

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: P938151

Luminaire Tested: SQ4-FB-125U-125D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

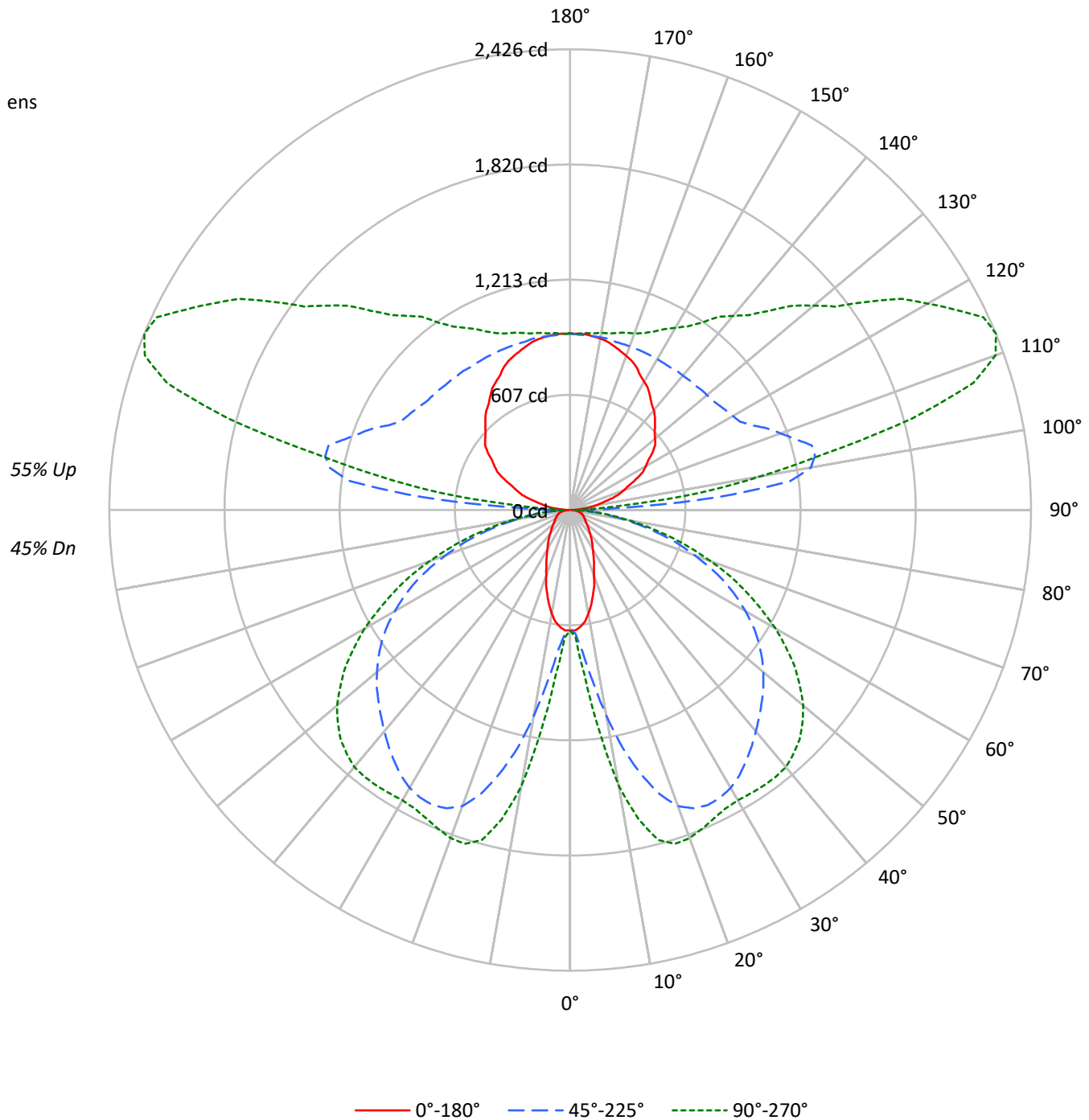
Test Method: LM-79-2019  
Report Number: P938151  
REPORT IS A COMBINATION OF REPORTS P933608 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-125D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10931.3 lumens  
Efficiency: N/A  
Efficacy: 96.9 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: General Diffuse  
  
Input Watts (W): 112.8  
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				
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	81	77	70	67	65	57	55	53	45	44	42	37	37	37	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	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	66	56	49	43	47	41	37	38	34	31	30	27	25	21	21	21	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18	18	18	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15	15	15	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13	13	13	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12	12	12	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10	10	10	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9	9	9	9

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

	0°	45°	90°
0°	3921	3921	3921
5°	3830	4531	5271
10°	3472	6604	8739
15°	2950	8626	10552
20°	2401	9993	10754
25°	2002	10454	10535
30°	1687	10518	10516
35°	1491	10341	10787
40°	1299	10111	11068
45°	1175	9941	11112
50°	1077	9789	10928
55°	1030	9566	10444
60°	1053	9142	9679
65°	1095	8499	8628
70°	1164	7407	7289
75°	1285	6034	5688
80°	1393	4180	3833
85°	1216	2213	1962

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11112 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.0	0.8
10°-20°	363.4	3.3
20°-30°	635.7	5.8
30°-40°	818.3	7.5
40°-50°	914.0	8.4
50°-60°	875.4	8.0
60°-70°	693.8	6.3
70°-80°	408.0	3.7
80°-90°	116.9	1.1
90°-100°	452.9	4.1
100°-110°	1190.8	10.9
110°-120°	1234.8	11.3
120°-130°	990.4	9.1
130°-140°	777.1	7.1
140°-150°	596.5	5.5
150°-160°	429.6	3.9
160°-170°	262.8	2.4
170°-180°	88.8	0.8
0°-30°	1081.1	9.9
0°-40°	1899.4	17.4
0°-60°	3688.9	33.7
0°-90°	4907.6	44.9
90°-120°	2878.5	26.3
90°-150°	5242.5	48.0
90°-180°	6024.0	55.1
0°-180°	10931.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	634	634	634	634	634	
5°	618	662	746	844	874	57
15°	463	854	1439	1745	1800	129
25°	296	968	1714	1790	1792	136
35°	200	925	1614	1706	1773	125
45°	137	738	1427	1635	1708	106
55°	98	469	1211	1406	1445	89
65°	78	249	899	1011	1025	77
75°	57	153	493	542	544	60
85°	20	47	122	134	137	22
90°	6	17	47	24	24	7
95°	60	234	780	402	274	66
105°	215	325	1316	1999	1865	227
115°	381	463	1055	2104	2401	376
125°	530	594	959	1621	1912	471
135°	632	695	929	1308	1484	489
145°	733	780	917	1116	1204	459
155°	828	851	917	1007	1036	381
165°	894	906	917	954	965	252
175°	929	929	924	936	936	88
180°	929	929	929	929	929	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9	633.9
2.5°	633.9	633.9	638.0	640.0	644.1	646.2	650.2	654.3	666.5	668.6	672.7
5°	617.6	625.8	652.3	662.5	691.0	729.7	746.0	772.5	827.6	843.9	854.1
7.5°	593.2	611.5	676.7	693.0	764.4	866.3	909.1	966.2	1053.8	1096.6	1131.3
10°	554.4	593.2	709.3	748.1	864.3	1019.2	1098.7	1178.2	1310.7	1369.8	1392.2
12.5°	511.6	574.8	744.0	797.0	964.1	1190.4	1286.2	1373.8	1524.7	1604.2	1616.4
15°	462.7	548.3	776.6	854.1	1070.1	1333.1	1439.1	1547.1	1687.7	1744.8	1759.1
17.5°	419.9	527.9	807.2	888.7	1151.7	1461.5	1569.5	1659.2	1773.3	1812.0	1822.2
20°	366.9	495.3	827.6	933.6	1237.3	1555.3	1659.2	1728.5	1805.9	1830.4	1834.5
22.5°	328.2	460.7	839.8	949.9	1294.4	1612.3	1700.0	1755.0	1808.0	1816.1	1818.2
25°	295.6	421.9	837.8	968.2	1343.3	1647.0	1714.2	1755.0	1785.6	1789.6	1789.6
27.5°	265.0	379.1	829.6	972.3	1380.0	1655.1	1708.1	1736.6	1750.9	1759.1	1759.1
30°	238.5	338.4	809.2	964.1	1396.3	1647.0	1689.8	1704.0	1718.3	1730.5	1736.6
32.5°	218.1	299.6	778.6	947.8	1398.3	1626.6	1657.2	1665.3	1685.7	1714.2	1724.4
35°	199.8	260.9	744.0	925.4	1386.1	1594.0	1614.4	1622.5	1663.3	1706.1	1720.3
37.5°	181.4	232.4	699.2	886.7	1367.7	1555.3	1569.5	1583.8	1647.0	1697.9	1714.2
40°	163.1	207.9	646.2	843.9	1339.2	1508.4	1520.6	1543.0	1626.6	1685.7	1702.0
42.5°	148.8	187.5	589.1	799.0	1302.5	1455.4	1473.7	1506.3	1602.1	1665.3	1683.7
45°	136.6	167.1	527.9	737.9	1255.6	1400.3	1426.8	1471.7	1573.6	1634.7	1651.0
47.5°	124.3	152.9	464.7	674.7	1204.7	1345.3	1380.0	1430.9	1534.9	1594.0	1608.2
50°	114.1	138.6	401.6	607.4	1149.6	1286.2	1327.0	1380.0	1486.0	1541.0	1559.3
52.5°	106.0	126.4	342.4	540.2	1086.4	1225.0	1271.9	1327.0	1426.8	1479.8	1492.1
55°	97.8	116.2	291.5	468.8	1021.2	1159.8	1210.8	1263.8	1361.6	1406.5	1414.6
57.5°	93.8	108.0	248.7	401.6	951.9	1086.4	1143.5	1192.4	1284.2	1318.8	1327.0
60°	87.6	101.9	216.1	344.5	876.5	1017.1	1066.1	1115.0	1192.4	1221.0	1227.1
62.5°	81.5	97.8	191.6	289.4	799.0	935.6	984.5	1029.4	1094.6	1115.0	1123.1
65°	77.5	93.8	173.3	248.7	719.5	850.0	898.9	937.6	990.6	1011.0	1015.1
67.5°	73.4	89.7	159.0	214.0	640.0	764.4	801.1	837.8	878.5	898.9	901.0
70°	67.3	85.6	146.8	189.6	558.5	666.5	697.1	735.8	768.5	778.6	784.8
72.5°	63.2	79.5	138.6	171.2	474.9	572.8	601.3	623.7	652.3	662.5	662.5
75°	57.1	71.3	130.5	152.9	389.3	468.8	493.3	515.7	538.1	542.2	536.1
77.5°	51.0	63.2	112.1	128.4	303.7	371.0	391.4	403.6	421.9	426.0	428.1
80°	42.8	55.0	87.6	99.9	220.1	273.1	287.4	297.6	313.9	313.9	318.0
82.5°	32.6	42.8	63.2	71.3	148.8	187.5	199.8	205.9	216.1	216.1	216.1
85°	20.4	26.5	40.8	46.9	89.7	114.1	122.3	124.3	132.5	134.5	134.5
87.5°	10.2	14.3	26.5	28.5	46.9	59.1	59.1	63.2	63.2	61.2	59.1
90°	6.3	11.2	16.2	17.4	27.4	40.7	47.4	42.1	31.6	23.7	23.7
92.5°	25.0	67.4	109.8	120.4	169.2	234.3	266.9	233.9	168.0	118.5	113.8
95°	59.9	137.5	215.0	234.5	416.4	658.9	780.2	696.2	528.2	402.2	387.9
97.5°	103.5	171.9	240.4	257.5	560.8	965.3	1167.5	1114.4	1008.2	928.6	901.4
100°	137.2	199.3	261.4	276.9	613.4	1062.2	1286.6	1290.4	1298.2	1304.0	1271.6
102.5°	165.9	223.8	281.8	296.2	637.6	1092.6	1320.2	1387.8	1523.1	1624.5	1596.8
105°	214.6	263.6	312.6	324.9	655.4	1096.2	1316.5	1468.1	1771.3	1998.7	1983.8
107.5°	264.4	310.1	355.9	367.3	658.8	1047.4	1241.7	1453.2	1876.1	2193.3	2196.9
110°	298.1	339.3	380.6	391.0	653.7	1004.1	1179.3	1415.7	1888.6	2243.3	2258.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	331.2	370.5	409.9	419.7	654.0	966.3	1122.5	1364.5	1848.4	2211.4	2235.2
115°	381.0	417.3	453.7	462.8	660.1	923.0	1054.6	1287.7	1753.9	2103.5	2136.6
117.5°	430.3	463.3	496.3	504.5	672.3	895.9	1007.8	1218.2	1638.9	1954.5	1991.1
120°	459.0	490.1	521.1	528.9	682.2	886.8	989.1	1181.3	1565.7	1854.0	1889.7
122.5°	487.1	518.4	549.7	557.5	696.6	882.0	974.8	1147.9	1494.1	1753.7	1788.8
125°	530.1	558.6	587.2	594.3	716.0	878.1	959.2	1106.2	1400.3	1620.9	1653.2
127.5°	565.0	593.8	622.6	629.9	735.3	875.8	946.1	1072.3	1324.9	1514.2	1541.5
130°	583.7	614.8	645.8	653.6	749.4	877.1	941.0	1053.5	1278.2	1446.8	1472.1
132.5°	603.1	634.1	665.1	672.9	760.8	878.1	936.7	1037.3	1238.5	1389.4	1412.0
135°	631.7	660.0	688.3	695.3	773.3	877.3	929.2	1013.5	1182.0	1308.4	1327.8
137.5°	661.0	689.1	717.1	724.1	792.0	882.7	927.9	999.2	1141.6	1248.5	1264.4
140°	685.4	711.1	736.9	743.3	803.4	883.5	923.6	985.1	1108.2	1200.5	1215.4
142.5°	704.1	727.9	751.8	757.7	813.0	886.8	923.6	977.7	1085.7	1166.8	1179.7
145°	732.7	753.5	774.3	779.6	825.5	886.8	917.3	961.6	1050.0	1116.3	1126.0
147.5°	761.5	781.7	802.0	807.0	843.8	892.9	917.3	952.1	1021.7	1073.9	1082.0
150°	780.2	798.5	816.7	821.3	853.3	896.0	917.3	946.7	1005.5	1049.6	1056.1
152.5°	799.5	813.4	827.3	830.7	859.6	898.1	917.3	942.4	992.6	1030.2	1035.1
155°	828.2	838.5	848.7	851.3	873.3	902.7	917.3	937.3	977.3	1007.2	1010.5
157.5°	849.4	859.4	869.3	871.8	887.0	907.2	917.3	932.8	963.9	987.2	989.5
160°	863.7	871.5	879.3	881.2	893.3	909.3	917.3	930.7	957.3	977.3	978.5
162.5°	878.1	883.9	889.7	891.2	899.9	911.6	917.3	928.6	951.0	967.9	969.1
165°	893.7	899.0	904.3	905.5	909.5	914.7	917.3	925.4	941.5	953.6	954.8
167.5°	908.0	910.5	913.0	913.7	916.9	921.4	923.6	928.9	939.4	947.3	947.9
170°	917.3	919.8	922.3	923.0	923.2	923.4	923.6	928.9	939.4	947.3	947.3
172.5°	922.3	922.9	923.4	923.6	923.6	923.6	923.6	927.8	936.1	942.3	941.8
175°	929.2	929.2	929.2	929.2	927.4	924.9	923.6	926.3	931.6	935.5	935.5
177.5°	929.2	929.2	929.2	929.2	927.8	925.8	924.8	926.9	931.1	934.2	933.6
180°	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2	929.2



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	633.9	633.9
2.5°	676.7	672.7
5°	870.4	874.5
7.5°	1172.1	1170.0
10°	1457.4	1475.8
12.5°	1665.3	1669.4
15°	1791.7	1799.8
17.5°	1840.6	1842.6
20°	1842.6	1838.5
22.5°	1820.2	1816.1
25°	1793.7	1791.7
27.5°	1769.2	1771.3
30°	1759.1	1765.2
32.5°	1759.1	1769.2
35°	1763.1	1773.3
37.5°	1761.1	1773.3
40°	1752.9	1767.2
42.5°	1730.5	1740.7
45°	1695.9	1708.1
47.5°	1651.0	1659.2
50°	1594.0	1602.1
52.5°	1522.6	1524.7
55°	1437.0	1445.2
57.5°	1345.3	1347.3
60°	1243.4	1249.5
62.5°	1135.4	1135.4
65°	1021.2	1025.3
67.5°	903.0	913.2
70°	782.7	784.8
72.5°	664.5	664.5
75°	542.2	544.2
77.5°	426.0	426.0
80°	315.9	318.0
82.5°	218.1	222.2
85°	136.6	136.6
87.5°	63.2	57.1
90°	23.7	23.7
92.5°	94.9	76.0
95°	330.8	273.7
97.5°	792.8	684.2
100°	1142.3	1012.8
102.5°	1486.0	1375.1
105°	1924.2	1864.6
107.5°	2211.3	2225.8
110°	2320.8	2382.9





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2330.5	2425.9
115°	2268.8	2401.0
117.5°	2137.7	2284.4
120°	2032.2	2174.6
122.5°	1929.3	2069.8
125°	1782.7	1912.1
127.5°	1650.7	1759.9
130°	1573.0	1673.9
132.5°	1502.4	1592.8
135°	1405.7	1483.6
137.5°	1328.2	1391.9
140°	1275.0	1334.6
142.5°	1230.9	1282.2
145°	1164.8	1203.6
147.5°	1114.2	1146.3
150°	1082.2	1108.2
152.5°	1054.8	1074.5
155°	1023.5	1036.5
157.5°	998.6	1007.8
160°	983.8	989.1
162.5°	974.1	979.1
165°	960.1	965.4
167.5°	950.0	952.3
170°	947.3	947.3
172.5°	939.9	938.0
175°	935.5	935.5
177.5°	931.5	929.2
180°	929.2	929.2



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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	5.26	6.11	6.26	7.12	8.46	18.43	19.28	19.42	20.29	21.63
	3H	5.97	6.73	6.97	7.75	9.11	20.26	21.03	21.26	22.04	23.40
	4H	6.27	6.99	7.28	8.01	9.38	20.90	21.63	21.92	22.65	24.02
	6H	6.52	7.18	7.54	8.21	9.59	21.33	22.00	22.36	23.02	24.40
	8H	6.58	7.22	7.62	8.26	9.64	21.45	22.08	22.48	23.13	24.50
	12H	6.60	7.21	7.64	8.24	9.64	21.51	22.12	22.55	23.15	24.56
4H	2H	12.47	13.19	13.49	14.22	15.58	18.70	19.43	19.72	20.45	21.82
	3H	14.04	14.64	15.07	15.69	17.07	20.74	21.35	21.77	22.40	23.78
	4H	14.13	14.69	15.17	15.73	17.13	21.50	22.06	22.54	23.10	24.51
	6H	14.14	14.62	15.19	15.69	17.08	22.04	22.52	23.09	23.58	24.98
	8H	14.12	14.57	15.17	15.62	17.04	22.20	22.65	23.25	23.70	25.12
	12H	14.07	14.48	15.14	15.55	16.97	22.29	22.69	23.36	23.77	25.19
8H	4H	15.57	16.02	16.62	17.08	18.49	21.56	22.01	22.61	23.07	24.48
	6H	15.81	16.18	16.89	17.28	18.70	22.19	22.56	23.26	23.66	25.07
	8H	15.83	16.16	16.91	17.24	18.67	22.41	22.73	23.49	23.82	25.25
	12H	15.80	16.09	16.88	17.16	18.64	22.55	22.83	23.63	23.91	25.38
12H	4H	15.71	16.12	16.78	17.19	18.61	21.52	21.92	22.59	22.99	24.41
	6H	16.07	16.40	17.15	17.48	18.91	22.17	22.50	23.25	23.58	25.01
	8H	16.14	16.43	17.22	17.50	18.98	22.40	22.69	23.48	23.76	25.24