

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: P937307

Luminaire Tested: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937307
REPORT IS A COMBINATION OF REPORTS P933511 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

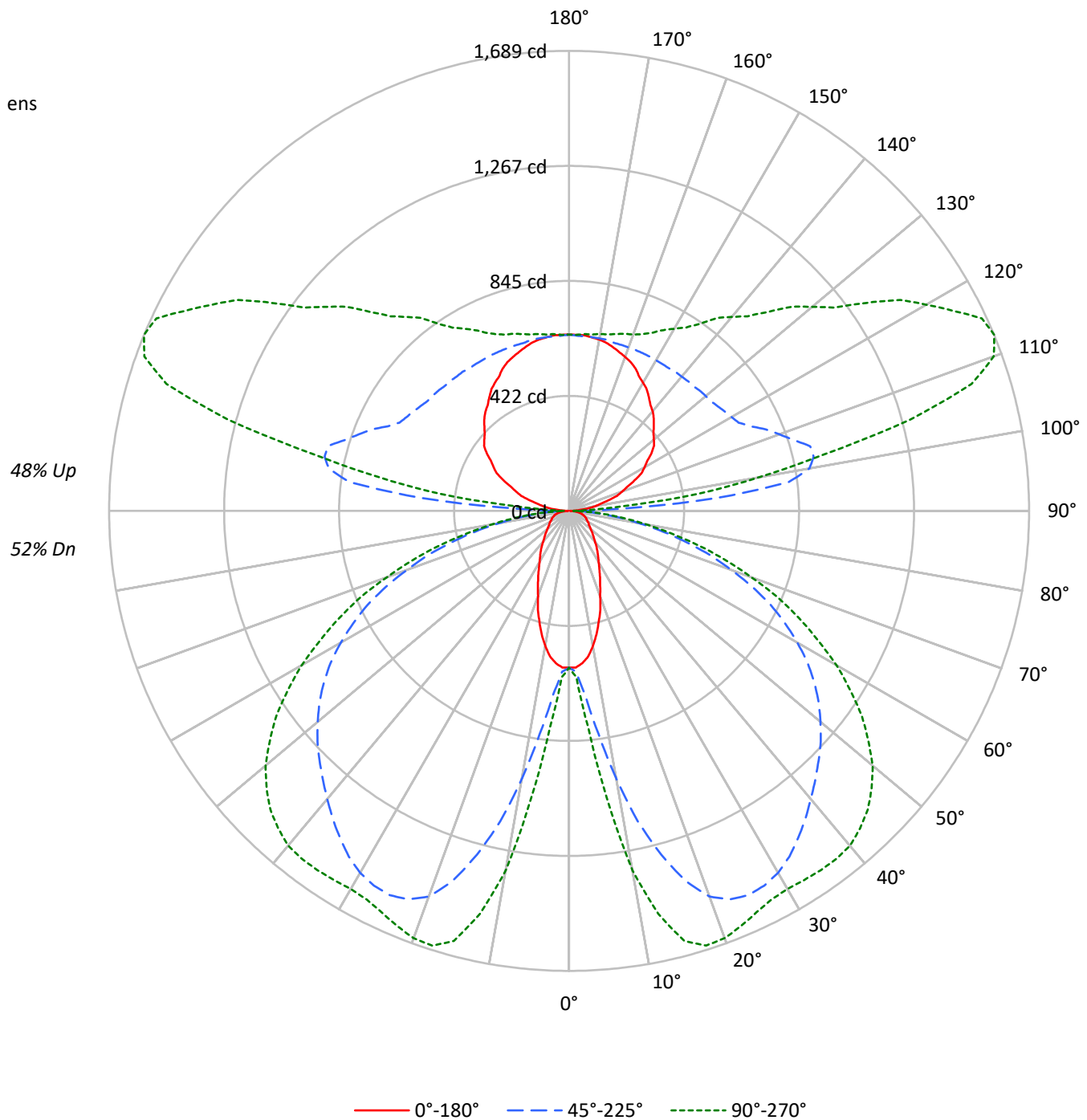
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8650.7 lumens
Efficiency: N/A
Efficacy: 112.6 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: General Diffuse

Input Watts (W): 76.8
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: P937307
CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3478	4114	4787
10°	3153	5997	7935
15°	2679	7833	9582
20°	2180	9075	9766
25°	1818	9494	9567
30°	1532	9552	9549
35°	1354	9390	9796
40°	1179	9181	10051
45°	1067	9028	10090
50°	979	8889	9924
55°	935	8687	9484
60°	957	8302	8789
65°	994	7718	7834
70°	1057	6727	6618
75°	1166	5479	5165
80°	1266	3796	3481
85°	1103	2011	1781

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10090 cd/sqm



TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	0.9
10°-20°	330.0	3.8
20°-30°	577.3	6.7
30°-40°	743.1	8.6
40°-50°	830.0	9.6
50°-60°	795.0	9.2
60°-70°	630.0	7.3
70°-80°	370.5	4.3
80°-90°	105.4	1.2
90°-100°	315.4	3.6
100°-110°	829.3	9.6
110°-120°	859.9	9.9
120°-130°	689.7	8.0
130°-140°	541.2	6.3
140°-150°	415.4	4.8
150°-160°	299.2	3.5
160°-170°	183.0	2.1
170°-180°	61.8	0.7
0°-30°	981.8	11.3
0°-40°	1724.9	19.9
0°-60°	3349.9	38.7
0°-90°	4455.8	51.5
90°-120°	2004.6	23.2
90°-150°	3650.9	42.2
90°-180°	4195.0	48.5
0°-180°	8650.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	576	576	576	576	576	
5°	561	602	677	766	794	52
15°	420	776	1307	1584	1634	117
25°	268	879	1557	1625	1627	124
35°	181	840	1466	1549	1610	113
45°	124	670	1296	1484	1551	96
55°	89	426	1100	1277	1312	81
65°	70	226	816	918	931	70
75°	52	139	448	492	494	54
85°	18	43	111	122	124	20
90°	4	12	33	16	16	5
95°	42	163	543	280	191	46
105°	149	226	917	1392	1298	158
115°	265	322	734	1465	1672	262
125°	369	414	668	1129	1332	328
135°	440	484	647	911	1033	340
145°	510	543	639	777	838	320
155°	577	593	639	701	722	265
165°	622	631	639	664	672	176
175°	647	647	643	652	652	61
180°	647	647	647	647	647	



TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6	575.6
2.5°	575.6	575.6	579.4	581.2	584.9	586.7	590.5	594.2	605.2	607.1	610.8
5°	560.9	568.2	592.3	601.6	627.5	662.7	677.4	701.5	751.5	766.3	775.6
7.5°	538.6	555.3	614.6	629.3	694.1	786.7	825.6	877.4	957.0	995.8	1027.3
10°	503.4	538.6	644.2	679.3	784.8	925.5	997.7	1069.9	1190.2	1243.9	1264.3
12.5°	464.6	522.0	675.7	723.8	875.5	1081.0	1168.0	1247.5	1384.6	1456.8	1467.9
15°	420.2	497.9	705.3	775.6	971.7	1210.6	1306.9	1404.9	1532.6	1584.4	1597.4
17.5°	381.4	479.4	733.0	807.1	1045.8	1327.2	1425.3	1506.7	1610.4	1645.5	1654.8
20°	333.2	449.8	751.5	847.8	1123.6	1412.3	1506.7	1569.7	1640.0	1662.2	1665.9
22.5°	298.0	418.3	762.6	862.5	1175.3	1464.1	1543.7	1593.7	1641.9	1649.3	1651.1
25°	268.4	383.1	760.7	879.3	1219.8	1495.6	1556.7	1593.7	1621.5	1625.2	1625.2
27.5°	240.6	344.3	753.4	882.9	1253.1	1503.0	1551.1	1577.1	1590.0	1597.4	1597.4
30°	216.6	307.3	734.9	875.5	1267.9	1495.6	1534.5	1547.5	1560.4	1571.5	1577.1
32.5°	198.1	272.1	707.0	860.7	1269.8	1477.1	1504.9	1512.2	1530.7	1556.7	1565.9
35°	181.4	237.0	675.7	840.3	1258.7	1447.5	1466.0	1473.4	1510.4	1549.3	1562.2
37.5°	164.8	211.0	634.9	805.2	1242.0	1412.3	1425.3	1438.3	1495.6	1541.8	1556.7
40°	148.0	188.8	586.7	766.3	1216.1	1369.7	1380.8	1401.2	1477.1	1530.7	1545.6
42.5°	135.1	170.3	534.9	725.6	1182.8	1321.6	1338.2	1367.8	1454.9	1512.2	1529.0
45°	124.0	151.8	479.4	670.1	1140.2	1271.6	1295.7	1336.5	1428.9	1484.5	1499.4
47.5°	112.9	138.8	422.1	612.7	1093.9	1221.7	1253.1	1299.4	1393.8	1447.5	1460.4
50°	103.7	125.9	364.6	551.6	1043.9	1168.0	1205.0	1253.1	1349.3	1399.3	1416.0
52.5°	96.3	114.8	310.9	490.5	986.6	1112.5	1155.0	1205.0	1295.7	1343.8	1355.0
55°	88.8	105.5	264.7	425.7	927.4	1053.2	1099.5	1147.6	1236.4	1277.2	1284.6
57.5°	85.2	98.1	225.8	364.6	864.4	986.6	1038.4	1082.9	1166.1	1197.6	1205.0
60°	79.6	92.6	196.2	312.8	796.0	923.6	968.1	1012.5	1082.9	1108.8	1114.3
62.5°	74.1	88.8	174.0	262.8	725.6	849.6	894.0	934.7	994.0	1012.5	1019.9
65°	70.3	85.2	157.4	225.8	653.4	771.9	816.3	851.4	899.6	918.1	921.8
67.5°	66.6	81.4	144.4	194.4	581.2	694.1	727.4	760.7	797.8	816.3	818.2
70°	61.1	77.7	133.3	172.1	507.2	605.2	633.1	668.2	697.8	707.0	712.6
72.5°	57.3	72.2	125.9	155.5	431.3	520.1	546.0	566.4	592.3	601.6	601.6
75°	51.8	64.8	118.4	138.8	353.5	425.7	447.9	468.3	488.7	492.4	486.8
77.5°	46.2	57.3	101.8	116.7	275.8	336.9	355.4	366.5	383.1	386.9	388.7
80°	38.9	50.0	79.6	90.7	199.9	248.1	261.0	270.2	285.1	285.1	288.8
82.5°	29.6	38.9	57.3	64.8	135.1	170.3	181.4	187.0	196.2	196.2	196.2
85°	18.5	24.1	37.0	42.6	81.4	103.7	111.1	112.9	120.3	122.2	122.2
87.5°	9.2	13.0	24.1	25.9	42.6	53.7	53.7	57.3	57.3	55.6	53.7
90°	4.3	7.8	11.3	12.1	19.1	28.3	33.0	29.3	22.0	16.5	16.5
92.5°	17.4	46.9	76.4	83.8	117.8	163.2	185.9	162.9	116.9	82.5	79.2
95°	41.7	95.7	149.7	163.3	289.9	458.9	543.3	484.8	367.8	280.1	270.2
97.5°	72.1	119.7	167.4	179.3	390.6	672.2	813.0	776.1	702.2	646.7	627.7
100°	95.5	138.8	182.0	192.9	427.2	739.7	896.0	898.7	904.1	908.1	885.6
102.5°	115.5	155.9	196.2	206.3	444.0	760.9	919.4	966.5	1060.7	1131.4	1112.0
105°	149.4	183.6	217.8	226.3	456.4	763.4	916.8	1022.4	1233.5	1391.9	1381.6
107.5°	184.2	216.0	247.9	255.8	458.8	729.4	864.7	1012.0	1306.6	1527.5	1530.0
110°	207.6	236.4	265.1	272.3	455.2	699.3	821.3	985.9	1315.3	1562.2	1573.0



TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	230.6	258.0	285.4	292.2	455.4	672.9	781.8	950.3	1287.2	1540.0	1556.6
115°	265.3	290.7	315.9	322.2	459.6	642.8	734.4	896.7	1221.4	1464.9	1487.9
117.5°	299.6	322.6	345.6	351.4	468.2	623.9	701.8	848.4	1141.3	1361.1	1386.6
120°	319.6	341.3	362.9	368.3	475.1	617.6	688.8	822.7	1090.4	1291.2	1316.0
122.5°	339.2	361.0	382.8	388.3	485.1	614.3	678.8	799.3	1040.4	1221.2	1245.7
125°	369.1	389.0	408.9	413.9	498.6	611.5	668.0	770.4	975.2	1128.7	1151.2
127.5°	393.5	413.6	433.6	438.6	512.0	609.9	658.8	746.7	922.6	1054.5	1073.5
130°	406.5	428.1	449.7	455.1	521.9	610.9	655.4	733.7	890.2	1007.6	1025.2
132.5°	419.9	441.6	463.2	468.6	529.9	611.5	652.3	722.4	862.5	967.6	983.3
135°	439.9	459.6	479.3	484.3	538.5	610.9	647.1	705.7	823.1	911.1	924.7
137.5°	460.4	479.8	499.3	504.2	551.5	614.7	646.2	695.8	795.0	869.5	880.6
140°	477.3	495.2	513.2	517.7	559.6	615.3	643.2	686.0	771.8	836.0	846.4
142.5°	490.4	507.0	523.6	527.7	566.2	617.5	643.2	680.8	756.1	812.6	821.5
145°	510.3	524.8	539.2	542.8	574.9	617.6	638.9	669.7	731.2	777.4	784.1
147.5°	530.2	544.3	558.4	562.0	587.6	621.8	638.9	663.0	711.5	747.9	753.5
150°	543.3	556.0	568.8	572.0	594.3	624.0	638.9	659.3	700.2	730.9	735.5
152.5°	556.8	566.5	576.1	578.5	598.6	625.4	638.9	656.3	691.3	717.5	721.0
155°	576.7	583.8	591.0	592.8	608.1	628.6	638.9	652.8	680.6	701.4	703.7
157.5°	591.5	598.5	605.4	607.2	617.7	631.9	638.9	649.7	671.3	687.5	689.1
160°	601.5	606.9	612.3	613.6	622.0	633.3	638.9	648.1	666.6	680.5	681.4
162.5°	611.5	615.6	619.6	620.6	626.7	634.8	638.9	646.7	662.3	674.1	674.9
165°	622.3	626.1	629.7	630.6	633.3	637.0	638.9	644.5	655.7	664.1	665.0
167.5°	632.3	634.1	635.8	636.2	638.6	641.7	643.2	646.8	654.2	659.7	660.1
170°	638.9	640.6	642.3	642.8	642.9	643.1	643.2	646.8	654.2	659.7	659.7
172.5°	642.3	642.7	643.1	643.2	643.2	643.2	643.2	646.0	651.8	656.2	655.9
175°	647.1	647.1	647.1	647.1	645.8	644.0	643.2	645.0	648.7	651.5	651.5
177.5°	647.1	647.1	647.1	647.1	646.0	644.7	644.1	645.6	648.5	650.6	650.3
180°	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1



TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	575.6	575.6
2.5°	614.6	610.8
5°	790.4	794.1
7.5°	1064.3	1062.5
10°	1323.5	1340.1
12.5°	1512.2	1516.0
15°	1627.0	1634.4
17.5°	1671.5	1673.3
20°	1673.3	1669.6
22.5°	1652.9	1649.3
25°	1628.9	1627.0
27.5°	1606.7	1608.5
30°	1597.4	1602.9
32.5°	1597.4	1606.7
35°	1601.2	1610.4
37.5°	1599.3	1610.4
40°	1591.8	1604.8
42.5°	1571.5	1580.8
45°	1540.1	1551.1
47.5°	1499.4	1506.7
50°	1447.5	1454.9
52.5°	1382.7	1384.6
55°	1305.0	1312.4
57.5°	1221.7	1223.5
60°	1129.1	1134.6
62.5°	1031.0	1031.0
65°	927.4	931.0
67.5°	820.0	829.2
70°	710.8	712.6
72.5°	603.5	603.5
75°	492.4	494.2
77.5°	386.9	386.9
80°	286.9	288.8
82.5°	198.1	201.7
85°	124.0	124.0
87.5°	57.3	51.8
90°	16.5	16.5
92.5°	66.0	53.0
95°	230.4	190.6
97.5°	552.1	476.4
100°	795.4	705.3
102.5°	1034.9	957.6
105°	1340.0	1298.5
107.5°	1540.0	1550.0
110°	1616.2	1659.4



TEST NUMBER: P937307

CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1623.0	1689.4
115°	1580.0	1672.0
117.5°	1488.7	1590.8
120°	1415.2	1514.4
122.5°	1343.6	1441.4
125°	1241.5	1331.6
127.5°	1149.6	1225.6
130°	1095.4	1165.6
132.5°	1046.3	1109.2
135°	978.9	1033.2
137.5°	924.9	969.4
140°	888.0	929.4
142.5°	857.2	892.9
145°	811.2	838.2
147.5°	775.8	798.2
150°	753.6	771.8
152.5°	734.6	748.3
155°	712.7	721.8
157.5°	695.5	701.8
160°	685.1	688.8
162.5°	678.4	681.8
165°	668.7	672.3
167.5°	661.6	663.1
170°	659.7	659.7
172.5°	654.5	653.1
175°	651.5	651.5
177.5°	648.7	647.1
180°	647.1	647.1



TEST NUMBER: P937307
 CATALOG NUMBER: SQ4-FB-075U-100D-B50-1D-UNV-STD-W-6

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	5.55	6.46	6.49	7.42	8.67	18.72	19.63	19.65	20.59	21.84
	3H	6.26	7.08	7.21	8.05	9.32	20.55	21.38	21.50	22.34	23.61
	4H	6.56	7.34	7.52	8.31	9.59	21.20	21.98	22.16	22.95	24.23
	6H	6.81	7.53	7.79	8.51	9.80	21.63	22.35	22.60	23.32	24.62
	8H	6.88	7.57	7.86	8.56	9.85	21.75	22.43	22.73	23.43	24.72
	12H	6.90	7.56	7.89	8.54	9.86	21.82	22.47	22.80	23.46	24.77
4H	2H	12.76	13.54	13.73	14.52	15.79	19.00	19.78	19.96	20.75	22.03
	3H	14.34	14.99	15.31	15.99	17.28	21.04	21.70	22.02	22.70	23.99
	4H	14.43	15.03	15.42	16.03	17.34	21.81	22.41	22.79	23.40	24.72
	6H	14.45	14.96	15.45	15.98	17.30	22.35	22.86	23.35	23.88	25.19
	8H	14.43	14.91	15.43	15.92	17.25	22.51	22.99	23.51	24.00	25.33
	12H	14.39	14.82	15.41	15.85	17.18	22.60	23.04	23.62	24.07	25.40
8H	4H	15.88	16.36	16.88	17.37	18.70	21.87	22.36	22.87	23.37	24.70
	6H	16.13	16.53	17.15	17.58	18.91	22.50	22.90	23.53	23.95	25.28
	8H	16.14	16.50	17.18	17.54	18.88	22.72	23.07	23.75	24.11	25.46
	12H	16.12	16.43	17.15	17.46	18.85	22.86	23.17	23.90	24.21	25.60
12H	4H	16.03	16.46	17.05	17.49	18.82	21.83	22.27	22.85	23.29	24.63
	6H	16.38	16.74	17.42	17.78	19.12	22.49	22.84	23.52	23.88	25.22
	8H	16.46	16.77	17.49	17.80	19.19	22.72	23.03	23.75	24.06	25.45