TEST REPORT

Testing Certification # 1367-01

Laboratory ID
PRODUCT SAFETY ENGINEERING, INC.
12955 Bellamy Brothers Boulevard
Dade City, Florida 33525 USA
PH (352) 588-2209 FX (352) 588-2544

Submitter ID
Game2Gear
2910 Bush Drive

Melbourne, FL 32935

Report Issue Date: April 08, 2008
Sample S/N: None
Sample Receipt Date: Mar 03, 2008
Sample Test Date: see data sheets

Test Report Number: 08F144B
Model Designation: 101
Product Description: RFID Reader

Description of non-standard test method or test practice: ***None***

Estimated Measurement Uncertainty: ***Not Applicable***

Special limitations of use: ***None***

Traceability: ***reference standards of measurement have been calibrated by a competent body using standards traceable to the NIST.***

According to testing performed at Product Safety Engineering, Inc., the above-mentioned unit is in compliance with the electromagnetic compatibility requirements defined in regulations indicated on page (3) of the test report. The test results contained herein relate only to the model(s) identified above. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics.

As the responsible EMC Project Engineer, I hereby declare that the equipment tested as specified above conforms to the requirements indicated on page (3) of the test report.

Signature _____ Name David Foerstner

Title Engineering Group Leader Date Apr 08, 2008

Reviewed by: Steven Hoke
Approved Signatory _____ Date Apr 08, 2008

FCC ID:V3ORDR101

D I R E C T O R Y - EMISSIONS

Product Safety Engineering, Inc 12955 Bellamy Brothers Blvd. Dade City, FL 33525
Tel (352) 588-2209 Fax (352) 588-2544

EMISSIONS TEST REGULATIONS :

The emissions tests were performed according to following regulations:

□ - EN 61000-6-3:2001

□ - EN 61000-6-4:2001

□ - EN 55011 : 1998 / A1:1999 — □ - Group 1 — □ - Group 2

□ - Class A — □ - Class B

□ - EN 55013 : 1990 / A12:1994 / A13:1996 / A14:1999

□ - EN 55014 -1: 2001 — □ - Household appliances and similar

□ - Portable tools

□ - Semiconductor devices

□ - EN 55022:2006 — □ - Class A — □ - Class B

□ -AS/NZS 3548:1995 — □ - Class A — □ - Class B

□ - ICES-003 — □ - Class A — □ - Class B

□ - CNS 13438 — □ - Class A — □ - Class B

□ - VCCI : 1999 — □ - Class A — □ - Class B

■ - FCC Part 15 — □ - Class A — ■ - Class B

■ - Certification (transmitter)
□ - Verification
■ - Declaration of Conformity (digital device)

□ - FCC Part 18

Environmental conditions during testing:

	LAB	OATS
Temperature: *	_____	: _____
Relative Humidity: **	_____	: _____

* The ambient temperature during the testing was within the range of (50° - 104° F) unless indicted above.
** The humidity levels during the testing was within the range of (10% - 90%) relative humidity unless indicated above.

Power supply system : 120 Volts 60 Hz SINGLE phase

Sign Explanations:

□ - not applicable
■ - applicable

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Emissions Test Conditions: CONDUCTED EMISSIONS (Interference Voltage)

The *CONDUCTED EMISSIONS (INTERFERENCE VOLTAGE)* measurements were performed at the following test location:

□ - Test not applicable

□ - Darby Test Site (Open Area Test Site)
■ - Darby Laboratory

Test equipment used :

	Model Number	Manufacturer	Description	Serial Number
■ -	8028-50	Solar	50 Ω LISN	829012, 829022
□ -	3825/2	Solar	50 Ω LISN	924840
■ -	EMC-30	Electro-Metrics	EMI Receiver	191
□ -	8566B	Hewlett-Packard	Spectrum Analyzer	2421A00526
□ -	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00209
□ -	85662A	Hewlett Packard	Analyzer Display	2403A07352
□ -	8028-50	Solar	50 Ω LISN	903725, 903726
□ -	FCC-TLISN-T4-02	Fisher Custom Com.	Telecom ISN	20454
□ -	FCC-TLISN-T8-02	Fisher Custom Com.	Telecom ISN	20452

Emissions Test Conditions: RADIATED EMISSIONS (Magnetic Field)

The *RADIATED EMISSIONS (MAGNETIC FIELD)* measurements were performed at the following test location:

■ - Darby Test Site (Open Area Test Site)
□ -
□ -

at a test distance of :

□ - 3 meters
■ - 30 meters

□ - Test not applicable

Test equipment used :

	Model Number	Manufacturer	Description	Serial Number
□ -	3148	EMCO	Log Periodic Antenna	00044783
□ -	BIA-25	Electro-Metrics	Biconical Antenna	4283
■ -	8566B	Hewlett-Packard	Spectrum Analyzer	2421A00526
■ -	85662A	Hewlett-Packard	Analyzer Display	2403A07352
■ -	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00209
□ -	ALR-30M	Electro-Metrics	Loop Antenna	824
□ -	8447D	Hewlett Packard	Preamplifier	2944A06832
■ -	52	Fluke	Digital thermometer	4475338
■ -	ALA-130/A	Antenna Research	Loop Antenna	106

Emissions Test Conditions: RADIATED EMISSIONS (Electric Field)

The *RADIATED EMISSIONS (ELECTRIC FIELD)* measurements, in the frequency range of 30 MHz-1000 MHz, were tested in a horizontal and vertical polarization at the following test location :

□ - Test not applicable

■ - Darby Site (Open Area Test Site)
□ - Darby Lab
□ -

at a test distance of :

■ - 3 meters
□ - 10 meters
□ - 30 meters

Test equipment used :

	Model Number	Manufacturer	Description	Serial Number
■ -	3148	EMCO	Log Periodic Antenna	00044783
■ -	BIA 25	Electro-Metrics	Biconical Antenna	4283
■ -	8566B	Hewlett-Packard	Spectrum Analyzer	2421A00526
■ -	85662A	Hewlett-Packard	Analyzer Display	2403A07352
■ -	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00209
■ -	8447D	Hewlett-Packard	Preamplifier (26dB)	2944A06832
□ -	EMC-30	Electro-Metrics	EMI Receiver	191
□ -	8568B	Hewlett Packard	Spectrum Analyzer	2407A03213
□ -	85650A	Hewlett Packard	Quasi-Peak Adapter	2043A00358
□ -	85662A	Hewlett Packard	Analyzer Display	2340A05806
□ -	LPA30	Electro-Metrics	Log Periodic	2280
□ -	BIA-30	Electro-Metrics	Biconical Antenna	3852

Emissions Test Conditions): INTERFERENCE POWER

The *INTERFERENCE POWER* measurements were performed by using the absorbing clamp on the mains and interface cables in the frequency range 30 MHz - 300 MHz at the following test location :

■ - Test not applicable

□ - Darby Lab
□ -

Test equipment used :

	Model Number	Manufacturer	Description	Serial Number
□ -	MDS-21	Rhode&Schwarz	Absorbing Clamp	8608447020
□ -	8566B	Hewlett-Packard	Spectrum Analyzer	2421A00526
□ -	85662A	Hewlett-Packard	Analyzer Display	2403A07352
□ -	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00209
□ -	8447D	Hewlett-Packard	Amplifier (26 dB)	2944A06832
□ -	EMC-30	Electro-Metrics	EMI Receiver	191

The *EQUIVALENT RADIATED EMISSIONS* measurements in the frequency range GHz - GHz were performed in a horizontal and vertical polarization at the following test location :

□ - Darby Test Site (Open Area Test Site)
□ -
□ -
□ -

at a test distance of:

□ - 1 meters
□ - 3 meters
□ - 10 meters

■ - Test not applicable

Test equipment used :

	Model Number	Manufacturer	Description	Serial Number
□ -	8566B	Hewlett-Packard	Spectrum Analyzer	2421A00526
□ -	85662A	Hewlett-Packard	Analyzer Display	2403A07352
□ -	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00209
□ -	8449B	Hewlett-Packard	Preamplifier	3008A00320
□ -	3115	Electro-Mechanics	Double Ridge Guide Horn	3810

The *ANTENNA TERMINAL DISTURBANCE VOLTAGE* in the frequency range 30 MHz - 1,000 MHz were performed.

□ - Darby Test Site (Open Area Test Site)
□ - Laboratory
□ -
□ -

■ - Test not applicable

	Model Number	Manufacturer	Description	Serial Number
□ -	2F9-3C4-3C5	Wavecom	UHF PAL TV Modulator	185879
□ -	2F1-3C4-3C5	Wavecom	VHF PAL TV Modulator	157728
□ -	A-8000	IFR	Spectrum Analyzer	1306
□ -	8648B	Hewlett-Packard	Signal Generator	3623A01433
□ -	8648B	Hewlett-Packard	Signal Generator	3623A01477
□ -	LMV-182A	Leader	RMS Milli-Voltmeter	8010091
□ -	3202	Krhon-Hite	Active filter	5899
□-	FMT115	Leaming	FM Modulator	NONE
□ -	371	UDT	Optical power meter	06657
□ -	TSG95	Tektronix	PAL video / Audio generator	B028883
□-				

Equipment Under Test (EUT) Test Operation Mode - Emission tests :

The device under test was operated under the following conditions during emissions testing:

□ - Standby

□ - Test program (H - Pattern)

□ - Test program (color bar)

■ - Test program (customer specific)

□ - Practice operation

□ - Normal Operating Mode

□ -

Configuration of the device under test:

■ - See System Under Test Information in Appendix B

Rationale for EUT setup / configuration:

ANSI C63.4:2003

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Emission Test Results:

Conducted emissions 150 kHz - 30 MHz				
The requirements are	■ **- MET**		□ **- NOT MET**	
Minimum limit margin	**1.0** dB	at	**13.558** MHz	
Remarks:				

Radiated emissions (magnetic field) 10 kHz - 30 MHz				
The requirements are	■ **- MET**		□ **- NOT MET**	
Minimum limit margin	**1.2** dB	at	**12.882** MHz	
Remarks:				

Radiated emissions (electric field) 30 MHz - 1000 MHz				
The requirements are	■ **- MET**		□ **- NOT MET**	
Minimum limit margin	**5.5** dB	at	**40.67** MHz	
Remarks:				

Interference Power at the mains and interface cables 30 MHz - 300 MHz				
The requirements are	□ **- MET**		□ **- NOT MET**	
Minimum limit margin	dB	at	MHz	
Remarks:				

Radiated emissions GHz - GHz				
The requirements are	□ **- MET**		□ **- NOT MET**	
Minimum limit margin	dB	at	GHz	
Remarks:				

Antenna Terminal Disturbance Voltage 30 MHz - 1,000 MHz				
The requirements are	□ **- MET**		□ **- NOT MET**	
Minimum limit margin	dB	at	MHz	
Remarks:				

GENERAL REMARKS:
We made measurements between (13) MHz and (1,000) MHz. We followed the measurement procedures detailed in ANSI C63.4-2003.

The EUT was placed in the center of a non-conductive table at a height of (0.8) meters above the ground plane. At each frequency of concern, the orientation of the EUT was checked in three orthogonal positions. The worst-case radiation for fundamental and spurious radiation was determined by rotating the EUT (360) degrees and scanning the height of the antenna between (1-4) meters for both antenna polarities when measuring above (30) MHz. When measuring below (30) MHz, the loop antenna was at a fixed (1) meter height and rotated (180) degrees. When the highest level was observed, the data was recorded.

All testing was performed using the following CISPR bandwidths:

Between (1.705) & (30) MHz - RBW = (9) kHz / VBW = (10) kHz
Between (30) & (1,000) MHz – RBW = (120) kHz / VBW = (300) kHz
Above (1,000) MHz – RBW = (1) MHz / VBW = (1) MHz

All measurements reported were made with a PEAK detector. The testing was completed with the transmitter operating in a normal mode and not in CW.

The conducted emissions were completed with a (50) ohm dummy load installed in place of the PWB antenna.

No spurious emissions were found in any restricted bands of operation listed in 15.205.

SUMMARY:

The requirements according to the technical regulations are

■ - met

□ - **not** met.

The device under test does

■ - fulfill the general approval requirements mentioned on page 3.

□ - **not** fulfill the general approval requirements mentioned on page 3.

Testing Start Date **March 03, 2008**

Testing End Date: **March 21, 2008**

Test-setup photo(s):
Conducted emission 450/150 kHz - 30 MHz

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Test-setup photo(s):
Radiated emission 30 MHz - 1000 MHz

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APPENDIX

A

Test Equipment Calibration Information

&

Test Data Sheets

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TEST EQUIPMENT CALIBRATION INFORMATION

Manufacturer	Model	Description	Serial Number	Cal Due
Hewlett Packard	8566B	Spectrum Analyzer	2421A00526	07/13/08
Hewlett Packard	85662A	Display	2403A07352	07/13/08
Hewlett Packard	85650A	Quasi-Peak Adapter	2043A00209	07/13/08
Hewlett Packard	8447D	Preamp 0.1 - 1,000 MHz	2944A06832	12/18/08
Hewlett Packard	8568B	Spectrum Analyzer	2407A03213	07/13/08
Hewlett Packard	85662A	Display	2340A05806	07/13/08
Hewlett Packard	85650A	Quasi-Peak Adapter	2043A00358	07/13/08
Hewlett Packard	8447D	Preamp 0.1 - 1,000 MHz	2944A06901	07/13/08
Hewlett Packard	8447D	Preamp 0.1 - 1,000 MHz	1937A03247	06/01/08
Hewlett Packard	8449B	Preamp 1 - 26.5 GHz	3008A00320	08/09/08
Hewlett Packard	8648B	Signal Generator	3443U00312	06/01/08
EMCO	3148	Log Periodic Antenna	00044783	03/21/08
Electro-Metrics	LPA 30	Log Periodic Antenna	2280	12/22/07
Electro-Metrics	BIA 30	Biconical Antenna	3852	12/28/07
Electro-Metrics	BIA 25	Biconical Antenna	4283	05/22/08
Electro-Mechanics	3115	Double Ridge Guide Ant.	3810	11/28/07
Electro-Metrics	ALR30M	Magnetic Loop Antenna	824	12/27/07
Solar	8012	LISN	924840	04/02/08
Solar	8028	LISN	829012/809022	01/05/08
Solar	8028	LISN	903725/903726	12/13/07
Fluke	51	Digital Thermometer	4475338	12/05/08
Leader	LFG1310	Function Generator	8060233	06/01/08
Electro-Metrics	EMC-30	EMI Receiver	191	06/01/08
Antenna Research	ALA-130/A	Loop Antenna	106	07/02/08
Cole-Palmer	9970-00	Digital Barometer	61493735	03/ 0708
EMC Automation	HLP3003C	Hybrid Log Periodic	017501	06/26/08
Fischer Custom	FCC-T4-02	Telecom ISN	20454	08/08/08
Fischer Custom	FCC-T8-02	Telecom ISN	20452	08/06/08

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RADIATED DATA SHEET
Below (30) MHz

FCC Rule Part	Frequency range	Limit dBuV/m @ 30 meters	Measured Freq. (MHz)	Level dBuV/m	Margin dB
15.225 (a)	**13.553 - 13.567**	84	13.558	58.9	-25.1
15.225 (b)	**13.410 - 13.553**	50.5	13.488	40.8	-9.7
15.225 (b)	**13.567 - 13.710**	50.5	13.625	43.0	-7.5
15.225 (b)	**13.567 - 13.710**	50.5	13.692	38.9	-11.6
15.225 (c)	**13.110 - 13.410**	40.5	13.287	31.1	-9.4
15.225 (c)	**13.110 - 13.410**	40.5	13.352	34.2	-6.3
15.225 (c)	**13.710 - 14.010**	40.5	13.760	35.0	-5.5
15.225 (d)	**1.705 - 13.110**	29.5	12.882	28.3	-1.2
15.225 (d)	**1.705 - 13.110**	29.5	12.948	27.9	-1.6
15.225 (d)	**14.010 - 30.0**	29.5	27.115	23.5	-6.0

* All measurements were collected with peak detector

Test Report Number 08F144B

DATA SHEET

Frequency tolerance

§15.225

(e) The frequency tolerance of the carrier signal shall be maintained within +/-0.01% of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

Temperature	Frequency (Hz)	Tolerance
-20 C	13,558,850	13,558,666 - 13,558,850 = -184
+ 50 C	13,558,638	13,558,666 - 13,558,638 = 28
+ 20 C	13,558,666	0.0001 X 13,558,666 = 1,356

The supply voltage to the host computer was varied from (102) to (138) VAC while we monitored the frequency. The frequency did not change during this voltage variation.

PASS

(f) In the case of radio frequency powered tags designed to operate with a device authorized under this section, the tag may be approved with the device or be considered as a separate device subject to its own authorization. Powered tags approved with a device under a single application shall be labeled with the same identification number as the device.

NOT APPLICABLE

RADIATED DATA
Above (30) MHz

PRODUCT EMISSIONS

PRODUCT SAFETY ENGINEERING Data File: READER MODEL 101 FCC-B 3-4-08

No	EMISSION FREQUENCY MHz	SPEC LIMIT dBuV/m	MEASUREMENTS ABS dBuV/m	MEASUREMENTS dLIM dB	MODE	POL	SITE HGT cm	SITE AZM deg	CORR FACTOR dB	COMMENTS
1	40.666	40.0	34.5	-5.5	QP	V	100	270	-12.8	
2	54.214	40.0	28.8	-11.2	PK	V	100	1	-16.2	
3	67.790	40.0	31.4	-8.7	PK	V	100	270	-16.5	
4	122.014	43.5	29.2	-14.3	PK	V	100	180	-13.1	
5	135.582	43.5	27.6	-15.9	QP	V	100	270	-13.	
6	149.128	43.5	36.4	-7.1	QP	V	100	270	-12.9	
7	162.712	43.5	29.4	-14.1	PK	V	100	90	-12.7	
8	167.973	43.5	33.3	-10.3	PK	H	200	45	-12.7	
9	189.802	43.5	24.4	-19.1	PK	H	200	45	-12.1	
10	203.360	43.5	26.1	-17.4	PK	V	100	315	-11.4	
11	230.485	46.0	34.6	-11.5	PK	H	200	180	-11.8	
12	244.061	46.0	32.4	-13.6	PK	V	100	135	-12.1	

CONDUCTED DATA

Below (30) MHz

Product Safety Engineering

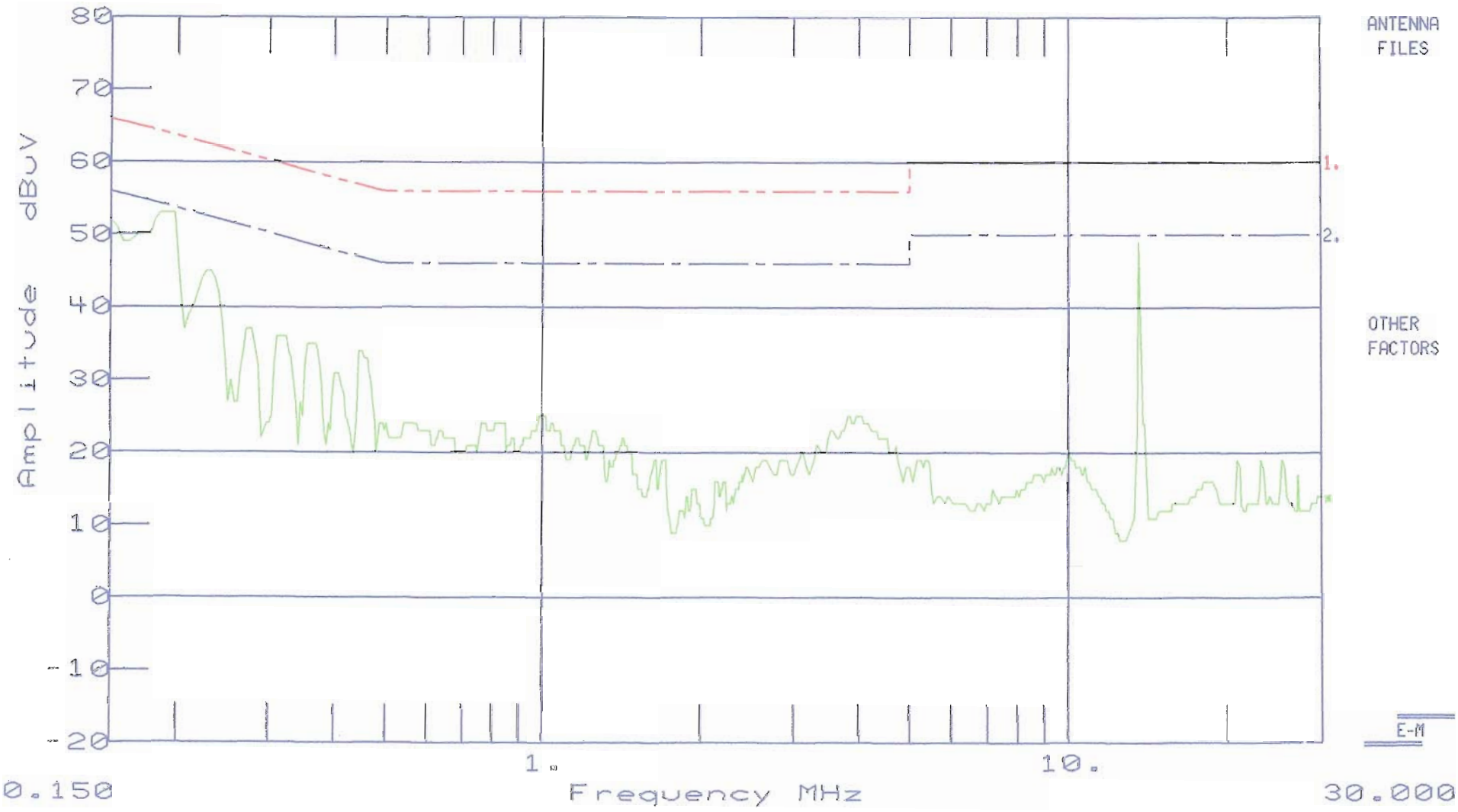
GAME2GEAR

Date :	03/21/08	Time :	11:38:36.88
Technician :	JACK GARNER	Test Equip. :	EMC-30
Test Method :	EN55022 CLASS B	Test Number :	1
Equipment :	READER MODEL 101	Sensor Loc. :	LINE
Mode of Op. :	NORMAL	Sensor Pol. :	
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB

Comment : 120 VAC / 60 HZ

EMC-30 SETTINGS
Detector QuasiPeak
Bandwidth CISPR
Dump/DwellN/A
RF Atten. 10 dB
IF Atten. 10 dB

SPECS
1) CISPR 22 Quasi Peak
2) CISPR 22 AVG
3)
4)



TEST TITLE:GAME2GEAR		PAGE 1
DATA FILE :144_L.D30		Freq.(MHz)
Amplitude Units : dBuV	Threshold -6 dB	0.1500

Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
0.1500	52.0		-4.000 *
0.1542	51.0		-4.771 *
0.1686	50.0		-5.029 *
0.1728	50.0		-4.825 *
0.1769	50.0		-4.630 *
0.1811	52.0		-2.435 *
0.1852	53.0		-1.249 *
0.1890	53.0		-1.080 *
0.1932	53.0		-0.898 *
0.1973	53.0		-0.723 *
13.5587	49.0		-1.000 *

Product Safety Engineering

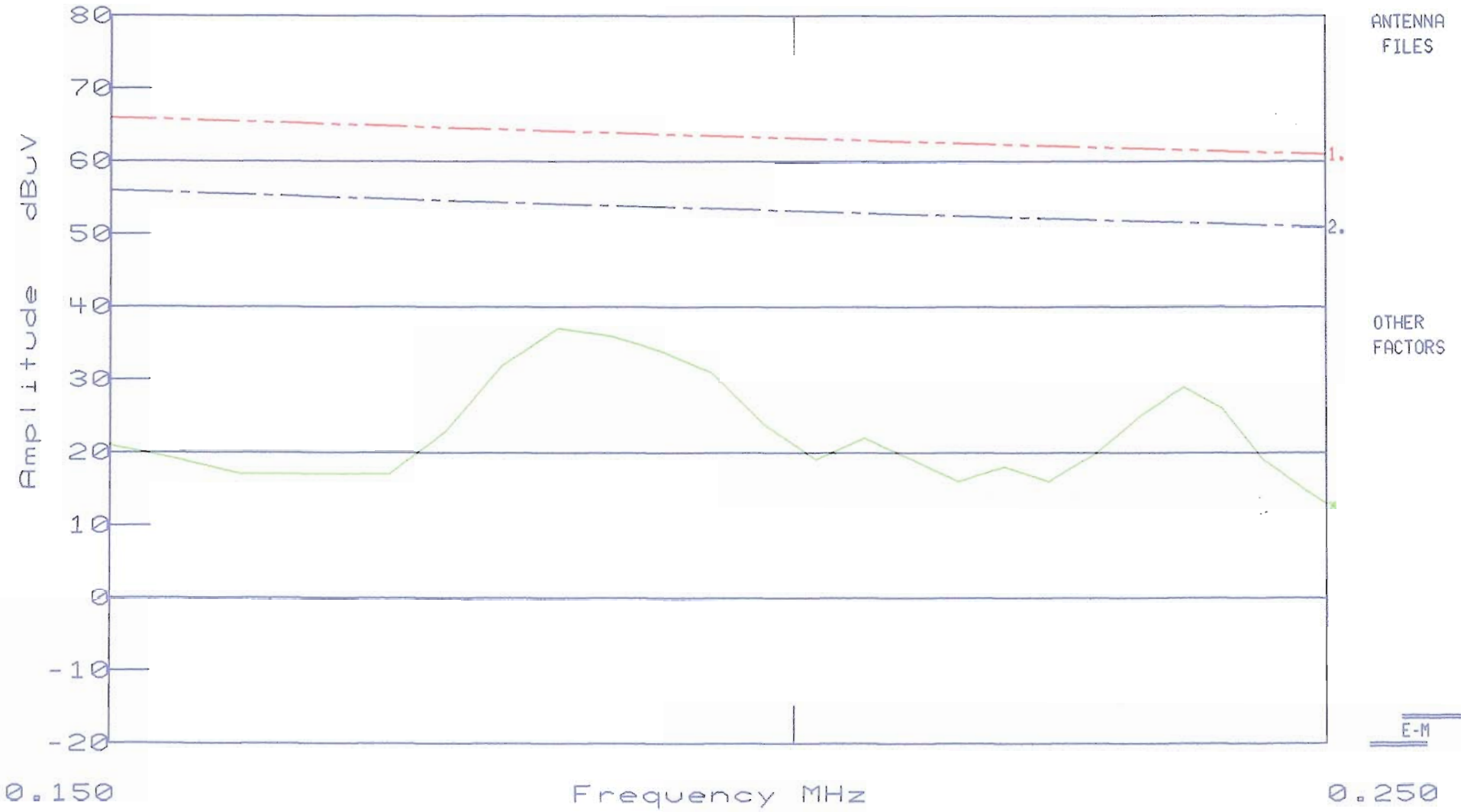
GAME2GEAR

Date :	03/21/08	Time :	12:05:50.25
Technician :	JACK GARNER	Test Equip. :	EMC-30
Test Method :	EN55022 CLASS B	Test Number :	1
Equipment :	READER MODEL 101	Sensor Loc. :	LINE
Mode of Op. :	NORMAL	Sensor Pol. :	
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB

Comment : 120 VAC / 60 HZ

EMC-30 SETTINGS
Detector Average
Bandwidth CISPR
Dump/Dwell N/A
RF Atten. 10 dB
IF Atten. 10 dB

SPECS
1) CISPR 22 Quasi Peak
2) CISPR 22 AVG
3)
4)



TEST TITLE:GAME2GEAR			PAGE 1
DATA FILE :144_LA1.D30			Freq.(MHz)
Amplitude Units : dBuV		Threshold -19 dB	0.1500

Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
0.1811	37.0		-17.435 *
0.1852	36.0		-18.249 *

Product Safety Engineering

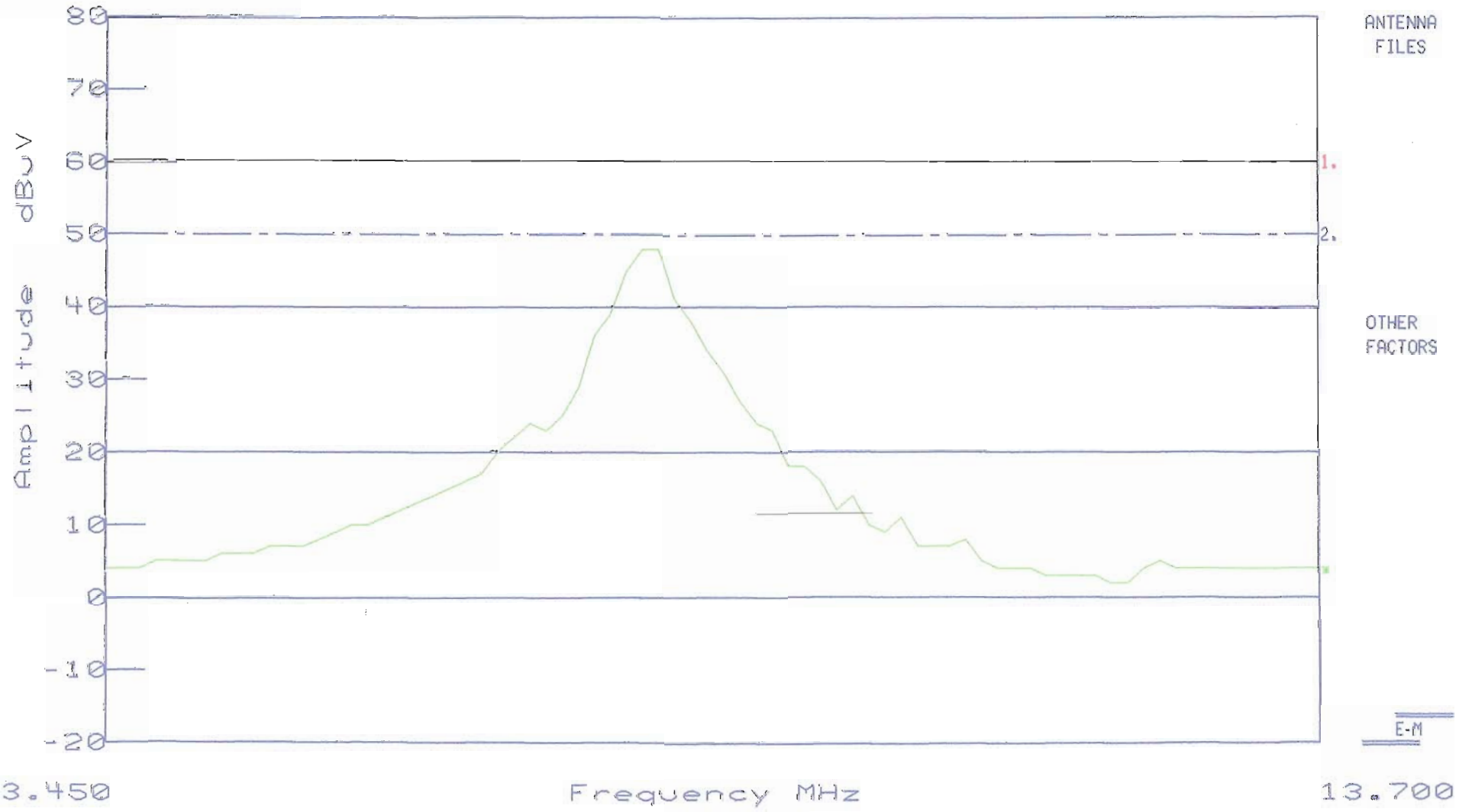
GAME2GEAR

Date :	03/21/08	Time :	11:58:53.59
Technician :	JACK GARNER	Test Equip. :	EMC-30
Test Method :	EN55022 CLASS B	Test Number :	1
Equipment :	READER MODEL 10i	Sensor Loc. :	LINE
Mode of Op. :	NORMAL	Sensor Pol. :	
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB

Comment : 120 VAC / 60 HZ

EMC-30 SETTINGS
Detector Average
Bandwidth CISPR
Dump/Dwell N/A
RF Atten. 10 dB
IF Atten. 10 dB

SPECS
1) CISPR 22 Quasi Peak
2) CISPR 22 AVG
3)
4)



TEST TITLE:GAME2GEAR		PAGE 1
DATA FILE :144_LA.D30		Freq.(MHz)
Amplitude Units : dBuV	Threshold -6 dB	13.4500

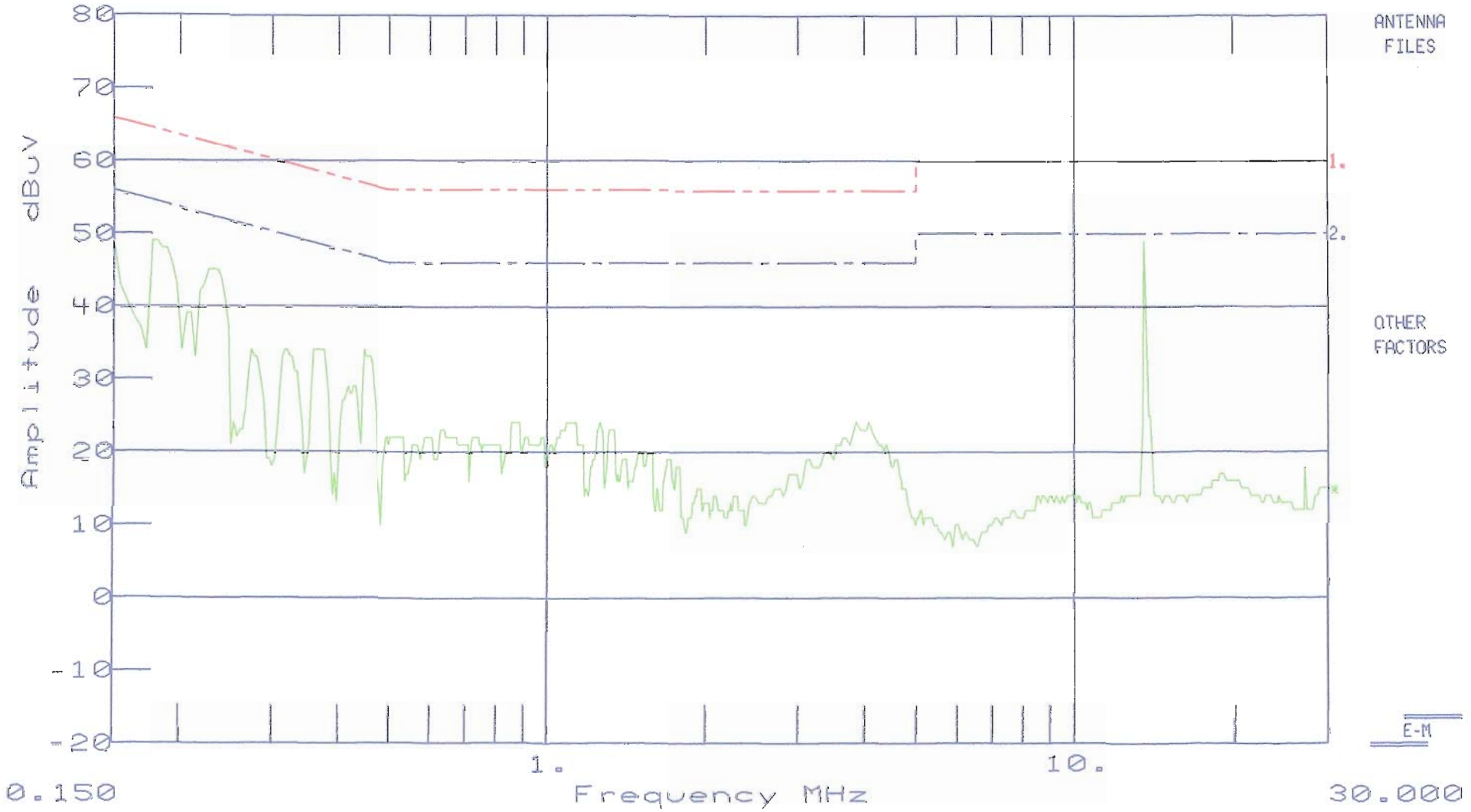
Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
13.5569	45.0		-5.000 *
13.5602	48.0		-2.000 *
13.5635	48.0		-2.000 *

Product Safety Engineering

GAME2GEAR

Date :	03/21/08	Time :	12:12:03.31	EMC-30 SETTINGS	SPECS
Technician :	JACK GARNER	Test Equip. :	EMC-30	Detector QuasiPeak	1) CISPR 22 Quasi Peak
Test Method :	EN55022 CLASS B	Test Number :	1	Bandwidth CISPR	2) CISPR 22 AVG
Equipment :	READER MODEL 101	Sensor Loc. :	NEUTRAL	Dump/Dwell IN/A	3)
Mode of Op. :	NORMAL	Sensor Pol. :		RF Atten. 10 dB	4)
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB	IF Atten. 10 dB	

Comment : 120 VAC / 60 HZ



TEST TITLE:GAME2GEAR	PAGE 1
DATA FILE :144_N.D30	Freq.(MHz)
Amplitude Units : dBuV Threshold -6 dB	0.1500

Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
0.1769	49.0		-5.630 *
0.1811	49.0		-5.435 *
13.5587	49.0		-1.000 *

Product Safety Engineering

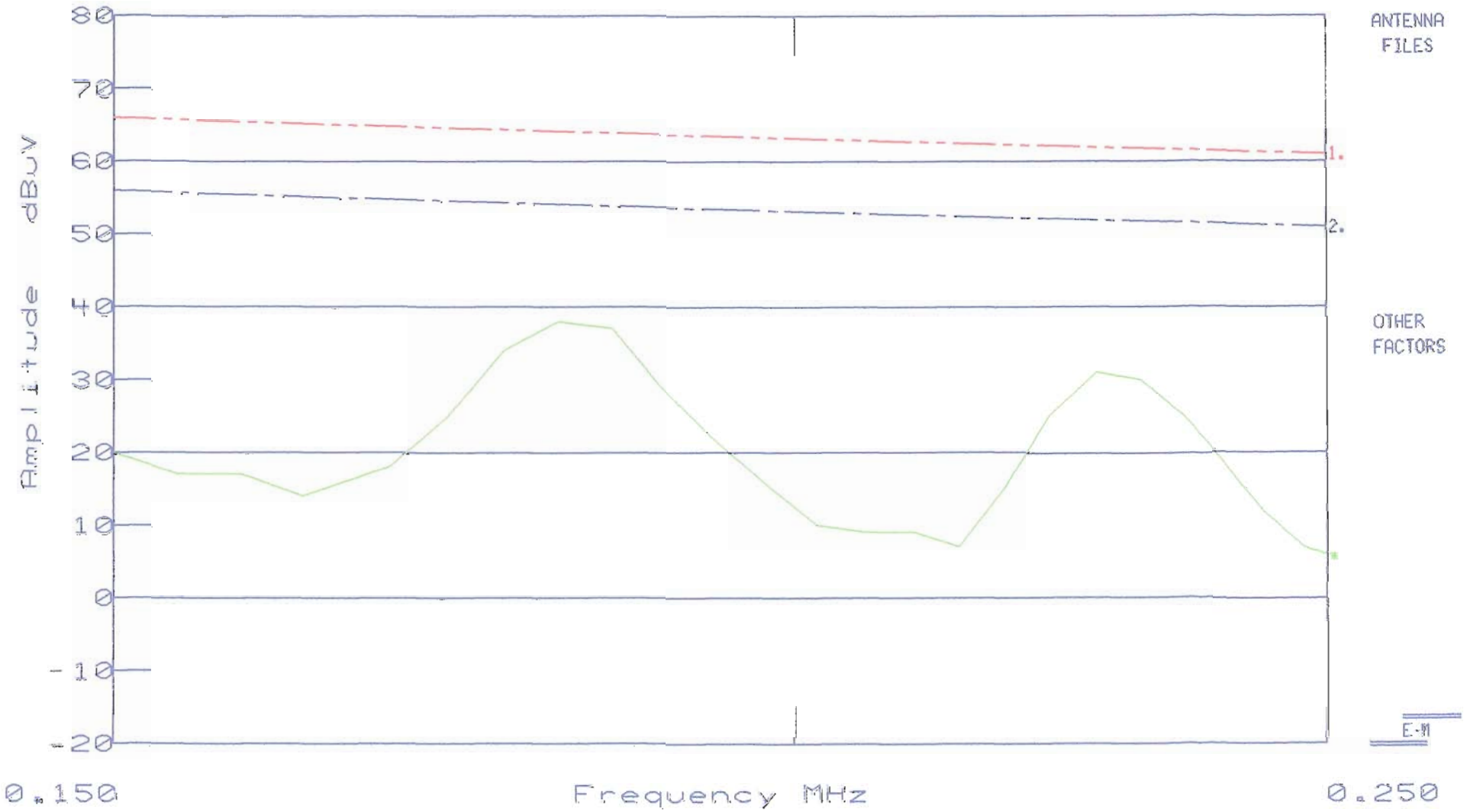
GAME2GEAR

Date :	03/21/08	Time :	12:08:13.77
Technician :	JACK GARNER	Test Equip. :	EMC-30
Test Method :	EN55022 CLASS B	Test Number :	1
Equipment :	READER MODEL 101	Sensor Loc. :	NEUTRAL
Mode of Op. :	NORMAL	Sensor Pol. :	
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB

Comment : 120 VAC / 60 HZ

EMC-30 SETTINGS
Detector Average
Bandwidth CISPR
Dump/Dwell N/A
RF Atten. 10 dB
IF Atten. 10 dB

SPECS
1) CISPR 22 Quasi Peak
2) CISPR 22 AVG
3)
4)



TEST TITLE:GAME2GEAR		PAGE 1
DATA FILE :144_NA1.D30		Freq.(MHz)
Amplitude Units : dBuV	Threshold -18 dB	0.1500

Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
0.1811	38.0		-16.435 *
0.1852	37.0		-17.249 *

Product Safety Engineering

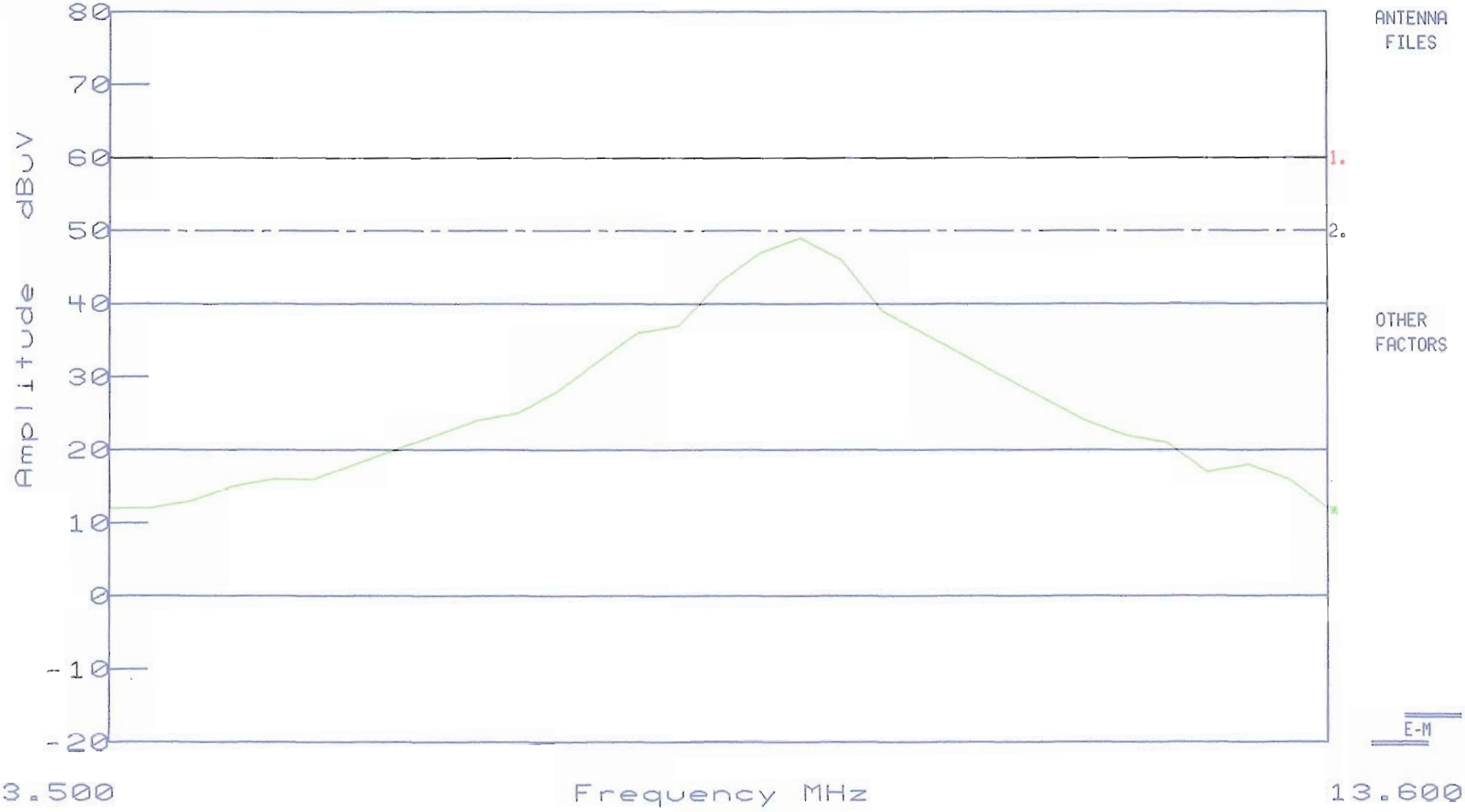
GAME2GEAR

Date :	03/21/08	Time :	12:09:55.28
Technician :	JACK GARNER	Test Equip. :	EMC-30
Test Method :	EN55022 CLASS B	Test Number :	1
Equipment :	READER MODEL 101	Sensor Loc. :	NEUTRAL
Mode of Op. :	NORMAL	Sensor Pol. :	
Serial No. :	FCC TEST 4	Ext. Atten. :	0 dB

Comment : 120 VAC / 60 HZ

EMC-30 SETTINGS
Detector Average
Bandwidth CISPR
Dump/Dwell N/A
RF Atten. 10 dB
IF Atten. 10 dB

SPECS
1) CISPR 22 Quasi Peak
2) CISPR 22 AVG
3)
4)



TEST TITLE:GAME2GEAR		PAGE 1
DATA FILE :144_NA.D30		Freq.(MHz)
Amplitude Units : dBuV	Threshold -6 dB	13.5000

Freq(MHz)	Amp	C22BQP.S30 vs Spec(dB)	C22BAVG.S30 vs Spec(dB)
13.5534	47.0		-3.000 *
13.5568	49.0		-1.000 *
13.5601	46.0		-4.000 *

APPENDIX

B

System Under Test Description

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Tel (352) 588-2209 Fax (352) 588-2544

SYSTEM COMPONENTS

****

DEVICE TYPE: EUT Game2Gear transceiver
Model 101 RFID transceiver
S/N: None

****

DEVICE TYPE: Computer - Dell
Model - PP21L
SN - 2LC0HB1

****

DEVICE TYPE: Dell Power Supply
Model PA-16
SN None

****

DEVICE TYPE: SMC Switch
Model SMC-EZ6505TX
SN None

****

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INTERFACE CABLES

****

DEVICE TYPE: EUT -
SHIELD: YES
LENGTH: 3 FEET
CONNECTOR TYPE: USB to mini USB
PORT: USB
****

DEVICE TYPE: SMC Switch
SHIELD: NO
LENGTH: 1 METER
CONNECTOR TYPE: RJ-45 to RJ-45
PORT: Ethernet of switch to host computer ethernet
****

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AC LINE CORDS

****

DEVICE TYPE: Host computer (AC SIDE)
SHIELD: NO
LENGTH: 2 METERS
CONNECTOR TYPE: IEC TO DEDICATED
****

DEVICE TYPE: Host computer (DC SIDE)
SHIELD: NO
LENGTH: 1 METER
CONNECTOR TYPE: coaxial DC power plug
****

DEVICE TYPE: SMC Switch
SHIELD: NO
LENGTH: 1 METER
CONNECTOR TYPE: Dedicated to dedicated
****

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APPENDIX

C

Measurement Protocol

Product Safety Engineering, Inc 12955 Bellamy Brothers Blvd. Dade City, FL 33525
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The test methodology followed during the collection of the data included within this technical report was ANSI C63.4:2003.

The EUT was powered with (120) VAC / (60) Hz during the collection of data included within.

The data is compared to the FCC Class B limits.

The "EMI" instrumentation is capable of calculating the final emission level based on the following formula:

Level at the receiver (dBµV) + Antenna Correction Factor (dB/M) + Cable Loss (dB) - Preamp Gain (dB) = Actual Level in dBµV/M.

The sample calculation below is based on the actual test data collected:

Observed Level		**45.1**	dBµV	
ACF	+	**14.6**	dB/M	
Cable Loss	+	**0.8**	dB	
Preamp Gain	−	**26.0**	dB	
Actual Level		**34.5**	dBµV/M	@ 40.7 MHz

Please have a company official review this report and sign.

_____

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