

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: P936525

Luminaire Tested: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-2700K

Issue Date: 12/17/2024

**Test Information**

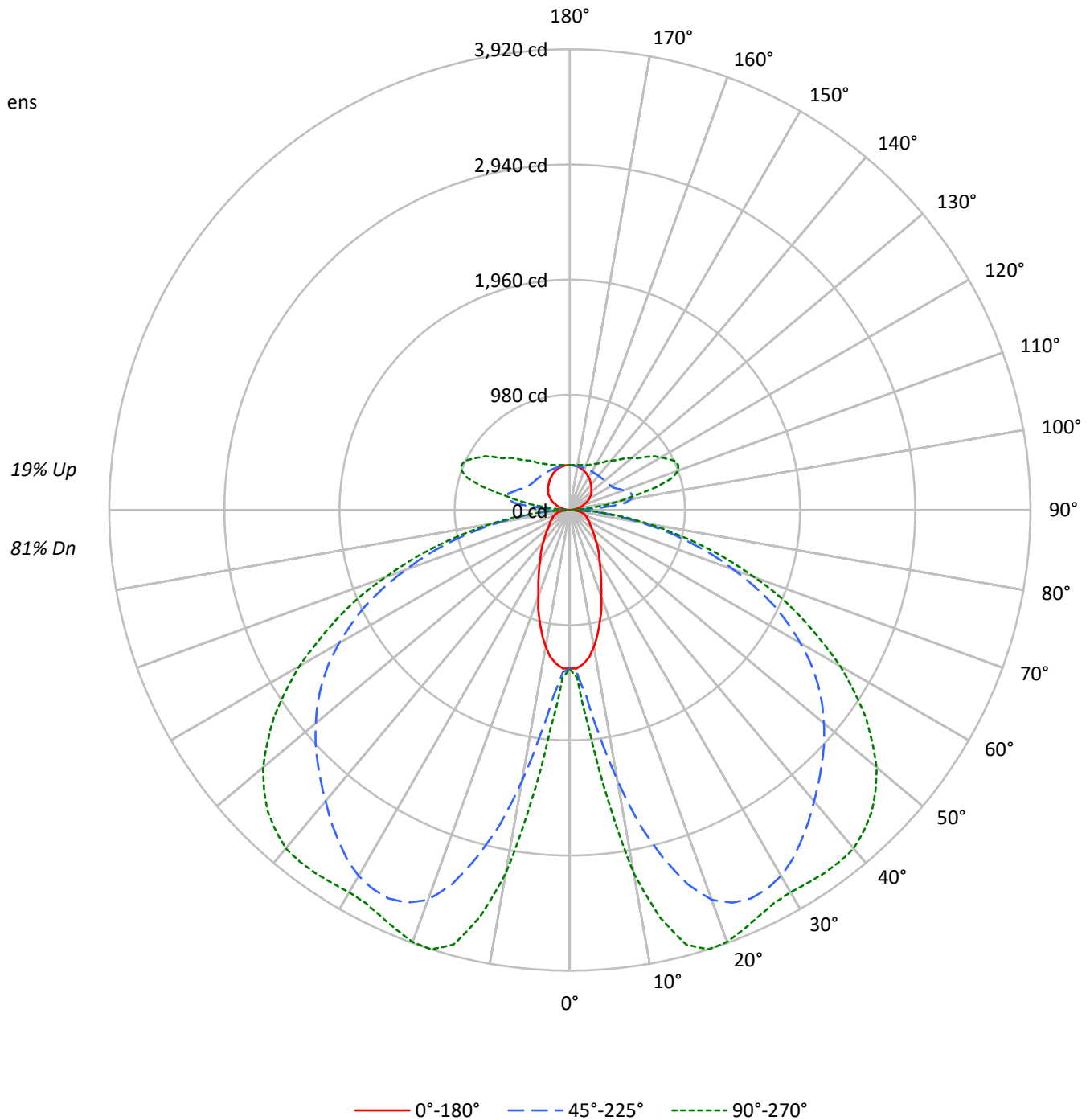
Test Method: LM-79-2019  
Report Number: P936525  
REPORT IS A COMBINATION OF REPORTS P933432 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-125D-92765-1D-UNV-STD-W-12-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12912.7 lumens  
Efficiency: N/A  
Efficacy: 86.8 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 (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	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°	4171	4171	4171
5°	4076	4822	5607
10°	3699	7031	9295
15°	3145	9188	11224
20°	2561	10650	11438
25°	2137	11147	11206
30°	1804	11221	11185
35°	1595	11037	11474
40°	1391	10799	11773
45°	1260	10624	11819
50°	1157	10468	11624
55°	1110	10238	11108
60°	1137	9793	10294
65°	1185	9114	9177
70°	1265	7954	7753
75°	1407	6491	6050
80°	1549	4507	4077
85°	1406	2396	2086

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11819 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.4	1.4
10°-20°	773.1	6.0
20°-30°	1352.3	10.5
30°-40°	1740.8	13.5
40°-50°	1944.4	15.1
50°-60°	1862.3	14.4
60°-70°	1475.9	11.4
70°-80°	867.9	6.7
80°-90°	242.6	1.9
90°-100°	186.4	1.4
100°-110°	490.0	3.8
110°-120°	508.1	3.9
120°-130°	407.6	3.2
130°-140°	319.8	2.5
140°-150°	245.5	1.9
150°-160°	176.8	1.4
160°-170°	108.2	0.8
170°-180°	36.5	0.3
0°-30°	2299.9	17.8
0°-40°	4040.7	31.3
0°-60°	7847.5	60.8
0°-90°	10433.8	80.8
90°-120°	1184.6	9.2
90°-150°	2157.4	16.7
90°-180°	2479.0	19.2
0°-180°	12912.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1349	1349	1349	1349	1349	
5°	1314	1409	1587	1795	1860	121
15°	984	1817	3061	3712	3829	274
25°	629	2060	3647	3807	3812	290
35°	425	1969	3434	3629	3772	265
45°	290	1570	3035	3478	3634	225
55°	208	997	2576	2992	3074	190
65°	165	529	1912	2151	2181	163
75°	121	325	1049	1153	1158	127
85°	43	100	260	286	290	46
90°	3	7	20	10	10	5
95°	25	96	321	166	113	27
105°	88	134	542	822	767	94
115°	157	190	434	866	988	155
125°	218	245	395	667	787	194
135°	260	286	382	538	610	201
145°	302	321	378	459	495	189
155°	341	350	378	414	427	157
165°	368	373	378	392	397	104
175°	382	382	380	385	385	36
180°	382	382	382	382	382	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6	1348.6
2.5°	1348.6	1348.6	1357.2	1361.6	1370.2	1374.5	1383.3	1391.9	1417.9	1422.3	1430.9
5°	1313.8	1331.2	1387.5	1409.2	1470.0	1552.4	1587.1	1643.4	1760.4	1795.2	1816.8
7.5°	1261.8	1300.8	1439.6	1474.3	1626.1	1842.9	1933.9	2055.4	2241.8	2332.9	2406.6
10°	1179.5	1261.8	1509.0	1591.3	1838.5	2168.0	2337.2	2506.3	2788.1	2913.9	2961.6
12.5°	1088.4	1222.8	1582.7	1695.4	2051.0	2532.3	2736.1	2922.6	3243.5	3412.6	3438.5
15°	984.3	1166.4	1652.1	1816.8	2276.5	2835.9	3061.3	3291.1	3590.3	3711.8	3742.1
17.5°	893.2	1123.1	1717.1	1890.5	2449.9	3109.0	3338.9	3529.6	3772.4	3854.9	3876.5
20°	780.5	1053.7	1760.4	1985.9	2632.1	3308.5	3529.6	3677.0	3841.9	3893.9	3902.5
22.5°	698.1	979.9	1786.5	2020.6	2753.5	3429.9	3616.4	3733.4	3846.1	3863.5	3867.8
25°	628.7	897.6	1782.1	2059.6	2857.5	3503.6	3646.7	3733.4	3798.5	3807.1	3807.1
27.5°	563.7	806.6	1764.8	2068.4	2935.6	3521.0	3633.7	3694.4	3724.8	3742.1	3742.1
30°	507.4	719.8	1721.4	2051.0	2970.2	3503.6	3594.7	3625.0	3655.4	3681.4	3694.4
32.5°	464.0	637.4	1656.4	2016.3	2974.6	3460.2	3525.3	3542.7	3586.0	3646.7	3668.4
35°	424.9	555.0	1582.7	1968.6	2948.6	3390.9	3434.2	3451.6	3538.3	3629.4	3659.7
37.5°	385.9	494.3	1487.3	1886.3	2909.6	3308.5	3338.9	3369.2	3503.6	3612.0	3646.7
40°	346.9	442.3	1374.5	1795.2	2848.9	3208.8	3234.8	3282.5	3460.2	3586.0	3620.6
42.5°	316.5	399.0	1253.2	1699.8	2770.8	3096.0	3135.1	3204.4	3408.2	3542.7	3581.7
45°	290.5	355.6	1123.1	1569.7	2671.0	2978.9	3035.3	3130.7	3347.5	3477.6	3512.3
47.5°	264.5	325.3	988.7	1435.3	2562.6	2861.8	2935.6	3043.9	3265.2	3390.9	3421.2
50°	242.8	294.8	854.2	1292.2	2445.6	2736.1	2822.8	2935.6	3161.0	3278.1	3317.2
52.5°	225.5	268.9	728.5	1149.1	2311.2	2606.0	2705.8	2822.8	3035.3	3148.1	3174.0
55°	208.2	247.2	620.1	997.3	2172.4	2467.2	2575.7	2688.5	2896.5	2991.9	3009.3
57.5°	199.4	229.8	529.0	854.2	2025.0	2311.2	2432.6	2536.7	2731.8	2805.5	2822.8
60°	186.5	216.8	459.6	732.8	1864.6	2163.8	2267.8	2371.9	2536.7	2597.3	2610.4
62.5°	173.5	208.2	407.6	615.7	1699.8	1990.3	2094.3	2189.7	2328.5	2371.9	2389.3
65°	164.8	199.4	368.6	529.0	1530.7	1808.2	1912.2	1994.6	2107.4	2150.7	2159.4
67.5°	156.1	190.8	338.2	455.3	1361.6	1626.1	1704.1	1782.1	1868.9	1912.2	1916.6
70°	143.1	182.1	312.2	403.2	1188.1	1417.9	1482.9	1565.4	1634.7	1656.4	1669.4
72.5°	134.4	169.1	294.8	364.2	1010.3	1218.5	1279.1	1326.9	1387.5	1409.2	1409.2
75°	121.4	151.8	277.5	325.3	828.2	997.3	1049.4	1097.0	1144.7	1153.4	1140.4
77.5°	108.4	134.4	238.5	273.2	646.1	789.2	832.5	858.6	897.6	906.2	910.6
80°	91.1	117.1	186.5	212.5	468.3	581.1	611.4	633.1	667.8	667.8	676.5
82.5°	69.4	91.1	134.4	151.8	316.5	399.0	424.9	437.9	459.6	459.6	459.6
85°	43.4	56.4	86.7	99.8	190.8	242.8	260.2	264.5	281.9	286.2	286.2
87.5°	21.7	30.3	56.4	60.7	99.8	125.7	125.7	134.4	134.4	130.1	125.7
90°	2.6	4.6	6.7	7.2	11.3	16.7	19.5	17.3	13.0	9.7	9.7
92.5°	10.2	27.7	45.2	49.5	69.6	96.4	109.8	96.3	69.1	48.8	46.8
95°	24.6	56.5	88.5	96.5	171.3	271.2	321.1	286.5	217.4	165.5	159.6
97.5°	42.6	70.8	99.0	106.0	230.8	397.3	480.4	458.6	414.9	382.1	370.9
100°	56.5	82.0	107.5	113.9	252.5	437.1	529.5	531.1	534.3	536.6	523.3
102.5°	68.2	92.1	115.9	121.9	262.4	449.7	543.3	571.2	626.8	668.5	657.1
105°	88.3	108.5	128.6	133.7	269.7	451.1	541.8	604.1	728.9	822.5	816.4
107.5°	108.8	127.6	146.5	151.2	271.1	431.0	510.9	598.0	772.0	902.6	904.1
110°	122.7	139.6	156.6	160.9	269.1	413.2	485.3	582.6	777.2	923.1	929.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	136.3	152.5	168.7	172.7	269.1	397.7	462.0	561.6	760.7	910.1	919.9
115°	156.8	171.8	186.7	190.5	271.6	379.8	434.0	529.9	721.7	865.7	879.2
117.5°	177.1	190.6	204.2	207.6	276.7	368.7	414.8	501.4	674.5	804.3	819.5
120°	188.8	201.7	214.5	217.6	280.8	364.9	407.0	486.1	644.4	763.0	777.7
122.5°	200.5	213.4	226.2	229.4	286.6	362.9	401.1	472.3	614.8	721.7	736.1
125°	218.1	229.9	241.7	244.6	294.7	361.4	394.7	455.2	576.2	667.0	680.3
127.5°	232.5	244.4	256.2	259.2	302.6	360.4	389.3	441.2	545.2	623.1	634.4
130°	240.2	253.0	265.8	269.0	308.4	361.0	387.3	433.6	526.1	595.4	605.8
132.5°	248.2	260.9	273.7	276.9	313.1	361.4	385.5	426.9	509.7	571.8	581.1
135°	260.0	271.6	283.2	286.1	318.2	361.0	382.4	417.1	486.4	538.4	546.5
137.5°	272.0	283.6	295.0	297.9	325.9	363.3	381.9	411.2	469.8	513.8	520.3
140°	282.0	292.6	303.3	305.9	330.6	363.6	380.1	405.4	456.0	494.0	500.2
142.5°	289.7	299.5	309.4	311.8	334.6	364.9	380.1	402.3	446.8	480.2	485.5
145°	301.6	310.1	318.7	320.8	339.7	364.9	377.5	395.7	432.1	459.4	463.4
147.5°	313.4	321.7	330.0	332.1	347.2	367.4	377.5	391.9	420.5	441.9	445.3
150°	321.1	328.6	336.1	338.0	351.1	368.7	377.5	389.7	413.8	431.9	434.6
152.5°	329.0	334.7	340.4	341.8	353.7	369.6	377.5	387.9	408.5	424.0	426.0
155°	340.8	345.0	349.3	350.3	359.3	371.5	377.5	385.7	402.2	414.5	415.9
157.5°	349.5	353.6	357.8	358.8	365.1	373.3	377.5	383.9	396.7	406.2	407.2
160°	355.5	358.6	361.9	362.7	367.6	374.2	377.5	383.0	393.9	402.1	402.6
162.5°	361.4	363.8	366.2	366.8	370.3	375.1	377.5	382.1	391.4	398.3	398.8
165°	367.8	369.9	372.1	372.7	374.3	376.4	377.5	380.9	387.4	392.4	392.9
167.5°	373.7	374.7	375.7	376.0	377.4	379.1	380.1	382.2	386.6	389.8	390.1
170°	377.5	378.5	379.6	379.8	379.9	380.0	380.1	382.2	386.6	389.8	389.8
172.5°	379.6	379.8	380.0	380.1	380.1	380.1	380.1	381.8	385.2	387.8	387.6
175°	382.4	382.4	382.4	382.4	381.6	380.6	380.1	381.2	383.3	385.0	385.0
177.5°	382.4	382.4	382.4	382.4	381.8	381.0	380.6	381.5	383.2	384.4	384.2
180°	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4	382.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	1348.6	1348.6
2.5°	1439.6	1430.9
5°	1851.6	1860.2
7.5°	2493.3	2488.9
10°	3100.3	3139.3
12.5°	3542.7	3551.3
15°	3811.5	3828.8
17.5°	3915.6	3919.8
20°	3919.8	3911.2
22.5°	3872.2	3863.5
25°	3815.8	3811.5
27.5°	3763.8	3768.2
30°	3742.1	3755.1
32.5°	3742.1	3763.8
35°	3750.7	3772.4
37.5°	3746.5	3772.4
40°	3729.1	3759.4
42.5°	3681.4	3703.1
45°	3607.7	3633.7
47.5°	3512.3	3529.6
50°	3390.9	3408.2
52.5°	3239.1	3243.5
55°	3057.0	3074.3
57.5°	2861.8	2866.2
60°	2645.1	2658.0
62.5°	2415.2	2415.2
65°	2172.4	2181.1
67.5°	1920.9	1942.6
70°	1665.1	1669.4
72.5°	1413.6	1413.6
75°	1153.4	1157.8
77.5°	906.2	906.2
80°	672.1	676.5
82.5°	464.0	472.7
85°	290.5	290.5
87.5°	134.4	121.4
90°	9.7	9.7
92.5°	39.1	31.3
95°	136.1	112.7
97.5°	326.3	281.5
100°	470.1	416.8
102.5°	611.5	565.9
105°	791.9	767.3
107.5°	910.1	916.0
110°	955.1	980.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	959.1	998.3
115°	933.6	988.1
117.5°	879.8	940.1
120°	836.3	894.9
122.5°	794.0	851.8
125°	733.5	786.8
127.5°	679.3	724.2
130°	647.3	688.9
132.5°	618.3	655.5
135°	578.5	610.5
137.5°	546.6	572.9
140°	524.7	549.2
142.5°	506.6	527.7
145°	479.3	495.3
147.5°	458.5	471.7
150°	445.3	456.0
152.5°	434.1	442.2
155°	421.2	426.6
157.5°	411.0	414.8
160°	404.9	407.0
162.5°	400.8	402.9
165°	395.1	397.3
167.5°	390.9	391.9
170°	389.8	389.8
172.5°	386.7	386.0
175°	385.0	385.0
177.5°	383.3	382.4
180°	382.4	382.4



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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	8.40	9.70	9.03	10.35	11.10	21.59	22.89	22.22	23.54	24.29
	3H	9.13	10.31	9.78	10.97	11.75	23.46	24.64	24.11	25.30	26.08
	4H	9.45	10.56	10.11	11.24	12.03	24.13	25.25	24.80	25.92	26.71
	6H	9.72	10.75	10.40	11.44	12.25	24.59	25.62	25.27	26.30	27.11
	8H	9.80	10.79	10.49	11.49	12.31	24.73	25.71	25.41	26.42	27.23
	12H	9.84	10.78	10.53	11.48	12.32	24.81	25.75	25.51	26.45	27.29
4H	2H	15.67	16.78	16.34	17.46	18.25	21.91	23.03	22.58	23.70	24.49
	3H	17.28	18.21	17.96	18.92	19.74	24.00	24.94	24.68	25.65	26.46
	4H	17.39	18.24	18.09	18.96	19.80	24.79	25.64	25.49	26.36	27.20
	6H	17.43	18.17	18.14	18.91	19.76	25.36	26.10	26.08	26.84	27.70
	8H	17.42	18.11	18.14	18.85	19.71	25.54	26.23	26.26	26.97	27.83
	12H	17.39	18.02	18.14	18.78	19.65	25.66	26.28	26.40	27.04	27.92
8H	4H	18.88	19.57	19.60	20.31	21.17	24.89	25.58	25.61	26.32	27.19
	6H	19.14	19.72	19.89	20.49	21.36	25.54	26.12	26.30	26.90	27.77
	8H	19.16	19.68	19.93	20.46	21.34	25.77	26.29	26.54	27.07	27.95
	12H	19.15	19.61	19.92	20.38	21.32	25.94	26.40	26.71	27.17	28.11
12H	4H	19.04	19.67	19.79	20.43	21.30	24.86	25.49	25.61	26.25	27.12
	6H	19.40	19.92	20.17	20.70	21.58	25.53	26.05	26.30	26.83	27.71
	8H	19.50	19.95	20.26	20.72	21.66	25.79	26.24	26.56	27.01	27.96