



**FCC CFR47 PART 15 SUBPART C
CERTIFICATION
TEST REPORT**

FOR

WIRELESS ADAPTOR FOR OXY

MODEL NUMBER: OXY-004

FCC ID: EW4-OXYWA

REPORT NUMBER: 05I3336-1

ISSUE DATE: APRIL 25, 2005

Prepared for
MITSUMI ELECTRIC CO., LTD.
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ATSUGI
KANAGAWA 243-8533, JAPAN

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NVLAP[®]
LAB CODE:200065-0

Revision History

<u>Rev.</u>	<u>Revisions</u>	<u>Revised By</u>
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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: MITSUMI ELECTRIC CO., LTD
1601, SAKAI
ATSUGI, KANAGAWA 243-8533, JAPAN

EUT DESCRIPTION: WIRELESS ADAPTER FOR OXY

MODEL: OXY-004

SERIAL NUMBER: 20 & 25

DATE TESTED: APRIL 15 – APRIL 19, 2005

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

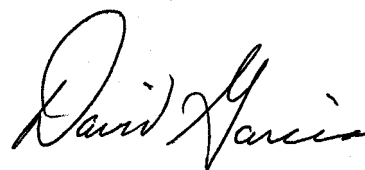
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

Tested By:



YAN ZHENG
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES



DAVID GARCIA
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003, FCC CFR 47 Part 2 and FCC CFR 47 Part 15.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a wireless transceiver adapter.

The radio module is manufactured by Mitsumi Electric Co., Ltd.

The EUT description was changed after testing commenced. All data in this report is applicable to the EUT description documented in Section 1 above.

EUT Type	WIRELESS ADAPTOR FOR OXY
Chassis Type	Plastic
Frequency Range	2426.248MHz and 2456.576MHz
Number of Channels	2
Channel Spacing	30.328MHz
Type of Modulation	ASK
Duty Cycle of Transmitter	10.8%
Antenna Type	Invert C
Antenna Gain	-0.1 dBi
No of External Connectors and Types	One, 8 pin plug
Power requirement	3.3 VDC

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes the invert C antenna with a maximum gain of -0.1 dBi.

5.3. SOFTWARE

The test utility software used during testing was ComTest3, ver.11, 19c.

5.4. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power. The highest measured output power was at 2426.248 MHz.

All emissions tests were made at both channels with X, Y, Z positions.

5.5. DESCRIPTION OF TEST SETUP

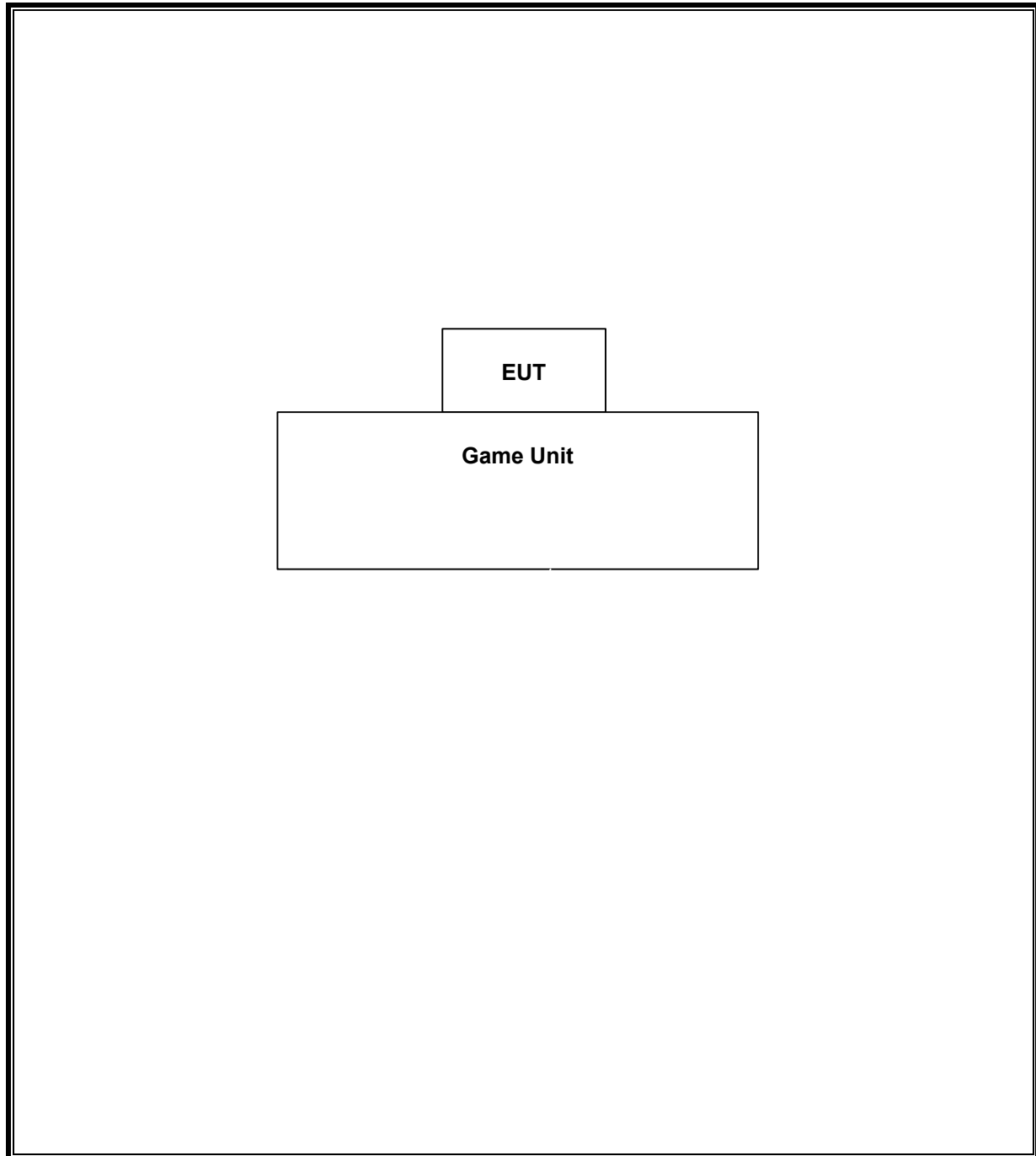
SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Game Unit	Nintendo	Gameboy Advanced	1521	DoC
Memory Card	Nintendo	n/a	195	n/a

TEST SETUP

The EUT is a wireless adapter for Nintendo Gameboy Advanced. The EUT is directly connected to the game unit. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	Cal Due
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent	E4446A	US42070220	1/1/2006
EMI Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	9/29/2006
RF Filter Section	HP	85420E	3705A00256	3/29/2006
Antenna, Bilog 30MHz ~ 2Ghz	Sunol Sciences	JB1	A121003	9/22/2005
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	2238	6/12/2005
Preamplifier, 1 ~ 26 GHz	Miteq	NSP2600-44	646456	8/17/2005
4.0 GHz High Pass Filter	MicroTronics	HPM13351	2708	CNR

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. 99% BANDWIDTH

LIMIT

None: for reporting purposes only.

TEST PROCEDURE

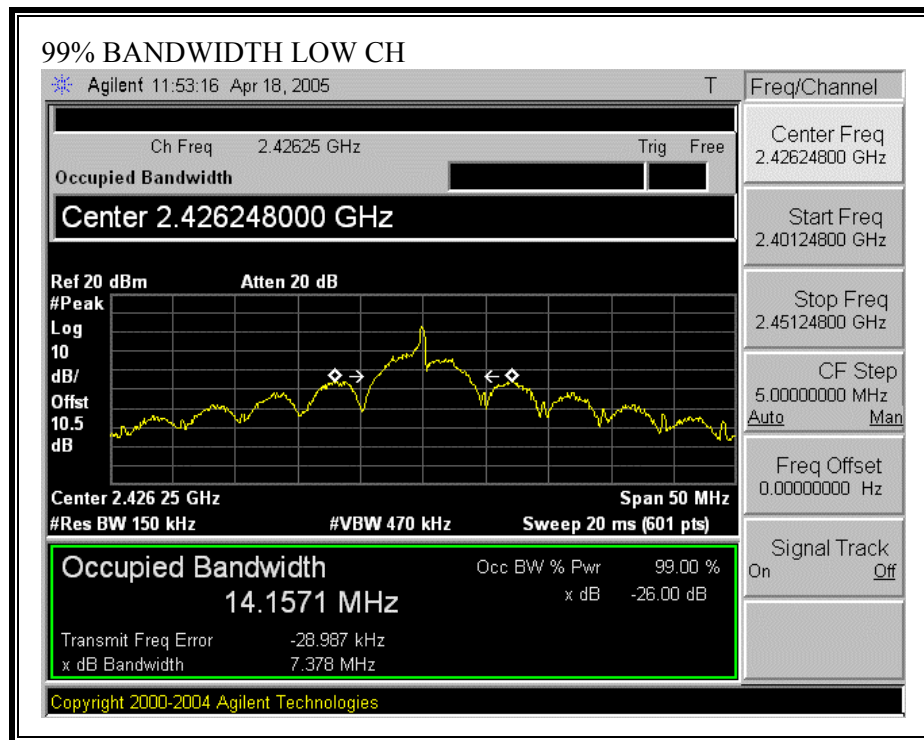
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

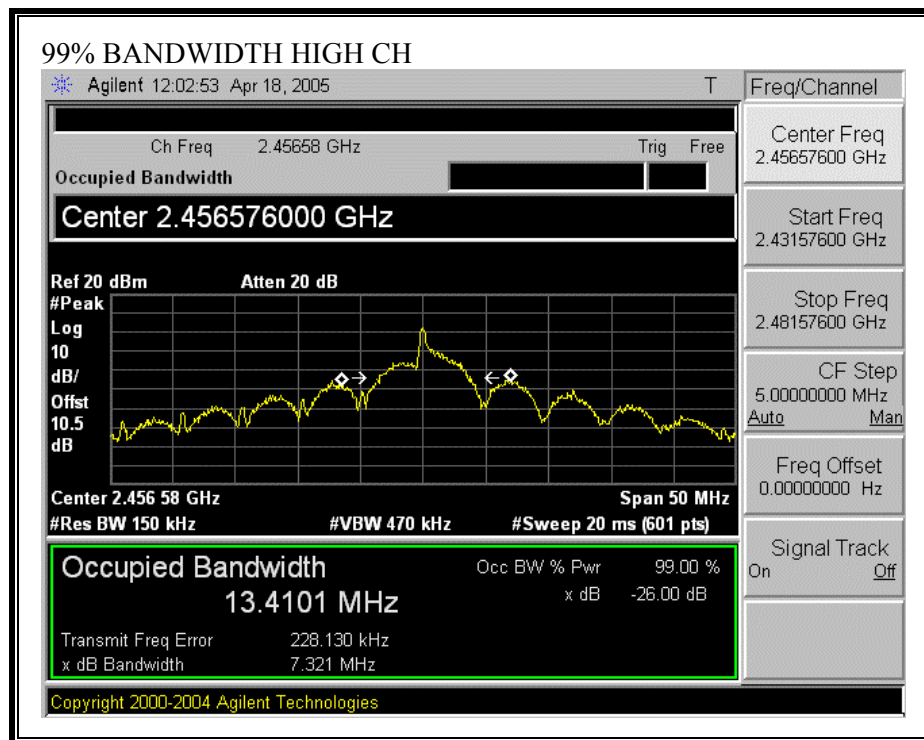
RESULTS

No non-compliance noted:

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2426.248	14.1571
High	2456.576	13.4101

99% BANDWIDTH





7.2. DUTY CYCLE

LIMIT

None, for reporting purposes only and a correction factor will apply to average readings.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The sweep time is coupled and the span is set to 0Hz. The RBW & VBW is set to usual and enough to capture a good plot.

RESULTS

No non-compliance noted:

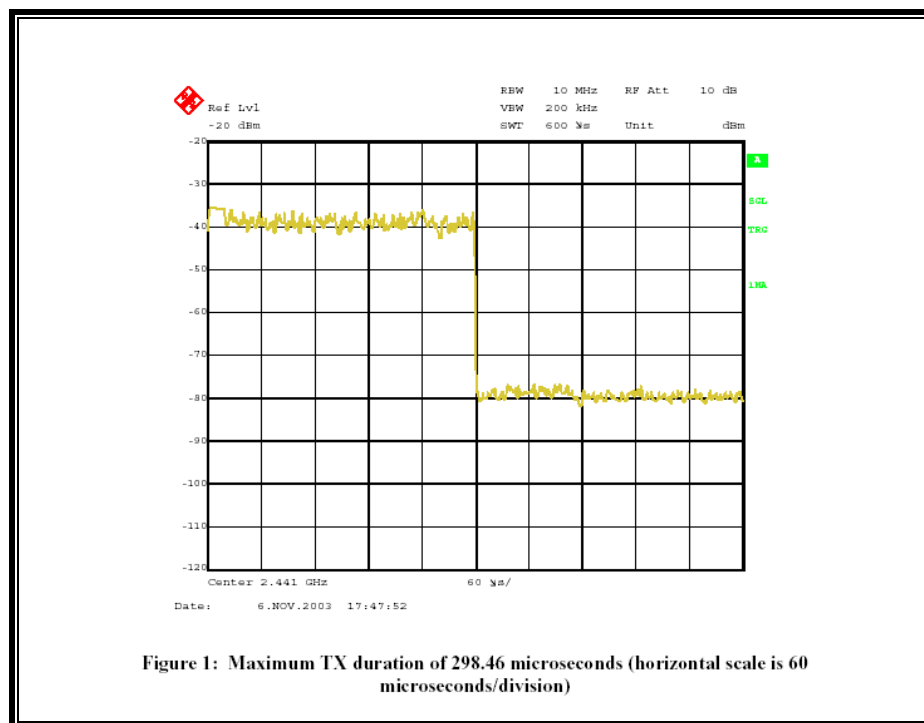
One Master Frame=2.78mS

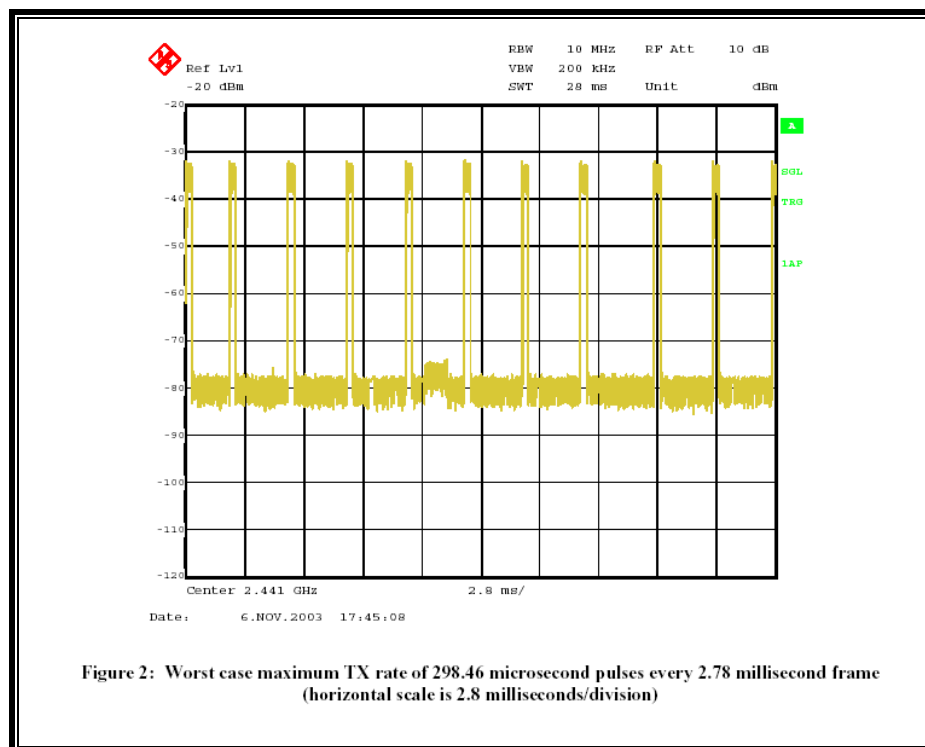
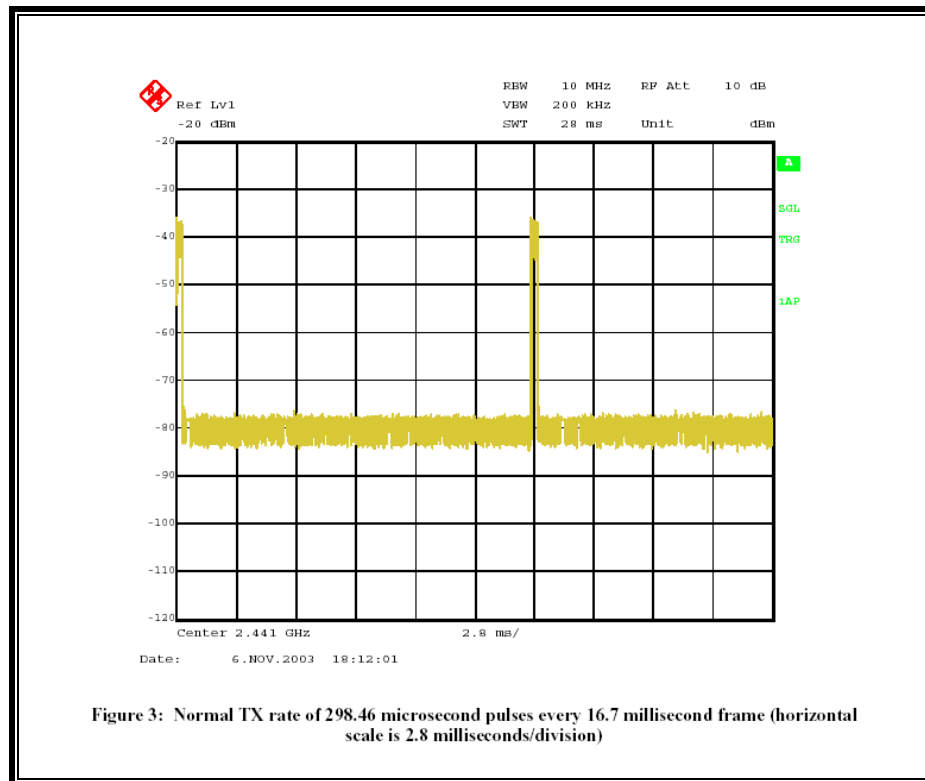
Master Frame is repeated continuously.

Max Tx bits in a Master Frame= 179bitsx8=1432bits

Transmit duration (data rate = 4.798MHz) = $1/4.798\text{MHz} \times 1432\text{bits} = 298.46\mu\text{S}$

$298.46\mu\text{S}/2780\mu\text{S} = 0.1073 = 10.7\%$





7.3. RADIATED EMISSIONS

7.3.1. TRANSMITTER RADIATED SPURIOUS EMISSIONS

LIMITS

The field strengths shall not exceed the following:

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902 - 928 MHz	50	500
2400 - 2483.5 MHz	50	500
5725 - 5875 MHz	50	500
24.0 - 24.25 GHz	250	2500

Field strength limits are specified at a distance of 3 meters.

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 - 88	100 **	3
88 - 216	150 **	3
216 - 960	200 **	3
Above 960	500	3

** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode. The X, Y, and Z positions shall be tested and the worst case reported.

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

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

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

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each 5 GHz band.

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

RESULTS

No non-compliance noted:

NOTE: Worst Case Duty Cycle of 0.1073 or 10.7% (-19.4dB) is included to correct the peak reading to the average value of emissions.

7.3.2. FUNDAMENTAL MEASUREMENT

FUNDAMENTAL MEASUREMENT @ X, Y, & Z POSITIONS:

04/15/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site															
Test Engr:		David Garcia													
Project #:		0513336-1													
Company:		Mitsumi Electric													
EUT Descrip.:		Wireless adapter for Gameboy													
EUT M/N:		OXY-004													
Test Target:		FCC 15.249													
Mode Oper:		Tx													
Average Power Meter:		Low = xx dBm, Mid = xx dBm, High = xx dBm													
Test Equipment:															
EMCO Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn > 18GHz									
T73; S/N: 6717 @3m															
Hi Frequency Cables															
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz			
						12_Yan						Average Measurements RBW=1MHz ; VBW=10Hz			
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)
EUT AT X POSITION, CONTINUOUS TX															
LOW CH = 2426.248 MHz															
2.426	3.0	59.6	40.2	28.3	2.7	0.0	0.0	0.0	90.6	71.2	114.0	94.0	-23.4	-22.8	V
2.426	3.0	67.0	47.6	28.3	2.7	0.0	0.0	0.0	98.0	78.6	114.0	94.0	-16.0	-15.4	H
HIGH CH = 2456.576 MHz															
2.457	3.0	58.8	39.4	28.4	2.7	0.0	0.0	0.0	89.9	70.5	114.0	94.0	-24.1	-23.5	V
2.457	3.0	66.2	46.8	28.4	2.7	0.0	0.0	0.0	97.3	77.9	114.0	94.0	-16.7	-16.1	H
EUT AT Y POSITION, CONTINUOUS TX															
LOW CH = 2426.248 MHz															
2.426	3.0	56.5	37.1	28.3	2.7	0.0	0.0	0.0	87.5	68.1	114.0	94.0	-26.5	-25.9	V
2.426	3.0	71.6	52.2	28.3	2.7	0.0	0.0	0.0	102.6	83.2	114.0	94.0	-11.4	-10.8	H
HIGH CH = 2456.576 MHz															
2.457	3.0	58.9	39.5	28.4	2.7	0.0	0.0	0.0	90.0	70.6	114.0	94.0	-24.0	-23.4	V
2.457	3.0	69.2	49.8	28.4	2.7	0.0	0.0	0.0	100.3	80.9	114.0	94.0	-13.7	-13.1	H
EUT AT Z POSITION, CONTINUOUS TX															
LOW CH = 2426.248 MHz															
2.426	3.0	67.8	48.4	28.3	2.7	0.0	0.0	0.0	98.8	79.4	114.0	94.0	-15.2	-14.6	V
2.426	3.0	60.5	41.1	28.3	2.7	0.0	0.0	0.0	91.5	72.1	114.0	94.0	-22.5	-21.9	H
HIGH CH = 2456.576 MHz															
2.457	3.0	65.2	45.8	28.4	2.7	0.0	0.0	0.0	96.3	76.9	114.0	94.0	-17.7	-17.1	V
2.457	3.0	55.6	36.2	28.4	2.7	0.0	0.0	0.0	86.7	67.3	114.0	94.0	-27.3	-26.7	H
NOTE: Worst case duty cycle of 0.1073 or 10.7% (-19.4 dB) is included to correct the peak reading to the average value of emissions.															
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit		
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit		
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit		
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit		
CL	Cable Loss					HPF	High Pass Filter								

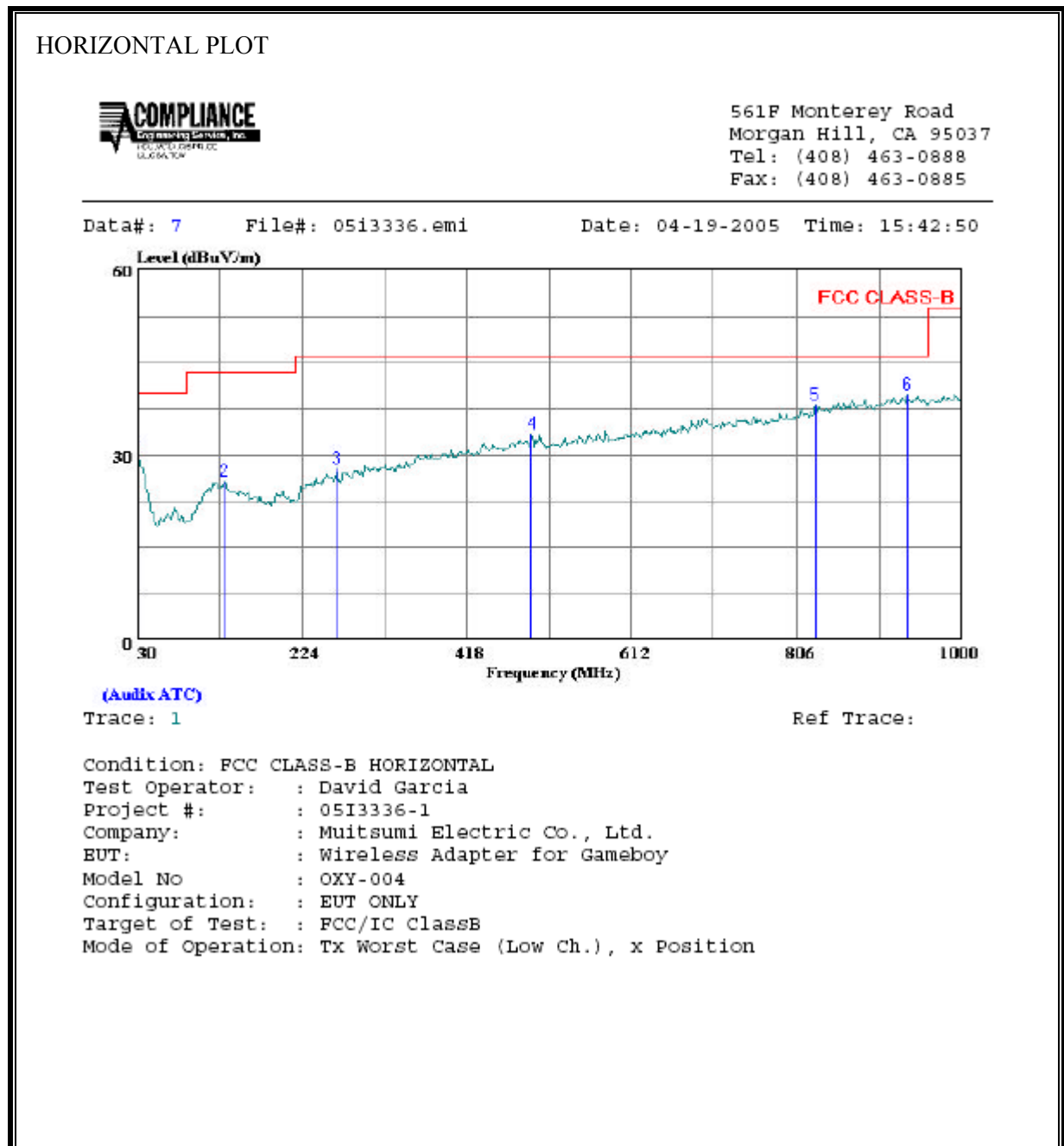
7.3.3. TRANSMITTER EMISSION ABOVE 1GHz

HARMONICS AND SPURIOUS EMISSIONS @ X, Y, & Z POSITIONS:

04/15/05 High Frequency Measurement Compliance Certification Services, Morgan Hill Open Field Site																
Test Engr:		David Garcia														
Project #:		0513336-1														
Company:		Mitsumi Electric														
EUT Descrip.:		Wireless adapter for Gameboy														
EUT M/N:		OXY-004														
Test Target:		FCC 15.249														
Mode Oper:		Tx														
Test Equipment:																
EMCO Horn 1-18GHz		Pre-amplifier 1-26GHz		Pre-amplifier 26-40GHz		Horn >18GHz										
T73; S/N: 6717 @3m		T63 Miteq 646456														
Hi Frequency Cables																
2 foot cable		3 foot cable		4 foot cable		12 foot cable		HPF		Reject Filter		Peak Measurements RBW=VBW=1MHz				
2_David				4_David		12_Yan		HPF_4.0GHz				Average Measurements RBW=1MHz ; VBW=10Hz				
f GHz	Dist (m)	Read Pk dBuV	Read Avg. dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Peak dBuV/m	Avg dBuV/m	Pk Lim dBuV/m	Avg Lim dBuV/m	Pk Mar dB	Avg Mar dB	Notes (V/H)	
EUT AT Z POSITION, CONTINUOUS Tx																
2426.248 CHANNEL																
4.852	3.0	57.4	46.8	32.9	5.5	-37.9	0.0	0.6	58.5	47.9	74	54	-15.5	-6.1	V	
4.852	3.0	49.3	39.9	32.9	5.5	-37.9	0.0	0.6	50.4	41.0	74	54	-23.6	-13.0	H	
2456.576 CHANNEL																
4.913	3.0	53.3	49.6	33.0	5.6	-37.9	0.0	0.6	54.5	50.8	74	54	-19.5	-3.2	V	
4.913	3.0	49.7	44.7	33.0	5.6	-37.9	0.0	0.6	50.9	45.9	74	54	-23.1	-8.1	H	
7.370	3.0	44.0	33.7	35.9	6.8	-36.9	0.0	0.6	50.5	40.2	74	54	-23.5	-13.8	H	
EUT AT Y POSITION, CONTINUOUS Tx																
2426.248 CHANNEL																
4.852	3.0	48.3	38.7	32.9	5.5	-37.9	0.0	0.6	49.4	39.8	74	54	-24.6	-14.2	V	
7.279	3.0	44.5	33.0	35.8	6.7	-37.0	0.0	0.6	50.7	39.2	74	54	-23.3	-14.8	V	
4.852	3.0	51.7	42.1	32.9	5.5	-37.9	0.0	0.6	52.8	43.2	74	54	-21.2	-10.8	H	
7.279	3.0	43.9	33.2	35.8	6.7	-37.0	0.0	0.6	50.1	39.4	74	54	-23.9	-14.6	H	
2456.576 CHANNEL																
4.913	3.0	51.6	47.9	33.0	5.6	-37.9	0.0	0.6	52.8	49.1	74	54	-21.2	-4.9	V	
7.370	3.0	44.2	34.6	35.9	6.8	-36.9	0.0	0.6	50.7	41.1	74	54	-23.3	-12.9	V	
4.913	3.0	46.8	39.8	33.0	5.6	-37.9	0.0	0.6	48.0	41.0	74	54	-26.0	-13.0	H	
7.370	3.0	45.2	33.0	35.9	6.8	-36.9	0.0	0.6	51.7	39.5	74	54	-22.3	-14.5	H	
EUT AT X POSITION, CONTINUOUS Tx																
2426.248 CHANNEL																
4.852	3.0	47.8	37.6	32.9	5.5	-37.9	0.0	0.6	48.9	38.7	74	54	-25.1	-15.3	V	
4.852	3.0	50.8	40.4	32.9	5.5	-37.9	0.0	0.6	51.9	41.5	74	54	-22.1	-12.5	H	
7.279	3.0	43.8	33.0	35.8	6.7	-37.0	0.0	0.6	50.0	39.2	74	54	-24.0	-14.8	H	
2456.576 CHANNEL																
4.913	3.0	47.6	38.5	33.0	5.6	-37.9	0.0	0.6	48.8	39.7	74	54	-25.2	-14.3	V	
7.370	3.0	44.0	33.6	35.9	6.8	-36.9	0.0	0.6	50.5	40.1	74	54	-23.5	-13.9	V	
4.913	3.0	49.1	43.0	33.0	5.6	-37.9	0.0	0.6	50.3	44.2	74	54	-23.7	-9.8	H	
No further emissions were detected above the noise floor of the test receiver.																
f	Measurement Frequency					Amp	Preamp Gain					Avg Lim	Average Field Strength Limit			
Dist	Distance to Antenna					D Corr	Distance Correct to 3 meters					Pk Lim	Peak Field Strength Limit			
Read	Analyzer Reading					Avg	Average Field Strength @ 3 m					Avg Mar	Margin vs. Average Limit			
AF	Antenna Factor					Peak	Calculated Peak Field Strength					Pk Mar	Margin vs. Peak Limit			
CL	Cable Loss					HPF	High Pass Filter									

7.3.4. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

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



HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	9.46	19.94	29.40	40.00	-10.60	Peak
2	133.790	10.69	15.02	25.71	43.50	-17.79	Peak
3	264.740	13.42	14.39	27.81	46.00	-18.19	Peak
4	494.630	13.30	20.14	33.44	46.00	-12.56	Peak
5	827.340	13.31	24.92	38.23	46.00	-7.77	Peak
6	935.980	13.60	26.33	39.93	46.00	-6.07	Peak

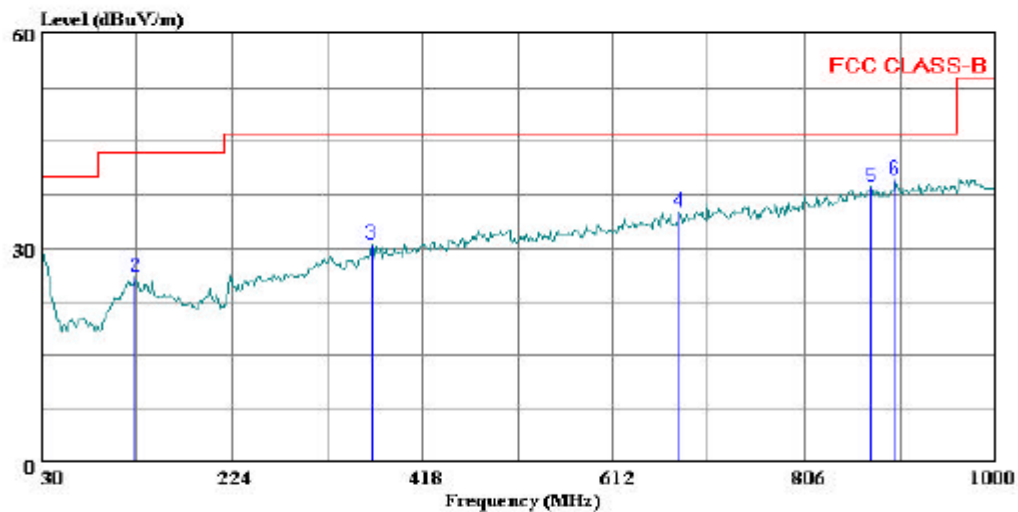
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, X POSITION, VERTICAL)

VERTICAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 8 File#: 05I3336.emi Date: 04-19-2005 Time: 15:44:24



(Auxiliary ATC)

Trace: 2

Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : David Garcia
Project #: : 05I3336-1
Company: : Mitsuomi Electric Co., Ltd.
EUT: : Wireless Adapter for Gameboy
Model No : OXY-004
Configuration: : EUT ONLY
Target of Test: : FCC/IC ClassB
Mode of Operation: Tx Worst Case (Low Ch.), x Position

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	9.51	20.45	29.96	40.00	-10.04	Peak
2	126.030	10.67	15.25	25.92	43.50	-17.58	Peak
3	366.590	13.12	17.31	30.43	46.00	-15.57	Peak
4	678.930	12.21	22.82	35.03	46.00	-10.97	Peak
5	872.930	12.94	25.61	38.55	46.00	-7.45	Peak
6	897.180	13.86	25.85	39.71	46.00	-6.29	Peak

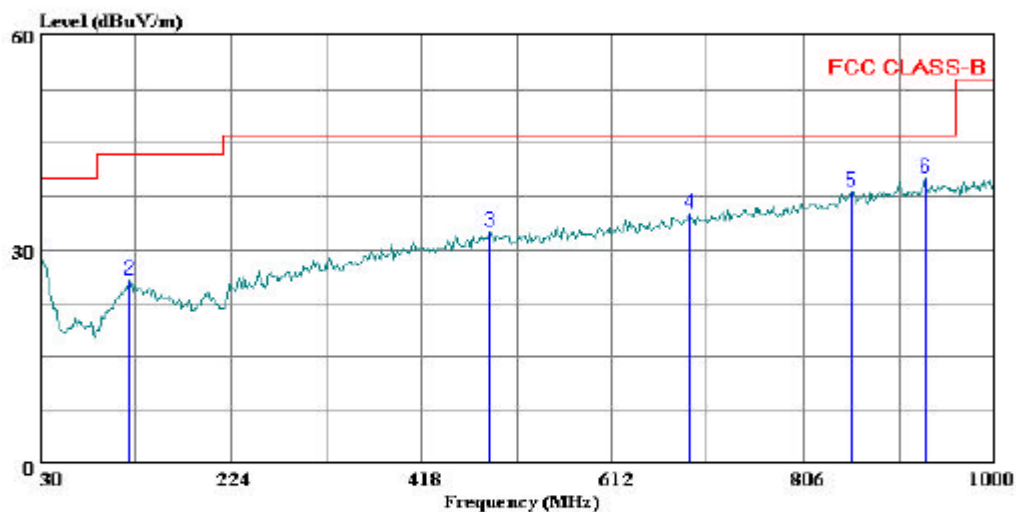
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, Y POSITION, HORIZONTAL)

HORIZONTAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 10 File#: 05I3336.emi Date: 04-19-2005 Time: 15:49:20



(Auxiliary ATC)

Trace: 4

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : David Garcia
Project #: : 05I3336-1
Company: : Mitsuami Electric Co., Ltd.
EUT: : Wireless Adapter for Gameboy
Model No : OXY-004
Configuration: : EUT ONLY
Target of Test: : FCC/IC ClassB
Mode of Operation: Tx Worst Case (Low Ch.), y Position

HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	8.52	19.94	28.46	40.00	-11.54	Peak
2	121.180	10.64	15.16	25.80	43.50	-17.70	Peak
3	487.840	12.59	20.00	32.59	46.00	-13.41	Peak
4	691.540	12.04	22.96	35.00	46.00	-11.00	Peak
5	853.530	13.00	25.30	38.30	46.00	-7.70	Peak
6	929.190	13.77	26.25	40.02	46.00	-5.98	Peak

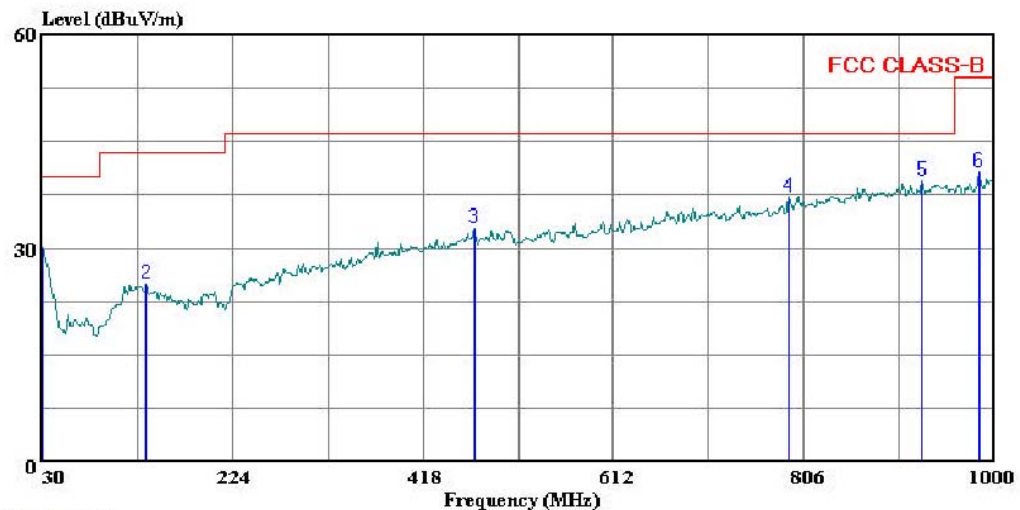
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, Y POSITION, VERTICAL)

VERTICAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 9 File#: 05I3336.emi Date: 04-19-2005 Time: 15:45:28



(Auxil ATC)

Trace: 3

Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : David Garcia
Project #: : 05I3336-1
Company: : Muitsumi Electric Co., Ltd.
EUT: : Wireless Adapter for Gameboy
Model No : OXY-004
Configuration: : EUT ONLY
Target of Test: : FCC/IC ClassB
Mode of Operation: Tx Worst Case (Low Ch.), y Position

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	9.58	20.45	30.03	40.00	-9.97	Peak
2	135.730	9.86	14.96	24.82	43.50	-18.68	Peak
3	470.380	13.25	19.65	32.90	46.00	-13.10	Peak
4	790.480	12.79	24.43	37.22	46.00	-8.78	Peak
5	926.280	13.32	26.23	39.55	46.00	-6.45	Peak
6	984.480	14.02	26.78	40.80	54.00	-13.20	Peak

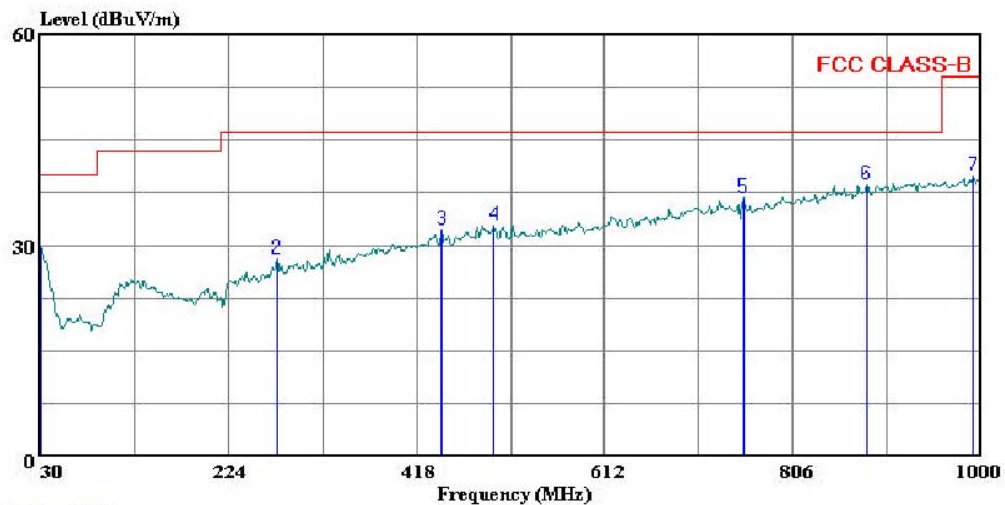
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, Z POSITION, HORIZONTAL)

HORIZONTAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 11 File#: 05i3336.emi Date: 04-19-2005 Time: 15:50:56



(Audix.ATC)

Trace: 5

Ref Trace:

Condition: FCC CLASS-B HORIZONTAL
Test Operator: : David Garcia
Project #: : 05I3336-1
Company: : Muitsumi Electric Co., Ltd.
EUT: : Wireless Adapter for Gameboy
Model No : OXY-004
Configuration: : EUT ONLY
Target of Test: : FCC/IC ClassB
Mode of Operation: Tx Worst Case (Low Ch.), z Position

HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	9.20	20.45	29.65	40.00	-10.35	Peak
2	274.440	13.21	14.76	27.97	46.00	-18.03	Peak
3	444.190	13.17	19.04	32.21	46.00	-13.79	Peak
4	497.540	12.69	20.19	32.88	46.00	-13.12	Peak
5	754.590	12.79	23.90	36.69	46.00	-9.31	Peak
6	882.630	12.85	25.73	38.58	46.00	-7.42	Peak
7	992.240	12.98	26.93	39.91	54.00	-14.09	Peak

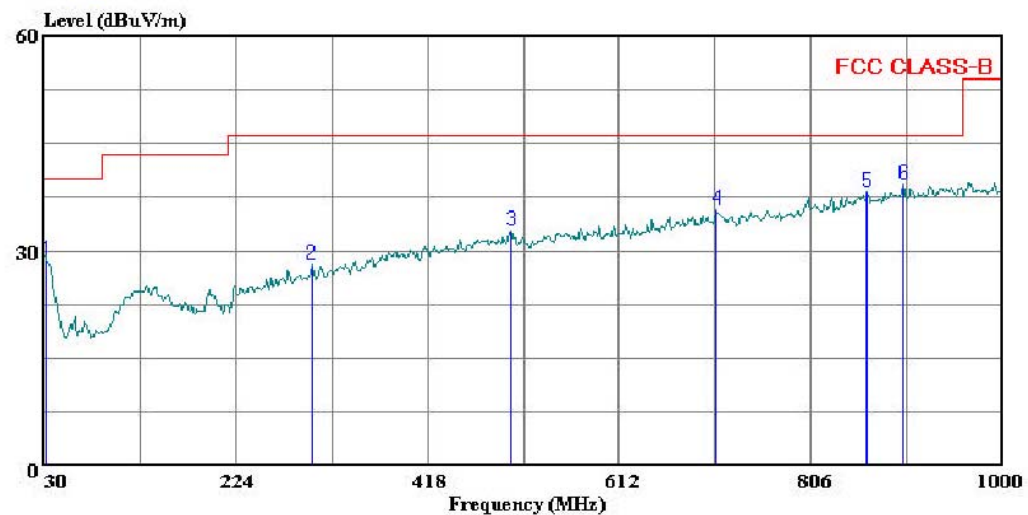
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, Z POSITION, VERTICAL)

VERTICAL PLOT



561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 12 File#: 05i3336.emi Date: 04-19-2005 Time: 15:52:16



(Aux ATC)

Trace: 6

Ref Trace:

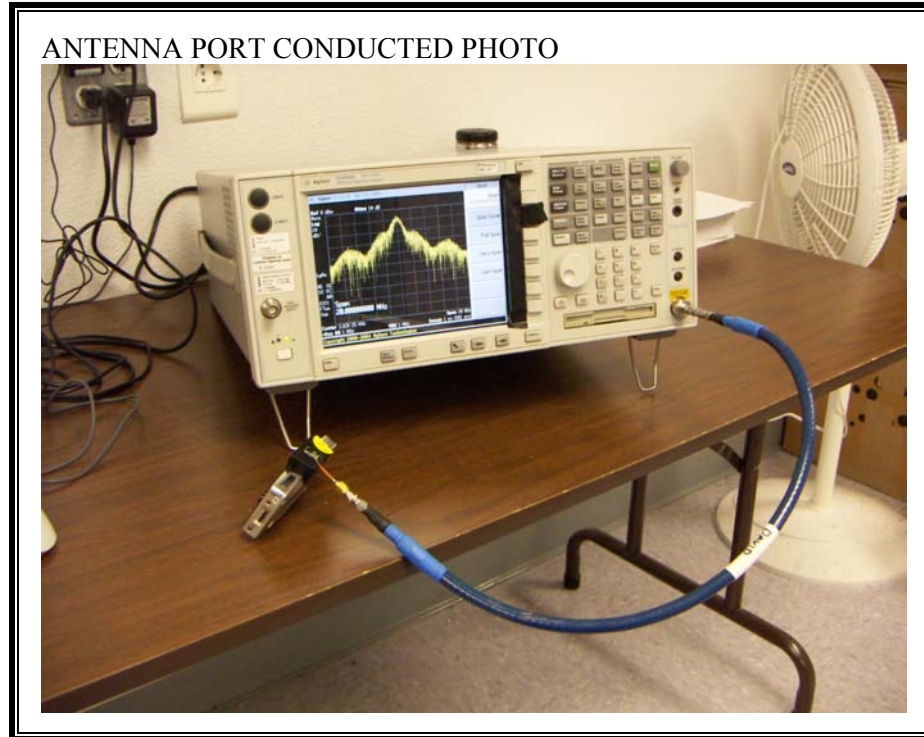
Condition: FCC CLASS-B VERTICAL
Test Operator: : David Garcia
Project #: : 05I3336-1
Company: : Muitsumi Electric Co., Ltd.
EUT: : Wireless Adapter for Gameboy
Model No : OXY-004
Configuration: : EUT ONLY
Target of Test: : FCC/IC ClassB
Mode of Operation: Tx Worst Case (Low Ch.), z Position

VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	31.940	8.76	19.94	28.70	40.00	-11.30	Peak
2	300.630	12.45	15.67	28.12	46.00	-17.88	Peak
3	502.390	12.57	20.24	32.81	46.00	-13.19	Peak
4	710.940	12.37	23.26	35.63	46.00	-10.37	Peak
5	863.230	12.86	25.42	38.28	46.00	-7.72	Peak
6	900.090	13.37	25.88	39.25	46.00	-6.75	Peak

8. SETUP PHOTOS

ANTENNA PORT CONDUCTED RF MEASUREMENT SETUP



RADIATED RF MEASUREMENT SETUP FOR PORTABLE CONFIGURATION



X-AXIS BACK PHOTO



Y-AXIS FRONT PHOTO



Y-AXIS BACK PHOTO



Z-AXIS FRONT PHOTO



Z-AXIS BACK PHOTO



END OF REPORT