284.7	674.9	770.3	810.8	845.5	910.5	935.1	940.9
60°	62.2	72.3	153.2	244.3	621.5	721.2	755.9	790.6	845.5	865.7	870.0
62.5°	57.8	69.4	135.9	205.2	566.5	663.4	698.1	729.9	776.1	790.6	796.3
65°	54.9	66.5	122.8	176.3	510.2	602.7	637.4	664.9	702.4	716.9	719.8
67.5°	52.0	63.6	112.7	151.8	453.8	541.9	568.0	594.0	622.9	637.4	638.8
70°	47.7	60.7	104.0	134.4	396.0	472.6	494.3	521.7	544.8	552.1	556.5
72.5°	44.8	56.4	98.3	121.4	336.8	406.1	426.4	442.3	462.5	469.7	469.7
75°	40.5	50.6	92.5	108.4	276.1	332.4	349.8	365.7	381.5	384.4	380.1
77.5°	36.1	44.8	79.5	91.1	215.3	263.1	277.5	286.1	299.2	302.0	303.5
80°	30.3	39.0	62.2	70.8	156.0	193.6	203.8	211.0	222.6	222.6	225.5
82.5°	23.1	30.3	44.8	50.6	105.5	133.0	141.6	146.0	153.2	153.2	153.2
85°	14.4	18.8	28.9	33.2	63.6	81.0	86.7	88.1	94.0	95.4	95.4
87.5°	7.3	10.1	18.8	20.2	33.2	41.9	41.9	44.8	44.8	43.4	41.9
90°	3.6	6.4	9.2	9.9	15.6	23.2	27.0	24.0	18.0	13.5	13.5
92.5°	14.2	38.4	62.5	68.6	96.4	133.5	152.0	133.2	95.7	67.5	64.8
95°	34.1	78.3	122.6	133.6	237.2	375.3	444.4	396.6	300.9	229.2	221.0
97.5°	58.9	98.0	137.0	146.7	319.5	549.9	665.0	634.8	574.3	529.0	513.5
100°	78.2	113.5	148.9	157.8	349.5	605.1	732.9	735.1	739.5	742.8	724.4
102.5°	94.5	127.5	160.5	168.8	363.3	622.5	752.1	790.7	867.7	925.4	909.6
105°	122.2	150.2	178.1	185.1	373.4	624.5	750.0	836.4	1009.1	1138.6	1130.2
107.5°	150.7	176.7	202.8	209.3	375.3	596.6	707.3	827.8	1068.8	1249.5	1251.6
110°	169.8	193.4	216.9	222.8	372.4	572.0	671.8	806.5	1075.9	1277.9	1286.7



TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.7	211.1	233.4	239.1	372.6	550.5	639.5	777.3	1053.0	1259.8	1273.3
115°	217.0	237.7	258.4	263.6	376.0	525.9	600.8	733.6	999.2	1198.3	1217.1
117.5°	245.1	263.9	282.7	287.4	383.0	510.4	574.1	694.0	933.6	1113.4	1134.3
120°	261.4	279.1	296.8	301.3	388.6	505.2	563.5	673.0	892.0	1056.2	1076.5
122.5°	277.5	295.4	313.2	317.7	396.8	502.5	555.3	653.8	851.1	999.0	1019.0
125°	302.0	318.2	334.5	338.6	407.8	500.2	546.4	630.2	797.7	923.3	941.8
127.5°	321.8	338.2	354.7	358.8	418.9	498.9	539.0	610.9	754.7	862.6	878.1
130°	332.5	350.2	367.9	372.3	426.9	499.8	536.1	600.2	728.2	824.2	838.6
132.5°	343.5	361.2	378.9	383.3	433.4	500.2	533.6	590.9	705.5	791.5	804.4
135°	359.9	376.0	392.1	396.1	440.6	499.8	529.4	577.4	673.3	745.3	756.4
137.5°	376.6	392.6	408.4	412.5	451.2	502.8	528.6	569.2	650.3	711.2	720.3
140°	390.4	405.1	419.8	423.5	457.7	503.3	526.1	561.2	631.3	683.9	692.4
142.5°	401.1	414.7	428.3	431.7	463.2	505.1	526.1	556.9	618.5	664.7	672.0
145°	417.4	429.3	441.1	444.1	470.3	505.2	522.6	547.8	598.1	635.9	641.5
147.5°	433.8	445.3	456.8	459.7	480.7	508.6	522.6	542.5	582.1	611.8	616.4
150°	444.4	454.8	465.2	467.9	486.2	510.5	522.6	539.4	572.8	597.9	601.6
152.5°	455.4	463.3	471.2	473.2	489.7	511.6	522.6	536.9	565.4	586.9	589.7
155°	471.8	477.6	483.5	485.0	497.5	514.3	522.6	534.0	556.7	573.7	575.6
157.5°	483.9	489.6	495.2	496.7	505.3	516.8	522.6	531.4	549.1	562.4	563.6
160°	492.1	496.5	500.9	502.0	508.9	518.0	522.6	530.2	545.4	556.7	557.5
162.5°	500.2	503.5	506.8	507.7	512.6	519.3	522.6	529.0	541.8	551.3	552.0
165°	509.1	512.0	515.0	515.8	518.1	521.1	522.6	527.3	536.4	543.2	544.0
167.5°	517.3	518.7	520.2	520.5	522.4	524.9	526.1	529.1	535.1	539.6	540.0
170°	522.6	524.0	525.5	525.8	525.9	526.1	526.1	529.1	535.1	539.6	539.6
172.5°	525.5	525.8	526.1	526.1	526.1	526.1	526.1	528.5	533.2	536.8	536.6
175°	529.4	529.4	529.4	529.4	528.3	526.8	526.1	527.7	530.7	532.9	532.9
177.5°	529.4	529.4	529.4	529.4	528.5	527.4	526.8	528.0	530.4	532.2	531.9
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	449.4	449.4
2.5°	479.8	476.9
5°	617.1	620.0
7.5°	831.1	829.6
10°	1033.3	1046.4
12.5°	1180.7	1183.7
15°	1270.4	1276.2
17.5°	1305.1	1306.6
20°	1306.6	1303.7
22.5°	1290.6	1287.8
25°	1271.8	1270.4
27.5°	1254.5	1255.9
30°	1247.3	1251.6
32.5°	1247.3	1254.5
35°	1250.2	1257.4
37.5°	1248.7	1257.4
40°	1242.9	1253.0
42.5°	1227.0	1234.2
45°	1202.4	1211.2
47.5°	1170.7	1176.5
50°	1130.2	1136.0
52.5°	1079.6	1081.1
55°	1018.9	1024.7
57.5°	953.9	955.3
60°	881.6	886.0
62.5°	805.0	805.0
65°	724.0	726.9
67.5°	640.3	647.5
70°	555.0	556.5
72.5°	471.1	471.1
75°	384.4	385.9
77.5°	302.0	302.0
80°	224.0	225.5
82.5°	154.7	157.5
85°	96.9	96.9
87.5°	44.8	40.5
90°	13.5	13.5
92.5°	54.1	43.3
95°	188.5	156.0
97.5°	451.6	389.7
100°	650.7	577.0
102.5°	846.5	783.4
105°	1096.2	1062.3
107.5°	1259.8	1268.0
110°	1322.1	1357.5





TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1327.7	1382.0
115°	1292.5	1367.8
117.5°	1217.8	1301.3
120°	1157.7	1238.8
122.5°	1099.1	1179.1
125°	1015.5	1089.3
127.5°	940.4	1002.6
130°	896.1	953.5
132.5°	855.8	907.3
135°	800.7	845.2
137.5°	756.7	793.0
140°	726.4	760.3
142.5°	701.2	730.5
145°	663.6	685.7
147.5°	634.7	653.0
150°	616.4	631.3
152.5°	600.9	612.2
155°	583.0	590.5
157.5°	568.9	574.1
160°	560.5	563.5
162.5°	554.9	557.7
165°	547.0	550.0
167.5°	541.2	542.5
170°	539.6	539.6
172.5°	535.5	534.3
175°	532.9	532.9
177.5°	530.7	529.4
180°	529.4	529.4



TEST NUMBER: P937731

CATALOG NUMBER: SQ4-FB-100U-125D-92765-1D-UNV-STD-W-4-2700K

**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	5.98	6.89	6.93	7.86	9.12	19.12	20.03	20.07	20.99	22.26
	3H	6.69	7.51	7.65	8.48	9.77	20.95	21.76	21.91	22.74	24.03
	4H	6.99	7.76	7.97	8.75	10.04	21.59	22.36	22.56	23.34	24.63
	6H	7.25	7.96	8.23	8.94	10.25	22.01	22.72	22.99	23.70	25.01
	8H	7.32	7.99	8.31	9.00	10.30	22.12	22.80	23.11	23.80	25.11
	12H	7.34	7.98	8.33	8.98	10.31	22.19	22.83	23.18	23.83	25.16
4H	2H	13.18	13.95	14.16	14.93	16.22	19.40	20.17	20.38	21.16	22.45
	3H	14.75	15.40	15.74	16.41	17.72	21.44	22.08	22.43	23.09	24.40
	4H	14.85	15.44	15.85	16.45	17.78	22.20	22.79	23.19	23.79	25.12
	6H	14.87	15.37	15.87	16.40	17.73	22.73	23.24	23.73	24.26	25.59
	8H	14.84	15.32	15.85	16.34	17.68	22.88	23.36	23.89	24.38	25.72
	12H	14.80	15.23	15.83	16.27	17.62	22.97	23.40	24.00	24.44	25.79
8H	4H	16.29	16.77	17.30	17.79	19.13	22.26	22.74	23.27	23.76	25.10
	6H	16.53	16.93	17.57	17.99	19.33	22.88	23.28	23.92	24.34	25.68
	8H	16.55	16.90	17.60	17.95	19.31	23.09	23.44	24.14	24.49	25.85
	12H	16.52	16.83	17.57	17.87	19.28	23.23	23.54	24.28	24.58	25.98
12H	4H	16.43	16.86	17.46	17.90	19.25	22.22	22.65	23.25	23.68	25.03
	6H	16.79	17.14	17.83	18.19	19.55	22.86	23.21	23.91	24.26	25.62
	8H	16.86	17.17	17.91	18.21	19.61	23.09	23.40	24.14	24.44	25.84