



**FCC & Industry Canada Certification
Test Report
for
Comsonics Inc.
FCC ID: PYN2007HHD
IC ID: 4261A-2007HHD**

**Revised
September 7, 2007**

Prepared for:

**Comsonics, Inc.
1350 Port Republic Rd.
Harrisonburg, VA, 22801**

Prepared By:

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7560 Lindbergh Drive
Gaithersburg, Maryland 20879**



**FCC & Industry Canada Certification Test Report
for the
Comsonics, Inc.
Qualifier X-Ray HHD
FCC ID: PYN2007HHD
IC ID: 4261A-2007HHD**

August 28, 2007

WLL JOB# 9886

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Reviewed by: Steven D. Koster
EMC Operations Manager

Abstract

This report has been prepared on behalf of Comsonics, Inc. to support the attached Application for Equipment Authorization. The test report and application are submitted for a Periodic Intentional Radiator under Part 15.231 of the FCC Rules and Regulations and Spectrum Management and Telecommunications Policy RSS-210 of Industry Canada. This Federal Communication Commission (FCC) Certification Test Report documents the test configuration and test results for a Comsonics, Inc. Qualifier X-Ray HHD.

Testing was performed on an Open Area Test Site (OATS) of Washington Laboratories, Ltd, 7560 Lindbergh Drive, Gaithersburg, MD 20879. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in Columbia, MD. The Industry Canada OATS numbers are 3035A-1 and 3035A-2 for Washington Laboratories, Ltd. Site 1 and Site 2, respectively. Washington Laboratories, Ltd. has been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

The Comsonics, Inc. Qualifier X-Ray HHD complies with the limits for a Periodic Intentional Radiator device under FCC Part 15.231 and Industry Canada RSS-210.

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1 Introduction

1.1 Compliance Statement

The Comsonics, Inc. Qualifier X-Ray HHD complies with the limits for a Periodic Intentional Radiator device under FCC Part 15.231 and Industry Canada RSS-210.

1.2 Test Scope

Tests for radiated emissions were performed. All measurements were performed according to the 2003 version of ANSI C63.4. The measurement equipment conforms to ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation.

1.3 Contract Information

Customer: Comsonics, Inc.
1350 Port Republic Rd.
Harrisonburg, VA, 22801

Quotation Number: 16736

1.4 Test Dates

Testing was performed from July 03 – July 05, 2007.

1.5 Test and Support Personnel

Washington Laboratories, LTD	Steven Dovell
Client Representative	Randy Smith

2 Equipment Under Test

2.1 EUT Identification & Description

Comsonics, Inc. Qualifier X-Ray HHD is a portable Radio Remote Control device used to excite cable installations. The Qualifier X-Ray HHD is powered via 3 “AAA” NiMH or Alkaline Batteries.

Table 1. Device Summary

ITEM	DESCRIPTION
Manufacturer:	Comsonics, Inc.
FCC ID Number	PYN2007HHD
Industry Canada Number	4261A-2007HHD
EUT Name:	Radio Remote Control
Model:	Qualifier X-Ray HHD
FCC Rule Parts:	§15.231
IC Rule Parts:	RSS-210
Frequency Range:	434MHz
Maximum Output Power:	N/A
Modulation:	GFSK
Occupied Bandwidth:	FCC: 30.6 kHz RSS210: 53.3kHz
Keying:	Manual
Type of Information:	Control
Number of Channels:	1
Antenna Type	Integral
Interface Cables:	None
Power Source & Voltage:	3X “AAA” NiMH or Alkaline Batteries – 3.6VDC
Channel Spacing	N/A
Serial Number of Unit Tested	N/A

2.2 Test Configuration

The Qualifier X-Ray HHD was tested in a stand-alone configuration.

2.3 Testing Algorithm

The Qualifier X-Ray HHD was tested in a continuous transmit operation.

Worst case emission levels are provided in the test results data.

2.4 Test Location

All measurements herein were performed at Washington Laboratories, Ltd. test center in Gaithersburg, MD. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in Columbia, MD. The Industry Canada OATS numbers are 3035A-1 and 3035A-2 for Washington Laboratories, Ltd. Site 1 and Site 2, respectively. Washington Laboratories, Ltd. has

been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

2.5 Measurements

2.5.1 References

ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation

ANSI C63.4 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Land Mobile FM or PM Communications Equipment Measurement and Performance Standards (ANSI/TIA/EIA-603-93)

2.6 Measurement Uncertainty

All results reported herein relate only to the equipment tested. For the purposes of the measurements performed by Washington Laboratories, the measurement uncertainty is ± 2.3 dB. This has been calculated for a *worst-case situation* (radiated emissions measurements performed on an open area test site).

The following measurement uncertainty calculation is provided:

$$\text{Total Uncertainty} = (A^2 + B^2 + C^2)^{1/2}/(n-1)$$

where:

A = Antenna calibration uncertainty, in dB = 2 dB

B = Spectrum Analyzer uncertainty, in dB = 1 dB

C = Site uncertainty, in dB = 4 dB

n = number of factors in uncertainty calculation = 3

Thus, Total Uncertainty = $0.5 (2^2 + 1^2 + 4^2)^{1/2} = \pm 2.3$ dB.

3 Test Equipment

Table 2 shows a list of the test equipment used for measurements along with the calibration information.

Table 2: Test Equipment List

Asset #	Manufacturer/Model	Description	Cal. Due
00528	AGILENT, E4446A	ANALYZER, SPECTRUM	2/15/2008
00559	HP, 8447D	AMPLIFIER	9/22/2007
00066	HP, 8449B	PRE-AMPLIFIER, RF. 1-26.5GHZ	8/1/2007
00007	ARA, LPB-2520	ANTENNA, BICONILOG ANTENNA	6/7/2008
00626	ARA	DRG-118/A	5/22/2008

4 Test Results

4.1 Transmission Duty Cycle Correction

FCC Part 15.35 states when the radiated emission limits are expressed in terms of the average value of the emission, and pulse operation is employed, the measurement fields strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1seconds.

By measuring the on time of the period of a single pulse, resulted in a 67.8% on time of a single pulse (See Figure 1).

The complete pulse train was measured as 54.27ms (See Figure 2). Applying the 67.8% on time produces a total on time of:

$$54.27 * 0.678 = 36.8\text{ms}$$

This is the on time over a 100ms period.

The Duty Cycle correction is calculated by:

$$20 * \text{Log} (36.8\text{ms}/100\text{ms}) = -8.68\text{dB}$$

This correction will be applied to field strength measurements related to the transmit frequency.

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Single Pulse Duty Cycle = $(325.572.2)/(445.972.2) = 67.8\%$

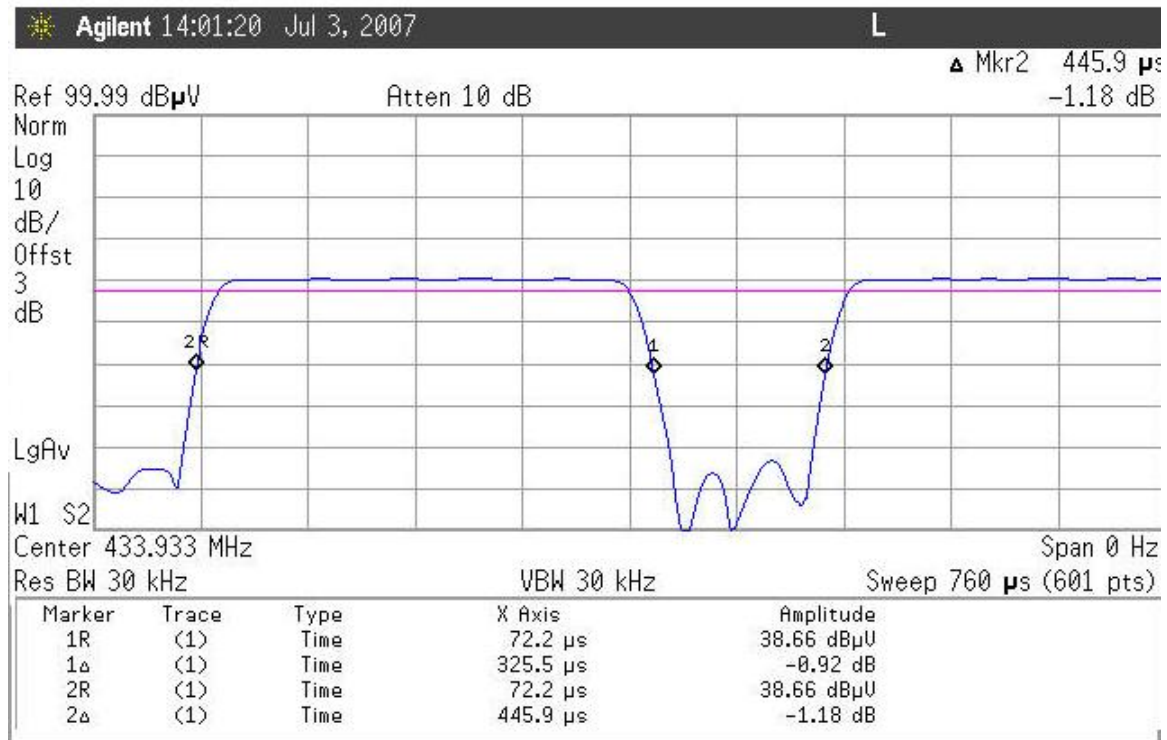


Figure 1: Duty Cycle of Transmission – Single Pulse

Comsonics, Inc: Job 9886 - Pt 15.231 Qualifier X-Ray HHD
Duty Cycle over 100ms period
ON time = 58.85ms · 4.58ms = 54.27ms

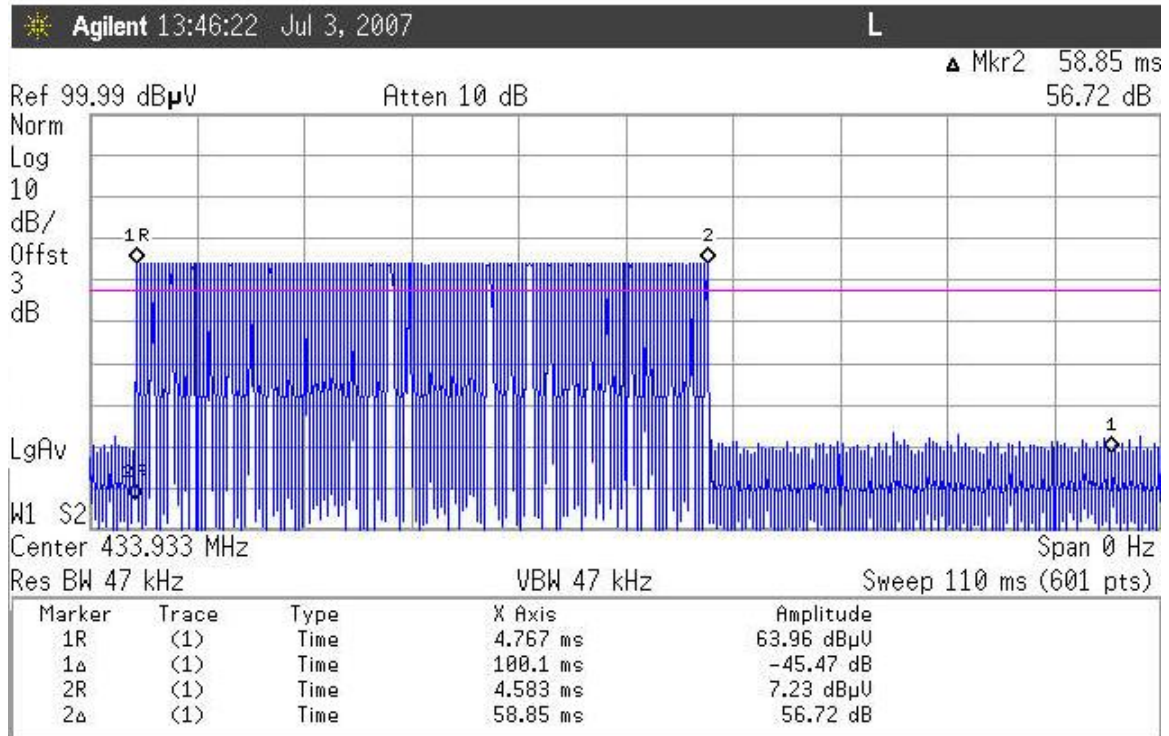


Figure 2: Duty Cycle of Transmission - Over 100ms

4.2 Transmission Cessation from Time-of-Release

FCC Part 15.231 states that a periodic intentional radiator shall cease transmission within a five second period from release of automatic or manual keying of operation.

Testing was conducted to verify that the Qualifier X-Ray HHD stopped transmitting within the required time period. A 6 second sweep was made, during which the control toggle was activated and released, and the time to transmission end was measured. Figure 3 shows the indicated time period from un-keying the device until cessation of transmission. The EUT complies with the requirements for this section.

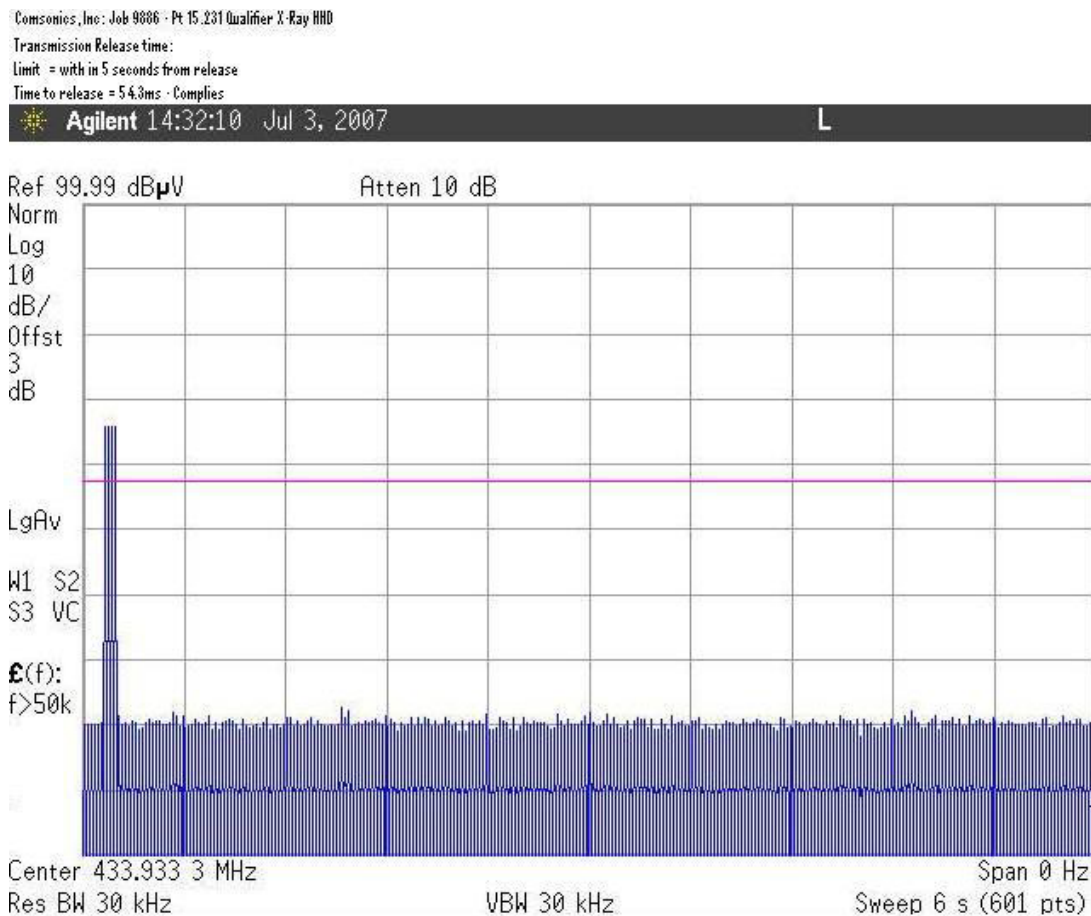


Figure 3. Time Period: Release to Termination of Transmission

4.3 Occupied Bandwidth: (FCC Part §2.1049)

Occupied bandwidth was performed by using a near field probe to detect the transmission with a spectrum analyzer.

FCC Part 15.231 states that the 20 dB bandwidth of the modulated carrier shall be as follows:

Frequency Range (MHz)	Occupied Bandwidth Limit
70-900 MHz	0.25%
>900 MHz	0.5%

At full modulation, the occupied bandwidth was measured as shown:

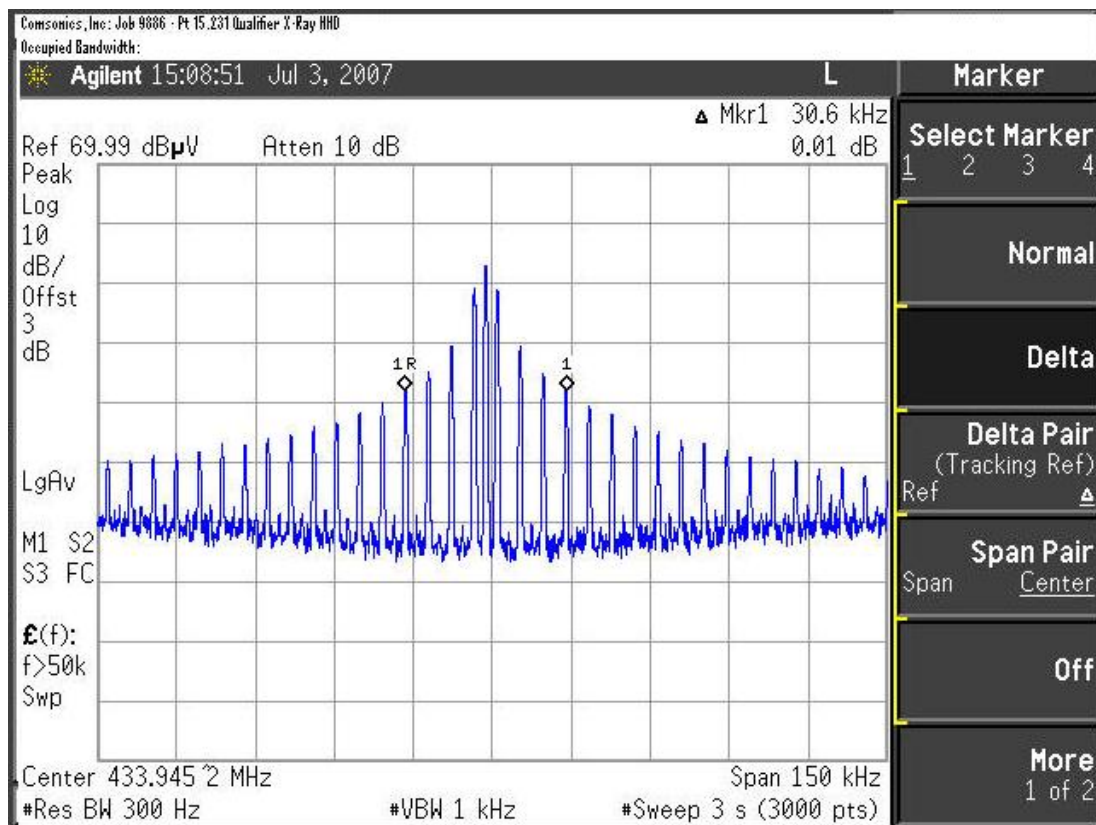


Figure 4. 20dB Occupied Bandwidth

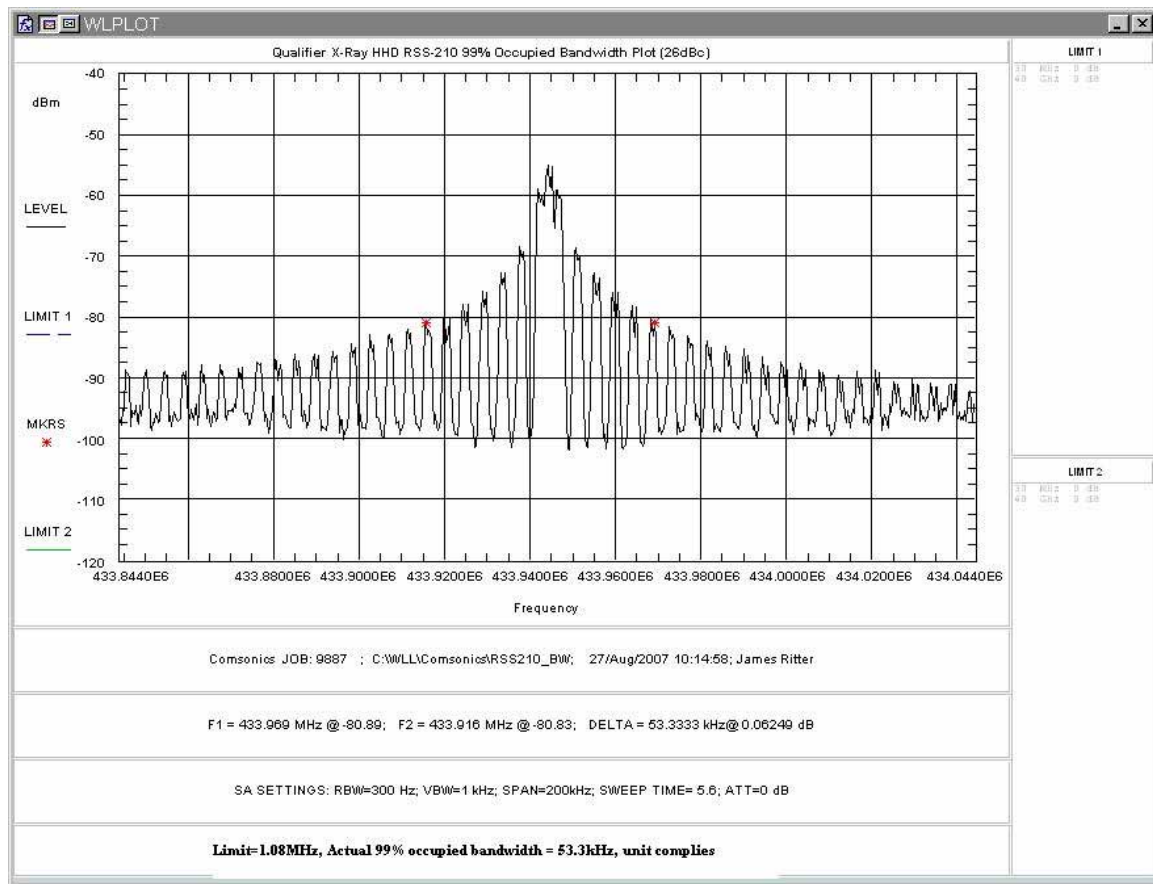


Figure 5. 26dBc Occupied Bandwidth

4.4 Radiated Spurious Emissions

The EUT must comply with requirements for radiated spurious emissions per the limits given in §15.231(a). In addition, any emissions appearing in the restricted bands listed in §15.205 must comply with the general emission limits of 15.209.

4.4.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. Receiving antennas were mounted on an antenna mast to determine the height of maximum emissions. The height of the antenna was varied between 1 and 4 meters. Both the horizontal and vertical field components were measured.

The emissions were measured using the following resolution bandwidths:

3038.00	H	45.0	1.0	35.8	34.3	5.0	32.0	0.0	43.1	143.4	11000.0	-37.7
3472.00	H	180.0	1.0	32.3	34.2	5.4	31.9	0.0	40.0	99.6	11000.0	-40.9
3906.00	H	0.0	1.0	23.0	34.1	5.7	31.9	0.0	30.9	35.3	5000.0	-43.0
4340.00	H	0.0	1.0	26.7	34.2	5.9	31.9	0.0	35.0	56.4	5000.0	-39.0

Table 4 Radiated Emissions Test Data – X Orthogonal continued

Average Data - Harmonics

Frequency	Polarity	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp Gain	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
434.00	V	170.0	1.0	44.4	16.2	3.8	0.0	0.0	64.4	1656.5	11000.0	-16.4
868.00	V	100.0	2.0	14.3	21.6	6.0	0.0	-8.7	33.2	45.5	1100.0	-27.7
1302.00	V	90.0	1.0	48.2	25.9	2.6	37.2	-8.7	30.8	34.5	500.0	-23.2
1736.00	V	110.0	1.0	49.8	27.3	2.1	36.7	-8.7	33.8	49.0	1100.0	-27.0
2170.00	V	300.0	1.0	54.3	28.4	2.5	36.4	-8.7	40.2	102.0	1100.0	-20.7
2604.00	V	270.0	1.0	43.9	29.3	3.9	36.1	-8.7	32.4	41.5	1100.0	-28.5
3038.00	V	100.0	1.0	45.0	30.0	5.0	35.8	-8.7	35.6	60.0	1100.0	-25.3
3472.00	V	110.0	1.0	34.0	30.6	5.4	35.6	-8.7	25.7	19.2	1100.0	-35.2
3906.00	V	0.0	1.0	23.3	31.0	5.7	35.4	-8.7	15.9	6.3	500.0	-38.1
4340.00	V	0.0	1.0	21.7	31.7	5.9	35.5	-8.7	15.2	5.8	500.0	-38.8
434.00	H	90.0	2.3	43.9	16.2	3.8	0.0	-8.7	55.2	575.7	11000.0	-25.6
868.00	H	180.0	2.3	13.6	21.6	6.0	0.0	-8.7	32.5	42.1	1100.0	-28.3
1302.00	H	270.0	1.0	49.8	25.9	2.6	37.2	-8.7	32.4	41.7	500.0	-21.6
1736.00	H	270.0	1.0	40.4	27.3	2.1	36.7	-8.7	24.4	16.6	1100.0	-36.4
2170.00	H	180.0	1.0	50.8	28.4	2.5	36.4	-8.7	36.7	68.2	1100.0	-24.2
2604.00	H	90.0	1.0	39.3	29.3	3.9	36.1	-8.7	27.8	24.4	1100.0	-33.1
3038.00	H	45.0	1.0	35.8	30.0	5.0	35.8	-8.7	26.4	20.8	1100.0	-34.5
3472.00	H	180.0	1.0	32.3	30.6	5.4	35.6	-8.7	24.0	15.8	1100.0	-36.9
3906.00	H	0.0	1.0	23.0	31.0	5.7	35.4	-8.7	15.6	6.0	500.0	-38.4
4340.00	H	0.0	1.0	26.7	31.7	5.9	35.5	-8.7	20.2	10.3	500.0	-33.8

Table 4: Radiated Emissions Test Data - Y Orthogonal

Peak Data - Harmonics

Frequency	Polarity	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp Gain	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
434.00	V	0.0	2.5	50.2	16.2	3.8	0.0	0.0	70.2	3229.9	110000.0	-30.6
868.00	V	350.0	2.5	13.4	21.6	6.0	0.0	0.0	41.0	111.7	11000.0	-39.9
1302.00	V	60.0	1.0	61.7	34.2	2.6	32.1	0.0	66.4	2089.0	5000.0	-7.6
1736.00	V	180.0	1.0	50.0	33.8	2.1	32.0	0.0	54.0	498.5	11000.0	-26.9
2170.00	V	180.0	1.0	55.6	33.9	2.5	32.0	0.0	60.0	999.6	11000.0	-20.8
2604.00	V	180.0	1.0	50.2	34.1	3.9	32.0	0.0	56.2	644.5	11000.0	-24.6
3038.00	V	0.0	1.0	44.5	34.3	5.0	32.0	0.0	51.8	390.4	11000.0	-29.0
3472.00	V	200.0	1.0	41.0	34.2	5.4	31.9	0.0	48.7	271.1	11000.0	-32.2
3906.00	V	0.0	1.0	38.2	34.1	5.7	31.9	0.0	46.1	202.8	5000.0	-27.8
4340.00	V	0.0	1.0	37.2	34.2	5.9	31.9	0.0	45.5	188.8	5000.0	-28.5
434.00	H	180.0	1.0	62.6	16.2	3.8	0.0	0.0	82.6	13464.6	110000.0	-18.2
868.00	H	90.0	1.0	37.0	21.6	6.0	0.0	0.0	64.6	1690.9	11000.0	-16.3
1302.00	H	180.0	1.0	60.8	34.2	2.6	32.1	0.0	65.4	1872.5	5000.0	-8.5
1736.00	H	180.0	1.0	55.2	33.8	2.1	32.0	0.0	59.2	907.1	11000.0	-21.7
2170.00	H	180.0	1.0	62.7	33.9	2.5	32.0	0.0	67.1	2263.8	11000.0	-13.7
2604.00	H	270.0	1.0	49.9	34.1	3.9	32.0	0.0	55.9	622.6	11000.0	-24.9
3038.00	H	180.0	1.0	49.5	34.3	5.0	32.0	0.0	56.8	694.3	11000.0	-24.0
3472.00	H	180.0	1.0	46.8	34.2	5.4	31.9	0.0	54.5	528.6	11000.0	-26.4
3906.00	H	0.0	1.0	37.8	34.1	5.7	31.9	0.0	45.7	193.7	5000.0	-28.2
4340.00	H	0.0	1.0	37.5	34.2	5.9	31.9	0.0	45.8	195.5	5000.0	-28.2

Table 5: Radiated Emissions Test Data - Y Orthogonal continued

Average Data - Harmonics

Frequency	Polarity	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp Gain	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
434.00	V	0.0	2.5	50.2	16.2	3.8	0.0	0.0	70.2	3229.9	11000.0	-10.6
868.00	V	350.0	2.5	13.4	21.6	6.0	0.0	-8.7	32.3	41.0	1100.0	-28.6
1302.00	V	60.0	1.0	61.7	25.9	2.6	37.2	-8.7	44.3	163.2	500.0	-9.7
1736.00	V	180.0	1.0	50.0	27.3	2.1	36.7	-8.7	34.0	50.1	1100.0	-26.8
2170.00	V	180.0	1.0	55.6	28.4	2.5	36.4	-8.7	41.5	118.5	1100.0	-19.4
2604.00	V	180.0	1.0	50.2	29.3	3.9	36.1	-8.7	38.7	85.7	1100.0	-22.2
3038.00	V	0.0	1.0	44.5	30.0	5.0	35.8	-8.7	35.1	56.7	1100.0	-25.8
3472.00	V	200.0	1.0	41.0	30.6	5.4	35.6	-8.7	32.7	43.0	1100.0	-28.2
3906.00	V	0.0	1.0	38.2	31.0	5.7	35.4	-8.7	30.8	34.8	500.0	-23.2
4340.00	V	0.0	1.0	37.2	31.7	5.9	35.5	-8.7	30.7	34.4	500.0	-23.3
434.00	H	180.0	1.0	62.6	16.2	3.8	0.0	-8.7	73.9	4956.7	11000.0	-6.9
868.00	H	90.0	1.0	37.0	21.6	6.0	0.0	-8.7	55.9	622.5	1100.0	-4.9
1302.00	H	180.0	1.0	60.8	25.9	2.6	37.2	-8.7	43.3	146.3	500.0	-10.7
1736.00	H	180.0	1.0	55.2	27.3	2.1	36.7	-8.7	39.2	91.3	1100.0	-21.6
2170.00	H	180.0	1.0	62.7	28.4	2.5	36.4	-8.7	48.6	268.4	1100.0	-12.3
2604.00	H	270.0	1.0	49.9	29.3	3.9	36.1	-8.7	38.4	82.8	1100.0	-22.5
3038.00	H	180.0	1.0	49.5	30.0	5.0	35.8	-8.7	40.1	100.8	1100.0	-20.8
3472.00	H	180.0	1.0	46.8	30.6	5.4	35.6	-8.7	38.5	83.8	1100.0	-22.4
3906.00	H	0.0	1.0	37.8	31.0	5.7	35.4	-8.7	30.4	33.2	500.0	-23.6
4340.00	H	0.0	1.0	37.5	31.7	5.9	35.5	-8.7	31.0	35.6	500.0	-23.0

Table 5: Radiated Emissions Test Data - Z Orthogonal

Peak Data - Harmonics

Frequency	Polarity	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp Gain	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
434.00	V	90.0	0.5	55.2	16.2	3.8	0.0	0.0	75.2	5743.7	110000.0	-25.6
868.00	V	270.0	1.0	27.6	21.6	6.0	0.0	0.0	55.2	572.9	11000.0	-25.7
1302.00	V	270.0	1.0	57.8	34.2	2.6	32.1	0.0	62.5	1336.4	5000.0	-11.5
1736.00	V	180.0	1.0	49.6	33.8	2.1	32.0	0.0	53.6	476.6	11000.0	-27.3
2170.00	V	180.0	1.0	63.4	33.9	2.5	32.0	0.0	67.8	2459.5	11000.0	-13.0
2604.00	V	120.0	1.0	50.2	34.1	3.9	32.0	0.0	56.2	644.5	11000.0	-24.6
3038.00	V	180.0	1.0	48.7	34.3	5.0	32.0	0.0	56.1	634.7	11000.0	-24.8
3472.00	V	180.0	1.0	48.0	34.2	5.4	31.9	0.0	55.7	606.9	11000.0	-25.2
3906.00	V	180.0	1.0	48.7	34.1	5.7	31.9	0.0	56.6	679.5	5000.0	-17.3
4340.00	V	180.0	1.0	43.0	34.2	5.9	31.9	0.0	51.3	368.2	5000.0	-22.7
434.00	H	180.0	1.0	52.8	16.2	3.8	0.0	0.0	72.8	4357.1	110000.0	-28.0
868.00	H	120.0	1.0	38.0	21.6	6.0	0.0	0.0	65.6	1897.2	11000.0	-15.3
1302.00	H	90.0	1.0	61.4	34.2	2.6	32.1	0.0	66.1	2018.0	5000.0	-7.9
1736.00	H	75.0	1.0	49.5	33.8	2.1	32.0	0.0	53.5	470.6	11000.0	-27.4
2170.00	H	250.0	1.0	55.7	33.9	2.5	32.0	0.0	60.1	1011.2	11000.0	-20.7
2604.00	H	300.0	1.0	54.9	34.1	3.9	32.0	0.0	60.9	1107.2	11000.0	-19.9
3038.00	H	100.0	1.0	51.1	34.3	5.0	32.0	0.0	58.4	830.0	11000.0	-22.4
3472.00	H	100.0	1.0	46.8	34.2	5.4	31.9	0.0	54.5	528.6	11000.0	-26.4
3906.00	H	100.0	1.0	43.0	34.1	5.7	31.9	0.0	50.9	352.5	5000.0	-23.0
4340.00	H	100.0	1.0	40.5	34.2	5.9	31.9	0.0	48.8	276.1	5000.0	-25.2

Table 6: Radiated Emissions Test Data - Z Orthogonal, continued

Average Data - Harmonics

Frequency	Polarity	Az	Ant. Hght	SA Level	Ant. Corr.	Cable Corr.	Amp Gain	Duty Cycle Corr	Corr. Level	Corr. Level	Limit	Margin
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB
434.00	V	90.0	0.5	55.2	16.2	3.8	0.0	0.0	75.2	5743.7	11000.0	-5.6
868.00	V	270.0	1.0	27.6	21.6	6.0	0.0	-8.7	46.5	210.4	1100.0	-14.4
1302.00	V	270.0	1.0	57.8	25.9	2.6	37.2	-8.7	40.4	104.4	500.0	-13.6
1736.00	V	180.0	1.0	49.6	27.3	2.1	36.7	-8.7	33.6	47.9	1100.0	-27.2
2170.00	V	180.0	1.0	63.4	28.4	2.5	36.4	-8.7	49.3	291.6	1100.0	-11.5
2604.00	V	120.0	1.0	50.2	29.3	3.9	36.1	-8.7	38.7	85.7	1100.0	-22.2
3038.00	V	180.0	1.0	48.7	30.0	5.0	35.8	-8.7	39.3	92.1	1100.0	-21.5
3472.00	V	180.0	1.0	48.0	30.6	5.4	35.6	-8.7	39.7	96.2	1100.0	-21.2
3906.00	V	180.0	1.0	48.7	31.0	5.7	35.4	-8.7	41.3	116.5	500.0	-12.7
4340.00	V	180.0	1.0	43.0	31.7	5.9	35.5	-8.7	36.5	67.0	500.0	-17.5
434.00	H	180.0	1.0	52.8	16.2	3.8	0.0	-8.7	64.1	1604.0	11000.0	-16.7
868.00	H	120.0	1.0	38.0	21.6	6.0	0.0	-8.7	56.9	698.4	1100.0	-3.9
1302.00	H	90.0	1.0	61.4	25.9	2.6	37.2	-8.7	44.0	157.6	500.0	-10.0
1736.00	H	75.0	1.0	49.5	27.3	2.1	36.7	-8.7	33.5	47.3	1100.0	-27.3
2170.00	H	250.0	1.0	55.7	28.4	2.5	36.4	-8.7	41.6	119.9	1100.0	-19.3
2604.00	H	300.0	1.0	54.9	29.3	3.9	36.1	-8.7	43.4	147.2	1100.0	-17.5
3038.00	H	100.0	1.0	51.1	30.0	5.0	35.8	-8.7	41.6	120.5	1100.0	-19.2
3472.00	H	100.0	1.0	46.8	30.6	5.4	35.6	-8.7	38.5	83.8	1100.0	-22.4
3906.00	H	100.0	1.0	43.0	31.0	5.7	35.4	-8.7	35.6	60.4	500.0	-18.4
4340.00	H	100.0	1.0	40.5	31.7	5.9	35.5	-8.7	34.0	50.3	500.0	-20.0

Table 6: Radiated Emissions Test Data - Non-Harmonic

Frequency (MHz)	Polarity H/V	Azimuth Degree	Ant. Height (m)	SA Level (QP) (dBµV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp Gain (dB)	Corr. Level (dBµV/m)	Corr. Level (µV/m)	Limit (µV/m)	Margin (dB)
83.24	V	160.0	0.5	39.7	7.6	1.5	27.0	21.7	12.2	100.0	-18.3
143.02	V	180.0	2.5	38.3	9.6	2.1	27.1	22.9	13.9	150.0	-20.7
332.82	V	90.0	2.0	44.4	14.6	3.2	27.0	35.1	57.1	200.0	-10.9
430.12	V	90.0	1.0	43.0	16.1	3.8	26.9	36.1	63.5	200.0	-10.0
440.00	V	180.0	4.0	42.6	16.3	3.8	26.8	35.9	62.1	200.0	-10.2
466.00	V	180.0	4.0	38.0	16.8	3.9	26.8	31.8	39.0	200.0	-14.2
83.24	H	90.0	1.5	43.0	7.6	1.5	27.0	25.0	17.9	100.0	-15.0
143.02	H	160.0	1.0	37.5	9.6	2.1	27.1	22.0	12.6	150.0	-21.5
332.82	H	200.0	3.3	37.7	14.6	3.2	27.0	28.4	26.4	200.0	-17.6
430.12	H	90.0	3.5	40.4	16.1	3.8	26.9	33.5	47.1	200.0	-12.6
440.00	H	180.0	2.8	44.5	16.3	3.8	26.8	37.8	77.3	200.0	-8.3
466.00	H	180.0	4.0	36.9	16.8	3.9	26.8	30.8	34.5	200.0	-15.3