Pegasus Technologies, Inc.
FCC Part 15, Certification Application
PT11MH

UST Project: 07-0186
Issue Date: August 17, 2007

3505 Francis Circle Alpharetta, GA 30004
PH: 770-740-0717 Fax: 770-740-1508
www.ustech-lab.com

Testing Tomorrow's Technology

I certify that I am authorized to sign for the manufacturer and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

UNITED STATES TECHNOLOGIES, INC. (AGENT RESPONSIBLE FOR TEST):

By: _____

Name: Louis A. Feudi

Title: VP / Operations & Engineering

Date: August 17, 2007

Pegasus Technologies, Inc.
108 Pawnook Farm Road
Lenoir City, TN 37771

By: _____

Name: _____

Title: _____

Date: _____

3505 Francis Circle Alpharetta, GA 30004
PH: 770-740-0717 Fax: 770-740-1508
www.ustech-lab.com

MEASUREMENT/TECHNICAL REPORT

This report concerns (check one): Original grant_X
Class II change_____

Equipment type:
Spread-Spectrum Frequency Hopping RF modem that operates in the 902-928 MHz ISM band

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? yes_____ No_X

If yes, defer until:_____
date

__N.A.__ agrees to notify the Commission by__N.A.
date
of the intended date of announcement of the product so that the grant can be issued on that date.

Report prepared by:

United States Technologies, Inc.
3505 Francis Circle
Alpharetta, GA 30004

Phone Number: (770) 740-0717
Fax Number: (770) 740-1508

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GENERAL INFORMATION

GENERAL INFORMATION

1.1 Product Description

The Equipment Under Test (EUT) is the Pegasus Technologies, Inc. PT11MH. The EUT is a Spread-Spectrum Frequency Hopping Data Transceiver Module operating in the 902-928 MHz ISM band.

1.2 Related Submittal(s)/Grant(s)

The EUT will be used to send/receive data. The transceiver presented in this report will be used with other like transceivers:

The EUT is subject to the following authorizations:

a) Certification as a transceiver (modular approval)
b) Verification as a digital device

The information contained in this report is presented for the certification & verification authorization(s) for the EUT. The manufacturer desires to seek a modular approval on this device.

SECTION 2

TESTS AND MEASUREMENTS

TEST AND MEASUREMENTS

2.1 Configuration of Tested System

The sample was tested per ANSI C63.4, Methods of Measurement from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (2003). Conducted and radiated emissions data were taken with the test receiver or spectrum analyzer's resolution bandwidth adjusted to 9 kHz and 120 kHz, respectively. All measurements are peak unless stated otherwise. The video filter associated with the spectrum analyzer was off throughout the evaluation process. Interconnecting cables were manipulated as necessary to maximize emissions. Bock diagrams of the tested systems are shown in Figures 1a and 16. Test configuration photographs for spurious and fundamental emissions are shown in Figure 2a -g.

The sample used for testing was received by U.S. Technologies on June 29, 2007 in good condition.

2.2 Test Facility

Testing was performed at US Tech's measurement facility at 3505 Francis Circle, Alpharetta, GA. This site has been fully described and registered with the FCC, under designation number US5117. Additionally this site has also been fully described and submitted to Industry Canada (IC), and has been approved under file number 2982A-1.

2.3 Test Equipment

Table 2 describes test equipment used to evaluate this product.

2.4 Modifications

No modifications were made by US Tech, to bring the EUT into compliance with FCC Part 15, Class B Limits for the transmitter portion of the EUT or the Class B Digital Device Requirements.

FIGURE 1
TEST CONFIGURATION

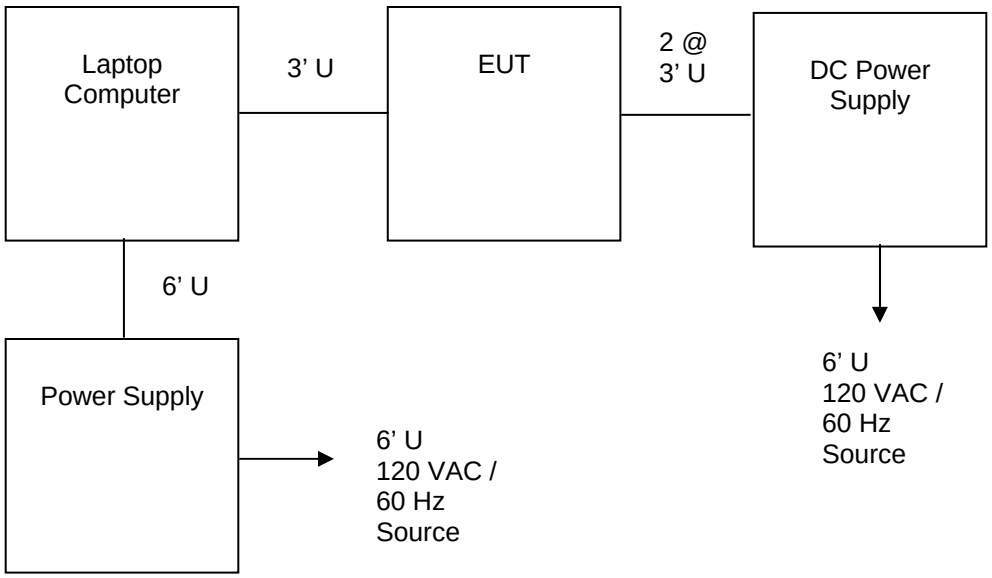


TABLE 1

EUT and Peripherals

PERIPHERAL MANU.	MODEL NUMBER	SERIAL NUMBER	FCC ID:	CABLES P/D
Transmitter (EUT) Pegasus Technologies, Inc.	PT11MH	None	QLBPT11MH (Pending)	3' U
AC Adapter Compaq Computer Corp	PPP014L	PA-1900-15C2	None	6' U 120 VAC/ 60 Hz Power Cord
Laptop Computer IBM	Thinkpad	78-RG537	None	6' U
DC Power Supply TekPower	HY 1803D	1072531	None	2@ 3' U 6' U 120 VAC/ 60 Hz Power Cord

TABLE 2
TEST INSTRUMENTS

EQUIPMENT	MODEL NUMBER	MANUFACTURER	SERIAL NUMBER	DATE OF LAST CALIBRATION
SPECTRUM ANALYZER	8558B	HEWLETT-PACKARD	2332A10055	3/28/07
SPECTRUM ANALYZER	8593E	HEWLETT-PACKARD	3205A00124	07/16/07
SIGNAL GENERATOR	8648B	HEWLETT-PACKARD	3642U01679	10/13/06
RF PREAMP	8447D	HEWLETT-PACKARD	2944A06291	6/14/07
BICONICAL ANTENNA	3110B	EMCO	9307-1431	10/11/06
LOG PERIODIC	3146	EMCO	3110-3236	09/15/05 2 Yr.
LISN (x 2) 8028-50-TS24-BNC	8028	SOLAR ELE.	910494 & 910495	05/10/07
HORN ANTENNA	3115	EMCO	6107-3723	10/16/07
PREAMP	8449B	HEWLETT PACKARD	3008A00480	08/10/06
CALCULATION PROGRAM	N/A	N/A	Ver. 6.0	N/A

2.6 Antenna Description (Paragraph 15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

Pegasus Technologies, Inc. Corporation will sell the PT11MH with the following antenna.

MANUFACTURER	TYPE OF ANTENNA	MODEL	GAIN dB	TYPE OR CONNECTOR
Mobile Antennas				
Pegasus Technologies, Inc.	Monopole	¼ Wave	Approximately 1.2 dBi	Reverse Polarity SMA connector

To ensure compliance with 15.203, Pegasus Technologies, Inc. Corporation attaches reverse-sex TNC or N connectors to all antennas.

The customer then purchases an adapter cable from Pegasus Technologies, Inc. Corporation that will connect the MMCX port on the module to the reverse-sex connector on the antenna. No other type of commercially available antenna will attach to this reverse-sex TNC or N connector. Given the nonstandard nature of the interconnect between module and antenna and the difficulty involved in circumventing that connection, Pegasus Technologies, Inc. Corporation feel that this procedure meets the requirements called out in 15.203.

For this evaluation only one antenna is provided or approved for use with the PT11MH
.

2.7 Peak power within the band 902 – 928 MHz per FCC Section 15.247(b)

Peak power within the band 902 – 928 MHz has been measured with a spectrum analyzer by connecting the spectrum analyzer directly via a short cable to the antenna output terminals or across the antenna leads on the PCB as specified by the manufacturer. The spectrum analyzer was set for a 50 Ω impedance with the VBW ≥ RBW 6 dB bandwidth. The results of the measurements are given in Table 3 and Figure 3a1 through Figure 3a3.

Fundamental Frequencies were measured at Low Channel, Mid Channel, and High Channel.

Results shown are the measured and plotted values– cable loss (0.1 dB with short cable).

TABLE 3a
PEAK POWER OUTPUT

Frequency of Fundamental (MHz)	Measurement (dBm)*	Measurement (mW)*	FCC Limit (Watt)
902.9.52	27.16	520	1.0
915.020	27.37	546	1.0
926.950	27.06	508	1.0

*** Measurement includes 0.1 dB for cable loss**

Test Date: August 7, 2007

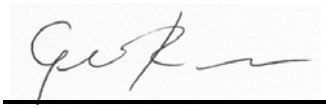
Tester Signature:  **Name: Gersop Riera**

Figure 3a1.
Peak Power per FCC Section 15.247(b) (Low Channel)

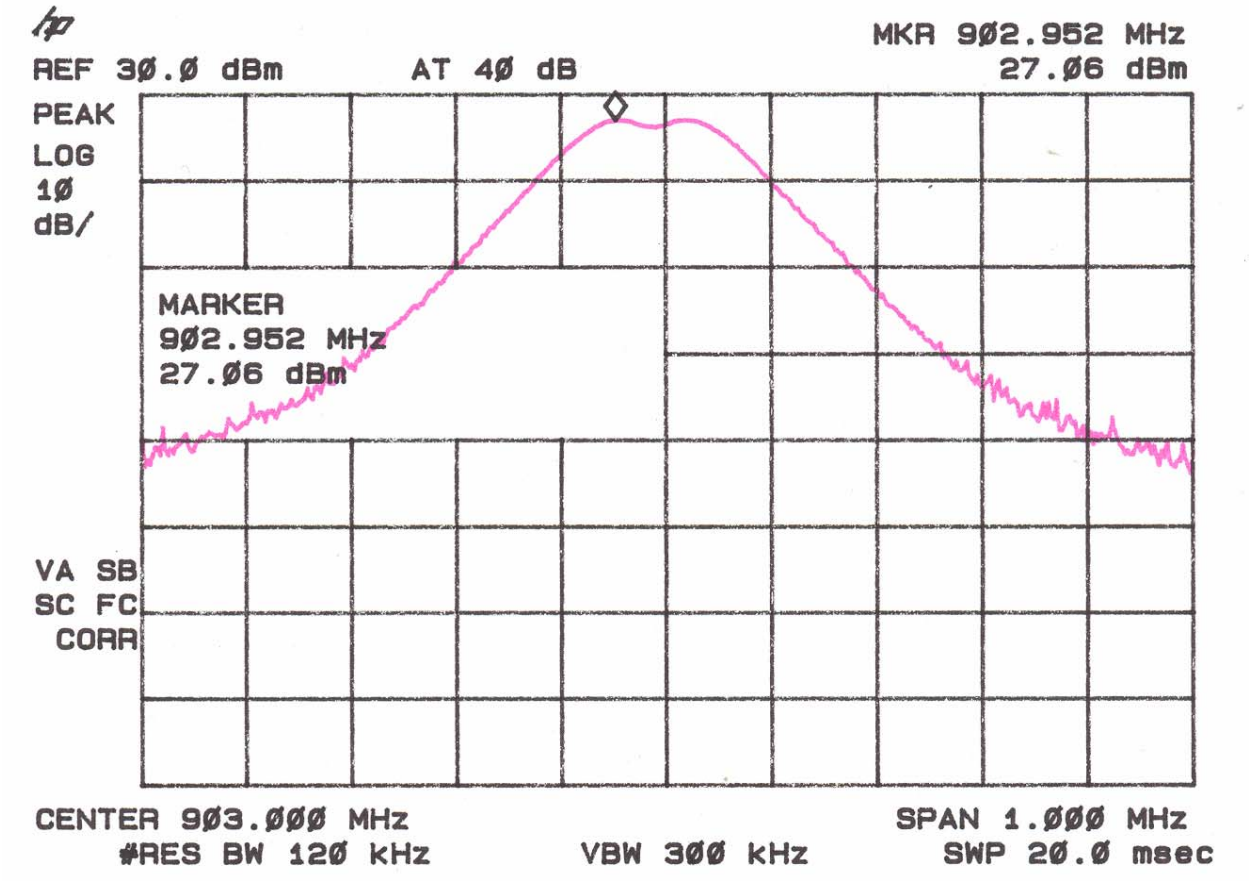


Figure 3a2.
Peak Power per FCC Section 15.247(b) (Mid Channel)

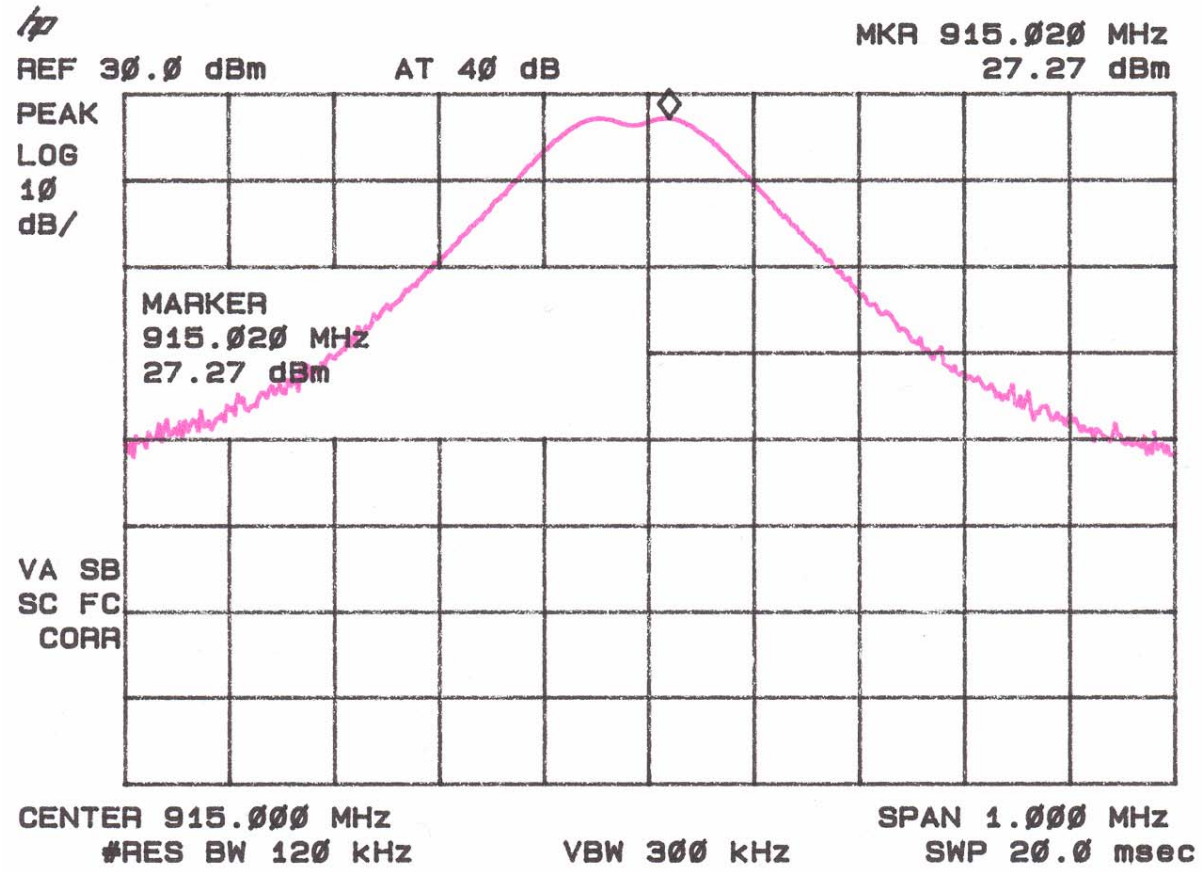
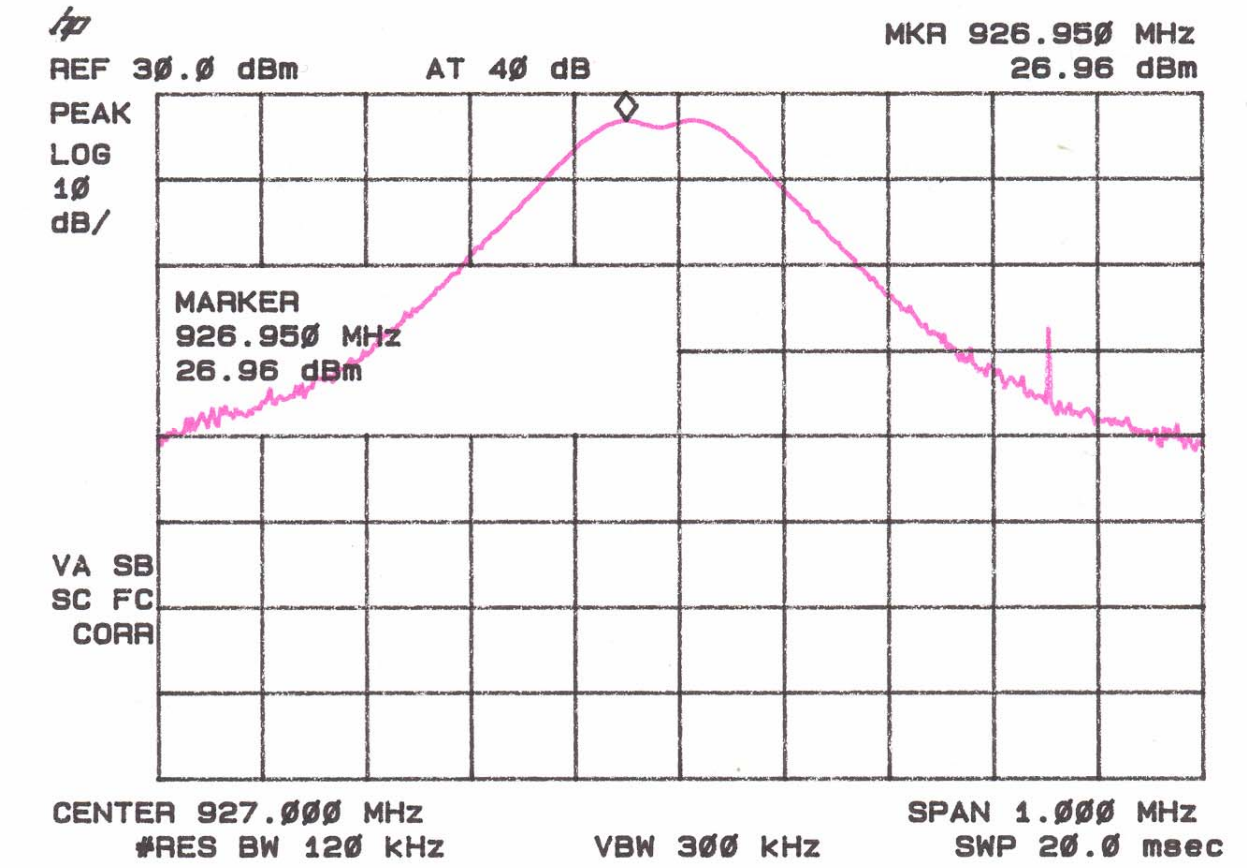


Figure 3a3.
Peak Power per FCC Section 15.247(b) (High Channel)



2.8 Antenna Conducted Spurious Emission the Frequency Range 30 – 25000 MHz (FCC Section 15.247(c))

Spurious emissions in the frequency range 30 – 25000 MHz have been measured with a spectrum analyzer by connecting the spectrum analyzer directly via a short cable to the antenna output terminals or across the antenna leads on the PCB as specified by the manufacturer. The spectrum analyzer was set for a 50 Ω impedance with the RBW = 100 kHz & VBW> RBW. All spurious emissions were measured to be greater than 20 dB down from the fundamental. The results or conducted spurious emissions are given in Figure 4a through 4l.

Figure 4a
Antenna Conducted Spurious Emissions 15.247(c) (Low Channel)

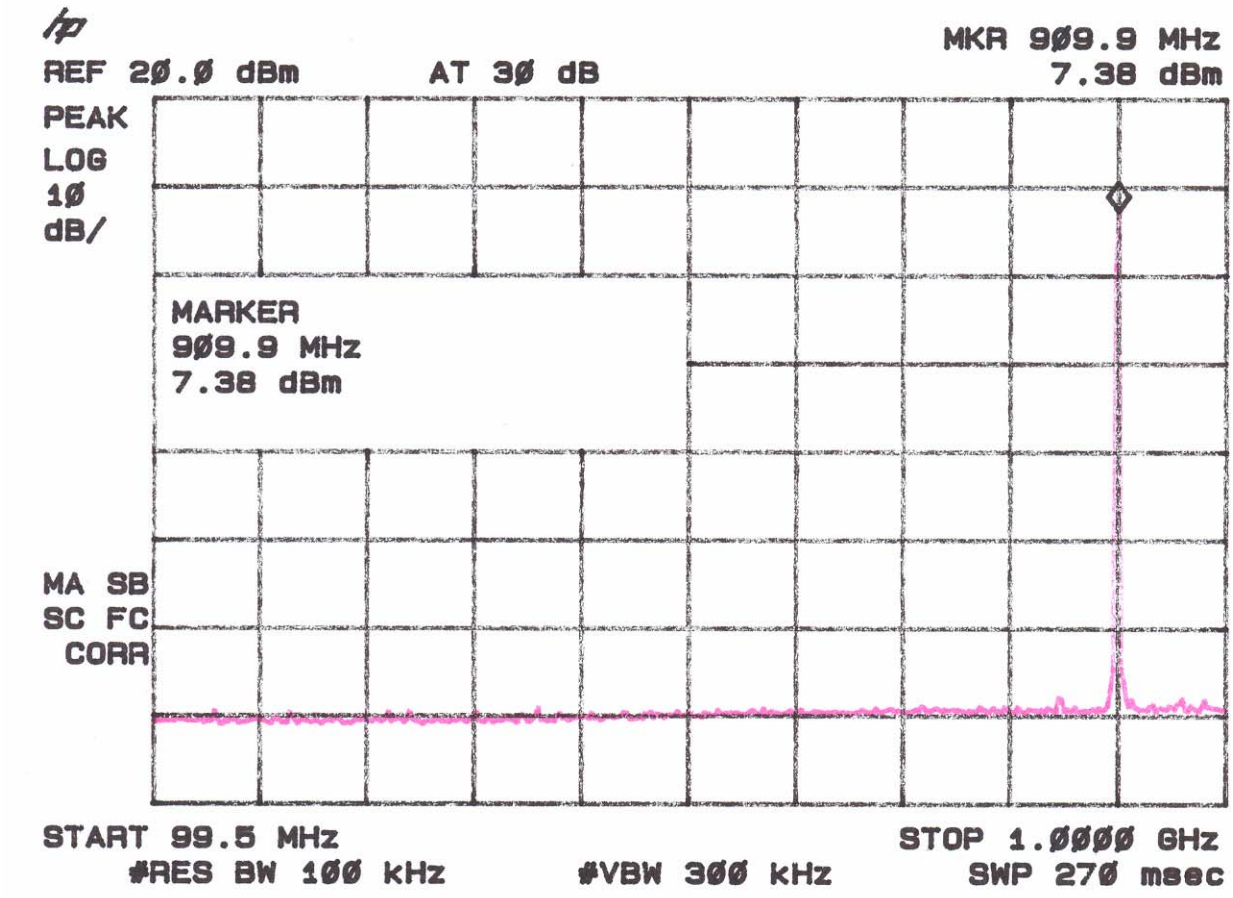


Figure 4b
Antenna Conducted Spurious Emissions 5.247(c) (Low Channel)

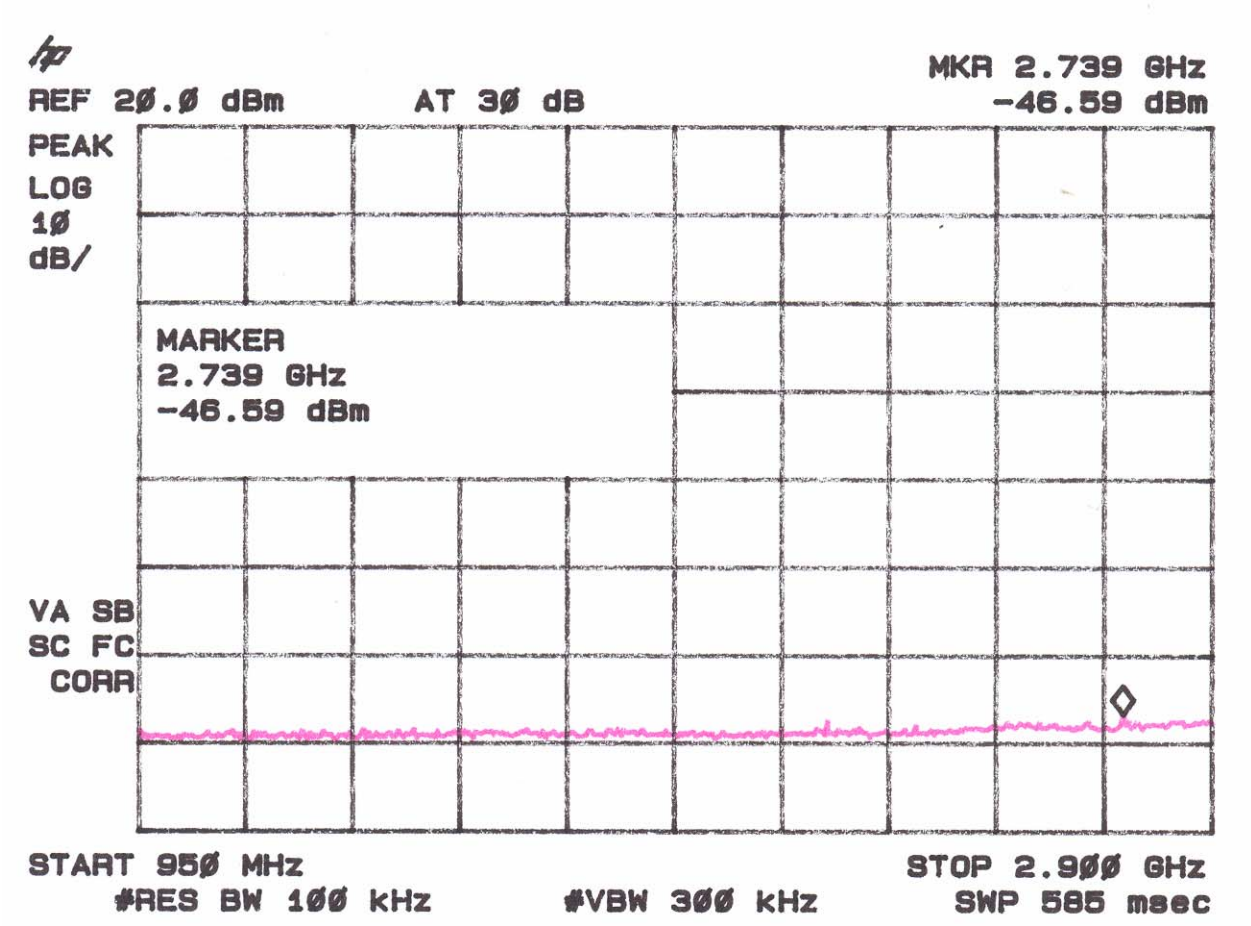


Figure 4c
Antenna Conducted Spurious Emissions 15.247(c) (Low Channel)

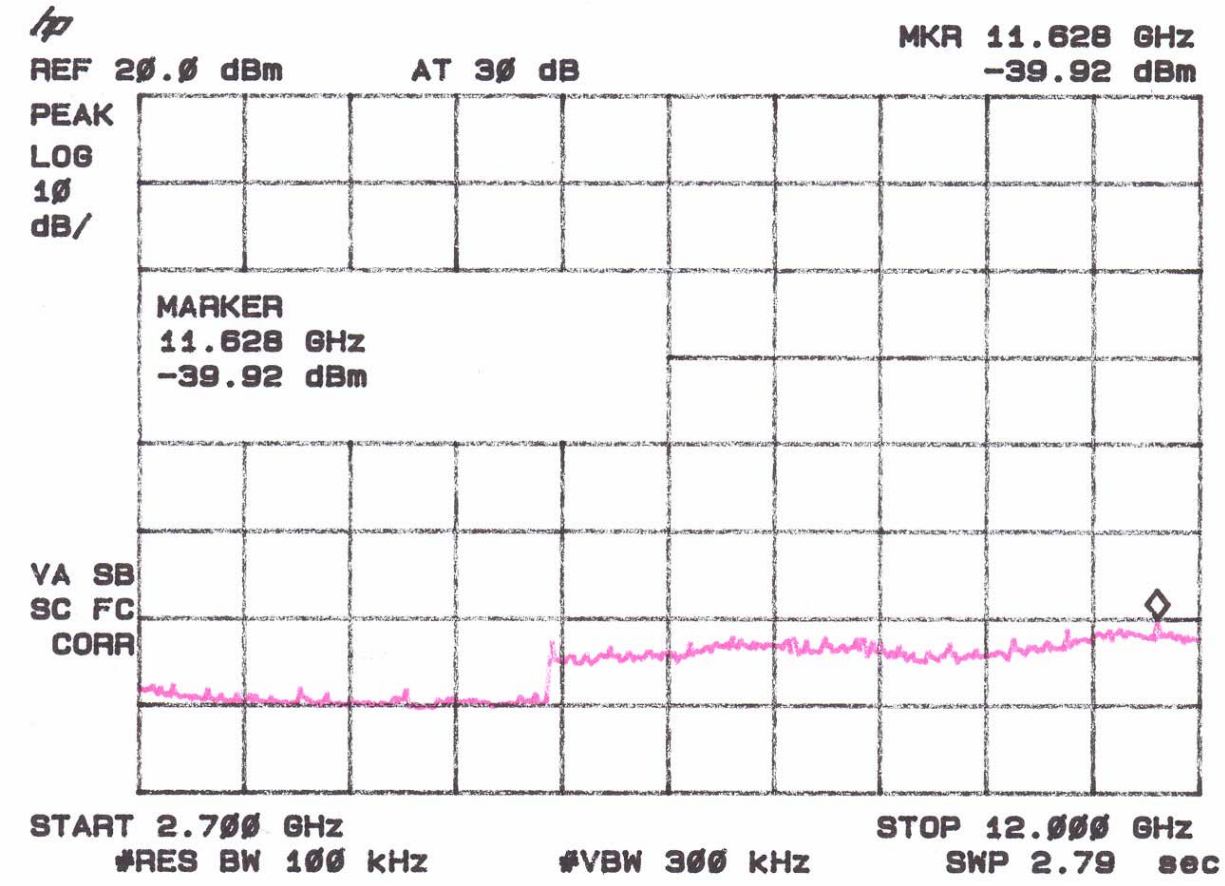


Figure 4d
Antenna Conducted Spurious Emissions 15.247(c)) (Mid Channel)

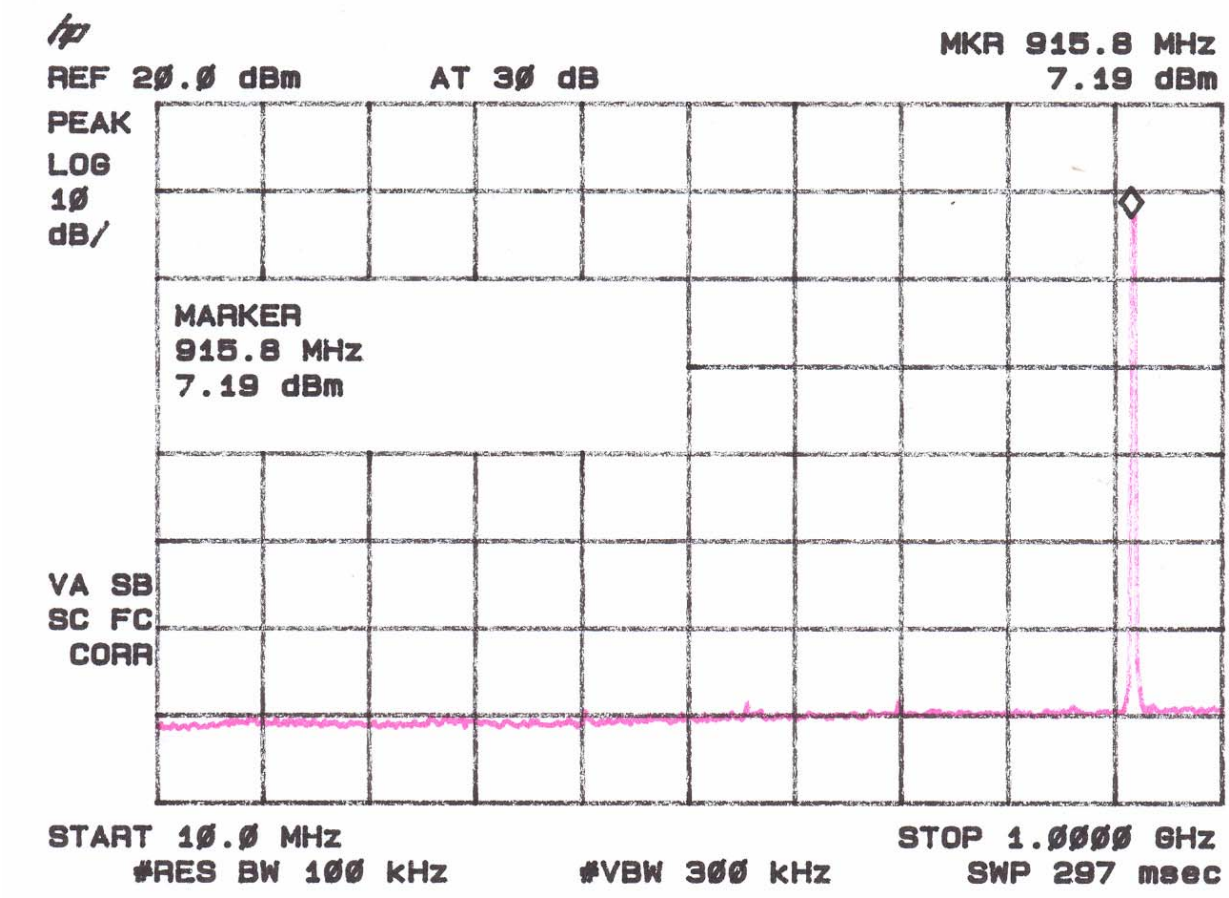


Figure 4e
Antenna Conducted Spurious Emissions 15.247(c) (Mid Channel)

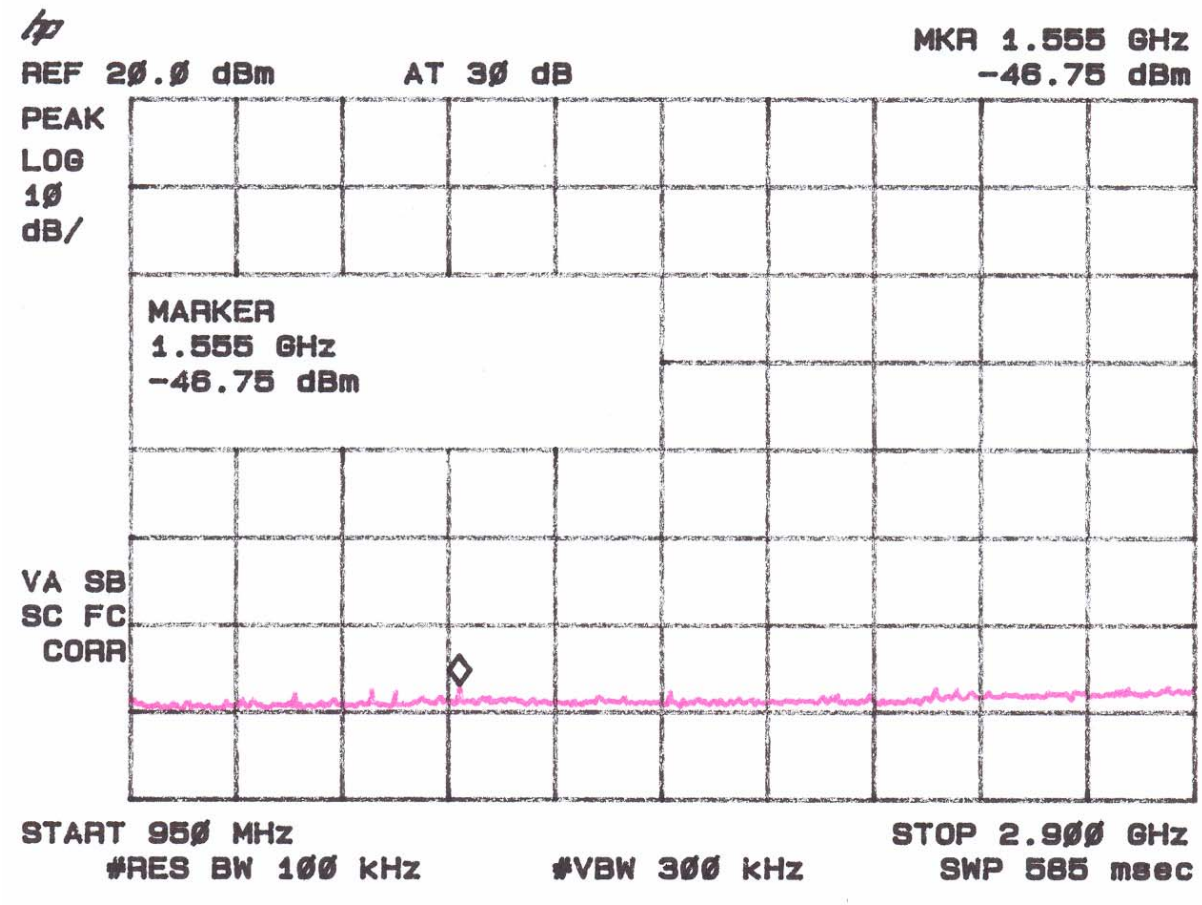


Figure 4f
Antenna Conducted Spurious Emissions 15.247(c) (Mid Channel)

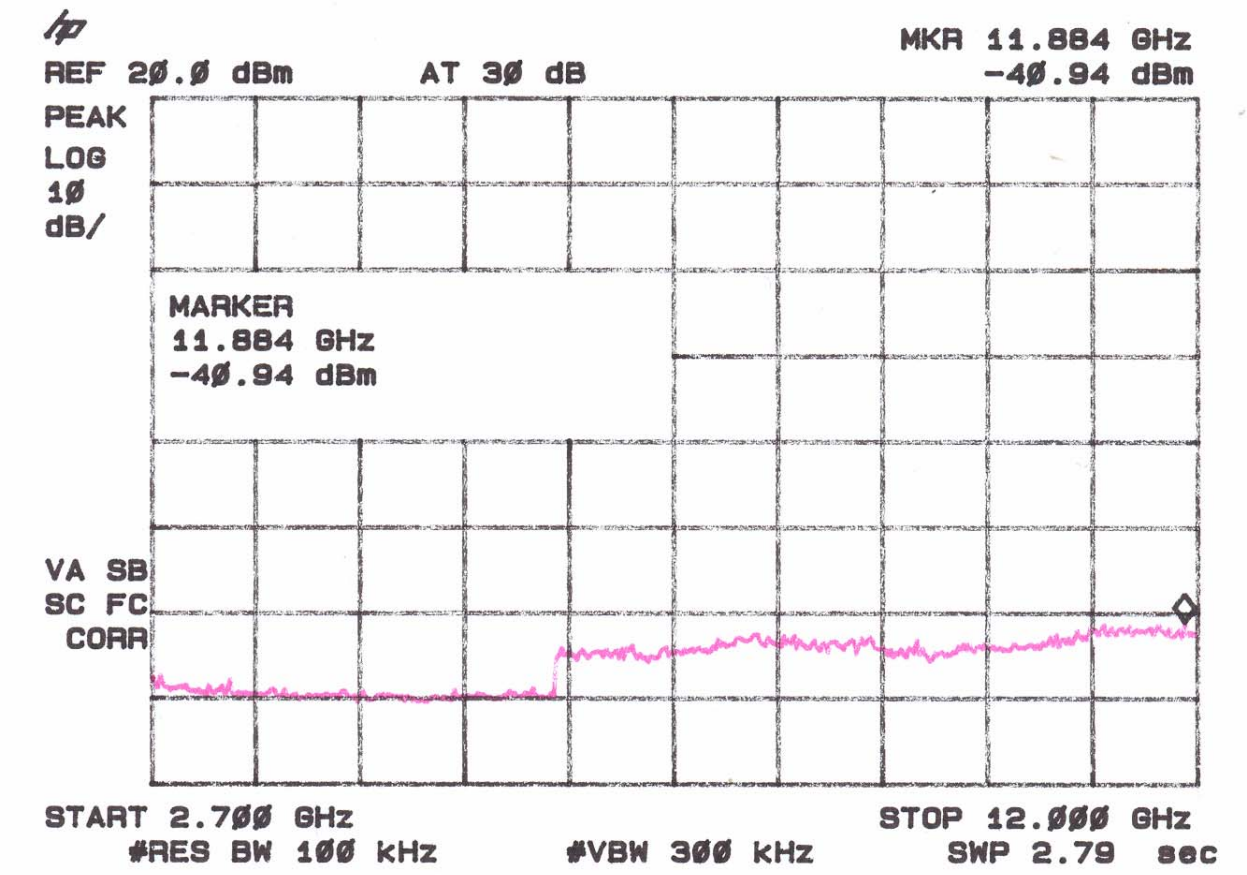


Figure 4g
Antenna Conducted Spurious Emissions 15.247(c) (High Channel)

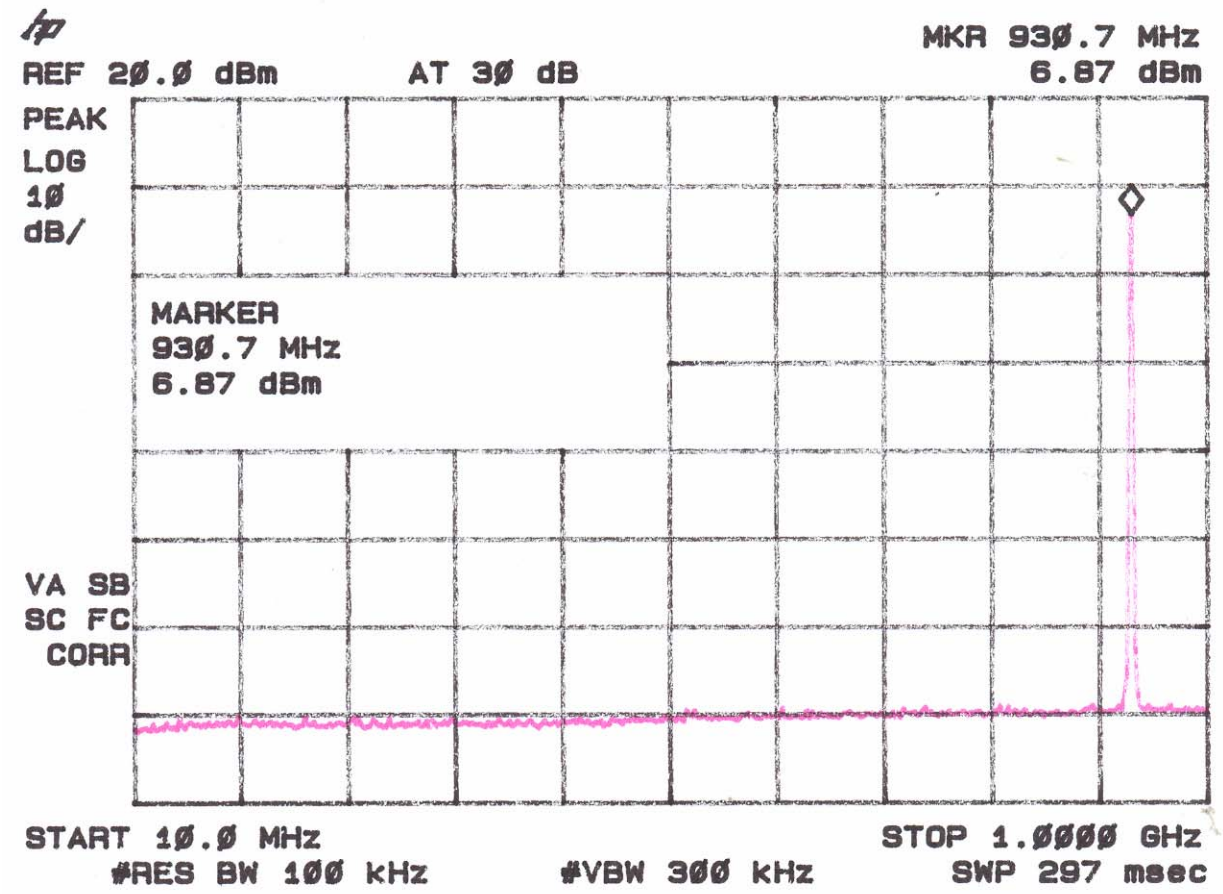


Figure 4h
Antenna Conducted Spurious Emissions 15.247(c) (High Channel)

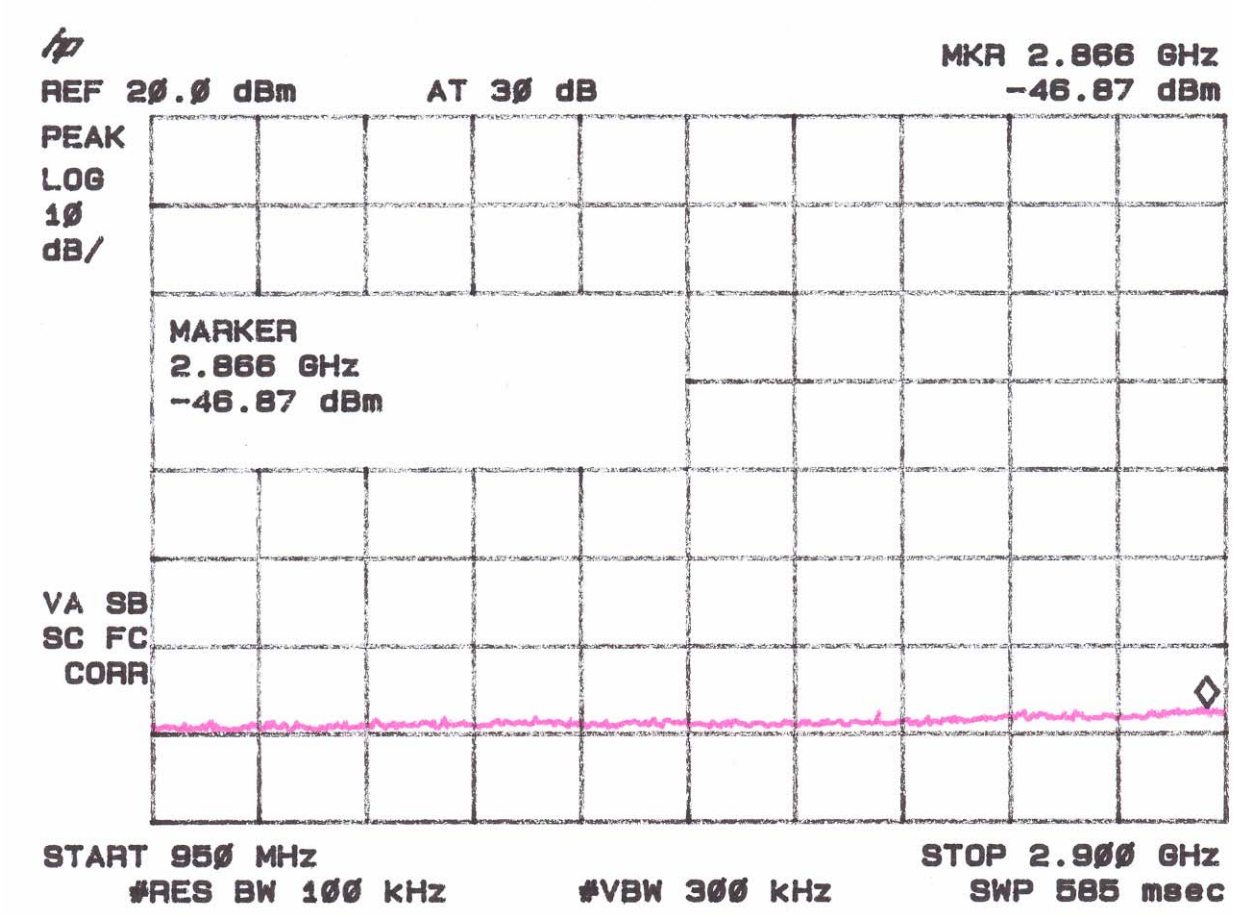
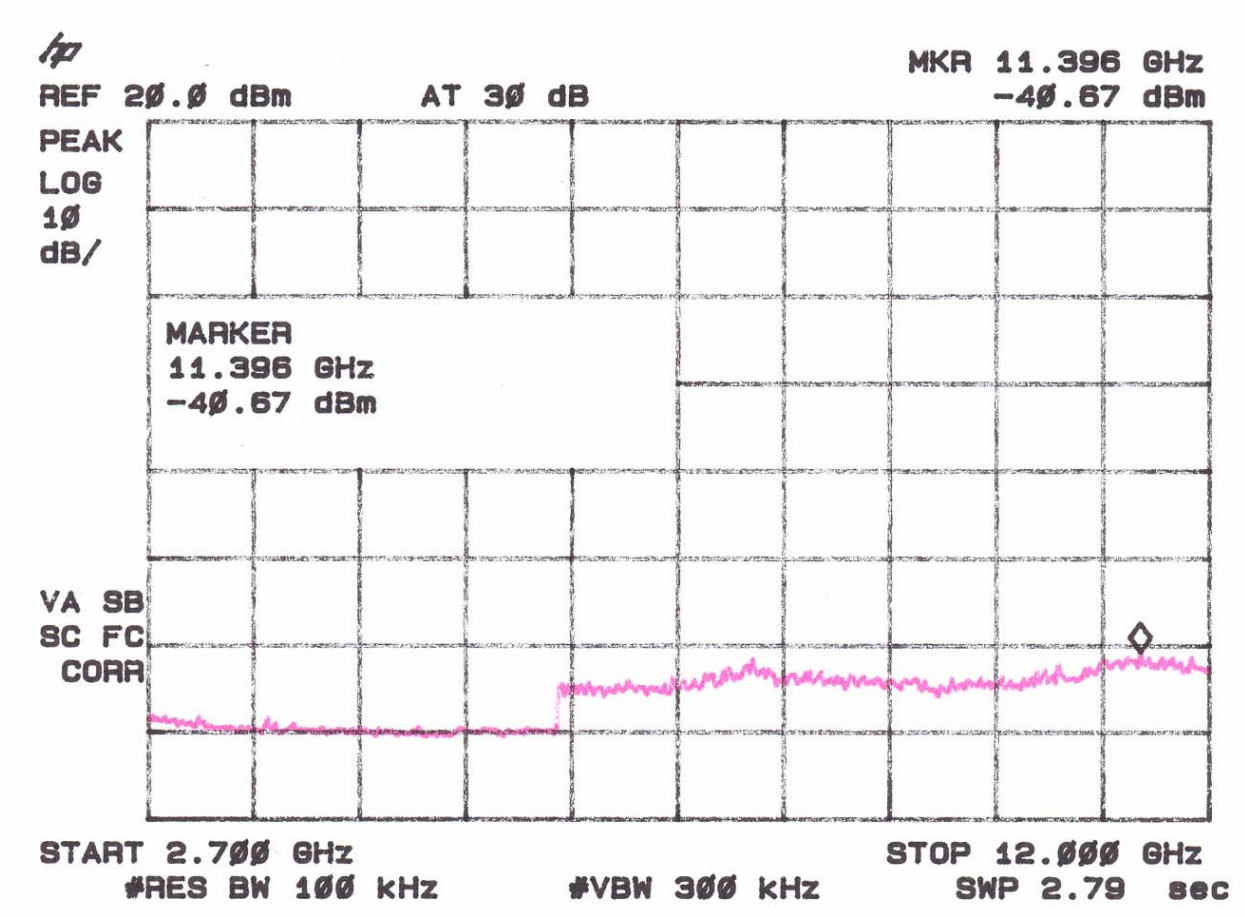


Figure 4i
Antenna Conducted Spurious Emissions 15.247(c) (High Channel)



2.9 Peak Radiated Spurious Emission in the Frequency Range 30 -25000 MHz (FCC Section 15.247(c))

The EUT was hop-stopped and when possible, placed into a continuous transmit mode of operation. A preliminary scan was performed on the EUT to determine frequencies that were caused by the transmitter portion of the product. Significant emissions that fell within restricted bands were then measured on an OAT's site. Radiated measurements below 1 GHz were tested with a RBW = 120 kHz. Radiated measurements above 1 GHz were measured using a RBW = VBW = 1 MHz. The results of peak radiated spurious emissions falling within restricted bands are given in Table 4a –4g and Figure 5a – Figure 5ai.

Table 4a. PEAK RADIATED SPURIOUS EMISSIONS Low Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Spurious Emissions- Low Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
902.96	-11.2	2LP3mH	95.8	29.2	1778279.0		3m./HORZ		**PK**
1805.965	-47.2	1HN3mV	59.8	-4.6	575.7	177828.0	3m./VERT	**49.8**	**PK**
2708.956	-45.9	1HN3mV	61.1	-1.6	939.7	5000.0	3m./VERT	**14.5**	**PK**
3611.958	-68.3	1HN3mV	38.7	2.2	110.4	5000.0	3m./VERT	**33.1**	**PK**
4515.951	-62.7	1HN3mV	44.3	4.2	266.3	5000.0	3m./VERT	**25.5**	**PK**
5417.949	-67.4	1HN3mV	39.6	6.9	209.7	5000.0	3m./VERT	**27.5**	**PK**
6320.983	-54.3	1HN3mV	52.7	8.1	1090.8	177828.0	3m./VERT	**44.2**	**PK**
7224.003	-66.2	1HN3mV	40.8	9.6	330.1	5000.0	3m./VERT	**23.6**	**PK**
8126.983	-61.9	1HN3mV	45.1	11.0	636.8	177828.0	3m./VERT	**48.9**	**PK**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-47.2 + -4.6 + 107)/20) = 575.7
CONVERSION FROM dBm TO dBuV = 107 dB

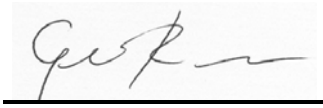
Tester Signature:  **Name: Gersop Riera**

Figure 5a
Peak Radiated Spurious Emission 15.247(c) Fundamental Low

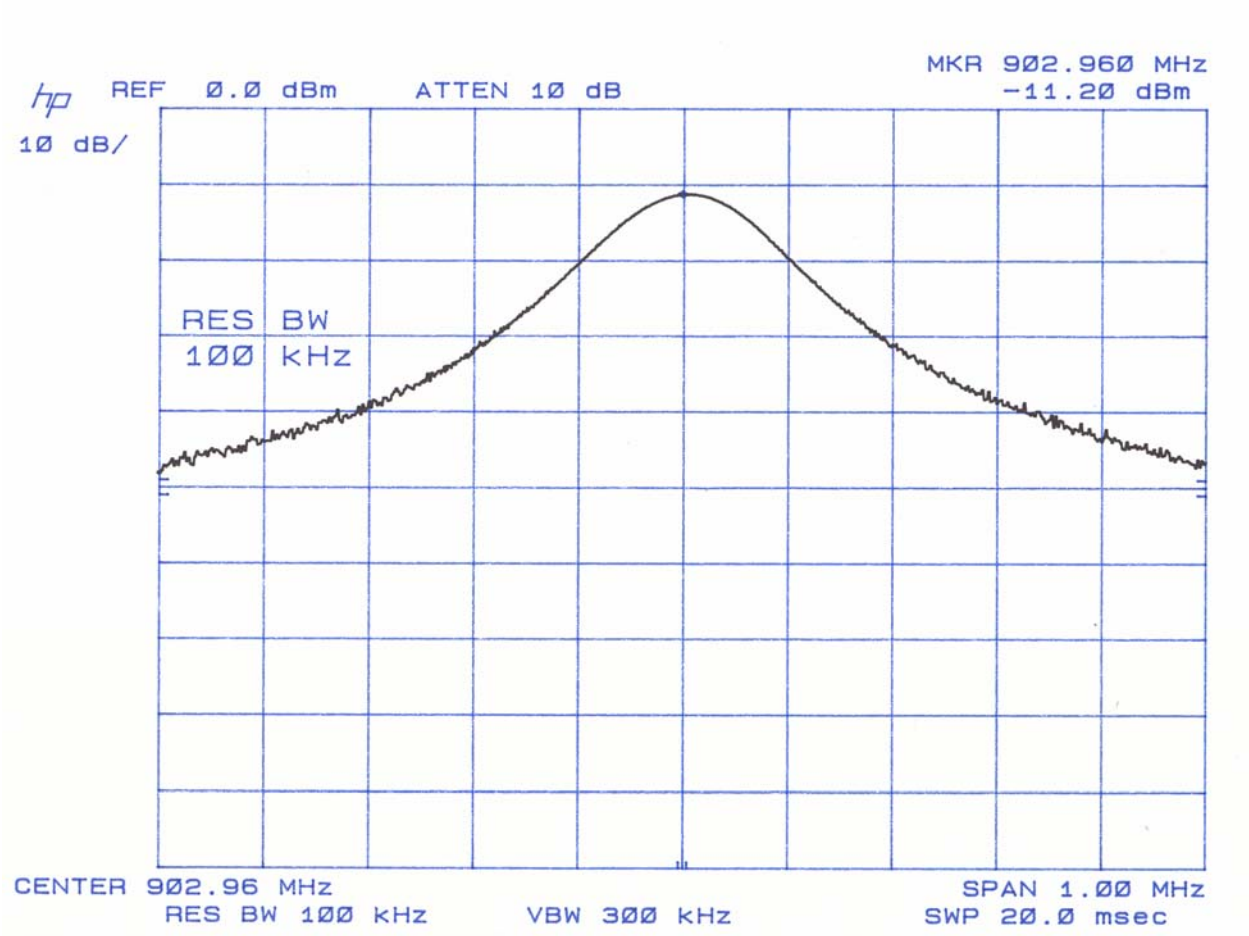


Table 4b. PEAK RADIATED SPURIOUS EMISSIONS Mid Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Spurious Emissions- Mid Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
914.96	-12.0	2lp3mh	95.0	29.4	1659587.0		3m./HORZ		**PK**
1829.96	-49.2	1HN3mV	57.8	-4.5	464.9	165958.7	3m./VERT	**51.1**	**PK**
2744.948	-49.1	1HN3mV	57.9	-1.5	660.6	5000.0	3m./VERT	**17.6**	**PK**
3659.954	-70.1	1HN3mV	36.9	2.4	92.1	5000.0	3m./VERT	**34.7**	**PK**
4574.946	-60.2	1HN3mV	46.8	4.4	363.4	5000.0	3m./VERT	**22.8**	**PK**
5489.937	-67.7	1HN3mV	39.3	7.0	206.5	165958.7	3m./VERT	**58.1**	**PK**
6404.972	-54.9	1HN3mV	52.1	8.1	1020.9	165958.7	3m./VERT	**44.2**	**PK**
7319.958	-59.2	1HN3mV	47.8	9.9	760.8	5000.0	3m./VERT	**16.4**	**PK**
8234.95	-67.0	1HN3mV	40.0	11.2	360.4	5000.0	3m./VERT	**22.8**	**PK**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-49.2 + -4.5 + 107)/20) = 464.9
CONVERSION FROM dBm TO dBuV = 107 dB

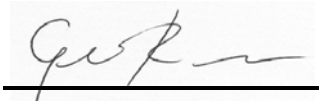
Tester Signature:  **Name: Gersop Riera**

Figure 5b
Peak Radiated Spurious Emission 15.247(c) Fundamental Mid

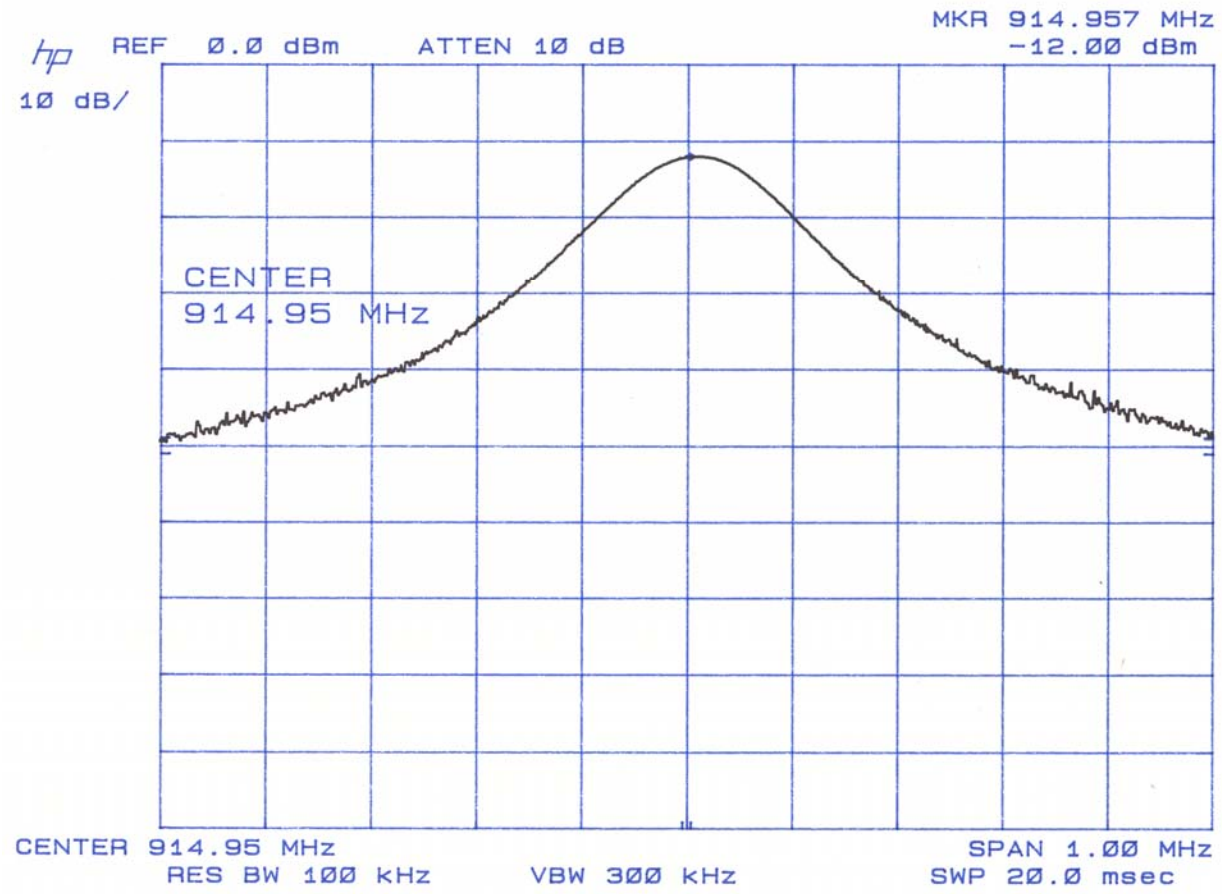


Table 4c. PEAK RADIATED SPURIOUS EMISSIONS High Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Spurious Emissions- High Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
926.96	-12.6	2lp3mh	94.4	29.6	158489.31		3m./HORZ		**PK**
1853.955	-51.1	1HN3mV	55.9	-4.3	379.7	158489.3	3m./VERT	**52.4**	**PK**
2780.948	-50.2	1HN3mV	56.8	-1.4	591.4	5000.0	3m./VERT	**18.5**	**PK**
3707.931	-69.6	1HN3mV	37.4	2.6	100.0	5000.0	3m./VERT	**34.0**	**PK**
4634.932	-60.6	1HN3mV	46.4	4.7	355.2	5000.0	3m./VERT	**23.0**	**PK**
5561.93	-67.9	1HN3mV	39.1	7.2	205.1	158489.3	3m./VERT	**57.8**	**PK**
6488.943	-57.2	1HN3mV	49.8	8.1	785.7	158489.3	3m./VERT	**46.1**	**PK**
7415.957	-66.3	1HN3mV	40.7	10.1	345.9	5000.0	3m./VERT	**23.2**	**PK**
8342.926	-62.2	1HN3mV	44.8	11.3	637.7	5000.0	3m./VERT	**17.9**	**PK**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-51.1 + -4.3 + 107)/20) = 379.7
CONVERSION FROM dBm TO dBuV = 107 dB

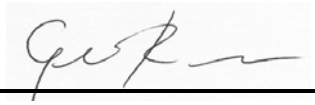
Tester Signature:  **Name: Gersop Reira**

Figure 5c
Peak Radiated Spurious Emission 15.247(c) Fundamental High

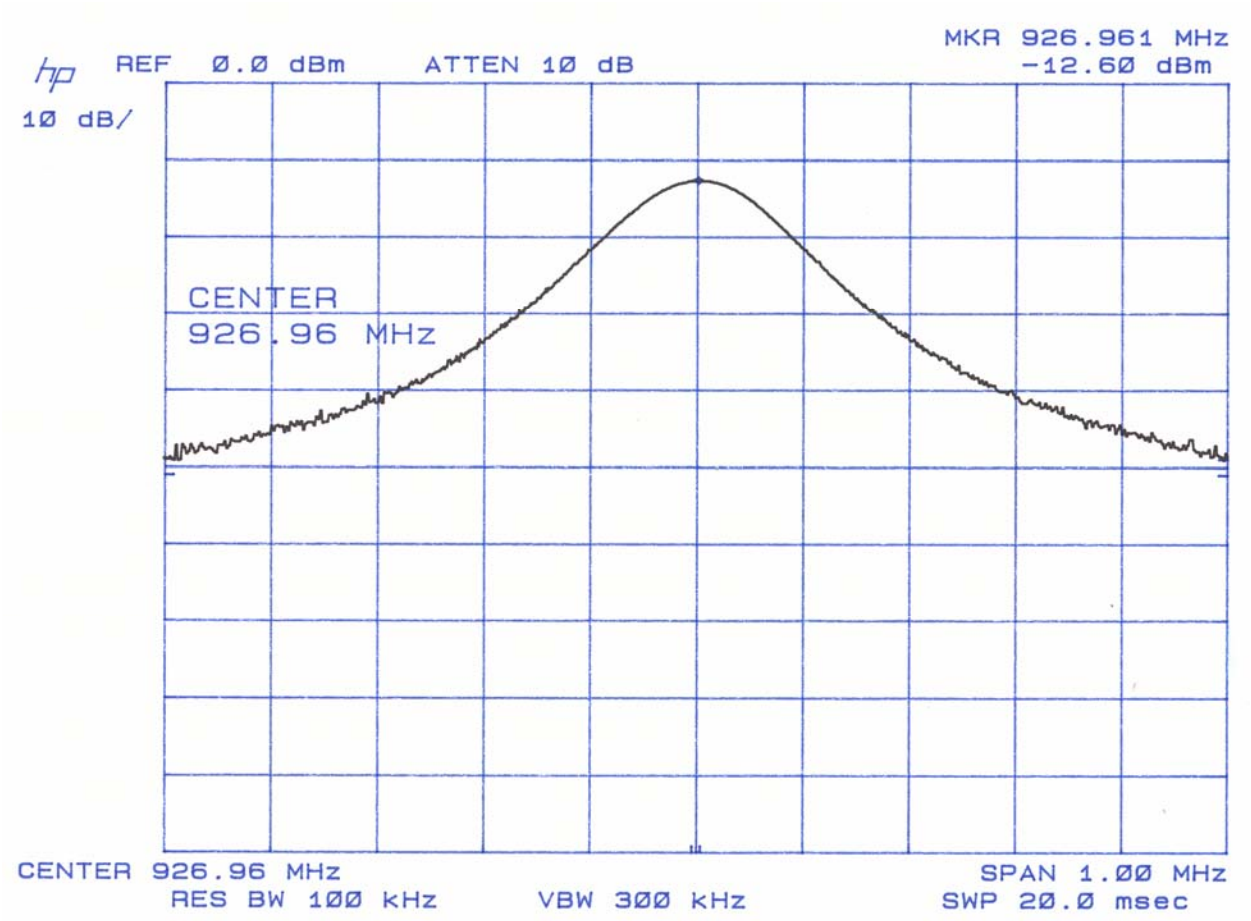
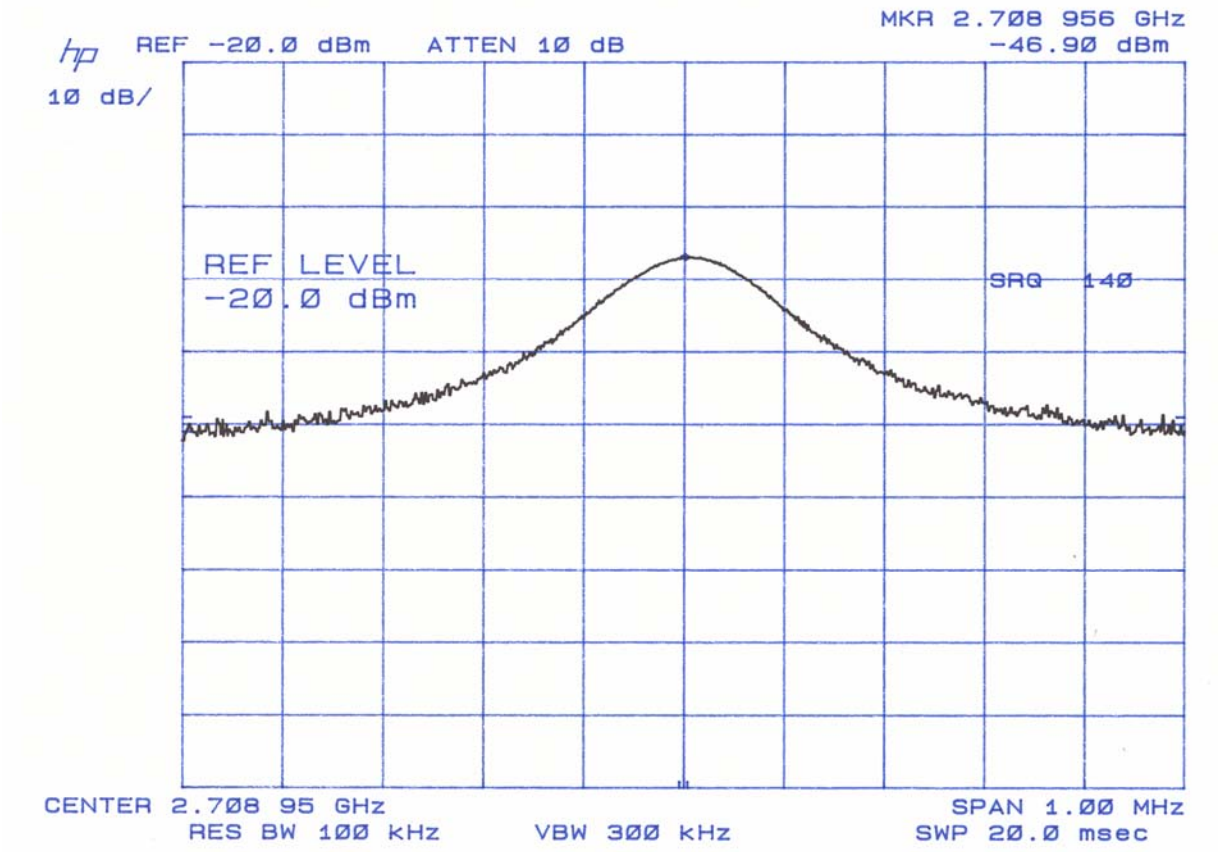


Figure 5d
Worst Case Peak Radiated Spurious Emission 15.247(c)



2.10 Average Spurious Emission in the Frequency Range 30 - 25000 MHz (FCC Section 15.247(c))

The results of average radiated spurious emissions falling within restricted bands are given in Tables 5a – 5u.

Calculation of Maximum Transmit Duty Cycle

As outlined, each remote PT11MH can transmit only once during a dwell time. The maximum amount of time that the Remote transmitter can operate in any 100 millisecond period is 40 ms.

The transmission duty cycle correction factor is then calculated as:

$$20 \log_{10} (40/100 \text{ ms}) = \textbf{-8 dB}$$

Table 5a. AVERAGE RADIATED SPURIOUS EMISSIONS Low Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Average Spurious Emissions-Low Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
902.96	-19.2	2LP3mH	87.8	29.2	710502.4		3m./HORZ		**AVG**
1805.965	-55.2	1HN3mV	51.8	-4.6	229.2	71050.2	3m./VERT	**49.8**	**AVG**
2708.956	-53.9	1HN3mV	53.1	-1.6	374.1	500.0	3m./VERT	**2.5**	**AVG**
3611.958	-76.3	1HN3mV	30.7	2.2	44.0	500.0	3m./VERT	**21.1**	**AVG**
4515.951	-70.7	1HN3mV	36.3	4.2	106.0	500.0	3m./VERT	**13.5**	**AVG**
5417.949	-75.4	1HN3mV	31.6	6.9	83.5	500.0	3m./VERT	**15.5**	**AVG**
6320.983	-62.3	1HN3mV	44.7	8.1	434.3	71050.2	3m./VERT	**44.3**	**AVG**
7224.003	-74.2	1HN3mV	32.8	9.6	131.4	500.0	3m./VERT	**11.6**	**AVG**
8126.983	-69.9	1HN3mV	37.1	11.0	253.5	71050.2	3m./VERT	**49.0**	**AVG**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-55.2 + -4.6 + 107)/20) = 229.2
CONVERSION FROM dBm TO dBuV = 107 dB

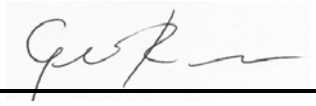
Tester Signature:  **Name: Gersop Reira**

Table 5b. AVERAGE RADIATED SPURIOUS EMISSIONS Mid Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Average Spurious Emissions- Mid Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
914.96	-20.0	2lp3mh	87.0	29.4	662040.4		3m./HORZ		**AVG**
1829.96	-57.2	1HN3mV	49.8	-4.5	185.1	66204.0	3m./VERT	**51.1**	**AVG**
2744.948	-57.1	1HN3mV	49.9	-1.5	263.0	500.0	3m./VERT	**5.6**	**AVG**
3659.954	-78.1	1HN3mV	28.9	2.4	36.6	500.0	3m./VERT	**22.7**	**AVG**
4574.946	-68.2	1HN3mV	38.8	4.4	144.7	500.0	3m./VERT	**10.8**	**AVG**
5489.937	-75.7	1HN3mV	31.3	7.0	82.2	66204.0	3m./VERT	**58.1**	**AVG**
6404.972	-62.9	1HN3mV	44.1	8.1	406.4	66204.0	3m./VERT	**44.2**	**AVG**
7319.958	-67.2	1HN3mV	39.8	9.9	302.9	500.0	3m./VERT	**4.4**	**AVG**
8234.95	-75.0	1HN3mV	32.0	11.2	143.5	500.0	3m./VERT	**10.8**	**AVG**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-57.2 + -4.5 + 107)/20) = 185.1
CONVERSION FROM dBm TO dBuV = 107 dB

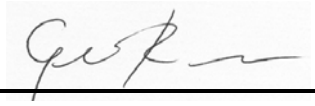
Tester Signature:  **Name: Gersop Reira**

Table 5c. AVERAGE RADIATED SPURIOUS EMISSIONS High Channel

Radiated Spurious Emissions									
Test By:	**Test:**	Average Spurious Emissions- High Channel				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
926.96	-20.6	2lp3mh	86.4	29.6	630174.4		3m./HORZ		**AVG**
1853.955	-59.1	1HN3mV	47.9	-4.3	151.2	63017.4	3m./VERT	**52.4**	**AVG**
2780.948	-58.2	1HN3mV	48.8	-1.4	235.4	500.0	3m./VERT	**6.5**	**AVG**
3707.931	-77.6	1HN3mV	29.4	2.6	39.8	500.0	3m./VERT	**22.0**	**AVG**
4634.932	-68.6	1HN3mV	38.4	4.7	141.4	500.0	3m./VERT	**11.0**	**AVG**
5561.93	-75.9	1HN3mV	31.1	7.2	81.7	63017.4	3m./VERT	**57.7**	**AVG**
6488.943	-65.2	1HN3mV	41.8	8.1	312.8	63017.4	3m./VERT	**46.1**	**AVG**
7415.957	-74.3	1HN3mV	32.7	10.1	137.7	500.0	3m./VERT	**11.2**	**AVG**
8342.926	-70.2	1HN3mV	36.8	11.3	253.9	500.0	3m./VERT	**5.9**	**AVG**

Data corrected by 1 dB for loss of high pass filter except for fundamental frequency
** Data conversion from 1 meter to 3 meters = -9.54

SAMPLE CALCULATION:
RESULTS (uV/m @ 3m) = Antilog ((-59.1 + -4.3 + 107)/20) = 151.2
CONVERSION FROM dBm TO dBuV = 107 dB

Tester Signature:  **Name: Gersop Reira**

2.11 Band Edge Measurements

Band Edge measurements were made at a Low Channel and High Channel peak at highest EUT related emission outside the occupied bandwidth. A peak measurement was made of the fundamental, and the emission was measured using a peak setting. A Resolution Bandwidth of > 1% of the emission bandwidth was used. This procedure was repeated for the high channel.

The plots shown were verified using a Horn Antenna. No preamp was used.

The limits were derived as follows:

High Bandedge

5000 uV/m = -33.02 dBm

-33.02 dBm – 29.6 dB (antenna factor and cable loss) = -62.62 dBm limit

Fundamental measured at High Channel from Table 4c: -12.6 dBm

Delta from conducted measurement of band edge from fundamental peak to highest spur 10 MHz outside band edge: -56.28

-12.6-56.28 = -68.88

Low Bandedge

-33.02 dBm – 29.2 dB (antenna factor and cable loss) = -62.22 dBm limit

Fundamental measured at Low Channel from Table 4a: -11.2 dBm

Delta from conducted measurement of band edge from fundamental peak to highest spur 10 MHz outside band edge: -56.25

-11.2 – 56.25 = -67.45

Figure 6a. Band Edge Compliance
Antenna Conducted, High Channel

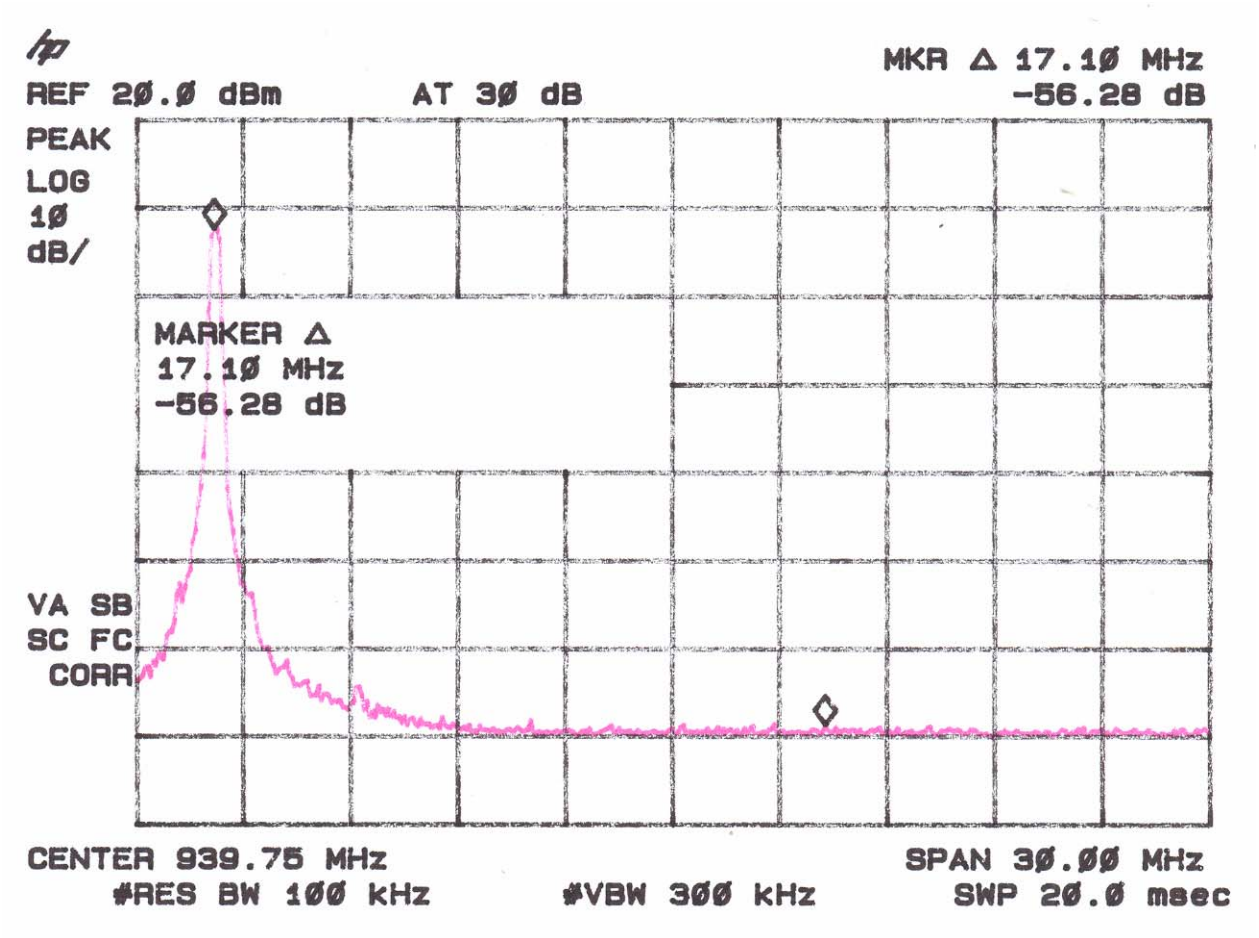
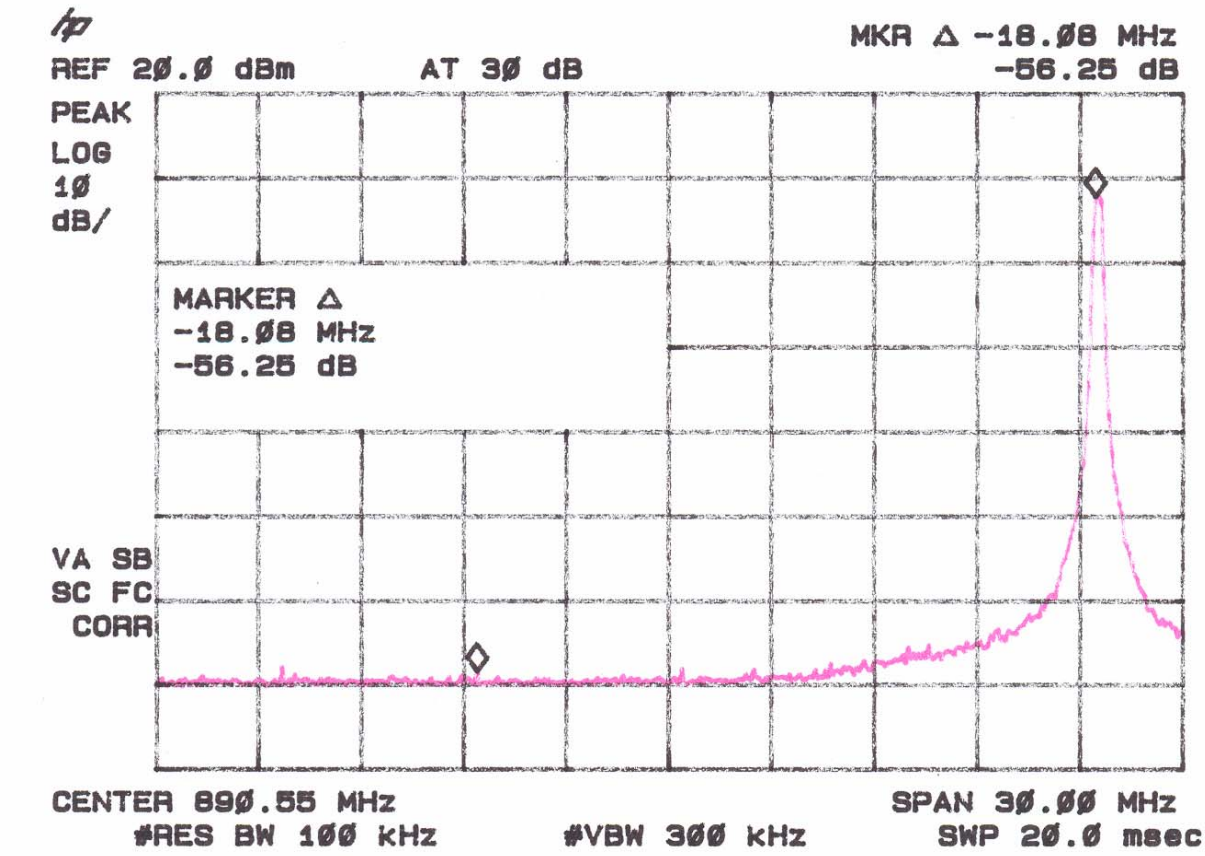


Figure 6b. Band Edge Compliance
Antenna Conducted, Low Channel



2.12 20 dB Bandwidth per FCC Section 15.247(a)(1)(ii)

The antenna port was connected to a spectrum analyzer that was set for a 50 Ω impedance with the RBW = approximately 1/100 of the manufacturers claimed RBW & VBW > RBW. The results of this test are given in Table 6 and Figure 6a through 6c.

TABLE 6
20 dB Bandwidth

Frequency (MHz)	20 dB Bandwidth (MHz)	MAXIMUM FCC LIMIT (MHz)
902.973	0.180	1.0
914.975	0.175	1.0
927.035	0.180	1.0

Test Date: July 16, 2007

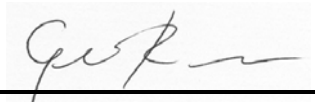
Tester Signature:  **Name: Gersop Reira**

Figure 7a.
20 dB Bandwidth per FCC Section 15.247(a)(1)(ii) (Low Channel)

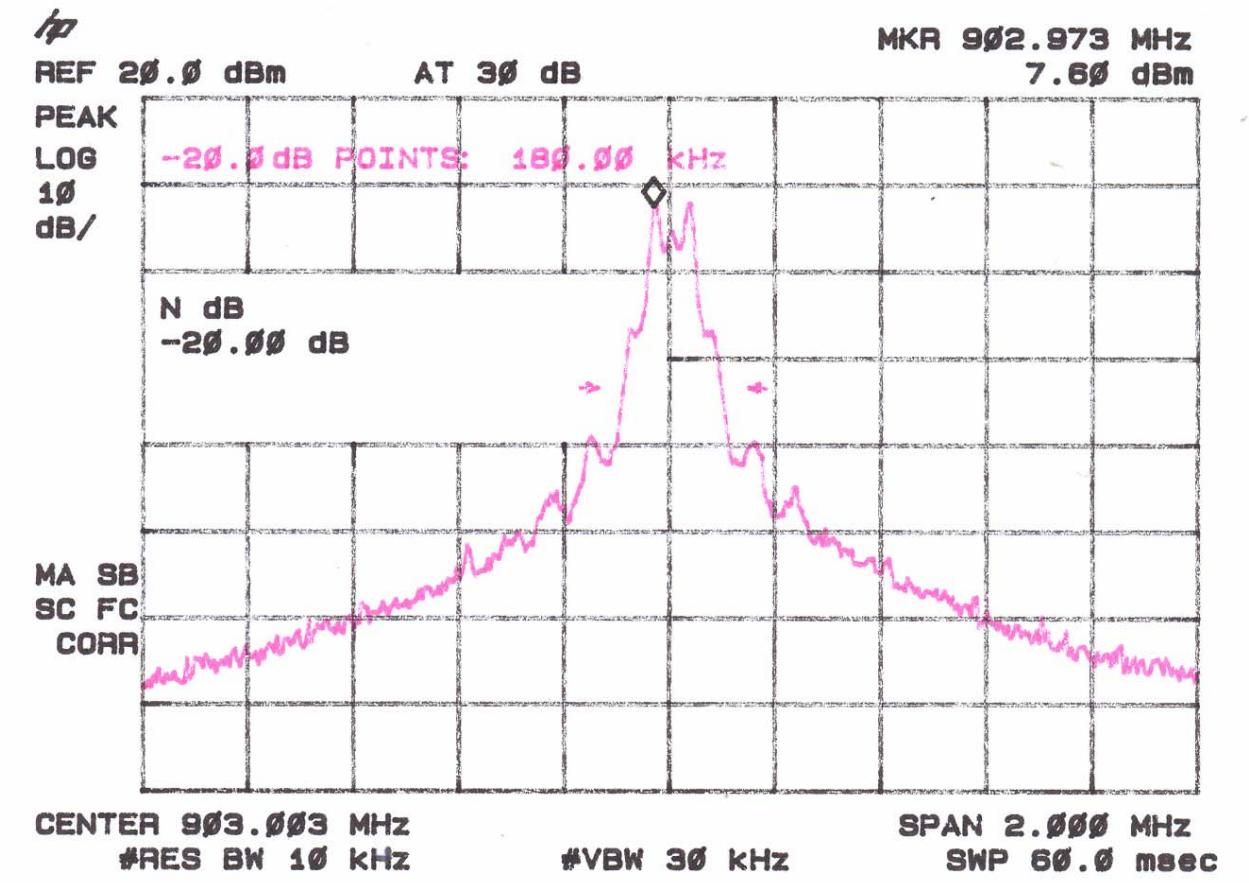


Figure 7b.
20 dB Bandwidth per FCC Section 15.247(a)(1)(ii) (Mid Channel)

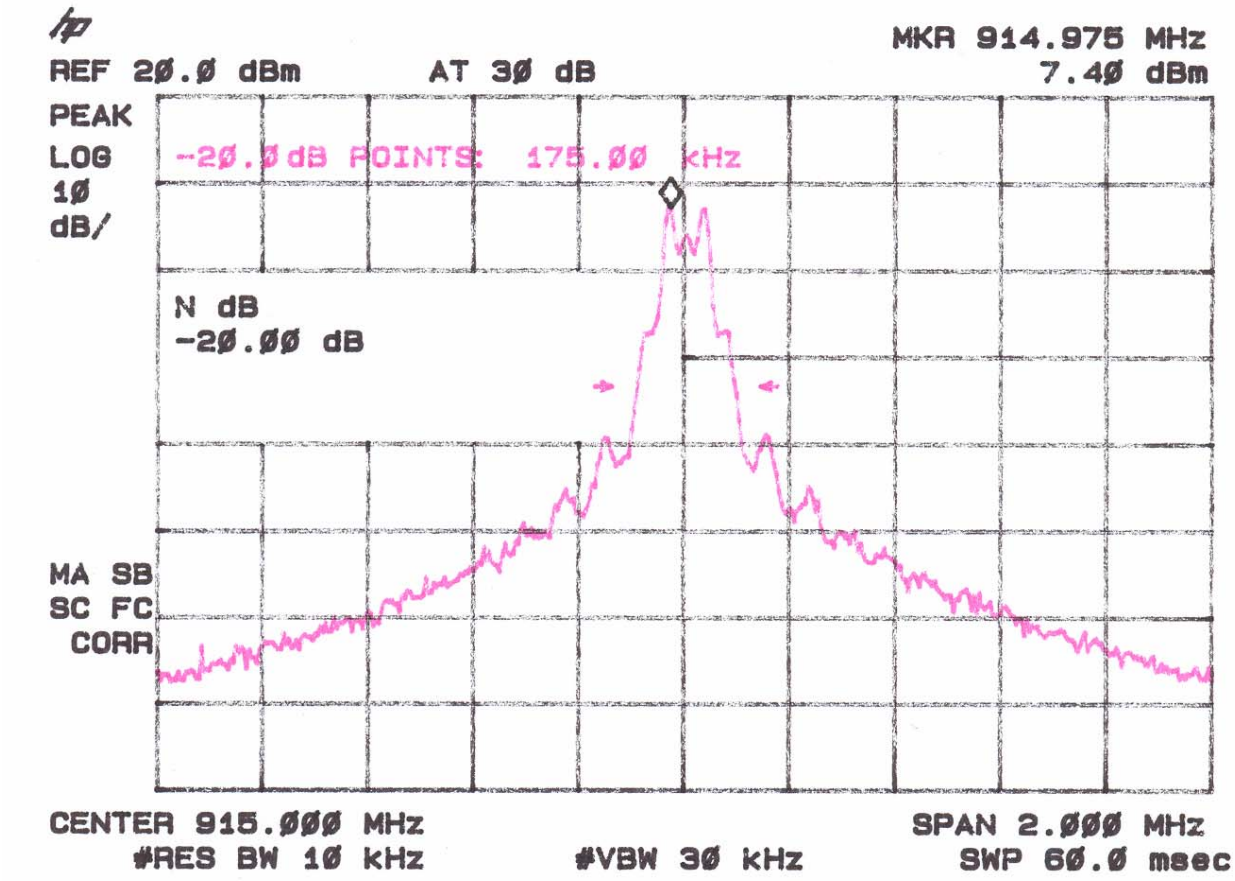
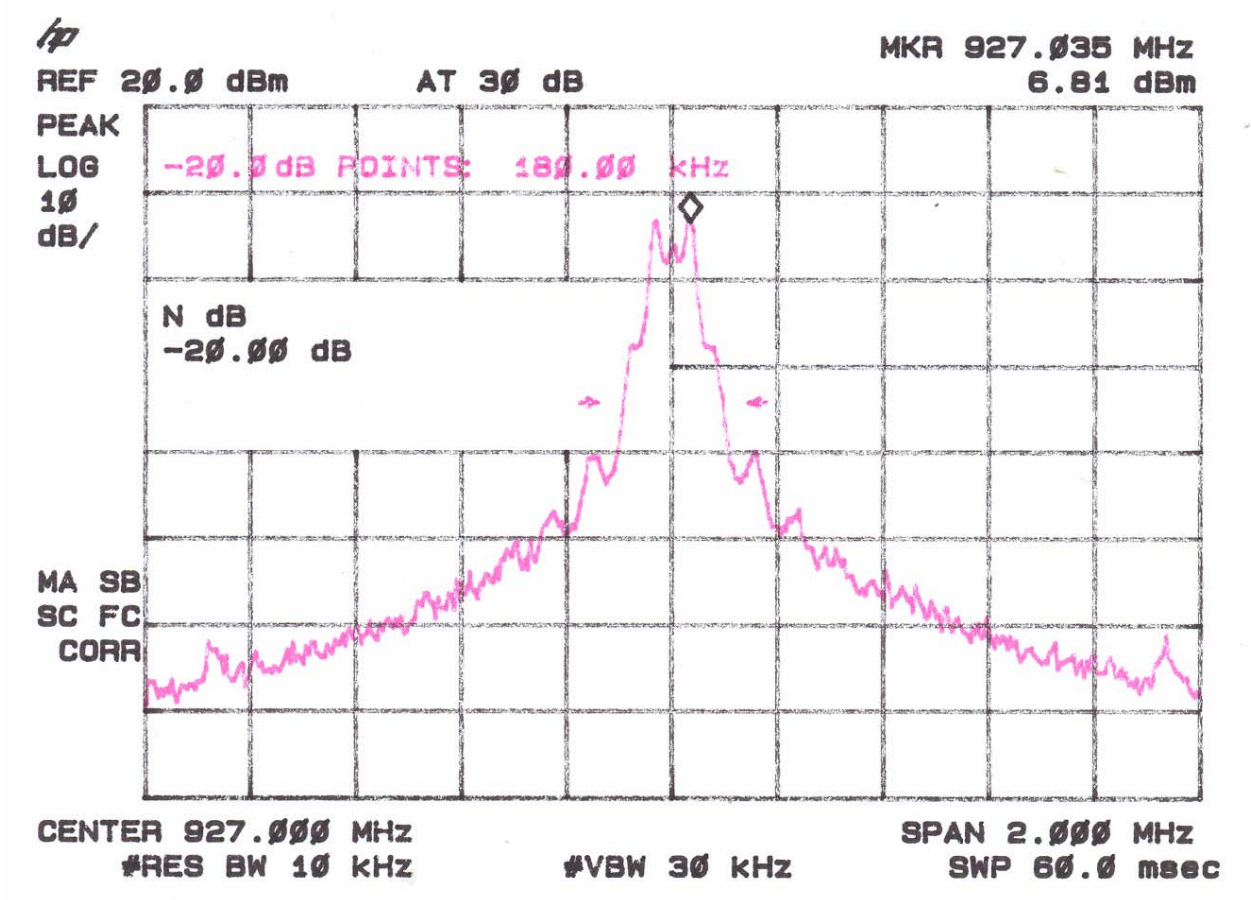


Figure 7c.
20 dB Bandwidth per FCC Section 15.247(a)(1)(ii) (High Channel)



2.13 Number of Hopping Channels FCC Section 15.247(a)(1)(ii)

The transmitter was placed into a typical frequency hopping mode of operation. The 902-928 MHz band was centered on the screen and the RBW and VBW chosen such that the individual channels could be discerned. The trace capture time was a minimum of 5 minutes.

The results of this test are given in Table 7 and Figure 7.

TABLE 7

NUMBER OF HOPPING CHANNELS

Number of Hopping Frequencies Measured	FCC Limit (Minimum Number of Channels)
50	50

Figure 8a
Number of Hopping Channels FCC Section 15.247(a)(1)(ii)

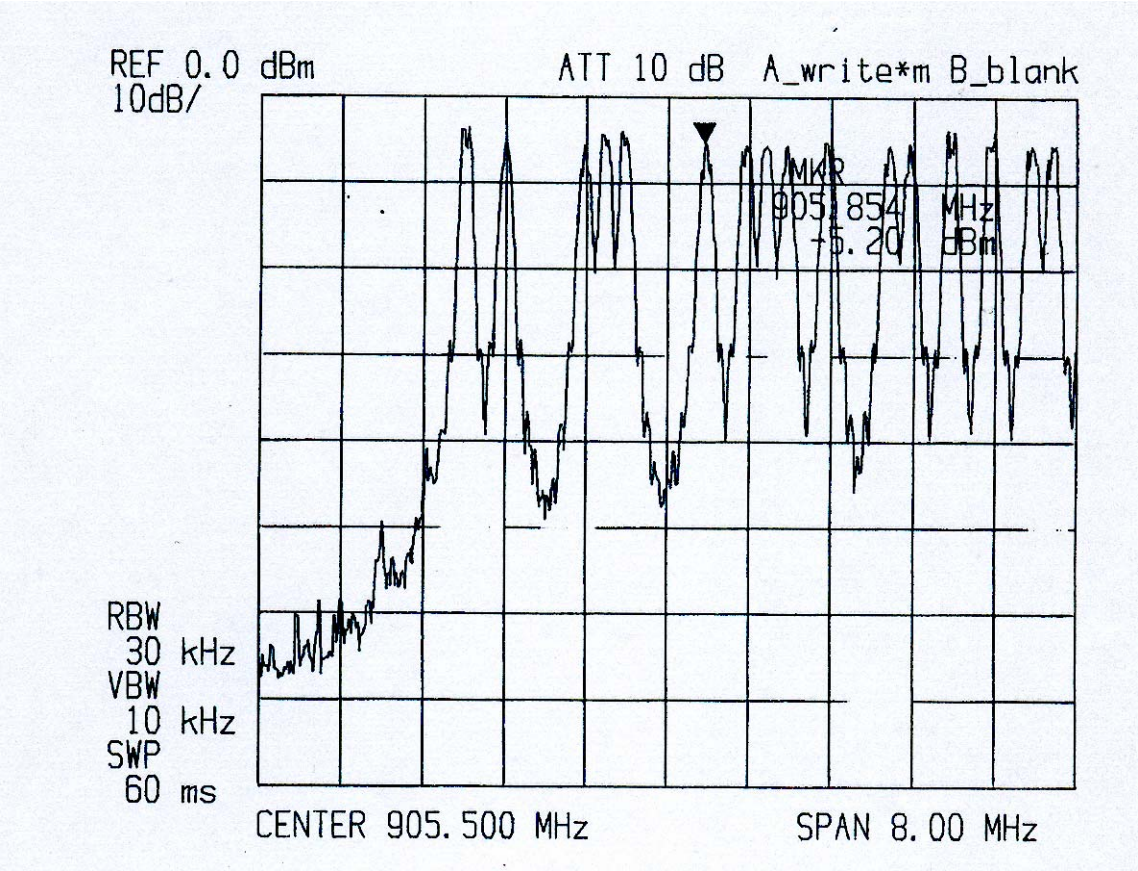


Figure 8b
Number of Hopping Channels FCC Section 15.247(a)(1)(ii)

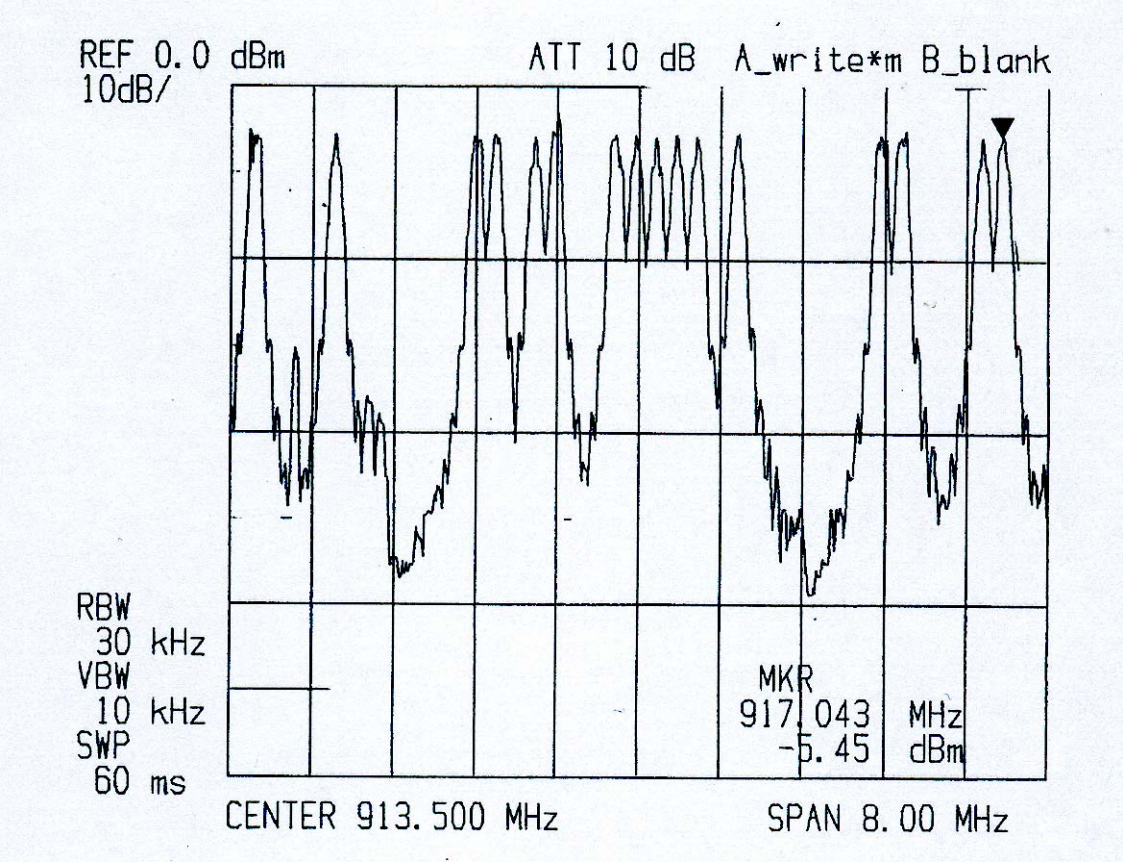


Figure 8c
Number of Hopping Channels FCC Section 15.247(a)(1)(ii)

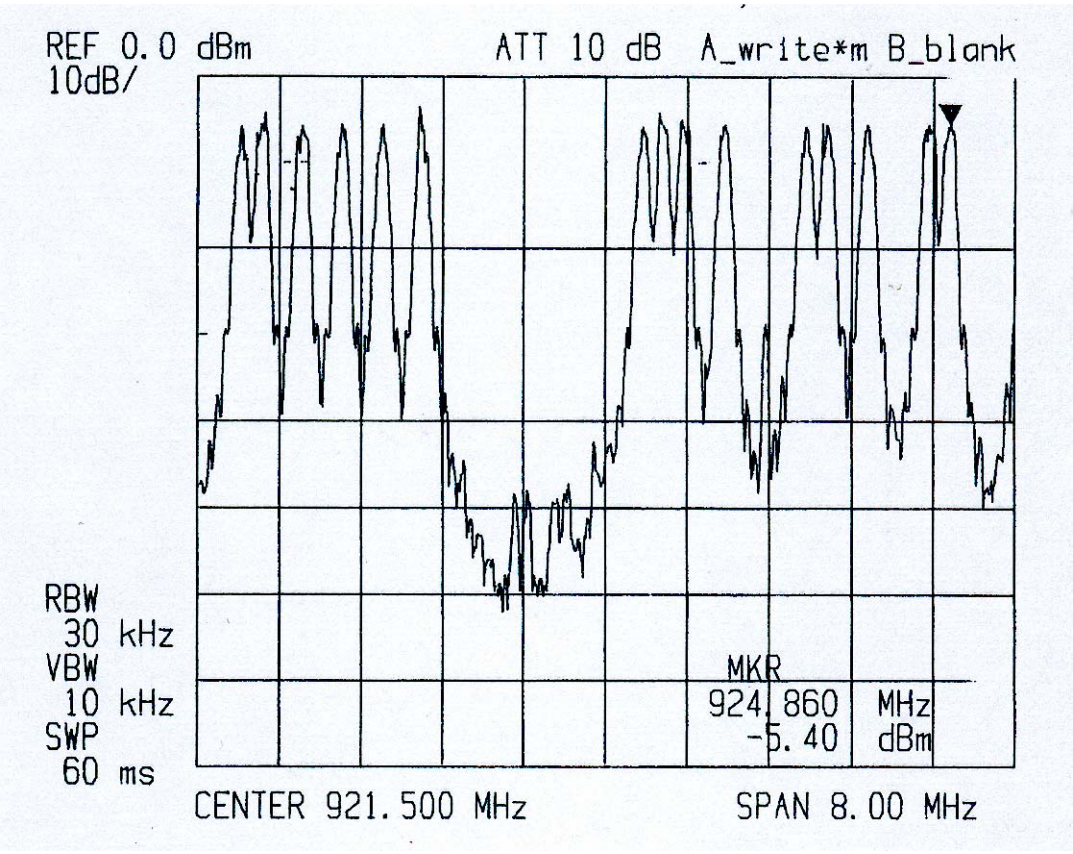
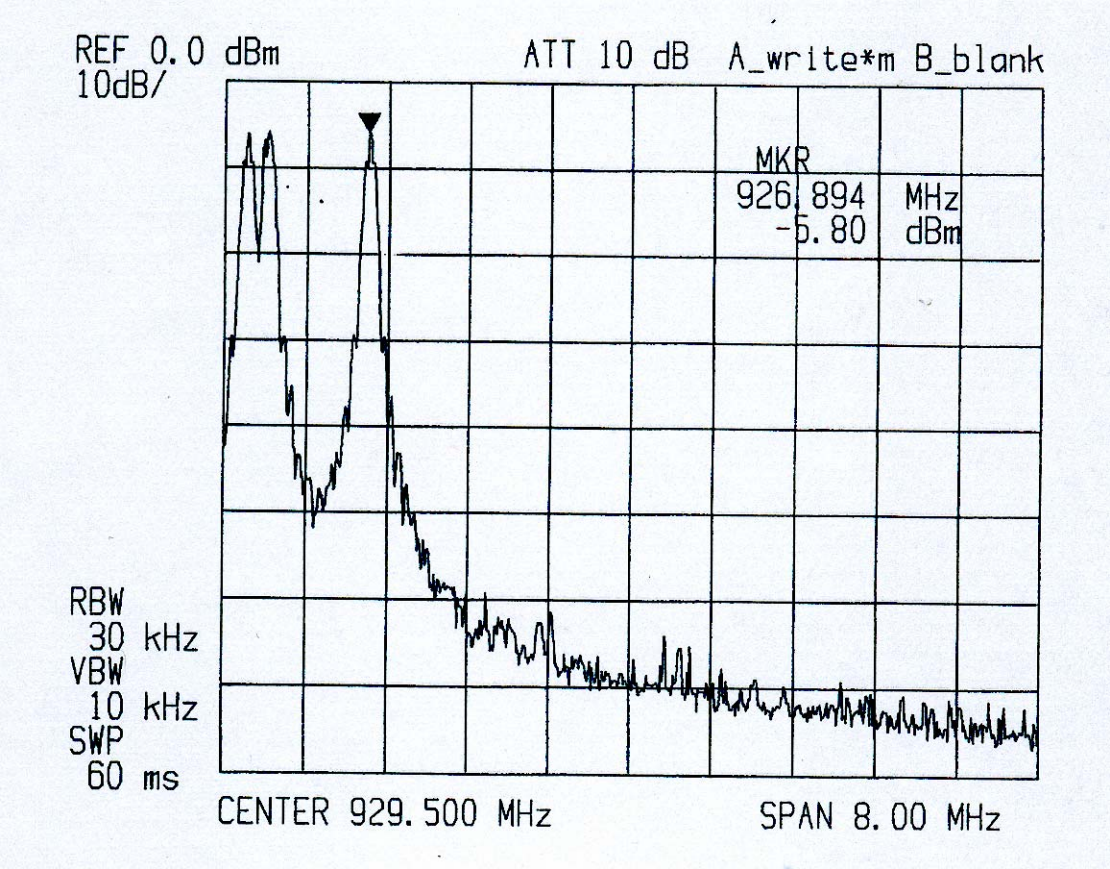


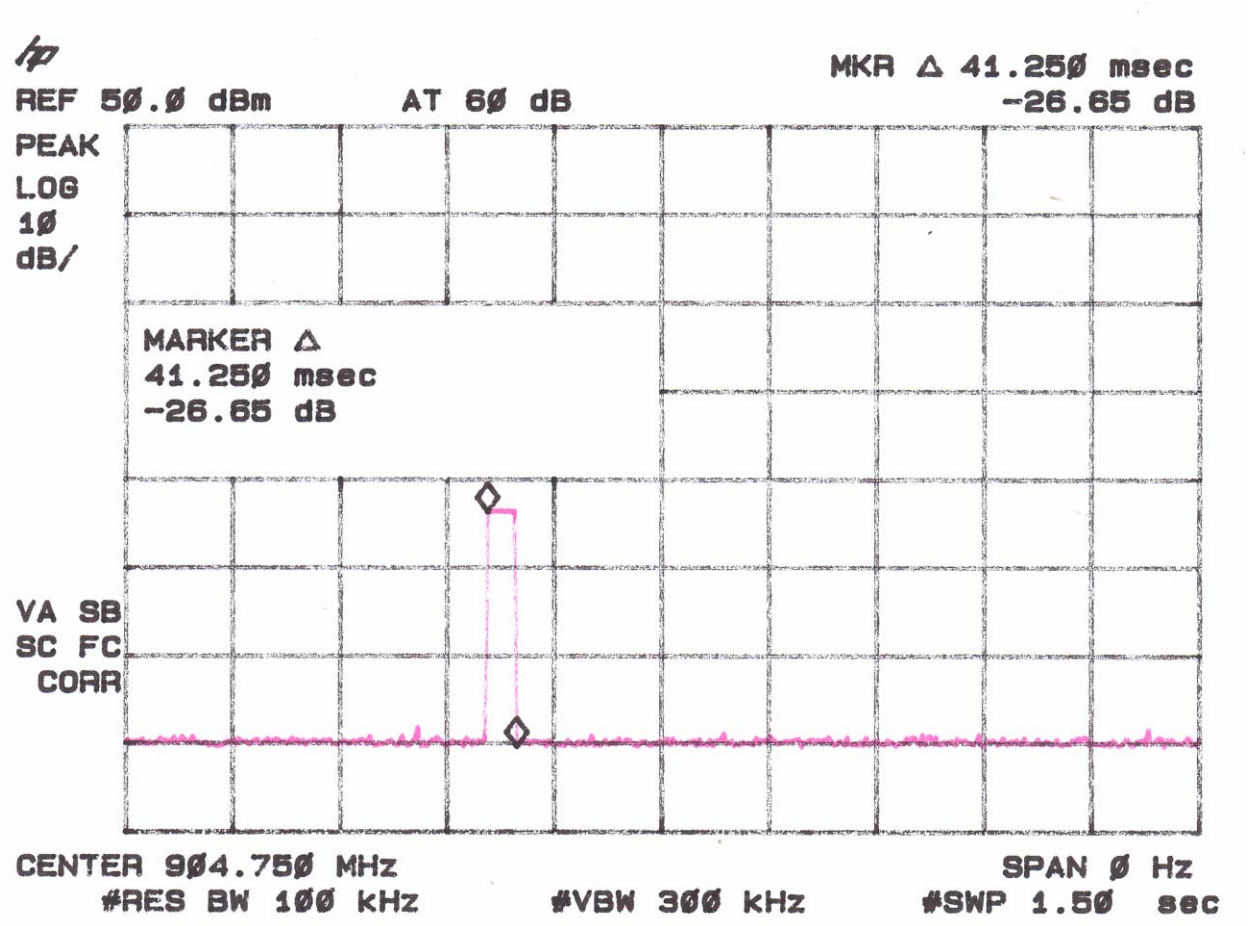
Figure 8d
Number of Hopping Channels FCC Section 15.247(a)(1)(ii)



2.14 Average Time of Occupancy per Channel FCC Section 15.247(a)(1)(ii)

The maximum transmit time of the EUT, based upon software and firmware settings, is 40 ms average time of occupancy.

Figure 9
Average Time of Occupancy per Channel FCC Section 15.247(a)(1)(ii)



2.15 Power Line Conducted Emissions for Transmitter FCC Section 15.207

The conducted voltage measurements have been carried out in accordance with FCC Section 15.207, with a spectrum analyzer connected to a LISN and the EUT placed into a continuous mode of transmit. The results are given in Tables 8a-8b and Figures 9a-9c.

TABLE 8a. CONDUCTED EMISSIONS DATA

CLASS B

(Peak-Quasi Peak Measurements vs Average Limits) PHASE DATA

Conducted Emissions									
Test By:	**Test:**	FCC Conducted Emissions POWER LINE				**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**B**	**Model:**	PT11MH		
Frequency	**Test Data**	**AF**	**Test Data**	**AF+CA-AMP**	**Results**	**Limits**	**Distance/**	**Margin**	**PK**
(MHz)	**(dBm)**	**Table**	**(dBuV)**	**(dB)**	**(dBuV)**	**(dBuV)**	**Polarity**	**(dB)**	**/ QP**
Not Applicable EUT is battery Operated									

Test Date: August 7, 2007

Tester Signature: _____ **Name: Gersop Reira**

TABLE 8b. CONDUCTED EMISSIONS DATA

CLASS B

(Peak-Quasi Peak Measurements vs Average Limits) NEUTRAL DATA

Conducted Emissions									
Test By:	Test:	FCC Conducted Emissions POWER LINE				Client:	Pegasus Technologies, Inc.		
GR	Project:	07-0186		Class:	B	Model:	PT11MH		
Frequency	Test Data	AF	Test Data	AF+CA-AMP	Results	Limits	Distance/	Margin	PK
(MHz)	(dBm)	Table	(dBuV)	(dB)	(dBuV)	(dBuV)	Polarity	(dB)	/ QP
Not Applicable EUT is Battery Operated									

Test Date: August 7, 2007

Tester Signature: _____ **Name: Gersop Reira**

2.16 Radiated Emissions for Digital Device & Receiver (47 CFR 15.109a)

Radiated emissions were evaluated from 30 to 14500 MHz while the EUT was placed into a Receive mode of operation. Measurements were made with the analyzer's bandwidth set to 120 kHz measurements made less than 1 GHz and 1 MHz for measurements made greater than or equal to 1 GHz. The results for less than 1 GHz are shown in Table 9.

TABLE 9a. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 30 MHz – 1 GHz

Radiated Emissions									
Test By:	Test:	Radiated Emissions Digital Device & Receiver				Client:	Pegasus Technologies, Inc.		
GR	Project:	07-0186		Class:	Peak	Model:	PT11MH		
Frequency (MHz)	Test Data (dBm)	AF Table	Test Data (dBuV)	AF+CA-AMP (dB)	Results (uV/m)	Limits (uV/m)	Distance / Polarity	Margin (dB)	PK / QP
No emissions seen within 20 dB of FCC Limit									

Test Date: July 9, 2007

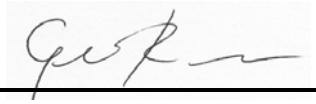
Tester Signature:  **Name: Gersop Reira**

TABLE 9b. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 1 GHz – 5 GHz (PEAK)

Radiated Emissions									
Test By:	**Test:**					**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
No emissions seen within 20 dB of FCC Limit									

Test Date: July 9, 2007

Tester Signature: _____ **Name: Gersop Reira**

TABLE 9c. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 1 GHz – 5 GHz (AVERAGE)

Radiated Emissions									
Test By:	**Test:**					**Client:**	Pegasus Technologies, Inc.		
GR	**Project:**	07-0186		**Class:**	**Peak**	**Model:**	PT11MH		
Frequency (MHz)	**Test Data (dBm)**	**AF Table**	**Test Data (dBuV)**	**AF+CA-AMP (dB)**	**Results (uV/m)**	**Limits (uV/m)**	**Distance / Polarity**	**Margin (dB)**	**PK / QP**
No emissions seen within 20 dB of FCC Limit									

Test Date: July 9, 2007

Tester Signature: _____ **Name: Gersop Reira**

2.17 Power Line Conducted Emissions for Digital Device and Receiver FCC Section 15.107

The conducted voltage measurements have been carried out in accordance with FCC Section 15.107, with a spectrum analyzer connected to a LISN and the EUT placed into an idle condition or a continuous mode of receive. Similar results were seen as compared to the EUT in a transmit mode of operation. **Therefore, please refer to the results as shown in Table 8.**

2.18 Channel Separation

The transmitter was placed into transmit mode on low channel. The measurement was max held on the spectrum analyzer. The transmitter was then changed to the next adjacent channel, while continuing to max hold the original measurement. Using an RBW of 120 kHz and VBW of 300 kHz, the delta between 2 peaks was measured and the distance between them was noted.

TABLE 10

CHANNEL SEPARATION

Channel Separation	FCC Limit
203 kHz	Min 180 kHz (20 dB Bandwidth)

Figure 10
Channel Separation FCC Section 15.247(a)(1)(ii)