

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: P936559

Luminaire Tested: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

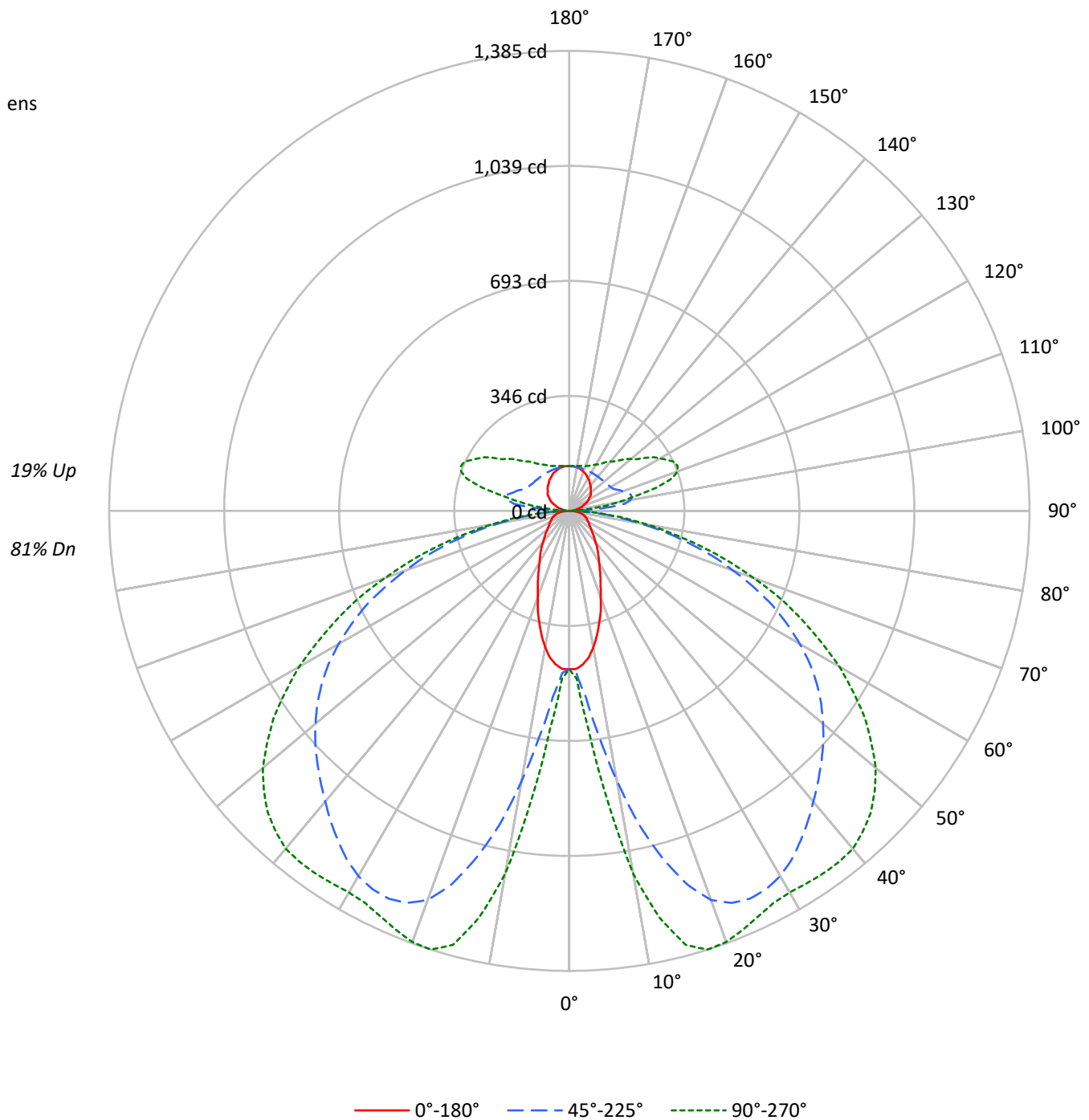
Test Method: LM-79-2019  
Report Number: P936559  
REPORT IS A COMBINATION OF REPORTS P933440 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4561.1 lumens  
Efficiency: N/A  
Efficacy: 92.0 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: Semi-Direct  
  
Input Watts (W): 49.6  
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

TEST NUMBER: P936559  
CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**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°	4420	4420	4420
5°	4314	5105	5941
10°	3908	7435	9850
15°	3318	9707	11893
20°	2698	11242	12121
25°	2248	11755	11875
30°	1893	11820	11852
35°	1671	11614	12159
40°	1455	11350	12475
45°	1314	11154	12524
50°	1203	10974	12318
55°	1148	10716	11771
60°	1172	10232	10909
65°	1213	9501	9724
70°	1282	8270	8216
75°	1407	6726	6412
80°	1502	4648	4321
85°	1267	2453	2211

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12524 cd/sqm



TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.6	1.4
10°-20°	273.1	6.0
20°-30°	477.7	10.5
30°-40°	614.9	13.5
40°-50°	686.8	15.1
50°-60°	657.8	14.4
60°-70°	521.3	11.4
70°-80°	306.5	6.7
80°-90°	85.7	1.9
90°-100°	65.8	1.4
100°-110°	173.1	3.8
110°-120°	179.5	3.9
120°-130°	144.0	3.2
130°-140°	113.0	2.5
140°-150°	86.7	1.9
150°-160°	62.4	1.4
160°-170°	38.2	0.8
170°-180°	12.9	0.3
0°-30°	812.4	17.8
0°-40°	1427.3	31.3
0°-60°	2771.9	60.8
0°-90°	3685.4	80.8
90°-120°	418.5	9.2
90°-150°	762.1	16.7
90°-180°	876.0	19.2
0°-180°	4561.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	464	498	561	634	657	43
15°	348	642	1081	1311	1352	97
25°	222	728	1288	1345	1346	102
35°	150	695	1213	1282	1332	94
45°	103	554	1072	1228	1284	79
55°	74	352	910	1057	1086	67
65°	58	187	675	760	770	58
75°	43	115	371	407	409	45
85°	15	35	92	101	103	16
90°	1	2	7	3	3	2
95°	9	34	113	58	40	10
105°	31	47	191	291	271	33
115°	55	67	153	306	349	55
125°	77	86	139	236	278	68
135°	92	101	135	190	216	71
145°	106	113	133	162	175	67
155°	120	124	133	146	151	55
165°	130	132	133	139	140	37
175°	135	135	134	136	136	13
180°	135	135	135	135	135	



TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	476.3	476.3	479.4	480.9	484.0	485.5	488.6	491.7	500.8	502.4	505.4
5°	464.1	470.2	490.1	497.7	519.2	548.3	560.6	580.5	621.8	634.1	641.8
7.5°	445.7	459.5	508.5	520.7	574.3	650.9	683.1	726.0	791.8	824.0	850.0
10°	416.6	445.7	533.0	562.1	649.4	765.8	825.5	885.2	984.8	1029.3	1046.1
12.5°	384.4	431.9	559.0	598.9	724.5	894.5	966.4	1032.3	1145.7	1205.4	1214.5
15°	347.7	412.0	583.6	641.8	804.1	1001.7	1081.3	1162.5	1268.2	1311.0	1321.8
17.5°	315.5	396.7	606.5	667.8	865.3	1098.1	1179.3	1246.8	1332.5	1361.6	1369.2
20°	275.7	372.2	621.8	701.5	929.7	1168.7	1246.8	1298.8	1357.0	1375.4	1378.5
22.5°	246.6	346.1	631.0	713.7	972.6	1211.5	1277.4	1318.7	1358.6	1364.7	1366.2
25°	222.1	317.1	629.5	727.5	1009.3	1237.5	1288.1	1318.7	1341.7	1344.8	1344.8
27.5°	199.1	284.9	623.4	730.6	1036.9	1243.7	1283.5	1305.0	1315.7	1321.8	1321.8
30°	179.2	254.3	608.1	724.5	1049.2	1237.5	1269.7	1280.4	1291.1	1300.4	1305.0
32.5°	163.9	225.1	585.1	712.2	1050.7	1222.2	1245.2	1251.3	1266.7	1288.1	1295.7
35°	150.1	196.1	559.0	695.3	1041.5	1197.7	1213.0	1219.2	1249.8	1282.0	1292.7
37.5°	136.3	174.6	525.4	666.3	1027.7	1168.7	1179.3	1190.1	1237.5	1275.8	1288.1
40°	122.6	156.2	485.5	634.1	1006.3	1133.4	1142.6	1159.4	1222.2	1266.7	1278.9
42.5°	111.8	140.9	442.6	600.4	978.7	1093.6	1107.4	1131.9	1203.9	1251.3	1265.1
45°	102.6	125.6	396.7	554.4	943.4	1052.2	1072.2	1105.8	1182.4	1228.4	1240.6
47.5°	93.4	114.9	349.2	507.0	905.2	1010.9	1036.9	1075.2	1153.3	1197.7	1208.5
50°	85.8	104.2	301.7	456.4	863.8	966.4	997.1	1036.9	1116.5	1157.9	1171.7
52.5°	79.7	95.0	257.3	405.9	816.4	920.5	955.8	997.1	1072.2	1112.0	1121.1
55°	73.5	87.3	219.0	352.3	767.3	871.5	909.8	949.6	1023.1	1056.8	1062.9
57.5°	70.4	81.2	186.8	301.7	715.3	816.4	859.3	896.0	964.9	991.0	997.1
60°	65.9	76.6	162.4	258.9	658.6	764.3	801.1	837.8	896.0	917.5	922.0
62.5°	61.3	73.5	144.0	217.5	600.4	703.0	739.8	773.5	822.5	837.8	843.9
65°	58.2	70.4	130.2	186.8	540.7	638.7	675.4	704.6	744.4	759.7	762.8
67.5°	55.1	67.4	119.5	160.8	480.9	574.3	601.9	629.5	660.1	675.4	677.0
70°	50.5	64.4	110.2	142.5	419.6	500.8	523.8	552.9	577.4	585.1	589.7
72.5°	47.5	59.7	104.2	128.6	356.9	430.4	451.9	468.7	490.1	497.7	497.7
75°	42.9	53.6	98.0	114.9	292.5	352.3	370.7	387.5	404.3	407.4	402.8
77.5°	38.3	47.5	84.3	96.5	228.2	278.8	294.1	303.2	317.1	320.1	321.6
80°	32.1	41.4	65.9	75.0	165.4	205.2	216.0	223.6	235.9	235.9	239.0
82.5°	24.5	32.1	47.5	53.6	111.8	140.9	150.1	154.7	162.4	162.4	162.4
85°	15.3	19.9	30.6	35.2	67.4	85.8	91.9	93.4	99.6	101.1	101.1
87.5°	7.7	10.7	19.9	21.5	35.2	44.4	44.4	47.5	47.5	46.0	44.4
90°	0.9	1.6	2.4	2.5	4.0	5.9	6.9	6.2	4.6	3.4	3.4
92.5°	3.6	9.8	15.9	17.5	24.6	34.1	38.8	34.0	24.4	17.2	16.5
95°	8.7	20.0	31.3	34.1	60.6	95.8	113.4	101.2	76.8	58.5	56.4
97.5°	15.0	25.0	34.9	37.5	81.6	140.3	169.7	162.0	146.5	135.0	131.0
100°	19.9	29.0	38.0	40.3	89.2	154.4	187.0	187.5	188.7	189.5	184.8
102.5°	24.1	32.5	41.0	43.1	92.7	158.9	191.9	201.8	221.4	236.2	232.1
105°	31.2	38.4	45.4	47.2	95.3	159.3	191.4	213.4	257.5	290.6	288.4
107.5°	38.5	45.1	51.8	53.4	95.8	152.2	180.5	211.3	272.7	318.9	319.4
110°	43.4	49.3	55.3	56.8	95.0	146.0	171.4	205.8	274.5	326.1	328.4



TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	48.2	53.9	59.6	61.0	95.0	140.5	163.2	198.4	268.7	321.5	325.0
115°	55.4	60.6	65.9	67.3	95.9	134.2	153.3	187.2	255.0	305.8	310.6
117.5°	62.5	67.3	72.1	73.3	97.8	130.3	146.5	177.1	238.2	284.1	289.5
120°	66.7	71.2	75.8	76.8	99.1	128.9	143.7	171.7	227.6	269.6	274.7
122.5°	70.8	75.3	79.8	81.0	101.2	128.2	141.7	166.8	217.1	254.9	260.0
125°	77.0	81.2	85.4	86.4	104.1	127.6	139.4	160.8	203.6	235.6	240.3
127.5°	82.1	86.4	90.5	91.6	106.9	127.3	137.5	155.9	192.6	220.1	224.1
130°	84.8	89.3	93.9	95.0	109.0	127.5	136.8	153.2	185.8	210.4	214.0
132.5°	87.7	92.2	96.8	97.8	110.6	127.6	136.1	150.8	180.0	202.0	205.3
135°	91.9	95.9	100.1	101.1	112.4	127.5	135.1	147.3	171.8	190.2	193.0
137.5°	96.1	100.2	104.3	105.3	115.1	128.3	134.9	145.2	165.9	181.5	183.8
140°	99.7	103.4	107.2	108.1	116.8	128.4	134.2	143.2	161.1	174.5	176.7
142.5°	102.4	105.8	109.3	110.2	118.2	128.9	134.2	142.1	157.9	169.6	171.5
145°	106.5	109.5	112.6	113.3	120.0	128.9	133.3	139.8	152.6	162.3	163.7
147.5°	110.7	113.6	116.6	117.3	122.6	129.8	133.3	138.4	148.5	156.1	157.3
150°	113.4	116.0	118.8	119.4	124.0	130.3	133.3	137.6	146.2	152.6	153.5
152.5°	116.2	118.2	120.2	120.7	124.9	130.5	133.3	137.0	144.3	149.8	150.5
155°	120.4	121.8	123.4	123.7	126.9	131.2	133.3	136.2	142.1	146.5	146.9
157.5°	123.5	124.9	126.4	126.7	128.9	131.9	133.3	135.6	140.1	143.5	143.8
160°	125.5	126.6	127.8	128.1	129.8	132.2	133.3	135.2	139.1	142.0	142.2
162.5°	127.6	128.4	129.3	129.5	130.8	132.5	133.3	135.0	138.2	140.7	140.8
165°	129.9	130.6	131.4	131.6	132.2	133.0	133.3	134.5	136.9	138.6	138.8
167.5°	132.0	132.3	132.7	132.8	133.2	133.9	134.2	135.0	136.5	137.7	137.8
170°	133.3	133.7	134.1	134.1	134.1	134.2	134.2	135.0	136.5	137.7	137.7
172.5°	134.1	134.1	134.2	134.2	134.2	134.2	134.2	134.9	136.0	137.0	136.9
175°	135.1	135.1	135.1	135.1	134.8	134.4	134.2	134.6	135.4	136.0	136.0
177.5°	135.1	135.1	135.1	135.1	134.9	134.6	134.4	134.7	135.3	135.8	135.7
180°	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1



TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	476.3	476.3
2.5°	508.5	505.4
5°	654.0	657.1
7.5°	880.7	879.2
10°	1095.1	1108.9
12.5°	1251.3	1254.4
15°	1346.3	1352.4
17.5°	1383.1	1384.6
20°	1384.6	1381.5
22.5°	1367.7	1364.7
25°	1347.8	1346.3
27.5°	1329.4	1330.9
30°	1321.8	1326.4
32.5°	1321.8	1329.4
35°	1324.9	1332.5
37.5°	1323.3	1332.5
40°	1317.2	1327.9
42.5°	1300.4	1308.0
45°	1274.3	1283.5
47.5°	1240.6	1246.8
50°	1197.7	1203.9
52.5°	1144.1	1145.7
55°	1079.8	1085.9
57.5°	1010.9	1012.4
60°	934.3	938.9
62.5°	853.1	853.1
65°	767.3	770.4
67.5°	678.5	686.2
70°	588.2	589.7
72.5°	499.3	499.3
75°	407.4	409.0
77.5°	320.1	320.1
80°	237.4	239.0
82.5°	163.9	166.9
85°	102.6	102.6
87.5°	47.5	42.9
90°	3.4	3.4
92.5°	13.8	11.0
95°	48.2	39.8
97.5°	115.2	99.5
100°	166.1	147.3
102.5°	216.0	199.9
105°	279.8	271.1
107.5°	321.5	323.6
110°	337.4	346.4





TEST NUMBER: P936559

CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	338.8	352.7
115°	329.8	349.0
117.5°	310.7	332.1
120°	295.4	316.1
122.5°	280.4	300.9
125°	259.1	278.0
127.5°	240.0	255.8
130°	228.6	243.3
132.5°	218.4	231.5
135°	204.4	215.7
137.5°	193.1	202.4
140°	185.3	194.0
142.5°	179.0	186.4
145°	169.4	175.0
147.5°	161.9	166.6
150°	157.3	161.1
152.5°	153.3	156.2
155°	148.8	150.7
157.5°	145.2	146.5
160°	143.0	143.7
162.5°	141.6	142.3
165°	139.6	140.3
167.5°	138.0	138.4
170°	137.7	137.7
172.5°	136.6	136.3
175°	136.0	136.0
177.5°	135.4	135.1
180°	135.1	135.1



TEST NUMBER: P936559  
 CATALOG NUMBER: SQ4-FB-025U-125D-93050-1D-UNV-STD-W-4-4000K

**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	8.58	9.88	9.21	10.53	11.28	21.72	23.02	22.35	23.67	24.42
	3H	9.32	10.49	9.96	11.15	11.94	23.57	24.75	24.22	25.41	26.19
	4H	9.63	10.75	10.30	11.42	12.21	24.23	25.34	24.89	26.01	26.81
	6H	9.91	10.94	10.59	11.62	12.43	24.67	25.70	25.35	26.38	27.19
	8H	9.99	10.97	10.68	11.68	12.49	24.80	25.78	25.48	26.48	27.30
	12H	10.02	10.96	10.72	11.66	12.50	24.87	25.81	25.57	26.51	27.35
4H	2H	15.82	16.93	16.49	17.60	18.40	22.04	23.16	22.71	23.83	24.62
	3H	17.43	18.36	18.11	19.07	19.89	24.11	25.05	24.79	25.76	26.57
	4H	17.54	18.39	18.24	19.11	19.95	24.89	25.74	25.59	26.45	27.30
	6H	17.58	18.32	18.30	19.06	19.91	25.44	26.18	26.16	26.92	27.78
	8H	17.57	18.26	18.29	19.00	19.87	25.61	26.30	26.33	27.04	27.91
	12H	17.55	18.17	18.29	18.93	19.81	25.72	26.34	26.46	27.10	27.97
8H	4H	19.02	19.71	19.74	20.45	21.31	24.99	25.68	25.71	26.42	27.28
	6H	19.28	19.86	20.03	20.63	21.50	25.63	26.20	26.38	26.98	27.85
	8H	19.30	19.82	20.07	20.60	21.48	25.84	26.36	26.61	27.14	28.02
	12H	19.29	19.75	20.06	20.52	21.46	26.00	26.46	26.77	27.23	28.17
12H	4H	19.18	19.80	19.92	20.56	21.44	24.96	25.59	25.71	26.35	27.22
	6H	19.54	20.06	20.30	20.84	21.72	25.61	26.13	26.38	26.91	27.79
	8H	19.63	20.09	20.40	20.86	21.80	25.86	26.32	26.63	27.08	28.03