

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: P936938

Luminaire Tested: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

**Test Information**

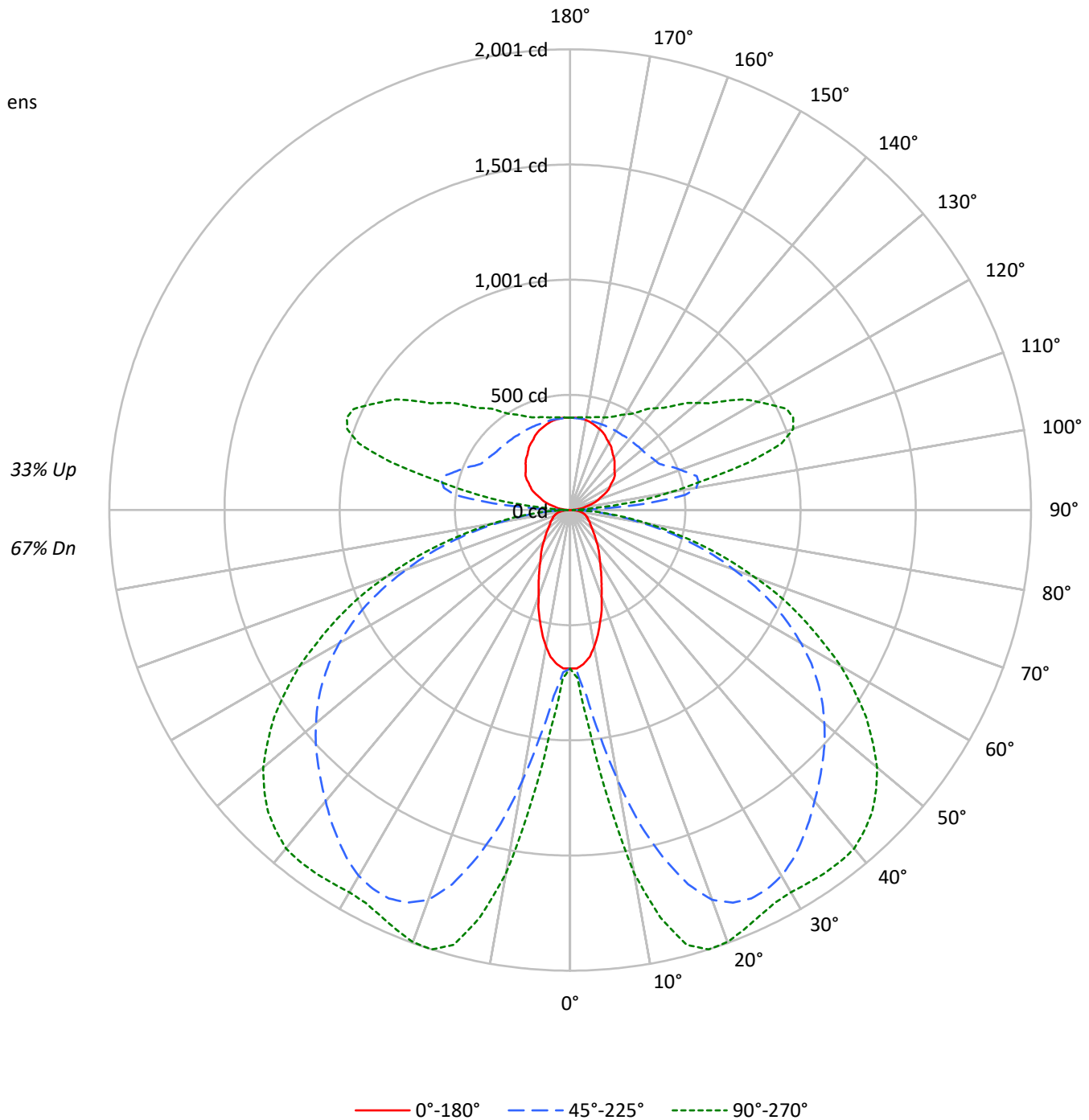
Test Method: LM-79-2019  
Report Number: P936938  
REPORT IS A COMBINATION OF REPORTS P933480 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7931.1 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 84  
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: P936938  
CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**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	0
RCR																		
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14

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

	0°	45°	90°
0°	4259	4259	4259
5°	4159	4921	5724
10°	3771	7171	9490
15°	3204	9367	11459
20°	2607	10852	11678
25°	2174	11353	11441
30°	1832	11422	11419
35°	1620	11229	11715
40°	1410	10980	12020
45°	1276	10796	12067
50°	1169	10630	11867
55°	1119	10389	11341
60°	1144	9928	10511
65°	1190	9230	9369
70°	1264	8043	7915
75°	1395	6553	6177
80°	1513	4539	4162
85°	1318	2404	2130

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12067 cd/sqm



TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	1.1
10°-20°	394.7	5.0
20°-30°	690.3	8.7
30°-40°	888.7	11.2
40°-50°	992.6	12.5
50°-60°	950.7	12.0
60°-70°	753.4	9.5
70°-80°	443.0	5.6
80°-90°	124.6	1.6
90°-100°	195.8	2.5
100°-110°	514.8	6.5
110°-120°	533.8	6.7
120°-130°	428.2	5.4
130°-140°	336.0	4.2
140°-150°	257.9	3.3
150°-160°	185.7	2.3
160°-170°	113.6	1.4
170°-180°	38.4	0.5
0°-30°	1174.1	14.8
0°-40°	2062.7	26.0
0°-60°	4006.0	50.5
0°-90°	5327.0	67.2
90°-120°	1244.4	15.7
90°-150°	2266.4	28.6
90°-180°	2604.0	32.8
0°-180°	7931.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	671	719	810	916	950	62
15°	502	928	1563	1895	1955	140
25°	321	1051	1862	1944	1946	148
35°	217	1005	1753	1853	1926	135
45°	148	801	1549	1775	1855	115
55°	106	509	1315	1527	1569	97
65°	84	270	976	1098	1113	83
75°	62	166	536	589	591	65
85°	22	51	133	146	148	23
90°	3	8	20	10	10	4
95°	26	101	337	174	118	29
105°	93	140	569	864	806	98
115°	165	200	456	909	1038	163
125°	229	257	415	701	827	203
135°	273	301	402	566	641	211
145°	317	337	397	483	520	198
155°	358	368	397	435	448	165
165°	386	392	397	412	417	109
175°	402	402	399	404	404	38
180°	402	402	402	402	402	



TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4
2.5°	688.4	688.4	692.8	695.0	699.5	701.7	706.1	710.5	723.8	726.1	730.5
5°	670.7	679.6	708.4	719.4	750.4	792.4	810.1	838.9	898.7	916.4	927.5
7.5°	644.2	664.1	734.9	752.6	830.1	940.8	987.2	1049.2	1144.4	1190.8	1228.5
10°	602.1	644.2	770.3	812.4	938.6	1106.8	1193.1	1279.4	1423.3	1487.5	1511.8
12.5°	555.6	624.2	807.9	865.5	1047.0	1292.7	1396.7	1491.9	1655.7	1742.1	1755.3
15°	502.5	595.4	843.3	927.5	1162.1	1447.7	1562.8	1680.1	1832.8	1894.8	1910.3
17.5°	456.0	573.3	876.6	965.1	1250.7	1587.1	1704.4	1801.8	1925.8	1967.8	1978.9
20°	398.4	537.9	898.7	1013.8	1343.6	1689.0	1801.8	1877.1	1961.2	1987.7	1992.2
22.5°	356.4	500.3	912.0	1031.5	1405.6	1750.9	1846.1	1905.8	1963.4	1972.3	1974.5
25°	321.0	458.2	909.8	1051.4	1458.7	1788.5	1861.6	1905.8	1939.1	1943.5	1943.5
27.5°	287.8	411.7	900.9	1055.9	1498.6	1797.3	1854.9	1885.9	1901.4	1910.3	1910.3
30°	259.0	367.5	878.7	1047.0	1516.3	1788.5	1835.0	1850.5	1866.0	1879.3	1885.9
32.5°	236.8	325.4	845.5	1029.3	1518.5	1766.4	1799.6	1808.4	1830.6	1861.6	1872.6
35°	217.0	283.3	807.9	1004.9	1505.2	1731.0	1753.1	1761.9	1806.2	1852.7	1868.2
37.5°	197.0	252.4	759.3	962.9	1485.2	1689.0	1704.4	1719.9	1788.5	1843.8	1861.6
40°	177.1	225.8	701.7	916.4	1454.3	1638.0	1651.3	1675.6	1766.4	1830.6	1848.3
42.5°	161.6	203.6	639.7	867.7	1414.4	1580.5	1600.4	1635.8	1739.8	1808.4	1828.4
45°	148.3	181.5	573.3	801.3	1363.5	1520.7	1549.4	1598.2	1708.8	1775.3	1793.0
47.5°	135.0	166.0	504.6	732.7	1308.2	1460.9	1498.6	1553.9	1666.8	1731.0	1746.5
50°	123.9	150.5	436.1	659.6	1248.4	1396.7	1441.0	1498.6	1613.7	1673.4	1693.3
52.5°	115.1	137.3	371.8	586.6	1179.8	1330.3	1381.2	1441.0	1549.4	1607.0	1620.3
55°	106.2	126.2	316.5	509.1	1109.0	1259.5	1314.9	1372.4	1478.6	1527.4	1536.2
57.5°	101.9	117.3	270.1	436.1	1033.7	1179.8	1241.8	1294.9	1394.6	1432.1	1441.0
60°	95.1	110.7	234.7	374.1	951.8	1104.5	1157.7	1210.8	1294.9	1325.9	1332.6
62.5°	88.5	106.2	208.1	314.3	867.7	1016.0	1069.1	1117.9	1188.7	1210.8	1219.6
65°	84.2	101.9	188.2	270.1	781.3	923.0	976.2	1018.2	1075.7	1097.9	1102.3
67.5°	79.7	97.4	172.7	232.4	695.0	830.1	869.9	909.8	954.0	976.2	978.4
70°	73.1	93.0	159.4	205.9	606.5	723.8	757.0	799.0	834.5	845.5	852.2
72.5°	68.6	86.3	150.5	185.9	515.7	622.0	653.0	677.3	708.4	719.4	719.4
75°	62.0	77.4	141.7	166.0	422.8	509.1	535.7	560.0	584.3	588.8	582.2
77.5°	55.4	68.6	121.7	139.4	329.8	402.9	425.0	438.3	458.2	462.6	464.9
80°	46.5	59.7	95.1	108.5	239.0	296.6	312.1	323.2	340.9	340.9	345.3
82.5°	35.4	46.5	68.6	77.4	161.6	203.6	217.0	223.6	234.7	234.7	234.7
85°	22.1	28.8	44.3	50.9	97.4	123.9	132.8	135.0	143.9	146.1	146.1
87.5°	11.1	15.5	28.8	31.0	50.9	64.2	64.2	68.6	68.6	66.4	64.2
90°	2.7	4.9	7.1	7.6	11.9	17.6	20.5	18.2	13.6	10.2	10.2
92.5°	10.8	29.1	47.4	52.1	73.2	101.3	115.4	101.1	72.6	51.2	49.2
95°	25.9	59.4	93.0	101.3	180.0	284.9	337.3	301.0	228.4	173.9	167.7
97.5°	44.7	74.4	103.9	111.4	242.5	417.4	504.7	481.8	435.8	401.4	389.6
100°	59.3	86.2	113.0	119.7	265.2	459.2	556.2	557.8	561.2	563.8	549.8
102.5°	71.7	96.8	121.8	128.1	275.6	472.4	570.7	600.0	658.5	702.3	690.4
105°	92.8	114.0	135.2	140.5	283.3	473.9	569.1	634.7	765.7	864.1	857.6
107.5°	114.3	134.1	153.8	158.8	284.8	452.8	536.7	628.1	811.0	948.2	949.7
110°	128.9	146.7	164.6	169.0	282.6	434.1	509.8	612.0	816.5	969.8	976.5



TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	143.2	160.2	177.2	181.5	282.7	417.8	485.3	589.9	799.1	956.0	966.3
115°	164.7	180.4	196.1	200.0	285.3	399.0	455.9	556.7	758.2	909.4	923.7
117.5°	186.0	200.3	214.5	218.1	290.6	387.4	435.7	526.6	708.5	844.9	860.8
120°	198.4	211.8	225.2	228.6	294.9	383.3	427.6	510.7	676.9	801.5	816.9
122.5°	210.6	224.1	237.6	241.0	301.1	381.3	421.4	496.2	645.9	758.1	773.3
125°	229.2	241.5	253.8	256.9	309.5	379.6	414.7	478.2	605.4	700.7	714.6
127.5°	244.3	256.7	269.2	272.3	317.9	378.6	409.0	463.6	572.7	654.5	666.3
130°	252.4	265.8	279.2	282.5	324.0	379.2	406.8	455.4	552.6	625.5	636.4
132.5°	260.7	274.2	287.6	290.9	328.9	379.6	405.0	448.5	535.4	600.7	610.4
135°	273.1	285.3	297.5	300.6	334.3	379.2	401.7	438.2	511.0	565.6	574.1
137.5°	285.8	297.9	309.9	313.0	342.4	381.5	401.1	431.9	493.5	539.7	546.6
140°	296.3	307.5	318.6	321.3	347.3	382.0	399.3	425.9	479.1	518.9	525.4
142.5°	304.3	314.6	324.9	327.5	351.4	383.3	399.3	422.7	469.3	504.4	510.0
145°	316.8	325.8	334.8	337.0	356.9	383.3	396.6	415.7	453.9	482.6	486.8
147.5°	329.2	337.9	346.7	348.9	364.8	386.0	396.6	411.6	441.7	464.3	467.8
150°	337.3	345.2	353.1	355.1	369.0	387.4	396.6	409.3	434.7	453.7	456.5
152.5°	345.6	351.6	357.6	359.1	371.6	388.2	396.6	407.4	429.1	445.3	447.4
155°	358.1	362.5	366.9	368.0	377.5	390.2	396.6	405.2	422.5	435.4	436.8
157.5°	367.2	371.5	375.8	376.9	383.4	392.2	396.6	403.3	416.7	426.8	427.7
160°	373.4	376.7	380.0	380.9	386.1	393.1	396.6	402.4	413.9	422.5	423.0
162.5°	379.6	382.1	384.7	385.3	389.0	394.1	396.6	401.5	411.2	418.4	418.9
165°	386.3	388.6	390.8	391.5	393.2	395.5	396.6	400.1	407.0	412.2	412.8
167.5°	392.5	393.5	394.7	394.9	396.4	398.3	399.3	401.6	406.1	409.5	409.8
170°	396.6	397.6	398.8	399.0	399.1	399.2	399.3	401.6	406.1	409.5	409.5
172.5°	398.8	399.0	399.2	399.3	399.3	399.3	399.3	401.0	404.6	407.3	407.2
175°	401.7	401.7	401.7	401.7	401.0	399.8	399.3	400.4	402.7	404.4	404.4
177.5°	401.7	401.7	401.7	401.7	401.1	400.3	399.8	400.7	402.5	403.8	403.6
180°	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7	401.7



TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	688.4	688.4
2.5°	734.9	730.5
5°	945.2	949.6
7.5°	1272.8	1270.6
10°	1582.7	1602.6
12.5°	1808.4	1812.9
15°	1945.7	1954.6
17.5°	1998.8	2001.1
20°	2001.1	1996.6
22.5°	1976.6	1972.3
25°	1947.9	1945.7
27.5°	1921.4	1923.5
30°	1910.3	1916.9
32.5°	1910.3	1921.4
35°	1914.7	1925.8
37.5°	1912.5	1925.8
40°	1903.7	1919.1
42.5°	1879.3	1890.4
45°	1841.6	1854.9
47.5°	1793.0	1801.8
50°	1731.0	1739.8
52.5°	1653.5	1655.7
55°	1560.5	1569.4
57.5°	1460.9	1463.1
60°	1350.3	1356.9
62.5°	1233.0	1233.0
65°	1109.0	1113.4
67.5°	980.6	991.7
70°	850.0	852.2
72.5°	721.6	721.6
75°	588.8	591.0
77.5°	462.6	462.6
80°	343.1	345.3
82.5°	236.8	241.3
85°	148.3	148.3
87.5°	68.6	62.0
90°	10.2	10.2
92.5°	41.0	32.9
95°	143.0	118.3
97.5°	342.7	295.8
100°	493.8	437.8
102.5°	642.4	594.5
105°	831.9	806.1
107.5°	955.9	962.2
110°	1003.3	1030.1





TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1007.5	1048.7
115°	980.8	1038.0
117.5°	924.2	987.6
120°	878.5	940.1
122.5°	834.1	894.8
125°	770.6	826.6
127.5°	713.6	760.8
130°	680.0	723.6
132.5°	649.5	688.6
135°	607.7	641.4
137.5°	574.2	601.8
140°	551.1	576.9
142.5°	532.1	554.3
145°	503.6	520.3
147.5°	481.6	495.5
150°	467.8	479.1
152.5°	456.0	464.5
155°	442.5	448.1
157.5°	431.7	435.7
160°	425.3	427.6
162.5°	421.1	423.3
165°	415.1	417.4
167.5°	410.7	411.7
170°	409.5	409.5
172.5°	406.3	405.5
175°	404.4	404.4
177.5°	402.7	401.7
180°	401.7	401.7



TEST NUMBER: P936938

CATALOG NUMBER: SQ4-FB-050U-125D-92765-1D-UNV-STD-W-6-3000K

**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	7.46	8.56	8.25	9.37	10.37	20.63	21.72	21.41	22.54	23.54
	3H	8.19	9.17	8.98	10.00	11.03	22.48	23.47	23.28	24.29	25.32
	4H	8.49	9.43	9.31	10.26	11.30	23.13	24.07	23.95	24.90	25.94
	6H	8.76	9.62	9.59	10.46	11.52	23.57	24.43	24.40	25.27	26.33
	8H	8.83	9.66	9.67	10.52	11.57	23.69	24.52	24.53	25.38	26.43
	12H	8.86	9.64	9.70	10.50	11.58	23.77	24.56	24.61	25.41	26.49
4H	2H	14.70	15.63	15.52	16.46	17.50	20.93	21.86	21.75	22.70	23.74
	3H	16.29	17.07	17.12	17.94	18.99	22.99	23.78	23.82	24.64	25.70
	4H	16.39	17.11	17.24	17.97	19.05	23.77	24.48	24.61	25.34	26.43
	6H	16.42	17.04	17.28	17.93	19.01	24.31	24.94	25.18	25.82	26.91
	8H	16.40	16.98	17.27	17.86	18.96	24.48	25.06	25.35	25.94	27.04
	12H	16.37	16.89	17.25	17.80	18.90	24.58	25.11	25.47	26.01	27.12
8H	4H	17.85	18.43	18.72	19.32	20.42	23.85	24.43	24.71	25.31	26.41
	6H	18.11	18.59	19.00	19.51	20.61	24.48	24.97	25.38	25.89	26.99
	8H	18.13	18.56	19.03	19.47	20.59	24.70	25.13	25.61	26.05	27.17
	12H	18.11	18.49	19.02	19.40	20.56	24.86	25.23	25.76	26.14	27.31
12H	4H	18.01	18.53	18.89	19.43	20.54	23.81	24.34	24.70	25.24	26.34
	6H	18.37	18.80	19.27	19.71	20.83	24.47	24.90	25.37	25.82	26.93
	8H	18.45	18.83	19.36	19.74	20.90	24.71	25.09	25.62	26.00	27.16