

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: P937815

Luminaire Tested: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937815
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

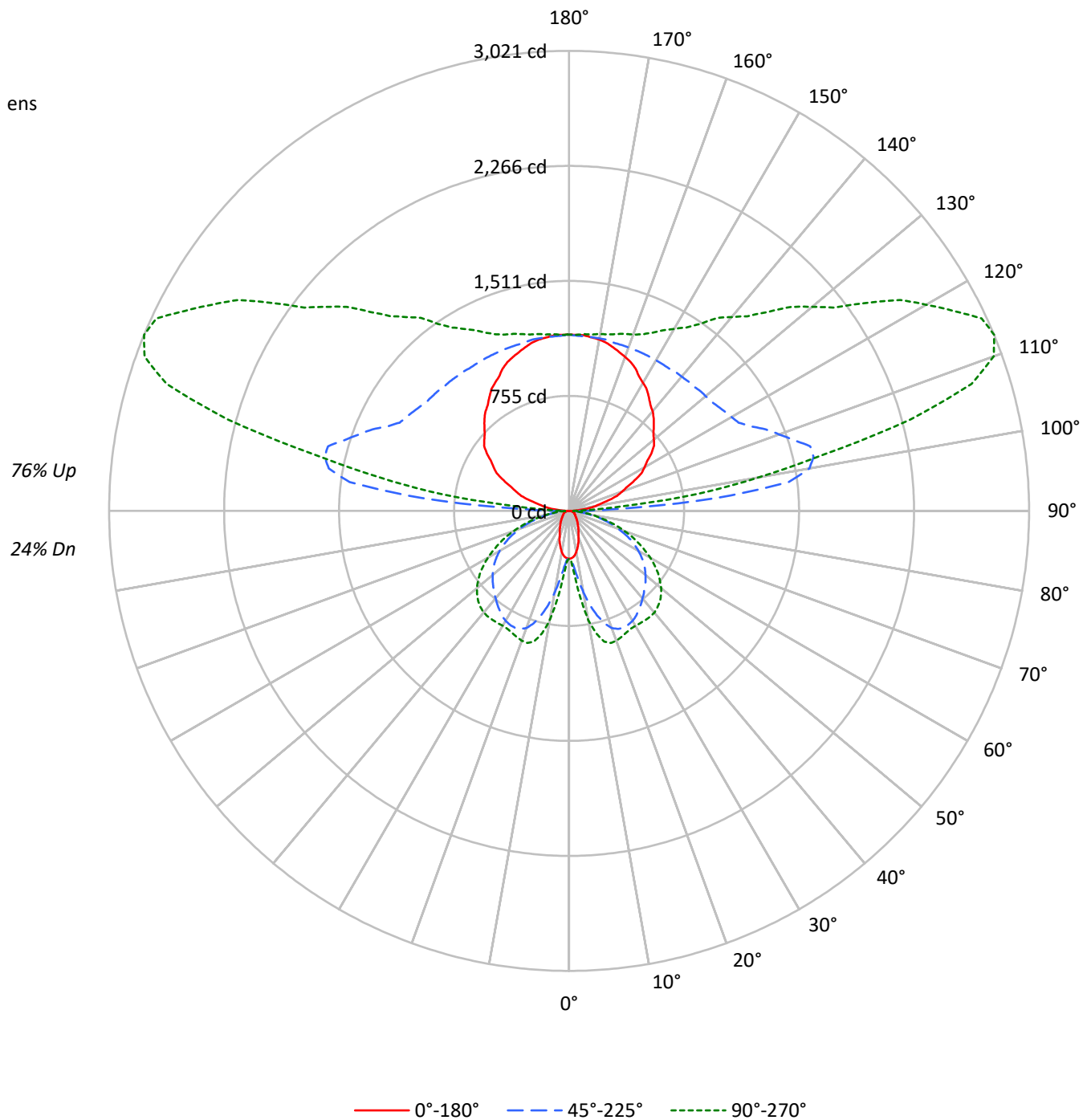
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9926.0 lumens
Efficiency: N/A
Efficacy: 139.0 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-Indirect

Input Watts (W): 71.4
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

TEST NUMBER: P937815
CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P937815

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24				24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20				20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16				16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19	13				13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11				11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10				10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8				8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7				7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6				6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6				6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5				5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1935	1935	1935
5°	1890	2236	2601
10°	1714	3259	4312
15°	1456	4256	5207
20°	1185	4931	5307
25°	988	5159	5199
30°	833	5191	5189
35°	736	5103	5323
40°	641	4990	5462
45°	580	4906	5483
50°	531	4830	5393
55°	509	4721	5154
60°	521	4512	4776
65°	540	4194	4257
70°	574	3655	3597
75°	635	2977	2807
80°	687	2062	1891
85°	602	1093	968

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5483 cd/sqm



TEST NUMBER: P937815

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.5	0.4
10°-20°	179.3	1.8
20°-30°	313.7	3.2
30°-40°	403.8	4.1
40°-50°	451.0	4.5
50°-60°	432.0	4.4
60°-70°	342.4	3.4
70°-80°	201.3	2.0
80°-90°	60.3	0.6
90°-100°	564.1	5.7
100°-110°	1483.0	14.9
110°-120°	1537.7	15.5
120°-130°	1233.4	12.4
130°-140°	967.8	9.7
140°-150°	742.8	7.5
150°-160°	534.9	5.4
160°-170°	327.3	3.3
170°-180°	110.6	1.1
0°-30°	533.5	5.4
0°-40°	937.3	9.4
0°-60°	1820.4	18.3
0°-90°	2424.4	24.4
90°-120°	3584.7	36.1
90°-150°	6528.7	65.8
90°-180°	7502.0	75.6
0°-180°	9926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	313	313	313	313	313	
5°	305	327	368	416	432	28
15°	228	422	710	861	888	64
25°	146	478	846	883	884	67
35°	99	457	797	842	875	62
45°	67	364	704	807	843	52
55°	48	231	598	694	713	44
65°	38	123	444	499	506	38
75°	28	75	243	268	269	29
85°	10	23	60	66	67	11
90°	8	22	59	30	30	7
95°	75	292	972	501	341	83
105°	267	405	1640	2489	2322	283
115°	474	576	1313	2620	2990	469
125°	660	740	1194	2018	2381	586
135°	787	866	1157	1629	1848	609
145°	912	971	1142	1390	1499	572
155°	1031	1060	1142	1254	1291	474
165°	1113	1128	1142	1188	1202	314
175°	1157	1157	1150	1165	1165	110
180°	1157	1157	1157	1157	1157	



TEST NUMBER: P937815

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8
2.5°	312.8	312.8	314.8	315.8	317.9	318.9	320.9	322.9	328.9	329.9	331.9
5°	304.8	308.8	321.9	326.9	341.0	360.1	368.1	381.2	408.4	416.4	421.5
7.5°	292.7	301.8	333.9	342.0	377.2	427.5	448.6	476.8	520.0	541.2	558.3
10°	273.6	292.7	350.0	369.2	426.5	502.9	542.2	581.4	646.8	675.9	687.0
12.5°	252.5	283.7	367.1	393.3	475.8	587.4	634.7	678.0	752.4	791.6	797.6
15°	228.3	270.6	383.2	421.5	528.1	657.8	710.1	763.5	832.9	861.0	868.1
17.5°	207.2	260.5	398.3	438.6	568.3	721.2	774.5	818.8	875.1	894.2	899.2
20°	181.1	244.4	408.4	460.7	610.6	767.5	818.8	853.0	891.2	903.3	905.3
22.5°	161.9	227.3	414.4	468.7	638.7	795.6	838.9	866.0	892.2	896.2	897.2
25°	145.9	208.2	413.4	477.8	662.9	812.7	845.9	866.0	881.1	883.1	883.1
27.5°	130.8	187.1	409.4	479.8	681.0	816.8	842.9	857.0	864.0	868.1	868.1
30°	117.7	167.0	399.3	475.8	689.0	812.7	833.9	840.9	847.9	854.0	857.0
32.5°	107.6	147.9	384.2	467.7	690.0	802.7	817.8	821.8	831.8	845.9	851.0
35°	98.6	128.8	367.1	456.7	684.0	786.6	796.6	800.7	820.8	841.9	848.9
37.5°	89.5	114.7	345.0	437.6	674.9	767.5	774.5	781.6	812.7	837.9	845.9
40°	80.5	102.6	318.9	416.4	660.9	744.3	750.4	761.4	802.7	831.8	839.9
42.5°	73.4	92.5	290.7	394.3	642.7	718.2	727.2	743.3	790.6	821.8	830.8
45°	67.4	82.5	260.5	364.1	619.6	691.0	704.1	726.2	776.5	806.7	814.7
47.5°	61.4	75.4	229.3	332.9	594.5	663.9	681.0	706.1	757.4	786.6	793.6
50°	56.3	68.4	198.2	299.7	567.3	634.7	654.8	681.0	733.3	760.4	769.5
52.5°	52.3	62.4	169.0	266.6	536.1	604.5	627.7	654.8	704.1	730.3	736.3
55°	48.3	57.3	143.8	231.3	503.9	572.3	597.5	623.6	671.9	694.0	698.1
57.5°	46.3	53.3	122.7	198.2	469.7	536.1	564.3	588.4	633.7	650.8	654.8
60°	43.3	50.3	106.6	170.0	432.5	501.9	526.1	550.2	588.4	602.5	605.5
62.5°	40.2	48.3	94.6	142.8	394.3	461.7	485.8	508.0	540.1	550.2	554.2
65°	38.2	46.3	85.5	122.7	355.1	419.4	443.6	462.7	488.8	498.9	500.9
67.5°	36.2	44.3	78.5	105.6	315.8	377.2	395.3	413.4	433.5	443.6	444.6
70°	33.2	42.2	72.4	93.5	275.6	328.9	344.0	363.1	379.2	384.2	387.3
72.5°	31.2	39.2	68.4	84.5	234.4	282.6	296.7	307.8	321.9	326.9	326.9
75°	28.2	35.2	64.4	75.4	192.1	231.3	243.4	254.5	265.5	267.6	264.5
77.5°	25.1	31.2	55.3	63.4	149.9	183.1	193.1	199.2	208.2	210.2	211.2
80°	21.1	27.2	43.3	49.3	108.6	134.8	141.8	146.9	154.9	154.9	156.9
82.5°	16.1	21.1	31.2	35.2	73.4	92.5	98.6	101.6	106.6	106.6	106.6
85°	10.1	13.1	20.1	23.1	44.3	56.3	60.4	61.4	65.4	66.4	66.4
87.5°	5.0	7.0	13.1	14.1	23.1	29.2	29.2	31.2	31.2	30.2	29.2
90°	7.8	14.0	20.2	21.7	34.1	50.7	59.0	52.4	39.3	29.5	29.5
92.5°	31.1	83.9	136.7	149.9	210.7	291.8	332.4	291.3	209.2	147.6	141.7
95°	74.6	171.2	267.8	292.0	518.5	820.6	971.6	867.0	657.8	500.9	483.1
97.5°	128.9	214.1	299.4	320.7	698.4	1202.1	1453.9	1387.8	1255.6	1156.4	1122.6
100°	170.9	248.2	325.5	344.8	763.9	1322.8	1602.2	1607.0	1616.7	1623.9	1583.6
102.5°	206.6	278.7	350.9	368.9	794.0	1360.7	1644.1	1728.3	1896.8	2023.1	1988.6
105°	267.2	328.3	389.3	404.6	816.2	1365.1	1639.5	1828.3	2205.9	2489.1	2470.5
107.5°	329.3	386.2	443.2	457.4	820.4	1304.3	1546.3	1809.7	2336.4	2731.4	2735.9
110°	371.2	422.6	474.0	486.9	814.1	1250.4	1468.6	1763.0	2351.9	2793.6	2812.9



TEST NUMBER: P937815

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	412.4	461.4	510.4	522.7	814.4	1203.4	1397.9	1699.2	2301.9	2753.9	2783.6
115°	474.5	519.7	565.0	576.3	822.0	1149.5	1313.3	1603.6	2184.2	2619.6	2660.8
117.5°	535.9	577.0	618.0	628.3	837.2	1115.7	1255.0	1517.0	2041.0	2434.0	2479.6
120°	571.6	610.3	648.9	658.6	849.6	1104.3	1231.7	1471.1	1949.8	2308.9	2353.3
122.5°	606.6	645.6	684.6	694.3	867.5	1098.4	1213.9	1429.5	1860.6	2183.9	2227.6
125°	660.1	695.7	731.2	740.1	891.6	1093.5	1194.5	1377.6	1743.8	2018.5	2058.8
127.5°	703.6	739.5	775.4	784.4	915.7	1090.7	1178.2	1335.4	1649.9	1885.7	1919.7
130°	726.9	765.6	804.2	813.9	933.2	1092.3	1171.9	1311.9	1591.8	1801.8	1833.2
132.5°	751.0	789.7	828.3	838.0	947.5	1093.5	1166.5	1291.8	1542.4	1730.3	1758.4
135°	786.7	821.9	857.1	865.9	963.0	1092.5	1157.2	1262.1	1472.0	1629.4	1653.6
137.5°	823.2	858.1	893.0	901.7	986.3	1099.2	1155.6	1244.3	1421.7	1554.8	1574.6
140°	853.5	885.6	917.7	925.7	1000.5	1100.3	1150.2	1226.8	1380.1	1495.0	1513.6
142.5°	876.8	906.5	936.2	943.6	1012.5	1104.3	1150.2	1217.5	1352.1	1453.1	1469.1
145°	912.5	938.4	964.3	970.8	1028.0	1104.3	1142.4	1197.5	1307.6	1390.2	1402.3
147.5°	948.3	973.5	998.7	1005.0	1050.8	1111.9	1142.4	1185.7	1272.4	1337.4	1347.4
150°	971.6	994.4	1017.1	1022.8	1062.7	1115.8	1142.4	1179.0	1252.2	1307.1	1315.2
152.5°	995.6	1012.9	1030.2	1034.5	1070.5	1118.4	1142.4	1173.6	1236.1	1283.0	1289.1
155°	1031.4	1044.2	1056.9	1060.1	1087.5	1124.1	1142.4	1167.3	1217.0	1254.3	1258.4
157.5°	1057.8	1070.2	1082.6	1085.7	1104.6	1129.8	1142.4	1161.7	1200.4	1229.4	1232.2
160°	1075.6	1085.3	1095.0	1097.4	1112.4	1132.4	1142.4	1159.0	1192.1	1217.0	1218.6
162.5°	1093.5	1100.7	1108.0	1109.8	1120.7	1135.2	1142.4	1156.4	1184.3	1205.3	1206.9
165°	1112.9	1119.5	1126.1	1127.7	1132.6	1139.1	1142.4	1152.4	1172.5	1187.5	1189.1
167.5°	1130.8	1133.9	1137.0	1137.8	1141.9	1147.4	1150.2	1156.8	1169.9	1179.7	1180.4
170°	1142.4	1145.5	1148.6	1149.4	1149.7	1150.0	1150.2	1156.8	1169.9	1179.7	1179.7
172.5°	1148.6	1149.3	1150.0	1150.2	1150.2	1150.2	1150.2	1155.4	1165.7	1173.5	1172.9
175°	1157.2	1157.2	1157.2	1157.2	1154.9	1151.8	1150.2	1153.5	1160.1	1165.0	1165.0
177.5°	1157.2	1157.2	1157.2	1157.2	1155.4	1152.9	1151.7	1154.3	1159.5	1163.4	1162.7
180°	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2	1157.2



TEST NUMBER: P937815

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	312.8	312.8
2.5°	333.9	331.9
5°	429.5	431.5
7.5°	578.4	577.4
10°	719.2	728.2
12.5°	821.8	823.8
15°	884.2	888.2
17.5°	908.3	909.3
20°	909.3	907.3
22.5°	898.2	896.2
25°	885.2	884.2
27.5°	873.1	874.1
30°	868.1	871.1
32.5°	868.1	873.1
35°	870.1	875.1
37.5°	869.1	875.1
40°	865.0	872.1
42.5°	854.0	859.0
45°	836.9	842.9
47.5°	814.7	818.8
50°	786.6	790.6
52.5°	751.4	752.4
55°	709.1	713.2
57.5°	663.9	664.9
60°	613.6	616.6
62.5°	560.3	560.3
65°	503.9	505.9
67.5°	445.6	450.6
70°	386.3	387.3
72.5°	327.9	327.9
75°	267.6	268.6
77.5°	210.2	210.2
80°	155.9	156.9
82.5°	107.6	109.6
85°	67.4	67.4
87.5°	31.2	28.2
90°	29.5	29.5
92.5°	118.2	94.7
95°	412.0	340.9
97.5°	987.3	852.0
100°	1422.5	1261.3
102.5°	1850.5	1712.5
105°	2396.3	2322.1
107.5°	2753.8	2771.8
110°	2890.2	2967.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2902.3	3021.1
115°	2825.4	2990.0
117.5°	2662.2	2844.8
120°	2530.7	2708.1
122.5°	2402.6	2577.6
125°	2220.0	2381.2
127.5°	2055.7	2191.7
130°	1958.9	2084.5
132.5°	1871.0	1983.5
135°	1750.6	1847.6
137.5°	1654.0	1733.4
140°	1587.8	1662.0
142.5°	1532.9	1596.8
145°	1450.6	1498.9
147.5°	1387.5	1427.5
150°	1347.7	1380.1
152.5°	1313.6	1338.1
155°	1274.6	1290.8
157.5°	1243.6	1255.0
160°	1225.2	1231.7
162.5°	1213.1	1219.3
165°	1195.7	1202.2
167.5°	1183.1	1185.9
170°	1179.7	1179.7
172.5°	1170.5	1168.1
175°	1165.0	1165.0
177.5°	1160.0	1157.2
180°	1157.2	1157.2



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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	0.28	0.97	1.42	2.10	3.70	13.44	14.13	14.59	15.27	16.86
	3H	0.97	1.59	2.12	2.73	4.34	15.27	15.88	16.42	17.03	18.63
	4H	1.26	1.85	2.42	2.99	4.60	15.90	16.48	17.06	17.63	19.24
	6H	1.50	2.04	2.67	3.19	4.81	16.32	16.85	17.49	18.00	19.63
	8H	1.57	2.08	2.74	3.24	4.86	16.43	16.94	17.60	18.10	19.72
	12H	1.58	2.06	2.75	3.22	4.86	16.49	16.98	17.66	18.13	19.77
4H	2H	7.47	8.05	8.63	9.20	10.81	13.70	14.28	14.87	15.43	17.04
	3H	9.02	9.51	10.19	10.68	12.30	15.72	16.21	16.90	17.38	19.01
	4H	9.10	9.55	10.28	10.71	12.36	16.48	16.93	17.65	18.09	19.73
	6H	9.10	9.49	10.29	10.67	12.31	17.00	17.39	18.18	18.57	20.20
	8H	9.08	9.44	10.26	10.61	12.26	17.16	17.52	18.34	18.69	20.34
	12H	9.02	9.35	10.22	10.54	12.19	17.24	17.57	18.44	18.75	20.41
8H	4H	10.53	10.89	11.71	12.06	13.71	16.52	16.88	17.70	18.06	19.71
	6H	10.76	11.06	11.96	12.28	13.92	17.14	17.44	18.34	18.65	20.30
	8H	10.78	11.04	11.98	12.23	13.90	17.35	17.61	18.56	18.81	20.47
	12H	10.74	10.97	11.95	12.16	13.86	17.49	17.72	18.70	18.91	20.60
12H	4H	10.66	10.99	11.86	12.17	13.83	16.47	16.79	17.66	17.98	19.63
	6H	11.02	11.28	12.22	12.47	14.14	17.12	17.38	18.33	18.57	20.24
	8H	11.08	11.31	12.29	12.50	14.20	17.34	17.57	18.55	18.76	20.46