FCC CFR47 PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 8

CERTIFICATION TEST REPORT

FOR

2.4GHz FHSS RFID ELECTRONIC LABELING LARGE TAG

MODEL NUMBER: ATAG400E

FCC ID: W22-ATAG400E
IC: 9005A-ATAG400E

REPORT NUMBER: 11U14079-1, Revision A

ISSUE DATE: NOVEMBER 10, 2011

Prepared for
ALTIERRE CORPORATION
1980 CONDOURSE DRIVE
SAN JOSE, CA95131
USA

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	11/09/11	Initial Issue	T. Chan
A	11/10/11	Revised model number	A. Zaffar

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: ALTIERRE CORPORATION
1980 CONDOURSE DRIVE
SAN JOSE, CA95131, USA

EUT DESCRIPTION: 2.4GHz FHSS RFID ELECTRONIC SHELF LABEL

MODEL: ATAG400E

SERIAL NUMBER: Unit # 3 for RF Radiated Test
Unit # 1 for RF Conducted Test

DATE TESTED: OCTOBER 5 to NOVEMBER 7, 2011

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 3	Pass

Compliance Certification Services (UL CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL CCS By:

THU CHAN
ENGINEERING MANAGER
UL CCS

Tested By:

THANH NGUYEN
EMC ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a 2.4GHz FHSS RFID Electronic Shelf Label, which is operated by 3.0 Volts coin batteries.

The radio module is manufactured by Altierre Corp.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2401.5 - 2479.5	Binary FSK	5.42	3.48

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PCB antenna, with a maximum gain of 0 dBi.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was the Large Tag provisioning revision1.17.

The test utility software used during testing was ADT UTIL10042011/eSignDockLinker.exe

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power.

5.6. DESCRIPTION OF TEST SETUP

FOR RF RADIATED TEST

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Lenovo	Thinkpad T61	L3-D0532	DoC
AC Adapter	Note Book Adapter	F21B007B0R11P7	11S02K6963Z2UF2763P3M4	DoC
ATD (dock)	Altierre	N/S	ATD00333	DoC

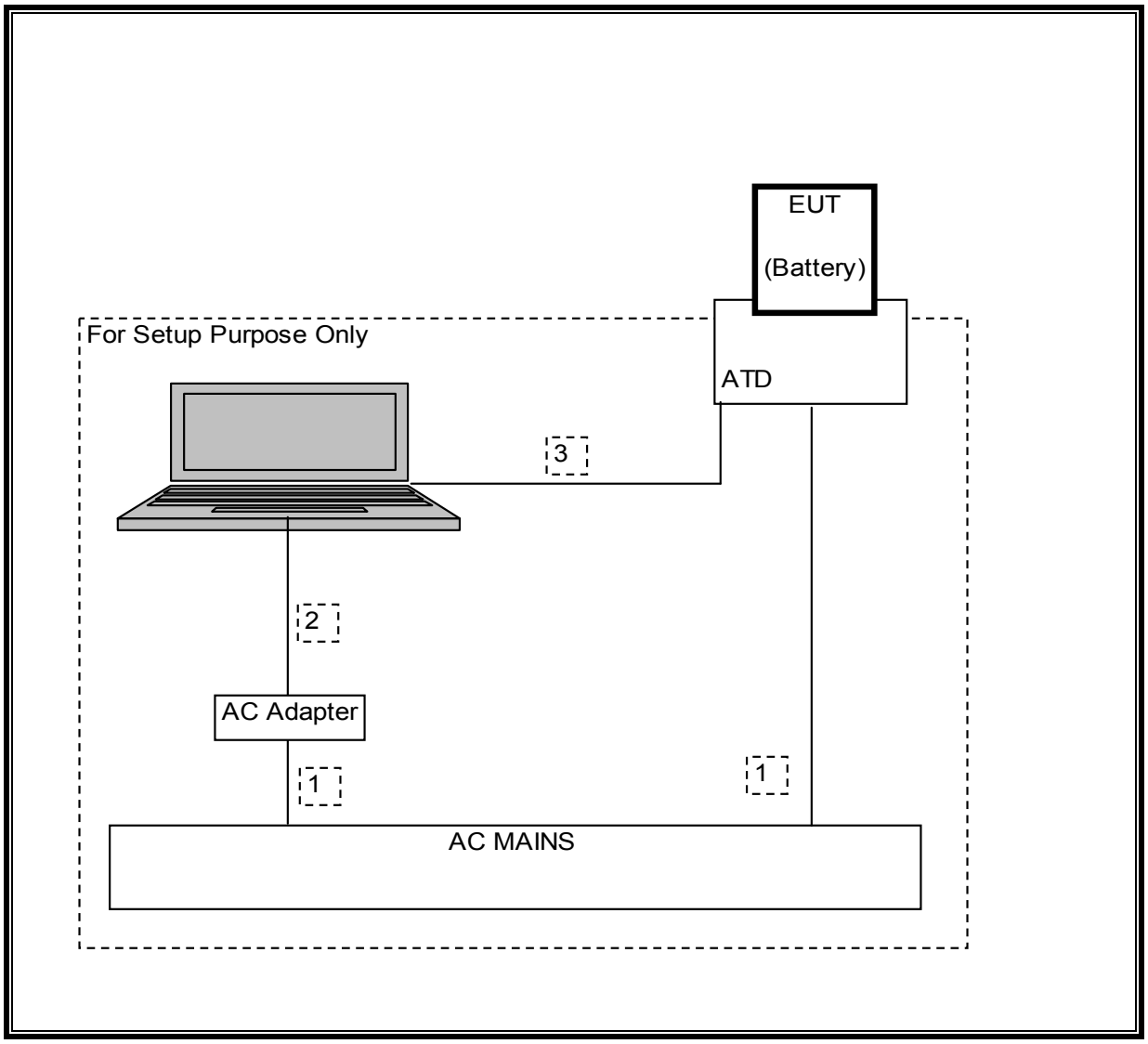
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identica Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	2	US115V	Unshielded	1.5m	
2	DC	1	DC	Unshielded	1m	A ferrite at laptop end
3	USB	1	USB	shielded	1m	

TEST SETUP

The EUT is a stand alone device during the tests; all support equipments will be removed after all parameters were configured via ATD (dock) and laptop computer.

SETUP DIAGRAM



FOR RF CONDUCTED TEST

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Laptop	Lenovo	Thinkpad T61	L3-D0532	DoC
AC Adapter	Note Book Adapter	F21B007B0R11P7	11S02K6963Z2UF2763P3M4	DoC
Access Point	Netgear	FS605V3	1FM218B08739	DoC
PoE	PowerDSine	9001G	D10046500000780A00	DoC
3.0 Volts Battery	N/A	N/A	N/A	

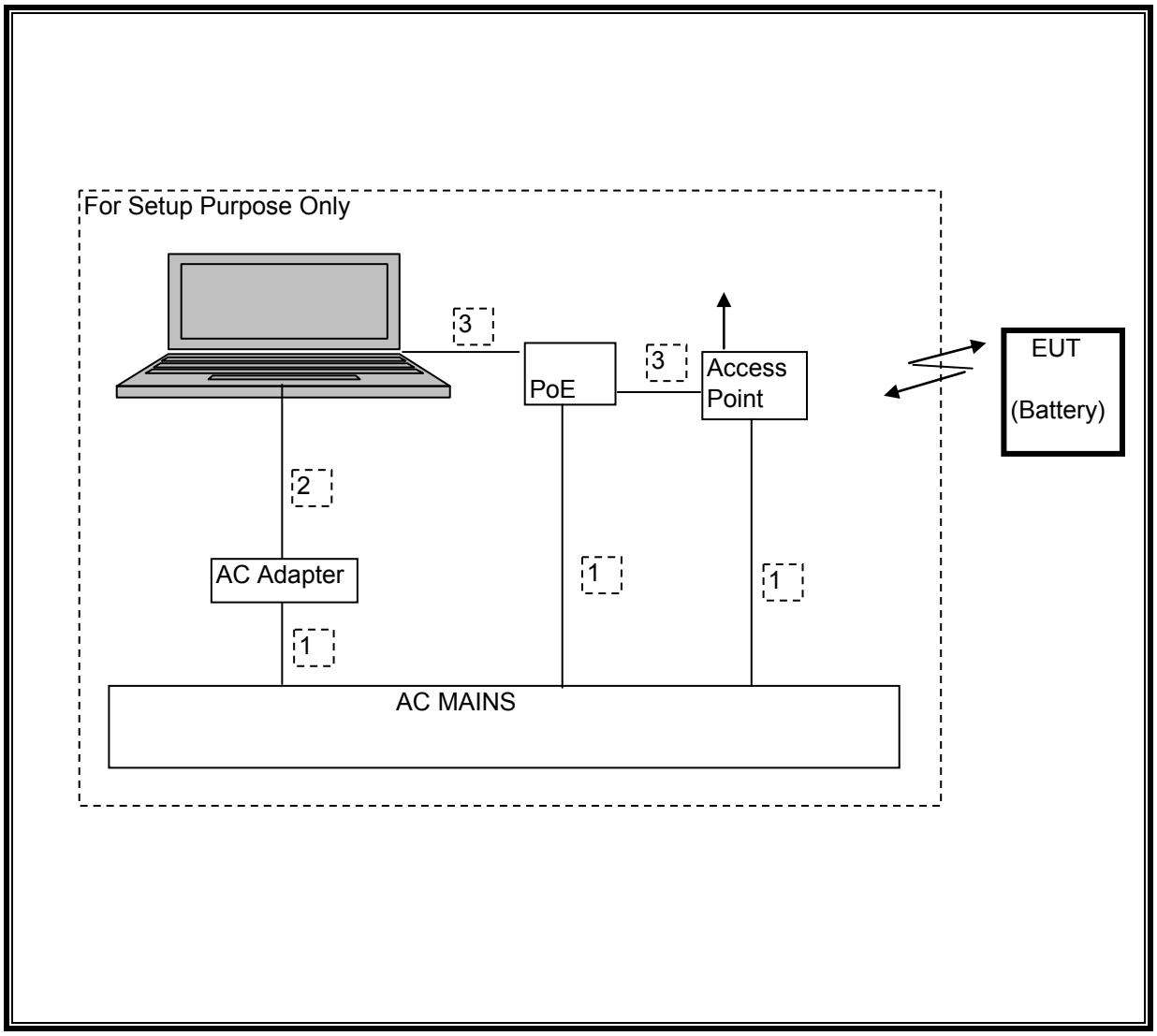
I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identica Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	2	US115V	Unshielded	1.5m	
2	DC	1	DC	Unshielded	1.0m	A ferrite at laptop end
3	Ethernet	2	RJ45	shielded	.80m	

TEST SETUP

The EUT is a stand alone device during the tests; all support equipments will be removed after all parameters were configured via access point and laptop computer.

SETUP DIAGRAM



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4446A	T200	08/15/12
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	07/16/12
Antenna, Horn, 18 GHz	EMCO	3115	C00945	06/28/12
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00885	01/28/12
Preamplifier, 1-26GHz	Agilent / HP	8449B	C01052	07/06/12
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	C00589	06/28/12
Peak Power Meter	Agilent / HP	E4416A	C00963	12/04/11
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/04/11

7. ANTENNA PORT TEST RESULTS

7.1. BINARY FSK MODULATION

7.1.1. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

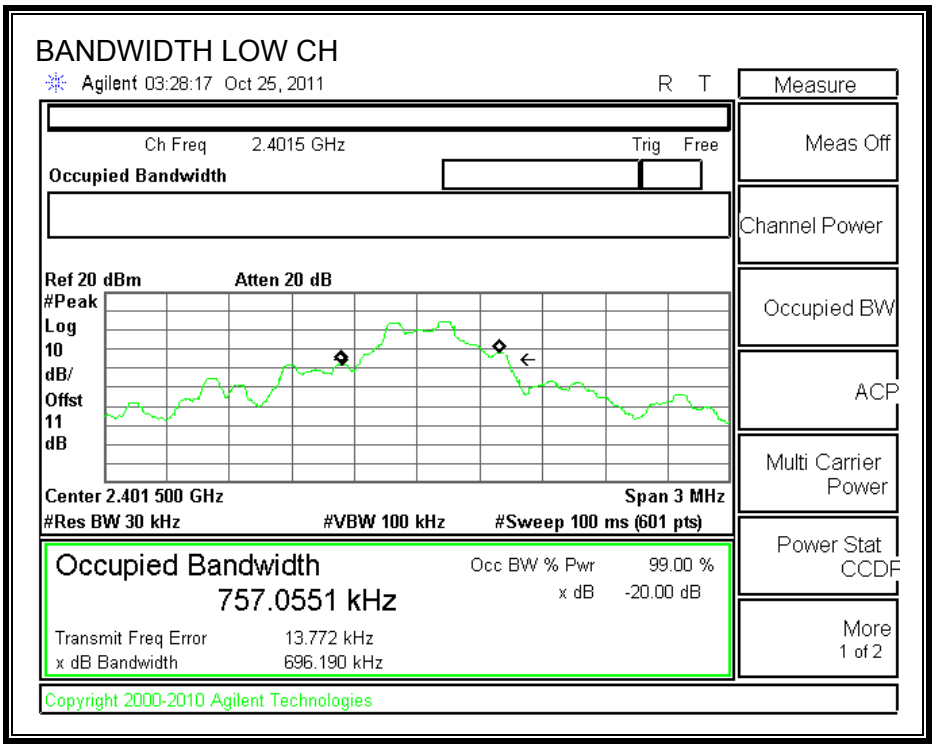
TEST PROCEDURE

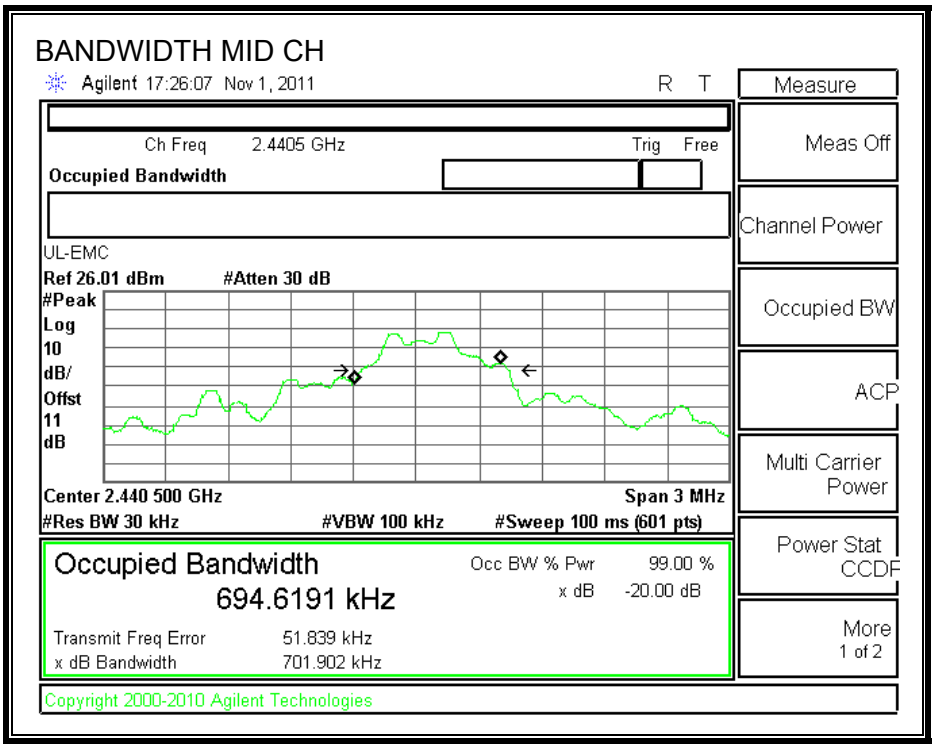
The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

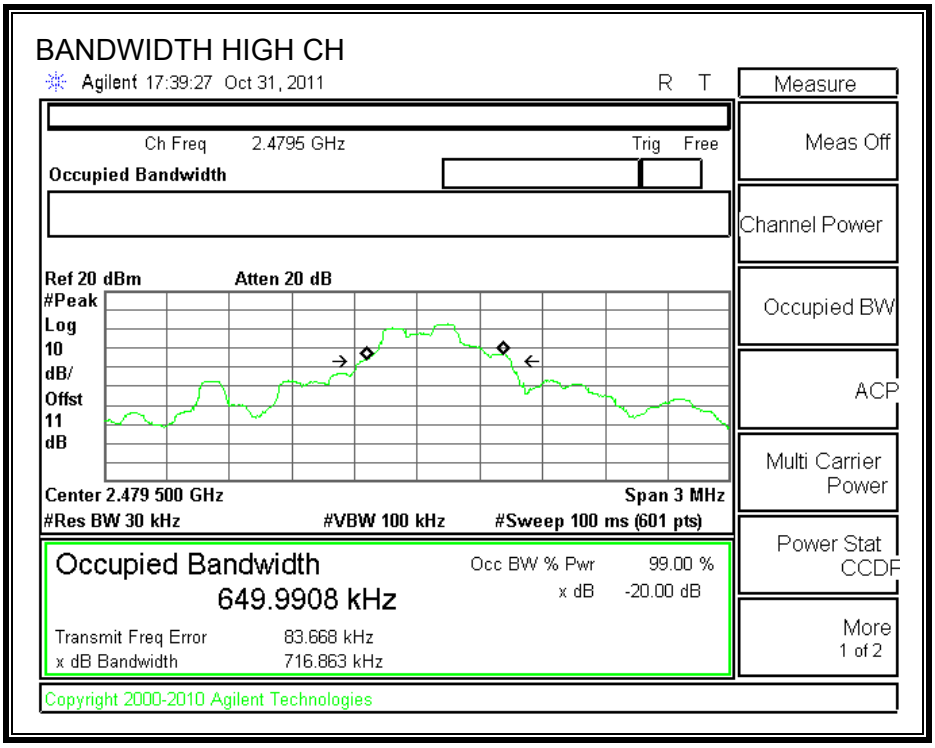
RESULTS

Channel	Frequency (MHz)	20 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	2401.5	696.190	743.241
Middle	2440.5	701.902	742.107
High	2479.5	716.863	661.261

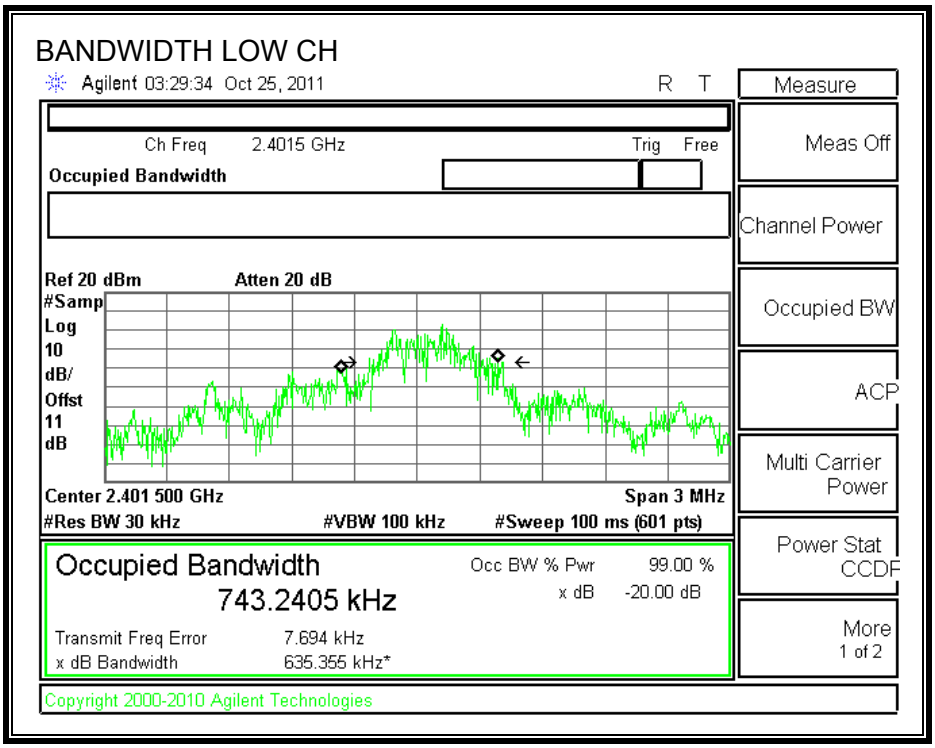
20 dB BANDWIDTH

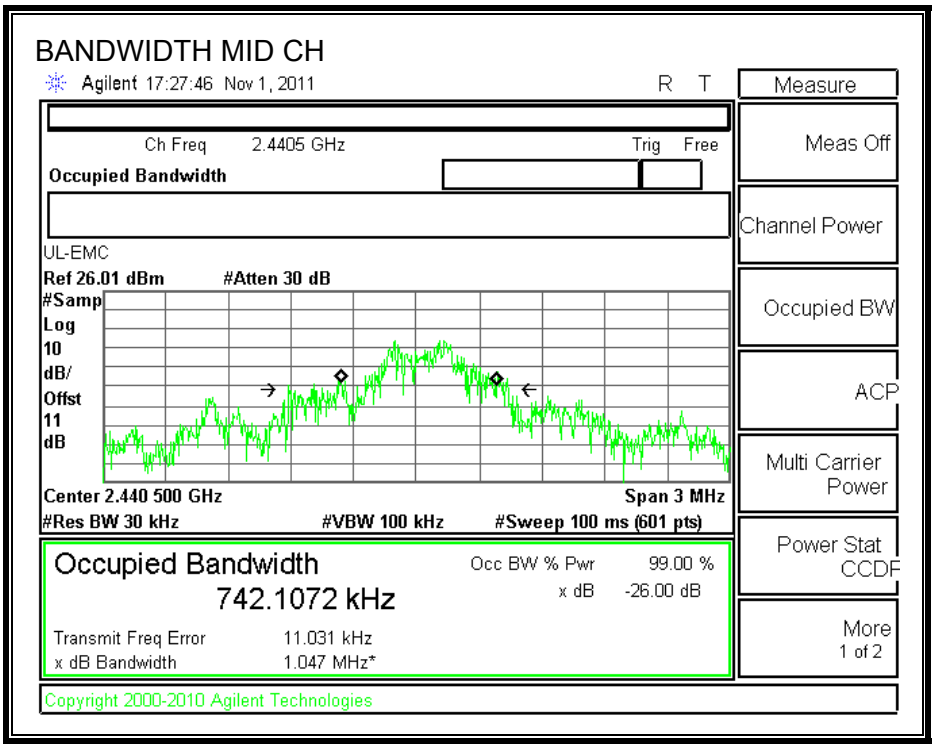


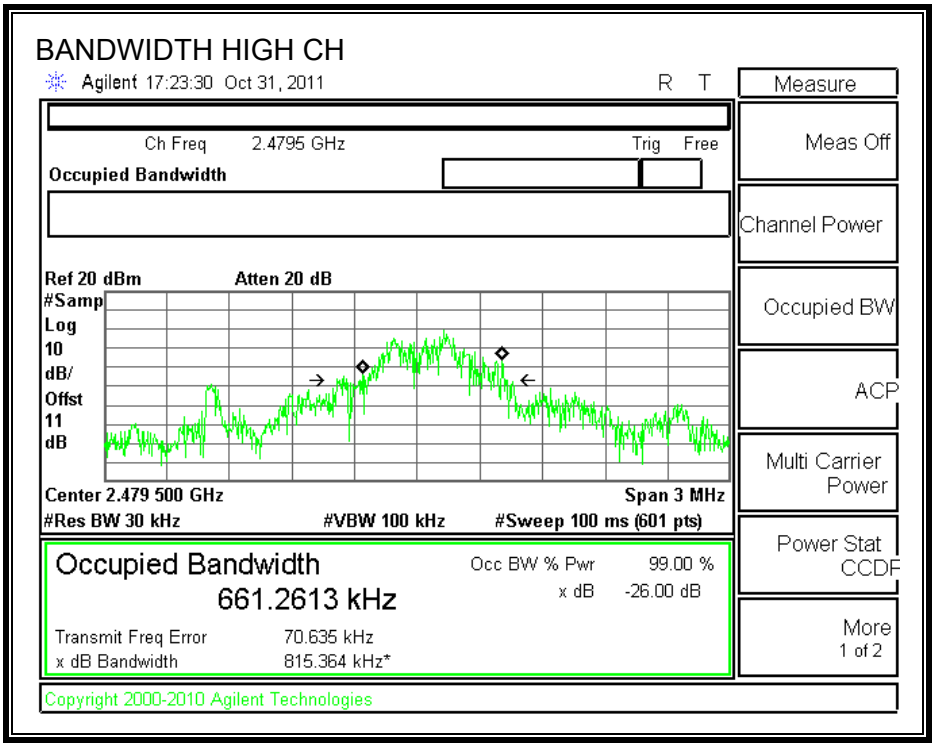




99% BANDWIDTH







7.1.2. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

IC RSS-210 A8.1 (b)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

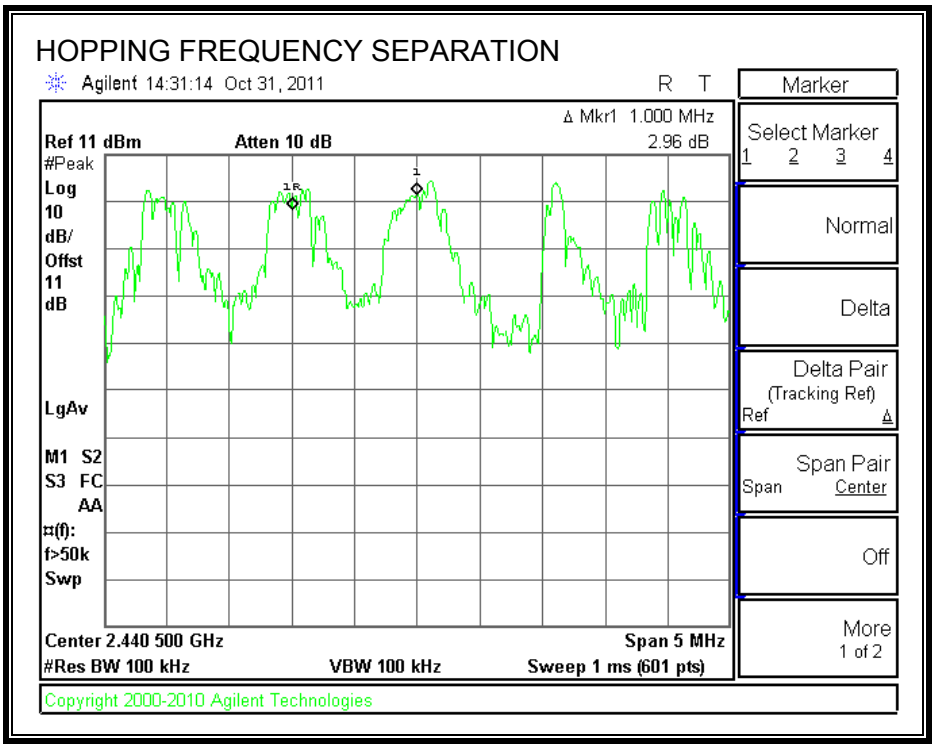
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION



7.1.3. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

TEST PROCEDURE

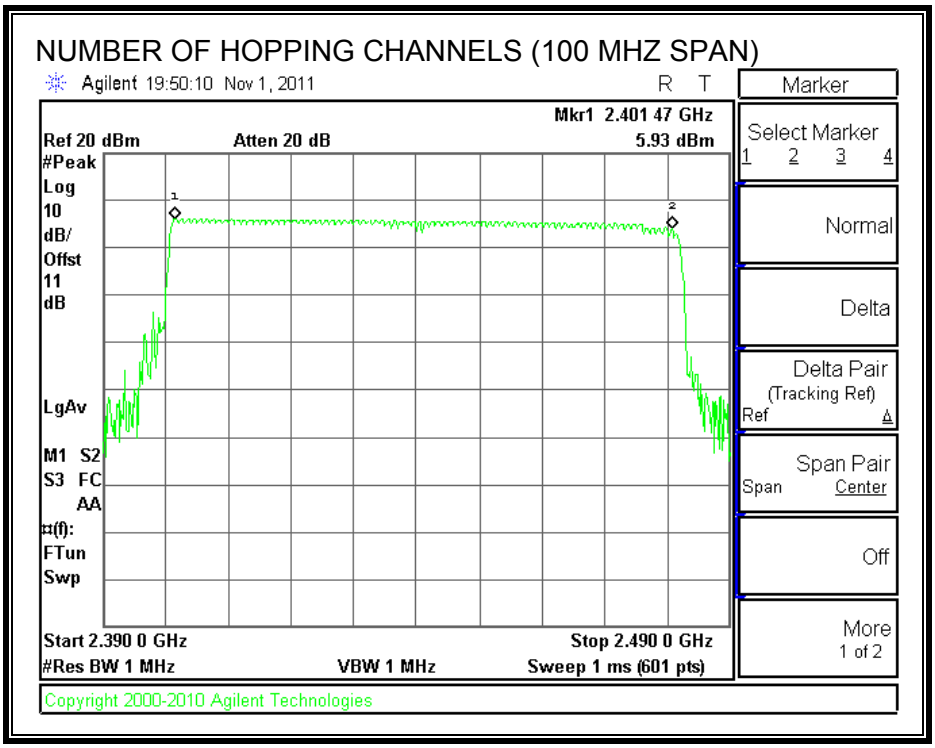
The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

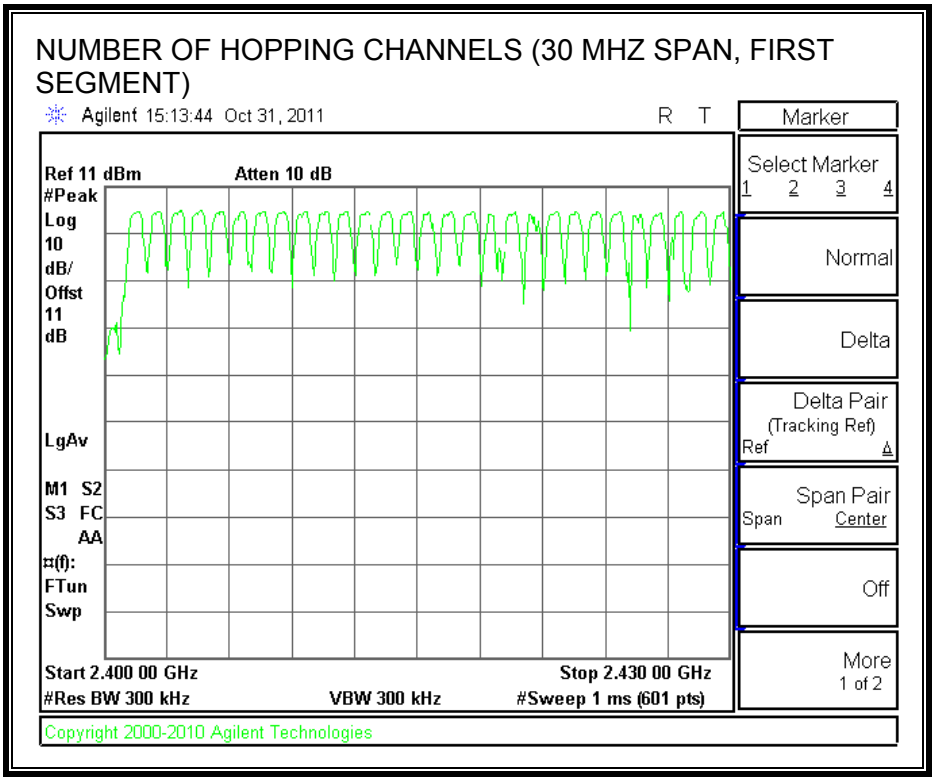
79 Channels observed.

NUMBER OF HOPPING CHANNELS

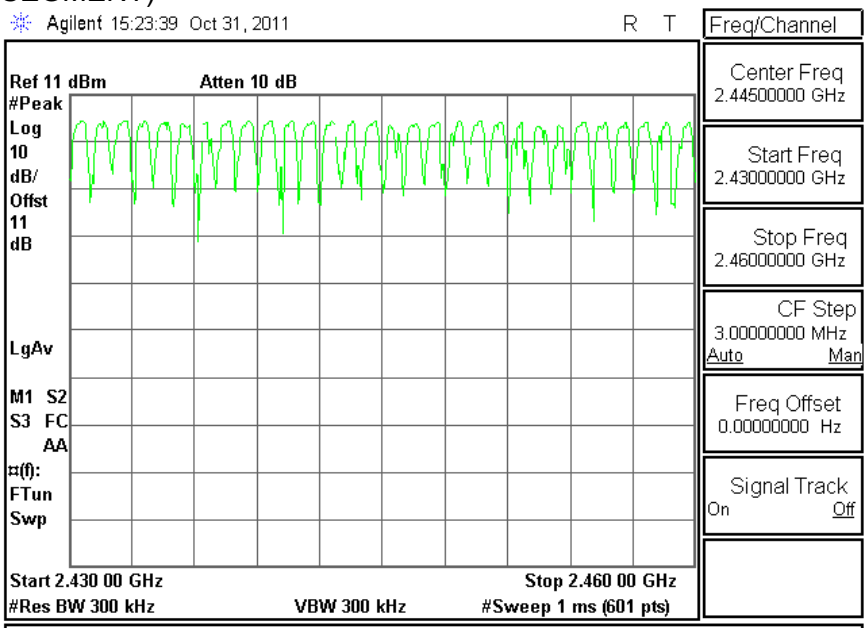
NUMBER OF HOPPING CHANNELS (100 MHZ SPAN)



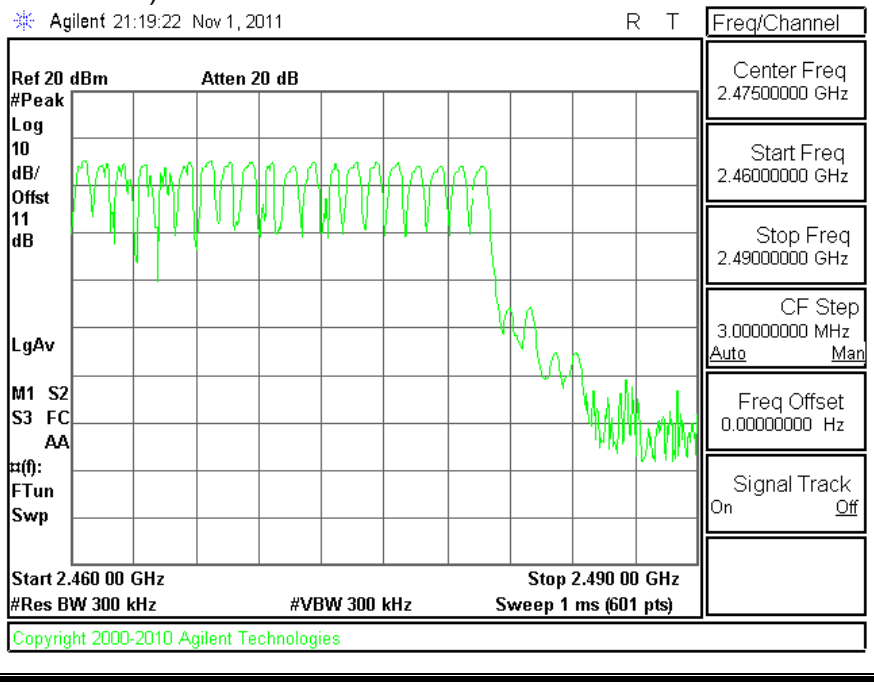
NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, FIRST SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, SECOND SEGMENT)



NUMBER OF HOPPING CHANNELS (30 MHZ SPAN, THIRD SEGMENT)



7.1.4. DUTY CYCLE

LIMITS

None; for reporting purposes only.

RESULTS

Mode	Tx on (msec)	Tx on + Tx off (msec)	Duty Cycle (%)	Correction Factor (dB)
Binary FSK	**0.58**	**855**	**0.07**	**31.69**

7.1.5. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

IC RSS-210 A8.1 (d)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

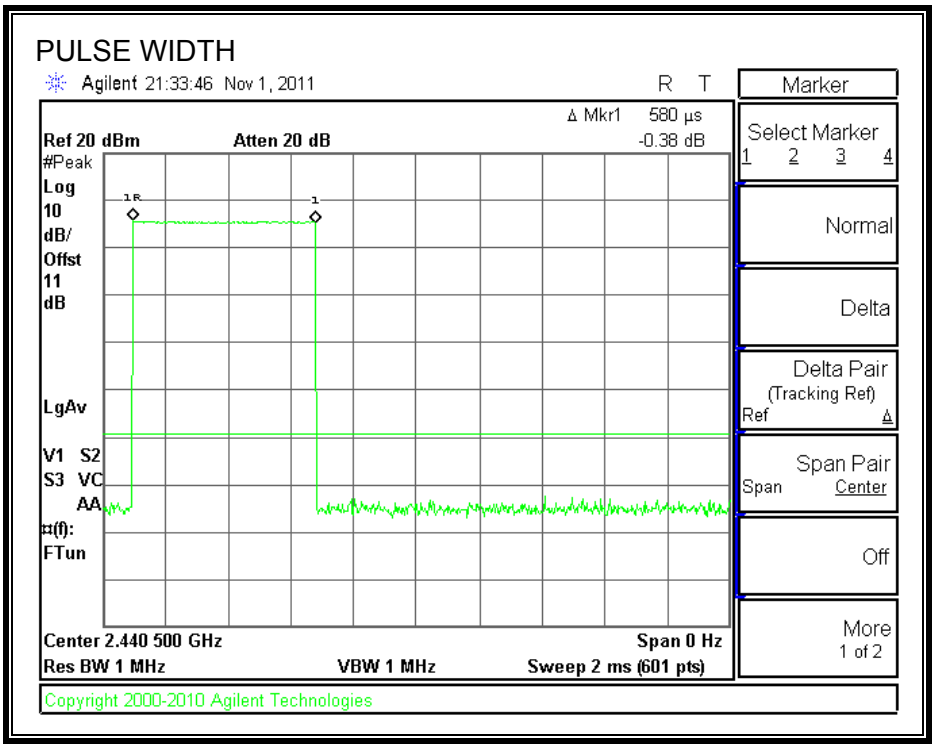
The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

RESULTS

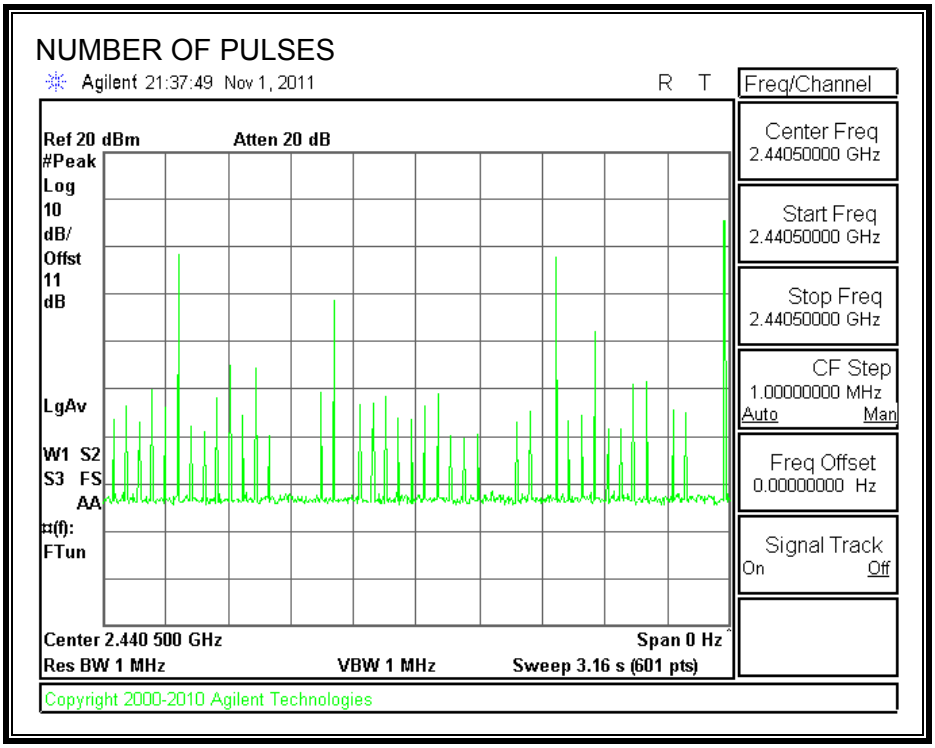
Time of Occupancy = 10 * xx pulses * yy msec = zz msec

Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of (sec)	Limit (sec)	Margin (sec)
0.58	3	0.017	0.4	0.383

PULSE WIDTH



NUMBER OF PULSES IN 3.16 SECOND OBSERVATION PERIOD



7.1.6. OUTPUT POWER

LIMIT

§15.247 (b) (1)

RSS-210 Issue 7 Clause A8.4

The maximum antenna gain is less than 6 dBi, therefore the limit is 30 dBm.

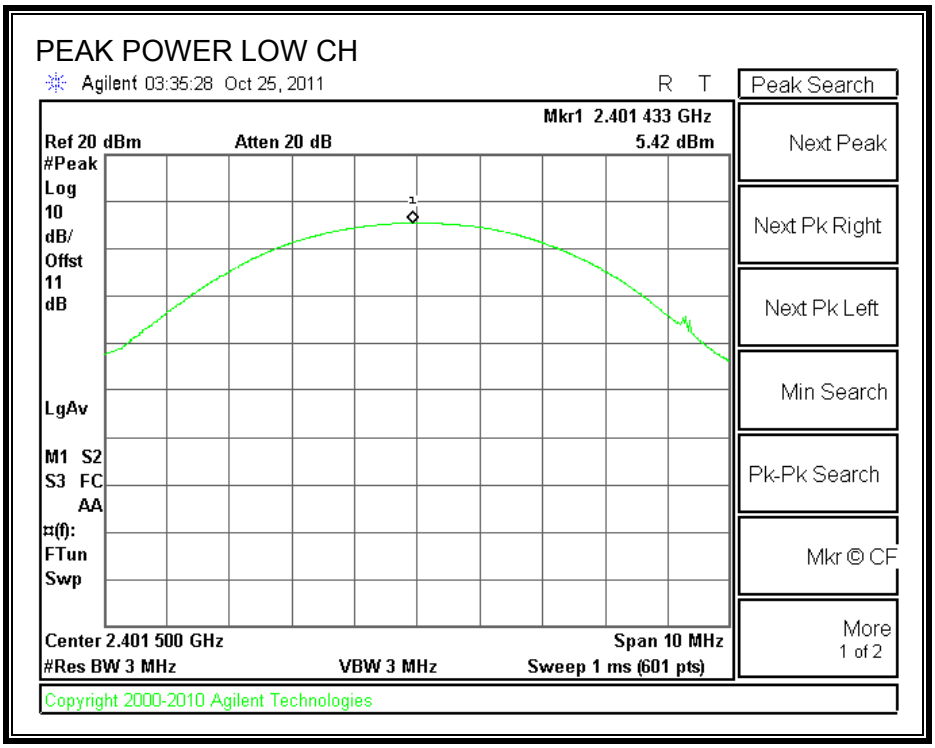
TEST PROCEDURE

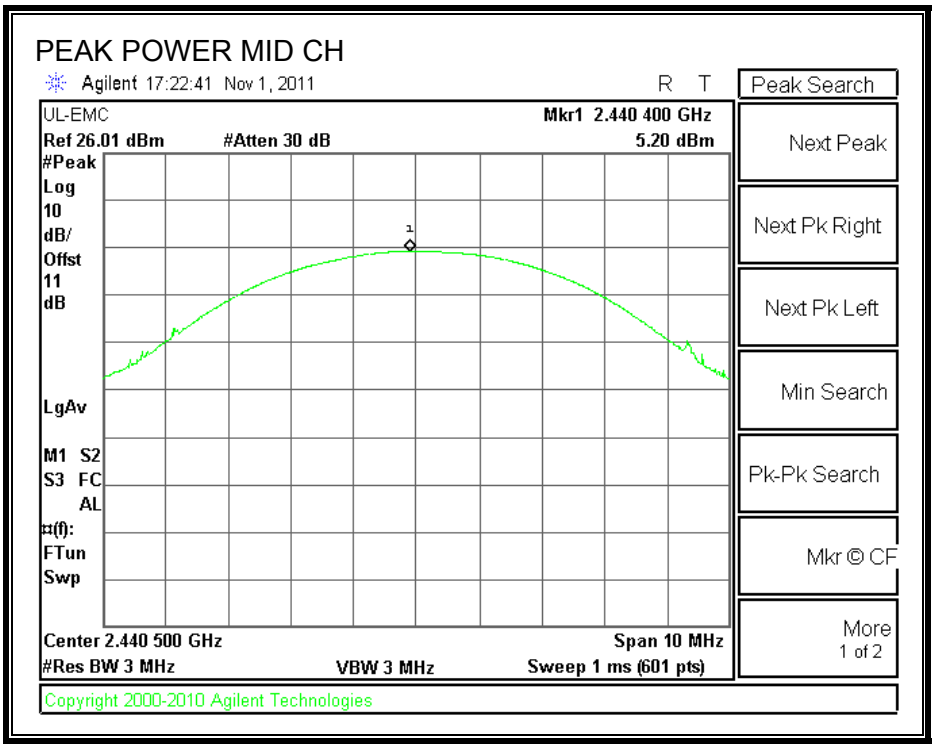
The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

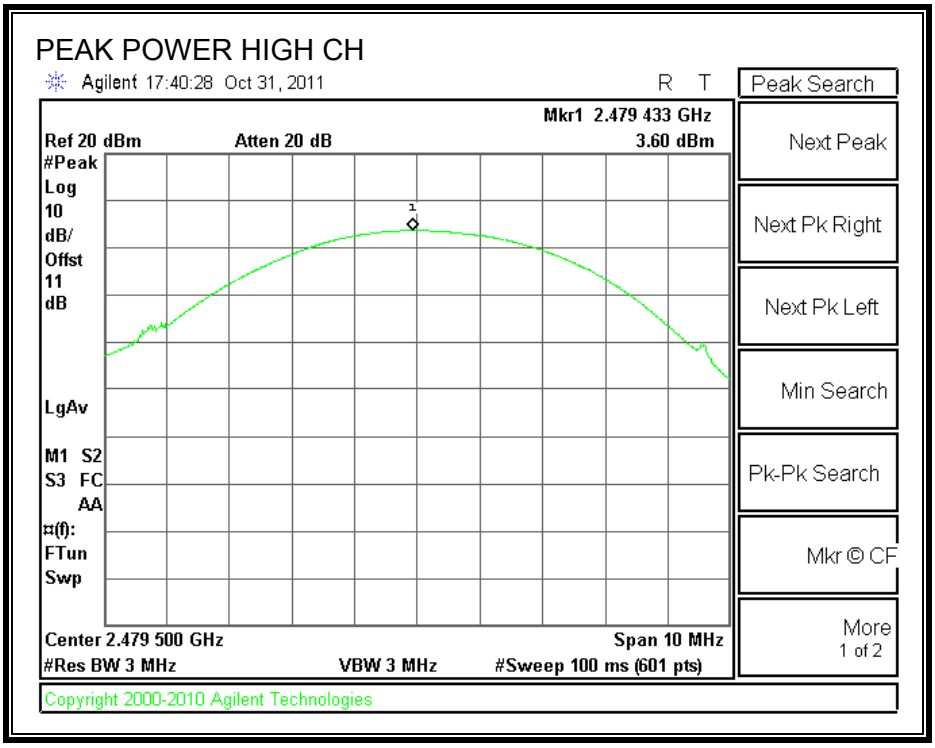
RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2401.5	5.42	30	-24.58
Middle	2440.5	5.20	30	-24.80
High	2479.5	3.60	30	-26.40

OUTPUT POWER







7.1.7. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.5dB (including 10 dB pad and 0.5 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	Average Power (dBm)
Low	2401.5	3.80
Middle	2440.5	2.80
High	2479.5	1.40

7.1.8. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

Limit = -20 dBc

TEST PROCEDURE

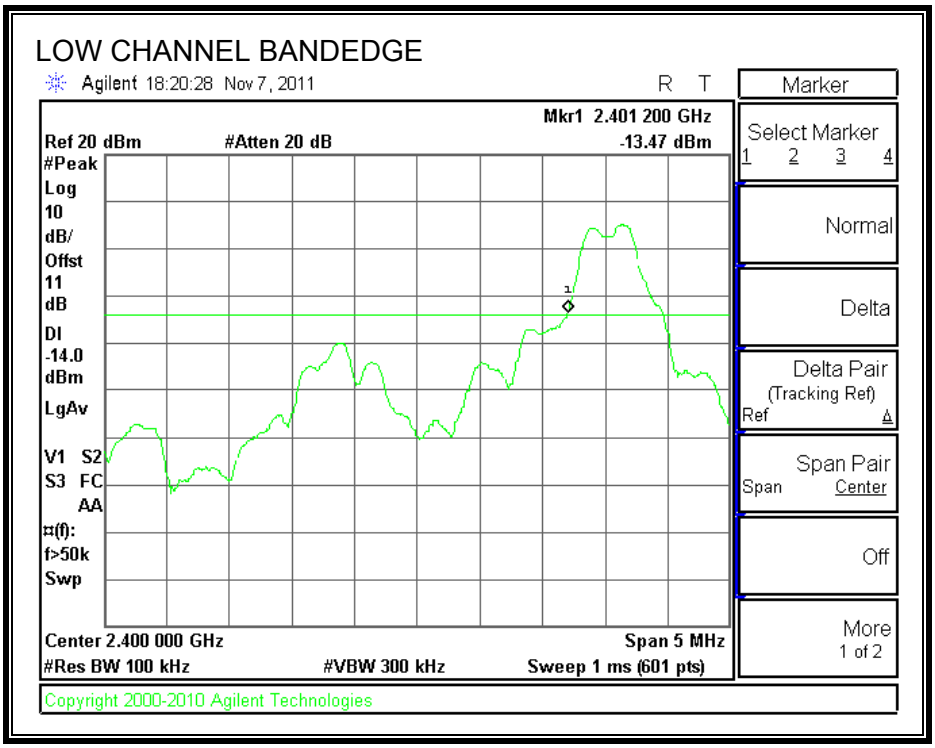
The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

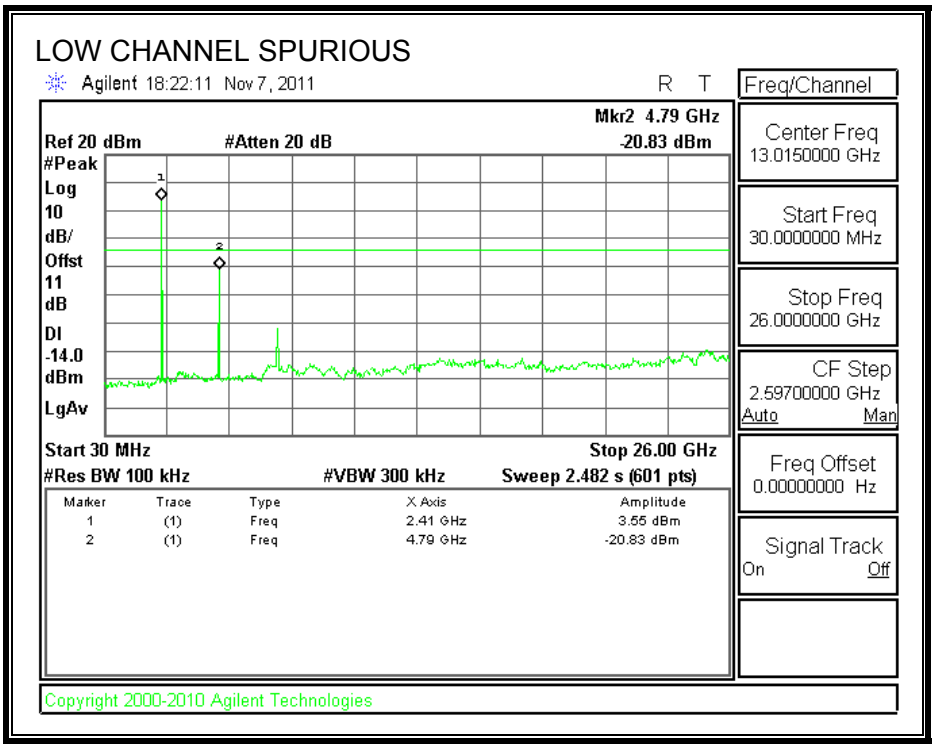
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels.

The band edges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

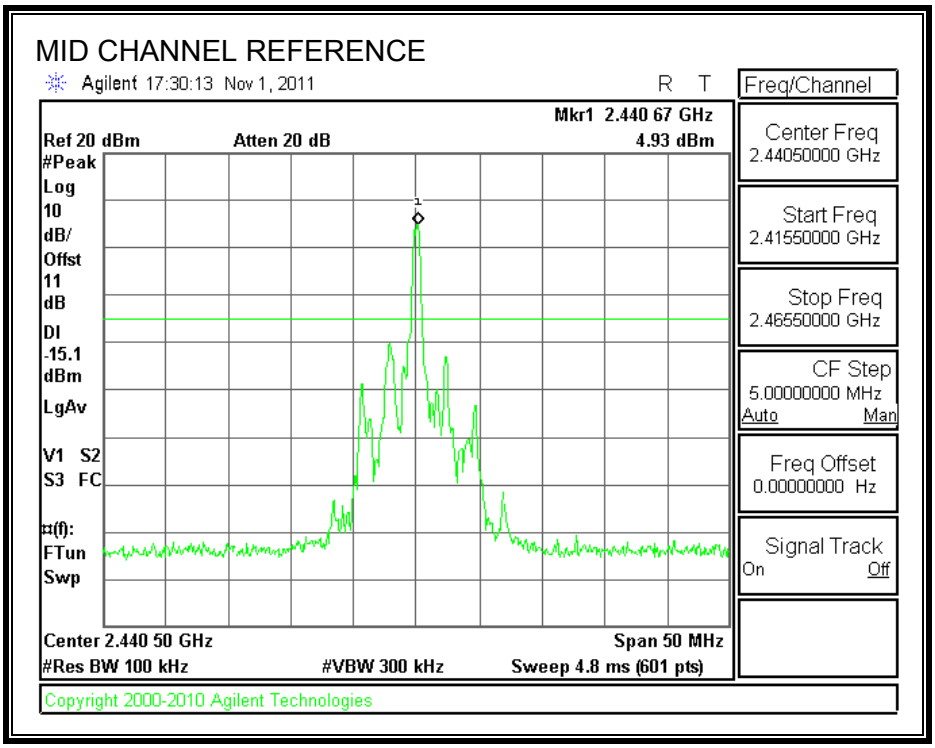
RESULTS

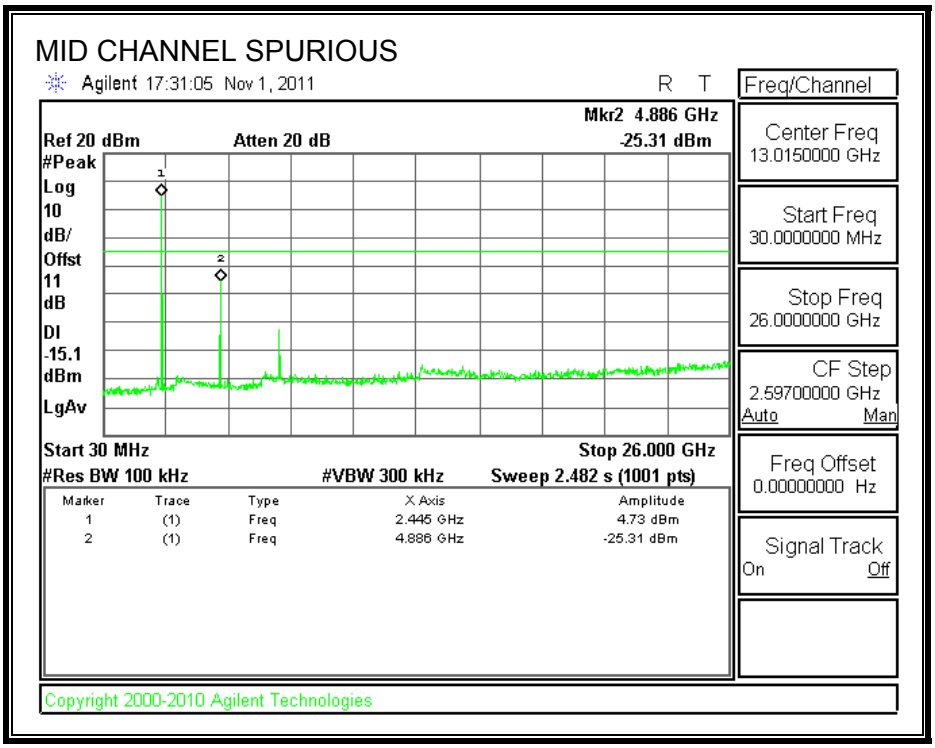
SPURIOUS EMISSIONS, LOW CHANNEL



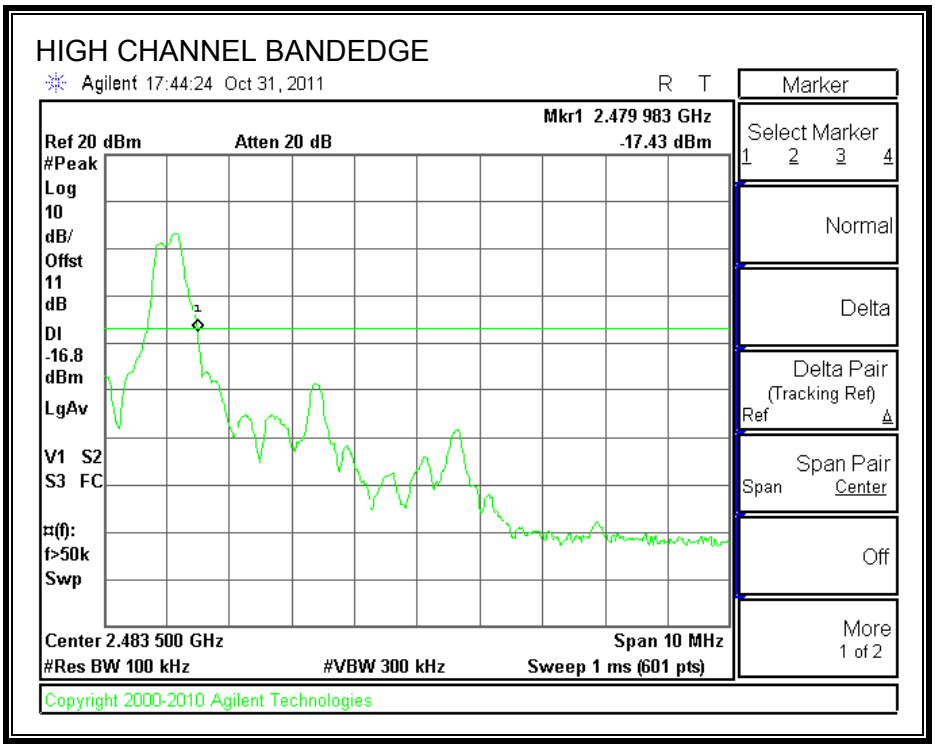


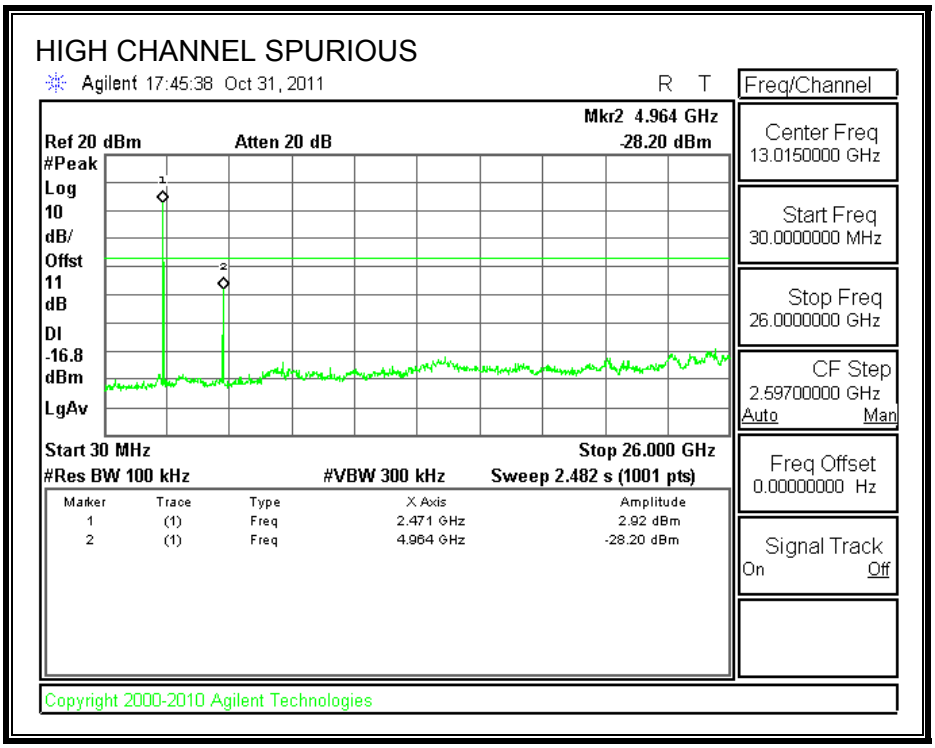
SPURIOUS EMISSIONS, MID CHANNEL



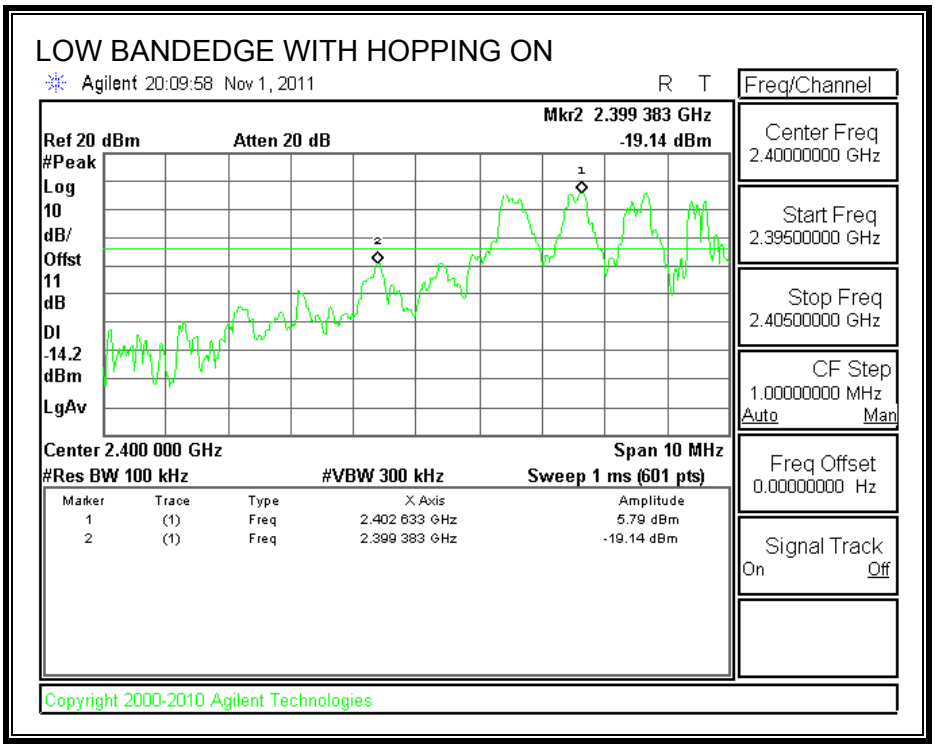


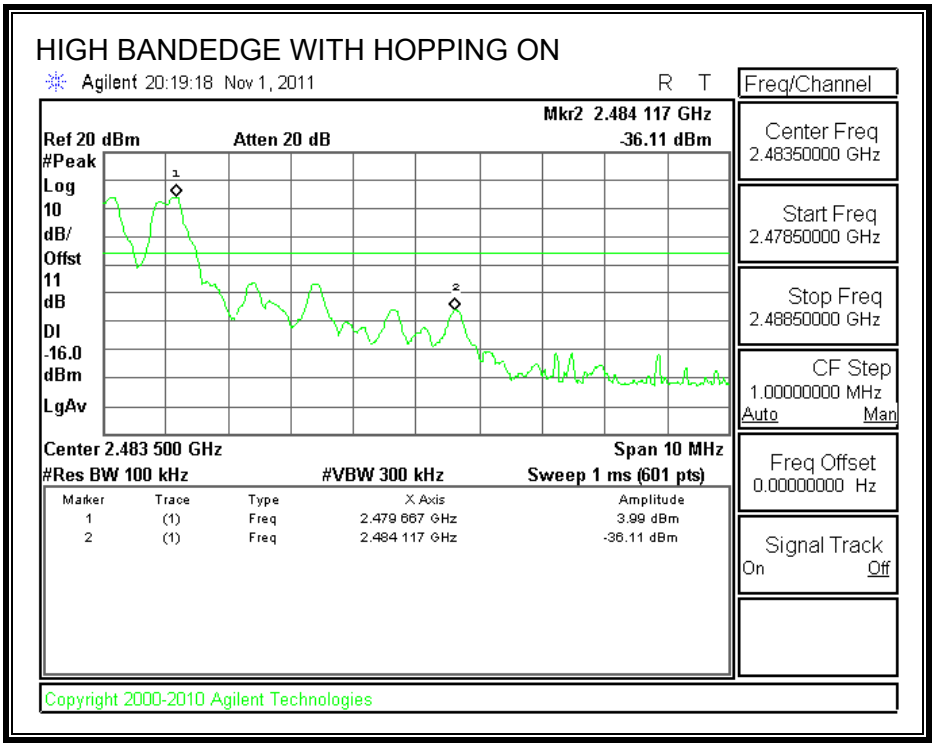
SPURIOUS EMISSIONS, HIGH CHANNEL





SPURIOUS BANDEDGE EMISSIONS WITH HOPPING ON





8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

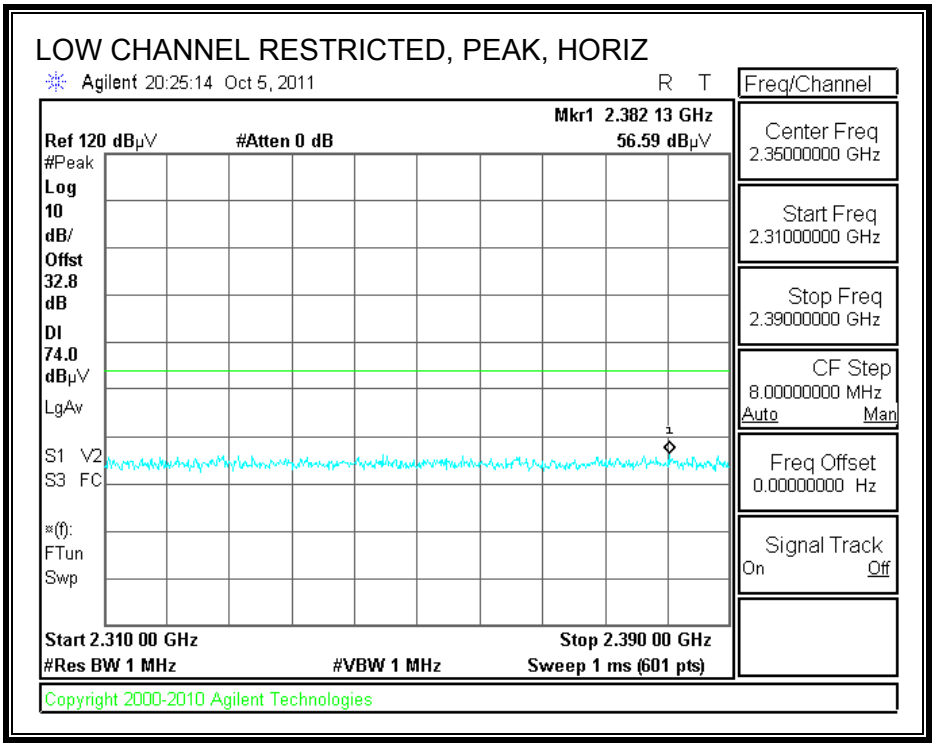
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

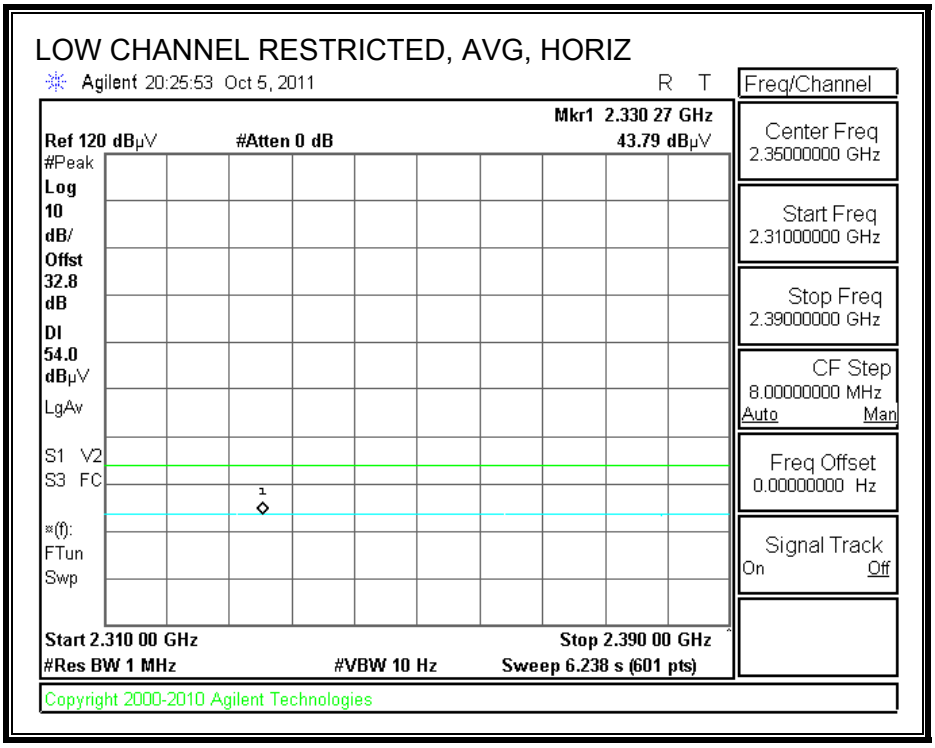
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

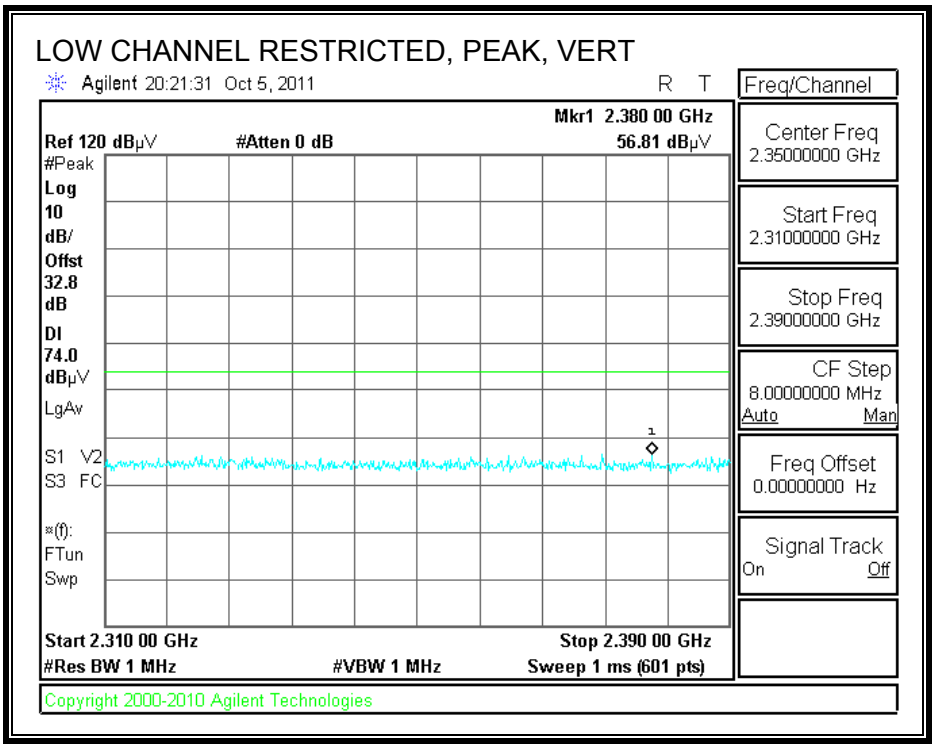
8.2. TRANSMITTER ABOVE 1 GHz

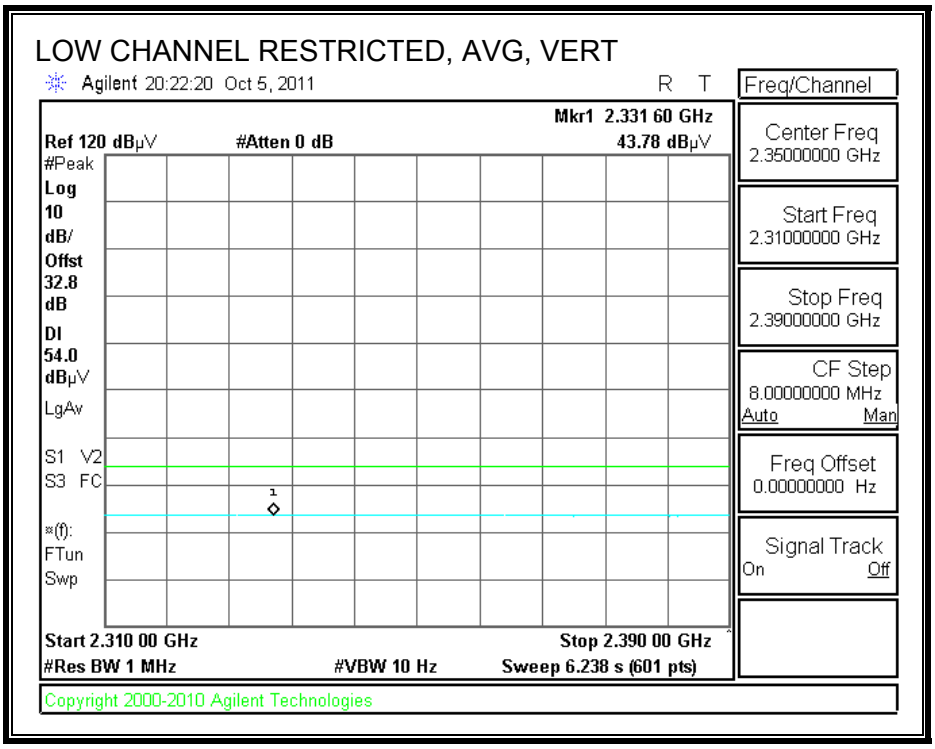
RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



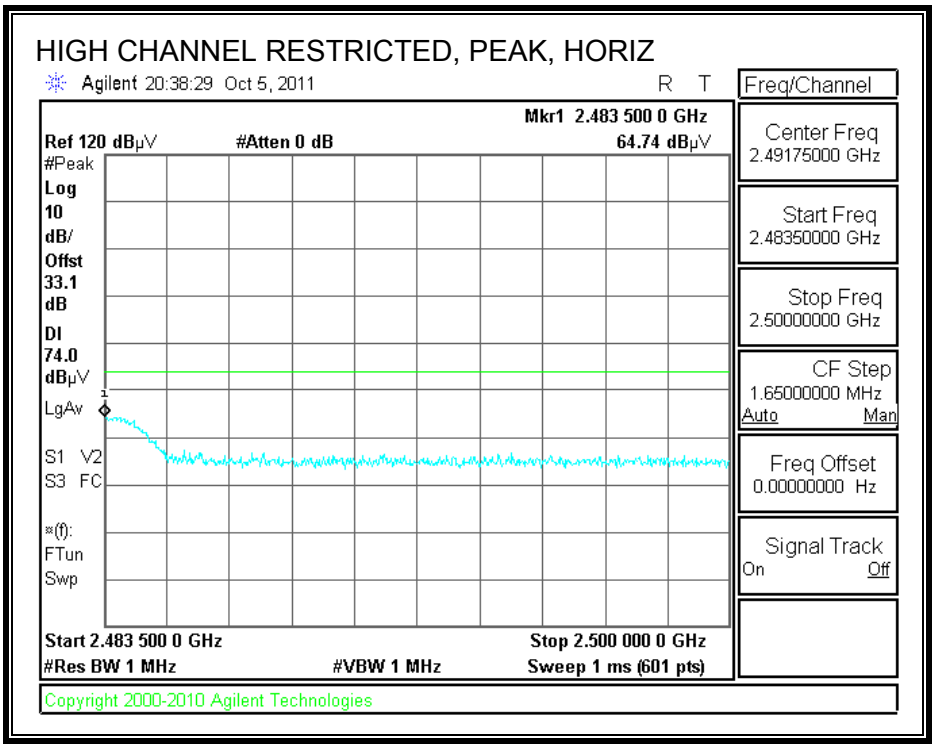


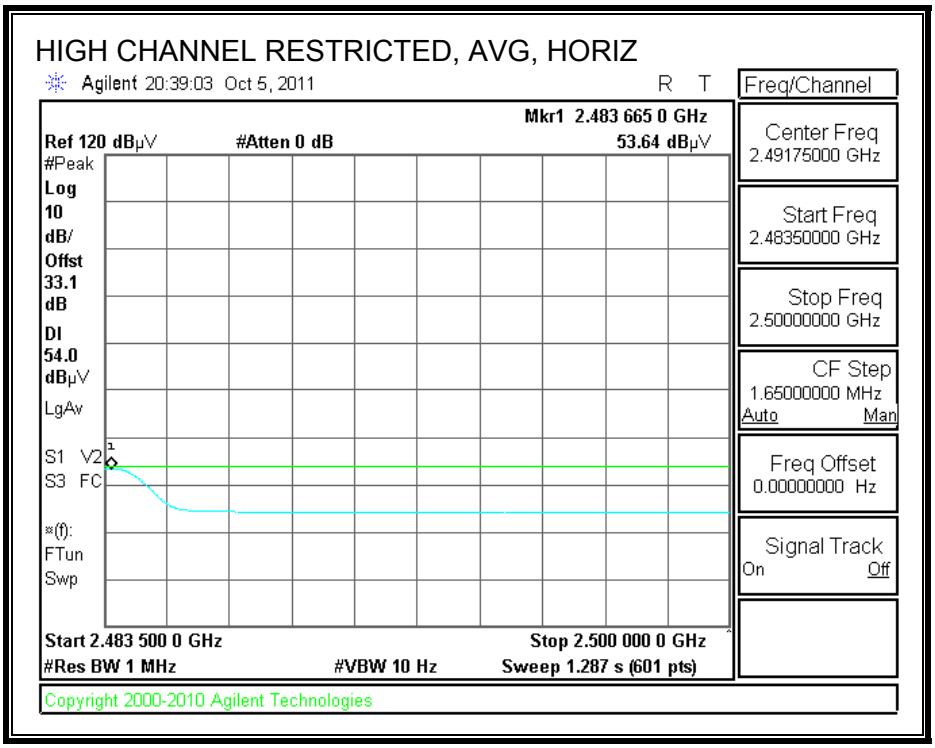
RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



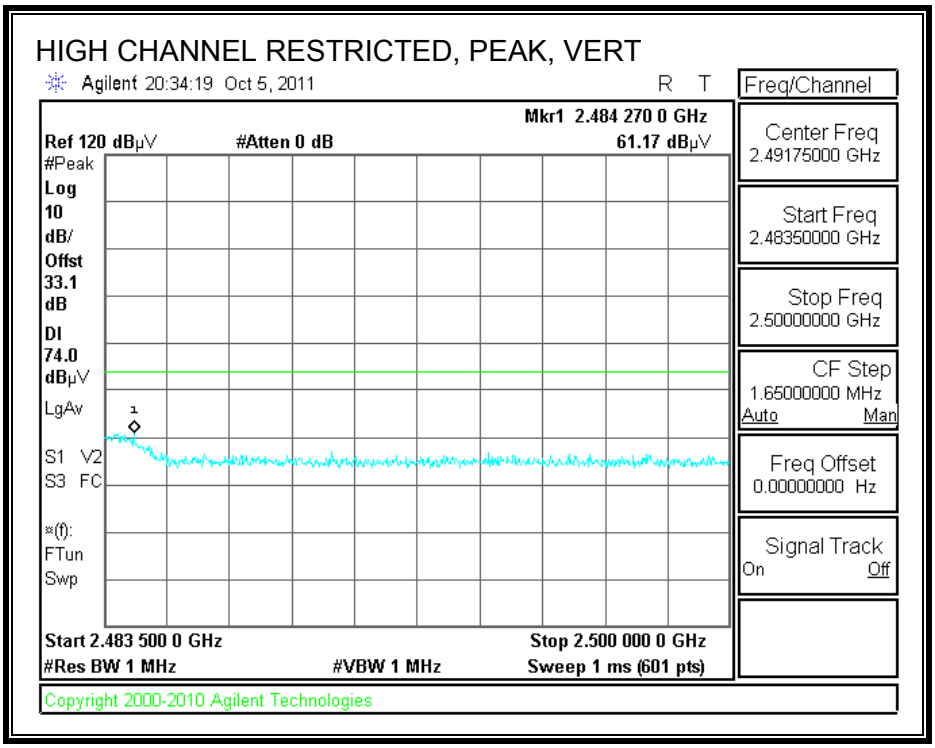


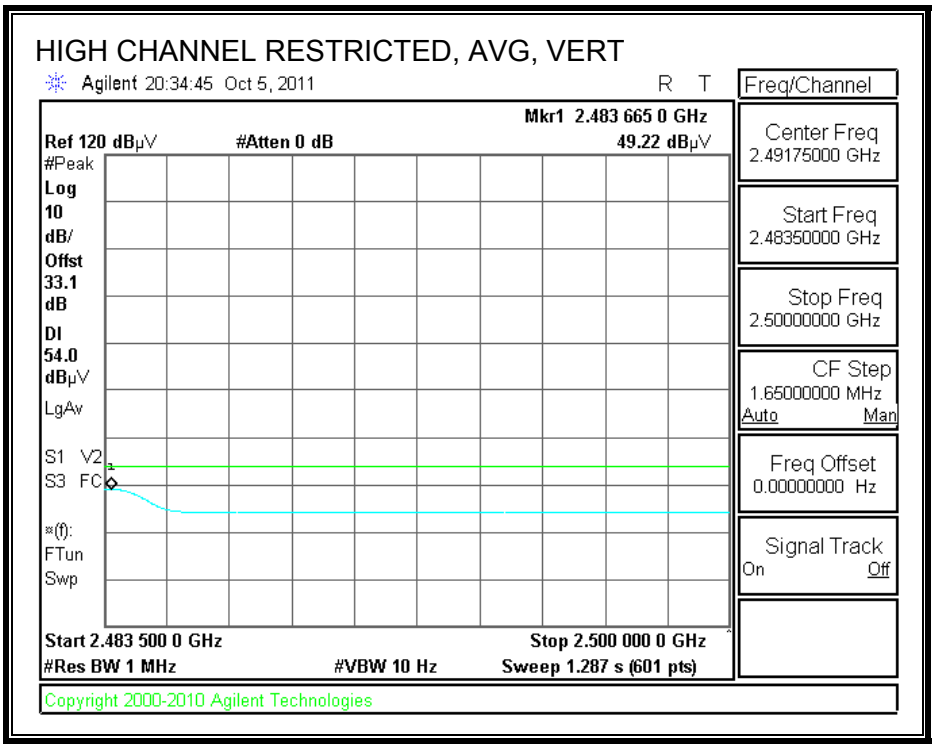
RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)





RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)





HARMONICS AND SPURIOUS EMISSIONS

High Frequency Measurement
Compliance Certification Services, Fremont 3m Chamber

Company:	Altierre
Project #:	11U14079
Date:	10/7/2011
Test Engineer:	Thanh Nguyen
Configuration:	EUT batteries Powered, worst position
Mode:	Transmit

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T60; S/N: 2238 @3m	T34 HP 8449B		T125; ARA 18-26GHz; S/N:1007	FCC 15.205

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500		

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
Duty Cycle Correction Factor = 20log ((0.58ms x 2) / 100) = -38.71dB															
Low Channel 2401.5Mhz															
4.803	3.0	52.9	32.9	33.9	6.8	-34.1	0.0	0.0	59.5	39.5	74	54	-14.5	-14.5	H
4.803	3.0	46.6	26.6	33.9	6.8	-34.1	0.0	0.0	53.1	33.1	74	54	-20.9	-20.9	V
Mid Channel 2445.5MHz															
4.891	3.0	52.3	32.3	34.0	6.8	-34.0	0.0	0.0	59.1	39.1	74	54	-14.9	-14.9	H
4.891	3.0	44.8	24.8	34.0	6.8	-34.0	0.0	0.0	51.5	31.5	74	54	-22.5	-22.5	V
7.336	3.0	43.9	23.9	36.6	9.1	-33.1	0.0	0.0	56.5	36.5	74	54	-17.5	-17.5	V
7.336	3.0	43.3	23.3	36.6	9.1	-33.1	0.0	0.0	55.9	35.9	74	54	-18.1	-18.1	H
High channel 2479.5MHz															V
4.959	3.0	51.5	31.5	34.0	6.9	-34.0	0.0	0.0	58.4	38.4	74	54	-15.6	-15.6	H
7.484	3.0	41.3	21.3	36.7	9.1	-33.0	0.0	0.0	54.1	34.1	74	54	-19.9	-19.9	H
4.959	3.0	47.0	27.0	34.0	6.9	-34.0	0.0	0.0	53.9	33.9	74	54	-20.1	-20.1	V
7.484	3.0	40.5	20.5	36.7	9.1	-33.0	0.0	0.0	53.3	33.3	74	54	-20.7	-20.7	V
															V
No other emissions were detected above the sysyitem noise floor															

Rev. 07.08.11

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

8.3. RECEIVER ABOVE 1 GHz

High Frequency Measurement
Compliance Certification Services, Fremont 3m Chamber

Company:	**Altierre**
Project #:	**11U14079**
Date:	**10/5/2011**
Test Engineer:	**Thanh Nguyen**
Configuration:	**EUT batteries Powered, worst position**
Mode:	**Receive Mode**

Test Equipment:

Horn 1-18GHz	Pre-amplifer 1-26GHz	Pre-amplifer 26-40GHz	Horn > 18GHz	Limit
T60; S/N: 2238 @3m	T34 HP 8449B		T125; ARA 18-26GHz; S/N:1007	RX RSS 210

Hi Frequency Cables

3' cable 22807700	12' cable 22807600	20' cable 22807500	HPF	Reject Filter
3' cable 22807700	12' cable 22807600	20' cable 22807500		

Peak Measurements
RBW=VBW=1MHz
Average Measurements
RBW=1MHz ; VBW=10Hz

f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
1.039	3.0	46.3	32.9	24.8	2.8	-37.8	0.0	0.0	36.1	22.7	74	54	-37.9	-31.3	V
1.120	3.0	46.9	33.0	25.1	2.9	-37.6	0.0	0.0	37.3	23.4	74	54	-36.7	-30.6	H

No other emissions were detected above the sysytem noise floor

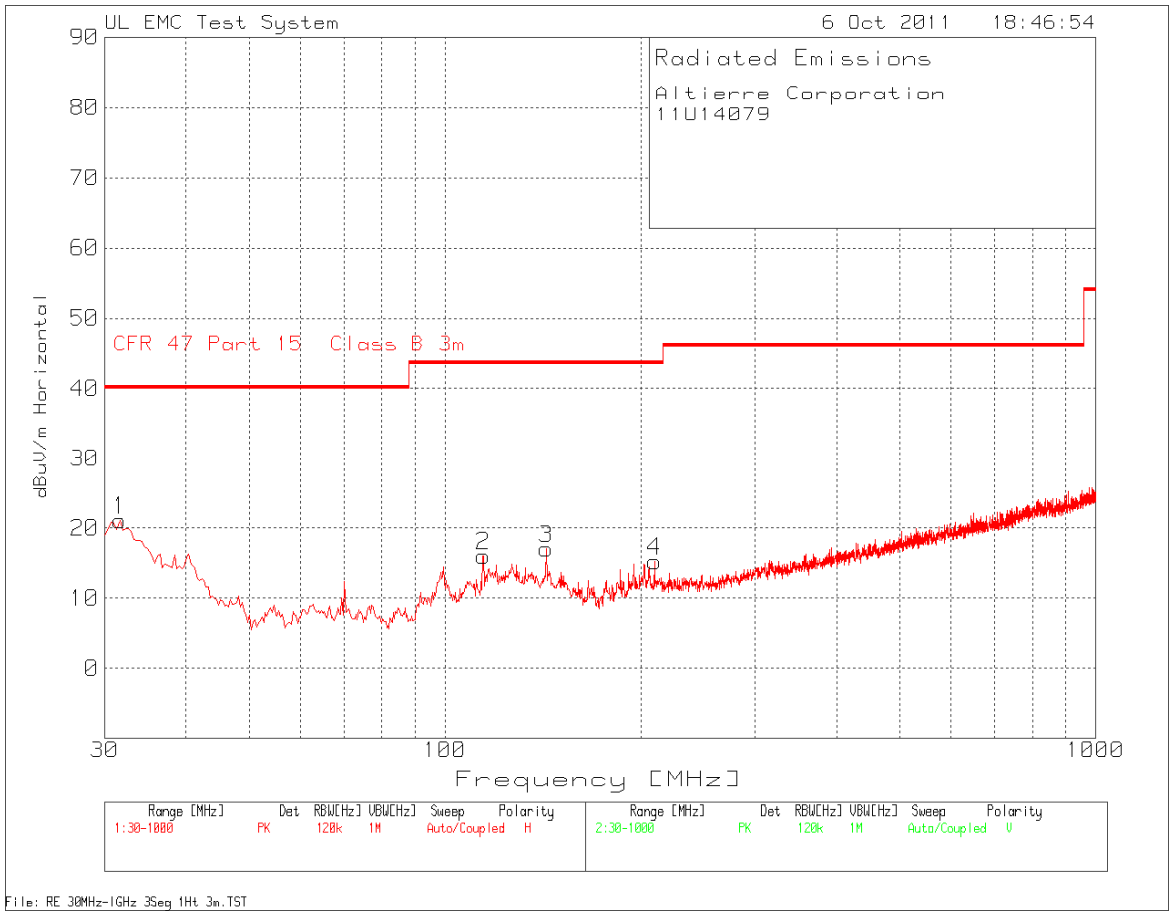
Rev. 07.08.11

f	Measurement Frequency	Amp	Preamp Gain	Avg Lim	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Pk Lim	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Avg Mar	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Pk Mar	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter		

8.4. WORST-CASE BELOW 1 GHz

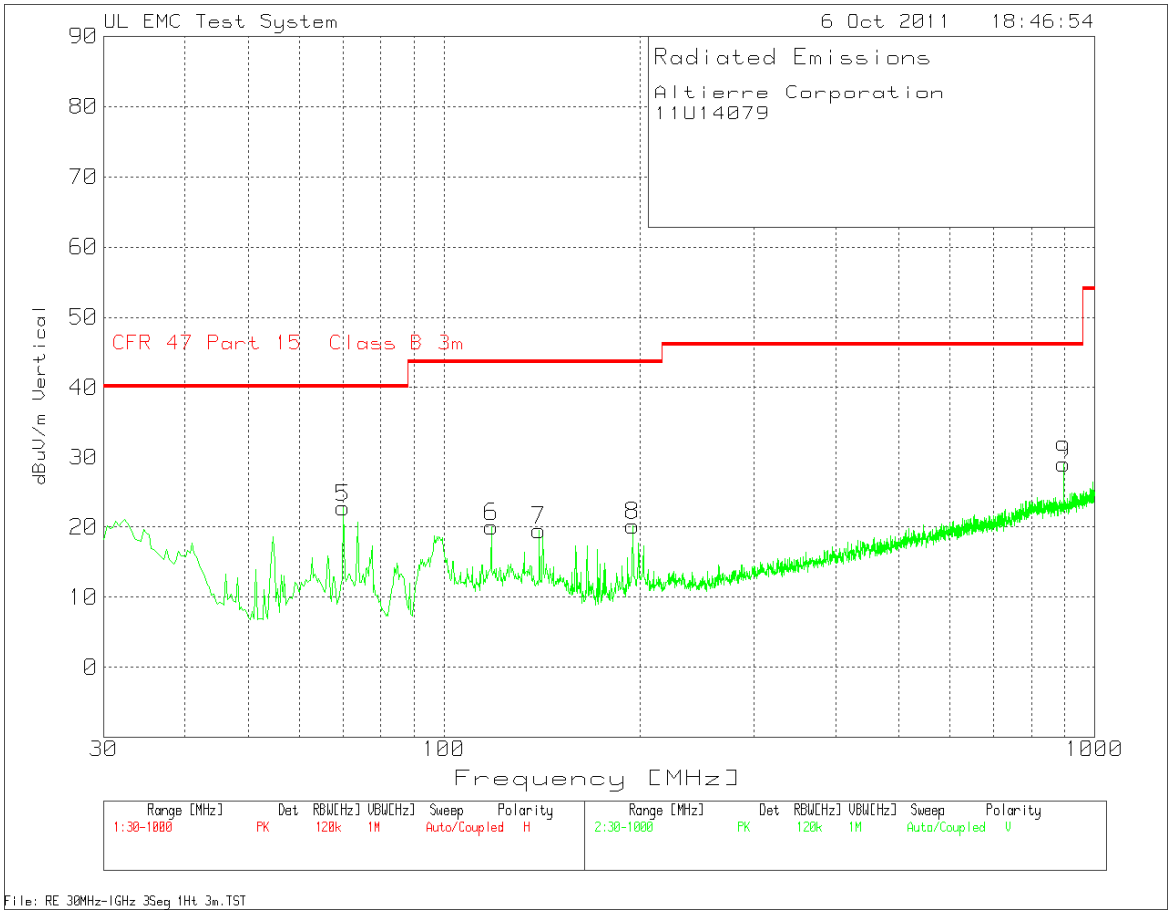
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL PLOT



SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT



HORIZONTAL & VERTICAL DATA

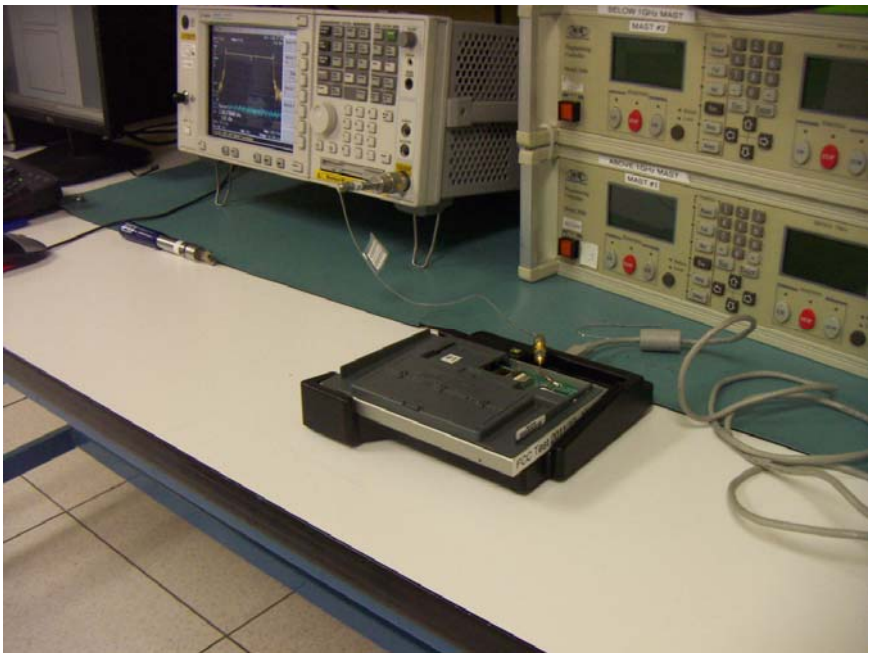
Altierre Corporation
11U14079

Range 1 30 - 1000MHz										
Test Freq. (MHz)	**Meter Reading (dBuV)**	**Detector**	**Cable Loss [dB]**	**Pre-Amp Gain [dB]**	**Antenna Factor [dB]**	**dBuV/m**	**CFR 47 Part 15 Class B 3m**	**Margin**	**Height [cm]**	**Polarity**
31.6156	30.13	PK	0.9	-29.5	19.6	21.13	40	-18.87	100	Horz
114.6569	31.14	PK	1.5	-29.3	12.7	16.04	43.5	-27.46	100	Horz
143.0913	31.41	PK	1.7	-29.1	13	17.01	43.5	-26.49	100	Horz
209.9767	30.16	PK	2	-28.9	12	15.26	43.5	-28.24	100	Horz
Range 2 30 - 1000MHz										
Test Freq. (MHz)	**Meter Reading (dBuV)**	**Detector**	**Cable Loss [dB]**	**Pre-Amp Gain [dB]**	**Antenna Factor [dB]**	**dBuV/m**	**CFR 47 Part 15 Class B 3m**	**Margin**	**Height [cm]**	**Polarity**
70.0666	42.62	PK	1.2	-29.4	8.3	22.72	40	-17.28	109	Vert
118.2112	34.35	PK	1.5	-29.2	13.4	20.05	43.5	-23.45	109	Vert
140.1832	33.86	PK	1.7	-29.2	13.2	19.56	43.5	-23.94	109	Vert
195.1133	35.59	PK	1.9	-28.9	11.6	20.19	43.5	-23.31	109	Vert
897.2485	32.06	PK	4.1	-28.6	21.5	29.06	46	-16.94	109	Vert

9. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP

ANTENNA PORT CONDUCTED PHOTO



ANTENNA PORT CONDUCTED PHOTO

RADIATED RF MEASUREMENT SETUP

RADIATED FRONT PHOTO

RADIATED BACK PHOTO

END OF REPORT