



ADDENDUM TO FC03-054A

FOR THE

WIRELESS CABLE MODEM, SBG 900 REV.3

**FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS B,
FCC PART 15 SUBPART C SECTIONS 15.207, 15.209, 15.247 AND RSS 210**

COMPLIANCE

DATE OF ISSUE: OCTOBER 23, 2003

PREPARED FOR:

Motorola BCS
6450 Sequence Drive
San Diego, CA 92121

P.O. No.: 4109866
W.O. No.: 80377

PREPARED BY:

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Date of test: October 10-22, 2003

Report No.: FC03-054B

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ADMINISTRATIVE INFORMATION

DATE OF TEST: October 10-22, 2003

DATE OF RECEIPT: October 10, 2003

PURPOSE OF TEST: To demonstrate the compliance of the Wireless Cable Modem, SBG900, with the requirements for FCC Part 15 Subpart B Sections 15.107 and 15.109, FCC Part 15 Subpart C Sections 15.207, 15.209, 15.247 & RSS 210 devices.
Addendum A is to revise the bandedge plots, the 15.247(c) OATS data sheet and the frequency range tested on the data sheets.
Addendum B is to demonstrate the compliance of the Wireless Cable Modem, SBG 900 Rev.3, after adding copper tape to ground the tuner shield to the back plate and making a small cut into the insulation of the external antenna's cable to ground the shield to the main circuit board.

TEST METHOD: ANSI C63.4 (1992)

MANUFACTURER: Motorola BCS
6450 Sequence Drive
San Diego, CA 92121

REPRESENTATIVE: Mike Harris

TEST LOCATION: CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92621

SUMMARY OF RESULTS

As received, the Motorola BCS Wireless Cable Modem, SBG 900 Rev.3 was found to be fully compliant with the following standards and specifications:

United States

- FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B
- FCC Part 15 Subpart C Section 15.207, 15.209 & 15.247
- ANSI C63.4 (1992) method
FCC Site No. 100638

Canada

- RSS-210 using:
- FCC Part 15 Subpart C Section 15.207, 15.209 & 15.247
- ICES-003 Class B using:
- FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B
 - ANSI C63.4 (1992) method
Industry of Canada File No. IC 3172-D

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Joyce Walker, Quality Assurance Administrative
Manager

TEST PERSONNEL:



Eddie Wong, EMC Engineer



Stuart Yamamoto, EMC Engineer

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The Wireless cable modem tested by CKC Laboratories was a production unit.

FCC 15.31(e) Voltage Variations

Equipment setup: The EUT is a wireless cable modem. The EUT's USB port is connected to a laptop computer via a shielded cable. The EUT's ethernet port is connected to a laptop computer via an unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. The laptop computers are running hyperterminal and are pinging the ethernet through ms dos. The local computer is running the Motorola software to interface with the EUT via the ethernet port. Antenna terminal measurement.

	Power at Nominal Voltage (dBm)	Power at 85% Nominal Voltage (dBm)	Power at 115% Nominal Voltage (dBm)
Channel 1	16.05	16.05	16.05
Channel 6	14.2	14.2	14.2
Channel 11	14.8	14.8	14.8

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.107/15.207 Conducted Emissions: 150 kHz – 30 MHz

15.109 Radiated Emissions: 9 kHz – 1000 MHz

15.209/15.247 Radiated: 9 kHz – 25 GHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz

Note: Radiated bandwidth settings are listed on the individual data sheets.

FCC 15.203 Antenna Requirements

This device uses a plug-in type Hirohshi connector that is permanently attached and therefore the EUT complies with Section 15.203 of the FCC rules.

FCC 15.205 Restricted Bands

The fundamental operating frequency lies outside the restricted bands and therefore complies with the requirements of Section 15.205 of the FCC rules. Any spurious emission coming from the EUT was investigated to determine if any portion lies inside the restricted band. If any portion of a spurious emissions signal was found to be within a restricted band, investigation was performed to ensure compliance with Section 15.209.

Eut Operating Frequency

The EUT was operating at 2412-2462 MHz.

The Eut is a direct sequencing device operating in the 2400 – 2483.5 MHz band.

EQUIPMENT UNDER TEST

AC to 12VDC Adapter

Manuf: Lite-ON
Model: PB-1090-1L1
Serial: NA
FCC ID: NA

Wireless Cable Modem

Manuf: Motorola BCS
Model: SBG 900 Rev.3
Serial: 131A
FCC ID: F2NSBG900-1

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Laptop Computer

Manuf: Toshiba
Model: Tecra 730 CDT
Serial: 12638047-3
FCC ID: DoC

Ethernet Hub

Manuf: Netgear
Model: DS104
Serial: DS141408355155
FCC ID: DoC

Mouse

Manuf: Logitech
Model: M-S35
Serial: LZB73905320
FCC ID: DoC

Head End

Manuf: Cisco
Model: uBR-MC11C
Serial: CN1ISS0AA
FCC ID: DoC

C6U Converter

Manuf: General Instruments
Model: C6U
Serial: J5M7000101358
FCC ID: DoC

USB Mouse

Manuf: Logitech
Model: M-BJ69
Serial: LNA30116672
FCC ID: DoC

Host Laptop Computer

Manuf: Dell Corporation
 Model: Inspiron 500m
 Serial: NA
 FCC ID: DoC

Serial Modem

Manuf: Best Data Products Inc.
 Model: 1442FX
 Serial: 9052120
 FCC ID: DoC

MEASUREMENT UNCERTAINTY

TEST	HIGHEST UNCERTAINTY
Radiated Emissions	+/- 2.94 dB
Conducted Emissions	+/- 1.56 dB

Note: Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2. Statements of compliance are based on the nominal values only.

REPORT OF MEASUREMENTS

The following tables report the six highest worst case levels recorded during the tests performed on the EUT. All readings taken are peak readings unless otherwise noted. The data sheets from which these tables were compiled are contained in Appendix C.

Table 1: FCC 15.109 - Six Highest Radiated Emission Levels

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB					
749.990	42.5	21.5	-26.1	6.7		44.6	46.0	-1.4	VQ
750.004	39.2	21.5	-26.1	6.7		41.3	46.0	-4.7	HQ
800.006	39.7	22.1	-25.6	6.7		42.9	46.0	-3.1	VQ
899.982	39.6	23.3	-26.1	7.2		44.0	46.0	-2.0	VQ
900.001	36.5	23.3	-26.1	7.2		40.9	46.0	-5.1	HQ
999.984	42.9	24.8	-26.3	7.7		49.1	54.0	-4.9	VQ

Test Method: ANSI C63.4 (1992)
 Spec Limit: FCC Part 15 Subpart C Section 15.109 Class B
 Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
 V = Vertical Polarization
 Q = Quasi Peak Reading

COMMENTS: The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Frequency range of measurement = 30 MHz to 1 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Table 3: FCC 15.107/15.207 - Six Highest Conducted Emission Levels

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V	SPEC LIMIT dB μ V	MARGIN dB	NOTES
		Lisn dB							
0.837204	41.4	0.0				41.4	46.0	-4.6	W
2.786597	41.8	0.0				41.8	46.0	-4.2	B
2.837633	42.2	0.0				42.2	46.0	-3.8	B
2.837633	40.8	0.0				40.8	46.0	-5.2	W
9.048915	45.6	0.0				45.6	50.0	-4.4	B
9.102969	45.5	0.0				45.5	50.0	-4.5	B

Test Method: ANSI C63.4 (1992)
Spec Limit: FCC Part 15 Subpart C Section 15.107/15.207

NOTES: B = Black Lead
W = White Lead

COMMENTS: The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Table 2: FCC 15.209 - Six Highest Radiated Emission Levels (OATS)

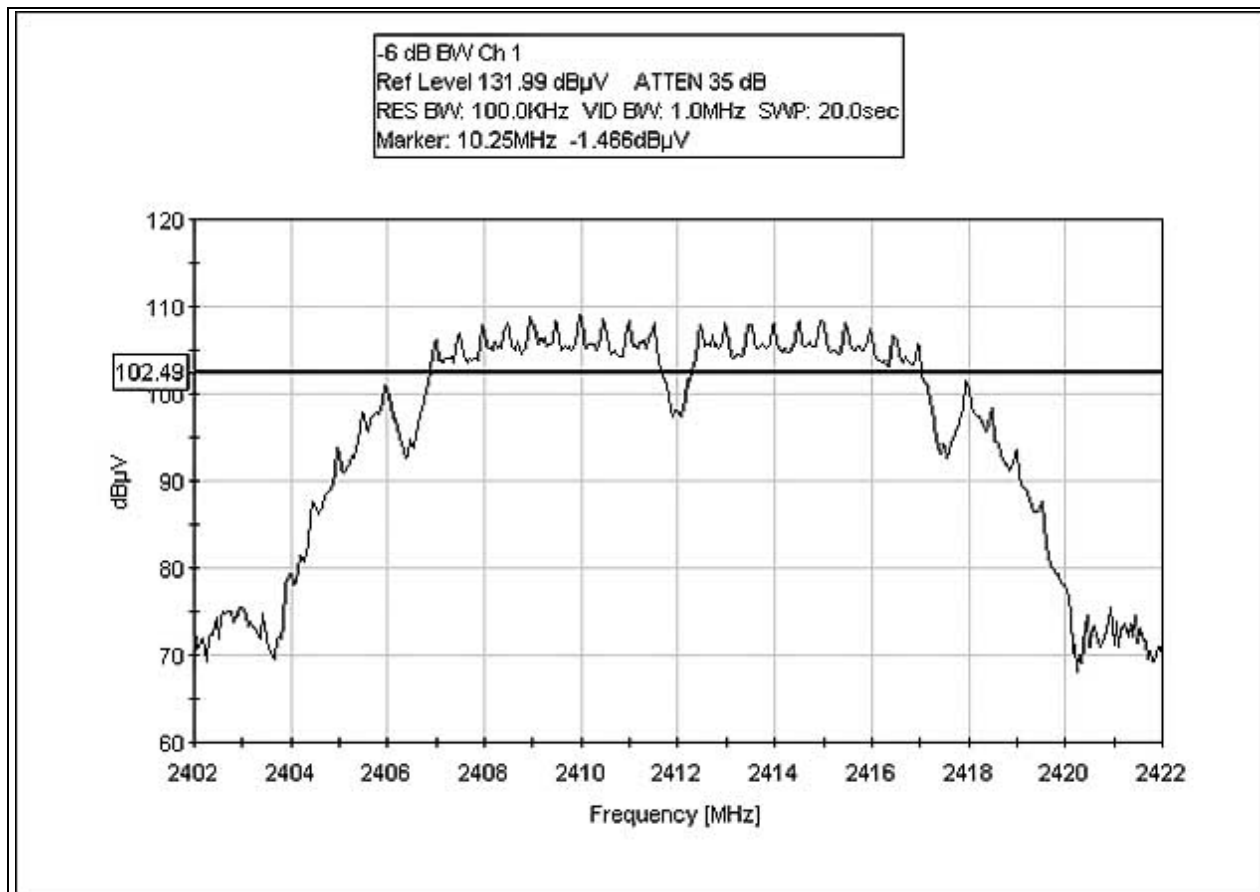
FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB					
749.990	42.5	21.5	-26.1	6.7		44.6	46.0	-1.4	VQ
750.004	42.6	21.5	-26.1	6.7		44.7	46.0	-1.3	VQ
750.005	42.5	21.5	-26.1	6.7		44.6	46.0	-1.4	HQ
899.982	39.6	23.3	-26.1	7.2		44.0	46.0	-2.0	VQ
900.000	40.0	23.3	-26.1	7.2		44.4	46.0	-1.6	HQ
900.000	40.0	23.3	-26.1	7.2		44.4	46.0	-1.6	HQ

Test Method: ANSI C63.4 (1992)
 Spec Limit: FCC Part 15 Subpart C Section 15.209
 Test Distance: 3 Meters

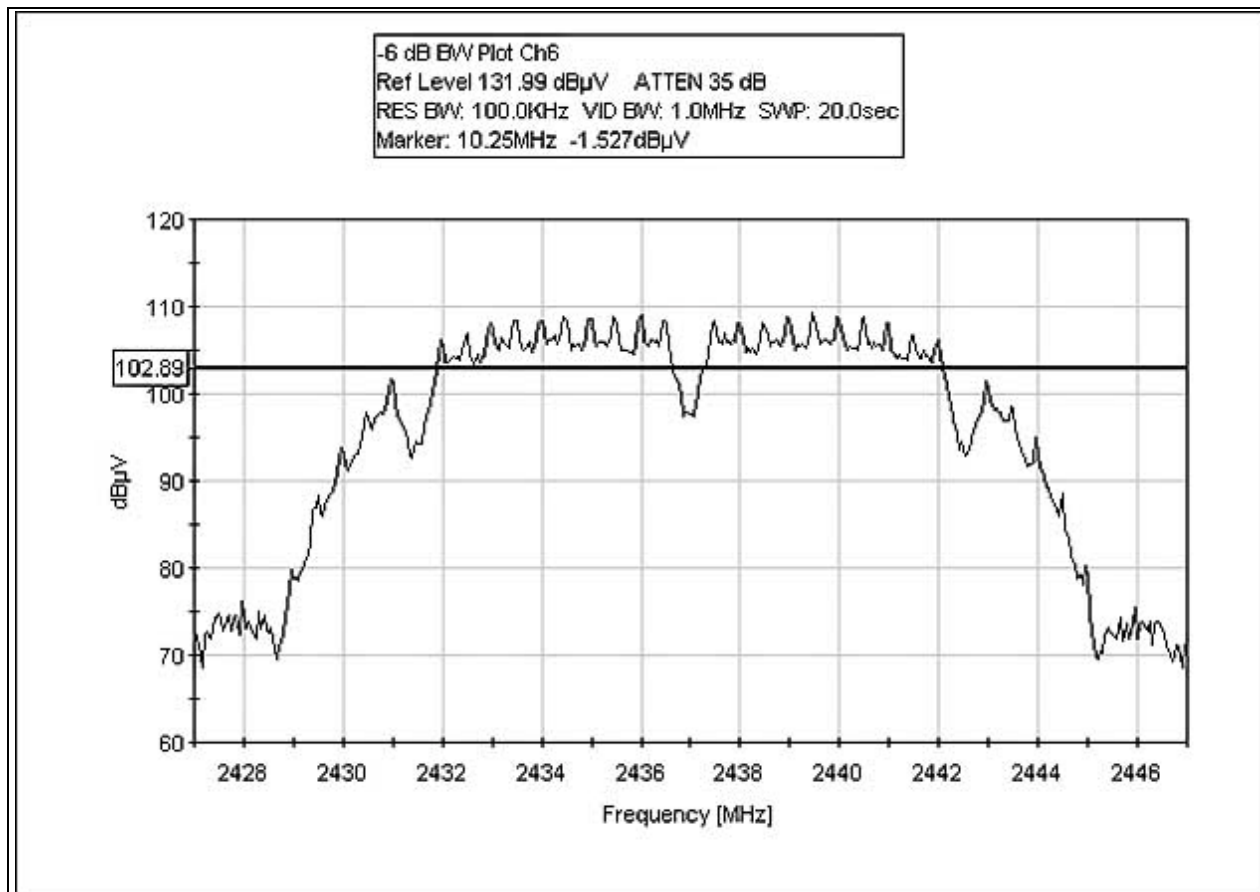
NOTES:
 H = Horizontal Polarization
 V = Vertical Polarization
 Q = Quasi Peak Reading
 1 = Channel 1
 6 = Channel 6
 11 = Channel 11

COMMENTS: The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channels 1, 6 and 11. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

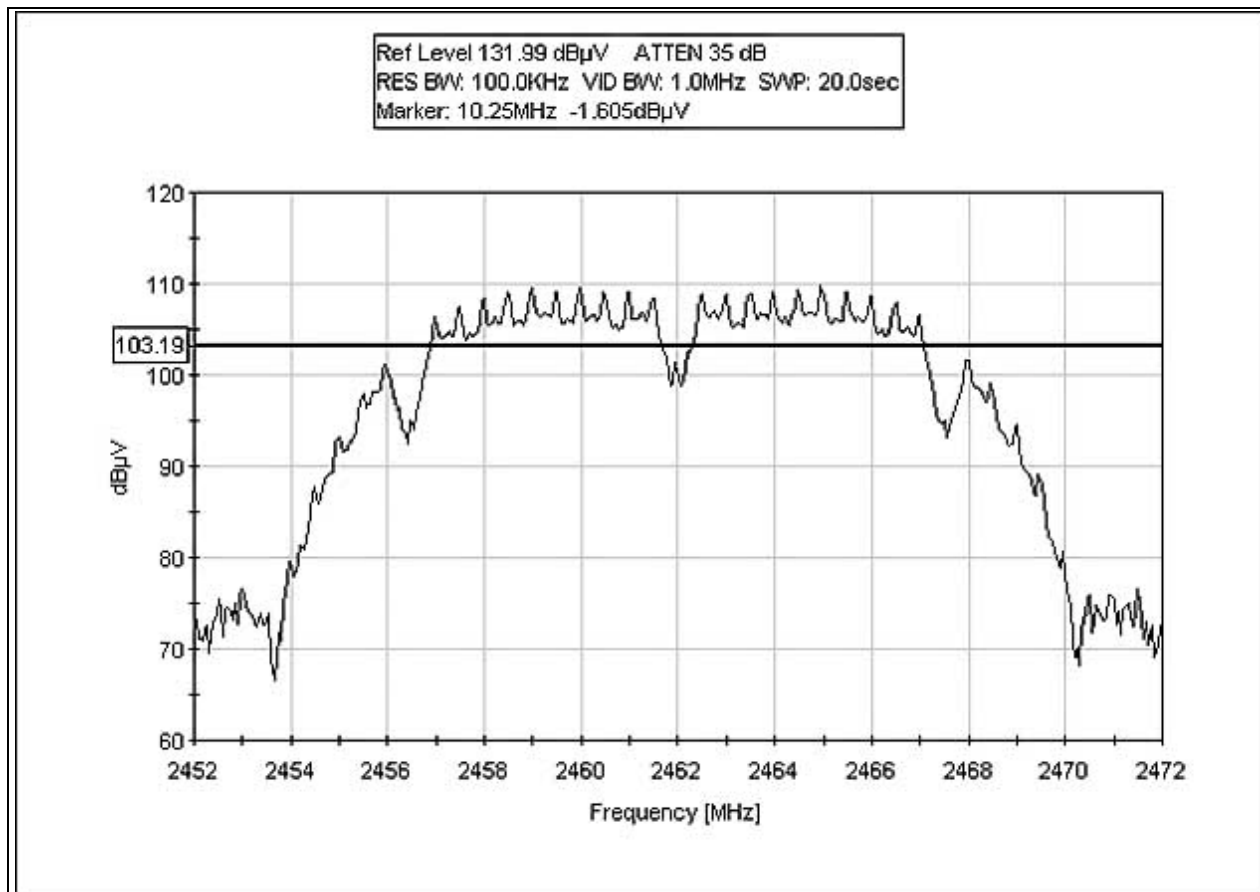
FCC 15.247(a)(2) BANDWIDTH PLOT CHANNEL 1



FCC 15.247(a)(2) BANDWIDTH PLOT CHANNEL 6



FCC 15.247(a)(2) BANDWIDTH PLOT CHANNEL 11



FCC 15.247(b)(3) OUTPUT POWER

Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.

(b) The maximum peak output power of the intentional radiator shall not exceed the following:

(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

Per FCC03-223, the measurement was measured with method outline in DA 02-2138 “Measurement procedure updated for peak transmit power in the unlicensed National infrastructure (U-NI) Band.

Conducted Power:

Setup :

The power measurement was made at the antenna port of the EUT. -26 dB band power was measured with a spectrum analyzer.

Channel 1	2412 MHz	16.05 dBm	= 0.04 watt
Channel 6	2437 MHz	14.2 dBm	= 0.03 watt
Channel 11	2462 MHz	14.8 dBm	= 0.03 watt

Result: The Peak power measured in accordance with FCC03-223 Document was less than 1 Watt.

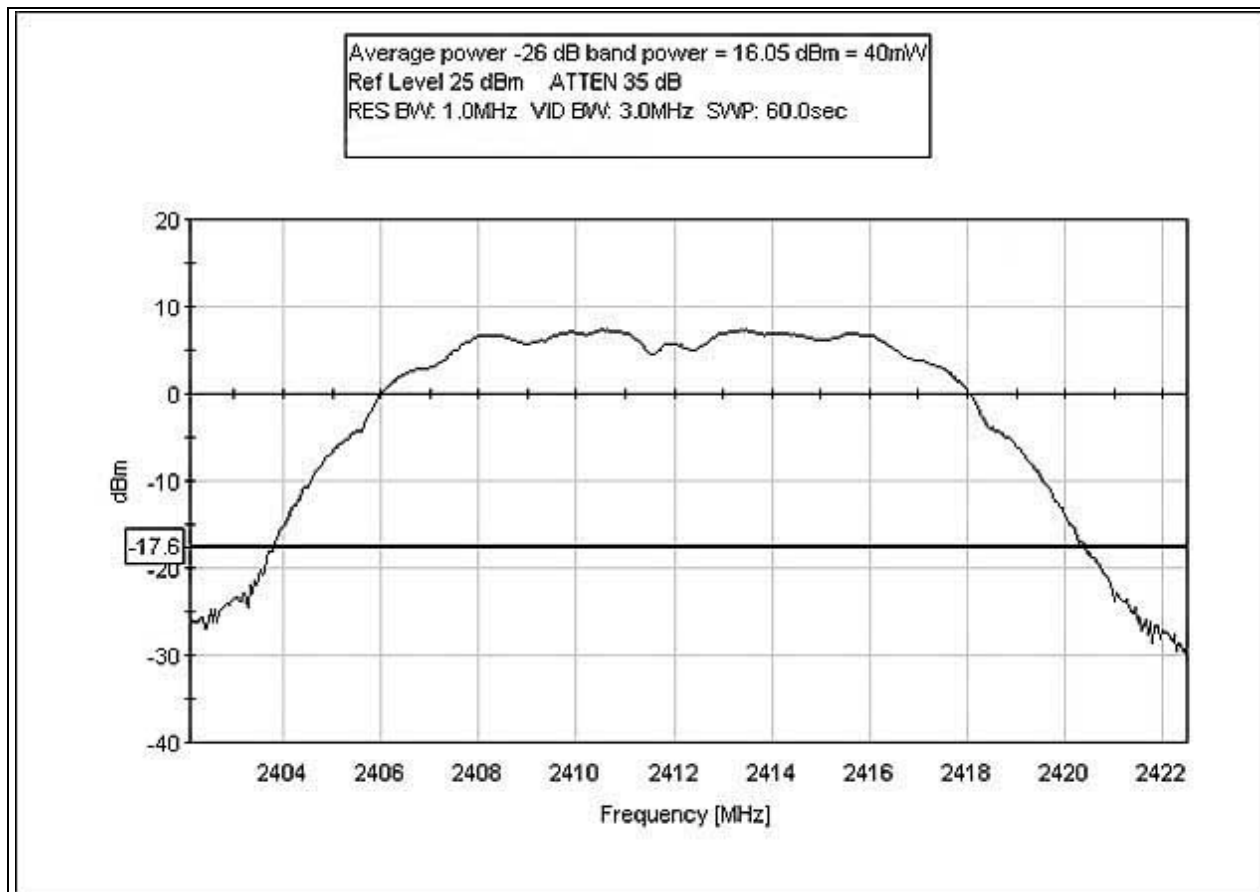
Radiated Power.

Calculation using customer provided antenna gain of 2.5 dBi

	Freq	Conducted power	Antenna Gain	EIRP	EIRP
Ch 1	2412 MHz	16.05 dBm	2.5dBi	18.6dBm	0.072 Watt
Ch 6	2437 MHz	14.2 dBm	2.5 dBi	16.7dBm	0.047 Watt
Ch 11	2462 MHz	14.8 dBm	2.5 dBi	16.8dBm	0.048 Watt

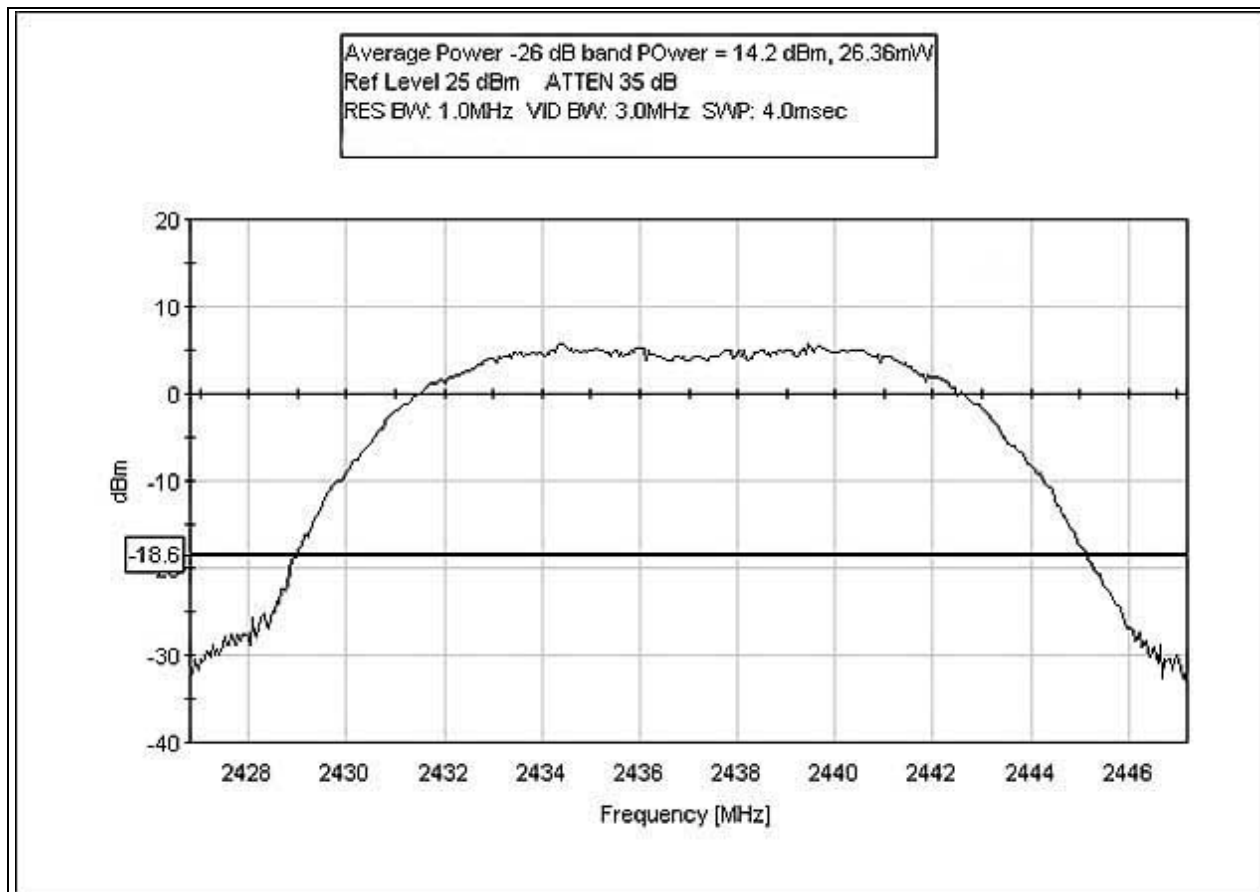
Result: The Peak power measured in accordance with FCC03-223 Document was less than 1 Watt.

FCC 15.247(b)(3) PEAK POWER CHANNEL 1



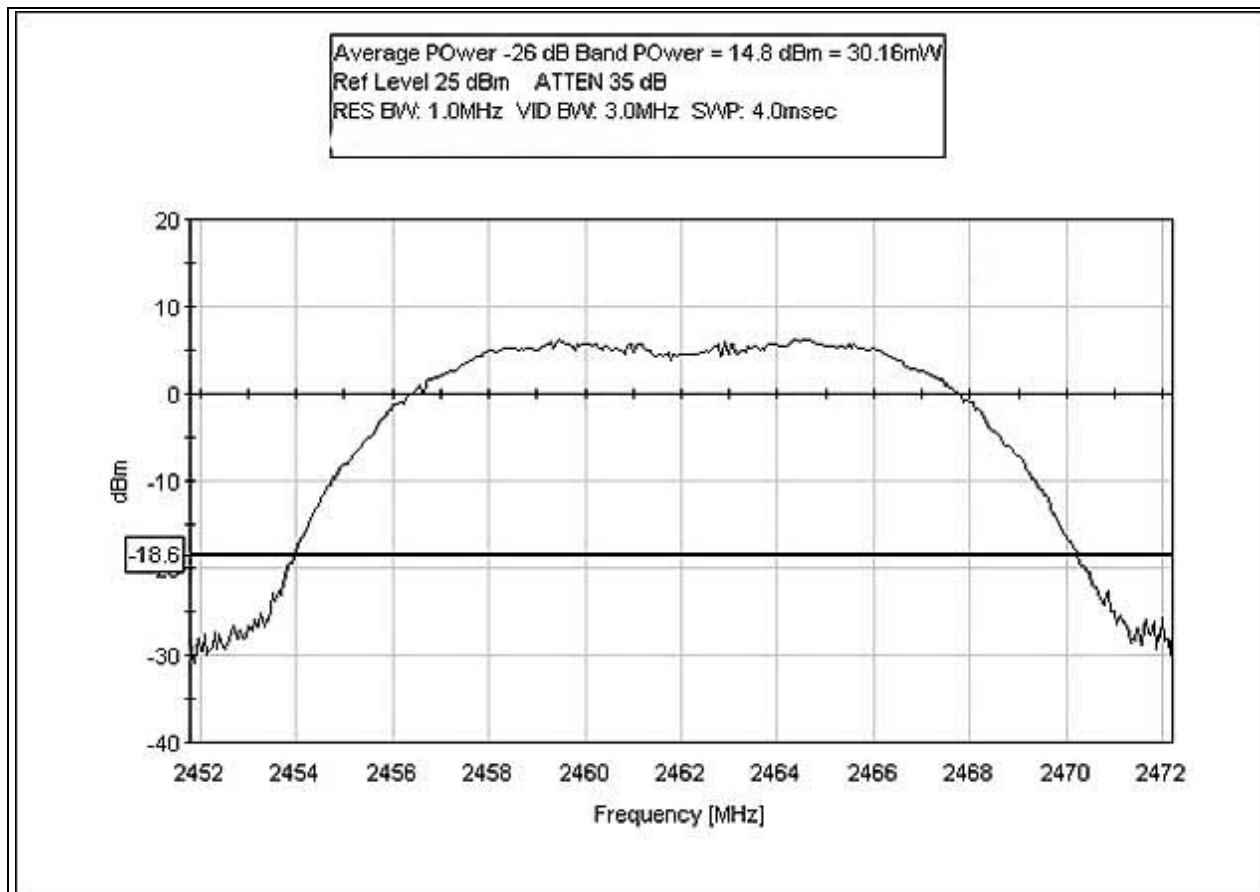
16.054 dBm = Integrated power measurement corrected for EBW vs RBW.

FCC 15.247(b)(3) PEAK POWER CHANNEL 6



14.186 dBm = Integrated power measurement corrected for EBW vs RBW.

FCC 15.247(b)(3) PEAK POWER CHANNEL 11



14.786 dBm = Integrated power measurement corrected for EBW vs RBW.

Table 4: FCC 15.247(c) - Six Highest Radiated Emission Levels (OATS)

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	HPF dB				
4923.980	35.3	33.4	-39.1	2.4	1.2	33.2	88.7	-55.5	V-11
7241.000	30.2	35.5	-38.5	3.0	4.3	34.5	88.7	-54.2	V-1
7316.000	29.6	35.7	-38.4	3.0	4.7	34.6	88.9	-54.3	V-6
7316.000	28.2	35.7	-38.4	3.0	4.7	33.2	88.9	-55.7	H-6
7386.380	34.9	35.9	-38.3	3.1	5.0	40.6	88.7	-48.1	V-11
7386.380	34.9	35.9	-38.3	3.1	5.0	40.6	88.7	-48.1	H-11

Test Method: ANSI C63.4 (1992)
 Spec Limit: FCC Part 15 Subpart C Section 15.247(c)
 Test Distance: 3 Meters

NOTES:
 H = Horizontal Polarization
 V = Vertical Polarization
 1 = Channel 1
 6 = Channel 6
 11 = Channel 11

COMMENTS: The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channels 1, 6 and 11. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Table 5: FCC 15.247(c) - Six Highest Radiated Emission Levels (Antenna Terminal)

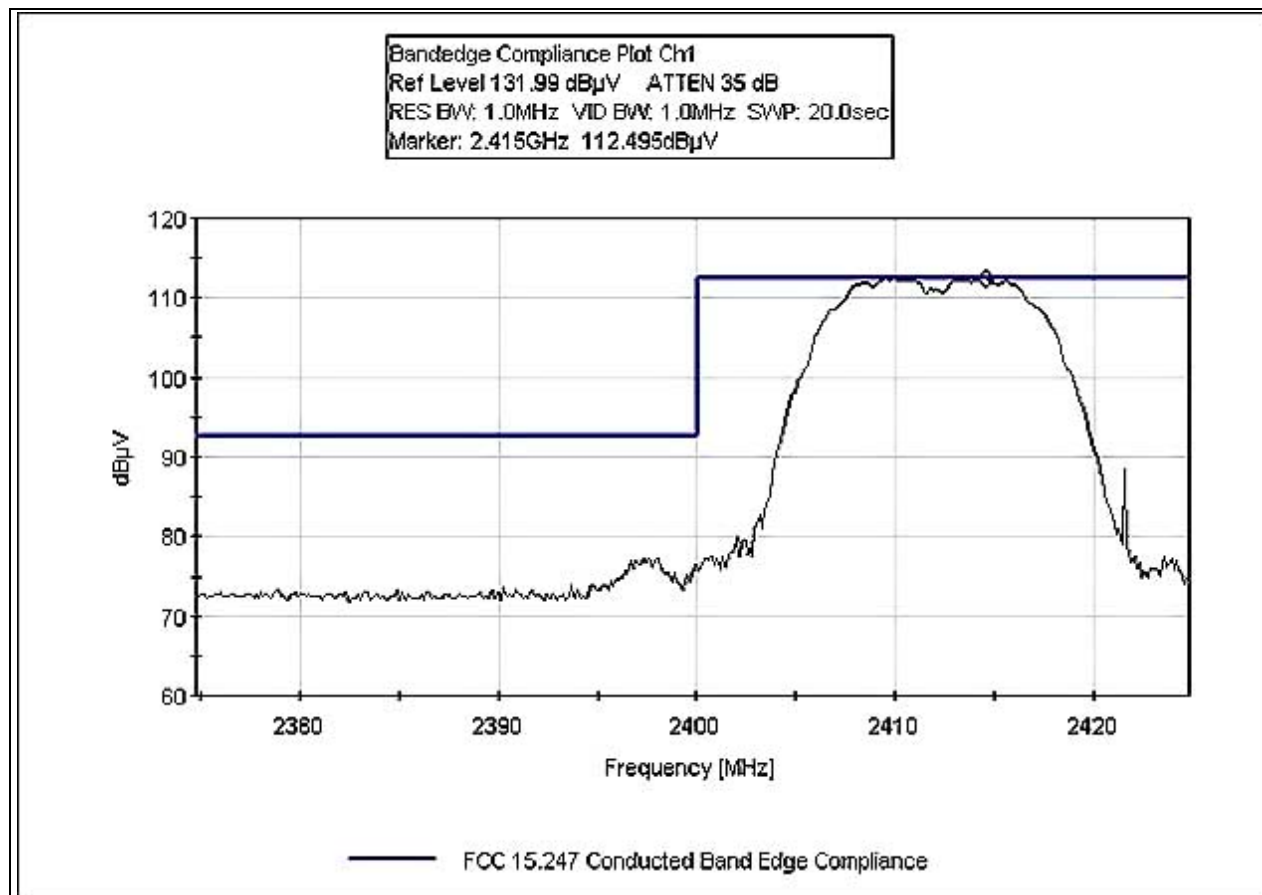
FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V	SPEC LIMIT dB μ V	MARGIN dB	NOTES
		HPF dB							
1625.000	35.6	0.3				35.9	96.7	-60.8	A-6
4824.000	49.5	1.4				50.9	94.5	-43.6	A-1
4924.000	45.7	1.2				46.9	96.9	-50.0	A-11
7236.000	51.3	4.3				55.6	94.5	-38.9	A-1
7311.000	48.7	4.6				53.3	96.7	-43.4	A-6
7387.000	47.5	5.0				52.5	96.9	-44.4	A-11

Test Method: ANSI C63.4 (1992)
 Spec Limit: FCC Part 15 Subpart C Section 15.247(c)
 Test Distance: No Distance

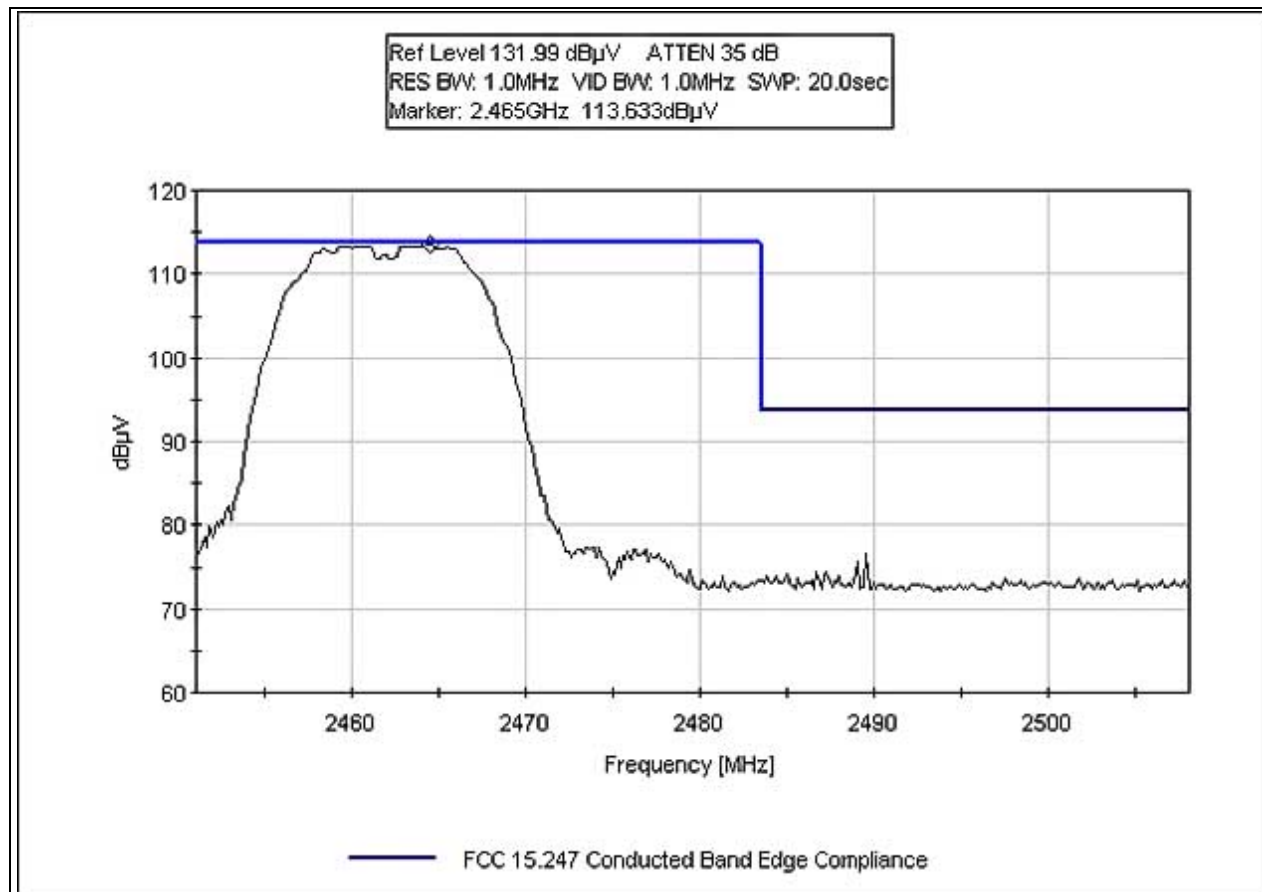
NOTES: A = Antenna Terminal
 1 = Channel 1
 6 = Channel 6
 11 = Channel 11

COMMENTS: The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channels 1, 6 & 11. Frequency range of measurement = 9 kHz to 25 GHz. RBW=100kHz, VBW=1MHz Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

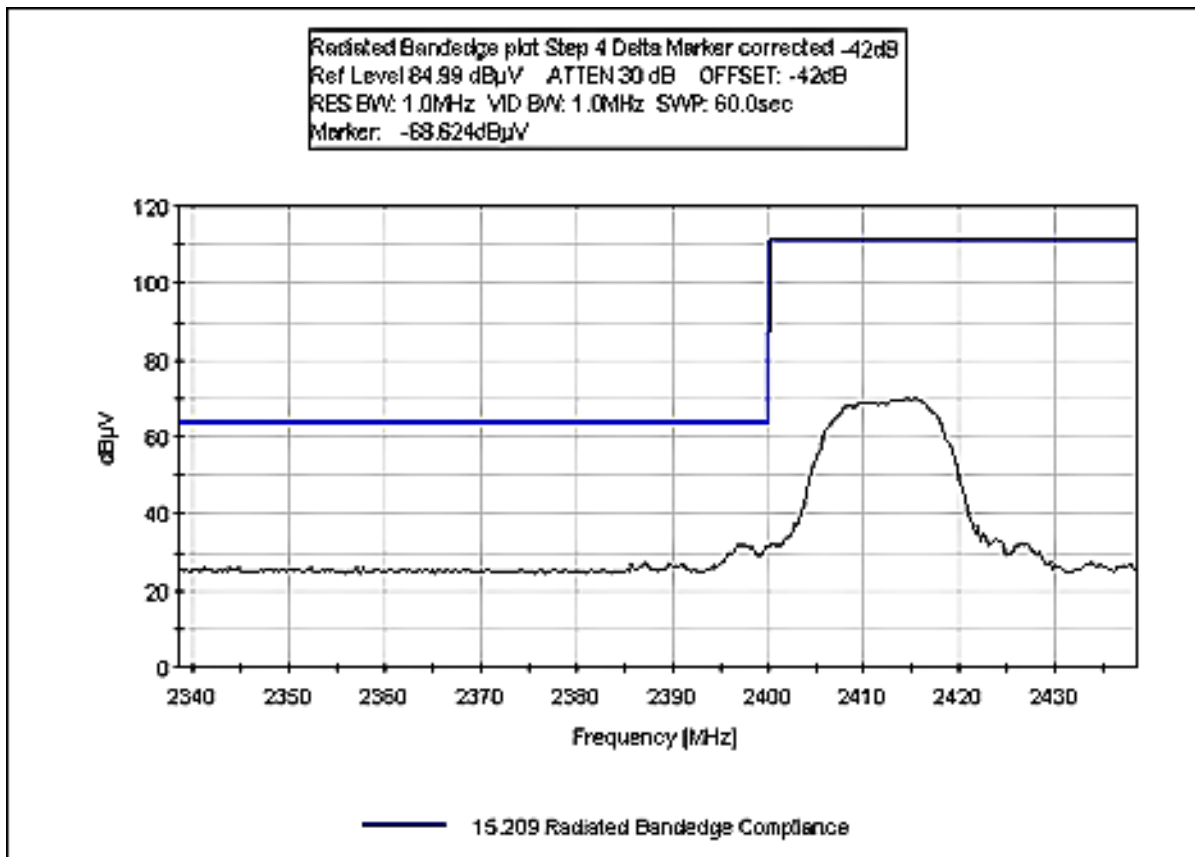
FCC 15.247(c) BANDEDGE PLOT CHANNEL 1



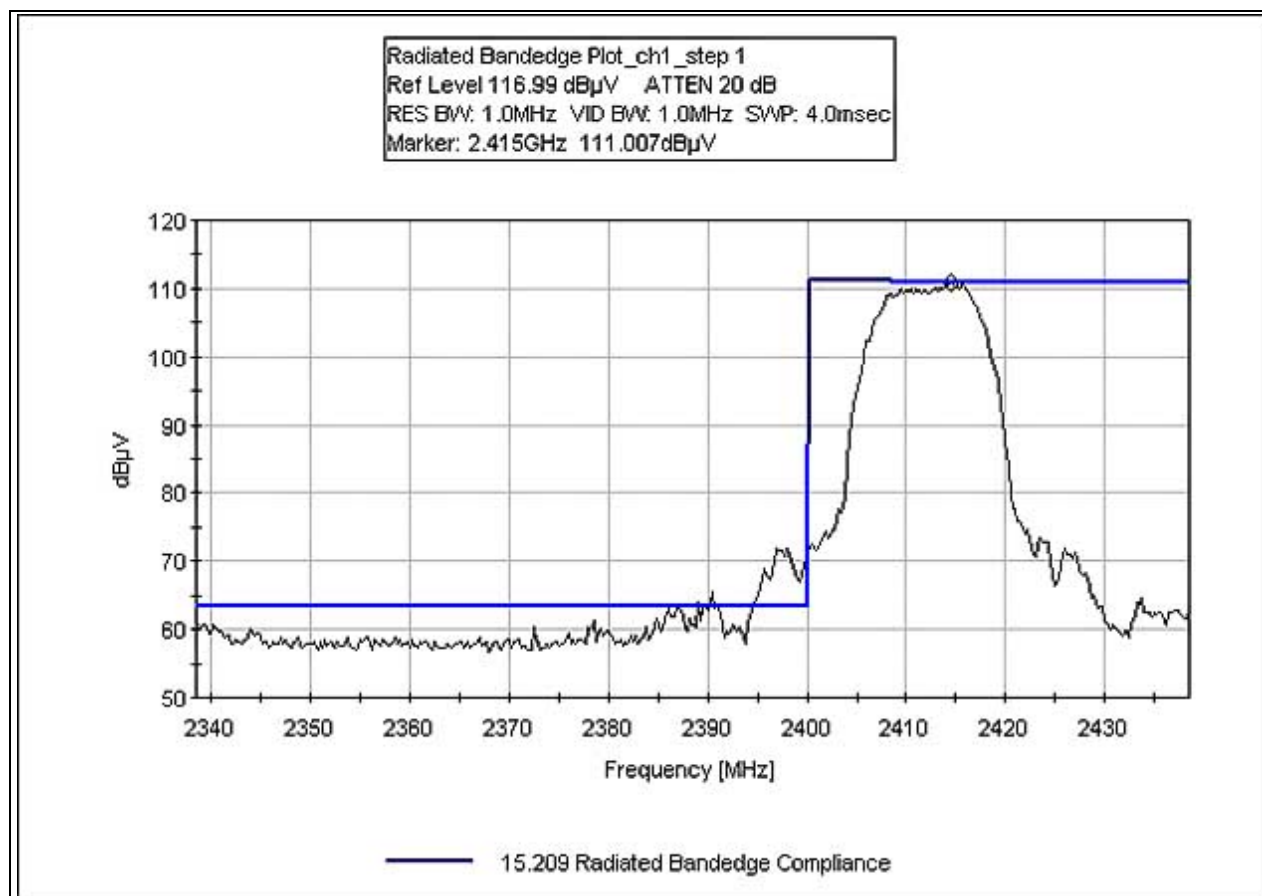
FCC 15.247(c) BANDEDGE PLOT CHANNEL 11



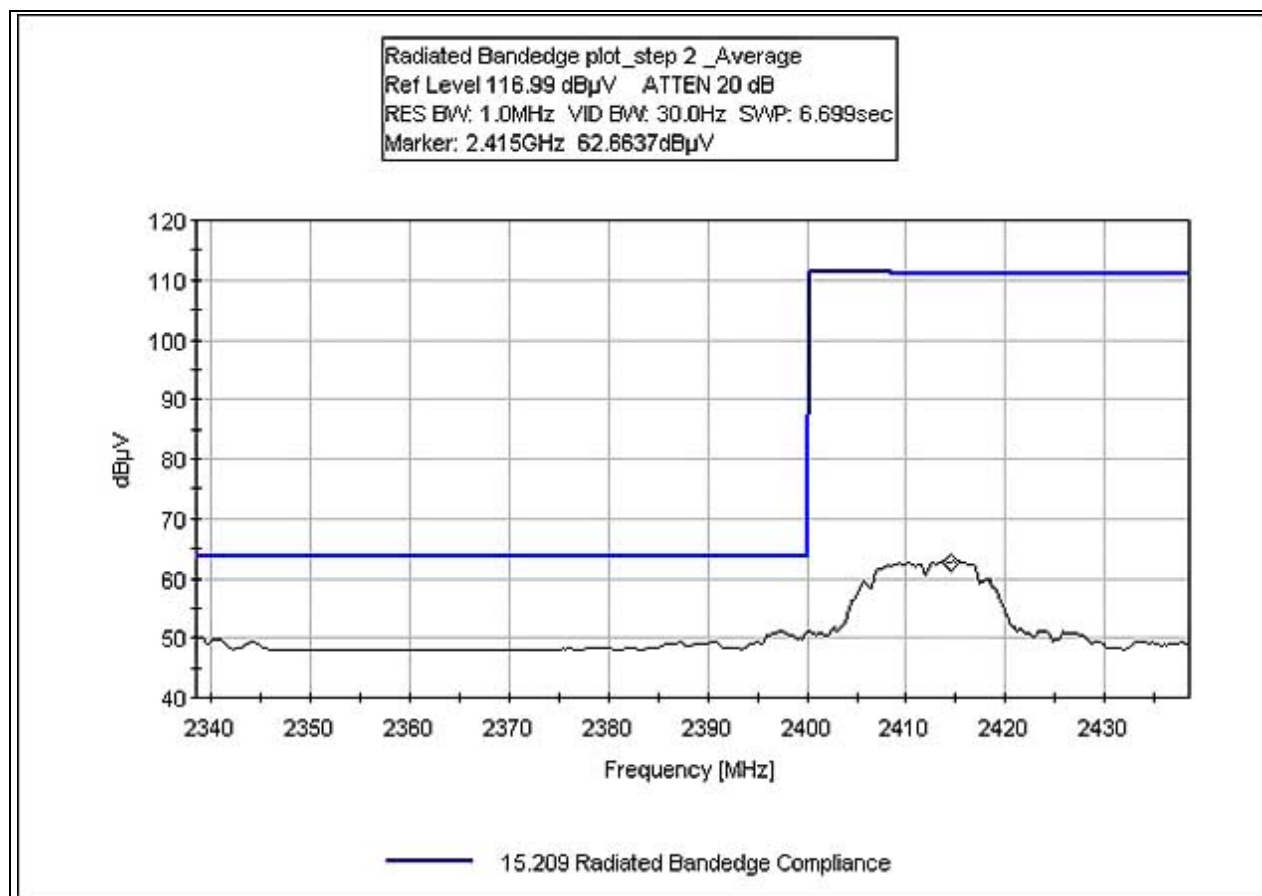
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 1
SHOWING COMPLIANCE USING THE MARKER DELTA METHOD**



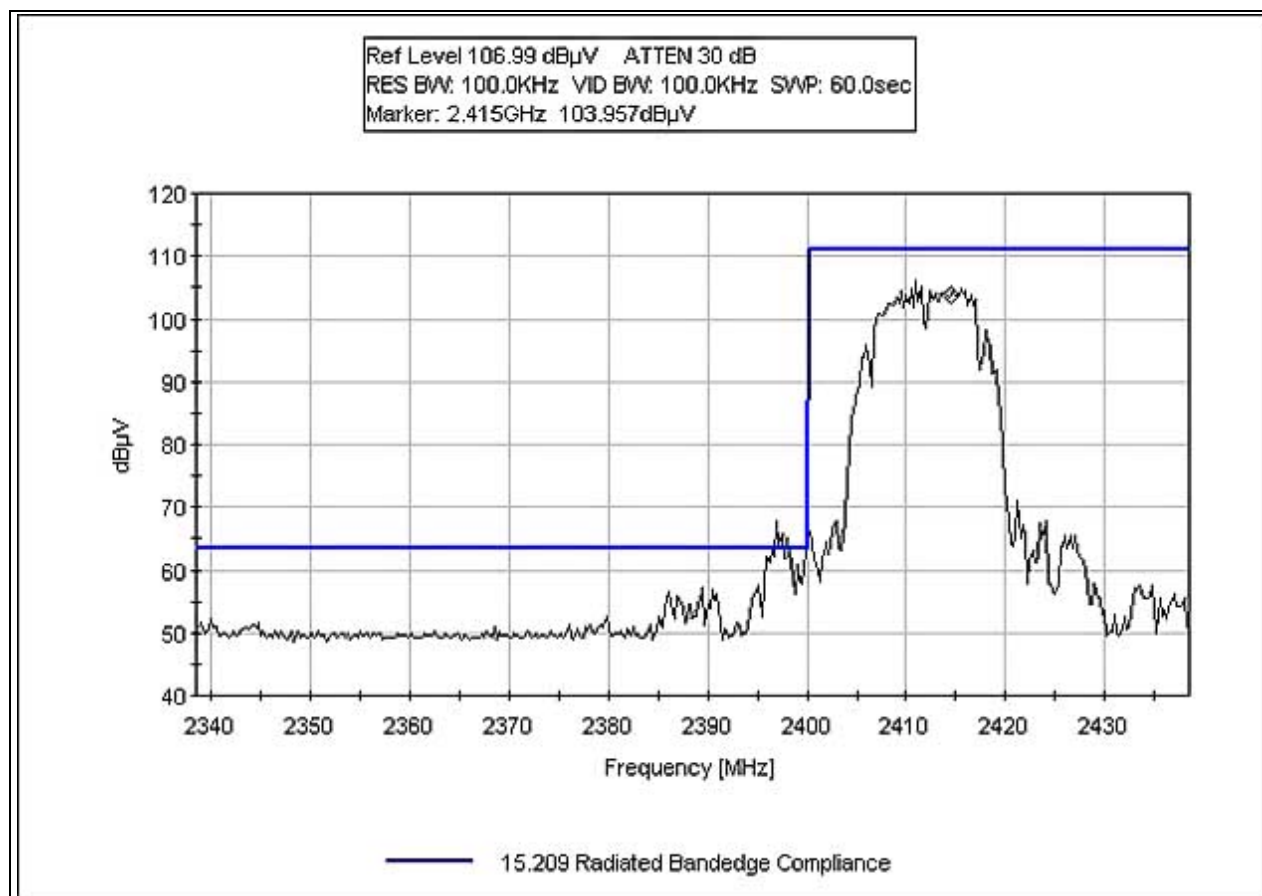
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 1 STEP 1
SHOWING MARKER DELTA METHOD USED**



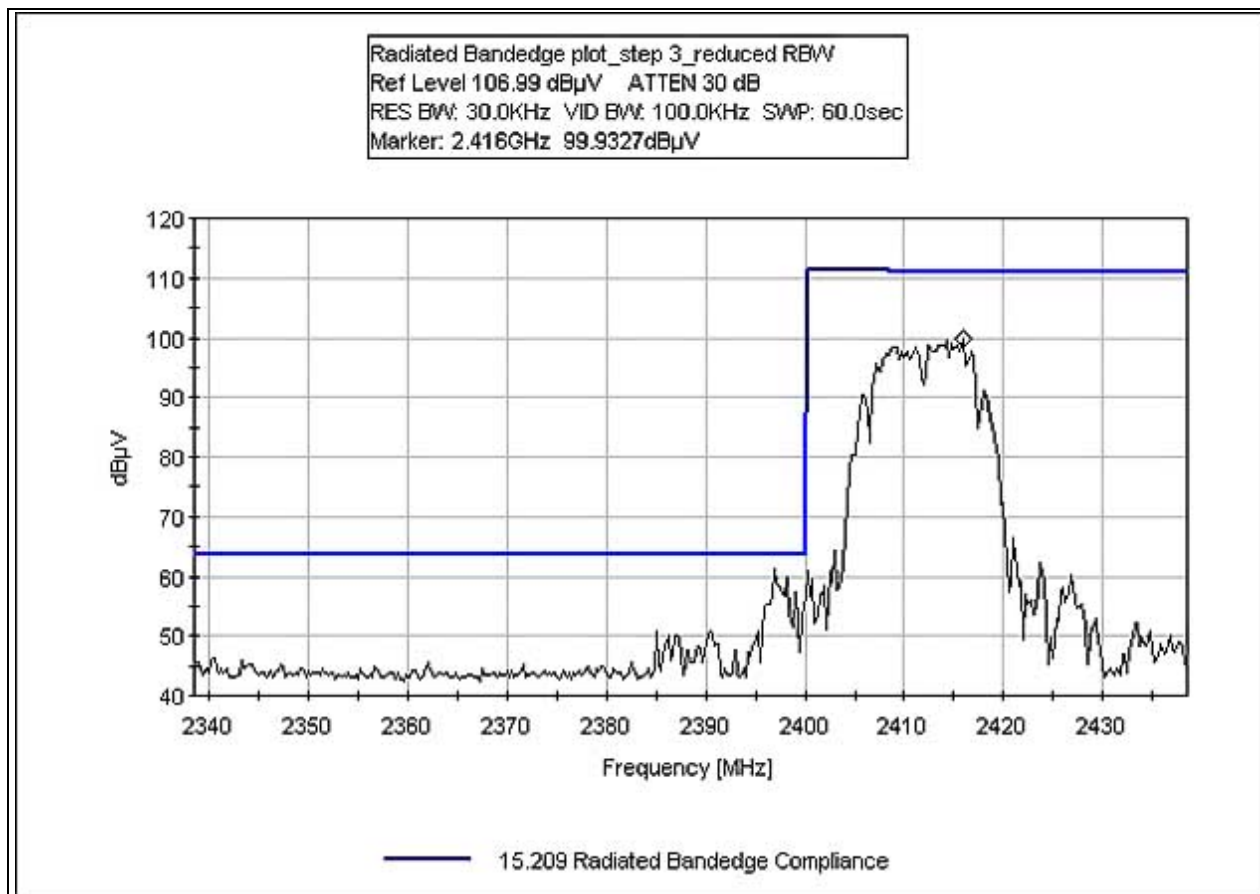
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 1 STEP 2
SHOWING MARKER DELTA METHOD USED**



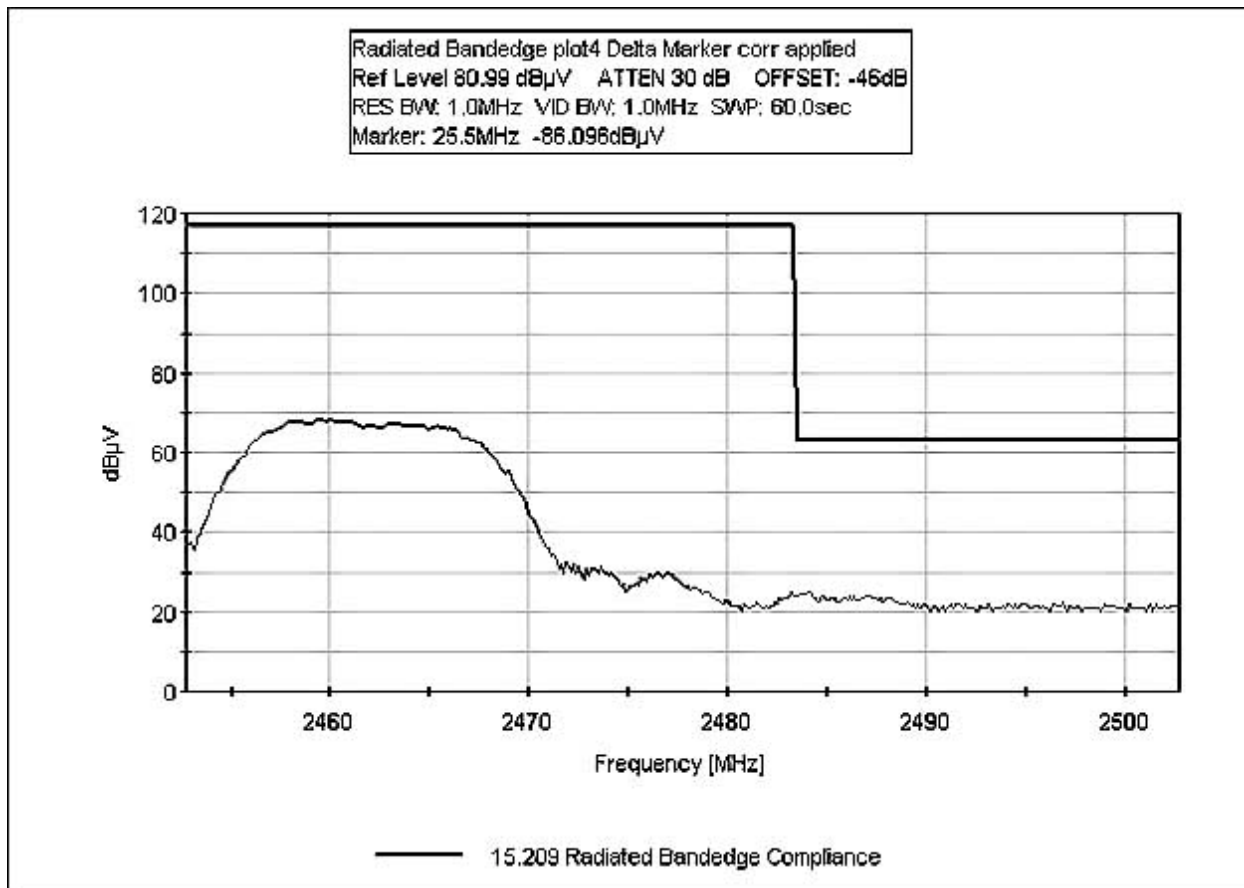
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 1 STEP 3 100 k
SHOWING MARKER DELTA METHOD USED**



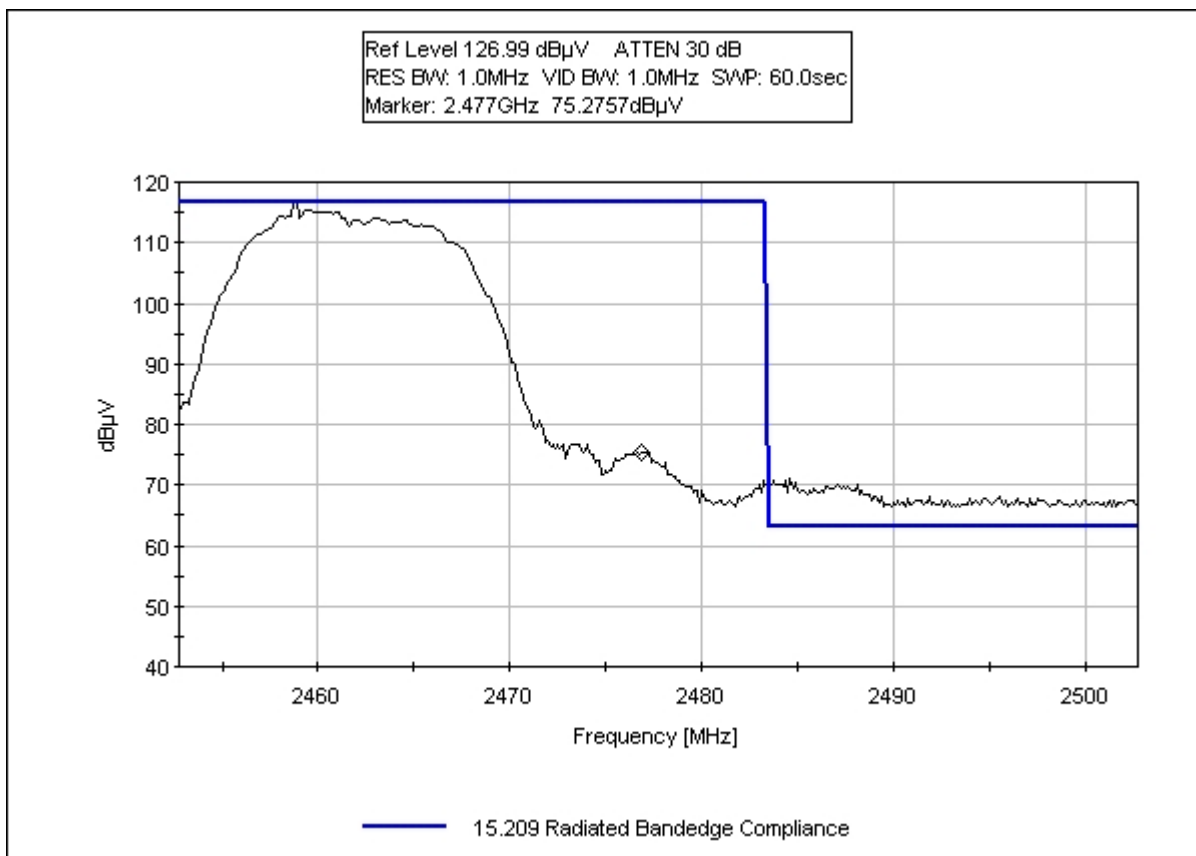
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 1 STEP 3 30 k
SHOWING MARKER DELTA METHOD USED**



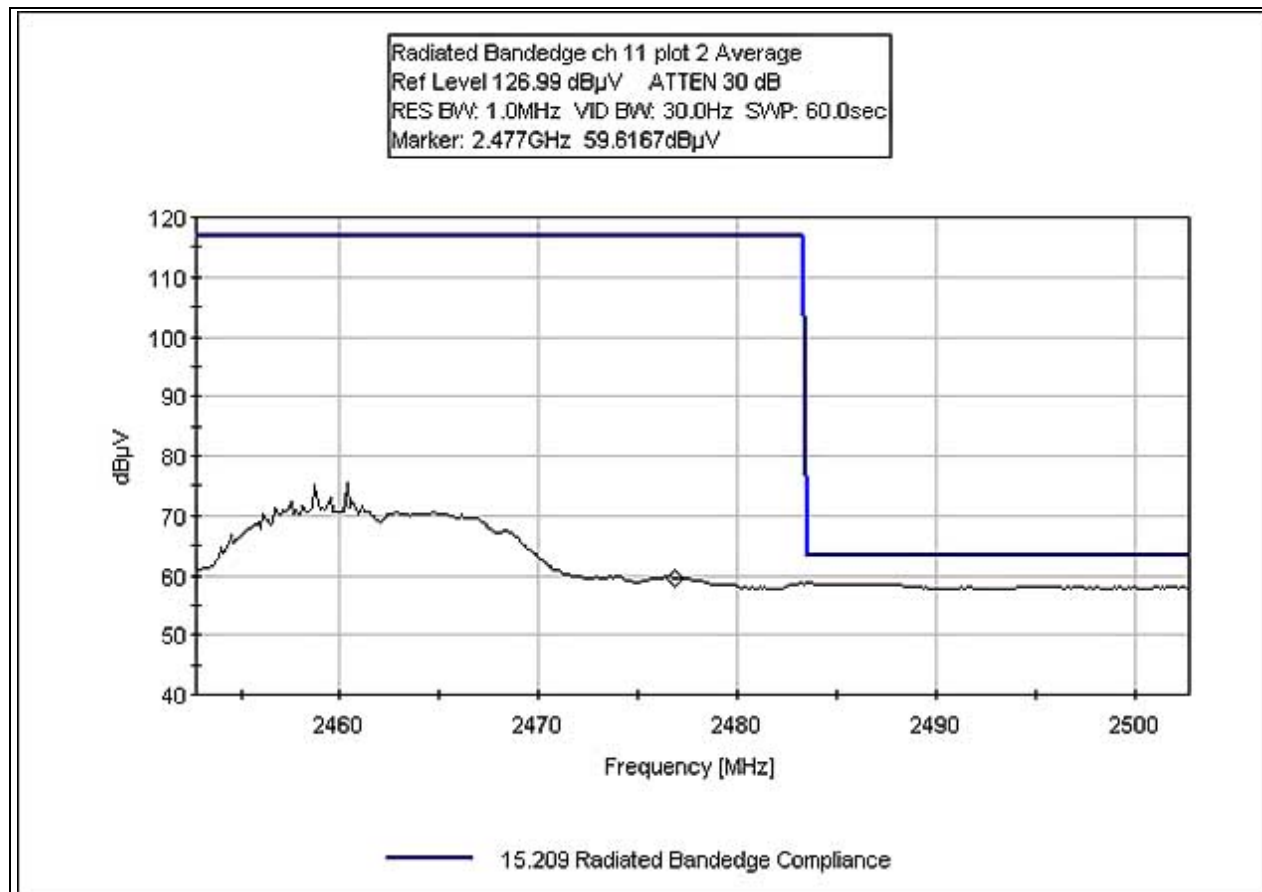
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 11
SHOWING COMPLIANCE USING THE MARKER DELTA METHOD**



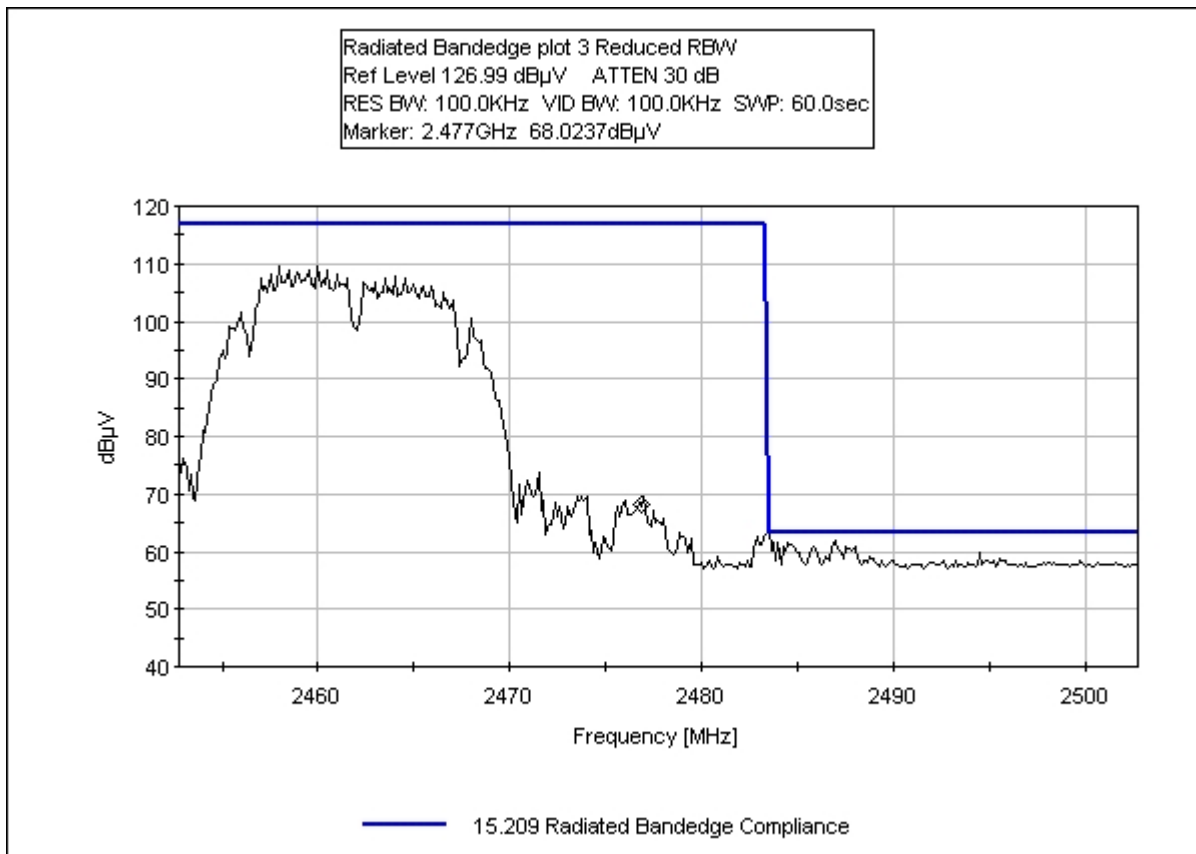
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 11 STEP 1
SHOWING MARKER DELTA METHOD USED**



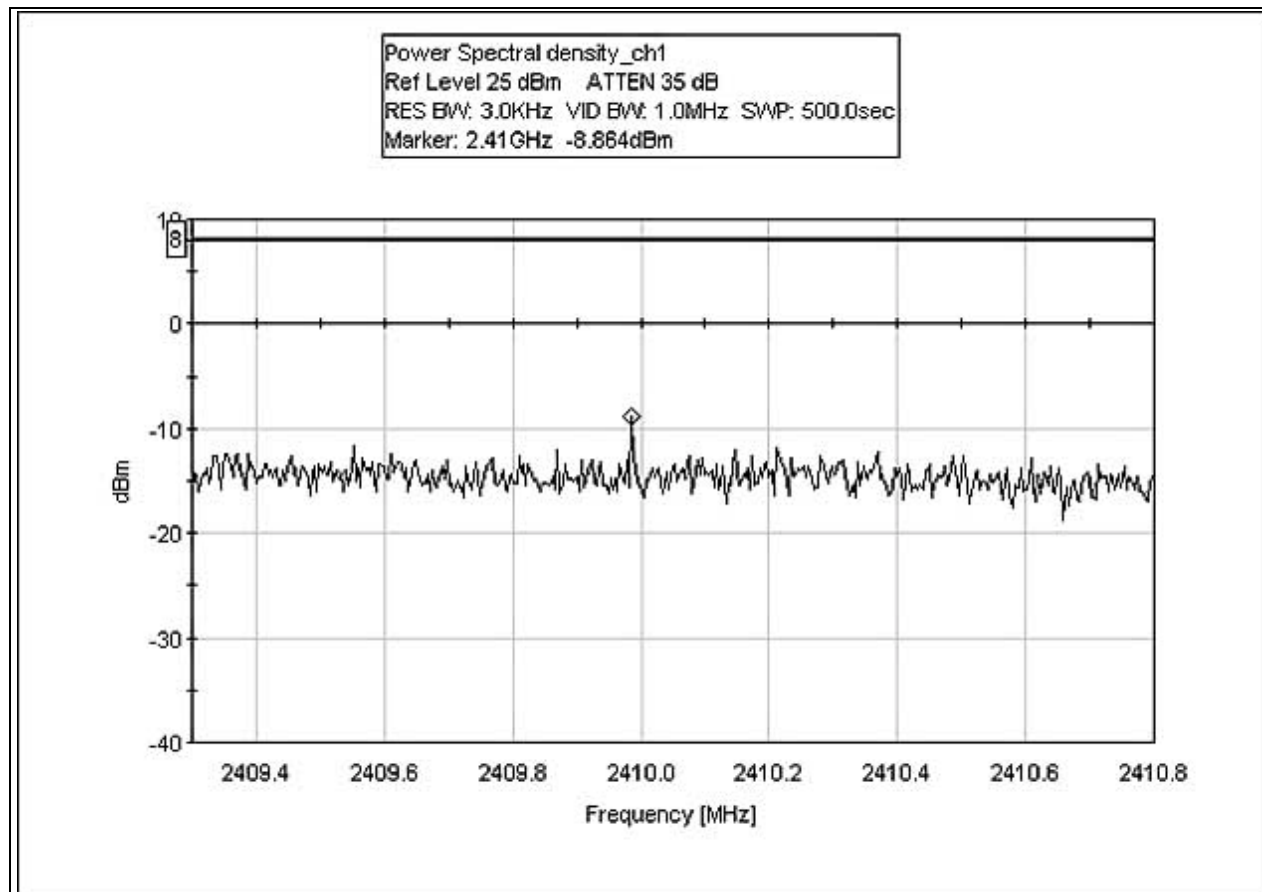
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 11 STEP 2
SHOWING MARKER DELTA METHOD USED**



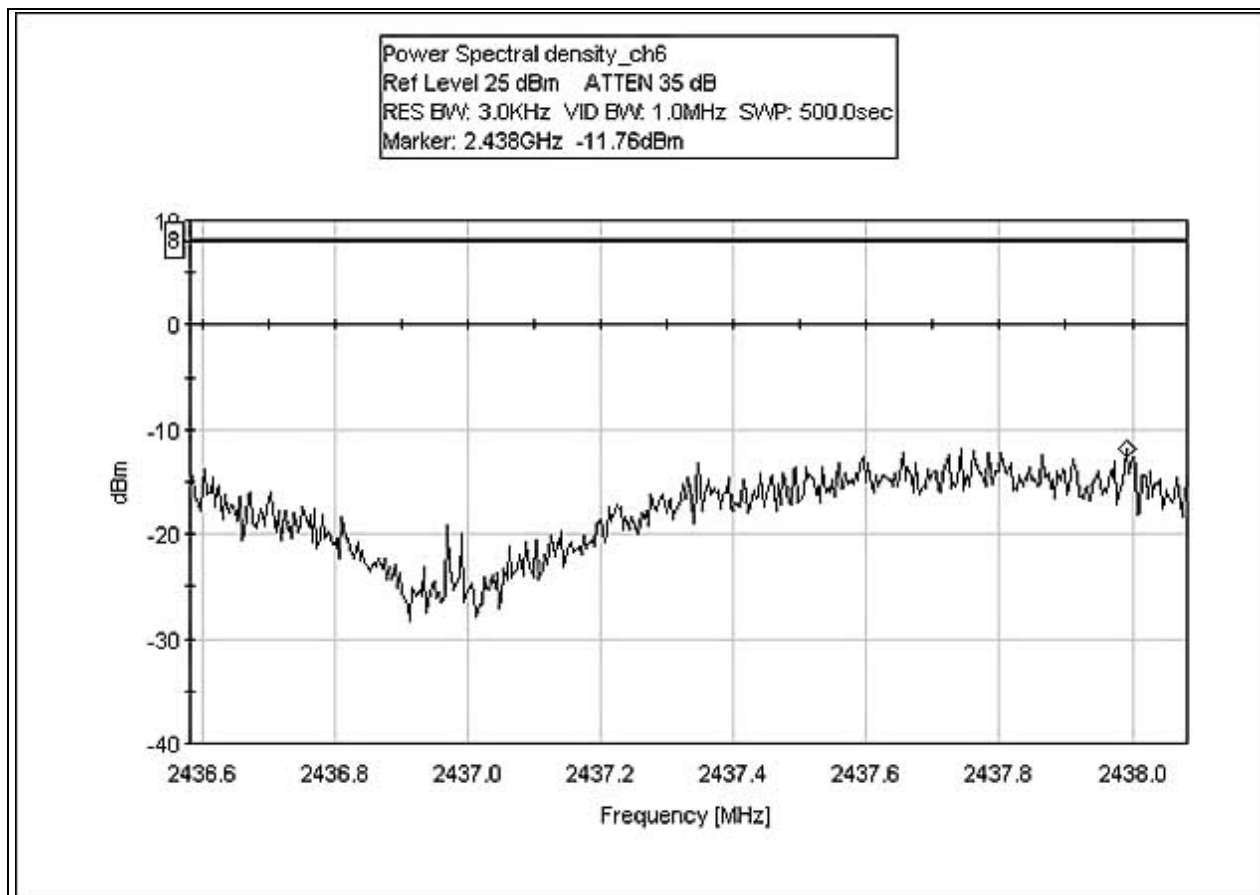
**FCC 15.247(c) RADIATED BANDEDGE CHANNEL 11 STEP 3 100k
SHOWING MARKER DELTA METHOD USED**



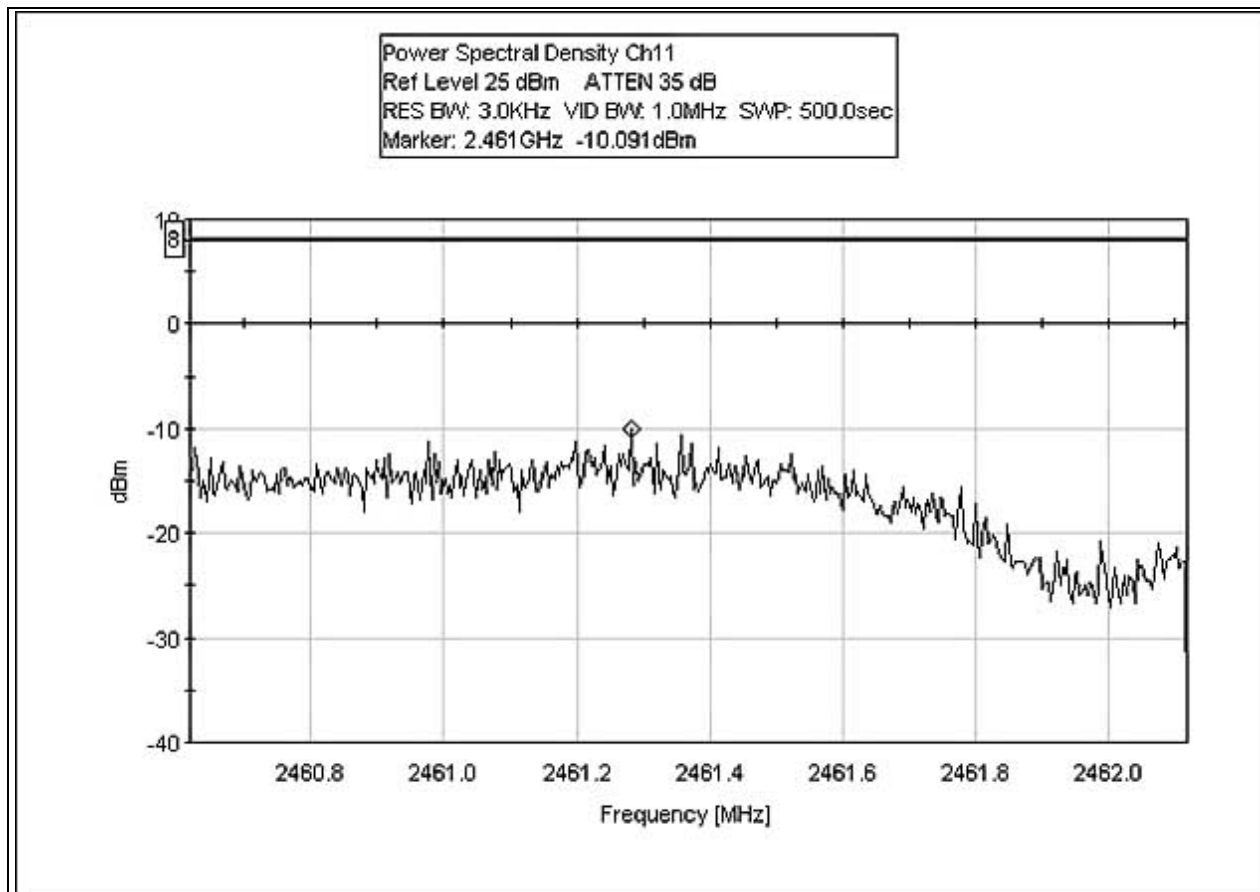
FCC 15.247(d) POWER SPECTRAL DENSITY CHANNEL 1



FCC 15.247(d) POWER SPECTRAL DENSITY CHANNEL 6



FCC 15.247(d) POWER SPECTRAL DENSITY CHANNEL 11



FCC 2.1093 MPE CALCULATIONS

Maximum Permissible Exposure Calculations

Calculations prepared for:
Motorola BCS
6450 Sequence Drive
San Diego, Ca 92121

Calculations prepared by:
E. Wong
110 N. Olinda Place
Brea, Ca 92823

Model Number: SBG 900 Rev.3
FCC Identification:

Fundamental Operating Frequency: 2412 MHz to 2462 MHz

Maximum Rated Output Power: 0.032 Watts (15.05 dBm)
Measured Maximum Output Power: 0.04 Watts (16.050 dBm)
(Antenna terminal, 2412 MHz)

MPE limit in accordance with FCC part 1.1311, table 1
EIRP = Maximum Rated Output Power (dBm) + Antenna Gain (dBi)
EIRP = 15.05 dBm + 2.5 dBi = 17.55 dBm (0.057 Watt)

EIRP = Maximum Measured Output Power (dBm) + Antenna Gain (dBi)
EIRP = 16.050 dBm + 2.5 dBi = 18.6 dBm (0.072Watt)

*Limit for Maximum permissible exposure: (B) Limit for General population/uncontrolled Exposure:
For the frequency range of 1500-100,000 MHz, the MPE is 1 (mW/cm²)*

EIRP (mW)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
57	20	0.0113	1.0000	PASS
72	20	0.0143	1.0000	PASS

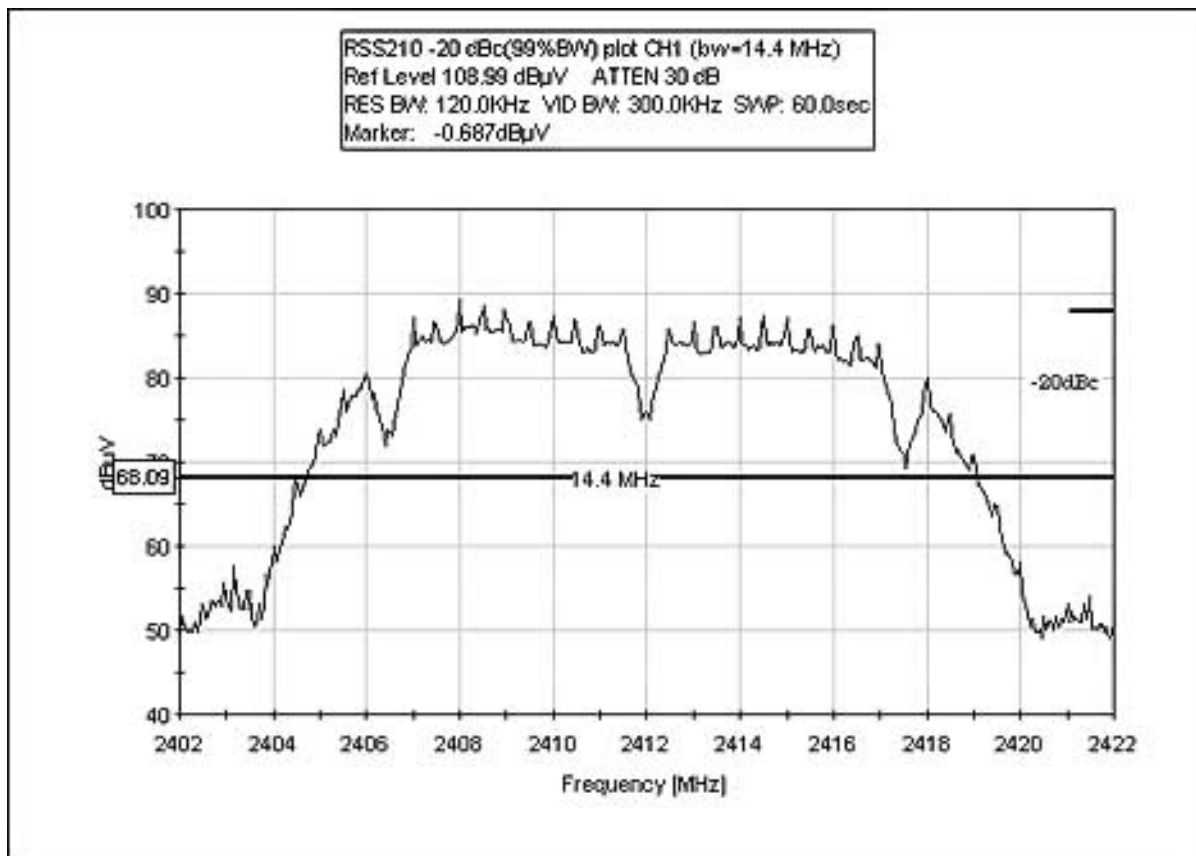
$$\text{Power Density (mW/cm}^2\text{)} = \frac{\text{EIRP}}{4 \cdot \pi \cdot d^2}$$

EIRP is given in mW
Distance (d) is given in centimeters

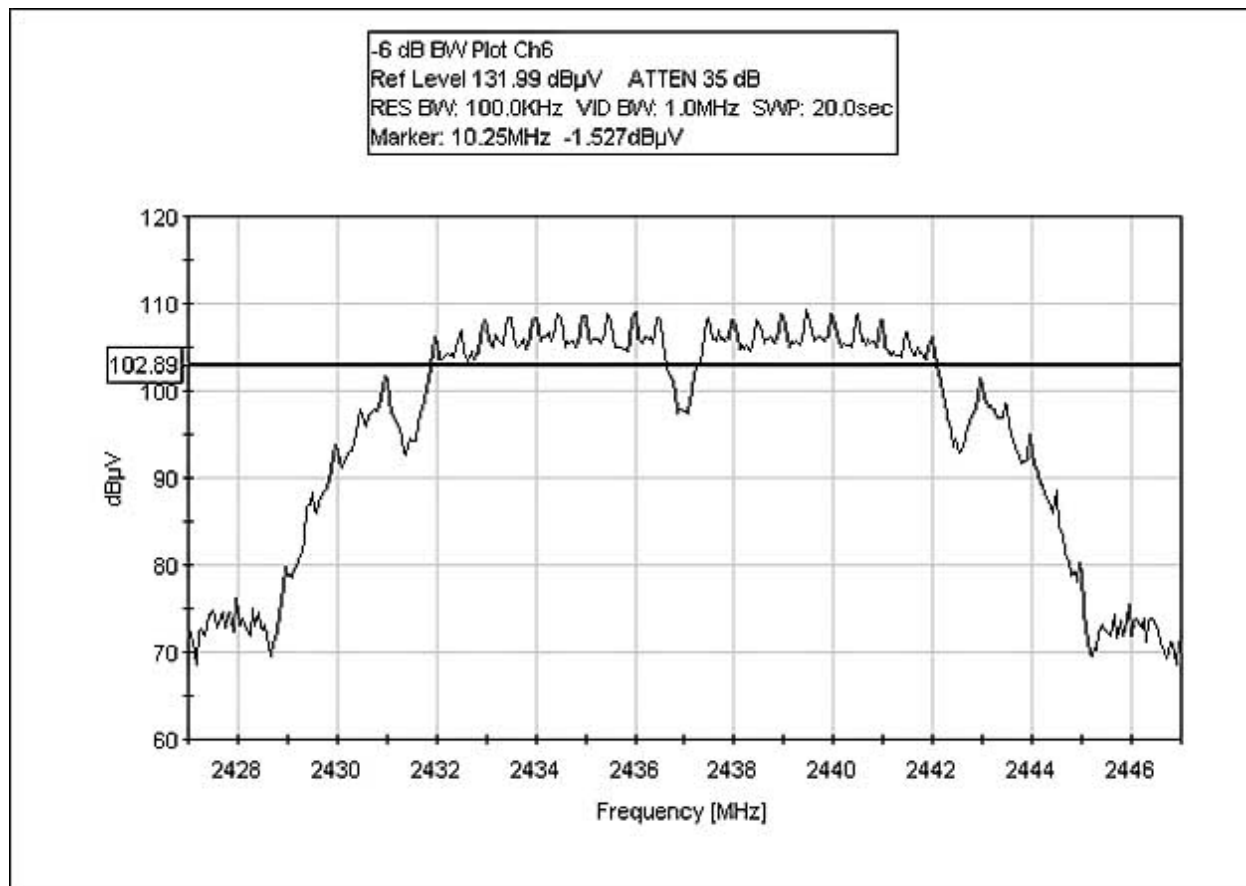
Under normal operating conditions, the antenna is designed to maintain a separation distance of 20 cm from all persons. As shown in the MPE results above, this device passes the limits specified in 1.1311 at a distance of 20 cm and at the rated output power of 0.032 Watts .

For the measured output power at the antenna terminal of 0.04 Watts, the EUT satisfies the requirement in the 1500 to 100000 MHz frequency range.

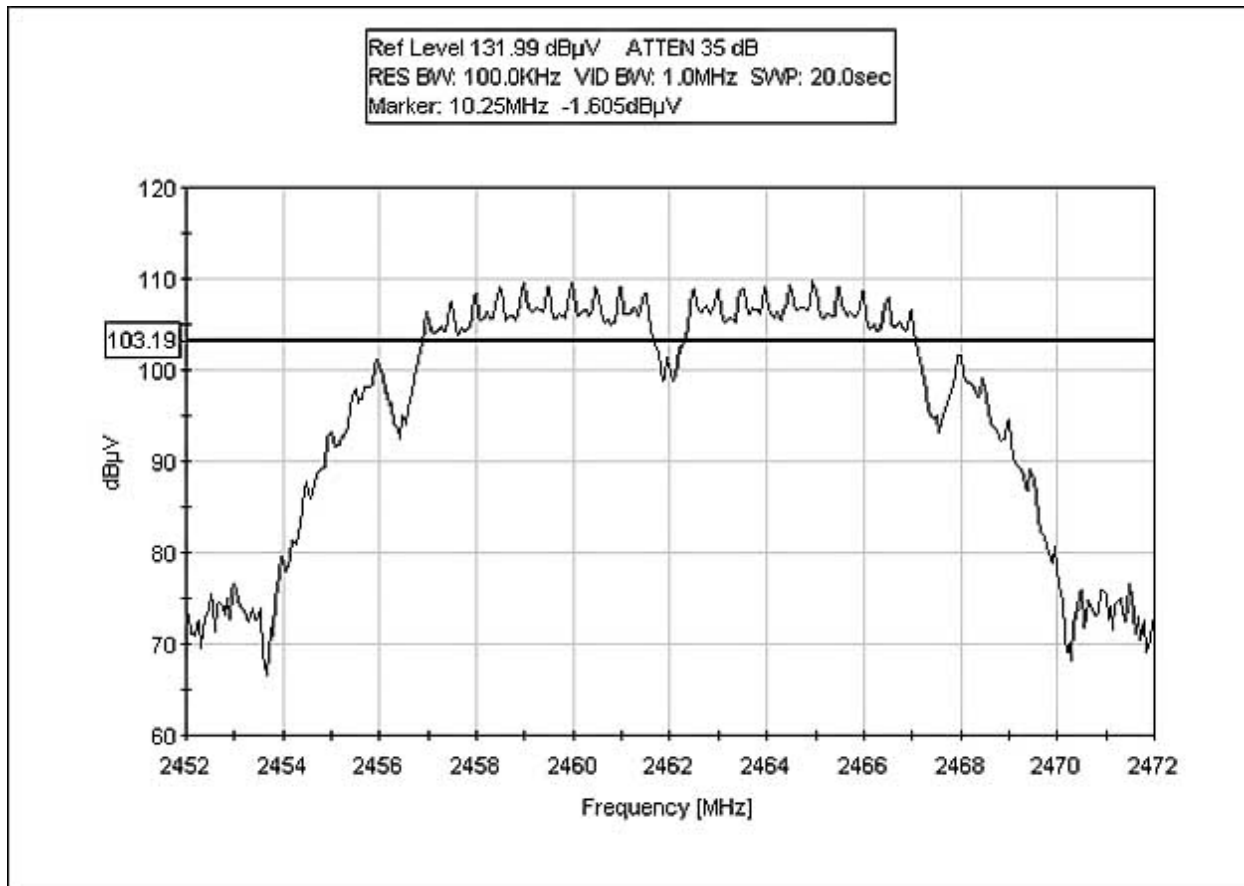
RSS 210 -20dBc BANDWIDTH CHANNEL 1



RSS 210 -20dBc BANDWIDTH CHANNEL 6



RSS 210 -20dBc BANDWIDTH CHANNEL 11



TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.

The relative humidity was between 20% and 75%.

EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available I/O ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. I/O cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The radiated and conducted emissions data of the EUT was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in Table A.

Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dB μ V/m, the spectrum analyzer reading in dB μ V was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS		
	Meter reading	(dB μ V)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dB μ V/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the EUT. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. For frequencies from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. All antennas were located at a distance of 3 meters from the edge of the EUT. Conducted emissions tests required the use of the FCC type LISNs.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dB μ V, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the Tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. One wall of the room where the EUT was located has a minimum 2 meter by 2 meter conductive plane. The EUT was mounted on the wooden table 40 cm away from the conductive plane, and 80 cm from any other conductive surface.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were 50 μ H/+50 ohms. Above 150 kHz, a 0.15 μ F series capacitor was added in-line prior to connecting the analyzer to restore the proper impedance for the range. A 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 500 kHz, and 500 kHz to 30 MHz. All readings within 20 dB of the limit were recorded, and those within 6 dB of the limit were examined with additional measurements using a slower sweep time.

Antenna Conducted Emissions

For measuring the signal strength on the RF output port of the EUT, the spectrum analyzer was connected directly to the EUT. The sweep time of the analyzer was adjusted so that the spectrum analyzer readings were always in a calibrated range. All readings within 20 dB of the limit were recorded.

Radiated Emissions

The EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable as needed. The test engineer maximized the readings with respect to the table rotation and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.

APPENDIX A

TEST SETUP PHOTOGRAPHS

FCC 15.31(e) VOLTAGE VARIATIONS



PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



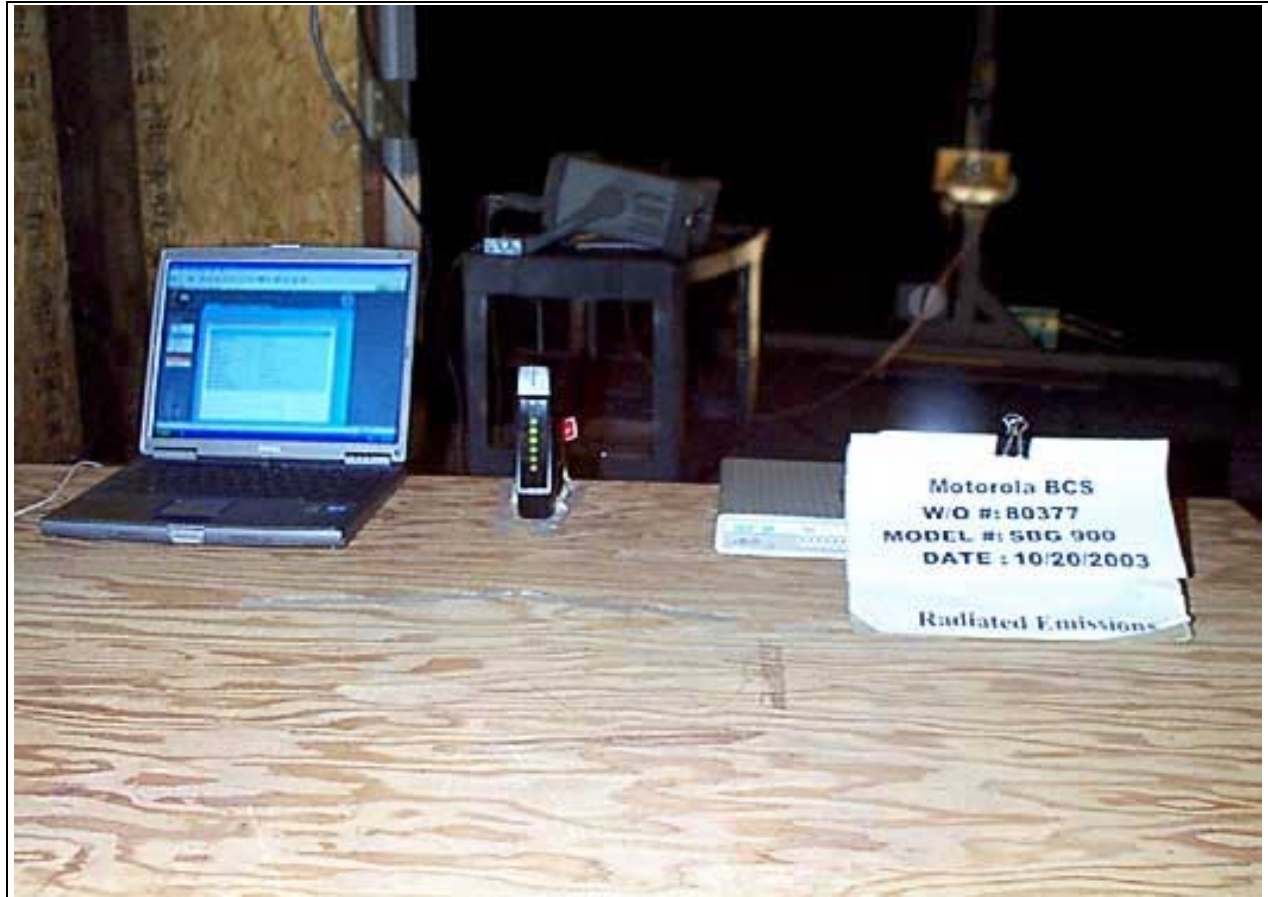
Mains Conducted Emissions - Front View

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



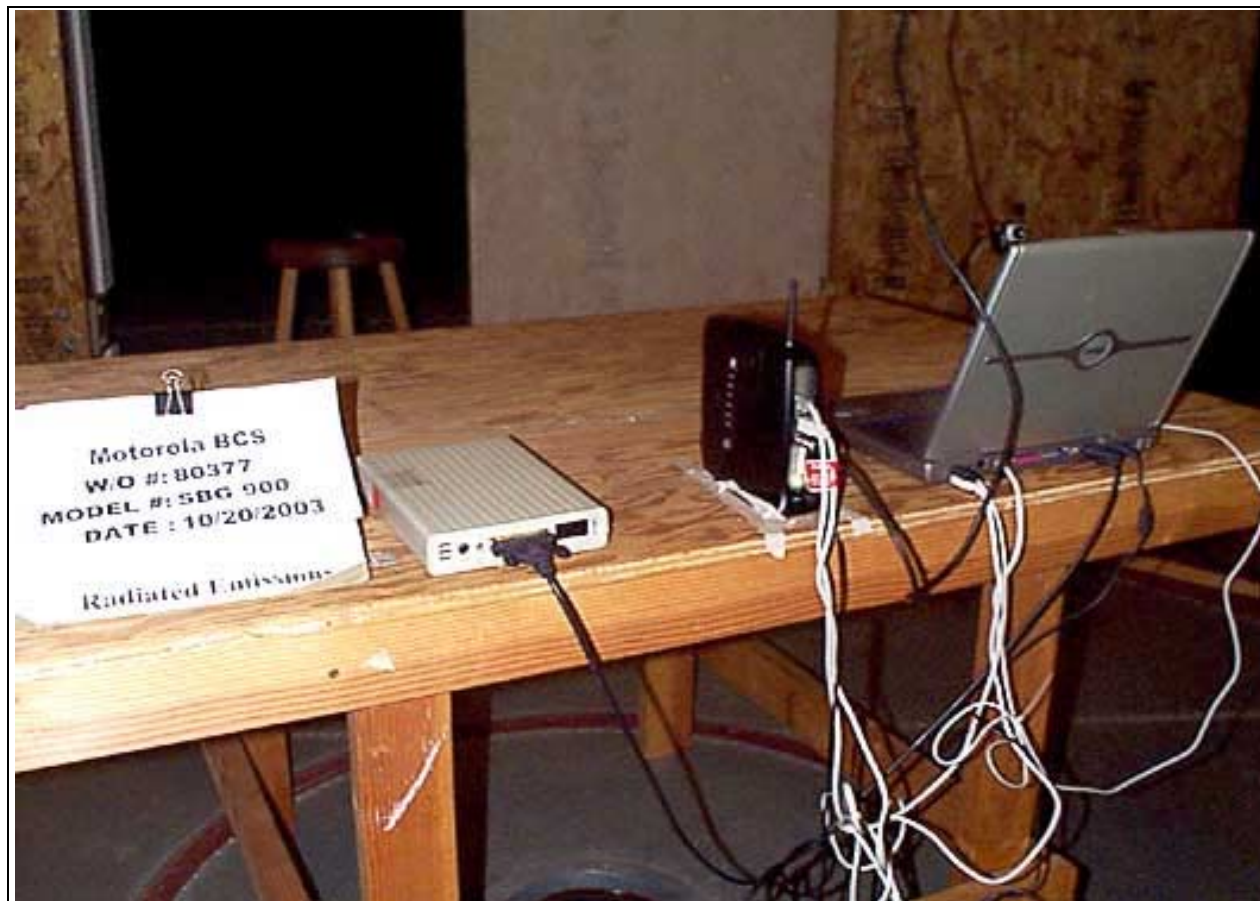
Mains Conducted Emissions - Side View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View

PHOTOGRAPH SHOWING DIRECT CONNECT EMISSIONS



FCC 15.247(a)(2), 15.247(c) and RSS 210

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions – FCC 15.247(c)

APPENDIX B

TEST EQUIPMENT LIST

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	00312	HP	8568A	2106A02107	073102	073104
Spectrum Analyzer Display	00312	HP	8568A	2049A01287	073102	073104
Quasi Peak Adapter (Site C)	02325	HP	85650A	2521A00932	073102	073104
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	033103	033104
FCC 15.205, FCC15.109, FCC 15.247(C) 30 – 1000MHz radiated spurious emissions						
Bilog Antenna	00851	Schaffner-Chase EMC	CBL6111C	2629	062603	062604
Pre-amp	02320	HP	8447D	2443A03665	010403	010404
Antenna cable from bulkhead to antenna	N/A	Belden	9268	Cable #6	051203	051204
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#19	100203	100204
Antenna cable (10 meter site D)	NA	Andrew	LDF1-50	Cable#17	100203	100204
Preamp to SA Cable (3 feet)	NA	Pasternack	E100316-I	Cable #22	100603	100604
FCC 15.205, FCC 15.247(C) 1- 18 GHz radiated spurious emissions						
Horn Antenna	01646	EMCO	3115	9603-4683	042503	042505
Microwave Pre-amp	00787	HP	83017A	3123A00282	042303	042305
Horn Antenna	0849	EMCO	3115	6246	091002	091004
Microwave Pre-amp	00786	HP	83017A	3123A00281	091102	091104
12' SMA Cable	01337	W.L.Gore	NA	244922	121602	121603
FCC 15.205, FCC 15.247(C) 18-25 GHz rad spur						
Horn Antenna	02112	HP	84125-80008	961178-005	070103	070105
FCC 15.205, FCC 15.247(C) 9kHz-30 MHz radiated spurious emissions						
Magnetic Loop Antenna	00314	Emco	6502	2014	072302	072304

FCC 15.31(e) voltage variations

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	033103	033104
Programmable Power Source	01695/ 01696	Pacific Power	345AMX / UPC32	250 / 245	052203	052204

15.247 (b) Peak power measurement, Power Spectral Density, 15.247(c) conducted spurious emissions, RSS210 -20 dBc

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	033103	033104

Conducted Emissions

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	00312	HP	8568A	2106A02107	073102	073104
Spectrum Analyzer Display	00312	HP	8568A	2049A01287	073102	073104
LISN	00848	EMCO	3816/2	1102	010403	010404
LISN	00847	EMCO	3816/2NM	1104	010403	010404

APPENDIX C
MEASUREMENT DATA SHEETS

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**

Specification: **FCC 15.109 Class B**

Work Order #: **80377**

Date: 10/20/2003

Test Type: **Maximized Emissions**

Time: 18:33:31

Equipment: **Wireless Cable Modem**

Sequence#: 11

Manufacturer: Motorola BCS

Tested By: Eddie Wong

Model: SBG 900 Rev.3

S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Frequency range of measurement = 30 MHz to 1 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog SN2629 062604	T2=Cable Heliax #17 84ft(10 meter)
T3=Cable#22 BNC (preamp to SA)	T4=Cable #6 (Ant to Bulkhead) 100204
T5=Preamp 8447D 02320 (site D) 010404	T6=-----
T7=Horn 6246_091004	T8=Cable P1510 13' GoreTex SMA
T9=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T10=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8					
	MHz	dB μ V	T9	T10			Table	dB μ V/m	dB μ V/m	dB	Ant
			dB	dB	dB	dB					
1	749.990M	42.5	+21.5	+3.1	+0.7	+2.9	+0.0	44.6	46.0	-1.5	Vert
	QP		-26.1								
^	749.990M	45.3	+21.5	+3.1	+0.7	+2.9	+0.0	47.4	46.0	+1.4	Vert
			-26.1								
3	899.982M	39.6	+23.3	+3.3	+0.6	+3.3	+0.0	44.0	46.0	-2.0	Vert
	QP		-26.1								
^	900.006M	41.7	+23.3	+3.3	+0.6	+3.3	+0.0	46.1	46.0	+0.1	Vert
			-26.1								
5	800.006M	39.7	+22.1	+3.3	+0.4	+3.0	+0.0	42.9	46.0	-3.1	Vert
	QP		-25.6								
6	750.004M	39.2	+21.5	+3.1	+0.7	+2.9	+0.0	41.3	46.0	-4.7	Horiz
	QP		-26.1								
^	750.004M	40.2	+21.5	+3.1	+0.7	+2.9	+0.0	42.3	46.0	-3.7	Horiz
			-26.1								
8	999.984M	42.9	+24.8	+3.6	+0.6	+3.5	+0.0	49.1	54.0	-4.9	Vert
	QP		-26.3								
^	999.984M	44.6	+24.8	+3.6	+0.6	+3.5	+0.0	50.8	54.0	-3.2	Vert
			-26.3								
10	900.001M	36.5	+23.3	+3.3	+0.6	+3.3	+0.0	40.9	46.0	-5.1	Horiz
	QP		-26.1								
^	899.998M	38.2	+23.3	+3.3	+0.6	+3.3	+0.0	42.6	46.0	-3.4	Horiz
			-26.1								

12	849.987M QP	36.8	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	40.9	46.0	-5.1	Vert
^	849.987M	38.9	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	43.0	46.0	-3.0	Vert
^	849.989M	35.3	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	39.4	46.0	-6.6	Vert
15	849.994M	36.0	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	40.1	46.0	-5.9	Horiz
16	800.015M QP	36.5	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	39.7	46.0	-6.3	Vert
^	800.006M	41.2	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	44.4	46.0	-1.6	Vert
^	800.015M	39.3	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	42.5	46.0	-3.5	Vert
19	104.746M QP	51.3	+10.5 -27.2	+1.1	+0.2	+1.0	+0.0	36.9	43.5	-6.6	Vert
^	104.746M	53.0	+10.5 -27.2	+1.1	+0.2	+1.0	+0.0	38.6	43.5	-4.9	Vert
21	649.991M	39.3	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	39.2	46.0	-6.8	Vert
22	107.296M QP	50.8	+10.7 -27.1	+1.1	+0.2	+1.0	+0.0	36.7	43.5	-6.8	Vert
^	107.296M	53.5	+10.7 -27.1	+1.1	+0.2	+1.0	+0.0	39.4	43.5	-4.1	Vert
24	800.005M	35.7	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	38.9	46.0	-7.1	Horiz
25	103.337M	50.6	+10.4 -27.2	+1.1	+0.2	+1.0	+0.0	36.1	43.5	-7.4	Vert
26	99.984M	50.8	+10.2 -27.2	+1.1	+0.2	+1.0	+0.0	36.1	43.5	-7.4	Vert
27	500.001M	41.8	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	38.1	46.0	-7.9	Vert
28	950.011M	32.3	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	37.8	46.0	-8.2	Vert

29	58.128M	50.2	+6.5 -27.1	+0.9	+0.2	+0.7	+0.0	31.4	40.0	-8.6	Vert
30	700.017M	36.4	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	37.2	46.0	-8.8	Horiz
31	587.975M	38.6	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	37.1	46.0	-8.9	Horiz
32	399.985M	43.1	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	37.0	46.0	-9.0	Horiz
33	450.002M	42.0	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	37.0	46.0	-9.0	Vert
34	114.537M	48.0	+11.2 -27.1	+1.2	+0.2	+1.0	+0.0	34.5	43.5	-9.0	Vert
35	650.005M	36.8	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	36.7	46.0	-9.3	Horiz
36	950.030M	30.6	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	36.1	46.0	-9.9	Horiz
37	269.115M	45.7	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	35.5	46.0	-10.5	Horiz
38	999.998M	37.3	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	43.5	54.0	-10.5	Horiz
39	399.999M	41.6	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	35.5	46.0	-10.5	Vert
40	349.992M	42.8	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	35.3	46.0	-10.7	Horiz
41	549.996M	37.8	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	35.2	46.0	-10.8	Horiz
42	549.980M	37.7	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	35.1	46.0	-10.9	Vert
43	999.976M	36.0	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	42.2	54.0	-11.8	Horiz
44	499.991M	37.9	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	34.2	46.0	-11.8	Horiz
45	134.202M	44.1	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	31.4	43.5	-12.1	Vert

46	587.966M	35.3	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	33.8	46.0	-12.2	Vert
47	515.432M	36.9	+18.5 -27.0	+2.5	+0.4	+2.3	+0.0	33.6	46.0	-12.4	Vert
48	702.243M	32.6	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	33.4	46.0	-12.6	Horiz
49	449.997M	38.4	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	33.4	46.0	-12.6	Horiz
50	137.220M	43.6	+11.8 -27.1	+1.3	+0.2	+1.1	+0.0	30.9	43.5	-12.6	Vert
51	349.995M	40.7	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.2	46.0	-12.8	Vert
52	350.013M	40.5	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.0	46.0	-13.0	Vert
53	479.987M	36.7	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	32.6	46.0	-13.4	Vert
54	142.387M	42.9	+11.7 -27.1	+1.3	+0.2	+1.1	+0.0	30.1	43.5	-13.4	Vert
55	250.028M	43.1	+12.7 -26.9	+1.8	+0.3	+1.5	+0.0	32.5	46.0	-13.5	Horiz
56	479.996M	36.1	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	32.0	46.0	-14.0	Horiz
57	299.997M	41.4	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	32.0	46.0	-14.0	Horiz
58	768.852M	29.0	+21.7 -25.9	+3.2	+0.6	+2.9	+0.0	31.5	46.0	-14.5	Vert
59	678.399M	31.1	+20.7 -26.4	+2.9	+0.5	+2.7	+0.0	31.5	46.0	-14.5	Vert
60	200.002M	43.6	+9.0 -26.9	+1.5	+0.2	+1.4	+0.0	28.8	43.5	-14.7	Vert
61	132.820M	41.5	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	28.8	43.5	-14.7	Vert
62	981.989M	33.2	+24.5 -26.2	+3.6	+0.6	+3.5	+0.0	39.2	54.0	-14.8	Vert

63	293.959M	40.5	+13.3 -26.7	+1.8	+0.4	+1.7	+0.0	31.0	46.0	-15.0	Horiz
64	668.160M	30.8	+20.6 -26.5	+3.0	+0.5	+2.6	+0.0	31.0	46.0	-15.0	Vert
65	672.751M	30.6	+20.6 -26.4	+3.0	+0.5	+2.6	+0.0	30.9	46.0	-15.1	Vert
66	661.747M	30.7	+20.5 -26.5	+3.0	+0.5	+2.6	+0.0	30.8	46.0	-15.2	Vert
67	672.755M	30.3	+20.6 -26.4	+3.0	+0.5	+2.6	+0.0	30.6	46.0	-15.4	Horiz
68	534.526M	33.4	+18.8 -27.1	+2.5	+0.5	+2.3	+0.0	30.4	46.0	-15.6	Vert
69	726.192M	28.4	+21.2 -26.1	+3.0	+0.6	+2.8	+0.0	29.9	46.0	-16.1	Horiz
70	386.544M	36.1	+16.0 -26.9	+2.2	+0.4	+1.9	+0.0	29.7	46.0	-16.3	Horiz
71	702.241M	28.9	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	29.7	46.0	-16.3	Vert
72	203.517M	41.5	+9.3 -26.9	+1.5	+0.2	+1.4	+0.0	27.0	43.5	-16.5	Horiz
73	658.011M	29.4	+20.5 -26.5	+3.0	+0.5	+2.6	+0.0	29.5	46.0	-16.5	Vert
74	171.804M	41.4	+9.7 -27.1	+1.4	+0.3	+1.2	+0.0	26.9	43.5	-16.6	Horiz
75	100.003M	41.6	+10.2 -27.2	+1.1	+0.2	+1.0	+0.0	26.9	43.5	-16.6	Horiz
76	375.009M	35.8	+15.6 -26.9	+2.2	+0.4	+1.9	+0.0	29.0	46.0	-17.0	Vert
77	455.994M	33.7	+17.4 -27.1	+2.3	+0.4	+2.1	+0.0	28.8	46.0	-17.2	Vert
78	383.997M	35.0	+15.9 -26.9	+2.2	+0.4	+1.9	+0.0	28.5	46.0	-17.5	Vert
79	504.000M	32.0	+18.3 -26.9	+2.4	+0.4	+2.2	+0.0	28.4	46.0	-17.6	Vert

80	299.998M	37.6	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	28.2	46.0	-17.8	Vert
81	321.942M	36.6	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	28.1	46.0	-17.9	Horiz
82	133.623M	38.0	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	25.3	43.5	-18.2	Horiz
83	429.528M	33.3	+16.9 -27.1	+2.2	+0.4	+2.1	+0.0	27.8	46.0	-18.2	Vert
84	332.830M	35.8	+14.4 -26.8	+2.0	+0.4	+1.8	+0.0	27.6	46.0	-18.4	Vert
85	287.506M	37.2	+13.2 -26.7	+1.8	+0.4	+1.6	+0.0	27.5	46.0	-18.5	Vert
86	370.839M	34.2	+15.5 -26.9	+2.2	+0.4	+1.9	+0.0	27.3	46.0	-18.7	Vert
87	611.927M	27.9	+20.0 -26.7	+2.7	+0.5	+2.5	+0.0	26.9	46.0	-19.1	Horiz
88	379.175M	33.5	+15.8 -26.9	+2.2	+0.4	+1.9	+0.0	26.9	46.0	-19.1	Vert
89	324.992M	35.3	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	26.9	46.0	-19.1	Vert
90	248.766M	37.4	+12.6 -26.9	+1.8	+0.3	+1.5	+0.0	26.7	46.0	-19.3	Horiz
91	324.985M	34.9	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	26.5	46.0	-19.5	Horiz
92	359.998M	33.6	+15.2 -26.8	+2.1	+0.4	+1.8	+0.0	26.3	46.0	-19.7	Vert
93	440.000M	31.2	+17.1 -27.1	+2.3	+0.4	+2.1	+0.0	26.0	46.0	-20.0	Horiz
94	419.998M	31.7	+16.7 -27.0	+2.2	+0.4	+2.0	+0.0	26.0	46.0	-20.0	Vert
95	275.010M	35.9	+13.1 -26.8	+1.8	+0.3	+1.5	+0.0	25.8	46.0	-20.2	Horiz
96	580.001M	27.5	+19.6 -26.9	+2.6	+0.5	+2.5	+0.0	25.8	46.0	-20.2	Vert

97	407.981M	31.0	+16.5 -27.0	+2.2	+0.4	+2.0	+0.0	25.1	46.0	-20.9	Vert
98	329.168M	32.8	+14.3 -26.8	+2.0	+0.4	+1.8	+0.0	24.5	46.0	-21.5	Vert
99	439.076M	29.6	+17.1 -27.1	+2.3	+0.4	+2.1	+0.0	24.4	46.0	-21.6	Vert
100	312.515M	33.2	+13.8 -26.7	+1.9	+0.4	+1.7	+0.0	24.3	46.0	-21.7	Horiz
101	293.496M	33.7	+13.3 -26.7	+1.8	+0.4	+1.6	+0.0	24.1	46.0	-21.9	Vert
102	320.846M	32.2	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	23.7	46.0	-22.3	Vert
103	381.804M	29.5	+15.8 -26.9	+2.2	+0.4	+1.9	+0.0	22.9	46.0	-23.1	Vert
104	312.503M	31.7	+13.8 -26.7	+1.9	+0.4	+1.7	+0.0	22.8	46.0	-23.2	Vert
105	319.997M	30.3	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	21.8	46.0	-24.2	Vert

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.107/15.207 Class B COND [AVE]**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Conducted Emissions** Time: 16:33:30
 Equipment: **Wireless Cable Modem** Sequence#: 20
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3 120V 60Hz
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

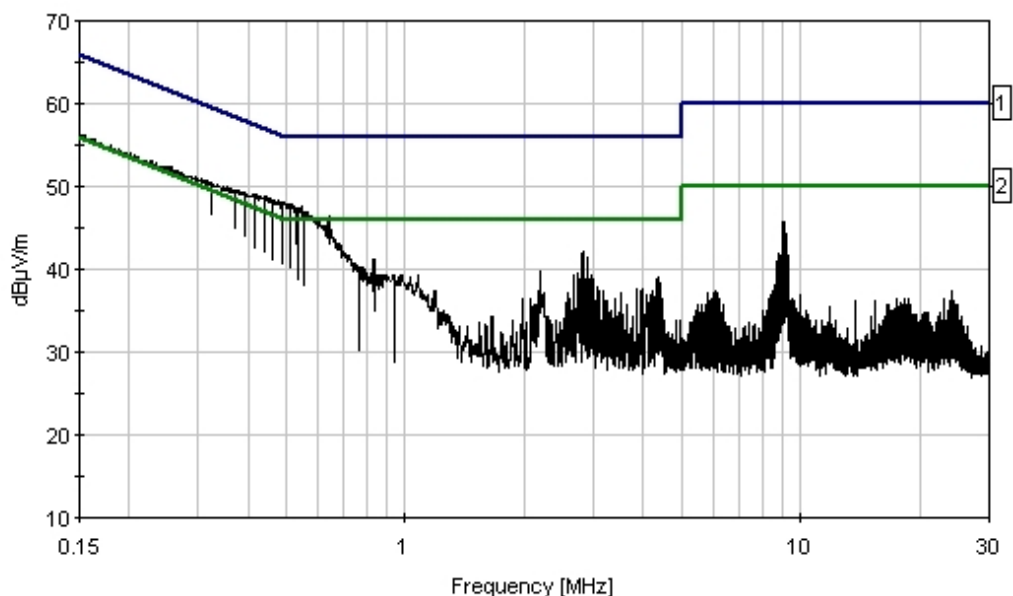
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Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dB μ V	dB			Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	2.838M	42.2				+0.0	42.2	46.0	-3.8	Black
2	2.787M	41.8				+0.0	41.8	46.0	-4.2	Black
3	9.049M	45.6				+0.0	45.6	50.0	-4.4	Black
4	9.103M	45.5				+0.0	45.5	50.0	-4.5	Black
5	151.000k Ave	40.7				+0.0	40.7	55.9	-15.2	Black
^	150.727k	56.1				+0.0	56.1	56.0	+0.1	Black

7	546.000k	17.2	+0.0	17.2	46.0	-28.8	Black
Ave							
8	478.000k	17.0	+0.0	17.0	46.4	-29.4	Black
Ave							
^	477.967k	48.4	+0.0	48.4	46.4	+2.0	Black
10	546.000k	16.5	+0.0	16.5	46.0	-29.5	Black
Ave							
^	546.324k	47.6	+0.0	47.6	46.0	+1.6	Black
12	398.000k	17.6	+0.0	17.6	47.9	-30.3	Black
Ave							
^	397.975k	49.1	+0.0	49.1	47.9	+1.2	Black

CKC Laboratories, Inc. Date: 10/21/2003 Time: 16:33:30 Motorola BCS WO#: 80377
 FCC 15.207 Class B COND [AVE] Test Lead: Black 120V 60Hz Sequence#: 20



—— 1 - FCC 15.207 Class B COND [QP] —— 2 - FCC 15.207 Class B COND [AVE]

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.107/15.207 Class B COND [AVE]**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Conducted Emissions** Time: 16:38:26
 Equipment: **Wireless Cable Modem** Sequence#: 21
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3 120V 60Hz
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

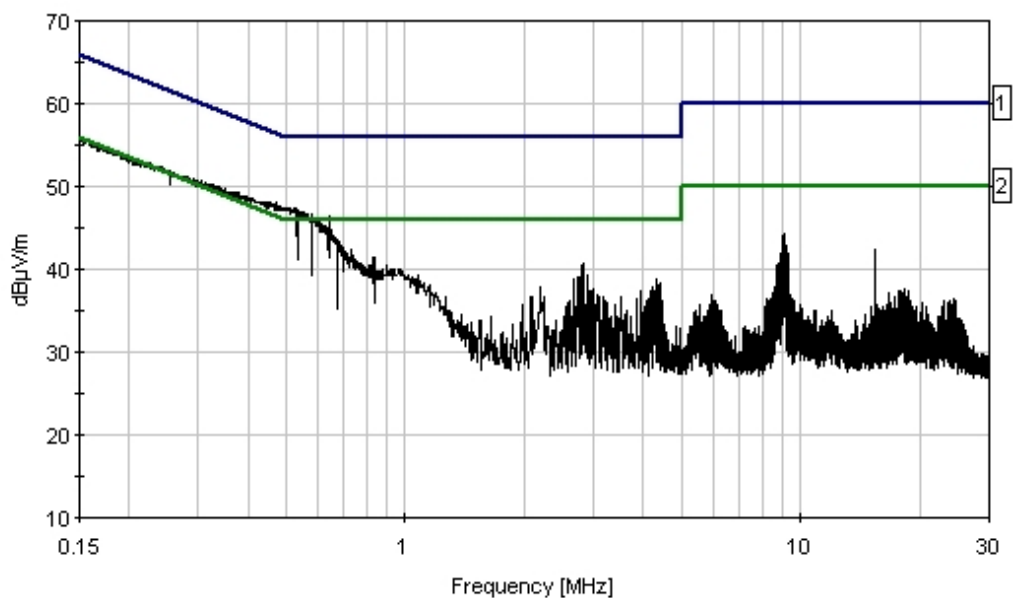
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Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dB μ V	dB				Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	837.204k	41.4					+0.0	41.4	46.0	-4.6	White
2	2.838M	40.8					+0.0	40.8	46.0	-5.2	White
3	902.518k	40.5					+0.0	40.5	46.0	-5.5	White
4	2.782M	40.4					+0.0	40.4	46.0	-5.6	White
5	9.112M	44.2					+0.0	44.2	50.0	-5.8	White
6	9.049M	44.0					+0.0	44.0	50.0	-6.0	White

7	2.884M	39.4	+0.0	39.4	46.0	-6.6	White
8	8.995M	43.1	+0.0	43.1	50.0	-6.9	White
9	2.723M	39.0	+0.0	39.0	46.0	-7.0	White
10	642.000k	34.7	+0.0	34.7	46.0	-11.3	White
	Ave						
^	642.314k	46.5	+0.0	46.5	46.0	+0.5	White
12	538.000k	17.4	+0.0	17.4	46.0	-28.6	White
	Ave						
^	538.325k	47.1	+0.0	47.1	46.0	+1.1	White

CKC Laboratories, Inc. Date: 10/21/2003 Time: 16:38:26 Motorola BCS WO#: 80377
 FCC 15.207 Class B COND [AVE] Test Lead: White 120V 60Hz Sequence#: 21



—— 1 - FCC 15.207 Class B COND [QP] —— 2 - FCC 15.207 Class B COND [AVE]

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**

Specification: **FCC 15.209**

Work Order #: **80377**

Date: 10/21/2003

Test Type: **Maximized Emissions**

Time: 18:35:28

Equipment: **Wireless Cable Modem**

Sequence#: 11

Manufacturer: Motorola BCS

Tested By: Eddie Wong

Model: SBG 900 Rev.3

S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog SN2629 062604	T2=Cable Heliax #17 84ft(10 meter)
T3=Cable#22 BNC (preamp to SA)	T4=Cable #6 (Ant to Bulkhead) 100204
T5=Preamp 8447D 02320 (site D) 010404	T6=-----
T7=Horn 6246_091004	T8=Cable P1510 13' GoreTex SMA
T9=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T10=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8					
	MHz	dB μ V	T9	T10			Table	dB μ V/m	dB μ V/m	dB	Ant
			dB	dB	dB	dB					
1	749.990M	42.5	+21.5	+3.1	+0.7	+2.9	+0.0	44.6	46.0	-1.5	Vert
	QP		-26.1								
^	749.990M	45.3	+21.5	+3.1	+0.7	+2.9	+0.0	47.4	46.0	+1.4	Vert
			-26.1								
3	899.982M	39.6	+23.3	+3.3	+0.6	+3.3	+0.0	44.0	46.0	-2.0	Vert
	QP		-26.1								
^	900.006M	41.7	+23.3	+3.3	+0.6	+3.3	+0.0	46.1	46.0	+0.1	Vert
			-26.1								
5	800.006M	39.7	+22.1	+3.3	+0.4	+3.0	+0.0	42.9	46.0	-3.1	Vert
	QP		-25.6								
6	750.004M	39.2	+21.5	+3.1	+0.7	+2.9	+0.0	41.3	46.0	-4.7	Horiz
	QP		-26.1								
^	750.004M	40.2	+21.5	+3.1	+0.7	+2.9	+0.0	42.3	46.0	-3.7	Horiz
			-26.1								
8	999.984M	42.9	+24.8	+3.6	+0.6	+3.5	+0.0	49.1	54.0	-4.9	Vert
	QP		-26.3								
^	999.984M	44.6	+24.8	+3.6	+0.6	+3.5	+0.0	50.8	54.0	-3.2	Vert
			-26.3								
10	900.001M	36.5	+23.3	+3.3	+0.6	+3.3	+0.0	40.9	46.0	-5.1	Horiz
	QP		-26.1								
^	899.998M	38.2	+23.3	+3.3	+0.6	+3.3	+0.0	42.6	46.0	-3.4	Horiz
			-26.1								

12	849.987M QP	36.8	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	40.9	46.0	-5.1	Vert
^	849.987M	38.9	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	43.0	46.0	-3.0	Vert
^	849.989M	35.3	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	39.4	46.0	-6.6	Vert
15	849.994M	36.0	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	40.1	46.0	-5.9	Horiz
16	800.015M QP	36.5	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	39.7	46.0	-6.3	Vert
^	800.006M	41.2	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	44.4	46.0	-1.6	Vert
^	800.015M	39.3	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	42.5	46.0	-3.5	Vert
19	104.746M QP	51.3	+10.5 -27.2	+1.1	+0.2	+1.0	+0.0	36.9	43.5	-6.6	Vert
^	104.746M	53.0	+10.5 -27.2	+1.1	+0.2	+1.0	+0.0	38.6	43.5	-4.9	Vert
21	649.991M	39.3	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	39.2	46.0	-6.8	Vert
22	107.296M QP	50.8	+10.7 -27.1	+1.1	+0.2	+1.0	+0.0	36.7	43.5	-6.8	Vert
^	107.296M	53.5	+10.7 -27.1	+1.1	+0.2	+1.0	+0.0	39.4	43.5	-4.1	Vert
24	800.005M	35.7	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	38.9	46.0	-7.1	Horiz
25	103.337M	50.6	+10.4 -27.2	+1.1	+0.2	+1.0	+0.0	36.1	43.5	-7.4	Vert
26	99.984M	50.8	+10.2 -27.2	+1.1	+0.2	+1.0	+0.0	36.1	43.5	-7.4	Vert
27	1624.680M	58.7	+0.0 +0.0 -39.5	+0.0 +0.0	+0.0 +25.9	+0.0 +1.4	+0.0	46.5	54.0	-7.5	Vert
28	500.001M	41.8	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	38.1	46.0	-7.9	Vert

29	950.011M	32.3	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	37.8	46.0	-8.2	Vert
30	58.128M	50.2	+6.5 -27.1	+0.9	+0.2	+0.7	+0.0	31.4	40.0	-8.6	Vert
31	700.017M	36.4	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	37.2	46.0	-8.8	Horiz
32	587.975M	38.6	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	37.1	46.0	-8.9	Horiz
33	399.985M	43.1	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	37.0	46.0	-9.0	Horiz
34	450.002M	42.0	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	37.0	46.0	-9.0	Vert
35	114.537M	48.0	+11.2 -27.1	+1.2	+0.2	+1.0	+0.0	34.5	43.5	-9.0	Vert
36	650.005M	36.8	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	36.7	46.0	-9.3	Horiz
37	950.030M	30.6	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	36.1	46.0	-9.9	Horiz
38	269.115M	45.7	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	35.5	46.0	-10.5	Horiz
39	999.998M	37.3	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	43.5	54.0	-10.5	Horiz
40	399.999M	41.6	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	35.5	46.0	-10.5	Vert
41	349.992M	42.8	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	35.3	46.0	-10.7	Horiz
42	549.996M	37.8	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	35.2	46.0	-10.8	Horiz
43	549.980M	37.7	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	35.1	46.0	-10.9	Vert
44	999.976M	36.0	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	42.2	54.0	-11.8	Horiz
45	499.991M	37.9	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	34.2	46.0	-11.8	Horiz

46	134.202M	44.1	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	31.4	43.5	-12.1	Vert
47	587.966M	35.3	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	33.8	46.0	-12.2	Vert
48	515.432M	36.9	+18.5 -27.0	+2.5	+0.4	+2.3	+0.0	33.6	46.0	-12.4	Vert
49	702.243M	32.6	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	33.4	46.0	-12.6	Horiz
50	449.997M	38.4	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	33.4	46.0	-12.6	Horiz
51	137.220M	43.6	+11.8 -27.1	+1.3	+0.2	+1.1	+0.0	30.9	43.5	-12.6	Vert
52	349.995M	40.7	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.2	46.0	-12.8	Vert
53	350.013M	40.5	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.0	46.0	-13.0	Vert
54	479.987M	36.7	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	32.6	46.0	-13.4	Vert
55	142.387M	42.9	+11.7 -27.1	+1.3	+0.2	+1.1	+0.0	30.1	43.5	-13.4	Vert
56	250.028M	43.1	+12.7 -26.9	+1.8	+0.3	+1.5	+0.0	32.5	46.0	-13.5	Horiz
57	479.996M	36.1	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	32.0	46.0	-14.0	Horiz
58	299.997M	41.4	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	32.0	46.0	-14.0	Horiz
59	1250.000M	53.4	+0.0 +0.0 -40.3	+0.0 +0.0	+0.0 +25.3	+0.0 +1.2	+0.0	39.6	54.0	-14.4	Vert
60	768.852M	29.0	+21.7 -25.9	+3.2	+0.6	+2.9	+0.0	31.5	46.0	-14.5	Vert
61	678.399M	31.1	+20.7 -26.4	+2.9	+0.5	+2.7	+0.0	31.5	46.0	-14.5	Vert
62	200.002M	43.6	+9.0 -26.9	+1.5	+0.2	+1.4	+0.0	28.8	43.5	-14.7	Vert

63	132.820M	41.5	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	28.8	43.5	-14.7	Vert
64	981.989M	33.2	+24.5 -26.2	+3.6	+0.6	+3.5	+0.0	39.2	54.0	-14.8	Vert
65	293.959M	40.5	+13.3 -26.7	+1.8	+0.4	+1.7	+0.0	31.0	46.0	-15.0	Horiz
66	668.160M	30.8	+20.6 -26.5	+3.0	+0.5	+2.6	+0.0	31.0	46.0	-15.0	Vert
67	672.751M	30.6	+20.6 -26.4	+3.0	+0.5	+2.6	+0.0	30.9	46.0	-15.1	Vert
68	661.747M	30.7	+20.5 -26.5	+3.0	+0.5	+2.6	+0.0	30.8	46.0	-15.2	Vert
69	672.755M	30.3	+20.6 -26.4	+3.0	+0.5	+2.6	+0.0	30.6	46.0	-15.4	Horiz
70	534.526M	33.4	+18.8 -27.1	+2.5	+0.5	+2.3	+0.0	30.4	46.0	-15.6	Vert
71	726.192M	28.4	+21.2 -26.1	+3.0	+0.6	+2.8	+0.0	29.9	46.0	-16.1	Horiz
72	386.544M	36.1	+16.0 -26.9	+2.2	+0.4	+1.9	+0.0	29.7	46.0	-16.3	Horiz
73	702.241M	28.9	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	29.7	46.0	-16.3	Vert
74	203.517M	41.5	+9.3 -26.9	+1.5	+0.2	+1.4	+0.0	27.0	43.5	-16.5	Horiz
75	658.011M	29.4	+20.5 -26.5	+3.0	+0.5	+2.6	+0.0	29.5	46.0	-16.5	Vert
76	171.804M	41.4	+9.7 -27.1	+1.4	+0.3	+1.2	+0.0	26.9	43.5	-16.6	Horiz
77	100.003M	41.6	+10.2 -27.2	+1.1	+0.2	+1.0	+0.0	26.9	43.5	-16.6	Horiz
78	375.009M	35.8	+15.6 -26.9	+2.2	+0.4	+1.9	+0.0	29.0	46.0	-17.0	Vert
79	455.994M	33.7	+17.4 -27.1	+2.3	+0.4	+2.1	+0.0	28.8	46.0	-17.2	Vert

80	383.997M	35.0	+15.9 -26.9	+2.2	+0.4	+1.9	+0.0	28.5	46.0	-17.5	Vert
81	504.000M	32.0	+18.3 -26.9	+2.4	+0.4	+2.2	+0.0	28.4	46.0	-17.6	Vert
82	299.998M	37.6	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	28.2	46.0	-17.8	Vert
83	321.942M	36.6	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	28.1	46.0	-17.9	Horiz
84	133.623M	38.0	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	25.3	43.5	-18.2	Horiz
85	429.528M	33.3	+16.9 -27.1	+2.2	+0.4	+2.1	+0.0	27.8	46.0	-18.2	Vert
86	332.830M	35.8	+14.4 -26.8	+2.0	+0.4	+1.8	+0.0	27.6	46.0	-18.4	Vert
87	287.506M	37.2	+13.2 -26.7	+1.8	+0.4	+1.6	+0.0	27.5	46.0	-18.5	Vert
88	370.839M	34.2	+15.5 -26.9	+2.2	+0.4	+1.9	+0.0	27.3	46.0	-18.7	Vert
89	611.927M	27.9	+20.0 -26.7	+2.7	+0.5	+2.5	+0.0	26.9	46.0	-19.1	Horiz
90	379.175M	33.5	+15.8 -26.9	+2.2	+0.4	+1.9	+0.0	26.9	46.0	-19.1	Vert
91	324.992M	35.3	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	26.9	46.0	-19.1	Vert
92	248.766M	37.4	+12.6 -26.9	+1.8	+0.3	+1.5	+0.0	26.7	46.0	-19.3	Horiz
93	324.985M	34.9	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	26.5	46.0	-19.5	Horiz
94	359.998M	33.6	+15.2 -26.8	+2.1	+0.4	+1.8	+0.0	26.3	46.0	-19.7	Vert
95	440.000M	31.2	+17.1 -27.1	+2.3	+0.4	+2.1	+0.0	26.0	46.0	-20.0	Horiz
96	419.998M	31.7	+16.7 -27.0	+2.2	+0.4	+2.0	+0.0	26.0	46.0	-20.0	Vert

97	275.010M	35.9	+13.1 -26.8	+1.8	+0.3	+1.5	+0.0	25.8	46.0	-20.2	Horiz
98	580.001M	27.5	+19.6 -26.9	+2.6	+0.5	+2.5	+0.0	25.8	46.0	-20.2	Vert
99	407.981M	31.0	+16.5 -27.0	+2.2	+0.4	+2.0	+0.0	25.1	46.0	-20.9	Vert
100	329.168M	32.8	+14.3 -26.8	+2.0	+0.4	+1.8	+0.0	24.5	46.0	-21.5	Vert
101	439.076M	29.6	+17.1 -27.1	+2.3	+0.4	+2.1	+0.0	24.4	46.0	-21.6	Vert
102	312.515M	33.2	+13.8 -26.7	+1.9	+0.4	+1.7	+0.0	24.3	46.0	-21.7	Horiz
103	293.496M	33.7	+13.3 -26.7	+1.8	+0.4	+1.6	+0.0	24.1	46.0	-21.9	Vert
104	320.846M	32.2	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	23.7	46.0	-22.3	Vert
105	381.804M	29.5	+15.8 -26.9	+2.2	+0.4	+1.9	+0.0	22.9	46.0	-23.1	Vert
106	312.503M	31.7	+13.8 -26.7	+1.9	+0.4	+1.7	+0.0	22.8	46.0	-23.2	Vert
107	319.997M	30.3	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	21.8	46.0	-24.2	Vert

Test Location: CKC Laboratories, Inc. •110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**

Specification: **FCC 15.209**

Work Order #: **80377**

Date: 10/20/2003

Test Type: **Maximized Emissions**

Time: 16:15:10

Equipment: **Wireless Cable Modem**

Sequence#: 12

Manufacturer: Motorola BCS

Tested By: Eddie Wong

Model: SBG 900 Rev.3

S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 6. Frequency range of measurement = 9kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog SN2629 062604	T2=Cable Helix #17 84ft(10 meter)
T3=Cable#22 BNC (preamp to SA)	T4=Cable #6 (Ant to Bulkhead) 100204
T5=Preamp 8447D 02320 (site D) 010404	T6=-----
T7=Horn 6246_091004	T8=12' SMA Gore cable #1337 121603
T9=HP83017A Preamp 091104	T10=Cable Helix #17 84ft(10 meter)
T11=Cable #19 54ft Helix 101304	T12=HPF 2.4GHz High Pass 022004
T13=HF Preamp Cal. HP-83017A,S/N- 3123A00282	

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq	Rdng	T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6	T7	T8					
			T9	T10	T11	T12					
	MHz	dB μ V	T13				Table	dB μ V/m	dB μ V/m	dB	Ant
			dB	dB	dB	dB					
1	750.005M	42.5	+21.5	+3.1	+0.7	+2.9	+0.0	44.6	46.0	-1.4	Horiz
	QP		-26.1								
^	750.005M	44.5	+21.5	+3.1	+0.7	+2.9	+0.0	46.6	46.0	+0.6	Horiz
			-26.1								
3	900.000M	40.0	+23.3	+3.3	+0.6	+3.3	+0.0	44.4	46.0	-1.6	Horiz
	QP		-26.1								
^	900.000M	41.4	+23.3	+3.3	+0.6	+3.3	+0.0	45.8	46.0	-0.2	Horiz
			-26.1								
5	750.003M	41.4	+21.5	+3.1	+0.7	+2.9	+0.0	43.5	46.0	-2.5	Vert
	QP		-26.1								
^	750.003M	45.6	+21.5	+3.1	+0.7	+2.9	+0.0	47.7	46.0	+1.7	Vert
			-26.1								
7	900.000M	37.6	+23.3	+3.3	+0.6	+3.3	+0.0	42.0	46.0	-4.0	Vert
	QP		-26.1								
^	900.000M	40.1	+23.3	+3.3	+0.6	+3.3	+0.0	44.5	46.0	-1.5	Vert
			-26.1								
9	2592.000M	44.6	+0.0	+0.0	+0.0	+0.0	+0.0	49.9	54.0	-4.1	Horiz
			+0.0	+0.0	+28.9	+2.5					
			-38.1	+6.4	+5.6						

10	649.976M	40.7	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	40.6	46.0	-5.4	Vert
11	800.004M	37.1	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	40.3	46.0	-5.7	Vert
12	125.678M	48.4	+11.7 -27.0	+1.2	+0.2	+1.0	+0.0	35.5	43.5	-8.0	Vert
13	950.047M	32.4	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	37.9	46.0	-8.1	Vert
14	479.983M	41.9	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	37.8	46.0	-8.2	Horiz
15	100.020M	49.8	+10.2 -27.2	+1.1	+0.2	+1.0	+0.0	35.1	43.5	-8.4	Vert
16	500.015M QP	41.2	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	37.5	46.0	-8.5	Vert
^	499.987M	44.5	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	40.8	46.0	-5.2	Vert
18	999.980M	39.2	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	45.4	54.0	-8.6	Horiz
19	1624.600M	48.1	+0.0 +0.0 -37.9	+0.0 +0.0 +4.6	+0.0 +25.9 +2.9	+0.0 +1.7	+0.0	45.3	54.0	-8.7	Horiz
20	850.000M QP	33.2	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	37.3	46.0	-8.7	Horiz
^	849.996M	38.3	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	42.4	46.0	-3.6	Horiz
22	2141.000M	45.3	+0.0 +0.0 -38.6	+0.0 +0.0 +5.1	+0.0 +28.1 +3.3	+0.0 +2.0	+0.0	45.2	54.0	-8.8	Horiz

23	499.983M	40.7	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	37.0	46.0	-9.0	Horiz
24	849.992M	32.8	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	36.9	46.0	-9.1	Vert
25	479.983M	40.7	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	36.6	46.0	-9.4	Vert
26	133.635M	46.7	+11.8 -27.0	+1.3	+0.2	+1.0	+0.0	34.0	43.5	-9.5	Vert
27	950.035M	30.7	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	36.2	46.0	-9.8	Horiz
28	700.011M	35.3	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	36.1	46.0	-9.9	Horiz
29	58.263M	48.7	+6.5 -27.1	+0.9	+0.2	+0.7	+0.0	29.9	40.0	-10.1	Vert
30	999.984M	37.6	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	43.8	54.0	-10.2	Vert
31	1000.400M	51.4	+0.0 +0.0 -40.9	+0.0 +0.0 +3.6	+0.0 +25.6 +2.2	+0.0 +1.5	+0.0	43.4	54.0	-10.6	Horiz
32	399.989M	41.5	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	35.4	46.0	-10.6	Vert
33	124.036M	45.7	+11.7 -27.0	+1.2	+0.2	+1.0	+0.0	32.8	43.5	-10.7	Vert
34	630.729M	35.1	+20.2 -26.6	+2.8	+0.5	+2.6	+0.0	34.6	46.0	-11.4	Horiz
35	199.983M	46.9	+9.0 -26.9	+1.5	+0.2	+1.4	+0.0	32.1	43.5	-11.4	Vert

36	549.989M	37.0	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	34.4	46.0	-11.6	Vert
37	587.962M	35.8	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	34.3	46.0	-11.7	Vert
38	587.906M	35.7	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	34.2	46.0	-11.8	Horiz
39	649.985M	34.2	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	34.1	46.0	-11.9	Horiz
40	450.000M	39.0	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	34.0	46.0	-12.0	Horiz
41	53.407M	45.4	+8.0 -27.2	+0.8	+0.2	+0.6	+0.0	27.8	40.0	-12.2	Horiz
42	399.997M	39.8	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	33.7	46.0	-12.3	Horiz
43	527.992M	36.7	+18.7 -27.1	+2.5	+0.5	+2.3	+0.0	33.6	46.0	-12.4	Vert
44	349.999M	40.8	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.3	46.0	-12.7	Vert
45	739.128M	31.0	+21.4 -26.1	+3.1	+0.7	+2.9	+0.0	33.0	46.0	-13.0	Horiz
46	350.002M	40.2	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	32.7	46.0	-13.3	Horiz
47	300.001M	42.0	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	32.6	46.0	-13.4	Horiz
48	249.979M	43.2	+12.7 -26.9	+1.8	+0.3	+1.5	+0.0	32.6	46.0	-13.4	Horiz

49	214.463M	43.5	+10.2 -27.0	+1.6	+0.3	+1.4	+0.0	30.0	43.5	-13.5	Vert
50	549.985M	34.8	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	32.2	46.0	-13.8	Horiz
51	504.035M	35.8	+18.3 -26.9	+2.4	+0.4	+2.2	+0.0	32.2	46.0	-13.8	Horiz
52	530.408M	34.8	+18.8 -27.1	+2.5	+0.5	+2.3	+0.0	31.8	46.0	-14.2	Vert
53	1100.100M	46.5	+0.0 +0.0 -40.2	+0.0 +0.0 +3.8	+0.0 +25.5 +2.3	+0.0 +1.5	+0.0	39.4	54.0	-14.6	Vert
54	702.235M	30.3	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	31.1	46.0	-14.9	Horiz
55	527.994M	34.1	+18.7 -27.1	+2.5	+0.5	+2.3	+0.0	31.0	46.0	-15.0	Horiz
56	672.767M	30.6	+20.6 -26.4	+3.0	+0.5	+2.6	+0.0	30.9	46.0	-15.1	Horiz
57	656.160M	30.7	+20.5 -26.5	+3.0	+0.5	+2.6	+0.0	30.8	46.0	-15.2	Horiz
58	503.979M	34.3	+18.3 -26.9	+2.4	+0.4	+2.2	+0.0	30.7	46.0	-15.3	Vert
59	501.090M	34.4	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	30.7	46.0	-15.3	Vert
60	1249.950M	45.0	+0.0 +0.0 -39.4	+0.0 +0.0 +3.8	+0.0 +25.3 +2.4	+0.0 +1.6	+0.0	38.7	54.0	-15.3	Horiz
61	203.474M	42.2	+9.3 -26.9	+1.5	+0.2	+1.4	+0.0	27.7	43.5	-15.8	Horiz

62	525.009M	33.2	+18.7 -27.1	+2.5	+0.5	+2.3	+0.0	30.1	46.0	-15.9	Vert
63	420.014M	35.7	+16.7 -27.0	+2.2	+0.4	+2.0	+0.0	30.0	46.0	-16.0	Vert
64	287.518M	39.5	+13.2 -26.7	+1.8	+0.4	+1.6	+0.0	29.8	46.0	-16.2	Horiz
65	486.791M	33.8	+18.0 -27.0	+2.4	+0.4	+2.2	+0.0	29.8	46.0	-16.2	Vert
66	428.752M	34.9	+16.9 -27.1	+2.2	+0.4	+2.1	+0.0	29.4	46.0	-16.6	Vert
67	300.003M	38.5	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	29.1	46.0	-16.9	Vert
68	374.989M	35.7	+15.6 -26.9	+2.2	+0.4	+1.9	+0.0	28.9	46.0	-17.1	Horiz
69	293.811M	38.4	+13.3 -26.7	+1.8	+0.4	+1.7	+0.0	28.9	46.0	-17.1	Horiz
70	297.799M	38.2	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	28.8	46.0	-17.2	Horiz
71	537.513M	31.3	+18.9 -27.1	+2.6	+0.5	+2.4	+0.0	28.6	46.0	-17.4	Horiz
72	544.052M	31.2	+19.0 -27.2	+2.6	+0.5	+2.4	+0.0	28.5	46.0	-17.5	Vert
73	275.006M	38.4	+13.1 -26.8	+1.8	+0.3	+1.5	+0.0	28.3	46.0	-17.7	Horiz
74	287.513M	37.9	+13.2 -26.7	+1.8	+0.4	+1.6	+0.0	28.2	46.0	-17.8	Vert

75	325.013M	36.3	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	27.9	46.0	-18.1	Horiz
76	372.808M	34.4	+15.6 -26.9	+2.2	+0.4	+1.9	+0.0	27.6	46.0	-18.4	Vert
77	271.298M	37.2	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	27.0	46.0	-19.0	Horiz
78	149.998M	37.5	+11.4 -27.1	+1.4	+0.2	+1.1	+0.0	24.5	43.5	-19.0	Horiz
79	237.495M	38.2	+11.8 -26.9	+1.7	+0.3	+1.5	+0.0	26.6	46.0	-19.4	Horiz
80	268.056M	36.4	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	26.2	46.0	-19.8	Horiz
81	337.501M	33.7	+14.6 -26.8	+2.1	+0.4	+1.8	+0.0	25.8	46.0	-20.2	Vert
82	336.026M	33.7	+14.5 -26.8	+2.0	+0.4	+1.8	+0.0	25.6	46.0	-20.4	Horiz
83	192.053M	38.1	+9.0 -27.0	+1.5	+0.2	+1.3	+0.0	23.1	43.5	-20.4	Vert
84	320.885M	33.9	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	25.4	46.0	-20.6	Horiz
85	359.987M	32.7	+15.2 -26.8	+2.1	+0.4	+1.8	+0.0	25.4	46.0	-20.6	Vert
86	320.007M	33.3	+14.1 -26.7	+2.0	+0.4	+1.7	+0.0	24.8	46.0	-21.2	Horiz
87	381.787M	31.4	+15.8 -26.9	+2.2	+0.4	+1.9	+0.0	24.8	46.0	-21.2	Vert

88	324.993M	33.2	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	24.8	46.0	-21.2	Vert
89	314.987M	33.5	+13.9 -26.7	+1.9	+0.4	+1.7	+0.0	24.7	46.0	-21.3	Vert
90	271.369M	32.3	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	22.1	46.0	-23.9	Vert

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**

Specification: **15.209**

Work Order #: **80377**

Date: 10/21/2003

Test Type: **Maximized Emissions**

Time: 18:49:50

Equipment: **Wireless Cable Modem**

Sequence#: 13

Manufacturer: Motorola BCS

Tested By: Eddie Wong

Model: SBG 900 Rev.3

S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 11. Frequency range of measurement = 30 MHz to 1 GHz. 9 kHz -150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Bilog SN2629 062604	T2=Cable Heliac #17 84ft(10 meter)
T3=Cable#22 BNC (preamp to SA)	T4=Cable #6 (Ant to Bulkhead) 100204
T5=Preamp 8447D 02320 (site D) 010404	T6=-----
T7=Horn AN 01646 1-18 GHz (Brea)	T8=Cable P1510 13' GoreTex SMA
T9=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T10=Cable #19 54ft Heliac 101304
T11=Cable Heliac #17 84ft(10 meter)	T12=-----
T13=Horn 6246_091004	T14=HP83017A Preamp 091104
T15=HPF 2.4GHz High Pass 022004	

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
			T1 dB	T2 dB	T3 dB	T4 dB					
1	750.004M QP	42.6	+21.5 -26.1	+3.1	+0.7	+2.9	+0.0	44.7	46.0	-1.3	Vert
^	750.004M	43.9	+21.5 -26.1	+3.1	+0.7	+2.9	+0.0	46.0	46.0	+0.0	Vert
3	900.000M QP	40.0	+23.3 -26.1	+3.3	+0.6	+3.3	+0.0	44.4	46.0	-1.6	Horiz
^	899.981M	41.7	+23.3 -26.1	+3.3	+0.6	+3.3	+0.0	46.1	46.0	+0.1	Horiz
5	899.985M QP	38.7	+23.3 -26.1	+3.3	+0.6	+3.3	+0.0	43.1	46.0	-2.9	Vert
^	899.982M	40.5	+23.3 -26.1	+3.3	+0.6	+3.3	+0.0	44.9	46.0	-1.1	Vert
7	2592.000M	44.7	+0.0 +0.0 +0.0 +28.9	+0.0 +0.0 +5.6 -38.1	+0.0 +0.0 +6.4 +0.0	+0.0 +1.9 +0.0	+0.0	49.4	54.0	-4.6	Vert
8	799.980M QP	38.0	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	41.2	46.0	-4.8	Vert
^	800.009M	38.6	+22.1 -25.6	+3.3	+0.4	+3.0	+0.0	41.8	46.0	-4.2	Vert

10	750.013M QP	38.8	+21.5 -26.1	+3.1	+0.7	+2.9	+0.0	40.9	46.0	-5.1	Horiz
^	750.013M	40.2	+21.5 -26.1	+3.1	+0.7	+2.9	+0.0	42.3	46.0	-3.7	Horiz
12	699.967M	39.8	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	40.6	46.0	-5.4	Vert
13	850.026M	36.4	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	40.5	46.0	-5.5	Vert
14	999.990M QP	41.7	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	47.9	54.0	-6.1	Vert
^	999.990M	43.8	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	50.0	54.0	-4.0	Vert
16	1624.600M	53.0	+0.0 +0.0 -39.5	+0.0 +0.0 +2.9	+0.0 +25.4 +4.6	+0.0 +1.4	+0.0	47.8	54.0	-6.2	Vert
17	849.979M	35.5	+22.7 -25.5	+3.2	+0.6	+3.1	+0.0	39.6	46.0	-6.4	Horiz
18	499.997M	43.1	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	39.4	46.0	-6.6	Vert
19	895.895M	34.9	+23.3 -26.1	+3.3	+0.6	+3.3	+0.0	39.3	46.0	-6.7	Vert
20	504.124M	42.4	+18.3 -26.9	+2.4	+0.4	+2.2	+0.0	38.8	46.0	-7.2	Vert
21	649.991M	37.6	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	37.5	46.0	-8.5	Vert
22	549.987M	39.7	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	37.1	46.0	-8.9	Vert

23	700.040M	36.3	+20.9 -26.2	+2.9	+0.5	+2.7	+0.0	37.1	46.0	-8.9	Horiz
24	2141.000M	45.4	+0.0 +0.0 +0.0 +28.1	+0.0 +0.0 +3.3 -38.6	+0.0	+0.0 +1.6	+0.0 +5.1 +0.0	44.9	54.0	-9.1	Horiz
25	479.997M	40.5	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	36.4	46.0	-9.6	Vert
26	950.032M	30.8	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	36.3	46.0	-9.7	Horiz
27	950.028M	30.6	+24.1 -26.1	+3.5	+0.6	+3.4	+0.0	36.1	46.0	-9.9	Vert
28	1250.100M	51.8	+0.0 +0.0 -40.3	+0.0 +0.0 +2.4	+0.0 +24.6 +3.8	+0.0 +1.2	+0.0	43.5	54.0	-10.5	Vert
29	649.988M	35.5	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	35.4	46.0	-10.6	Horiz
30	400.003M	41.5	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	35.4	46.0	-10.6	Vert
31	649.982M	35.5	+20.4 -26.6	+3.0	+0.5	+2.6	+0.0	35.4	46.0	-10.6	Vert
32	549.979M	37.9	+19.1 -27.2	+2.6	+0.5	+2.4	+0.0	35.3	46.0	-10.7	Horiz
33	1625.000M	46.1	+0.0 +0.0 +0.0 +25.9	+0.0 +0.0 +2.9 -37.9	+0.0 +0.0 +4.6 +0.0	+0.0 +1.4	+0.0	43.0	54.0	-11.0	Horiz
34	450.018M	40.0	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	35.0	46.0	-11.0	Vert
35	499.980M	38.3	+18.2 -26.9	+2.4	+0.4	+2.2	+0.0	34.6	46.0	-11.4	Horiz

36	349.985M	42.1	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	34.6	46.0	-11.4	Horiz
37	999.997M	36.1	+24.8 -26.3	+3.6	+0.6	+3.5	+0.0	42.3	54.0	-11.7	Horiz
38	269.165M	44.4	+13.0 -26.8	+1.8	+0.3	+1.5	+0.0	34.2	46.0	-11.8	Horiz
39	1000.300M	50.5	+0.0 +0.0 +0.0 +25.6	+0.0 +0.0 +2.2 -40.9	+0.0 +0.0 +3.6	+0.0 +1.1 +0.0	+0.0	42.1	54.0	-11.9	Horiz
40	51.113M	45.0	+8.7 -27.2	+0.8	+0.2	+0.6	+0.0	28.1	40.0	-11.9	Vert
41	399.980M	39.9	+16.3 -27.0	+2.2	+0.4	+2.0	+0.0	33.8	46.0	-12.2	Horiz
42	350.004M	41.3	+15.0 -26.8	+2.1	+0.4	+1.8	+0.0	33.8	46.0	-12.2	Vert
43	479.991M	37.4	+17.9 -27.0	+2.4	+0.4	+2.2	+0.0	33.3	46.0	-12.7	Horiz
44	449.987M	37.7	+17.3 -27.1	+2.3	+0.4	+2.1	+0.0	32.7	46.0	-13.3	Horiz
45	587.937M	33.9	+19.7 -26.8	+2.6	+0.5	+2.5	+0.0	32.4	46.0	-13.6	Horiz
46	365.701M	38.9	+15.4 -26.9	+2.2	+0.4	+1.9	+0.0	31.9	46.0	-14.1	Vert
47	1099.950M	49.0	+0.0 +0.0 -40.8	+0.0 +0.0 +2.3	+0.0 +24.4 +3.8	+0.0 +1.1	+0.0	39.8	54.0	-14.2	Vert
48	299.989M	41.1	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	31.7	46.0	-14.3	Vert

49	200.000M	43.9	+9.0 -26.9	+1.5	+0.2	+1.4	+0.0	29.1	43.5	-14.4	Vert
50	1728.300M	44.2	+0.0 +0.0 -39.5	+0.0 +0.0 +3.0	+0.0 +25.8 +4.7	+0.0 +1.4	+0.0	39.6	54.0	-14.4	Vert
51	249.992M	41.9	+12.7 -26.9	+1.8	+0.3	+1.5	+0.0	31.3	46.0	-14.7	Horiz
52	1250.300M	45.9	+0.0 +0.0 +0.0 +25.3	+0.0 +0.0 +2.4 -39.4	+0.0 +0.0 +3.8 +0.0	+0.0 +1.2	+0.0	39.2	54.0	-14.8	Horiz
53	300.010M	40.4	+13.4 -26.7	+1.8	+0.4	+1.7	+0.0	31.0	46.0	-15.0	Horiz
54	249.996M	41.5	+12.7 -26.9	+1.8	+0.3	+1.5	+0.0	30.9	46.0	-15.1	Vert
55	168.366M	42.5	+10.0 -27.1	+1.4	+0.3	+1.2	+0.0	28.3	43.5	-15.2	Vert
56	717.032M	29.4	+21.1 -26.2	+3.0	+0.6	+2.8	+0.0	30.7	46.0	-15.3	Horiz
57	324.993M	39.1	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	30.7	46.0	-15.3	Horiz
58	386.563M	36.8	+16.0 -26.9	+2.2	+0.4	+1.9	+0.0	30.4	46.0	-15.6	Horiz
59	149.985M	40.8	+11.4 -27.1	+1.4	+0.2	+1.1	+0.0	27.8	43.5	-15.7	Vert
60	1359.900M	45.4	+0.0 +0.0 -39.9	+0.0 +0.0 +2.6	+0.0 +24.7 +4.0	+0.0 +1.3	+0.0	38.1	54.0	-15.9	Vert
61	150.009M	39.9	+11.4 -27.1	+1.4	+0.2	+1.1	+0.0	26.9	43.5	-16.6	Horiz

62	527.977M	32.5	+18.7 -27.1	+2.5	+0.5	+2.3	+0.0	29.4	46.0	-16.6	Vert
63	274.995M	39.4	+13.1 -26.8	+1.8	+0.3	+1.5	+0.0	29.3	46.0	-16.7	Horiz
64	143.180M	39.6	+11.7 -27.1	+1.3	+0.2	+1.1	+0.0	26.8	43.5	-16.7	Horiz
65	375.001M	35.8	+15.6 -26.9	+2.2	+0.4	+1.9	+0.0	29.0	46.0	-17.0	Horiz
66	419.986M	34.0	+16.7 -27.0	+2.2	+0.4	+2.0	+0.0	28.3	46.0	-17.7	Horiz
67	275.001M	37.4	+13.1 -26.8	+1.8	+0.3	+1.5	+0.0	27.3	46.0	-18.7	Vert
68	337.499M	35.0	+14.6 -26.8	+2.1	+0.4	+1.8	+0.0	27.1	46.0	-18.9	Horiz
69	544.062M	29.6	+19.0 -27.2	+2.6	+0.5	+2.4	+0.0	26.9	46.0	-19.1	Horiz
70	312.529M	35.4	+13.8 -26.7	+1.9	+0.4	+1.7	+0.0	26.5	46.0	-19.5	Horiz
71	362.518M	33.0	+15.3 -26.9	+2.2	+0.4	+1.9	+0.0	25.9	46.0	-20.1	Vert
72	324.989M	33.8	+14.2 -26.8	+2.0	+0.4	+1.8	+0.0	25.4	46.0	-20.6	Vert
73	329.156M	33.1	+14.3 -26.8	+2.0	+0.4	+1.8	+0.0	24.8	46.0	-21.2	Vert

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c)**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Maximized Emissions** Time: 06:30:40
 Equipment: **Wireless Cable Modem** Sequence#: 15
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 6. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Horn 6246_091004	T2=Cable P1510 13' GoreTex SMA
T3=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T4=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	7316.000M	29.6	+35.7	+3.0	-38.4	+4.7	+0.0	34.6	88.9	-54.3	Vert
2	7316.000M	28.2	+35.7	+3.0	-38.4	+4.7	+0.0	33.2	88.9	-55.7	Horiz
3	4879.000M	28.4	+33.4	+2.4	-39.1	+1.3	+0.0	26.4	88.9	-62.5	Horiz
4	4879.000M	28.1	+33.4	+2.4	-39.1	+1.3	+0.0	26.1	88.9	-62.8	Vert

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c)**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Maximized Emissions** Time: 06:34:52
 Equipment: **Wireless Cable Modem** Sequence#: 14
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 50 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, VBW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Horn 6246_091004	T2=Cable P1510 13' GoreTex SMA
T3=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T4=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	7241.000M	30.2	+35.5	+3.0	-38.5	+4.3	+0.0	34.5	88.7	-54.2	Vert
2	7241.000M	27.9	+35.5	+3.0	-38.5	+4.3	+0.0	32.2	88.7	-56.5	Horiz
3	4829.000M	29.2	+33.3	+2.4	-39.1	+1.4	+0.0	27.2	88.7	-61.5	Vert
4	4829.000M	28.8	+33.3	+2.4	-39.1	+1.4	+0.0	26.8	88.7	-61.9	Horiz

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c)**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Maximized Emissions** Time: 06:37:46
 Equipment: **Wireless Cable Modem** Sequence#: 16
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 11. Frequency range of measurement = 9 kHz to 25 GHz. 9 kHz - 150 kHz; RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz; RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz; RBW=120 kHz, VBW=120 kHz, 1000 MHz - 25000 MHz; RBW=1 MHz, BW=1 MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=Horn 6246_091004	T2=Cable P1510 13' GoreTex SMA
T3=HF Preamp Cal. HP-83017A,S/N- 3123A00282	T4=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	7386.380M	34.9	+35.9	+3.1	-38.3	+5.0	+0.0	40.6	88.7	-48.1	Horiz
2	7386.380M	34.9	+35.9	+3.1	-38.3	+5.0	+0.0	40.6	88.7	-48.1	Vert
3	4923.980M	35.3	+33.4	+2.4	-39.1	+1.2	+0.0	33.2	88.7	-55.5	Vert
4	4924.380M	27.3	+33.4	+2.4	-39.1	+1.2	+0.0	25.2	88.7	-63.5	Horiz

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c) Cond Spur Em**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Conducted Emissions** Time: 07:05:04
 Equipment: **Wireless Cable Modem** Sequence#: 17
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3 120V 60Hz
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 1. Frequency range of measurement = 9 kHz to 25 GHz. RBW=100kHz, VBW=1MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=HPF 2.4GHz High Pass 022004

Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dBµV	T1 dB	dB			Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	2412.000M	114.5	+0.0				+0.0	114.5	114.5	+0.0	Anten
Fundamental											
2	7236.000M	51.3	+4.3				+0.0	55.6	94.5	-38.9	Anten
3	4824.000M	49.5	+1.4				+0.0	50.9	94.5	-43.6	Anten

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c) Cond Spur Em**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Conducted Emissions** Time: 07:20:37
 Equipment: **Wireless Cable Modem** Sequence#: 18
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3 120V 60Hz
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 6. Frequency range of measurement = 9 kHz to 25 GHz. RBW=100kHz, VBW=1MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=HPF 2.4GHz High Pass 022004	T2=LPF 2.4 GHz Low Pass 101803
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Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dBμV	T1 dB	T2 dB	dB	dB	Dist Table	Corr dBμV	Spec dBμV	Margin dB	Polar Ant
1	2437.000M	116.7	+0.0	+0.0			+0.0	116.7	116.7	+0.0	Anten
Fundamental											
2	7311.000M	48.7	+4.6	+0.0			+0.0	53.3	96.7	-43.4	Anten
3	1625.000M	35.6	+0.0	+0.3			+0.0	35.9	96.7	-60.8	Anten
4	4817.000M	26.6	+1.5	+0.0			+0.0	28.1	96.7	-68.6	Anten

Test Location: CKC Laboratories, Inc. • 110 N. Olinda Place • Brea, CA 92823 • (714) 993-6112

Customer: **Motorola BCS**
 Specification: **FCC 15.247 (c) Cond Spur Em**
 Work Order #: **80377** Date: 10/21/2003
 Test Type: **Conducted Emissions** Time: 07:31:35
 Equipment: **Wireless Cable Modem** Sequence#: 19
 Manufacturer: Motorola BCS Tested By: Eddie Wong
 Model: SBG 900 Rev.3 120V 60Hz
 S/N: 131A

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
AC to 12Vdc Adapter	Lite-ON	PB-1090-1L1	
Wireless Cable Modem*	Motorola BCS	SBG 900 Rev.3	131A

Support Devices:

Function	Manufacturer	Model #	S/N
Mouse	Logitech	M-S35	LZB73905320
Laptop Computer	Toshiba	Tecra 730 CDT	12638047-3
Ethernet Hub	Netgear	DS104	DS141408355155
C6U Converter	General Instruments	C6U	J5M7000101358
Head End	Cisco	uBR-MC11C	CN1ISS0AA
Host Laptop Computer	Dell Corporation	Inspiron 500m	
USB Mouse	Logitech	M-BJ69	LNA30116672
Serial Modem	Best Data Products Inc.	1442FX	9052120

Test Conditions / Notes:

The EUT is a wireless cable modem. The EUT's USB port is connected to the host laptop computer via shielded cable. The EUT's ethernet ports is connected to the host laptop computer via unshielded cat. 5 cable. The F connector port is connected to the remotely located support equipment. Also connected to the host laptop computer are a USB mouse and a serial modem. The laptop computer is running hyperterminal and is pinging the ethernet through MS DOS. The EUT is in Transmit mode channel 11. Frequency range of measurement = 9 kHz to 25 GHz. RBW=100kHz, VBW=1MHz. Voltage to EUT is 12 VDC via AC-DC Adapter. Temperature: 26°C, Humidity: 55%, Pressure: 100kPa.

Transducer Legend:

T1=HPF 2.4GHz High Pass 022004	T2=LPF 2.4 GHz Low Pass 101803
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Measurement Data: Reading listed by margin. Test Lead: Antenna Terminal

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	2462.000M	116.9	+0.0	+0.0			+0.0	116.9	116.9	+0.0	Anten
Fundamental											
2	7387.000M	47.5	+5.0	+0.0			+0.0	52.5	96.9	-44.4	Anten
3	4924.000M	45.7	+1.2	+0.0			+0.0	46.9	96.9	-50.0	Anten
4	1642.000M	34.9	+0.0	+0.3			+0.0	35.2	96.9	-61.7	Anten
5	2181.000M	31.2	+0.0	+1.2			+0.0	32.4	96.9	-64.5	Anten