

Raltron Electronics

Test Report

RST-MB1-MC1-50-23M-H-001

December 2024

OUTLINE

1. Measurement Information

1.1 Experimental Setup

1.2 Antenna Solution Detail

2. Antenna Characteristics

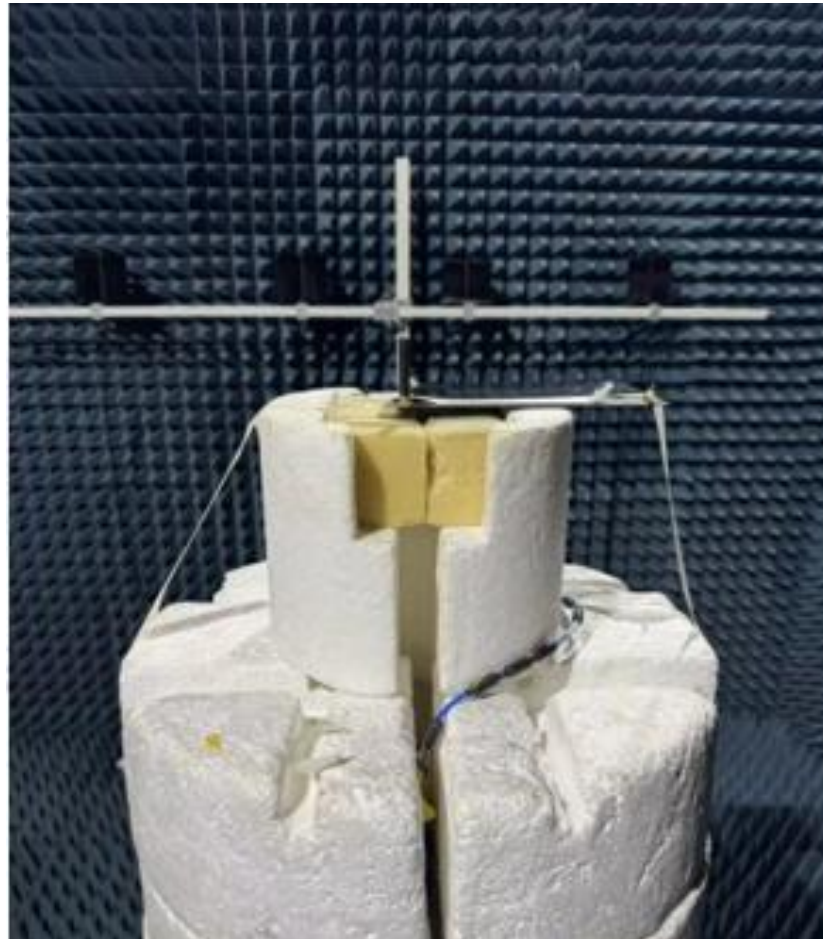
2.1 VSWR

2.2 Antenna Efficiency and Peak Gain

2.3 3D Views of Antenna & 2D Radiation Patterns

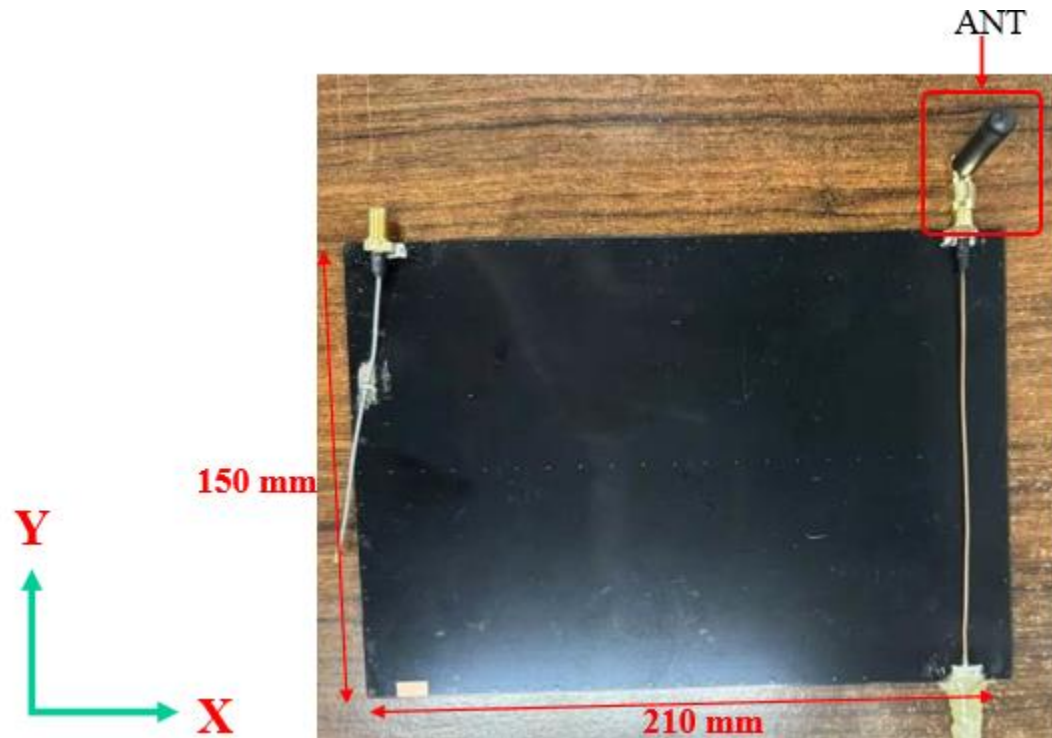
1. Measurement Information

1.1 Experimental Setup



1. Measurement Information

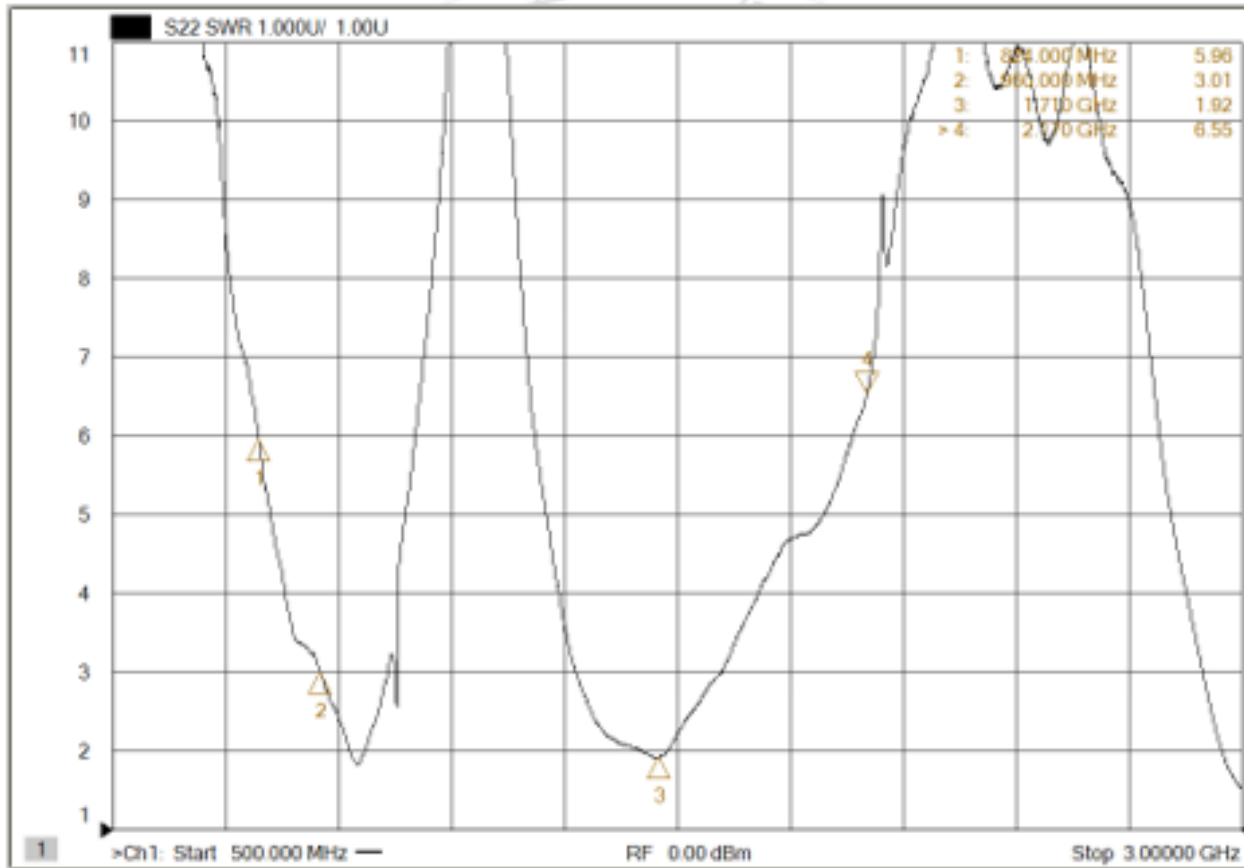
1.2 Antenna Solution Detail



Size : 150 * 210 mm

2. Antenna Characteristics

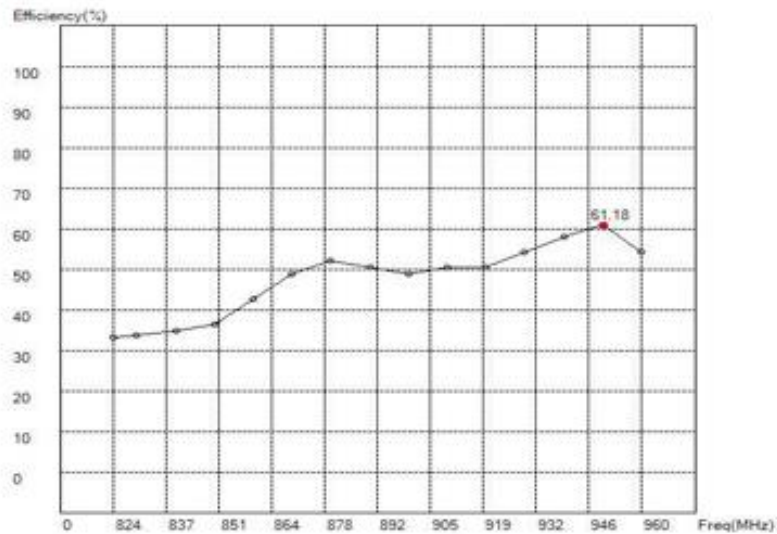
2.1 VSWR



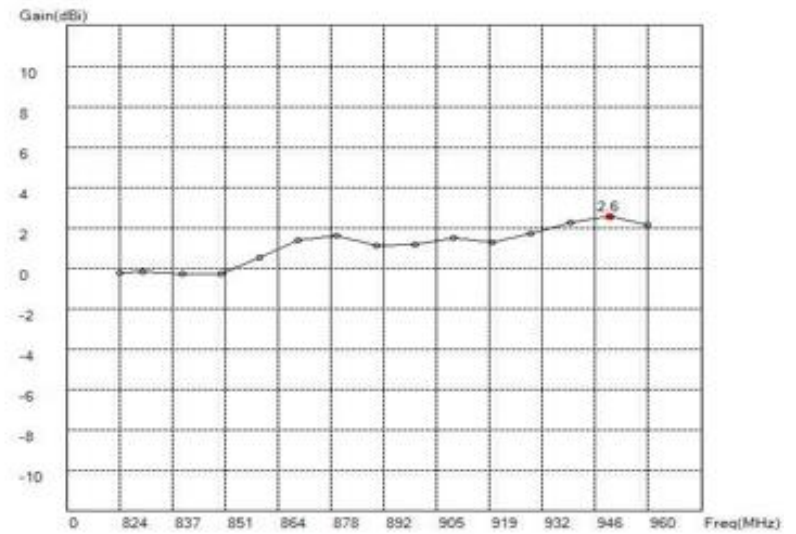
2. Antenna Characteristics

ANT
824-960MHz

2.2 Antenna Efficiency and Peak Gain



Maximum Efficiency at 950 MHz: 61.18 %

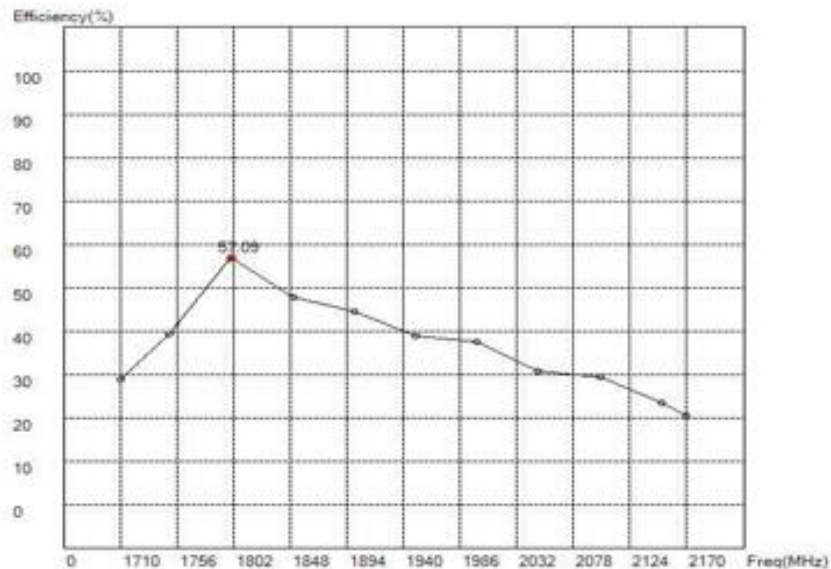


Maximum Peak Gain at 950 MHz : 2.6 dBi

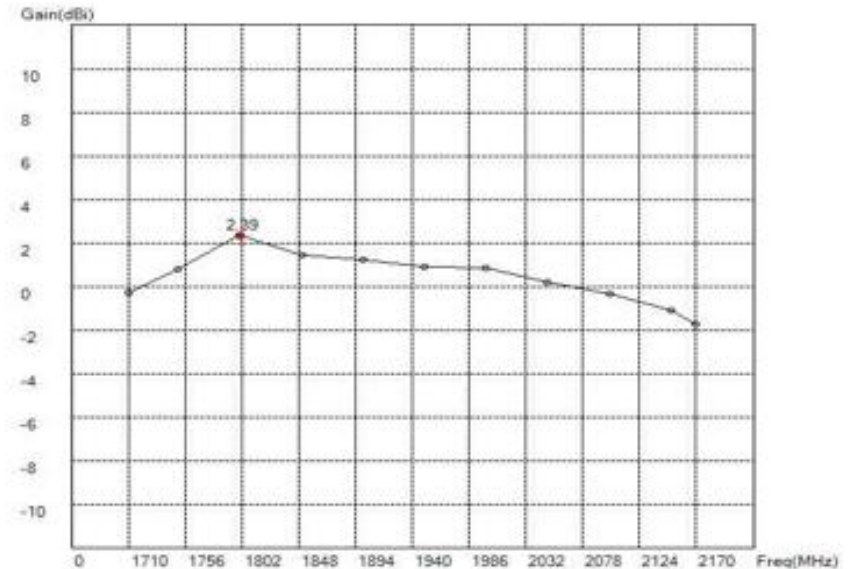
2. Antenna Characteristics

ANT
1710-2170MHz

2.2 Antenna Efficiency and Peak Gain



Maximum Efficiency at 1800 MHz : 57.09 %



Maximum Peak Gain at 1800 MHz: 2.39 dBi

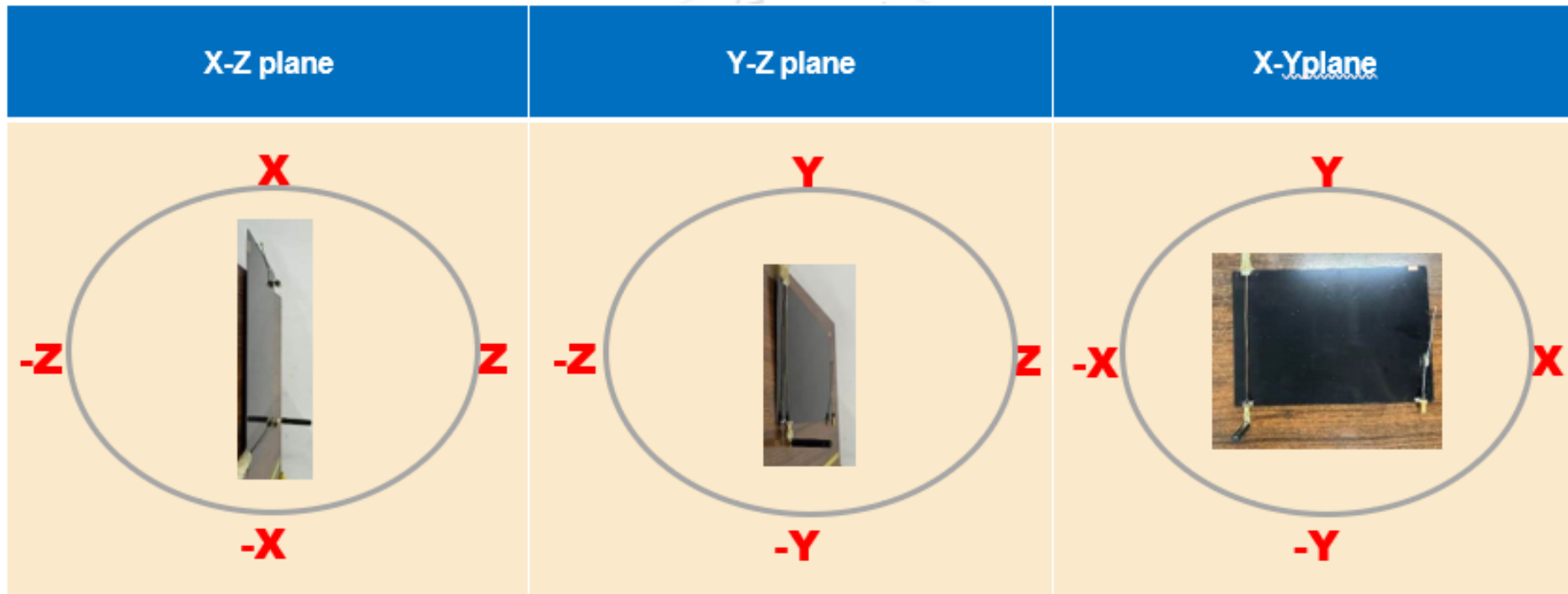
2. Antenna Characteristics

2.2 Antenna Efficiency and Peak Gain

ANT		
Frequency (MHz)	Efficiency (%)	Peak gain (dBi)
824	33.36	-0.20
880	52.21	1.64
960	54.34	2.17
1710	28.99	-0.29
1950	38.96	0.91
2170	20.46	-1.71

2. Antenna Characteristics

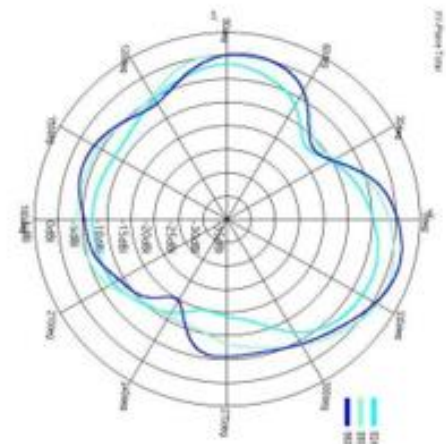
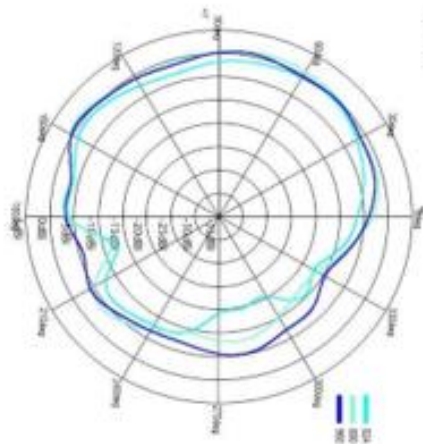
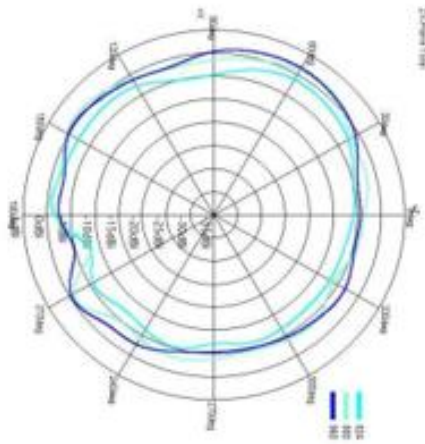
2.3 3 views of antenna



2. Antenna Characteristics

ANT
824-960MHz

2.3 2D Radiation Patterns

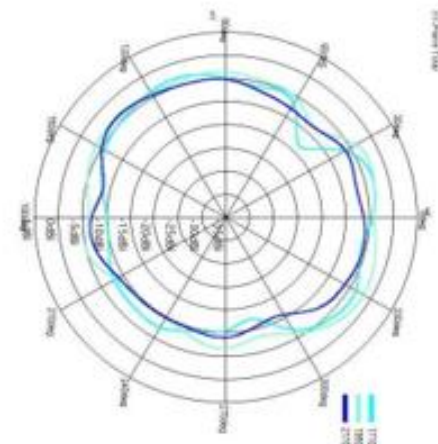
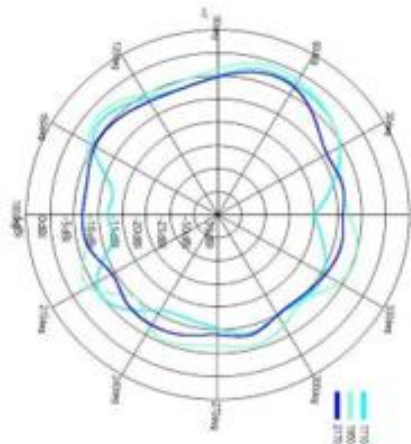
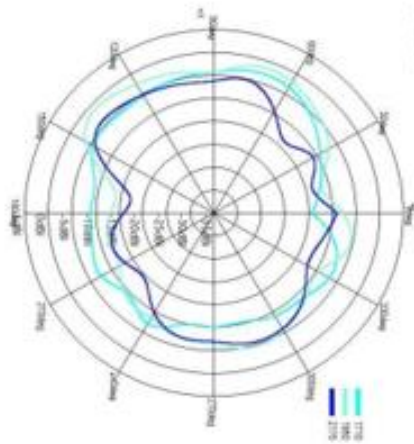


	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
824	-1.12	-4.42	-0.34	-4.36	-1.68	-6.06
880	1.24	-1.99	1.18	-2.49	1.12	-3.22
960	1.76	-1.68	0.57	-2.59	2.11	-3.16

2. Antenna Characteristics

ANT
1710-2170MHz

2.3 2D Radiation Patterns



2.3

	ZX plane		ZY plane		XY plane	
Frequency [MHz]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]	Max Value [dBi]	Average [dBi]
1710	-2.94	-6.97	-2.26	-6.67	-3.11	-6.11
1950	-1.27	-5.22	-1.05	-4.86	-1.70	-4.80
2170	-4.16	-7.92	-3.03	-6.97	-3.62	-6.87

Contact



<http://www.raltron.com>

Raltron Electronics

10400 N.W. 33rd Street

Miami, FL 33172, U.S.A.

Phone: +1-305-593-6033

Fax: +1-305-594-3973