



MOV-A-LOAD CORP. TEST REPORT
FOR THE
TRAILER MOUNTED RECEIVER, PROJACK M1 RECEIVER BOARD
**FCC PART 15 SUBPART C SECTIONS 15.209 & 15.249,
SUBPART B SECTION 15.109 CLASS B AND RSS-210**
COMPLIANCE

DATE OF ISSUE: JUNE 19, 2006

PREPARED FOR:

Mov-A-Load Corp.
2245 Industrial Road
Dyersburg, TN 38024

W.O. No.: 84961

PREPARED BY:

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Date of test: June 5-14, 2006

Report No.: FC06-038

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ADMINISTRATIVE INFORMATION

DATE OF TEST: June 5-14, 2006

DATE OF RECEIPT: June 5, 2006

MANUFACTURER: Mov-A-Load Corp.
2245 Industrial Road
Dyersburg, TN 38024

REPRESENTATIVE: Sandy Hutcherson

TEST LOCATION: CKC Laboratories, Inc.
1120 Fulton Place
Fremont, CA 94539

TEST METHOD: ANSI C63.4 (2003), RSS-210 and RSS GEN

PURPOSE OF TEST: To demonstrate the compliance of the Trailer
Mounted Receiver, ProJack M1 Receiver Board
with the requirements for FCC Part 15 Subpart C
Sections 15.209 & 15.249 and Subpart B Section
15.109 Class B and RSS-210 devices.

FCC TO CANADA STANDARD CORRELATION MATRIX

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS 210	6.2.1	47CFR	15.209	General Radiated Emissions Requirement
RSS 210	6.3	47CFR	15.205	Restricted Bands of Operation
RSS 210	6.4	47CFR	15.215(c)	Frequency Stability Recommendation
RSS 210	6.5	47CFR	15.35(c)	Pulsed Operation
RSS 210	6.6	47CFR	15.207	AC Mains Conducted Emissions Requirement
RSS 210	6.2.2(m1)(1)	47 CFR	15.249(a)	Field Strength Limitations
N/A	N/A	47 CFR	15.249(b)	Point-to-Point Operations Limitations
RSS 210	6.2.2(m1)(2)	47 CFR	15.249(c)	Test Distance Requirement
RSS 210	6.2.2(m1)(3)	47 CFR	15.249(d)	Spurious Emissions Attenuation Requirement
RSS 210	6.2.2(m1)(4)	47 CFR	15.249(e)	Detector Functions
N/A	N/A	47 CFR	15.249(e)	Peak to Average Limit Requirement
RSS 210	6.2.2(m1)(5)	N/A	N/A	Cross Reference
RSS 210	5.9.1	N/A	N/A	99% Emissions Bandwidth Requirement
RSS 210	5.9.2	N/A	N/A	Emissions Designator
	IC 5933		958979	Site File No.

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply. Conducted emissions not required for this device.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:



Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:



Art Rice, EMC Test Engineer



Christine Nicklas, Project Manager & Principal Consultant



Norberto Gamez Jr., EMC Test Technologist

FCC 15.31(e) Voltage Variations

Testing was performed with a new battery.

FCC 15.31(m) Number Of Channels

This device was tested on three channels.

FCC 15.33(a) Frequency Ranges Tested

15.109 Radiated Emissions: 30 MHz – 5 GHz

15.209/15.249 Radiated Emissions: 3 MHz – 10 GHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	3 MHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	10 GHz	1 MHz

FCC 15.203 Antenna Requirements

The antenna is an integral part of the EUT and is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

EUT Operating Frequency

The EUT was operating at 902-928 MHz.

Temperature And Humidity During Testing

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

The relative humidity was between 20% and 75%.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Trailer Mounted Receiver

Manuf: Mov-A-Load Corp.
Model: ProJack M1 Receiver Board
Serial: 006
FCC ID: pending

PERIPHERAL DEVICES

The EUT was not tested with peripheral devices.

REPORT OF MEASUREMENTS

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

Table 1: FCC 15.109 Six Highest Radiated Emission Levels: 30-1000 MHz

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	Dist dB				
58.580	53.5	5.8	-26.1	0.9		34.1	40.0	-5.9	V
116.996	32.2	11.0	-25.8	1.0		18.4	43.5	-25.1	V
147.553	29.2	10.8	-25.7	1.2		15.5	43.5	-28.0	H
201.494	32.4	8.7	-25.6	1.4		16.9	43.5	-26.6	V
552.485	35.0	19.2	-27.0	2.0		29.2	46.0	-16.8	V
611.076	29.9	19.3	-27.3	2.3		24.2	46.0	-21.8	H

Test Method: ANSI C63.4 (2003)

NOTES:

H = Horizontal Polarization

Spec Limit: FCC Part 15 Subpart B Section 15.109 Class B

V = Vertical Polarization

Test Distance: 3 Meters

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit. Radiated Emissions 30-1000MHz

Table 2: FCC 15.109 Highest Radiated Emission Levels: 1-5 GHz

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	Dist dB				
3950.782	38.3	31.8	-37.5	6.7		39.3	54.0	-14.7	H
3968.254	38.5	31.8	-37.5	6.6		39.4	54.0	-14.6	V
4136.451	37.6	31.8	-37.4	5.7		37.7	54.0	-16.3	H
4673.506	36.6	32.0	-37.2	6.1		37.5	54.0	-16.5	V

Test Method: ANSI C63.4 (2003)

Spec Limit: FCC Part 15 Subpart B Section 15.109 Class B

Test Distance: 3 Meters

NOTES: H = Horizontal Polarization

V = Vertical Polarization

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit. NOTES: 1) Receiver in receive mode. 2) NOT using 1.5 GHz Hi Pass Filter. Scanning 1-5 GHz. Measurements above 1 GHz used RBW=1 MHz, VBW=100 kHz for initial peak readings.

Table 3: FCC 15.209 Six Highest Radiated Emission Levels: 3-30 MHz

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	Dist dB				
3.071	26.9	10.0		0.2		37.1	49.5	-12.4	V
3.098	25.5	10.0		0.2		35.7	49.5	-13.8	H
3.234	26.4	10.0		0.2		36.6	49.5	-12.9	H
3.840	26.4	10.0		0.2		36.6	49.5	-12.9	V
4.687	26.1	10.0		0.3		36.4	49.5	-13.1	H
4.899	26.5	10.0		0.3		36.8	49.5	-12.7	H

Test Method: ANSI C63.4 (2003)
 Spec Limit: FCC Part 15 Subpart C Section 15.209
 Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
 V = Vertical Polarization

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit. Note 1) Receiver is in transmit mode. Signals include LO, MID, and HI channels. Radiated emissions 3-30 MHz.

Table 4: FCC 15.209 Six Highest Radiated Emission Levels: 30-1000 MHz

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	Dist dB				
58.489	34.5	5.8	-26.1	0.9		15.1	40.0	-24.9	V
149.498	33.5	10.7	-25.7	1.2		19.7	43.5	-23.8	H
162.496	33.4	10.0	-25.7	1.2		18.9	43.5	-24.6	H
201.492	32.4	8.7	-25.6	1.4		16.9	43.5	-26.6	V
526.487	32.8	18.4	-27.0	2.2		26.4	46.0	-19.6	H
552.481	35.1	19.2	-26.9	2.0		29.4	46.0	-16.6	V

Test Method: ANSI C63.4 (2003)
 Spec Limit: FCC Part 15 Subpart C Section 15.209
 Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
 V = Vertical Polarization

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit. Radiated Emissions 30-1000 MHz.

FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	HPF dB				
1804.538	57.3	27.6	-38.3	4.9	0.6	52.1	54.0	-1.9	VA-L
1830.120	56.2	27.8	-38.3	5.0	0.6	51.3	54.0	-2.7	VA-M
1855.346	58.0	28.0	-38.2	5.1	0.6	53.5	54.0	-0.5	VA-H
2706.808	53.0	28.9	-37.7	6.2	0.2	50.6	54.0	-3.4	VA-L
2745.199	53.7	29.1	-37.7	6.2	0.2	51.5	54.0	-2.5	VA-M
2783.019	52.5	29.2	-37.7	6.3	0.2	50.5	54.0	-3.5	VA-H

Test Method: ANSI C63.4 (2003)
 Spec Limit: FCC Part 15 Subpart C Section 15.209
 Test Distance: 3 Meters

NOTES:
 A = Average Reading
 V = Vertical Polarization
 L = Low Channel
 M = Mid Channel
 H = High Channel

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit. Note 1) Receiver is in transmit mode. Measurements above 1 GHz used RBW=1 MHz, VBW=1 MHz for initial peak readings.

Table 6: FCC 15.249 Fundamental Emission Levels

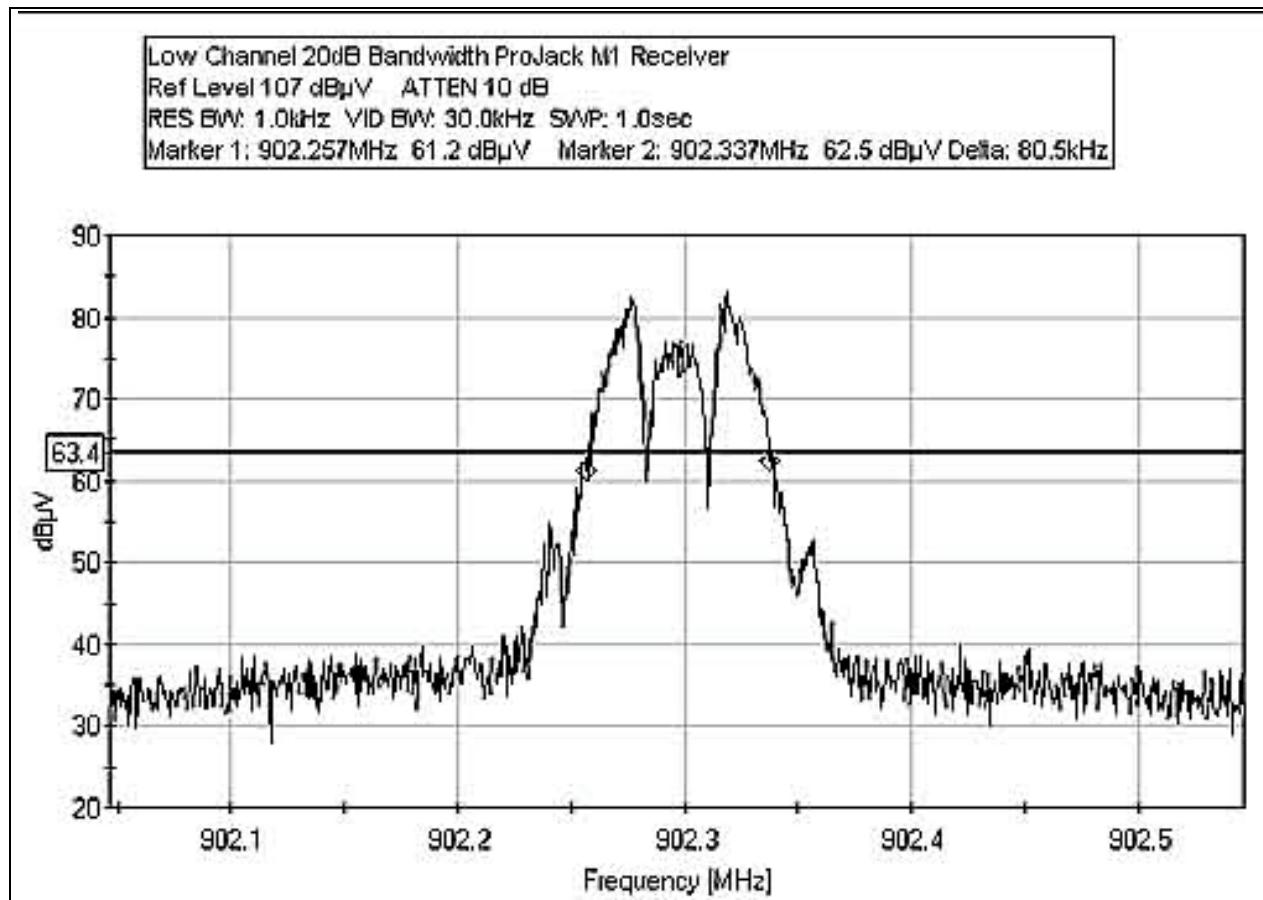
FREQUENCY MHz	METER READING dB μ V	CORRECTION FACTORS				CORRECTED READING dB μ V/m	SPEC LIMIT dB μ V/m	MARGIN dB	NOTES
		Ant dB	Amp dB	Cable dB	Dist dB				
902.268	90.3	22.4	-26.6	2.9		89.0	94.0	-5.0	V
902.268	82.4	22.4	-26.6	2.9		81.1	94.0	-12.9	H
915.063	93.1	22.7	-26.7	2.8		91.9	94.0	-2.1	V
915.063	83.6	22.7	-26.7	2.8		82.4	94.0	-11.6	H
927.659	83.4	23.0	-26.6	2.9		82.7	94.0	-11.3	H
927.673	90.8	23.0	-26.6	2.9		90.1	94.0	-3.9	V

Test Method: ANSI C63.4 (2003)
 Spec Limit: FCC Part 15 Subpart C Section 15.249
 Test Distance: 3 Meters

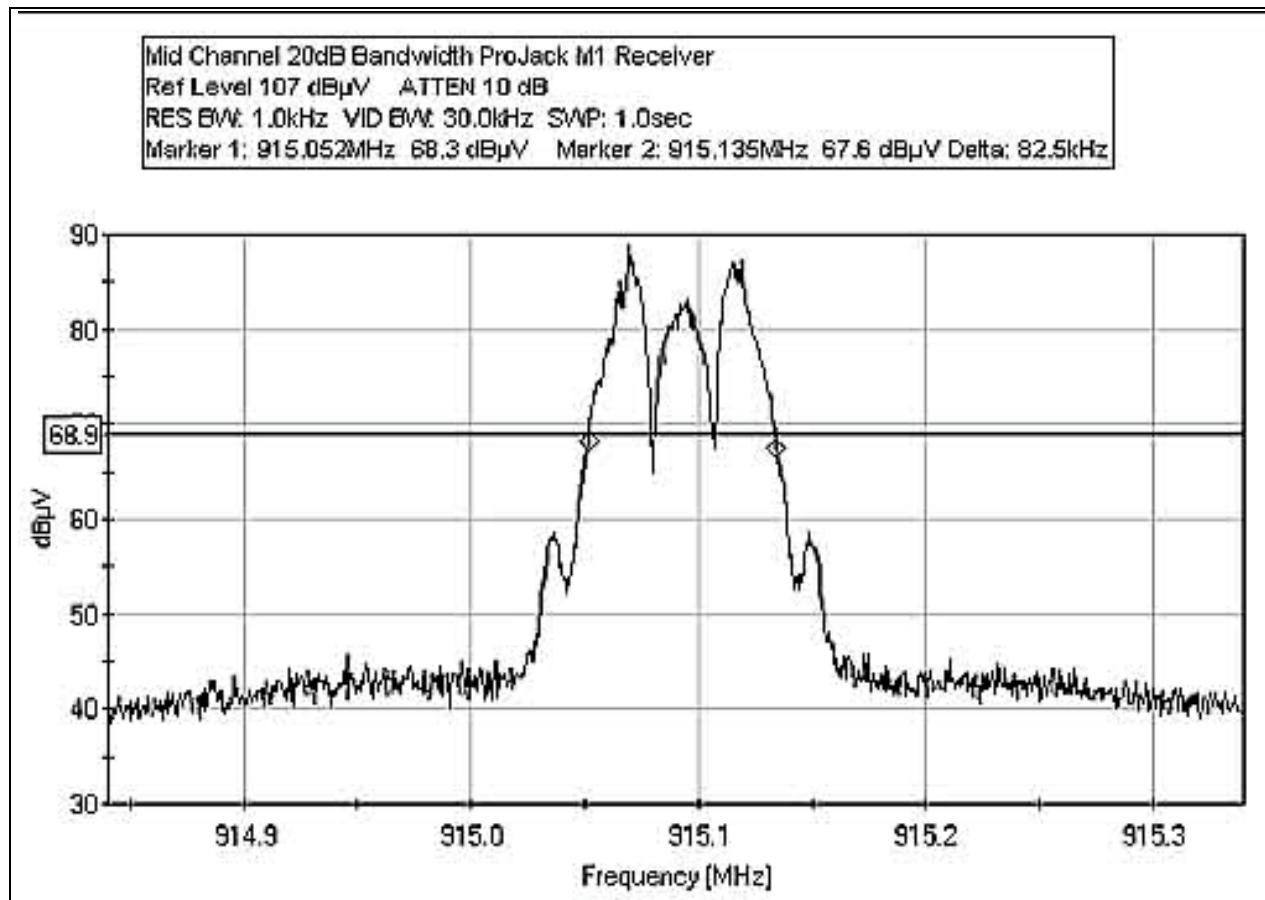
NOTES: H = Horizontal Polarization
 V = Vertical Polarization

COMMENTS: Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. A FALCON-900 RF Modem board (DCS-00001-REV B is piggy-backed onto the Receiver Board. Customer states this is representative of a production unit.

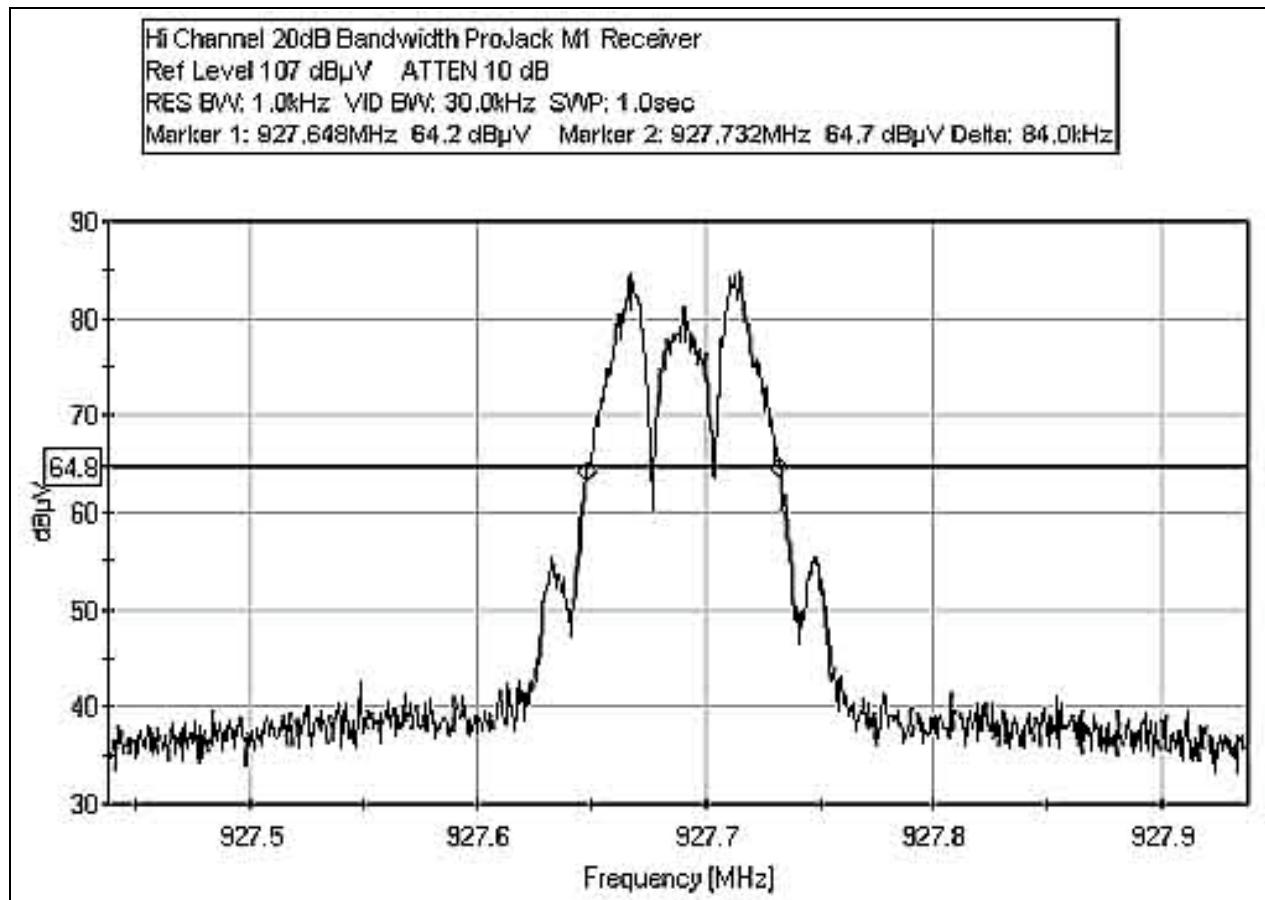
20dB BANDWIDTH - LOW CHANNEL



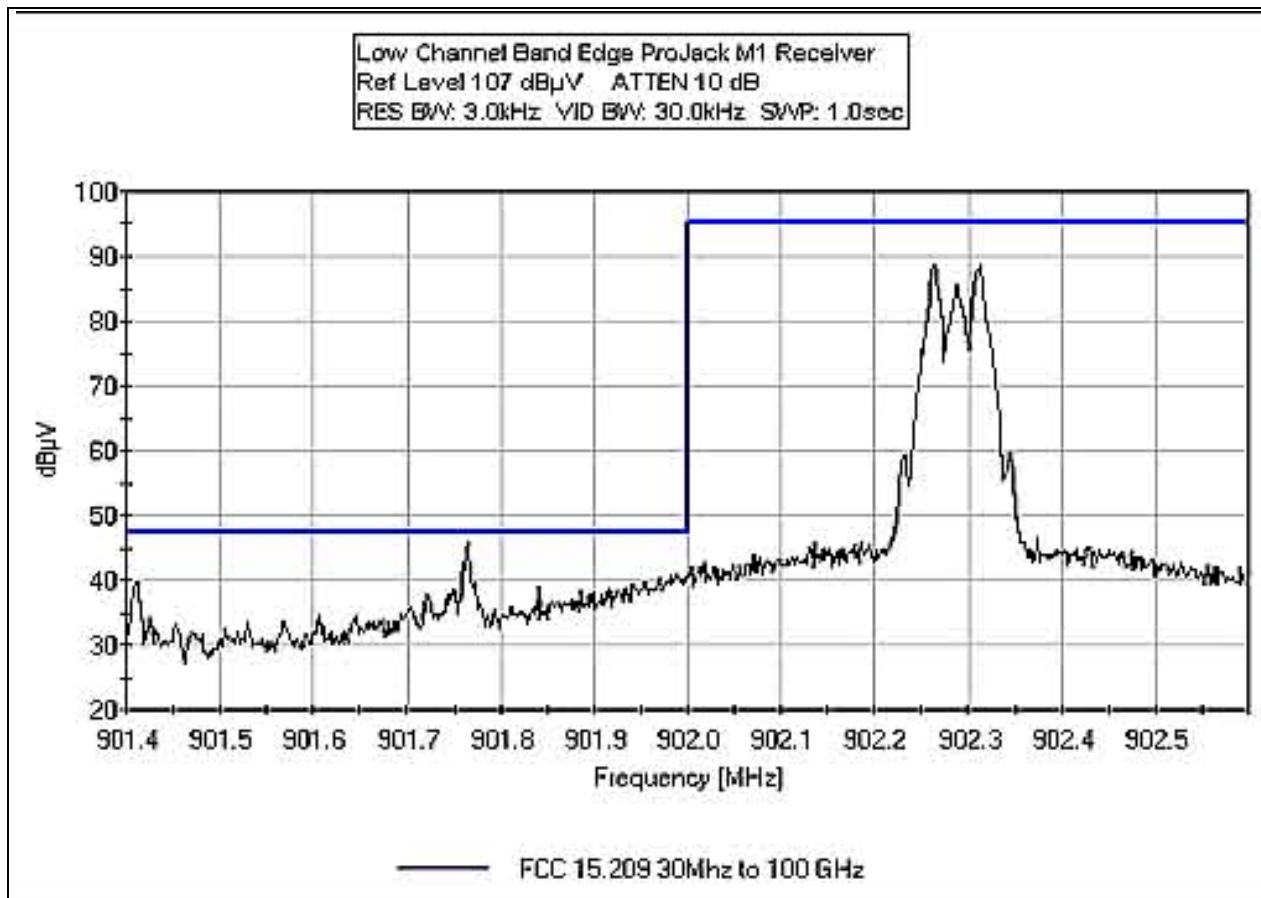
20dB BANDWIDTH - MID CHANNEL



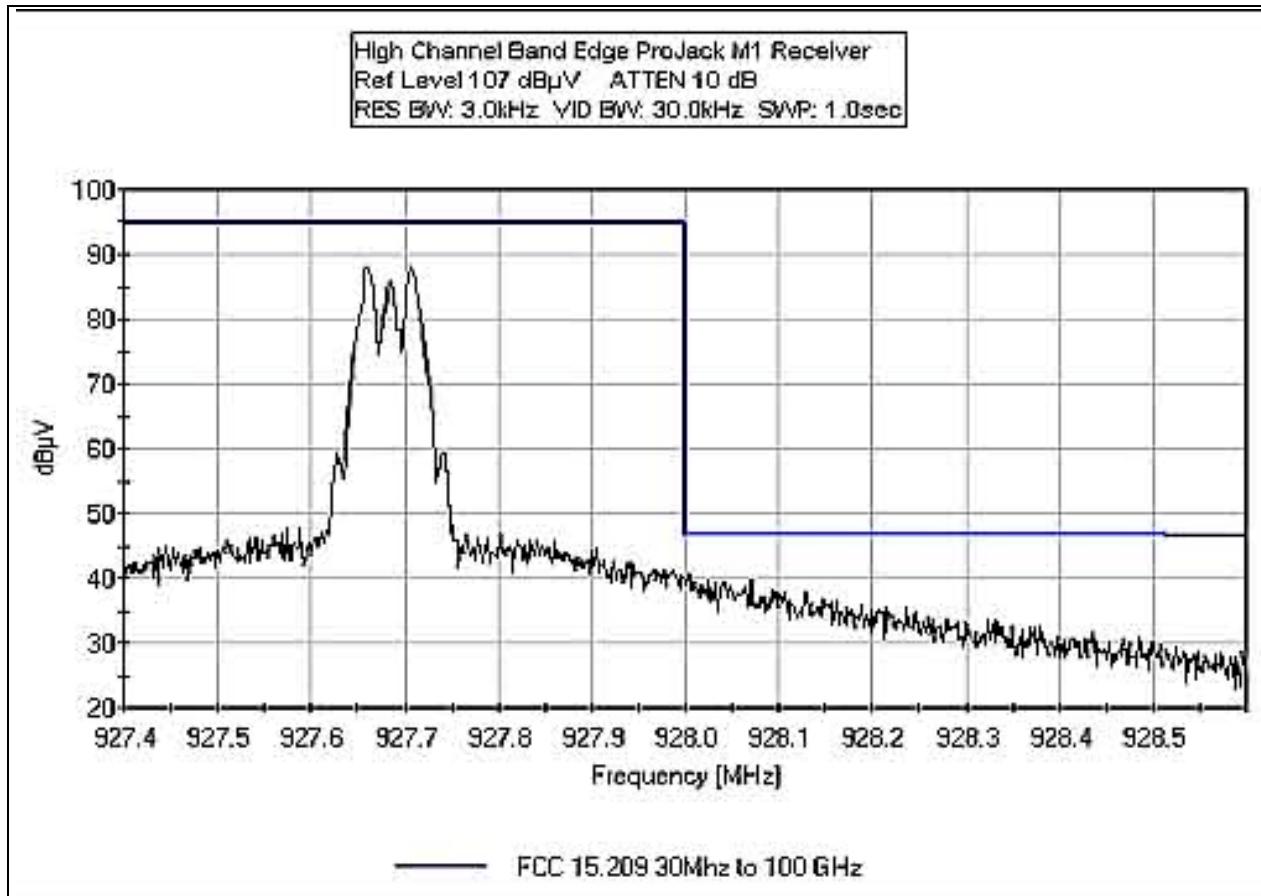
20dB BANDWIDTH - HIGH CHANNEL



BAND EDGE - LOW CHANNEL



BAND EDGE - HIGH CHANNEL



EUT SETUP

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

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

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

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

CORRECTION FACTORS

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

TABLE A: SAMPLE CALCULATIONS

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

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Appendix B were used to collect both the radiated and conducted emissions data. For radiated measurements from 3 to 30 MHz, the magnetic loop antenna was used. For frequencies from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dB μ V, and a vertical scale of 10 dB per division.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

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

Peak

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

Quasi-Peak

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

Average

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

EUT TESTING

Radiated Emissions

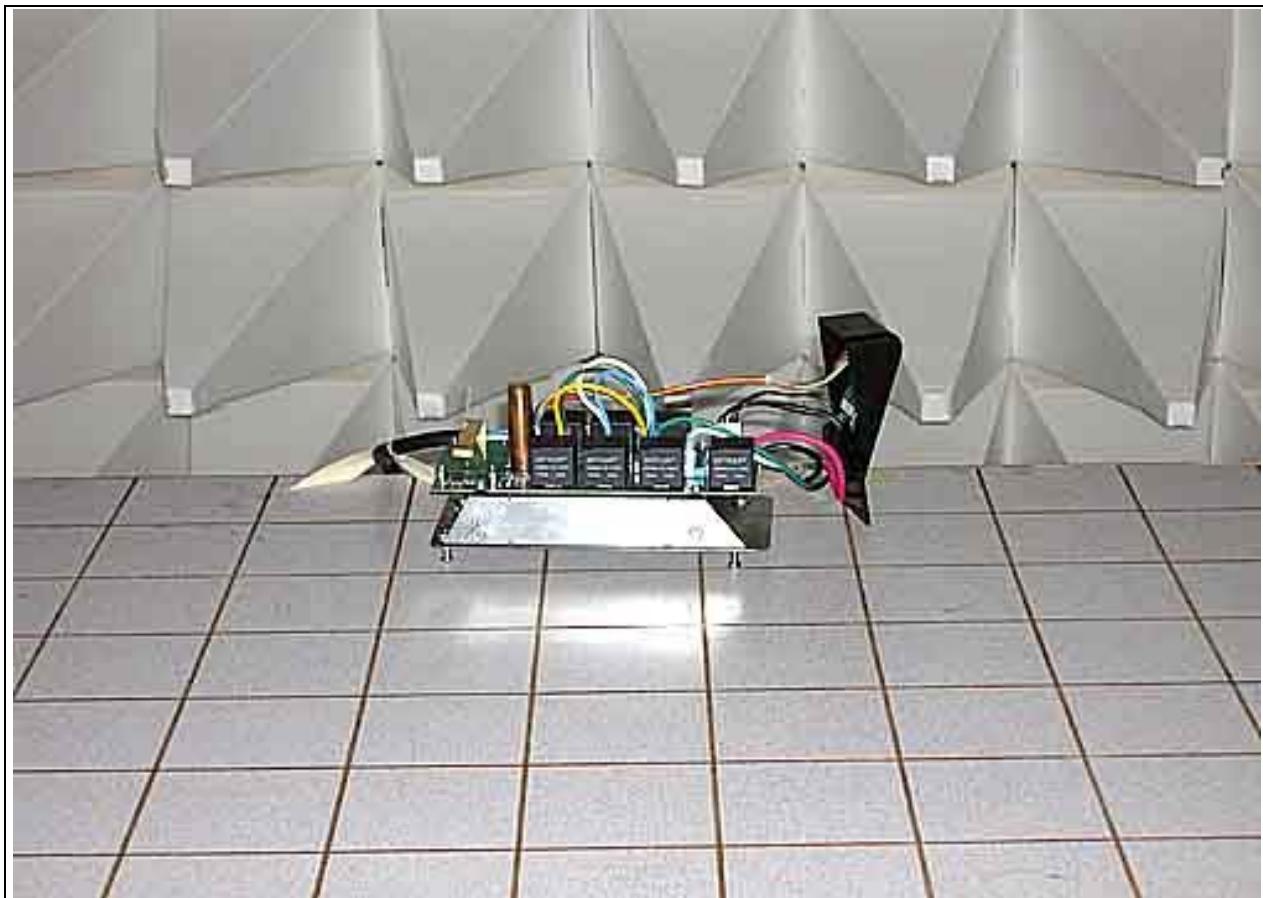
The EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters.

During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. For radiated measurements from 3 to 30 MHz, the magnetic loop antenna was used. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. For frequencies exceeding 1000 MHz, the horn antenna was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands.

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

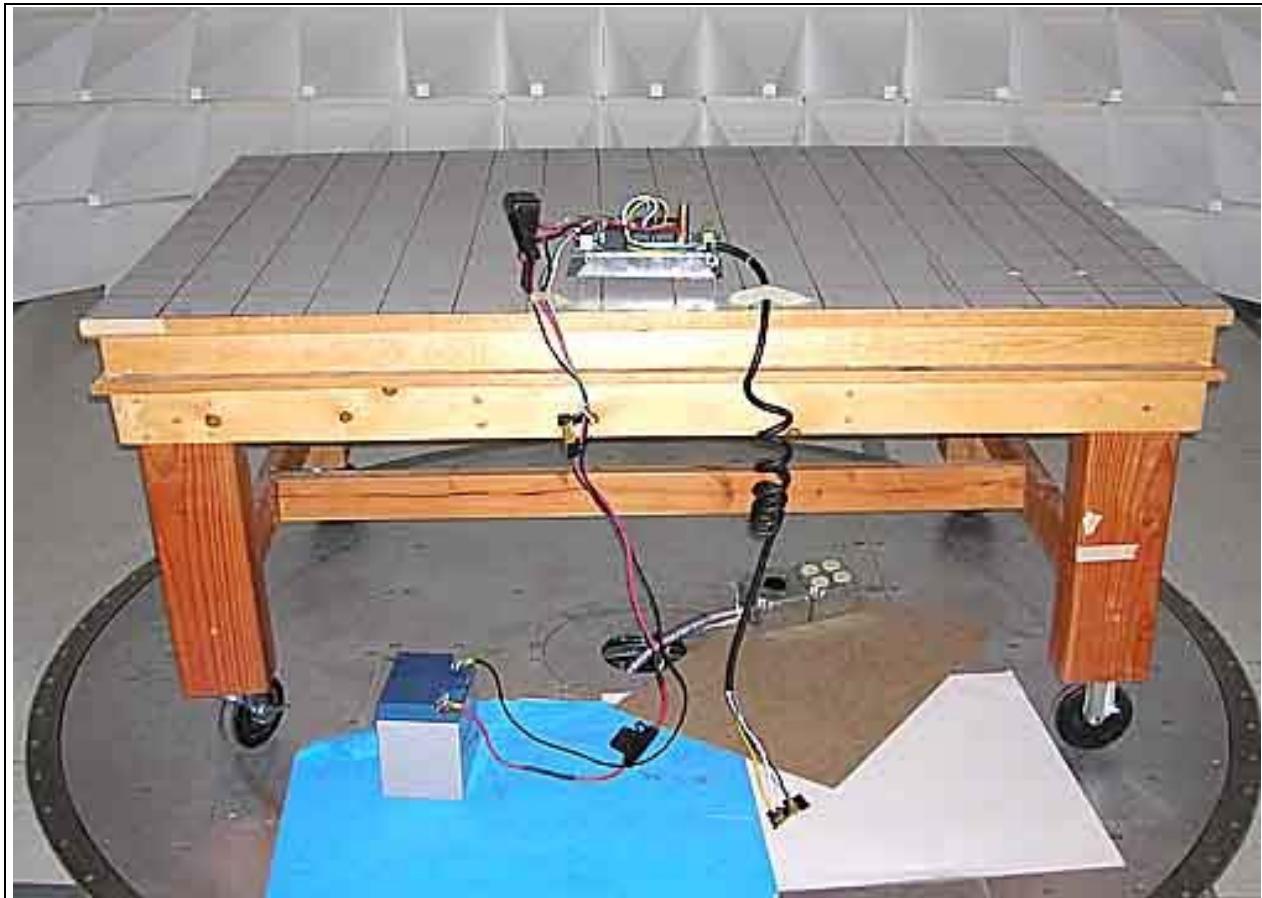
APPENDIX A
TEST SETUP PHOTOGRAPHS

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS



Radiated Emissions - Back View

APPENDIX B

TEST EQUIPMENT LIST

FCC 15.109: 30-1000 MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., Display HP-85662A	2542A12169	11/28/2005	11/28/2007	02662
S.A., RF Section HP-8568B	2601A02492	11/28/2005	11/28/2007	02663
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
HP8447F opt H64 preamp	2944A03850	03/05/2005	03/05/2007	00501
Cable	None	06/21/2005	06/21/2007	P05299
Cable	None	06/21/2005	06/21/2007	P05300
Cable	None	06/21/2005	06/21/2007	P05296

FCC 15.109: >1 GHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
HF-Cable FSJ1P-50A-4A		02/20/2006	02/20/2008	P05138
Antenna, Horn	1064	03/08/2005	03/08/2007	02061
S.A. HP 8593EM	3624A00159	10/31/2004	10/31/2006	02111
Preamp, HP83017A	3123A00283	05/09/2005	05/09/2007	00785
Cable, HF 36"	n/a	02/08/2005	02/08/2007	P05200
Cable, 6'	n/a	06/07/2006	06/07/2008	P04241

FCC 15.209: 3-30MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., Display HP-85662A	2542A12169	11/28/2005	11/28/2007	02662
S.A., RF Section HP-8568B	2601A02492	11/28/2005	11/28/2007	02663
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
Cable	None	06/21/2005	06/21/2007	P05300
Cable	None	06/21/2005	06/21/2007	P05296
Antenna-Mag Loop-6502	2078	05/13/2005	05/13/2007	00432

FCC 15.209/15.249: 30-1000 MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
S.A., Display HP-85662A	2542A12169	11/28/2005	11/28/2007	02662
S.A., RF Section HP-8568B	2601A02492	11/28/2005	11/28/2007	02663
HP8447F opt H64 preamp	2944A03850	03/05/2005	03/05/2007	00501
QP Adapter HP-85650A	2043A00188	10/23/2004	10/23/2006	01508
Cable	None	06/21/2005	06/21/2007	P05299
Cable	None	06/21/2005	06/21/2007	P05300
Cable	None	06/21/2005	06/21/2007	P05296
Chase Bilog CBL6111C	2630	01/24/2005	01/24/2007	00852

FCC 15.209: >1 GHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
HF-Cable FSJ1P-50A-4A		02/20/2006	02/20/2008	P05138
Antenna, Horn	1064	03/08/2005	03/08/2007	02061
HF-Cable-72" Pasternack	None	07/12/2005	07/12/2007	P05317
S.A. HP 8593EM	3624A00159	10/31/2004	10/31/2006	02111
Cable, HF 48"	n/a	02/08/2005	02/08/2007	P05201
Preamp, HP83017A	3123A00283	05/09/2005	05/09/2007	00785
1.5GHz HP Filter	PN 83400-80037	03/07/2006	03/07/2008	P04215

APPENDIX C:
MEASUREMENT DATA SHEETS

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.109 Class B Radiated**
 Work Order #: **84961** Date: 6/9/2006
 Test Type: **Radiated Scan** Time: 13:44:58
 Equipment: **Trailer Mounted Receiver** Sequence#: 10
 Manufacturer: Mov-A-Load Corp. Tested By: N. Gamez
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit. NOTES: 1) Receiver in receive mode. Radiated Emissions 30-1000MHz.

Transducer Legend:

T1=0852-Bi-Log Antenna	T2=Cable P05296 25' RG214 N-N
T3=Cable P05299 2' RG214 N-N	T4=Cable P05300 12' RG214 N-N
T5=Amp Cal.HP-8447F OPT H64- AN 00501	

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Test Distance: 3 Meters				
			T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar
			T5 dB								Ant
1	58.580M	53.5	+5.8	+0.5	+0.1	+0.3	+0.0	34.1	40.0	-5.9	Vert 180
			-26.1				2				
2	552.485M	35.0	+19.2	+1.3	+0.1	+0.6	+0.0	29.2	46.0	-16.8	Vert 143
			-27.0				178				
3	611.076M	29.9	+19.3	+1.4	+0.2	+0.7	+0.0	24.2	46.0	-21.8	Horiz 99
			-27.3				12				
4	116.996M	32.2	+11.0	+0.6	+0.1	+0.3	+0.0	18.4	43.5	-25.1	Vert 100
			-25.8				180				
5	201.494M	32.4	+8.7	+0.8	+0.1	+0.5	+0.0	16.9	43.5	-26.6	Vert 105
			-25.6				316				
6	147.553M	29.2	+10.8	+0.7	+0.1	+0.4	+0.0	15.5	43.5	-28.0	Horiz 166
			-25.7				214				

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.109 Class B Radiated**
 Work Order #: **84961** Date: 6/13/2006
 Test Type: **Maximized Emissions** Time: 16:52:33
 Equipment: **Trailer Mounted Receiver** Sequence #: 27
 Manufacturer: Mov-A-Load Corp. Tested By: Art Rice
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit. NOTES: 1) Receiver in receive mode. 2) NOT using 1.5 GHz Hi Pass Filter. Scanning 1-5 GHz. Measurements above 1 GHz used RBW=1 MHz, VBW=100 kHz for initial peak readings.

Transducer Legend:

T1=Horn Antenna AN02061 sn1064 (Fremont)	T2=P05138 HF Cable 25ft
T3=HP-83017A, A/N 00785	T4=ANP05200 1-40GHz
T5=ANP04241 HF-Heliax Cable	

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

#	Freq	Rdng	T1 T5	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
	MHz	dB μ V	dB	dB	dB	dB	Table	dB μ V/m	dB μ V/m	dB	Ant
1	3968.254M	38.5	+31.8 +1.2	+3.8	-37.5	+1.6	+0.0 370	39.4	54.0	-14.6	Vert 119
2	3950.782M	38.3	+31.8 +1.2	+3.9	-37.5	+1.6	+0.0 369	39.3	54.0	-14.7	Horiz 149
3	4136.451M	37.6	+31.8 +0.8	+3.3	-37.4	+1.6	+0.0 -10	37.7	54.0	-16.3	Horiz 149
4	4673.506M	36.6	+32.0 +0.8	+3.6	-37.2	+1.7	+0.0 -10	37.5	54.0	-16.5	Vert 119

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.209 3-30MHz**
 Work Order #: **84961** Date: **6/14/2006**
 Test Type: **Maximized Emissions** Time: **16:29:29**
 Equipment: **Trailer Mounted Receiver** Sequence#: **44**
 Manufacturer: Mov-A-Load Corp. Tested By: Art Rice
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit. Note 1) Receiver is in transmit mode. Signals include LO, MID, and HI channels. Radiated emissions 3-30 MHz.

Transducer Legend:

T1=Cable P05296 25' RG214 N-N	T2=Cable P05300 12' RG214 N-N
T3=Mag Loop A/N 00432, S/N 2078	

#	Freq MHz	Reading listed by margin.			Test Distance: 3 Meters					
		Rdng dB μ V	T1 dB	T2 dB	T3 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	3.071M	26.9	+0.1	+0.1	+10.0	+0.0 370	37.1	49.5	-12.4	Vert 100
2	4.899M	26.5	+0.2	+0.1	+10.0	+0.0 -10	36.8	49.5	-12.7	Horiz 100
3	3.840M	26.4	+0.1	+0.1	+10.0	+0.0 -10	36.6	49.5	-12.9	Vert 100
4	3.234M	26.4	+0.1	+0.1	+10.0	+0.0 -10	36.6	49.5	-12.9	Horiz 100
5	4.687M	26.1	+0.2	+0.1	+10.0	+0.0 370	36.4	49.5	-13.1	Horiz 100
6	3.098M	25.5	+0.1	+0.1	+10.0	+0.0 333	35.7	49.5	-13.8	Horiz 100

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.209 30MHz to 1 GHz**
 Work Order #: **84961** Date: **6/9/2006**
 Test Type: **Radiated Scan** Time: **12:38:28**
 Equipment: **Trailer Mounted Receiver** Sequence #: **7**
 Manufacturer: Mov-A-Load Corp. Tested By: N. Gamez
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit. NOTES: 1) Receiver in receive mode. Radiated Emissions 30-1000MHz.

Transducer Legend:

T1=0852-Bi-Log Antenna	T2=Cable P05296 25' RG214 N-N
T3=Cable P05299 2' RG214 N-N	T4=Cable P05300 12' RG214 N-N
T5=Amp Cal.HP-8447F OPT H64- AN 00501	

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Test Distance: 3 Meters			
			T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB
1	552.481M	35.1	+19.2 -26.9	+1.3	+0.1	+0.6	+0.0 179	29.4	46.0	-16.6 126
2	526.487M	32.8	+18.4 -27.0	+1.3	+0.2	+0.7	+0.0 226	26.4	46.0	-19.6 126
3	149.498M	33.5	+10.7 -25.7	+0.7	+0.1	+0.4	+0.0 317	19.7	43.5	-23.8 152
4	162.496M	33.4	+10.0 -25.7	+0.7	+0.1	+0.4	+0.0 168	18.9	43.5	-24.6 146
5	58.489M	34.5	+5.8 -26.1	+0.5	+0.1	+0.3	+0.0 359	15.1	40.0	-24.9 99
6	201.492M	32.4	+8.7 -25.6	+0.8	+0.1	+0.5	+0.0 204	16.9	43.5	-26.6 137
7	188.500M	32.1	+8.6 -25.6	+0.8	+0.1	+0.5	+0.0 317	16.5	43.5	-27.0 152
8	56.858M	31.5	+6.3 -26.1	+0.5	+0.1	+0.3	+0.0 -9	12.6	40.0	-27.4 99

Test Location: CKC Laboratories, Inc. • 1120 Fulton Place • Fremont, CA 94539 • 510-249-1170

Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.209 30MHz to 10 GHz**
 Work Order #: **84961** Date: **6/6/2006**
 Test Type: **Radiated Scan/Maximized** Time: **11:13:07**
 Equipment: **Trailer Mounted Receiver** Sequence#: **5**
 Manufacturer: Mov-A-Load Corp. Tested By: Art Rice
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit. Note 1) Receiver is in transmit mode. Measurements above 1 GHz used RBW=1 MHz, VBW=1 MHz for initial peak readings.

Transducer Legend:

T1=Horn Antenna AN02061 sn1064 (Fremont)	T2=CAB HF 72" ANP05317 Pasternack
T3=ANP5201 1-40GHz	T4=P05138 HF Cable 25ft
T5=HPF-83017A, A/N 00785	T6=HPF AN01415 1.5GHz

#	Freq	Rdng	Reading listed by margin.				Test Distance: 3 Meters				
			T1	T2	T3	T4	Dist	Corr	Spec	Margin	Polar
			T5	T6			Table	dB μ V/m	dB μ V/m	dB	Ant
	MHz	dB μ V	dB	dB	dB	dB					
1	1855.346M	58.0	+28.0	+1.9	+1.1	+2.1	+0.0	53.5	54.0	-0.5	Vert
	Ave		-38.2	+0.6			275				157
^	1855.309M	59.2	+28.0	+1.9	+1.1	+2.1	+0.0	54.7	54.0	+0.7	Vert
			-38.2	+0.6			275				157
3	1804.538M	57.3	+27.6	+1.8	+1.1	+2.0	+0.0	52.1	54.0	-1.9	Vert
	Ave		-38.3	+0.6			262				138
^	1804.538M	58.4	+27.6	+1.8	+1.1	+2.0	+0.0	53.1	54.0	-0.9	Vert
			-38.3	+0.6			262				138
5	2745.199M	53.7	+29.1	+2.3	+1.4	+2.5	+0.0	51.5	54.0	-2.5	Vert
	Ave		-37.7	+0.2			238				138
^	2745.230M	55.4	+29.1	+2.3	+1.4	+2.5	+0.0	53.2	54.0	-0.8	Vert
			-37.7	+0.2			345				138
7	1830.120M	56.2	+27.8	+1.9	+1.1	+2.0	+0.0	51.3	54.0	-2.7	Vert
	Ave		-38.3	+0.6			264				138
^	1830.145M	58.2	+27.8	+1.9	+1.1	+2.0	+0.0	53.3	54.0	-0.7	Vert
			-38.3	+0.6			264				138

9	2706.808M	53.0	+28.9	+2.3	+1.4	+2.5	+0.0	50.6	54.0	-3.4	Vert
	Ave		-37.7	+0.2			266		Low channel		149
^	2706.821M	55.2	+28.9	+2.3	+1.4	+2.5	+0.0	52.8	54.0	-1.2	Vert
			-37.7	+0.2			266		Low channel		149
11	2783.019M	52.5	+29.2	+2.3	+1.4	+2.6	+0.0	50.5	54.0	-3.5	Vert
	Ave		-37.7	+0.2			250		Hi channel		160
^	2782.990M	54.4	+29.2	+2.3	+1.4	+2.6	+0.0	52.4	54.0	-1.6	Vert
			-37.7	+0.2			-10		Hi channel		157
13	5413.881M	43.8	+33.7	+3.2	+2.0	+3.7	+0.0	49.8	54.0	-4.2	Vert
			-36.8	+0.2			241		Low channel		116
14	1804.493M	53.1	+27.6	+1.8	+1.1	+2.0	+0.0	47.9	54.0	-6.1	Horiz
			-38.3	+0.6			226		Low channel		150
15	1830.218M	52.2	+27.8	+1.9	+1.1	+2.0	+0.0	47.3	54.0	-6.7	Horiz
	Ave		-38.3	+0.6			218		Mid Channel		135
^	1830.198M	54.9	+27.8	+1.9	+1.1	+2.0	+0.0	50.0	54.0	-4.0	Horiz
			-38.3	+0.6			218		Mid Channel		135
17	2706.858M	49.6	+28.9	+2.3	+1.4	+2.5	+0.0	47.2	54.0	-6.8	Horiz
			-37.7	+0.2			257		Low channel		121
18	2745.258M	49.1	+29.1	+2.3	+1.4	+2.5	+0.0	46.9	54.0	-7.1	Horiz
			-37.7	+0.2			152		Mid Channel		135
19	4575.540M	44.2	+31.7	+3.0	+1.8	+3.4	+0.0	46.9	54.0	-7.1	Vert
			-37.3	+0.1			266		Mid Channel		136
20	2783.119M	48.8	+29.2	+2.3	+1.4	+2.6	+0.0	46.8	54.0	-7.2	Horiz
			-37.7	+0.2			109		Hi channel		121
21	5566.038M	40.3	+33.9	+3.3	+2.0	+3.8	+0.0	46.5	54.0	-7.5	Vert
	Ave		-36.9	+0.1			345		Hi channel		119
^	5566.038M	44.5	+33.9	+3.3	+2.0	+3.8	+0.0	50.7	54.0	-3.3	Vert
			-36.9	+0.1			345		Hi channel		119
23	5413.768M	40.5	+33.7	+3.2	+2.0	+3.7	+0.0	46.5	54.0	-7.5	Vert
	Ave		-36.8	+0.2			241		Low channel		116
24	5490.372M	39.6	+33.9	+3.2	+2.0	+3.8	+0.0	45.9	54.0	-8.1	Vert
	Ave		-36.8	+0.2			346		Mid Channel		166
^	5490.373M	47.1	+33.9	+3.2	+2.0	+3.8	+0.0	53.4	54.0	-0.6	Vert
			-36.8	+0.2			346		Mid Channel		166
26	3660.115M	44.4	+31.2	+2.6	+1.6	+3.5	+0.0	45.7	54.0	-8.3	Vert
			-37.7	+0.1			241		Mid Channel		136
27	1855.384M	49.0	+28.0	+1.9	+1.1	+2.1	+0.0	44.5	54.0	-9.5	Horiz
			-38.2	+0.6			370		Hi channel		121
28	5413.643M	37.6	+33.7	+3.2	+2.0	+3.7	+0.0	43.6	54.0	-10.4	Horiz
	Ave		-36.8	+0.2			223		Low channel		121
^	5413.680M	46.1	+33.7	+3.2	+2.0	+3.7	+0.0	52.1	54.0	-1.9	Horiz
			-36.8	+0.2			223		Low channel		121
30	3609.078M	41.9	+31.1	+2.6	+1.6	+3.3	+0.0	42.9	54.0	-11.1	Vert
			-37.7	+0.1			276		Low channel		131
31	3710.680M	41.3	+31.3	+2.6	+1.6	+3.5	+0.0	42.7	54.0	-11.3	Vert
			-37.7	+0.1			252		Hi channel		160

32	4511.486M	40.4	+31.5 -37.3	+2.9 +0.1	+1.8	+3.3	+0.0	42.7	54.0	-11.3	Vert 131
33	5490.381M	35.8	+33.9 Ave	+3.2 -36.8	+2.0 +0.2	+3.8	+0.0	42.1	54.0	-11.9	Horiz 135
^	5490.350M	45.0	+33.9 -36.8	+3.2 +0.2	+2.0	+3.8	+0.0	51.3	54.0	-2.7	Horiz 135
35	5566.038M	34.0	+33.9 Ave	+3.3 -36.9	+2.0 +0.1	+3.8	+0.0	40.2	54.0	-13.8	Horiz 122
^	5566.013M	44.8	+33.9 -36.9	+3.3 +0.1	+2.0	+3.8	+0.0	51.0	54.0	-3.0	Horiz 130

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Customer: **Mov-A-Load Corp.**
 Specification: **FCC 15.249 902-928MHz**
 Work Order #: **84961** Date: **6/5/2006**
 Test Type: **Radiated Scan** Time: **14:01:20**
 Equipment: **Trailer Mounted Receiver** Sequence#: **4**
 Manufacturer: Mov-A-Load Corp. Tested By: C. Nicklas
 Model: ProJack M1 Receiver Board
 S/N: 006

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Trailer Mounted Receiver*	Mov-A-Load Corp.	ProJack M1 Receiver Board	006

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Trailer Mounted Receiver is located at the center of the turntable with the cables draped back to the edge of the table and then down towards the floor. This is to simulate as close as possible the actual installation. Board is ProJack M1 Receiver Board, Assembly Number: ASY-00002-REVB. Customer states this is representative of a production unit.

Transducer Legend:

T1=0852-Bi-Log Antenna	T2=Cable P05296 25' RG214 N-N
T3=Cable P05299 2' RG214 N-N	T4=Cable P05300 12' RG214 N-N
T5=Amp Cal.HP-8447F OPT H64- AN 00501	

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Test Distance: 3 Meters			
			T1 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB
1	915.063M	93.1	+22.7 -26.7	+1.7	+0.2	+0.9	+0.0 263	91.9	94.0	-2.1 99
2	927.673M	90.8	+23.0 -26.6	+1.8	+0.2	+0.9	+0.0 260	90.1	94.0	-3.9 99
3	902.268M	90.3	+22.4 -26.6	+1.6	+0.3	+1.0	+0.0 262	89.0	94.0	-5.0 99
4	927.659M	83.4	+23.0 -26.6	+1.8	+0.2	+0.9	+0.0 328	82.7	94.0	-11.3 225
5	915.063M	83.6	+22.7 -26.7	+1.7	+0.2	+0.9	+0.0 289	82.4	94.0	-11.6 164
6	902.268M	82.4	+22.4 -26.6	+1.6	+0.3	+1.0	+0.0 286	81.1	94.0	-12.9 174