



**FCC CFR47 PART 15 SUBPART C  
INDUSTRY CANADA RSS-210 ISSUE 7**

**CERTIFICATION TEST REPORT**

**FOR**

**902-928 MHZ TRANSCEIVER**

**MODEL NUMBER: A1101R09A AND A1101R09C**

**FCC ID: X7J-A10040601  
IC: 8975A-A10040601**

**REPORT NUMBER: 10U13329-2, Revision B**

**ISSUE DATE: AUGUST 20, 2010**

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	08/03/10	Initial Issue	T. Chan
A	08/13/10	Updated report, includes 1. Added serial number 2. Updated model differences description in the section 5.2 3. Updated description of worst case configuration	Sunny Shih
B	08/20/10	Updated 99% BW	T. Chan

## TABLE OF CONTENTS

<b>1. ATTESTATION OF TEST RESULTS.....</b>	<b>4</b>
<b>2. TEST METHODOLOGY .....</b>	<b>5</b>
<b>3. FACILITIES AND ACCREDITATION.....</b>	<b>5</b>
<b>4. CALIBRATION AND UNCERTAINTY .....</b>	<b>5</b>
4.1. <i>MEASURING INSTRUMENT CALIBRATION.....</i>	5
4.2. <i>SAMPLE CALCULATION.....</i>	5
4.3. <i>MEASUREMENT UNCERTAINTY.....</i>	5
<b>5. EQUIPMENT UNDER TEST .....</b>	<b>6</b>
5.1. <i>DESCRIPTION OF EUT.....</i>	6
5.2. <i>MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES .....</i>	6
5.3. <i>DESCRIPTION OF AVAILABLE ANTENNAS.....</i>	6
5.4. <i>SOFTWARE AND FIRMWARE.....</i>	6
5.5. <i>WORST-CASE CONFIGURATION AND MODE .....</i>	6
5.6. <i>DESCRIPTION OF TEST SETUP.....</i>	7
<b>6. TEST AND MEASUREMENT EQUIPMENT .....</b>	<b>9</b>
<b>7. ANTENNA PORT TEST RESULTS .....</b>	<b>10</b>
7.1.1. <i>99% BANDWIDTH .....</i>	10
<b>8. RADIATED TEST RESULTS .....</b>	<b>14</b>
8.1. <i>LIMITS AND PROCEDURE .....</i>	14
8.2. <i>TRANSMITTER BELOW 1 GHz.....</i>	15
8.3. <i>TRANSMITTER ABOVE 1 GHz .....</i>	40
8.4. <i>RECEIVER BELOW 1 GHz.....</i>	42
8.5. <i>RECEIVER ABOVE 1 GHz .....</i>	44
<b>9. AC POWER LINE CONDUCTED EMISSIONS .....</b>	<b>46</b>
<b>10. SETUP PHOTOS .....</b>	<b>50</b>

## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** ANAREN, INC  
6635 KIRKVILLE ROAD  
EAST SYRACUSE, NY, 13057, U.S.A.

**EUT DESCRIPTION:** 902-928 MHZ TRANSCEIVER

**MODEL:** A1101R09A AND A1101R09C

**SERIAL NUMBER:** 0001-04 (Conducted unit), 0001-09 (Radiated unit)

**DATE TESTED:** JULY 26 – JULY 30, 2010

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 7 Annex 2.9	Pass
INDUSTRY CANADA RSS-GEN Issue 2	Pass

Compliance Certification Services, Inc. (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 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 CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by 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 CCS By:



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THU CHAN  
ENGINEERING MANAGER  
COMPLIANCE CERTIFICATION SERVICES

Tested By:



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WILLIAM ZHUANG  
EMC ENGINEER  
COMPLIANCE CERTIFICATION SERVICES

## 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 2, and RSS-210 Issue 7.

## 3. FACILITIES AND ACCREDITATION

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

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:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

### 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 900 MHz Transceiver operating at 907.78 – 922.06 MHz frequency range.

### 5.2. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES

A1101R09A and A1101R09C are Identical, except A1101R09C has a U.FL connector, and A1101R09A has an integral printed antenna.

### 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes Monopole and PCB antenna with maximum peak gains of 3dBi gain on Monopole and 2dBi on PCB antennas.

### 5.4. SOFTWARE AND FIRMWARE

The EUT Firmware software installed during testing was v01.00

The test utility software used during testing was AirFCC, V2.0.0.10.

### 5.5. WORST-CASE CONFIGURATION AND MODE

The power level of -7 dBm was used with register file set at -7dBm for all tests.

Modulation	Data Rate	Deviation
2-FSK	10kbaud	19kHz

The EUT with patch and PCB antenna have been investigated on X, Y and Z position. The worst case was found to be at X orientation.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	T61	L3-B9034	DoC
AC Adapter	Lenovo	92P1105	11S92P1105Z1ZBW973VOK	DoC

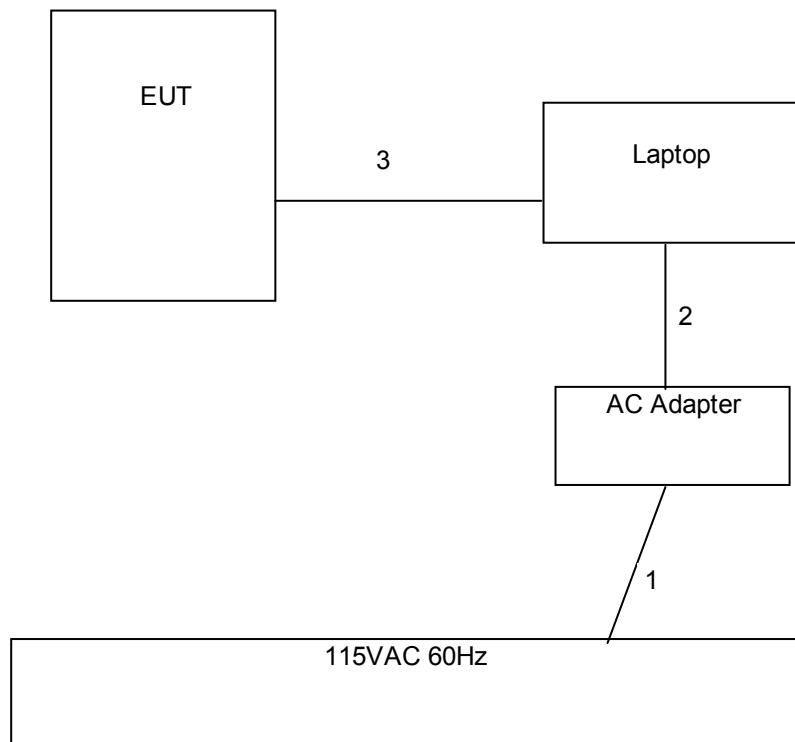
### I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	2m	One ferrite at Laptop's end.
2	DC	1	DC	Un-shielded	2m	NA
3	USB	1	EUT	Un-shielded	2m	NA

### TEST SETUP

The EUT is connected to a host laptop computer during the tests. Test software exercised the radio card.

**SETUP DIAGRAM FOR TESTS**



## 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
Antenna, BiLog, 2 GHz	Sunol Sciences	JB1	C01016	07/14/11
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	08/04/11
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01176	08/24/10
Antenna, Horn, 18 GHz	EMCO	3115	C00945	07/29/11
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	11/06/10
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	05/06/11
Reject Filter, 2.4-2.5 GHz	Micro-Tronics	BRC13192	N02683	CNR
Peak Power Meter	Boonton	4541	C01186	03/01/11
Peak Power Sensor	Boonton	57318	C01202	02/23/11

## 7. ANTENNA PORT TEST RESULTS

### 7.1.1. 99% BANDWIDTH

#### LIMITS

None; for reporting purposes only.

#### TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

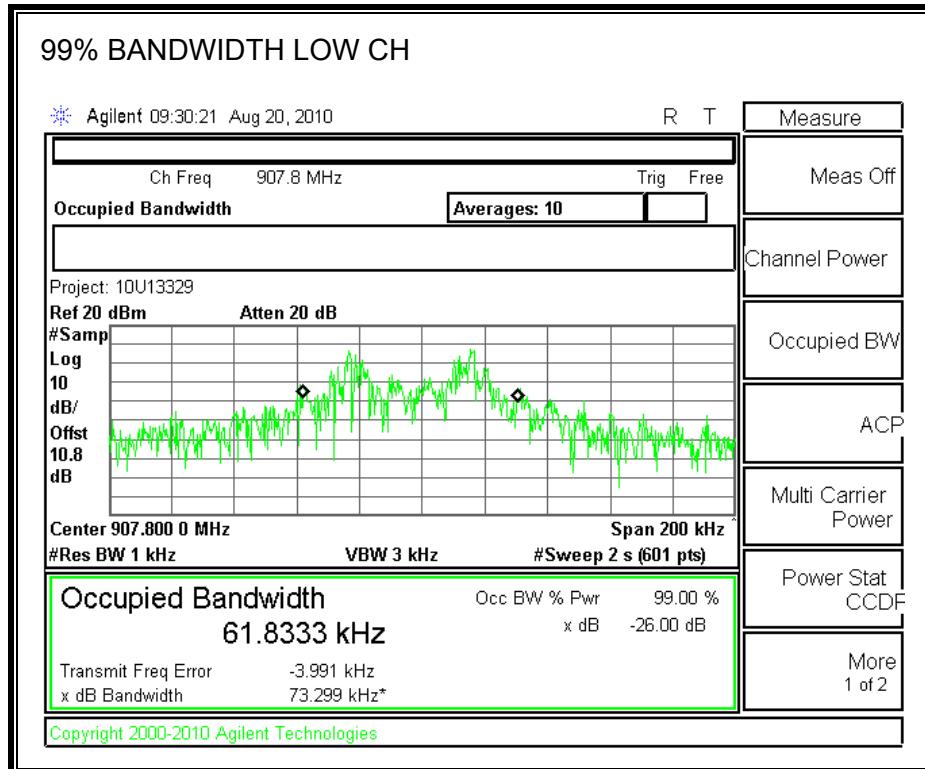
#### RESULTS

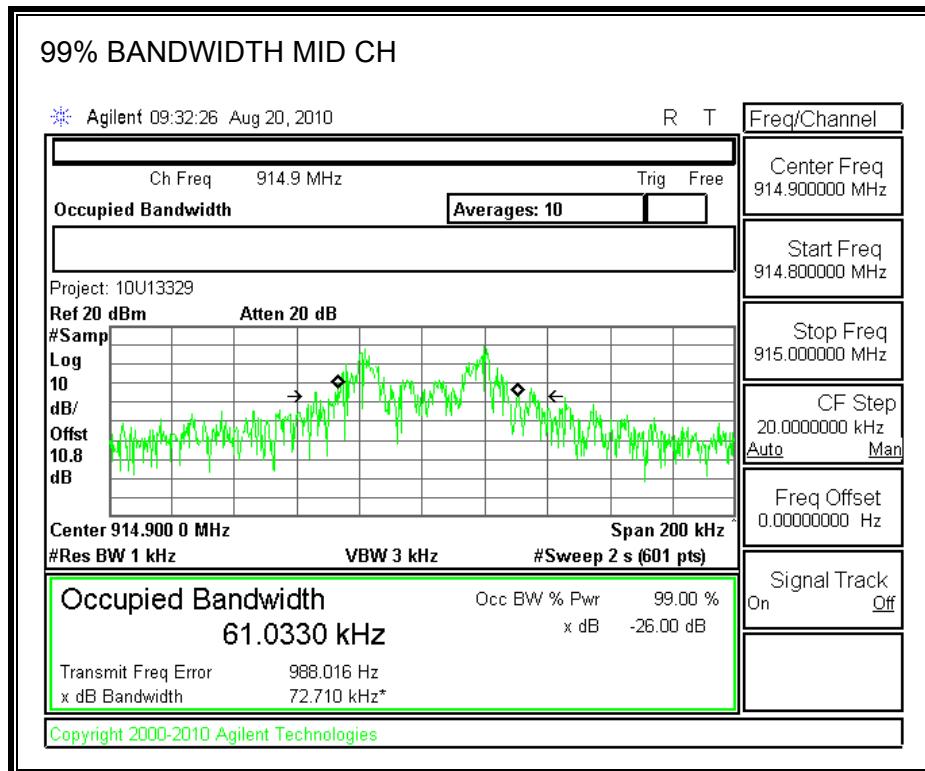
##### 2FSK MODE

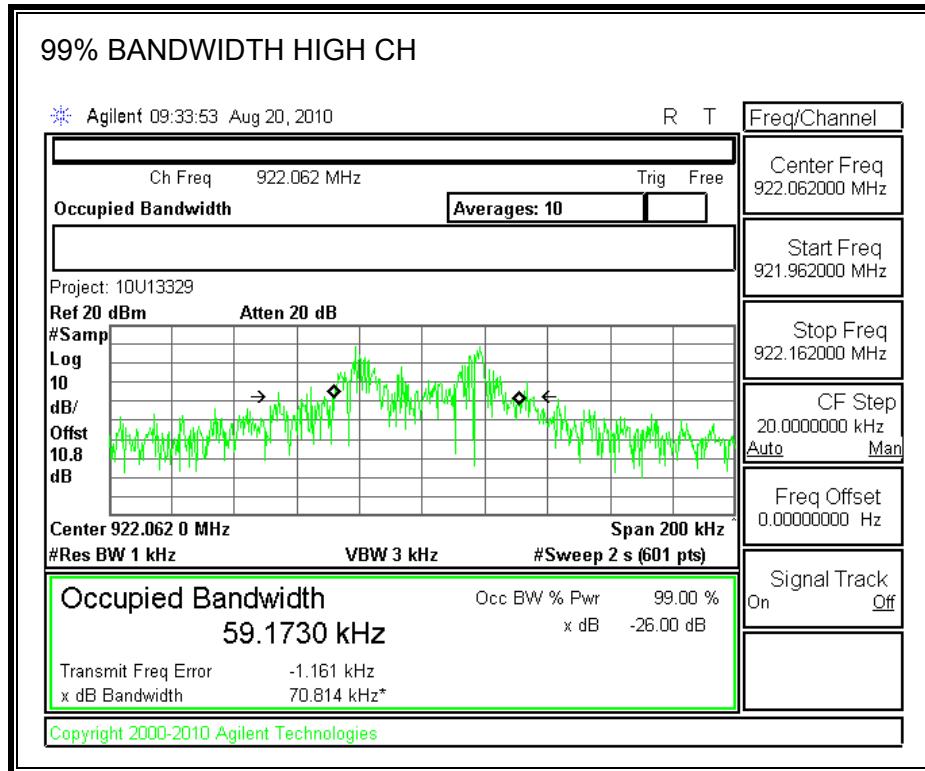
Channel	Frequency (MHz)	99% Bandwidth (KHz)
Low	907.798	61.833
Middle	914.902	61.033
High	922.062	59.173

## 2FSK MODE

### 99% BANDWIDTH







## 8. RADIATED TEST RESULTS

### 8.1. LIMITS AND PROCEDURE

#### LIMITS

The field strengths measured at 3 metres shall not exceed the following:

Frequency Range (MHz)	Field Strength (mV/m)	
	Fundamental	Harmonic
902 - 928	50	0.5
216 - 960	50	0.5
Above 960	50	0.5

FCC §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, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

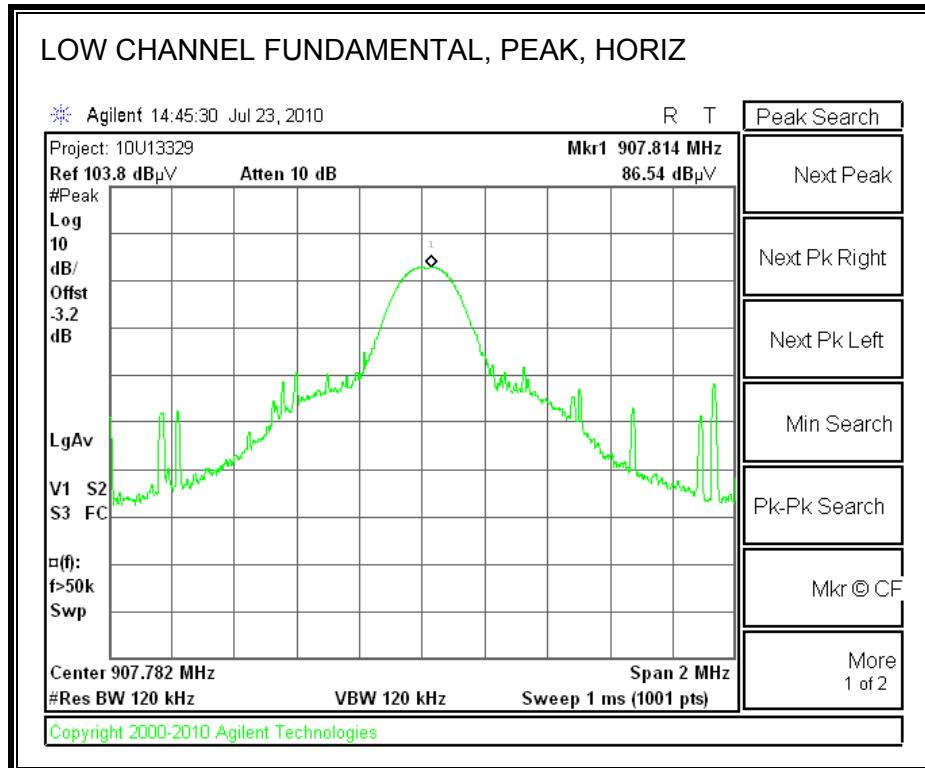
The spectrum from 30 MHz to 10 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 900 MHz band.

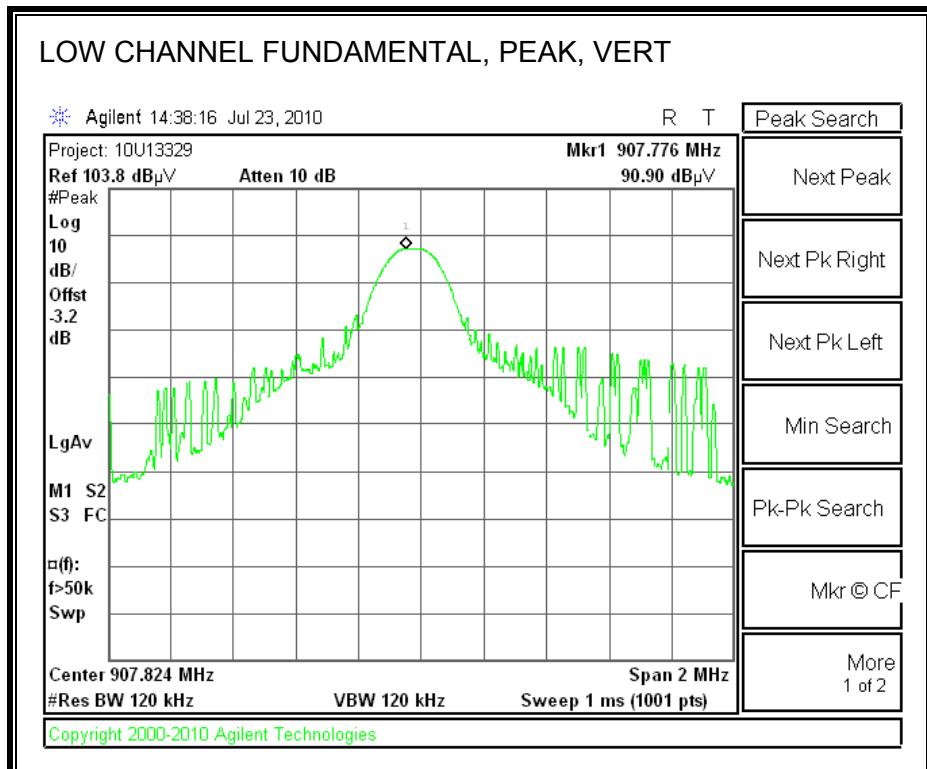
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

## 8.2. TRANSMITTER BELOW 1 GHz

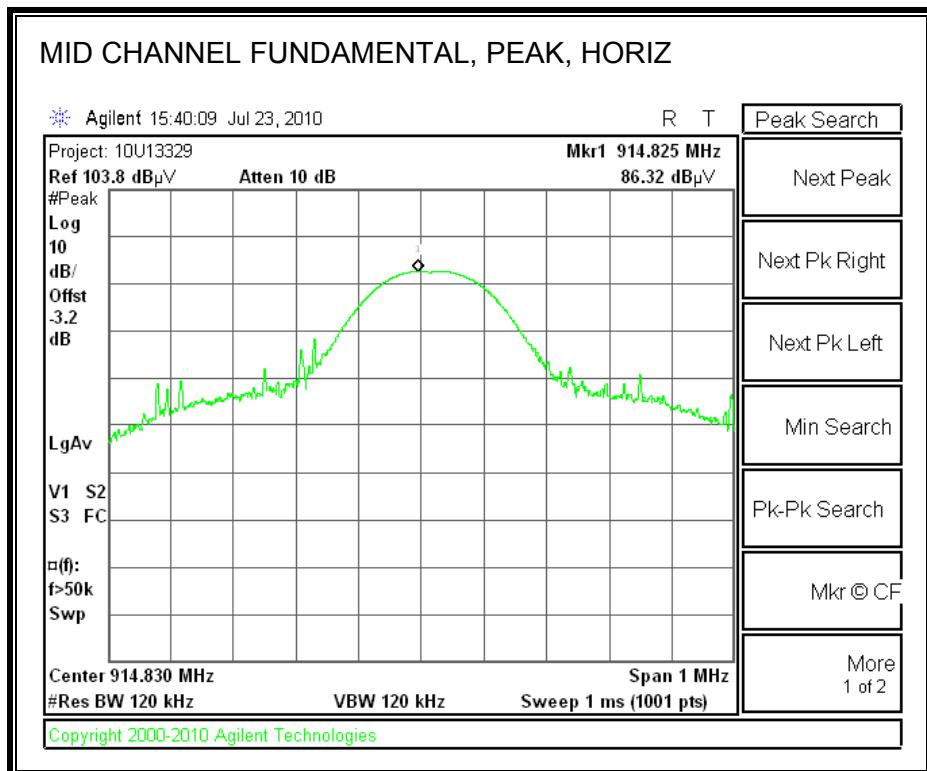
### 3dBi MONPOLE ANTENNA

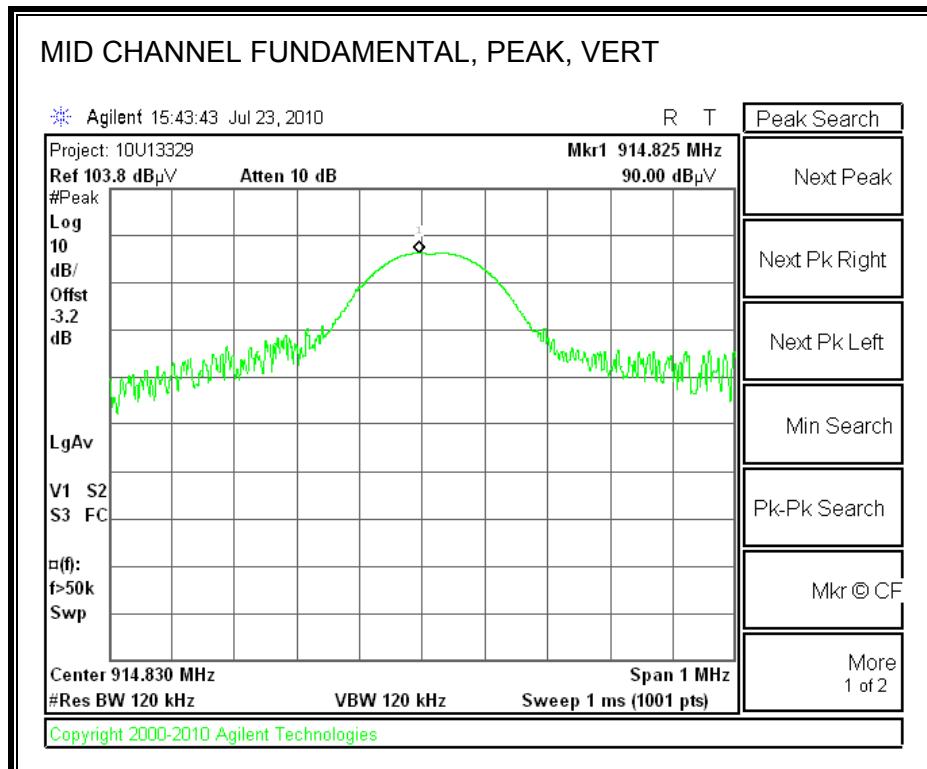
#### FUNDAMENTAL (LOW CHANNEL)



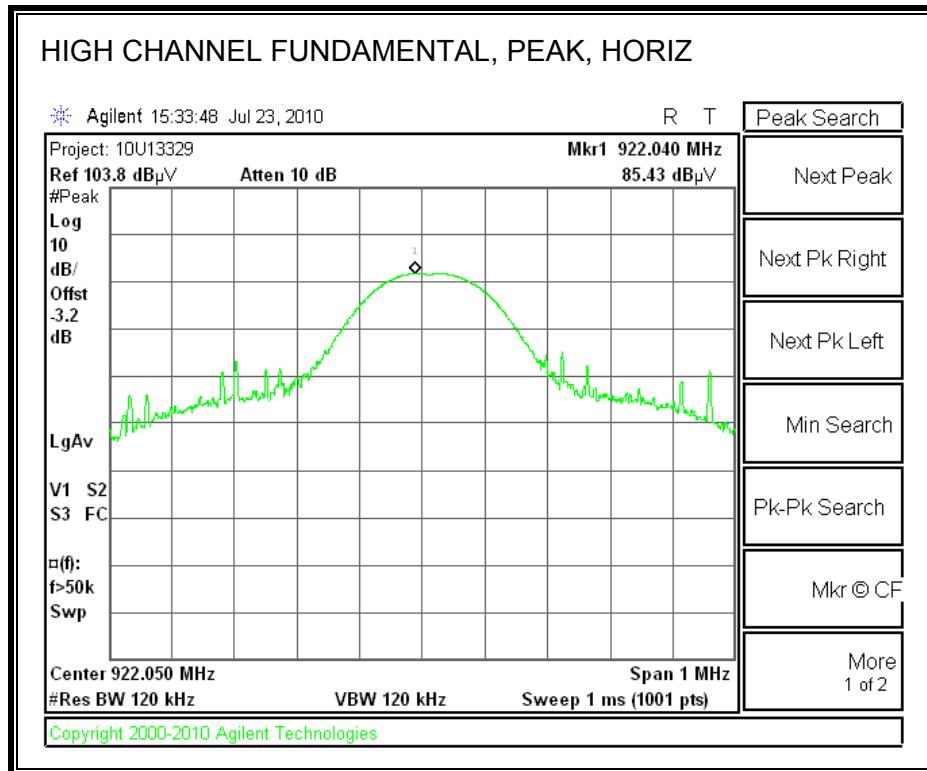


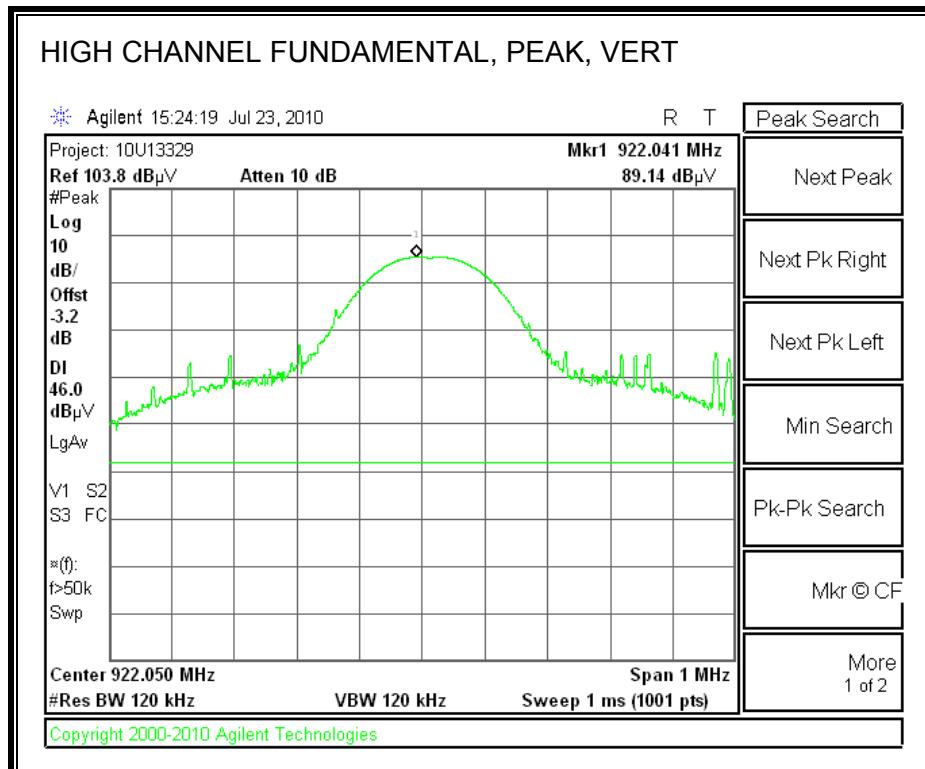
### FUNDAMENTAL (MID CHANNEL)



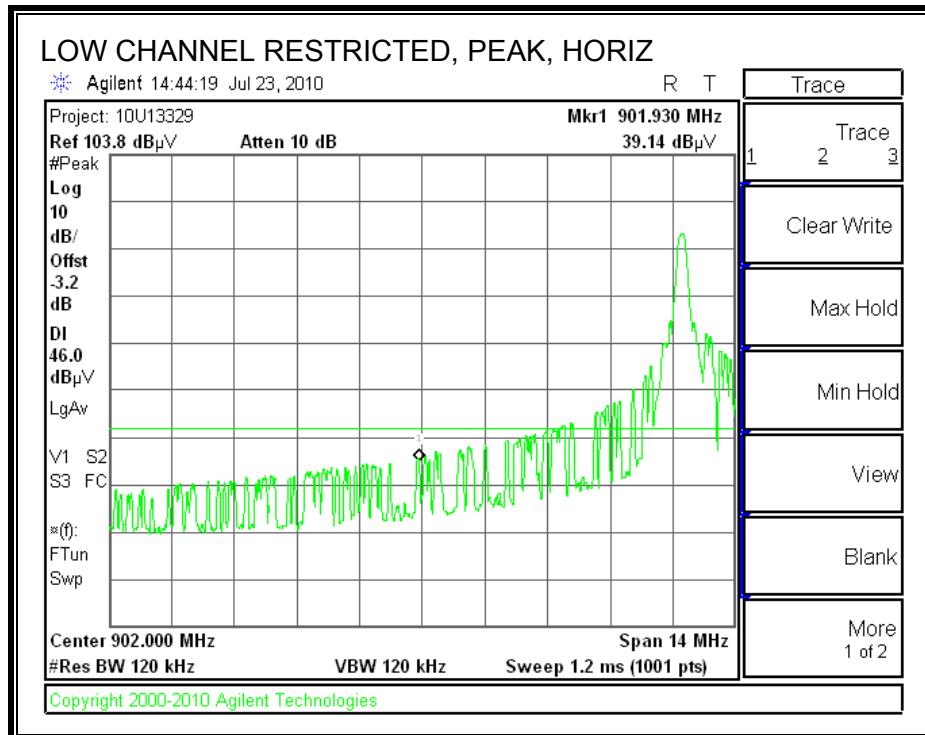


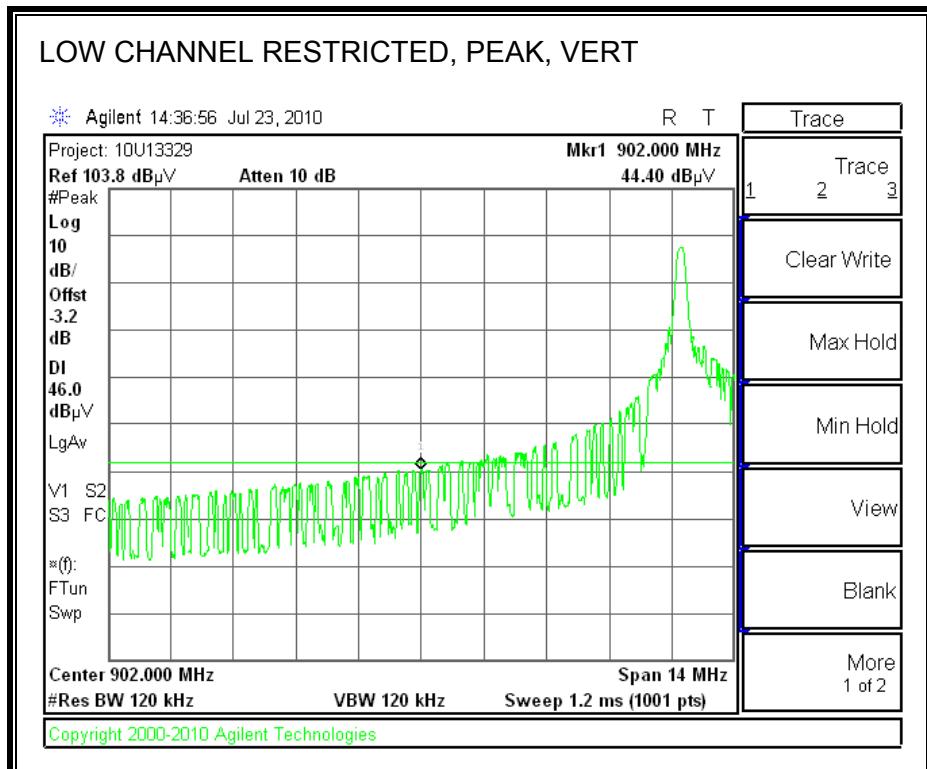
### FUNDAMENTAL (HIGH CHANNEL)



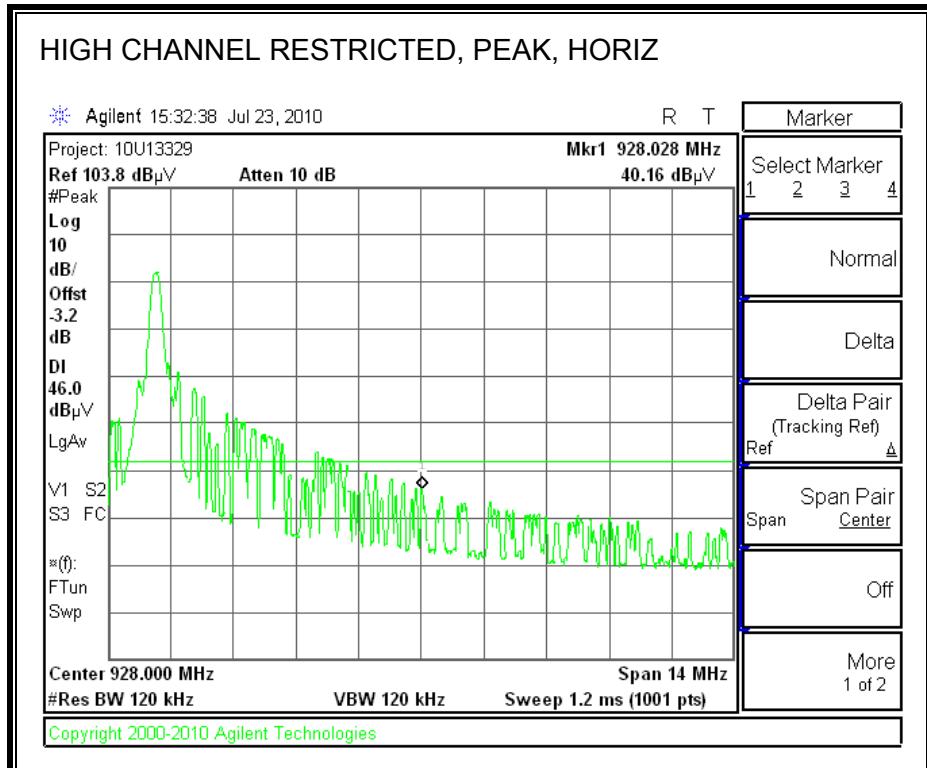


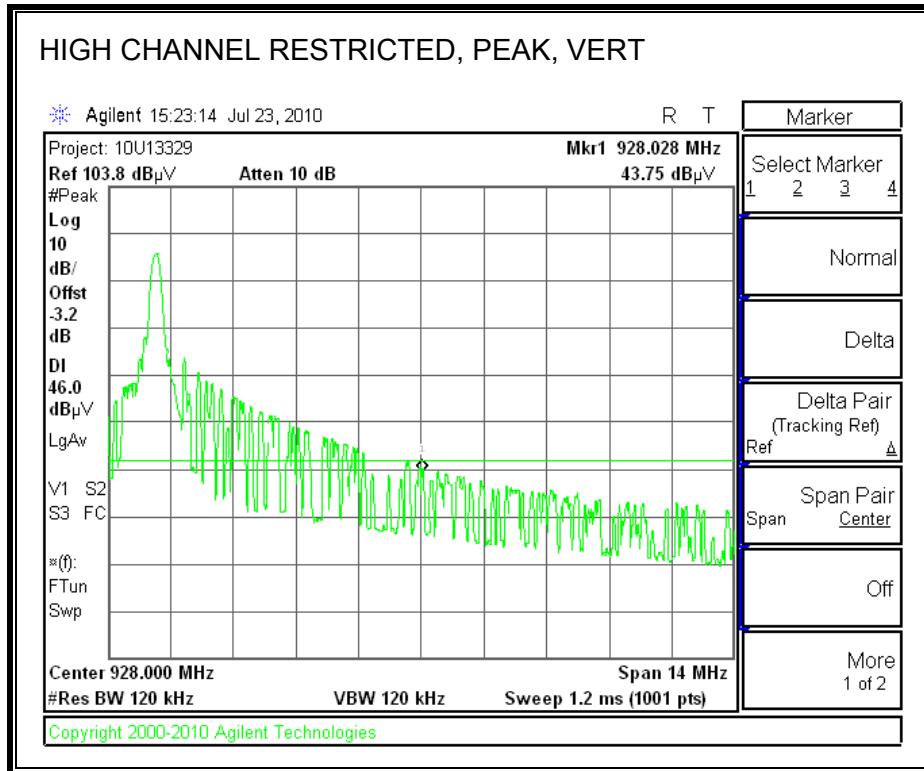
**RESTRICTED BANDEDGE (LOW CHANNEL)**

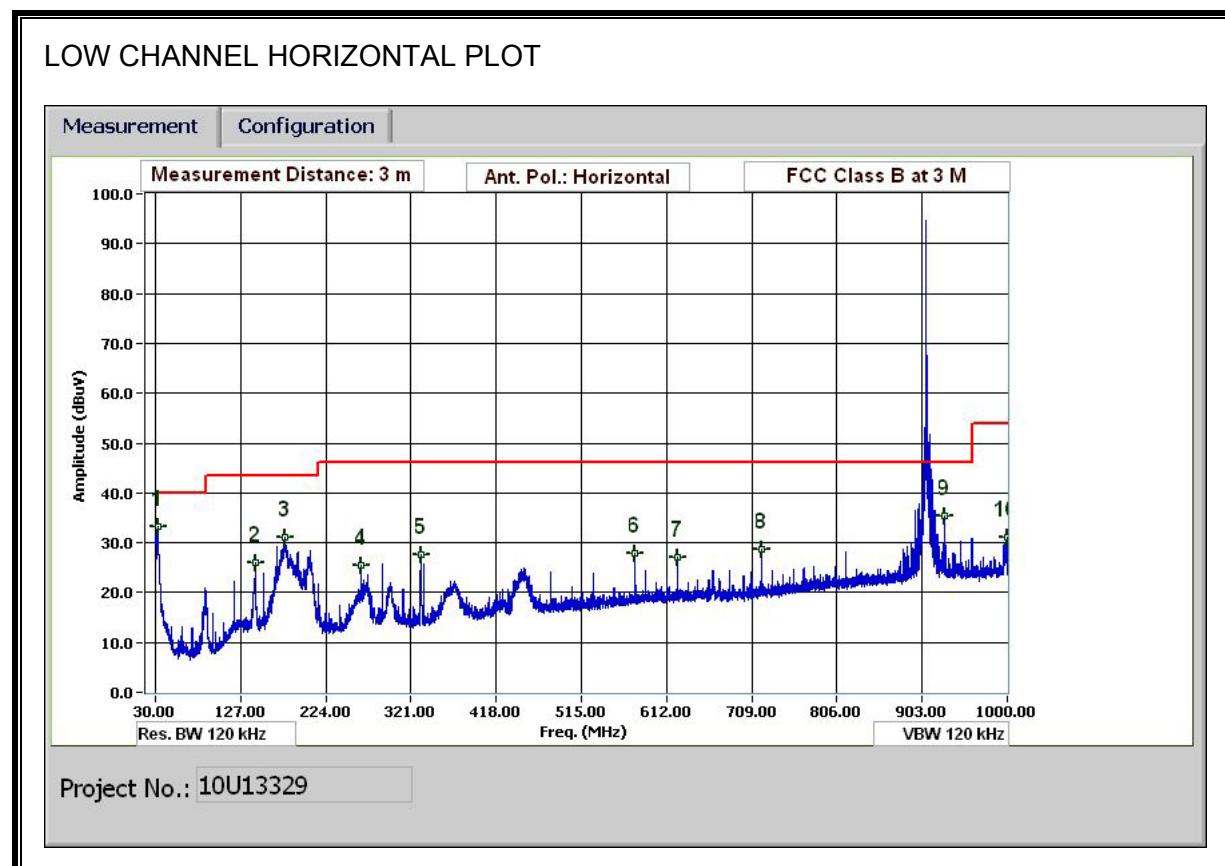




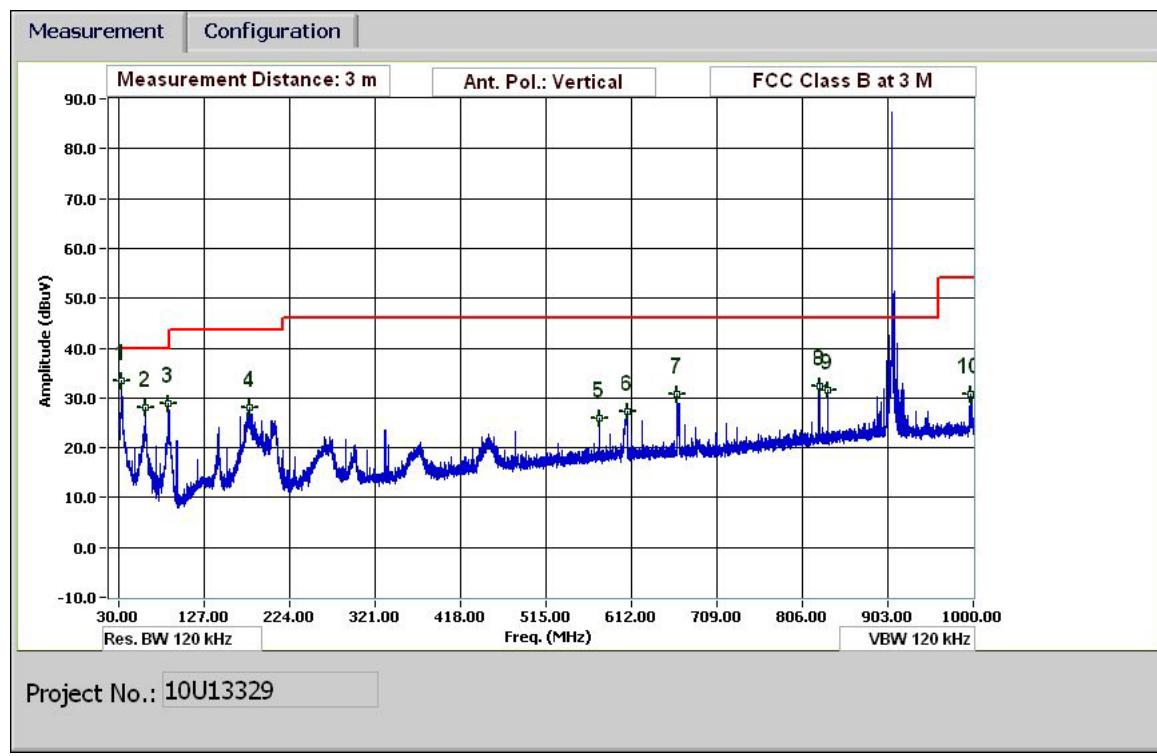
### RESTRICTED BANDEDGE (HIGH CHANNEL)



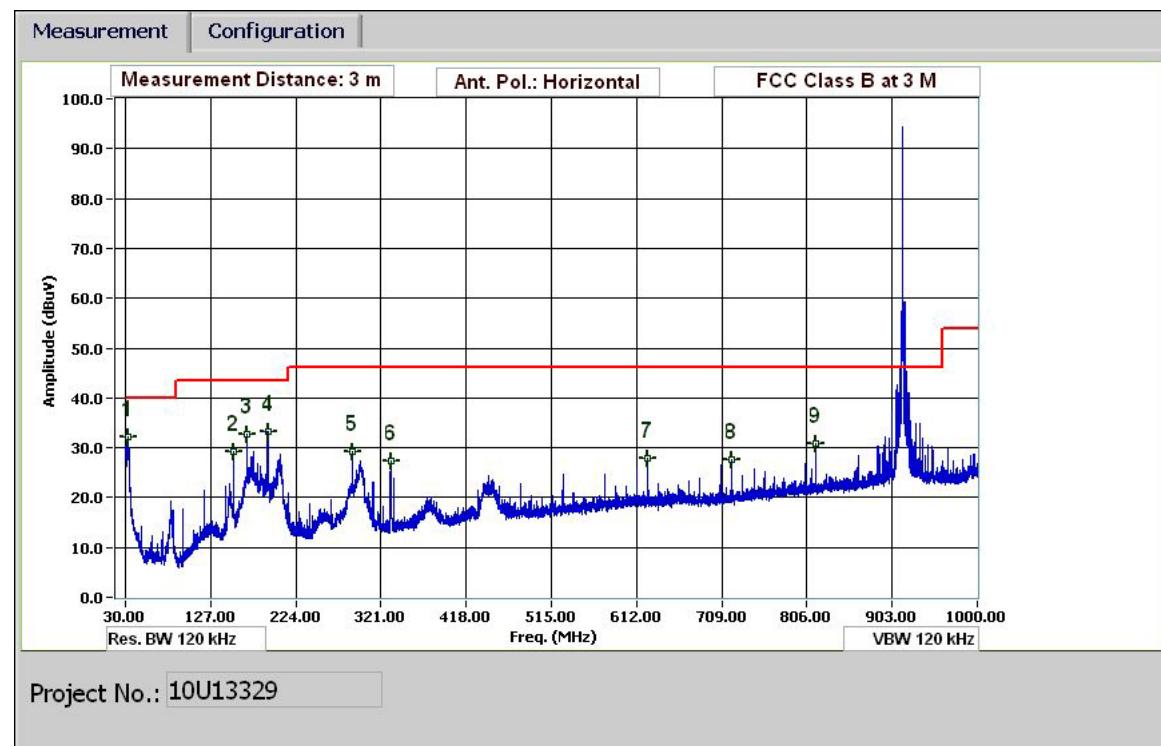




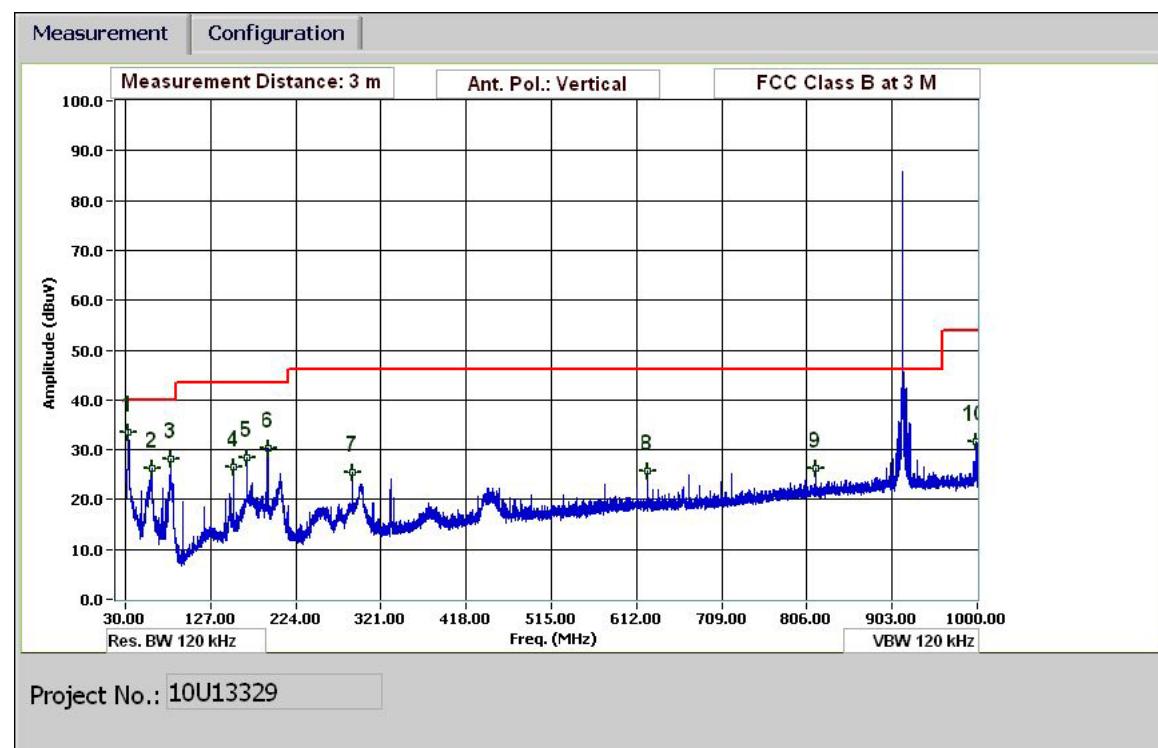
## LOW CHANNEL VERTICAL PLOT



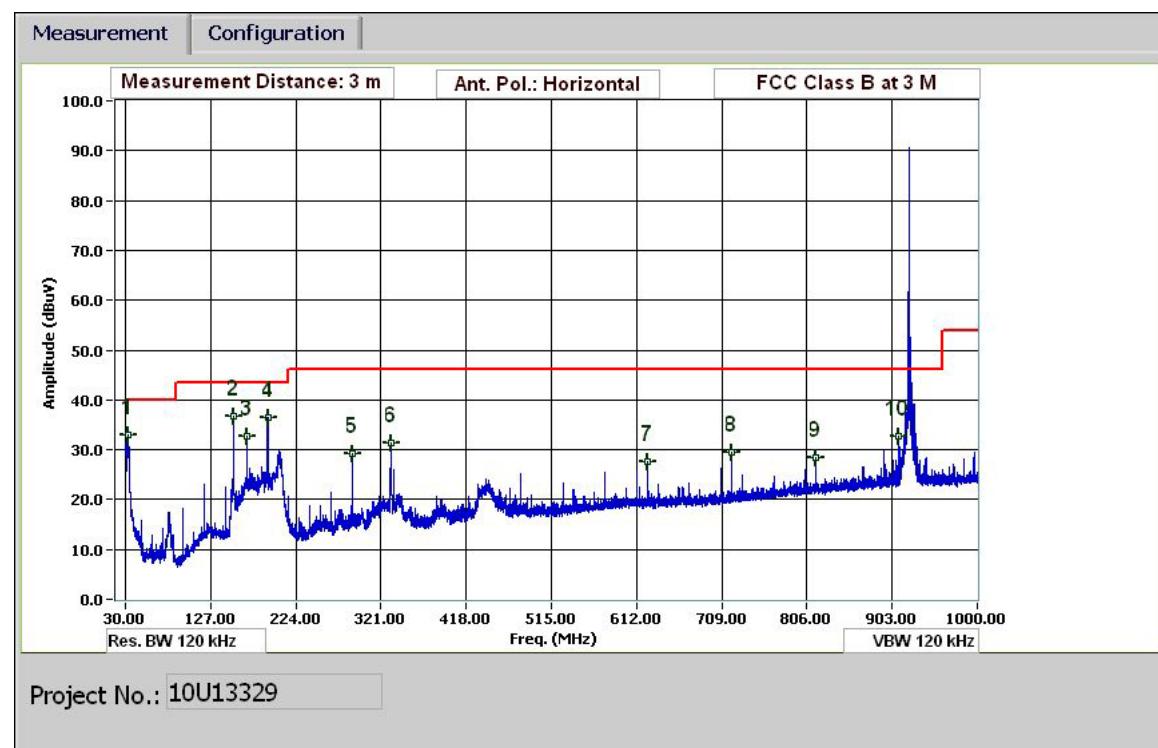
MID CHANNEL HORIZONTAL PLOT

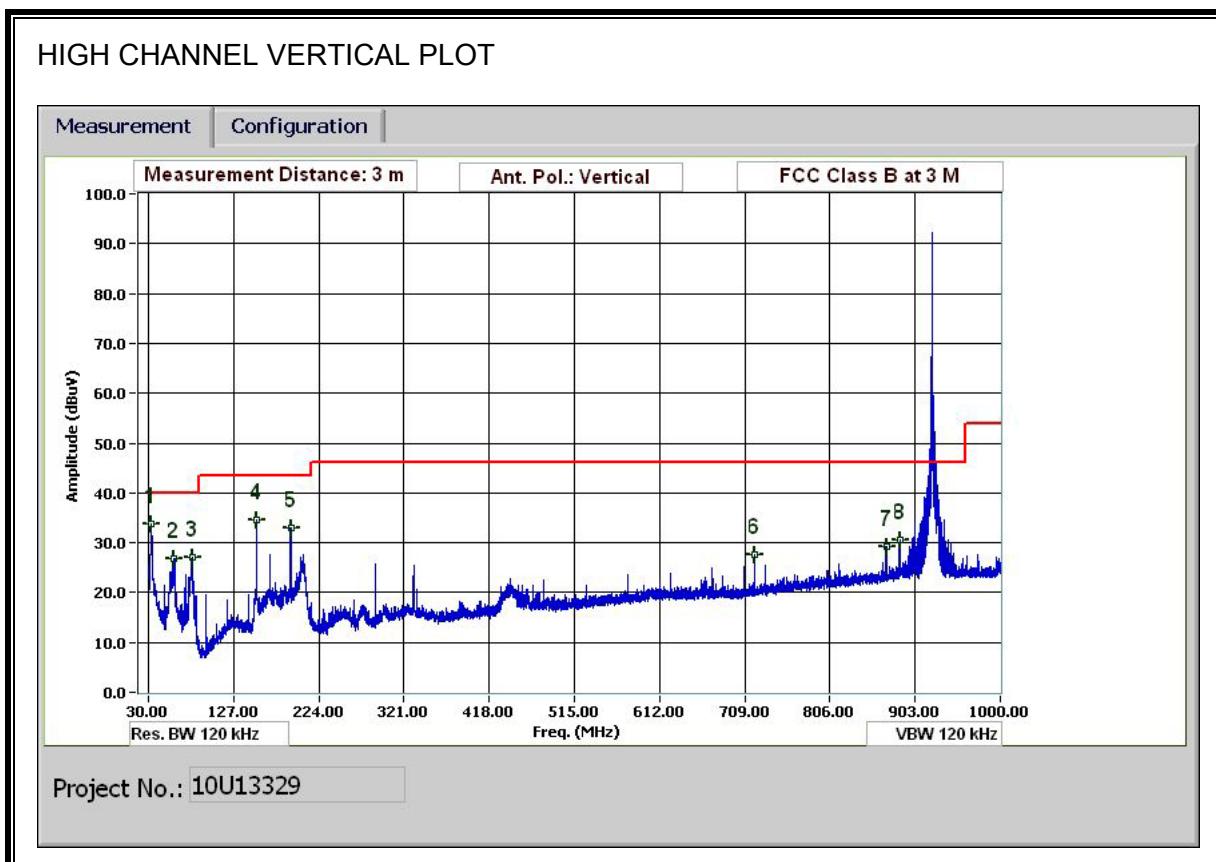


MID CHANNEL VERTICAL PLOT



### HIGH CHANNEL HORIZONTAL PLOT



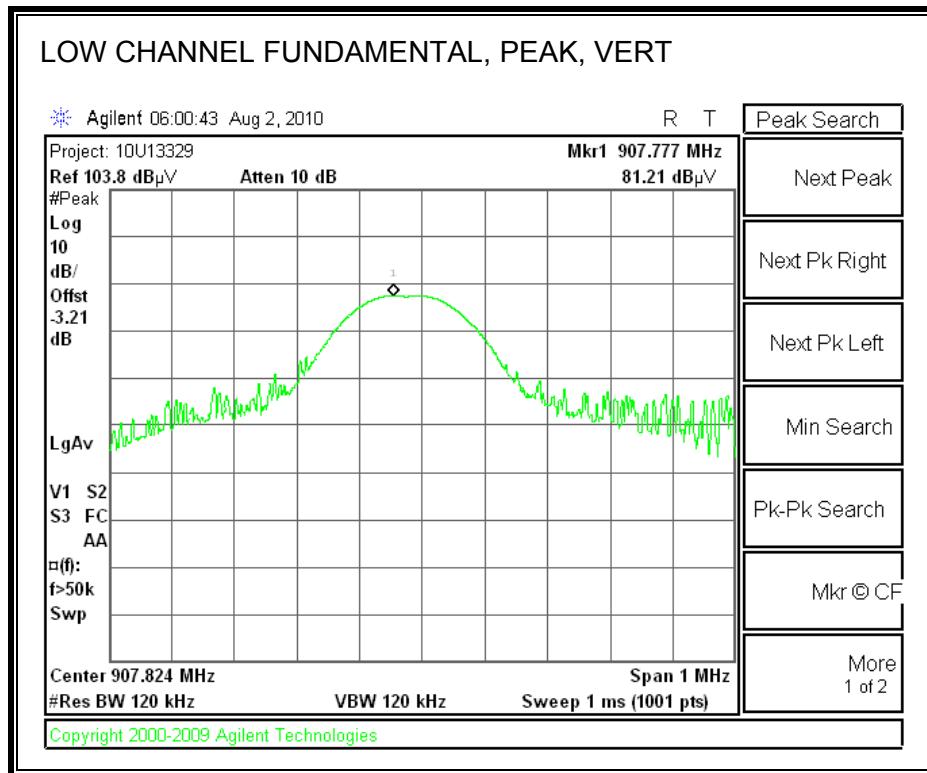
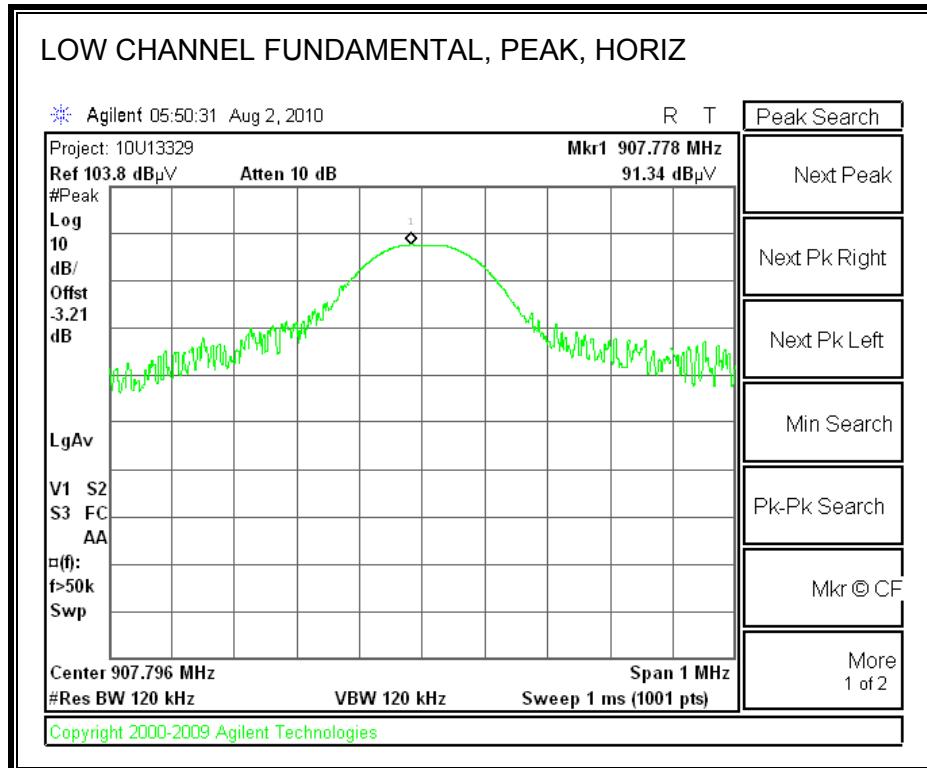


**VERTICAL AND HORIZONTAL DATA**

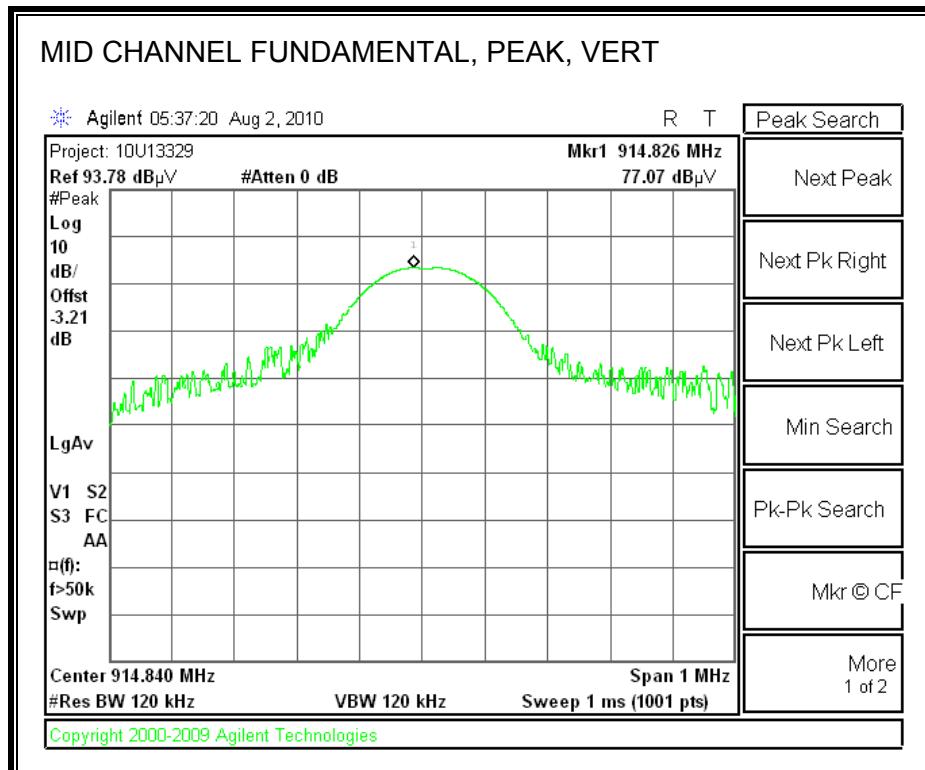
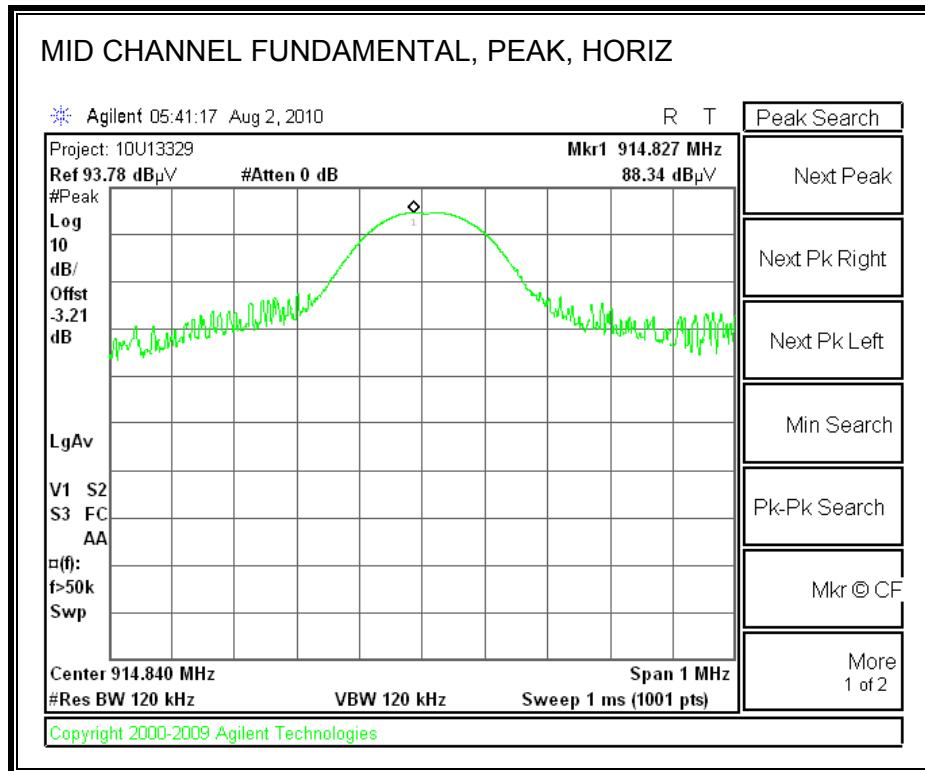
30-1000MHz Frequency Measurement Compliance Certification Services, Fremont 5m Chamber															
Test Engr:		William Zhuang													
Date:		07/30/10													
Project #:		10U13329													
Company:		Anaren Inc.													
EUT Description:		Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 3 dBi monopole													
EUT M/N:		09C and 09A													
Test Target:		FCC 15.247													
Mode Oper:		Tx, 2FSK 10K Baud 19K Dev.													
f		Measurement Frequency		Amp		Preamp Gain		Margin		Margin vs. Limit					
Dist	Distance to Antenna	D	Corr	Distance	Correct to 3 meters					P	100.0	0 - 360	Prescan		
Read	Analyzer Reading	Filter		Filter	Insert Loss					P	100.0	0 - 360	Prescan		
AF	Antenna Factor	Corr.		Calculated	Field Strength					P	100.0	0 - 360	Prescan		
CL	Cable Loss	Limit		Field	Strength Limit					P	100.0	0 - 360	Prescan		
f	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant. High cm	Table Angle Degree	Notes
Low Ch.															
33.240	3.0	42.9	18.4	0.5	28.4	0.0	0.0	33.4	40.0	-6.6	V	P	100.0	0 - 360	Prescan
60.001	3.0	47.8	7.9	0.7	28.3	0.0	0.0	28.0	40.0	-12.0	V	P	100.0	0 - 360	Prescan
86.282	3.0	48.8	7.6	0.8	28.3	0.0	0.0	28.9	40.0	-11.1	V	P	100.0	0 - 360	Prescan
178.926	3.0	43.7	10.7	1.1	27.5	0.0	0.0	28.0	43.5	-15.5	V	P	100.0	0 - 360	Prescan
576.143	3.0	34.2	18.1	2.1	28.6	0.0	0.0	25.8	46.0	-20.2	V	P	100.0	0 - 360	Prescan
607.344	3.0	35.1	18.5	2.2	28.6	0.0	0.0	27.2	46.0	-18.8	V	P	100.0	0 - 360	Prescan
663.866	3.0	38.3	18.8	2.3	28.5	0.0	0.0	30.8	46.0	-15.2	V	P	100.0	0 - 360	Prescan
825.513	3.0	36.8	21.2	2.6	28.1	0.0	0.0	32.4	46.0	-13.6	V	P	100.0	0 - 360	Prescan
834.753	3.0	35.6	21.3	2.6	28.1	0.0	0.0	31.5	46.0	-14.5	V	P	100.0	0 - 360	Prescan
997.000	3.0	32.6	22.7	2.9	27.6	0.0	0.0	30.6	54.0	-23.4	V	P	100.0	0 - 360	Prescan
33.000	3.0	42.5	18.5	0.5	28.4	0.0	0.0	33.2	40.0	-6.8	H	P	100.0	0 - 360	Prescan
144.005	3.0	39.8	12.9	1.0	27.9	0.0	0.0	25.9	43.5	-17.6	H	P	100.0	0 - 360	Prescan
178.086	3.0	47.0	10.6	1.1	27.5	0.0	0.0	31.2	43.5	-12.3	H	P	100.0	0 - 360	Prescan
264.010	3.0	39.3	12.3	1.4	27.4	0.0	0.0	25.5	46.0	-20.5	H	P	100.0	0 - 360	Prescan
332.052	3.0	39.6	14.0	1.6	27.6	0.0	0.0	27.6	46.0	-18.4	H	P	100.0	0 - 360	Prescan
576.143	3.0	36.4	18.1	2.1	28.6	0.0	0.0	28.0	46.0	-18.0	H	P	100.0	0 - 360	Prescan
624.145	3.0	34.8	18.6	2.2	28.6	0.0	0.0	27.0	46.0	-19.0	H	P	100.0	0 - 360	Prescan
720.268	3.0	35.4	19.3	2.4	28.5	0.0	0.0	28.6	46.0	-17.4	H	P	100.0	0 - 360	Prescan
929.197	3.0	38.3	22.3	2.8	27.8	0.0	0.0	35.5	46.0	-10.5	H	P	100.0	0 - 360	Prescan
999.400	3.0	33.1	22.7	2.9	27.6	0.0	0.0	31.1	54.0	-22.9	H	P	100.0	0 - 360	Prescan
Mid Ch.															
33.240	3.0	41.6	18.4	0.5	28.4	0.0	0.0	32.1	40.0	-7.9	H	P	100.0	0 - 360	Prescan
152.885	3.0	43.1	12.8	1.0	27.8	0.0	0.0	29.2	43.5	-14.3	H	P	100.0	0 - 360	Prescan
168.006	3.0	47.7	11.6	1.1	27.6	0.0	0.0	32.7	43.5	-10.8	H	P	100.0	0 - 360	Prescan
192.007	3.0	48.1	11.4	1.1	27.4	0.0	0.0	33.2	43.5	-10.3	H	P	100.0	0 - 360	Prescan
288.131	3.0	42.2	13.1	1.4	27.4	0.0	0.0	29.3	46.0	-16.7	H	P	100.0	0 - 360	Prescan
333.133	3.0	39.4	14.0	1.6	27.6	0.0	0.0	27.3	46.0	-18.7	H	P	100.0	0 - 360	Prescan
624.145	3.0	35.6	18.6	2.2	28.6	0.0	0.0	27.9	46.0	-18.1	H	P	100.0	0 - 360	Prescan
720.268	3.0	34.3	19.3	2.4	28.5	0.0	0.0	27.6	46.0	-18.4	H	P	100.0	0 - 360	Prescan
816.272	3.0	35.5	21.1	2.6	28.1	0.0	0.0	30.9	46.0	-15.1	H	P	100.0	0 - 360	Prescan
33.240	3.0	43.1	18.4	0.5	28.4	0.0	0.0	33.6	40.0	-6.4	V	P	100.0	0 - 360	Prescan
60.001	3.0	46.1	7.9	0.7	28.3	0.0	0.0	26.4	40.0	-13.6	V	P	100.0	0 - 360	Prescan
81.602	3.0	47.8	7.8	0.7	28.3	0.0	0.0	28.1	40.0	-11.9	V	P	100.0	0 - 360	Prescan
153.005	3.0	40.4	12.8	1.0	27.8	0.0	0.0	26.5	43.5	-17.0	V	P	100.0	0 - 360	Prescan
168.006	3.0	43.4	11.6	1.1	27.6	0.0	0.0	28.5	43.5	-15.0	V	P	100.0	0 - 360	Prescan
192.007	3.0	45.1	11.4	1.1	27.4	0.0	0.0	30.3	43.5	-13.2	V	P	100.0	0 - 360	Prescan
288.011	3.0	38.3	13.1	1.4	27.4	0.0	0.0	25.5	46.0	-20.5	V	P	100.0	0 - 360	Prescan
624.145	3.0	33.4	18.6	2.2	28.6	0.0	0.0	25.6	46.0	-20.4	V	P	100.0	0 - 360	Prescan
816.272	3.0	30.8	21.1	2.6	28.1	0.0	0.0	26.3	46.0	-19.7	V	P	100.0	0 - 360	Prescan
999.160	3.0	33.6	22.7	2.9	27.6	0.0	0.0	31.6	54.0	-22.4	V	P	100.0	0 - 360	Prescan
High Ch.															
33.120	3.0	43.1	18.5	0.5	28.4	0.0	0.0	33.7	40.0	-6.3	V	P	100.0	0 - 360	Prescan
58.561	3.0	46.3	8.1	0.7	28.3	0.0	0.0	26.7	40.0	-13.3	V	P	100.0	0 - 360	Prescan
79.562	3.0	46.7	8.0	0.7	28.3	0.0	0.0	27.1	40.0	-12.9	V	P	100.0	0 - 360	Prescan
152.885	3.0	48.5	12.8	1.0	27.8	0.0	0.0	34.6	43.5	-8.9	V	P	100.0	0 - 360	Prescan
192.007	3.0	47.9	11.4	1.1	27.4	0.0	0.0	33.0	43.5	-10.5	V	P	100.0	0 - 360	Prescan
720.268	3.0	34.4	19.3	2.4	28.5	0.0	0.0	27.7	46.0	-18.3	V	P	100.0	0 - 360	Prescan
870.035	3.0	32.7	21.7	2.7	28.0	0.0	0.0	29.1	46.0	-16.9	V	P	100.0	0 - 360	Prescan
886.115	3.0	33.9	21.9	2.7	27.9	0.0	0.0	30.6	46.0	-15.4	V	P	100.0	0 - 360	Prescan
33.120	3.0	42.4	18.5	0.5	28.4	0.0	0.0	32.9	40.0	-7.1	H	P	100.0	0 - 360	Prescan
153.365	3.0	50.7	12.8	1.0	27.8	0.0	0.0	36.8	43.5	-6.7	H	P	100.0	0 - 360	Prescan
168.006	3.0	47.6	11.6	1.1	27.6	0.0	0.0	32.7	43.5	-10.8	H	P	100.0	0 - 360	Prescan
192.007	3.0	51.3	11.4	1.1	27.4	0.0	0.0	36.4	43.5	-7.1	H	P	100.0	0 - 360	Prescan
288.131	3.0	42.1	13.1	1.4	27.4	0.0	0.0	29.2	46.0	-16.8	H	P	100.0	0 - 360	Prescan
33.012	3.0	43.5	14.0	1.6	27.6	0.0	0.0	31.4	46.0	-14.6	H	P	100.0	0 - 360	Prescan
624.145	3.0	35.2	18.6	2.2	28.6	0.0	0.0	27.5	46.0	-20.5	H	P	100.0	0 - 360	Prescan
720.268	3.0	36.2	19.3	2.4	28.5	0.0	0.0	29.5	46.0	-16.5	H	P	100.0	0 - 360	Prescan
816.392	3.0	33.0	21.1	2.6	28.1	0.0	0.0	28.5	46.0	-17.5	H	P	100.0	0 - 360	Prescan
910.836	3.0	35.5	22.1	2.7	27.8	0.0	0.0	32.6	46.0	-13.4	H	P	100.0	0 - 360	Prescan
Rev. 1.27.09															
Note: No other emissions were detected above the system noise floor.															

## 2dBi PCB ANTENNA

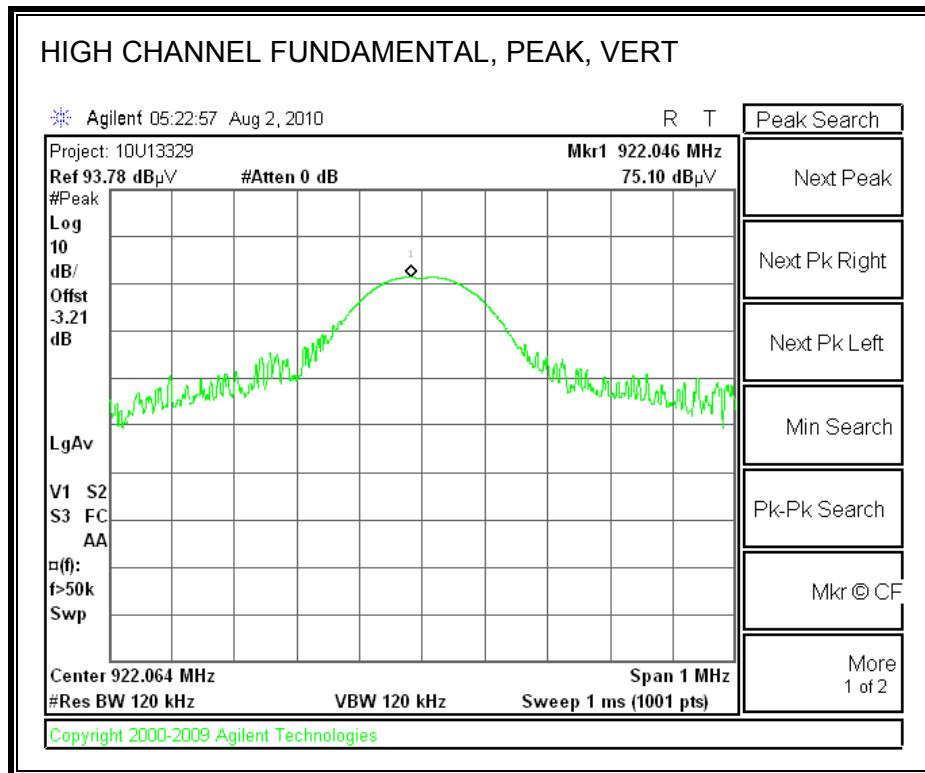
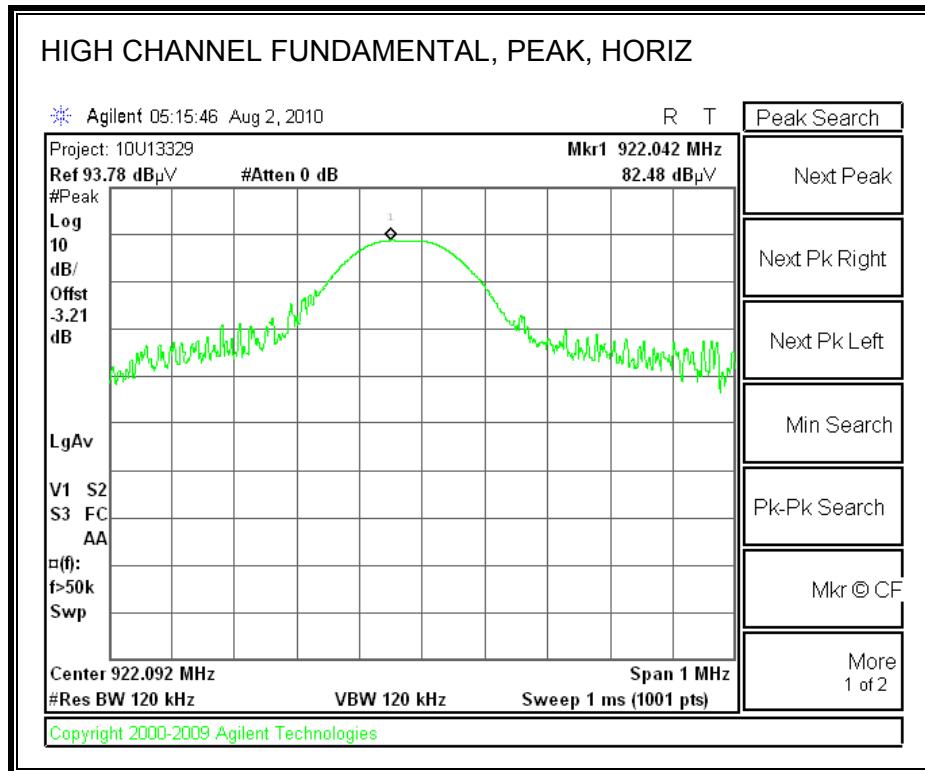
### FUNDAMENTAL (LOW CHANNEL)



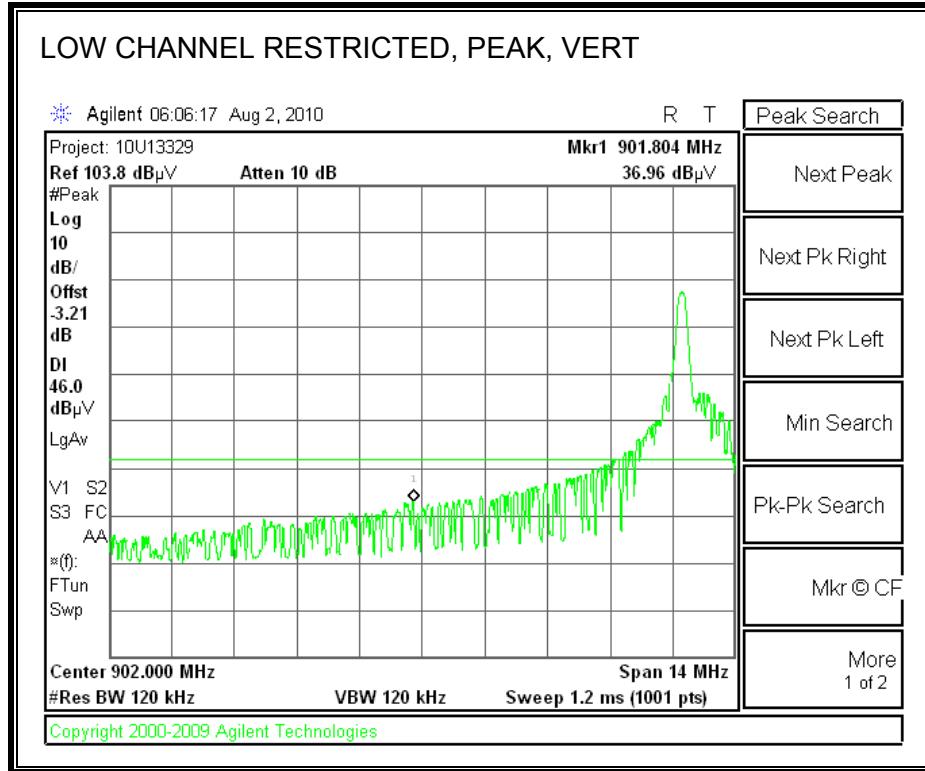
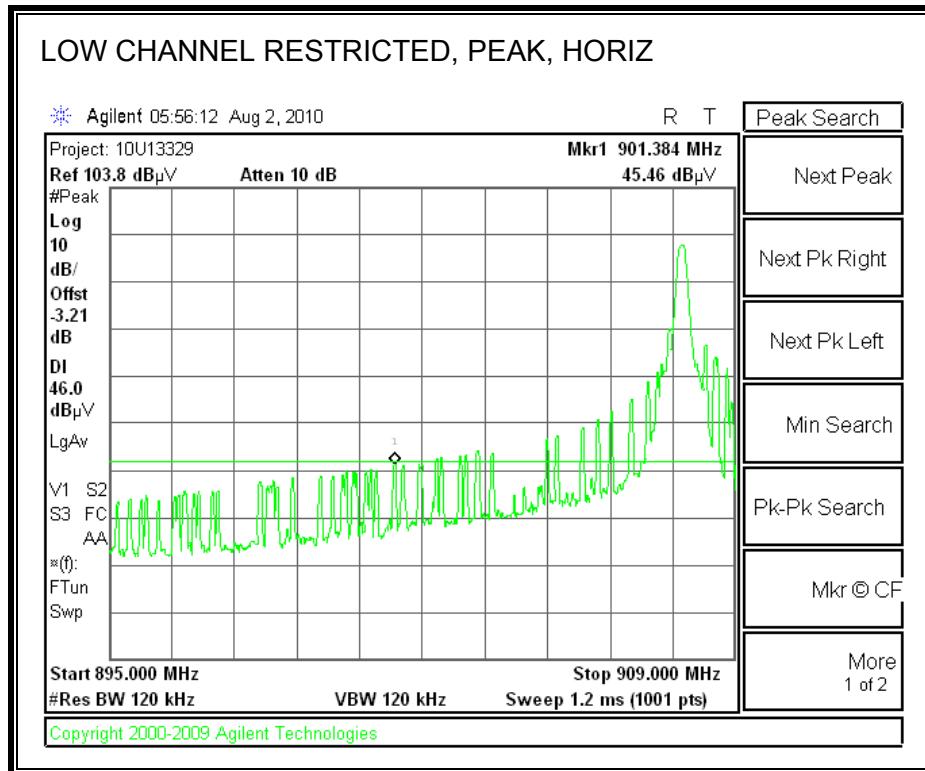
**FUNDAMENTAL (MID CHANNEL)**



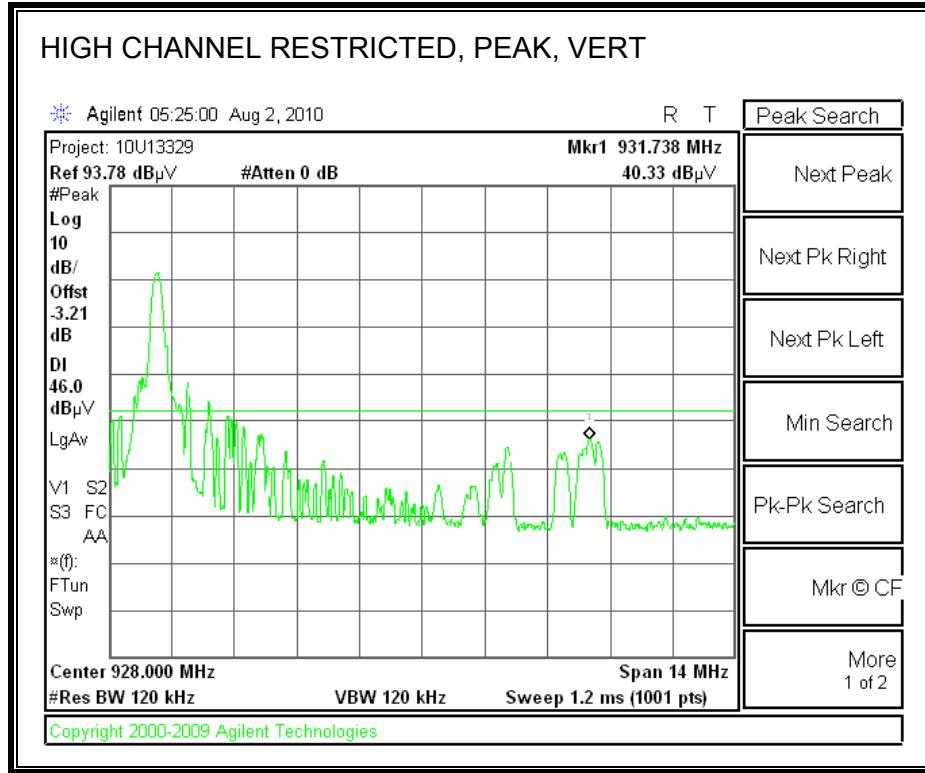
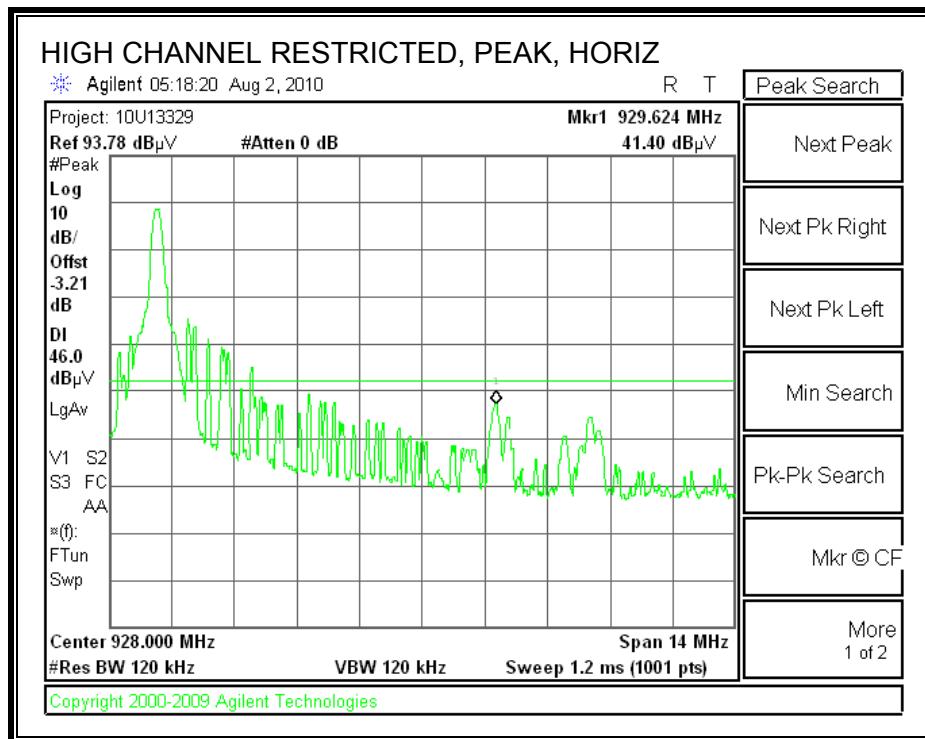
**FUNDAMENTAL (HIGH CHANNEL)**



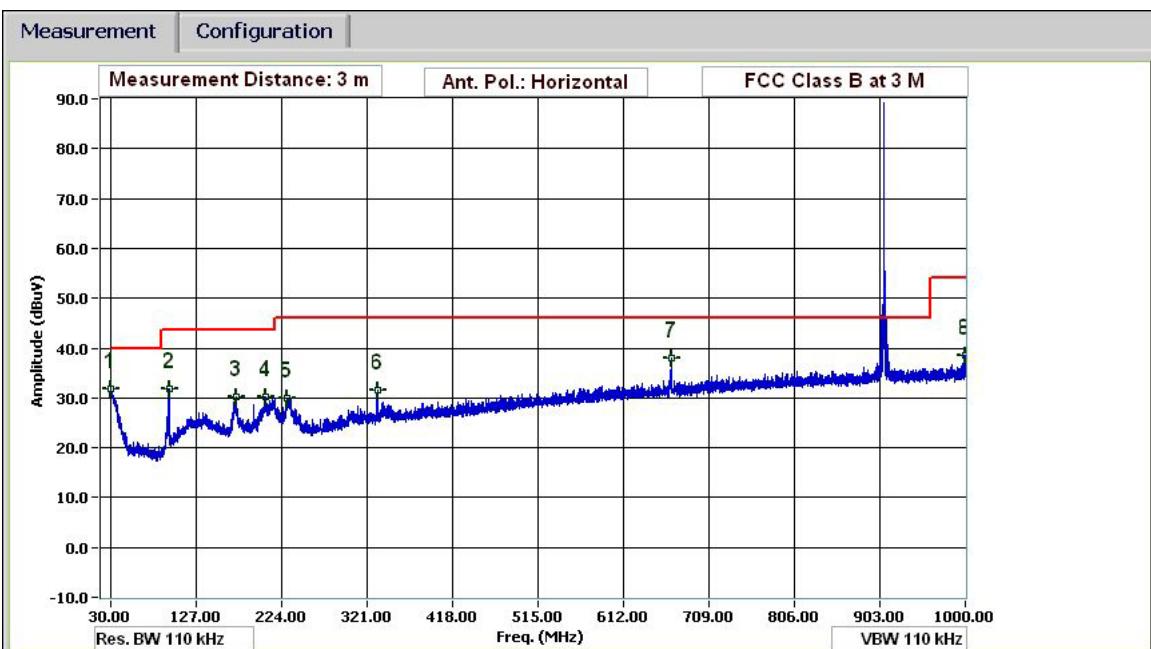
**RESTRICTED BANDEDGE (LOW CHANNEL)**



**RESTRICTED BANDEDGE (HIGH CHANNEL)**

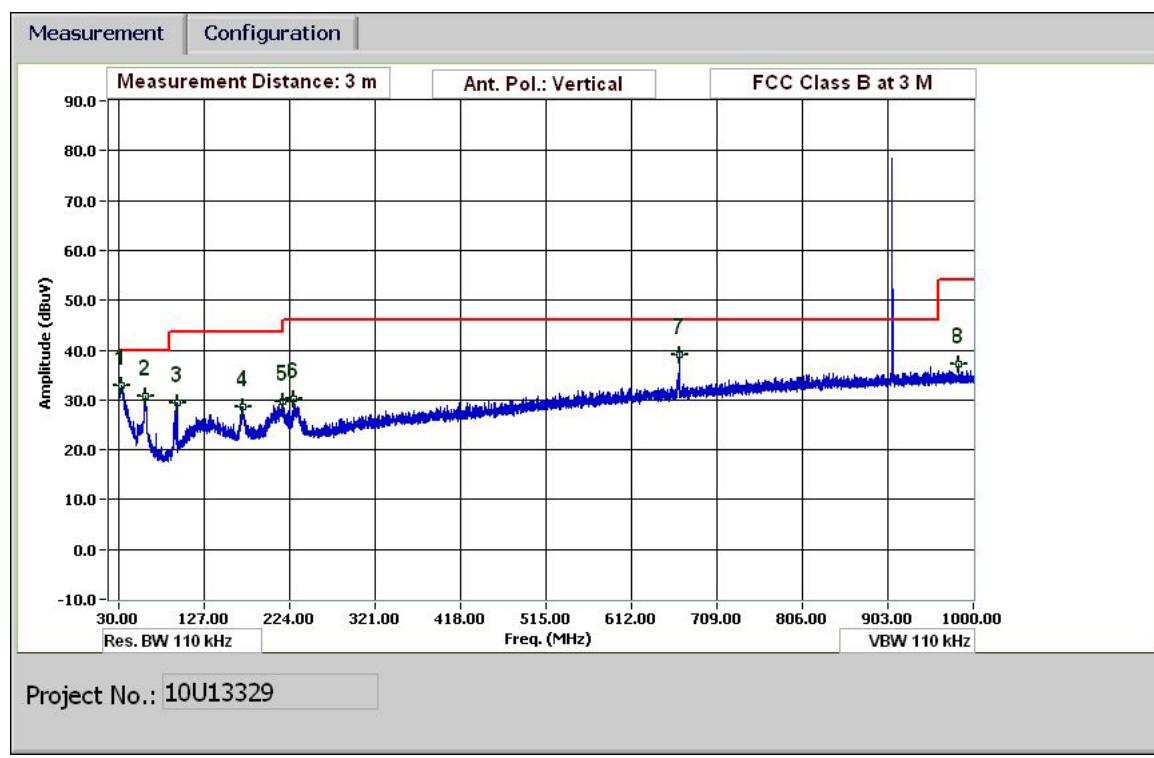


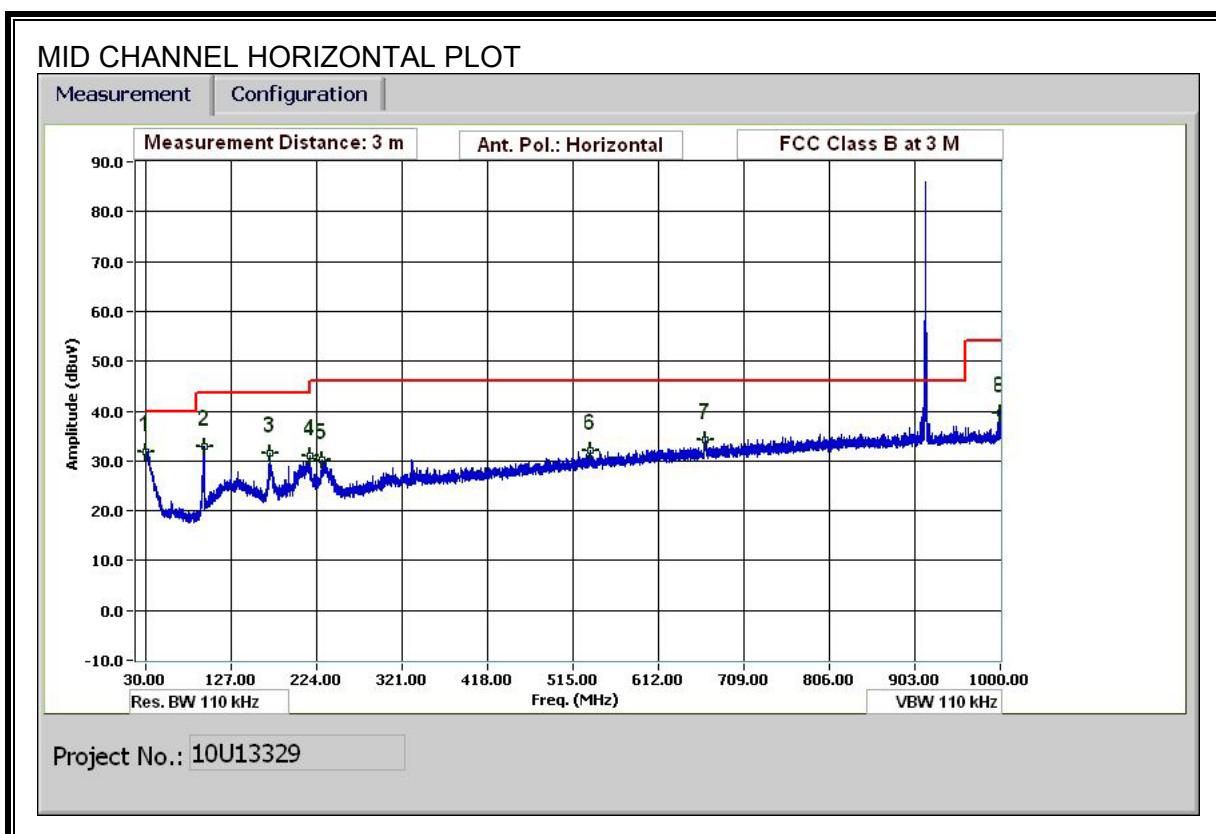
LOW CHANNEL HORIZONTAL PLOT



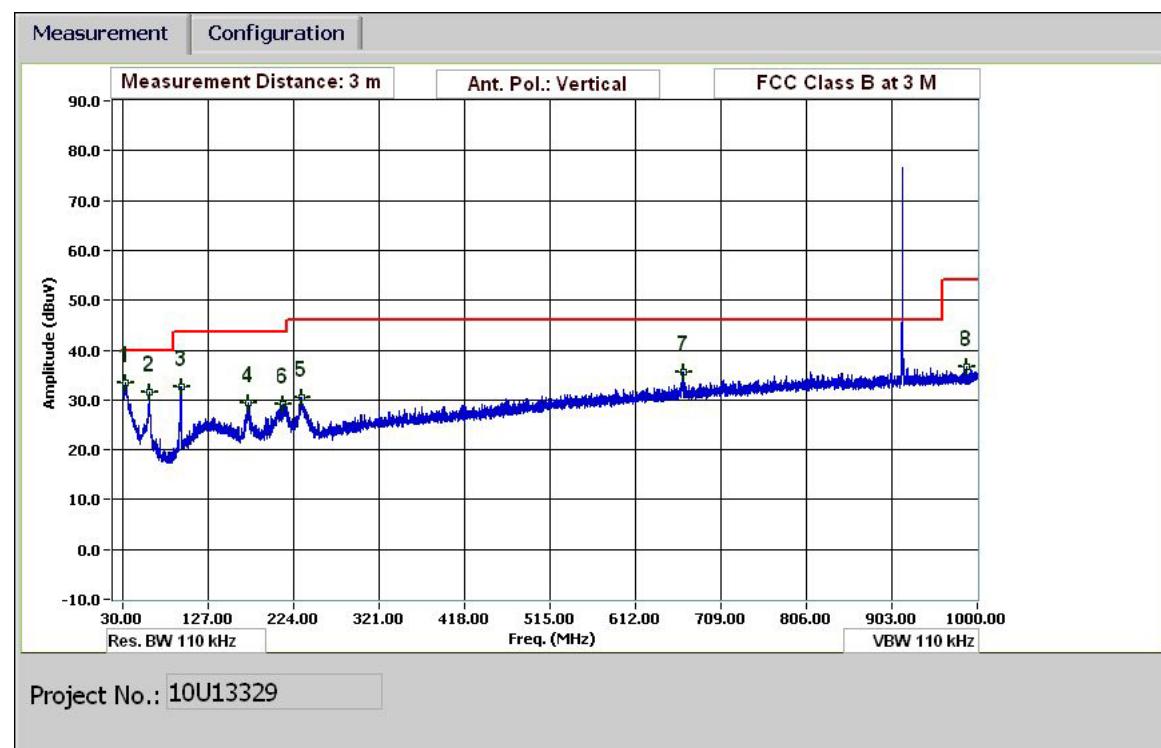
Project No.: 10U13329

## LOW CHANNEL VERTICAL PLOT

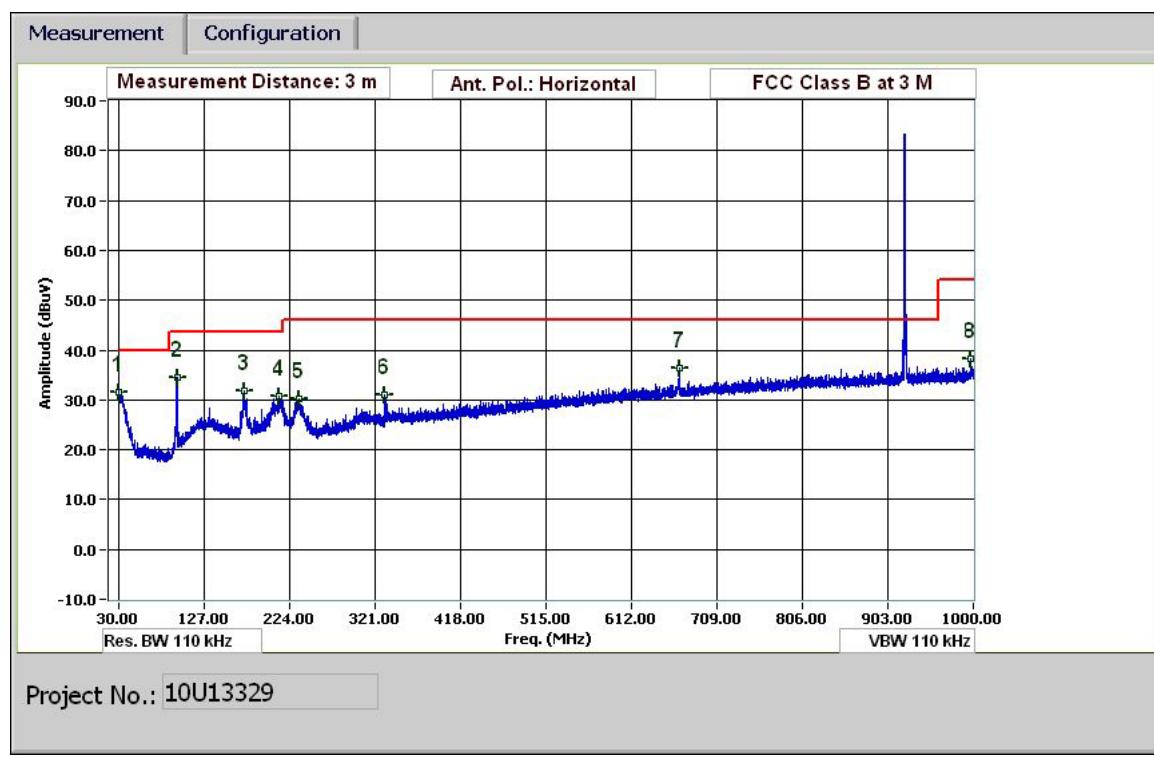




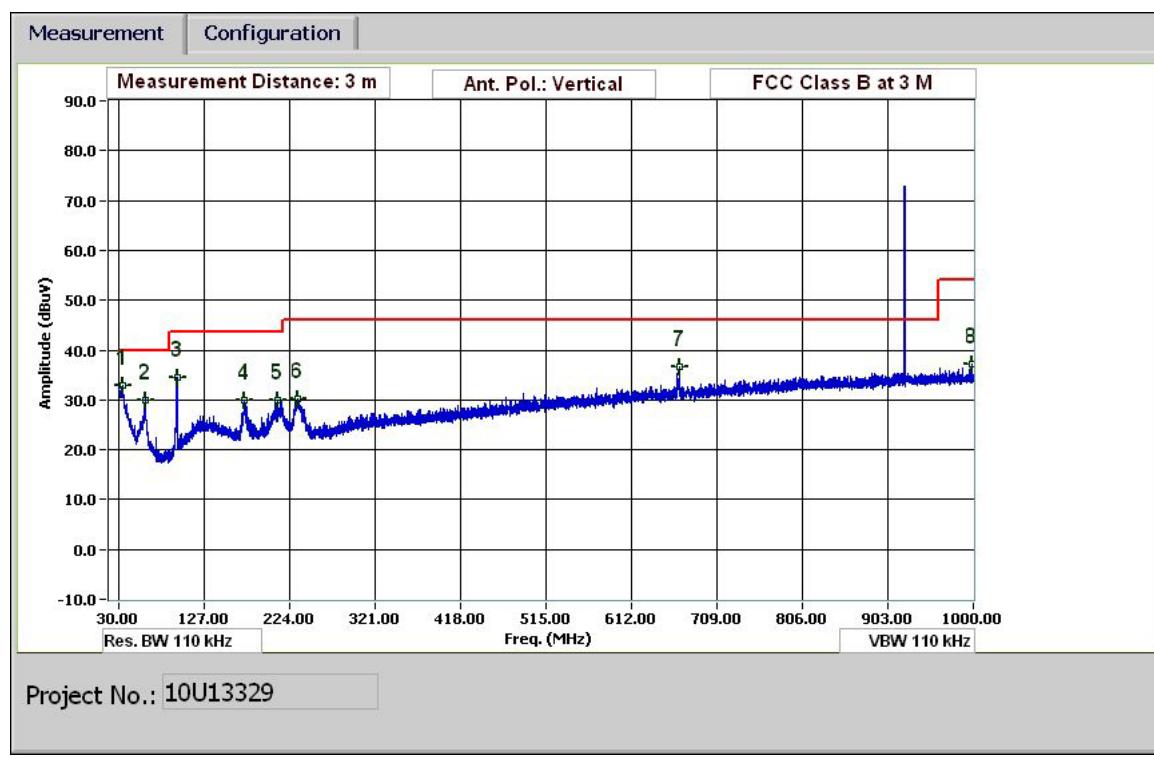
MID CHANNEL VERTICAL PLOT



## HIGH CHANNEL HORIZONTAL PLOT



## HIGH CHANNEL VERTICAL PLOT



**VERTICAL AND HORIZONTAL DATA**

30-1000MHz Frequency Measurement Compliance Certification Services, Fremont 5m Chamber															
Test Engr:	William Zhuang														
Date:	08/02/10														
Project #:	10U13329														
Company:	Anaren Inc.														
EUT Description:	Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 2 dBi PCB														
EUT M/N:	09C and 09A														
Test Target:	FCC 15.249														
Mode Oper:	Tx, 2FSK 10K Baud 19K Dev.														
f	Measurement Frequency	Amp	Preamp Gain						Margin	Margin vs. Limit					
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters												
Read	Analyzer Reading	Filter	Filter Insert Loss												
AF	Antenna Factor	Corr.	Calculated Field Strength												
CL	Cable Loss	Limit	Field Strength Limit												
<b>Low Ch.</b>															
32.880	3.0	31.8	18.9	0.5	28.4	0.0	10.0	32.8	40.0	-7.2	V	P	100.0	0 - 360	Prescan
60.001	3.0	40.5	7.9	0.7	28.4	0.0	10.0	30.7	40.0	-9.3	V	P	100.0	0 - 360	Prescan
96.003	3.0	37.7	9.0	0.9	28.3	0.0	10.0	29.3	43.5	-14.2	V	P	100.0	0 - 360	Prescan
170.286	3.0	34.9	10.8	1.2	28.2	0.0	10.0	28.6	43.5	-14.5	V	P	100.0	0 - 360	Prescan
216.008	3.0	34.7	11.9	1.3	28.2	0.0	10.0	29.7	46.0	-16.3	V	P	100.0	0 - 360	Prescan
228.848	3.0	35.2	11.9	1.3	28.2	0.0	10.0	30.2	46.0	-15.8	V	P	100.0	0 - 360	Prescan
666.146	3.0	34.8	19.2	2.4	27.3	0.0	10.0	39.1	46.0	-6.9	V	P	100.0	0 - 360	Prescan
983.199	3.0	29.7	22.4	3.0	27.9	0.0	10.0	37.2	54.0	-16.8	V	P	100.0	0 - 360	Prescan
30.360	3.0	29.8	19.9	0.5	28.4	0.0	10.0	31.9	40.0	-8.1	H	P	100.0	0 - 360	Prescan
96.003	3.0	40.3	9.0	0.9	28.3	0.0	10.0	31.9	43.5	-11.6	H	P	100.0	0 - 360	Prescan
172.206	3.0	36.6	10.6	1.2	28.2	0.0	10.0	30.1	43.5	-13.4	H	P	100.0	0 - 360	Prescan
205.087	3.0	35.3	12.0	1.3	28.2	0.0	10.0	30.3	43.5	-13.2	H	P	100.0	0 - 360	Prescan
229.448	3.0	35.0	11.9	1.3	28.2	0.0	10.0	30.0	46.0	-16.0	H	P	100.0	0 - 360	Prescan
333.012	3.0	34.1	13.9	1.6	28.1	0.0	10.0	31.5	46.0	-14.5	H	P	100.0	0 - 360	Prescan
666.266	3.0	33.7	19.2	2.4	27.3	0.0	10.0	37.9	46.0	-8.1	H	P	100.0	0 - 360	Prescan
999.280	3.0	30.9	22.5	3.0	27.9	0.0	10.0	38.4	54.0	-15.6	H	P	100.0	0 - 360	Prescan
<b>Mid Ch.</b>															
30.720	3.0	29.9	19.8	0.5	28.4	0.0	10.0	31.8	40.0	-8.2	H	P	100.0	0 - 360	Prescan
96.003	3.0	41.4	9.0	0.9	28.3	0.0	10.0	32.9	43.5	-10.6	H	P	100.0	0 - 360	Prescan
171.366	3.0	38.0	10.7	1.2	28.2	0.0	10.0	31.6	43.5	-11.9	H	P	100.0	0 - 360	Prescan
216.008	3.0	36.0	11.9	1.3	28.2	0.0	10.0	31.0	46.0	-15.0	H	P	100.0	0 - 360	Prescan
230.168	3.0	35.2	11.9	1.3	28.2	0.0	10.0	30.2	46.0	-15.8	H	P	100.0	0 - 360	Prescan
535.341	3.0	30.3	17.3	2.1	27.7	0.0	10.0	32.0	46.0	-14.0	H	P	100.0	0 - 360	Prescan
665.426	3.0	30.1	19.2	2.4	27.3	0.0	10.0	34.3	46.0	-11.7	H	P	100.0	0 - 360	Prescan
999.280	3.0	32.0	22.5	3.0	27.9	0.0	10.0	39.5	54.0	-14.5	H	P	100.0	0 - 360	Prescan
33.240	3.0	32.5	18.7	0.5	28.4	0.0	10.0	33.3	40.0	-6.7	V	P	100.0	0 - 360	Prescan
60.001	3.0	41.4	7.9	0.7	28.4	0.0	10.0	31.6	40.0	-8.4	V	P	100.0	0 - 360	Prescan
96.003	3.0	41.0	9.0	0.9	28.3	0.0	10.0	32.6	43.5	-10.9	V	P	100.0	0 - 360	Prescan
171.966	3.0	35.7	10.7	1.2	28.2	0.0	10.0	29.3	43.5	-14.2	V	P	100.0	0 - 360	Prescan
211.928	3.0	34.0	12.0	1.3	28.2	0.0	10.0	29.0	43.5	-14.5	V	P	100.0	0 - 360	Prescan
232.448	3.0	35.5	11.9	1.3	28.2	0.0	10.0	30.5	46.0	-15.5	V	P	100.0	0 - 360	Prescan
665.906	3.0	31.3	19.2	2.4	27.3	0.0	10.0	35.6	46.0	-10.4	V	P	100.0	0 - 360	Prescan
987.759	3.0	29.3	22.4	3.0	27.9	0.0	10.0	36.7	54.0	-17.3	V	P	100.0	0 - 360	Prescan
<b>High Ch.</b>															
34.320	3.0	32.5	18.2	0.5	28.4	0.0	10.0	32.9	40.0	-7.1	V	P	100.0	0 - 360	Prescan
59.881	3.0	39.8	7.9	0.7	28.4	0.0	10.0	30.0	40.0	-10.0	V	P	100.0	0 - 360	Prescan
96.003	3.0	43.0	9.0	0.9	28.3	0.0	10.0	34.6	43.5	-8.9	V	P	100.0	0 - 360	Prescan
171.846	3.0	36.3	10.7	1.2	28.2	0.0	10.0	29.9	43.5	-13.6	V	P	100.0	0 - 360	Prescan
211.087	3.0	35.0	12.0	1.3	28.2	0.0	10.0	30.0	43.5	-13.5	V	P	100.0	0 - 360	Prescan
232.808	3.0	35.3	11.9	1.3	28.2	0.0	10.0	30.2	46.0	-15.9	V	P	100.0	0 - 360	Prescan
666.146	3.0	32.5	19.2	2.4	27.3	0.0	10.0	36.7	46.0	-9.3	V	P	100.0	0 - 360	Prescan
999.160	3.0	29.6	22.5	3.0	27.9	0.0	10.0	37.1	54.0	-16.9	V	P	100.0	0 - 360	Prescan
30.600	3.0	29.7	19.8	0.5	28.4	0.0	10.0	31.6	40.0	-8.4	H	P	100.0	0 - 360	Prescan
96.003	3.0	42.8	9.0	0.9	28.3	0.0	10.0	34.4	43.5	-9.1	H	P	100.0	0 - 360	Prescan
172.686	3.0	38.2	10.6	1.2	28.2	0.0	10.0	31.7	43.5	-11.8	H	P	100.0	0 - 360	Prescan
212.168	3.0	35.6	11.9	1.3	28.2	0.0	10.0	30.6	43.5	-12.9	H	P	100.0	0 - 360	Prescan
234.608	3.0	35.4	11.9	1.3	28.2	0.0	10.0	30.3	46.0	-15.7	H	P	100.0	0 - 360	Prescan
331.932	3.0	33.6	13.9	1.6	28.1	0.0	10.0	31.0	46.0	-15.0	H	P	100.0	0 - 360	Prescan
666.146	3.0	32.2	19.2	2.4	27.3	0.0	10.0	36.5	46.0	-9.5	H	P	100.0	0 - 360	Prescan
997.000	3.0	30.7	22.4	3.0	27.9	0.0	10.0	38.2	54.0	-15.8	H	P	100.0	0 - 360	Prescan

Rev. 1.27.09

Note: No other emissions were detected above the system noise floor.

### 8.3. TRANSMITTER ABOVE 1 GHz

#### 3dBi MONPOLE ANTENNA, 2FSK MODE

**High Frequency Measurement**  
Compliance Certification Services, Fremont 5m Chamber

Test Engr: William Zhuang

Date: 08/02/10

Project #: 10U13329

Company: Anaren Inc.

EUT Description: Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 3 dBi monopole

EUT M/N: 09C and 09A

Test Target: FCC 15.249

Mode Oper: Tx, 2FSK 10K Baud 19K Dev.

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

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
<b>Low Ch.</b>															
2.707	3.0	39.7	28.9	4.1	-36.1	0.0	0.6	37.2	74.0	-36.8	V	P	156.0	126.0	
2.707	3.0	27.3	28.9	4.1	-36.1	0.0	0.6	24.7	54.0	-29.3	V	A	156.0	126.0	
2.707	3.0	40.1	28.9	4.1	-36.1	0.0	0.6	37.5	74.0	-36.5	H	P	158.0	15.0	
2.707	3.0	27.3	28.9	4.1	-36.1	0.0	0.6	24.8	54.0	-29.2	H	A	158.0	15.0	
<b>Mid Ch.</b>															
2.744	3.0	42.5	29.2	4.1	-37.4	0.0	0.6	39.0	74.0	-35.0	V	P	194.0	157.4	
2.744	3.0	29.2	29.2	4.1	-37.4	0.0	0.6	25.7	54.0	-28.3	V	A	194.0	157.4	
2.744	3.0	41.8	29.2	4.1	-37.4	0.0	0.6	38.3	74.0	-35.7	H	P	160.4	67.3	
2.744	3.0	29.2	29.2	4.1	-37.4	0.0	0.6	25.7	54.0	-28.3	H	A	160.4	67.3	
<b>High Ch.</b>															
2.782	3.0	41.8	29.4	4.2	-37.4	0.0	0.6	38.4	74.0	-35.6	H	P	167.8	125.2	
2.782	3.0	29.2	29.4	4.2	-37.4	0.0	0.6	25.9	54.0	-28.1	H	A	167.8	125.2	
2.782	3.0	42.3	29.4	4.2	-37.4	0.0	0.6	38.9	74.0	-35.1	V	P	100.0	249.6	
2.782	3.0	29.2	29.4	4.2	-37.4	0.0	0.6	25.9	54.0	-28.1	V	A	100.0	249.6	

Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

**2dBi PCB ANTENNA, 2FSK MODE**

**High Frequency Measurement**  
**Compliance Certification Services, Fremont 5m Chamber**

Test Engr: William Zhuang  
Date: 08/02/10  
Project #: 10U13329  
Company: Anaren Inc.  
EUT Description: Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 2 dBi PCB  
EUT M/N: 09C and 09A  
Test Target: FCC 15.249  
Mode Oper: Tx, 2FSK 10K Baud 19K Dev.  
f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
CL Cable Loss HPF High Pass Filter

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
<b>Low Ch.</b>															
2.707	3.0	41.1	29.1	4.1	-37.4	0.0	0.6	37.5	74.0	-36.5	V	P	165.9	336.9	
2.707	3.0	29.1	29.1	4.1	-37.4	0.0	0.6	25.5	54.0	-28.5	V	A	165.9	336.9	
2.707	3.0	41.8	29.1	4.1	-37.4	0.0	0.6	38.1	74.0	-35.9	H	P	119.9	229.7	
2.707	3.0	29.1	29.1	4.1	-37.4	0.0	0.6	25.5	54.0	-28.5	H	A	119.9	229.7	
<b>Mid Ch.</b>															
2.744	3.0	42.7	29.2	4.1	-37.4	0.0	0.6	39.2	74.0	-34.8	H	P	101.6	35.6	
2.744	3.0	29.2	29.2	4.1	-37.4	0.0	0.6	25.7	54.0	-28.3	H	A	101.6	35.6	
2.744	3.0	42.2	29.2	4.1	-37.4	0.0	0.6	38.7	74.0	-35.3	V	P	154.9	192.1	
2.744	3.0	29.1	29.2	4.1	-37.4	0.0	0.6	25.7	54.0	-28.3	V	A	154.9	192.1	
<b>High Ch.</b>															
2.782	3.0	41.8	29.4	4.2	-37.4	0.0	0.6	38.5	74.0	-35.5	V	P	180.4	63.3	
2.782	3.0	29.2	29.4	4.2	-37.4	0.0	0.6	25.8	54.0	-28.2	V	A	180.4	63.3	
2.782	3.0	42.7	29.4	4.2	-37.4	0.0	0.6	39.3	74.0	-34.7	H	P	103.0	358.3	
2.782	3.0	29.2	29.4	4.2	-37.4	0.0	0.6	25.9	54.0	-28.1	H	A	103.0	358.3	

Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

## 8.4. RECEIVER BELOW 1 GHz

### 2FSK Mode with 3dBi Monopole Antenna

30-1000MHz Frequency Measurement Compliance Certification Services, Fremont 5m Chamber															
Test Engr:		William Zhuang													
Date:		08/02/10													
Project #:		10U13329													
Company:		Anaren Inc.													
EUT Description:		Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 3 dBi monopole													
EUT M/N:		09 C and 09 A													
Test Target:		FCC 15.247													
Mode Oper:		Rx, Mid Ch. 2FSK 10K Baud 19K Dev.													
f	Dist	Read	AF	CL	Amp	D Corr	Filter	Corr.	Limit	Margin	Ant. Pol.	Det.	Ant. High	Table Angle	Notes
MHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP	cm	Degree	
34.200	3.0	40.9	18.3	0.5	28.4	0.0	0.0	31.3	40.0	-8.7	V	P	100.0	0 - 360	Prescan
47.761	3.0	50.7	9.5	0.6	28.4	0.0	0.0	32.4	40.0	-7.6	V	P	100.0	0 - 360	Prescan
58.561	3.0	49.7	8.0	0.7	28.4	0.0	0.0	29.9	40.0	-10.1	V	P	100.0	0 - 360	Prescan
92.283	3.0	48.7	8.1	0.9	28.3	0.0	0.0	26.4	43.5	-17.1	V	P	100.0	0 - 360	Prescan
176.646	3.0	48.0	10.6	1.2	28.2	0.0	0.0	31.6	43.5	-11.9	V	P	100.0	0 - 360	Prescan
216.008	3.0	43.9	11.9	1.3	28.2	0.0	0.0	28.9	46.0	-17.1	V	P	100.0	0 - 360	Prescan
233.888	3.0	43.3	11.9	1.3	28.2	0.0	0.0	28.3	46.0	-17.7	V	P	100.0	0 - 360	Prescan
333.133	3.0	38.4	13.9	1.6	28.1	0.0	0.0	25.8	46.0	-20.2	V	P	100.0	0 - 360	Prescan
663.866	3.0	39.1	19.2	2.4	27.3	0.0	0.0	33.3	46.0	-12.7	V	P	100.0	0 - 360	Prescan
841.113	3.0	37.6	21.3	2.7	27.6	0.0	0.0	34.0	46.0	-12.0	V	P	100.0	0 - 360	Prescan
915.637	3.0	34.5	22.0	2.8	27.8	0.0	0.0	31.5	46.0	-14.5	V	P	100.0	0 - 360	Prescan
999.280	3.0	38.6	22.5	3.0	27.9	0.0	0.0	36.1	54.0	-17.9	V	P	100.0	0 - 360	Prescan
30.120	3.0	31.0	20.0	0.5	28.4	0.0	0.0	23.1	40.0	-16.9	H	P	100.0	0 - 360	Prescan
138.964	3.0	37.9	13.3	1.1	28.3	0.0	0.0	24.0	43.5	-19.5	H	P	100.0	0 - 360	Prescan
192.007	3.0	52.3	11.5	1.2	28.2	0.0	0.0	36.7	43.5	-6.8	H	P	100.0	0 - 360	Prescan
215.648	3.0	48.6	11.9	1.3	28.2	0.0	0.0	30.6	43.5	-12.9	H	P	100.0	0 - 360	Prescan
332.172	3.0	41.1	13.9	1.6	28.1	0.0	0.0	28.5	46.0	-17.5	H	P	100.0	0 - 360	Prescan
480.139	3.0	35.9	16.4	2.0	27.9	0.0	0.0	26.4	46.0	-19.6	H	P	100.0	0 - 360	Prescan
666.146	3.0	35.6	19.2	2.4	27.3	0.0	0.0	29.8	46.0	-16.2	H	P	100.0	0 - 360	Prescan
720.268	3.0	33.4	19.9	2.5	27.2	0.0	0.0	28.5	46.0	-17.5	H	P	100.0	0 - 360	Prescan
816.152	3.0	31.7	21.1	2.7	27.5	0.0	0.0	28.0	46.0	-18.0	H	P	100.0	0 - 360	Prescan
997.600	3.0	32.1	22.4	3.0	27.9	0.0	0.0	29.6	54.0	-24.4	H	P	100.0	0 - 360	Prescan

Rev. L.27.09

Note: No other emissions were detected above the system noise floor.

## 2FSK Mode with 2dBi PCB Antenna

30-1000MHz Frequency Measurement Compliance Certification Services, Fremont 5m Chamber																						
Test Engr:	William Zhuang																					
Date:	08/02/10																					
Project #:	10U13329																					
Company:	Anaren Inc.																					
EUT Description:	Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 2 dBi PCB																					
EUT M/N:	09C and 09A																					
Test Target:	FCC 15.249																					
Mode Oper:	Rx, Mid Ch. 2FSK 10K Baud 19K Dev.																					
f	Measurement Frequency	Amp	Preamp Gain	Margin	Margin vs. Limit	Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Read	Analyzer Reading	Filter	Filter Insert Loss	AF	Antenna Factor	Corr.	Calculated Field Strength	CL	Cable Loss	Limit	Field Strength Limit	Notes
MHz	(m)	dBm	dB	dB	dB	Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Read	Analyzer Reading	Filter	Filter Insert Loss	AF	Antenna Factor	Corr.	Calculated Field Strength	CL	Cable Loss	Limit	Field Strength Limit	Notes
96.003	3.0	53.5	9.0	0.9	28.3	0.0	0.0	35.1	43.5	-8.4	H	P	100.0	0 - 360	Prescan							
173.406	3.0	46.7	10.5	1.2	28.2	0.0	0.0	30.2	43.5	-13.3	H	P	100.0	0 - 360	Prescan							
214.808	3.0	45.2	11.9	1.3	28.2	0.0	0.0	30.2	43.5	-13.3	H	P	100.0	0 - 360	Prescan							
234.368	3.0	44.1	11.9	1.3	28.2	0.0	0.0	29.1	46.0	-16.9	H	P	100.0	0 - 360	Prescan							
331.932	3.0	40.8	13.9	1.6	28.1	0.0	0.0	28.2	46.0	-17.8	H	P	100.0	0 - 360	Prescan							
666.266	3.0	38.3	19.2	2.4	27.3	0.0	0.0	32.6	46.0	-13.4	H	P	100.0	0 - 360	Prescan							
815.792	3.0	33.8	21.1	2.7	27.5	0.0	0.0	30.1	46.0	-15.9	H	P	100.0	0 - 360	Prescan							
908.436	3.0	35.9	21.9	2.8	27.8	0.0	0.0	32.9	46.0	-13.1	H	P	100.0	0 - 360	Prescan							
951.998	3.0	34.6	22.2	2.9	27.9	0.0	0.0	31.8	46.0	-14.2	H	P	100.0	0 - 360	Prescan							
999.400	3.0	39.0	22.5	3.0	27.9	0.0	0.0	36.5	54.0	-17.5	H	P	100.0	0 - 360	Prescan							
34.320	3.0	40.5	18.2	0.5	28.4	0.0	0.0	30.9	40.0	9.1	V	P	100.0	0 - 360	Prescan							
60.001	3.0	50.5	7.9	0.7	28.4	0.0	0.0	30.8	40.0	-9.2	V	P	100.0	0 - 360	Prescan							
96.003	3.0	53.4	9.0	0.9	28.3	0.0	0.0	35.0	43.5	-8.5	V	P	100.0	0 - 360	Prescan							
173.046	3.0	45.4	10.6	1.2	28.2	0.0	0.0	28.9	43.5	-14.6	V	P	100.0	0 - 360	Prescan							
216.008	3.0	44.8	11.9	1.3	28.2	0.0	0.0	29.8	46.0	-16.2	V	P	100.0	0 - 360	Prescan							
234.488	3.0	44.2	11.9	1.3	28.2	0.0	0.0	29.2	46.0	-16.8	V	P	100.0	0 - 360	Prescan							
666.146	3.0	40.3	19.2	2.4	27.3	0.0	0.0	34.5	46.0	-11.5	V	P	100.0	0 - 360	Prescan							
998.440	3.0	36.7	22.5	3.0	27.9	0.0	0.0	34.2	54.0	-19.8	V	P	100.0	0 - 360	Prescan							

Rev. 1.27.09

Note: No other emissions were detected above the system noise floor.

## 8.5. RECEIVER ABOVE 1 GHz

### 2FSK Mode with 3dBi Monopole Antenna

High Frequency Measurement Compliance Certification Services, Fremont 5m Chamber															
Test Engr:	William Zhuang														
Date:	08/02/10														
Project #:	10U13329														
Company:	Anaren Inc.														
EUT Description:	Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 3 dBi monopole														
EUT M/N:	09C and 09A														
Test Target:	FCC 15.247														
Mode Oper:	Rx, Mid Ch., 2-FSK-10K Baud 19K Dev.														
f	Measurement Frequency	Amp	Preamp Gain											Average Field Strength Limit	
Dist	Distance to Antenna	D	Corr	Distance Correct to 3 meters										Peak Field Strength Limit	
Read	Analyzer Reading	Avg		Average Field Strength @ 3 m										Margin vs. Average Limit	
AF	Antenna Factor	Peak		Calculated Peak Field Strength										Margin vs. Peak Limit	
CL	Cable Loss	HPF		High Pass Filter											
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Ant.High cm	Table Angle Degree	Notes
1.104	3.0	49.1	24.2	2.5	-39.3	0.0	0.0	36.5	74.0	-37.5	V	P	108.3	344.1	
1.104	3.0	42.2	24.2	2.5	-39.3	0.0	0.0	29.6	54.0	-24.4	V	A	108.3	344.1	
1.104	3.0	50.3	24.2	2.5	-39.3	0.0	0.0	37.7	74.0	-36.3	H	P	100.7	338.7	
1.104	3.0	44.7	24.2	2.5	-39.3	0.0	0.0	32.1	54.0	-21.9	H	A	100.7	338.7	

Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

## 2FSK Mode with 2dBi PCB Antenna

**High Frequency Measurement**  
Compliance Certification Services, Fremont 5m Chamber

Test Engr:

William Zhuang

Date:

08/02/10

Project #:

10U13329

Company:

Anaren Inc.

EUT Description: Low Power Sub-1 GHz RF Transceiver 902-928 MHz for FCC/IC; 2 dBi PCB

EUT M/N:

09C and 09A

Test Target:

FCC 15.247

Mode Oper:

Rx, Mid Ch., 2-FSK-10K Baud 19K Dev.

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

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant Pol V/H	Det P/A/QP	Ant.High cm	Table Angle Degree	Notes
1.106	3.0	46.4	24.2	2.5	-39.3	0.0	0.0	33.8	74.0	-40.2	H	P	100.9	286.5	
1.106	3.0	34.2	24.2	2.5	-39.3	0.0	0.0	21.6	54.0	-32.4	H	A	100.9	286.5	
1.106	3.0	46.4	24.2	2.5	-39.3	0.0	0.0	33.8	74.0	-40.2	V	P	189.5	22.7	
1.106	3.0	33.8	24.2	2.5	-39.3	0.0	0.0	21.2	54.0	-32.8	V	A	189.5	22.7	

Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

## 9. AC POWER LINE CONDUCTED EMISSIONS

### LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 <sup>*</sup>	56 to 46 <sup>*</sup>
0.5-5	56	46
5-30	60	50

<sup>\*</sup> Decreases with the logarithm of the frequency.

### TEST PROCEDURE

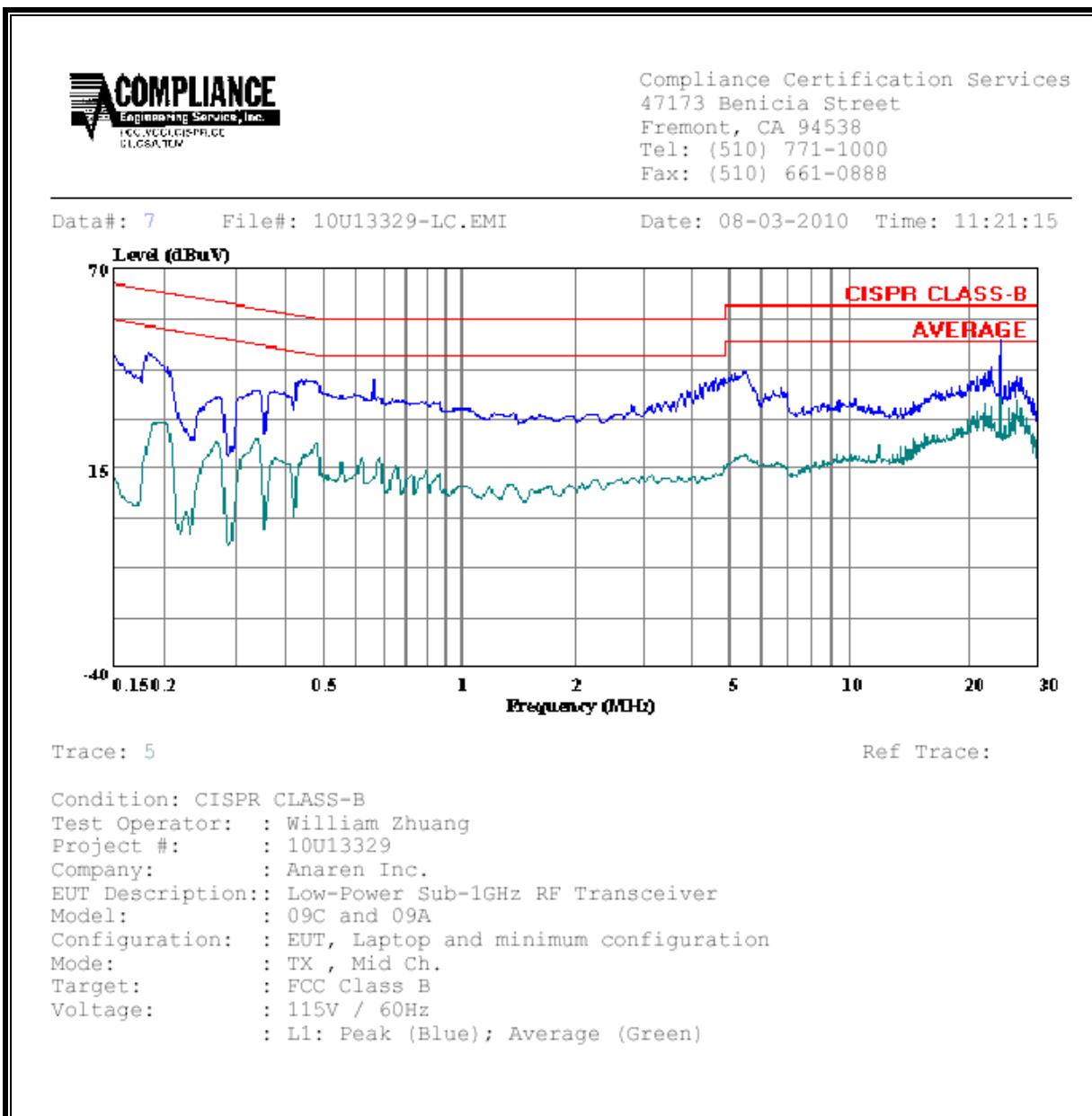
ANSI C63.4

### RESULTS

**6 WORST EMISSIONS (WORST CASE)**

CONDUCTED EMISSIONS DATA									
Freq. (MHz)	Reading			Closs (dB)	Limit	FCC_B	Margin		Remark
	PK (dBuV)	QP (dBuV)	AV (dBuV)				QP	AV	
0.18	46.46	--	27.48	0.00	64.30	54.30	-17.84	-26.82	L1
5.59	41.81	--	18.91	0.00	60.00	50.00	-18.19	-31.09	L1
24.01	50.53	--	44.16	0.00	60.00	50.00	-9.47	-5.84	L1
0.18	45.78	--	25.50	0.00	64.35	54.35	-18.57	-28.85	L2
5.62	41.81	--	21.93	0.00	60.00	50.00	-18.19	-28.07	L2
24.01	50.39	--	43.64	0.00	60.00	50.00	-9.61	-6.36	L2
6 Worst Data									

**LINE 1 RESULTS**



**LINE 2 RESULTS**

