

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: P937446

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937446
REPORT IS A COMBINATION OF REPORTS P933581 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

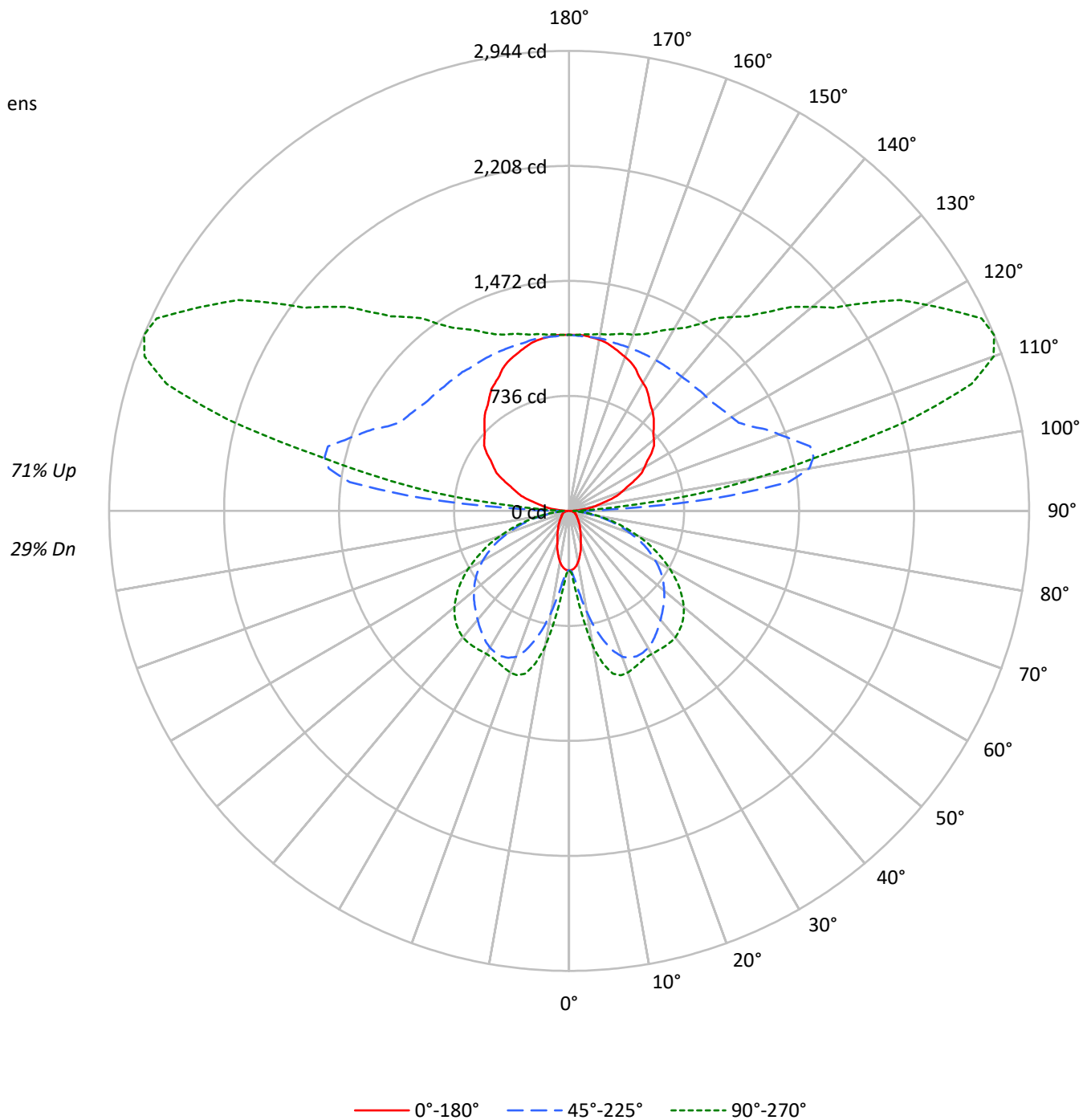
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10248.9 lumens
Efficiency: N/A
Efficacy: 124.4 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): 82.4
Input Voltage (V): NR
Input Current (A_{in}): 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

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Luminous Intensity Polar Plot





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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7			7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1760	1760	1760
5°	1720	2035	2366
10°	1560	2966	3923
15°	1326	3875	4737
20°	1079	4490	4828
25°	900	4699	4730
30°	759	4729	4721
35°	671	4650	4843
40°	585	4548	4969
45°	530	4474	4988
50°	486	4406	4906
55°	466	4308	4689
60°	477	4119	4345
65°	496	3831	3873
70°	529	3341	3272
75°	586	2724	2553
80°	641	1889	1720
85°	568	1002	881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4988 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	0.5
10°-20°	217.5	2.1
20°-30°	380.5	3.7
30°-40°	489.8	4.8
40°-50°	547.1	5.3
50°-60°	524.0	5.1
60°-70°	415.3	4.1
70°-80°	244.2	2.4
80°-90°	72.1	0.7
90°-100°	549.6	5.4
100°-110°	1444.9	14.1
110°-120°	1498.2	14.6
120°-130°	1201.8	11.7
130°-140°	943.0	9.2
140°-150°	723.8	7.1
150°-160°	521.2	5.1
160°-170°	318.9	3.1
170°-180°	107.7	1.1
0°-30°	647.1	6.3
0°-40°	1137.0	11.1
0°-60°	2208.1	21.5
0°-90°	2939.7	28.7
90°-120°	3492.8	34.1
90°-150°	6361.3	62.1
90°-180°	7309.0	71.3
0°-180°	10248.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	379	379	379	379	379	
5°	370	396	446	505	523	34
15°	277	511	861	1044	1077	77
25°	177	580	1026	1071	1072	81
35°	120	554	966	1021	1062	75
45°	82	442	854	978	1022	63
55°	59	281	725	842	865	53
65°	46	149	538	605	614	46
75°	34	92	295	325	326	36
85°	12	28	73	80	82	13
90°	8	21	58	29	29	7
95°	73	284	947	488	332	81
105°	260	394	1597	2425	2262	276
115°	462	562	1280	2552	2913	457
125°	643	721	1164	1967	2320	571
135°	767	844	1128	1588	1800	593
145°	889	946	1113	1354	1460	557
155°	1005	1033	1113	1222	1258	462
165°	1084	1099	1113	1157	1171	306
175°	1128	1128	1121	1135	1135	107
180°	1128	1128	1128	1128	1128	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4	379.4
2.5°	379.4	379.4	381.9	383.1	385.5	386.8	389.2	391.7	399.0	400.1	402.6
5°	369.7	374.6	390.4	396.5	413.6	436.8	446.5	462.4	495.4	505.1	511.2
7.5°	355.0	366.0	405.1	414.8	457.5	518.5	544.1	578.3	630.7	656.4	677.1
10°	331.8	355.0	424.6	447.8	517.3	610.0	657.7	705.2	784.5	819.9	833.3
12.5°	306.3	344.0	445.4	477.0	577.1	712.5	769.9	822.3	912.6	960.2	967.5
15°	277.0	328.2	464.8	511.2	640.6	797.9	861.4	926.0	1010.2	1044.4	1052.9
17.5°	251.3	316.0	483.2	532.0	689.3	874.8	939.5	993.1	1061.5	1084.7	1090.7
20°	219.6	296.5	495.4	558.8	740.6	930.9	993.1	1034.6	1081.0	1095.7	1098.1
22.5°	196.4	275.7	502.7	568.5	774.7	965.1	1017.5	1050.5	1082.2	1087.1	1088.3
25°	176.9	252.5	501.5	579.5	804.0	985.9	1026.1	1050.5	1068.8	1071.3	1071.3
27.5°	158.6	227.0	496.6	582.0	826.0	990.7	1022.4	1039.5	1048.1	1052.9	1052.9
30°	142.7	202.6	484.4	577.1	835.8	985.9	1011.4	1020.0	1028.5	1035.9	1039.5
32.5°	130.5	179.4	466.1	567.3	837.0	973.6	992.0	996.8	1009.0	1026.1	1032.2
35°	119.5	156.2	445.4	553.9	829.7	954.1	966.3	971.2	995.6	1021.2	1029.7
37.5°	108.6	139.1	418.5	530.8	818.7	930.9	939.5	948.0	985.9	1016.3	1026.1
40°	97.6	124.4	386.8	505.1	801.6	902.9	910.2	923.6	973.6	1009.0	1018.8
42.5°	89.1	112.2	352.6	478.3	779.6	871.2	882.2	901.6	959.0	996.8	1007.8
45°	81.8	100.1	316.0	441.6	751.5	838.2	854.1	880.9	941.9	978.5	988.2
47.5°	74.4	91.5	278.2	403.9	721.1	805.3	826.0	856.5	918.7	954.1	962.7
50°	68.3	83.0	240.3	363.6	688.1	769.9	794.3	826.0	889.4	922.4	933.4
52.5°	63.4	75.7	204.9	323.3	650.3	733.3	761.4	794.3	854.1	885.8	893.1
55°	58.6	69.6	174.5	280.6	611.3	694.2	724.7	756.5	815.0	841.9	846.8
57.5°	56.1	64.7	148.8	240.3	569.8	650.3	684.5	713.8	768.6	789.4	794.3
60°	52.5	61.0	129.4	206.2	524.7	608.8	638.1	667.4	713.8	730.8	734.5
62.5°	48.8	58.6	114.7	173.3	478.3	560.1	589.3	616.2	655.2	667.4	672.3
65°	46.4	56.1	103.7	148.8	430.7	508.8	538.1	561.2	593.0	605.2	607.6
67.5°	43.9	53.7	95.1	128.1	383.1	457.5	479.5	501.5	525.9	538.1	539.2
70°	40.3	51.2	87.9	113.4	334.3	399.0	417.3	440.4	460.0	466.1	469.7
72.5°	37.8	47.6	83.0	102.5	284.3	342.8	359.9	373.3	390.4	396.5	396.5
75°	34.2	42.7	78.0	91.5	233.0	280.6	295.3	308.6	322.1	324.6	320.9
77.5°	30.5	37.8	67.1	76.9	181.8	222.0	234.2	241.6	252.5	255.0	256.2
80°	25.7	32.9	52.5	59.8	131.8	163.5	172.0	178.1	187.9	187.9	190.3
82.5°	19.6	25.7	37.8	42.7	89.1	112.2	119.5	123.3	129.4	129.4	129.4
85°	12.2	15.8	24.4	28.0	53.7	68.3	73.2	74.4	79.3	80.5	80.5
87.5°	6.1	8.6	15.8	17.1	28.0	35.4	35.4	37.8	37.8	36.6	35.4
90°	7.5	13.6	19.6	21.2	33.3	49.4	57.5	51.1	38.3	28.7	28.7
92.5°	30.3	81.8	133.3	146.1	205.3	284.4	323.8	283.8	203.8	143.8	138.1
95°	72.7	166.8	261.0	284.5	505.2	799.5	946.7	844.8	640.9	488.1	470.8
97.5°	125.6	208.7	291.8	312.6	680.6	1171.2	1416.6	1352.2	1223.4	1126.8	1093.8
100°	166.5	241.8	317.2	336.0	744.4	1288.9	1561.1	1565.8	1575.2	1582.3	1543.0
102.5°	201.3	271.5	341.8	359.4	773.6	1325.8	1602.0	1684.0	1848.2	1971.3	1937.6
105°	260.3	319.8	379.3	394.2	795.3	1330.1	1597.4	1781.3	2149.3	2425.3	2407.2
107.5°	320.8	376.3	431.8	445.7	799.4	1270.9	1506.6	1763.2	2276.5	2661.3	2665.7
110°	361.7	411.8	461.9	474.5	793.3	1218.4	1430.9	1717.8	2291.6	2721.9	2740.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	401.8	449.5	497.4	509.3	793.6	1172.6	1362.1	1655.7	2242.9	2683.3	2712.3
115°	462.4	506.4	550.5	561.5	800.8	1120.0	1279.6	1562.5	2128.2	2552.4	2592.6
117.5°	522.1	562.2	602.2	612.2	815.8	1087.1	1222.8	1478.1	1988.6	2371.5	2416.0
120°	557.0	594.6	632.3	641.7	827.9	1076.1	1200.2	1433.4	1899.9	2249.7	2292.9
122.5°	591.0	629.0	667.0	676.5	845.2	1070.2	1182.7	1392.7	1812.8	2127.9	2170.6
125°	643.2	677.9	712.5	721.2	868.7	1065.5	1163.8	1342.3	1699.1	1966.7	2006.0
127.5°	685.6	720.5	755.5	764.3	892.2	1062.7	1148.0	1301.1	1607.5	1837.3	1870.4
130°	708.2	745.9	783.6	793.0	909.3	1064.4	1141.9	1278.2	1551.0	1755.6	1786.2
132.5°	731.7	769.4	807.0	816.5	923.2	1065.5	1136.6	1258.7	1502.8	1685.9	1713.3
135°	766.6	800.8	835.2	843.8	938.4	1064.5	1127.5	1229.7	1434.2	1587.6	1611.2
137.5°	802.1	836.0	870.1	878.5	961.0	1071.0	1125.9	1212.4	1385.3	1514.9	1534.3
140°	831.6	862.9	894.2	902.0	974.9	1072.1	1120.7	1195.4	1344.7	1456.7	1474.8
142.5°	854.3	883.3	912.2	919.4	986.5	1075.9	1120.7	1186.3	1317.4	1415.8	1431.4
145°	889.2	914.4	939.7	945.9	1001.7	1076.0	1113.1	1166.8	1274.0	1354.5	1366.3
147.5°	923.9	948.5	973.0	979.2	1023.9	1083.4	1113.1	1155.3	1239.7	1303.1	1312.8
150°	946.7	968.9	991.0	996.6	1035.4	1087.2	1113.1	1148.8	1220.1	1273.6	1281.5
152.5°	970.1	987.0	1003.8	1008.0	1043.0	1089.7	1113.1	1143.6	1204.5	1250.1	1256.1
155°	1004.9	1017.3	1029.8	1032.9	1059.6	1095.3	1113.1	1137.3	1185.8	1222.1	1226.0
157.5°	1030.6	1042.7	1054.9	1057.9	1076.3	1100.8	1113.1	1132.0	1169.6	1197.9	1200.6
160°	1048.1	1057.5	1066.9	1069.3	1083.9	1103.4	1113.1	1129.3	1161.6	1185.8	1187.4
162.5°	1065.5	1072.6	1079.6	1081.4	1091.9	1106.0	1113.1	1126.8	1154.0	1174.4	1176.0
165°	1084.4	1090.7	1097.1	1098.8	1103.6	1109.9	1113.1	1122.9	1142.4	1157.1	1158.7
167.5°	1101.8	1104.8	1107.8	1108.6	1112.6	1117.9	1120.7	1127.0	1139.9	1149.4	1150.1
170°	1113.1	1116.1	1119.2	1119.9	1120.2	1120.5	1120.7	1127.0	1139.9	1149.4	1149.4
172.5°	1119.2	1119.9	1120.5	1120.7	1120.7	1120.7	1120.7	1125.8	1135.9	1143.4	1142.9
175°	1127.5	1127.5	1127.5	1127.5	1125.2	1122.2	1120.7	1123.9	1130.2	1135.0	1135.0
177.5°	1127.5	1127.5	1127.5	1127.5	1125.8	1123.4	1122.2	1124.8	1129.8	1133.6	1133.0
180°	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5	1127.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	379.4	379.4
2.5°	405.1	402.6
5°	520.9	523.4
7.5°	701.5	700.3
10°	872.3	883.3
12.5°	996.8	999.2
15°	1072.5	1077.4
17.5°	1101.8	1102.9
20°	1102.9	1100.5
22.5°	1089.6	1087.1
25°	1073.6	1072.5
27.5°	1059.0	1060.3
30°	1052.9	1056.6
32.5°	1052.9	1059.0
35°	1055.4	1061.5
37.5°	1054.2	1061.5
40°	1049.3	1057.8
42.5°	1035.9	1042.0
45°	1015.2	1022.4
47.5°	988.2	993.1
50°	954.1	959.0
52.5°	911.4	912.6
55°	860.2	865.1
57.5°	805.3	806.5
60°	744.3	747.9
62.5°	679.6	679.6
65°	611.3	613.7
67.5°	540.5	546.6
70°	468.6	469.7
72.5°	397.8	397.8
75°	324.6	325.7
77.5°	255.0	255.0
80°	189.1	190.3
82.5°	130.5	133.0
85°	81.8	81.8
87.5°	37.8	34.2
90°	28.7	28.7
92.5°	115.3	92.3
95°	401.5	332.2
97.5°	961.9	830.1
100°	1386.0	1228.9
102.5°	1803.1	1668.5
105°	2334.9	2262.5
107.5°	2683.2	2700.7
110°	2816.1	2891.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2827.9	2943.6
115°	2752.9	2913.4
117.5°	2593.9	2771.8
120°	2465.8	2638.7
122.5°	2341.0	2511.5
125°	2163.0	2320.1
127.5°	2002.9	2135.5
130°	1908.6	2031.0
132.5°	1823.0	1932.6
135°	1705.8	1800.3
137.5°	1611.6	1689.0
140°	1547.0	1619.3
142.5°	1493.6	1555.8
145°	1413.4	1460.4
147.5°	1351.8	1390.8
150°	1313.1	1344.7
152.5°	1280.0	1303.8
155°	1241.8	1257.7
157.5°	1211.7	1222.8
160°	1193.8	1200.2
162.5°	1182.0	1188.1
165°	1165.1	1171.4
167.5°	1152.8	1155.5
170°	1149.4	1149.4
172.5°	1140.5	1138.1
175°	1135.0	1135.0
177.5°	1130.2	1127.5
180°	1127.5	1127.5



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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	0.60	1.31	1.71	2.43	3.97	13.78	14.49	14.89	15.61	17.15
	3H	1.29	1.93	2.41	3.05	4.61	15.60	16.25	16.73	17.37	18.93
	4H	1.58	2.19	2.72	3.32	4.88	16.24	16.85	17.38	17.98	19.54
	6H	1.82	2.39	2.97	3.51	5.09	16.67	17.23	17.81	18.35	19.93
	8H	1.89	2.42	3.03	3.56	5.13	16.78	17.32	17.93	18.46	20.03
	12H	1.90	2.41	3.05	3.54	5.14	16.84	17.35	17.99	18.49	20.08
4H	2H	7.79	8.41	8.94	9.53	11.09	14.03	14.64	15.17	15.77	17.33
	3H	9.35	9.86	10.50	11.01	12.59	16.06	16.58	17.21	17.72	19.30
	4H	9.44	9.91	10.59	11.04	12.64	16.82	17.30	17.97	18.43	20.03
	6H	9.44	9.84	10.59	11.00	12.59	17.36	17.76	18.51	18.92	20.51
	8H	9.41	9.79	10.57	10.94	12.55	17.51	17.89	18.67	19.04	20.65
	12H	9.36	9.70	10.53	10.87	12.48	17.60	17.94	18.77	19.10	20.71
8H	4H	10.87	11.25	12.02	12.40	14.00	16.87	17.25	18.03	18.40	20.01
	6H	11.10	11.42	12.28	12.61	14.21	17.49	17.81	18.67	19.00	20.60
	8H	11.12	11.39	12.30	12.56	14.19	17.71	17.98	18.89	19.16	20.78
	12H	11.08	11.32	12.27	12.49	14.14	17.85	18.09	19.04	19.26	20.91
12H	4H	11.00	11.35	12.18	12.51	14.12	16.82	17.16	17.99	18.32	19.93
	6H	11.36	11.63	12.54	12.81	14.43	17.48	17.75	18.66	18.92	20.54
	8H	11.42	11.66	12.61	12.83	14.49	17.70	17.94	18.88	19.11	20.76