BandRich Inc.

Project Name: C 170

For GSM850/900/DCS/PCS/WCDMA Antenna tested

Test Date: August 13th 2008

Written by Edison Chin

1. Test fixture

The test fixture as Figure 1.



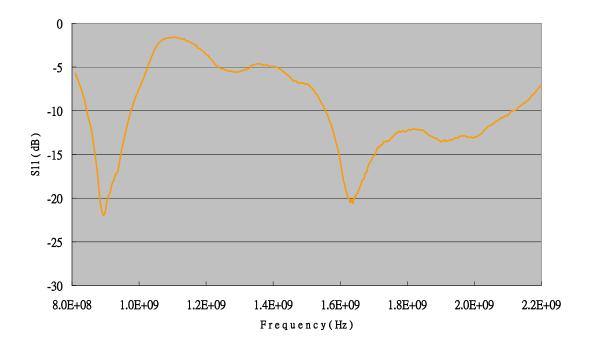
Figure 1.

2. Measurement Results

In Passive measurement condition the fixture was inserted into Notebook. The numerical data had tested in SGS Satimo Lab are presented as below.

	Project	C279	
Frequency	E Total. dB	Efficiency	Efficiency . dB
82400000	0.12	34.94%	-4.57
836000000	0.27	35.51%	-4.50
84900000	0.28	35.78%	-4.46
86900000	0.61	40.71%	-3.90
880000000	0.45	41.07%	-3.86
89400000	0.71	43.13%	-3.65
90000000	0.82	43.77%	-3.59
915000000	1.26	45.10%	-3.46
925000000	1.35	45.33%	-3.44
94000000	1.33	46.05%	-3.37
96000000	1.17	46.37%	-3.34
1710000000	3.06	74.72%	-1.27
1750000000	3.05	68.97%	-1.61
1785000000	2.96	64.50%	-1.90
1805000000	2.77	63.81%	-1.95
1840000000	3.11	67.10%	-1.73
1850000000	3.37	70.52%	-1.52
1880000000	3.32	70.26%	-1.53
1910000000	3.33	69.88%	-1.56
1920000000	3.18	67.32%	-1.72
1930000000	3.26	69.46%	-1.58
1950000000	3.21	68.57%	-1.64
1960000000	3.16	67.74%	-1.69
1980000000	3.03	65.21%	-1.86
199000000	3.05	65.66%	-1.83
2110000000	2.47	64.49%	-1.90
2140000000	1.93	58.51%	-2.33
2170000000	1.66	50.10%	-3.00

S parameter



3. Summary

The passive average gain of each bandwidth of all band are shown in table 1.

Frequency (MHz)	Average Gain (dB)	
824 - 880	-4.25	
880 - 960	-3.37	
1710 - 1880	-1.37	
1880 - 1990	-1.69	
2110 - 2170	-2.41	

Table 1