

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: P937116

Luminaire Tested: SQ4-FB-075U-075D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937116  
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-075D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

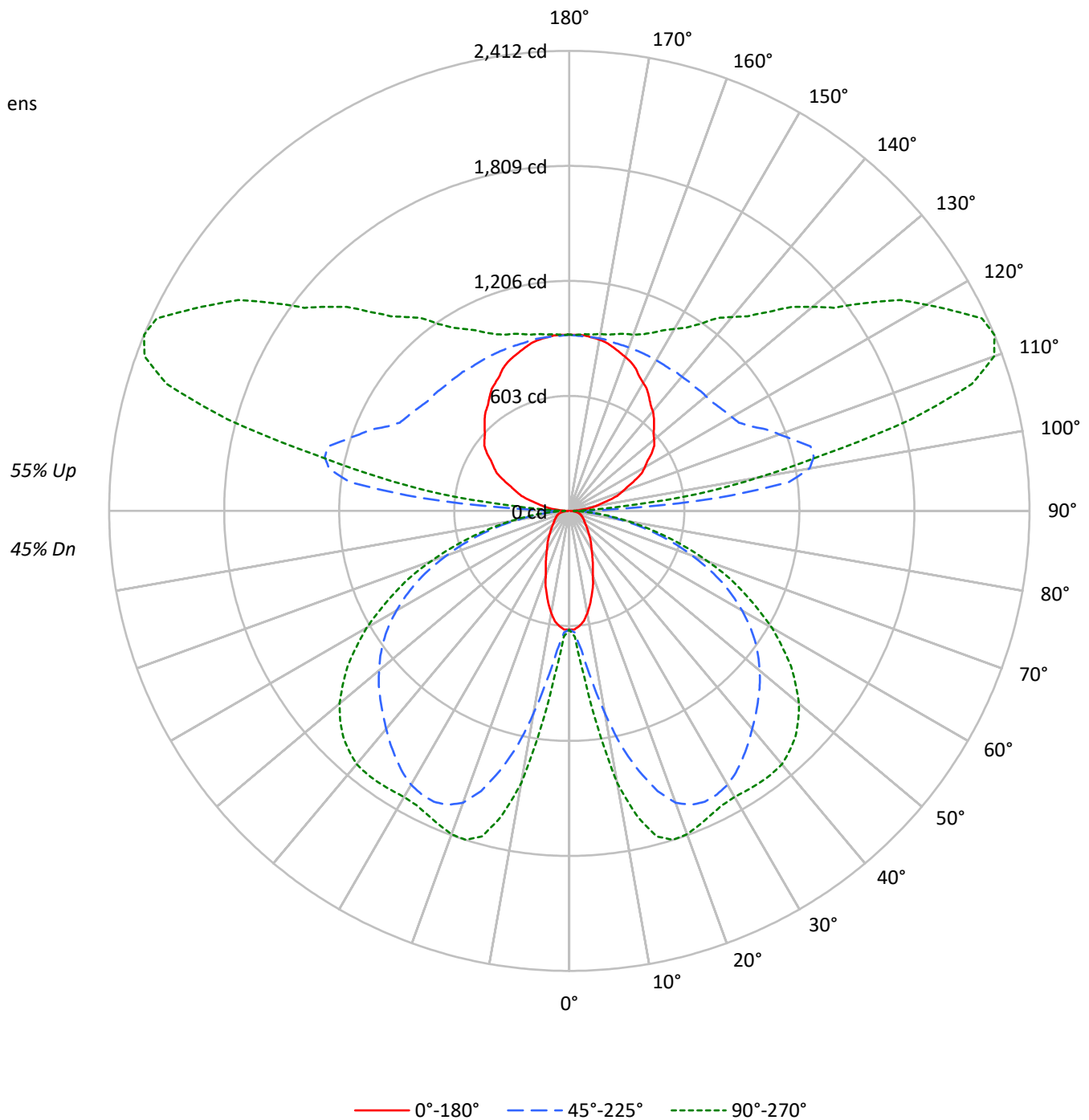
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10804.0 lumens  
Efficiency: N/A  
Efficacy: 127.4 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: General Diffuse

Input Watts (W): 84.8  
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

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### Luminous Intensity Polar Plot





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**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45	45	45	45
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42	37	37	37	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30	30	30	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25	25	25	25
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	17	17	17	17
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13	13	13	13
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14	11	11	11	11
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12	10	10	10	10
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11	9	9	9	9

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2886	2886	2886
5°	2819	3335	3879
10°	2557	4862	6431
15°	2173	6353	7766
20°	1769	7362	7914
25°	1476	7703	7753
30°	1245	7752	7739
35°	1100	7623	7939
40°	959	7456	8146
45°	868	7334	8178
50°	797	7223	8042
55°	763	7062	7686
60°	781	6751	7123
65°	813	6280	6349
70°	866	5477	5364
75°	959	4465	4186
80°	1048	3097	2820
85°	932	1643	1444

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8178 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.5	0.7
10°-20°	356.6	3.3
20°-30°	623.8	5.8
30°-40°	803.0	7.4
40°-50°	896.9	8.3
50°-60°	859.0	8.0
60°-70°	680.7	6.3
70°-80°	400.3	3.7
80°-90°	114.7	1.1
90°-100°	450.3	4.2
100°-110°	1183.8	11.0
110°-120°	1227.5	11.4
120°-130°	984.6	9.1
130°-140°	772.6	7.2
140°-150°	593.0	5.5
150°-160°	427.0	4.0
160°-170°	261.3	2.4
170°-180°	88.3	0.8
0°-30°	1060.8	9.8
0°-40°	1863.8	17.3
0°-60°	3619.7	33.5
0°-90°	4815.5	44.6
90°-120°	2861.7	26.5
90°-150°	5211.9	48.2
90°-180°	5988.0	55.4
0°-180°	10804.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	606	650	732	828	858	56
15°	454	838	1412	1712	1766	126
25°	290	950	1682	1756	1758	134
35°	196	908	1584	1674	1740	122
45°	134	724	1400	1604	1676	104
55°	96	460	1188	1380	1418	87
65°	76	244	882	992	1006	75
75°	56	150	484	532	534	59
85°	20	46	120	132	134	21
90°	6	17	47	24	24	6
95°	60	233	776	400	272	66
105°	213	323	1309	1987	1854	226
115°	379	460	1048	2091	2387	374
125°	527	591	954	1611	1901	468
135°	628	691	924	1301	1475	486
145°	728	775	912	1110	1197	456
155°	823	846	912	1001	1030	378
165°	888	900	912	948	960	251
175°	924	924	918	930	930	88
180°	924	924	924	924	924	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0	622.0
2.5°	622.0	622.0	626.0	628.0	632.0	634.0	638.0	642.0	654.0	656.0	660.0
5°	606.0	614.0	640.0	650.0	678.0	716.0	732.0	758.0	812.0	828.0	838.0
7.5°	582.0	600.0	664.0	680.0	750.0	850.0	892.0	948.0	1034.0	1076.0	1110.0
10°	544.0	582.0	696.0	734.0	848.0	1000.0	1078.0	1156.1	1286.1	1344.1	1366.1
12.5°	502.0	564.0	730.0	782.0	946.0	1168.1	1262.1	1348.1	1496.1	1574.1	1586.1
15°	454.0	538.0	762.0	838.0	1050.0	1308.1	1412.1	1518.1	1656.1	1712.1	1726.1
17.5°	412.0	518.0	792.0	872.0	1130.0	1434.1	1540.1	1628.1	1740.1	1778.1	1788.1
20°	360.0	486.0	812.0	916.0	1214.1	1526.1	1628.1	1696.1	1772.1	1796.1	1800.1
22.5°	322.0	452.0	824.0	932.0	1270.1	1582.1	1668.1	1722.1	1774.1	1782.1	1784.1
25°	290.0	414.0	822.0	950.0	1318.1	1616.1	1682.1	1722.1	1752.1	1756.1	1756.1
27.5°	260.0	372.0	814.0	954.0	1354.1	1624.1	1676.1	1704.1	1718.1	1726.1	1726.1
30°	234.0	332.0	794.0	946.0	1370.1	1616.1	1658.1	1672.1	1686.1	1698.1	1704.1
32.5°	214.0	294.0	764.0	930.0	1372.1	1596.1	1626.1	1634.1	1654.1	1682.1	1692.1
35°	196.0	256.0	730.0	908.0	1360.1	1564.1	1584.1	1592.1	1632.1	1674.1	1688.1
37.5°	178.0	228.0	686.0	870.0	1342.1	1526.1	1540.1	1554.1	1616.1	1666.1	1682.1
40°	160.0	204.0	634.0	828.0	1314.1	1480.1	1492.1	1514.1	1596.1	1654.1	1670.1
42.5°	146.0	184.0	578.0	784.0	1278.1	1428.1	1446.1	1478.1	1572.1	1634.1	1652.1
45°	134.0	164.0	518.0	724.0	1232.1	1374.1	1400.1	1444.1	1544.1	1604.1	1620.1
47.5°	122.0	150.0	456.0	662.0	1182.1	1320.1	1354.1	1404.1	1506.1	1564.1	1578.1
50°	112.0	136.0	394.0	596.0	1128.0	1262.1	1302.1	1354.1	1458.1	1512.1	1530.1
52.5°	104.0	124.0	336.0	530.0	1066.0	1202.1	1248.1	1302.1	1400.1	1452.1	1464.1
55°	96.0	114.0	286.0	460.0	1002.0	1138.1	1188.1	1240.1	1336.1	1380.1	1388.1
57.5°	92.0	106.0	244.0	394.0	934.0	1066.0	1122.0	1170.1	1260.1	1294.1	1302.1
60°	86.0	100.0	212.0	338.0	860.0	998.0	1046.0	1094.0	1170.1	1198.1	1204.1
62.5°	80.0	96.0	188.0	284.0	784.0	918.0	966.0	1010.0	1074.0	1094.0	1102.0
65°	76.0	92.0	170.0	244.0	706.0	834.0	882.0	920.0	972.0	992.0	996.0
67.5°	72.0	88.0	156.0	210.0	628.0	750.0	786.0	822.0	862.0	882.0	884.0
70°	66.0	84.0	144.0	186.0	548.0	654.0	684.0	722.0	754.0	764.0	770.0
72.5°	62.0	78.0	136.0	168.0	466.0	562.0	590.0	612.0	640.0	650.0	650.0
75°	56.0	70.0	128.0	150.0	382.0	460.0	484.0	506.0	528.0	532.0	526.0
77.5°	50.0	62.0	110.0	126.0	298.0	364.0	384.0	396.0	414.0	418.0	420.0
80°	42.0	54.0	86.0	98.0	216.0	268.0	282.0	292.0	308.0	308.0	312.0
82.5°	32.0	42.0	62.0	70.0	146.0	184.0	196.0	202.0	212.0	212.0	212.0
85°	20.0	26.0	40.0	46.0	88.0	112.0	120.0	122.0	130.0	132.0	132.0
87.5°	10.0	14.0	26.0	28.0	46.0	58.0	58.0	62.0	62.0	60.0	58.0
90°	6.2	11.2	16.2	17.4	27.3	40.5	47.1	41.9	31.4	23.6	23.6
92.5°	24.8	67.0	109.2	119.7	168.3	233.0	265.4	232.6	167.0	117.8	113.1
95°	59.5	136.7	213.8	233.1	413.9	655.0	775.6	692.1	525.1	399.9	385.7
97.5°	102.9	171.0	239.1	256.1	557.6	959.6	1160.6	1107.8	1002.3	923.2	896.2
100°	136.4	198.1	259.9	275.3	609.9	1056.0	1279.0	1282.9	1290.6	1296.4	1264.2
102.5°	164.9	222.5	280.1	294.5	633.8	1086.3	1312.5	1379.7	1514.2	1615.1	1587.5
105°	213.3	262.1	310.8	323.0	651.6	1089.7	1308.8	1459.5	1760.9	1987.0	1972.2
107.5°	262.9	308.4	353.8	365.2	654.9	1041.2	1234.4	1444.6	1865.1	2180.5	2184.1
110°	296.4	337.4	378.4	388.7	649.9	998.2	1172.4	1407.4	1877.5	2230.1	2245.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	329.2	368.3	407.4	417.2	650.1	960.7	1116.0	1356.6	1837.7	2198.5	2222.2
115°	378.8	414.9	451.0	460.0	656.1	917.6	1048.4	1280.1	1743.6	2091.2	2124.1
117.5°	427.8	460.6	493.4	501.6	668.4	890.7	1001.9	1211.0	1629.3	1943.0	1979.4
120°	456.3	487.1	518.0	525.7	678.2	881.6	983.3	1174.4	1556.6	1843.2	1878.6
122.5°	484.2	515.4	546.5	554.3	692.5	876.8	969.0	1141.1	1485.3	1743.4	1778.3
125°	527.0	555.4	583.7	590.8	711.7	872.9	953.5	1099.7	1392.0	1611.3	1643.5
127.5°	561.7	590.4	619.0	626.2	731.0	870.7	940.5	1066.0	1317.0	1505.3	1532.4
130°	580.3	611.1	642.0	649.7	745.0	872.1	935.6	1047.3	1270.8	1438.4	1463.5
132.5°	599.5	630.4	661.3	669.0	756.4	872.9	931.2	1031.2	1231.3	1381.3	1403.8
135°	628.0	656.1	684.3	691.3	768.8	872.1	923.8	1007.6	1175.1	1300.7	1320.1
137.5°	657.2	685.0	712.8	719.8	787.4	877.5	922.5	993.3	1135.0	1241.2	1257.0
140°	681.4	707.0	732.6	739.0	798.7	878.4	918.2	979.4	1101.7	1193.5	1208.3
142.5°	700.0	723.7	747.4	753.3	808.3	881.6	918.2	971.9	1079.4	1160.0	1172.7
145°	728.5	749.2	769.8	775.0	820.7	881.6	912.0	956.0	1043.9	1109.8	1119.4
147.5°	757.0	777.1	797.3	802.3	838.9	887.6	912.0	946.6	1015.7	1067.6	1075.6
150°	775.6	793.8	812.0	816.5	848.3	890.8	912.0	941.2	999.6	1043.4	1049.9
152.5°	794.8	808.6	822.4	825.8	854.5	892.8	912.0	936.9	986.8	1024.2	1029.1
155°	823.3	833.5	843.7	846.3	868.2	897.4	912.0	931.8	971.5	1001.3	1004.5
157.5°	844.4	854.3	864.2	866.7	881.8	901.9	912.0	927.4	958.3	981.4	983.7
160°	858.7	866.4	874.1	876.0	888.0	904.0	912.0	925.2	951.7	971.5	972.8
162.5°	872.9	878.7	884.5	886.0	894.7	906.2	912.0	923.2	945.5	962.2	963.4
165°	888.4	893.6	898.9	900.2	904.1	909.4	912.0	920.0	936.0	948.0	949.3
167.5°	902.7	905.2	907.7	908.3	911.6	916.0	918.2	923.4	933.9	941.8	942.3
170°	912.0	914.5	917.0	917.6	917.8	918.1	918.2	923.4	933.9	941.8	941.8
172.5°	917.0	917.5	918.1	918.2	918.2	918.2	918.2	922.3	930.6	936.8	936.3
175°	923.8	923.8	923.8	923.8	921.9	919.4	918.2	920.8	926.1	930.0	930.0
177.5°	923.8	923.8	923.8	923.8	922.3	920.4	919.4	921.5	925.6	928.7	928.2
180°	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8	923.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	622.0	622.0
2.5°	664.0	660.0
5°	854.0	858.0
7.5°	1150.1	1148.1
10°	1430.1	1448.1
12.5°	1634.1	1638.1
15°	1758.1	1766.1
17.5°	1806.1	1808.1
20°	1808.1	1804.1
22.5°	1786.1	1782.1
25°	1760.1	1758.1
27.5°	1736.1	1738.1
30°	1726.1	1732.1
32.5°	1726.1	1736.1
35°	1730.1	1740.1
37.5°	1728.1	1740.1
40°	1720.1	1734.1
42.5°	1698.1	1708.1
45°	1664.1	1676.1
47.5°	1620.1	1628.1
50°	1564.1	1572.1
52.5°	1494.1	1496.1
55°	1410.1	1418.1
57.5°	1320.1	1322.1
60°	1220.1	1226.1
62.5°	1114.0	1114.0
65°	1002.0	1006.0
67.5°	886.0	896.0
70°	768.0	770.0
72.5°	652.0	652.0
75°	532.0	534.0
77.5°	418.0	418.0
80°	310.0	312.0
82.5°	214.0	218.0
85°	134.0	134.0
87.5°	62.0	56.0
90°	23.6	23.6
92.5°	94.4	75.6
95°	329.0	272.2
97.5°	788.1	680.1
100°	1135.6	1006.9
102.5°	1477.3	1367.1
105°	1912.9	1853.7
107.5°	2198.4	2212.7
110°	2307.3	2369.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2316.9	2411.7
115°	2255.5	2386.9
117.5°	2125.2	2271.0
120°	2020.3	2161.9
122.5°	1918.0	2057.7
125°	1772.2	1900.9
127.5°	1641.0	1749.6
130°	1563.7	1664.0
132.5°	1493.6	1583.4
135°	1397.5	1474.9
137.5°	1320.4	1383.8
140°	1267.6	1326.8
142.5°	1223.7	1274.7
145°	1158.0	1196.6
147.5°	1107.5	1139.5
150°	1075.8	1101.7
152.5°	1048.6	1068.2
155°	1017.5	1030.4
157.5°	992.8	1001.9
160°	978.1	983.3
162.5°	968.4	973.4
165°	954.5	959.7
167.5°	944.5	946.7
170°	941.8	941.8
172.5°	934.4	932.5
175°	930.0	930.0
177.5°	926.0	923.8
180°	923.8	923.8



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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	4.17	5.02	5.17	6.03	7.37	17.35	18.20	18.34	19.21	20.55
	3H	4.88	5.64	5.88	6.66	8.02	19.19	19.95	20.19	20.97	22.33
	4H	5.17	5.89	6.19	6.92	8.29	19.83	20.55	20.85	21.58	22.95
	6H	5.42	6.09	6.45	7.12	8.50	20.26	20.93	21.29	21.96	23.34
	8H	5.49	6.12	6.52	7.17	8.55	20.38	21.02	21.42	22.06	23.44
	12H	5.51	6.11	6.55	7.15	8.55	20.45	21.05	21.49	22.09	23.50
4H	2H	11.38	12.11	12.41	13.13	14.50	17.62	18.34	18.65	19.37	20.74
	3H	12.95	13.56	13.98	14.61	15.99	19.67	20.27	20.70	21.32	22.71
	4H	13.04	13.60	14.09	14.64	16.05	20.43	20.99	21.47	22.03	23.44
	6H	13.05	13.53	14.11	14.60	16.00	20.97	21.45	22.02	22.52	23.92
	8H	13.03	13.48	14.08	14.54	15.96	21.13	21.58	22.18	22.64	24.06
	12H	12.99	13.39	14.06	14.46	15.89	21.23	21.63	22.30	22.70	24.13
8H	4H	14.49	14.93	15.54	15.99	17.41	20.49	20.94	21.54	22.00	23.42
	6H	14.73	15.10	15.81	16.20	17.62	21.12	21.49	22.20	22.59	24.01
	8H	14.75	15.07	15.83	16.16	17.59	21.34	21.67	22.42	22.75	24.19
	12H	14.72	15.00	15.80	16.08	17.56	21.48	21.77	22.57	22.85	24.33
12H	4H	14.63	15.04	15.70	16.11	17.53	20.44	20.85	21.51	21.92	23.35
	6H	14.99	15.31	16.07	16.40	17.83	21.10	21.43	22.19	22.51	23.95
	8H	15.06	15.34	16.14	16.42	17.90	21.33	21.62	22.42	22.70	24.17