

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: P937719

Luminaire Tested: SQ4-FB-100U-125D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937719
REPORT IS A COMBINATION OF REPORTS P933576 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

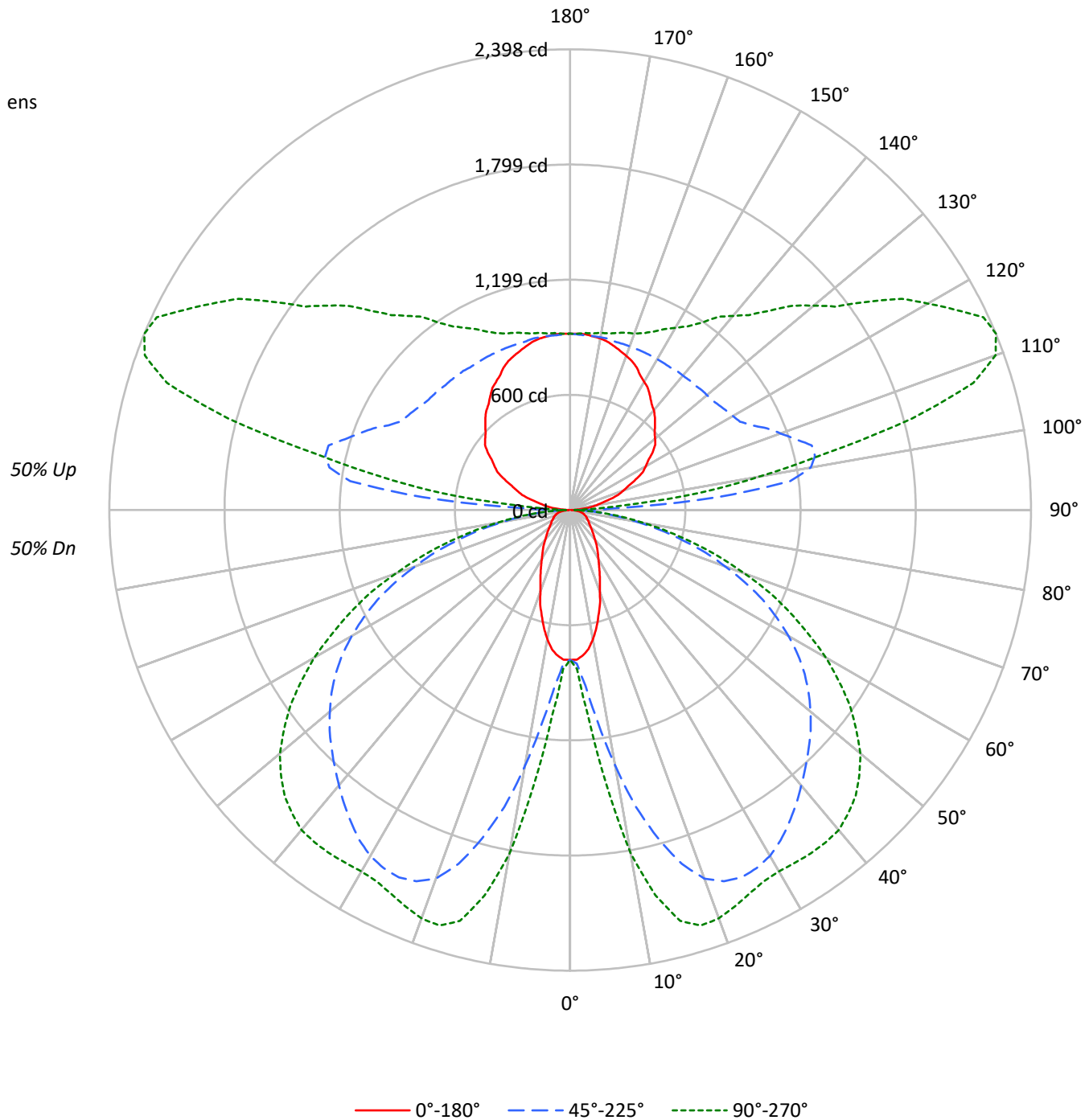
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11991.4 lumens
Efficiency: N/A
Efficacy: 116.2 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: General Diffuse

Input Watts (W): 103.2
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	47	47	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	38	38	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	32	32	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	27	27	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	23	23	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	20	20	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	17	17	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	15	15	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	14	14	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4825	4825	4825
5°	4712	5575	6485
10°	4272	8125	10752
15°	3630	10613	12983
20°	2954	12295	13231
25°	2463	12863	12962
30°	2076	12941	12938
35°	1835	12723	13273
40°	1598	12440	13618
45°	1447	12232	13672
50°	1325	12044	13445
55°	1267	11770	12849
60°	1296	11249	11908
65°	1347	10457	10615
70°	1432	9113	8968
75°	1580	7424	6998
80°	1715	5142	4715
85°	1496	2724	2415

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13672 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	0.8
10°-20°	447.1	3.7
20°-30°	782.1	6.5
30°-40°	1006.8	8.4
40°-50°	1124.6	9.4
50°-60°	1077.1	9.0
60°-70°	853.6	7.1
70°-80°	501.9	4.2
80°-90°	143.0	1.2
90°-100°	447.7	3.7
100°-110°	1177.1	9.8
110°-120°	1220.5	10.2
120°-130°	979.0	8.2
130°-140°	768.2	6.4
140°-150°	589.6	4.9
150°-160°	424.6	3.5
160°-170°	259.8	2.2
170°-180°	87.8	0.7
0°-30°	1330.2	11.1
0°-40°	2337.0	19.5
0°-60°	4538.7	37.8
0°-90°	6037.2	50.3
90°-120°	2845.2	23.7
90°-150°	5182.0	43.2
90°-180°	5954.0	49.7
0°-180°	11991.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	760	815	918	1038	1076	70
15°	569	1051	1771	2147	2214	158
25°	364	1191	2109	2202	2204	168
35°	246	1139	1986	2099	2182	153
45°	168	908	1756	2011	2102	130
55°	120	577	1490	1730	1778	110
65°	95	306	1106	1244	1262	94
75°	70	188	607	667	670	74
85°	25	58	150	166	168	27
90°	6	17	47	23	23	7
95°	59	232	771	398	271	66
105°	212	321	1301	1976	1843	225
115°	377	457	1042	2079	2373	372
125°	524	588	948	1602	1890	465
135°	624	687	918	1293	1466	483
145°	724	770	907	1103	1190	454
155°	819	841	907	996	1024	376
165°	883	895	907	943	954	249
175°	918	918	913	925	925	87
180°	918	918	918	918	918	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9
2.5°	779.9	779.9	785.0	787.4	792.5	795.0	800.0	805.0	820.0	822.6	827.6
5°	759.9	769.9	802.6	815.1	850.2	897.8	917.9	950.5	1018.2	1038.3	1050.8
7.5°	729.8	752.4	832.6	852.6	940.5	1065.9	1118.5	1188.8	1296.6	1349.2	1391.9
10°	682.1	729.8	872.7	920.4	1063.4	1254.0	1351.8	1449.6	1612.6	1685.3	1712.9
12.5°	629.5	707.2	915.4	980.6	1186.2	1464.6	1582.5	1690.3	1875.9	1973.7	1988.7
15°	569.3	674.6	955.5	1050.8	1316.6	1640.2	1770.6	1903.5	2076.6	2146.7	2164.3
17.5°	516.6	649.5	993.1	1093.4	1417.0	1798.2	1931.0	2041.4	2181.9	2229.5	2242.1
20°	451.4	609.4	1018.2	1148.6	1522.3	1913.6	2041.4	2126.7	2222.0	2252.0	2257.1
22.5°	403.8	566.8	1033.3	1168.7	1592.6	1983.7	2091.6	2159.3	2224.5	2234.6	2237.0
25°	363.7	519.1	1030.8	1191.2	1652.7	2026.4	2109.2	2159.3	2196.9	2202.0	2202.0
27.5°	326.0	466.4	1020.7	1196.3	1697.9	2036.4	2101.6	2136.7	2154.2	2164.3	2164.3
30°	293.4	416.3	995.6	1186.2	1717.9	2026.4	2079.0	2096.6	2114.1	2129.2	2136.7
32.5°	268.3	368.6	958.0	1166.1	1720.4	2001.3	2038.9	2048.9	2074.0	2109.2	2121.6
35°	245.8	321.0	915.4	1138.6	1705.4	1961.2	1986.3	1996.3	2046.4	2099.1	2116.7
37.5°	223.2	285.9	860.3	1090.9	1682.8	1913.6	1931.0	1948.6	2026.4	2089.0	2109.2
40°	200.7	255.8	795.0	1038.3	1647.7	1855.9	1870.9	1898.4	2001.3	2074.0	2094.1
42.5°	183.1	230.7	724.8	983.1	1602.5	1790.7	1813.2	1853.3	1971.2	2048.9	2071.5
45°	168.1	205.6	649.5	907.9	1544.8	1722.9	1755.5	1810.7	1936.1	2011.4	2031.4
47.5°	152.9	188.1	571.8	830.1	1482.2	1655.2	1697.9	1760.5	1888.5	1961.2	1978.8
50°	140.4	170.5	494.1	747.3	1414.4	1582.5	1632.7	1697.9	1828.3	1896.0	1918.5
52.5°	130.4	155.5	421.3	664.6	1336.7	1507.2	1564.9	1632.7	1755.5	1820.7	1835.8
55°	120.3	143.0	358.6	576.8	1256.4	1427.0	1489.7	1554.9	1675.3	1730.5	1740.5
57.5°	115.4	132.9	306.0	494.1	1171.2	1336.7	1406.9	1467.1	1580.0	1622.6	1632.7
60°	107.8	125.4	265.9	423.9	1078.4	1251.4	1311.7	1371.8	1467.1	1502.3	1509.8
62.5°	100.3	120.3	235.7	356.1	983.1	1151.1	1211.3	1266.5	1346.7	1371.8	1381.8
65°	95.3	115.4	213.2	306.0	885.2	1045.8	1106.0	1153.6	1218.8	1243.9	1248.9
67.5°	90.3	110.4	195.6	263.3	787.4	940.5	985.6	1030.8	1080.9	1106.0	1108.5
70°	82.8	105.3	180.6	233.3	687.2	820.0	857.7	905.3	945.5	958.0	965.6
72.5°	77.8	97.8	170.5	210.6	584.3	704.7	739.8	767.4	802.6	815.1	815.1
75°	70.2	87.7	160.6	188.1	479.0	576.8	606.9	634.5	662.1	667.1	659.6
77.5°	62.7	77.8	137.9	158.0	373.7	456.5	481.6	496.6	519.1	524.1	526.7
80°	52.7	67.7	107.8	122.9	270.8	336.0	353.6	366.2	386.2	386.2	391.2
82.5°	40.1	52.7	77.8	87.7	183.1	230.7	245.8	253.3	265.9	265.9	265.9
85°	25.1	32.6	50.2	57.7	110.4	140.4	150.5	152.9	163.0	165.5	165.5
87.5°	12.5	17.6	32.6	35.1	57.7	72.7	72.7	77.8	77.8	75.3	72.7
90°	6.1	11.1	16.0	17.3	27.2	40.3	46.8	41.6	31.2	23.4	23.4
92.5°	24.7	66.6	108.5	119.0	167.3	231.6	263.8	231.2	166.0	117.1	112.4
95°	59.2	135.8	212.6	231.8	411.6	651.3	771.1	688.1	522.1	397.6	383.4
97.5°	102.4	170.0	237.7	254.6	554.4	954.1	1154.0	1101.5	996.6	917.9	891.0
100°	135.7	197.0	258.4	273.7	606.3	1049.8	1271.7	1275.5	1283.2	1288.9	1256.9
102.5°	164.0	221.3	278.5	292.8	630.2	1080.1	1305.0	1371.8	1505.5	1605.8	1578.4
105°	212.0	260.5	309.0	321.2	647.9	1083.5	1301.3	1451.2	1750.8	1975.6	1960.9
107.5°	261.3	306.6	351.8	363.1	651.2	1035.2	1227.3	1436.4	1854.4	2168.0	2171.5
110°	294.6	335.4	376.3	386.5	646.3	992.5	1165.6	1399.3	1866.7	2217.3	2232.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	327.3	366.3	405.2	414.9	646.4	955.2	1109.5	1348.7	1827.1	2185.9	2209.4
115°	376.6	412.5	448.4	457.3	652.4	912.3	1042.3	1272.7	1733.6	2079.2	2111.9
117.5°	425.3	457.9	490.5	498.6	664.4	885.5	996.1	1204.1	1619.9	1931.8	1968.1
120°	453.7	484.4	515.0	522.8	674.4	876.6	977.6	1167.6	1547.6	1832.6	1867.8
122.5°	481.5	512.4	543.4	551.1	688.5	871.8	963.5	1134.6	1476.8	1733.3	1768.1
125°	523.9	552.2	580.4	587.5	707.7	868.0	948.1	1093.4	1384.1	1602.1	1634.2
127.5°	558.5	587.0	615.5	622.6	726.8	865.7	935.1	1059.9	1309.5	1496.7	1523.7
130°	577.0	607.7	638.3	646.1	740.8	867.1	930.2	1041.3	1263.5	1430.1	1455.0
132.5°	596.1	626.8	657.4	665.1	752.1	868.0	925.9	1025.3	1224.2	1373.4	1395.7
135°	624.4	652.4	680.3	687.4	764.4	867.1	918.4	1001.7	1168.3	1293.3	1312.6
137.5°	653.4	681.0	708.8	715.7	782.9	872.5	917.3	987.7	1128.5	1234.1	1249.8
140°	677.5	703.0	728.5	734.8	794.2	873.3	912.9	973.8	1095.4	1186.6	1201.3
142.5°	695.9	719.6	743.1	749.0	803.6	876.5	912.9	966.4	1073.2	1153.3	1165.9
145°	724.3	744.9	765.4	770.5	816.0	876.6	906.8	950.5	1037.9	1103.4	1113.0
147.5°	752.7	772.6	792.6	797.6	834.0	882.5	906.8	941.2	1009.9	1061.5	1069.4
150°	771.1	789.2	807.3	811.8	843.5	885.6	906.8	935.8	993.8	1037.4	1043.8
152.5°	790.3	804.0	817.7	821.1	849.7	887.7	906.8	931.6	981.2	1018.3	1023.2
155°	818.7	828.7	838.8	841.4	863.2	892.3	906.8	926.5	966.0	995.5	998.8
157.5°	839.6	849.5	859.3	861.7	876.8	896.8	906.8	922.1	952.8	975.8	978.1
160°	853.7	861.4	869.1	871.0	883.0	898.9	906.8	919.9	946.2	966.0	967.3
162.5°	868.0	873.7	879.4	880.9	889.5	901.1	906.8	917.9	940.1	956.7	957.9
165°	883.4	888.5	893.7	895.0	899.0	904.2	906.8	914.7	930.6	942.6	943.8
167.5°	897.5	900.0	902.4	903.0	906.3	910.7	912.9	918.1	928.5	936.3	936.9
170°	906.8	909.3	911.7	912.3	912.5	912.8	912.9	918.1	928.5	936.3	936.3
172.5°	911.7	912.2	912.8	912.9	912.9	912.9	912.9	917.1	925.3	931.4	930.9
175°	918.4	918.4	918.4	918.4	916.6	914.1	912.9	915.5	920.7	924.7	924.7
177.5°	918.4	918.4	918.4	918.4	917.1	915.2	914.2	916.3	920.3	923.4	922.8
180°	918.4	918.4	918.4	918.4	918.4	918.4	918.4	918.4	918.4	918.4	918.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	779.9	779.9
2.5°	832.6	827.6
5°	1070.9	1075.9
7.5°	1442.1	1439.5
10°	1793.1	1815.7
12.5°	2048.9	2054.0
15°	2204.4	2214.5
17.5°	2264.6	2267.2
20°	2267.2	2262.1
22.5°	2239.5	2234.6
25°	2206.9	2204.4
27.5°	2176.9	2179.3
30°	2164.3	2171.8
32.5°	2164.3	2176.9
35°	2169.4	2181.9
37.5°	2166.8	2181.9
40°	2156.8	2174.3
42.5°	2129.2	2141.8
45°	2086.6	2101.6
47.5°	2031.4	2041.4
50°	1961.2	1971.2
52.5°	1873.3	1875.9
55°	1768.0	1778.1
57.5°	1655.2	1657.7
60°	1529.8	1537.3
62.5°	1396.9	1396.9
65°	1256.4	1261.5
67.5°	1111.0	1123.6
70°	963.0	965.6
72.5°	817.6	817.6
75°	667.1	669.6
77.5°	524.1	524.1
80°	388.7	391.2
82.5°	268.3	273.4
85°	168.1	168.1
87.5°	77.8	70.2
90°	23.4	23.4
92.5°	93.8	75.2
95°	327.0	270.6
97.5°	783.6	676.2
100°	1129.0	1001.0
102.5°	1468.8	1359.2
105°	1902.0	1843.1
107.5°	2185.9	2200.1
110°	2294.0	2355.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2303.6	2397.9
115°	2242.6	2373.3
117.5°	2113.0	2258.0
120°	2008.7	2149.5
122.5°	1907.0	2046.0
125°	1762.0	1889.9
127.5°	1631.7	1739.6
130°	1554.8	1654.5
132.5°	1485.1	1574.4
135°	1389.5	1466.5
137.5°	1312.9	1375.9
140°	1260.3	1319.2
142.5°	1216.7	1267.4
145°	1151.4	1189.7
147.5°	1101.2	1133.0
150°	1069.6	1095.4
152.5°	1042.6	1062.1
155°	1011.6	1024.5
157.5°	987.1	996.1
160°	972.5	977.6
162.5°	962.8	967.7
165°	949.1	954.2
167.5°	939.1	941.3
170°	936.3	936.3
172.5°	929.0	927.1
175°	924.7	924.7
177.5°	920.6	918.4
180°	918.4	918.4



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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	6.50	7.40	7.45	8.37	9.64	19.67	20.57	20.61	21.54	22.80
	3H	7.21	8.02	8.17	9.00	10.28	21.50	22.32	22.46	23.29	24.58
	4H	7.51	8.28	8.48	9.26	10.55	22.15	22.92	23.12	23.90	25.19
	6H	7.76	8.47	8.75	9.46	10.77	22.58	23.29	23.56	24.27	25.58
	8H	7.83	8.51	8.82	9.51	10.82	22.70	23.37	23.68	24.38	25.68
	12H	7.85	8.50	8.85	9.49	10.82	22.76	23.41	23.76	24.40	25.73
4H	2H	13.71	14.48	14.69	15.46	16.76	19.95	20.72	20.92	21.70	22.99
	3H	15.29	15.93	16.27	16.94	18.25	21.99	22.63	22.98	23.64	24.95
	4H	15.38	15.97	16.38	16.98	18.31	22.76	23.35	23.75	24.35	25.68
	6H	15.40	15.90	16.40	16.93	18.26	23.29	23.80	24.30	24.83	26.16
	8H	15.37	15.85	16.38	16.87	18.21	23.45	23.93	24.46	24.95	26.29
	12H	15.33	15.76	16.36	16.80	18.15	23.55	23.98	24.58	25.01	26.36
8H	4H	16.83	17.30	17.84	18.32	19.67	22.82	23.30	23.83	24.32	25.66
	6H	17.07	17.47	18.11	18.53	19.87	23.45	23.84	24.48	24.90	26.25
	8H	17.09	17.44	18.13	18.49	19.85	23.66	24.01	24.71	25.06	26.42
	12H	17.06	17.37	18.11	18.41	19.81	23.81	24.11	24.86	25.16	26.56
12H	4H	16.97	17.40	18.00	18.44	19.79	22.77	23.21	23.80	24.24	25.59
	6H	17.33	17.68	18.37	18.72	20.09	23.43	23.78	24.47	24.83	26.19
	8H	17.40	17.71	18.45	18.75	20.15	23.66	23.97	24.71	25.01	26.41