

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: P936413

Luminaire Tested: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936413
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

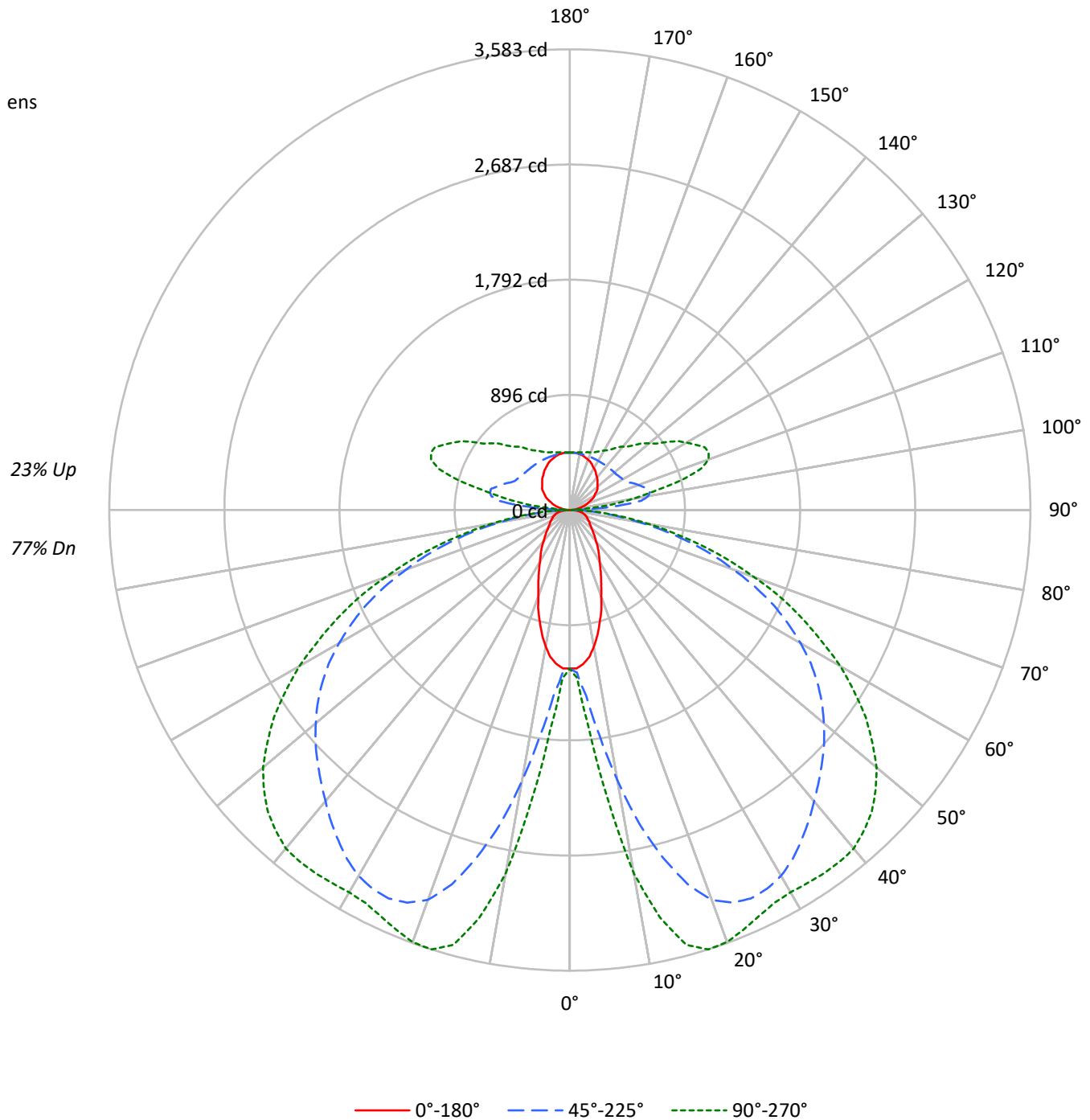
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12440.0 lumens
Efficiency: N/A
Efficacy: 106.9 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): 116.4
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P936413
CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81	77			77
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66				63
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55				51
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45				42
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38				35
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33				30
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28				26
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25				22
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22				20
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19				17
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17				16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3813	3813	3813
5°	3726	4408	5125
10°	3381	6427	8496
15°	2875	8399	10259
20°	2341	9735	10456
25°	1954	10190	10243
30°	1648	10257	10224
35°	1458	10089	10488
40°	1271	9870	10761
45°	1152	9711	10804
50°	1058	9569	10625
55°	1014	9359	10154
60°	1039	8952	9410
65°	1083	8331	8388
70°	1156	7271	7087
75°	1287	5933	5530
80°	1415	4120	3726
85°	1283	2190	1908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10804 cd/sqm



TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	1.3
10°-20°	706.7	5.7
20°-30°	1236.1	9.9
30°-40°	1591.3	12.8
40°-50°	1777.4	14.3
50°-60°	1702.3	13.7
60°-70°	1349.1	10.8
70°-80°	793.3	6.4
80°-90°	222.1	1.8
90°-100°	218.2	1.8
100°-110°	573.7	4.6
110°-120°	594.9	4.8
120°-130°	477.2	3.8
130°-140°	374.4	3.0
140°-150°	287.4	2.3
150°-160°	207.0	1.7
160°-170°	126.6	1.0
170°-180°	42.8	0.3
0°-30°	2102.3	16.9
0°-40°	3693.5	29.7
0°-60°	7173.2	57.7
0°-90°	9537.7	76.7
90°-120°	1386.9	11.1
90°-150°	2525.9	20.3
90°-180°	2902.0	23.3
0°-180°	12440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1233	1233	1233	1233	1233	
5°	1201	1288	1451	1641	1700	111
15°	900	1661	2798	3393	3500	250
25°	575	1883	3333	3480	3484	265
35°	388	1800	3139	3318	3448	243
45°	266	1435	2774	3179	3322	205
55°	190	912	2354	2735	2810	173
65°	151	484	1748	1966	1994	149
75°	111	297	959	1054	1058	116
85°	40	91	238	262	266	42
90°	3	8	23	11	11	5
95°	29	113	376	194	132	32
105°	103	156	634	963	898	110
115°	184	223	508	1014	1157	181
125°	255	286	462	781	921	227
135°	304	335	448	630	715	236
145°	353	376	442	538	580	221
155°	399	410	442	485	499	183
165°	431	436	442	459	465	122
175°	448	448	445	451	451	42
180°	448	448	448	448	448	



TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7	1232.7
2.5°	1232.7	1232.7	1240.6	1244.6	1252.5	1256.5	1264.4	1272.3	1296.1	1300.1	1308.0
5°	1201.0	1216.8	1268.4	1288.2	1343.7	1419.0	1450.7	1502.2	1609.2	1640.9	1660.7
7.5°	1153.4	1189.1	1315.9	1347.6	1486.3	1684.5	1767.8	1878.7	2049.2	2132.4	2199.8
10°	1078.1	1153.4	1379.3	1454.6	1680.6	1981.8	2136.4	2291.0	2548.6	2663.5	2707.1
12.5°	994.9	1117.7	1446.7	1549.8	1874.8	2314.7	2501.0	2671.5	2964.8	3119.4	3143.1
15°	899.7	1066.2	1510.1	1660.7	2080.9	2592.2	2798.3	3008.4	3281.9	3392.8	3420.6
17.5°	816.5	1026.6	1569.6	1728.1	2239.4	2841.9	3052.0	3226.4	3448.3	3523.6	3543.5
20°	713.4	963.2	1609.2	1815.3	2405.9	3024.2	3226.4	3361.1	3511.7	3559.3	3567.2
22.5°	638.1	895.8	1633.0	1847.0	2516.9	3135.2	3305.6	3412.7	3515.7	3531.6	3535.5
25°	574.7	820.5	1629.0	1882.7	2612.0	3202.6	3333.4	3412.7	3472.1	3480.0	3480.0
27.5°	515.3	737.2	1613.2	1890.6	2683.4	3218.4	3321.5	3377.0	3404.7	3420.6	3420.6
30°	463.7	658.0	1573.5	1874.8	2715.1	3202.6	3285.8	3313.6	3341.3	3365.1	3377.0
32.5°	424.1	582.6	1514.1	1843.1	2719.0	3163.0	3222.4	3238.3	3277.9	3333.4	3353.2
35°	388.4	507.3	1446.7	1799.5	2695.2	3099.5	3139.2	3155.0	3234.3	3317.5	3345.3
37.5°	352.8	451.9	1359.5	1724.2	2659.6	3024.2	3052.0	3079.7	3202.6	3301.7	3333.4
40°	317.1	404.3	1256.5	1640.9	2604.1	2933.1	2956.8	3000.4	3163.0	3277.9	3309.6
42.5°	289.3	364.7	1145.5	1553.7	2532.7	2830.0	2865.7	2929.1	3115.4	3238.3	3273.9
45°	265.6	325.0	1026.6	1434.8	2441.6	2723.0	2774.5	2861.7	3059.9	3178.8	3210.5
47.5°	241.8	297.3	903.7	1312.0	2342.5	2616.0	2683.4	2782.4	2984.6	3099.5	3127.3
50°	222.0	269.5	780.8	1181.2	2235.5	2501.0	2580.3	2683.4	2889.5	2996.5	3032.2
52.5°	206.1	245.7	665.9	1050.4	2112.6	2382.1	2473.3	2580.3	2774.5	2877.6	2901.4
55°	190.3	225.9	566.8	911.6	1985.8	2255.3	2354.4	2457.4	2647.7	2734.9	2750.7
57.5°	182.3	210.1	483.6	780.8	1851.0	2112.6	2223.6	2318.7	2497.1	2564.4	2580.3
60°	170.4	198.2	420.1	669.8	1704.3	1977.8	2073.0	2168.1	2318.7	2374.2	2386.1
62.5°	158.5	190.3	372.6	562.8	1553.7	1819.3	1914.4	2001.6	2128.5	2168.1	2183.9
65°	150.6	182.3	336.9	483.6	1399.2	1652.8	1747.9	1823.3	1926.3	1965.9	1973.9
67.5°	142.7	174.4	309.2	416.2	1244.6	1486.3	1557.7	1629.0	1708.3	1747.9	1751.9
70°	130.8	166.5	285.4	368.6	1086.0	1296.1	1355.6	1430.9	1494.3	1514.1	1526.0
72.5°	122.9	154.6	269.5	332.9	923.5	1113.8	1169.3	1212.9	1268.4	1288.2	1288.2
75°	111.0	138.7	253.7	297.3	757.0	911.6	959.2	1002.8	1046.4	1054.3	1042.4
77.5°	99.1	122.9	218.0	249.7	590.6	721.4	761.0	784.8	820.5	828.4	832.4
80°	83.2	107.0	170.4	194.2	428.1	531.1	558.9	578.7	610.4	610.4	618.3
82.5°	63.4	83.2	122.9	138.7	289.3	364.7	388.4	400.3	420.1	420.1	420.1
85°	39.6	51.5	79.3	91.2	174.4	222.0	237.8	241.8	257.6	261.6	261.6
87.5°	19.8	27.7	51.5	55.5	91.2	114.9	114.9	122.9	122.9	118.9	114.9
90°	3.0	5.4	7.8	8.4	13.2	19.6	22.8	20.3	15.2	11.4	11.4
92.5°	12.0	32.4	52.9	58.0	81.5	112.9	128.6	112.7	80.9	57.1	54.8
95°	28.8	66.2	103.6	113.0	200.6	317.5	375.9	335.4	254.5	193.8	186.9
97.5°	49.9	82.9	115.9	124.1	270.2	465.1	562.5	536.9	485.8	447.4	434.3
100°	66.1	96.0	125.9	133.4	295.6	511.8	619.9	621.8	625.5	628.3	612.7
102.5°	79.9	107.8	135.7	142.7	307.2	526.5	636.1	668.7	733.8	782.7	769.3
105°	103.4	127.0	150.6	156.5	315.8	528.1	634.3	707.3	853.4	963.0	955.8
107.5°	127.4	149.4	171.5	177.0	317.4	504.6	598.2	700.1	903.9	1056.8	1058.5
110°	143.6	163.5	183.4	188.4	315.0	483.8	568.2	682.1	909.9	1080.8	1088.3



TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.6	178.5	197.5	202.2	315.1	465.6	540.9	657.5	890.6	1065.5	1077.0
115°	183.6	201.1	218.6	223.0	318.0	444.7	508.1	620.4	845.0	1013.5	1029.4
117.5°	207.3	223.2	239.1	243.1	323.9	431.7	485.6	587.0	789.7	941.7	959.4
120°	221.1	236.1	251.1	254.8	328.7	427.2	476.5	569.1	754.4	893.3	910.5
122.5°	234.7	249.8	264.8	268.6	335.6	424.9	469.6	553.0	719.8	844.9	861.8
125°	255.4	269.2	283.0	286.4	345.0	423.1	462.1	532.9	674.6	780.9	796.5
127.5°	272.2	286.1	300.0	303.5	354.3	422.0	455.8	516.6	638.3	729.5	742.7
130°	281.2	296.2	311.2	314.9	361.1	422.6	453.4	507.6	615.9	697.1	709.3
132.5°	290.6	305.5	320.5	324.2	366.6	423.1	451.3	499.8	596.8	669.5	680.4
135°	304.4	318.0	331.6	335.0	372.6	422.7	447.7	488.3	569.5	630.4	639.8
137.5°	318.5	332.0	345.4	348.8	381.6	425.3	447.1	481.4	550.0	601.5	609.2
140°	330.2	342.6	355.1	358.2	387.1	425.7	445.0	474.6	533.9	578.4	585.6
142.5°	339.2	350.7	362.2	365.1	391.7	427.2	445.0	471.0	523.1	562.2	568.4
145°	353.1	363.1	373.1	375.6	397.7	427.2	442.0	463.3	505.9	537.8	542.5
147.5°	366.9	376.6	386.4	388.8	406.5	430.2	442.0	458.8	492.3	517.4	521.3
150°	375.9	384.7	393.5	395.7	411.1	431.7	442.0	456.2	484.5	505.7	508.8
152.5°	385.2	391.9	398.5	400.2	414.1	432.7	442.0	454.1	478.3	496.4	498.8
155°	399.0	403.9	408.9	410.1	420.7	434.9	442.0	451.6	470.9	485.3	486.9
157.5°	409.2	414.0	418.9	420.1	427.4	437.1	442.0	449.5	464.4	475.6	476.7
160°	416.2	419.9	423.7	424.6	430.4	438.1	442.0	448.4	461.2	470.8	471.4
162.5°	423.1	425.9	428.7	429.4	433.6	439.2	442.0	447.4	458.2	466.3	466.9
165°	430.6	433.1	435.7	436.3	438.2	440.7	442.0	445.9	453.6	459.4	460.0
167.5°	437.5	438.7	439.9	440.2	441.8	443.9	445.0	447.5	452.6	456.4	456.7
170°	442.0	443.2	444.4	444.7	444.8	444.9	445.0	447.5	452.6	456.4	456.4
172.5°	444.4	444.7	444.9	445.0	445.0	445.0	445.0	447.0	451.0	454.0	453.8
175°	447.7	447.7	447.7	447.7	446.8	445.6	445.0	446.3	448.8	450.7	450.7
177.5°	447.7	447.7	447.7	447.7	447.0	446.1	445.6	446.6	448.6	450.1	449.8
180°	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7	447.7



TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1232.7	1232.7
2.5°	1315.9	1308.0
5°	1692.5	1700.4
7.5°	2279.1	2275.1
10°	2834.0	2869.6
12.5°	3238.3	3246.2
15°	3484.0	3499.9
17.5°	3579.1	3583.1
20°	3583.1	3575.2
22.5°	3539.5	3531.6
25°	3488.0	3484.0
27.5°	3440.4	3444.4
30°	3420.6	3432.5
32.5°	3420.6	3440.4
35°	3428.5	3448.3
37.5°	3424.5	3448.3
40°	3408.7	3436.4
42.5°	3365.1	3384.9
45°	3297.7	3321.5
47.5°	3210.5	3226.4
50°	3099.5	3115.4
52.5°	2960.8	2964.8
55°	2794.3	2810.2
57.5°	2616.0	2619.9
60°	2417.8	2429.7
62.5°	2207.7	2207.7
65°	1985.8	1993.7
67.5°	1755.9	1775.7
70°	1522.0	1526.0
72.5°	1292.1	1292.1
75°	1054.3	1058.3
77.5°	828.4	828.4
80°	614.4	618.3
82.5°	424.1	432.0
85°	265.6	265.6
87.5°	122.9	111.0
90°	11.4	11.4
92.5°	45.8	36.7
95°	159.4	131.9
97.5°	382.0	329.6
100°	550.4	488.0
102.5°	715.9	662.5
105°	927.1	898.4
107.5°	1065.5	1072.4
110°	1118.2	1148.1



TEST NUMBER: P936413

CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1122.9	1168.8
115°	1093.1	1156.8
117.5°	1030.0	1100.6
120°	979.1	1047.7
122.5°	929.6	997.3
125°	858.8	921.2
127.5°	795.3	847.9
130°	757.9	806.5
132.5°	723.9	767.4
135°	677.3	714.8
137.5°	639.9	670.7
140°	614.3	643.0
142.5°	593.1	617.8
145°	561.2	579.9
147.5°	536.8	552.3
150°	521.4	533.9
152.5°	508.2	517.7
155°	493.1	499.4
157.5°	481.2	485.6
160°	474.0	476.5
162.5°	469.3	471.7
165°	462.6	465.1
167.5°	457.7	458.8
170°	456.4	456.4
172.5°	452.8	451.9
175°	450.7	450.7
177.5°	448.8	447.7
180°	447.7	447.7



TEST NUMBER: P936413
 CATALOG NUMBER: SQ4-FB-025U-100D-835-1D-UNV-STD-W-12

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	7.79	9.03	8.47	9.73	10.56	20.98	22.22	21.66	22.92	23.75
	3H	8.52	9.64	9.22	10.35	11.21	22.85	23.97	23.55	24.68	25.54
	4H	8.84	9.89	9.55	10.62	11.49	23.52	24.57	24.23	25.30	26.17
	6H	9.11	10.08	9.83	10.82	11.71	23.97	24.95	24.70	25.68	26.57
	8H	9.19	10.12	9.92	10.87	11.76	24.11	25.04	24.84	25.79	26.69
	12H	9.22	10.11	9.96	10.86	11.77	24.19	25.08	24.93	25.83	26.75
4H	2H	15.06	16.11	15.77	16.84	17.71	21.30	22.35	22.02	23.08	23.95
	3H	16.66	17.54	17.39	18.30	19.20	23.38	24.27	24.11	25.03	25.92
	4H	16.77	17.57	17.51	18.34	19.26	24.17	24.98	24.92	25.74	26.66
	6H	16.80	17.50	17.56	18.29	19.22	24.74	25.44	25.50	26.23	27.15
	8H	16.79	17.44	17.56	18.23	19.17	24.91	25.57	25.68	26.35	27.29
	12H	16.76	17.36	17.55	18.16	19.11	25.03	25.62	25.82	26.43	27.37
8H	4H	18.25	18.91	19.02	19.69	20.63	24.26	24.92	25.03	25.70	26.64
	6H	18.51	19.05	19.31	19.88	20.82	24.91	25.46	25.71	26.29	27.23
	8H	18.53	19.02	19.34	19.84	20.80	25.14	25.63	25.95	26.45	27.41
	12H	18.52	18.95	19.33	19.76	20.78	25.31	25.74	26.12	26.55	27.57
12H	4H	18.41	19.00	19.20	19.81	20.76	24.23	24.83	25.02	25.63	26.58
	6H	18.77	19.26	19.58	20.09	21.04	24.90	25.39	25.71	26.21	27.17
	8H	18.86	19.29	19.67	20.11	21.12	25.15	25.58	25.97	26.40	27.41