



**FCC 47 CFR PART 15 SUBPART B**

**TEST REPORT**

**FOR**

**MOBILE HOT SPOT WITH CDMA, LTE, WIMAX AND WI-FI**

**MODEL NUMBER: AC803S**

**REPORT NUMBER: 11U14068-5**

**ISSUE DATE: MARCH 6, 2012**

*Prepared for*

**COMPANY**

**SIERRA WIRELESS INC.**

**2200 FARADAY AVE. SUITE 150**

**CARLSBAD, CA 92008, U.S.A.**

*Prepared by*

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**NVLAP LAB CODE 200065-0**

Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	03/06/12	Initial Issue	S. Leitner



# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** SIERRA WIRELESS INC.  
2200 FARADAY AVE. SUITE 150  
CARLSBAD, CA 92008, U.S.A.

**EUT DESCRIPTION:** MOBILE HOT SPOT WITH CDMA, LTE, WIMAX AND WI-FI

**MODEL:** AC803S

**SERIAL NUMBER:** CDW2911001210-E (107144)

**DATE TESTED:** JANUARY 5 to 10, 2012


APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART B	Pass

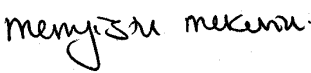
Compliance Certification Services (UL CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties 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:

Tested By:

  
\_\_\_\_\_  
STEVE LEITNER  
ENGINEERING SUPERVISOR  
UL CCS

  
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MENGISTU MEKURIA  
EMC ENGINEER  
UL CCS

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2009.

## 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:

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

### 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 mobile hotspot that features CDMA, LTE, WIMAX and Wi-Fi transceivers that are manufactured by Sierra Wireless Inc.

#### GENERAL INFORMATION

Power Requirements	5.2 VDC, 1.2 A
List of frequencies generated or used by the EUT	32.768 kHz, 12 MHz, 13 MHz, 19.2 MHz, 24 MHz, 26 MHz and 40 MHz

#### SUBASSEMBLIES

The EUT was constructed using the following subassemblies:

Subassembly Description	Manufacturer	Part Number	Serial Number
AC adapter	Sierra Wireless	SSW-2013	5/29/2450
Cradle	Sierra Wireless	N/A	1145-0003

### 5.2. PRELIMINARY TEST CONFIGURATIONS

The following configurations were investigated during preliminary testing:

EUT Configuration	Description
Configuration 1	Stand-alone EUT
Configuration 2	EUT connected to an AC adapter
Configuration 3	EUT connected to a laptop PC that is connected to mouse and printer
Configuration 4	EUT mounted on a charging cradle with AC adapter
Configuration 5	EUT mounted on a charging cradle connected to a laptop PC together with a mouse and a printer

The worst-case configuration was determined to be Configuration 5.

### 5.3. MODES OF OPERATION

Mode	Description
Mode 1	The EUT in standby mode
Mode 2	EUT in standby mode charging
Mode 3	EUT in standby mode actively synched and charging from laptop via USB cable
Mode 4	EUT in standby mode charging from a DC source via cradle charger
Mode 5	EUT in standby mode actively synched and charging from laptop via cradle charger through USB cable

### 5.4. SOFTWARE AND FIRMWARE

The EUT driver software installed in the host laptop PC during testing was version 6.20.0.8.

### 5.5. MODIFICATIONS

No modifications were made during testing.

### 5.6. DETAILS OF TESTED SYSTEM

#### CONFIGURATION 2: EUT WITH AC ADAPTER

#### I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	MINI USB	UNSHIELDED	1 m	N/A

#### TEST SETUP

The EUT was stand-alone and charging through the AC adapter.

**CONFIGURATION 3: EUT WITH LAPTOP PC**

**SUPPORT EQUIPMENT & PERIPHERALS**

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop PC	HP	Compaq 6515b	CNU82518TY	DoC
AC Adapter	HP	PA-1900-08H2	597920ALLUJ0XZ	DoC
Printer	Oki Data Co.	D22300A	AE5C018494A0	DoC
Mouse	HP	M-U48a	LZE01650032	DoC

**I/O CABLES**

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	AC	Unshielded	2 m	N/A
2	DC	1	DC	Unshielded	2 m	Ferrite core at one end
3	USB	1	USB	Unshielded	1 m	N/A
4	USB	1	Printer USB	Unshielded	2 m	Ferrite core at one end
5	DC	1	MINI USB	Unshielded	1 m	N/A

**TEST SETUP**

The EUT was connected to a support laptop PC with peripherals.

**CONFIGURATION 4: EUT WITH CRADLE AND AC ADAPTER**

**I/O CABLES**

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	Built-in	UNSHIELDED	2 m	Ferrite core at one

**TEST SETUP**

The EUT was mounted on a cradle charger that was connected to the AC adapter.



**CONFIGURATION 5: EUT WITH CRADLE AND LAPTOP PC**

**SUPPORT EQUIPMENT & PERIPHERALS**

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop PC	HP	Compaq 6515b	CNU82518TY	DoC
AC Adapter	HP	PA-1900-08H2	597920ALLUJ0XZ	DoC
Printer	Oki Data Co.	D22300A	AE5C018494A0	DoC
Mouse	HP	M-U48a	LZE01650032	DoC

**I/O CABLES**

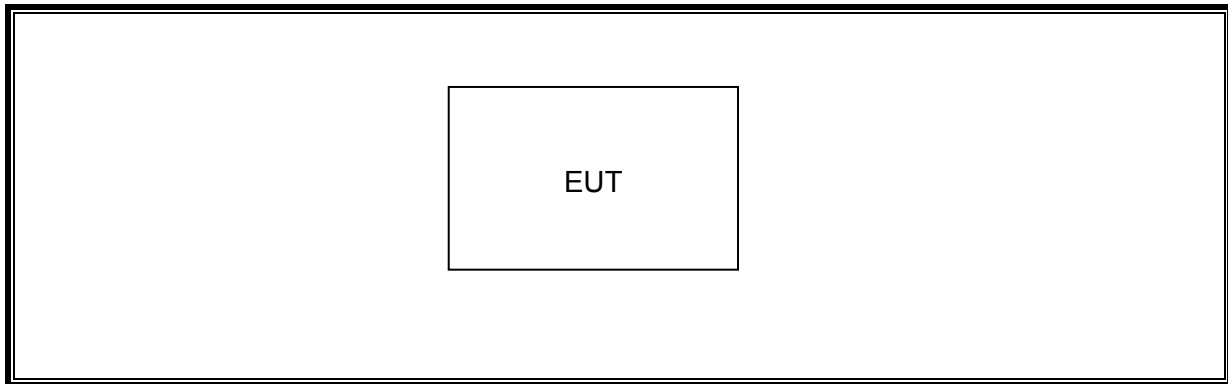
I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	AC	Unshielded	2 m	N/A
2	DC	1	DC	Unshielded	2 m	Ferrite core at one end
3	USB	1	USB	Unshielded	1 m	N/A
4	USB	1	Printer USB	Unshielded	2 m	Ferrite core at one end
5	DC	1	Built-in	Unshielded	2 m	Ferrite core at one end

**TEST SETUP**

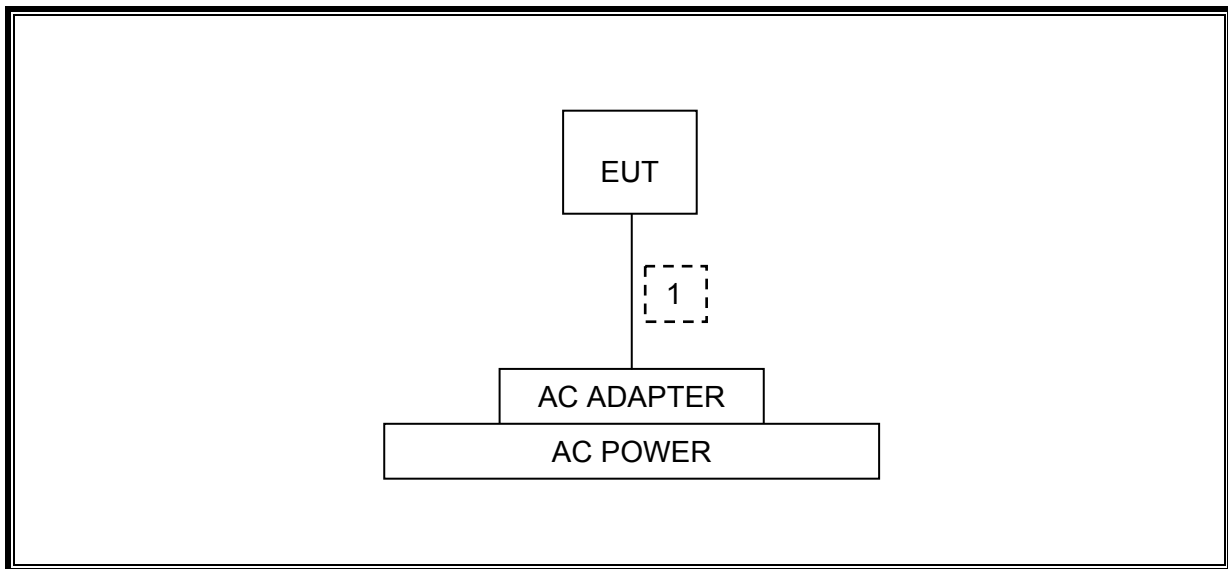
The EUT was mounted on a cradle charger that was connected to a laptop PC with peripherals.

**TEST SETUP DIAGRAMS**

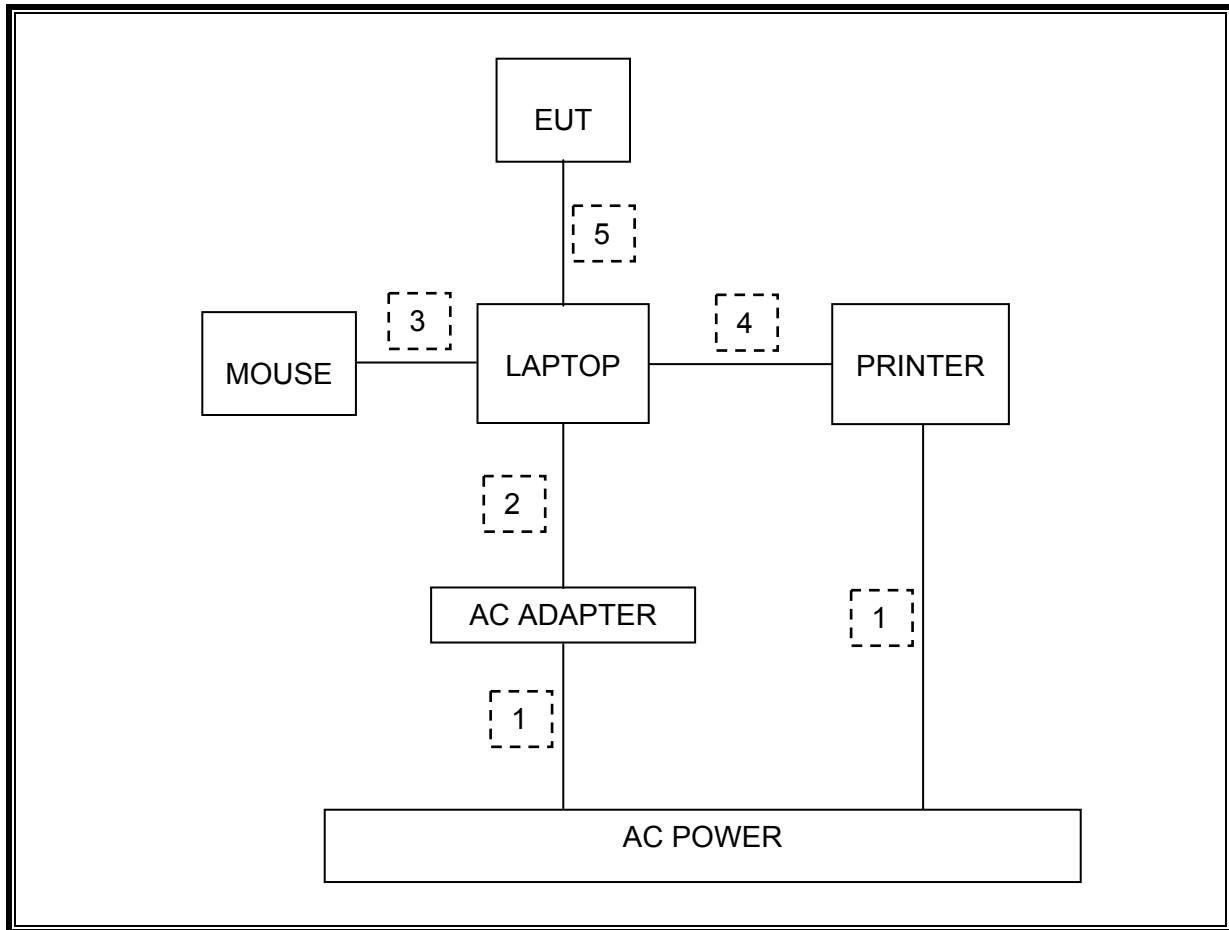
**CONFIGURATION 1: EUT STANDALONE**



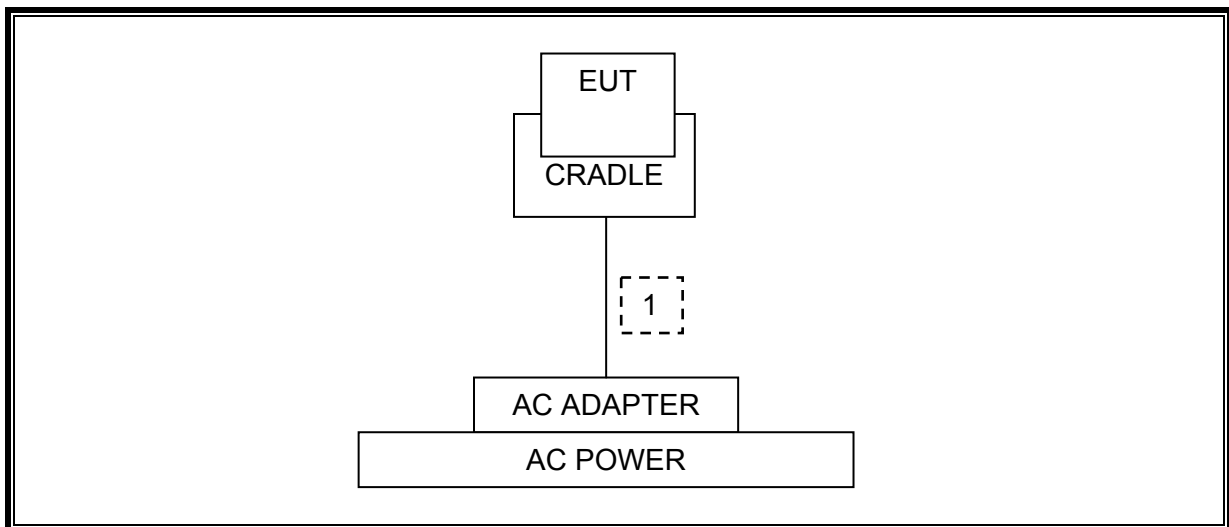
**CONFIGURATION 2: EUT WITH AC ADAPTER**



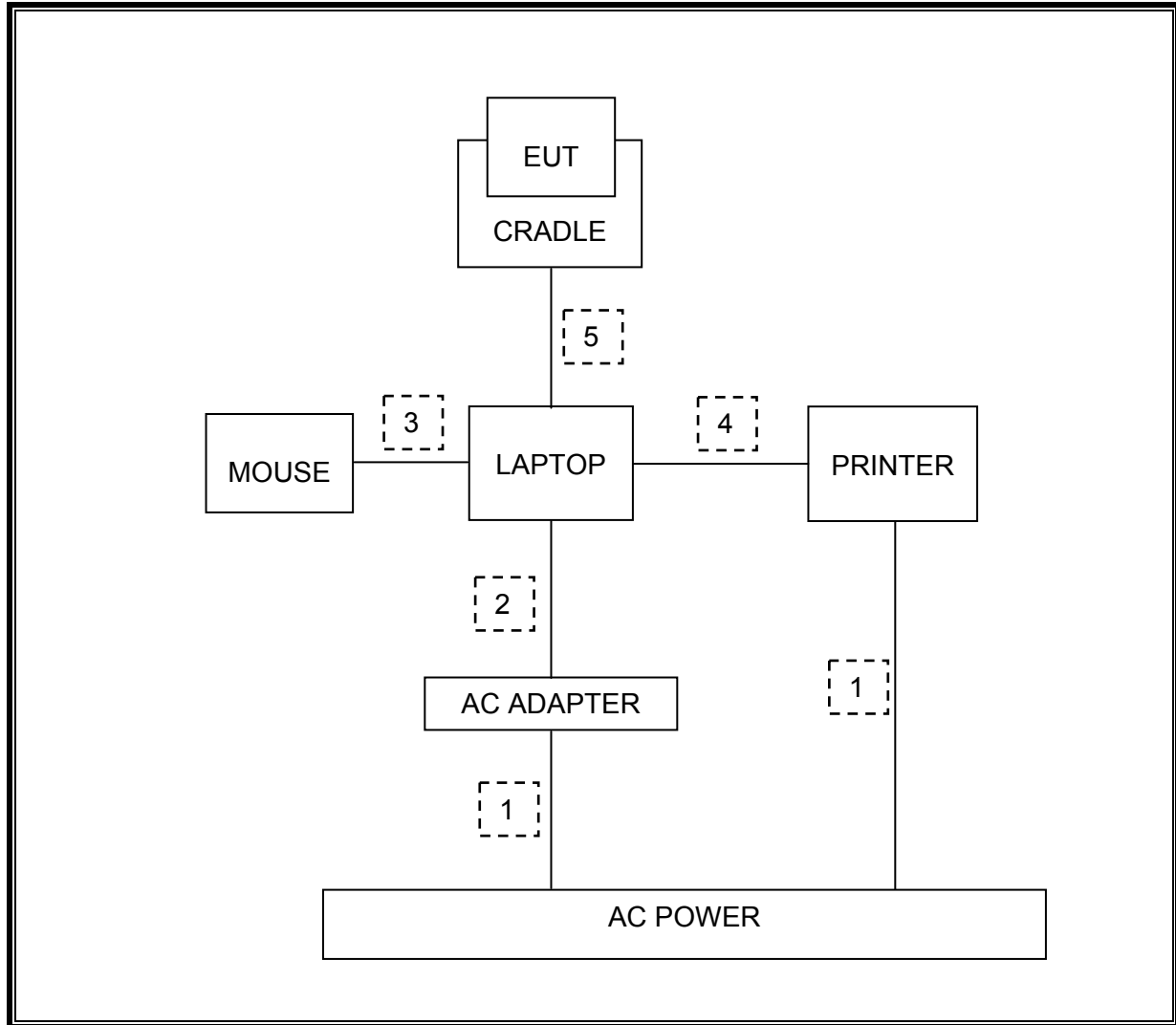
**CONFIGURATION 3: EUT WITH LAPTOP PC**



**CONFIGURATION 4: EUT WITH CRADLE AND AC ADAPTER**



**CONFIGURATION 5: EUT WITH CRADLE AND LAPTOP PC**



## 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	Serial Number	Cal Due
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	MY48250925	8/15/2012
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	100773	2/21/2013
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	A092308	1/26/2013
Preamplifier, 1300 MHz	Agilent / HP	8447D	2944A06550	11/11/2012
LISN, 30 MHz	FCC	50/250-25-2	114	12/13/2012
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	8379443	C.N.R.

## 7. APPLICABLE LIMITS AND TEST RESULTS

### 7.1. RADIATED EMISSIONS

#### TEST PROCEDURE

ANSI C63.4

The highest clock frequency generated or used in the EUT is 40 MHz; therefore the frequency range was investigated from 30 MHz to 1000 MHz

#### LIMIT

§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

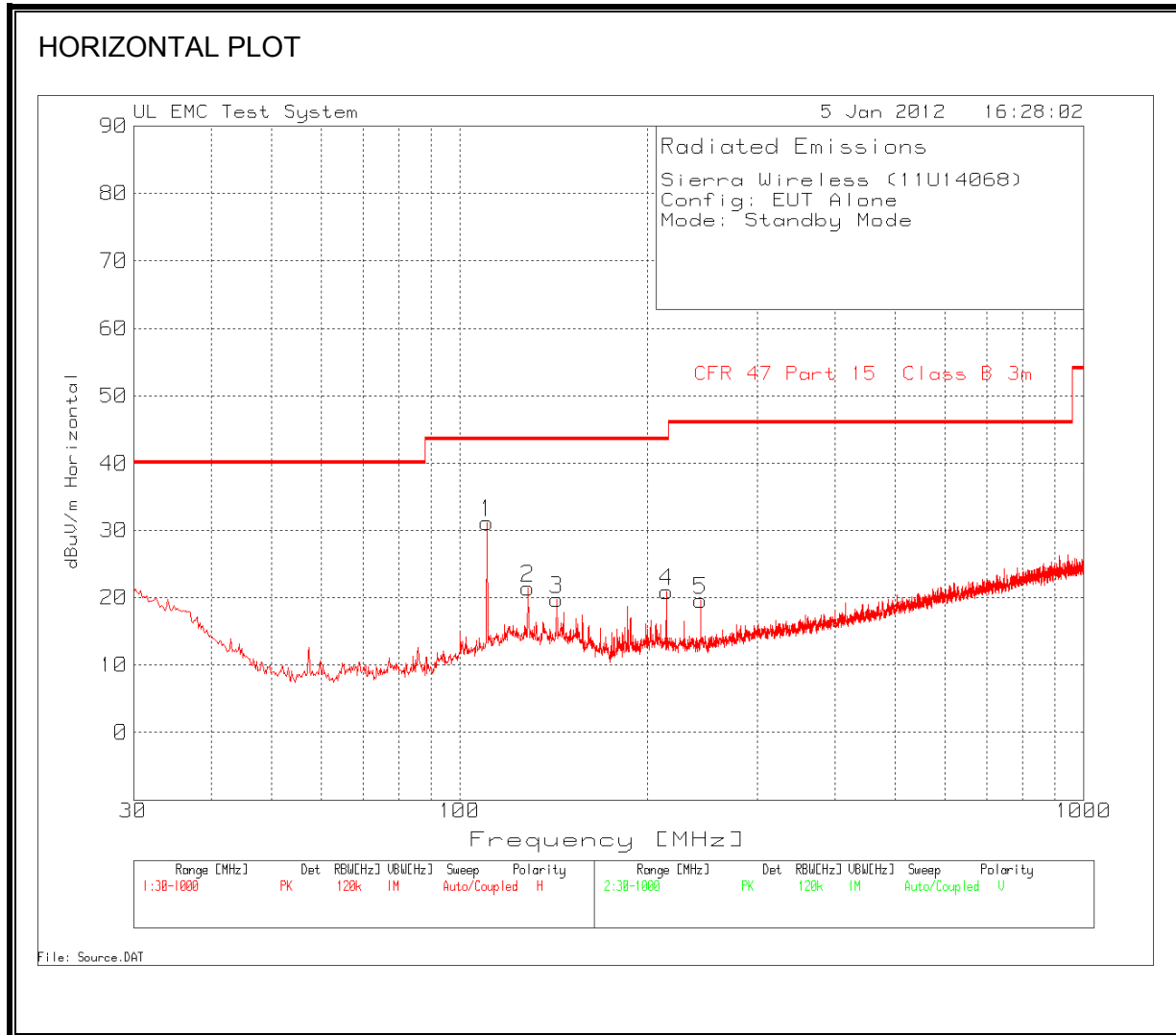
Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dB $\mu$ V/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54

Note: The lower limit shall apply at the transition frequency.

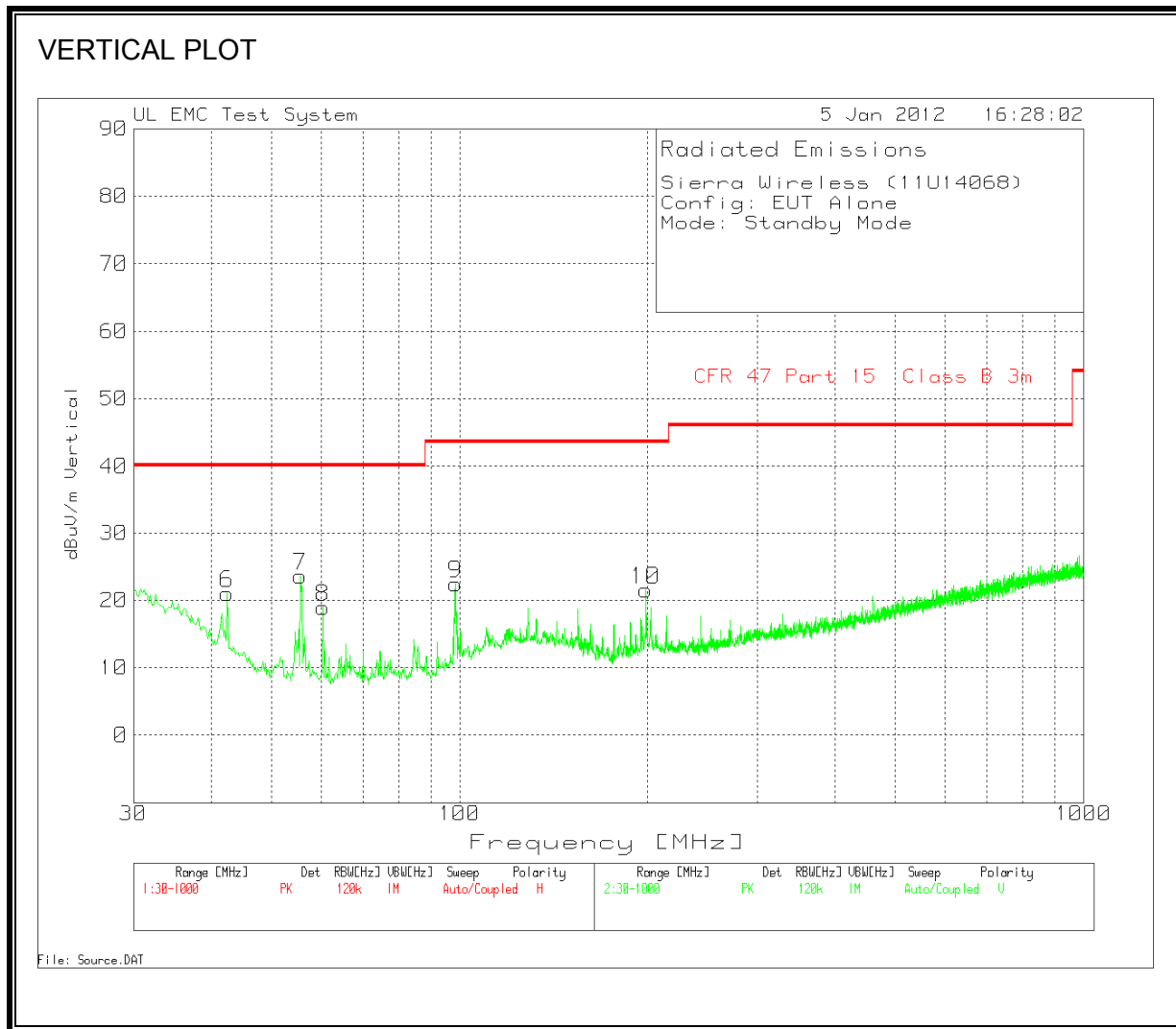
**RESULTS**

**CONFIGURATION 1: EUT STANDALONE**

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



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



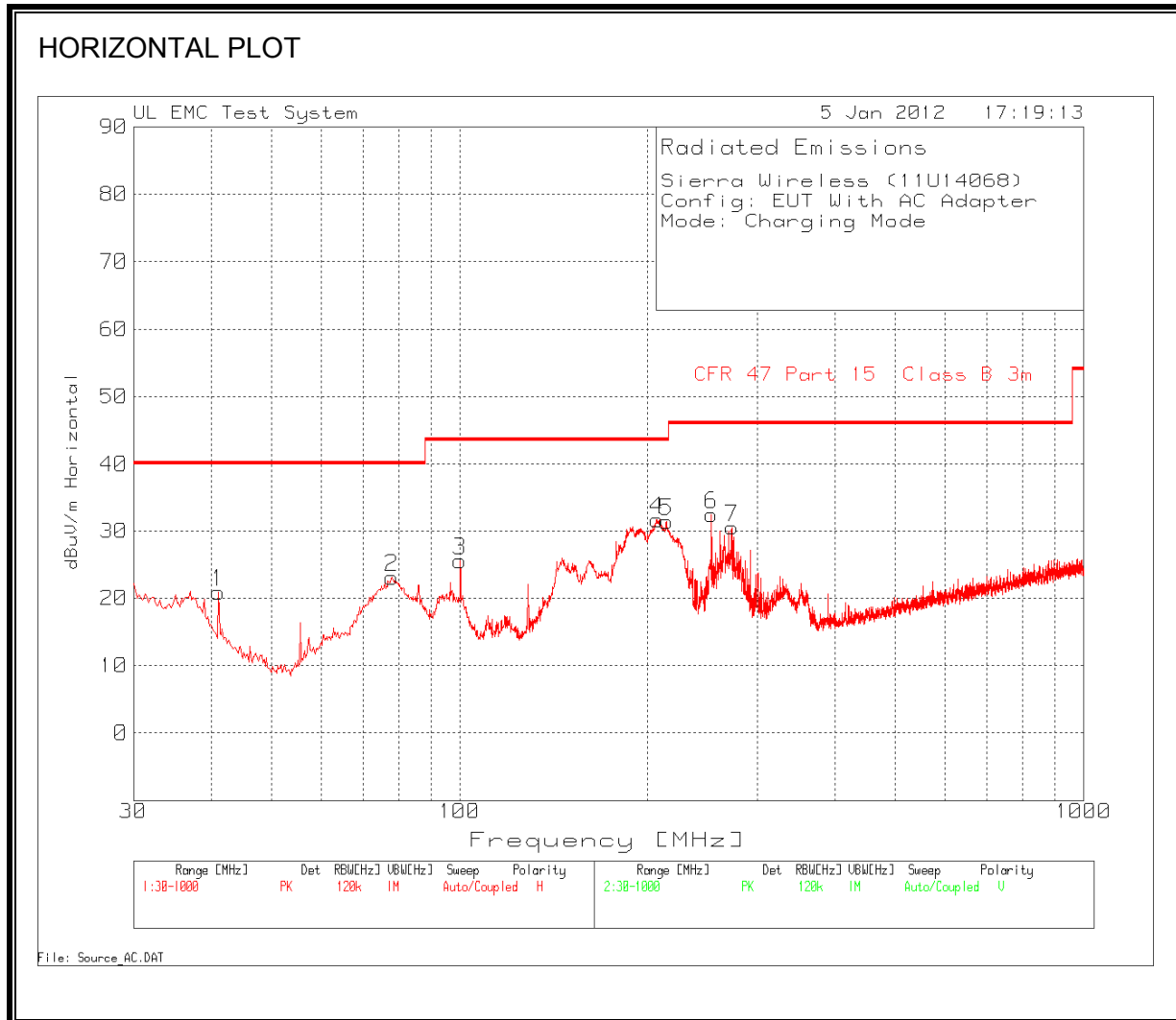


**HORIZONTAL AND VERTICAL DATA**

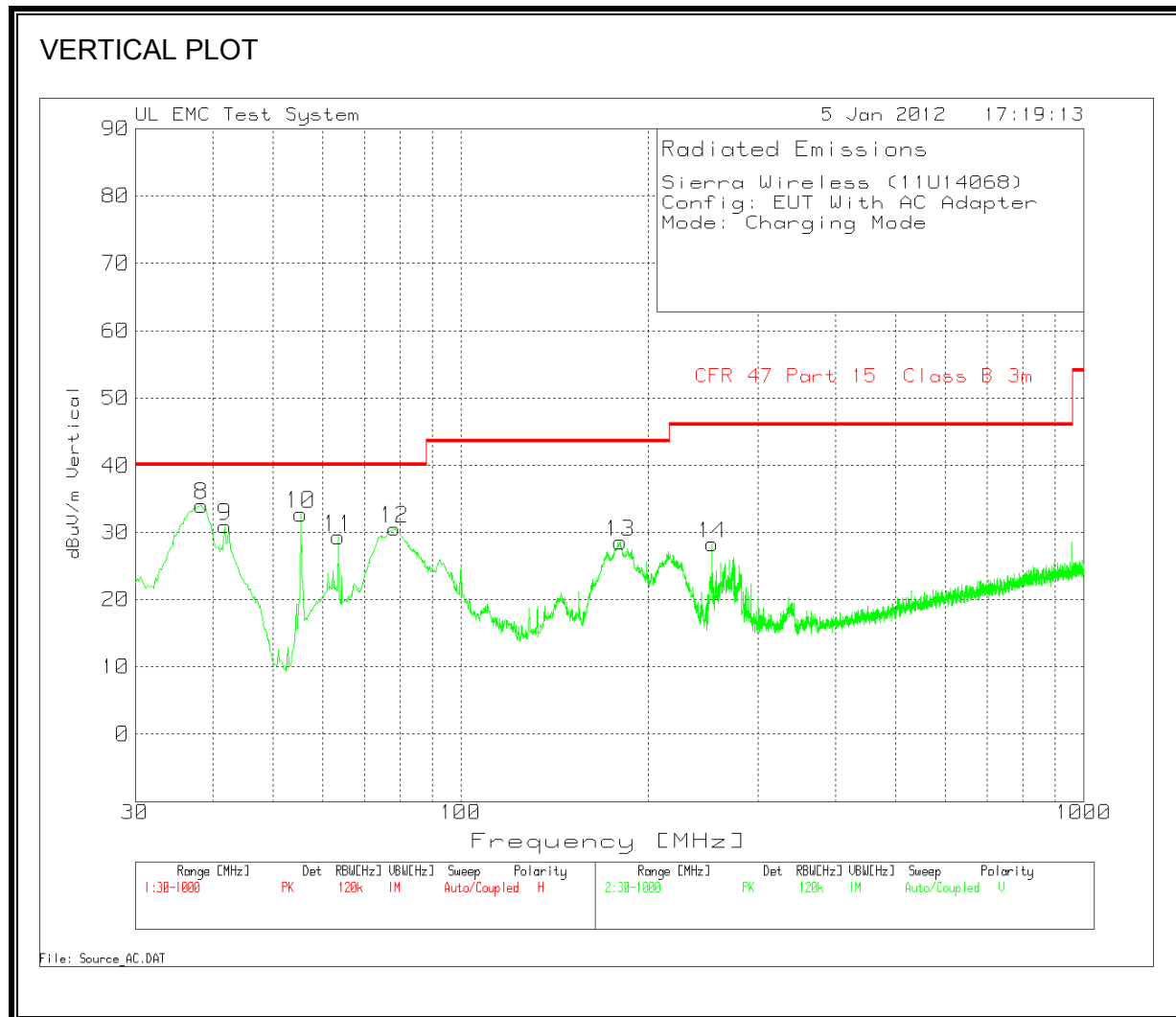
Sierra Wireless (11U14068)									
Config: EUT Alone									
Mode: Standby Mode									
Tested by: M. Merkuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	Amplifier dB	Bilog dBm <sup>-1</sup>	Corrected dB(μV/m)	Class B 3m Limits dB(μV/m)	QP Margin dB	Height cm	Polarity
110.6395	46.08	PK	-26.7	11.9	31.28	43.5	-12.22	300	Horz
128.8609	34.49	PK	-26.7	13.6	21.39	43.5	-22.11	200	Horz
143.0116	33.24	PK	-26.6	13.1	19.74	43.5	-23.76	200	Horz
214.5404	35.18	PK	-26.2	11.9	20.88	43.5	-22.62	91	Horz
243.4233	33.82	PK	-26	11.8	19.62	46	-26.38	91	Horz
42.4061	35.97	PK	-27.4	12.4	20.97	40	-19.03	200	Vert
55.5875	42.82	PK	-27.3	8.1	23.62	40	-16.38	100	Vert
60.4337	38.22	PK	-27.2	7.9	18.92	40	-21.08	100	Vert
98.4273	39.73	PK	-26.9	9.6	22.43	43.5	-21.07	100	Vert
198.9359	35.78	PK	-26.2	11.9	21.48	43.5	-22.02	100	Vert
QP = Quasi-peak detector									
PK = Peak detector									

**CONFIGURATION 2: EUT WITH AC ADAPTER**

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



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

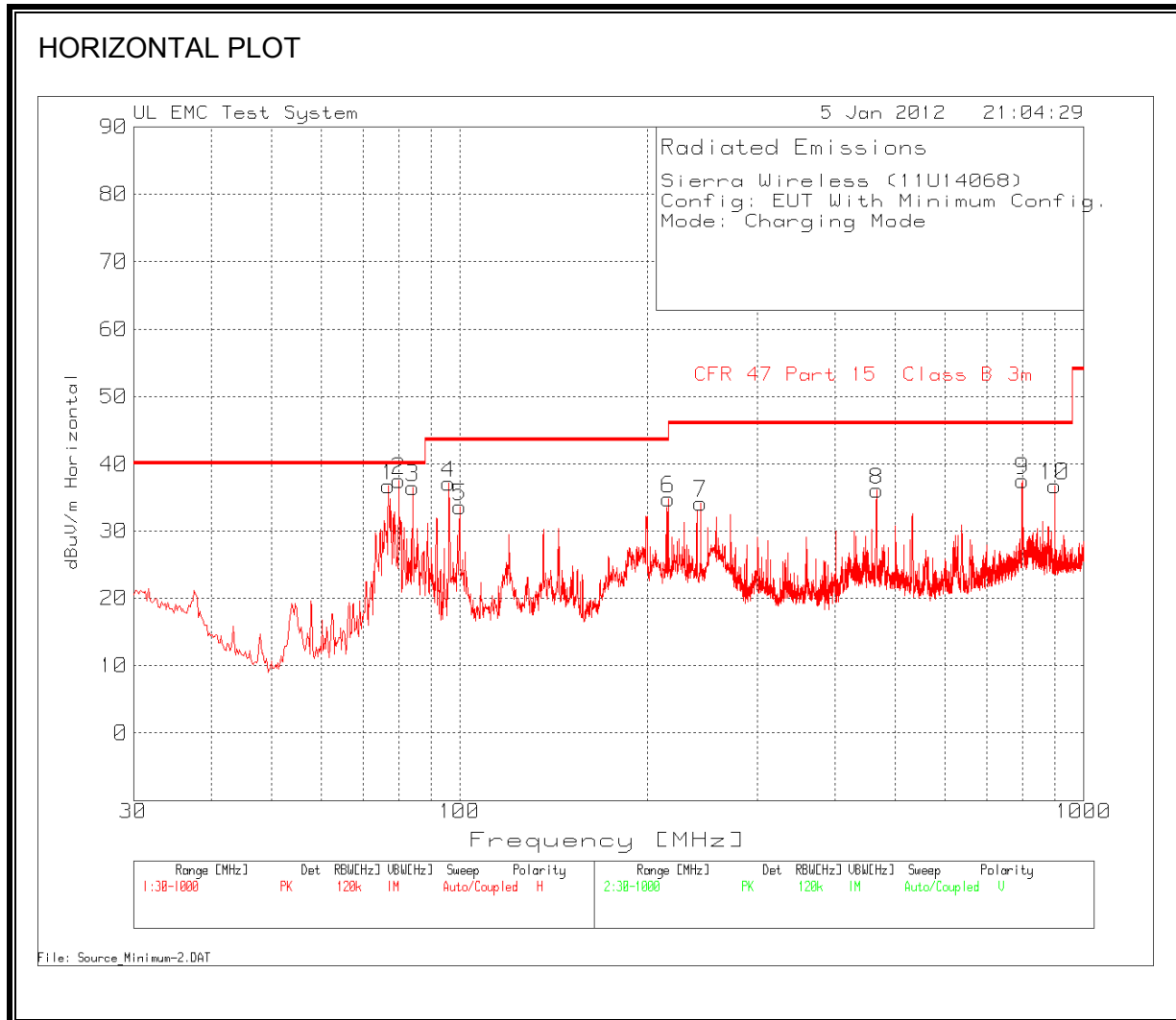


**HORIZONTAL AND VERTICAL DATA**

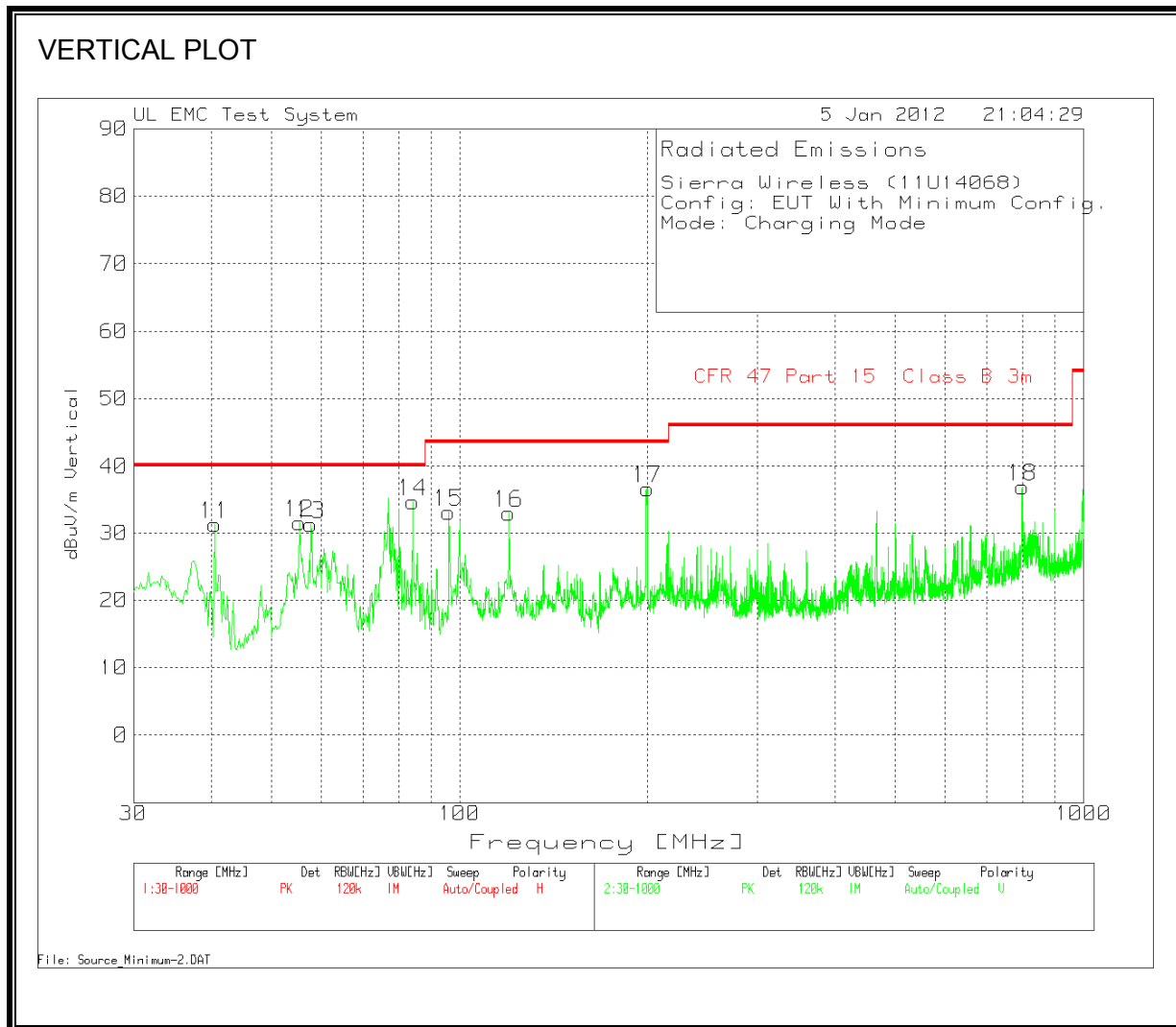
Sierra Wireless (11U14068)									
Config: EUT With AC Adapter									
Mode: Charging Mode									
Tested by: M. Merkuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	Amplifier dB	Bilog dBm <sup>-1</sup>	Corrected dB(μV/m)	Class B 3m Limits dB(μV/m)	QP Margin dB	Height cm	Polarity
41.0492	35.08	PK	-27.4	13.2	20.88	40	-19.12	300	Horz
77.8797	42.74	PK	-27.1	7.5	23.14	40	-16.86	200	Horz
100.1719	42.49	PK	-26.9	10	25.59	43.5	-17.91	200	Horz
207.562	46.07	PK	-26.3	12	31.77	43.5	-11.73	100	Horz
214.5404	45.8	PK	-26.2	11.9	31.5	43.5	-12	100	Horz
253.5032	46.55	PK	-25.9	11.9	32.55	46	-13.45	100	Horz
273.0815	44	PK	-25.9	12.5	30.6	46	-15.4	100	Horz
38.3353	46.28	PK	-27.4	15.2	34.08	40	-5.92	100	Vert
41.8245	45.56	PK	-27.4	12.8	30.96	40	-9.04	100	Vert
55.3937	51.98	PK	-27.3	8.1	32.78	40	-7.22	100	Vert
63.5352	48.51	PK	-27.2	8	29.31	40	-10.69	100	Vert
78.2674	50.27	PK	-27.1	7.4	30.57	40	-9.43	100	Vert
180.2298	43.86	PK	-26.4	11.1	28.56	43.5	-14.94	100	Vert
253.5032	42.31	PK	-25.9	11.9	28.31	46	-17.69	200	Vert
QP = Quasi-peak detector									
PK = Peak detector									

**CONFIGURATION 3: EUT WITH LAPTOP PC**

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



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

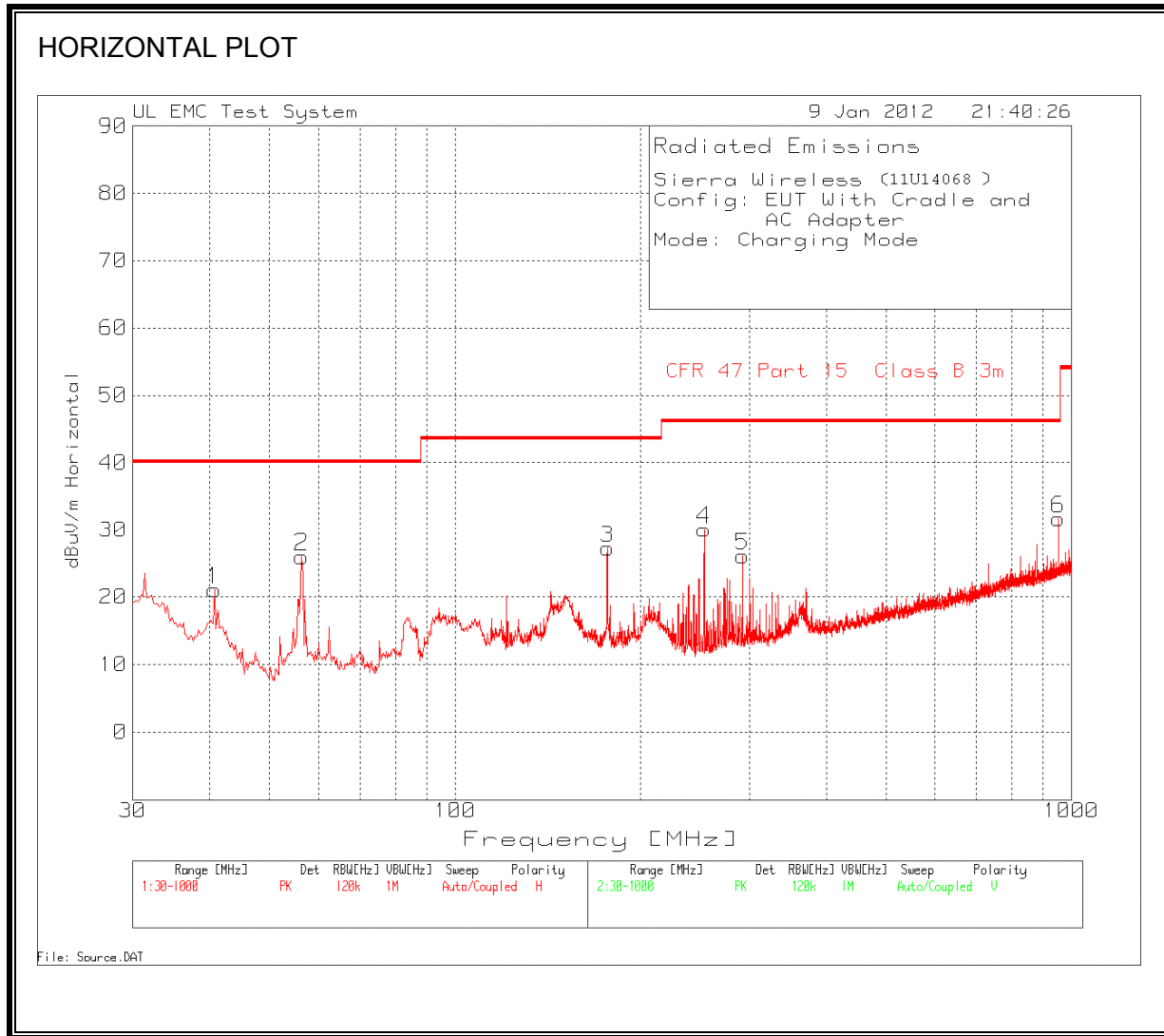


**HORIZONTAL AND VERTICAL DATA**

Sierra Wireless (11U14068)									
Config: EUT With Minimum Config.									
Mode: Charging Mode									
Tested by: M. Merkuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	Amplifier dB	Bilog dBm <sup>-1</sup>	Corrected dB(μV/m)	Class B 3m Limits dB(μV/m)	QP Margin dB	Height cm	Polarity
76.9105	51.19	QP	-27.1	7.5	31.59	40	-8.41	300	Horz
79.8181	49.63	QP	-27.1	7.3	29.83	40	-10.17	300	Horz
84.0827	55.13	QP	-27.1	7.4	35.43	40	-4.57	200	Horz
96.1011	55.03	PK	-26.9	9	37.13	43.5	-6.37	200	Horz
215.8973	49.17	PK	-26.2	11.9	34.87	43.5	-8.63	200	Horz
799.3705	39.88	PK	-23.3	21	37.58	46	-8.42	91	Horz
40.4676	45.01	PK	-27.3	13.6	31.31	40	-8.69	100	Vert
55.3937	50.81	PK	-27.3	8.1	31.61	40	-8.39	100	Vert
57.7198	50.68	PK	-27.3	8	31.38	40	-8.62	100	Vert
84.0827	54.45	PK	-27.1	7.4	34.75	40	-5.25	200	Vert
199.8082	50.91	PK	-26.2	12	36.71	43.5	-6.79	100	Vert
799.5643	39.2	PK	-23.3	21	36.9	46	-9.1	100	Vert
PK - Peak detector									
QP - Quasi-Peak detector									

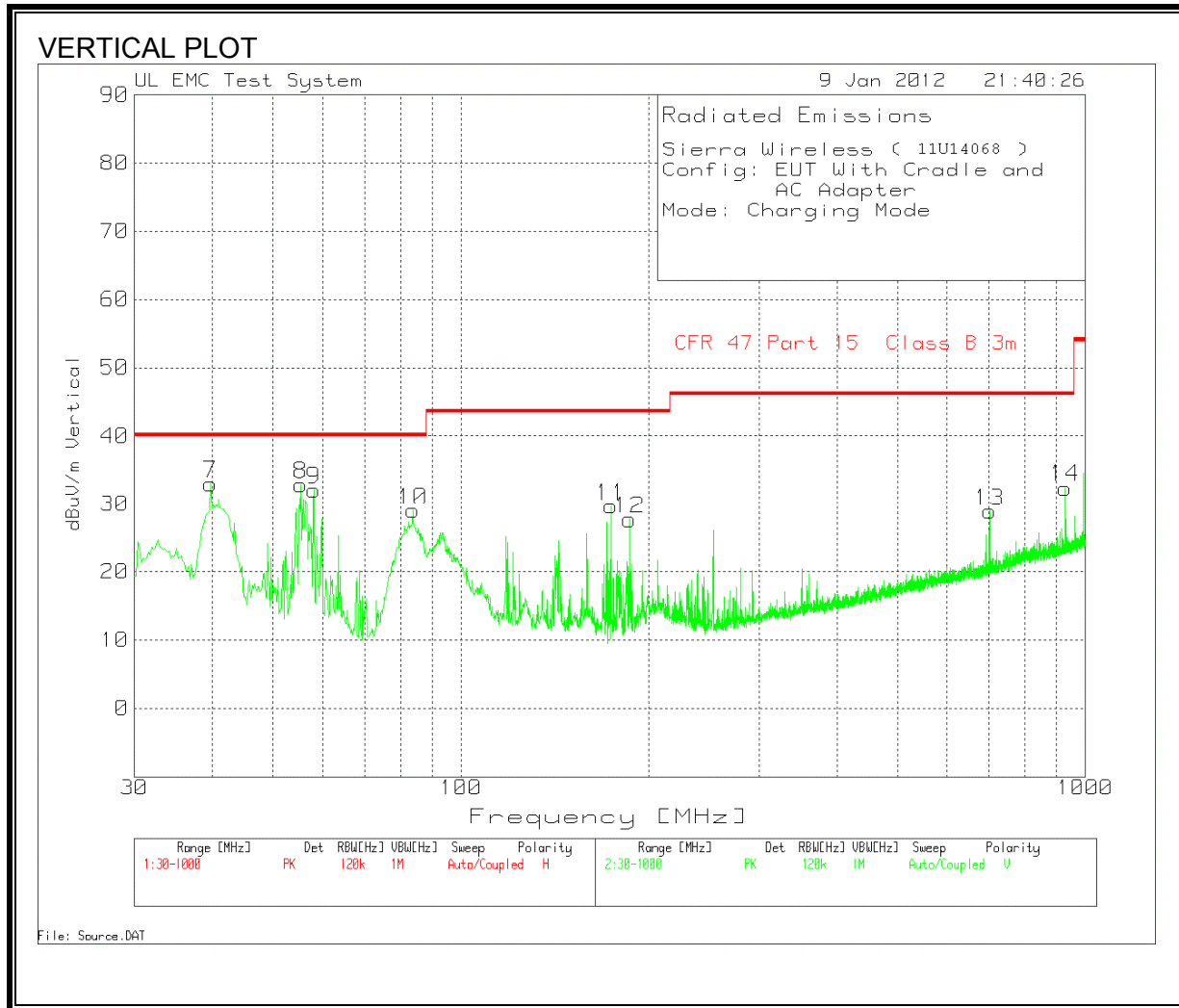
**CONFIGURATION 4: EUT WITH CRADLE AND AC ADAPTER**

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





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

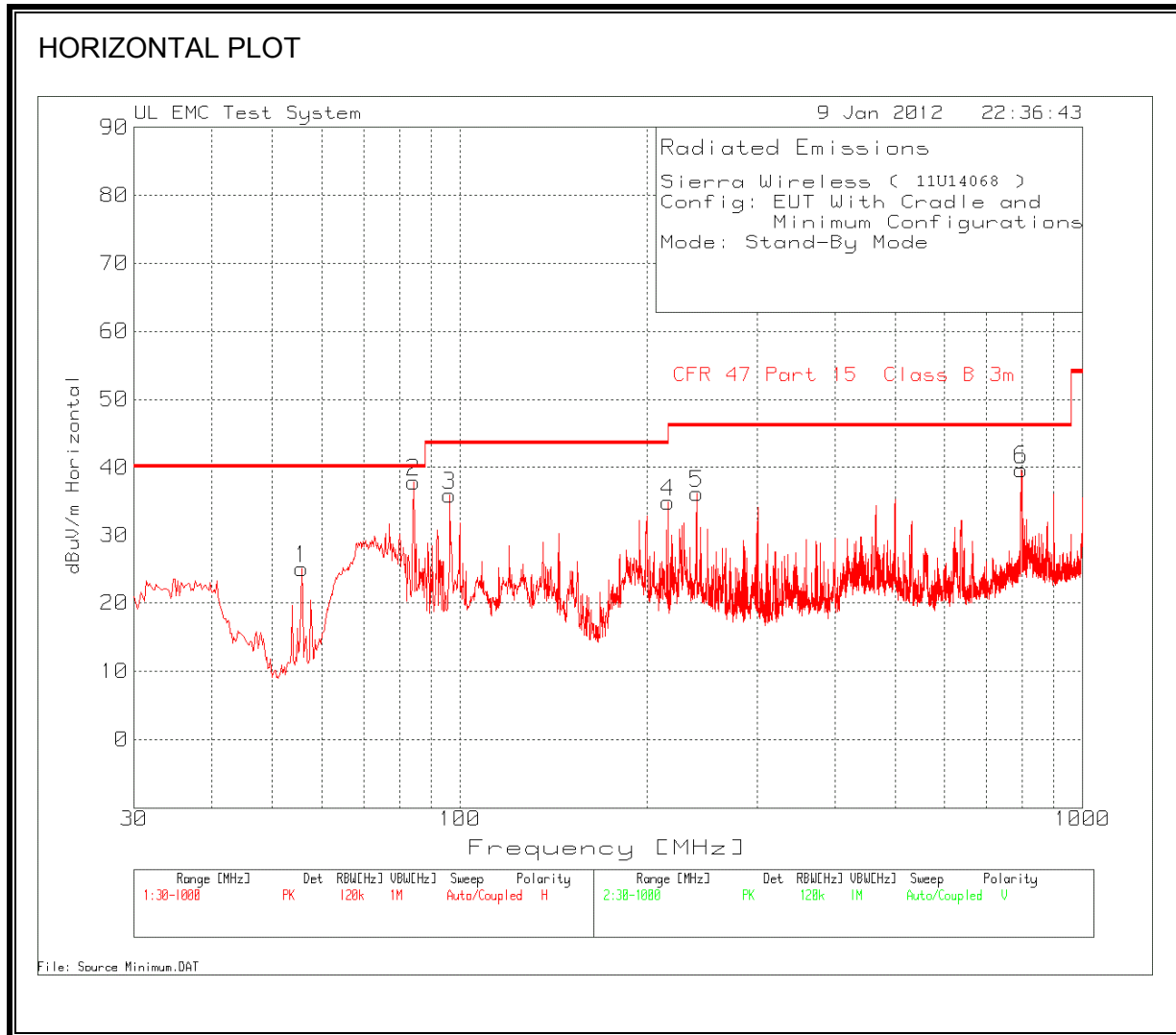


**HORIZONTAL AND VERTICAL DATA**

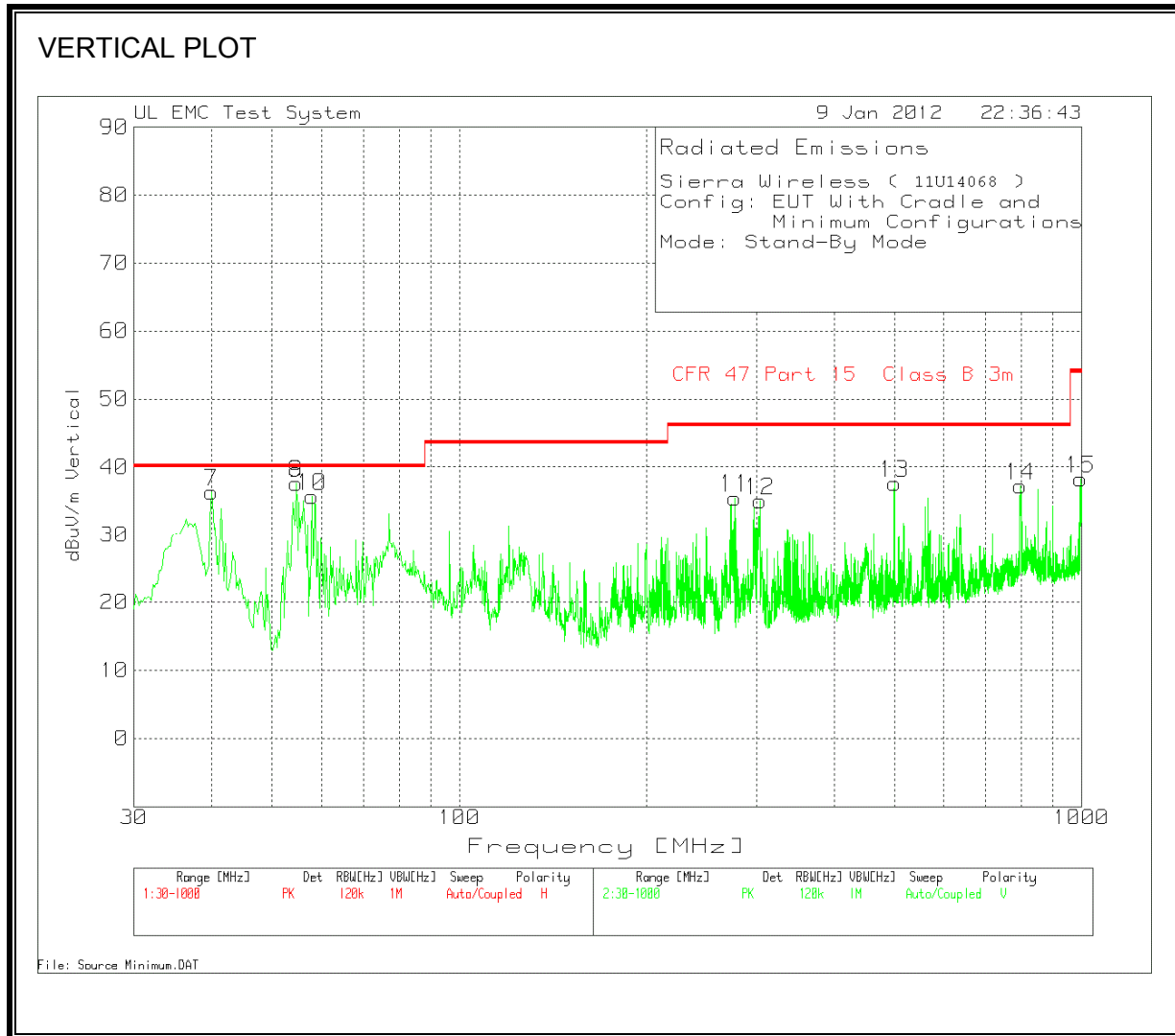
Sierra Wireless (11U14068)									
Config: EUT With Cradle and AC Adapter									
Mode: Charging Mode									
Tested by: M. Merkuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	Amplifier dB	Bilog dBm <sup>-1</sup>	Corrected dB(μV/m)	Class B 3m Limits dB(μV/m)	QP Margin dB	Height cm	Polarity
40.6615	36.55	PK	-29.2	13.7	21.05	40	-18.95	200	Horz
56.3629	47.07	PK	-29	7.9	25.97	40	-14.03	200	Horz
176.5468	44.79	PK	-27.8	10.2	27.19	43.5	-16.31	200	Horz
253.5032	45.28	PK	-27.1	11.9	30.08	46	-15.92	91	Horz
292.466	39.79	PK	-26.9	13.1	25.99	46	-20.01	91	Horz
952.3141	34.09	PK	-24.5	22.1	31.69	46	-14.31	300	Horz
39.6922	47.92	PK	-29.2	14.3	33.02	40	-6.98	100	Vert
55.3937	53.98	PK	-29	7.9	32.88	40	-7.12	100	Vert
58.1075	53.19	PK	-29	7.9	32.09	40	-7.91	100	Vert
83.695	50.04	PK	-28.7	7.6	28.94	40	-11.06	100	Vert
173.8329	47.58	PK	-27.8	9.9	29.68	43.5	-13.82	100	Vert
929.8281	35.2	PK	-24.6	21.8	32.4	46	-13.6	200	Vert
PK - Peak detector									
QP - Quasi-Peak detector									

**CONFIGURATION 5: EUT WITH CRADLE AND SUPPORT LAPTOP**

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



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



**HORIZONTAL AND VERTICAL DATA**

Sierra Wireless (11U14068)									
Config: EUT With Cradle and									
Minimum Configurations									
Mode: Stand-By Mode									
Tested by: M. Merkuria									
Test Frequency MHz	Meter Reading dB( $\mu$ V)	Detector	Amplifier dB	Bilog dBm <sup>-1</sup>	Corrected dB( $\mu$ V/m)	Class B 3m Limits dB( $\mu$ V/m)	QP Margin dB	Height cm	Polarity
55.7814	46.13	PK	-29	7.9	25.03	40	-14.97	300	Horz
84.2766	55.66	QP	-28.7	7.5	34.46	40	-5.54	200	Horz
96.295	55.41	PK	-28.6	9.1	35.91	43.5	-7.59	200	Horz
215.8973	50.45	PK	-27.5	11.9	34.85	43.5	-8.65	200	Horz
240.1279	51.64	PK	-27.3	11.8	36.14	46	-9.86	200	Horz
797.4321	44.22	PK	-25.5	21	39.72	46	-6.28	100	Horz
39.8861	42.79	QP	-29.2	14.2	27.79	40	-12.21	100	Vert
54.6183	42.56	QP	-29	7.9	21.46	40	-18.54	200	Vert
57.9137	48.63	QP	-29	7.9	27.53	40	-12.47	100	Vert
303.9029	48.5	PK	-26.8	13.3	35	46	-11	100	Vert
500.0739	47.76	PK	-27	16.8	37.56	46	-8.44	100	Vert
796.6567	41.77	PK	-25.5	21	37.27	46	-8.73	100	Vert
PK - Peak detector									
QP - Quasi-Peak detector									

## 7.2. AC MAINS LINE CONDUCTED EMISSIONS

### TEST PROCEDURE

ANSI C63.4

### LIMIT

§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency range (MHz)	Limits (dB $\mu$ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

Notes:  
1. The lower limit shall apply at the transition frequencies  
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

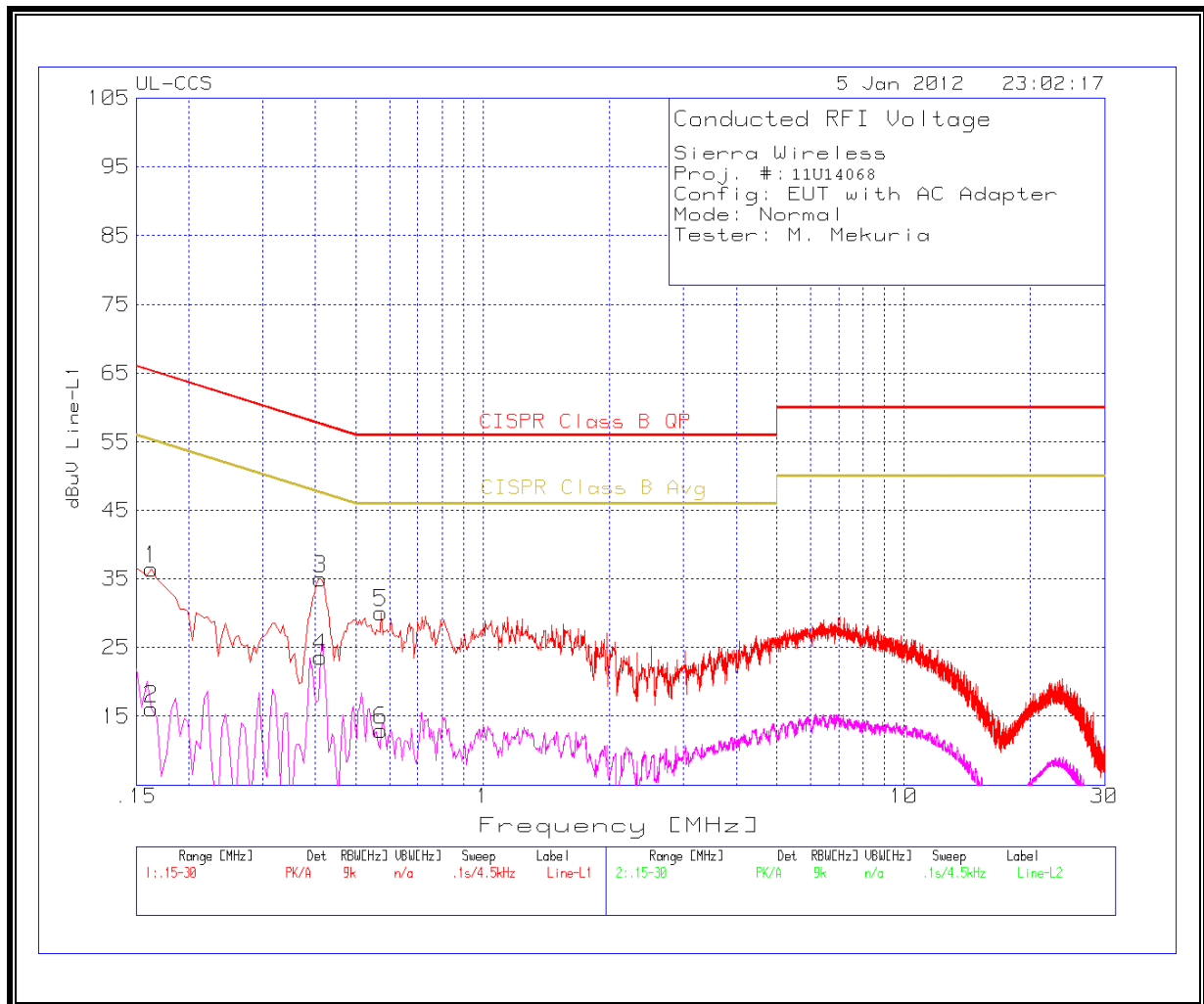
**RESULTS**

**CONFIGURATION 2: EUT WITH AC ADAPTER**

**6 WORST EMISSIONS**

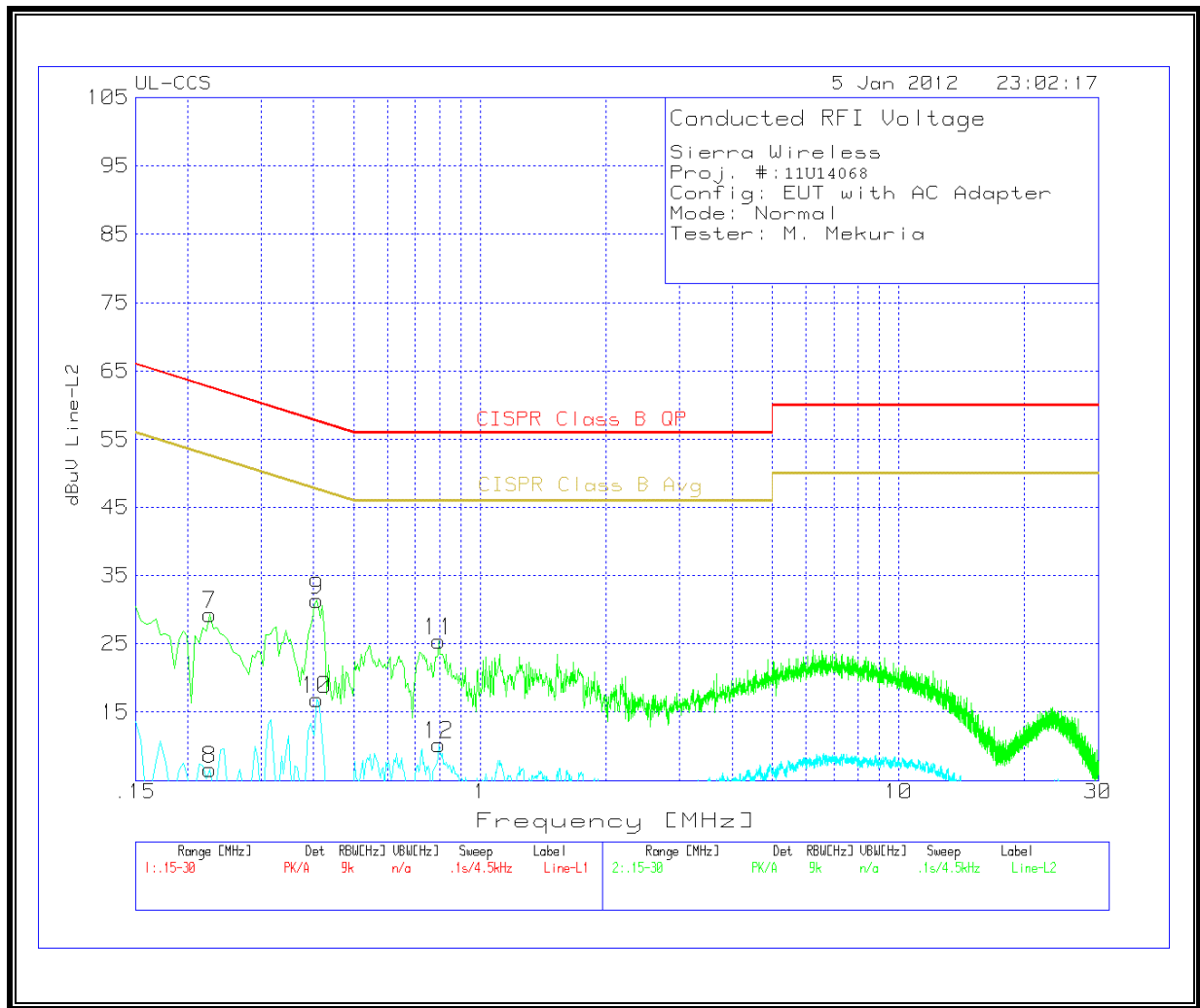
Sierra Wireless									
Proj. #: 11U14068									
Config: EUT with AC Adapter									
Mode: Normal									
Tester: M. Mekuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	T24 LISN dB	LC Cables dB	Corrected dB(μV)	Class B QP Limit dB(μV)	Margin dB	Class B Av Limit dB(μV)	Margin dB
Line-L1 .15 - 30MHz									
0.1635	36.33	PK	0.1	0	36.43	65.3	-28.87	-	-
0.1635	16.02	Av	0.1	0	16.12	-	-	55.3	-39.18
0.411	34.85	PK	0.1	0	34.95	57.6	-22.65	-	-
0.411	23.49	Av	0.1	0	23.59	-	-	47.6	-24.01
0.573	30.01	PK	0.1	0	30.11	56	-25.89	-	-
0.573	12.87	Av	0.1	0	12.97	-	-	46	-33.03
Line-L2 .15 - 30MHz									
0.2265	29.15	PK	0.1	0	29.25	62.6	-33.35	-	-
0.2265	6.52	Av	0.1	0	6.62	-	-	52.6	-45.98
0.4065	31.25	PK	0.1	0	31.35	57.7	-26.35	-	-
0.4065	16.79	Av	0.1	0	16.89	-	-	47.7	-30.81
0.798	25.3	PK	0.1	0	25.4	56	-30.6	-	-
0.798	10.13	Av	0.1	0	10.23	-	-	46	-35.77
PK - Peak detector									
QP - Quasi-Peak detector									
Av - Average detector									

**LINE 1 RESULTS**





**LINE 2 RESULTS**

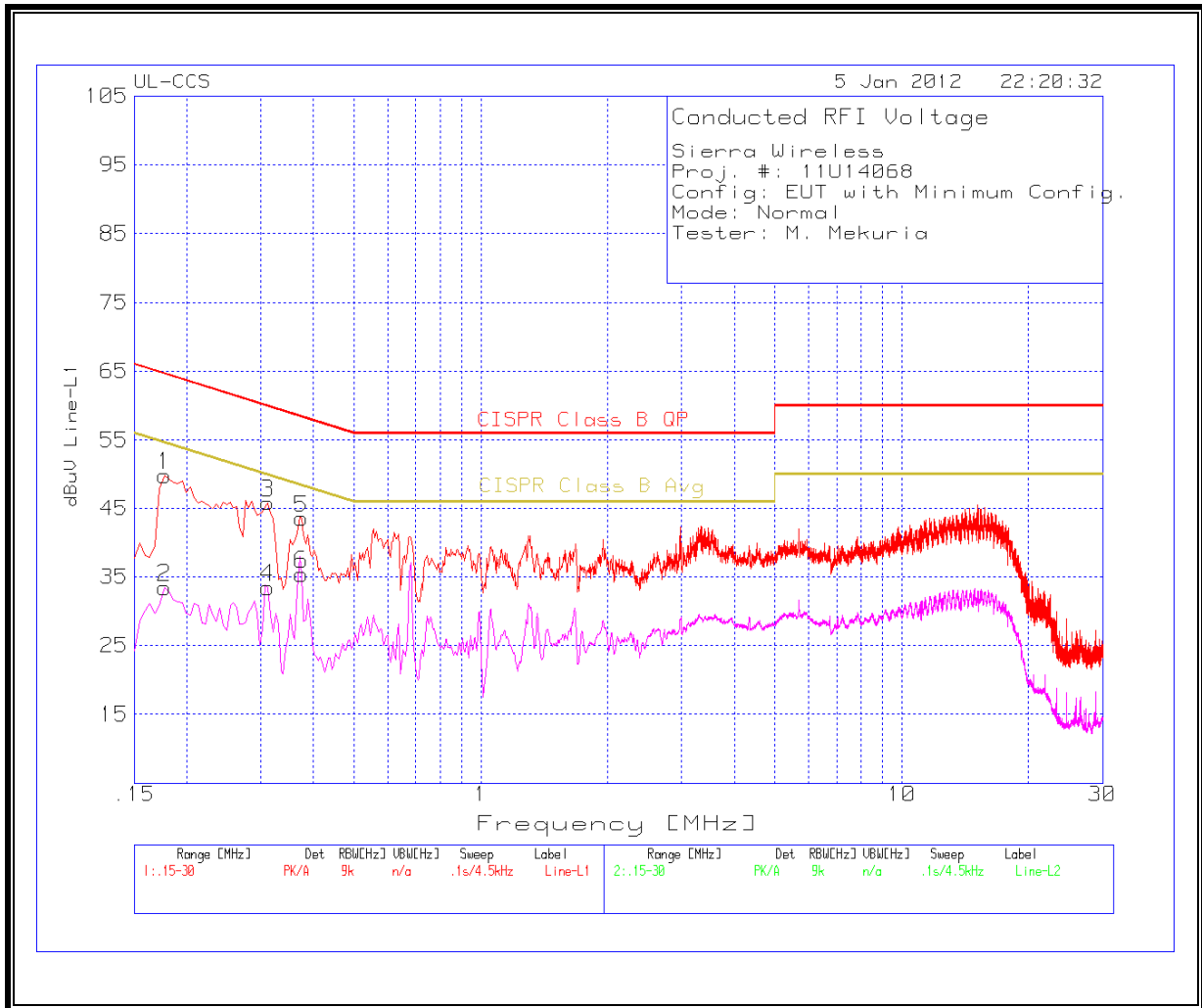


**CONFIGURATION 2: EUT WITH LAPTOP PC**

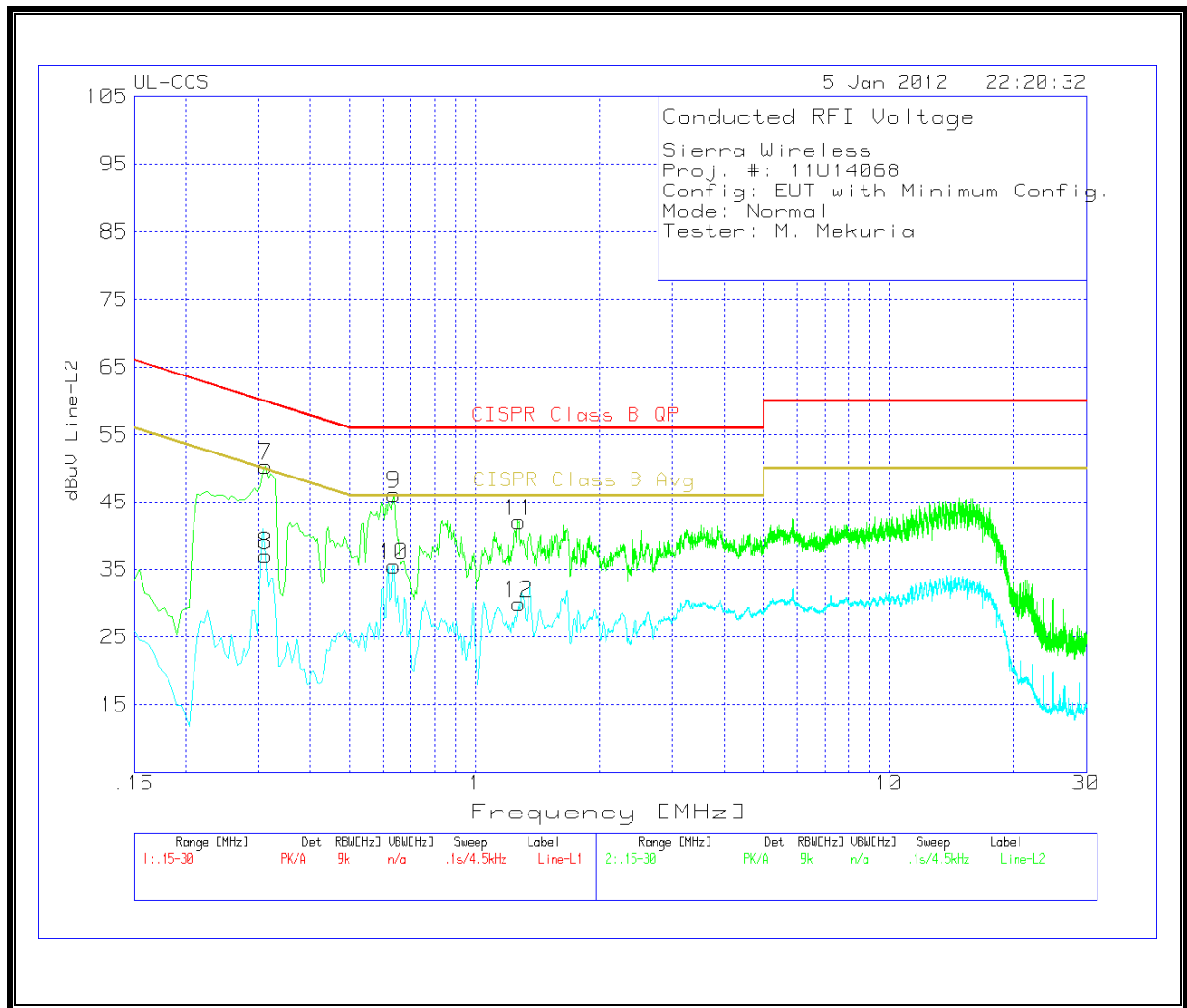
**6 WORST EMISSIONS**

Sierra Wireless									
Proj. #: 11U14068									
Config: EUT with Minimum Config.									
Mode: Normal									
Tester: M. Mekuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	T24 LISN dB	LC Cables dB	Corrected dB(μV)	Class B QP Limit dB(μV)	Margin dB	Class B Av Limit dB(μV)	Margin dB
Line-L1 .15 - 30MHz									
0.177	49.71	PK	0.1	0	49.81	64.6	-14.79	-	-
0.177	33.33	Av	0.1	0	33.43	-	-	54.6	-21.17
0.312	45.79	PK	0.1	0	45.89	59.9	-14.01	-	-
0.312	33.34	Av	0.1	0	33.44	-	-	49.9	-16.46
0.375	43.43	PK	0.1	0	43.53	58.4	-14.87	-	-
0.375	35.32	Av	0.1	0	35.42	-	-	48.4	-12.98
Line-L2 .15 - 30MHz									
0.312	50.22	PK	0.1	0	50.32	59.9	-9.58	-	-
0.312	36.95	Av	0.1	0	37.05	-	-	49.9	-12.85
0.636	46.18	PK	0.1	0	46.28	56	-9.72	-	-
0.636	35.35	Av	0.1	0	35.45	-	-	46	-10.55
1.275	41.85	PK	0.1	0.1	42.05	56	-13.95	-	-
1.275	29.76	Av	0.1	0.1	29.96	-	-	46	-16.04
PK - Peak detector									
QP - Quasi-Peak detector									
Av - Average detector									

**LINE 1 RESULTS**



**LINE 2 RESULTS**

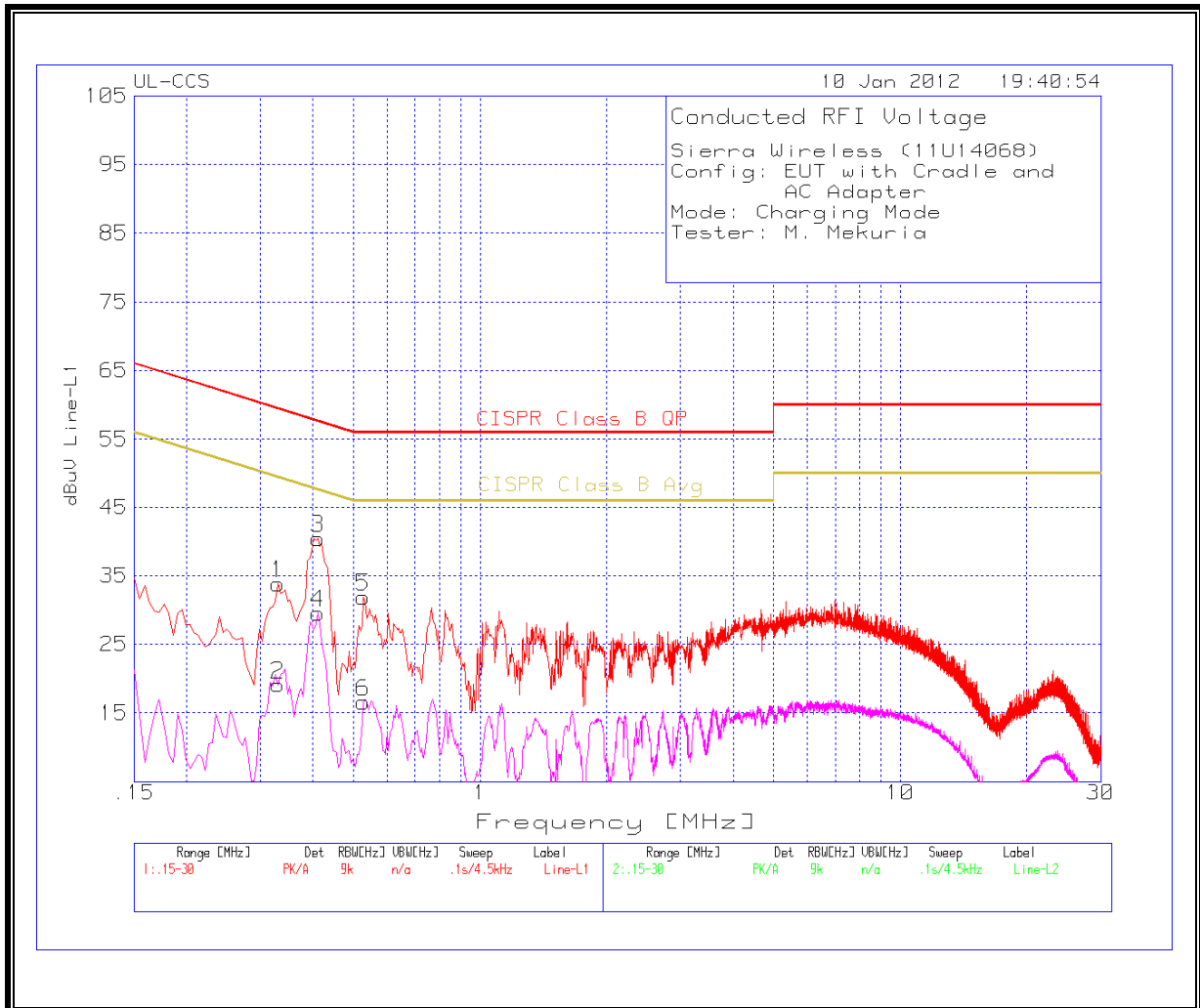


**CONFIGURATION 4: EUT WITH CRADLE AND AC ADAPTER**

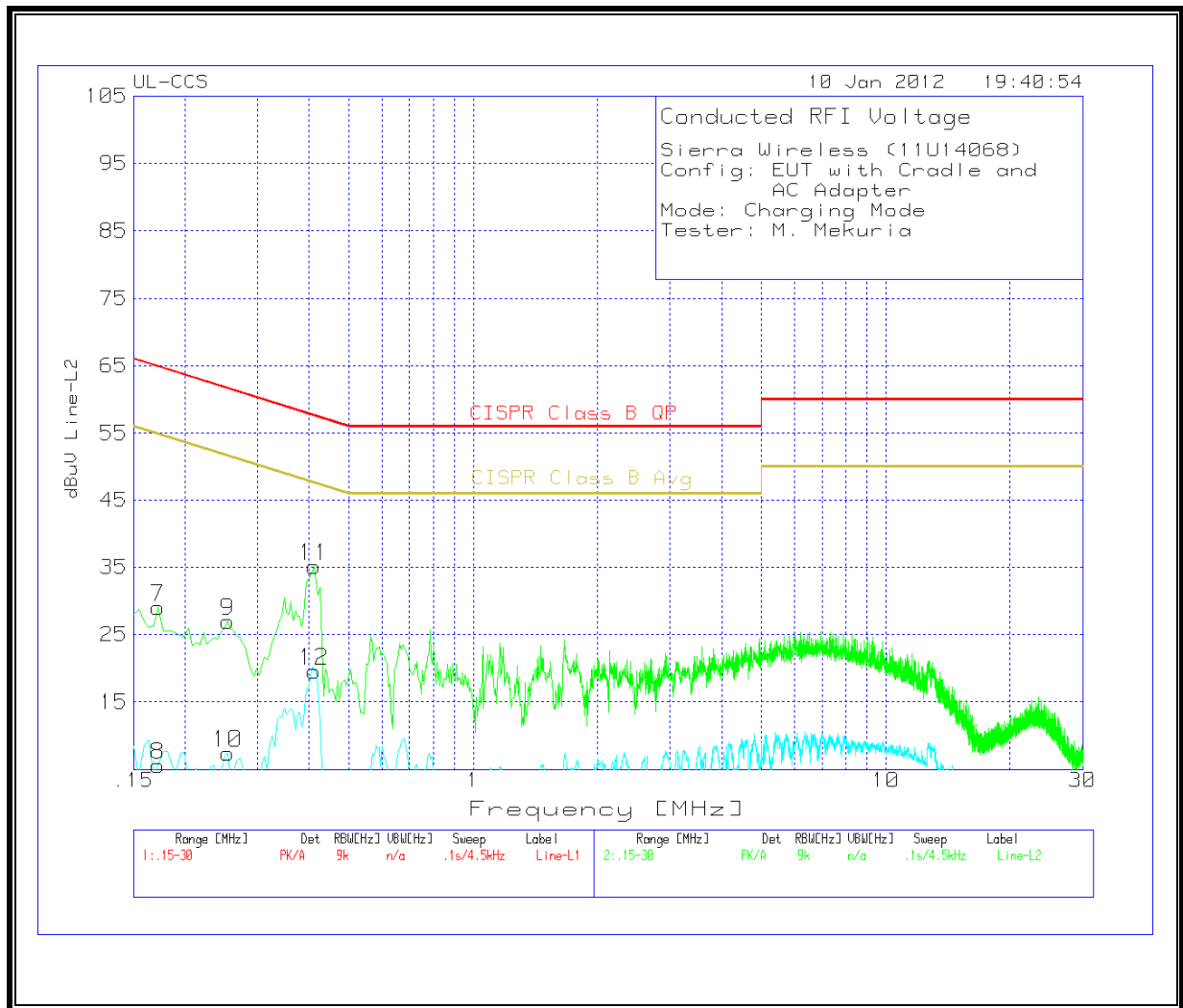
**6 WORST EMISSIONS**

Sierra Wireless (11U14068)									
Config: EUT with Cradle and AC Adapter									
Mode: Charging Mode									
Tester: M. Mekuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	T24 LISN dB	LC Cables dB	Corrected dB(μV)	Class B QP Limit dB(μV)	Margin dB	Class B Av Limit dB(μV)	Margin dB
Line-L1 .15 - 30MHz									
0.33	33.67	PK	0.1	0	33.77	59.5	-25.73	-	-
0.33	19.02	Av	0.1	0	19.12	-	-	49.5	-30.38
0.411	40.32	PK	0.1	0	40.42	57.6	-17.18	-	-
0.411	29.48	Av	0.1	0	29.58	-	-	47.6	-18.02
0.528	31.81	PK	0.1	0	31.91	56	-24.09	-	-
0.528	16.44	Av	0.1	0	16.54	-	-	46	-29.46
Line-L2 .15 - 30MHz									
0.1725	28.96	PK	0.1	0	29.06	64.8	-35.74	-	-
0.1725	5.54	Av	0.1	0	5.64	-	-	54.8	-49.16
0.2535	26.88	PK	0.1	0	26.98	61.6	-34.62	-	-
0.2535	7.35	Av	0.1	0	7.45	-	-	51.6	-44.15
0.411	35.02	PK	0.1	0	35.12	57.6	-22.48	-	-
0.411	19.53	Av	0.1	0	19.63	-	-	47.6	-27.97
PK - Peak detector									
QP - Quasi-Peak detector									
Av - Average detector									

**LINE 1 RESULTS**



**LINE 2 RESULTS**



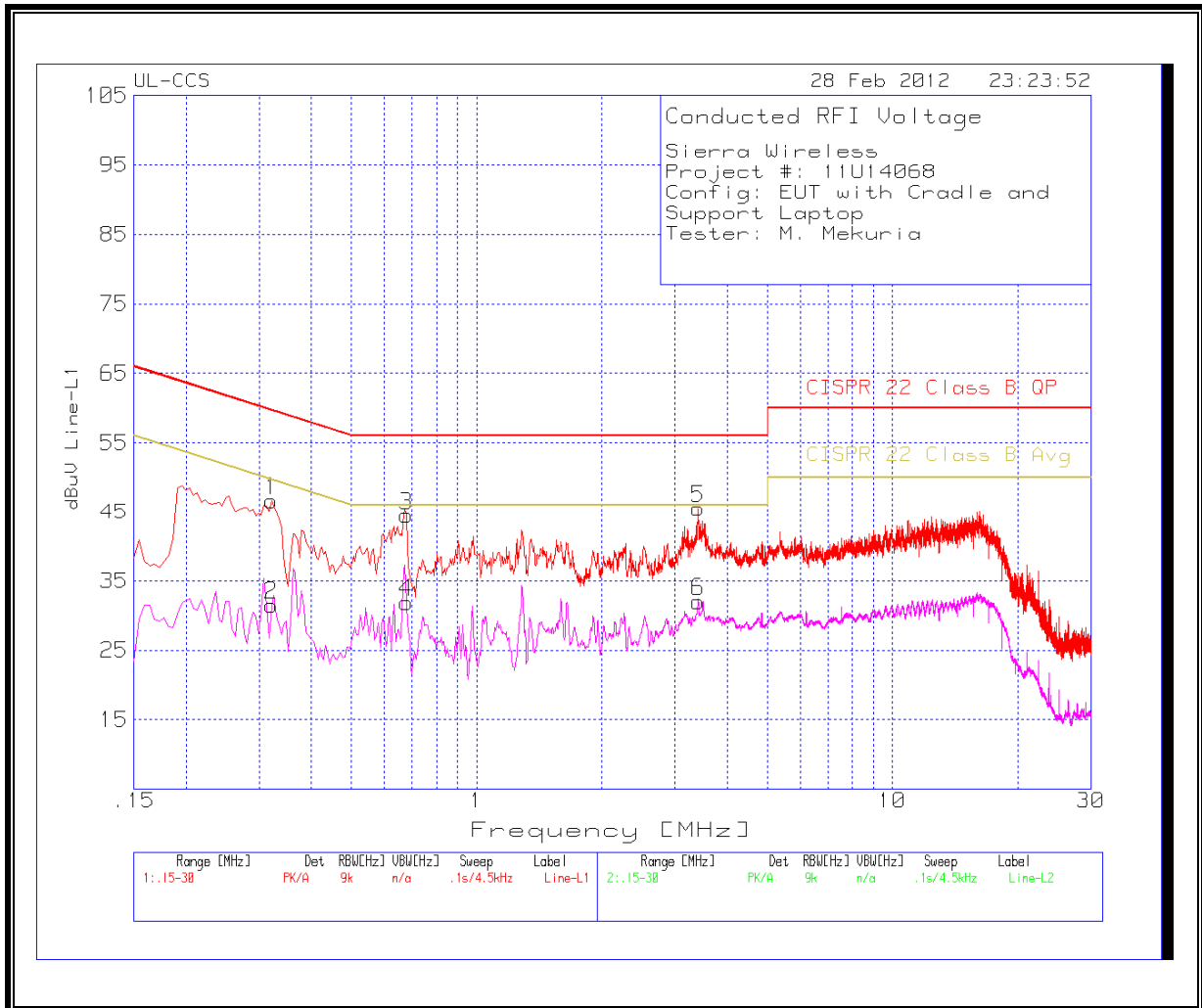
**CONFIGURATION 5: EUT WITH CRADLE AND LAPTOP PC**

**6 WORST EMISSIONS**

Sierra Wireless									
Project #: 11U14068									
Config: EUT with Cradle and									
Support Laptop									
Tester: M. Mekuria									
Test Frequency MHz	Meter Reading dB(μV)	Detector	T24 LISN dB	LC Cables dB	Corrected dB(μV)	Class B QP Limit dB(μV)	Margin dB	Class B Av Limit dB(μV)	Margin dB
Line-L1 .15 - 30MHz									
0.321	46.54	PK	0.1	0	46.64	59.7	-13.06	-	-
0.321	31.46	Av	0.1	0	31.56	-	-	49.7	-18.14
0.6765	44.34	PK	0.1	0	44.44	56	-11.56	-	-
0.6765	31.82	Av	0.1	0	31.92	-	-	46	-14.08
3.4125	45.27	PK	0.1	0.1	45.47	56	-10.53	-	-
3.4125	31.84	Av	0.1	0.1	32.04	-	-	46	-13.96
Line-L2 .15 - 30MHz									
0.312	51.38	PK	0.1	0	51.48	59.9	-8.42	-	-
0.312	37.83	Av	0.1	0	37.93	-	-	49.9	-11.97
0.6225	46.63	PK	0.1	0	46.73	56	-9.27	-	-
0.6225	32.52	Av	0.1	0	32.62	-	-	46	-13.38
1.3515	42.54	PK	0.1	0.1	42.74	56	-13.26	-	-
1.3515	30.86	Av	0.1	0.1	31.06	-	-	46	-14.94
PK - Peak detector									
QP - Quasi-Peak detector									
Av - Average detector									



**LINE 1 RESULTS**



**LINE 2 RESULTS**

