

47 CFR PART 22 SUBPART H

TEST REPORT

of

GSM FWP

Model Name:

FX855P

Brand Name:

MOTOROLA

Report No.:

SZ07050045E1

FCC ID:

VKO-FX855P

prepared for

Brightstar Corporate

2010 NW 84th Avenue, Miami - Florida 33122

Shenzhen Electronic Product Quality Pesting Center

Morlab Laboratory 3/F, Electronic Testing Building Shale Road, Xili,

Nanshan District Shenzhen, 518055 P. R. China











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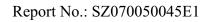
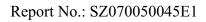




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1. TEST CERTIFICATION

Equipment under Test: GSM FWP

Brand Name: MOTOROLA

Model Name: FX855P

FCC ID: VKO-FX855P

Applicant: Brightstar Corporate

2010 NW 84th Avenue, Miami - Florida 33122

Manufacturer: TeleEpoch Limited

5A,B1 Building, Digital Tech Zone South section, High-Tech park,

Nanshan, Shenzhen, Guangdong Province, China

Test Standards: 47 CFR Part 2

47 CFR Part 15 Subpart B

47 CFR Part 22 Subpart H

Emission Designator 300KGXW

Test Date(s): August 23, 2007 – September 19, 2007

Test Result: PASS

* We Hereby Certify That:

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by:

Ni Yong

Reviewed by:

Wei Yanquan

Chr. /u

Shu Luan



2. GENERAL INFORMATION

2.1 EUT Description

EUT Type GSM Wireless Telephone

Model Name FX855P

Serial No...... (n.a, marked #1 by test site)

IMEI 123456789012347

Frequency Range Tx: 824.20 - 848.80MHz (at intervals of 200kHz);

Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

Power Supply Battery

Mode no.: B0173A

Capacitance: 900mAh/0.2C mA

Rated voltage: 3.6V

Manufacturer: EVE BATTERY CO.,LTD

Manufacturer Address: HUICHENG BLDG. HUITAI INDUSTRIAL

ZONE, HUIZHOU, GUANGDONG, CHINA

Ancillary Equipments 1....... AC Adapter (Charger for Battery)

Model Name: HY0181-A

Serial No.: (n.a. marked #1 by test site)
Rated Input: ~ 100-240V, 0.2A,47-63Hz
Rated Output: = 4.25-4.75V, 500mA

Raica Oaipai. 4.23 4.75 V, 500mm

Manufacturer: SHENZHEN HUAYE NEW TECHNOLOGY

INDUSTRY CO. LTD

Manufacturer Address: NO, 4-7#, Tongfuyu, Industrial, AiqunRoad,

Shiyan, town, Baoan District, Shenzhen

Wire Length: 143cm

- Note 1: The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula F(n)=824.2+0.2*(n-128), 128<=n<=251; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 190 (836.6MHz) and 251 (848.8MHz).
- Note 2: The EUT is equipped with a special USB interface which can be connected to computer by the common USB Adapter Cable, but no USB Adapter will be sold with the phone to the consumer, and the USB interface was just used in the factory with a USB Adapter for program-loading on the assembly line.
- *Note 3:* For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



2.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General
	(10-1-05 Edition)	Rules and Regulations
2	47 CFR Part 15	Radio Frequency Devices
	(10-1-05 Edition)	
3	47 CFR Part 22	Public Mobile Services
	(10-1-05 Edition)	

Test detailed items/section required by FCC rules and results are as below:

No.	Rules	Test Type	Result	Date of Test				
FCC	FCC Part 15 Requirement							
1	§15.107 Conducted Emissions PASS 2007-8							
2	§15.109	Radiated Emissions	PASS	2007-9-7				
FCC	Part 22 Red	quirement						
1	§2.106	Frequencies	PASS	2007-9-3				
	§22.905							
2	§2.1046	Conducted RF Output Power at Antenna Terminal	PASS	2007-9-3				
3	§2.1049	Occupied Bandwidth	PASS	2007-9-3				
4	§2.1051	Conducted Spurious Emission at Antenna Terminal	PASS	2007-9-3				
	§2.1057							
	§22.917							
5	§22.913	Transmitter Radiated Power (EIPR/ERP)	PASS	2007-9-3				
6	§2.1053	Radiated Spurious Emission	PASS	2007-9-4				
	§2.1057							
	§22.917							
7	§2.1055	Frequency Stability	PASS	2007-9-2				
	§22.355							

NOTE:

The tests were performed according to the method of measurements prescribed in ANSI C63.4 2003.



2.3 Facilities and Accreditations

2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center (Morlab) is a testing organization accredited by China National Accreditation Board for Laboratories (CNAL) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, P. R. China. The site was constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22, the FCC registration number is 741109.

2.3.2 Test Equipments

No.	Description	Specification	
1	System Simulator	Manufacturer:	Rohde&Schwarz
		Model No.:	CMU200
		Serial No.:	100448
2	System Simulator	Manufacturer:	Agilent
		Model No.:	E5515C
		Serial No.:	GB43130131
3 Spectrum Analyzer Manufacturer: Agilent		Agilent	
		Model No.:	E7405A
		Serial No.:	US44210471
4	Telecommunication	Manufacturer:	European Antennas
	Antenna	Model No.:	PSA-45010R/356
		Serial No.:	403688-001
5	Trilogy Antenna	Manufacturer:	Schwarzbeck
		Model No.:	VULB 9163
		Serial No.:	9163-274
6	Horn Antenna	Manufacturer:	Schwarzbeck
		Model No.:	BBHA 9120C
		Serial No.:	9120C-384
7	Power Splitter	Manufacturer:	WEINSCHEL
		Model No.:	1506A
		Serial No.:	NW521
8	Anechoic Chamber	Manufacturer:	Albatross Projects GmbH
9	DC Power Supply	Manufacturer:	Good Will Instrument Co., Ltd.
10	Temperature Chamber	Manufacturer:	Chongqing YinHe Experimental Equip. Co., Ltd.



NOTE:

1. Equipments listed above have been calibrated and are in the period of validation.

2.3.3 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	20 - 25
Relative Humidity (%):	40 - 60
Atmospheric Pressure (kPa):	96



3. 47 CFR PART 15B REQUIREMENTS

3.1 General Information

3.1.1 Test Mode

According to the functions of the EUT, several Test Modes listed below should be tested:

"CALL MS BTHS" Test Mode:

The EUT serves mainly as a mobile phone.

The EUT configuration is MS + Battery + Charger. During the measurement, the Charger which is powered by 220V 50Hz AC mains supply keeps charging the emptied Battery.

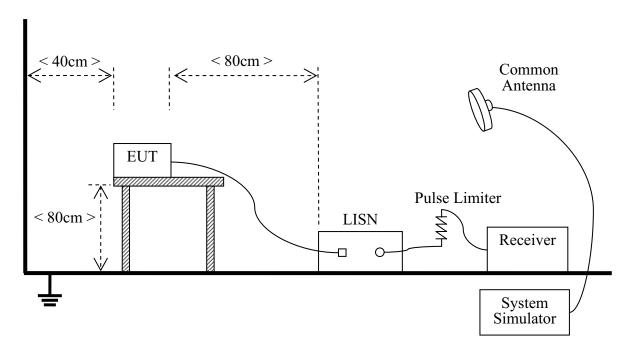
The EUT is commanded via a System Simulator to operate at GSM 850MHz band, and to work at the maximum output power i.e. Power Control Level (PCL) = 5, Power Class = 4; the operating channel number is set to middle ARFCN 190. A call is established between the EUT and the System Simulator.





3.1.2 Test Setup:

3.1.2.1 Conducted Emission Test:



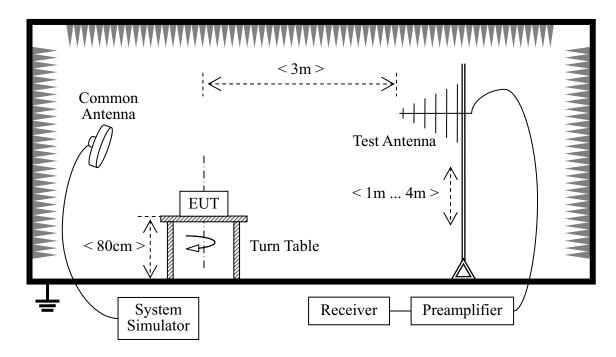
The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides $50\Omega/50\mu H$ of coupling impedance for the measuring instrument. The Common Antenna is used for the call between the EUT and the System Simulator (SS). A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Agilent	E7405A	US44210471	2007.07	1year
LISN	Schwarzbeck	NSLK 8127	812744	2007.08	1 year
Pulse Limiter (20dB)	Schwarzbeck	VTSD 9561-D	9391	(n.a.)	(n.a.)
System Simulator	Agilent	E5515C	GB43130131	2007.06	1year



3.1.2.2 Radiated Emission Test Setup:



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on a variable-height antenna master tower. The Common Antenna is used for the call between the EUT and the System Simulator (SS).

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal.	Cal. Due
				Date	
Receiver	Agilent	E7405A	US44210471	2007.07	1year
Full-Anechoic	Albatross	9m*6m*6m	(n.a.)	2006.08	2year
Chamber					
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2007.07	1 year
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2007.07	1year
System Simulator	Agilent	E5515C	GB43130131	2007.06	1 year

3.2 Conducted Emission

3.2.1 Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the



following table, as measured using a $50\mu H/50\Omega$ line impedance stabilization network (LISN).

Eraguanay ranga (MUz)	Conducted L	imit (dBμV)
Frequency range (MHz)	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
0.50 - 30	60	50

NOTE:

- a) The limit subjects to the Class B digital device.
- b) The lower limit shall apply at the band edges.
- c) The limit decreases linearly with the logarithm of the frequency in the range 0.15 0.50MHz.

3.2.2 Test Description

See section 3.1.2.1 of this report.

3.2.3 Test Result

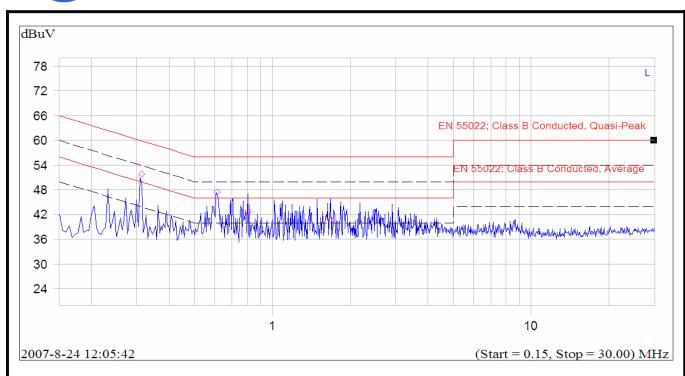
The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.

Test Verdict Recorded for Suspicious Points

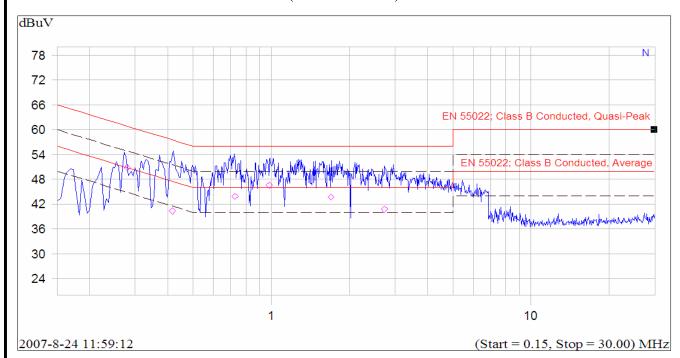
No.	@Frequency	Measured Emission Level (dBμV) Limit (dBμV)					Verdict	
INO.	(MHz)	PK	QP	AV	Phase	QP	AV	verdict
1	0.314	51.9	46.7	31.2	L	59.9	49.9	PASS
2	0.612	47.5	44.4	33.6	L	56.0	46.0	PASS
3	0.809	42.8	34.5	22.7	L	56.0	46.0	PASS
4	1.680	40.7	35.1	22.0	L	56.0	46.0	PASS
5	0.279	50.9	43.0	24.3	N	60.9	50.9	PASS
6	0.417	40.3	31.9	24.0	N	57.5	47.5	PASS
7	0.725	43.8	37.6	23.2	N	56.0	46.0	PASS
8	0.984	46.6	35.3	22.5	N	56.00	46.00	PASS
9	1.700	43.7	35.9	22.4	N	56.00	46.00	PASS
10	2.726	40.8	32.9	21.9	N	56.00	46.00	PASS

Test Plot





(Plot A: L Phase)



(Plot B: N Phase)



3.3 Radiated Emission

3.3.1 Requirement

According to FCC section 15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Fraguency range (MUz)	Field S	trength
Frequency range (MHz)	μV/m	dBμV/m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

NOTE:

- a) Field Strength $(dB\mu V/m) = 20*log[Field Strength (\mu V/m)].$
- b) In the emission tables above, the tighter limit applies at the band edges.

3.3.2 Test Description

See section 3.1.2.2of this report.

3.3.3 Test Result

The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

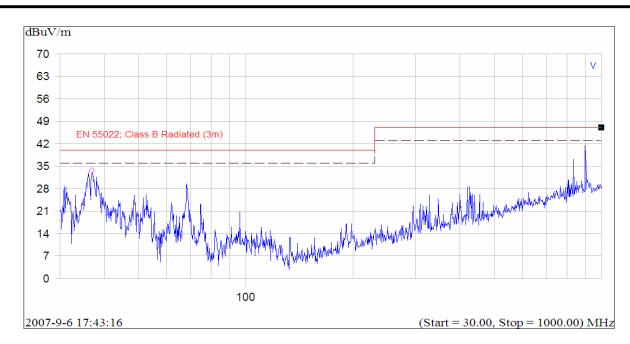
Test Verdict Recorded for Suspicious Points

No.	@Frequency	E	Emission Leve	l (dBμV/m)	Quasi-Peak	Result
INO.	(MHz)	PK	QK	Antenna Polarization	Limit (dBµV/m)	Result
1	36.881	33.6		Vertical	40.0	PASS
2	198.262	33.2	30.3	Horizontal	40.0	PASS

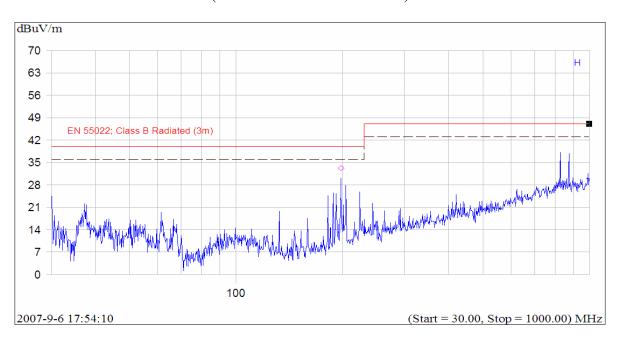
Test Plot

Note: Following is the plots for emission measurement; please note that marked spikes with circle should be ignored because they are MS and SS carrier frequency.





(Plot A: Test Antenna Vertical)



(Plot B: Test Antenna Horizontal)





4. 47 CFR PART 2, PART 22H REQUIREMENTS

4.1 Frequencies

4.1.1 Requirement

According to FCC section 22.905, the frequency blocks assignment for the cellular radiotelephone service is listed as below:

(a) Channel Block A:

Mobile 824 - 835MHz, Base 869 - 880MHz;

Mobile 845 - 846.5MHz, Base 890 - 891.5MHz

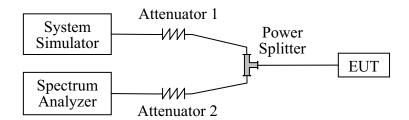
(b) Channel Block B:

Mobile 835 - 845 MHz, Base 880 - 890MHz;

Mobile 846.5 - 849 MHz, Base 891.5 - 894MHz

4.1.2 Test Description

1. Test Setup:



The EUT, which is powered by the Battery, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2007.06	1year
Spectrum Analyzer	Agilent	E7405A	US44210471	2007.07	1year
Power Splitter	Weinschel	1506A	NW521	(n.a.)	(n.a.)
Attenuator 1	Resnet	20dB	(n.a.)	(n.a.)	(n.a.)
Attenuator 2	Resnet	3dB	(n.a.)	(n.a.)	(n.a.)



4.1.3 Test Result

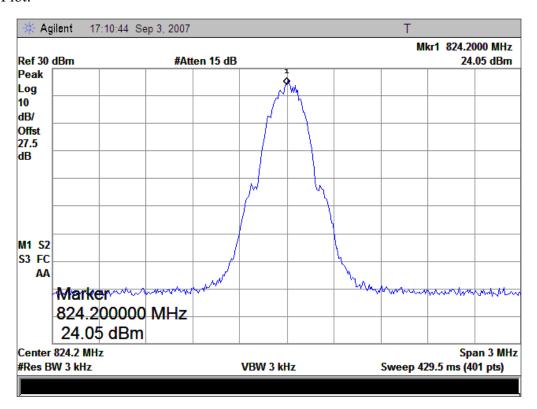
The Tx frequency arrangement of the Cellular 850MHz band employed by the EUT should be from 824.2MHz to 848.8MHz (the corresponding frequency block is from 824MHz to 849MHz). Here the lowest and highest channels are tested to verify the EUT's using the frequency block required.

1. Test Verdict:

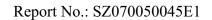
The required frequency block is employed legally, the verdict is PASS.

Channel	Frequency (MHz)	Measured Carrier (dBm)	Refer to Plot
128	824.2	24.05	Plot A
251	848.8	24.31	Plot B

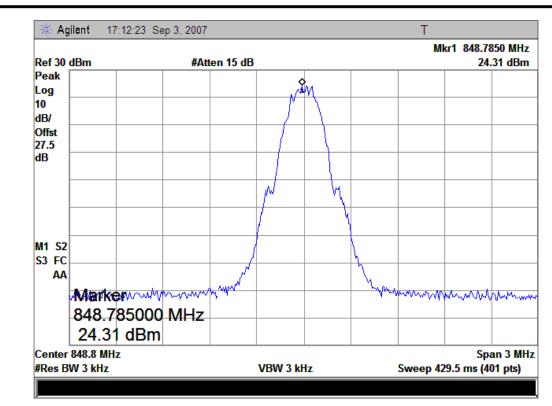
2. Test Plot:



(Plot A: Channel = 128)







(Plot B: Channel = 251)



4.2 Conducted RF Output Power

4.2.1 Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

4.2.2 Test Description

See section 4.1.2of this report.

4.2.3 Test Result

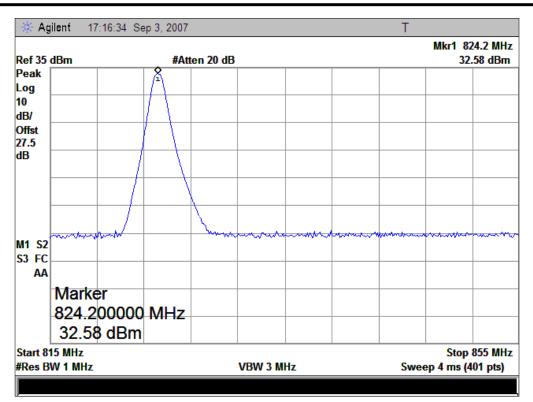
Here the lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT. For the mobile phone operates at PCL=5 (where Power Class is 4), the rated conducted RF output power is 33dBm within the tolerance of ± 3 dB.

1. Test Verdict:

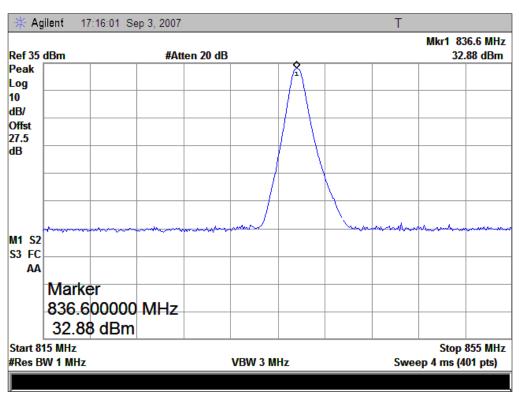
Channal	Channal Fraguency (MHz)		ed Output Power	Rated	Verdict	
Channel Frequency (MHz)		dBm	Refer to Plot	dBm	Tolerance (dB)	verdict
128	824.2	32.58	Plot A			PASS
190	836.6	32.88	Plot B	33	±3	PASS
251	848.8	33.30	Plot C			PASS

2. Test Plot:



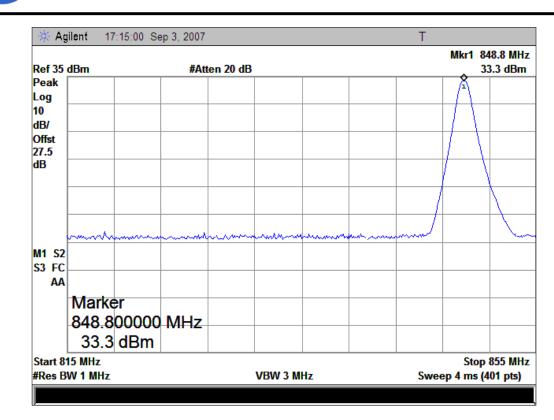


(Plot A: Channel = 128)



(Plot B: Channel = 190)





(Plot C: Channel = 251)



4.3 20dB Occupied Bandwidth

4.3.1 Definition

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Occupied bandwidth is also known as the 99% emission bandwidth, or 20dB bandwidth (10*log1% = 20dB) taking the total RF output power as reference.

4.3.2 Test Description

See section 4.1.2 of this report.

4.3.3 Test Verdict

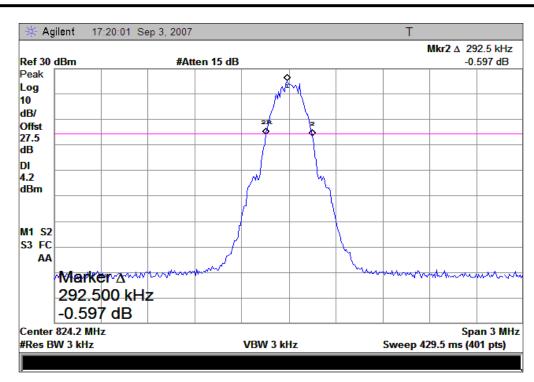
Here the lowest, middle and highest channels are tested to record the 20dB occupied bandwidth, it's about 300kHz.

1. Test Verdict:

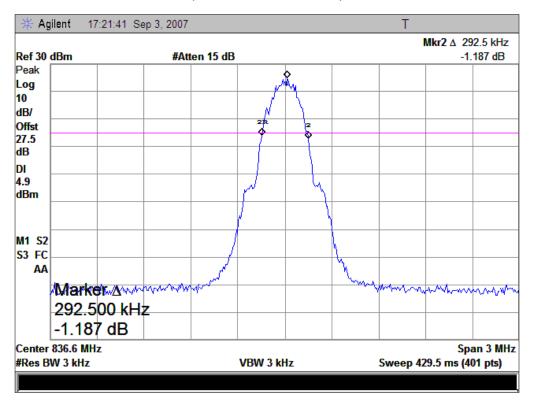
Channel	Frequency (MHz)	quency (MHz) Measured 20dB Occupied Bandwidth (kHz)	
128	824.2	292.5	Plot A
190	836.6	292.5	Plot B
251	848.8	292.5	Plot C

2. Test Plot:

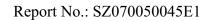




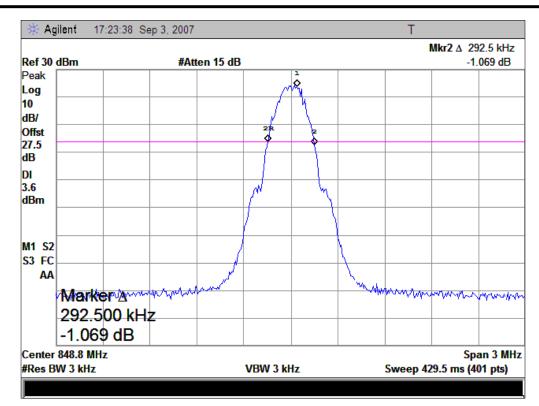
(Plot A: Channel = 128)



(Plot B: Channel = 190)







(Plot C: Channel = 251)



4.4 Frequency Stability

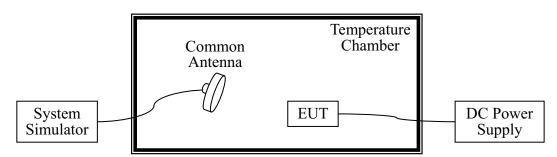
4.4.1 Requirement

According to FCC section 22.355, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

4.4.2 Test Description

1. Test Setup:



The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS via a Common Antenna.

2. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2007.06	1year
DC Power Supply	Good Will	GPS-3030DD	EF920938	2007.06	2year
Temperature	YinHe Experimental	HL4003T	(n.a.)	2007.03	1 year
Chamber	Equip.				

4.4.3 Test Verdict

The nominal, highest and lowest extreme voltages are separately 3.7VDC, 4.2VDC and 3.6VDC, which are specified by the applicant; the normal temperature here used is 25°C. The frequency



deviation limit is ± 2.5 ppm.

Test	Conditions			Frequency	Deviation			
Power	Power Tomporatura		Channel = 128		Channel = 190		Channel = 251	
(VDC)	Temperature	(824.2	2MHz)	(836.6	MHz)	(848.8	BMHz)	Verdict
(VDC)	(°C)	Hz	Limit	Hz	Limit	Hz	Limit	
	-30	-15.46		14.78		-13.31		
	-20	12.55		-10.05		-11.86		
	-10	12.17		-8.45		10.04		
	0	9.80		9.52		8.34		
3.7	+10	-7.45		8.79		10.26		
	+20	-11.54	±2060.5	9.51	±2091.5	17.70	±2122.0	PASS
	+30	14.21		-9.69		16.38		
	+40	10.27		-11.94		-14.09	1	
	+50	-16.51		-12.22		-11.63		
4.2	+25	-17.54		15.39		10.93		
3.6	+25	-15.60		-13.24		8.82		



4.5 Conducted Out of Band Emissions

4.5.1 Requirement

According to FCC section 22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

4.5.2 Test Description

See section 4.1.2 of this report.

4.5.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

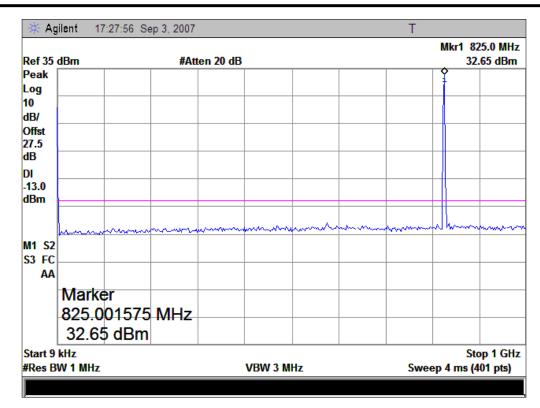
1. Test Verdict:

Channel	Frequency (MHz)	Measured Max. Spurious Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
128	824.2		Plot A.1/A.2		PASS
190	836.6		Plot B.1/B.2	-13	PASS
251	848.8		Plot C.1/C.2		PASS

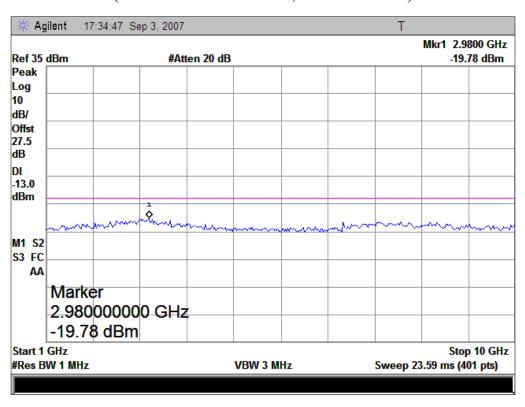
2. Test Plot for the Whole Measurement Frequency Range:

Note: the power of the EUT transmitting frequency should be ignored.



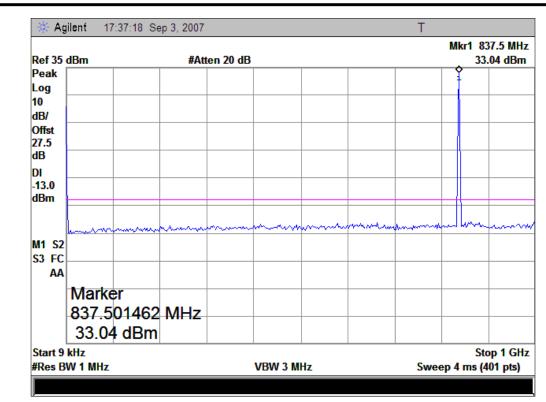


(Plot A.1: Channel = 128, 30MHz to 1GHz)

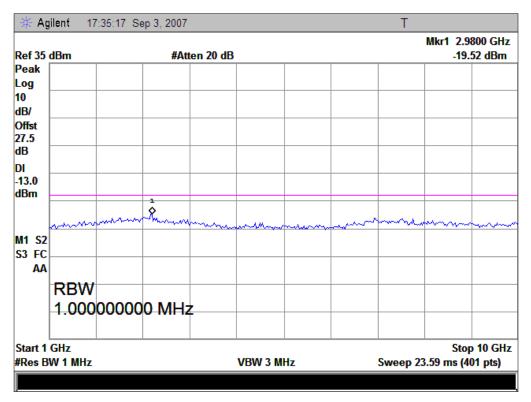


(Plot A.2: Channel = 128, 1GHz to 10GHz)



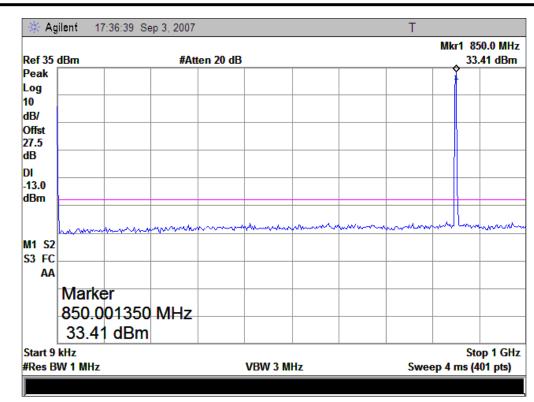


(Plot B.1: Channel = 190, 30MHz to 1GHz)

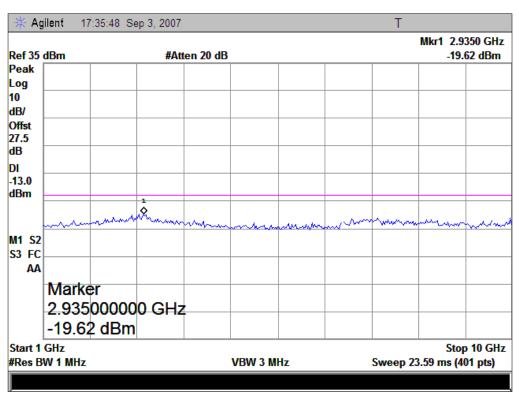


(Plot B.2: Channel = 190, 1GHz to 10GHz)





(Plot C.1: Channel = 251, 30MHz to 1GHz)



(Plot C.2: Channel = 251, 1GHz to 10GHz)



4.6 Band Edge

4.6.1 Requirement

According to FCC section 22.917(b), in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth (26dB emission bandwidth) of the fundamental emission of the transmitter may be employed.

4.6.2 Test Description

See section 4.1.2 of this report.

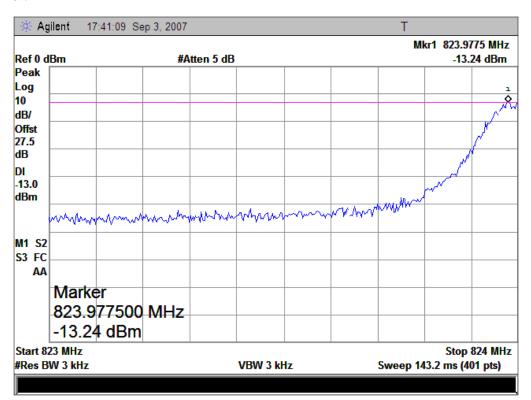
4.6.3 Test Result

The lowest and highest channels are tested to verify the band edge emissions.

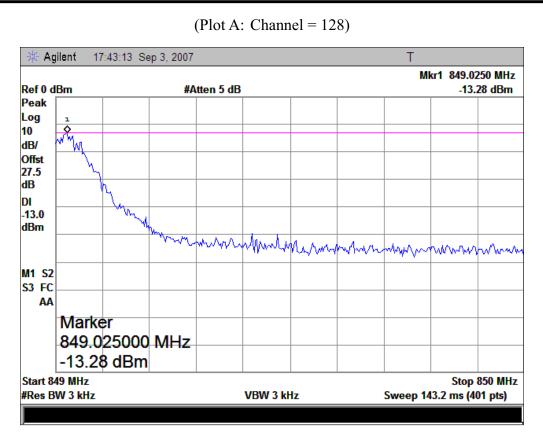
1. Test Verdict:

Channel	Frequency (MHz)	Measured Max. Band Edge Emission (dBm)	Refer to Plot	Limit (dBm)	Verdict
128	824.2	-13.24	Plat A	12	PASS
251	848.8	-13.28	Plot B	-13	PASS

2. Test Plot:







(Plot B: Channel = 251)



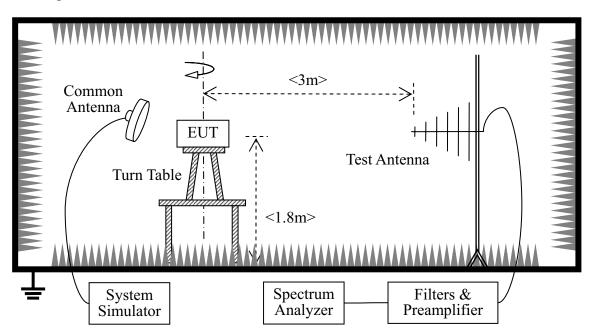
4.7 Transmitter Radiated Power (EIRP/ERP)

4.7.1 Requirement

According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts.

4.7.2 Test Description

1. Test Setup:



The EUT, which is powered by the Battery charged with the AC Adapter, is located in a 3m Full-Anechoic Chamber; the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS via a Common Antenna.

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) or a Horn one (used for above 3GHz), and it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

2. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Agilent	E5515C	GB43130131	2007.06	1year
Spectrum Analyzer	Agilent	E7405A	US44210471	2007.07	1year
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2006.08	2year



Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2007.07	1 year
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2007.07	1 year

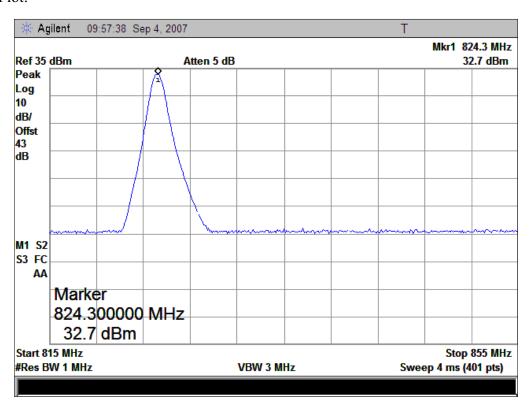
4.7.3 Test Result

The Turn Table is actuated to turn from 0° to 360° , and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

1. Test Verdict:

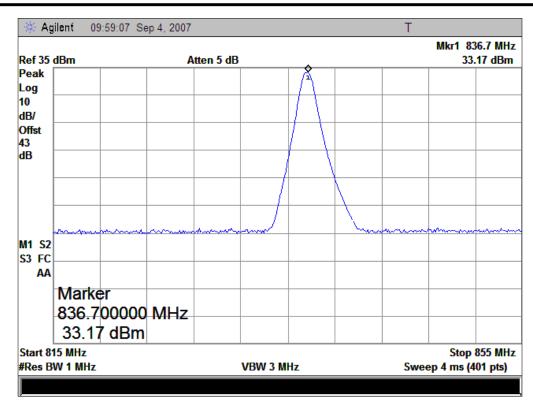
Channel Frequency (MHz)			Measured	ERP	Liı	nit	Verdict
		dBm	W	Refer to Plot	dBm	W	verdict
128	824.20	32.70	1.86	Plot A			PASS
190	836.60	33.17	2.07	Plot B	38.45	7	PASS
251	848.80	32.88	1.94	Plot C			PASS

2. Test Plot:

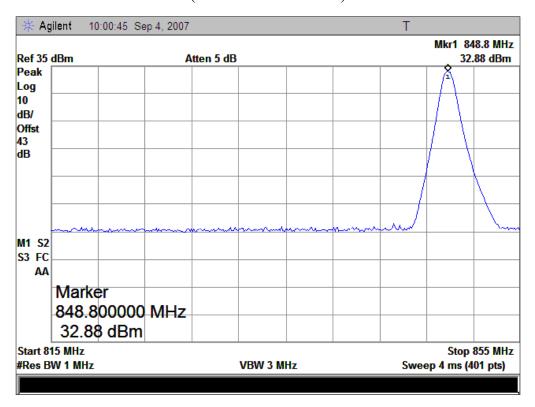


(Plot A: Channel = 128)





(Plot B: Channel = 190)



(Plot C: Channel = 251)



4.8 Radiated Out of Band Emissions

4.8.1 Requirement

According to FCC section 22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

4.8.2 Test Description

See section 4.7.2 of this report.

4.8.3 Test Result

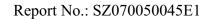
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested to verify the out of band emissions.

1. Test Verdict:

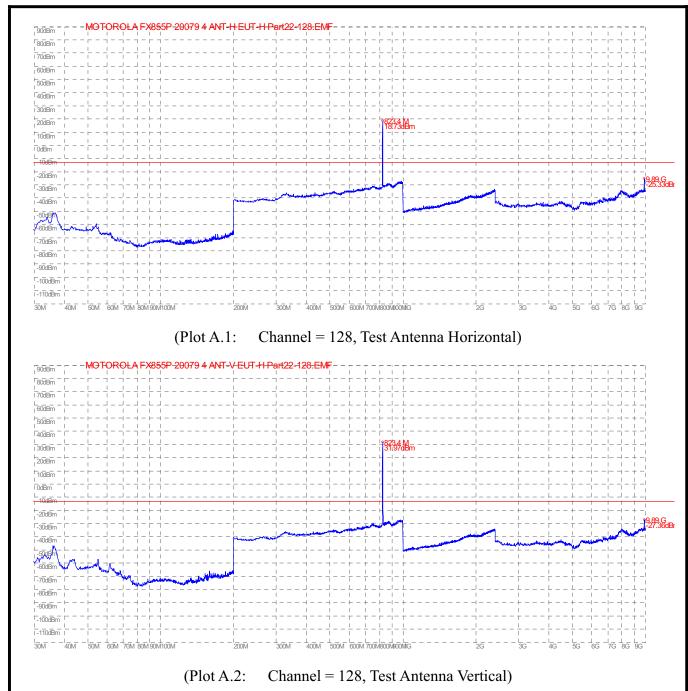
Frequency			ax. Spurious			
Channel	(MHz)	Emission (dBm) Test Antenna Test Antenna		Refer to Plot	Limit (dBm)	Verdict
	Но		Vertical			
128	824.2	< -20	< -20	Plot A.1/A.2		PASS
190	836.6	< -20	< -20	Plot B.1/B.2	-13	PASS
251	848.8	< -20	< -20	Plot C.1/C.2		PASS

2. Test Plot for the Whole Measurement Frequency Range:

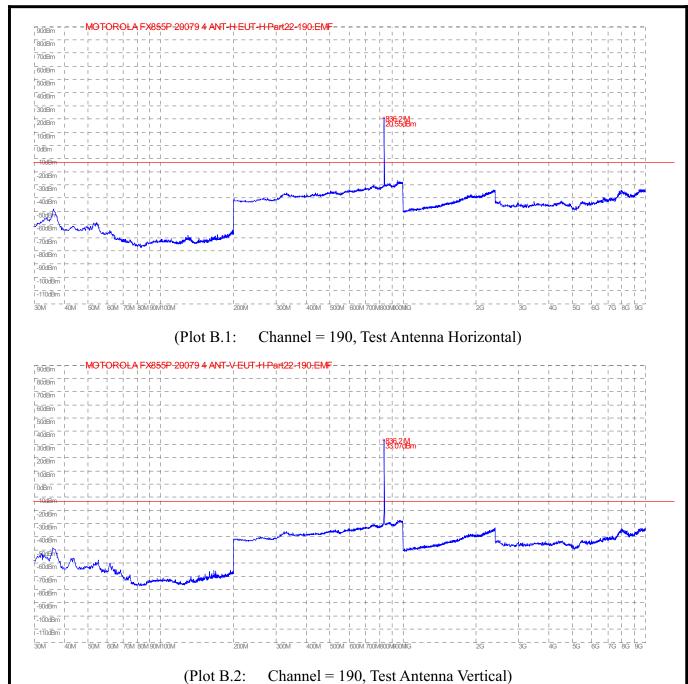
Note: the power of the EUT transmitting frequency should be ignored.

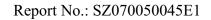




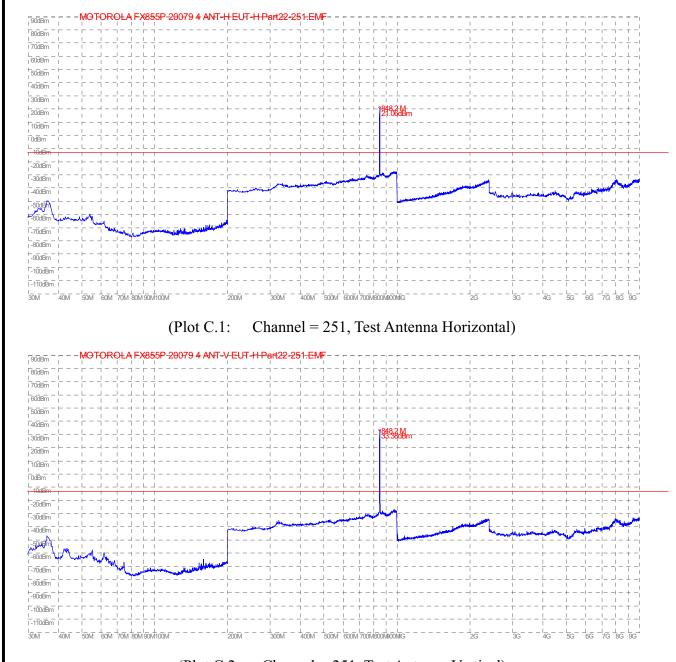












(Plot C.2: Channel = 251, Test Antenna Vertical)

** END OF REPORT **