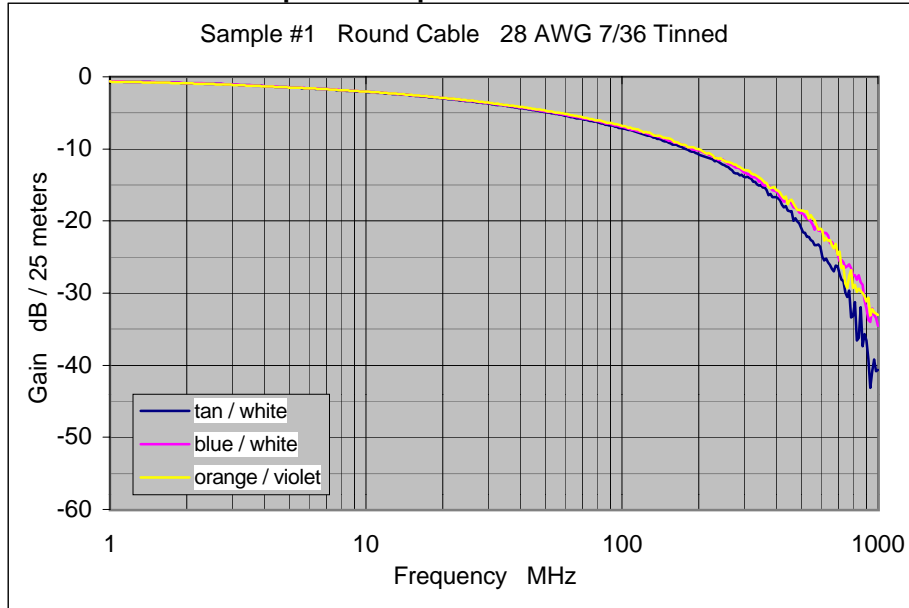
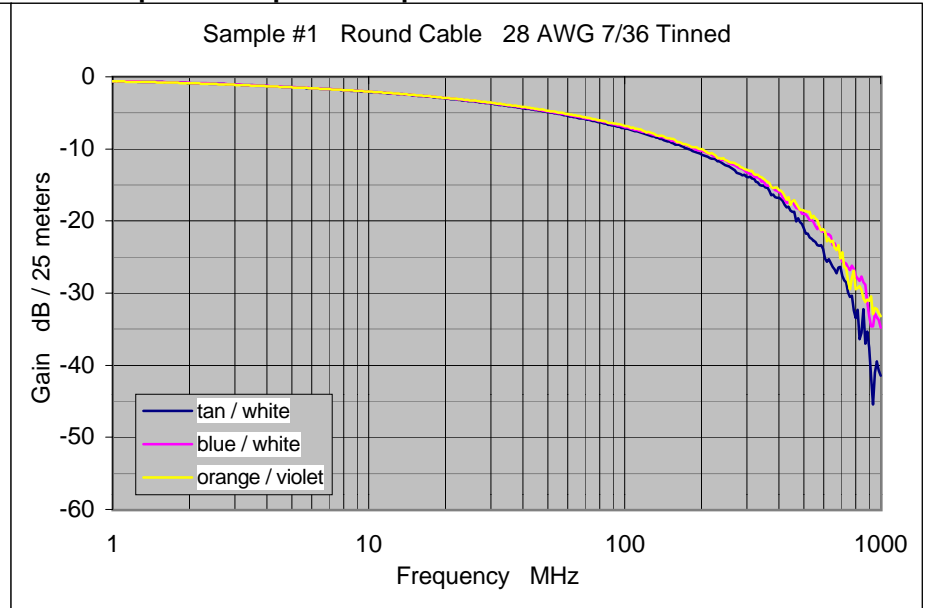


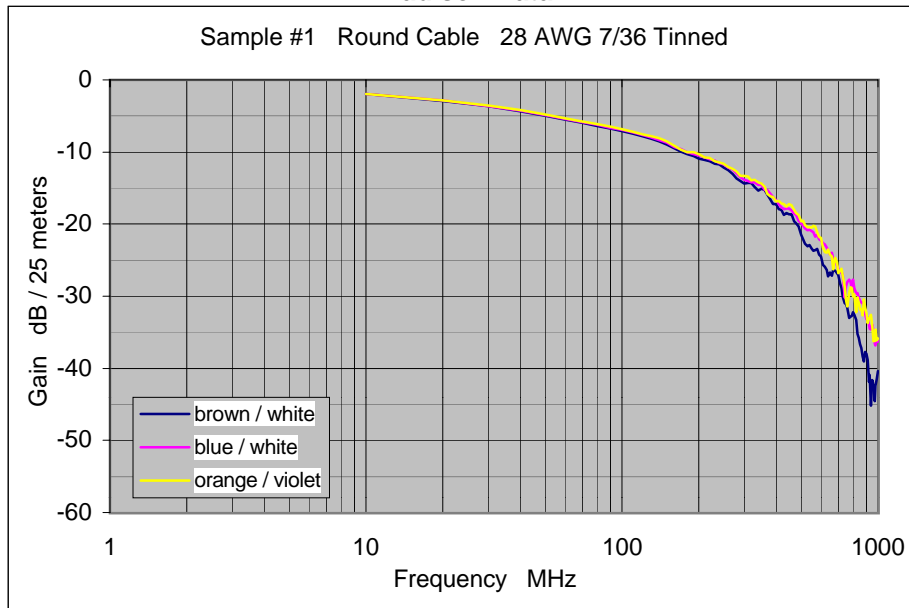
Spectra-Strip Data - Normalized



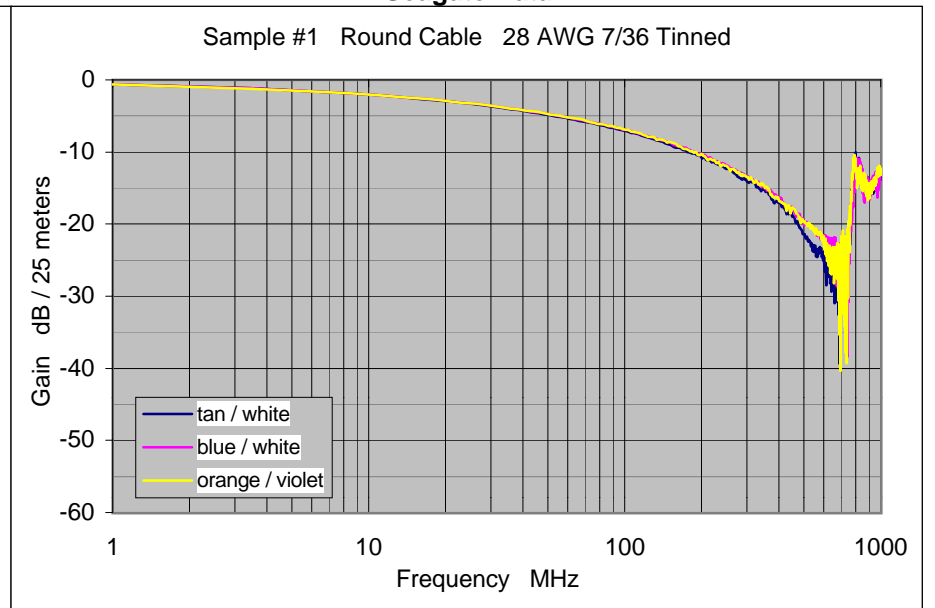
Spectra-Strip Data - 2 port Calibration then Normalized



Madison Data



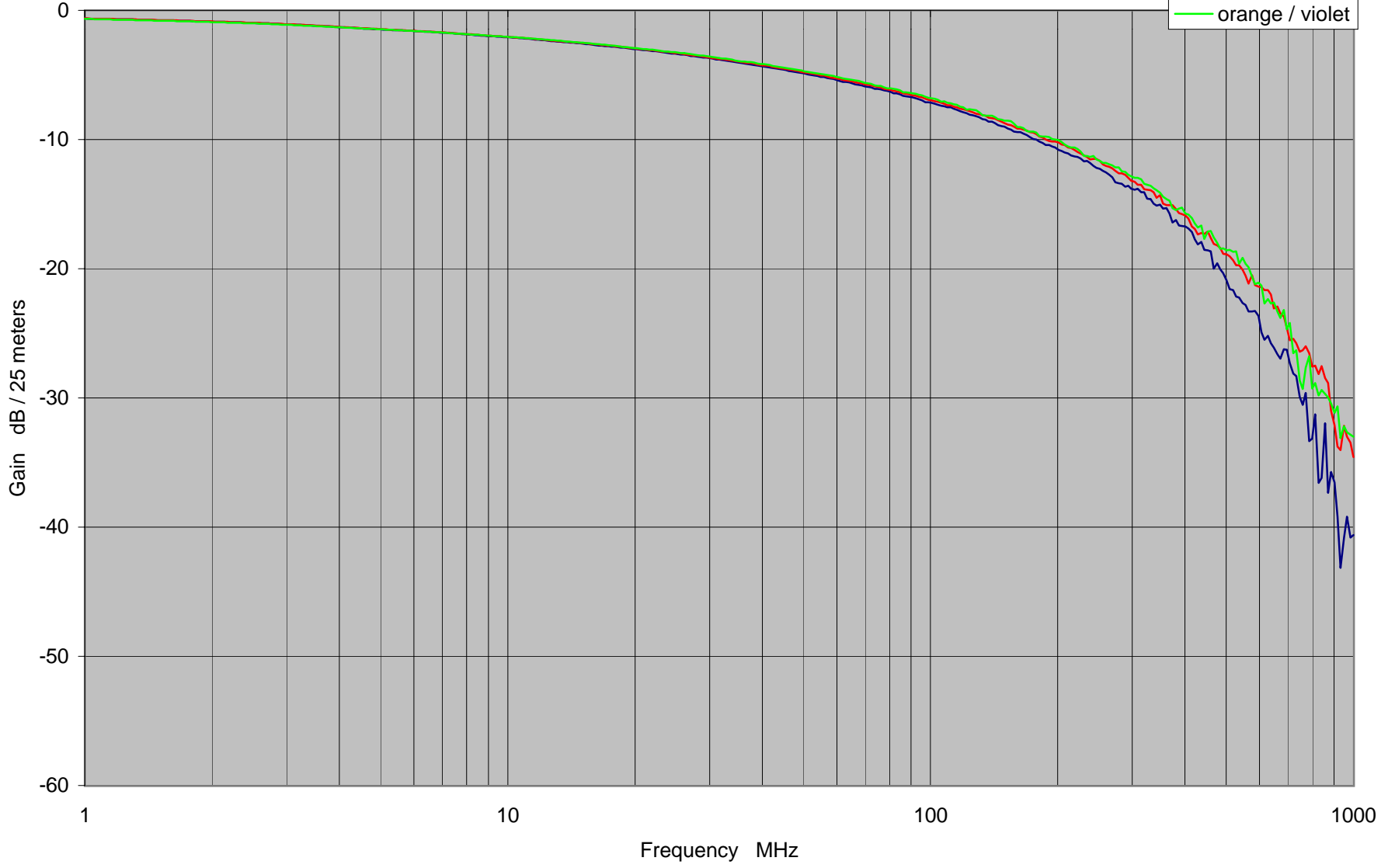
Seagate Data



"ATTENUATION"
Normalized Only

Sample #1 Round Cable 28 AWG 7/36 Tinned

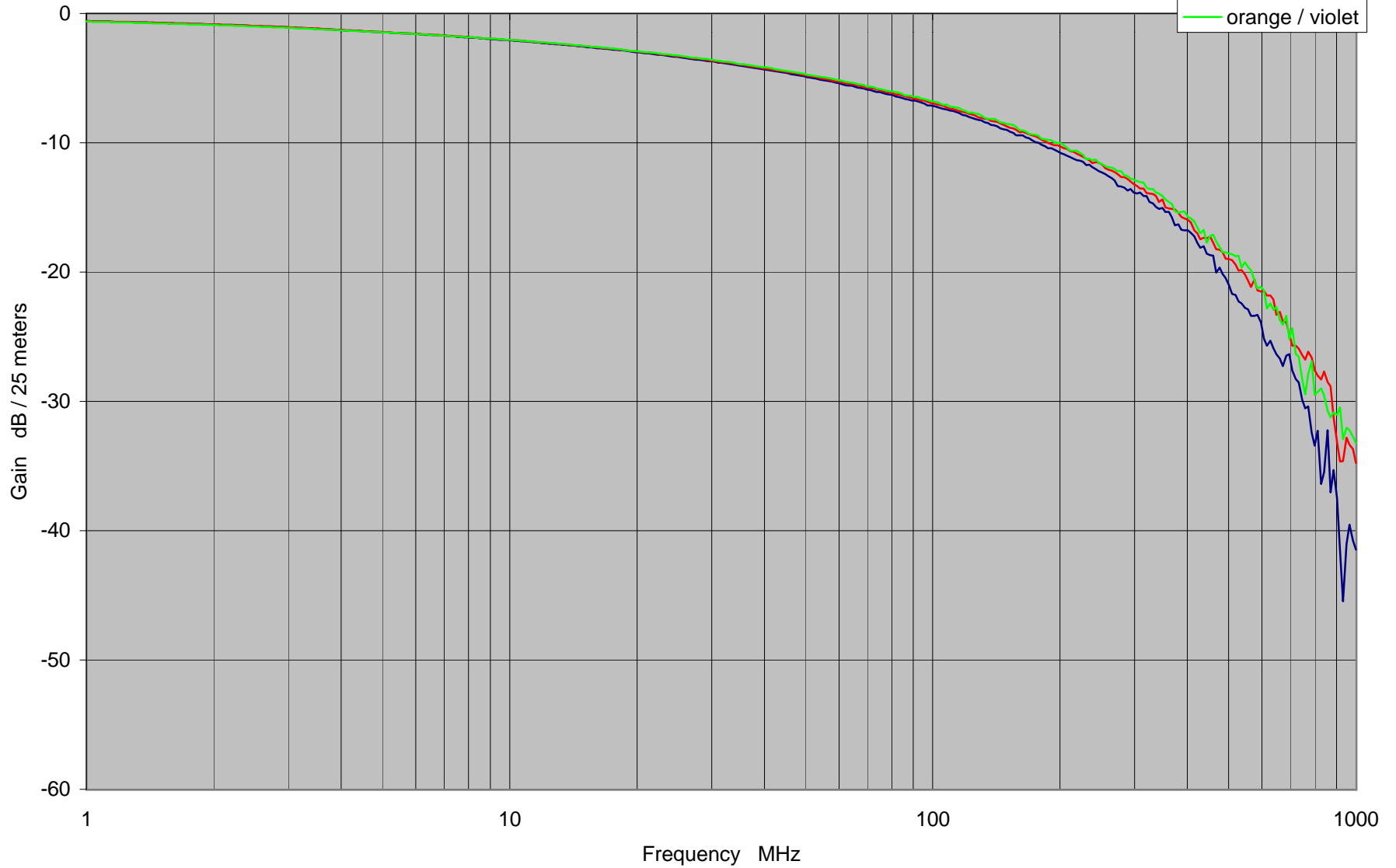
- tan / white
- blue / white
- orange / violet



"ATTENUATION"
2 Port Calibration

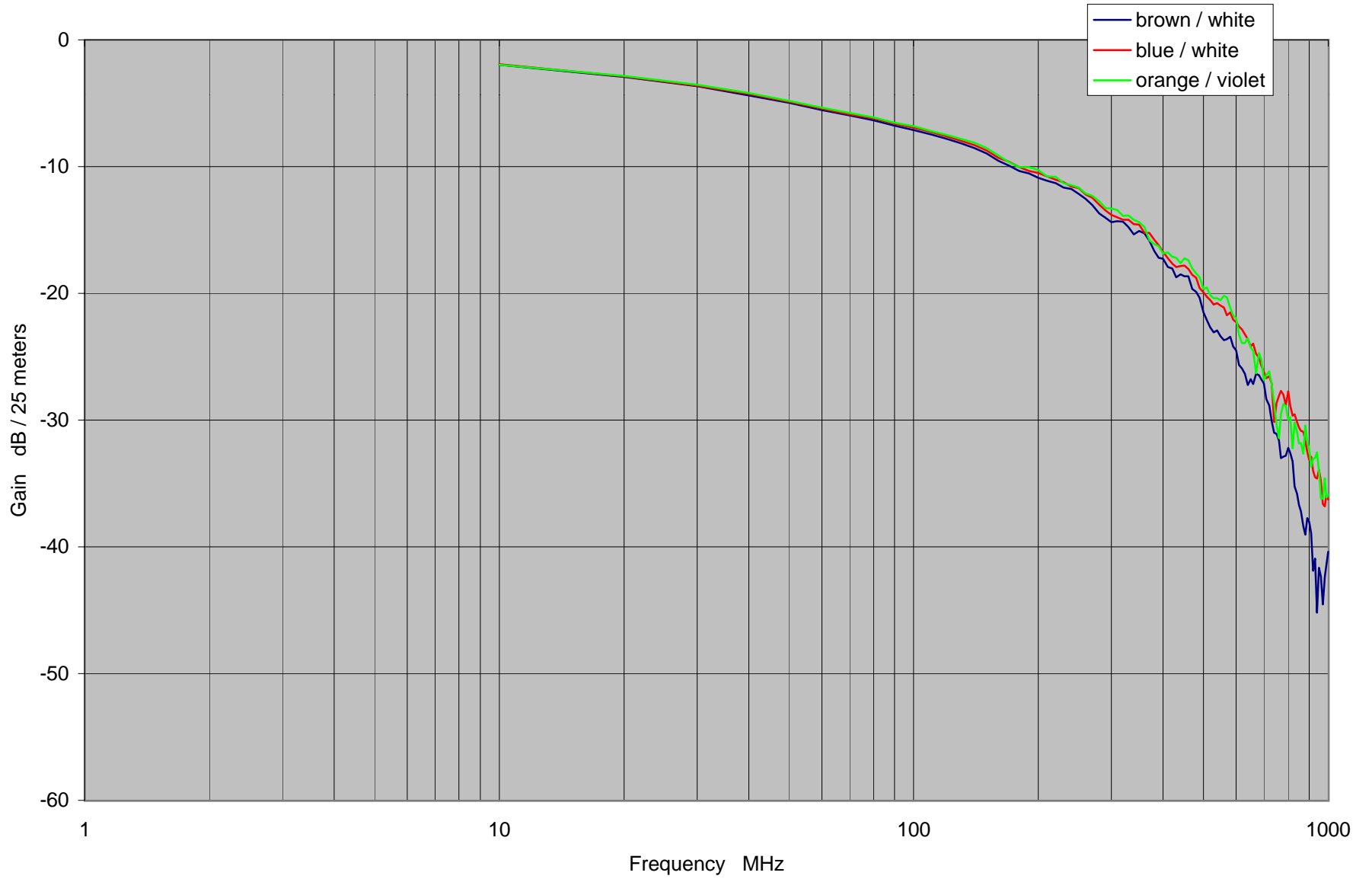
Sample #1 Round Cable 28 AWG 7/36 Tinned

- tan / white
- blue / white
- orange / violet



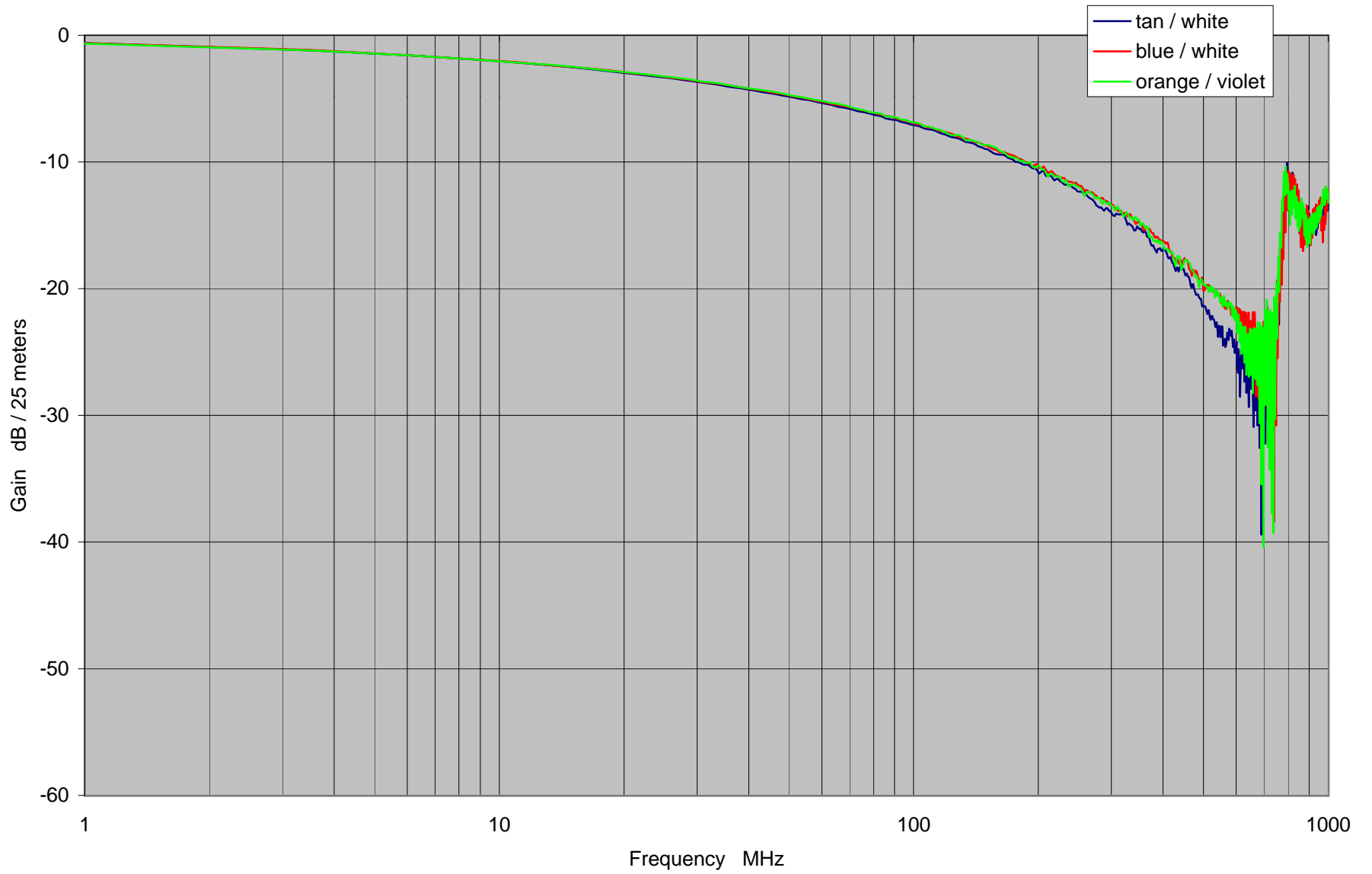
"ATTENUATION"

Sample #1 Round Cable 28 AWG 7/36 Tinned



"ATTENUATION"

Sample #1 Round Cable 28 AWG 7/36 Tinned



SAVED BY:
TITLE:
COMMENTS:
DATE: 2/12/01
TIME: 8:17 AM

Freq MHz	tan / white	blue / white	orange / violet
1.00	-0.63	-0.62	-0.67
1.02	-0.64	-0.63	-0.67
1.04	-0.64	-0.63	-0.67
1.05	-0.65	-0.64	-0.68
1.07	-0.65	-0.65	-0.68
1.09	-0.66	-0.65	-0.69
1.11	-0.66	-0.66	-0.70
1.13	-0.67	-0.66	-0.70
1.15	-0.67	-0.67	-0.71
1.17	-0.68	-0.67	-0.71
1.19	-0.69	-0.68	-0.72
1.21	-0.69	-0.68	-0.72
1.23	-0.69	-0.69	-0.73
1.25	-0.70	-0.69	-0.74
1.27	-0.71	-0.70	-0.74
1.30	-0.71	-0.70	-0.75
1.32	-0.72	-0.71	-0.75
1.34	-0.73	-0.72	-0.76
1.36	-0.73	-0.72	-0.76
1.39	-0.74	-0.73	-0.77
1.41	-0.74	-0.73	-0.78
1.44	-0.75	-0.74	-0.78
1.46	-0.75	-0.75	-0.79
1.49	-0.76	-0.75	-0.79
1.51	-0.77	-0.76	-0.80
1.54	-0.77	-0.77	-0.81
1.57	-0.78	-0.77	-0.81
1.59	-0.79	-0.78	-0.82
1.62	-0.79	-0.78	-0.83
1.65	-0.80	-0.79	-0.83
1.68	-0.80	-0.79	-0.84
1.71	-0.81	-0.80	-0.84
1.74	-0.81	-0.81	-0.85
1.77	-0.82	-0.82	-0.86
1.80	-0.83	-0.82	-0.86
1.83	-0.83	-0.83	-0.87
1.86	-0.84	-0.83	-0.88
1.89	-0.85	-0.84	-0.88
1.93	-0.86	-0.85	-0.89
1.96	-0.86	-0.85	-0.90
2.00	-0.87	-0.86	-0.90
2.03	-0.88	-0.87	-0.91
2.07	-0.88	-0.88	-0.92

2.10	-0.89	-0.88	-0.93
2.14	-0.90	-0.89	-0.94
2.18	-0.91	-0.90	-0.94
2.21	-0.91	-0.91	-0.95
2.25	-0.92	-0.92	-0.96
2.29	-0.93	-0.92	-0.96
2.33	-0.94	-0.93	-0.98
2.37	-0.95	-0.94	-0.98
2.41	-0.95	-0.95	-0.99
2.45	-0.96	-0.96	-1.00
2.50	-0.97	-0.96	-1.01
2.54	-0.98	-0.97	-1.02
2.59	-0.99	-0.98	-1.03
2.63	-1.00	-0.99	-1.04
2.68	-1.01	-1.00	-1.05
2.72	-1.02	-1.01	-1.06
2.77	-1.03	-1.02	-1.07
2.82	-1.04	-1.03	-1.08
2.87	-1.05	-1.04	-1.09
2.92	-1.06	-1.05	-1.10
2.97	-1.07	-1.06	-1.11
3.02	-1.08	-1.07	-1.12
3.07	-1.09	-1.08	-1.13
3.13	-1.11	-1.09	-1.14
3.18	-1.12	-1.11	-1.15
3.24	-1.13	-1.12	-1.16
3.29	-1.14	-1.13	-1.18
3.35	-1.15	-1.14	-1.19
3.41	-1.17	-1.16	-1.20
3.47	-1.18	-1.17	-1.21
3.53	-1.19	-1.18	-1.22
3.59	-1.21	-1.20	-1.23
3.65	-1.22	-1.21	-1.25
3.72	-1.24	-1.22	-1.26
3.78	-1.25	-1.24	-1.27
3.85	-1.26	-1.25	-1.28
3.91	-1.28	-1.26	-1.30
3.98	-1.29	-1.28	-1.31
4.05	-1.31	-1.29	-1.32
4.12	-1.32	-1.30	-1.33
4.19	-1.33	-1.32	-1.35
4.27	-1.35	-1.33	-1.36
4.34	-1.36	-1.35	-1.37
4.42	-1.38	-1.36	-1.38
4.49	-1.39	-1.38	-1.40
4.57	-1.41	-1.39	-1.41
4.65	-1.42	-1.40	-1.42
4.73	-1.43	-1.42	-1.43
4.81	-1.45	-1.43	-1.44
4.90	-1.46	-1.44	-1.46
4.98	-1.47	-1.45	-1.47

5.07	-1.48	-1.47	-1.48
5.16	-1.50	-1.48	-1.49
5.25	-1.51	-1.49	-1.50
5.34	-1.52	-1.50	-1.51
5.43	-1.53	-1.51	-1.53
5.53	-1.55	-1.53	-1.54
5.62	-1.56	-1.54	-1.55
5.72	-1.57	-1.55	-1.56
5.82	-1.58	-1.56	-1.57
5.92	-1.59	-1.57	-1.59
6.03	-1.60	-1.58	-1.60
6.13	-1.62	-1.60	-1.61
6.24	-1.63	-1.61	-1.62
6.35	-1.64	-1.62	-1.64
6.46	-1.66	-1.64	-1.65
6.57	-1.67	-1.65	-1.67
6.68	-1.68	-1.66	-1.68
6.80	-1.70	-1.68	-1.70
6.92	-1.71	-1.69	-1.71
7.04	-1.73	-1.71	-1.72
7.16	-1.75	-1.72	-1.74
7.29	-1.76	-1.74	-1.76
7.41	-1.79	-1.76	-1.77
7.54	-1.80	-1.77	-1.79
7.67	-1.82	-1.79	-1.81
7.81	-1.84	-1.81	-1.82
7.94	-1.86	-1.83	-1.84
8.08	-1.88	-1.85	-1.85
8.22	-1.90	-1.87	-1.87
8.37	-1.92	-1.88	-1.89
8.51	-1.93	-1.90	-1.90
8.66	-1.95	-1.92	-1.92
8.81	-1.97	-1.93	-1.94
8.96	-1.99	-1.95	-1.95
9.12	-2.00	-1.97	-1.97
9.28	-2.02	-1.98	-1.98
9.44	-2.03	-2.00	-2.00
9.61	-2.05	-2.02	-2.01
9.77	-2.06	-2.03	-2.03
9.94	-2.08	-2.05	-2.05
10.12	-2.10	-2.06	-2.06
10.29	-2.11	-2.08	-2.08
10.47	-2.13	-2.10	-2.10
10.65	-2.15	-2.11	-2.12
10.84	-2.17	-2.13	-2.13
11.03	-2.19	-2.15	-2.15
11.22	-2.21	-2.17	-2.17
11.42	-2.24	-2.20	-2.19
11.61	-2.25	-2.22	-2.21
11.82	-2.28	-2.24	-2.23
12.02	-2.30	-2.26	-2.25

12.23	-2.32	-2.29	-2.27
12.45	-2.35	-2.31	-2.29
12.66	-2.37	-2.33	-2.31
12.88	-2.39	-2.35	-2.33
13.11	-2.41	-2.37	-2.35
13.34	-2.42	-2.39	-2.37
13.57	-2.44	-2.41	-2.38
13.80	-2.46	-2.43	-2.41
14.04	-2.48	-2.44	-2.43
14.29	-2.50	-2.46	-2.45
14.54	-2.52	-2.48	-2.47
14.79	-2.55	-2.51	-2.49
15.05	-2.58	-2.53	-2.52
15.31	-2.61	-2.56	-2.54
15.58	-2.63	-2.58	-2.56
15.85	-2.66	-2.61	-2.58
16.12	-2.68	-2.63	-2.60
16.41	-2.71	-2.66	-2.62
16.69	-2.74	-2.68	-2.64
16.98	-2.76	-2.70	-2.67
17.28	-2.78	-2.72	-2.69
17.58	-2.80	-2.75	-2.72
17.89	-2.82	-2.77	-2.75
18.20	-2.84	-2.79	-2.77
18.51	-2.87	-2.82	-2.80
18.84	-2.90	-2.85	-2.83
19.16	-2.93	-2.88	-2.86
19.50	-2.96	-2.91	-2.89
19.84	-2.99	-2.94	-2.91
20.18	-3.01	-2.97	-2.94
20.54	-3.04	-2.99	-2.96
20.89	-3.06	-3.02	-2.98
21.26	-3.08	-3.04	-3.00
21.63	-3.11	-3.06	-3.03
22.00	-3.14	-3.08	-3.05
22.39	-3.17	-3.11	-3.08
22.78	-3.21	-3.14	-3.11
23.17	-3.24	-3.18	-3.14
23.58	-3.28	-3.21	-3.17
23.99	-3.31	-3.24	-3.20
24.41	-3.34	-3.28	-3.22
24.83	-3.36	-3.30	-3.24
25.26	-3.38	-3.32	-3.26
25.70	-3.41	-3.35	-3.29
26.15	-3.44	-3.38	-3.32
26.61	-3.48	-3.41	-3.36
27.07	-3.52	-3.46	-3.40
27.54	-3.56	-3.49	-3.43
28.02	-3.59	-3.52	-3.46
28.51	-3.62	-3.55	-3.49
29.01	-3.64	-3.58	-3.51

29.51	-3.67	-3.61	-3.54
30.03	-3.70	-3.63	-3.57
30.55	-3.74	-3.68	-3.62
31.08	-3.79	-3.72	-3.66
31.62	-3.83	-3.75	-3.69
32.17	-3.86	-3.79	-3.71
32.73	-3.90	-3.81	-3.74
33.30	-3.92	-3.84	-3.78
33.88	-3.95	-3.87	-3.81
34.47	-3.99	-3.92	-3.87
35.08	-4.03	-3.96	-3.92
35.69	-4.08	-4.00	-3.94
36.31	-4.11	-4.03	-3.96
36.94	-4.14	-4.06	-3.98
37.58	-4.18	-4.09	-4.01
38.24	-4.23	-4.13	-4.05
38.90	-4.28	-4.18	-4.10
39.58	-4.32	-4.22	-4.14
40.27	-4.36	-4.25	-4.17
40.97	-4.39	-4.28	-4.20
41.69	-4.42	-4.32	-4.24
42.41	-4.46	-4.37	-4.29
43.15	-4.50	-4.41	-4.34
43.90	-4.55	-4.45	-4.38
44.67	-4.58	-4.49	-4.41
45.45	-4.63	-4.52	-4.44
46.24	-4.68	-4.57	-4.49
47.04	-4.74	-4.62	-4.53
47.86	-4.78	-4.66	-4.56
48.70	-4.81	-4.71	-4.61
49.54	-4.85	-4.75	-4.66
50.41	-4.90	-4.82	-4.73
51.29	-4.95	-4.85	-4.77
52.18	-5.00	-4.88	-4.79
53.09	-5.04	-4.92	-4.83
54.01	-5.09	-4.98	-4.88
54.95	-5.14	-5.02	-4.93
55.91	-5.17	-5.06	-4.96
56.89	-5.22	-5.11	-4.99
57.88	-5.27	-5.18	-5.04
58.88	-5.32	-5.23	-5.09
59.91	-5.37	-5.26	-5.14
60.95	-5.46	-5.31	-5.19
62.02	-5.53	-5.40	-5.26
63.10	-5.56	-5.44	-5.30
64.19	-5.58	-5.46	-5.33
65.31	-5.66	-5.50	-5.39
66.45	-5.73	-5.56	-5.44
67.61	-5.75	-5.60	-5.47
68.79	-5.80	-5.66	-5.54
69.98	-5.89	-5.74	-5.63

71.20	-5.92	-5.76	-5.66
72.44	-5.97	-5.81	-5.70
73.71	-6.07	-5.89	-5.80
74.99	-6.08	-5.94	-5.86
76.30	-6.13	-5.98	-5.87
77.62	-6.21	-6.06	-5.94
78.98	-6.25	-6.11	-6.02
80.35	-6.31	-6.15	-6.02
81.75	-6.40	-6.25	-6.08
83.18	-6.44	-6.26	-6.13
84.63	-6.51	-6.33	-6.20
86.10	-6.62	-6.44	-6.34
87.60	-6.63	-6.44	-6.36
89.12	-6.70	-6.52	-6.37
90.68	-6.72	-6.58	-6.42
92.26	-6.79	-6.62	-6.46
93.86	-6.89	-6.71	-6.56
95.50	-6.95	-6.74	-6.59
97.16	-7.10	-6.86	-6.69
98.86	-7.10	-6.91	-6.76
100.58	-7.16	-6.96	-6.79
102.33	-7.21	-7.03	-6.84
104.11	-7.29	-7.08	-6.93
105.93	-7.40	-7.16	-7.09
107.77	-7.41	-7.24	-7.04
109.65	-7.49	-7.34	-7.17
111.56	-7.52	-7.35	-7.21
113.50	-7.60	-7.47	-7.28
115.48	-7.69	-7.51	-7.31
117.49	-7.82	-7.61	-7.48
119.54	-7.88	-7.65	-7.52
121.62	-7.97	-7.74	-7.70
123.74	-8.07	-7.81	-7.66
125.89	-8.13	-7.89	-7.71
128.09	-8.21	-8.02	-7.74
130.32	-8.28	-8.05	-7.87
132.59	-8.42	-8.13	-8.10
134.90	-8.46	-8.17	-8.17
137.25	-8.61	-8.29	-8.15
139.64	-8.62	-8.34	-8.14
142.07	-8.74	-8.40	-8.26
144.54	-8.89	-8.52	-8.44
147.06	-8.96	-8.61	-8.48
149.62	-9.00	-8.74	-8.52
152.23	-9.14	-8.86	-8.54
154.88	-9.23	-8.87	-8.59
157.58	-9.40	-8.99	-8.78
160.32	-9.43	-9.17	-9.05
163.12	-9.43	-9.15	-9.03
165.96	-9.55	-9.21	-9.10
168.85	-9.64	-9.32	-9.35

171.79	-9.79	-9.41	-9.38
174.78	-9.97	-9.46	-9.39
177.83	-9.99	-9.58	-9.46
180.93	-10.15	-9.78	-9.72
184.08	-10.27	-9.87	-9.76
187.28	-10.40	-9.99	-9.78
190.55	-10.43	-10.11	-9.79
193.86	-10.52	-10.15	-9.97
197.24	-10.62	-10.17	-10.01
200.68	-10.79	-10.25	-10.02
204.17	-10.88	-10.37	-10.17
207.73	-10.99	-10.43	-10.39
211.35	-11.08	-10.63	-10.55
215.03	-11.21	-10.66	-10.61
218.78	-11.31	-10.82	-10.60
222.59	-11.35	-10.95	-10.74
226.46	-11.45	-11.06	-10.92
230.41	-11.69	-11.21	-11.27
234.42	-11.66	-11.34	-11.25
238.51	-11.83	-11.54	-11.35
242.66	-12.02	-11.49	-11.26
246.89	-12.19	-11.49	-11.52
251.19	-12.26	-11.65	-11.64
255.56	-12.42	-11.92	-11.81
260.02	-12.54	-12.04	-11.81
264.54	-12.74	-12.12	-11.91
269.15	-12.92	-12.24	-12.00
273.84	-13.30	-12.41	-12.15
278.61	-13.37	-12.61	-12.16
283.46	-13.43	-12.62	-12.47
288.40	-13.66	-12.74	-12.52
293.43	-13.56	-12.95	-12.71
298.54	-13.82	-13.18	-12.84
303.74	-13.89	-13.29	-12.96
309.03	-13.82	-13.49	-12.96
314.41	-14.07	-13.51	-13.07
319.89	-14.08	-13.85	-13.41
325.46	-14.59	-13.89	-13.50
331.13	-14.60	-13.93	-13.58
336.90	-14.95	-14.08	-13.78
342.77	-15.10	-14.52	-13.93
348.74	-15.03	-14.31	-14.11
354.81	-15.35	-14.98	-14.42
360.99	-15.31	-15.07	-14.60
367.28	-15.72	-15.08	-14.73
373.68	-16.41	-15.07	-15.29
380.19	-16.25	-15.38	-15.45
386.81	-16.67	-15.71	-15.34
393.55	-16.69	-15.78	-15.26
400.40	-16.72	-15.90	-15.72
407.38	-16.89	-16.13	-15.81

414.48	-17.15	-16.71	-16.08
421.70	-17.73	-16.91	-16.51
429.04	-18.11	-17.35	-16.82
436.51	-17.94	-17.24	-16.64
444.12	-18.55	-17.29	-17.70
451.86	-18.59	-17.11	-17.13
459.73	-18.66	-17.61	-17.08
467.73	-19.98	-18.07	-17.59
475.88	-19.58	-18.20	-18.01
484.17	-20.05	-18.38	-18.46
492.61	-20.36	-18.83	-18.44
501.19	-20.91	-18.90	-18.56
509.92	-21.59	-19.02	-18.54
518.80	-21.64	-19.36	-18.69
527.84	-22.16	-19.74	-18.64
537.03	-22.22	-19.71	-19.61
546.39	-22.64	-20.06	-19.16
555.90	-22.80	-20.53	-19.62
565.59	-23.31	-21.17	-19.87
575.44	-23.31	-20.51	-20.63
585.46	-23.29	-21.28	-21.20
595.66	-23.65	-21.40	-21.07
606.04	-24.91	-21.44	-21.32
616.59	-25.49	-21.63	-22.69
627.33	-25.18	-21.64	-22.35
638.26	-25.76	-22.01	-22.69
649.38	-26.10	-23.09	-22.62
660.69	-26.61	-22.91	-23.32
672.20	-26.97	-23.46	-23.79
683.91	-26.21	-23.71	-23.17
695.82	-26.27	-24.59	-24.70
707.94	-27.31	-25.53	-24.20
720.28	-28.12	-25.41	-26.55
732.82	-28.32	-25.75	-26.30
745.59	-29.91	-26.42	-28.64
758.58	-30.55	-26.29	-29.33
771.79	-29.63	-26.00	-27.64
785.23	-33.36	-26.53	-26.77
798.91	-33.15	-27.56	-29.28
812.83	-31.27	-27.49	-28.84
826.99	-36.59	-28.16	-29.81
841.39	-36.21	-27.56	-29.37
856.05	-31.97	-28.47	-29.70
870.96	-37.35	-28.87	-29.96
886.13	-35.72	-31.01	-30.43
901.57	-36.55	-32.12	-31.14
917.27	-39.19	-33.76	-30.66
933.25	-43.14	-34.03	-33.13
949.51	-40.85	-32.15	-32.19
966.05	-39.21	-33.00	-32.66
982.88	-40.81	-33.46	-32.83

1000.00

-40.62

-34.56

-33.01

SAVED BY:
TITLE:
COMMENTS:
DATE: 2/12/01
TIME: 8:17 AM

Freq MHz	tan / white	blue / white	range / violet
1.00	-0.60	-0.59	-0.63
1.02	-0.60	-0.59	-0.63
1.04	-0.61	-0.60	-0.64
1.05	-0.61	-0.61	-0.64
1.07	-0.62	-0.61	-0.65
1.09	-0.62	-0.61	-0.65
1.11	-0.63	-0.62	-0.66
1.13	-0.63	-0.62	-0.67
1.15	-0.64	-0.63	-0.67
1.17	-0.64	-0.64	-0.68
1.19	-0.65	-0.64	-0.68
1.21	-0.66	-0.65	-0.69
1.23	-0.67	-0.66	-0.69
1.25	-0.67	-0.66	-0.70
1.27	-0.67	-0.66	-0.70
1.30	-0.68	-0.67	-0.71
1.32	-0.69	-0.68	-0.72
1.34	-0.69	-0.69	-0.73
1.36	-0.70	-0.69	-0.73
1.39	-0.71	-0.70	-0.74
1.41	-0.71	-0.71	-0.74
1.44	-0.72	-0.71	-0.75
1.46	-0.72	-0.72	-0.75
1.49	-0.73	-0.72	-0.76
1.51	-0.74	-0.73	-0.77
1.54	-0.74	-0.73	-0.78
1.57	-0.75	-0.74	-0.79
1.59	-0.76	-0.75	-0.79
1.62	-0.76	-0.76	-0.80
1.65	-0.77	-0.76	-0.81
1.68	-0.78	-0.77	-0.81
1.71	-0.78	-0.77	-0.82
1.74	-0.79	-0.78	-0.83
1.77	-0.80	-0.79	-0.83
1.80	-0.81	-0.79	-0.84
1.83	-0.82	-0.80	-0.85
1.86	-0.82	-0.81	-0.86
1.89	-0.83	-0.82	-0.86
1.93	-0.84	-0.83	-0.87
1.96	-0.85	-0.83	-0.88
2.00	-0.85	-0.84	-0.89
2.03	-0.86	-0.85	-0.90
2.07	-0.87	-0.86	-0.91

2.10	-0.88	-0.87	-0.91
2.14	-0.89	-0.87	-0.92
2.18	-0.89	-0.88	-0.93
2.21	-0.90	-0.89	-0.94
2.25	-0.91	-0.90	-0.95
2.29	-0.92	-0.91	-0.96
2.33	-0.93	-0.92	-0.97
2.37	-0.94	-0.93	-0.97
2.41	-0.94	-0.93	-0.98
2.45	-0.96	-0.94	-1.00
2.50	-0.97	-0.95	-1.00
2.54	-0.97	-0.96	-1.01
2.59	-0.99	-0.98	-1.02
2.63	-1.00	-0.98	-1.03
2.68	-1.00	-0.99	-1.04
2.72	-1.02	-1.00	-1.05
2.77	-1.03	-1.01	-1.06
2.82	-1.04	-1.03	-1.07
2.87	-1.05	-1.03	-1.08
2.92	-1.05	-1.04	-1.09
2.97	-1.07	-1.06	-1.10
3.02	-1.08	-1.07	-1.11
3.07	-1.09	-1.08	-1.12
3.13	-1.10	-1.09	-1.14
3.18	-1.11	-1.10	-1.15
3.24	-1.13	-1.11	-1.16
3.29	-1.14	-1.13	-1.17
3.35	-1.15	-1.14	-1.18
3.41	-1.16	-1.15	-1.19
3.47	-1.18	-1.16	-1.20
3.53	-1.19	-1.17	-1.22
3.59	-1.20	-1.19	-1.23
3.65	-1.22	-1.20	-1.24
3.72	-1.23	-1.21	-1.25
3.78	-1.24	-1.23	-1.26
3.85	-1.26	-1.24	-1.27
3.91	-1.27	-1.25	-1.29
3.98	-1.28	-1.26	-1.30
4.05	-1.29	-1.28	-1.31
4.12	-1.31	-1.29	-1.32
4.19	-1.32	-1.31	-1.33
4.27	-1.33	-1.32	-1.34
4.34	-1.35	-1.33	-1.36
4.42	-1.36	-1.35	-1.37
4.49	-1.37	-1.36	-1.38
4.57	-1.39	-1.37	-1.39
4.65	-1.40	-1.38	-1.40
4.73	-1.42	-1.40	-1.41
4.81	-1.43	-1.41	-1.43
4.90	-1.44	-1.42	-1.44
4.98	-1.45	-1.43	-1.45

5.07	-1.47	-1.45	-1.47
5.16	-1.48	-1.46	-1.47
5.25	-1.49	-1.47	-1.49
5.34	-1.50	-1.49	-1.50
5.43	-1.52	-1.50	-1.51
5.53	-1.53	-1.51	-1.53
5.62	-1.54	-1.52	-1.54
5.72	-1.56	-1.54	-1.55
5.82	-1.57	-1.55	-1.57
5.92	-1.58	-1.56	-1.58
6.03	-1.59	-1.57	-1.59
6.13	-1.61	-1.59	-1.61
6.24	-1.62	-1.60	-1.62
6.35	-1.64	-1.62	-1.63
6.46	-1.65	-1.63	-1.64
6.57	-1.66	-1.64	-1.66
6.68	-1.68	-1.66	-1.68
6.80	-1.69	-1.67	-1.69
6.92	-1.71	-1.69	-1.70
7.04	-1.73	-1.70	-1.72
7.16	-1.74	-1.72	-1.74
7.29	-1.76	-1.74	-1.75
7.41	-1.78	-1.75	-1.77
7.54	-1.80	-1.77	-1.79
7.67	-1.82	-1.79	-1.80
7.81	-1.83	-1.80	-1.82
7.94	-1.85	-1.82	-1.83
8.08	-1.87	-1.84	-1.85
8.22	-1.89	-1.85	-1.86
8.37	-1.90	-1.87	-1.88
8.51	-1.92	-1.88	-1.89
8.66	-1.94	-1.90	-1.91
8.81	-1.96	-1.92	-1.92
8.96	-1.97	-1.94	-1.94
9.12	-1.99	-1.95	-1.96
9.28	-2.01	-1.97	-1.97
9.44	-2.02	-1.99	-1.99
9.61	-2.04	-2.00	-2.01
9.77	-2.05	-2.02	-2.02
9.94	-2.07	-2.04	-2.04
10.12	-2.09	-2.05	-2.06
10.29	-2.10	-2.07	-2.07
10.47	-2.12	-2.09	-2.09
10.65	-2.14	-2.11	-2.11
10.84	-2.17	-2.13	-2.13
11.03	-2.18	-2.15	-2.15
11.22	-2.21	-2.17	-2.17
11.42	-2.23	-2.19	-2.19
11.61	-2.25	-2.22	-2.21
11.82	-2.27	-2.23	-2.22
12.02	-2.29	-2.26	-2.24

12.23	-2.31	-2.27	-2.26
12.45	-2.33	-2.30	-2.28
12.66	-2.35	-2.32	-2.30
12.88	-2.37	-2.34	-2.32
13.11	-2.39	-2.36	-2.34
13.34	-2.41	-2.38	-2.36
13.57	-2.43	-2.40	-2.38
13.80	-2.45	-2.42	-2.40
14.04	-2.47	-2.44	-2.42
14.29	-2.50	-2.46	-2.45
14.54	-2.52	-2.49	-2.47
14.79	-2.55	-2.51	-2.49
15.05	-2.57	-2.53	-2.51
15.31	-2.60	-2.56	-2.54
15.58	-2.63	-2.58	-2.56
15.85	-2.65	-2.60	-2.57
16.12	-2.68	-2.63	-2.60
16.41	-2.70	-2.65	-2.62
16.69	-2.72	-2.67	-2.64
16.98	-2.74	-2.70	-2.67
17.28	-2.77	-2.72	-2.69
17.58	-2.79	-2.74	-2.72
17.89	-2.81	-2.77	-2.75
18.20	-2.84	-2.79	-2.77
18.51	-2.86	-2.82	-2.80
18.84	-2.90	-2.85	-2.84
19.16	-2.93	-2.88	-2.87
19.50	-2.96	-2.90	-2.89
19.84	-2.99	-2.93	-2.92
20.18	-3.01	-2.96	-2.94
20.54	-3.04	-2.99	-2.96
20.89	-3.06	-3.01	-2.98
21.26	-3.09	-3.03	-3.01
21.63	-3.11	-3.06	-3.03
22.00	-3.14	-3.09	-3.06
22.39	-3.17	-3.12	-3.08
22.78	-3.21	-3.15	-3.11
23.17	-3.25	-3.18	-3.14
23.58	-3.28	-3.21	-3.17
23.99	-3.30	-3.24	-3.19
24.41	-3.33	-3.27	-3.22
24.83	-3.36	-3.30	-3.24
25.26	-3.38	-3.32	-3.26
25.70	-3.41	-3.35	-3.30
26.15	-3.44	-3.38	-3.33
26.61	-3.48	-3.41	-3.37
27.07	-3.52	-3.46	-3.41
27.54	-3.56	-3.49	-3.43
28.02	-3.59	-3.52	-3.46
28.51	-3.62	-3.55	-3.49
29.01	-3.65	-3.58	-3.52

29.51	-3.67	-3.61	-3.55
30.03	-3.71	-3.64	-3.58
30.55	-3.75	-3.68	-3.62
31.08	-3.79	-3.72	-3.67
31.62	-3.82	-3.75	-3.69
32.17	-3.86	-3.78	-3.72
32.73	-3.90	-3.82	-3.75
33.30	-3.92	-3.85	-3.78
33.88	-3.96	-3.88	-3.83
34.47	-4.00	-3.92	-3.87
35.08	-4.04	-3.96	-3.92
35.69	-4.08	-4.00	-3.94
36.31	-4.12	-4.03	-3.96
36.94	-4.15	-4.06	-3.99
37.58	-4.19	-4.10	-4.02
38.24	-4.24	-4.14	-4.07
38.90	-4.29	-4.19	-4.11
39.58	-4.32	-4.22	-4.14
40.27	-4.36	-4.26	-4.17
40.97	-4.40	-4.29	-4.21
41.69	-4.42	-4.33	-4.24
42.41	-4.47	-4.38	-4.30
43.15	-4.51	-4.42	-4.34
43.90	-4.55	-4.45	-4.38
44.67	-4.59	-4.49	-4.42
45.45	-4.63	-4.54	-4.46
46.24	-4.69	-4.58	-4.50
47.04	-4.74	-4.63	-4.54
47.86	-4.78	-4.67	-4.57
48.70	-4.82	-4.71	-4.62
49.54	-4.86	-4.76	-4.67
50.41	-4.91	-4.82	-4.73
51.29	-4.96	-4.85	-4.77
52.18	-5.01	-4.88	-4.80
53.09	-5.05	-4.93	-4.84
54.01	-5.10	-4.98	-4.90
54.95	-5.14	-5.03	-4.94
55.91	-5.18	-5.07	-4.97
56.89	-5.23	-5.12	-5.01
57.88	-5.28	-5.18	-5.05
58.88	-5.33	-5.23	-5.11
59.91	-5.38	-5.27	-5.15
60.95	-5.46	-5.32	-5.21
62.02	-5.53	-5.40	-5.27
63.10	-5.56	-5.44	-5.31
64.19	-5.59	-5.47	-5.35
65.31	-5.67	-5.51	-5.40
66.45	-5.73	-5.57	-5.46
67.61	-5.76	-5.61	-5.49
68.79	-5.81	-5.67	-5.56
69.98	-5.89	-5.74	-5.64

71.20	-5.93	-5.77	-5.66
72.44	-5.99	-5.82	-5.71
73.71	-6.07	-5.90	-5.81
74.99	-6.09	-5.94	-5.85
76.30	-6.14	-5.99	-5.87
77.62	-6.22	-6.07	-5.95
78.98	-6.26	-6.11	-6.01
80.35	-6.32	-6.16	-6.03
81.75	-6.41	-6.26	-6.08
83.18	-6.44	-6.27	-6.13
84.63	-6.52	-6.34	-6.21
86.10	-6.62	-6.43	-6.35
87.60	-6.66	-6.45	-6.36
89.12	-6.72	-6.53	-6.40
90.68	-6.74	-6.59	-6.44
92.26	-6.81	-6.64	-6.48
93.86	-6.90	-6.72	-6.56
95.50	-6.96	-6.75	-6.60
97.16	-7.10	-6.86	-6.70
98.86	-7.11	-6.92	-6.77
100.58	-7.17	-6.97	-6.81
102.33	-7.23	-7.03	-6.86
104.11	-7.30	-7.09	-6.95
105.93	-7.40	-7.17	-7.09
107.77	-7.43	-7.25	-7.05
109.65	-7.50	-7.35	-7.17
111.56	-7.54	-7.37	-7.22
113.50	-7.62	-7.48	-7.28
115.48	-7.70	-7.52	-7.31
117.49	-7.83	-7.62	-7.46
119.54	-7.90	-7.66	-7.52
121.62	-7.99	-7.75	-7.69
123.74	-8.08	-7.82	-7.67
125.89	-8.14	-7.89	-7.72
128.09	-8.21	-8.02	-7.77
130.32	-8.29	-8.07	-7.89
132.59	-8.43	-8.14	-8.09
134.90	-8.47	-8.17	-8.15
137.25	-8.63	-8.30	-8.17
139.64	-8.65	-8.36	-8.16
142.07	-8.75	-8.40	-8.26
144.54	-8.89	-8.52	-8.44
147.06	-8.96	-8.61	-8.48
149.62	-9.01	-8.74	-8.53
152.23	-9.14	-8.86	-8.57
154.88	-9.24	-8.89	-8.61
157.58	-9.41	-9.00	-8.78
160.32	-9.43	-9.17	-9.04
163.12	-9.43	-9.17	-9.05
165.96	-9.56	-9.23	-9.11
168.85	-9.65	-9.33	-9.33

171.79	-9.81	-9.42	-9.36
174.78	-9.96	-9.48	-9.38
177.83	-10.00	-9.60	-9.46
180.93	-10.16	-9.79	-9.68
184.08	-10.27	-9.89	-9.73
187.28	-10.42	-10.01	-9.78
190.55	-10.44	-10.13	-9.79
193.86	-10.54	-10.20	-9.96
197.24	-10.65	-10.20	-10.00
200.68	-10.82	-10.29	-10.02
204.17	-10.90	-10.41	-10.19
207.73	-11.01	-10.46	-10.40
211.35	-11.10	-10.66	-10.60
215.03	-11.23	-10.68	-10.62
218.78	-11.33	-10.83	-10.60
222.59	-11.37	-10.98	-10.76
226.46	-11.47	-11.09	-10.93
230.41	-11.71	-11.23	-11.27
234.42	-11.71	-11.36	-11.24
238.51	-11.87	-11.56	-11.36
242.66	-12.06	-11.52	-11.29
246.89	-12.20	-11.53	-11.55
251.19	-12.30	-11.68	-11.66
255.56	-12.43	-11.94	-11.80
260.02	-12.58	-12.07	-11.88
264.54	-12.75	-12.15	-11.94
269.15	-12.93	-12.26	-12.03
273.84	-13.33	-12.41	-12.19
278.61	-13.40	-12.65	-12.21
283.46	-13.47	-12.65	-12.49
288.40	-13.67	-12.80	-12.57
293.43	-13.57	-12.99	-12.75
298.54	-13.84	-13.20	-12.85
303.74	-13.91	-13.33	-12.97
309.03	-13.85	-13.53	-13.03
314.41	-14.11	-13.53	-13.09
319.89	-14.10	-13.88	-13.47
325.46	-14.59	-13.91	-13.56
331.13	-14.68	-13.94	-13.59
336.90	-14.98	-14.10	-13.84
342.77	-15.13	-14.59	-13.92
348.74	-15.05	-14.39	-14.12
354.81	-15.35	-14.99	-14.40
360.99	-15.35	-15.09	-14.58
367.28	-15.75	-15.13	-14.74
373.68	-16.40	-15.15	-15.27
380.19	-16.31	-15.43	-15.41
386.81	-16.71	-15.73	-15.33
393.55	-16.76	-15.83	-15.32
400.40	-16.79	-15.95	-15.72
407.38	-16.94	-16.15	-15.84

414.48	-17.23	-16.76	-16.08
421.70	-17.72	-17.01	-16.52
429.04	-18.12	-17.45	-17.00
436.51	-18.00	-17.36	-16.71
444.12	-18.57	-17.40	-17.73
451.86	-18.70	-17.26	-17.18
459.73	-18.71	-17.73	-17.10
467.73	-20.03	-18.21	-17.60
475.88	-19.64	-18.28	-18.06
484.17	-20.17	-18.46	-18.48
492.61	-20.46	-18.98	-18.44
501.19	-21.06	-19.01	-18.58
509.92	-21.70	-19.09	-18.60
518.80	-21.77	-19.43	-18.76
527.84	-22.28	-19.90	-18.73
537.03	-22.43	-19.83	-19.65
546.39	-22.76	-20.18	-19.24
555.90	-22.88	-20.66	-19.63
565.59	-23.37	-21.16	-19.86
575.44	-23.40	-20.58	-20.65
585.46	-23.32	-21.42	-21.27
595.66	-23.88	-21.52	-21.16
606.04	-25.17	-21.46	-21.43
616.59	-25.68	-21.81	-22.80
627.33	-25.32	-21.81	-22.44
638.26	-25.87	-22.12	-22.92
649.38	-26.35	-23.31	-22.68
660.69	-26.68	-23.06	-23.69
672.20	-27.27	-23.80	-24.07
683.91	-26.46	-23.87	-23.38
695.82	-26.35	-24.81	-25.21
707.94	-27.62	-25.68	-24.33
720.28	-28.26	-25.70	-26.35
732.82	-28.53	-25.93	-26.52
745.59	-29.88	-26.41	-28.29
758.58	-30.55	-26.79	-29.45
771.79	-30.39	-26.17	-27.87
785.23	-32.43	-26.62	-26.89
798.91	-33.43	-27.58	-29.50
812.83	-32.28	-28.00	-29.27
826.99	-36.40	-28.30	-29.00
841.39	-35.47	-27.68	-29.52
856.05	-32.25	-28.49	-30.72
870.96	-37.04	-28.84	-31.24
886.13	-35.31	-31.25	-30.86
901.57	-37.51	-33.16	-31.03
917.27	-41.58	-34.65	-30.45
933.25	-45.46	-34.62	-32.91
949.51	-41.03	-32.82	-32.02
966.05	-39.52	-33.35	-32.22
982.88	-40.77	-33.69	-32.74

1000.00

-41.47

-34.78

-33.22

28AWG HITACHI Cable (ATTN in dB)

	brown / white	blue / white	orange / violet
10	-1.97	-1.94	-1.96
20	-2.91	-2.87	-2.85
30	-3.65	-3.60	-3.54
40	-4.37	-4.27	-4.18
50	-4.96	-4.88	-4.79
60	-5.52	-5.42	-5.33
70	-5.98	-5.88	-5.76
80	-6.36	-6.18	-6.12
90	-6.76	-6.62	-6.52
100	-7.11	-6.94	-6.82
110	-7.47	-7.28	-7.19
120	-7.82	-7.63	-7.51
130	-8.15	-7.96	-7.81
140	-8.52	-8.30	-8.12
150	-8.97	-8.73	-8.55
160	-9.54	-9.29	-9.10
170	-9.91	-9.63	-9.65
180	-10.34	-10.02	-10.04
190	-10.55	-10.33	-10.04
200	-10.89	-10.49	-10.28
210	-11.10	-10.78	-10.77
220	-11.31	-11.05	-10.81
230	-11.66	-11.22	-11.31
240	-11.75	-11.56	-11.46
250	-12.14	-11.69	-11.65
260	-12.54	-12.19	-12.11
270	-13.04	-12.47	-12.31
280	-13.70	-12.99	-12.72
290	-14.04	-13.46	-13.27
300	-14.37	-13.82	-13.30
310	-14.29	-14.00	-13.42
320	-14.33	-14.20	-13.90
330	-14.78	-14.19	-13.84
340	-15.33	-14.54	-14.21
350	-15.09	-14.58	-14.39
360	-15.26	-15.24	-14.78
370	-15.86	-15.24	-15.82
380	-16.64	-15.77	-16.11
390	-17.18	-16.21	-16.26
400	-17.25	-16.73	-16.83
410	-17.93	-17.24	-16.76
420	-18.03	-17.64	-17.10
430	-18.73	-17.93	-17.18
440	-18.50	-17.86	-17.61
450	-18.66	-17.81	-17.22
460	-18.66	-18.07	-17.37
470	-19.64	-18.52	-18.02
480	-19.88	-18.76	-18.43

490	-20.36	-19.57	-18.72
500	-21.50	-19.91	-19.65
510	-22.11	-20.27	-19.54
520	-22.71	-20.55	-20.15
530	-23.08	-20.90	-20.39
540	-22.92	-20.78	-20.38
550	-23.37	-20.97	-20.53
560	-23.71	-21.12	-20.20
570	-23.63	-21.73	-20.32
580	-23.43	-21.50	-21.15
590	-24.21	-22.07	-21.73
600	-24.51	-22.25	-21.95
610	-25.67	-22.60	-23.28
620	-25.91	-22.83	-23.92
630	-26.33	-23.24	-23.94
640	-27.24	-23.61	-23.55
650	-26.76	-24.19	-24.25
660	-27.17	-23.95	-24.53
670	-26.33	-24.78	-26.31
680	-26.45	-25.07	-24.71
690	-26.79	-25.72	-25.28
700	-27.10	-26.18	-26.80
710	-28.33	-26.69	-26.47
720	-28.84	-26.55	-26.17
730	-30.07	-27.11	-27.16
740	-31.01	-30.17	-28.66
750	-31.08	-28.64	-30.40
760	-31.61	-28.09	-31.44
770	-33.00	-27.70	-29.52
780	-32.88	-27.99	-28.73
790	-32.79	-28.81	-28.87
800	-32.19	-27.72	-29.98
810	-32.56	-28.84	-29.75
820	-33.28	-29.67	-32.22
830	-35.22	-29.55	-30.20
840	-35.81	-30.17	-30.92
850	-36.69	-30.59	-31.86
860	-37.20	-30.86	-31.80
870	-38.38	-30.92	-32.65
880	-39.03	-31.66	-30.41
890	-37.72	-32.51	-31.61
900	-38.03	-33.17	-32.30
910	-38.92	-32.89	-33.71
920	-41.90	-33.99	-33.03
930	-40.91	-34.50	-32.99
940	-45.21	-34.63	-32.54
950	-41.64	-33.92	-33.95
960	-42.33	-34.82	-36.18
970	-44.54	-36.61	-36.21
980	-42.39	-36.79	-34.58
990	-41.51	-35.91	-36.10

1000

-40.37

-36.27

-35.86

HP4396A REV3.01
DATE: Jan 31 2002

CHANNEL: 1
MEASURE TYPE: S21
FORMAT TYPE: LOG MAG
NUMBER of POINTS: 401
SWEEP TIME: 27 s
SWEEP TYPE: LIN FREQ
SOURCE POWER: 0 dBm
IF BANDWIDTH: 30 Hz

Frequency	tan / white	blue / white	orange / violet
1.00	-0.62	-0.61	-0.64
3.50	-1.18	-1.17	-1.21
6.00	-1.58	-1.56	-1.58
8.49	-1.90	-1.87	-1.89
10.99	-2.16	-2.13	-2.14
13.49	-2.40	-2.37	-2.36
15.99	-2.63	-2.58	-2.58
18.48	-2.83	-2.79	-2.79
20.98	-3.03	-2.99	-2.98
23.48	-3.23	-3.17	-3.15
25.98	-3.39	-3.33	-3.30
28.47	-3.57	-3.50	-3.47
30.97	-3.75	-3.68	-3.65
33.47	-3.89	-3.81	-3.78
35.97	-4.06	-3.98	-3.95
38.46	-4.21	-4.12	-4.10
40.96	-4.34	-4.25	-4.22
43.46	-4.49	-4.40	-4.35
45.96	-4.61	-4.52	-4.47
48.45	-4.76	-4.66	-4.60
50.95	-4.89	-4.80	-4.76
53.45	-5.02	-4.91	-4.87
55.95	-5.13	-5.02	-5.01
58.44	-5.26	-5.18	-5.13
60.94	-5.39	-5.28	-5.23
63.44	-5.50	-5.41	-5.33
65.94	-5.65	-5.51	-5.44
68.43	-5.74	-5.62	-5.54
70.93	-5.84	-5.74	-5.71
73.43	-5.99	-5.85	-5.83
75.93	-6.06	-5.95	-5.94
78.42	-6.20	-6.06	-6.09
80.92	-6.29	-6.15	-6.10
83.42	-6.38	-6.26	-6.20
85.92	-6.56	-6.40	-6.41
88.41	-6.64	-6.44	-6.43

90.91	-6.69	-6.57	-6.48
93.41	-6.84	-6.68	-6.63
95.91	-6.92	-6.74	-6.68
98.40	-7.06	-6.89	-6.83
100.90	-7.12	-6.96	-6.90
103.40	-7.19	-7.04	-6.96
105.90	-7.34	-7.14	-7.19
108.39	-7.41	-7.26	-7.18
110.89	-7.47	-7.31	-7.29
113.39	-7.58	-7.44	-7.41
115.89	-7.71	-7.52	-7.45
118.38	-7.81	-7.62	-7.61
120.88	-7.91	-7.71	-7.76
123.38	-8.02	-7.78	-7.87
125.88	-8.09	-7.88	-7.87
128.37	-8.17	-8.02	-7.89
130.87	-8.26	-8.07	-8.00
133.37	-8.41	-8.17	-8.32
135.87	-8.46	-8.22	-8.26
138.36	-8.51	-8.32	-8.25
140.86	-8.61	-8.42	-8.37
143.36	-8.77	-8.45	-8.42
145.86	-8.86	-8.59	-8.66
148.35	-8.96	-8.70	-8.64
150.85	-9.01	-8.72	-8.65
153.35	-9.15	-8.89	-8.71
155.85	-9.32	-9.01	-8.79
158.34	-9.38	-9.05	-8.90
160.84	-9.41	-9.22	-9.12
163.34	-9.41	-9.22	-9.19
165.84	-9.48	-9.22	-9.27
168.33	-9.65	-9.35	-9.49
170.83	-9.72	-9.41	-9.63
173.33	-9.79	-9.44	-9.60
175.83	-10.01	-9.59	-9.69
178.32	-9.99	-9.68	-9.75
180.82	-10.08	-9.76	-9.95
183.32	-10.20	-9.85	-9.89
185.82	-10.25	-9.99	-10.09
188.31	-10.21	-10.03	-10.06
190.81	-10.36	-10.12	-10.01
193.31	-10.51	-10.37	-10.34
195.81	-10.51	-10.23	-10.47
198.30	-10.62	-10.16	-10.34
200.80	-10.94	-10.41	-10.28
203.30	-10.77	-10.55	-10.58
205.80	-10.69	-10.36	-10.56
208.29	-11.07	-10.56	-10.80
210.79	-11.16	-10.90	-11.19
213.29	-11.06	-10.76	-10.96
215.79	-11.18	-10.71	-10.90

218.28	-11.45	-10.97	-11.10
220.78	-11.35	-11.08	-11.15
223.28	-11.33	-11.10	-11.13
225.78	-11.54	-11.23	-11.21
228.27	-11.63	-11.27	-11.55
230.77	-11.75	-11.28	-11.58
233.27	-11.79	-11.41	-11.40
235.77	-11.80	-11.55	-11.86
238.26	-11.86	-11.59	-11.96
240.76	-11.95	-11.58	-11.72
243.26	-12.07	-11.73	-11.76
245.76	-12.16	-11.63	-11.88
248.25	-12.31	-11.78	-11.92
250.75	-12.36	-11.90	-12.00
253.25	-12.36	-11.90	-12.11
255.75	-12.44	-12.03	-12.34
258.24	-12.55	-12.34	-12.70
260.74	-12.57	-12.21	-12.47
263.24	-12.73	-12.25	-12.34
265.74	-12.86	-12.42	-12.36
268.23	-12.93	-12.40	-12.55
270.73	-13.02	-12.43	-12.54
273.23	-13.20	-12.63	-12.86
275.73	-13.41	-12.66	-12.89
278.22	-13.51	-12.80	-12.78
280.72	-13.61	-12.89	-12.84
283.22	-13.56	-12.84	-13.16
285.72	-13.73	-12.84	-13.30
288.21	-13.84	-12.98	-13.05
290.71	-13.64	-13.08	-13.29
293.21	-13.66	-13.10	-13.26
295.71	-13.84	-13.30	-13.18
298.20	-13.88	-13.41	-13.39
300.70	-14.07	-13.35	-13.45
303.20	-14.22	-13.43	-13.51
305.70	-14.25	-13.64	-13.83
308.19	-14.06	-13.69	-13.73
310.69	-14.13	-13.84	-13.52
313.19	-14.16	-13.88	-13.69
315.69	-14.11	-13.79	-13.93
318.18	-14.17	-14.05	-14.09
320.68	-14.20	-14.11	-14.32
323.18	-14.38	-13.99	-14.19
325.68	-14.69	-14.19	-13.95
328.17	-14.94	-14.30	-14.04
330.67	-14.83	-14.15	-14.30
333.17	-14.94	-14.10	-14.43
335.67	-15.05	-14.38	-14.37
338.16	-15.14	-14.45	-14.61
340.66	-15.41	-14.65	-14.39
343.16	-15.37	-14.90	-14.33

345.66	-15.09	-14.79	-14.61
348.15	-15.19	-14.57	-14.49
350.65	-15.30	-14.82	-14.64
353.15	-15.27	-15.01	-15.04
355.65	-15.49	-14.99	-14.89
358.14	-15.56	-15.39	-14.83
360.64	-15.40	-15.39	-15.12
363.14	-15.57	-15.19	-15.28
365.64	-15.88	-15.21	-15.07
368.13	-15.94	-15.35	-15.27
370.63	-16.04	-15.28	-15.97
373.13	-16.52	-15.48	-15.94
375.63	-16.63	-15.62	-15.89
378.12	-16.59	-15.60	-16.25
380.62	-16.81	-15.87	-16.25
383.12	-17.00	-16.02	-16.22
385.62	-17.16	-15.87	-16.33
388.11	-16.87	-15.91	-16.15
390.61	-16.86	-16.13	-16.24
393.11	-16.81	-16.16	-16.44
395.61	-16.98	-16.19	-16.28
398.10	-17.04	-16.31	-16.37
400.60	-16.73	-16.25	-16.78
403.10	-16.84	-16.32	-16.90
405.60	-17.09	-16.47	-16.85
408.09	-17.24	-16.35	-16.88
410.59	-17.54	-16.38	-17.00
413.09	-17.63	-16.84	-16.92
415.59	-17.50	-17.07	-17.12
418.08	-17.74	-17.07	-17.21
420.58	-17.96	-17.50	-17.11
423.08	-17.99	-17.60	-17.39
425.58	-18.28	-17.54	-17.86
428.07	-18.61	-17.91	-18.23
430.57	-18.35	-17.91	-17.61
433.07	-18.35	-17.68	-17.42
435.57	-18.65	-17.95	-17.44
438.06	-18.34	-18.08	-17.48
440.56	-18.19	-17.71	-18.10
443.06	-18.36	-17.75	-18.55
445.56	-18.51	-18.20	-18.19
448.05	-18.43	-17.90	-18.13
450.55	-18.71	-17.59	-17.78
453.05	-18.97	-17.78	-17.71
455.55	-18.80	-17.72	-17.76
458.04	-19.03	-17.84	-17.85
460.54	-19.08	-18.40	-17.91
463.04	-19.34	-18.53	-18.00
465.54	-19.81	-18.63	-18.32
468.03	-19.92	-19.01	-18.54
470.53	-19.67	-18.76	-18.54

473.03	-19.64	-18.51	-18.62
475.53	-20.03	-18.67	-18.77
478.02	-20.28	-18.79	-19.06
480.52	-20.48	-18.59	-19.13
483.02	-20.48	-18.76	-19.05
485.52	-20.48	-19.11	-19.43
488.01	-20.67	-19.29	-19.89
490.51	-20.80	-19.44	-19.35
493.01	-20.82	-19.43	-19.24
495.51	-21.36	-19.13	-19.34
498.00	-21.41	-19.48	-19.67
500.50	-21.35	-20.16	-19.66
503.00	-21.39	-20.14	-19.74
505.50	-21.41	-19.74	-19.64
507.99	-21.75	-19.73	-19.85
510.49	-22.01	-19.93	-19.85
512.99	-21.75	-19.70	-19.96
515.49	-21.71	-19.74	-20.25
517.98	-22.25	-19.80	-19.93
520.48	-22.48	-19.92	-19.78
522.98	-22.15	-20.23	-20.21
525.48	-22.15	-20.09	-20.20
527.97	-22.41	-20.01	-19.92
530.47	-22.47	-20.35	-20.23
532.97	-22.96	-20.36	-20.71
535.47	-23.05	-20.40	-20.23
537.96	-22.65	-20.32	-20.13
540.46	-23.31	-20.32	-20.58
542.96	-23.81	-20.36	-20.39
545.46	-22.92	-20.51	-20.36
547.95	-23.30	-20.37	-21.07
550.45	-23.85	-20.63	-20.98
552.95	-22.95	-21.14	-20.68
555.45	-22.99	-20.93	-21.39
557.94	-24.50	-20.74	-21.35
560.44	-24.45	-21.28	-20.59
562.94	-23.95	-21.58	-21.00
565.44	-24.62	-21.43	-21.40
567.93	-24.33	-21.62	-21.07
570.43	-23.45	-21.40	-21.38
572.93	-23.91	-20.97	-21.60
575.43	-24.03	-21.25	-21.02
577.92	-23.15	-21.20	-21.06
580.42	-23.62	-21.37	-21.35
582.92	-23.72	-22.06	-21.14
585.42	-23.33	-21.95	-21.75
587.91	-24.26	-21.45	-22.23
590.41	-24.62	-22.01	-21.37
592.91	-24.01	-22.09	-21.68
595.41	-25.06	-21.56	-22.51
597.90	-25.05	-22.22	-21.64

600.40	-24.20	-22.34	-21.92
602.90	-25.92	-21.47	-23.51
605.40	-26.66	-21.93	-22.27
607.89	-24.76	-22.42	-22.03
610.39	-26.12	-21.59	-24.20
612.89	-28.53	-21.98	-23.45
615.39	-25.58	-22.67	-22.66
617.88	-24.85	-21.76	-25.14
620.38	-26.31	-22.12	-25.02
622.88	-24.91	-23.27	-22.99
625.38	-25.11	-21.79	-24.36
627.87	-27.35	-21.93	-25.86
630.37	-25.17	-23.92	-22.99
632.87	-24.92	-22.46	-24.03
635.37	-28.23	-21.90	-26.81
637.86	-26.32	-24.23	-23.57
640.36	-25.28	-22.99	-23.62
642.86	-29.35	-21.90	-26.95
645.36	-27.21	-24.26	-23.97
647.85	-24.52	-24.16	-23.16
650.35	-27.94	-22.53	-26.80
652.85	-27.81	-24.28	-24.26
655.35	-24.18	-23.82	-23.21
657.84	-27.86	-21.84	-28.27
660.34	-30.93	-24.89	-25.87
662.84	-25.02	-25.65	-23.12
665.34	-26.04	-21.85	-26.92
667.83	-29.63	-23.82	-27.17
670.33	-24.71	-28.48	-23.15
672.83	-26.45	-23.16	-26.38
675.33	-30.82	-23.60	-27.62
677.82	-25.02	-28.66	-22.66
680.32	-26.50	-23.77	-25.76
682.82	-32.59	-23.33	-30.61
685.32	-24.37	-28.63	-22.72
687.81	-25.11	-23.94	-24.40
690.31	-39.44	-23.19	-35.45
692.81	-24.46	-30.81	-23.01
695.31	-23.25	-25.08	-23.37
697.80	-37.23	-22.63	-40.39
700.30	-25.15	-29.30	-24.53
702.80	-22.56	-26.80	-21.66
705.30	-32.24	-21.82	-29.21
707.79	-25.82	-26.13	-26.67
710.29	-21.49	-29.23	-20.88
712.79	-27.20	-21.42	-24.38
715.29	-30.23	-24.04	-32.53
717.78	-23.01	-31.80	-21.83
720.28	-27.34	-22.58	-24.43
722.78	-31.33	-24.64	-34.30
725.28	-22.80	-31.72	-21.67

727.77	-26.65	-22.56	-24.00
730.27	-31.75	-24.99	-37.77
732.77	-23.12	-35.80	-21.91
735.27	-25.86	-22.28	-22.20
737.76	-31.33	-23.46	-39.32
740.26	-22.75	-38.43	-20.71
742.76	-23.94	-23.00	-21.15
745.26	-28.45	-21.72	-30.30
747.75	-21.10	-30.80	-20.48
750.25	-20.97	-22.37	-19.55
752.75	-25.45	-19.36	-23.98
755.25	-20.08	-25.51	-20.28
757.74	-18.96	-21.50	-17.45
760.24	-22.86	-17.63	-20.25
762.74	-19.18	-20.94	-19.08
765.24	-16.89	-21.04	-15.54
767.73	-18.46	-16.09	-16.65
770.23	-17.29	-17.10	-16.76
772.73	-15.06	-19.70	-13.03
775.23	-16.27	-14.46	-12.90
777.72	-15.68	-14.52	-13.88
780.22	-13.21	-17.71	-11.90
782.72	-12.88	-13.70	-10.82
785.22	-13.21	-12.84	-12.66
787.71	-11.43	-15.60	-11.92
790.21	-10.71	-13.15	-10.34
792.71	-11.34	-11.57	-11.69
795.21	-10.27	-13.84	-12.51
797.70	-10.04	-13.36	-10.95
800.20	-11.77	-10.70	-11.82
802.70	-11.80	-12.22	-13.71
805.20	-11.19	-13.43	-12.35
807.69	-12.41	-10.86	-12.44
810.19	-12.45	-11.58	-15.01
812.69	-11.02	-13.25	-12.96
815.19	-11.61	-11.22	-12.28
817.68	-12.07	-11.04	-14.16
820.18	-10.86	-13.16	-13.17
822.68	-11.35	-11.74	-12.24
825.18	-12.32	-10.99	-13.59
827.67	-11.68	-13.59	-13.55
830.17	-11.71	-12.96	-11.90
832.67	-13.09	-11.33	-12.97
835.17	-12.32	-13.43	-14.47
837.66	-11.87	-13.89	-12.73
840.16	-13.63	-11.77	-13.35
842.66	-13.55	-13.40	-15.12
845.16	-12.82	-14.66	-13.17
847.65	-14.50	-12.23	-13.28
850.15	-14.40	-13.15	-15.45
852.65	-13.68	-15.67	-13.77

855.15	-14.91	-13.35	-13.35
857.64	-15.14	-13.67	-15.09
860.14	-14.28	-16.73	-13.93
862.64	-15.05	-14.08	-12.89
865.14	-15.20	-13.75	-14.34
867.63	-13.58	-17.03	-14.47
870.13	-13.84	-14.68	-13.25
872.63	-14.63	-13.78	-14.39
875.13	-13.85	-16.54	-15.79
877.62	-14.42	-15.16	-13.76
880.12	-15.23	-13.86	-14.50
882.62	-14.20	-16.04	-16.17
885.12	-13.83	-14.85	-14.24
887.61	-14.65	-13.44	-14.56
890.11	-14.05	-15.15	-16.68
892.61	-13.51	-15.38	-14.64
895.11	-14.74	-13.82	-14.56
897.60	-14.59	-15.00	-16.34
900.10	-14.06	-16.17	-14.91
902.60	-15.47	-14.32	-14.45
905.10	-15.49	-14.88	-16.45
907.59	-14.80	-16.59	-15.39
910.09	-15.78	-14.48	-14.28
912.59	-15.70	-14.60	-15.55
915.09	-14.70	-16.01	-15.37
917.58	-14.91	-14.28	-14.07
920.08	-15.03	-13.71	-15.56
922.58	-14.44	-15.23	-15.73
925.08	-14.84	-14.23	-14.06
927.57	-15.20	-13.63	-14.99
930.07	-14.77	-15.23	-15.34
932.57	-14.94	-14.65	-14.00
935.07	-15.78	-13.35	-14.31
937.56	-15.56	-14.71	-15.19
940.06	-15.01	-14.90	-13.69
942.56	-15.21	-13.46	-13.58
945.06	-14.78	-14.61	-14.76
947.55	-14.29	-14.76	-13.75
950.05	-14.78	-13.04	-13.48
952.55	-14.49	-13.39	-14.69
955.05	-13.88	-14.00	-14.12
957.54	-14.49	-12.79	-13.42
960.04	-14.61	-13.53	-14.29
962.54	-14.05	-15.42	-13.91
965.04	-14.40	-14.44	-12.78
967.53	-14.38	-14.57	-13.42
970.03	-13.78	-16.34	-13.29
972.53	-14.13	-14.96	-12.15
975.03	-14.25	-14.27	-12.89
977.52	-13.37	-15.33	-13.43
980.02	-13.51	-14.19	-12.17

982.52	-13.96	-13.62	-12.52
985.02	-12.89	-14.94	-13.24
987.51	-12.80	-14.38	-11.93
990.01	-13.63	-13.03	-12.13
992.51	-13.55	-13.88	-12.90
995.01	-13.45	-13.37	-12.31
997.50	-13.86	-12.21	-12.24
1000.00	-13.28	-13.17	-13.23