

**FCC PART 15 SUBPART B & C
TEST REPORT***for***HANDHELD WIRELESS REMOTE CONTROL****Model: 2440**

Prepared for

SmartLabs, Inc.
16542 MILLIKAN AVENUE
IRVINE, CA 92606 USA

Prepared by: _____

JOEY MADLANGBAYAN

Approved by: _____

JOSH HANSEN

COMPATIBLE ELECTRONICS INC.
20621 PASCAL WAY
LAKE FOREST, CALIFORNIA 92630
(949) 589-0700

DATE: JUNE 27, 2011

	REPORT BODY	APPENDICES					TOTAL
		A	B	C	D	E	
PAGES	18	2	2	2	10	12	46

This report shall not be reproduced except in full, without the written approval of Compatible Electronics.

**Brea Division**
114 Olinda Drive
Brea, CA 92823
(714) 579-0500**Agoura Division**
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600**Silverado Division**
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700**Lake Forest Division**
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	4
SUMMARY OF TEST RESULTS	5
1. PURPOSE	6
2. ADMINISTRATIVE DATA	7
2.1 Location of Testing	7
2.2 Traceability Statement	7
2.3 Cognizant Personnel	7
2.4 Date Test Sample was Received	7
2.5 Disposition of the Test Sample	7
2.6 Abbreviations and Acronyms	7
3. APPLICABLE DOCUMENTS	8
4. DESCRIPTION OF TEST CONFIGURATION	9
4.1 Description of Test Configuration - EMI	9
4.1.1 Photograph Test Configuration - EMI	9
4.1.2 Cable Construction and Termination	10
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	11
5.1 EUT and Accessory List	11
5.2 EMI Test Equipment	12
6. TEST SITE DESCRIPTION	13
6.1 Test Facility Description	13
6.2 EUT Mounting, Bonding and Grounding	13
6.3 Facility Environmental Characteristics	13
7. CHARACTERISTICS OF THE TRANSMITTER	14
7.1 Channel Number and Frequencies	14
7.2 Antenna	14
7.3 Modulation	14
8. TEST PROCEDURES	15
8.1 RF Emissions	15
8.1.1 Conducted Emissions Test	15
8.1.2 Radiated Emissions (Spurious and Harmonics) Test	16
8.1.3 Peak Transmit EMI	16
8.1.4 Band Edge	17
9. TEST PROCEDURE DEVIATIONS	18
10. CONCLUSIONS	18



LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Additional Models Covered Under This Report
D	Diagrams, Charts, and Photos <ul style="list-style-type: none">• Test Setup Diagrams• Antenna Factors• Radiated and Conducted Emissions Photos
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Plot Map And Layout of Test Site
2	Radiated Emissions 3-Meter Semi-Anechoic Test Chamber Above 1 GHz



GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full with the written permission of Compatible Electronics.

This report must not be used to claim product endorsement by NVLAP, NIST, or any other agency of the U.S. Government or other governments.

Device Tested: Handheld Wireless Remote Control
Model: 2440
S/N: 14.3D.6B

Product Description: The EUT is a Wireless Remote Control transceiver.

Modifications: The EUT was not modified in during the testing.

Manufacturer: SmartLabs, Inc.
16542 Millikan Avenue
Irvine, California 92606

Test Date: June 23, 2011

Test Specifications: EMI requirements
CFR Title 47, Part 15 Subpart B and Subpart C Sections 15.205, 15.209 and 15.249

Test Procedure: ANSI C63.10
CFR 47, Part 15.31



SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz.	The EUT is a battery powered device and does not connect to the AC mains; therefore this test was not performed.
2	Spurious Radiated RF Emissions, 9 kHz – 30 MHz, 30 - 1,000 MHz, and 1,000 MHz – 10,000 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.249(a)
3	Emissions produced by the intentional radiator , 9 kHz – 10 GHz	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, 15.249 (d)
4	Peak Transmit EMI	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.249 (a)
5	Input Power Variation	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart A, section 15.31 (e)

SIX HIGHEST RADIATED SPURIOUS EMISSIONS READINGS

	Reading Type (PK / QP / AV)	Polarization (Vert / Horz)	Frequency (MHz)	Level (dB μ V/m)	Limit (dB μ V/m)	Delta (dB)	Test Distance
1	AV	V	1830.00	48.60	53.98	-5.37	3-meter
2	QP	V	935.00	40.06	46.00	-5.94	3-meter
3	QP	V	945.00	39.85	46.00	-6.15	3-meter
4	QP	V	895.20	37.75	46.00	-8.25	3-meter
5	QP	V	885.00	36.50	46.00	-9.50	3-meter
6	QP	V	901.50	31.82	46.00	-14.18	3-meter



1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on Handheld Wireless Remote Control Model: 2440. The EMI measurements were performed according to the measurement procedure described in ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by the Code of Federal Regulations Title 47, Part 15 Subpart B and Subpart C.



3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this EMI Test Report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.10: 2009	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz



4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - EMI

The Handheld Wireless Remote Control Model: 2440 (EUT) was setup in a tabletop configuration. The EUT was oriented in the X, Y, and Z axis to determine the orientation that produced the worst case emissions. The Z axis was determined to be worst case and was continuously transmitting a data stream throughout all the tests. The EUT was also tested in a mode which the transmit function was disabled; while continuously receiving.

The antenna is constructed of a permanently integrated PCB trace. A fresh set of batteries were installed before the tests.

It was determined that the emissions were at their highest level when the EUT was setup in the above configuration. The final radiated data was taken in the above configuration. The EUT was set up as shown in the photographs in Appendix D. Please see Appendix E for the test data.

4.1.1 Photograph Test Configuration - EMI



4.1.2 Cable Construction and Termination

The EUT does not have any external signal cables.



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT**5.1 EUT and Accessory List**

#	EQUIPMENT TYPE	MANU-FACTURER	MODEL	SERIAL NUMBER	FCC ID
1	HANDHELD WIRELESS REMOTE CONTROL (EUT)	SMARTLABS, INC.	2440	14.3D.6B	SBP2440A



5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Computer	Compatible Electronics	NONE	NONE	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100172	1/13/2011	1/13/2012
Antenna, Loop	Com Power	AL-130	17085	1/26/2011	1/26/2012
Antenna, CombiLog	Com Power	AC-220	25857	6/07/2011	6/07/2012
Antenna, Horn 1-18GHz	Com Power	AH-118	071250	10/01/2010	10/01/2011
Pre-Amp, 1-18GHz	Com Power	PA-122	1321	2/1/2010	2/1/2012
Pre-Amp, 1-18GHz	Com Power	PA-118	181653	10/01/2010	10/01/2011
Mast, Antenna Positioner	Sunol Science Corporation	TWR 95-4	020808-3	N/A	N/A
Antenna Mast	Sunol Science Corporation	TWR 95-4	020808-3	N/A	N/A
Turntable	Sunol Science Corporation	FM 2001	N/A	N/A	N/A
Mast and Turntable Controller	Sunol Science Corporation	SC104V	020808-1	N/A	N/A



6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 of this report for EMI test location.

6.2 EUT Mounting, Bonding and Grounding

The EUT was centered on a 1.0 by 1.5 by 0.8 meter high non-conductive table, which was placed on the ground plane.

The EUT was not grounded.

6.3 Facility Environmental Characteristics

When applicable refer to the data sheets in Appendix E for the relative humidity, air temperature, and barometric pressure.



7. CHARACTERISTICS OF THE TRANSMITTER

7.1 Channel Number and Frequencies

There is a total of 1 channel.

1 == 915 MHz

7.2 Antenna

The antenna is a integral antenna comprised of a trace on the PCB.

7.3 Modulation

The EUT uses FSK modulation. (ie. Frequency Shift Keyed)



8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

(This test was not performed)

The EMI receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. The LISN output was measured using the EMI receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT received its power through the LISN, which was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI 63.4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by the computer software. The final qualification data is located in Appendix E.

Test Results:

The EUT is a battery powered device and does not connect to the AC mains; therefore this test was not performed.



8.1.2 Radiated Emissions (Spurious and Harmonics) Test

The measurement bandwidths and transducers used for the radiated emissions test were:

The quasi-peak adapter was used only for those readings which are marked accordingly on the data sheets.

The average detector was used for frequencies above 1 GHz.

FREQUENCY RANGE (MHz)	TRANSDUCER	EFFECTIVE MEASUREMENT BANDWIDTH
.009 to .150	Active Loop Antenna	200 Hz
.150 to 30	Active Loop Antenna	9 kHz
30 to 1,000	Combilog Antenna	120 kHz
1,000 to 10,000	Horn Antenna	1 MHz

The TDK FACT-3 shielded test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.10, EN 50147-2, and CISPR 22. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters in both vertical and horizontal polarizations (for E field radiated field strength).

Test Results:

The EUT complies with the limits of CFR Title 47 Part 15 Subpart B (Class B devices) and Subpart C sections 15.205, 15.209 and 15.249.

8.1.3 Peak Transmit EMI

The EUT was tested at a 3-meter test distance to obtain the final test data. The single EUT channel was measured. The final qualification data sheets are located in Appendix E.

Test Results:

The EUT complies with Part 15, Subpart C, Section 15.249(a).



8.1.4 Band Edge

The EUT was tested at a 3-meter test distance to obtain the final test data. The single EUT channel was measured during the low and high band edge tests. The final qualification data sheets are located in Appendix E.

Test Results:

The EUT complies with Part 15, Subpart C, Section 15.249(d).



9. TEST PROCEDURE DEVIATIONS

The test procedures were not deviated from throughout all tests.

10. CONCLUSIONS

The Handheld Wireless Remote Control Model: 2440 meets all of the **Class B** specification limits defined in the Code of Federal Regulations Title 47, Part 15 of the FCC Rules.



APPENDIX A

***LABORATORY ACCREDITATIONS AND
RECOGNITIONS***



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

LABORATORY ACCREDITATIONS AND RECOGNITIONS



NVLAP LAB CODES 200063-0,
200528-0, 200527-0

For US, Canada, Australia/New Zealand, Taiwan and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025 an ISO 9002 equivalent. Please follow the link to the NIST site for each of our facilities NVLAP certificate and scope of accreditation.

NVLAP listing links

Agoura Division - <http://ts.nist.gov/Standards/scopes/2000630.htm>

Brea Division - <http://ts.nist.gov/Standards/scopes/2005280.htm>

Silverado/Lake Forest Division - <http://ts.nist.gov/Standards/scopes/2005270.htm>



ANSI listing

[CETCB](#)

<https://www.ansica.org/wwwversion2/outside/ALLdirectoryDetails.asp?menuID=1&prgID=3&orgID=123&status=4>



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

We are also certified/listed for IT products by the following country/agency:



VCCI Listing, from VCCI site

[Enter "Compatible" in search form](http://www.vcci.or.jp/vcci_e/activity/registration/setsubi.html) http://www.vcci.or.jp/vcci_e/activity/registration/setsubi.html



FCC Listing, from FCC OET site

[FCC test lab search](https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm>



Compatible Electronics IC listing can be found at:

<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home>

Lab ID# 2154C



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

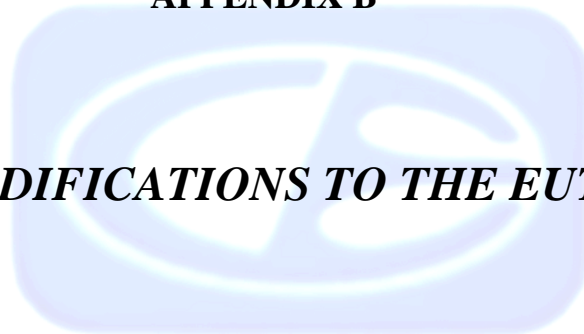
Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

APPENDIX B

MODIFICATIONS TO THE EUT



MODIFICATIONS TO THE EUT

There were no modifications made to the EUT during the test.





APPENDIX C

***ADDITIONAL MODELS COVERED
UNDER THIS REPORT***



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Handheld Wireless Remote Control
Model: 2440
S/N: 14.3D.6B

There were no additional models covered under this report.




APPENDIX D***DIAGRAMS, CHARTS, AND PHOTOS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

FIGURE 1: RADIATED EMISSIONS 3-METER SEMI-ANECHOIC TEST CHAMBER BELOW 1GHz

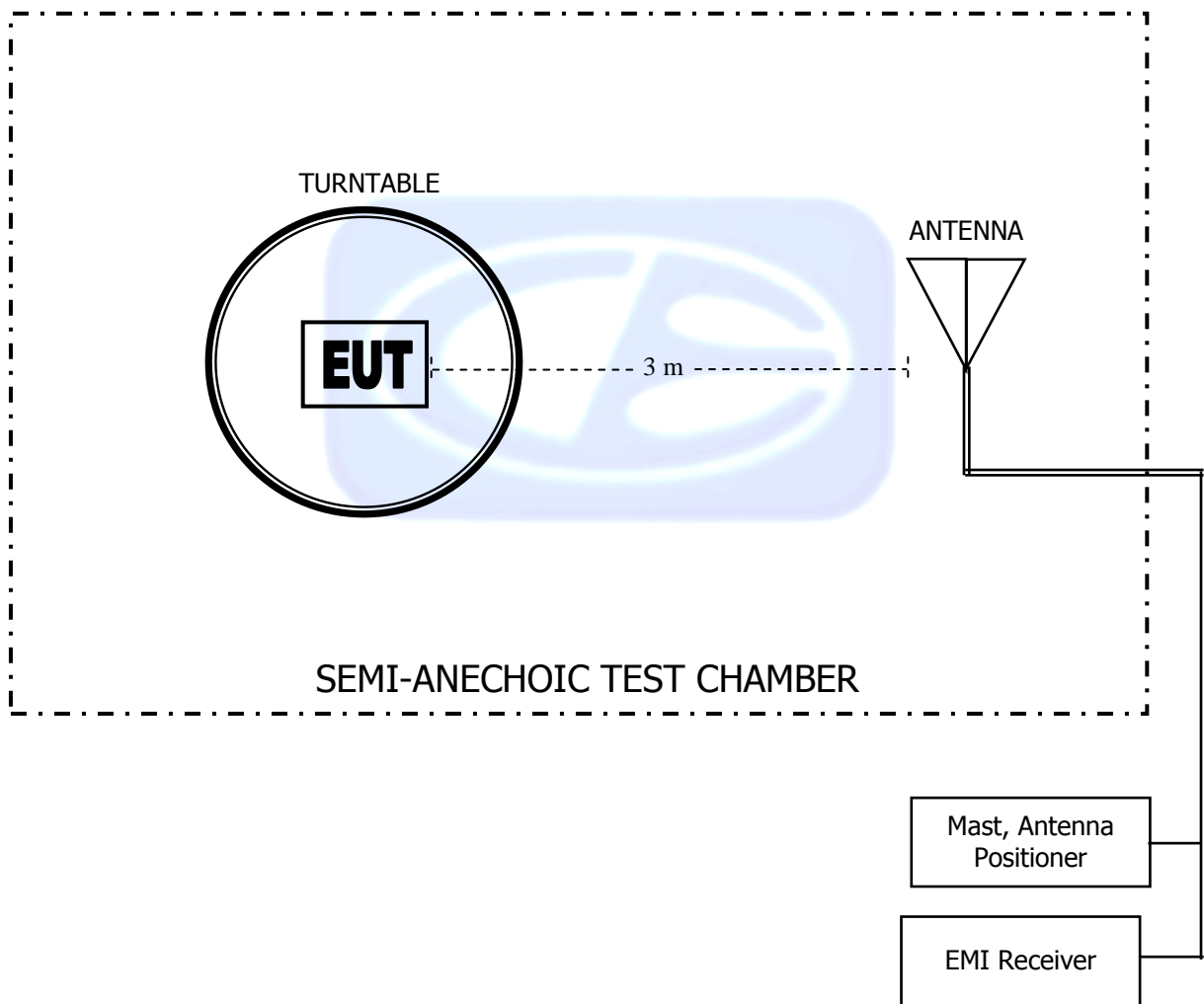
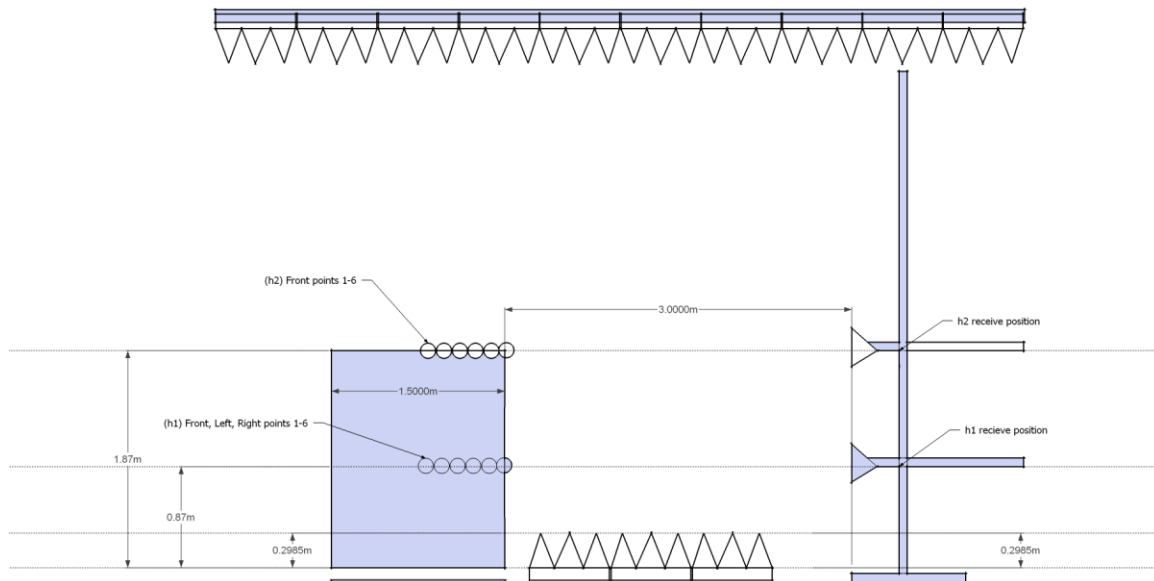


FIGURE 2: RADIATED EMISSIONS 3-METER SEMI-ANECHOIC TEST CHAMBER ABOVE 1 GHz



COM-POWER AC-220**LAB R - COMBYLOG ANTENNA**

S/N: 25857

CALIBRATION DUE: JUNE 07, 2012

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	17.20	180	8.50
35	17.60	200	9.00
40	18.30	250	11.70
45	17.10	300	13.40
50	16.10	300	13.40
60	13.10	400	15.00
70	8.60	500	16.00
80	5.50	600	17.90
90	7.20	700	20.20
100	8.20	800	21.10
120	9.40	900	20.50
140	8.60	1000	22.60
160	8.40		



COM-POWER AH-118**HORN ANTENNA**

S/N: 071250

CALIBRATION DUE: OCTOBER 01, 2011

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	24.0	9500	35.9
1500	23.9	10000	40.4
2000	27.9	10500	41.7
2500	29.6	11000	38.9
3000	30.7	11500	40.3
3500	30.3	12000	38.1
4000	28.6	12500	42.8
4500	30.7	13000	38.8
5000	33.0	13500	36.9
5500	32.9	14000	43.7
6000	34.1	14500	42.0
6500	37.2	15000	42.0
7000	37.9	15500	37.9
7500	38.3	16000	38.5
8000	38.5	16500	38.2
8500	36.9	17000	39.2
9000	40.2	17500	42.8
		18000	43.2



COM-POWER PA-122**1-18GHz - PREAMPLIFIER**

S/N: 1321

CALIBRATION DUE: FEBRUARY 1, 2012

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
500	31.52	11500	29.55
1000	31.53	12000	30.03
1500	31.24	12500	30.43
2000	30.99	13000	30.02
2500	30.66	13500	30.13
3000	30.44	14000	30.58
3500	29.9	14500	30.58
4000	29.27	15000	29.12
4500	28.63	15500	28.92
5000	28.2	16000	29.7
5500	28.13	16500	29.65
6000	28.4	17000	28.64
6500	28.29	17500	28.26
7000	28.19	18000	27.76
7500	28.72	18500	27.29
8000	29.22	19000	27.11
8500	29.05	19500	26.99
9000	28.71	20000	26.92
9500	28.5	20500	24.87
10000	29.13	21000	25.17
10500	29.92	21500	26.97
11000	29.96	22000	25.73



COM-POWER PA-118**1-18GHz - PREAMPLIFIER**

S/N: 181653

CALIBRATION DUE: OCTOBER 1, 2011

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1.0	25.6	9.5	25.8
1.5	26.8	10.0	25.7
2.0	26.6	10.5	25.1
2.5	26.5	11.0	24.4
3.0	26.3	11.5	24.0
3.5	26.0	12.0	24.0
4.0	26.0	12.5	24.2
4.5	25.5	13.0	24.4
5.0	25.4	13.5	24.4
5.5	28.2	14.0	24.4
6.0	25.3	14.5	24.7
6.5	25.0	15.0	25.3
7.0	24.7	15.5	25.9
7.5	24.5	16.0	26.3
8.0	24.7	16.5	25.9
8.5	25.1	17.0	25.3
9.0	25.5	17.5	25.1
		18.0	26.1





X-AXIS

SMARTLABS, INC.
HANDHELD WIRELESS REMOTE CONTROL
Model: 2440
FCC SUBPART B & C - RADIATED EMISSIONS – 6-23-2011

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

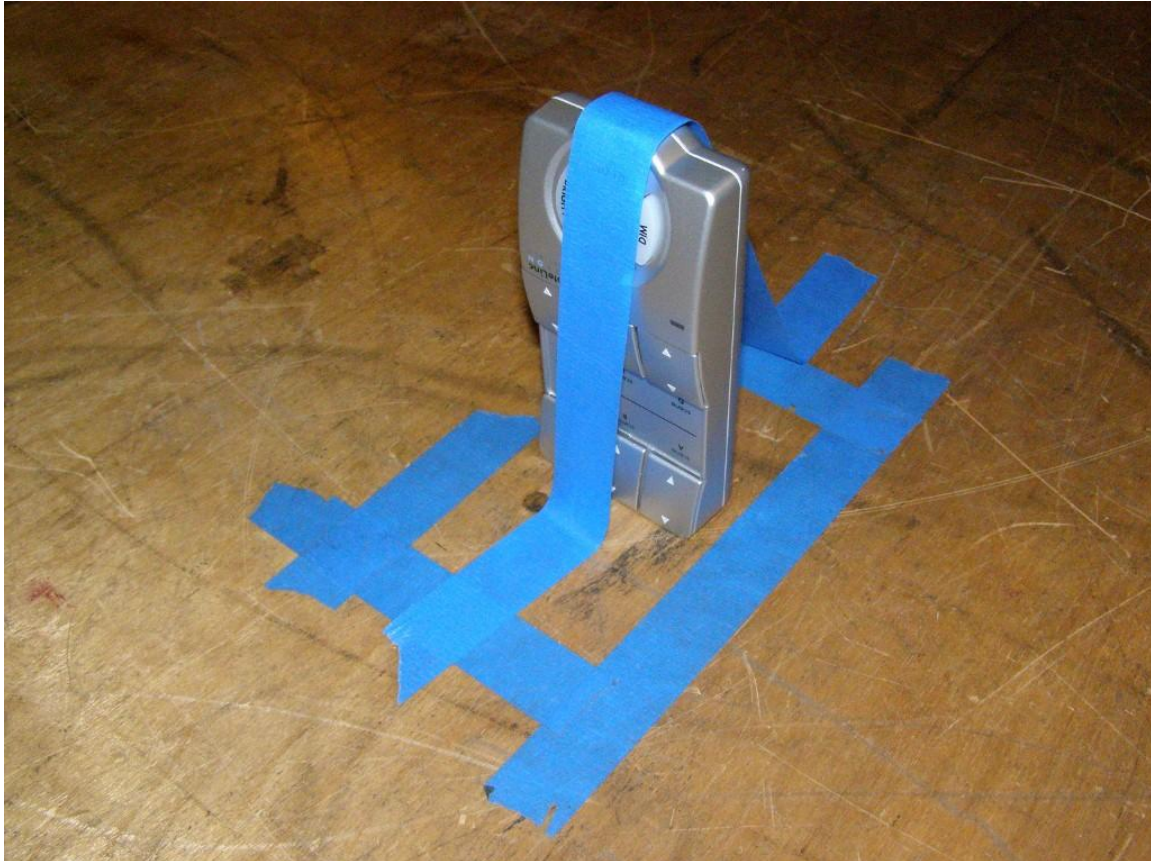


Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400



Y-AXIS

SMARTLABS, INC.
HANDHELD WIRELESS REMOTE CONTROL
Model: 2440
FCC SUBPART B & C - RADIATED EMISSIONS – 6-23-11

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**





Z-AXIS

SMARTLABS, INC.
HANDHELD WIRELESS REMOTE CONTROL
Model: 2440
FCC SUBPART B & C - RADIATED EMISSIONS – 6-23-11

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

APPENDIX E

RADIATED EMISSIONS DATA SHEETS



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

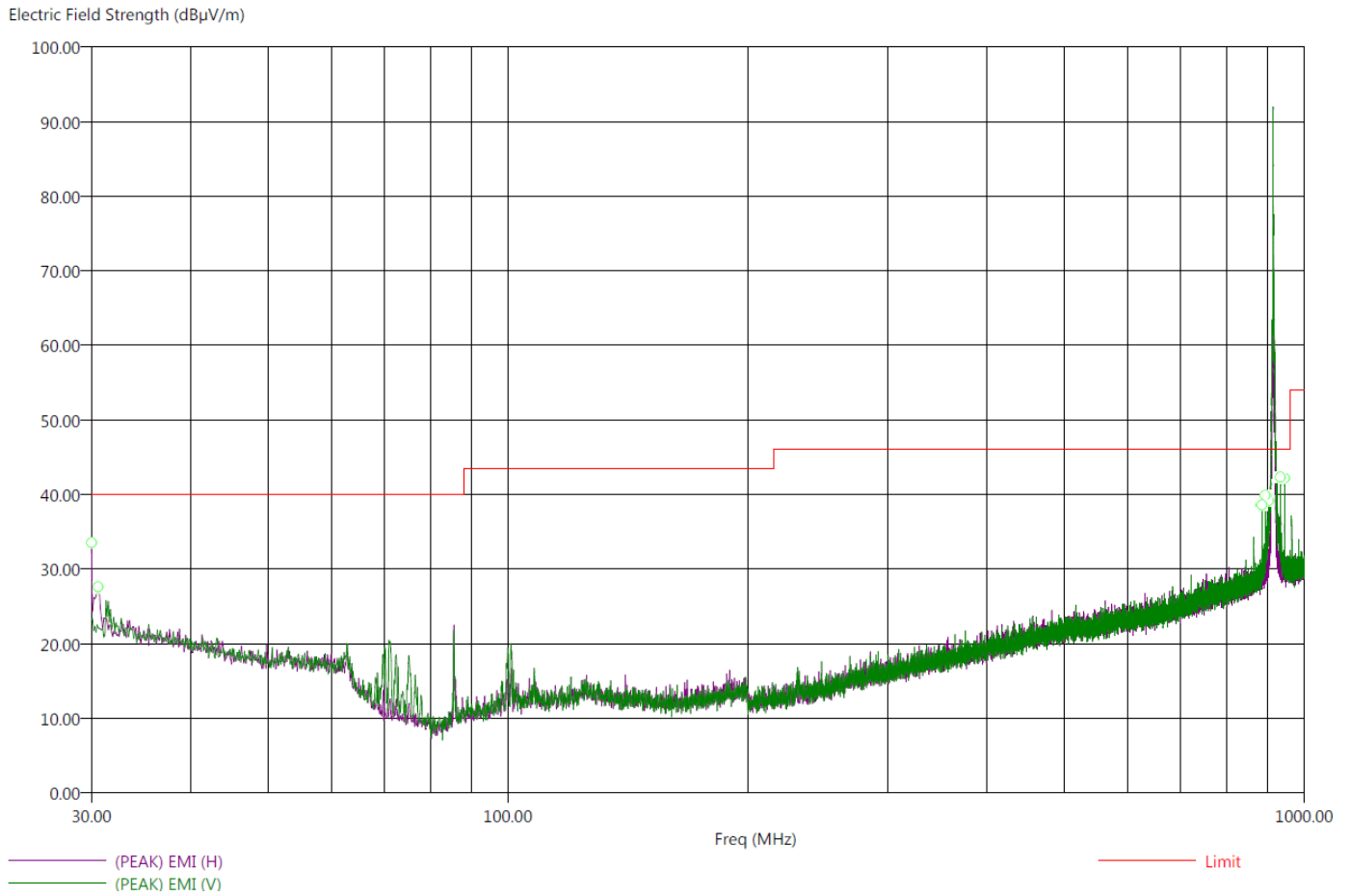
Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC 15.209
File: Radiated Pre-scan 30-1000Mhz.set
Operator: Matt Harrison
EUT Type: RemoteLinc 2440
EUT Condition: Continuously Transmitting
Comments: In Z-Axis
Temp: 64f
Hum: 45%
Battery Powered

6/23/2011 4:35:06 PM
Sequence: Preliminary Scan

Compatible Electronics, Inc. FAC-3 (Lab R)



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC 15.209
File: Radiated Final 30-1000Mhz.set
Operator: Matt Harrison
EUT Type: RemoteLinc 2440
EUT Condition: Continuously Transmitting
Comments: In Z-Axis
Temp: 64f
Hum: 45%
Battery Powered

6/23/2011 4:56:01 PM
Sequence: Final Measurements

Compatible Electronics, Inc. FAC-3 (Lab R)

Freq (MHz)	(QP) Margin (dB)	(QP) EMI (dBµV/m)	(PEAK) EMI (dBµV/m)	Limit (dBµV/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)	Transducer (dB)	Cable(dB)
30.00	-24.86	15.14	19.9	40.00	H	173.75	250.08	17.2	0.52
30.60	-23.24	16.76	21.99	40.00	H	257.50	286.98	17.24	0.53
885.00	-9.5	36.5	38.92	46.00	V	0.25	117.25	20.59	3.56
895.20	-8.25	37.75	40.32	46.00	V	1.25	114.74	20.53	3.60
901.50	-14.18	31.82	36.86	46.00	V	206.25	120.29	20.53	3.62
935.00	-5.94	40.06	42.35	46.00	V	360.00	117.61	21.24	3.66
945.00	-6.15	39.85	41.82	46.00	V	22.75	114.32	21.45	3.67

There were no radiated emissions found below 30 MHz



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

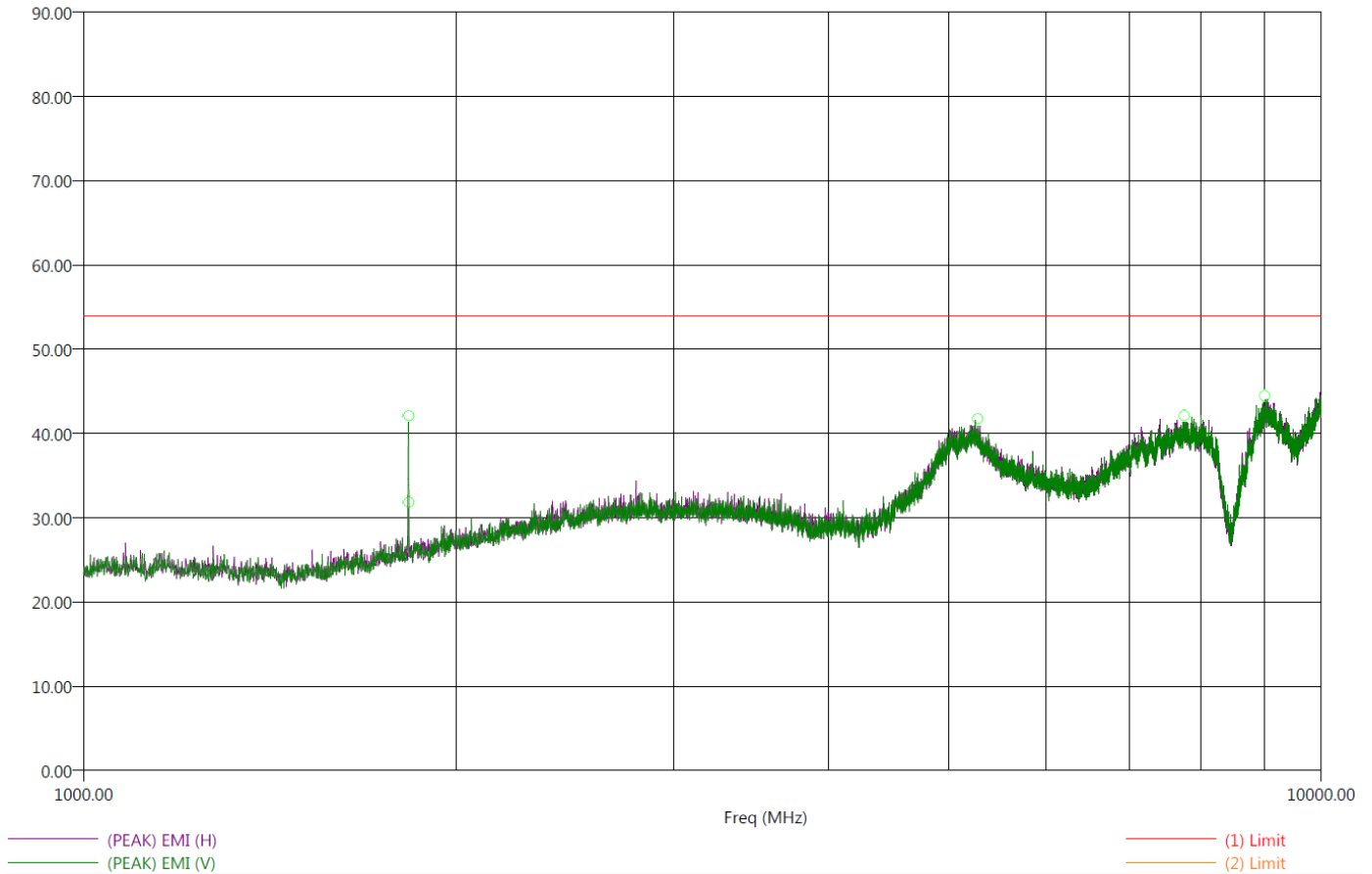
Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Title: FCC 15.209
 File: Radiated Pre-scan 1-18GHz.set
 Operator: Matt Harrison
 EUT Type: RemoteLinc MN: 2440 SN: 14.3D.6B
 EUT Condition: Continuously Transmitting.
 Comments: In Z-Axis
 Temp: 64f
 Hum: 45%
 Battery Powered

6/23/2011 2:36:48 PM
 Sequence: Preliminary Scan

Compatible Electronics, Inc. FAC-3 (Lab R)

Electric Field Strength (dBμV/m)



Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

Agoura Division
 2337 Troutdale Drive
 Agoura, CA 91301
 (818) 597-0600

Silverado Division
 19121 El Toro Road
 Silverado, CA 92676
 (949) 589-0700

Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

Title: FCC 15.209
 File: Radiated Final 1-18GHz.set
 Operator: Matt Harrison
 EUT Type: RemoteLinc MN: 2440 SN: 14.3D.6B
 EUT Condition: Continuously Transmitting.
 Comments: In Z-Axis
 Temp: 64f
 Hum: 45%
 Battery Powered

6/23/2011 3:07:46 PM
 Sequence: Final Measurements

Compatible Electronics, Inc. FAC-3 (Lab R)

Freq (MHz)	(AVG) Margin (dB)	(AVG) EMI (dBµV/m)	(PEAK) EMI (dBµV/m)	AVG Limit (dBµV/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)	Transducer (dB)	Preamp (dB)	Cable (dB)
5281.00	-24.79	29.19	41.35	53.98	H	101.25	295.76	32.94	53.45	18.94
7760.00	-24.36	29.62	42.19	53.98	V	1.75	112.71	38.40	53.59	17.43
9011.00	-22.06	31.92	44.39	53.98	H	40.00	299.34	40.07	54.21	17.70

There were no radiated emissions found above 9,011.00 MHz



PEAK TRANSMIT EMI & HARMONICS

DATA SHEETS



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

***LOWER & UPPER
BAND EDGE***

DATA SHEETS



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Agoura Division
2337 Troutdale Drive
Agoura, CA 91301
(818) 597-0600

Silverado Division
19121 El Toro Road
Silverado, CA 92676
(949) 589-0700

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

FCC 15.249SmartLabs
Handheld Wireless Remote Control
Model: 2440Date: 06/23/2011
Lab: R
Tested By: Matt Harrison

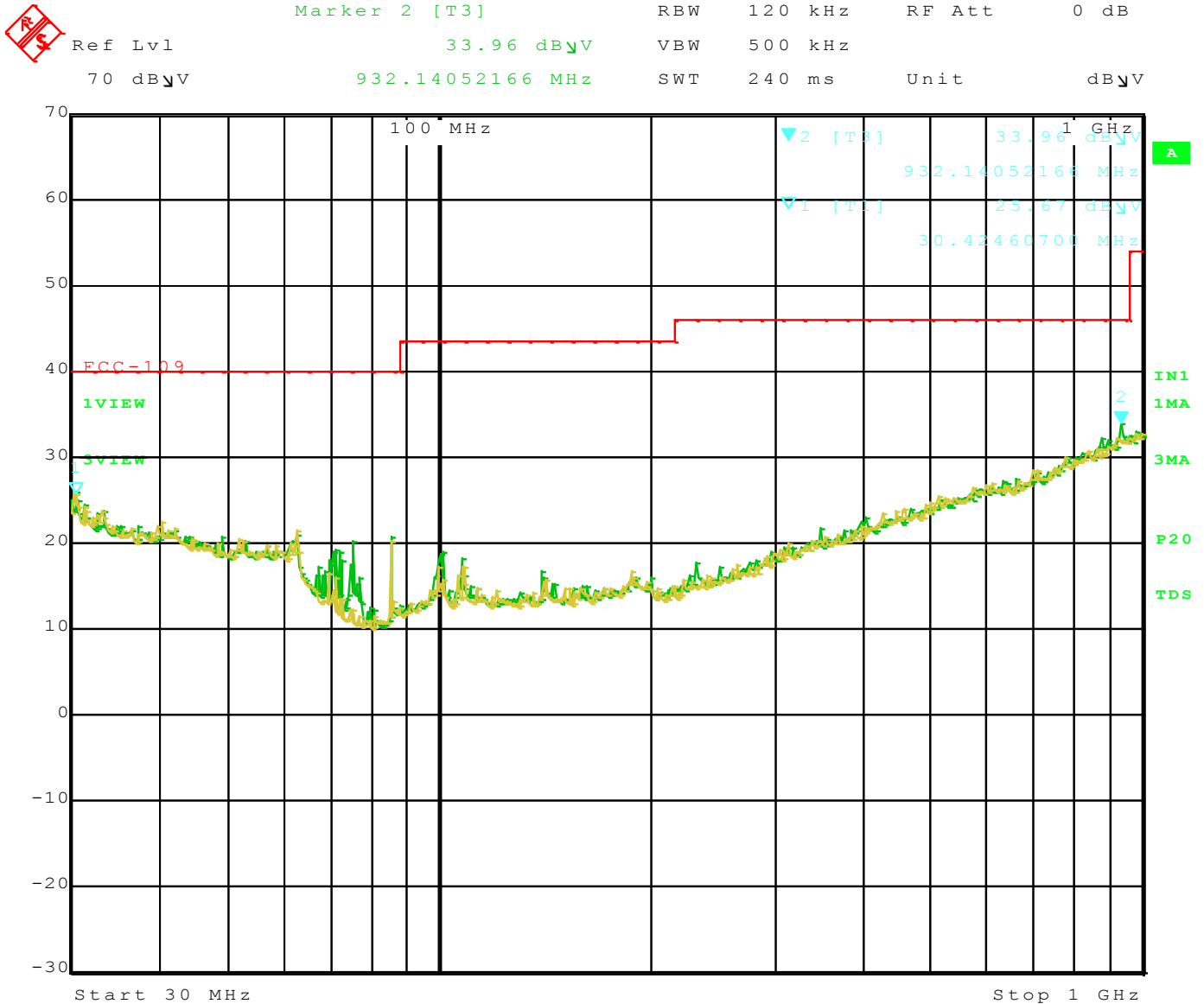
Freq. (MHz)	Level (dBuV)	Pol	Limit (dBuV)	Margin (dBuV)	Detector Type	Comments
895.04	41.43	V	46.00	-4.57	Peak	
935.08	45.07	V	46.00	-0.93	Peak	





***SPURIOUS EMISSION PLOTS
RX ONLY***





Title: RemoteLinc 2440
 Comment A: Z-Axis Spurious Rx Only
 Date: 23.JUN.2011 17:01:41

No emissions found above 1GHz.

