

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: P937365

Luminaire Tested: SQ4-FB-075U-125D-93050-1D-UNV-STD-W-8-3000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937365  
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-125D-93050-1D-UNV-STD-W-8-3000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

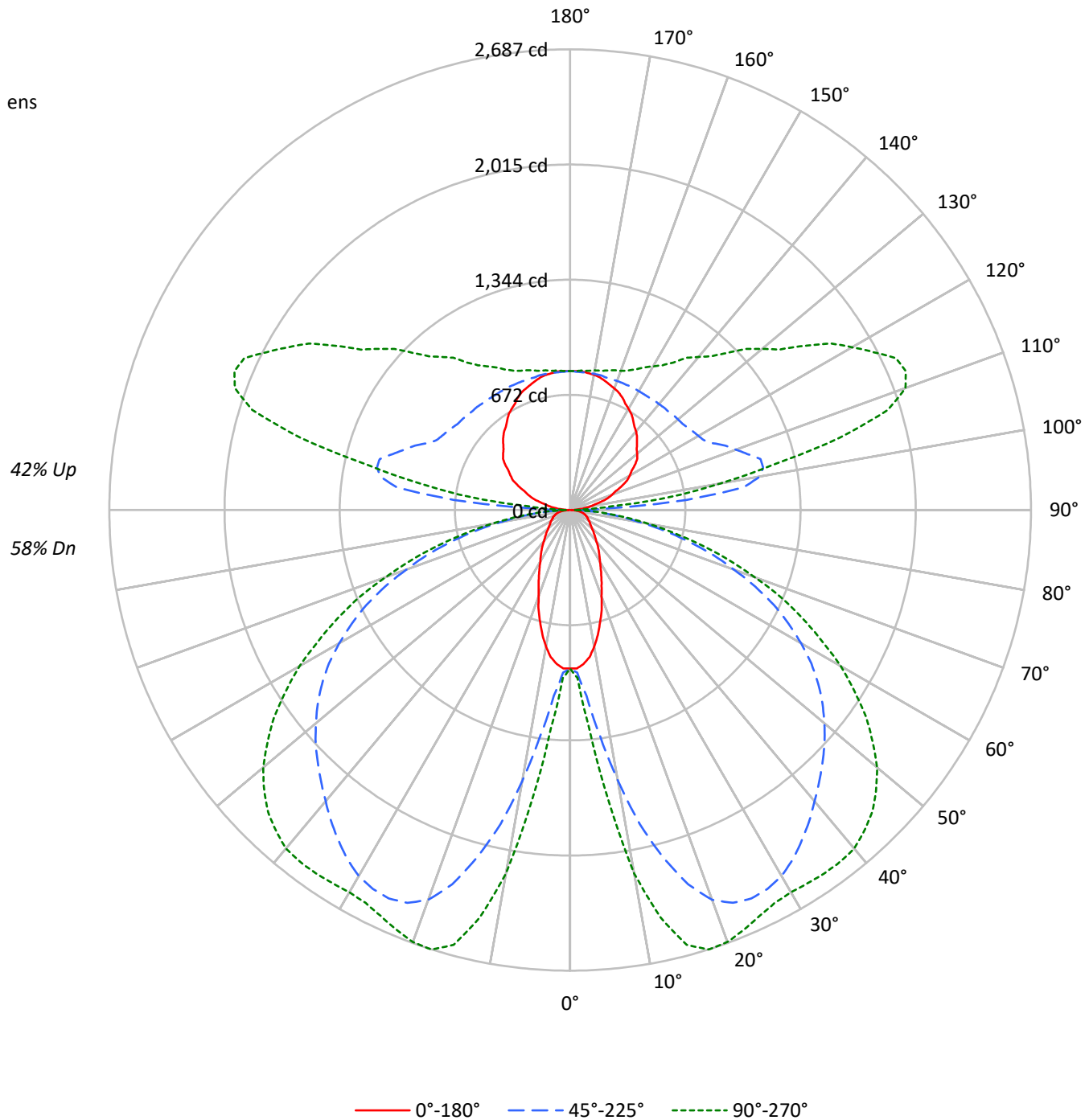
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12414.8 lumens  
Efficiency: N/A  
Efficacy: 100.1 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): 124  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58			58
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52	47			47
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43	38			38
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36	32			32
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30	27			27
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26	23			23
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22	19			19
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19	17			17
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17	15			15
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15	13			13
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14	12			12

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

	0°	45°	90°
0°	4289	4289	4289
5°	4190	4958	5766
10°	3801	7227	9559
15°	3230	9441	11542
20°	2630	10941	11763
25°	2194	11450	11524
30°	1850	11521	11502
35°	1636	11331	11799
40°	1425	11082	12107
45°	1291	10900	12154
50°	1183	10736	11953
55°	1134	10496	11423
60°	1161	10035	10587
65°	1207	9335	9437
70°	1287	8140	7972
75°	1427	6637	6221
80°	1557	4603	4192
85°	1383	2443	2146

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12154 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.6	1.0
10°-20°	530.0	4.3
20°-30°	927.1	7.5
30°-40°	1193.4	9.6
40°-50°	1333.0	10.7
50°-60°	1276.7	10.3
60°-70°	1011.8	8.2
70°-80°	595.0	4.8
80°-90°	168.4	1.4
90°-100°	395.5	3.2
100°-110°	1039.8	8.4
110°-120°	1078.1	8.7
120°-130°	864.8	7.0
130°-140°	678.6	5.5
140°-150°	520.8	4.2
150°-160°	375.1	3.0
160°-170°	229.5	1.8
170°-180°	77.5	0.6
0°-30°	1576.7	12.7
0°-40°	2770.2	22.3
0°-60°	5379.9	43.3
0°-90°	7155.1	57.6
90°-120°	2513.4	20.2
90°-150°	4577.6	36.9
90°-180°	5260.0	42.4
0°-180°	12414.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	924	924	924	924	924	
5°	901	966	1088	1231	1275	83
15°	675	1246	2099	2545	2625	188
25°	431	1412	2500	2610	2613	199
35°	291	1350	2354	2488	2586	182
45°	199	1076	2081	2384	2491	154
55°	143	684	1766	2051	2108	130
65°	113	363	1311	1474	1495	112
75°	83	223	719	791	794	87
85°	30	68	178	196	199	32
90°	5	15	41	21	21	6
95°	52	205	681	351	239	58
105°	187	284	1150	1745	1628	199
115°	333	404	921	1837	2096	329
125°	463	519	838	1415	1670	411
135°	552	607	811	1142	1295	427
145°	640	681	801	975	1051	401
155°	723	743	801	879	905	332
165°	780	791	801	833	843	220
175°	811	811	806	817	817	77
180°	811	811	811	811	811	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5	924.5
2.5°	924.5	924.5	930.5	933.5	939.3	942.3	948.3	954.3	972.1	975.1	981.0
5°	900.7	912.6	951.3	966.1	1007.8	1064.2	1088.0	1126.7	1206.9	1230.7	1245.5
7.5°	865.0	891.8	986.9	1010.7	1114.7	1263.4	1325.8	1409.1	1536.9	1599.3	1649.9
10°	808.6	865.0	1034.5	1090.9	1260.4	1486.3	1602.3	1718.2	1911.4	1997.7	2030.4
12.5°	746.1	838.3	1085.1	1162.3	1406.1	1736.0	1875.8	2003.6	2223.6	2339.5	2357.4
15°	674.8	799.7	1132.6	1245.5	1560.7	1944.1	2098.7	2256.3	2461.4	2544.6	2565.4
17.5°	612.4	769.9	1177.2	1296.1	1679.6	2131.5	2288.9	2419.8	2586.2	2642.7	2657.6
20°	535.1	722.4	1206.9	1361.5	1804.5	2268.2	2419.8	2520.8	2633.8	2669.5	2675.4
22.5°	478.6	671.8	1224.8	1385.3	1887.6	2351.4	2479.3	2559.5	2636.7	2648.7	2651.7
25°	431.1	615.3	1221.8	1412.0	1959.1	2402.0	2500.1	2559.5	2604.1	2610.0	2610.0
27.5°	386.5	552.9	1209.9	1418.0	2012.5	2413.8	2491.1	2532.8	2553.6	2565.4	2565.4
30°	347.8	493.4	1180.2	1406.1	2036.3	2402.0	2464.3	2485.2	2506.0	2523.8	2532.8
32.5°	318.1	437.0	1135.6	1382.3	2039.2	2372.2	2416.8	2428.7	2458.5	2500.1	2514.9
35°	291.3	380.5	1085.1	1349.6	2021.4	2324.7	2354.4	2366.2	2425.7	2488.1	2509.0
37.5°	264.5	338.8	1019.6	1293.1	1994.7	2268.2	2288.9	2309.8	2402.0	2476.3	2500.1
40°	237.8	303.2	942.3	1230.7	1953.1	2199.8	2217.6	2250.3	2372.2	2458.5	2482.2
42.5°	217.0	273.5	859.2	1165.3	1899.6	2122.5	2149.3	2196.8	2336.5	2428.7	2455.5
45°	199.2	243.7	769.9	1076.1	1831.2	2042.2	2080.9	2146.3	2294.9	2384.1	2407.9
47.5°	181.4	222.9	677.8	984.0	1756.9	1961.9	2012.5	2086.8	2238.4	2324.7	2345.5
50°	166.4	202.2	585.7	885.9	1676.6	1875.8	1935.2	2012.5	2167.1	2247.4	2274.1
52.5°	154.6	184.3	499.4	787.7	1584.5	1786.6	1855.0	1935.2	2080.9	2158.2	2176.0
55°	142.7	169.4	425.1	683.8	1489.3	1691.4	1765.8	1843.1	1985.8	2051.2	2063.0
57.5°	136.8	157.6	362.7	585.7	1388.2	1584.5	1667.7	1739.0	1872.8	1923.3	1935.2
60°	127.8	148.6	315.1	502.4	1278.3	1483.4	1554.7	1626.1	1739.0	1780.7	1789.5
62.5°	118.9	142.7	279.5	422.1	1165.3	1364.4	1435.8	1501.2	1596.3	1626.1	1637.9
65°	112.9	136.8	252.7	362.7	1049.4	1239.6	1311.0	1367.4	1444.7	1474.5	1480.4
67.5°	107.0	130.8	231.9	312.1	933.5	1114.7	1168.2	1221.8	1281.3	1311.0	1313.9
70°	98.1	124.9	214.0	276.5	814.5	972.1	1016.6	1073.1	1120.7	1135.6	1144.5
72.5°	92.1	115.9	202.2	249.7	692.6	835.4	877.0	909.7	951.3	966.1	966.1
75°	83.3	104.1	190.2	222.9	567.8	683.8	719.4	752.1	784.8	790.7	781.9
77.5°	74.3	92.1	163.5	187.3	442.9	541.0	570.7	588.6	615.3	621.3	624.3
80°	62.4	80.3	127.8	145.6	321.0	398.3	419.1	434.1	457.8	457.8	463.7
82.5°	47.6	62.4	92.1	104.1	217.0	273.5	291.3	300.2	315.1	315.1	315.1
85°	29.7	38.6	59.5	68.3	130.8	166.4	178.4	181.4	193.2	196.2	196.2
87.5°	14.8	20.8	38.6	41.6	68.3	86.2	86.2	92.1	92.1	89.1	86.2
90°	5.4	9.8	14.2	15.3	24.0	35.6	41.4	36.8	27.6	20.7	20.7
92.5°	21.8	58.8	95.9	105.1	147.8	204.6	233.1	204.3	146.7	103.5	99.3
95°	52.3	120.1	187.8	204.7	363.5	575.3	681.2	607.9	461.2	351.2	338.8
97.5°	90.4	150.2	210.0	224.9	489.7	842.8	1019.4	973.0	880.3	810.8	787.1
100°	119.8	174.0	228.3	241.8	535.7	927.5	1123.3	1126.8	1133.5	1138.6	1110.3
102.5°	144.8	195.4	246.0	258.7	556.7	954.1	1152.8	1211.8	1329.9	1418.5	1394.3
105°	187.3	230.2	273.0	283.7	572.3	957.1	1149.5	1281.9	1546.6	1745.2	1732.2
107.5°	230.9	270.9	310.7	320.8	575.2	914.5	1084.2	1268.8	1638.1	1915.1	1918.3
110°	260.3	296.3	332.3	341.4	570.8	876.7	1029.7	1236.1	1649.0	1958.7	1972.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	289.1	323.5	357.8	366.4	571.0	843.8	980.2	1191.5	1614.1	1930.9	1951.8
115°	332.7	364.4	396.1	404.0	576.3	805.9	920.8	1124.3	1531.4	1836.7	1865.6
117.5°	375.7	404.5	433.4	440.6	587.1	782.3	880.0	1063.6	1431.0	1706.5	1738.5
120°	400.8	427.8	455.0	461.7	595.7	774.3	863.6	1031.5	1367.2	1618.9	1650.0
122.5°	425.3	452.7	480.0	486.8	608.2	770.1	851.1	1002.2	1304.5	1531.2	1561.9
125°	462.9	487.8	512.7	518.9	625.1	766.7	837.5	965.9	1222.6	1415.2	1443.5
127.5°	493.3	518.5	543.7	550.0	642.0	764.7	826.0	936.3	1156.7	1322.1	1345.9
130°	509.7	536.7	563.9	570.6	654.3	766.0	821.7	919.8	1116.1	1263.3	1285.4
132.5°	526.5	553.7	580.8	587.6	664.3	766.7	817.9	905.7	1081.5	1213.2	1233.0
135°	551.6	576.3	601.0	607.2	675.2	766.0	811.4	885.0	1032.1	1142.4	1159.4
137.5°	577.2	601.6	626.1	632.2	691.6	770.7	810.2	872.4	996.9	1090.1	1104.0
140°	598.5	621.0	643.4	649.1	701.5	771.5	806.5	860.2	967.6	1048.3	1061.3
142.5°	614.8	635.6	656.4	661.6	709.9	774.3	806.5	853.6	948.0	1018.8	1030.0
145°	639.8	658.0	676.1	680.7	720.8	774.3	801.0	839.7	916.9	974.7	983.2
147.5°	664.9	682.5	700.3	704.7	736.8	779.6	801.0	831.4	892.1	937.7	944.7
150°	681.2	697.2	713.2	717.1	745.1	782.4	801.0	826.7	877.9	916.4	922.1
152.5°	698.1	710.2	722.3	725.3	750.5	784.1	801.0	822.9	866.7	899.6	903.9
155°	723.1	732.1	741.0	743.3	762.5	788.2	801.0	818.4	853.3	879.4	882.3
157.5°	741.6	750.3	759.0	761.2	774.5	792.1	801.0	814.5	841.7	862.0	864.0
160°	754.2	761.0	767.7	769.4	779.9	794.0	801.0	812.6	835.9	853.3	854.4
162.5°	766.7	771.8	776.9	778.2	785.8	795.9	801.0	810.8	830.4	845.1	846.2
165°	780.3	784.8	789.5	790.6	794.1	798.7	801.0	808.0	822.1	832.6	833.8
167.5°	792.8	795.0	797.2	797.8	800.7	804.5	806.5	811.0	820.2	827.2	827.6
170°	801.0	803.2	805.4	805.9	806.1	806.4	806.5	811.0	820.2	827.2	827.2
172.5°	805.4	805.8	806.4	806.5	806.5	806.5	806.5	810.1	817.3	822.8	822.4
175°	811.4	811.4	811.4	811.4	809.7	807.5	806.5	808.7	813.4	816.8	816.8
177.5°	811.4	811.4	811.4	811.4	810.1	808.4	807.5	809.4	813.0	815.7	815.2
180°	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4	811.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	924.5	924.5
2.5°	986.9	981.0
5°	1269.3	1275.3
7.5°	1709.3	1706.4
10°	2125.5	2152.3
12.5°	2428.7	2434.7
15°	2613.0	2624.9
17.5°	2684.4	2687.3
20°	2687.3	2681.4
22.5°	2654.7	2648.7
25°	2616.0	2613.0
27.5°	2580.3	2583.3
30°	2565.4	2574.4
32.5°	2565.4	2580.3
35°	2571.4	2586.2
37.5°	2568.4	2586.2
40°	2556.6	2577.4
42.5°	2523.8	2538.7
45°	2473.3	2491.1
47.5°	2407.9	2419.8
50°	2324.7	2336.5
52.5°	2220.6	2223.6
55°	2095.7	2107.7
57.5°	1961.9	1964.9
60°	1813.3	1822.3
62.5°	1655.8	1655.8
65°	1489.3	1495.3
67.5°	1316.9	1331.8
70°	1141.5	1144.5
72.5°	969.1	969.1
75°	790.7	793.7
77.5°	621.3	621.3
80°	460.8	463.7
82.5°	318.1	324.0
85°	199.2	199.2
87.5°	92.1	83.3
90°	20.7	20.7
92.5°	82.9	66.4
95°	289.0	239.1
97.5°	692.2	597.3
100°	997.4	884.4
102.5°	1297.5	1200.7
105°	1680.1	1628.1
107.5°	1930.9	1943.4
110°	2026.5	2080.7





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2034.9	2118.2
115°	1981.0	2096.4
117.5°	1866.6	1994.6
120°	1774.4	1898.8
122.5°	1684.6	1807.3
125°	1556.5	1669.6
127.5°	1441.3	1536.7
130°	1373.4	1461.5
132.5°	1311.8	1390.7
135°	1227.4	1295.4
137.5°	1159.7	1215.4
140°	1113.3	1165.3
142.5°	1074.8	1119.6
145°	1017.1	1051.0
147.5°	972.7	1000.8
150°	944.9	967.6
152.5°	921.0	938.2
155°	893.7	905.0
157.5°	872.0	880.0
160°	859.1	863.6
162.5°	850.5	854.9
165°	838.3	842.9
167.5°	829.6	831.5
170°	827.2	827.2
172.5°	820.7	819.0
175°	816.8	816.8
177.5°	813.3	811.4
180°	811.4	811.4



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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	6.73	7.71	7.61	8.62	9.77	19.91	20.89	20.79	21.80	22.95
	3H	7.45	8.33	8.34	9.24	10.42	21.76	22.64	22.65	23.56	24.74
	4H	7.75	8.59	8.66	9.51	10.70	22.41	23.24	23.32	24.17	25.35
	6H	8.01	8.78	8.93	9.71	10.91	22.85	23.62	23.77	24.55	25.75
	8H	8.08	8.81	9.01	9.76	10.96	22.97	23.71	23.90	24.65	25.85
	12H	8.10	8.80	9.03	9.74	10.97	23.04	23.74	23.98	24.68	25.91
4H	2H	13.96	14.80	14.87	15.72	16.91	20.20	21.03	21.11	21.96	23.14
	3H	15.54	16.24	16.46	17.19	18.40	22.25	22.96	23.18	23.91	25.11
	4H	15.64	16.28	16.57	17.23	18.46	23.03	23.67	23.96	24.61	25.84
	6H	15.66	16.21	16.61	17.18	18.41	23.57	24.13	24.52	25.10	26.33
	8H	15.64	16.16	16.59	17.12	18.36	23.74	24.26	24.69	25.22	26.47
	12H	15.60	16.07	16.57	17.05	18.30	23.84	24.31	24.81	25.29	26.54
8H	4H	17.09	17.61	18.05	18.58	19.82	23.10	23.62	24.05	24.58	25.82
	6H	17.34	17.77	18.32	18.78	20.02	23.73	24.16	24.71	25.17	26.41
	8H	17.36	17.74	18.35	18.74	20.00	23.95	24.33	24.94	25.33	26.59
	12H	17.34	17.67	18.33	18.66	19.97	24.10	24.44	25.10	25.43	26.74
12H	4H	17.24	17.71	18.22	18.69	19.94	23.06	23.52	24.03	24.51	25.76
	6H	17.60	17.98	18.59	18.98	20.24	23.72	24.10	24.70	25.09	26.35
	8H	17.68	18.01	18.67	19.00	20.31	23.95	24.29	24.94	25.28	26.58