

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: P936213

Luminaire Tested: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936213
REPORT IS A COMBINATION OF REPORTS P933429 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

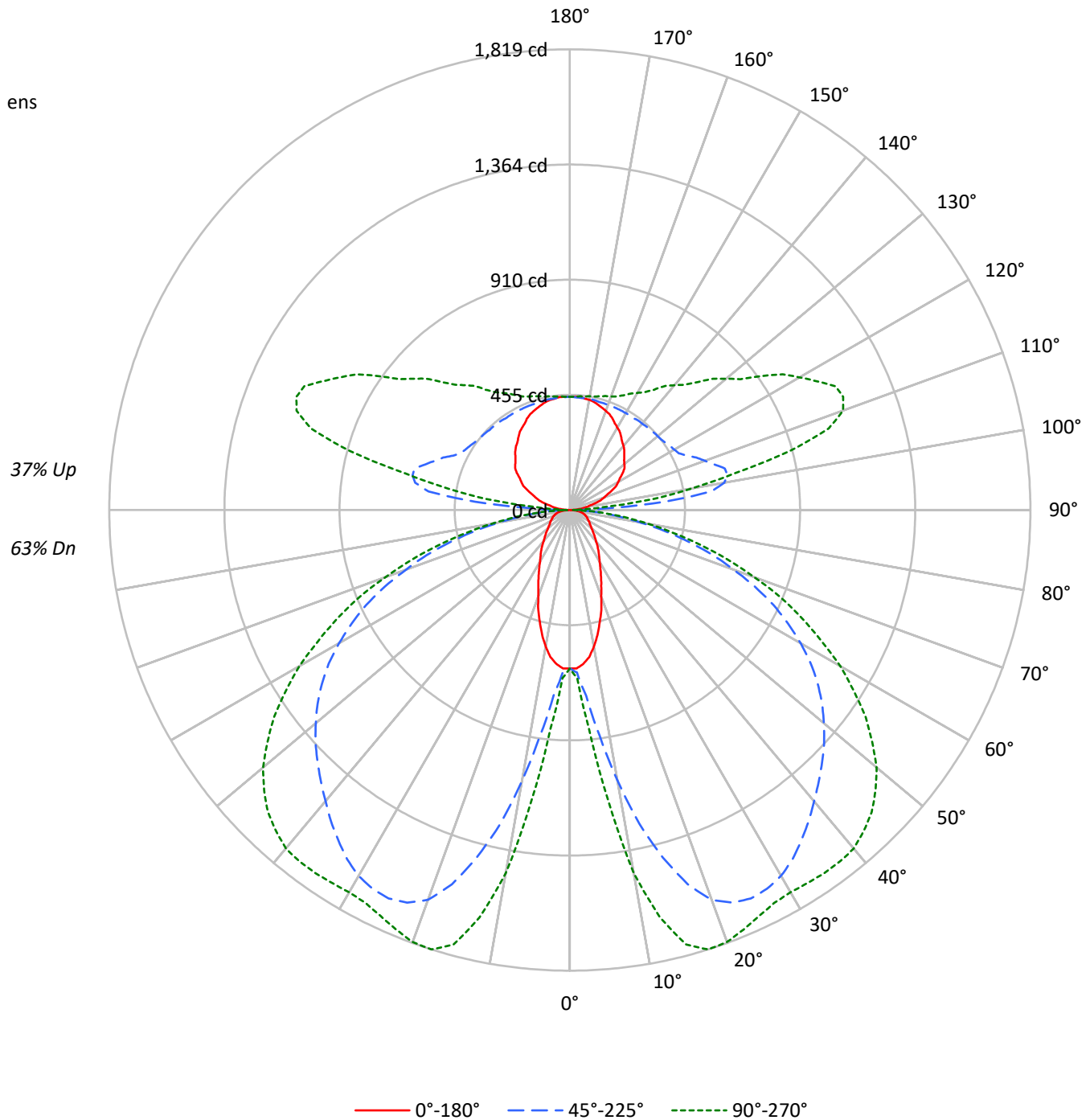
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7745.0 lumens
Efficiency: N/A
Efficacy: 117.3 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: Semi-Direct

Input Watts (W): 66
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: P936213
CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P936213

CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-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	50	30	10	0
RCR																					
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	22	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1936	1936	1936
5°	1892	2238	2602
10°	1716	3263	4313
15°	1460	4264	5208
20°	1189	4942	5308
25°	992	5173	5200
30°	837	5207	5190
35°	740	5122	5325
40°	646	5011	5463
45°	585	4930	5485
50°	537	4858	5394
55°	515	4751	5155
60°	527	4545	4777
65°	550	4230	4258
70°	587	3691	3598
75°	653	3012	2807
80°	719	2091	1892
85°	651	1111	968

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5485 cd/sqm



TEST NUMBER: P936213

CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	1.0
10°-20°	358.8	4.6
20°-30°	627.5	8.1
30°-40°	807.8	10.4
40°-50°	902.3	11.6
50°-60°	864.2	11.2
60°-70°	684.9	8.8
70°-80°	402.7	5.2
80°-90°	113.6	1.5
90°-100°	218.2	2.8
100°-110°	573.7	7.4
110°-120°	594.9	7.7
120°-130°	477.2	6.2
130°-140°	374.4	4.8
140°-150°	287.4	3.7
150°-160°	207.0	2.7
160°-170°	126.6	1.6
170°-180°	42.8	0.6
0°-30°	1067.2	13.8
0°-40°	1875.0	24.2
0°-60°	3641.5	47.0
0°-90°	4842.7	62.5
90°-120°	1386.9	17.9
90°-150°	2525.9	32.6
90°-180°	2902.0	37.5
0°-180°	7745.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	610	654	736	833	863	56
15°	457	843	1421	1722	1777	127
25°	292	956	1692	1767	1769	134
35°	197	914	1594	1684	1751	123
45°	135	728	1408	1614	1686	104
55°	97	463	1195	1388	1427	88
65°	76	246	887	998	1012	76
75°	56	151	487	535	537	59
85°	20	46	121	133	135	21
90°	3	8	23	11	11	4
95°	29	113	376	194	132	32
105°	103	156	634	963	898	110
115°	184	223	508	1014	1157	181
125°	255	286	462	781	921	227
135°	304	335	448	630	715	236
145°	353	376	442	538	580	221
155°	399	410	442	485	499	183
165°	431	436	442	459	465	122
175°	448	448	445	451	451	42
180°	448	448	448	448	448	



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CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8
2.5°	625.8	625.8	629.8	631.8	635.8	637.8	641.9	645.9	658.0	660.0	664.0
5°	609.7	617.7	643.9	653.9	682.1	720.3	736.4	762.6	816.9	833.0	843.1
7.5°	585.5	603.6	668.0	684.1	754.6	855.2	897.4	953.8	1040.3	1082.5	1116.7
10°	547.3	585.5	700.2	738.5	853.1	1006.1	1084.5	1163.0	1293.8	1352.2	1374.3
12.5°	505.0	567.4	734.4	786.7	951.7	1175.1	1269.7	1356.2	1505.1	1583.6	1595.6
15°	456.8	541.3	766.6	843.1	1056.4	1315.9	1420.6	1527.2	1666.1	1722.4	1736.5
17.5°	414.5	521.1	796.8	877.3	1136.9	1442.7	1549.3	1637.9	1750.6	1788.8	1798.9
20°	362.2	489.0	816.9	921.6	1221.4	1535.3	1637.9	1706.3	1782.8	1806.9	1810.9
22.5°	324.0	454.7	829.0	937.7	1277.7	1591.6	1678.1	1732.5	1784.8	1792.8	1794.8
25°	291.8	416.5	827.0	955.8	1326.0	1625.8	1692.2	1732.5	1762.6	1766.7	1766.7
27.5°	261.6	374.3	818.9	959.8	1362.2	1633.9	1686.2	1714.3	1728.4	1736.5	1736.5
30°	235.4	334.0	798.8	951.7	1378.3	1625.8	1668.1	1682.2	1696.2	1708.3	1714.3
32.5°	215.3	295.8	768.6	935.6	1380.3	1605.7	1635.9	1643.9	1664.0	1692.2	1702.3
35°	197.2	257.6	734.4	913.5	1368.3	1573.5	1593.6	1601.7	1641.9	1684.2	1698.2
37.5°	179.1	229.4	690.2	875.3	1350.1	1535.3	1549.3	1563.4	1625.8	1676.1	1692.2
40°	161.0	205.2	637.8	833.0	1322.0	1489.0	1501.1	1523.2	1605.7	1664.0	1680.1
42.5°	146.9	185.1	581.5	788.8	1285.8	1436.7	1454.8	1487.0	1581.5	1643.9	1662.0
45°	134.8	165.0	521.1	728.4	1239.5	1382.3	1408.5	1452.8	1553.4	1613.7	1629.8
47.5°	122.7	150.9	458.8	666.0	1189.2	1328.0	1362.2	1412.5	1515.1	1573.5	1587.6
50°	112.7	136.8	396.4	599.6	1134.8	1269.7	1309.9	1362.2	1466.9	1521.2	1539.3
52.5°	104.6	124.8	338.0	533.2	1072.5	1209.3	1255.6	1309.9	1408.5	1460.8	1472.9
55°	96.6	114.7	287.7	462.8	1008.1	1144.9	1195.2	1247.5	1344.1	1388.4	1396.4
57.5°	92.6	106.6	245.5	396.4	939.7	1072.5	1128.8	1177.1	1267.6	1301.9	1309.9
60°	86.5	100.6	213.3	340.1	865.2	1004.1	1052.4	1100.6	1177.1	1205.3	1211.3
62.5°	80.5	96.6	189.1	285.7	788.8	923.6	971.9	1016.1	1080.5	1100.6	1108.7
65°	76.5	92.6	171.0	245.5	710.3	839.1	887.4	925.6	977.9	998.0	1002.0
67.5°	72.4	88.5	156.9	211.3	631.8	754.6	790.8	827.0	867.2	887.4	889.4
70°	66.4	84.5	144.9	187.1	551.3	658.0	688.2	726.4	758.6	768.6	774.7
72.5°	62.4	78.5	136.8	169.0	468.8	565.4	593.6	615.7	643.9	653.9	653.9
75°	56.3	70.4	128.8	150.9	384.3	462.8	486.9	509.1	531.2	535.2	529.2
77.5°	50.3	62.4	110.7	126.8	299.8	366.2	386.3	398.4	416.5	420.5	422.5
80°	42.3	54.3	86.5	98.6	217.3	269.6	283.7	293.8	309.9	309.9	313.9
82.5°	32.2	42.3	62.4	70.4	146.9	185.1	197.2	203.2	213.3	213.3	213.3
85°	20.1	26.2	40.2	46.3	88.5	112.7	120.7	122.7	130.8	132.8	132.8
87.5°	10.1	14.1	26.2	28.2	46.3	58.4	58.4	62.4	62.4	60.4	58.4
90°	3.0	5.4	7.8	8.4	13.2	19.6	22.8	20.3	15.2	11.4	11.4
92.5°	12.0	32.4	52.9	58.0	81.5	112.9	128.6	112.7	80.9	57.1	54.8
95°	28.8	66.2	103.6	113.0	200.6	317.5	375.9	335.4	254.5	193.8	186.9
97.5°	49.9	82.9	115.9	124.1	270.2	465.1	562.5	536.9	485.8	447.4	434.3
100°	66.1	96.0	125.9	133.4	295.6	511.8	619.9	621.8	625.5	628.3	612.7
102.5°	79.9	107.8	135.7	142.7	307.2	526.5	636.1	668.7	733.8	782.7	769.3
105°	103.4	127.0	150.6	156.5	315.8	528.1	634.3	707.3	853.4	963.0	955.8
107.5°	127.4	149.4	171.5	177.0	317.4	504.6	598.2	700.1	903.9	1056.8	1058.5
110°	143.6	163.5	183.4	188.4	315.0	483.8	568.2	682.1	909.9	1080.8	1088.3



TEST NUMBER: P936213

CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.6	178.5	197.5	202.2	315.1	465.6	540.9	657.5	890.6	1065.5	1077.0
115°	183.6	201.1	218.6	223.0	318.0	444.7	508.1	620.4	845.0	1013.5	1029.4
117.5°	207.3	223.2	239.1	243.1	323.9	431.7	485.6	587.0	789.7	941.7	959.4
120°	221.1	236.1	251.1	254.8	328.7	427.2	476.5	569.1	754.4	893.3	910.5
122.5°	234.7	249.8	264.8	268.6	335.6	424.9	469.6	553.0	719.8	844.9	861.8
125°	255.4	269.2	283.0	286.4	345.0	423.1	462.1	532.9	674.6	780.9	796.5
127.5°	272.2	286.1	300.0	303.5	354.3	422.0	455.8	516.6	638.3	729.5	742.7
130°	281.2	296.2	311.2	314.9	361.1	422.6	453.4	507.6	615.9	697.1	709.3
132.5°	290.6	305.5	320.5	324.2	366.6	423.1	451.3	499.8	596.8	669.5	680.4
135°	304.4	318.0	331.6	335.0	372.6	422.7	447.7	488.3	569.5	630.4	639.8
137.5°	318.5	332.0	345.4	348.8	381.6	425.3	447.1	481.4	550.0	601.5	609.2
140°	330.2	342.6	355.1	358.2	387.1	425.7	445.0	474.6	533.9	578.4	585.6
142.5°	339.2	350.7	362.2	365.1	391.7	427.2	445.0	471.0	523.1	562.2	568.4
145°	353.1	363.1	373.1	375.6	397.7	427.2	442.0	463.3	505.9	537.8	542.5
147.5°	366.9	376.6	386.4	388.8	406.5	430.2	442.0	458.8	492.3	517.4	521.3
150°	375.9	384.7	393.5	395.7	411.1	431.7	442.0	456.2	484.5	505.7	508.8
152.5°	385.2	391.9	398.5	400.2	414.1	432.7	442.0	454.1	478.3	496.4	498.8
155°	399.0	403.9	408.9	410.1	420.7	434.9	442.0	451.6	470.9	485.3	486.9
157.5°	409.2	414.0	418.9	420.1	427.4	437.1	442.0	449.5	464.4	475.6	476.7
160°	416.2	419.9	423.7	424.6	430.4	438.1	442.0	448.4	461.2	470.8	471.4
162.5°	423.1	425.9	428.7	429.4	433.6	439.2	442.0	447.4	458.2	466.3	466.9
165°	430.6	433.1	435.7	436.3	438.2	440.7	442.0	445.9	453.6	459.4	460.0
167.5°	437.5	438.7	439.9	440.2	441.8	443.9	445.0	447.5	452.6	456.4	456.7
170°	442.0	443.2	444.4	444.7	444.8	444.9	445.0	447.5	452.6	456.4	456.4
172.5°	444.4	444.7	444.9	445.0	445.0	445.0	445.0	447.0	451.0	454.0	453.8
175°	447.7	447.7	447.7	447.7	446.8	445.6	445.0	446.3	448.8	450.7	450.7
177.5°	447.7	447.7	447.7	447.7	447.0	446.1	445.6	446.6	448.6	450.1	449.8
180°	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7



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CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	625.8	625.8
2.5°	668.0	664.0
5°	859.2	863.2
7.5°	1157.0	1155.0
10°	1438.7	1456.8
12.5°	1643.9	1647.9
15°	1768.7	1776.7
17.5°	1817.0	1819.0
20°	1819.0	1815.0
22.5°	1796.8	1792.8
25°	1770.7	1768.7
27.5°	1746.5	1748.6
30°	1736.5	1742.5
32.5°	1736.5	1746.5
35°	1740.5	1750.6
37.5°	1738.5	1750.6
40°	1730.4	1744.5
42.5°	1708.3	1718.4
45°	1674.1	1686.2
47.5°	1629.8	1637.9
50°	1573.5	1581.5
52.5°	1503.1	1505.1
55°	1418.6	1426.6
57.5°	1328.0	1330.0
60°	1227.4	1233.4
62.5°	1120.8	1120.8
65°	1008.1	1012.1
67.5°	891.4	901.4
70°	772.7	774.7
72.5°	656.0	656.0
75°	535.2	537.2
77.5°	420.5	420.5
80°	311.9	313.9
82.5°	215.3	219.3
85°	134.8	134.8
87.5°	62.4	56.3
90°	11.4	11.4
92.5°	45.8	36.7
95°	159.4	131.9
97.5°	382.0	329.6
100°	550.4	488.0
102.5°	715.9	662.5
105°	927.1	898.4
107.5°	1065.5	1072.4
110°	1118.2	1148.1



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CATALOG NUMBER: SQ4-FB-025U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1122.9	1168.8
115°	1093.1	1156.8
117.5°	1030.0	1100.6
120°	979.1	1047.7
122.5°	929.6	997.3
125°	858.8	921.2
127.5°	795.3	847.9
130°	757.9	806.5
132.5°	723.9	767.4
135°	677.3	714.8
137.5°	639.9	670.7
140°	614.3	643.0
142.5°	593.1	617.8
145°	561.2	579.9
147.5°	536.8	552.3
150°	521.4	533.9
152.5°	508.2	517.7
155°	493.1	499.4
157.5°	481.2	485.6
160°	474.0	476.5
162.5°	469.3	471.7
165°	462.6	465.1
167.5°	457.7	458.8
170°	456.4	456.4
172.5°	452.8	451.9
175°	450.7	450.7
177.5°	448.8	447.7
180°	447.7	447.7



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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	4.37	5.41	5.20	6.27	7.35	17.56	18.60	18.39	19.46	20.54
	3H	5.09	6.02	5.93	6.89	8.00	19.42	20.35	20.26	21.23	22.33
	4H	5.39	6.28	6.26	7.16	8.27	20.08	20.96	20.94	21.84	22.95
	6H	5.65	6.47	6.53	7.36	8.48	20.52	21.34	21.39	22.22	23.35
	8H	5.73	6.51	6.61	7.41	8.54	20.65	21.43	21.53	22.33	23.46
	12H	5.75	6.49	6.64	7.39	8.55	20.73	21.47	21.62	22.37	23.52
4H	2H	11.61	12.50	12.48	13.38	14.49	17.86	18.74	18.72	19.62	20.73
	3H	13.20	13.94	14.08	14.85	15.98	19.92	20.67	20.80	21.58	22.71
	4H	13.30	13.98	14.19	14.88	16.04	20.70	21.38	21.59	22.29	23.44
	6H	13.32	13.91	14.23	14.84	15.99	21.26	21.84	22.16	22.77	23.93
	8H	13.30	13.85	14.21	14.78	15.95	21.43	21.97	22.33	22.90	24.07
	12H	13.27	13.76	14.20	14.71	15.88	21.53	22.03	22.46	22.97	24.15
8H	4H	14.76	15.31	15.67	16.24	17.41	20.78	21.33	21.69	22.25	23.42
	6H	15.01	15.47	15.95	16.44	17.61	21.42	21.88	22.36	22.84	24.01
	8H	15.03	15.44	15.98	16.40	17.58	21.64	22.05	22.59	23.01	24.19
	12H	15.01	15.37	15.96	16.32	17.55	21.80	22.16	22.75	23.11	24.34
12H	4H	14.92	15.41	15.85	16.36	17.53	20.74	21.23	21.67	22.18	23.36
	6H	15.28	15.68	16.22	16.64	17.83	21.40	21.81	22.35	22.77	23.95
	8H	15.35	15.71	16.30	16.66	17.90	21.65	22.00	22.60	22.95	24.19