

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: P937092

Luminaire Tested: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937092
REPORT IS A COMBINATION OF REPORTS P933517 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

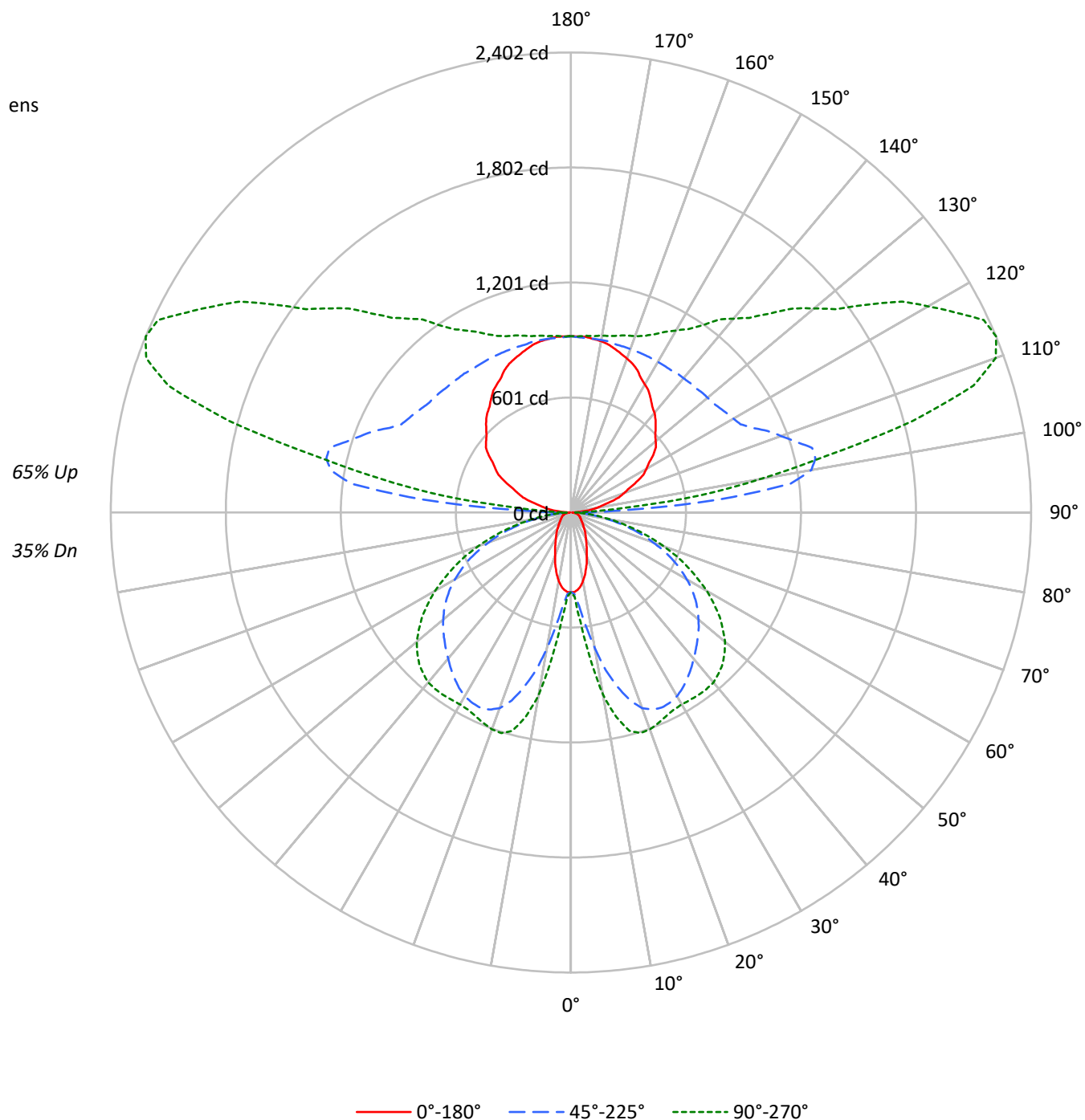
Lumens per Lamp: N/A
Luminaire Lumens: 9182.2 lumens
Efficiency: N/A
Efficacy: 133.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

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: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

Luminous Intensity Polar Plot



TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

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
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29		
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23		
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16		
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8		
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1927	1927	1927
5°	1883	2228	2591
10°	1708	3248	4295
15°	1452	4243	5187
20°	1182	4917	5286
25°	986	5145	5179
30°	831	5178	5169
35°	735	5092	5302
40°	641	4980	5441
45°	580	4898	5462
50°	532	4825	5372
55°	509	4717	5134
60°	522	4510	4757
65°	543	4195	4241
70°	578	3658	3583
75°	641	2983	2796
80°	701	2068	1884
85°	619	1098	964

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5462 cd/sqm

TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	0.6
10°-20°	238.2	2.6
20°-30°	416.6	4.5
30°-40°	536.3	5.8
40°-50°	599.1	6.5
50°-60°	573.8	6.2
60°-70°	454.7	5.0
70°-80°	267.4	2.9
80°-90°	77.8	0.8
90°-100°	448.5	4.9
100°-110°	1179.1	12.8
110°-120°	1222.6	13.3
120°-130°	980.7	10.7
130°-140°	769.5	8.4
140°-150°	590.6	6.4
150°-160°	425.3	4.6
160°-170°	260.3	2.8
170°-180°	87.9	1.0
0°-30°	708.6	7.7
0°-40°	1244.9	13.6
0°-60°	2417.7	26.3
0°-90°	3217.6	35.0
90°-120°	2850.2	31.0
90°-150°	5191.0	56.5
90°-180°	5965.0	65.0
0°-180°	9182.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	405	434	489	553	573	37
15°	303	560	943	1144	1180	84
25°	194	635	1124	1173	1174	89
35°	131	606	1058	1118	1162	82
45°	90	484	935	1071	1120	69
55°	64	307	794	922	947	58
65°	51	163	589	663	672	50
75°	37	100	323	355	357	39
85°	13	31	80	88	90	14
90°	6	17	47	24	24	6
95°	59	232	772	398	271	66
105°	212	322	1304	1979	1846	225
115°	377	458	1044	2083	2377	373
125°	525	588	950	1605	1893	466
135°	626	688	920	1296	1469	484
145°	726	772	908	1105	1192	455
155°	820	843	908	997	1026	377
165°	885	897	908	944	956	250
175°	920	920	914	926	926	87
180°	920	920	920	920	920	

TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4	415.4
2.5°	415.4	415.4	418.1	419.5	422.1	423.5	426.2	428.9	436.8	438.1	440.8
5°	404.8	410.2	427.5	434.2	452.9	478.3	488.9	506.3	542.4	553.1	559.8
7.5°	388.7	400.8	443.5	454.2	501.0	567.7	595.8	633.3	690.6	718.7	741.4
10°	363.3	388.7	464.9	490.3	566.4	667.9	720.1	772.2	859.0	897.7	912.4
12.5°	335.4	376.7	487.6	522.3	631.9	780.2	843.0	900.4	999.3	1051.4	1059.3
15°	303.3	359.4	509.0	559.8	701.4	873.7	943.2	1013.9	1106.2	1143.5	1152.9
17.5°	275.2	346.0	529.1	582.5	754.8	957.9	1028.7	1087.4	1162.2	1187.6	1194.3
20°	240.4	324.6	542.4	611.8	810.9	1019.3	1087.4	1132.9	1183.6	1199.7	1202.4
22.5°	215.0	301.9	550.4	622.5	848.3	1056.8	1114.1	1150.3	1184.9	1190.3	1191.6
25°	193.7	276.5	549.1	634.6	880.4	1079.5	1123.5	1150.3	1170.3	1173.0	1173.0
27.5°	173.7	248.5	543.7	637.2	904.5	1084.7	1119.5	1138.2	1147.6	1152.9	1152.9
30°	156.3	221.8	530.4	631.9	915.1	1079.5	1107.5	1116.8	1126.2	1134.2	1138.2
32.5°	142.9	196.4	510.4	621.2	916.4	1066.0	1086.1	1091.4	1104.8	1123.5	1130.2
35°	130.9	171.0	487.6	606.5	908.5	1044.7	1058.1	1063.4	1090.1	1118.2	1127.5
37.5°	118.9	152.3	458.3	581.2	896.4	1019.3	1028.7	1038.0	1079.5	1112.8	1123.5
40°	106.9	136.3	423.5	553.1	877.7	988.6	996.6	1011.3	1066.0	1104.8	1115.5
42.5°	97.5	122.9	386.0	523.7	853.7	953.9	965.9	987.2	1050.1	1091.4	1103.5
45°	89.5	109.6	346.0	483.6	822.9	917.8	935.1	964.5	1031.4	1071.4	1082.1
47.5°	81.5	100.2	304.6	442.2	789.5	881.8	904.5	937.8	1006.0	1044.7	1054.1
50°	74.8	90.8	263.1	398.1	753.5	843.0	869.7	904.5	973.9	1009.9	1022.0
52.5°	69.4	82.9	224.4	354.0	712.0	802.9	833.7	869.7	935.1	969.9	977.9
55°	64.1	76.2	191.0	307.3	669.3	760.1	793.5	828.3	892.4	921.8	927.2
57.5°	61.5	70.8	162.9	263.1	623.9	712.0	749.5	781.6	841.6	864.3	869.7
60°	57.5	66.8	141.6	225.8	574.5	666.6	698.7	730.8	781.6	800.2	804.3
62.5°	53.5	64.1	125.6	189.7	523.7	613.2	645.2	674.7	717.4	730.8	736.1
65°	50.8	61.5	113.5	162.9	471.6	557.1	589.1	614.5	649.3	662.6	665.3
67.5°	48.1	58.8	104.2	140.2	419.5	501.0	525.0	549.1	575.8	589.1	590.4
70°	44.1	56.1	96.2	124.2	366.0	436.8	456.9	482.3	503.7	510.4	514.3
72.5°	41.4	52.1	90.8	112.2	311.2	375.4	394.1	408.8	427.5	434.2	434.2
75°	37.4	46.7	85.5	100.2	255.2	307.3	323.3	337.9	352.7	355.4	351.4
77.5°	33.4	41.4	73.5	84.2	199.1	243.1	256.5	264.5	276.5	279.2	280.6
80°	28.1	36.1	57.5	65.4	144.3	179.0	188.3	195.0	205.8	205.8	208.4
82.5°	21.4	28.1	41.4	46.7	97.5	122.9	130.9	135.0	141.6	141.6	141.6
85°	13.3	17.3	26.7	30.7	58.8	74.8	80.2	81.5	86.9	88.1	88.1
87.5°	6.7	9.4	17.3	18.7	30.7	38.7	38.7	41.4	41.4	40.0	38.7
90°	6.2	11.2	16.1	17.3	27.2	40.3	46.9	41.7	31.3	23.5	23.5
92.5°	24.7	66.7	108.8	119.2	167.6	232.1	264.3	231.7	166.3	117.3	112.6
95°	59.3	136.2	212.9	232.2	412.2	652.4	772.5	689.3	523.0	398.3	384.2
97.5°	102.5	170.3	238.1	255.1	555.4	955.8	1156.0	1103.4	998.3	919.5	892.6
100°	135.9	197.3	258.9	274.2	607.5	1051.8	1273.9	1277.8	1285.4	1291.2	1259.1
102.5°	164.2	221.6	279.0	293.3	631.3	1082.0	1307.2	1374.2	1508.1	1608.6	1581.2
105°	212.4	261.1	309.6	321.7	649.0	1085.3	1303.6	1453.7	1753.9	1979.1	1964.3
107.5°	261.8	307.2	352.4	363.7	652.3	1037.0	1229.5	1438.8	1857.6	2171.8	2175.4
110°	295.2	336.1	376.9	387.1	647.3	994.2	1167.7	1401.8	1870.0	2221.2	2236.5

TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	327.9	366.8	405.8	415.5	647.5	956.9	1111.5	1351.2	1830.3	2189.7	2213.3
115°	377.3	413.2	449.2	458.2	653.5	913.9	1044.2	1275.0	1736.6	2082.8	2115.6
117.5°	426.1	458.8	491.4	499.6	665.7	887.1	997.9	1206.2	1622.8	1935.2	1971.5
120°	454.5	485.2	515.9	523.6	675.5	878.1	979.4	1169.7	1550.4	1835.8	1871.1
122.5°	482.3	513.3	544.3	552.1	689.7	873.3	965.1	1136.5	1479.4	1736.4	1771.2
125°	524.9	553.2	581.4	588.4	708.9	869.4	949.7	1095.3	1386.4	1604.9	1636.9
127.5°	559.5	588.0	616.5	623.7	728.1	867.2	936.7	1061.7	1311.7	1499.3	1526.3
130°	578.0	608.7	639.4	647.1	742.0	868.6	931.9	1043.1	1265.7	1432.6	1457.6
132.5°	597.1	627.9	658.7	666.3	753.4	869.4	927.5	1027.1	1226.4	1375.8	1398.2
135°	625.5	653.5	681.6	688.5	765.7	868.6	920.1	1003.6	1170.4	1295.5	1314.8
137.5°	654.6	682.3	709.9	716.9	784.3	874.0	918.8	989.3	1130.5	1236.2	1252.0
140°	678.7	704.2	729.7	736.0	795.5	874.9	914.5	975.5	1097.3	1188.7	1203.5
142.5°	697.2	720.8	744.4	750.3	805.1	878.1	914.5	968.0	1075.1	1155.4	1168.0
145°	725.6	746.2	766.7	771.9	817.4	878.1	908.4	952.2	1039.7	1105.4	1114.9
147.5°	754.0	774.0	794.1	799.1	835.5	884.0	908.4	942.8	1011.6	1063.3	1071.3
150°	772.5	790.6	808.8	813.2	844.9	887.2	908.4	937.4	995.6	1039.2	1045.7
152.5°	791.6	805.4	819.1	822.5	851.1	889.2	908.4	933.2	982.9	1020.1	1025.0
155°	820.0	830.2	840.3	842.9	864.7	893.8	908.4	928.1	967.6	997.3	1000.5
157.5°	841.0	850.9	860.7	863.2	878.3	898.3	908.4	923.7	954.5	977.5	979.8
160°	855.3	862.9	870.6	872.5	884.4	900.4	908.4	921.5	947.9	967.6	968.9
162.5°	869.4	875.2	881.0	882.5	891.1	902.6	908.4	919.5	941.7	958.4	959.5
165°	884.8	890.0	895.3	896.6	900.5	905.8	908.4	916.3	932.3	944.2	945.5
167.5°	899.1	901.6	904.1	904.7	908.0	912.3	914.5	919.7	930.2	938.0	938.5
170°	908.4	910.8	913.3	913.9	914.1	914.4	914.5	919.7	930.2	938.0	938.0
172.5°	913.3	913.8	914.4	914.5	914.5	914.5	914.5	918.6	926.9	933.1	932.6
175°	920.1	920.1	920.1	920.1	918.2	915.7	914.5	917.1	922.4	926.3	926.3
177.5°	920.1	920.1	920.1	920.1	918.6	916.7	915.7	917.8	921.9	925.0	924.5
180°	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1	920.1

TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	415.4	415.4
2.5°	443.5	440.8
5°	570.4	573.1
7.5°	768.1	766.8
10°	955.2	967.2
12.5°	1091.4	1094.1
15°	1174.3	1179.7
17.5°	1206.4	1207.6
20°	1207.6	1205.0
22.5°	1193.0	1190.3
25°	1175.6	1174.3
27.5°	1159.5	1160.9
30°	1152.9	1157.0
32.5°	1152.9	1159.5
35°	1155.6	1162.2
37.5°	1154.3	1162.2
40°	1148.9	1158.2
42.5°	1134.2	1140.9
45°	1111.5	1119.5
47.5°	1082.1	1087.4
50°	1044.7	1050.1
52.5°	997.9	999.3
55°	941.8	947.2
57.5°	881.8	883.1
60°	814.9	818.9
62.5°	744.1	744.1
65°	669.3	672.0
67.5°	591.8	598.5
70°	513.0	514.3
72.5°	435.6	435.6
75°	355.4	356.7
77.5°	279.2	279.2
80°	207.1	208.4
82.5°	142.9	145.6
85°	89.5	89.5
87.5°	41.4	37.4
90°	23.5	23.5
92.5°	94.0	75.3
95°	327.7	271.1
97.5°	784.9	677.4
100°	1131.1	1002.9
102.5°	1471.4	1361.6
105°	1905.2	1846.3
107.5°	2189.6	2203.8
110°	2298.1	2359.5



TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2307.6	2402.1
115°	2246.5	2377.4
117.5°	2116.7	2261.9
120°	2012.2	2153.3
122.5°	1910.3	2049.5
125°	1765.1	1893.3
127.5°	1634.4	1742.6
130°	1557.4	1657.3
132.5°	1487.6	1577.1
135°	1391.9	1469.0
137.5°	1315.1	1378.3
140°	1262.5	1321.5
142.5°	1218.8	1269.6
145°	1153.4	1191.8
147.5°	1103.1	1134.9
150°	1071.5	1097.3
152.5°	1044.4	1063.9
155°	1013.4	1026.3
157.5°	988.8	997.9
160°	974.2	979.4
162.5°	964.5	969.5
165°	950.7	955.9
167.5°	940.7	942.9
170°	938.0	938.0
172.5°	930.7	928.8
175°	926.3	926.3
177.5°	922.3	920.1
180°	920.1	920.1

TEST NUMBER: P937092

CATALOG NUMBER: SQ4-FB-075U-050D-B2750-1D-UNV-W2A-W-8-2700K

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	1.73	2.50	2.80	3.57	5.04	14.91	15.68	15.98	16.75	18.22
	3H	2.43	3.12	3.51	4.20	5.69	16.75	17.43	17.82	18.52	20.00
	4H	2.72	3.38	3.81	4.46	5.95	17.39	18.04	18.48	19.12	20.62
	6H	2.97	3.57	4.07	4.66	6.16	17.81	18.41	18.91	19.50	21.01
	8H	3.04	3.61	4.14	4.71	6.21	17.93	18.50	19.03	19.61	21.10
	12H	3.05	3.59	4.16	4.69	6.21	17.99	18.54	19.10	19.64	21.16
4H	2H	8.94	9.59	10.03	10.68	12.17	15.18	15.83	16.27	16.91	18.41
	3H	10.50	11.04	11.60	12.15	13.66	17.21	17.76	18.32	18.87	20.37
	4H	10.59	11.09	11.70	12.19	13.71	17.98	18.48	19.08	19.58	21.10
	6H	10.59	11.02	11.71	12.15	13.66	18.51	18.94	19.63	20.07	21.58
	8H	10.57	10.97	11.68	12.09	13.62	18.67	19.07	19.78	20.19	21.72
	12H	10.52	10.88	11.65	12.01	13.55	18.76	19.12	19.89	20.25	21.79
8H	4H	12.02	12.43	13.14	13.54	15.08	18.03	18.43	19.14	19.55	21.08
	6H	12.26	12.59	13.40	13.75	15.28	18.65	18.99	19.79	20.14	21.67
	8H	12.28	12.57	13.42	13.71	15.26	18.87	19.16	20.01	20.30	21.85
	12H	12.24	12.50	13.39	13.63	15.22	19.01	19.27	20.16	20.40	21.99
12H	4H	12.16	12.53	13.30	13.66	15.20	17.97	18.34	19.11	19.47	21.01
	6H	12.52	12.81	13.66	13.95	15.50	18.63	18.93	19.78	20.07	21.62
	8H	12.58	12.84	13.73	13.98	15.56	18.86	19.12	20.01	20.25	21.84