

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: P936527

Luminaire Tested: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-3500K

Issue Date: 12/17/2024

**Test Information**

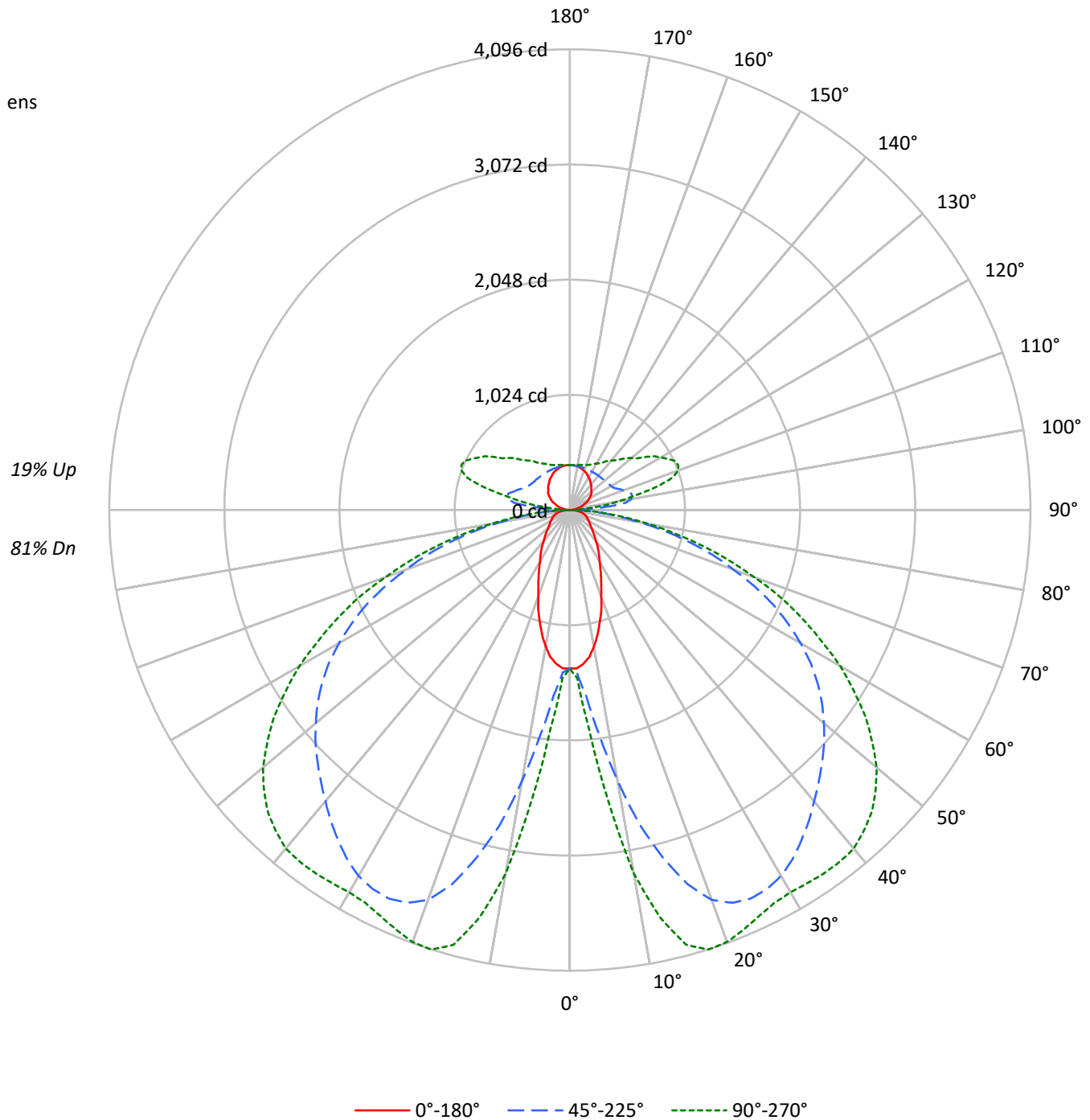
Test Method: LM-79-2019  
Report Number: P936527  
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13494.6 lumens  
Efficiency: N/A  
Efficacy: 90.7 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): 148.8  
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	114	114	114	114	110	110	110	110	100	100	100	92	92	92	84	84	84	84	84	84	81
1	104	99	94	90	99	95	91	87	87	84	81	80	77	75	73	71	70	70	70	70	66
2	94	85	78	72	89	82	75	70	75	70	66	69	65	61	63	60	57	57	57	57	54
3	85	74	66	59	81	71	64	58	65	59	54	60	55	51	55	51	48	48	48	48	45
4	77	65	56	49	74	63	54	48	58	51	45	53	47	43	49	44	40	40	40	40	37
5	71	58	49	42	67	55	47	41	51	44	39	47	41	36	43	38	34	34	34	34	32
6	65	51	42	36	62	49	41	35	46	39	33	42	36	31	39	34	30	30	30	30	27
7	60	46	37	31	57	45	36	30	41	34	29	38	32	27	35	30	26	26	26	26	24
8	55	42	33	27	53	40	32	27	37	30	25	35	29	24	32	27	23	23	23	23	21
9	52	38	30	24	49	37	29	24	34	27	23	32	26	22	29	24	20	20	20	20	18
10	48	35	27	22	46	34	26	21	31	25	20	29	23	19	27	22	18	18	18	18	16

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

	0°	45°	90°
0°	4359	4359	4359
5°	4260	5040	5859
10°	3866	7348	9714
15°	3287	9602	11729
20°	2677	11130	11954
25°	2234	11650	11711
30°	1885	11727	11689
35°	1667	11535	11991
40°	1454	11285	12304
45°	1317	11103	12352
50°	1209	10940	12147
55°	1159	10700	11609
60°	1189	10234	10758
65°	1238	9525	9591
70°	1322	8312	8102
75°	1470	6784	6323
80°	1619	4710	4261
85°	1468	2504	2180

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12352 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.3	1.4
10°-20°	808.0	6.0
20°-30°	1413.3	10.5
30°-40°	1819.3	13.5
40°-50°	2032.1	15.1
50°-60°	1946.3	14.4
60°-70°	1542.4	11.4
70°-80°	907.0	6.7
80°-90°	253.5	1.9
90°-100°	194.8	1.4
100°-110°	512.1	3.8
110°-120°	531.0	3.9
120°-130°	426.0	3.2
130°-140°	334.2	2.5
140°-150°	256.5	1.9
150°-160°	184.7	1.4
160°-170°	113.0	0.8
170°-180°	38.2	0.3
0°-30°	2403.5	17.8
0°-40°	4222.8	31.3
0°-60°	8201.1	60.8
0°-90°	10904.0	80.8
90°-120°	1238.0	9.2
90°-150°	2254.7	16.7
90°-180°	2591.0	19.2
0°-180°	13494.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1373	1473	1659	1876	1944	127
15°	1029	1899	3199	3879	4001	286
25°	657	2152	3811	3979	3983	303
35°	444	2057	3589	3793	3942	277
45°	304	1640	3172	3634	3798	235
55°	218	1042	2692	3127	3213	198
65°	172	553	1998	2248	2279	171
75°	127	340	1097	1205	1210	133
85°	45	104	272	299	304	48
90°	3	8	20	10	10	5
95°	26	101	336	173	118	29
105°	92	140	566	860	802	98
115°	164	199	454	905	1033	162
125°	228	256	412	697	822	202
135°	272	299	400	563	638	210
145°	315	335	394	480	518	197
155°	356	366	394	433	446	164
165°	384	390	394	410	415	108
175°	400	400	397	402	402	38
180°	400	400	400	400	400	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4
2.5°	1409.4	1409.4	1418.4	1422.9	1431.9	1436.5	1445.6	1454.6	1481.8	1486.4	1495.4
5°	1373.0	1391.1	1450.1	1472.7	1536.2	1622.3	1658.6	1717.5	1839.8	1876.1	1898.7
7.5°	1318.7	1359.5	1504.5	1540.8	1699.4	1925.9	2021.1	2148.0	2342.9	2438.0	2515.0
10°	1232.6	1318.7	1577.0	1663.0	1921.4	2265.7	2442.5	2619.2	2913.8	3045.2	3095.1
12.5°	1137.5	1277.9	1654.0	1771.9	2143.4	2646.4	2859.4	3054.3	3389.6	3566.4	3593.5
15°	1028.7	1219.0	1726.5	1898.7	2379.1	2963.7	3199.2	3439.4	3752.1	3879.1	3910.7
17.5°	933.5	1173.7	1794.5	1975.7	2560.3	3249.1	3489.3	3688.7	3942.4	4028.6	4051.2
20°	815.7	1101.1	1839.8	2075.4	2750.7	3457.6	3688.7	3842.7	4015.0	4069.4	4078.4
22.5°	729.5	1024.1	1867.0	2111.7	2877.5	3584.5	3779.4	3901.6	4019.5	4037.6	4042.1
25°	657.1	938.1	1862.5	2152.5	2986.3	3661.5	3811.0	3901.6	3969.7	3978.7	3978.7
27.5°	589.1	842.9	1844.3	2161.6	3067.8	3679.6	3797.5	3860.8	3892.6	3910.7	3910.7
30°	530.2	752.2	1799.0	2143.4	3104.1	3661.5	3756.7	3788.4	3820.1	3847.3	3860.8
32.5°	484.9	666.2	1731.1	2107.2	3108.6	3616.2	3684.2	3702.3	3747.6	3811.0	3833.7
35°	444.1	580.0	1654.0	2057.3	3081.5	3543.7	3589.0	3607.2	3697.8	3792.9	3824.6
37.5°	403.3	516.6	1554.3	1971.3	3040.7	3457.6	3489.3	3521.0	3661.5	3774.8	3811.0
40°	362.5	462.2	1436.5	1876.1	2977.2	3353.4	3380.5	3430.4	3616.2	3747.6	3783.8
42.5°	330.8	416.9	1309.7	1776.4	2895.7	3235.6	3276.4	3348.8	3561.8	3702.3	3743.1
45°	303.6	371.6	1173.7	1640.5	2791.4	3113.2	3172.1	3271.8	3498.4	3634.3	3670.5
47.5°	276.4	339.9	1033.2	1500.0	2678.1	2990.8	3067.8	3181.1	3412.3	3543.7	3575.4
50°	253.8	308.1	892.7	1350.4	2555.8	2859.4	2950.0	3067.8	3303.5	3425.9	3466.7
52.5°	235.7	281.0	761.3	1200.8	2415.3	2723.5	2827.7	2950.0	3172.1	3289.9	3317.1
55°	217.5	258.3	648.0	1042.2	2270.3	2578.4	2691.8	2809.6	3027.1	3126.8	3144.9
57.5°	208.4	240.2	552.9	892.7	2116.2	2415.3	2542.2	2651.0	2854.9	2931.9	2950.0
60°	194.9	226.5	480.3	765.9	1948.6	2261.3	2370.0	2478.8	2651.0	2714.4	2728.0
62.5°	181.3	217.5	426.0	643.5	1776.4	2080.0	2188.7	2288.4	2433.5	2478.8	2496.9
65°	172.2	208.4	385.2	552.9	1599.7	1889.7	1998.4	2084.5	2202.4	2247.6	2256.7
67.5°	163.2	199.4	353.5	475.9	1422.9	1699.4	1780.9	1862.5	1953.1	1998.4	2003.0
70°	149.5	190.3	326.3	421.4	1241.6	1481.8	1549.8	1635.9	1708.4	1731.1	1744.6
72.5°	140.5	176.7	308.1	380.6	1055.9	1273.4	1336.8	1386.7	1450.1	1472.7	1472.7
75°	126.8	158.6	290.0	339.9	865.5	1042.2	1096.7	1146.5	1196.3	1205.4	1191.8
77.5°	113.3	140.5	249.2	285.5	675.2	824.8	870.0	897.3	938.1	947.1	951.6
80°	95.2	122.4	194.9	222.1	489.4	607.2	638.9	661.6	697.9	697.9	707.0
82.5°	72.5	95.2	140.5	158.6	330.8	416.9	444.1	457.6	480.3	480.3	480.3
85°	45.3	58.9	90.6	104.3	199.4	253.8	271.9	276.4	294.6	299.1	299.1
87.5°	22.7	31.7	58.9	63.5	104.3	131.4	131.4	140.5	140.5	135.9	131.4
90°	2.7	4.8	7.0	7.5	11.8	17.5	20.4	18.1	13.6	10.2	10.2
92.5°	10.7	28.9	47.2	51.8	72.7	100.8	114.8	100.6	72.2	51.0	48.9
95°	25.7	59.1	92.5	100.9	179.1	283.4	335.5	299.4	227.2	173.0	166.8
97.5°	44.5	74.0	103.5	110.8	241.2	415.2	502.1	479.2	433.6	399.4	387.7
100°	59.0	85.7	112.4	119.1	263.9	456.8	553.3	555.0	558.3	560.8	546.9
102.5°	71.3	96.2	121.1	127.4	274.2	470.0	567.8	596.9	655.0	698.7	686.7
105°	92.3	113.4	134.4	139.7	281.9	471.4	566.2	631.4	761.8	859.6	853.2
107.5°	113.7	133.4	153.1	158.0	283.3	450.4	534.0	624.9	806.8	943.3	944.8
110°	128.2	145.9	163.7	168.2	281.2	431.8	507.2	608.9	812.2	964.7	971.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	142.5	159.3	176.3	180.5	281.3	415.6	482.8	586.9	795.0	951.1	961.4
115°	163.9	179.5	195.1	199.1	283.9	396.9	453.5	553.8	754.3	904.7	918.9
117.5°	185.0	199.2	213.4	217.0	289.1	385.3	433.5	524.0	704.9	840.6	856.4
120°	197.4	210.7	224.1	227.4	293.4	381.3	425.3	508.0	673.4	797.4	812.7
122.5°	209.5	223.0	236.4	239.8	299.6	379.3	419.2	493.6	642.5	754.2	769.3
125°	228.0	240.3	252.6	255.6	308.0	377.7	412.5	475.7	602.2	697.0	711.0
127.5°	243.0	255.4	267.8	270.9	316.3	376.7	406.9	461.1	569.8	651.2	662.9
130°	251.0	264.4	277.8	281.1	322.3	377.2	404.7	453.1	549.8	622.2	633.1
132.5°	259.4	272.7	286.1	289.4	327.2	377.7	402.8	446.1	532.7	597.6	607.3
135°	271.7	283.9	296.0	299.0	332.6	377.3	399.6	435.9	508.3	562.7	571.1
137.5°	284.3	296.3	308.3	311.3	340.6	379.6	399.1	429.7	490.9	536.9	543.8
140°	294.7	305.8	317.0	319.7	345.5	380.0	397.2	423.6	476.6	516.3	522.7
142.5°	302.8	313.0	323.3	325.9	349.6	381.3	397.2	420.4	466.9	501.8	507.4
145°	315.2	324.1	333.0	335.3	355.0	381.3	394.5	413.6	451.6	480.1	484.2
147.5°	327.5	336.2	344.9	347.1	362.9	384.0	394.5	409.5	439.4	461.8	465.3
150°	335.5	343.4	351.2	353.2	367.0	385.3	394.5	407.2	432.5	451.4	454.2
152.5°	343.8	349.8	355.7	357.2	369.6	386.2	394.5	405.3	426.9	443.1	445.2
155°	356.2	360.5	365.0	366.1	375.5	388.2	394.5	403.1	420.3	433.2	434.6
157.5°	365.3	369.5	373.9	375.0	381.5	390.2	394.5	401.2	414.5	424.5	425.5
160°	371.5	374.8	378.2	379.0	384.2	391.1	394.5	400.3	411.7	420.2	420.8
162.5°	377.7	380.2	382.7	383.3	387.0	392.0	394.5	399.4	409.0	416.2	416.8
165°	384.4	386.6	388.9	389.5	391.1	393.4	394.5	398.0	404.9	410.1	410.6
167.5°	390.5	391.6	392.7	392.9	394.4	396.2	397.2	399.4	404.0	407.4	407.7
170°	394.5	395.6	396.7	396.9	397.0	397.1	397.2	399.4	404.0	407.4	407.4
172.5°	396.7	396.9	397.1	397.2	397.2	397.2	397.2	399.0	402.6	405.2	405.1
175°	399.6	399.6	399.6	399.6	398.8	397.8	397.2	398.4	400.6	402.3	402.3
177.5°	399.6	399.6	399.6	399.6	399.0	398.2	397.8	398.6	400.4	401.8	401.5
180°	399.6	399.6	399.6	399.6	399.6	399.6	399.6	399.6	399.6	399.6	399.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1409.4	1409.4
2.5°	1504.5	1495.4
5°	1935.0	1944.0
7.5°	2605.6	2601.1
10°	3240.0	3280.8
12.5°	3702.3	3711.3
15°	3983.2	4001.3
17.5°	4092.0	4096.5
20°	4096.5	4087.5
22.5°	4046.7	4037.6
25°	3987.8	3983.2
27.5°	3933.4	3938.0
30°	3910.7	3924.3
32.5°	3910.7	3933.4
35°	3919.8	3942.4
37.5°	3915.3	3942.4
40°	3897.2	3928.9
42.5°	3847.3	3870.0
45°	3770.2	3797.5
47.5°	3670.5	3688.7
50°	3543.7	3561.8
52.5°	3385.1	3389.6
55°	3194.8	3212.9
57.5°	2990.8	2995.4
60°	2764.3	2777.8
62.5°	2524.1	2524.1
65°	2270.3	2279.4
67.5°	2007.5	2030.2
70°	1740.2	1744.6
72.5°	1477.3	1477.3
75°	1205.4	1209.9
77.5°	947.1	947.1
80°	702.4	707.0
82.5°	484.9	494.0
85°	303.6	303.6
87.5°	140.5	126.8
90°	10.2	10.2
92.5°	40.9	32.8
95°	142.3	117.7
97.5°	341.0	294.2
100°	491.3	435.6
102.5°	639.0	591.4
105°	827.5	801.9
107.5°	951.1	957.2
110°	998.1	1024.8





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1002.3	1043.3
115°	975.7	1032.6
117.5°	919.4	982.4
120°	874.0	935.2
122.5°	829.8	890.2
125°	766.6	822.3
127.5°	709.9	756.9
130°	676.5	719.9
132.5°	646.2	685.0
135°	604.6	638.0
137.5°	571.2	598.7
140°	548.3	574.0
142.5°	529.4	551.5
145°	500.9	517.6
147.5°	479.2	493.0
150°	465.4	476.6
152.5°	453.6	462.1
155°	440.2	445.8
157.5°	429.5	433.5
160°	423.1	425.3
162.5°	418.9	421.0
165°	412.9	415.2
167.5°	408.6	409.5
170°	407.4	407.4
172.5°	404.2	403.4
175°	402.3	402.3
177.5°	400.6	399.6
180°	399.6	399.6



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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	8.55	9.85	9.18	10.50	11.25	21.74	23.04	22.37	23.69	24.44
	3H	9.29	10.46	9.93	11.12	11.91	23.62	24.80	24.26	25.46	26.24
	4H	9.60	10.72	10.27	11.39	12.18	24.29	25.40	24.95	26.07	26.87
	6H	9.88	10.91	10.55	11.59	12.40	24.74	25.77	25.42	26.46	27.27
	8H	9.96	10.94	10.65	11.65	12.46	24.88	25.86	25.57	26.57	27.38
	12H	9.99	10.93	10.69	11.63	12.47	24.97	25.91	25.66	26.60	27.45
4H	2H	15.82	16.94	16.49	17.61	18.40	22.07	23.18	22.73	23.85	24.65
	3H	17.43	18.37	18.11	19.08	19.89	24.16	25.09	24.84	25.80	26.62
	4H	17.54	18.39	18.24	19.11	19.95	24.95	25.80	25.64	26.51	27.35
	6H	17.58	18.32	18.30	19.06	19.91	25.52	26.26	26.23	27.00	27.85
	8H	17.57	18.26	18.29	19.00	19.87	25.69	26.39	26.41	27.12	27.99
	12H	17.55	18.17	18.29	18.93	19.81	25.81	26.44	26.55	27.20	28.07
8H	4H	19.03	19.72	19.75	20.46	21.33	25.04	25.74	25.76	26.47	27.34
	6H	19.29	19.87	20.04	20.65	21.52	25.70	26.28	26.45	27.05	27.92
	8H	19.32	19.83	20.08	20.61	21.50	25.93	26.44	26.69	27.22	28.11
	12H	19.31	19.76	20.07	20.53	21.47	26.10	26.55	26.86	27.32	28.26
12H	4H	19.20	19.82	19.94	20.58	21.45	25.02	25.64	25.76	26.40	27.28
	6H	19.56	20.08	20.32	20.85	21.74	25.69	26.20	26.45	26.98	27.87
	8H	19.65	20.11	20.42	20.87	21.82	25.94	26.40	26.71	27.17	28.11