

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: P936721

Luminaire Tested: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936721
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

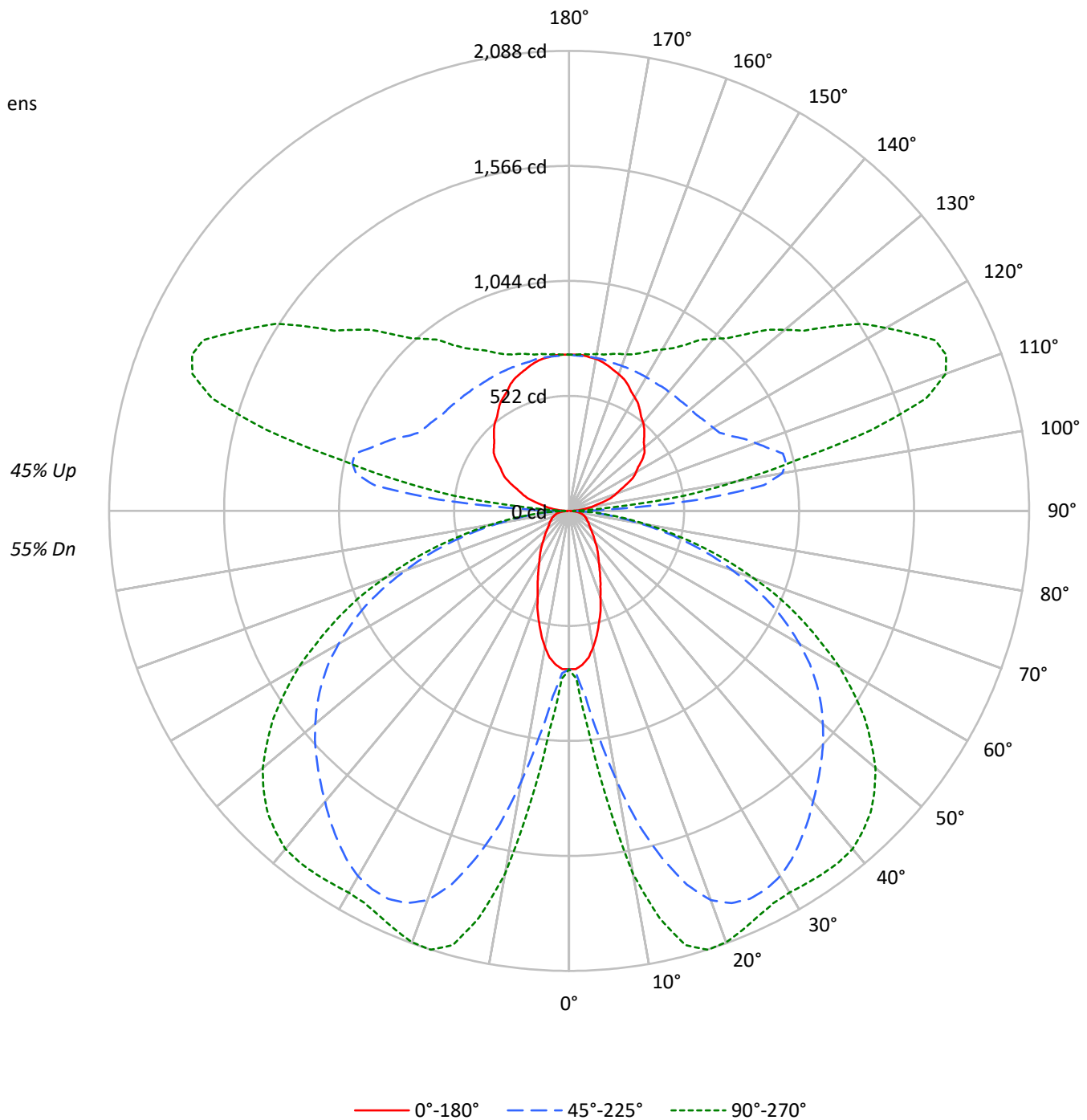
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10159.3 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 109.2
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: P936721
CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





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CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2172	2569	2987
10°	1970	3746	4952
15°	1675	4895	5979
20°	1365	5674	6094
25°	1139	5939	5970
30°	961	5978	5959
35°	850	5880	6113
40°	741	5753	6272
45°	672	5660	6297
50°	617	5577	6192
55°	591	5454	5918
60°	606	5217	5485
65°	631	4856	4889
70°	674	4237	4130
75°	750	3458	3223
80°	825	2401	2172
85°	749	1276	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



TEST NUMBER: P936721

CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	0.9
10°-20°	411.9	4.1
20°-30°	720.5	7.1
30°-40°	927.4	9.1
40°-50°	1035.9	10.2
50°-60°	992.2	9.8
60°-70°	786.3	7.7
70°-80°	462.3	4.6
80°-90°	131.2	1.3
90°-100°	345.8	3.4
100°-110°	909.1	8.9
110°-120°	942.7	9.3
120°-130°	756.1	7.4
130°-140°	593.3	5.8
140°-150°	455.4	4.5
150°-160°	328.0	3.2
160°-170°	200.7	2.0
170°-180°	67.8	0.7
0°-30°	1225.3	12.1
0°-40°	2152.7	21.2
0°-60°	4180.8	41.2
0°-90°	5560.5	54.7
90°-120°	2197.6	21.6
90°-150°	4002.4	39.4
90°-180°	4599.0	45.3
0°-180°	10159.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	751	846	956	991	65
15°	524	968	1631	1977	2040	146
25°	335	1097	1943	2028	2031	154
35°	226	1049	1830	1934	2010	141
45°	155	836	1617	1853	1936	120
55°	111	531	1372	1594	1638	101
65°	88	282	1019	1146	1162	87
75°	65	173	559	614	617	68
85°	23	53	139	152	155	25
90°	5	13	36	18	18	6
95°	46	179	596	307	209	51
105°	164	248	1005	1526	1424	174
115°	291	353	805	1606	1833	287
125°	405	454	732	1237	1460	359
135°	482	531	709	999	1133	373
145°	559	595	700	852	919	350
155°	632	650	700	769	791	291
165°	682	691	700	728	737	193
175°	709	709	705	714	714	67
180°	709	709	709	709	709	



TEST NUMBER: P936721

CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4	718.4
2.5°	718.4	718.4	723.0	725.3	730.0	732.3	736.9	741.5	755.4	757.7	762.3
5°	699.9	709.2	739.2	750.8	783.1	827.0	845.5	875.6	937.9	956.4	968.0
7.5°	672.2	693.0	766.9	785.4	866.2	981.8	1030.3	1095.0	1194.3	1242.9	1282.1
10°	628.3	672.2	803.9	847.8	979.5	1155.1	1245.2	1335.3	1485.4	1552.4	1577.8
12.5°	579.8	651.4	843.2	903.3	1092.7	1349.1	1457.7	1557.0	1728.0	1818.0	1831.9
15°	524.4	621.4	880.2	968.0	1212.8	1510.8	1630.9	1753.4	1912.8	1977.4	1993.6
17.5°	475.9	598.3	914.8	1007.2	1305.2	1656.3	1778.8	1880.4	2009.8	2053.7	2065.2
20°	415.8	561.3	937.9	1058.1	1402.2	1762.6	1880.4	1959.0	2046.7	2074.5	2079.1
22.5°	371.9	522.1	951.8	1076.5	1466.9	1827.3	1926.6	1989.0	2049.0	2058.3	2060.6
25°	335.0	478.2	949.5	1097.3	1522.4	1866.6	1942.8	1989.0	2023.6	2028.3	2028.3
27.5°	300.3	429.7	940.2	1101.9	1563.9	1875.8	1935.9	1968.2	1984.4	1993.6	1993.6
30°	270.3	383.5	917.1	1092.7	1582.4	1866.6	1915.1	1931.2	1947.4	1961.3	1968.2
32.5°	247.2	339.6	882.5	1074.2	1584.7	1843.5	1878.1	1887.3	1910.4	1942.8	1954.3
35°	226.4	295.7	843.2	1048.8	1570.9	1806.5	1829.6	1838.8	1885.0	1933.5	1949.7
37.5°	205.6	263.3	792.3	1004.9	1550.1	1762.6	1778.8	1794.9	1866.6	1924.3	1942.8
40°	184.8	235.6	732.3	956.4	1517.7	1709.5	1723.3	1748.7	1843.5	1910.4	1928.9
42.5°	168.6	212.5	667.6	905.6	1476.2	1649.4	1670.2	1707.2	1815.7	1887.3	1908.1
45°	154.8	189.4	598.3	836.2	1423.0	1587.0	1617.1	1667.9	1783.4	1852.7	1871.2
47.5°	140.9	173.2	526.7	764.6	1365.3	1524.7	1563.9	1621.7	1739.5	1806.5	1822.7
50°	129.4	157.1	455.1	688.4	1302.9	1457.7	1503.9	1563.9	1684.1	1746.4	1767.2
52.5°	120.1	143.2	388.1	612.2	1231.3	1388.4	1441.5	1503.9	1617.1	1677.1	1691.0
55°	110.9	131.7	330.3	531.3	1157.4	1314.5	1372.2	1432.3	1543.2	1594.0	1603.2
57.5°	106.3	122.4	281.8	455.1	1078.8	1231.3	1296.0	1351.4	1455.4	1494.6	1503.9
60°	99.3	115.5	244.9	390.4	993.4	1152.8	1208.2	1263.6	1351.4	1383.8	1390.7
62.5°	92.4	110.9	217.1	328.0	905.6	1060.4	1115.8	1166.6	1240.5	1263.6	1272.9
65°	87.8	106.3	196.4	281.8	815.4	963.3	1018.8	1062.7	1122.7	1145.8	1150.5
67.5°	83.2	101.6	180.2	242.6	725.3	866.2	907.9	949.5	995.7	1018.8	1021.1
70°	76.2	97.0	166.3	214.8	632.9	755.4	790.0	833.9	870.9	882.5	889.4
72.5°	71.6	90.1	157.1	194.0	538.2	649.1	681.4	706.9	739.2	750.8	750.8
75°	64.7	80.9	147.8	173.2	441.2	531.3	559.0	584.4	609.8	614.5	607.5
77.5°	57.8	71.6	127.0	145.5	344.2	420.4	443.5	457.4	478.2	482.8	485.1
80°	48.5	62.4	99.3	113.2	249.5	309.5	325.7	337.3	355.7	355.7	360.4
82.5°	37.0	48.5	71.6	80.9	168.6	212.5	226.4	233.3	244.9	244.9	244.9
85°	23.1	30.0	46.2	53.1	101.6	129.4	138.6	140.9	150.2	152.5	152.5
87.5°	11.6	16.2	30.0	32.3	53.1	67.0	67.0	71.6	71.6	69.3	67.0
90°	4.8	8.5	12.4	13.3	20.9	31.1	36.2	32.2	24.1	18.1	18.1
92.5°	19.0	51.4	83.8	91.9	129.1	178.9	203.7	178.6	128.2	90.5	86.9
95°	45.7	105.0	164.2	179.0	317.9	503.0	595.6	531.5	403.2	307.1	296.1
97.5°	79.0	131.3	183.6	196.7	428.2	736.9	891.3	850.8	769.7	708.9	688.2
100°	104.7	152.2	199.5	211.4	468.3	810.9	982.2	985.1	991.1	995.5	970.8
102.5°	126.7	170.9	215.1	226.1	486.7	834.2	1007.9	1059.5	1162.8	1240.2	1219.1
105°	163.8	201.2	238.6	248.0	500.3	836.8	1005.1	1120.8	1352.3	1525.9	1514.5
107.5°	201.9	236.8	271.7	280.4	503.0	799.6	947.9	1109.4	1432.4	1674.5	1677.3
110°	227.6	259.1	290.7	298.5	499.1	766.6	900.4	1080.8	1441.8	1712.6	1724.4



TEST NUMBER: P936721

CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	252.8	282.8	312.9	320.4	499.3	737.7	857.0	1041.7	1411.2	1688.3	1706.5
115°	290.9	318.6	346.3	353.3	503.9	704.7	805.1	983.1	1339.0	1605.9	1631.2
117.5°	328.5	353.7	378.8	385.2	513.2	684.0	769.4	930.0	1251.2	1492.1	1520.1
120°	350.4	374.1	397.8	403.7	520.8	677.1	755.1	901.9	1195.3	1415.5	1442.7
122.5°	371.8	395.8	419.6	425.7	531.8	673.4	744.1	876.3	1140.6	1338.8	1365.6
125°	404.7	426.5	448.3	453.8	546.6	670.4	732.3	844.5	1069.0	1237.4	1262.1
127.5°	431.4	453.4	475.4	480.9	561.3	668.6	722.3	818.7	1011.4	1156.0	1176.9
130°	445.7	469.4	493.0	499.0	572.1	669.7	718.5	804.3	975.9	1104.6	1123.8
132.5°	460.4	484.1	507.8	513.7	580.9	670.4	715.1	791.9	945.6	1060.8	1078.0
135°	482.3	503.9	525.4	530.8	590.4	669.7	709.4	773.8	902.4	998.9	1013.8
137.5°	504.7	526.1	547.5	552.8	604.7	673.9	708.5	762.8	871.6	953.2	965.3
140°	523.2	542.9	562.6	567.5	613.4	674.5	705.1	752.1	846.1	916.5	927.9
142.5°	537.5	555.7	574.0	578.5	620.7	677.0	705.1	746.4	828.9	890.8	900.6
145°	559.4	575.3	591.1	595.1	630.2	677.0	700.4	734.1	801.6	852.2	859.6
147.5°	581.4	596.8	612.2	616.1	644.2	681.7	700.4	727.0	780.1	819.9	826.1
150°	595.6	609.5	623.5	627.0	651.5	684.1	700.4	722.8	767.6	801.3	806.3
152.5°	610.4	620.9	631.6	634.2	656.3	685.7	700.4	719.6	757.8	786.6	790.3
155°	632.2	640.1	648.0	649.9	666.7	689.2	700.4	715.6	746.1	768.9	771.4
157.5°	648.5	656.1	663.7	665.6	677.2	692.7	700.4	712.2	735.9	753.7	755.4
160°	659.4	665.4	671.3	672.7	682.0	694.2	700.4	710.6	730.8	746.1	747.1
162.5°	670.4	674.8	679.3	680.4	687.1	695.9	700.4	708.9	726.0	738.9	739.8
165°	682.3	686.3	690.3	691.3	694.3	698.4	700.4	706.6	718.8	728.0	729.0
167.5°	693.2	695.1	697.0	697.5	700.0	703.4	705.1	709.1	717.2	723.2	723.6
170°	700.4	702.2	704.2	704.6	704.8	705.0	705.1	709.1	717.2	723.2	723.2
172.5°	704.2	704.6	705.0	705.1	705.1	705.1	705.1	708.2	714.6	719.4	719.0
175°	709.4	709.4	709.4	709.4	707.9	706.0	705.1	707.1	711.2	714.2	714.2
177.5°	709.4	709.4	709.4	709.4	708.3	706.9	706.1	707.7	710.9	713.3	712.8
180°	709.4	709.4	709.4	709.4	709.4	709.4	709.4	709.4	709.4	709.4	709.4



TEST NUMBER: P936721

CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	718.4	718.4
2.5°	766.9	762.3
5°	986.4	991.1
7.5°	1328.3	1326.0
10°	1651.7	1672.5
12.5°	1887.3	1892.0
15°	2030.6	2039.8
17.5°	2086.0	2088.3
20°	2088.3	2083.7
22.5°	2062.9	2058.3
25°	2032.9	2030.6
27.5°	2005.2	2007.5
30°	1993.6	2000.5
32.5°	1993.6	2005.2
35°	1998.2	2009.8
37.5°	1995.9	2009.8
40°	1986.7	2002.8
42.5°	1961.3	1972.8
45°	1922.0	1935.9
47.5°	1871.2	1880.4
50°	1806.5	1815.7
52.5°	1725.6	1728.0
55°	1628.6	1637.9
57.5°	1524.7	1527.0
60°	1409.2	1416.1
62.5°	1286.7	1286.7
65°	1157.4	1162.0
67.5°	1023.4	1035.0
70°	887.1	889.4
72.5°	753.1	753.1
75°	614.5	616.8
77.5°	482.8	482.8
80°	358.0	360.4
82.5°	247.2	251.8
85°	154.8	154.8
87.5°	71.6	64.7
90°	18.1	18.1
92.5°	72.5	58.1
95°	252.6	209.0
97.5°	605.2	522.3
100°	872.0	773.2
102.5°	1134.4	1049.8
105°	1469.1	1423.6
107.5°	1688.2	1699.2
110°	1771.8	1819.2



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CATALOG NUMBER: SQ4-FB-050U-075D-927-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1779.3	1852.1
115°	1732.1	1833.1
117.5°	1632.0	1744.0
120°	1551.5	1660.2
122.5°	1472.9	1580.2
125°	1360.9	1459.8
127.5°	1260.2	1343.6
130°	1200.9	1277.9
132.5°	1147.0	1216.0
135°	1073.2	1132.7
137.5°	1014.0	1062.7
140°	973.4	1018.9
142.5°	939.8	978.9
145°	889.3	918.9
147.5°	850.5	875.1
150°	826.1	846.1
152.5°	805.3	820.4
155°	781.4	791.3
157.5°	762.4	769.4
160°	751.1	755.1
162.5°	743.7	747.5
165°	733.0	737.0
167.5°	725.3	727.0
170°	723.2	723.2
172.5°	717.6	716.1
175°	714.2	714.2
177.5°	711.1	709.4
180°	709.4	709.4



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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	4.20	5.15	5.11	6.09	7.28	17.40	18.35	18.30	19.28	20.48
	3H	4.92	5.77	5.83	6.71	7.93	19.25	20.10	20.17	21.04	22.27
	4H	5.22	6.03	6.15	6.97	8.20	19.90	20.71	20.83	21.66	22.89
	6H	5.47	6.22	6.42	7.17	8.42	20.34	21.09	21.29	22.04	23.28
	8H	5.54	6.26	6.50	7.23	8.47	20.47	21.18	21.42	22.15	23.39
	12H	5.56	6.24	6.52	7.21	8.48	20.54	21.22	21.50	22.18	23.45
4H	2H	11.44	12.25	12.38	13.19	14.43	17.68	18.49	18.62	19.44	20.67
	3H	13.01	13.69	13.96	14.67	15.91	19.74	20.42	20.69	21.39	22.64
	4H	13.11	13.73	14.07	14.70	15.97	20.51	21.13	21.47	22.10	23.38
	6H	13.13	13.66	14.10	14.66	15.93	21.06	21.60	22.04	22.59	23.86
	8H	13.11	13.61	14.08	14.60	15.88	21.23	21.73	22.21	22.72	24.00
	12H	13.07	13.52	14.06	14.53	15.82	21.33	21.78	22.33	22.79	24.08
8H	4H	14.57	15.07	15.54	16.06	17.34	20.58	21.08	21.56	22.07	23.36
	6H	14.81	15.23	15.82	16.26	17.54	21.22	21.64	22.22	22.67	23.95
	8H	14.83	15.20	15.84	16.22	17.52	21.44	21.81	22.45	22.83	24.13
	12H	14.81	15.13	15.82	16.14	17.49	21.60	21.92	22.61	22.93	24.28
12H	4H	14.72	15.17	15.71	16.17	17.46	20.54	20.99	21.53	22.00	23.29
	6H	15.08	15.44	16.08	16.46	17.76	21.20	21.57	22.21	22.59	23.89
	8H	15.15	15.47	16.16	16.48	17.83	21.44	21.76	22.46	22.78	24.12