ADASA, Inc.

M8S radio in PAD 3500

July 05, 2006

Report No. ADAS0002

Report Prepared By

www.nwemc.com
1-888-EMI-CERT

EMC Test Report

NORTHWEST EMC

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Issue Date: July 05, 2006
ADASA, Inc.
Model: M8S radio in PAD 3500

Emissions				
Test Description	**Specification**	**Test Method**	**Pass**	**Fail**
Radiated Emissions	FCC 15.109(g) (CISPR 22:1997) Class A:2005-10	ANSI C63.4:2003	☒	☐
Conducted Emissions	FCC 15.107 Class B:2005-10	ANSI C63.4:2003	☒	☐
AC Powerline Conducted Emissions	FCC 15.207 Class B:2005-9	ANSI C63.4:2003	☒	☐
Occupied Bandwidth	FCC 15.247:2005-9	ANSI C63.4:2003	☒	☐
Channel Spacing	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Dwell Time	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Number of Hopping Frequencies	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Output Power	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Band Edge Compliance	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Spurious Conducted Emissions	FCC 15.247:2006-2	ANSI C63.4:2003	☒	☐
Spurious Radiated Emissions	FCC 15.247(d):2005-9	ANSI C63.4:2003	☒	☐

Modifications made to the product
See the Modifications section of this report

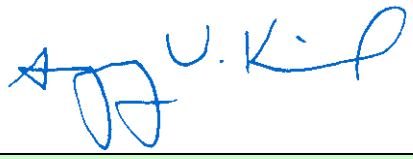
Test Facility

The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
22975 NW Evergreen Parkway, Suite 400; Hillsboro, OR 97124
Phone: (503) 844-4066
Fax: 844-3826

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada.

Approved By:



Greg Kiemel, Director of Engineering

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested, the specific description is noted in each of the individual sections of the test report supporting this certificate of test.

Revision Number	Description	Date	Page Number
00	None		

Accreditations and Authorizations

FCC: Accredited by NVLAP for performance of FCC radio, digital, and ISM device testing. Our Open Area Test Sites, certification chambers, and conducted measurement facilities have been fully described in reports filed with the FCC and accepted by the FCC in letters maintained in our files. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by the FCC as a Telecommunications Certification Body (TCB). This allows Northwest EMC to certify transmitters to FCC specifications in accordance with 47 CFR 2.960 and 2.962.

NVLAP: Northwest EMC, Inc. is accredited under the United States Department of Commerce, National Institute of Standards and Technology, and National Voluntary Laboratory Accreditation Program for satisfactory compliance with the requirements of ISO/IEC 17025 for Testing Laboratories. The NVLAP accreditation encompasses Electromagnetic Compatibility Testing in accordance with the European Union EMC Directive 89/336/EEC, ANSI C63.4, MIL-STD 461E, DO-160D and SAE J1113. Additionally, Northwest EMC is accredited by NVLAP to perform radio testing in accordance with the European Union R&TTE Directive 1999/5/EEC, the requirements of FCC, and the RSS radio standards for Industry Canada.

NVLAP LAB CODE 200629-0
NVLAP LAB CODE 200630-0
NVLAP LAB CODE 200676-0

Industry Canada: Accredited by NVLAP for performance of Industry Canada RSS and ICES testing. Our Open Area Test Sites and certification chambers comply with RSS 212, Issue 1 (Provisional) and have been filed with Industry Canada and accepted. Northwest EMC has been accredited by ANSI to ISO / IEC Guide 65 as a product certifier. We have been designated by NIST and recognized by Industry Canada as a Certification Body (CB) per the APEC Mutual Recognition Arrangement (MRA). This allows Northwest EMC to certify transmitters to Industry Canada technical requirements.

CAB: Designated by NIST and validated by the European Commission as a Conformity Assessment Body (CAB) to conduct tests and approve products to the EMC directive and transmitters to the R&TTE directive, as described in the U.S. - EU Mutual Recognition Agreement.

TÜV Product Service: Included in TUV Product Service Group's Listing of Recognized Laboratories. It qualifies in connection with the TUV Certification after Recognition of Agent's Testing Program for the product categories and/or standards shown in TUV's current Listing of CARAT Laboratories, available from TUV. A certificate was issued to represent that this laboratory continues to meet TUV's CARAT Program requirements. Certificate No. USA0401C.

TÜV Rheinland: Authorized to carryout EMC tests by order and under supervision of TÜV Rheinland. This authorization is based on "Conditions for EMC-Subcontractors" of November 1992.

NEMKO: Assessed and accredited by NEMKO (Norwegian testing and certification body) for European emissions and immunity testing. As a result of NEMKO's laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification (Authorization No. ELA 119).

Australia/New Zealand: The National Association of Testing Authorities (NATA), Australia has been appointed by the ACA as an accreditation body to accredit test laboratories and competent bodies for EMC standards. Accredited test reports or assessments by competent bodies must carry the NATA logo. Test reports made by an overseas laboratory that has been accredited for the relevant standards by an overseas accreditation body that has a Mutual Recognition Agreement (MRA) with NATA are also accepted as technical grounds for product conformity. The report should be endorsed with the respective logo of the accreditation body (NVLAP).

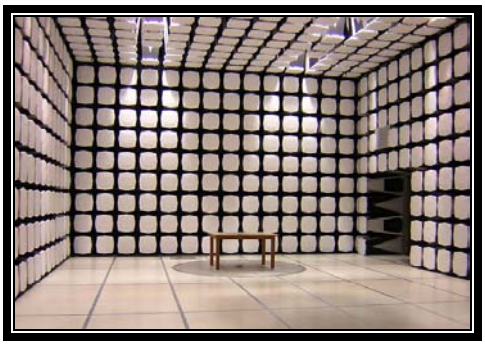
VCCI: Accepted as an Associate Member to the VCCI, Acceptance No. 564. Conducted and radiated measurement facilities have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. *(Registration Numbers. - Hillsboro: C-1071, R-1025, and R-2318, Irvine: C-2094 and R-1943, Sultan: R-871, C-1784 and R-1761).*

BSMI: Northwest EMC has been designated by NIST and validated by C-Taipei (BSMI) as a CAB to conduct tests as described in the APEC Mutual Recognition Agreement. License No.SL2-IN-E-1017.

GOST: Northwest EMC, Inc. has been assessed and accredited by the Russian Certification bodies Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC, to perform EMC and Hygienic testing for Information Technology Products. As a result of their laboratory assessment, they will accept test results from Northwest EMC, Inc. for product certification

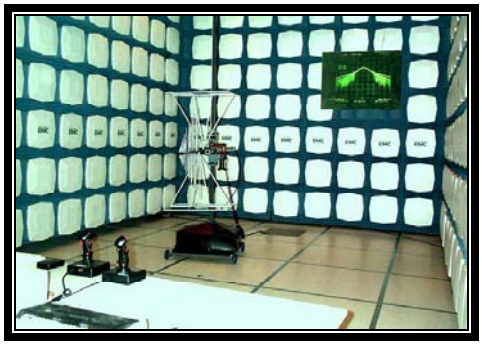
SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/scope.asp



California – Orange County Facility
Labs OC01 – OC13

41 Tesla Ave. Irvine, CA 92618
(888) 364-2378 Fax: (503) 844-3826



Oregon – Evergreen Facility
Labs EV01 – EV11

22975 NW Evergreen Pkwy. Suite 400 Hillsboro, OR 97124
(503) 844-4066 Fax: (503) 844-3826

Washington – Sultan Facility
Labs SU01 – SU07

14128 339th Ave. SE Sultan, WA 98294
(888) 364-2378

Party Requesting the Test	
Company Name:	ADASA, Inc.
Address:	2674 Garfield Street
City, State, Zip:	Eugene, OR 97405
Test Requested By:	Clarke McAllister
Model:	M8S radio in PAD 3500
First Date of Test:	May 22, 2006
Last Date of Test:	June 28, 2006
Receipt Date of Samples:	May 22, 2006
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
Model M8S radio in 902-928 MHz RFID Tag Reader / Programmer

Testing Objective:
These tests are to satisfy the requirements for FCC Certification.

EUT Photo

CONFIGURATION 1 ELET0003

Software/Firmware Running during test	
Description	**Version**
Hyperterminal	**5.1**

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT	Adasa	M8S radio in PAD 3500	Beta 8 (Host)

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter	CUI, Inc	KSAFD1500100W1US	None

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Notebook PC	Dell	5150	9LNK741

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	No	1.88m	PA	AC Adapter	EUT
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 2 ELET0003

Software/Firmware Running during test	
Description	**Version**
Hyperterminal	**5.1**

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter	CUI, Inc	KSAFD1500100W1US	None
Notebook PC	Dell	5150	9LNK741
EUT	Adasa	M8S radio in PAD 3500	Beta 6 (Host)

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	No	1.88m	PA	AC Adapter	EUT
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 3 ELET0003

Software/Firmware Running during test	
Description	**Version**
Hyperterminal	**5.1**

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT	Adasa	M8S radio in PAD 3500	Beta 8 (Host)

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter	CUI, Inc	KSAFD1500100W1US	None

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Notebook PC	Dell	5150	9LNK741

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	No	1.88m	PA	AC Adapter	EUT
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

CONFIGURATION 4 ELET0003

Software/Firmware Running during test	
Description	**Version**
Hyperterminal	**5.1**

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
EUT	Adasa	M8S radio in PAD 3500	Beta 6 (Host)

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
AC Adapter	CUI, Inc	KSAFD1500100W1US	None

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Notebook PC	Dell	5150	9LNK741

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Leads	No	1.88m	PA	AC Adapter	EUT
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Equipment modifications					
Item	Date	Test	Modification	Note	Disposition of EUT
1	5/22/2006	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	5/22/2006	Dwell Time	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	5/31/2006	Channel Spacing	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	5/31/2006	Number of Hopping Frequencies	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
5	5/31/2006	AC Power Line Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
6	5/31/2006	Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
7	5/31/2006	Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
8	6/4/2006	Spurious Radiated Emissions	Modified from delivered configuration. Initial or No Modification	Completely encased circuit board with copper tape. Output power set to P15. Modification done by Clarke McAllister.	EUT remained at Northwest EMC following the test.
9	6/28/2006	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
10	6/28/2006	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
11	6/28/2006	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

RADIATED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION

RFID standby; 802.11(b) turned on normal mode

MODE USED FOR FINAL DATA

RFID standby; 802.11(b) turned on normal mode

POWER SETTINGS INVESTIGATED

120VAC/60Hz

POWER SETTINGS USED FOR FINAL DATA

120VAC/60Hz

FREQUENCY RANGE INVESTIGATED

Start Frequency	30MHz	Stop Frequency	1000MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Antenna, Biconilog	EMCO	3142	AXB	1/6/2005	24
Pre-Amplifier	Miteq	AM-1551	AOY	4/5/2006	13
Spectrum Analyzer	Agilent	E4443A	AAS	12/8/2005	12

MEASUREMENT BANDWIDTHS

	Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, a final radiated emissions test was performed. The frequency range investigated (scanned), is also noted in this report. Radiated emissions measurements were made at the EUT azimuth and antenna height such that the maximum radiated emissions level will be detected. This requires the use of a turntable and an antenna positioner. The preferred method of a continuous azimuth search is utilized for frequency scans of the EUT field strength with both polarities of the measuring antenna. A calibrated, linearly polarized antenna was positioned at the specified distance from the periphery of the EUT.

Tests were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna was varied in height above the conducting ground plane to obtain the maximum signal strength. Though specified in the report, the measurement distance shall be 3 meters or 10 meters. At any measurement distance, the antenna height was varied from 1 meter to 4 meters. These height scans apply for both horizontal and vertical polarization, except that for vertical polarization the minimum height of the center of the antenna shall be increased so that the lowest point of the bottom of the antenna clears the ground surface by at least 25 cm.

NORTHWEST EMC

RADIATED EMISSIONS DATA SHEET

PSA 2006.05.30
EMI 2006.4.26

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 6			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	David Divergigelis	Power:	120VAC/60Hz	Job Site:	EV11

TEST SPECIFICATIONS	Test Method
FCC 15.109(g) (CISPR 22:1997) Class A:2005-10	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	0

COMMENTS

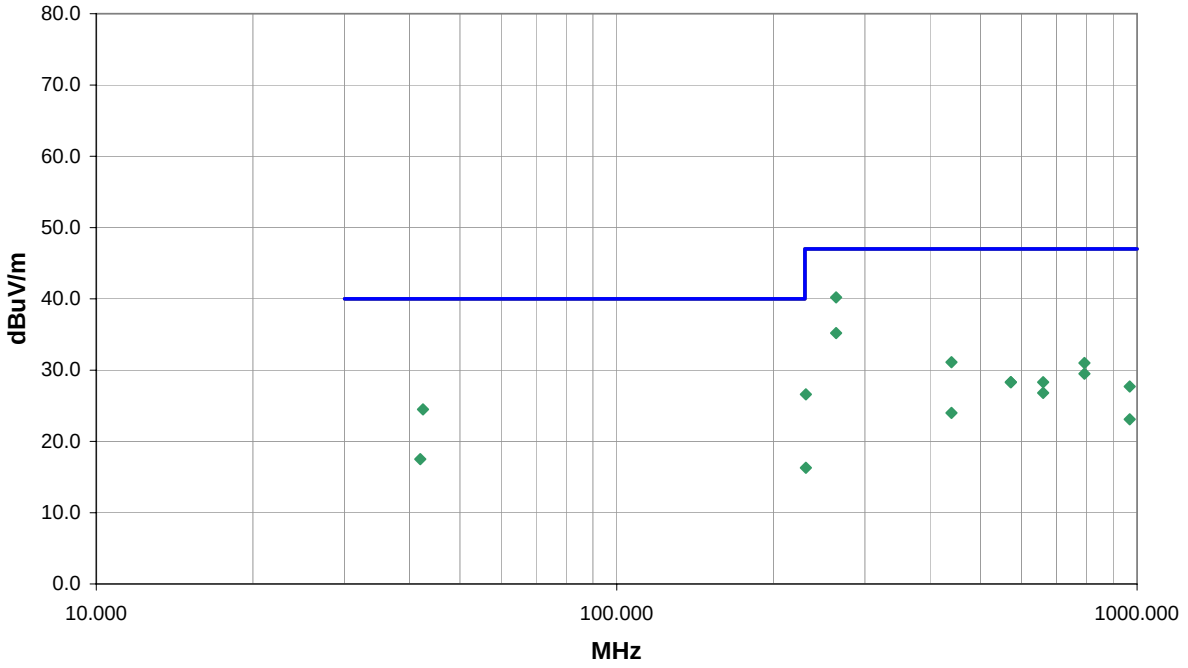
EUT OPERATING MODES

RFID standby; 802.11(b) turned on normal mode

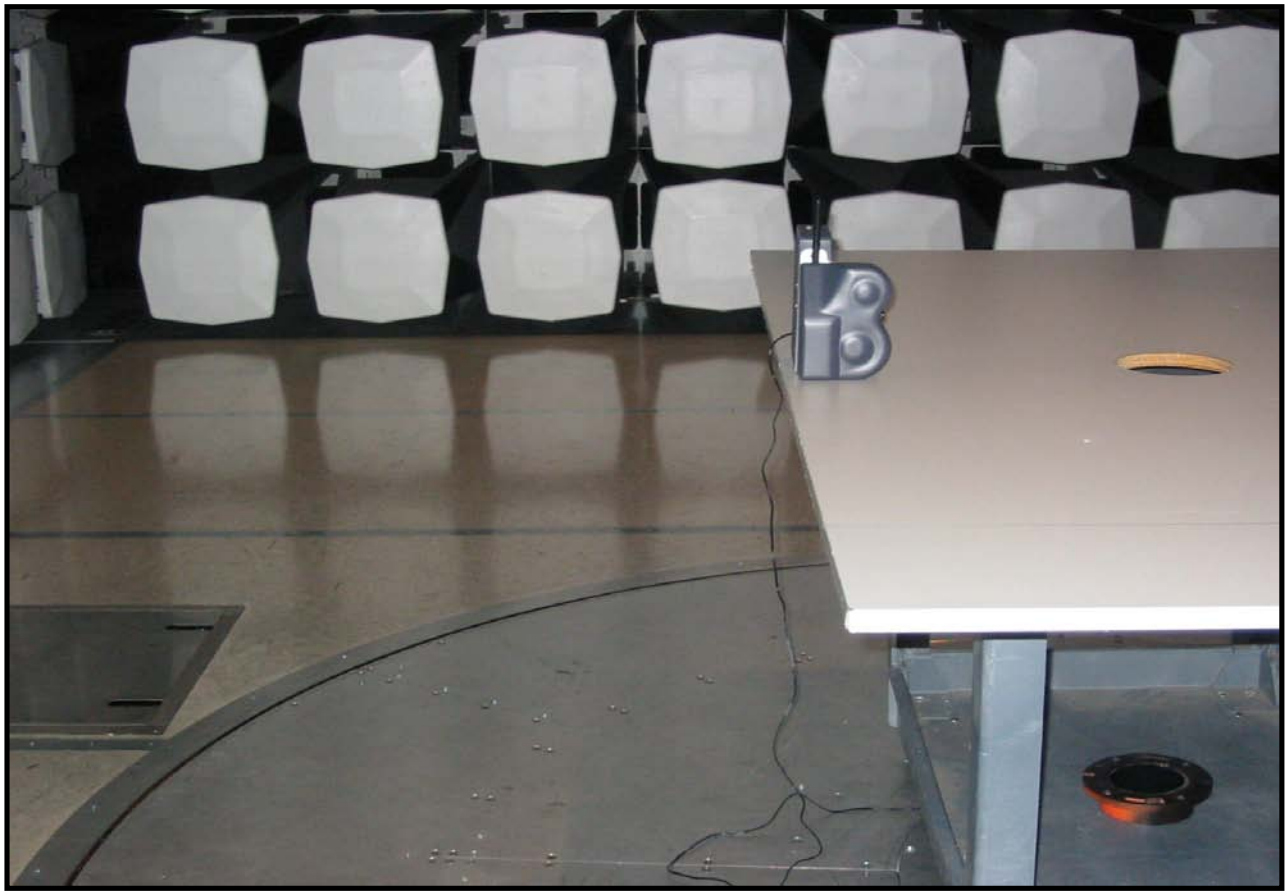
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	1		
Configuration #	2		
Results	Pass	NVLAP Lab Code 200630-0	Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)
264.018	61.1	-20.9	109.0	1.0	0.0	0.0	V-Bilog	QP	0.0	40.2	47.0	-6.8
264.019	56.1	-20.9	360.0	2.9	0.0	0.0	H-Bilog	QP	0.0	35.2	47.0	-11.8
42.438	45.7	-21.2	360.0	2.3	0.0	0.0	V-Bilog	QP	0.0	24.5	40.0	-15.5
440.015	47.2	-16.1	301.0	3.6	0.0	0.0	V-Bilog	QP	0.0	31.1	47.0	-15.9
792.014	41.7	-10.7	65.0	1.9	0.0	0.0	V-Bilog	QP	0.0	31.0	47.0	-16.0
792.013	40.2	-10.7	333.0	1.0	0.0	0.0	H-Bilog	QP	0.0	29.5	47.0	-17.5
572.014	41.7	-13.4	106.0	3.3	0.0	0.0	V-Bilog	QP	0.0	28.3	47.0	-18.7
572.015	41.7	-13.4	15.0	1.3	0.0	0.0	H-Bilog	QP	0.0	28.3	47.0	-18.7
660.013	40.3	-12.0	108.0	1.0	0.0	0.0	V-Bilog	QP	0.0	28.3	47.0	-18.7
968.012	36.0	-8.3	51.0	1.0	0.0	0.0	H-Bilog	QP	0.0	27.7	47.0	-19.3
660.015	38.8	-12.0	0.0	1.2	0.0	0.0	H-Bilog	QP	0.0	26.8	47.0	-20.2
230.944	48.4	-21.8	213.0	1.0	0.0	0.0	V-Bilog	PK	0.0	26.6	47.0	-20.4
41.940	38.5	-21.0	0.0	2.1	0.0	0.0	H-Bilog	QP	0.0	17.5	40.0	-22.5
439.966	40.1	-16.1	361.0	1.9	0.0	0.0	H-Bilog	PK	0.0	24.0	47.0	-23.0
968.011	31.4	-8.3	161.0	1.0	0.0	0.0	V-Bilog	QP	0.0	23.1	47.0	-23.9
231.032	38.1	-21.8	284.0	3.3	0.0	0.0	H-Bilog	PK	0.0	16.3	47.0	-30.7



CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION

RFID high channel
RFID mid channel
RFID low channel

POWER SETTINGS INVESTIGATED

120VAC/60Hz

SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar	9252-50-R-24-BNC	LIQ	12/13/2005	13
High Pass Filter	T.T.E.	7766	HFG	12/19/2005	13
Attenuator	Coaxicom	66702 2910-20	RBS	12/19/2005	13
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQD	12/21/2005	13
Spectrum Analyzer Display	Hewlett Packard	85662A	AAID	12/21/2005	13
Spectrum Analyzer	Hewlett-Packard	8568B	AAI	12/21/2005	13

MEASUREMENT BANDWIDTHS

	Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	David Divergigelis	Power:	120VAC/60Hz	Job Site:	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

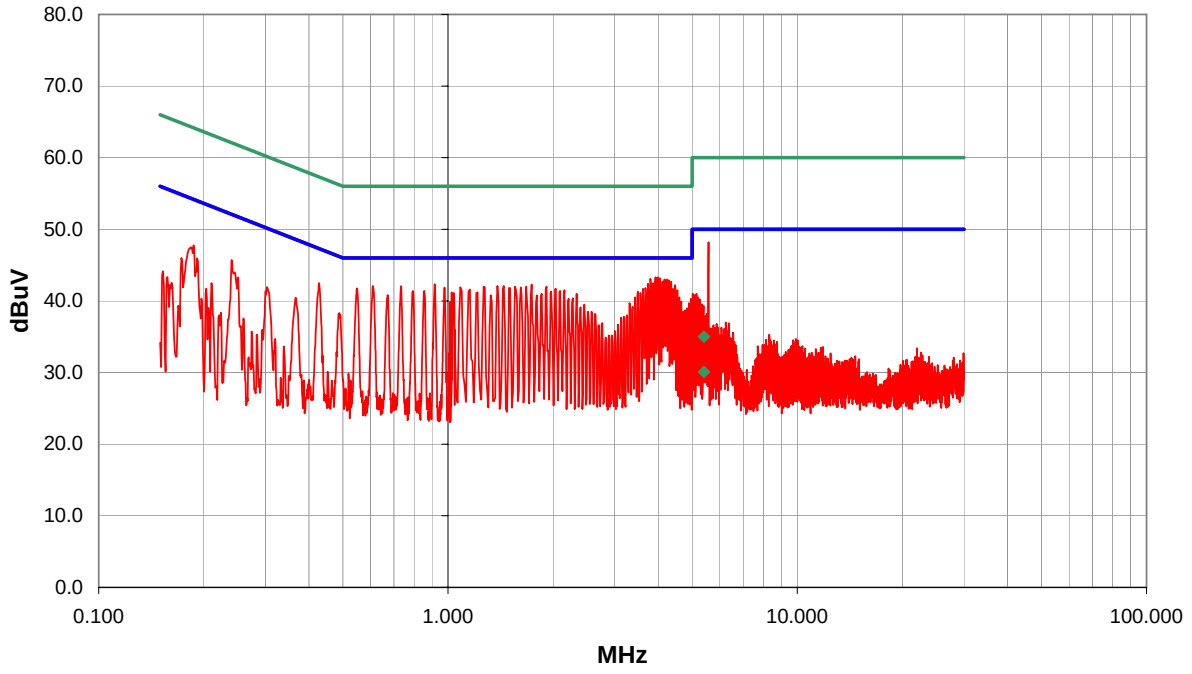
EUT OPERATING MODES

RFID low channel

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	1		
Configuration #	1		
Results	Pass	NVLAP Lab Code 200630-0	Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
5.409	9.6			0.5	0.0	20.0		AV		30.1	50.0	-19.9
5.409	14.5			0.5	0.0	20.0		QP		35.0	60.0	-25.0
5.567	27.7			0.5	0.0	20.0				48.2	50.0	-1.8
3.926	22.8			0.5	0.0	20.0				43.3	46.0	-2.7
3.986	22.8			0.5	0.0	20.0				43.3	46.0	-2.7
4.047	22.7			0.5	0.0	20.0				43.2	46.0	-2.8
3.796	22.6			0.5	0.0	20.0				43.1	46.0	-2.9
4.167	22.5			0.5	0.0	20.0				43.0	46.0	-3.0
4.227	22.5			0.5	0.0	20.0				43.0	46.0	-3.0
4.287	22.4			0.5	0.0	20.0				42.9	46.0	-3.1
4.107	22.2			0.5	0.0	20.0				42.7	46.0	-3.3
4.357	22.2			0.5	0.0	20.0				42.7	46.0	-3.3
3.866	22.0			0.5	0.0	20.0				42.5	46.0	-3.5
3.736	21.9			0.5	0.0	20.0				42.4	46.0	-3.6
0.916	21.6			0.7	0.0	20.0				42.3	46.0	-3.7
1.735	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
4.467	21.7			0.5	0.0	20.0				42.2	46.0	-3.8
1.385	21.6			0.5	0.0	20.0				42.1	46.0	-3.9
1.445	21.6			0.5	0.0	20.0				42.1	46.0	-3.9

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID low channel

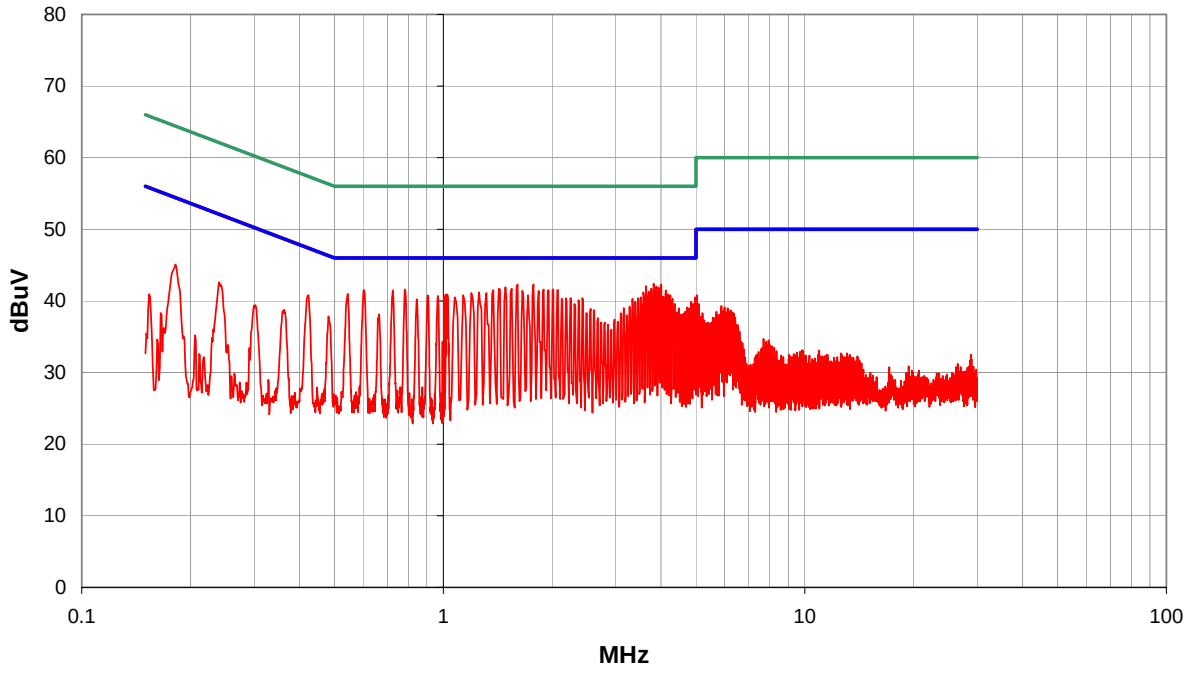
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	2
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
3.816	21.9			0.5	0.0	20.0				42.4	46.0	-3.6
1.605	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
1.775	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
3.996	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
3.636	21.6			0.5	0.0	20.0				42.1	46.0	-3.9
3.886	21.5			0.5	0.0	20.0				42.0	46.0	-4.0
1.485	21.4			0.5	0.0	20.0				41.9	46.0	-4.1
3.936	21.4			0.5	0.0	20.0				41.9	46.0	-4.1
1.425	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
1.545	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
3.756	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
0.783	20.5			1.1	0.0	20.0				41.6	46.0	-4.4
1.895	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
2.006	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
0.604	19.9			1.6	0.0	20.0				41.5	46.0	-4.5
1.375	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
1.955	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
2.066	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
4.127	21.0			0.5	0.0	20.0				41.5	46.0	-4.5

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID mid channel

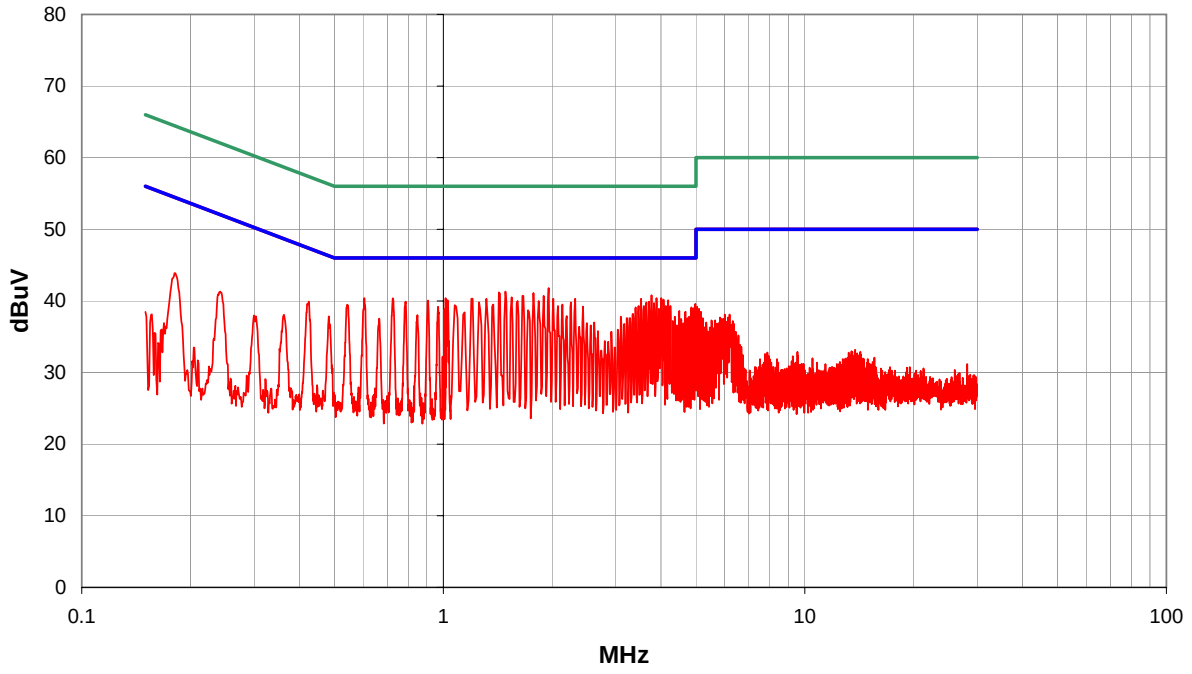
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	3
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
1.955	21.3			0.5	0.0	20.0				41.8	46.0	-4.2
1.485	20.8			0.5	0.0	20.0				41.3	46.0	-4.7
1.425	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
1.775	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.766	20.3			0.5	0.0	20.0				40.8	46.0	-5.2
1.655	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.895	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.545	20.0			0.5	0.0	20.0				40.5	46.0	-5.5
1.015	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
0.604	18.8			1.6	0.0	20.0				40.4	46.0	-5.6
3.886	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
4.007	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
0.725	19.1			1.3	0.0	20.0				40.4	46.0	-5.6
1.195	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
1.315	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
2.016	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
2.316	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
3.526	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
4.067	19.7			0.5	0.0	20.0				40.2	46.0	-5.8

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

EUT OPERATING MODES

RFID mid channel

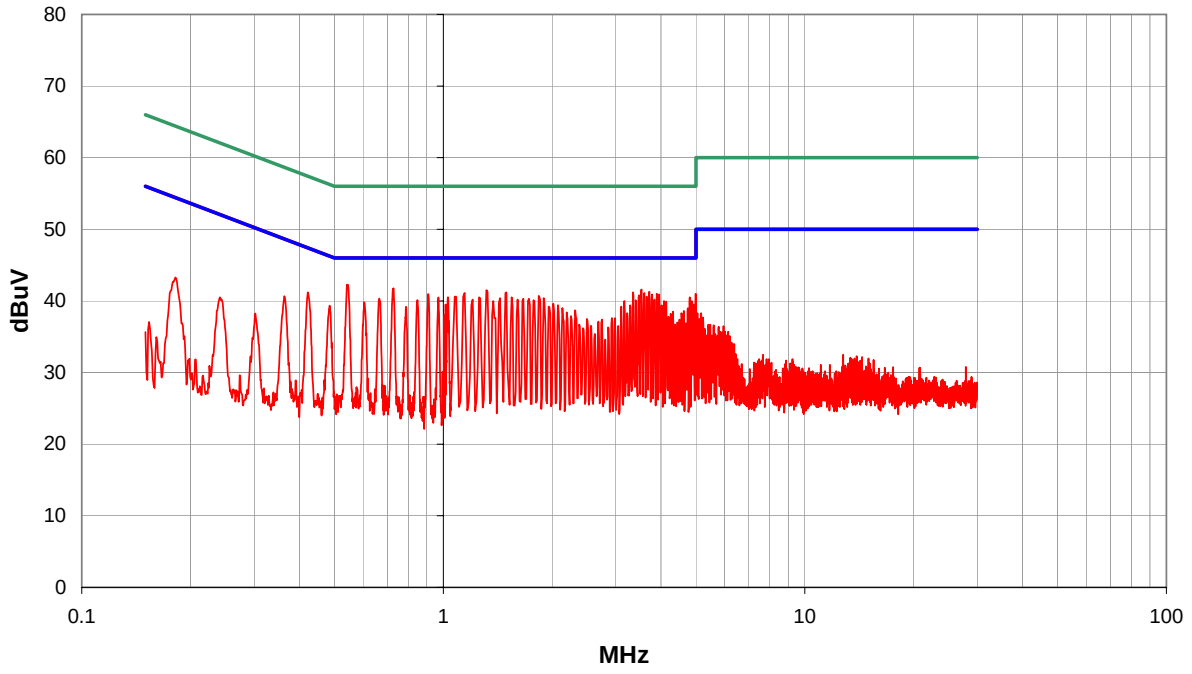
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	4
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.541	20.5			1.8	0.0	20.0				42.3	46.0	-3.7
0.728	20.5			1.3	0.0	20.0				41.8	46.0	-4.2
3.536	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
1.315	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
3.716	20.8			0.5	0.0	20.0				41.3	46.0	-4.7
1.495	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
3.346	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
1.145	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.596	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.896	20.5			0.5	0.0	20.0				41.0	46.0	-5.0
4.987	20.5			0.5	0.0	20.0				41.0	46.0	-5.0
0.908	20.2			0.8	0.0	20.0				41.0	46.0	-5.0
3.776	20.4			0.5	0.0	20.0				40.9	46.0	-5.1
3.956	20.4			0.5	0.0	20.0				40.9	46.0	-5.1
3.476	20.3			0.5	0.0	20.0				40.8	46.0	-5.2
1.835	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.075	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
3.646	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
1.029	20.0			0.5	0.0	20.0				40.5	46.0	-5.5

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

EUT OPERATING MODES

RFID high channel

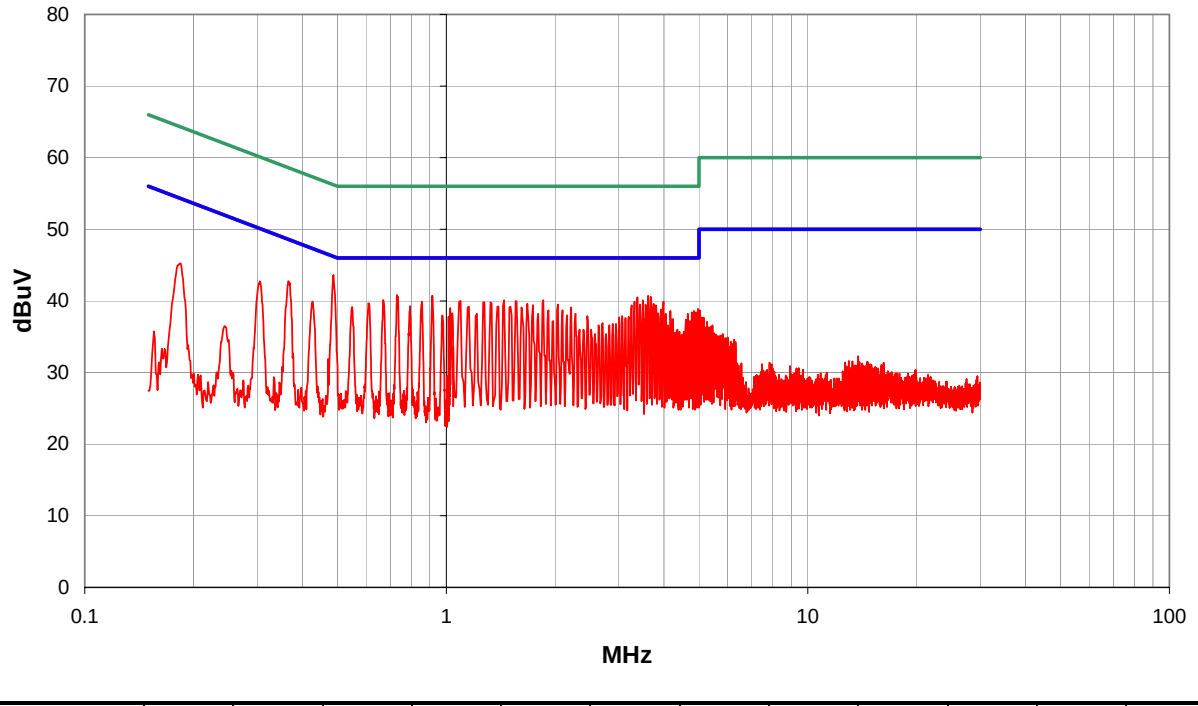
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	5
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelio



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.488	21.7			1.9	0.0	20.0				43.6	46.2	-2.6
0.730	19.6			1.2	0.0	20.0				40.8	46.0	-5.2
0.915	20.0			0.7	0.0	20.0				40.7	46.0	-5.3
3.616	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
3.676	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
3.376	20.0			0.5	0.0	20.0				40.5	46.0	-5.5
0.366	20.5			2.3	0.0	20.0				42.8	48.6	-5.8
0.669	18.7			1.4	0.0	20.0				40.1	46.0	-5.9
1.445	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
1.855	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
3.496	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
1.095	19.5			0.5	0.0	20.0				40.0	46.0	-6.0
1.555	19.5			0.5	0.0	20.0				40.0	46.0	-6.0
0.856	19.0			0.9	0.0	20.0				39.9	46.0	-6.1
3.316	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
3.986	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
1.265	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
1.325	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
0.609	18.1			1.6	0.0	20.0				39.7	46.0	-6.3

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.107 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID high channel

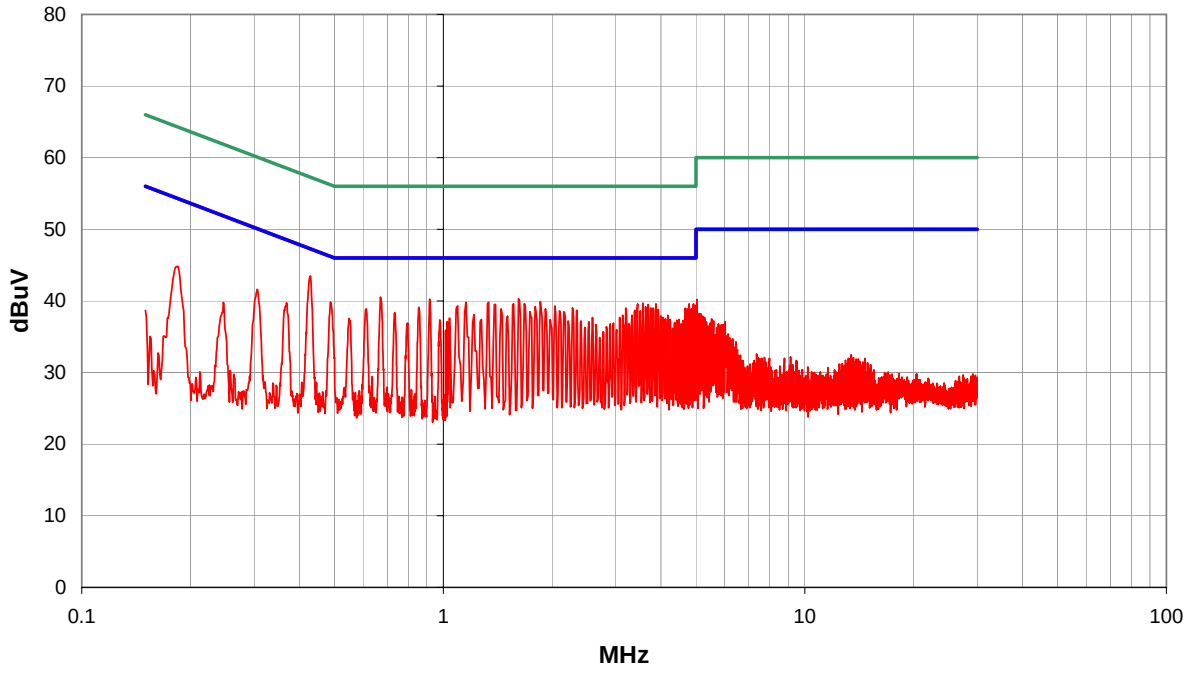
DEVIATIONS FROM TEST STANDARD

No deviations.

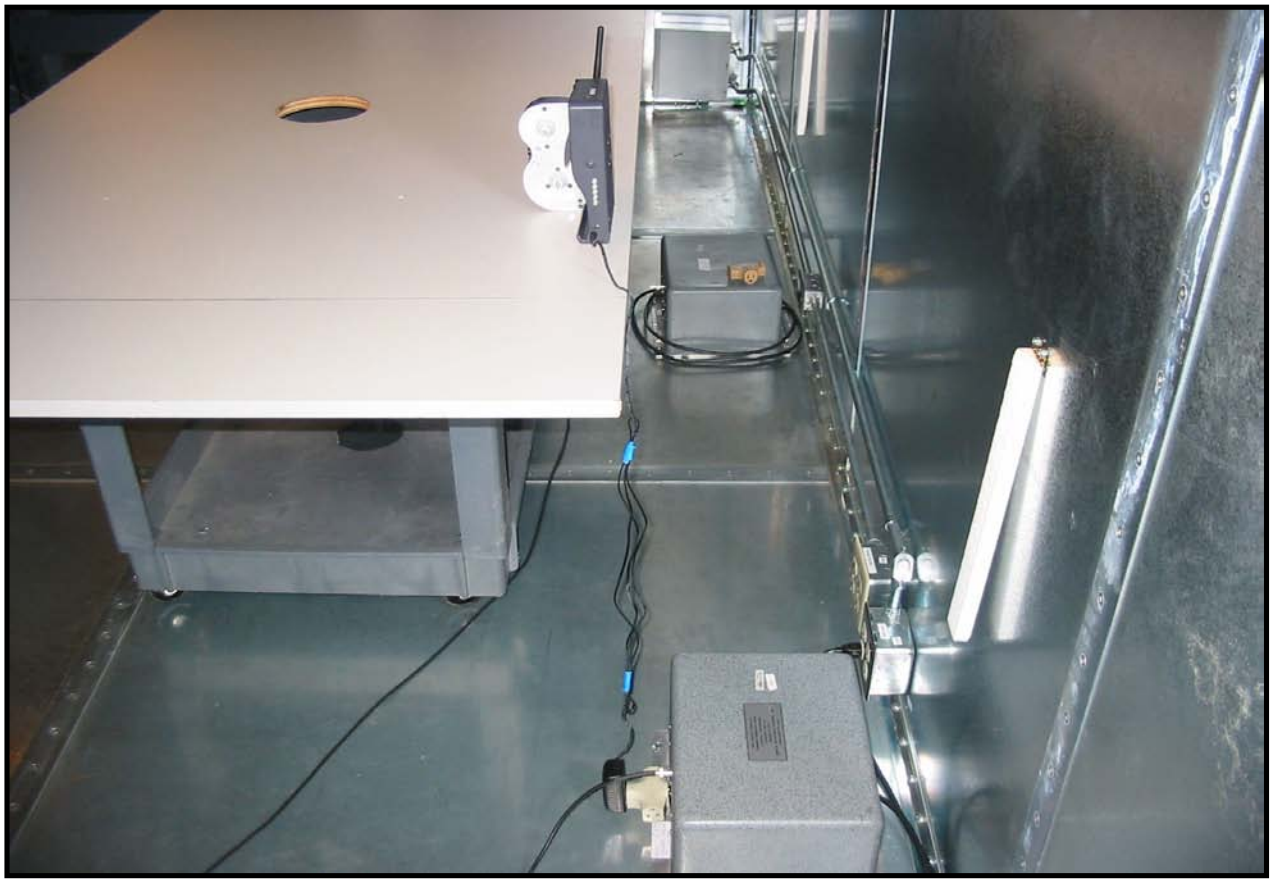
Run #	6
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.429	21.4			2.1	0.0	20.0				43.5	47.3	-3.8
0.670	19.1			1.4	0.0	20.0				40.5	46.0	-5.5
1.615	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
0.918	19.5			0.7	0.0	20.0				40.2	46.0	-5.8
1.855	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
1.155	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
1.335	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
3.566	19.2			0.5	0.0	20.0				39.7	46.0	-6.3
0.488	17.9			1.9	0.0	20.0				39.8	46.2	-6.4
1.565	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
1.675	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
3.446	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
3.876	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
4.787	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
4.917	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
1.385	19.0			0.5	0.0	20.0				39.5	46.0	-6.5
3.686	19.0			0.5	0.0	20.0				39.5	46.0	-6.5
4.977	18.9			0.5	0.0	20.0				39.4	46.0	-6.6
1.095	18.8			0.5	0.0	20.0				39.3	46.0	-6.7



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The carrier frequency separation was measured between each of 5 hopping channels in the middle of the authorized band. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

NORTHWEST EMC

CHANNEL SEPARATION

XMit 2006.03.01

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	Rod Peloquin	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

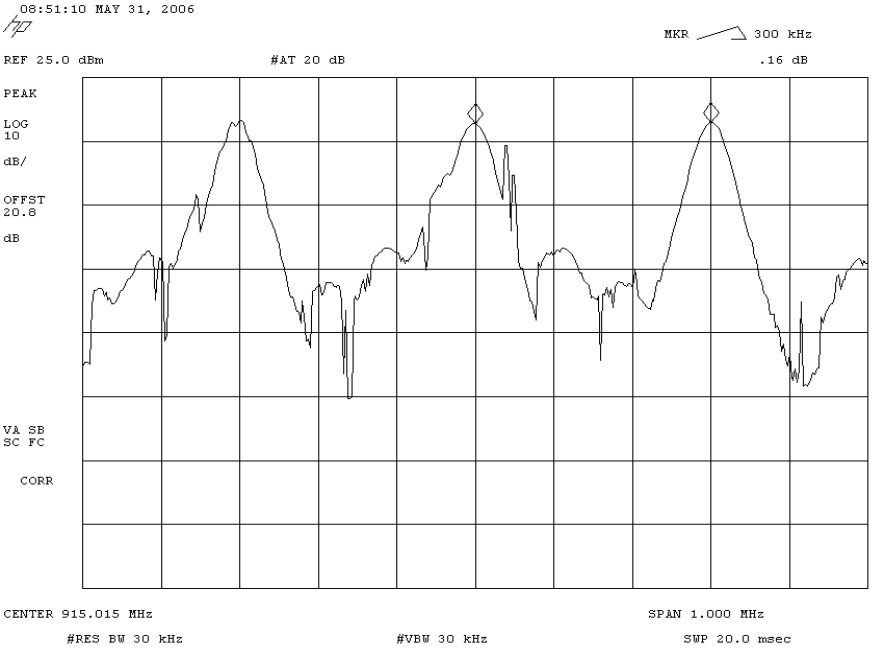
DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

Modes of Operation and Test Conditions	Value	Limit	Result
Channel separation	300 kHz	≥ 87.5 kHz	Pass

CHANNEL SEPARATION

Channel separation					
Result:	Pass	**Value:**	300 kHz	**Limit:**	≥ 87.5 kHz



DWELL TIME

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The average dwell time per hopping channel was measured at one hopping channel in the middle of the authorized band. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

NORTHWEST EMC

DWELL TIME

XMit 2006.03.01

EUT:	**M8S radio in PAD 3500**			**Work Order:**	**ELET0003**
Serial Number:	**Beta 8 (Host)**			**Date:**	**05/22/06**
Customer:	**ADASA, Inc.**			**Temperature:**	**23°C**
Attendees:	**Clarke McAllister**			**Humidity:**	**42%**
Project:	**None**			**Barometric Pres.:**	**29.61**
Tested by:	**Rod Peloquin**	**Power:**	**120VAC/60Hz**	**Job Site:**	**EV06**

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

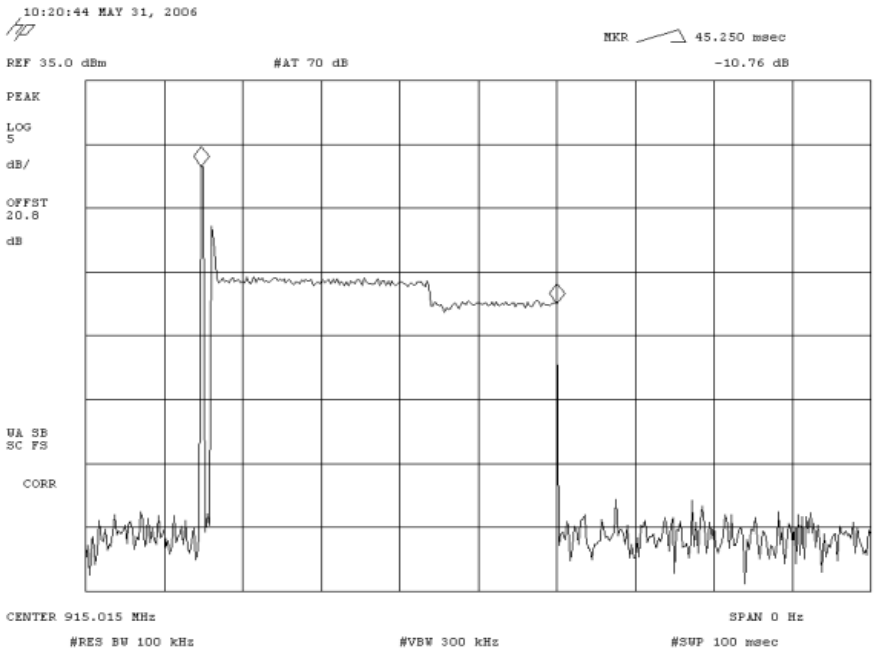
DEVIATIONS FROM TEST STANDARD

Configuration #	**1**	*Signature*

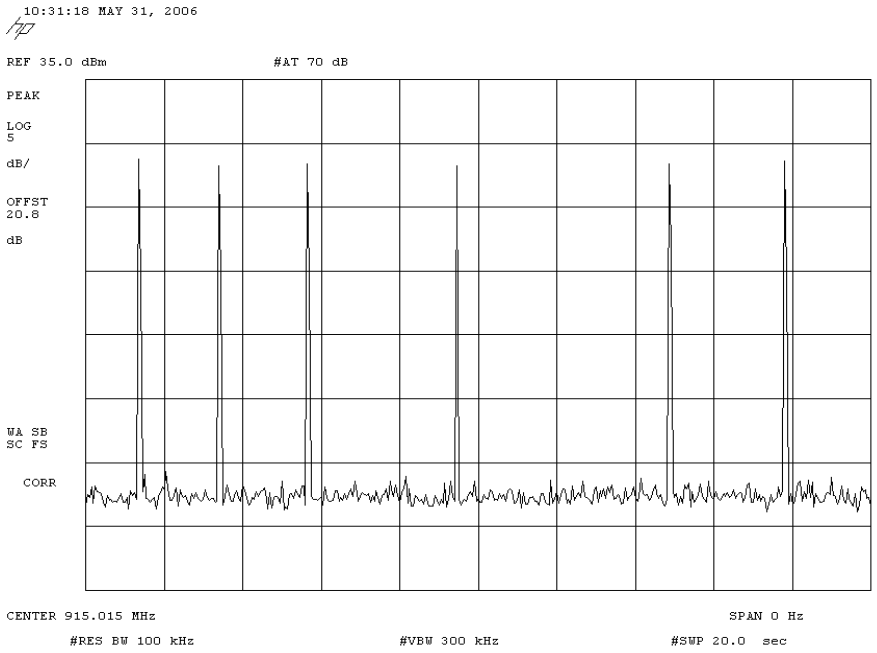
Modes of Operation and Test Conditions	**Value**	**Limit**	**Result**
Pulse Width	45.25 mSec	N/A	N/A
Period	20 Seconds	N/A	N/A
Number of Pulses in 20 second period	8 Pulses	N/A	N/A
Dwell Time	0.362 Seconds	0.4 Seconds	Pass

DWELL TIME

Pulse Width					
Result:	N/A	**Value:**	45.25 mSec	**Limit:**	N/A

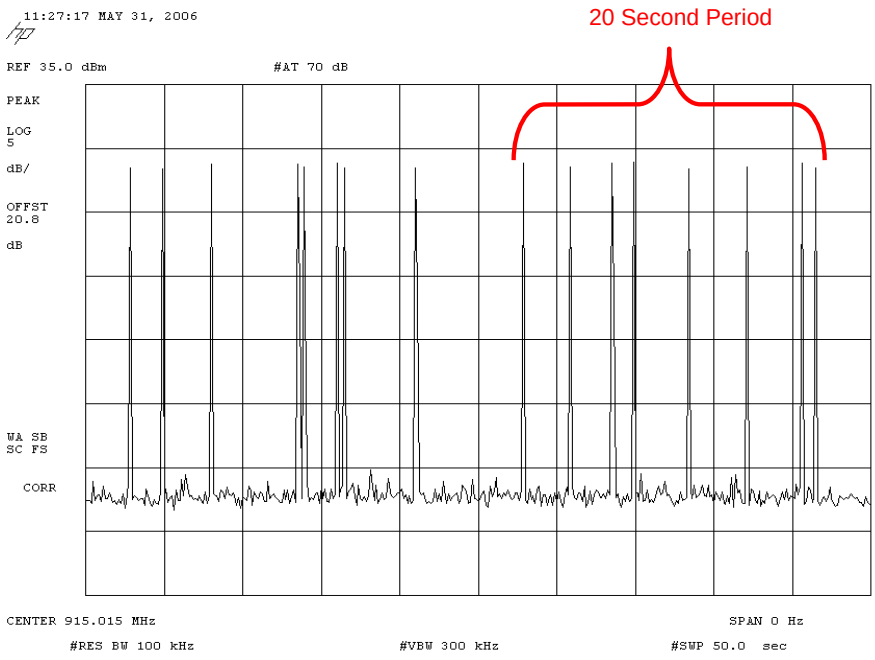


Period					
Result:	N/A	**Value:**	20 Seconds	**Limit:**	N/A



DWELL TIME

Number of Pulses in 20 second period					
Result:	N/A	**Value:**	8	**Limit:**	N/A



Period					
Result:	Pass	**Value:**	0.362 Seconds	**Limit:**	0.4 Seconds

Pulse Width * Number of Pulses in 20 Second period = Dwell Time

0.04525 * 8 = 0.362 Seconds

NUMBER OF HOPPING CHANNELS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The number of hopping frequencies was measured across the authorized band. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The hopping function of the EUT was enabled.

NORTHWEST EMC

NUMBER OF HOPPING CHANNELS

XMit 2006.03.01

EUT:	**M8S radio in PAD 3500**			**Work Order:**	**ELET0003**
Serial Number:	**Beta 8 (Host)**			**Date:**	**05/31/06**
Customer:	**ADASA Inc.**			**Temperature:**	**23°C**
Attendees:	**Clarke McAllister**			**Humidity:**	**40%**
Project:	**None**			**Barometric Pres.:**	**29.99**
Tested by:	**Rod Peloquin**	**Power:**	**120VAC/60Hz**	**Job Site:**	**EV06**

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

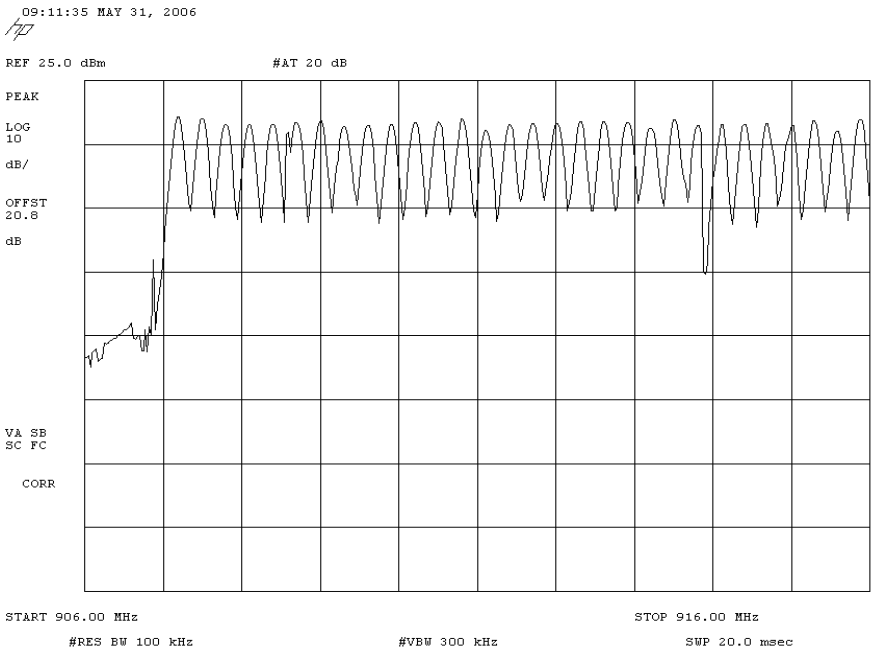
DEVIATIONS FROM TEST STANDARD

Configuration #	**1**	*Signature*

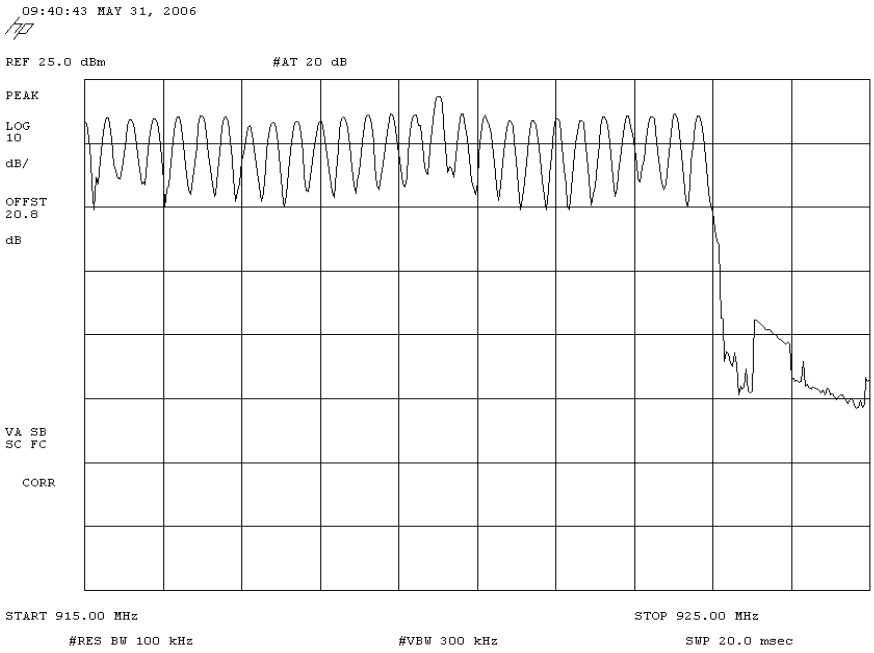
Modes of Operation and Test Conditions	Value	Limit	Result
906 MHz - 916 MHz	53 Channels	At least 50 Channels	Pass
915 MHz - 925 MHz	53 Channels	At least 50 Channels	Pass

NUMBER OF HOPPING CHANNELS

906 MHz - 916 MHz					
Result:	Pass	**Value:**	53 Channels	**Limit:**	At least 50 Channels



915 MHz - 925 MHz					
Result:	Pass	**Value:**	53 Channels	**Limit:**	At least 50 Channels



NUMBER OF HOPPING CHANNELS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The occupied bandwidth was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

NORTHWEST EMC

OCCUPIED BANDWIDTH

XMit 2006.03.01

EUT:	**M8S radio in PAD 3500**			**Work Order:**	**ELET0003**
Serial Number:	**Beta 8 (Host)**			**Date:**	**05/22/06**
Customer:	**ADASA Inc**			**Temperature:**	**23°C**
Attendees:	**Clarke McAllister**			**Humidity:**	**42%**
Project:	**None**			**Barometric Pres.:**	**29.61**
Tested by:	**Rod Peloquin**	**Power:**	**120VAC/60Hz**	**Job Site:**	**EV06**

TEST SPECIFICATIONS	Test Method
FCC 15.247 2005-9	ANSI C63.4 2003

COMMENTS

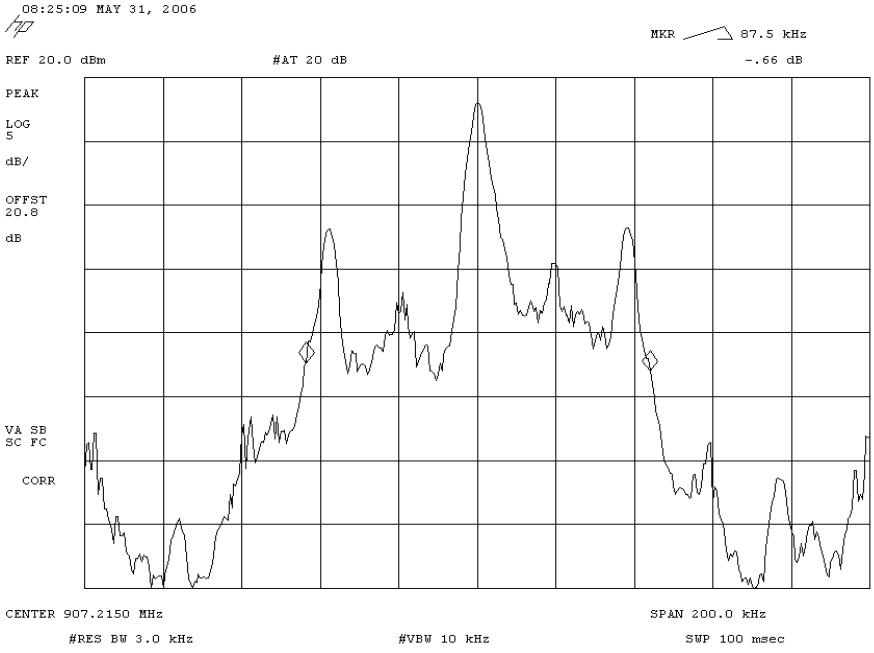
DEVIATIONS FROM TEST STANDARD

Configuration #	**1**	*Signature*

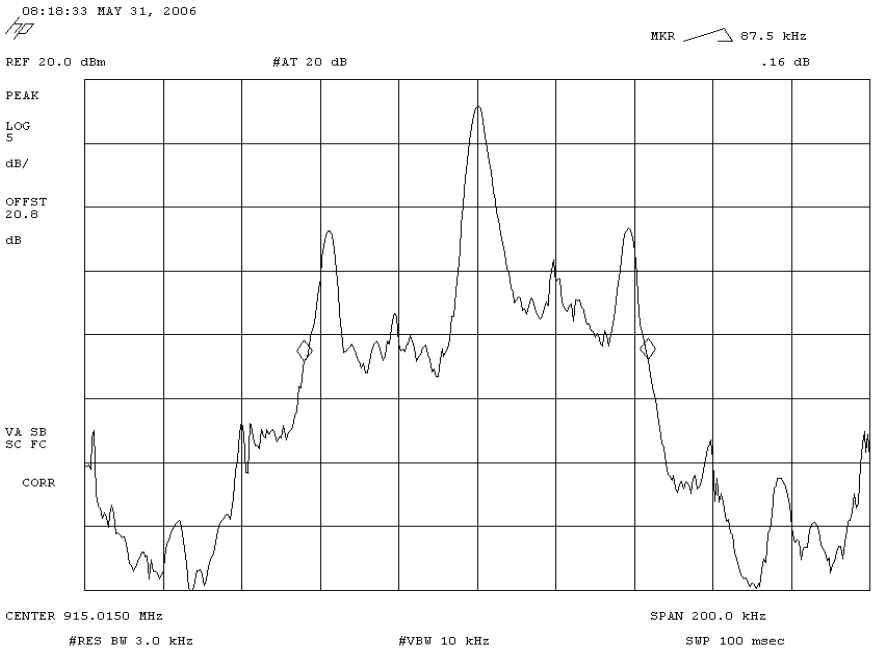
Modes of Operation and Test Conditions	Value	Limit	Result
Low Channel	87.5 kHz	< 250 kHz	Pass
Mid Channel	87.5 kHz	< 250 kHz	Pass
High Channel	86.5 kHz	< 250 kHz	Pass

OCCUPIED BANDWIDTH

Low Channel					
Result:	Pass	**Value:**	87.5 kHz	**Limit:**	< 250 kHz

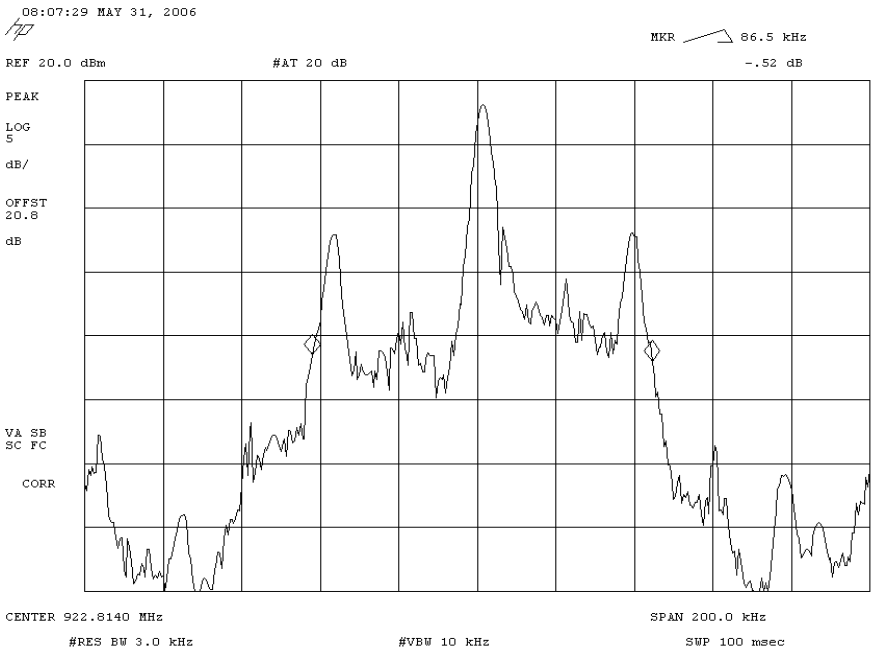


Mid Channel					
Result:	Pass	**Value:**	87.5 kHz	**Limit:**	< 250 kHz



OCCUPIED BANDWIDTH

High Channel		
Result: Pass	**Value:** 86.5 kHz	**Limit:** < 250 kHz



OCCUPIED BANDWIDTH

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Attenuator	Pasternack	PE7005-20	AUN	2/14/2006	13
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13
Power Meter	Hewlett Packard	E4418A	SPA	7/23/2004	24
Power Sensor	Hewlett-Packard	8481H	SPB	7/23/2004	24
Signal Generator	Hewlett-Packard	8648D	TGC	1/27/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode.

De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36dBm.

NORTHWEST EMC

OUTPUT POWER

XMit 2006.03.01

EUT:	**M8S radio in PAD 3500**			**Work Order:**	**ELET0003**
Serial Number:	**Beta 8 (Host)**			**Date:**	**06/28/06**
Customer:	**ADASA Inc.**			**Temperature:**	**23°C**
Attendees:	**Clarke McAllister**			**Humidity:**	**42%**
Project:	**None**			**Barometric Pres.:**	**29.61**
Tested by:	**Rod Peloquin**	**Power:**	**120VAC/60Hz**	**Job Site:**	**EV06**

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

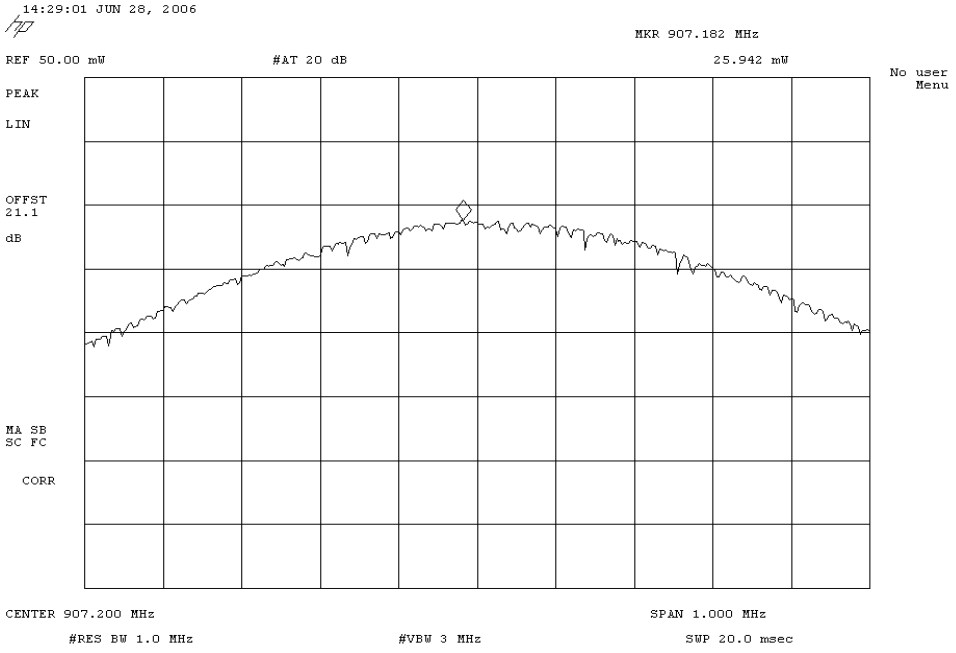
DEVIATIONS FROM TEST STANDARD

Configuration #	**1**	*Signature*

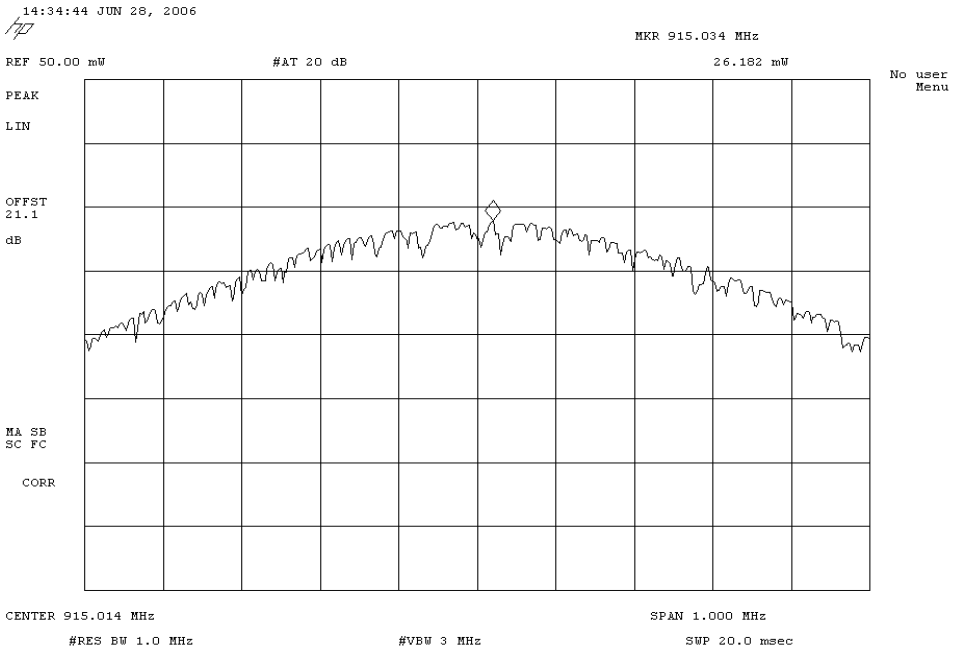
Modes of Operation and Test Conditions	Value	Limit	Result
Low Channel	25.94 mW	1 W	Pass
Mid Channel	26.18 mW	1 W	Pass
High Channel	26.85 mW	1 W	Pass

OUTPUT POWER

Low Channel					
Result:	Pass	**Value:**	25.94 mW	**Limit:**	1 W

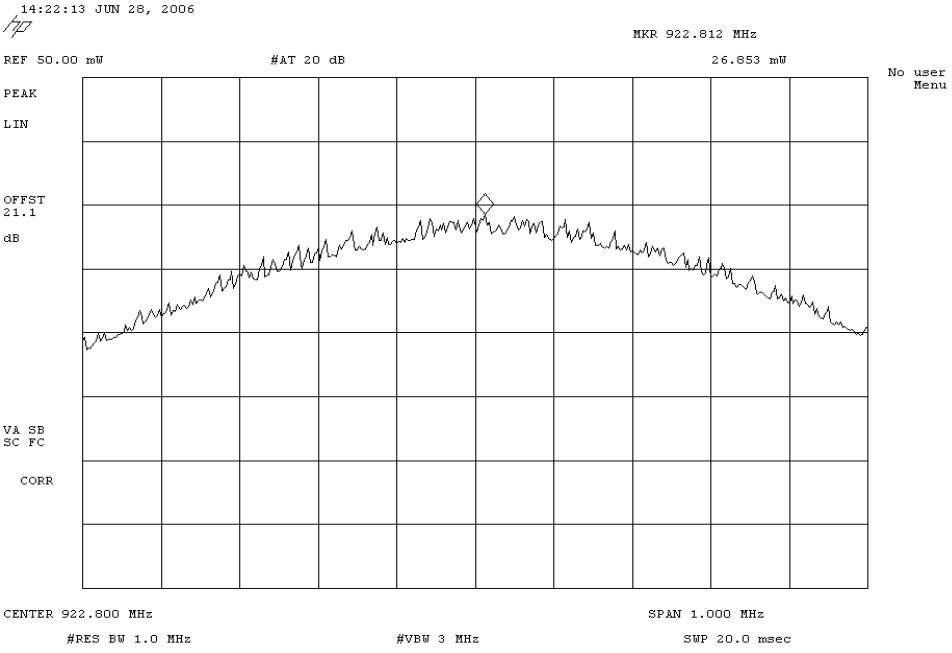


Mid Channel					
Result:	Pass	**Value:**	26.18 mW	**Limit:**	1 W



OUTPUT POWER

High Channel		
Result: Pass	**Value:** 26.85 mW	**Limit:** 1 W



BAND EDGE COMPLIANCE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. The channels closest to the band edges were selected. The spectrum was scanned across each band edge from 5 MHz below the band edge to 5 MHz above the band edge.

NORTHWEST EMC

BAND EDGE COMPLIANCE

XMit 2006.03.01

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	06/28/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	None			Humidity:	34%
Project:	None			Barometric Pres.:	30.09
Tested by:	Greg Kiemel	Power:		Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

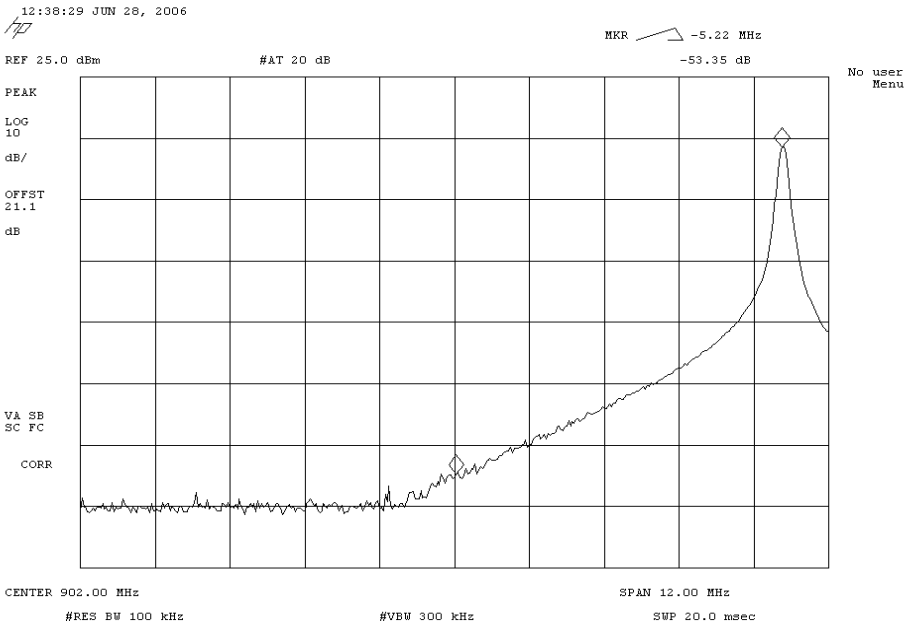
DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

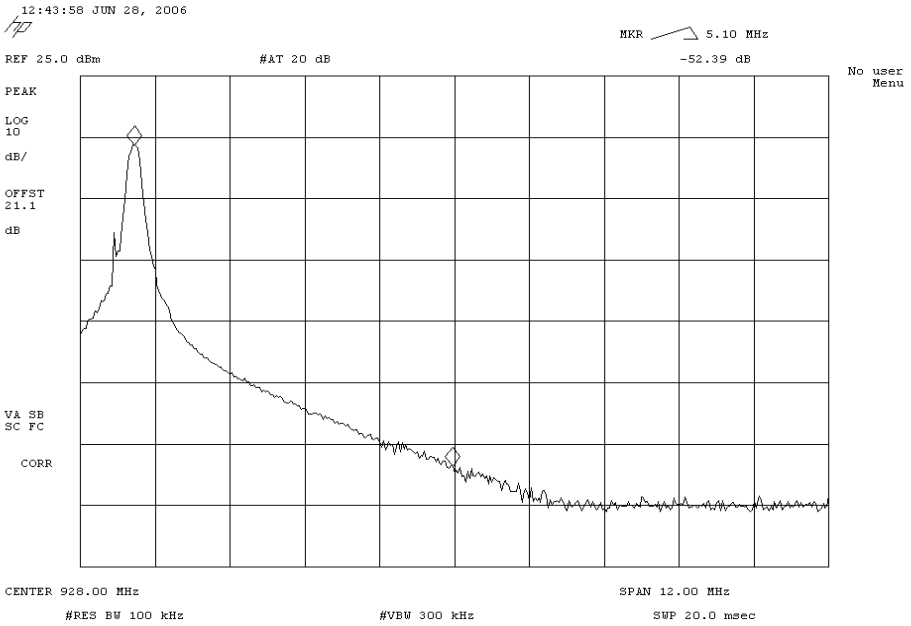
Modes of Operation and Test Conditions	Value	Limit	Result
Low Channel	-53.35 dBc	≤ -20 dBc	Pass
High Channel	-52.39 dBc	≤ -20 dBc	Pass

BAND EDGE COMPLIANCE

Low Channel					
Result:	Pass	**Value:**	-53.35 dBc	**Limit:**	≤ -20 dBc



High Channel					
Result:	Pass	**Value:**	-52.39 dBc	**Limit:**	≤ -20 dBc



BAND EDGE COMPLIANCE

SPURIOUS CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Hewlett-Packard	8593E	AAN	1/25/2006	13

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The spurious RF conducted emissions were measured with the EUT set to low, medium, and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate in a no hop mode. For each transmit frequency, the spectrum was scanned throughout the specified frequency.

NORTHWEST EMC

SPURIOUS CONDUCTED EMISSIONS

XMit 2006.03.01

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	06/28/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	38%
Project:	None			Barometric Pres.:	29.99
Tested by:	Rod Peloquin	Power:	120VAC/60Hz	Job Site:	EV06

TEST SPECIFICATIONS	Test Method
FCC 15.247 2006-2	ANSI C63.4 2003

COMMENTS

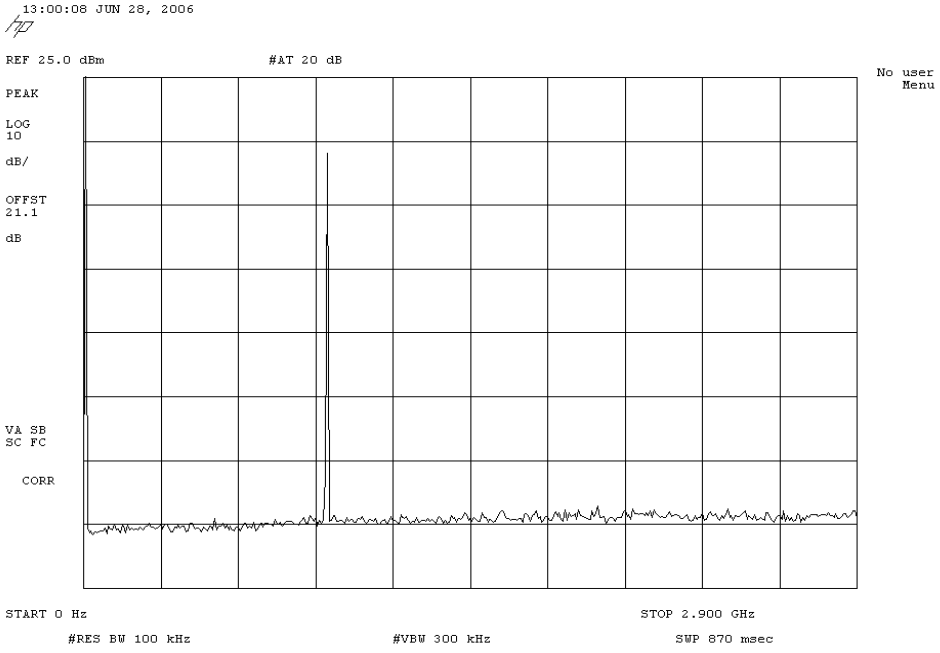
DEVIATIONS FROM TEST STANDARD

Configuration #	1	Signature

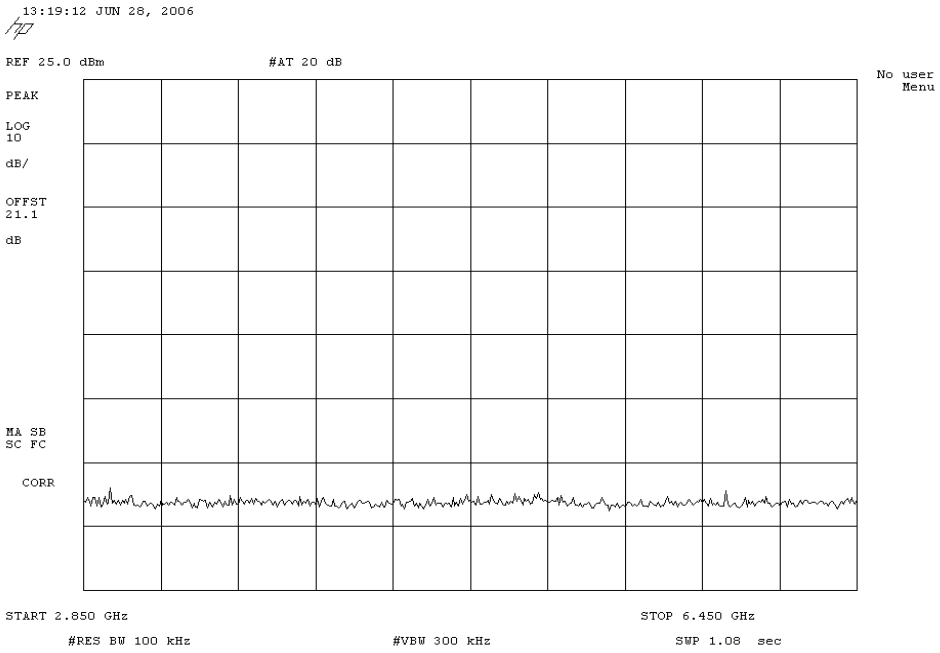
Modes of Operation and Test Conditions	Value	Limit	Result
Low Channel, 0MHz - 2.9GHz	< -50 dBc	≤ -20 dBc	Pass
Low Channel, 2.85GHz-6.45GHz	< -50 dBc	≤ -20 dBc	Pass
Low Channel, 6.4GHz-10GHz	< -50 dBc	≤ -20 dBc	Pass
Mid Channel, 0MHz - 2.9GHz	< -50 dBc	≤ -20 dBc	Pass
Mid Channel, 2.85GHz-6.45GHz	< -50 dBc	≤ -20 dBc	Pass
Mid Channel, 6.4GHz-10GHz	< -50 dBc	≤ -20 dBc	Pass
High Channel, 0MHz - 2.9GHz	< -50 dBc	≤ -20 dBc	Pass
High Channel, 2.85GHz-6.45GHz	< -50 dBc	≤ -20 dBc	Pass
High Channel, 6.4GHz-10GHz	< -50 dBc	≤ -20 dBc	Pass

SPURIOUS CONDUCTED EMISSIONS

Low Channel, 0MHz - 2.9GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc

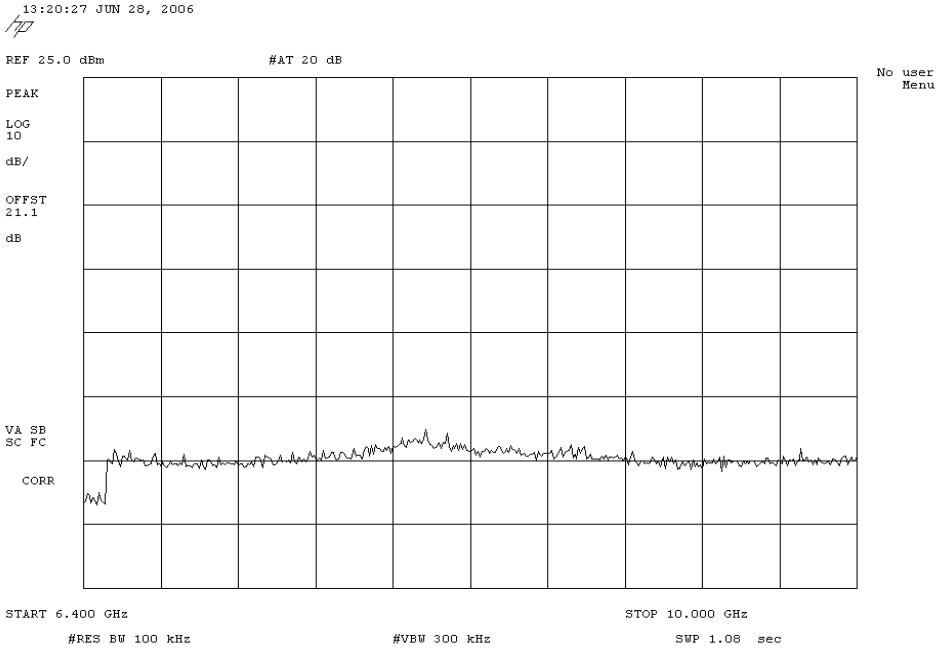


Low Channel, 2.85GHz-6.45GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc

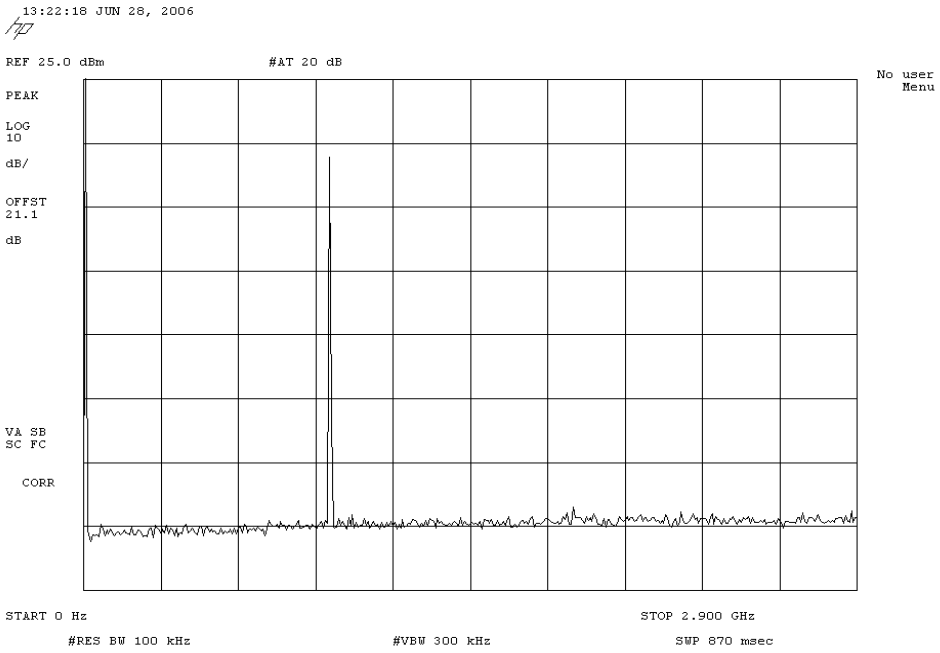


SPURIOUS CONDUCTED EMISSIONS

Low Channel, 6.4GHz-10GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc

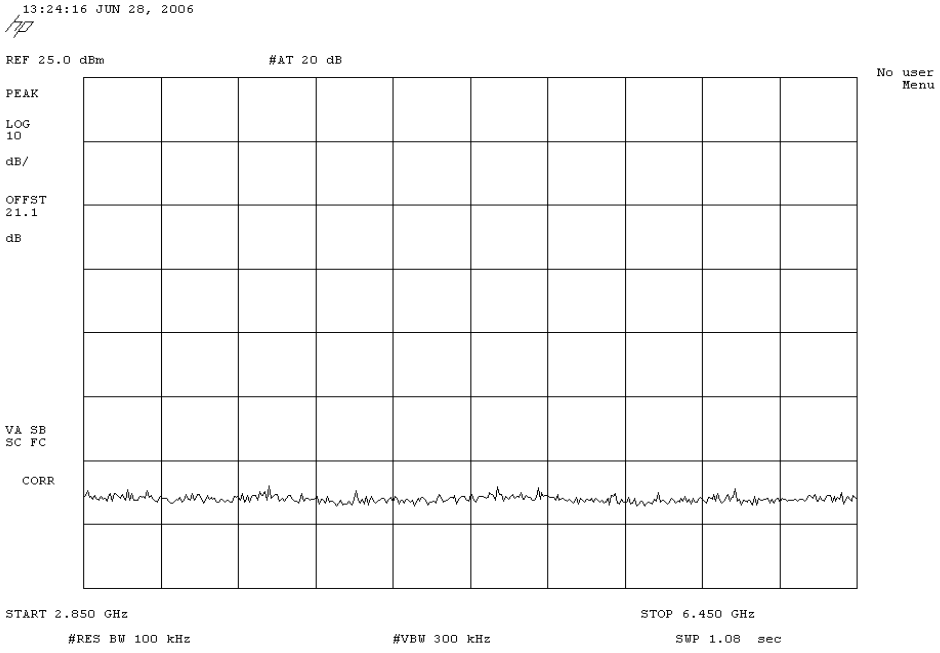


Mid Channel, 0MHz - 2.9GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc

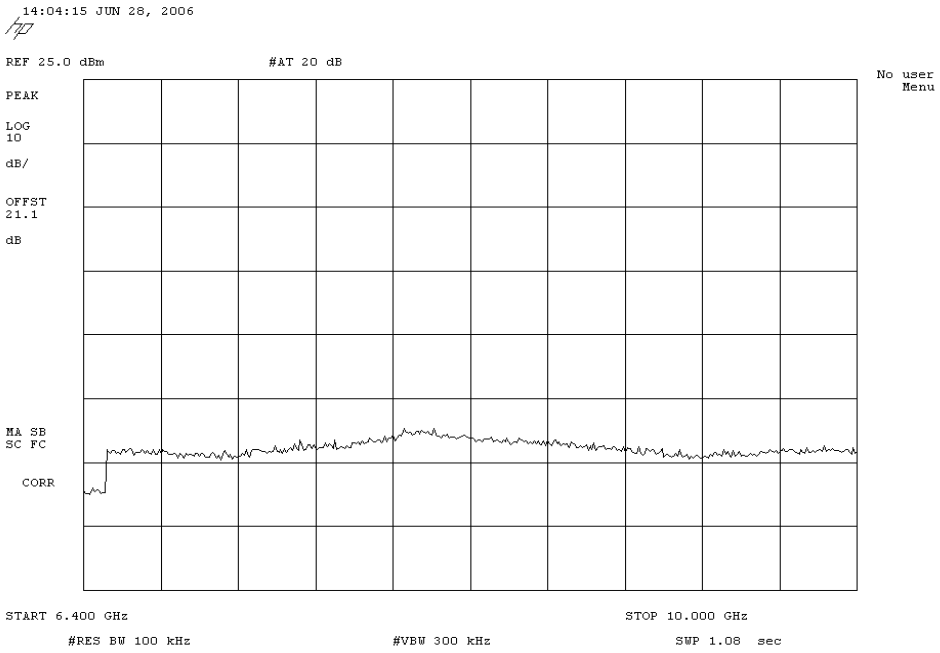


SPURIOUS CONDUCTED EMISSIONS

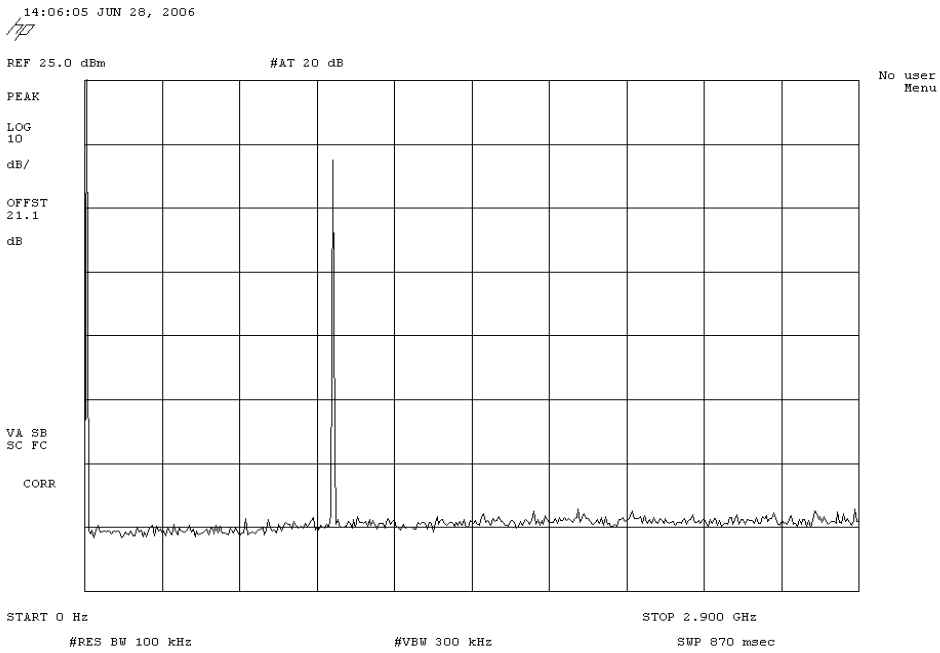
Mid Channel, 2.85GHz-6.45GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc



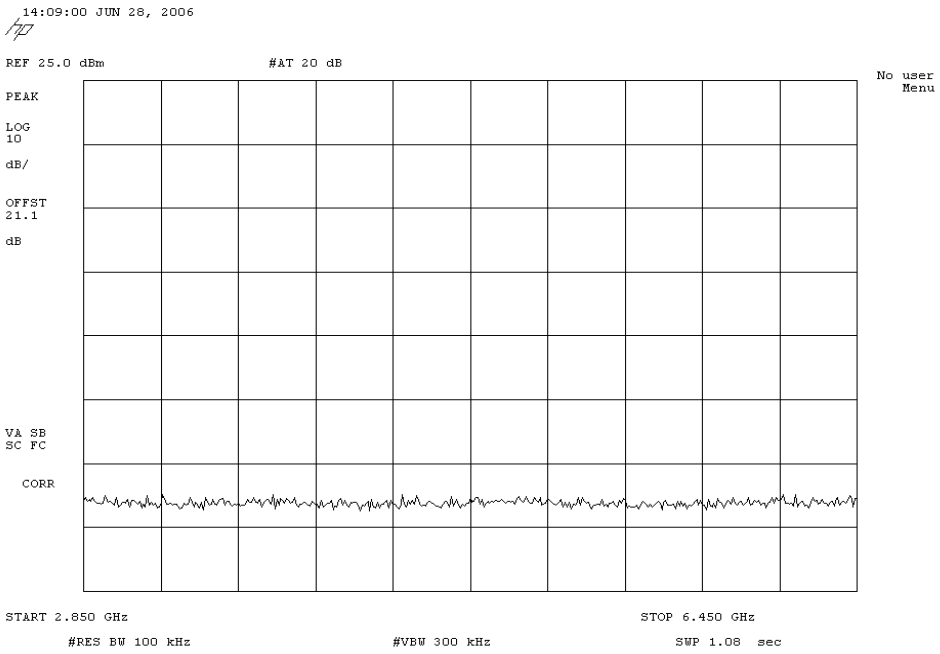
Mid Channel, 6.4GHz-10GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc



High Channel, 0MHz - 2.9GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc

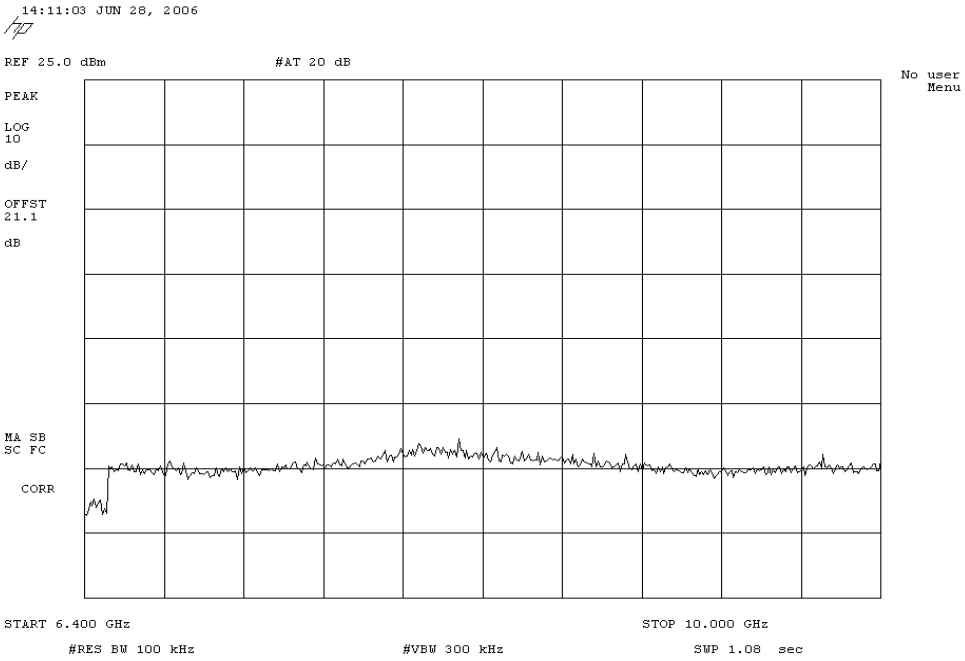


High Channel, 2.85GHz-6.45GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc



SPURIOUS CONDUCTED EMISSIONS

High Channel, 6.4GHz-10GHz					
Result:	Pass	**Value:**	< -50 dBc	**Limit:**	≤ -20 dBc



SPURIOUS CONDUCTED EMISSIONS

SPURIOUS RADIATED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION
RFID low channel,
RFID high channel,
RFID mid channel

POWER SETTINGS INVESTIGATED
120VAC/60Hz

FREQUENCY RANGE INVESTIGATED			
Start Frequency	30 MHz	Stop Frequency	12.5 GHz

SAMPLE CALCULATIONS
Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT					
Description	Manufacturer	Model	ID	Last Cal.	Interval
EV01 cables g,h,j			EVB	3/30/2006	13
EV01 cables c,g, h			EVA	3/30/2006	13
.5-1 GHz Notch Filter	K&L Microwave	3TNF-500/1000-N/N	HFT	8/4/2005	13
Antenna, Horn	EMCO	3115	AHC	8/30/2005	12
Antenna, Biconilog	EMCO	3141	AXE	12/28/2005	24
Low Pass Filter 0-425 MHz	Micro-Tronics	LPM50003	LFB	9/28/2005	13
Low Pass Filter 0-1000 MHz	Micro-Tronics	LPM50004	LFD	9/28/2005	13
High Pass Filter 1.2 - 18 GHz	Micro-Tronics	HPM50108	HFV	9/28/2005	13
Pre-Amplifier	Miteq	AMF-4D-010100-24-10P	APW	8/2/2005	13
Pre-Amplifier	Miteq	AM-1616-1000	AOL	1/4/2006	13
Spectrum Analyzer	Agilent	E4446A	AAT	4/4/2006	12

MEASUREMENT BANDWIDTHS				
	Frequency Range (MHz)	**Peak Data (kHz)**	**Quasi-Peak Data (kHz)**	**Average Data (kHz)**
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0
Measurements were made using the bandwidths and detectors specified. No video filter was used.				

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high channels in both frequency bands. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization, and manipulating the EUT antenna in 3 orthogonal planes (per ANSI C63.4:2003). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500	Work Order:	ELET0003
Serial Number:	Beta 6 (Host)	Date:	06/03/06
Customer:	ADASA Inc.	Temperature:	24
Attendees:	Clarke McAllister	Humidity:	40%
Project:	None	Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware. Completely encased with copper tape. Adasa antenna. 15dBm output power.

EUT OPERATING MODES

RFID high channel,

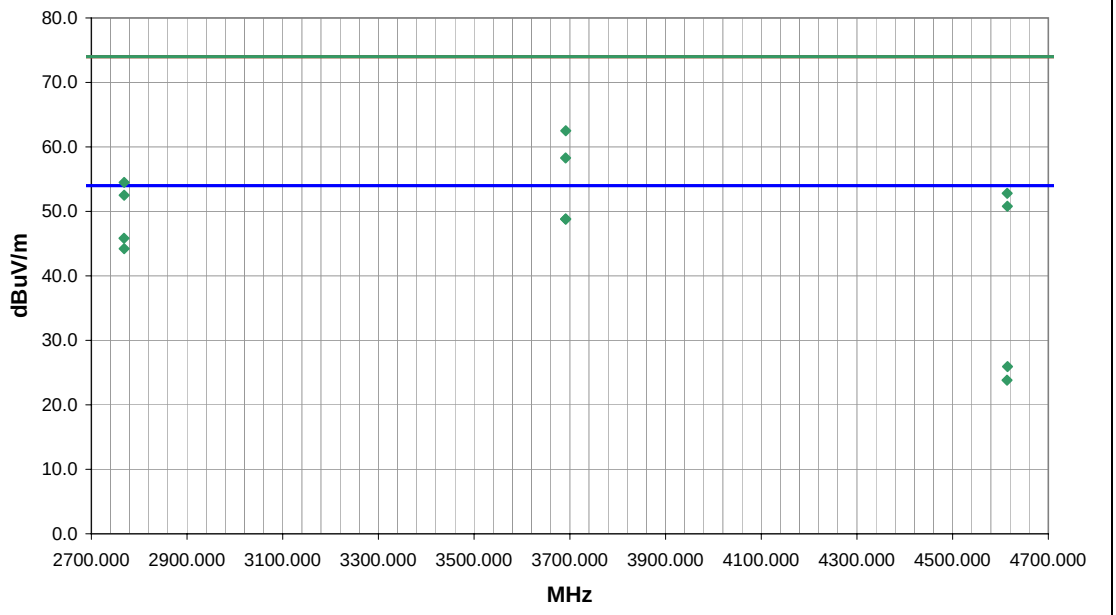
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	7
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature Holly Ashkannejhad



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
3691.231	51.1	4.6	-1.0	1.9	6.9	0.0	H-Horn	AV	0.0	48.8	54.0	-5.2	EUT on side
3691.334	51.1	4.6	48.0	1.1	6.9	0.0	V-Horn	AV	0.0	48.8	54.0	-5.2	EUT vertical
2768.370	51.1	1.6	22.0	1.1	6.9	0.0	V-Horn	AV	0.0	45.8	54.0	-8.2	EUT vertical
2768.597	49.5	1.6	360.0	1.7	6.9	0.0	H-Horn	AV	0.0	44.2	54.0	-9.8	EUT on side
3691.344	57.9	4.6	48.0	1.1	0.0	0.0	V-Horn	PK	0.0	62.5	74.0	-11.5	EUT vertical
3691.231	53.7	4.6	-1.0	1.9	0.0	0.0	H-Horn	PK	0.0	58.3	74.0	-15.7	EUT on side
2768.577	52.9	1.6	22.0	1.1	0.0	0.0	V-Horn	PK	0.0	54.5	74.0	-19.5	EUT vertical
4614.067	46.9	5.9	53.0	1.1	0.0	0.0	V-Horn	PK	0.0	52.8	74.0	-21.2	EUT vertical
2768.581	50.9	1.6	360.0	1.7	0.0	0.0	H-Horn	PK	0.0	52.5	74.0	-21.5	EUT on side
4614.241	44.9	5.9	282.0	1.2	0.0	0.0	H-Horn	PK	0.0	50.8	74.0	-23.2	EUT on side
4614.571	26.9	5.9	282.0	1.2	6.9	0.0	H-Horn	AV	0.0	25.9	54.0	-28.1	EUT on side
4613.830	24.8	5.9	53.0	1.1	6.9	0.0	V-Horn	AV	0.0	23.8	54.0	-30.2	EUT vertical

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 6 (Host)			Date:	06/03/06
Customer:	ADASA Inc.			Temperature:	24
Attendees:	Clarke McAllister			Humidity:	40%
Project:	None			Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware.Completely encased with copper tape. Adasa antenna. Output power set to P15.

EUT OPERATING MODES

RFID mid channel

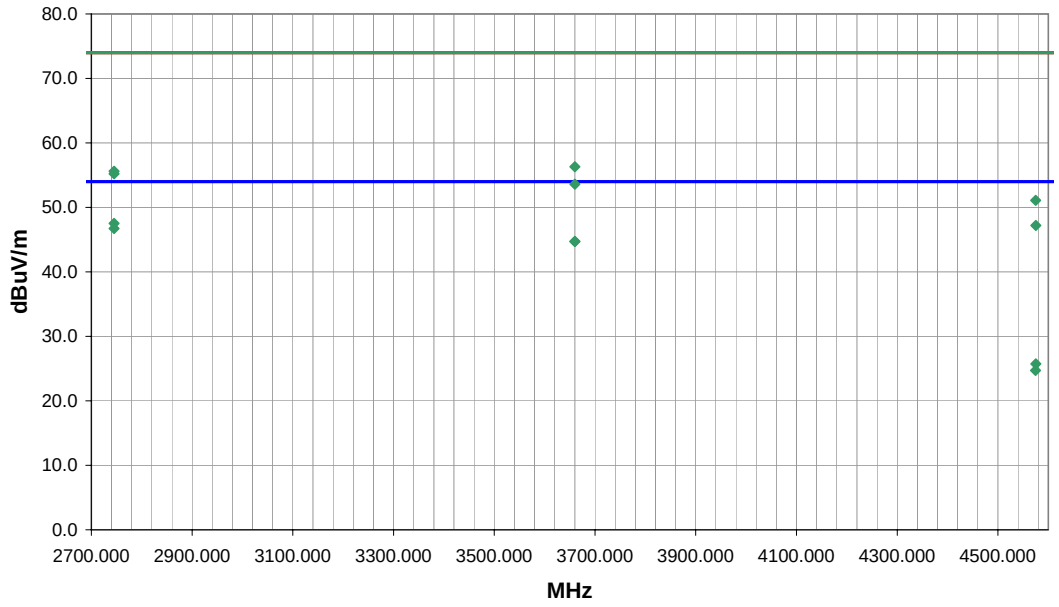
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	8
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature Holly Ashkannejhad



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
2745.142	52.9	1.5	10.0	1.1	6.9	0.0	V-Horn	AV	0.0	47.5	54.0	-6.5	EUT vertical
2745.125	52.1	1.5	23.0	1.2	6.9	0.0	H-Horn	AV	0.0	46.7	54.0	-7.3	EUT on side
3660.144	47.1	4.5	53.0	1.1	6.9	0.0	V-Horn	AV	0.0	44.7	54.0	-9.3	EUT vertical
3660.145	47.1	4.5	-1.0	1.2	6.9	0.0	H-Horn	AV	0.0	44.7	54.0	-9.3	EUT on side
3660.114	51.8	4.5	53.0	1.1	0.0	0.0	V-Horn	PK	0.0	56.3	74.0	-17.7	EUT vertical
2745.098	54.1	1.5	23.0	1.2	0.0	0.0	H-Horn	PK	0.0	55.6	74.0	-18.4	EUT on side
2745.122	53.7	1.5	10.0	1.1	0.0	0.0	V-Horn	PK	0.0	55.2	74.0	-18.8	EUT vertical
3660.108	49.1	4.5	-1.0	1.2	0.0	0.0	H-Horn	PK	0.0	53.6	74.0	-20.4	EUT on side
4575.017	45.3	5.8	343.0	1.2	0.0	0.0	H-Horn	PK	0.0	51.1	74.0	-22.9	EUT on side
4575.292	41.4	5.8	148.0	1.6	0.0	0.0	V-Horn	PK	0.0	47.2	74.0	-26.8	EUT vertical
4575.333	26.8	5.8	343.0	1.2	6.9	0.0	H-Horn	AV	0.0	25.7	54.0	-28.3	EUT on side
4574.679	25.8	5.8	148.0	1.6	6.9	0.0	V-Horn	AV	0.0	24.7	54.0	-29.3	EUT vertical

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500	Work Order:	ELET0003
Serial Number:	Beta 6 (Host)	Date:	06/03/06
Customer:	ADASA Inc.	Temperature:	24
Attendees:	Clarke McAllister	Humidity:	40%
Project:	None	Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware. Completely encased with copper tape. Adasa antenna. Output power set to P15.

EUT OPERATING MODES

RFID low channel,

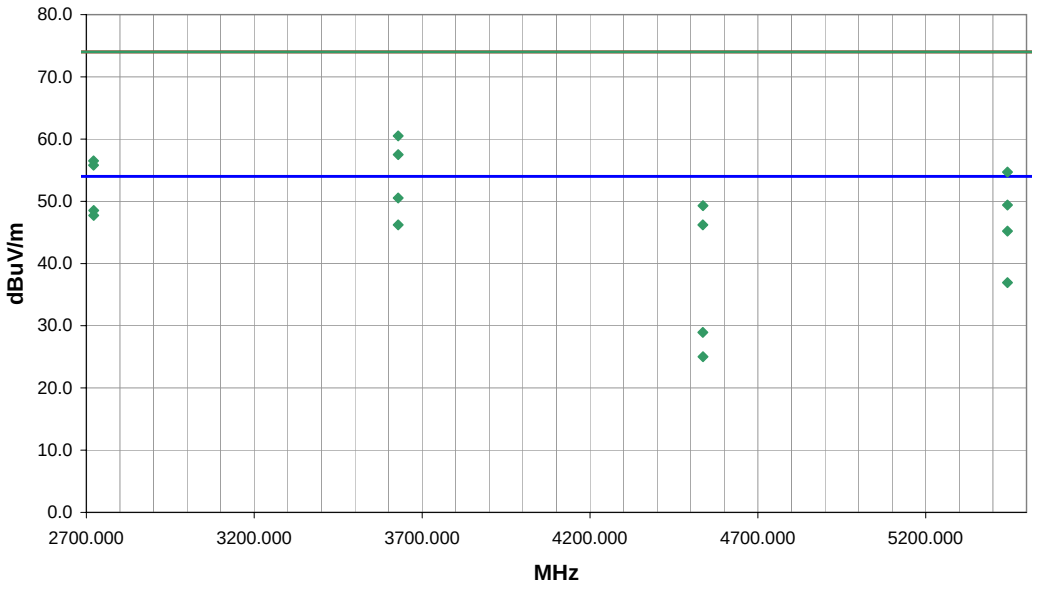
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	11
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
3628.953	53.0	4.4	351.0	2.9	6.9	0.0	H-Horn	AV	0.0	50.5	54.0	-3.5	EUT horizontal
2721.710	53.9	1.5	25.0	1.2	6.9	0.0	H-Horn	AV	0.0	48.5	54.0	-5.5	EUT horizontal
2721.835	53.1	1.5	13.0	1.1	6.9	0.0	V-Horn	AV	0.0	47.7	54.0	-6.3	EUT vertical
3628.943	48.7	4.4	37.0	1.1	6.9	0.0	V-Horn	AV	0.0	46.2	54.0	-7.8	EUT vertical
5443.355	44.2	7.9	40.0	1.2	6.9	0.0	H-Horn	AV	0.0	45.2	54.0	-8.8	EUT horizontal
3628.963	56.1	4.4	351.0	2.9	0.0	0.0	H-Horn	PK	0.0	60.5	74.0	-13.5	EUT horizontal
3628.833	53.1	4.4	37.0	1.1	0.0	0.0	V-Horn	PK	0.0	57.5	74.0	-16.5	EUT vertical
5443.425	35.9	7.9	62.0	1.1	6.9	0.0	V-Horn	AV	0.0	36.9	54.0	-17.1	EUT vertical
2721.660	55.0	1.5	25.0	1.2	0.0	0.0	H-Horn	PK	0.0	56.5	74.0	-17.5	EUT horizontal
2721.621	54.3	1.5	13.0	1.1	0.0	0.0	V-Horn	PK	0.0	55.8	74.0	-18.2	EUT vertical
5443.369	46.8	7.9	40.0	1.2	0.0	0.0	H-Horn	PK	0.0	54.7	74.0	-19.3	EUT horizontal
5443.359	41.5	7.9	62.0	1.1	0.0	0.0	V-Horn	PK	0.0	49.4	74.0	-24.6	EUT vertical
4536.254	43.5	5.8	326.0	1.1	0.0	0.0	V-Horn	PK	0.0	49.3	74.0	-24.7	EUT vertical
4536.142	30.0	5.8	274.0	1.7	6.9	0.0	H-Horn	AV	0.0	28.9	54.0	-25.1	EUT horizontal
4536.165	40.4	5.8	274.0	1.7	0.0	0.0	H-Horn	PK	0.0	46.2	74.0	-27.8	EUT horizontal
4536.451	26.1	5.8	326.0	1.1	6.9	0.0	V-Horn	AV	0.0	25.0	54.0	-29.0	EUT vertical

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500	Work Order:	ELET0003
Serial Number:	Beta 6 (Host)	Date:	06/04/06
Customer:	ADASA Inc.	Temperature:	24
Attendees:	Clarke McAllister	Humidity:	40%
Project:	None	Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware. Completely encased with copper tape. Adasa antenna. Output power set to P15.

EUT OPERATING MODES

RFID low channel

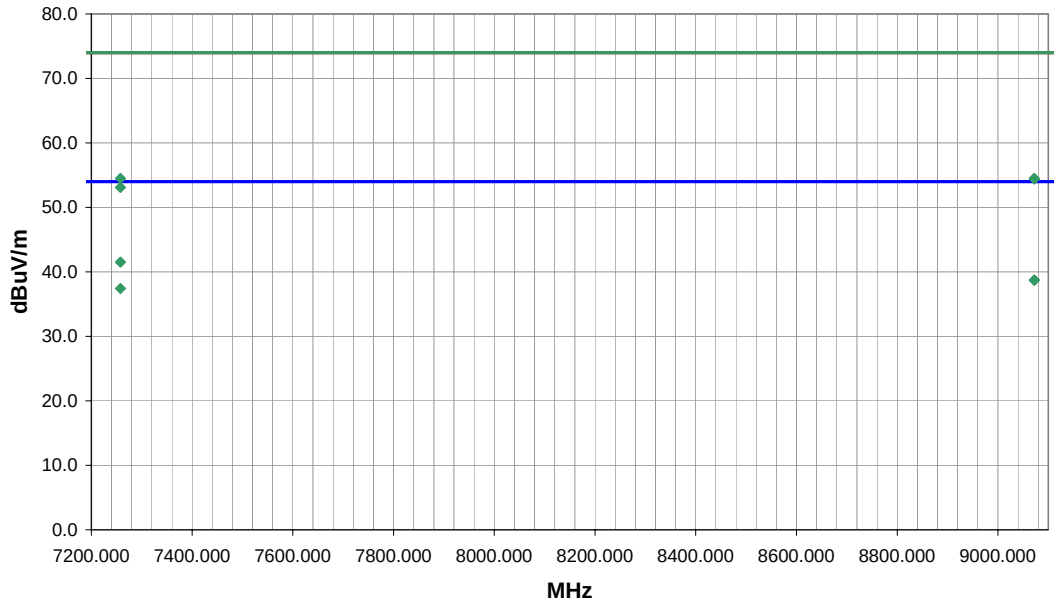
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	12
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature Holly Ashkannejhad



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
7257.856	35.2	13.2	59.0	1.1	6.9	0.0	V-Horn	AV	0.0	41.5	54.0	-12.5	EUT vertical
9072.191	30.1	15.5	17.0	1.2	6.9	0.0	H-Horn	AV	0.0	38.7	54.0	-15.3	EUT on side
9072.243	30.1	15.5	14.0	1.1	6.9	0.0	V-Horn	AV	0.0	38.7	54.0	-15.3	EUT vertical
7257.848	31.1	13.2	360.0	1.5	6.9	0.0	H-Horn	AV	0.0	37.4	54.0	-16.6	EUT on side
7257.876	41.3	13.2	59.0	1.1	0.0	0.0	V-Horn	PK	0.0	54.5	74.0	-19.5	EUT vertical
9072.191	39.0	15.5	17.0	1.2	0.0	0.0	H-Horn	PK	0.0	54.5	74.0	-19.5	EUT on side
9072.293	38.9	15.5	14.0	1.1	0.0	0.0	V-Horn	PK	0.0	54.4	74.0	-19.6	EUT vertical
7257.761	39.9	13.2	360.0	1.5	0.0	0.0	H-Horn	PK	0.0	53.1	74.0	-20.9	EUT on side

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500	Work Order:	ELET0003
Serial Number:	Beta 6 (Host)	Date:	06/04/06
Customer:	ADASA Inc.	Temperature:	24
Attendees:	Clarke McAllister	Humidity:	40%
Project:	None	Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power: 120VAC/60Hz	Job Site: EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware. Completely encased with copper tape. Adasa antenna. Output power set to P15.

EUT OPERATING MODES

RFID mid channel

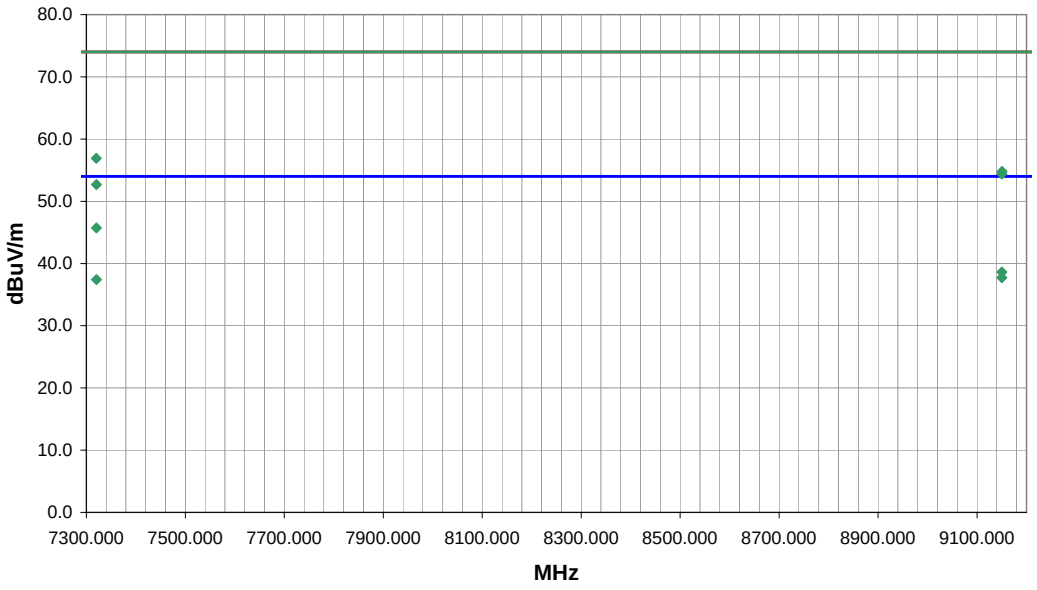
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	13
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature Holly Ashkannejhad



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Duty Cycle Correction Factor	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
7320.290	39.2	13.4	63.0	1.1	6.9	0.0	V-Horn	AV	0.0	45.7	54.0	-8.3	EUT vertical
9150.336	30.0	15.5	63.0	1.1	6.9	0.0	V-Horn	AV	0.0	38.6	54.0	-15.4	EUT vertical
9150.322	29.1	15.5	360.0	2.0	6.9	0.0	H-Horn	AV	0.0	37.7	54.0	-16.3	EUT horizontal
7320.266	30.9	13.4	13.0	1.2	6.9	0.0	H-Horn	AV	0.0	37.4	54.0	-16.6	EUT horizontal
7320.200	43.5	13.4	63.0	1.1	0.0	0.0	V-Horn	PK	0.0	56.9	74.0	-17.1	EUT vertical
9150.452	39.3	15.5	63.0	1.1	0.0	0.0	V-Horn	PK	0.0	54.8	74.0	-19.2	EUT vertical
9150.122	38.9	15.5	360.0	2.0	0.0	0.0	H-Horn	PK	0.0	54.4	74.0	-19.6	EUT horizontal
7320.243	39.3	13.4	13.0	1.2	0.0	0.0	H-Horn	PK	0.0	52.7	74.0	-21.3	EUT horizontal

NORTHWEST EMC

SPURIOUS RADIATED EMISSIONS

PSA 2006.05.30
EMI 2006.6.2

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 6 (Host)			Date:	06/04/06
Customer:	ADASA Inc.			Temperature:	24
Attendees:	Clarke McAllister			Humidity:	40%
Project:	None			Barometric Pres.:	29.61
Tested by:	Holly Ashkannejhad	Power:	120VAC/60Hz	Job Site:	EV01

TEST SPECIFICATIONS	Test Method
FCC 15.247(d) Spurious Radiated Emissions:2005-9	ANSI C63.4:2003

TEST PARAMETERS			
Antenna Height(s) (m)	1 - 4	Test Distance (m)	3

COMMENTS

2.0.1 hardware and ADASA 5-26-06 frimware. Completely encased with copper tape. Adasa antenna. Output power set to P15.

EUT OPERATING MODES

RFID high channel

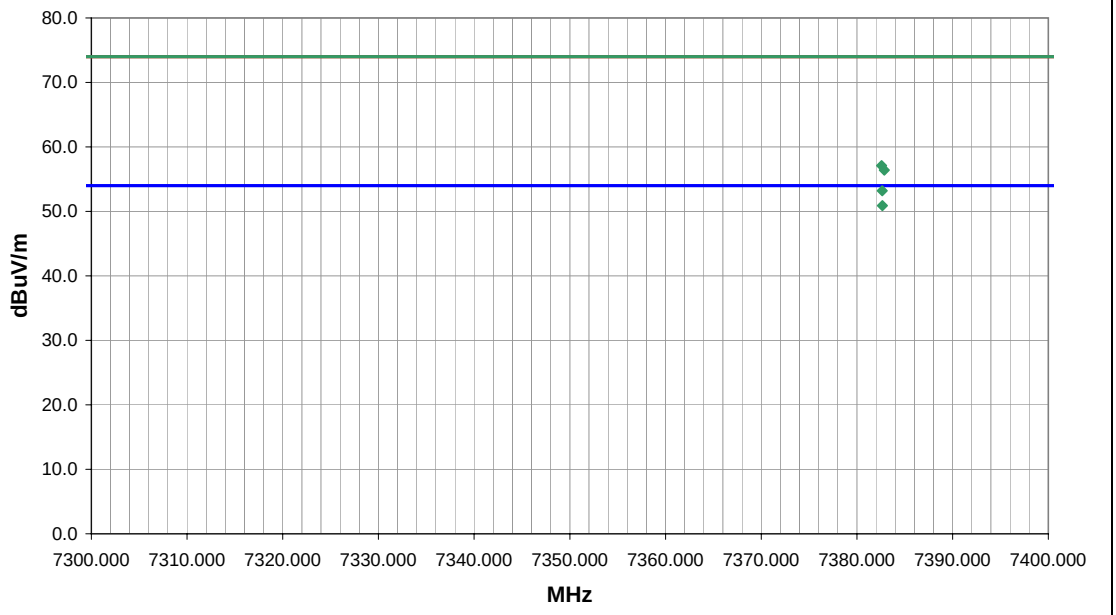
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	14
Configuration #	4
Results	Pass

NVLAP Lab Code 200630-0

Signature Holly Ashkannejhad



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	External Attenuation (dB)	Polarity	Detector	Distance Adjustment (dB)	Adjusted dBuV/m	Spec. Limit dBuV/m	Compared to Spec. (dB)	Comments
7382.653	39.6	13.6	167.0	1.1	3.0	0.0	V-Horn	AV	0.0	53.2	54.0	-0.8	EUT vertical
7382.659	37.3	13.6	194.0	1.2	3.0	0.0	H-Horn	AV	0.0	50.9	54.0	-3.1	EUT on side
7382.583	43.5	13.6	167.0	1.1	3.0	0.0	V-Horn	PK	0.0	57.1	74.0	-16.9	EUT vertical
7382.869	42.8	13.6	194.0	1.2	3.0	0.0	H-Horn	PK	0.0	56.4	74.0	-17.6	EUT on side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CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION
RFID high channel
RFID mid channel
RFID low channel

POWER SETTINGS INVESTIGATED
120VAC/60Hz

SAMPLE CALCULATIONS
Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar	9252-50-R-24-BNC	LIQ	12/13/2005	13
High Pass Filter	T.T.E.	7766	HFG	12/19/2005	13
Attenuator	Coaxicom	66702 2910-20	RBS	12/19/2005	13
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQD	12/21/2005	13
Spectrum Analyzer Display	Hewlett Packard	85662A	AAID	12/21/2005	13
Spectrum Analyzer	Hewlett-Packard	8568B	AAI	12/21/2005	13

MEASUREMENT BANDWIDTHS

	Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
	0.01 - 0.15	1.0	0.2	0.2
	0.15 - 30.0	10.0	9.0	9.0
	30.0 - 1000	100.0	120.0	120.0
	Above 1000	1000.0	N/A	1000.0
Measurements were made using the bandwidths and detectors specified. No video filter was used.				

MEASUREMENT UNCERTAINTY

Measurement uncertainty is used to reflect the accuracy of the measured result as compared with its "true" or theoretically correct value. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4. In the case of transient tests our test equipment has been demonstrated by calibration to provide at least a 95% confidence that it complies with the test specification requirements. The measurement uncertainty for any test is available upon request.

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50 Ω measuring port is terminated by a 50 Ω EMI meter or a 50 Ω resistive load. All 50 Ω measuring ports of the LISN are terminated by 50Ω.

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	David Divergigelis	Power:	120VAC/60Hz	Job Site:	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

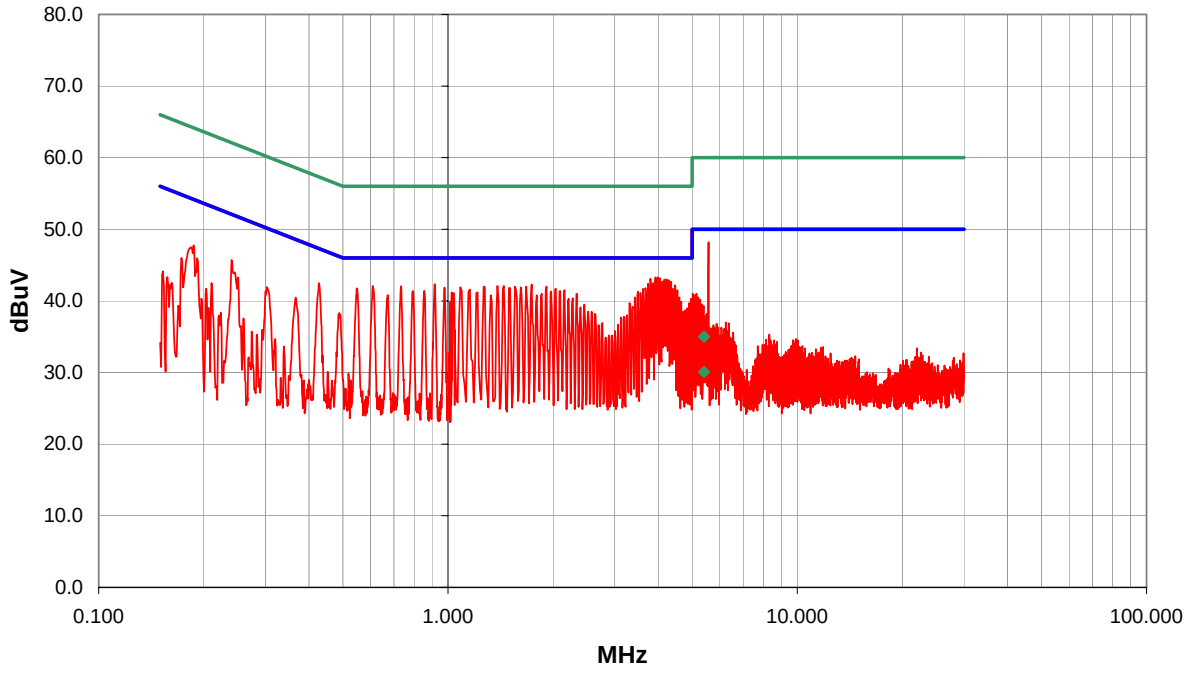
EUT OPERATING MODES

RFID low channel

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	1		
Configuration #	1		
Results	Pass	NVLAP Lab Code 200630-0	Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
5.409	9.6			0.5	0.0	20.0		AV		30.1	50.0	-19.9
5.409	14.5			0.5	0.0	20.0		QP		35.0	60.0	-25.0
5.567	27.7			0.5	0.0	20.0				48.2	50.0	-1.8
3.926	22.8			0.5	0.0	20.0				43.3	46.0	-2.7
3.986	22.8			0.5	0.0	20.0				43.3	46.0	-2.7
4.047	22.7			0.5	0.0	20.0				43.2	46.0	-2.8
3.796	22.6			0.5	0.0	20.0				43.1	46.0	-2.9
4.167	22.5			0.5	0.0	20.0				43.0	46.0	-3.0
4.227	22.5			0.5	0.0	20.0				43.0	46.0	-3.0
4.287	22.4			0.5	0.0	20.0				42.9	46.0	-3.1
4.107	22.2			0.5	0.0	20.0				42.7	46.0	-3.3
4.357	22.2			0.5	0.0	20.0				42.7	46.0	-3.3
3.866	22.0			0.5	0.0	20.0				42.5	46.0	-3.5
3.736	21.9			0.5	0.0	20.0				42.4	46.0	-3.6
0.916	21.6			0.7	0.0	20.0				42.3	46.0	-3.7
1.735	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
4.467	21.7			0.5	0.0	20.0				42.2	46.0	-3.8
1.385	21.6			0.5	0.0	20.0				42.1	46.0	-3.9
1.445	21.6			0.5	0.0	20.0				42.1	46.0	-3.9

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID low channel

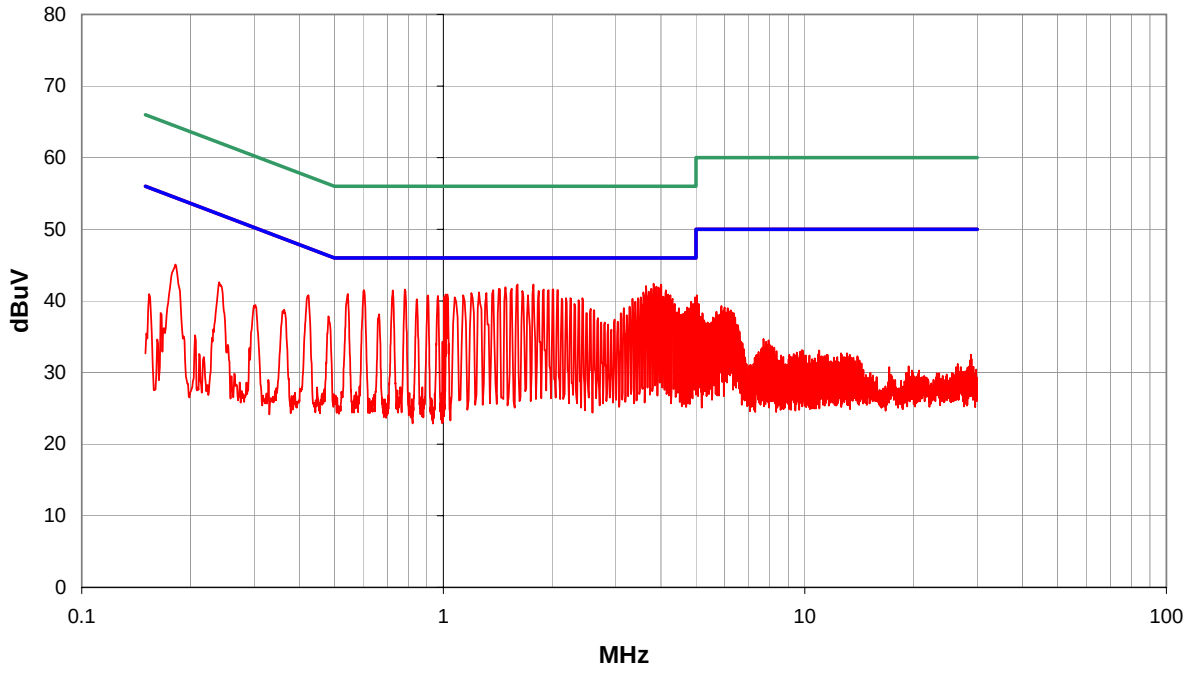
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	2
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
3.816	21.9			0.5	0.0	20.0				42.4	46.0	-3.6
1.605	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
1.775	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
3.996	21.8			0.5	0.0	20.0				42.3	46.0	-3.7
3.636	21.6			0.5	0.0	20.0				42.1	46.0	-3.9
3.886	21.5			0.5	0.0	20.0				42.0	46.0	-4.0
1.485	21.4			0.5	0.0	20.0				41.9	46.0	-4.1
3.936	21.4			0.5	0.0	20.0				41.9	46.0	-4.1
1.425	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
1.545	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
3.756	21.2			0.5	0.0	20.0				41.7	46.0	-4.3
0.783	20.5			1.1	0.0	20.0				41.6	46.0	-4.4
1.895	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
2.006	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
0.604	19.9			1.6	0.0	20.0				41.5	46.0	-4.5
1.375	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
1.955	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
2.066	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
4.127	21.0			0.5	0.0	20.0				41.5	46.0	-4.5

NORTHWEST

EMC CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	David Divergigelis	Power:	120VAC/60Hz	Job Site:	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID mid channel

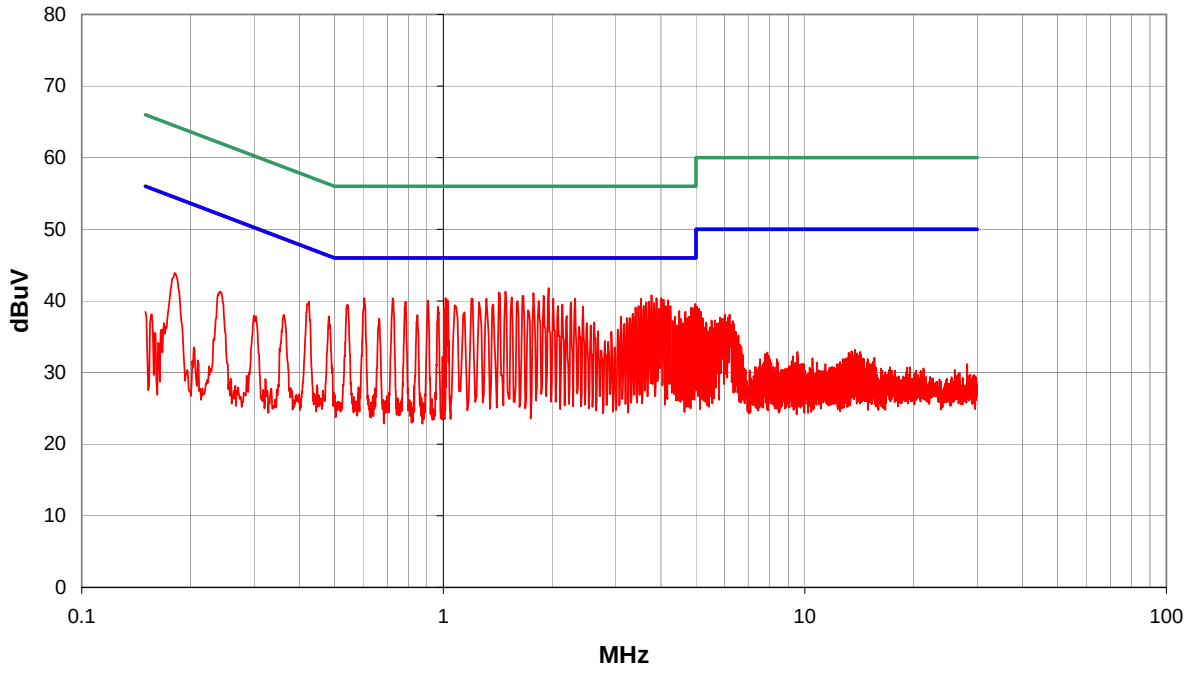
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	3
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
1.955	21.3			0.5	0.0	20.0				41.8	46.0	-4.2
1.485	20.8			0.5	0.0	20.0				41.3	46.0	-4.7
1.425	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
1.775	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.766	20.3			0.5	0.0	20.0				40.8	46.0	-5.2
1.655	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.895	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.545	20.0			0.5	0.0	20.0				40.5	46.0	-5.5
1.015	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
0.604	18.8			1.6	0.0	20.0				40.4	46.0	-5.6
3.886	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
4.007	19.9			0.5	0.0	20.0				40.4	46.0	-5.6
0.725	19.1			1.3	0.0	20.0				40.4	46.0	-5.6
1.195	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
1.315	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
2.016	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
2.316	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
3.526	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
4.067	19.7			0.5	0.0	20.0				40.2	46.0	-5.8

NORTHWEST EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			Work Order:	ELET0003
Serial Number:	Beta 8 (Host)			Date:	05/31/06
Customer:	ADASA Inc.			Temperature:	23°C
Attendees:	Clarke McAllister			Humidity:	42%
Project:	None			Barometric Pres.:	29.61
Tested by:	David Divergigelis	Power:	120VAC/60Hz	Job Site:	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

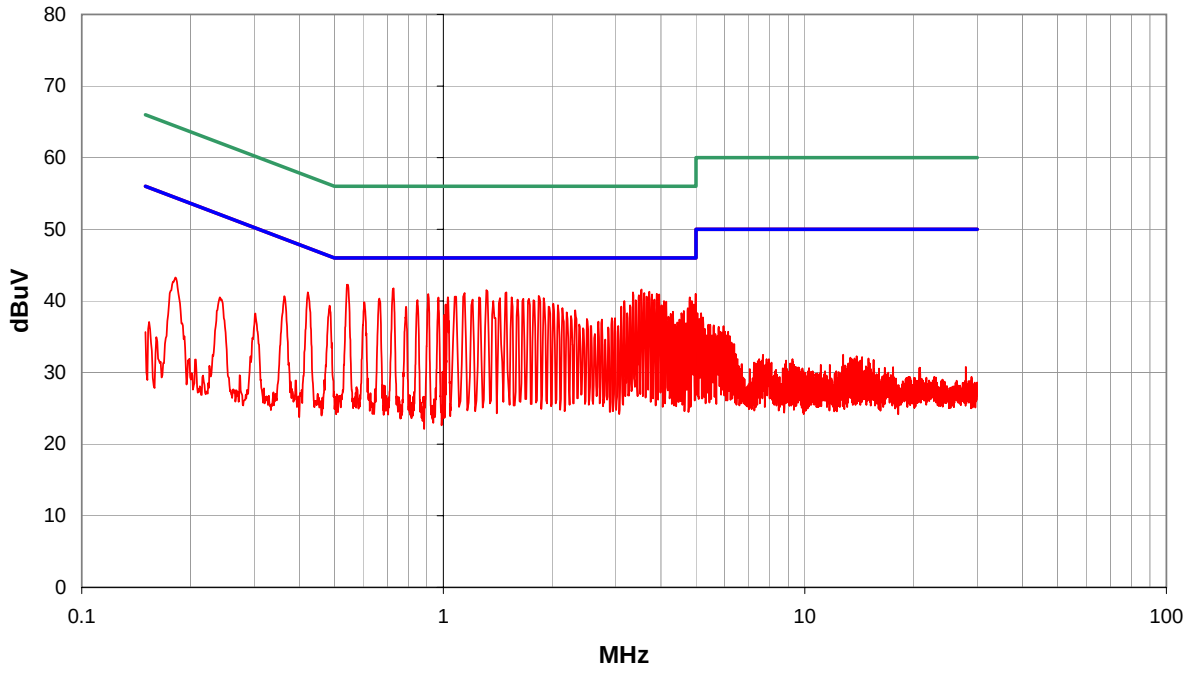
EUT OPERATING MODES

RFID mid channel

DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	4		
Configuration #	1		
Results	Pass	NVLAP Lab Code 200630-0	Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.541	20.5			1.8	0.0	20.0				42.3	46.0	-3.7
0.728	20.5			1.3	0.0	20.0				41.8	46.0	-4.2
3.536	21.1			0.5	0.0	20.0				41.6	46.0	-4.4
1.315	21.0			0.5	0.0	20.0				41.5	46.0	-4.5
3.716	20.8			0.5	0.0	20.0				41.3	46.0	-4.7
1.495	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
3.346	20.7			0.5	0.0	20.0				41.2	46.0	-4.8
1.145	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.596	20.6			0.5	0.0	20.0				41.1	46.0	-4.9
3.896	20.5			0.5	0.0	20.0				41.0	46.0	-5.0
4.987	20.5			0.5	0.0	20.0				41.0	46.0	-5.0
0.908	20.2			0.8	0.0	20.0				41.0	46.0	-5.0
3.776	20.4			0.5	0.0	20.0				40.9	46.0	-5.1
3.956	20.4			0.5	0.0	20.0				40.9	46.0	-5.1
3.476	20.3			0.5	0.0	20.0				40.8	46.0	-5.2
1.835	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
1.075	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
3.646	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
1.029	20.0			0.5	0.0	20.0				40.5	46.0	-5.5

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	N

COMMENTS

EUT OPERATING MODES

RFID high channel

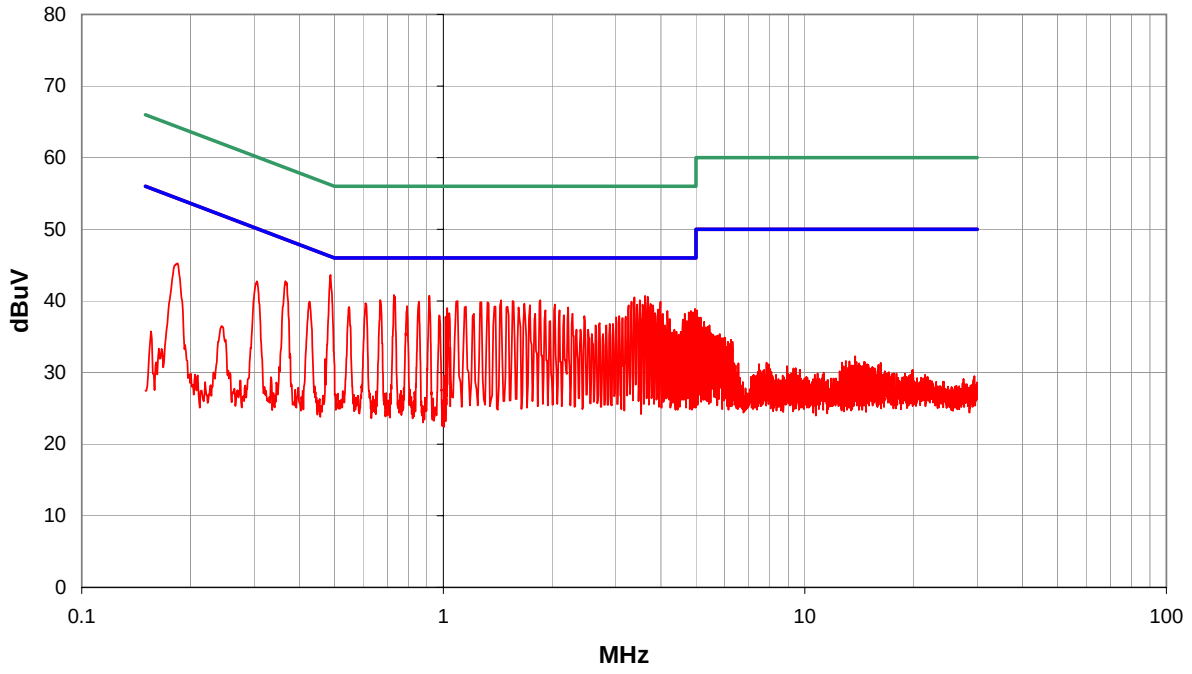
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	5
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelio



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.488	21.7			1.9	0.0	20.0				43.6	46.2	-2.6
0.730	19.6			1.2	0.0	20.0				40.8	46.0	-5.2
0.915	20.0			0.7	0.0	20.0				40.7	46.0	-5.3
3.616	20.2			0.5	0.0	20.0				40.7	46.0	-5.3
3.676	20.1			0.5	0.0	20.0				40.6	46.0	-5.4
3.376	20.0			0.5	0.0	20.0				40.5	46.0	-5.5
0.366	20.5			2.3	0.0	20.0				42.8	48.6	-5.8
0.669	18.7			1.4	0.0	20.0				40.1	46.0	-5.9
1.445	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
1.855	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
3.496	19.6			0.5	0.0	20.0				40.1	46.0	-5.9
1.095	19.5			0.5	0.0	20.0				40.0	46.0	-6.0
1.555	19.5			0.5	0.0	20.0				40.0	46.0	-6.0
0.856	19.0			0.9	0.0	20.0				39.9	46.0	-6.1
3.316	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
3.986	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
1.265	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
1.325	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
0.609	18.1			1.6	0.0	20.0				39.7	46.0	-6.3

NORTHWEST
EMC

CONDUCTED EMISSIONS DATA SHEET

ACQ-2006.05.30
EMI 2005.9.18

EUT:	M8S radio in PAD 3500			**Work Order:**	ELET0003
Serial Number:	Beta 8 (Host)			**Date:**	05/31/06
Customer:	ADASA Inc.			**Temperature:**	23°C
Attendees:	Clarke McAllister			**Humidity:**	42%
Project:	None			**Barometric Pres.:**	29.61
Tested by:	David Divergigelis	**Power:**	120VAC/60Hz	**Job Site:**	EV07

TEST SPECIFICATIONS	Test Method
FCC 15.207 Class B:2005-10	ANSI C63.4:2003

TEST PARAMETERS	
Cable or Line Tested	L1

COMMENTS

EUT OPERATING MODES

RFID high channel

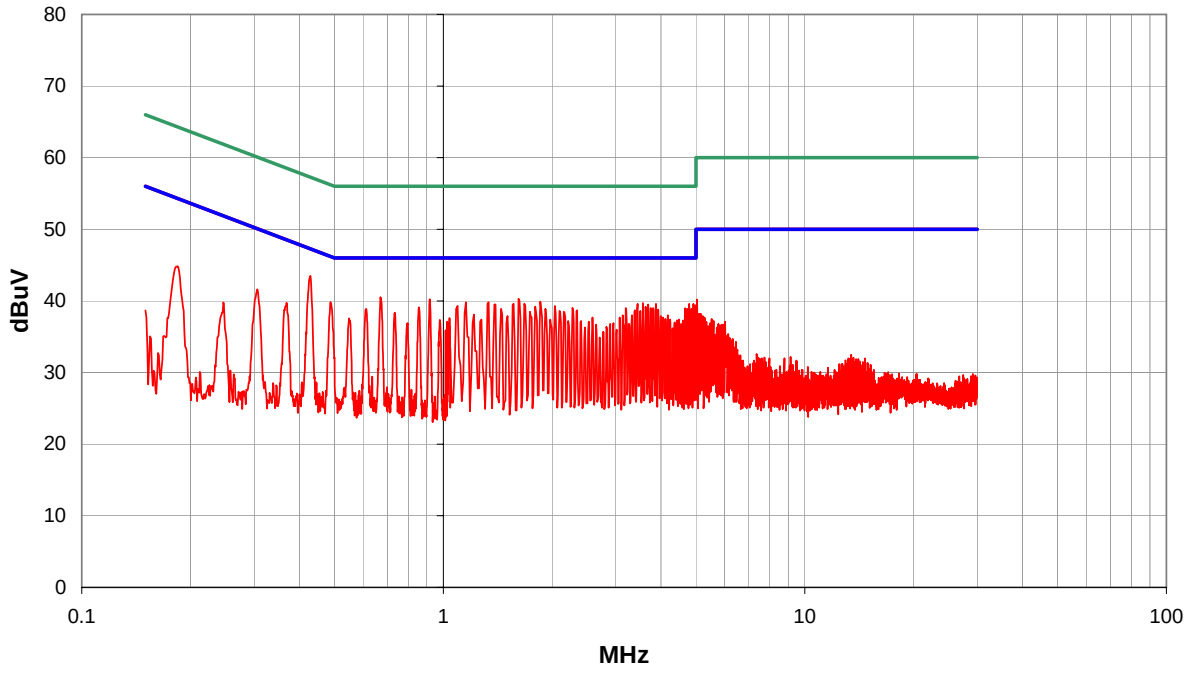
DEVIATIONS FROM TEST STANDARD

No deviations.

Run #	6
Configuration #	1
Results	Pass

NVLAP Lab Code 200630-0

Signature David DiVergigelis



Freq (MHz)	Amplitude (dBuV)			Transducer (dB)	Cable (dB)	External Attenuation (dB)		Detector (blank equal peaks [PK] from scan)		Adjusted dBuV	Spec. Limit dBuV	Compared to Spec. (dB)
0.429	21.4			2.1	0.0	20.0				43.5	47.3	-3.8
0.670	19.1			1.4	0.0	20.0				40.5	46.0	-5.5
1.615	19.8			0.5	0.0	20.0				40.3	46.0	-5.7
0.918	19.5			0.7	0.0	20.0				40.2	46.0	-5.8
1.855	19.4			0.5	0.0	20.0				39.9	46.0	-6.1
1.155	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
1.335	19.3			0.5	0.0	20.0				39.8	46.0	-6.2
3.566	19.2			0.5	0.0	20.0				39.7	46.0	-6.3
0.488	17.9			1.9	0.0	20.0				39.8	46.2	-6.4
1.565	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
1.675	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
3.446	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
3.876	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
4.787	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
4.917	19.1			0.5	0.0	20.0				39.6	46.0	-6.4
1.385	19.0			0.5	0.0	20.0				39.5	46.0	-6.5
3.686	19.0			0.5	0.0	20.0				39.5	46.0	-6.5
4.977	18.9			0.5	0.0	20.0				39.4	46.0	-6.6
1.095	18.8			0.5	0.0	20.0				39.3	46.0	-6.7