

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: P937841

Luminaire Tested: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937841
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-92765-1D-UNV-STD-W-6-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

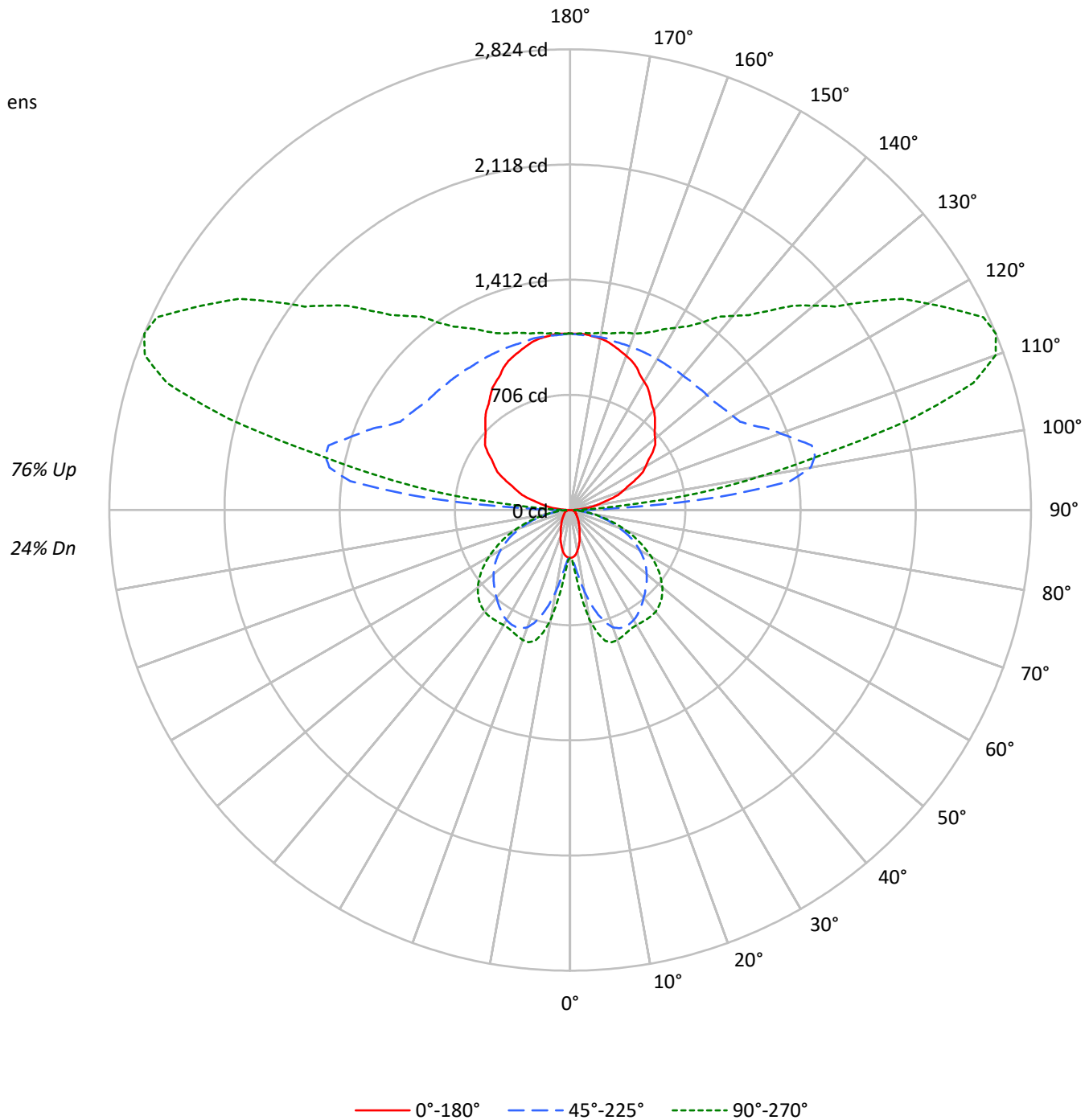
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9277.8 lumens
Efficiency: N/A
Efficacy: 129.9 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

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CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-5000K

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	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°	1809	1809	1809
5°	1767	2090	2431
10°	1601	3046	4031
15°	1361	3978	4867
20°	1108	4609	4961
25°	924	4822	4860
30°	778	4852	4850
35°	688	4769	4976
40°	599	4664	5106
45°	542	4585	5126
50°	496	4515	5041
55°	475	4413	4817
60°	487	4217	4464
65°	505	3920	3979
70°	536	3416	3362
75°	594	2783	2624
80°	641	1927	1768
85°	560	1023	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5126 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.8	0.4
10°-20°	167.6	1.8
20°-30°	293.2	3.2
30°-40°	377.5	4.1
40°-50°	421.6	4.5
50°-60°	403.8	4.4
60°-70°	320.0	3.4
70°-80°	188.2	2.0
80°-90°	56.4	0.6
90°-100°	527.2	5.7
100°-110°	1386.1	14.9
110°-120°	1437.3	15.5
120°-130°	1152.9	12.4
130°-140°	904.6	9.7
140°-150°	694.3	7.5
150°-160°	500.0	5.4
160°-170°	305.9	3.3
170°-180°	103.4	1.1
0°-30°	498.7	5.4
0°-40°	876.1	9.4
0°-60°	1701.5	18.3
0°-90°	2266.1	24.4
90°-120°	3350.6	36.1
90°-150°	6102.4	65.8
90°-180°	7012.0	75.6
0°-180°	9277.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	285	306	344	389	403	26
15°	213	394	664	805	830	59
25°	136	447	791	825	826	63
35°	92	427	745	787	818	58
45°	63	340	658	754	788	49
55°	45	216	558	649	667	41
65°	36	115	415	466	473	35
75°	26	70	228	250	251	28
85°	9	22	56	62	63	10
90°	7	20	55	28	28	7
95°	70	273	908	468	319	77
105°	250	378	1532	2327	2170	265
115°	444	539	1228	2449	2795	438
125°	617	692	1116	1887	2226	548
135°	735	809	1082	1523	1727	569
145°	853	907	1068	1299	1401	534
155°	964	991	1068	1172	1206	443
165°	1040	1054	1068	1110	1124	294
175°	1082	1082	1075	1089	1089	103
180°	1082	1082	1082	1082	1082	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4
2.5°	292.4	292.4	294.2	295.2	297.1	298.1	299.9	301.8	307.4	308.4	310.2
5°	284.9	288.6	300.9	305.6	318.7	336.6	344.1	356.3	381.7	389.2	394.0
7.5°	273.6	282.1	312.1	319.7	352.6	399.6	419.3	445.7	486.0	505.9	521.8
10°	255.7	273.6	327.1	345.1	398.7	470.1	506.8	543.4	604.6	631.8	642.1
12.5°	236.0	265.2	343.1	367.6	444.7	549.0	593.3	633.7	703.3	739.9	745.5
15°	213.4	252.9	358.2	394.0	493.6	614.8	663.7	713.6	778.5	804.8	811.4
17.5°	193.7	243.5	372.3	410.0	531.2	674.1	723.9	765.3	818.0	835.8	840.5
20°	169.3	228.4	381.7	430.6	570.7	717.4	765.3	797.3	833.0	844.3	846.2
22.5°	151.3	212.5	387.3	438.1	597.0	743.7	784.1	809.5	833.9	837.7	838.6
25°	136.4	194.6	386.4	446.6	619.6	759.6	790.7	809.5	823.6	825.4	825.4
27.5°	122.3	174.9	382.7	448.5	636.5	763.5	787.9	801.0	807.6	811.4	811.4
30°	110.0	156.1	373.2	444.7	644.0	759.6	779.5	786.0	792.5	798.2	801.0
32.5°	100.6	138.2	359.1	437.2	644.9	750.3	764.4	768.1	777.5	790.7	795.4
35°	92.2	120.4	343.1	426.9	639.3	735.2	744.6	748.4	767.2	786.9	793.5
37.5°	83.7	107.2	322.5	409.0	630.8	717.4	723.9	730.6	759.6	783.2	790.7
40°	75.2	95.9	298.1	389.2	617.7	695.7	701.4	711.7	750.3	777.5	785.1
42.5°	68.6	86.5	271.7	368.6	600.7	671.3	679.7	694.8	739.0	768.1	776.6
45°	63.0	77.1	243.5	340.3	579.1	645.9	658.1	678.8	725.8	754.0	761.5
47.5°	57.4	70.5	214.3	311.2	555.7	620.6	636.5	660.0	707.9	735.2	741.8
50°	52.6	63.9	185.3	280.1	530.3	593.3	612.0	636.5	685.4	710.8	719.3
52.5°	48.9	58.3	158.0	249.2	501.1	565.0	586.7	612.0	658.1	682.6	688.2
55°	45.1	53.6	134.4	216.2	471.0	534.9	558.5	582.9	628.0	648.7	652.5
57.5°	43.3	49.8	114.7	185.3	439.0	501.1	527.5	550.0	592.3	608.3	612.0
60°	40.5	47.0	99.6	158.9	404.3	469.1	491.7	514.3	550.0	563.2	566.0
62.5°	37.6	45.1	88.4	133.5	368.6	431.6	454.1	474.8	504.8	514.3	518.0
65°	35.7	43.3	79.9	114.7	331.9	392.0	414.6	432.5	456.9	466.3	468.2
67.5°	33.8	41.4	73.4	98.7	295.2	352.6	369.5	386.4	405.2	414.6	415.6
70°	31.0	39.4	67.7	87.4	257.6	307.4	321.5	339.4	354.4	359.1	362.0
72.5°	29.2	36.6	63.9	79.0	219.1	264.1	277.3	287.7	300.9	305.6	305.6
75°	26.4	32.9	60.2	70.5	179.6	216.2	227.5	237.9	248.2	250.1	247.2
77.5°	23.5	29.2	51.7	59.3	140.1	171.1	180.5	186.2	194.6	196.5	197.4
80°	19.7	25.4	40.5	46.1	101.5	126.0	132.5	137.3	144.8	144.8	146.7
82.5°	15.0	19.7	29.2	32.9	68.6	86.5	92.2	95.0	99.6	99.6	99.6
85°	9.4	12.2	18.8	21.6	41.4	52.6	56.5	57.4	61.1	62.1	62.1
87.5°	4.7	6.5	12.2	13.2	21.6	27.3	27.3	29.2	29.2	28.2	27.3
90°	7.3	13.1	18.9	20.3	31.9	47.4	55.1	49.0	36.7	27.6	27.6
92.5°	29.1	78.4	127.8	140.1	196.9	272.7	310.7	272.3	195.5	138.0	132.4
95°	69.7	160.0	250.3	272.9	484.6	767.0	908.2	810.4	614.8	468.2	451.6
97.5°	120.5	200.1	279.9	299.8	652.8	1123.6	1359.0	1297.2	1173.6	1080.9	1049.3
100°	159.7	232.0	304.2	322.3	714.0	1236.4	1497.6	1502.1	1511.1	1517.9	1480.2
102.5°	193.1	260.5	328.0	344.8	742.2	1271.9	1536.8	1615.5	1773.0	1891.0	1858.8
105°	249.8	306.9	363.9	378.2	762.9	1276.0	1532.5	1708.9	2061.9	2326.6	2309.2
107.5°	307.8	361.0	414.3	427.5	766.8	1219.1	1445.3	1691.5	2183.8	2553.1	2557.3
110°	347.0	395.0	443.1	455.1	760.9	1168.8	1372.7	1647.9	2198.3	2611.2	2629.2



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CATALOG NUMBER: SQ4-FB-125U-050D-92765-1D-UNV-STD-W-6-5000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	385.5	431.3	477.1	488.6	761.2	1124.8	1306.6	1588.3	2151.6	2574.1	2601.8
115°	443.5	485.8	528.1	538.7	768.3	1074.4	1227.5	1498.9	2041.6	2448.6	2487.1
117.5°	500.9	539.3	577.6	587.3	782.5	1042.9	1173.1	1417.9	1907.7	2275.1	2317.7
120°	534.3	570.5	606.5	615.6	794.1	1032.2	1151.3	1375.0	1822.5	2158.1	2199.6
122.5°	567.0	603.4	639.9	649.0	810.9	1026.7	1134.6	1336.2	1739.1	2041.3	2082.2
125°	617.0	650.3	683.5	691.8	833.4	1022.1	1116.5	1287.7	1629.9	1886.7	1924.4
127.5°	657.7	691.2	724.8	733.2	855.9	1019.5	1101.3	1248.2	1542.2	1762.6	1794.4
130°	679.4	715.6	751.7	760.8	872.3	1021.0	1095.4	1226.2	1487.9	1684.2	1713.5
132.5°	702.0	738.1	774.2	783.3	885.6	1022.1	1090.3	1207.5	1441.7	1617.3	1643.6
135°	735.3	768.2	801.1	809.4	900.1	1021.2	1081.6	1179.7	1375.9	1523.0	1545.6
137.5°	769.4	802.1	834.7	842.8	921.9	1027.4	1080.1	1163.1	1328.9	1453.3	1471.8
140°	797.8	827.8	857.8	865.3	935.2	1028.5	1075.1	1146.7	1290.0	1397.4	1414.8
142.5°	819.6	847.3	875.1	882.0	946.4	1032.2	1075.1	1138.0	1263.8	1358.2	1373.2
145°	852.9	877.1	901.3	907.4	960.9	1032.2	1067.8	1119.3	1222.2	1299.4	1310.7
147.5°	886.4	909.9	933.5	939.4	982.2	1039.3	1067.8	1108.3	1189.3	1250.1	1259.4
150°	908.2	929.5	950.7	956.0	993.3	1042.9	1067.8	1102.0	1170.4	1221.8	1229.3
152.5°	930.6	946.8	962.9	967.0	1000.6	1045.4	1067.8	1097.0	1155.4	1199.2	1204.9
155°	964.1	976.0	987.9	990.9	1016.5	1050.7	1067.8	1091.1	1137.5	1172.4	1176.2
157.5°	988.7	1000.3	1011.9	1014.8	1032.5	1056.0	1067.8	1085.8	1122.0	1149.1	1151.7
160°	1005.4	1014.4	1023.5	1025.7	1039.8	1058.5	1067.8	1083.3	1114.3	1137.5	1139.0
162.5°	1022.1	1028.8	1035.7	1037.3	1047.5	1061.1	1067.8	1080.9	1107.0	1126.6	1128.1
165°	1040.2	1046.4	1052.6	1054.1	1058.6	1064.7	1067.8	1077.2	1095.9	1110.0	1111.5
167.5°	1057.0	1059.9	1062.8	1063.5	1067.3	1072.5	1075.1	1081.3	1093.5	1102.7	1103.3
170°	1067.8	1070.7	1073.6	1074.4	1074.6	1074.9	1075.1	1081.3	1093.5	1102.7	1102.7
172.5°	1073.6	1074.3	1074.9	1075.1	1075.1	1075.1	1075.1	1080.0	1089.6	1096.9	1096.3
175°	1081.6	1081.6	1081.6	1081.6	1079.5	1076.6	1075.1	1078.2	1084.4	1088.9	1088.9
177.5°	1081.6	1081.6	1081.6	1081.6	1080.0	1077.6	1076.5	1078.9	1083.8	1087.4	1086.8
180°	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6	1081.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	292.4	292.4
2.5°	312.1	310.2
5°	401.5	403.3
7.5°	540.6	539.7
10°	672.2	680.7
12.5°	768.1	770.0
15°	826.5	830.2
17.5°	849.0	849.9
20°	849.9	848.1
22.5°	839.6	837.7
25°	827.4	826.5
27.5°	816.1	817.0
30°	811.4	814.2
32.5°	811.4	816.1
35°	813.3	818.0
37.5°	812.4	818.0
40°	808.5	815.2
42.5°	798.2	802.9
45°	782.3	787.9
47.5°	761.5	765.3
50°	735.2	739.0
52.5°	702.3	703.3
55°	662.8	666.6
57.5°	620.6	621.5
60°	573.5	576.3
62.5°	523.7	523.7
65°	471.0	472.9
67.5°	416.5	421.2
70°	361.1	362.0
72.5°	306.5	306.5
75°	250.1	251.1
77.5°	196.5	196.5
80°	145.7	146.7
82.5°	100.6	102.4
85°	63.0	63.0
87.5°	29.2	26.4
90°	27.6	27.6
92.5°	110.5	88.5
95°	385.1	318.6
97.5°	922.8	796.4
100°	1329.6	1178.9
102.5°	1729.7	1600.7
105°	2239.8	2170.5
107.5°	2574.0	2590.8
110°	2701.5	2773.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2712.8	2823.8
115°	2640.9	2794.8
117.5°	2488.4	2659.1
120°	2365.5	2531.3
122.5°	2245.7	2409.3
125°	2075.0	2225.7
127.5°	1921.5	2048.6
130°	1831.0	1948.4
132.5°	1748.8	1854.0
135°	1636.3	1727.0
137.5°	1546.0	1620.2
140°	1484.1	1553.5
142.5°	1432.8	1492.5
145°	1355.9	1401.0
147.5°	1296.9	1334.3
150°	1259.7	1290.0
152.5°	1227.8	1250.7
155°	1191.4	1206.5
157.5°	1162.4	1173.1
160°	1145.2	1151.3
162.5°	1133.9	1139.7
165°	1117.6	1123.7
167.5°	1105.9	1108.5
170°	1102.7	1102.7
172.5°	1094.1	1091.8
175°	1088.9	1088.9
177.5°	1084.3	1081.6
180°	1081.6	1081.6



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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	0.04	0.73	1.19	1.87	3.46	13.21	13.90	14.36	15.03	16.63
	3H	0.74	1.35	1.89	2.50	4.11	15.03	15.65	16.18	16.79	18.40
	4H	1.03	1.61	2.19	2.76	4.37	15.66	16.25	16.83	17.40	19.01
	6H	1.27	1.81	2.44	2.95	4.58	16.08	16.62	17.25	17.77	19.39
	8H	1.33	1.84	2.50	3.01	4.62	16.19	16.71	17.37	17.87	19.49
	12H	1.34	1.83	2.52	2.98	4.62	16.25	16.74	17.43	17.90	19.54
4H	2H	7.23	7.82	8.40	8.96	10.57	13.46	14.05	14.63	15.19	16.81
	3H	8.78	9.27	9.96	10.44	12.07	15.49	15.98	16.66	17.15	18.77
	4H	8.87	9.32	10.05	10.48	12.12	16.24	16.69	17.42	17.85	19.50
	6H	8.87	9.26	10.05	10.44	12.07	16.77	17.15	17.95	18.34	19.97
	8H	8.84	9.20	10.02	10.38	12.03	16.92	17.28	18.10	18.46	20.11
	12H	8.79	9.12	9.99	10.30	11.96	17.00	17.33	18.20	18.52	20.17
8H	4H	10.29	10.66	11.48	11.83	13.48	16.29	16.65	17.47	17.82	19.47
	6H	10.53	10.83	11.73	12.04	13.69	16.90	17.20	18.10	18.42	20.07
	8H	10.54	10.80	11.75	12.00	13.66	17.12	17.38	18.32	18.57	20.24
	12H	10.50	10.73	11.71	11.92	13.62	17.25	17.48	18.46	18.67	20.37
12H	4H	10.43	10.76	11.62	11.94	13.60	16.23	16.56	17.43	17.74	19.40
	6H	10.78	11.04	11.99	12.24	13.90	16.89	17.15	18.09	18.34	20.01
	8H	10.84	11.07	12.05	12.26	13.96	17.10	17.33	18.31	18.52	20.22