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Verification Test Report:	2007 128454-1-FCC25
Applicant:	Harris Corporation 1680 University Avenue Rochester, New York, 14610
Equipment Under Test:	EUT: Land Mobile BGAN Terminal Model: RF-7800B-VU104
FCC ID:	AQZRF-7800B-VU104
In Accordance With:	FCC Part 25, Subpart C Satellite Communications
Tested By:	Nemko USA Inc. 11696 Sorrento Valley Road San Diego, CA 92121-1024
Date:	April 13, 2009
Total Number of Pages:	39

DOCUMENT HISTORY

REVISION	DATE	COMMENTS
-	April 13, 2009	Prepared By: Alan Laudani
-	April 13, 2009	Initial Release: Alan Laudani

NOTE: Nemko USA, Inc. hereby makes the following statements so as to conform to Chapter 10 (Test Reports) Requirements of ANSI C63.4 (2003) “Methods and Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz”:

- The unit described in this report was received at Nemko USA, Inc.'s facilities on March 1, 2009. Testing was performed on the unit described in this report from March 3, 2009 to April 10, 2009.
- The Test Results reported herein apply only to the Unit actually tested, and to substantially identical Units.
- This report does not imply the endorsement of the Federal Communications Commission (FCC), NVLAP or any other government agency.

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CERTIFICATION

Nemko USA, Inc., an independent Electromagnetic Compatibility (EMC) Test Laboratory, produced this Test Report and performed the Radio Frequency Interference (RFI) testing and data evaluation contained herein.

Nemko USA, Inc.'s measurement facility is currently registered with the United States Federal Communications Commission (FCC) in accordance with the provisions of 47 United States Code (CFR) Part 2, Subpart I, Section 2.948(a). A current description of Nemko USA, Inc.'s measurement facility is on file with the FCC. Nemko USA Inc. has additionally satisfied the FCC that it complies with the requirements set forth in 47 CFR Part 2, Subpart I, Section 2.948(d) regarding the accreditation of EMC laboratories. As a result, the FCC has placed Nemko USA Inc. on its list of EMC laboratories approved to perform Declaration of Conformity (DOC) procedure testing.

The RFI testing, test data collection and test data evaluation were accomplished in accordance with the ANSI C63.4: 2003 Standard, and in accordance with the applicable sections of the FCC rules (47 CFR Parts 2 and 18)." digital devices. The testing was also accomplished in accordance with Industry Canada's ICES-003 standard for unintentional radiating device per EMCAB-3, Issue 4 (December 2005). The administrative summary of this test report provides a description of the test sample

I hereby certify that the test data, test data evaluation, and equipment configurations used to compile this test report are a true and accurate representation of the test sample's radio frequency interference characteristics as of the test date(s), and, for the design of the test sample.

Alan Laudani,
EMC/RF Test Engineer

Section 1. Summary of Test Results

All measurements are traceable to national standards.

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 25, Subpart C.

Summary Of Test Data

Name Of Test	Part 2	Part 25	Result
RF Power Output	2.1046	25.204	Pass
Occupied Bandwidth	2.1049	25.202	Pass
Spurious Emissions at Antenna Terminals	2.1051	25.202(f)	Pass
Field Strength of Spurious Emissions	2.1053	25.202(f)	Pass
Field Strength of Spurious Emissions	2.1053	25.202(h)	Pass
Frequency Stability	2.1055	25.202(d)	Pass

.

Section 2. General Equipment Specifications

Manufacturer: Hughes Network Systems

Model No.: RF-7800B-VU104

Serial No.: 2

Date Received In Laboratory: March 1, 2009

Nemko Identification No.: 25610-1

Description and Method of Exercising the EUT

The RF-7800B-VU104 is a Land Mobile BGAN Terminal. The RF-7800B-VU104 comprises a FCC Part 25 Transmitter in the frequency range 1626.5 MHz to 1660.5 MHz. An Ethernet connection allows for frequency changes during RF testing of the Part 25 device. The Part 25 radio continues to transmit without the Ethernet connection and to be used for network connection in normal operation.

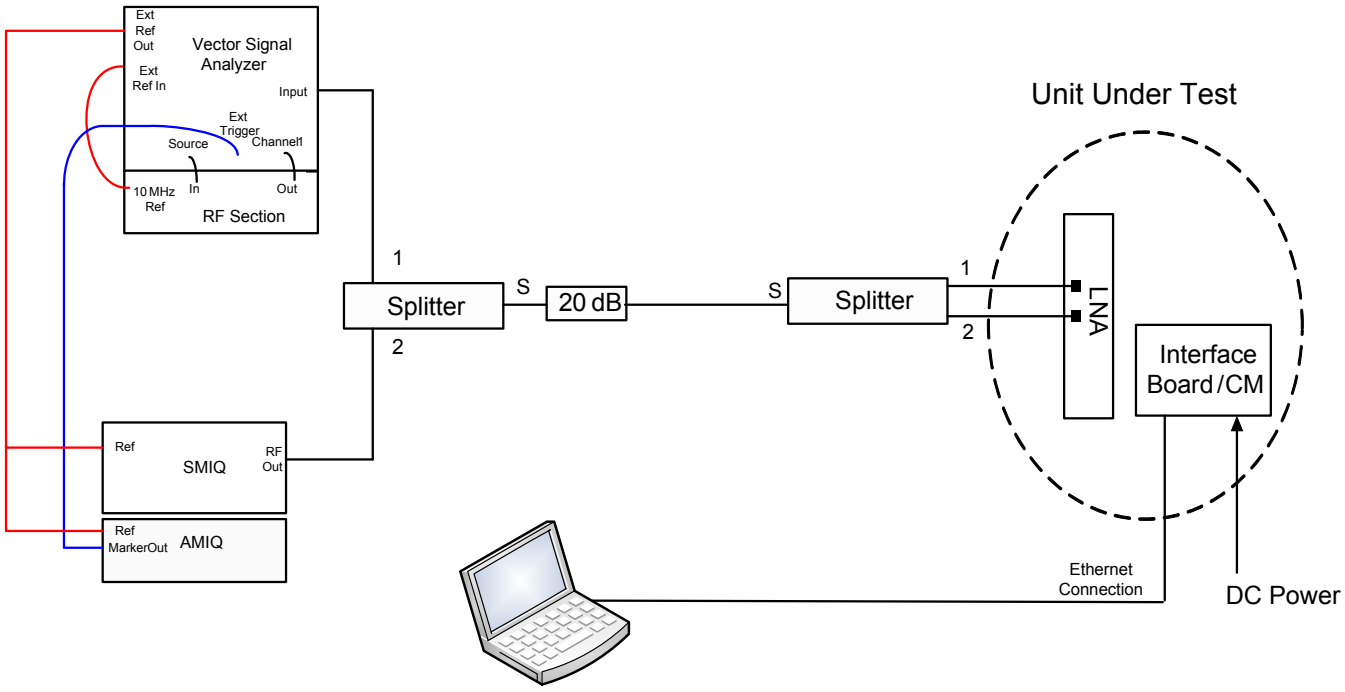
The RF-7800B-VU104 was manufactured by Hughes Network Systems of 9605 Scranton Road Suite 500, San Diego, CA 92121.

EUT Configuration

DEVICE	MANUFACTURER MODEL # SERIAL #	POWER CABLE
EUT - Land Mobile BGAN Terminal	Harris Corporation Model: RF-7800B-VU104 Serial #: 2	3 wire, shielded 20 AWG
Support Laptop computer	Toshiba Model: Protege 4000 Serial #: X1086201PU	1.5m, unshielded, 12 VDC coaxial
Laptop – AC Adapter	Toshiba Model: PA2450U Serial #: 0561919	1.5m, unshielded, 18 AWG, 3-wire, IEC connector
DC power supply	Kikusui Electronics Corp Model: PAD Serial #: Nemko 97	1.5m, unshielded, 18 AWG, 3-wire, IEC connector
I/Q Modulation Generator	Rohde & Schwarz Model: AMIQ SN: 833750/020 Calibration Due 10/31/09	1.5m, unshielded, 18 AWG, 3-wire, IEC connector
Signal Generator	Rohde & Schwarz Model: SMIQ 03B SN: 1125.5555.03 Calibration Due 4/30/09	1.5m, unshielded, 18 AWG, 3-wire, IEC connector
Vector Signal Analyzer w/ RF Section for VSA	Hewlett Packard Model: 89441A SN: 3416A03318 Calibration Due 11/29/09	(2) 1.5m, unshielded, 18 AWG, 3-wire, IEC connector
Power Splitter	Mini Circuits Model: AN2PD-1900W SN: 476100731	NA
Power Splitter	Mini Circuits Model: ZAPD-21 SN: 15542	NA
Power Splitter	KPMCI Model: 03SJ0 SN: 00002	NA

20 dB Attenuator	Weinshel Corp Model: 33-20-34 SN: BB9251	NA

Connection	I/O Cable
EUT Ethernet to Laptop	CAT5, 5m, unshielded cable
Support Equipment to EUT	Coax, 50 ohm—see test configuration diagram



Design Modifications for Compliance

The following design modifications were made to the EUT during testing.

None. No design modifications were made to the EUT during testing.

Section 3. RF Power Output

Para. No.: 2.1046

Test Performed By: A. Laudani	**Date of Test:** April 6, 2009

Minimum Standard: 25.204

a) In bands shared coequally with terrestrial radio communication services, the equivalent isotropically radiated power transmitted in any direction towards the horizon by an earth station, other than an ESV, operating in frequency bands between 1 and 15 GHz, shall not exceed the following limits except as provided for in paragraph (c) of this section:

+40 dBW in any 4 kHz band for $\Theta \leq 0°$

+40 + 3Θ dBW in any 4 kHz band for $0° < \Theta \leq 5°$

where Θ is the angle of elevation of the horizon viewed from the center of radiation of the antenna of the earth station and measured in degrees as positive above the horizontal plane and negative below it.

Test Results: EUT complies.

Antenna Gain: 13.2dBi

Measurement Data:

Frequency	Output Power (dBm)	Antenna Gain dBi	E.I.R.P (dBm)	E.I.R.P (dBW)
1631.8	28.89	13.2	42.1	12.1
1643.7	25.37	13.2	38.6	8.6
1660.2	24.76	13.2	38.0	8.0

Section 4. Occupied Bandwidth

Para. No.: 2.1047

Test Performed By: A. Laudani	**Date of Test:** April 8, 2009

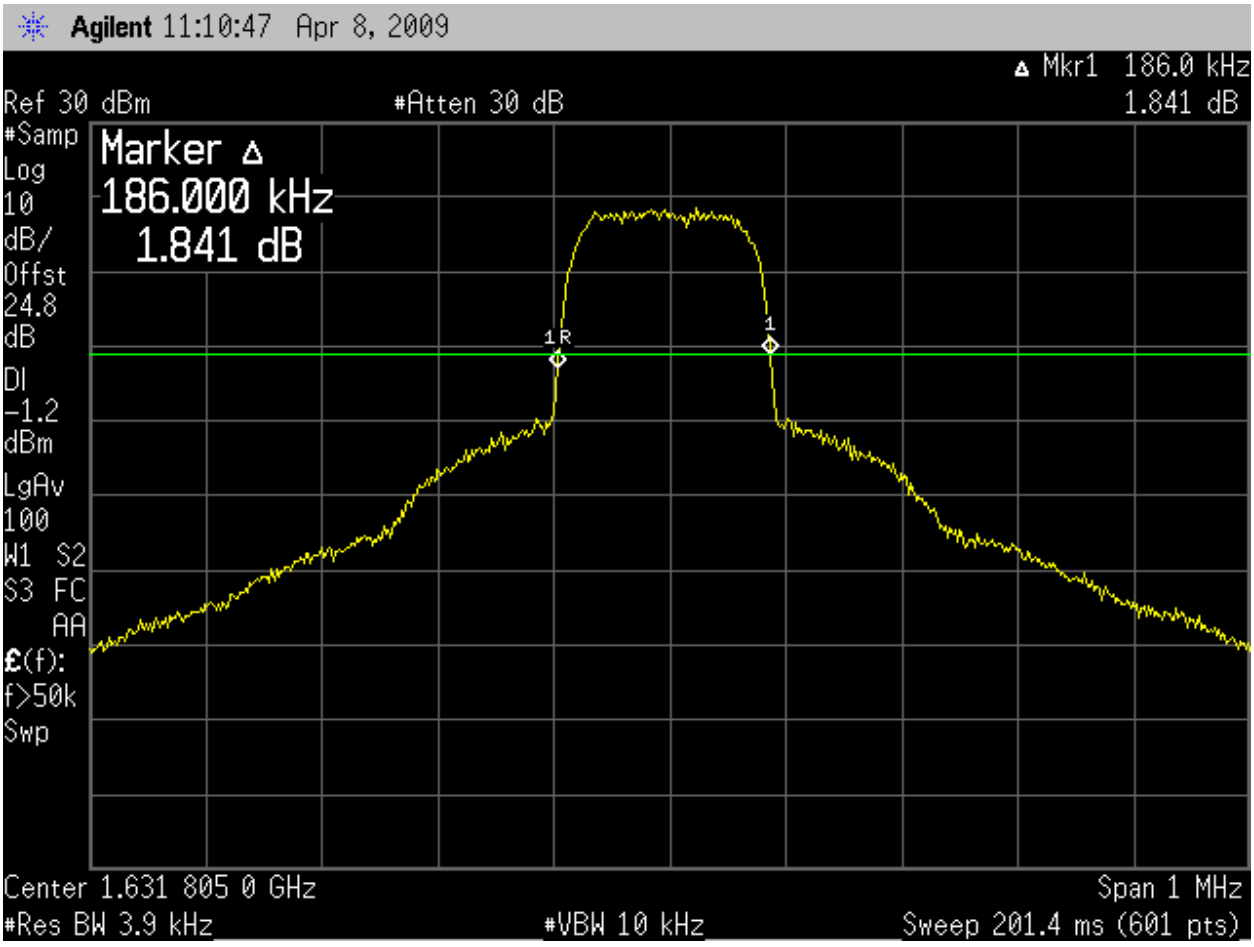
Minimum Standard: 25.202 No limit noted.

Test Results: 99% or –20dB BW

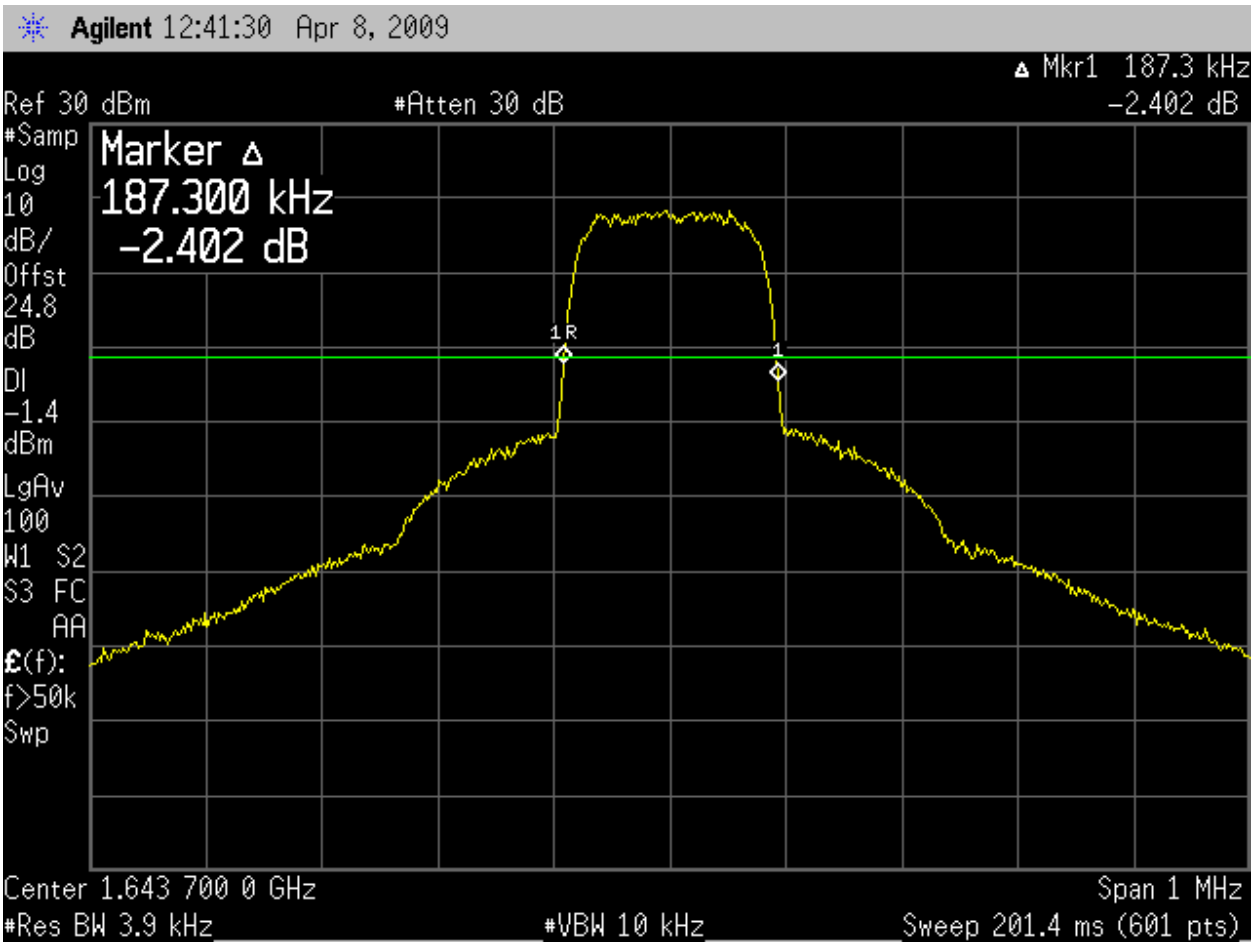
Frequency MHz	**Bandwidth (kHz)**
1631.8	186.0
1643.7	187.3
1660.2	187.2

Measurement Data: See plots below.

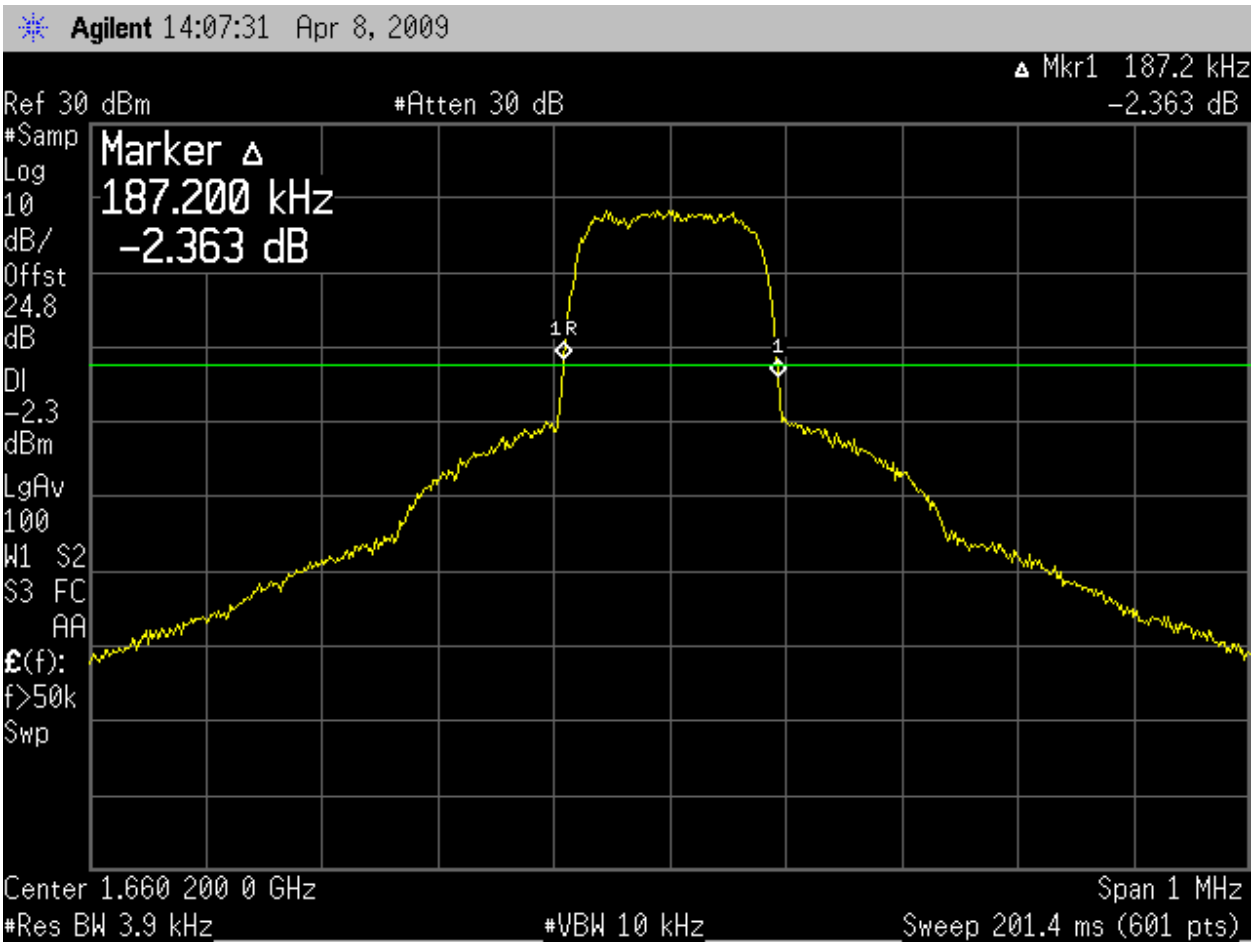
Low Channel


Agilent 11:10:47 Apr 8, 2009
Ref 30 dBm
#Atten 30 dB
Mkr1 186.0 kHz
1.841 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-1.2
dBm
LgAv
100
W1 S2
S3 FC
AA
£(f):
f>50k
Swp
Marker Δ
186.000 kHz
1.841 dB
1R
1
Center 1.631 805 0 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Span 1 MHz
Sweep 201.4 ms (601 pts)

Mid Channel


Agilent 12:41:30 Apr 8, 2009
Ref 30 dBm
#Atten 30 dB
Mkr1 187.3 kHz
-2.402 dB
Marker Δ
187.300 kHz
-2.402 dB
1R
1
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-1.4
dBm
LgAv
100
W1 S2
S3 FC
AA
£(f):
f>50k
Swp
Center 1.643 700 0 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Span 1 MHz
Sweep 201.4 ms (601 pts)

High Channel



Section 6. Spurious Emissions At Antenna Terminals

Para. No.: 2.1051

Test Performed By: A. Laudani	**Date of Test:** April 8, 2009

Minimum Standard: 25.202 Frequencies, frequency tolerance and emission limitations

f) *Emission limitations.* The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:

(1) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: 25 dB;

(2) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: 35 dB;

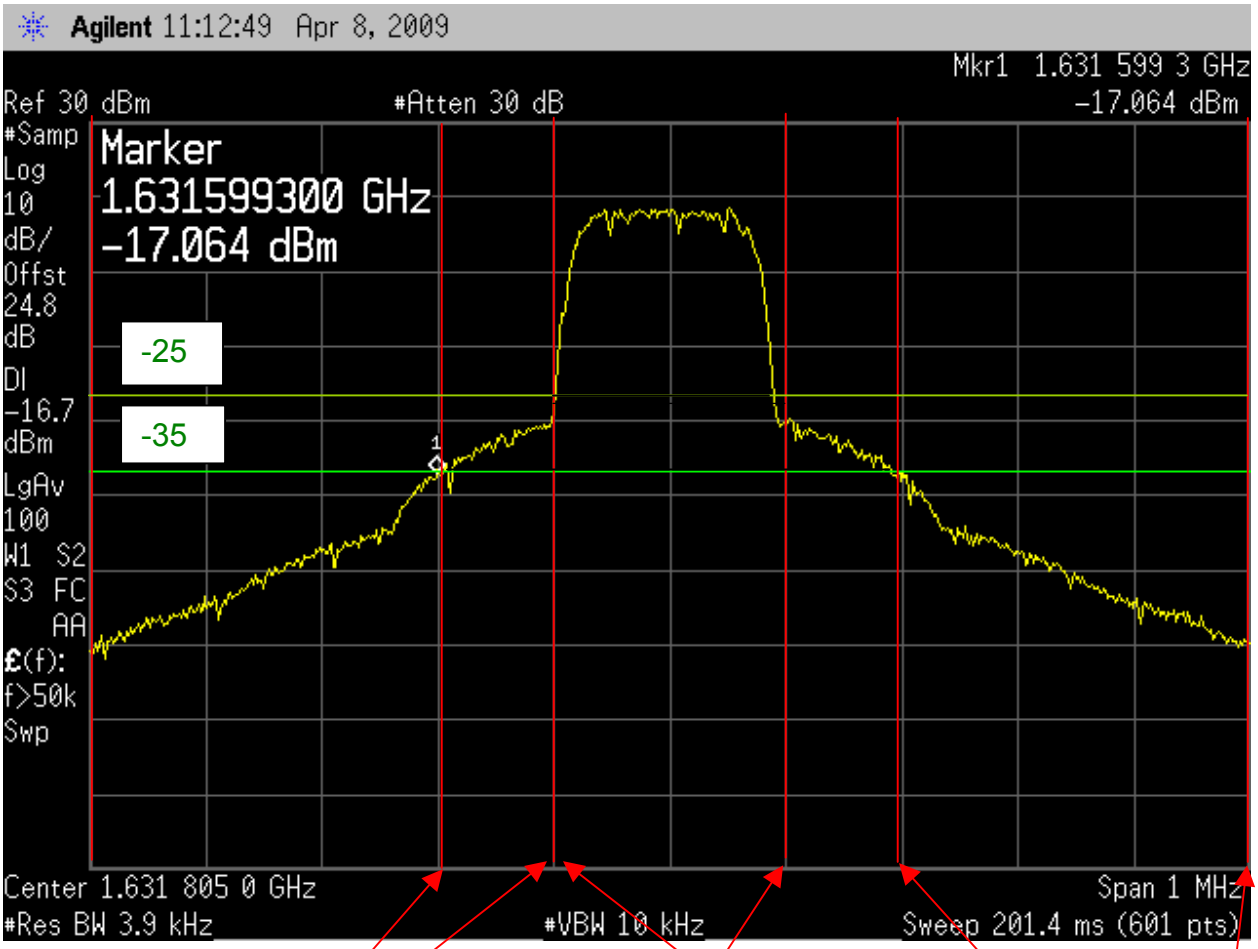
(3) In any 4 kHz band, the center frequency of which is removed from the assigned frequency by more than 250 percent of the authorized bandwidth: An amount equal to 43 dB plus 10 times the logarithm (to the base 10) of the transmitter power in watts;

(4) In any event, when an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in paragraphs (f) (1), (2) and (3) of this section.

Test Results: EUT Complies.

Test Data: See attached plots.

Lowest channel. Frequency Mask Part 1

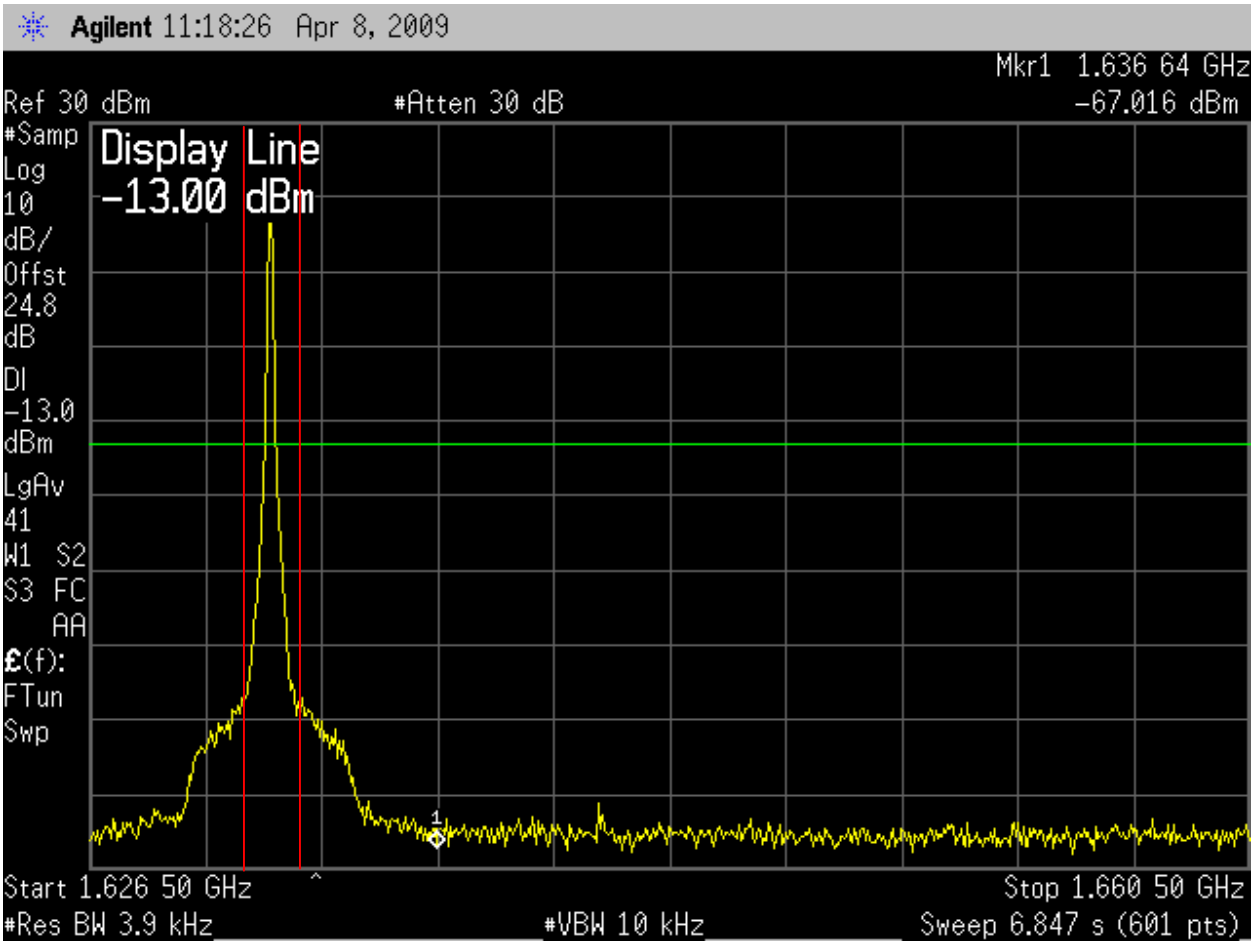


Red Vertical Lines =
Frequency at 50% x 200 kHz BW
= +/- 100 kHz from center frequency

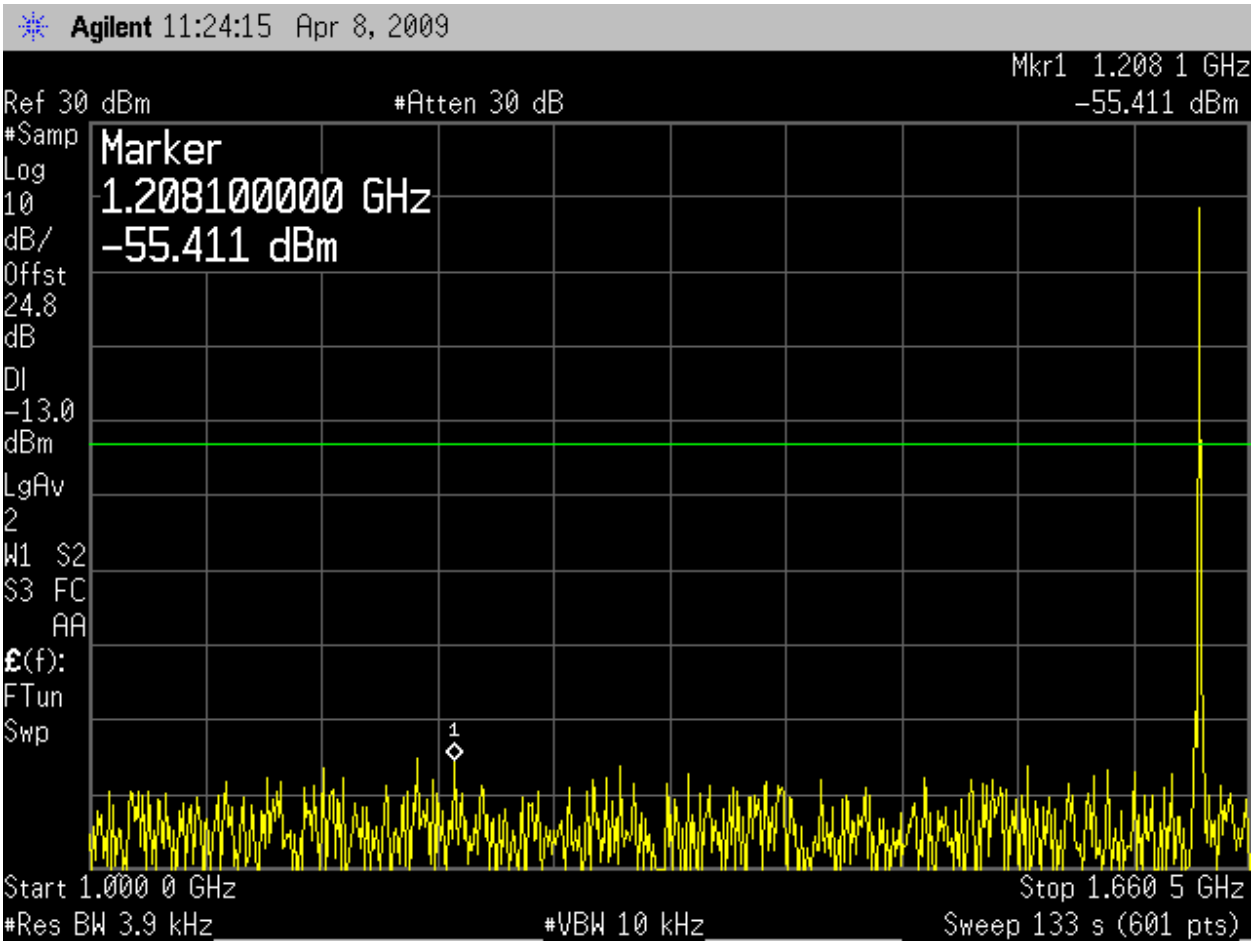
Red Vertical Lines =
Frequency at 50 to 100% x 200 kHz BW =
+/- 100 kHz to 200 kHz from center frequency

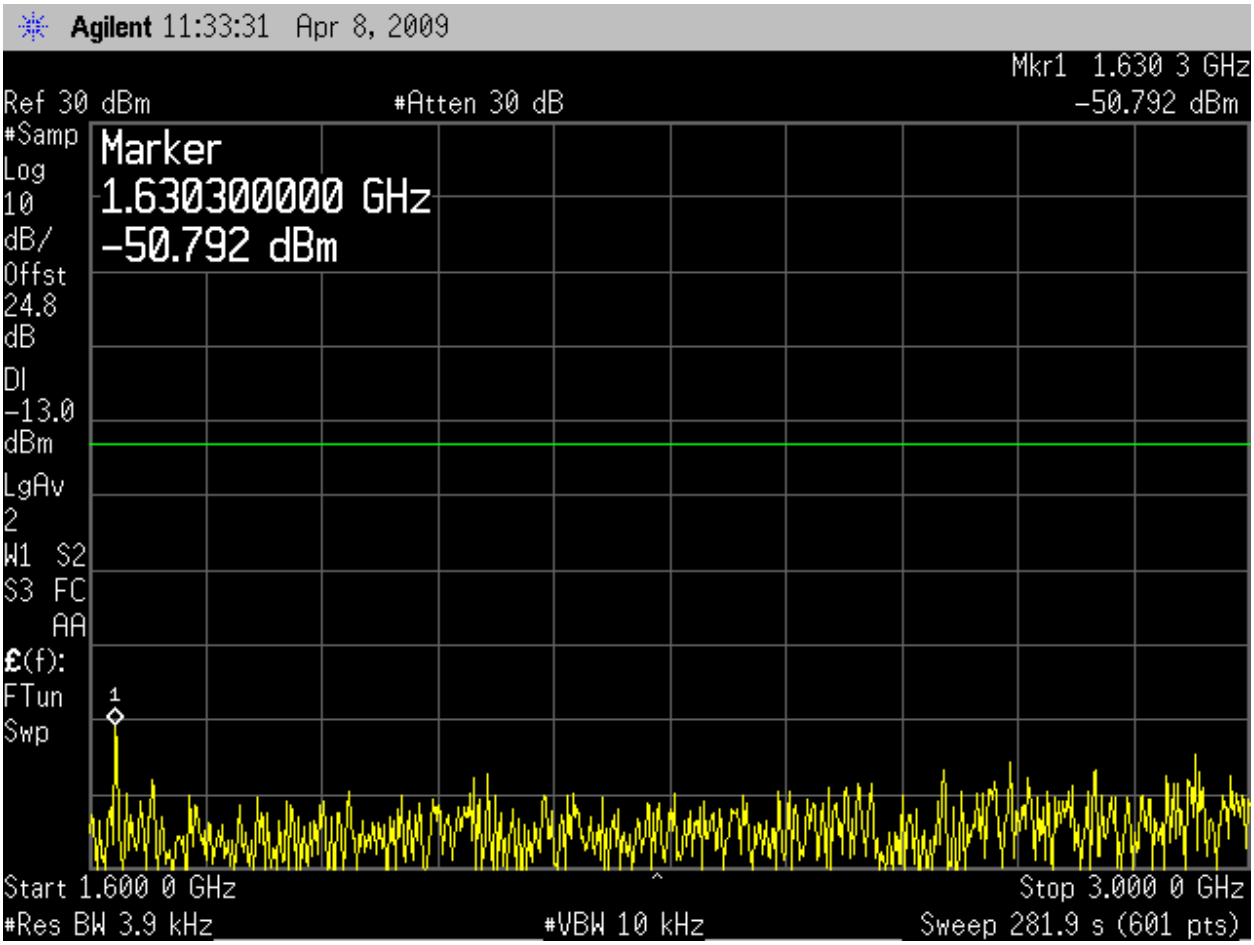
Red Vertical Lines =
Frequency at 100 to 250% x 200 kHz BW =
+/-200 kHz to +/- 1 MHz from center frequency

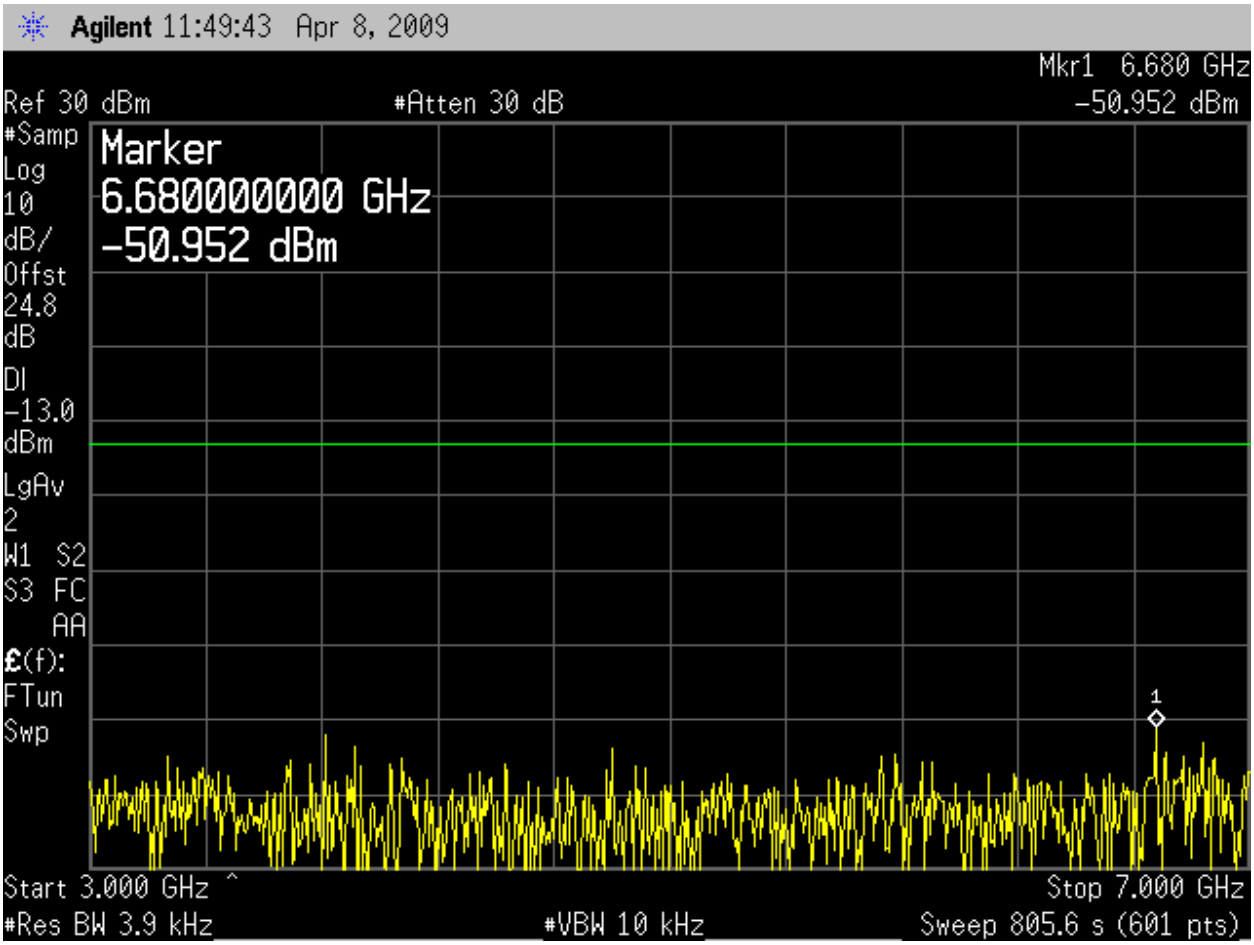
Lowest channel. Frequency Mask Part 2

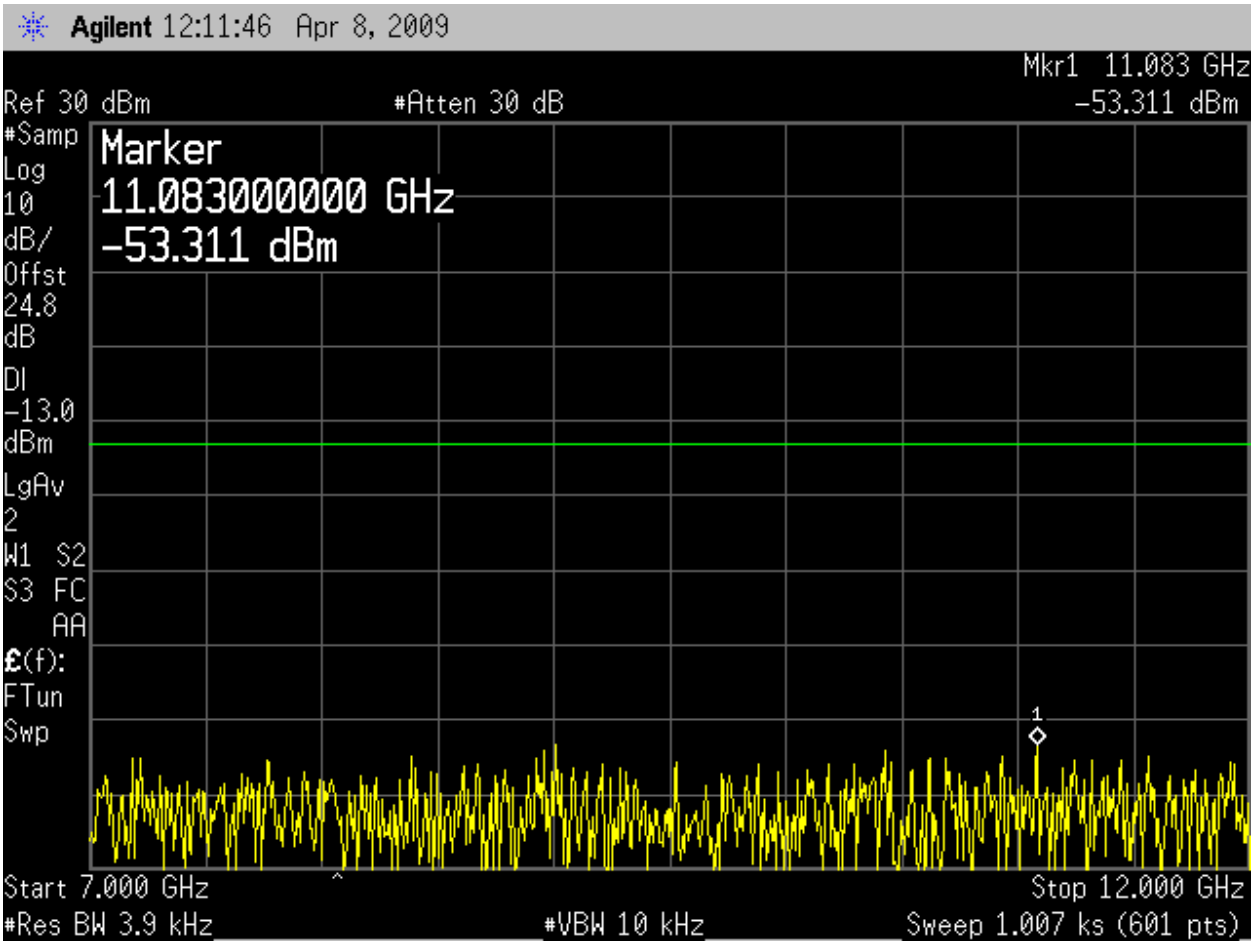


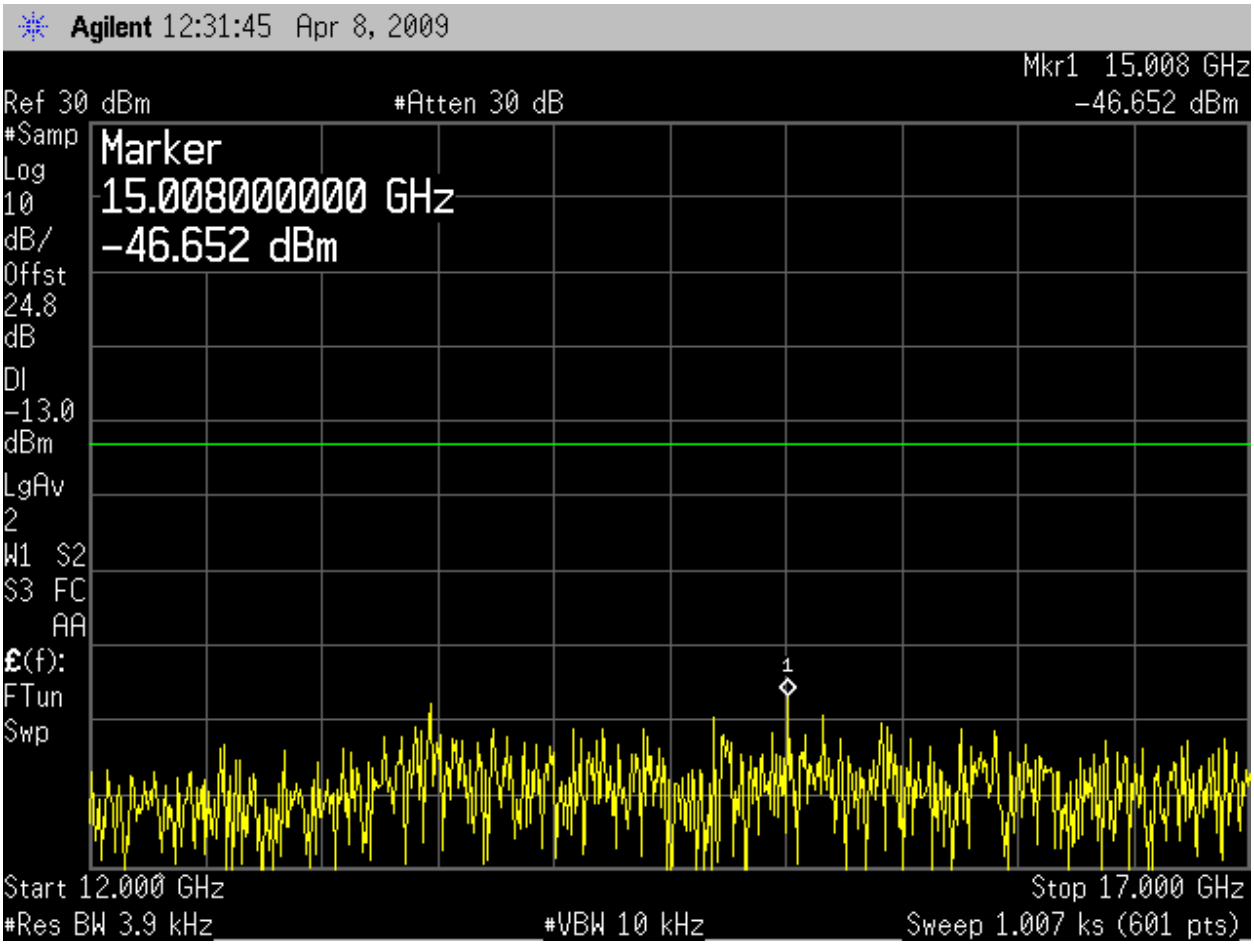
Red Vertical Lines = Frequency at 250% x 200 kHz BW = +/- 1 MHz from center frequency


Agilent 11:24:15 Apr 8, 2009
Mkr1 1.208 1 GHz
-55.411 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
1.208100000 GHz
-55.411 dBm
1
Start 1.000 0 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Stop 1.660 5 GHz
Sweep 133 s (601 pts)

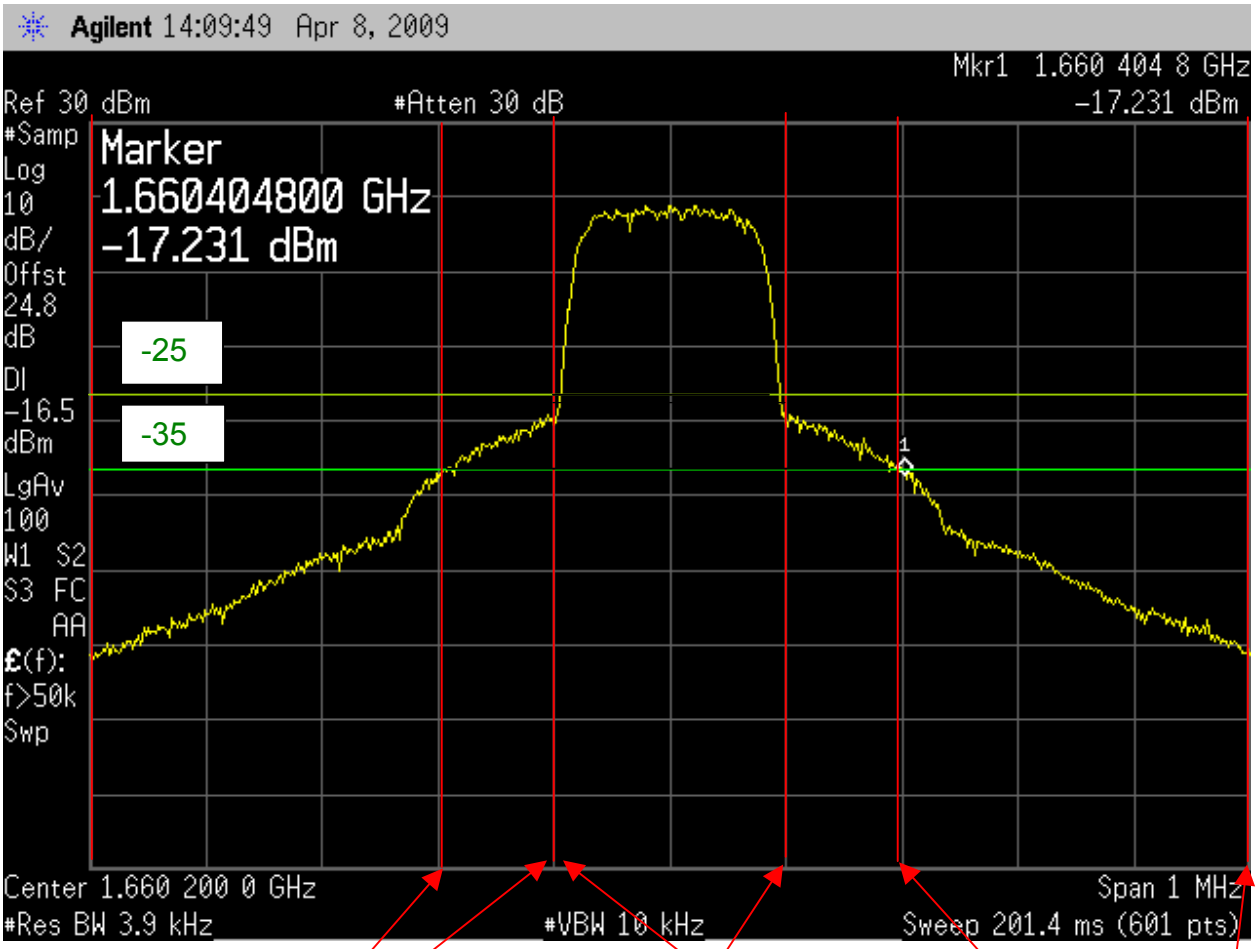

Agilent 11:33:31 Apr 8, 2009
Mkr1 1.630 3 GHz
-50.792 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
1.630300000 GHz
-50.792 dBm
1
Start 1.600 0 GHz
Stop 3.000 0 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 281.9 s (601 pts)


Agilent 11:49:43 Apr 8, 2009
Mkr1 6.680 GHz
-50.952 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
6.680000000 GHz
-50.952 dBm
1
Start 3.000 GHz
Stop 7.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 805.6 s (601 pts)


Agilent 12:11:46 Apr 8, 2009
Mkr1 11.083 GHz
-53.311 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
11.083000000 GHz
-53.311 dBm
1
Start 7.000 GHz
Stop 12.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 1.007 ks (601 pts)


Agilent 12:31:45 Apr 8, 2009
Mkr1 15.008 GHz
-46.652 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
15.008000000 GHz
-46.652 dBm
1
Start 12.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Stop 17.000 GHz
Sweep 1.007 ks (601 pts)

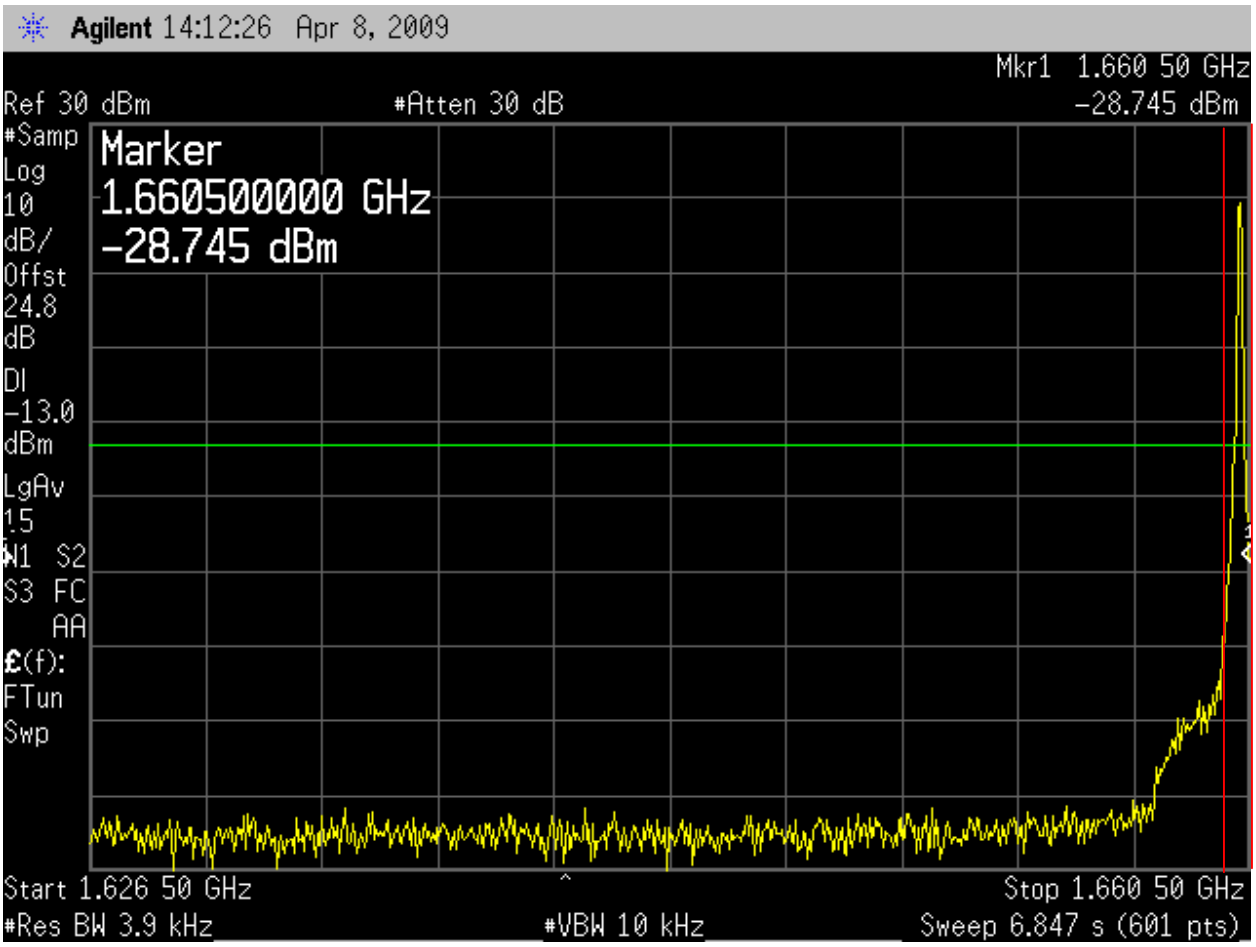
Highest channel. Frequency Mask.



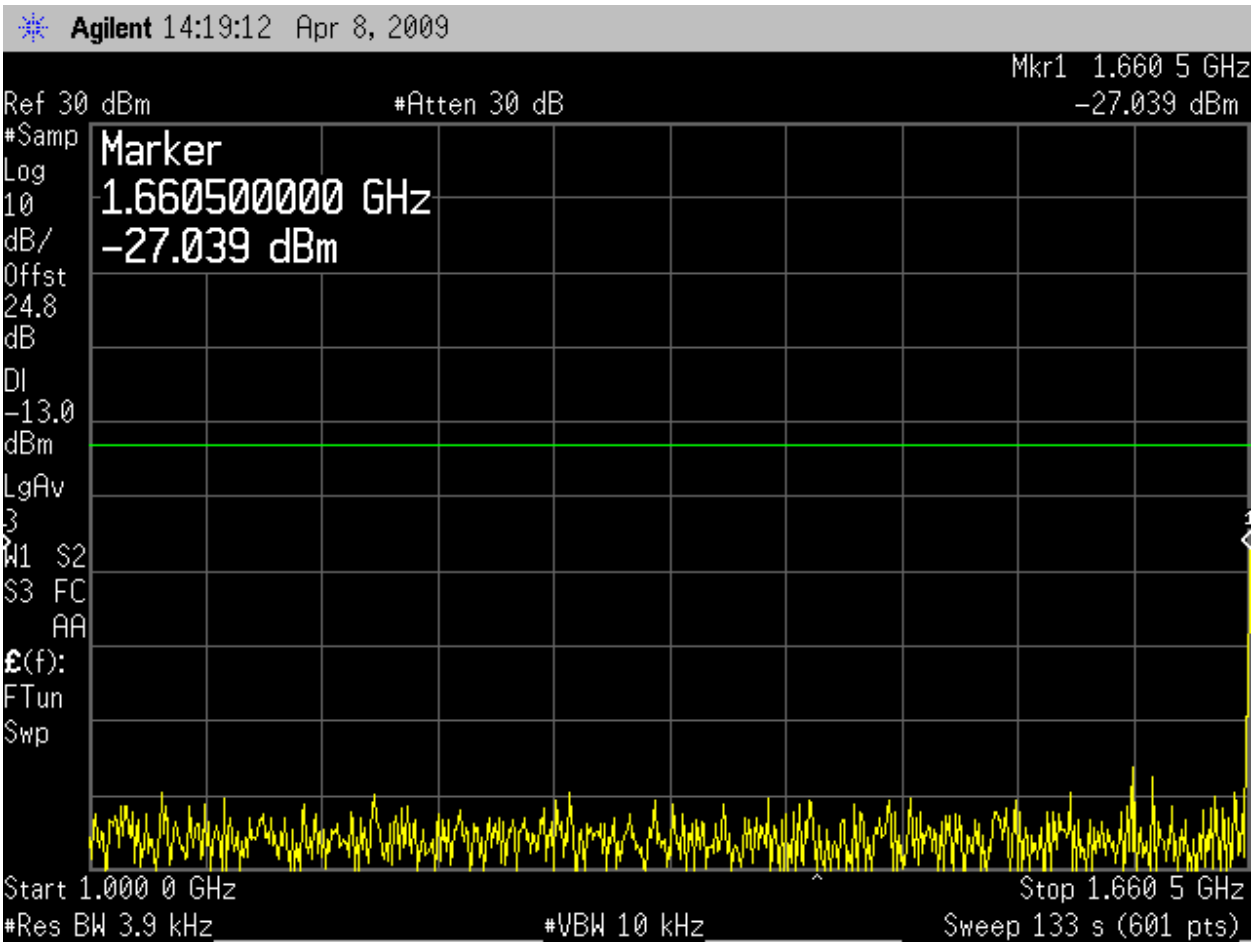
Red Vertical Lines =
Frequency at 50% x 200 kHz BW
= +/- 100 kHz from center frequency

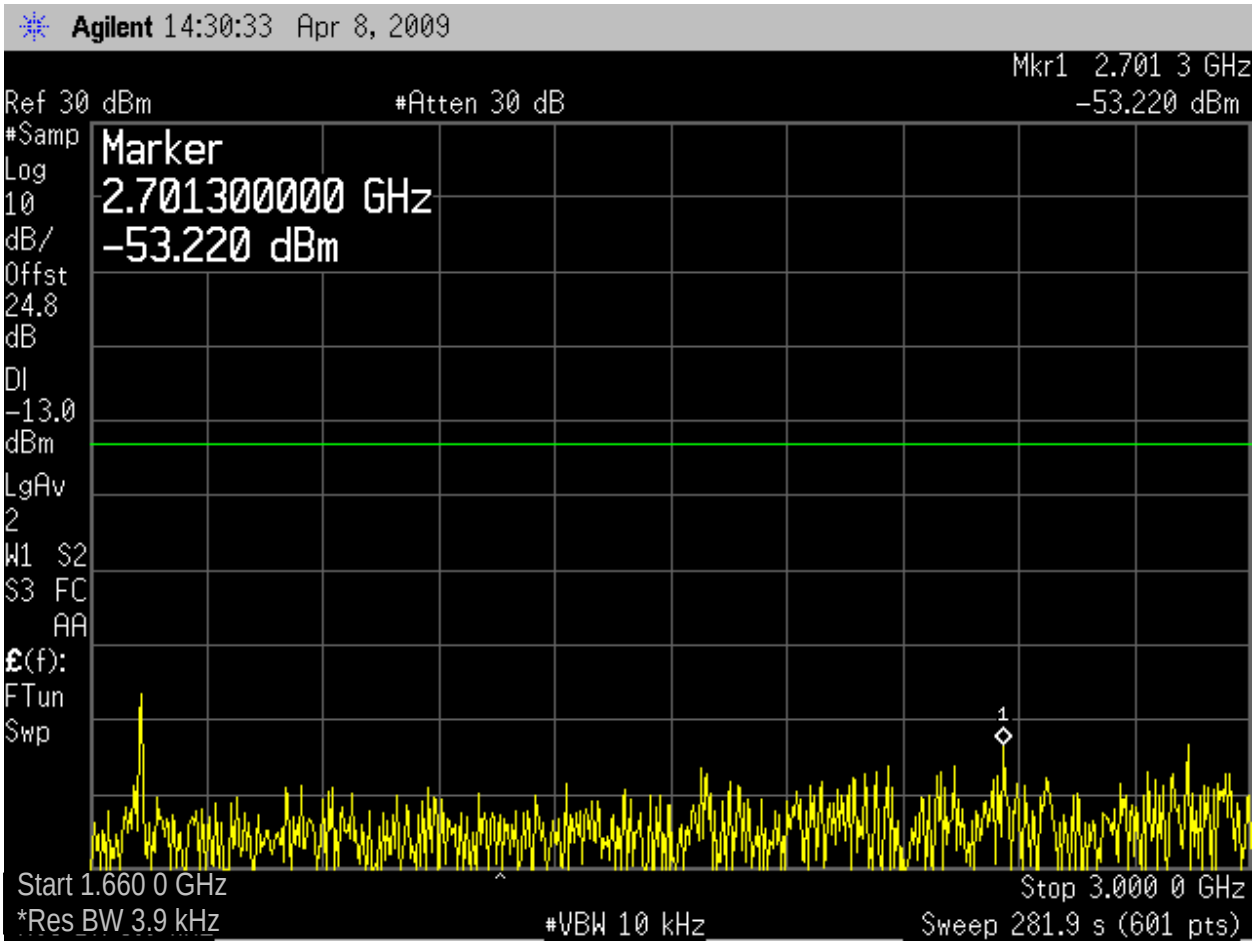
Red Vertical Lines =
Frequency at 50 to 100% x 200 kHz BW =
+/- 100 kHz to 200 kHz from center frequency

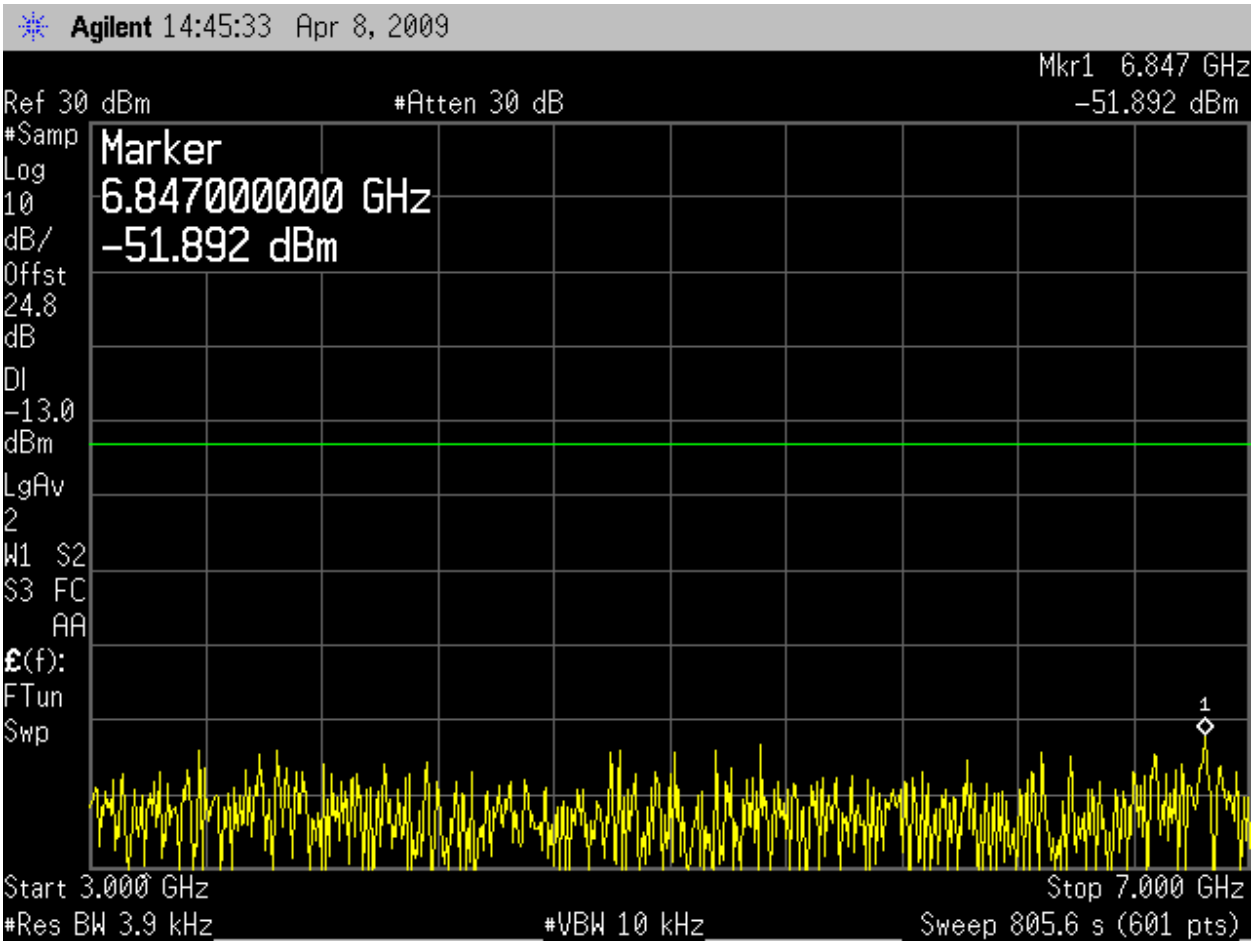
Red Vertical Lines =
Frequency at 100 to 250% x 200 kHz BW =
+/-200 kHz to +/- 1 MHz from center frequency

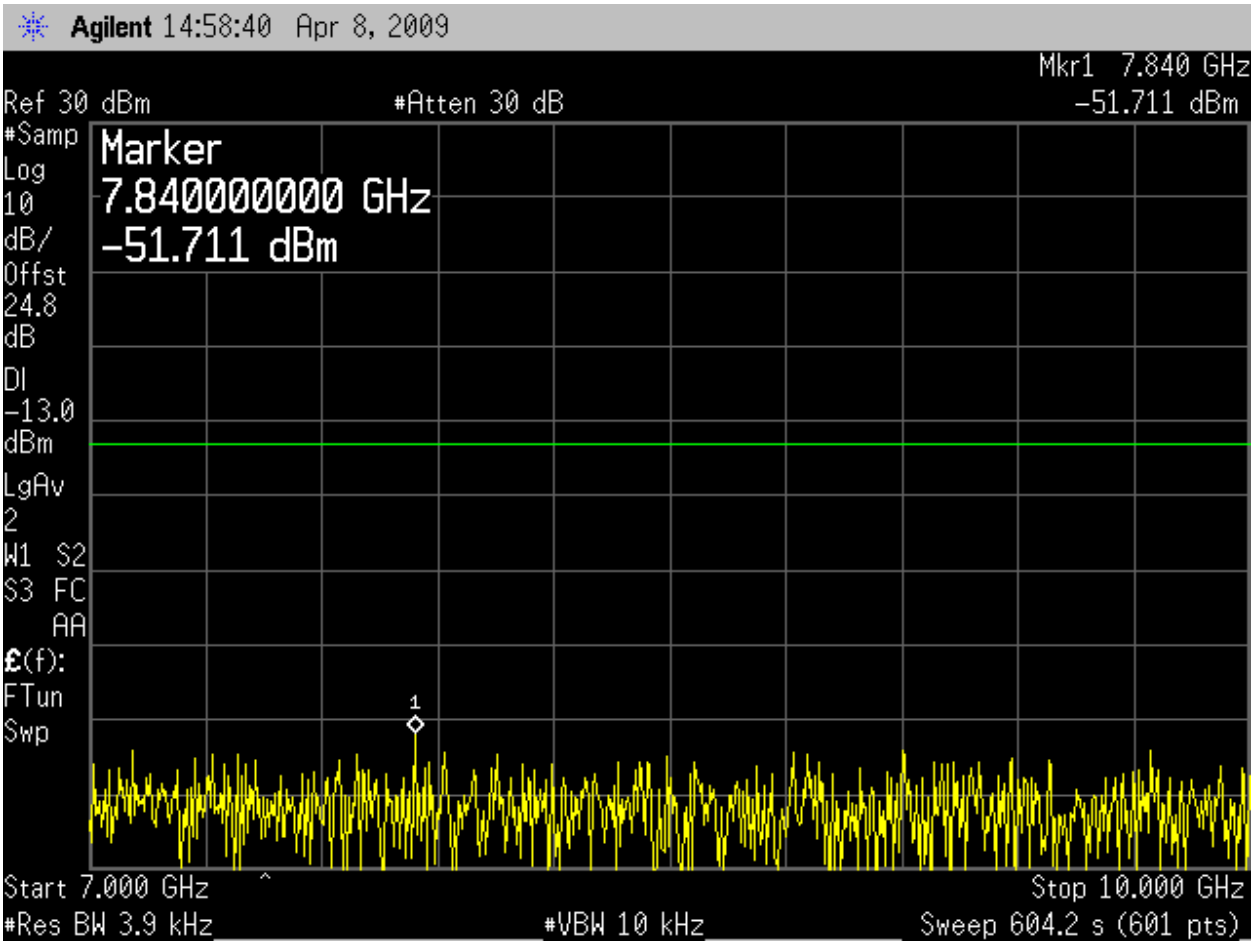


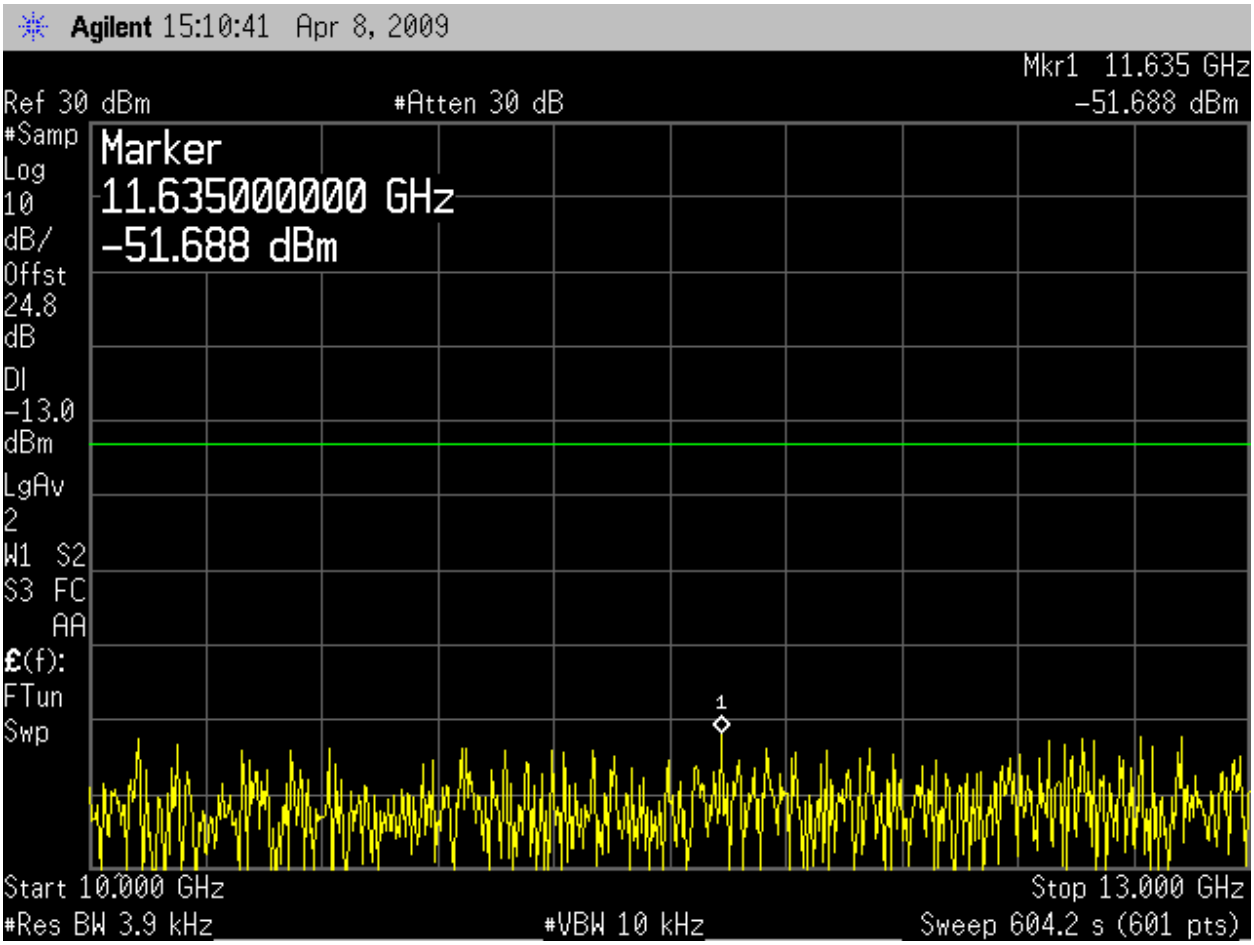
Red Vertical Lines = Frequency at 250% x 200 kHz BW = +/- 1 MHz from center frequency

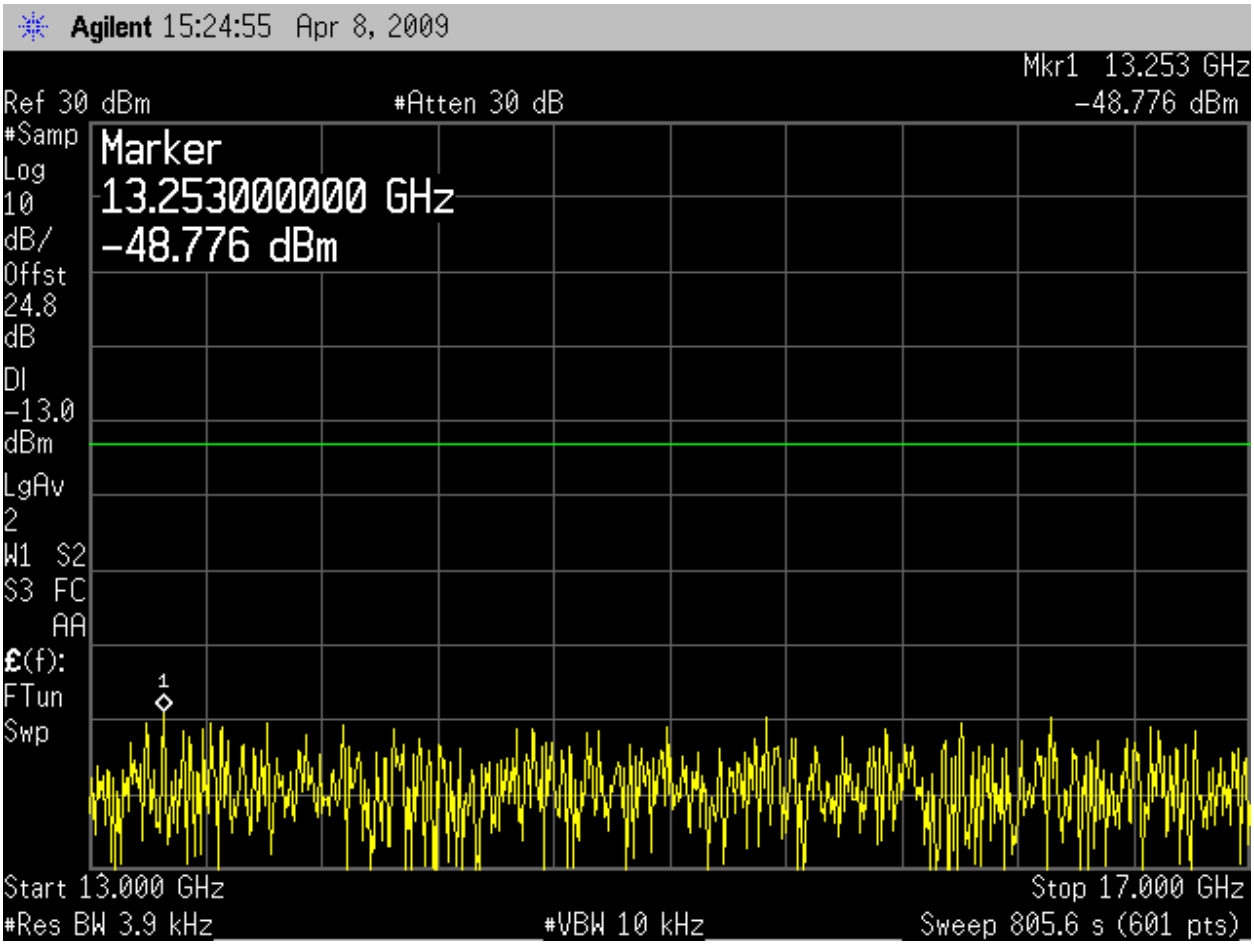

Agilent 14:19:12 Apr 8, 2009
Mkr1 1.660 5 GHz
Ref 30 dBm
#Atten 30 dB
-27.039 dBm
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
3
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
1.660500000 GHz
-27.039 dBm
Start 1.000 0 GHz
Stop 1.660 5 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 133 s (601 pts)


Agilent 14:30:33 Apr 8, 2009
Mkr1 2.701 3 GHz
Ref 30 dBm
#Atten 30 dB
-53.220 dBm
#Samp
Log
10
dB/
Offst
24.8
dB
Marker
2.701300000 GHz
-53.220 dBm
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
1
Start 1.660 0 GHz
*Res BW 3.9 kHz
#VBW 10 kHz
Stop 3.000 0 GHz
Sweep 281.9 s (601 pts)


Agilent 14:45:33 Apr 8, 2009
Mkr1 6.847 GHz
Ref 30 dBm
#Atten 30 dB
-51.892 dBm
#Samp
Log
10
dB/
Offst
24.8
dB
Marker
6.847000000 GHz
-51.892 dBm
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
1
Start 3.000 GHz
Stop 7.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 805.6 s (601 pts)


Agilent 14:58:40 Apr 8, 2009
Mkr1 7.840 GHz
-51.711 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
7.840000000 GHz
-51.711 dBm
1
Start 7.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Stop 10.000 GHz
Sweep 604.2 s (601 pts)


Agilent 15:10:41 Apr 8, 2009
Mkr1 11.635 GHz
-51.688 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
11.635000000 GHz
-51.688 dBm
1
Start 10.000 GHz
Stop 13.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Sweep 604.2 s (601 pts)


Agilent 15:24:55 Apr 8, 2009
Mkr1 13.253 GHz
-48.776 dBm
Ref 30 dBm
#Atten 30 dB
#Samp
Log
10
dB/
Offst
24.8
dB
Dl
-13.0
dBm
LgAv
2
W1 S2
S3 FC
AA
£(f):
FTun
Swp
Marker
13.253000000 GHz
-48.776 dBm
1
Start 13.000 GHz
#Res BW 3.9 kHz
#VBW 10 kHz
Stop 17.000 GHz
Sweep 805.6 s (601 pts)

Section 5. Field Strength of Spurious

Para. No.: 2.1053

Test Performed By: A. Laudani	**Date of Test:** March 4, 2009

Minimum Standard: 25.202 Frequencies, frequency tolerance and emission limitations

Test Results: EUT Complies

No emissions found due to radio spurious emissions within 20 dB of the limits.

Emissions searched from 30 MHz to 10 times the transmit frequency or 17 GHz.

Emissions below attributed to digital processing circuitry—non radio emissions whose mode and limits are met by FCC Part 15B—limits more restrictive than FCC Part 25.202.

Transmissions blocked by transmitting into a load.

Modes: Ping from laptop computer and continuous transmit full power with maximum modulation.

No emissions found due to radio spurious emissions within 20 dB of the limits.

Test Data: See attached table.

Radiated Emissions Data

Job # : 25610-1 Date : 3-4-09 Page 1 of 1
NEX #: 122417 Time : 0910
Staff : AAL

Client Name : Hughes Network Systems
EUT Name : Land Mobile BGAN Terminal
EUT Model # : RF-7800B-DU024
EUT Serial # : 2
EUT Config. : SEE COMMENTS

EUT Voltage : 24
EUT Frequency : DC
Phase:
NOATS
SOATS X
Distance < 1000 MHz: 3 m
Distance > 1000 MHz: 3 m

Specification : CFR47 Part 15, Subpart B, Class B
Loop Ant. #: NA
Bicon Ant.#: 116_3m Temp. (°C) : 14
Log Ant.#: 111_3m Humidity (%) : 56
DRG Ant. # NA Spec An.#: 898
Cable LF#: SOATS Spec An. Display #: 898
Cable HF#: 60ft QP #: 898
Preamp LF#: NA PreSelect#: 899
Preamp HF# NA

Quasi-Peak	RBW:	120 kHz
	Video Bandwidth	300 kHz
Peak	RBW:	1 MHz
	Video Bandwidth	3 MHz
Average	RBW:	1 MHz
	Video Bandwidth	10 Hz

Measurements below 1 GHz are Quasi-Peak values, unless otherwise stated.
Measurements above 1 GHz are Average values, unless otherwise stated.

Meas. Freq. (MHz)	Meter Reading **Vertical**	Meter Reading **Horizontal**	Det.	EUT Side F/L/R/B	Ant. Height m	Max. Reading (dBµV)	Corrected Reading (dBµV/m)	Spec. limit (dBµV/m)	CR/SL Diff. (dB)	Pass Fail	Comment
45.7	14.6	9.2	Q	-	1.0	14.6	28.1	40.0	-11.9	Pass	Carrier Off -- ping from laptop
49.9	17.1	9.9	Q	-	1.0	17.1	30.6	40.0	-9.4	Pass	
63.9	14.2	11.4	Q	-	1.0	14.2	23.3	40.0	-16.7	Pass	
74.7	14.2	12.2	Q	-	1.0	14.2	21.5	40.0	-18.5	Pass	
261.0	8.2	17.8	Q	-	1.0	17.8	35.3	46.0	-10.7	Pass	
266.0	6.7	7.8	Q	-	1.0	7.8	25.3	46.0	-20.7	Pass	
45.7	15.5	8.3	Q	-	1.0	15.5	29.0	40.0	-11.0	Pass	Carrier On -- ping from laptop
49.9	13.3	7.8	Q	-	1.0	13.3	26.8	40.0	-13.2	Pass	Low Frequency
74.7	13.5	11.2	Q	-	1.0	13.5	20.8	40.0	-19.2	Pass	
73.1	14.8	10.5	Q	-	1.0	14.8	22.1	40.0	-17.9	Pass	
261.1	12.8	13.9	Q	-	1.0	13.9	31.4	46.0	-14.6	Pass	
266.0	6.6	10.4	Q	-	1.0	10.4	27.9	46.0	-18.1	Pass	
											Carrier On -- ping from laptop
45.7	17.6	11.4	Q	-	1.0	17.6	31.1	40.0	-8.9	Pass	Mid Frequency
49.9	9.7	18.5	Q	-	1.0	18.5	32.0	40.0	-8.0	Pass	
74.7	18.9	12.5	Q	-	1.0	18.9	26.2	40.0	-13.8	Pass	
73.1	14.8	10.5	Q	-	1.0	14.8	22.1	40.0	-17.9	Pass	
261.1	8.1	12.2	Q	-	1.0	12.2	29.7	46.0	-16.3	Pass	
266.0	13.9	13.5	Q	-	1.0	13.9	31.4	46.0	-14.6	Pass	
											Carrier On -- ping from laptop
45.7	15.5	8.3	Q	-	1.0	15.5	29.0	40.0	-11.0	Pass	High Frequency
49.9	18.9	7.8	Q	-	1.0	18.9	32.4	40.0	-7.6	Pass	
74.7	14.8	13.5	Q	-	1.0	14.8	22.1	40.0	-17.9	Pass	
73.1	14.8	10.5	Q	-	1.0	14.8	22.1	40.0	-17.9	Pass	
261.1	9.8	17.8	Q	-	1.0	17.8	35.3	46.0	-10.7	Pass	
266.0	8.3	13.4	Q	-	1.0	13.4	30.9	46.0	-15.1	Pass	

Section 6. Frequency Stability

Para. No.: 2.1055

Test Performed By: Alan Laudani	**Date of Test:** March 3, 2009

Minimum Standard: 25.202 Frequencies, frequency tolerance and emission limitations

(d) *Frequency tolerance, Earth stations.* The carrier frequency of each earth station transmitter authorized in these services shall be maintained within 0.001 percent of the reference frequency.

Test Results: EUT Complies

Measurement Data: Standard Test Frequency: 1643.7 MHz
Standard Test Voltage: 24 Vdc

Limts **0.001%**

Limit (Hz) ± 16437

Voltage Nominal 24.0 V 3-Mar-09

Temperature(°C)	**Frequency center MHz**	**Freq.difference Hz**
-30	1643.700000	0
-20	1643.700000	0
-10	1643.700000	0
0	1643.700000	0
10	1643.700000	0
20	**1643.700000**	**0**
30	1643.700000	0
40	1643.700000	0
50	1643.700000	0

Voltage 85% 20.4 V Temperature(°C)	**Frequency center**	**Freq.difference**
-30	1643.700000	0
-20	1643.700000	0
-10	1643.700000	0
0	1643.700000	0
10	1643.700000	0
20	1643.700000	0
30	1643.700000	0
40	1643.700000	0
50	1643.700000	0

Voltage 1.15% 27.6 V Temperature(°C)	**Frequency center**	**Freq.difference**
-30	1643.700000	0
-20	1643.700000	0
-10	1643.700000	0
0	1643.700000	0
10	1643.700000	0
20	1643.700000	0
30	1643.700000	0
40	1643.700000	0
50	1643.700000	0

Date:	8-Apr-09
Mode:	CW
Channel:	1643.700000 MHz

Voltage	Output Power	Frequency Difference
Volt	dBm	HZ
20.4	23.17	0
18.0	23.17	0
16.0	23.16	0
14.0	23.06	0
12.0	23.05	0
11.5	off	on freq

Testing is done at 25°C Humidity: 21 %

Section 7. Field Strength of Spurious Emissions

Para. No.: 2.1053

Test Performed By: A. Laudani	**Date of Test:**

Minimum Standard: 25.216

25.216(h)
(h) Mobile earth stations manufactured more than six months after Federal Register publication of the rule changes adopted in FCC 03–283 with assigned uplink frequencies in the 1626.5–1660.5 MHz band shall suppress the power density of emissions in the 1605–1610 MHz band-segment to an extent determined by linear interpolation from −70 dBW/MHz at 1605 MHz to −46 dBW/MHz at 1610 MHz, averaged over any 2 millisecond active transmission interval. The e.i.r.p of discrete emissions of less than 700 Hz bandwidth from such stations shall not exceed a level determined by linear interpolation from −80 dBW at 1605 MHz to −56 dBW at 1610 MHz, averaged over any 2 millisecond active transmission interval.

(j) A Root-Mean-Square detector shall be used for all power density measurements.

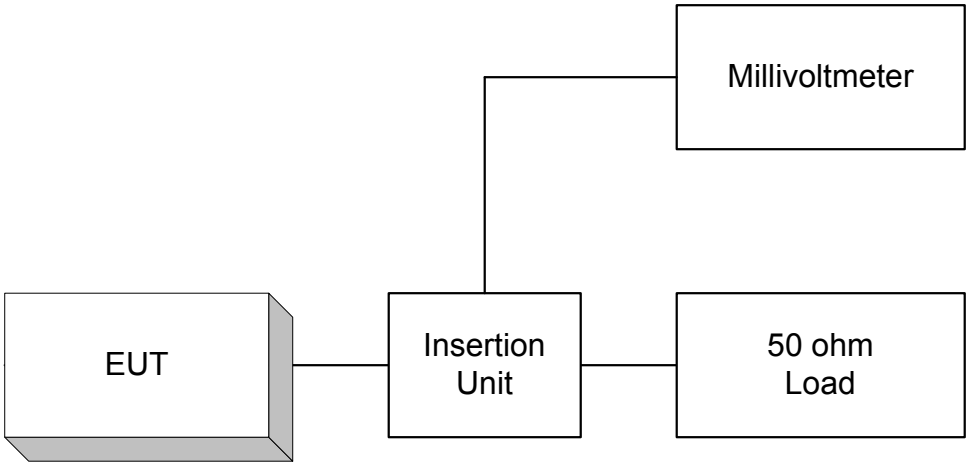
Antenna Gain:

Test Results: The EUT does not transmit between 1605 MHz and 1610 MHz

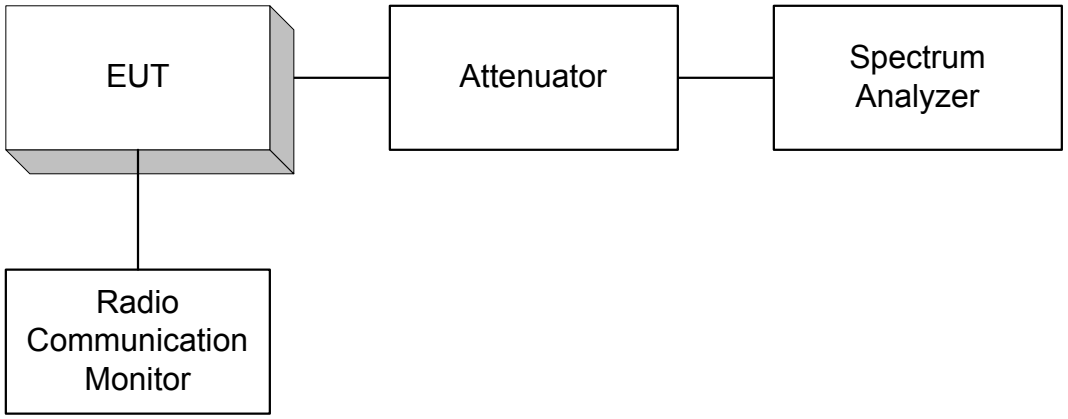
Test Data: No data to present.

Section 8. Test Set Up Block Diagrams

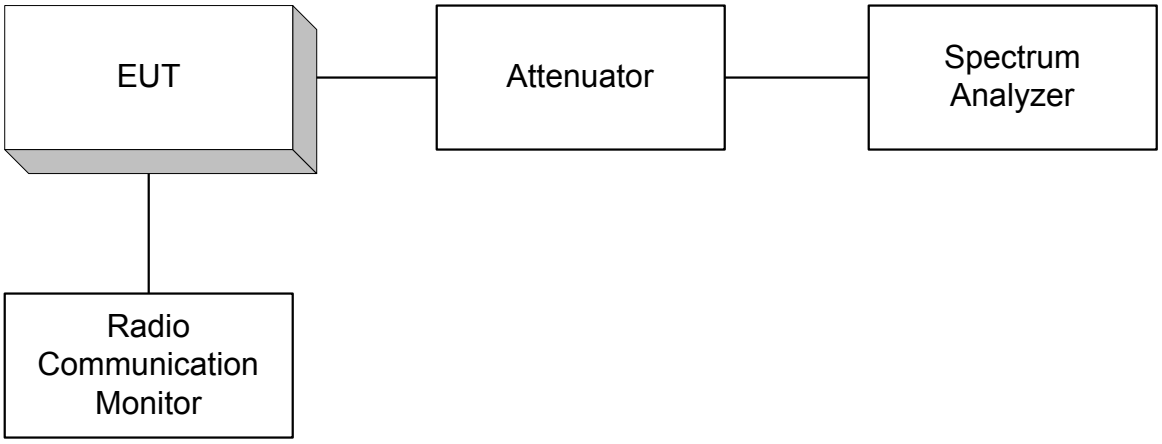
Para. No. 2.1046 - R.F. Power Output



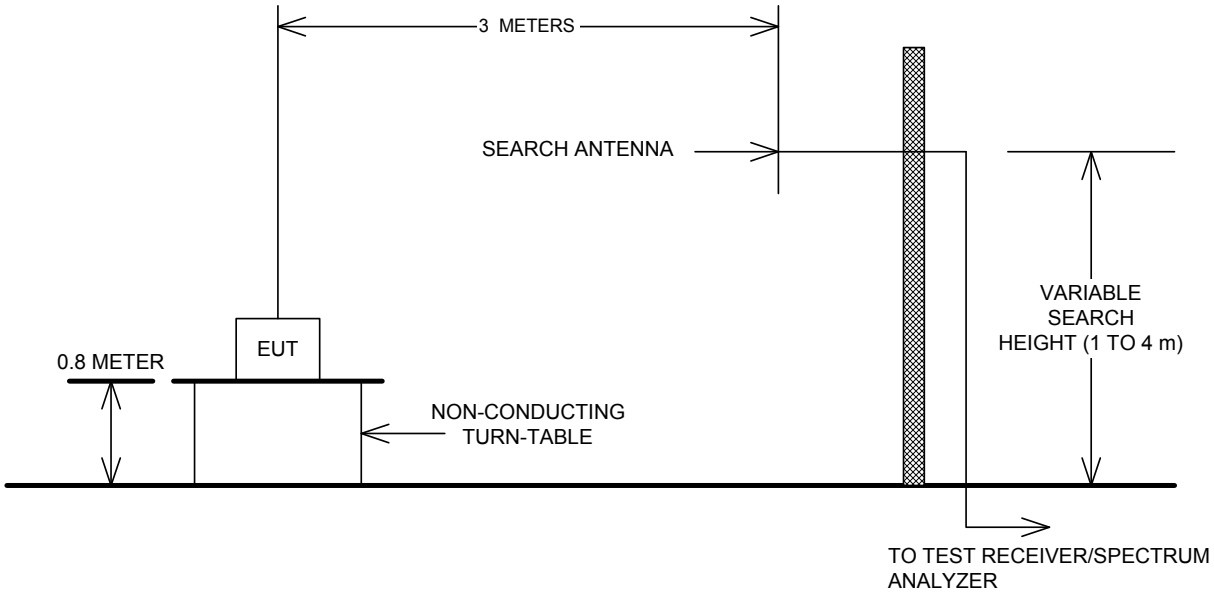
Para. No. 2.1049 - Occupied Bandwidth



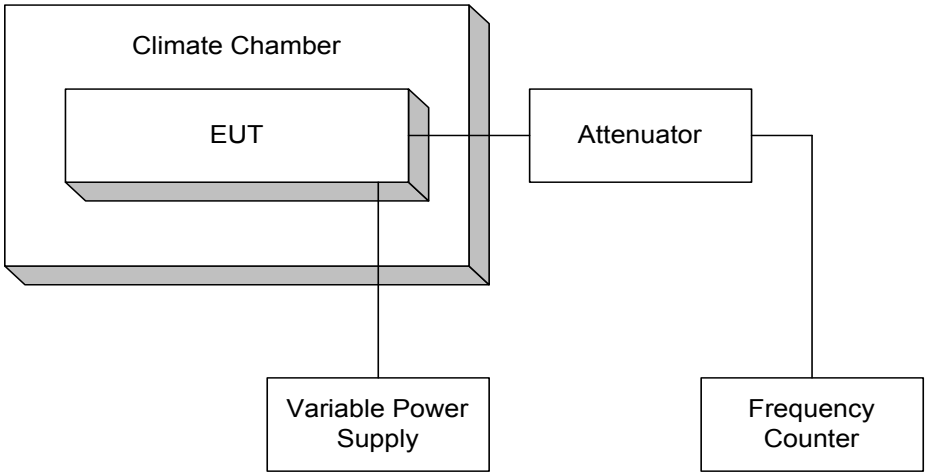
Para. No. 2.1051 - Spurious Emissions at Antenna Terminals



Para. No. 2.1053 - Field Strength of Spurious Radiation



Para. No. 2.1055 - Frequency Stability



Section 9. Test Equipment List

Nemko ID	Device	Manufacturer	Model	Serial Number	Cal Date	Cal Due Date
N149	Environmental Chamber	Cincinnati Sub-Zero	ZPHS-32-2-2-H/AC	ZP0552665	5/30/2007	5/302008
317	Preamplifier	HP	8449A	2749A00167	2/9/2007	02/09/08
110	Antenna, LPA	Electrometrics	LPA-25	1217	12/18/2006	12/18/07
114	Antenna, Bicon	EMCO	3104	2997	12/20/2006	12/20/07
529	Antenna, DRWG	EMCO	3115	2505	8/27/2007	08/27/08
898/899	EMI Receiver & filter set	HP	8546A	3625A00348	1/18/2007	01/18/08
835	Spectrum Analyzer	Rohde & Schwarz	RHDFSEK	829058/005	6/20/2007	06/20/08
813	Multimeter	Fluke	111	78130060	29-Aug-08	29-Aug-09
911	Spectrum Analyzer	Agilent	E4440A	US41421266	06-Nov-08	06-Nov-09