



**FCC Test Report for
47CFR15, Subpart B for Unintentional Radiators, per Section 101
Equipment authorization of unintentional radiators,
and
47CFR15, Subpart C for Intentional Radiators, per Section 231
Periodic Operation above 70 MHz**

on
Home Attendant
[FCC ID: Q7JHOME-ATTENDANT]

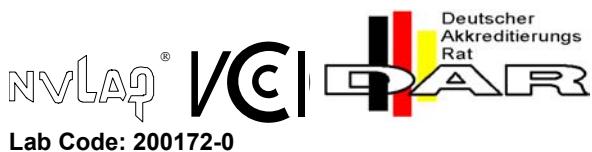
part number
MB2USA

itc report number
20030416-02-F15

manufacturer
MyCasa Network, Inc.
2197 East Bayshore Rd #150
Palo Alto, CA 94303

judgement
Complies

tests and report by
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Lab Code: 200172-0

EN45001 Accredited Compliance Laboratory (RES-GmbH)
Registration number: TTI-P-G 159/98-00 (RES-GmbH)

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PART 1 General

Test Information

Product Name	Home Attendant	
Model(s)	MB2USA	
Test Laboratory	ITC Engineering Services (ITC) 9959 Calaveras Road, PO Box 543 Sunol, CA 94586-0543 Tel: +1(925) 862-2944 Email: docs@itcemc.com Web Site: http://www.itcemc.com	Fax: +1(925) 862-9013
Test Number	20030416-02-F15	
Test Date(s)	May 16 to 20, 2003	
Issue Date	June 3, 2003	
Project Engineer(s)	Bandele Adepoju	

The electromagnetic interference tests, which this report describes, were performed by an independent electromagnetic compatibility consultant, ITC Engineering Services, Inc., in accordance with the emissions requirements specified in the FCC rules, 47CFR Part 15, Subparts B and C. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications specified in this report for compliance must be implemented in all production units for compliance to be maintained.

Tests Performed:

Emissions Requirements:

- OPEN FIELD RADIATED EMISSIONS in accordance with the FCC PART 15.109
- POWER LINE CONDUCTED EMISSIONS in accordance with the FCC PART 15.107.

RF Requirements:

- RESTRICTED BANDS in accordance with FCC 47 CFR 15.231(b)
- FIELD STRENGTH OF FUNDAMENTAL in accordance with the FCC 47 CFR 15.231(b)(2)
- SPURIOUS EMISSIONS in accordance with the FCC 47 CFR 15.231(b)(3)
- 20dB BANDWIDTH in accordance with the FCC 47 CFR 15.231(C)

PART 1 General (Cont)**Declaration/Disclaimer**

ITC Engineering Services, Inc. reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. ITC Engineering Services, Inc. shall have no liability for any deductions, inferences or generalizations drawn by the client or others from ITC Engineering Services, Inc. issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full with our written approval. The applicant/manufacturer shall not use this report to claim product endorsement by NVLAP or any US Government agency.

ITC Engineering Services, Inc. is:

Accepted by the Federal Communications Commission (FCC) for FCC Methods, CISPR Methods and AUSTEL Technical Standards (Ref: NVLAP Lab Code 200172-0)

Approved by the Industry Canada for Telecom Testing

Certified by Rockford Engineering Services GmbH for EMC Testing according to the European EMC Directive 89/336/EEC per EN45001

Certified by Reg. TP for EMC Testing according to the European EMC Directive 89/336/EEC per EN45001 for RES GmbH (DAR-Registration number: TTI-P-G 159/98-00)

Certified by the Voluntary Control Council for Interference by Information Technology Equipment (VCCI) for EMC testing, in accordance with the Regulations for Voluntary Control Measures, Article 8, Registration Numbers - Site 1: C-1582 and R-1497.

PART 1 General (Cont)**Test Methodology**

The electromagnetic interference tests, which this report describes, were performed by an independent electromagnetic compatibility consultant, ITC Engineering Services, Inc., in accordance with the FCC test procedure ANSI C63.4-1992.

Test Facility

The open area test site, the conducted measurement facility, and the test equipment used to collect the emissions data is located in Sunol, California, and is fully described in site attenuation report. The approved site attenuation description is on file at the Federal Communications Commission.

Table 1 Radio Device Measurement Information

Product Type Model	Home Attendant MB2USA	
Applicant / Manufacturer Address	MyCasa Network, Inc. 2197 East Bayshore Rd #150, Palo Alto, CA 94303,	
Contact	Mr. Stathis Kassimidas Tel: +1(650) 752-0390 X 101	stathis@mymcasanetwork.com Fax: +1(650) 752-0399
Test Results	<input checked="" type="checkbox"/> Complies	<input type="checkbox"/> Not Compliant
Date(s) of Test(s)	May 16 to 20 2003	
Total Number of Pages including Appendices	26 Page(s)	
Test Report File No.	20030416-02-F15	

Table 2 Measurement Uncertainty

RF frequency	$\pm 1 \times 10^{-7}$ HP8565E
RF power, conducted	± 1.5 dB
Adjacent channel power	± 3 dB
Conducted emission of transmitter, valid up to 1 GHz	± 1.5 dB
Conducted emission of transmitter, valid up to 18 GHz	± 1.5 dB
Conducted emission of receivers	± 1.5 dB
Radiated emission of transmitter, valid up to 1 GHz	± 1.5 dB
Radiated emission of transmitter, valid up to 18 GHz	± 1.5 dB
Radiated emission of transmitter, valid up to 26 GHz	± 3 dB
Radiated emission of transmitter, valid up to 40 GHz	± 3 dB
Radiated emission of transmitter, valid up to 75 GHz	± 3 dB

Accuracy of Test Data

The test results contained in this report accurately represent the emissions generated by the sample equipment under test. ITC Engineering Services, Inc. as an independent testing laboratory declares that the equipment as tested complies with the functional requirements of:

1. FCC standard 47CFR15.231.

for Intentional Radiators Operation above 70 MHz.

Bandele Adepoju
EMC MANAGER

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Home Attendant
Model: MB2USA

FCC ID: Q7JHOME-ATTENDANT

PART 2 RECEIVER MEASUREMENTS

OPEN FIELD RADIATED EMISSIONS

Test Specification: 47 CFR PART 15.109

The EUT was set up at 10 meters in accordance with the suggested configuration given in FCC Measurement Procedure ANSI C63.4-1992. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-1992. The Home Attendant was set up on a wooden non-conductive tabletop, 80 cm above the ground reference plane, in an open field. The transmit function was not activated for the tests. All ports were terminated with equivalent loads.

Table 3 Test Equipment – Radiated Emissions Tests

Equipment Description	Manufacturer	Model Name	Serial Number
Spectrum Analyzer	Hewlett-Packard	8566B	2618A02909
Spectrum Analyzer Display	Hewlett-Packard	85662A	2848A17028
Quasi Peak Adapter	Hewlett-Packard	85650	2521A00871
Preselector	Hewlett-Packard	85685A	2620A00265
Spectrum Analyzer	Hewlett-Packard	8565E	2618A02909
Pre-amplifier	Hewlett-Packard 8449B		3008A00101
Pre-amplifier	Hewlett-Packard 83051A		3332A002B3
Antenna Cable	Hewlett-Packard (OPTK45)	RG8/u	-
Antenna Cable (high freq)	Specialty Cable Corp.	M17/60-RG142	-

Equipment calibration data is listed in Appendix A at the end of this report.

Test Procedure – Radiated Emissions Tests

The measurement range investigated was from 30 MHz to 2 GHz. For measurements below 1GHz, the Home Attendant (the EUT) was set up at 10 meters on an Open Area Test Site (OATS) as described above, with the EUT running in a continuous mode. The EUT was rotated 360 degrees azimuth and the search antenna height varied 1 to 4m in order to maximize the emissions. Significant peaks from the EUT were then recorded to determine margin to the limits. For measurements above 1GHz, pre-scan measurements were first performed by collecting data with a spectrum analyzer at 3 meters in an Anechoic Chamber. The EUT running in continuous mode was rotated 360 degrees azimuth with the search antenna at a fixed height of 1meter and was also rotated in its x-y-z axis positions. Significant peaks were marked and then the highest emissions were analyzed in detail on an OATS at 3 meters. The EUT was rotated 360 degrees azimuth and the search antenna height varied 1 to 4m while operating the spectrum analyzer in fixed tuned mode to determine the precise amplitude of the emissions. The maximum emissions levels from the EUT were then recorded to determine margin to the limits.

Open Field Radiated Emissions (cont)

Spectrum Analyzer Configuration (during swept frequency scans) – Radiated Emissions

IF Bandwidth..... 120 kHz
Sweep Speed Manual

Measurements below 1000 MHz (unless stated otherwise)

Analyzer Mode (for Peak Measurements) Peak/Log
Resolution Bandwidth..... 100 kHz
Video Bandwidth..... 100 kHz
Analyzer Mode (for Quasi-Peak Measurements)
Quasi-Peak/Linear Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz

Measurements above 1000 MHz (unless stated otherwise)

Quasi-Peak Adapter Mode Disabled
Analyzer Mode (for Peak Measurements) Peak
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz
Analyzer Mode (for Average Measurements) Video Filter
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 10 Hz

Table 4 Data Table Legend and Field Strength Calculation – Radiated Emissions Tests

Detector mode: Peak (P) or Quasi-Peak (QP) or Average (A)

	Polarization	Antenna	Freq Range (MHz)
VB	Vertical	EMCO 3104/sn 3549 Biconical	30 – 200
HB	Horizontal	EMCO 3104/sn 3549 Biconical	30 – 200
VL	Vertical	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
HL	Horizontal	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
VH1	Vertical	EMC 3115/sn. 2362 Horn	Below 18000
HH1	Horizontal	EMC 3115/sn. 2362 Horn	Below 18000
VH2	Vertical	EMC 3116/sn. 2655 Horn	Below 26500
HH2	Horizontal	EMC 3116/sn. 2655 Horn	Below 26500
VH4	Vertical	S&D DBD-520 Horn	Below 75000
HH4	Horizontal	S&D DBD-520 Horn	Below 75000

The margin in the Table 6 is calculated as follows:

Margin = Corrected Amplitude – Limit, where Corrected Amplitude = Spectrum Analyzer Amplitude + Cable Loss + Antenna Factor – Pre-Amp Gain.

OPEN FIELD RADIATED EMISSIONS Results

Site Used – Radiated Emissions Measurement

- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Radiated Emissions Measurement

Test Date:	May 16 and 19, 2003
Test Engineer:	Bandele Adepoju

Environmental Conditions – Radiated Emissions Measurement

Temperature	25.5°C (average) 23.3 28.3
Humidity	32% (average) 48 16

Table 5 Test Data for Radiated Emissions Measurement up to 1 GHz @ 10 meters

The table below shows a summary of the highest amplitudes of the radiated emissions from the equipment under test at various antenna heights, antenna polarization, and EUT orientations.

INDICATED		CORRECTION		CORR	TURNTABLE ANT			CLASS A		CLASS B		
FREQ	AMPL	ANT	CAB	AMPL	ANG	HT	POL	AMPL	MARG	AMPL	MARG	DET
MHz	dB μ V/m	dB	dB	dB μ V/m	DEG	m	-	dB μ V/m	dB	dB μ V/m	dB	MODE
39.90	5.2	11.1	0.5	16.8	0	1.0	VB	40.0	-23.2	30.0	-13.2	P
76.31	6.0	4.0	1.9	11.9	90	1.0	HB	40.0	-28.1	30.0	-18.1	P
114.43	7.2	12.6	3.4	23.2	180	1.0	HB	40.0	-16.8	30.0	-6.8	QP
114.44	10.3	12.6	3.4	26.3	90	1.0	VB	40.0	-13.7	30.0	-3.7	QP
118.02	3.4	12.1	3.4	18.9	180	1.0	VB	40.0	-21.1	30.0	-11.1	P
124.19	7.6	11.7	3.6	22.9	180	1.0	VB	40.0	-17.1	30.0	-7.1	QP
133.52	13.0	11.3	3.6	27.9	90	1.0	VB	40.0	-12.1	30.0	-2.1	P
133.52	6.9	9.8	3.6	20.3	0	2.0	HB	40.0	-19.7	30.0	-9.7	P
143.00	8.3	11.1	4.4	23.8	180	2.0	VB	40.0	-16.2	30.0	-6.2	QP
156.55	5.5	13.1	5.4	24.0	90	1.0	VB	40.0	-16.0	30.0	-6.0	QP
171.67	5.6	15.8	6.0	27.4	180	1.0	VB	40.0	-12.6	30.0	-2.6	QP
221.21	11.0	10.7	3.9	25.5	180	1.5	HL	40.0	-14.5	30.0	-4.5	QP
276.53	3.7	13.6	2.7	20.0	180	1.5	VL	47.0	-27.0	37.0	-17.0	P
400.00	0.9	15.2	6.4	22.5	180	1.5	HL	47.0	-24.5	37.0	-14.5	P
451.28	3.6	16.5	4.0	24.2	180	1.5	VL	47.0	-22.8	37.0	-12.8	P
573.34	4.8	18.6	11.9	35.3	180	1.5	VL	47.0	-11.7	37.0	-1.7	QP
601.00	2.6	18.4	9.1	30.1	0	1.2	HL	47.0	-16.9	37.0	-6.9	QP
622.79	2.2	19.1	8.9	30.3	180	1.5	VL	47.0	-16.7	37.0	-6.7	QP

No emission of significant level was observed above 30 MHz thru 1GHz.

P = Peak

QP = Quasi Peak

OPEN FIELD RADIATED EMISSIONS Results (cont)**Table 6 Test Data for Radiated Emissions Measurement above 1 GHz @ 3 meters**

The table below shows a summary of the highest amplitudes of the radiated emissions from the equipment under test at various antenna heights, antenna polarization, and EUT orientations.

INDICATED		CORRECTION		CORRECTED		TURNTABLE ANT			CLASS A		CLASS B		
FREQ MHz	AMPL dBm	Cable dB	Ant	AMPL dBm	AMPL dBuV/m	ANG DEG	HT m	POL	AMPL dBuV/m	MARG dB	AMPL dBuV/m	MARG dB	DET MODE
1000.0	-75.00	-36	25.3	-85.70	21.30	180	1	VH1	-	-	54	-32.70	P
1083.1	-65.00	-35	25.3	-74.70	32.30	90	1	VH1	-	-	54	-21.70	P
1087.2	-68.00	-35	25.3	-77.70	29.30	90	1	HH1	-	-	54	-24.70	P
1088.2	-65.00	-35	25.3	-74.70	32.30	90	1	VH1	-	-	54	-21.70	P
1089.4	-65.00	-35	25.3	-74.70	32.30	90	1	VH1	-	-	54	-21.70	P
1090.0	-65.00	-35	25.3	-74.70	32.30	90	1	VH1	-	-	54	-21.70	P
1104.4	-64.00	-35	26.6	-72.40	34.60	180	1	VH1	-	-	54	-19.40	P
1233.0	-65.00	-35	26.6	-73.40	33.60	125	1	HH1	-	-	54	-20.40	P
1459.0	-59.00	-35	26.6	-67.40	39.60	225	1	VH1	-	-	54	-14.40	P
1460.0	-62.00	-35	26.6	-70.40	36.60	225	1	VH1	-	-	54	-17.40	P
1461.0	-62.00	-35	26.6	-70.40	41.60	225	1	VH1	-	-	54	-12.40	P
1462.0	-63.00	-35	26.6	-71.40	35.60	225	1	HH1	-	-	54	-18.40	P
1463.0	-63.00	-35	26.6	-71.40	35.60	225	1	VH1	-	-	54	-18.40	P
1464.0	-64.00	-35	26.6	-72.40	34.60	225	1	VH1	-	-	54	-19.40	P
1465.0	-63.00	-35	26.6	-71.40	35.60	225	1	VH1	-	-	54	-18.40	P

No emission of significant level was observed above 1465.0MHz

P = Peak

A = Average

Test Data Summary

The margin is calculated as follows:

Margin = Corrected Amplitude - Limit; where Corrected Amplitude = Amplitude + Cable Loss + Antenna Factor.

Conclusion

The Home Attendant meets the requirements of FCC Part 15, Class B.

POWER LINE CONDUCTED EMISSIONS

Test Specification: 47 CFR PART 15.107

The EUT was set up on a wooden non-conductive tabletop, 80cm above the horizontal reference plane and 40cm away from the vertical reference plane in a shielded room in accordance with the suggested configuration given in FCC Measurement Procedure ANSI C63.4-1992. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-1992. The transmit function was not activated for the tests. All ports were terminated with equivalent loads.

Table 7 Test Equipment – Power Line Conducted Emissions Tests

Equipment Description	Manufacturer	Model Name	Serial Number
Spectrum Analyzer	Hewlett-Packard	8566B	2618A02909
Spectrum Analyzer Display	Hewlett-Packard	85662A	2848A17028
Quasi Peak Adapter	Hewlett-Packard	85650	2521A00871
Preselector	Hewlett-Packard	85685A	2620A00265
Spectrum Analyzer	Hewlett-Packard	8565E	2618A02909
Pre-amplifier	Hewlett-Packard	8449B	3008A00101
Pre-amplifier	Hewlett-Packard	83051A	3332A002B3
Antenna Cable	Hewlett-Packard (OPTK45)	RG8/u	-
Antenna Cable (high freq)	Specialty Cable Corp.	M17/60-RG142	-

Equipment calibration data is listed in Appendix A at the end of this report.

Test Procedure – Power Line Conducted Emissions Tests

The measurement range investigated was from 0.150 kHz to 30 MHz. The Home Attendant (the EUT) was set up on a wooden table, 80cm above the horizontal reference plane and 40cm away from the vertical reference plane in a shielded room. It was connected to peripherals as listed above, powered and tested continuously according to requirements specified in CISPR22:1998 and using ANSI-C63.4-2001 as a guide. The power line conducted EMI tests were run on all the current carrying conductors of the power cords. Excess cord of the EUT was bundled in the center or shortened to appropriate length.

Power Line Conducted Radiated Emissions (cont)**Spectrum Analyzer Configuration (during swept frequency scans) – Power Line Conducted**

IF Bandwidth..... 9 kHz
Sweep Speed Manual
Analyzer Mode (for Peak Measurements)..... Peak/Log
Resolution Bandwidth 10 kHz
Video Bandwidth 10 kHz
Analyzer Mode (for Quasi-Peak Measurements) Quasi-Peak/Linear
Resolution Bandwidth 100 kHz
Video Bandwidth 100 kHz

The margin in the Table 6 is calculated as follows:

Margin = Corrected Amplitude – Limit, where Corrected Amplitude = Spectrum Analyzer Amplitude + Cable Loss + Antenna Factor – Pre-Amp Gain.

POWER LINE CONDUCTED RADIATED EMISSIONS Results

Site Used – Power Line Conducted Emissions Measurement

- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Power Line Conducted Emissions Measurement

Test Date:	May 19, 2003
Test Engineer:	Bandele Adepoju

Environmental Conditions – Power Line Conducted Emissions Measurement

Temperature	22°C
Humidity	43%

Table 8 Test Data for Power Line Conducted Emissions Measurement

The table below shows a summary of the highest amplitudes of the Power Line Conducted emissions from the equipment under test.

FREQ MHz	AMPL dB μ V/m	INDICATED		CORRECTION		CAB dB μ V/m	TURNTABLE ANT			CLASS A		CLASS B		DET MODE	NOTES
		ANT dB	CAB dB	AMPL dB μ V/m	ANG DEG		HT m	POL	AMPL dB μ V/m	MARG dB	AMPL dB μ V/m	MARG dB			
0.16	46.7	-	3.0	49.7	-	-	-	-	79.0	-29.3	65.7	-16.0	P	Hot	
0.16	49.0	-	3.0	52.0	-	-	-	-	79.0	-27.0	65.7	-13.7	P	Neutral	
0.20	40.1	-	3.0	43.1	-	-	-	-	79.0	-35.9	63.8	-20.7	P	Hot	
0.31	36.7	-	3.0	39.7	-	-	-	-	79.0	-39.3	59.9	-20.2	P	Neutral	
0.46	29.9	-	3.0	32.9	-	-	-	-	79.0	-46.1	56.8	-23.9	P	Neutral	
0.47	32.8	-	3.0	35.8	-	-	-	-	79.0	-43.2	56.4	-20.6	P	Neutral	
0.63	36.4	-	3.0	39.4	-	-	-	-	73.0	-33.6	56.0	-16.6	P	Hot	
0.63	33.5	-	3.0	36.5	-	-	-	-	73.0	-36.5	56.0	-19.5	P	Neutral	
0.68	24.3	-	3.0	27.3	-	-	-	-	73.0	-45.7	56.0	-28.7	P	Neutral	
0.76	23.7	-	3.0	26.7	-	-	-	-	73.0	-46.3	56.0	-29.3	P	Neutral	
0.79	23.7	-	3.0	26.7	-	-	-	-	73.0	-46.3	56.0	-29.3	P	Neutral	
0.81	24.3	-	3.0	27.3	-	-	-	-	73.0	-45.7	56.0	-28.7	P	Neutral	
0.91	23.2	-	3.0	26.2	-	-	-	-	73.0	-46.8	56.0	-29.8	P	Neutral	
0.94	24.3	-	3.0	27.3	-	-	-	-	73.0	-45.7	56.0	-28.7	P	Neutral	
1.09	27.1	-	3.0	30.1	-	-	-	-	73.0	-42.9	56.0	-25.9	P	Hot	
1.09	24.3	-	3.0	27.3	-	-	-	-	73.0	-45.7	56.0	-28.7	P	Neutral	
1.14	23.9	-	3.0	26.9	-	-	-	-	73.0	-46.1	56.0	-29.1	P	Neutral	
1.41	22.9	-	3.0	25.9	-	-	-	-	73.0	-47.1	56.0	-30.1	P	Neutral	
1.57	23.3	-	3.0	26.3	-	-	-	-	73.0	-46.7	56.0	-29.7	P	Neutral	
1.67	15.6	-	3.0	18.6	-	-	-	-	73.0	-54.4	56.0	-37.4	P	Hot	
2.02	16.2	-	3.0	19.2	-	-	-	-	73.0	-53.8	56.0	-36.8	P	Neutral	
2.20	15.2	-	3.0	18.2	-	-	-	-	73.0	-54.8	56.0	-37.8	P	Hot	
2.83	10.9	-	3.0	13.9	-	-	-	-	73.0	-59.1	56.0	-42.1	P	Hot	
3.00	17.2	-	3.0	20.2	-	-	-	-	73.0	-52.8	56.0	-35.8	P	Neutral	
3.18	8.7	-	3.0	11.7	-	-	-	-	73.0	-61.3	56.0	-44.3	P	Hot	
3.31	8.4	-	3.0	11.4	-	-	-	-	73.0	-61.6	56.0	-44.6	P	Hot	
6.13	7.0	-	3.0	10.0	-	-	-	-	73.0	-63.0	60.0	-50.0	P	Hot	
7.60	8.7	-	3.0	11.7	-	-	-	-	73.0	-61.3	60.0	-48.3	P	Hot	
9.10	21.5	-	3.0	24.5	-	-	-	-	73.0	-48.5	60.0	-35.5	P	Hot	
9.28	21.4	-	3.0	24.4	-	-	-	-	73.0	-48.6	60.0	-35.6	P	Hot	
9.38	22.7	-	3.0	25.7	-	-	-	-	73.0	-47.3	60.0	-34.3	P	Hot	

POWER LINE CONDUCTED RADIATED EMISSIONS Results (cont)**Power Line Conducted Emissions Measurement (cont)**

INDICATED		CORRECTION		CORR	TURNTABLE ANT			CLASS A		CLASS B			
FREQ	AMPL	ANT	CAB	AMPL	ANG	HT	POL	AMPL	MARG	AMPL	MARG	DET	
MHz	dB μ V/m	dB	dB	dB μ V/m	DEG	m	-	dB μ V/m	dB	dB μ V/m	dB	MODE	NOTES
10.61	10.5	-	3.0	13.5	-	-		73.0	-59.5	60.0	-46.5	P	Hot
12.10	9.8	-	3.0	12.8	-	-		73.0	-60.2	60.0	-47.2	P	Hot
12.54	9.3	-	3.0	12.3	-	-		73.0	-60.7	60.0	-47.7	P	Neutral
13.60	10.4	-	3.0	13.4	-	-		73.0	-59.6	60.0	-46.6	P	Hot
15.11	12.4	-	3.0	15.4	-	-		73.0	-57.6	60.0	-44.6	P	Hot
15.87	8.7	-	3.0	11.7	-	-		73.0	-61.3	60.0	-48.3	P	Hot
16.18	8.8	-	3.0	11.8	-	-		73.0	-61.2	60.0	-48.2	P	Neutral
18.11	9.3	-	3.0	12.3	-	-		73.0	-60.7	60.0	-47.7	P	Hot
18.43	10.5	-	3.0	13.5	-	-		73.0	-59.5	60.0	-46.5	P	Neutral
19.99	4.1	-	3.0	7.1	-	-		73.0	-65.9	60.0	-52.9	P	Neutral
22.61	26.0	-	3.0	29.0	-	-		73.0	-44.0	60.0	-31.0	P	Hot
24.57	9.8	-	3.0	12.8	-	-		73.0	-60.2	60.0	-47.2	P	Neutral
25.00	9.5	-	3.0	12.5	-	-		73.0	-60.5	60.0	-47.5	P	Neutral
26.53	26.1	-	3.0	29.1	-	-		73.0	-43.9	60.0	-30.9	P	Hot
28.10	16.7	-	3.0	19.7	-	-		73.0	-53.3	60.0	-40.3	P	Hot

No emission of significant level was observed above 15kHz thru 30MHz.

P = Peak

QP = Quasi Peak

Test Data Summary

The margin is calculated as follows:

Margin = Corrected Amplitude - Limit; where Corrected Amplitude = Amplitude + Cable Loss + Antenna Factor.

Conclusion

The Home Attendant meets the requirements of FCC Part 15, Class B.

PART 3 RF MEASUREMENTS

EUT Description:

MyCasa Network's Home Attendant, or the "EUT" as referred to in this report, is intentional radiator. It comes with an antenna permanently attached. The EUT, was set up on a wooden table, 80cm above the ground reference plane in an anechoic chamber and in an open field. It was powered and tested in normal continuous mode.

List of equipment used during RF Tests

Table 9: Test Equipment – RF Measurements

Test Equipment	Manufacturer	Model Number	Serial Number
Preamplifier	Hewlett-Packard	8449B	3008A00101
Preamplifier	Hewlett-Packard	83051A	3332A002B3
RF Power Amplifier	Amplifier Research	5S1G4	18220
Signal Generator	Hewlett Packard	8673C	2918A00649
Quasi Peak Adapter	Hewlett-Packard	85650A	2521A00737
Spectrum Analyzer	Hewlett-Packard	8566B	2618A02909
Spectrum Analyzer Display	Hewlett-Packard		
Oscilloscope Receiver	LeCroy	WP960	2348
Signal Generator	Hewlett-Packard	8656B	2623A04271
Spectrum Analyzer	Hewlett-Packard	8591A	3149A2541
Signal Generator	Anritsu	Mg3690A	
LISN (25 Amp)	EMCO	38825/2	9210-2008
LISN	EMCO	3825/2R	1188/1001

Equipment calibration data is listed in Appendix A at the end of this report.

Voltage Tested: 120 VAC

Table 10: Data Table Legend and Field Strength Calculation

Detector mode: Peak (P) or Quasi-Peak (QP) or Average (A)

	Polarization	Antenna	Freq Range (MHz)
VB	Vertical	EMCO 3104/sn 3549 Biconical	30 – 200
HB	Horizontal	EMCO 3104/sn 3549 Biconical	30 – 200
VL	Vertical	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
HL	Horizontal	EMCO 3146/sn. 2075 Log Periodic	200 – 1000
VH1	Vertical	EMC 3115/sn. 2362 Horn	Below 18000
HH1	Horizontal	EMC 3115/sn. 2362 Horn	Below 18000
VH2	Vertical	EMC 3116/sn. 2655 Horn	Below 26500
HH2	Horizontal	EMC 3116/sn. 2655 Horn	Below 26500
VH4	Vertical	S&D DBD-520 Horn	Below 75000
HH4	Horizontal	S&D DBD-520 Horn	Below 75000

FIELD STRENGTH OF FUNDAMENTAL

Test Specification: FCC PART 15 SECTION 47 CFR 15.231(b) (2)

The EUT was set up on a wooden non-conductive tabletop, 80 cm above the ground plane on an Open Area Test Site (OATS) at 3 meters. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-2001. The EUT running in continuous mode, was rotated 360 degrees azimuth with the search antenna varied between 1 to 4 meters in height and was also rotated in its x-y-z axis positions while operating the spectrum analyzer in fixed tuned mode to determine the precise amplitude of the emission. The highest peak and orientation was marked and recorded in the test data below.

Site Used – Field Strength of Fundamental Measurements

- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Field Strength of Fundamental Measurements

Test Date(s):	May 20, 2003
Test Engineer(s):	Bandele Adepoju

Environmental Conditions – Field Strength of Fundamental Measurements

Temperature	21.1°C
Humidity	49%

Table 11: Spectrum Analyzer Configuration – Fundamental Field Strength Measurement

IF Bandwidth..... 120 kHz
 Sweep Speed..... Manual

Peak Measurement

RES Bandwidth 100 kHz
 Video Bandwidth 100 kHz

Average Measurement

RES Bandwidth 1000 kHz
 Video Bandwidth 1000 kHz
 Average Detector Enabled with 100 sweeps sampled
 Quasi Peak Adapter Mode Bypass
 Quasi peak Adapter Bandwidth Disabled

Table 12 Test Data – Field Strength of Fundamental

The measurement plot below represents the maximum worst-case result from the measurement performed in accordance to the requirements of this section.

INDICATED		CORRECTION		CORR		TURNTABLE ANT			DUTY CYCLE CORR		CLASS B		
FREQ	AMPL	ANT	CAB	AMPL	ANG	HT	POL	AMPL	AMPL	AMPL	MARG	DET	MODE
MHz	dBuV/m	dB	dB	dBuV/m	DEG	m	-	dBuV	dBuV/m	dBuV/m	dB		
315.00	62.8	14.5	4.9	82.2	320	1.0	HL	-	-	95.6	-13.40	P	
315.00	62.8	14.5	4.9	82.2	320	1.0	HL	-15.39	66.81	75.6	-8.79	A	
315.00	59.4	14.7	4.9	79.0	320	2.3	VL	-	-	95.6	-16.60	P	

FIELD STRENGTH OF FUNDAMENTAL (cont)

Peak Calculation with Duty Cycle Correction

Measurement-Plot Summary:

Duty Cycle "X" = 16.96msecs = 17% = 0.17 where X is (0 < X < 1)

47CFR 15.35c:

Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.

Peak Level Calculation of Field Strength of Fundamental with Duty Cycle correction

$$\begin{array}{lll} \text{dB (in } \mu\text{V) Duty Cycle Correction} & = 20\log(0.17) & = -15.39 \text{dB}\mu\text{V} \\ \text{Peak Level with Duty Cycle Correction} & = 82.20 \text{dB}\mu\text{V/m} - 15.39 \text{dB}\mu\text{V} & = 66.81 \text{dB}\mu\text{V/m} \end{array}$$

Test-Data Summary – Fundamental Measurement:

Center Frequency	= 315 MHz
Duty Cycle Manufacturer Rating	= 16.96msecs (per 0.1 sec interval)
Average Level (Measured)	= 82.2dB μ V/m
Average Level (with Duty Cycle Correction)	= 66.79dB μ V
Average Limit (47CFR15.231)	= 75.6dB μ V/m
Peak Limit (47CFR15.231)	= 75.6dB μ V + 20dB = 95.6dB μ V

EMISSIONS AND RESTRICTED BANDS

Test Specification: FCC PART 15 SECTION 47 CFR 15.231(b) (2)
FCC PART 15 SECTION 47 CFR 15.231(b) (3)

The EUT was placed on the wooden table and the measurements were made. Signals were measured with a Spectrum Analyzer, using the 50-ohm cable. The EUT running in continuous mode, was rotated 360 degrees azimuth and was also rotated in its x-y-z axis positions. The search antenna height was varied 1 to 4m while operating the spectrum analyzer in fixed tuned mode to determine the precise amplitude of the emission. The highest orientation and peak were marked.

Site Used – Spurious Emissions Measurements

- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Spurious Emissions Measurements

Test Date:	May 16, 2003
Test Engineer:	Bandele Adepoju

Environmental Conditions – Harmonics Emissions

Temperature	23.3 °C
Humidity	48%

Table 13 Test Data – Spurious Emissions below 1GHz (OATS Test @ 10 meters)

The table below shows the summary of the highest amplitudes of the harmonic RF radiated emissions from the equipment under test.

INDICATED		CORRECTION		CORR	TURNTABLE ANT			LIMIT		
FREQ	AMPL	ANT	CAB	AMPL	ANG	HT	POL	AMPL	MARG	DET
MHz	dB μ V/m	dB	dB	dB μ V/m	DEG	m	-	dB μ V/m	dB	MODE
39.90	5.2	11.1	0.5	16.8	0	1.0	VB	45.6	-15.2	P
76.31	6.0	4.0	1.9	11.9	90	1.0	HB	45.6	-20.1	P
114.43	7.2	12.6	3.4	23.2	180	1.0	HB	33.5	-10.3	QP
114.44	10.3	12.6	3.4	26.3	90	1.0	VB	33.5	-7.2	QP
118.02	3.4	12.1	3.4	18.9	180	1.0	VB	33.5	-14.6	P
124.19	7.6	11.7	3.6	22.9	180	1.0	VB	33.5	-10.6	QP
133.52	13.0	11.3	3.6	27.9	90	1.0	VB	33.5	-5.6	P
133.52	6.9	9.8	3.6	20.3	0	2.0	HB	33.5	-13.2	P
143.00	8.3	11.1	4.4	23.8	180	2.0	VB	45.6	-21.8	QP
156.55	5.5	13.1	5.4	24.0	90	1.0	VB	45.6	-21.6	QP
171.67	5.6	15.8	6.0	27.4	180	1.0	VB	33.5	-6.1	QP
221.21	11.0	10.7	3.9	25.5	180	1.5	HL	45.6	-20.1	QP
276.53	3.7	13.6	2.7	20.0	180	1.5	VL	33.5	-13.5	P
400.00	0.9	15.2	6.4	22.5	180	1.5	HL	33.5	-11.0	P
451.28	3.6	16.5	4.0	24.2	180	1.5	VL	45.6	-21.0	P
573.34	4.8	18.6	11.9	35.3	180	1.5	VL	45.6	-10.3	QP
601.00	2.6	18.4	9.1	30.1	0	1.2	HL	45.6	-24.5	QP
622.79	2.2	19.1	8.9	30.3	180	1.5	VL	45.6	-15.3	QP

*All emissions within the restricted bands per 47CFR 15.205, are below the levels specified in the 47CFR15.209.

Test Data Summary

The margin in the Table 6 is calculated as follows:

Margin = Corrected Amplitude – Limit, where Corrected Amplitude = Spectrum Analyzer Amplitude + Cable Loss + Antenna Factor.

EMISSIONS AND RESTRICTED BANDS (cont)

Site Used – Harmonics Emissions Measurements

- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Harmonics Emissions Measurements

Test Date:	May 19 and 20, 2003
Test Engineer:	Bandele Adepoju

Environmental Conditions – Harmonics Emissions

Temperature	24.0 °C (average)
Humidity	35% (average)

Table 14 Test Data –Emissions above 1GHz and Harmonics (OATS Test @ 3 meters)

The table below shows the summary of the highest amplitudes of the harmonic RF radiated emissions from the equipment under test.

INDICATED		CORRECTION		CORRECTED		TURNTABLE ANT			LIMIT			
FREQ	AMPL	Cable	Ant	AMPL	AMPL	ANG	HT	POL	AMPL	MARG	DET	MODE
MHz	dB/m	dB	dB	dBm	dBuV/m	DEG	m	-	dBuV/m	dB		
630.0	-54.00	-32	20.1	-65.90	41.10	225	1.0	VH1	55.6	-14.50	P	
630.0	-44.00	-32	20.1	-55.90	51.10	90	1.5	HH1	55.6	-4.50	P	
945.0	-41.00	-36	23.7	-53.30	53.70	180	1.0	VH1	55.6	-1.90	P	
945.0	-42.00	-36	23.7	-54.30	52.70	225	1.5	HH1	55.6	-2.90	P	
1000.0	-75.00	-36	25.3	-85.70	21.30	180	1	VH1	55.6	-34.30	P	
1083.1	-65.00	-35	25.3	-74.70	32.30	90	1	VH1	55.6	-23.30	P	
1104.4	-64.00	-35	26.6	-72.40	34.60	180	1	VH1	55.6	-21.00	P	
1233.0	-65.00	-35	26.6	-73.40	33.60	125	1.3	HH1	55.6	-22.00	P	
1260.0	-48.00	-35	26.6	-56.40	50.60	225	1	VH1	55.6	-5.00	P	
1260.0	-56.00	-35	26.6	-64.40	42.60	270	1.3	HH1	55.6	-13.00	P	
1459.0	-59.00	-35	26.6	-67.40	39.60	225	1	VH1	54.0	-14.40	P	
1465.0	-63.00	-35	26.6	-71.40	35.60	225	1	VH1	54.0	-18.40	P	
1575.0	-47.00	-35	26.6	-55.00	52.00	270	1	VH1	54.0	-2.00	P	
1575.0	-58.00	-35	26.6	-66.40	40.60	45	1.3	HH1	54.0	-13.40	P	
1890.0	-61.00	-27	28.7	-59.30	47.70	180	1	VH1	55.6	-7.90	P	
1890.0	-66.00	-27	28.7	-64.30	42.70	225	1.5	HH1	55.6	-12.90	P	
2205.0	-59.00	-24	30.1	-65.10	41.90	180	1.0	VH1	54.0	-12.10	P	
2205.0	-68.00	-24	30.1	-61.90	45.10	225	1.5	HH1	54.0	-8.90	P	
2520.0	-62.00	-21	30.1	-52.90	54.10	180	1	VH1	55.6	-1.50	P	
2520.0	-70.00	-21	30.1	-60.90	46.10	45	1.3	HH1	55.6	-9.50	P	
2835.0	-67.00	-20	31.7	-55.30	51.70	225	1	VH1	54.0	-2.30	P	
2835.0	-80.00	-20	31.7	-68.30	38.70	225	1	HH1	54.0	-15.30	P	
3150.0	-80.00	-13	32.0	-61.00	46.00	225	1	VH1	55.6	-9.60	P	

*All emissions within the restricted bands per 47CFR 15.205, are below the levels specified in the 47CFR15.209.

Test Data Summary

The margin in the Table is calculated as follows:

Margin = Corrected Amplitude – Limit, where Corrected Amplitude = Spectrum Analyzer Amplitude + Cable Loss + Antenna Factor.

Conclusion

The Home Attendant meets the requirements of the test reference for Harmonic Emissions.

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Home Attendant
Model: MB2USA

FCC ID: Q7JHOME-ATTENDANT

EMISSIONS AND RESTRICTED BANDS (cont)**Spectrum Analyzer Configuration (during swept frequency scans) – Spurious and Harmonic Emissions**

IF Bandwidth..... 120 kHz
Sweep Speed Manual

Measurements below 1000 MHz (unless stated otherwise)

Analyzer Mode (for Peak Measurements) Peak/Log
Resolution Bandwidth..... 100 kHz
Video Bandwidth..... 100 kHz
Analyzer Mode (for Quasi-Peak Measurements)
Quasi-Peak/Linear Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz

Measurements above 1000 MHz (unless stated otherwise)

Quasi-Peak Adapter Mode Disabled
Analyzer Mode (for Peak Measurements) Peak
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 1000 kHz
Analyzer Mode (for Average Measurements) Video Filter
Resolution Bandwidth..... 1000 kHz
Video Bandwidth..... 10 Hz

20dB BANDWIDTH**Test Specification:** FCC PART 15 SECTION 47 CFR 15.231(c)

The EUT was set up on a wooden non-conductive tabletop, 80 cm above the ground plane on an Open Area Test Site (OATS) at 3 meters. The measurement instrumentation used was a receiver with bandwidth parameters as stipulated in ANSI C63.4-2001. The EUT was running in continuous mode at its maximum data rate. The marker-to-peak function was set to the peak of the emission. The marker-delta function was used to measure 20 dB down one side of the emission. The marker-delta function was then reset and moved to the other side of the emission, until it was even with the reference marker level. The marker-delta reading at this point was recorded as the 20 dB bandwidth of the emission,

Site Used – Harmonics Emissions Measurements

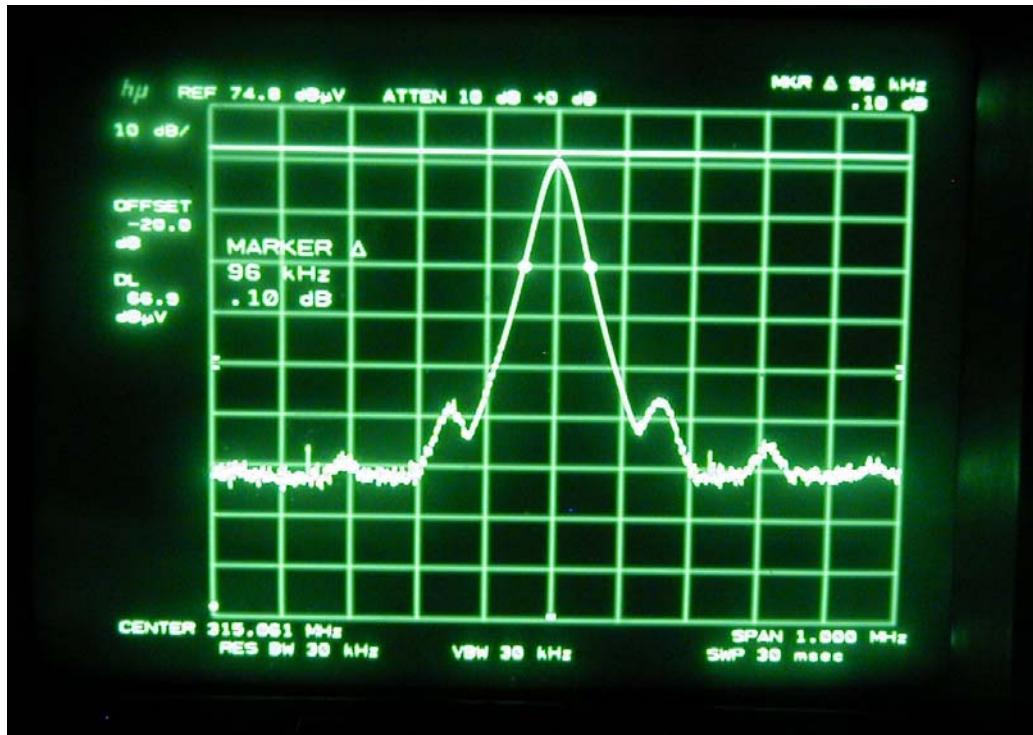
- Test Site 1 - Shielded Room: 16' x 12' x 9'
- Test Site 1 - 3m Open Field Radiated Site
- Test Site 1 - 10m Open Field Radiated Site
- Test Site 2 - Environmental Lab
- EMC Lab 1 - Test Laboratory
- Semi-Anechoic Absorber Lined Shielded Room
- Other:

Administrative Details – Spurious and Restricted Bands Emissions

Test Date:	May 20, 2003
Test Engineer:	Bandele Adepoju

Environmental Conditions – Spurious and Restricted Bands Emissions

Temperature	20.4°C
Humidity	52%

20dB Bandwidth Plot**Figure 1: Picture of 20dB Bandwidth display**

20dB BANDWIDTH (cont)**Spectrum Analyzer Configuration (during swept frequency scans) – 20dB Bandwidth**

IF Bandwidth..... 120 kHz
Sweep Speed Manual

Measurements below 1000 MHz (unless stated otherwise)

Analyzer Mode (for Peak Measurements) Peak/Log
Resolution Bandwidth..... 30 kHz
Video Bandwidth..... 30 kHz
Span 1 MHz
Attenuation..... 10 dB

Test-Data Summary – 20dB Bandwidth Measurement:

Center Frequency	=315 MHz
20dB Bandwidth	=96 kHz
Bandwidth Limit (47CFR15.231)	=787.5 kHz

Conclusion

The Home Attendant meets the requirements of the test reference for the 20dB Bandwidth specified in the 47CFR15.231(c).

PART 4 APPENDICES**A. Test Equipment**

Some or all of the following test equipment was used to measure the equipment under test:

Test Equipment	Manufacturer & Model Number	Serial Number	Calibration Due Date
Spectrum Analyzer	Hewlett Packard 8590A	2752 A02715	12/06/2003
Spectrum Analyzer	Hewlett-Packard 8590A	2542A11954	12/06/2003
Spectrum Monitor	Rhode & Schwarz EZM	881 334/025	03/01/2004
Test Receiver (9 kHz - 30 MHz)	Rhode & Schwarz ESH3	RES 0753	03/01/2004
Test Receiver (20-1300 MHz)	Rhode & Schwarz ESVP	RES 0749	03/01/2004
Spectrum Analyzer	Hewlett-Packard 8566B	2618A02909	12/06/2003
Spectrum Analyzer	Hewlett-Packard 8567A	2602A00239	12/06/2003
Spectrum Analyzer Display (Site 1)	Hewlett-Packard 85662A	2848A17028	12/06/2003
Quasi Peak Adapter (Site 1)	Hewlett-Packard 85650	2521A00871	12/06/2003
Preselector (Site 1)	Hewlett-Packard 85685A	2620A00265	03/01/2004
Preamp	Hewlett-Packard 8447D	2648A04855	03/01/2004
Preamp	Hewlett-Packard 8449B	3008A00101	03/01/2004
Absorbing Clamp	MDS21	891 092/025	05/13/2004
Antenna Cable (OPTK45)	RG8/u	-	N/A
Antenna System	EMCO 3230	-	N/A
Biconical Antenna (Site 1)	EMCO 3104	3549	01/25/2004
L. P. Ant. (Site 1) (200-1000 MHz)	EMCO 3146	2075	01/25/2004
Adj. Elem. Dip. Ant. (28 MHz-1 GHz)	EMCO 3120	2632	03/01/2004
Horn Antenna	Eaton 96001	2632	01/12/2004
LISN (25 Amp)	EMCO 38825/2	9210-2008	03/01/2004
LISN (100 Amp)	Solar 8610-50-TS-100N		03/01/2004
LISN	EMCO 3825/2R	1188/1001	03/01/2004
Computer	HP 000/300	RES 449	N/A
Remote Controlled 8 ft Rotating Table	RES RT1	Not Provided	N/A
Remote Controlled 25 ft Rotating Table	RES RT2	Not Provided	N/A
Remote Controlled 4 ft Rotating Table	RES RT3, RT4, RT5	Not Provided	N/A
Remote Controlled 4 m Antenna Mast	RES AM1	Not Provided	N/A
Remote Controlled 6 m Antenna Mast	RES AM2 & AM3	Not Provided	N/A
3 Phase 230 V~/50 Hz Generator	Not Provided	DB7130B40	05/13/2004
Oscilloscope (300 MHz)	Tektronix 2465B	602053	05/13/2004
Lindgren RF Shielded Enclosure	46-3/5-0	8220	N/A
Haefely ESD Simulator	PSD25B	081 486-02	05/13/2004
Hewlett Packard Signal Generator	HP8662A	2330A01371	05/13/2004
Amplifier Research Power Amplifier	100A100	10922	05/13/2004
Amplifier Research Power Amplifier	25W1000M7	10830	05/13/2004
Amplifier Research Field Strength Monitor	FM1000	60670	05/13/2004
Amplifier Research Isotropic Field Probe	FP1000	16270	05/13/2004
Amplifier Research L. P. Antenna (100-1000 MHz)	AT 1100	10537	05/13/2004
Amplifier Research F. Generator (10kHz - 100MHz)	AT500	11294	05/13/2004
Lindgren RFI Shielded Enclosure	46-2/5-0	8220	N/A
IFI Field Strength Meter	EFS-1	-	05/13/2004
IFI LDI	Not Provided	-	05/13/2004
Hewlett Packard Signal Generator	8673C	2918A00649	05/13/2004
Leader Functional Generator	LFG-1300S	7050152	05/13/2004
Haefely Burst-Tester Mainframe	PEFT.1	081 979-03	05/13/2004
Haefely Coupling Filter Module	PHV 4/1	081 979-03	05/13/2004
Haefely Control Unit Module	P90.1	0810979-03	05/13/2004
Haefely Power Supply Module	PP53.1	081 979-03	05/13/2004
Haefely Capacitive Coup. Clamp	IPA	083839-11	05/13/2004
Haefely Coupling Filter	FP 16/3-1	082529-12	05/13/2004
Haefely Surge Generator	PC6-288-1	Not Provided	05/13/2004

A. Test Equipment (Cont.)

Haefely Coupling Filter	FP 20/3-3	Not Provided	05/13/2004
Haefely Comm. Wave 1.2/50us, 8/20us.	PHV1	Not Provided	05/13/2004
Haefely H.V. Retractable Probe	-	Not Provided	05/13/2004
Topaz Electronics Isolation Transformer	16630	Not Provided	05/13/2004
HP Signal Generator	8673C	2918A00649	03/21/2004
HP Signal Generator	8656B	2623A04271	01/11/2004
Amplifier Research Power Amplifier	100A100	10922	05/13/2004
Amplifier Research Power Amplifier	25W1000M7	10830	05/13/2004
Amplifier Research Leveling Amplifier	999	Not Provided	N/A
Lindgren RFI Shielded Enclosure	46-2/5-0	8220	N/A
Hewlett Packard Spectrum Analyzer	8566B	2618A02909	12/08/2004
Westelle Power Supply	-	AF1AA	05/08/2004
Fischer Custom Comm. P.L. Coup/Decoup.	FCC-801-M3-25A	02003	01/08/2004
Fischer Custom Comm. Passive Impedance Adapt.	FCC-801-150-50-CDN	02013-02014	01/08/2004
Schaffner Main Frame	NSG200E	2514	05/08/2004
Schaffner Line Voltage Simulator	NSG203A	2514	05/13/2004
Tektronix Oscilloscope	2465B	B013718	05/09/2004
Powerstat Variac	GP58004	801-5218	05/13/2004
Schaffner Main Frame	NSG200E	2514	05/13/2004
HP HP6843A Harmonic & Flicker Test Sys.	3531A-00130		N/A
Acer Pentium 90	2600427019	N/A	N/A
Acer 6311-K Keyboard	K6311459320	N/A	N/A
Logitech M-SR14 Mouse	LT293C00116	N/A	N/A
Acer 2133S111 Monitor	M5A00000462C1A8A	N/A	N/A
HFTS Software Version HFTS A.00.05	-	N/A	N/A

Note for Test Equipment: The spectrum analyzers are self-calibrated every morning before test and are calibrated annually. All calibrations are traceable to the NIST.

B. EUT Technical Specification

Applicant	MyCasa Network, Inc.			
Product Specifications				
Trade Name	Home Attendant			
Description	A Service Gateway which provides the means to access a variety of security devices and control devices through the internet.			
Dimensions	Approx. 190.5mm (l) x 203.2mm(b) x 50.8mm(h)			
Model	MB2USA			
	Power Requirements		110Vac @ 50-60Hz; 50mA	
	Transmitter	Frequency	315MHz	
		Bandwidth	ISM band	
	Receiver	Modulation Type	OOK	
		Range	100ft open air	
		Frequency	315MHz	
	Boards	Mainboard (MB2)	Part #:	1.0e
			# of layers	6
			Approx Dimensions	183mm x 200mm
			Crystals/Oscillators	X1=3.6864MHz X2=32.768kHz X3=25 MHz X4=24.576 MHz X5=20.25 MHz X6= 4.8970 MHz X7=18.432 MHz X8=18.432 MHz
			Transmitter Module (Antenna Board)	Part #: Rft-3 Number of layers 2 Dimensions Approx. 26mm x 23mm Microprocessor ARM, m/n. NMS7210A Crystals/Oscillators X1=23.264MHz Antenna Type Helical (Integral)
			Receiver Module	Part #: Rfr-3 Number of layers 2 Approx Dimensions 42mm x 25mm Antenna Type Mono (10cm)
			Display Module	Part #: DMC 16249 Number of layers 2 Approx Dimensions 37mm x 80mm
			Ports/Connectors	RJ-45 Connector (10-100 Base-T port) Qty 1 RCA Connector(s) (Video Input) Qty 4 Center-Tap Connector (Power Input) Qty 1 Power cord Length 2m Type Unshielded RSMA Jack (Receiver Antenna) Qty 1 PCMCIA slot Qty 1 Cables UTP CAT-5 Cable Length 2m Type Unshielded

Prepared By: ITC Engineering Services, Inc.
9959 Calaveras Road, PO Box 543
Sunol, California 94586-0543

Home Attendant
Model: MB2USA

Tel: (925) 862-2944 Fax: (925) 862-9013
Email: docs@itcemc.com Web: www.itcemc.com

FCC ID: Q7JHOME-ATTENDANT

C. Modification Letter

To Whom It May Concern:

This is to certify that no modifications were necessary for Home Attendant, model MB2USA to comply with the required Requirements of:

FCC Rules and Regulations per 47 CFR 15.231

It is the manufacturer's responsibility to ensure that additional production units of the Home Attendant model MB2USA are manufactured with identical electrical and mechanical characteristics. For further information, please contact the manufacturer at:

MyCasa Network, Inc.
2197 East Bayshore Rd #150,
Palo Alto, CA 94303,

Tel: +1(650) 752-0390 X 101
Attention: Mr. Stathis Kassimidas