

**FCC PART 15 SUBPART B & C
TEST REPORT***for***REMOTELINC
Model: 2440
FCC ID: SBP2440**

Prepared for

SMARTLABS, INC.
16542 MILLIKAN AVENUE
IRVINE, CALIFORNIA 92606

Prepared by: _____

JOEY MADLANGBAYAN

Approved by: _____

ELI McCLURE

COMPATIBLE ELECTRONICS INC.
19121 EL TORO ROAD
LAKE FOREST (SILVERADO), CALIFORNIA 92676
(949) 589-0700

DATE: JUNE 6, 2007

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	16	2	2	2	12	13	47

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



TABLE OF CONTENTS

Section / Title	PAGE
<i>GENERAL REPORT SUMMARY</i>	4
1. PURPOSE	5
2. ADMINISTRATIVE DATA	6
2.1 Location of Testing	6
2.2 Traceability Statement	6
2.3 Cognizant Personnel	6
2.4 Date Test Sample was Received	6
2.5 Disposition of the Test Sample	6
2.6 Abbreviations and Acronyms	6
3. APPLICABLE DOCUMENTS	7
4. DESCRIPTION OF TEST CONFIGURATION	8
4.1 Description of Test Configuration - EMI	8
4.1.1 Photograph Test Configuration - EMI	8
4.1.2 Cable Construction and Termination	9
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	10
5.1 EUT and Accessory List	10
5.2 EMI Test Equipment	11
5.3 EMI Measurement and Control Software Information	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. TEST PROCEDURES	14
7.1 RF Emissions	14
7.1.1 Conducted Emissions Test	14
7.1.2 Radiated Emissions Test	15
8. TEST PROCEDURE DEVIATIONS	16
9. CONCLUSIONS	16



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 and Amplifier Gain Factors• Radiated and Conducted Emissions Photos
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Plot Map And Layout of Test Site



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: RemoteLinc
Model: 2440
S/N: None

Product Description: This is a 916MHz range remote control transmitter used for the purpose of controlling an AC outlet.

Modifications: The EUT was not modified during the testing.

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

Test Dates: February 28 & April 6, 2007

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

Test Procedure: ANSI C63.4: 2003

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz.	The EUT does not connect to AC mains, therefore this test was not performed.
2	Radiated RF Emissions, 9 kHz - 9150 MHz.	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.



1. PURPOSE

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on RemoteLinc Model: 2440. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4: 2003. 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 Code of Federal Regulations Title 47, Part 15 Subpart B and Subpart C sections 15.205, 15.209 and 15.249.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 19121 El Toro Road, Lake Forest (Silverado), California 92676.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

SmartLabs, Inc.

Mike Pearson VP of Engineering

Compatible Electronics, Inc.

Joey Madlangbayan Test Engineer
Eli McClure Test Technician

2.4 Date Test Sample was Received

The test sample was received on February 28, 2007.

2.5 Disposition of the Test Sample

The test sample remains at Compatible Electronics, Inc. as of June 6, 2007.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
NVLAP	National Voluntary Laboratory Accreditation Program
CFR	Code of Federal Regulations
PCB	Printed Circuit Board
TX	Transmit
RX	Receive



3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
CFR Title 47, FCC Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4: 2003	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 RemoteLinc Model: 2440 (EUT) was setup in a tabletop configuration. The EUT was continuously transmitting a data stream throughout all tests.

The antenna consists of a short wire soldered to the PCB board assembly.

The final radiated data was taken in the above configuration. 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 contain any external 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	REMOTELINC (EUT)	SMARTLABS, INC.	2440	NONE	SBP2440



5.2 EMI Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
Analyzer, Spectrum - Quasi-Peak	Hewlett Packard	85650A	2811A01081	3/29/06	3/29/07
Analyzer, Spectrum - Display Section	Hewlett Packard	85662A	2848A18214	4/11/06	4/11/07
Analyzer, Spectrum - RF Section	Hewlett Packard	8566B	2747A04875	4/11/06	4/11/07
Antenna, Active Loop	Com Power	AL-130	4000	7/28/05	7/28/07
Antenna, Biconical	Com Power	AB-900	15012	2/19/07	2/19/08
Antenna, Log Periodic	Com Power	AL-100	16044	1/29/07	1/29/08
Antenna, Horn	Com Power	AH-118	1319	6/05/06	6/05/08
Computer	Hewlett Packard	Pavilion 4530	US92100357	N/A	N/A
Keyboard	Hewlett Packard	5183-7399	B91617789	N/A	N/A
Mast Antenna	Com Power	AM-400	N/A	N/A	N/A
Monitor	Sony	CPD-100GS	7030391	N/A	N/A
Mouse	Hewlett Packard	M-S34	LZC91158065	N/A	N/A
Preamplifier	Com Power	PA-103	161206	1/19/07	1/19/08
Preamplifier	Com Power	PA-122	25196	1/19/07	1/19/08



5.3 EMI Measurement and Control Software Information

SOFTWARE TITLE	MANUFACTURER	VERSION
Compatible Electronics Data Capture Program	Compatible Electronics	3.1
Compatible Electronics Emissions Program	Compatible Electronics	2.3 (SR21)



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 mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above 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. TEST PROCEDURES

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

7.1 RF Emissions

7.1.1 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. A quasi-peak and/or average measurement was taken only where indicated in the data sheets. A 10 dB attenuation pad was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. 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 was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4: 2003. 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 Compatible Electronics test software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

Test Results:

The EUT does not connect to AC mains, therefore this test was not performed.



7.1.2 Radiated Emissions Test

The spectrum analyzer was used as a measuring meter. A preamplifier was used to increase the sensitivity of the instrument. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps. A quasi-peak or average measurement was taken only for those readings, which are marked accordingly on the data sheets. The following antennas and measurement bandwidths were used as specified in the following table.

FREQUENCY RANGE (MHz)	TRANSDUCER	EFFECTIVE MEASUREMENT BANDWIDTH
0.09 to 30	Active Loop Antenna	9 kHz
30 to 299.999	Biconical Antenna	120 kHz
300 to 1000	Log Periodic Antenna	120 kHz
1000 to 9150	Horn Antenna	1 MHz

The final data was taken with a frequency span of 1 MHz, but the frequency span was reduced during the preliminary investigations as deemed necessary to distinguish between emissions from the EUT and any ambients.

The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4: 2003. 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 (for E field radiated field strength). To ensure accurate results, the gunsight method was used when measuring with the horn antenna and the Active Loop antenna was rotated in its vertical and horizontal axis.

The presence of ambient signals was verified by turning the EUT off. In case an ambient signal was detected, the measurement bandwidth was reduced temporarily and verification was made that an additional adjacent peak did not exist. This ensures that the ambient signal does not hide any emissions from the EUT. The EUT was tested at a 3-meter test distance to obtain final test data. The final qualification data is located in Appendix E.

Test Results:

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



8. TEST PROCEDURE DEVIATIONS

The test procedure was not deviated from during the testing.

9. CONCLUSIONS

The RemoteLinc Model: 2440 meets all of the **Class B** specification limits defined in the Code of Federal Regulations Title 47, Part 15 Subpart B and Subpart C sections 15.209 15.205 and 15.249.

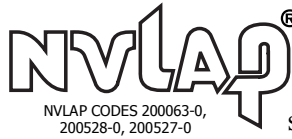


APPENDIX A

***LABORATORY ACCREDITATIONS AND
RECOGNITIONS***



LABORATORY ACCREDITATIONS AND RECOGNITIONS



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.

Silverado/Lake Forest Division: <http://ts.nist.gov/ts/htdocs/210/214/scopes/2005270.htm>

Brea Division: <http://ts.nist.gov/ts/htdocs/210/214/scopes/2005280.htm>

Agoura Division: <http://ts.nist.gov/ts/htdocs/210/214/scopes/2000630.htm>



Compatible Electronics has been accredited by ANSI and appointed by the FCC to serve as a Telecommunications Certification Body (TCB). Compatible Electronics ANSI TCB listing can be found at: http://www.ansi.org/public/ca/ansi_cp.html



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA). Compatible Electronics NIST US/EU CAB listing can be found at: <http://ts.nist.gov/ts/htdocs/210/gsig/emc-cabs-mar02.pdf>



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). Compatible Electronics NIST US/APEC CAB listing can be found at: <http://ts.nist.gov/ts/htdocs/210/gsig/apec/bsmi-cabs-may02.pdf>

World Wide Market Access with



Compatible Electronics has been validated by NEMKO against ISO/IEC 17025 under the NEMKO EMC Laboratory Authorization (ELA) program to all EN standards required by the European Union (EU) EMC Directive 89/336/EEC. Please follow the link to the Compatible Electronics' web site for each of our facilities NEMKO ELA certificate and scope of accreditation. <http://www.celectronics.com/certs.htm>

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



Compatible Electronics VCCI listing can be found at:
http://www.vcci.or.jp/vcci_e/member/tekigo/setsubi_index_id.html

Just type "Compatible Electronics" into the Keyword search box.



Compatible Electronics FCC listing can be found at:
https://gullfoss2.fcc.gov/prod/oet/index_ie.html

Just type "Compatible Electronics" into the Test Firms search box.



Compatible Electronics IC listing can be found at:
http://spectrum.ic.gc.ca/~cert/labs/oats_lab_c_e.html



APPENDIX B

MODIFICATIONS TO THE EUT



MODIFICATIONS TO THE EUT

No modifications were made to the EUT during the test.



APPENDIX C

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



ADDITIONAL MODELS COVERED UNDER THIS REPORT

There were no additional models covered under this report.

USED FOR THE PRIMARY TEST

REMOTELINC
Model: 2440
S/N: NONE



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS



FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

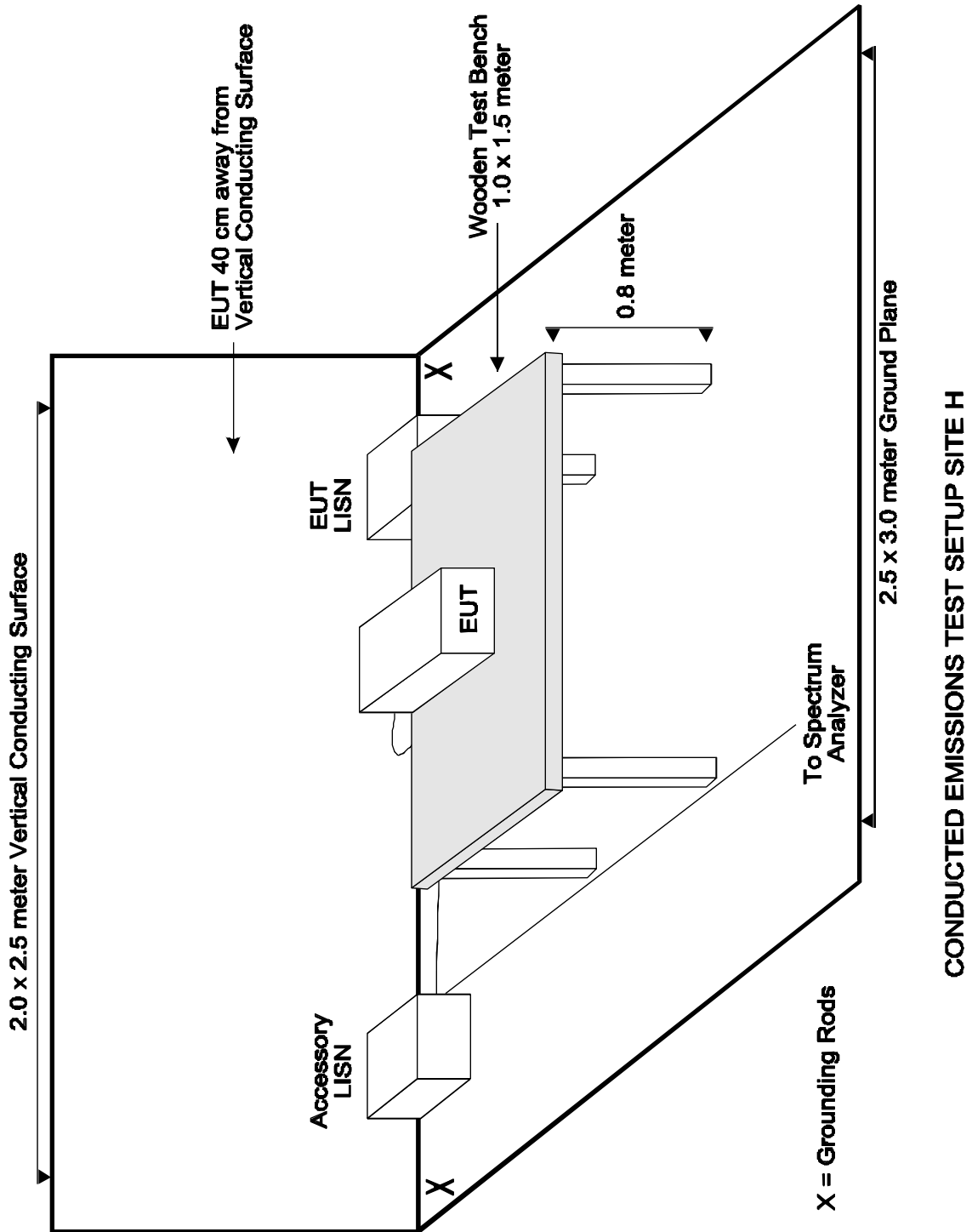
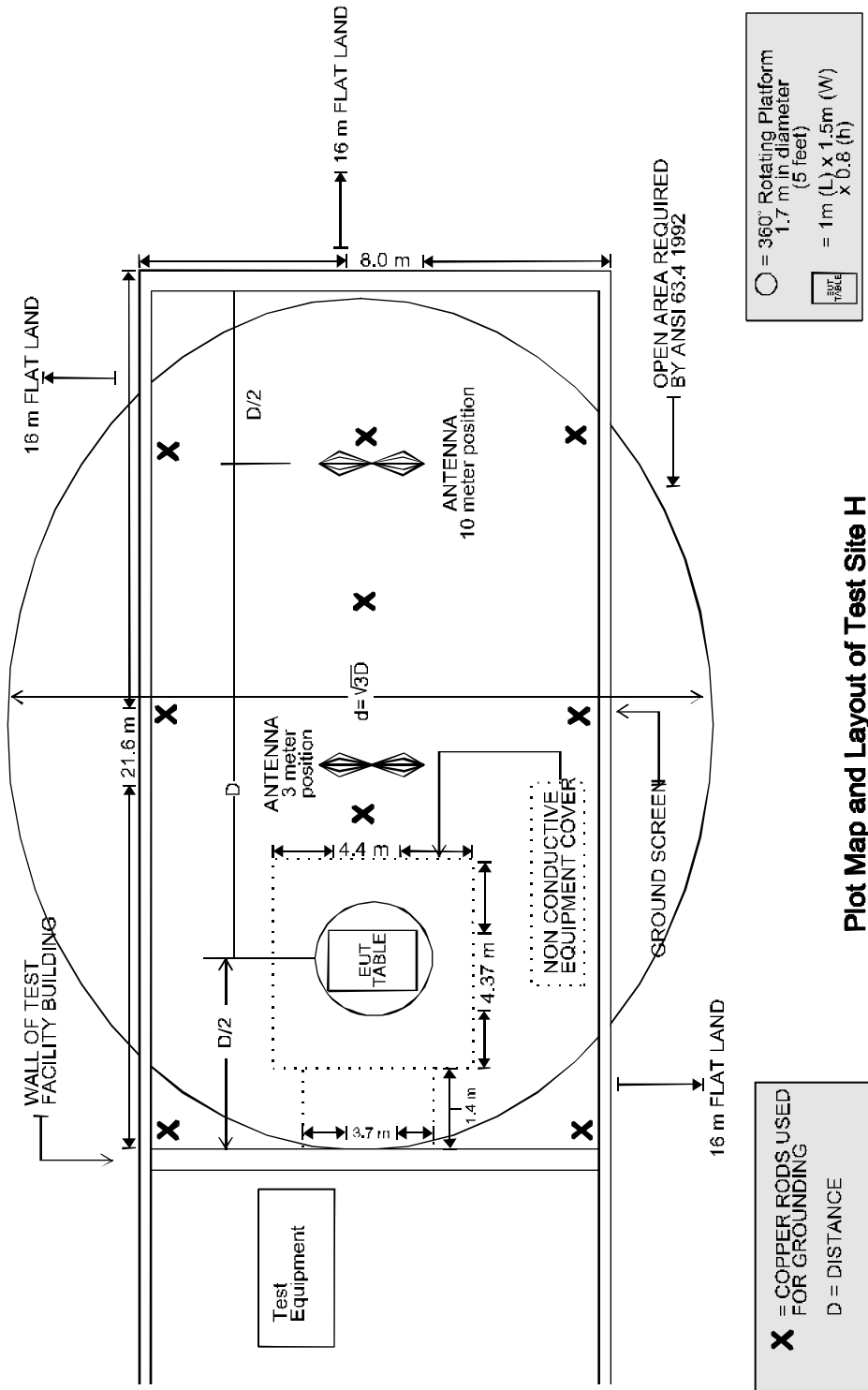


FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE



Plot Map and Layout of Test Site H



COM-POWER AL-130**ACTIVE LOOP ANTENNA (E-FIELD)**

S/N: 17107

CALIBRATION DATE: JULY 28, 2005

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
0.009	12.0	0.8	11.6
0.01	11.6	0.9	11.5
0.02	11.0	1.0	11.7
0.03	12.4	2.0	12.2
0.4	12.1	3.0	11.9
0.05	10.8	4.0	11.8
0.06	11.4	5.0	12.4
0.07	11.2	6.0	12.5
0.08	11.1	7.0	12.1
0.09	11.3	8.0	12.3
0.1	11.3	9.0	12.6
0.2	8.7	10.0	12.2
0.3	11.4	15.0	9.5
0.4	11.2	20.0	8.9
0.5	11.2	25.0	10.6
0.6	11.7	30.0	3.4
0.7	11.6		



COM-POWER AB-900**LAB H - BICONICAL ANTENNA**

S/N: 15012

CALIBRATION DATE: FEBRUARY 19, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30.0	11.30	120.0	12.80
35.0	10.90	125.0	13.10
40.0	11.30	140.0	11.60
45.0	10.60	150.0	11.60
50.0	12.00	160.0	12.60
60.0	10.50	175.0	14.70
70.0	8.00	180.0	15.40
80.0	6.20	200.0	16.20
90.0	7.80	250.0	15.30
100.0	10.30	300.0	19.30



COM-POWER AL-100**LAB H - LOG PERIODIC ANTENNA**

S/N: 16044

CALIBRATION DATE: JANUARY 29, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
300	13.5	350	14.3
400	15.0	450	15.1
500	16.0	550	16.3
600	17.7	650	18.2
700	21.6	750	20.8
800	22.8	850	24.9
900	24.1	950	24.6
1000	23.2	-	-



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

S/N: 1319

CALIBRATION DATE: JUNE 05, 2006

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	22.8	10000	35.9
1500	24.2	10500	37.7
2000	26.8	11000	37.0
2500	26.1	11500	39.9
3000	28.1	12000	38.1
3500	27.7	12500	38.4
4000	28.2	13000	37.5
4500	29.4	13500	39.0
5000	30.4	14000	40.3
5500	31.2	14500	40.0
6000	30.7	15000	39.6
6500	32.4	15500	38.1
7000	33.8	16000	37.3
7500	35.1	16500	38.4
8000	35.4	17000	39.4
8500	35.1	17500	41.4
9000	37.1	18000	43.1
9500	35.6		



COM-POWER PA-103**LAB H - PREAMPLIFIER**

S/N: 161206

CALIBRATION DATE: JANUARY 19, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	32.0	300	31.5
40	31.8	350	31.6
50	31.9	400	31.7
60	31.8	450	31.4
70	31.8	500	31.5
80	31.7	550	31.1
90	31.7	600	31.4
100	31.7	650	31.4
125	31.8	700	31.6
150	31.8	750	31.5
175	31.8	800	31.4
200	31.8	850	31.5
225	31.7	900	31.2
250	31.7	950	31.3
275	31.7	1000	31.3



COM-POWER PA-122**HI-FREQUENCY PREAMPLIFIER**

S/N: 25196

CALIBRATION DATE: JAN 19, 2007

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	31.6	6000	28.7
1100	31.6	6500	27.6
1200	31.4	7000	28.1
1300	31.3	7500	29.1
1400	31.1	8000	29.3
1500	30.9	8500	27.9
1600	30.8	9000	27.3
1700	30.7	9500	27.2
1800	30.5	10000	26.3
1900	30.5	11000	25.9
2000	30.1	12000	27.5
2500	30.1	13000	28.6
3000	29.3	14000	27.6
3500	28.3	15000	28.8
4000	28.1	16000	27.4
4500	28.6	17000	24.6
5000	26.8	18000	22.8
5500	25.3		





X-AXIS

SMARTLABS, INC.

REMOTELINC

Model: 2440

FCC SUBPART B & C - RADIATED EMISSIONS - 04-06-07

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





Y-AXIS

SMARTLABS, INC.

REMOTELINC

Model: 2440

FCC SUBPART B & C - RADIATED EMISSIONS - 04-06-07

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





Z-AXIS

SMARTLABS, INC.

REMOTELINC

Model: 2440

FCC SUBPART B & C - RADIATED EMISSIONS - 04-06-07

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



APPENDIX E

DATA SHEETS



Test Location : Compatible Electronics	Page : 1/2
Customer : Mike Pearson	Date : 04/06/2007
Manufacturer : SmartLabs	Time : 03:28:42 PM
Eut name : RemoteLinc	Lab : H
Model : 2440	Test Distance : 3.00 Meters
Serial # : spurious emissions X,Y,Z	
Specification : FCC Class B	
Distance correction factor (20 * log(test/spec)) : 0.00	
Test Mode : MHz	
test range: 9kHz-9150MHz tested by: J. Madlangbayan	
temp: 16degC RH: 50%	

Pol	Freq MHz	Reading dBuV	Cable loss dB	Antenna factor dB	Amplifier gain dB	Corr'd rdg = R dBuV/m	Limit = L dBuV/m	Delta R-L dB
V	934.905	38.30	4.64	24.45	31.27	36.12	46.00	-9.88
H	934.915	44.60	4.64	24.45	31.27	42.42	46.00	-3.58
H	944.904	38.00	4.68	24.55	31.29	35.94	46.00	-10.06
H	954.911	40.50	4.71	24.46	31.30	38.37	46.00	-7.63
H	964.927	37.70	4.73	24.17	31.30	35.30	54.00	-18.70
H	894.963	43.50	4.47	24.18	31.23	40.92	46.00	-5.08
H	814.970	40.00	4.13	23.44	31.43	36.14	46.00	-9.86
H	794.924	41.70	4.09	22.60	31.41	36.98	46.00	-9.02
X-axis								
V	934.929	43.40	4.64	24.45	31.27	41.22	46.00	-4.78
V	954.929	39.70	4.71	24.46	31.30	37.57	46.00	-8.43
V	894.962	42.70	4.47	24.18	31.23	40.12	46.00	-5.88
V	944.953	39.30	4.68	24.55	31.29	37.24	46.00	-8.76
H	934.917	43.30	4.64	24.45	31.27	41.12	46.00	-4.88
H	944.922	38.30	4.68	24.55	31.29	36.24	46.00	-9.76
H	954.933	39.30	4.71	24.46	31.30	37.17	46.00	-8.83
Y-axis								
H	934.963	41.80	4.64	24.45	31.27	39.62	46.00	-6.38
H	954.939	37.60	4.71	24.46	31.30	35.47	46.00	-10.53
H	894.916	38.30	4.47	24.18	31.23	35.72	46.00	-10.28
H	774.972	36.50	4.05	21.82	31.45	30.92	46.00	-15.08
H	794.954	36.90	4.09	22.60	31.41	32.18	46.00	-13.82
H	804.942	35.70	4.11	23.01	31.41	31.41	46.00	-14.59
H	824.906	37.00	4.15	23.86	31.45	33.56	46.00	-12.44
H	844.958	35.20	4.19	24.69	31.49	32.59	46.00	-13.41
H	853.935	39.00	4.22	24.84	31.48	36.58	46.00	-9.42
H	864.954	37.40	4.29	24.66	31.41	34.94	46.00	-11.06
V	934.973	45.00	4.64	24.45	31.27	42.82	46.00	-3.18
V	954.966	39.90	4.71	24.46	31.30	37.77	46.00	-8.23
V	894.921	41.30	4.47	24.18	31.23	38.72	46.00	-7.28
V	774.940	38.30	4.05	21.81	31.45	32.72	46.00	-13.28
V	794.946	37.30	4.09	22.60	31.41	32.58	46.00	-13.42
V	804.912	38.00	4.11	23.01	31.41	33.71	46.00	-12.29
V	824.924	38.90	4.15	23.86	31.45	35.46	46.00	-10.54
V	844.954	37.70	4.19	24.69	31.49	35.09	46.00	-10.91

Test Location : Compatible Electronics	Page : 2/2
Customer : Mike Pearson	Date : 04/06/2007
Manufacturer : SmartLabs	Time : 03:28:42 PM
Eut name : RemoteLinc	Lab : H
Model : 2440	Test Distance : 3.00 Meters
Serial # : spurious emissions X,Y,Z	
Specification : FCC Class B	
Distance correction factor (20 * log(test/spec))	: 0.00
Test Mode : MHz	
test range: 9kHz-9150MHz tested by: J. Madlangbayan	
temp: 16degC RH: 50%	

Pol	Freq	Reading	Cable	Antenna	Amplifier	Corr'd	Limit	Delta
	MHz	dBuV	loss	factor	gain	rdg = R	= L	R-L
			dB	dB	dB	dBuV/m	dBuV/m	dB
V	853.691	37.70	4.22	24.84	31.48	35.28	46.00	-10.72
V	864.959	40.50	4.29	24.66	31.41	38.04	46.00	-7.96
Z-axis								



RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi-Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
915.0000	88.9	QP	H	1.0	270	X	MED.	24.3	4.6	31.2		0.0	86.5	-7.5	94.0	
915.0000	87.8	QP	H	2.0	0	Y	MED.	24.3	4.6	31.2		0.0	85.4	-8.6	94.0	
915.0000	79.1	QP	H	1.5	270	Z	MED.	24.3	4.6	31.2		0.0	76.7	-17.3	94.0	
915.0000	75.6	QP	V	1.5	90	X	MED.	24.3	4.6	31.2		0.0	73.2	-20.8	94.0	
915.0000	85.6	QP	V	1.0	90	Y	MED.	24.3	4.6	31.2		0.0	83.2	-10.8	94.0	
915.0000	88.6	QP	V	1.0	0	Z	MED.	24.3	4.6	31.2		0.0	86.2	-7.8	94.0	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
1830.0000	45.9	A	H	1.5	90	X	MED.	25.9	1.6	34.4		0.0	39.0	-15.0	54.0	
1830.0000	43.4	A	H	1.5	180	Y	MED.	25.9	1.6	34.4		0.0	36.5	-17.5	54.0	
1830.0000	45.4	A	H	1.5	90	Z	MED.	25.9	1.6	34.4		0.0	38.5	-15.5	54.0	
1830.0000	44.8	A	V	1.5	90	X	MED.	25.9	1.6	34.4		0.0	37.9	-16.1	54.0	
1830.0000	49.0	A	V	1.5	90	Y	MED.	25.9	1.6	34.4		0.0	42.1	-11.9	54.0	
1830.0000	49.1	A	V	1.5	180	Z	MED.	25.9	1.6	34.4		0.0	42.2	-11.8	54.0	

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
2745.0000		A	H			X	MED.	25.9	1.6	34.4					54.0	no emission found
2745.0000	43.2	A	H	1.5	0	Y	MED.	25.9	1.6	34.4		0.0	36.3	-17.7	54.0	
2745.0000		A	H			Z	MED.	25.9	1.6	34.4					54.0	no emission found
2745.0000	42.2	A	V	3.0	180	X	MED.	25.9	1.6	34.4		0.0	35.3	-18.7	54.0	
2745.0000	40.9	A	V	1.5	270	Y	MED.	25.9	1.6	34.4		0.0	34.0	-20.0	54.0	
2745.0000		A	V			Z	MED.	25.9	1.6	34.4					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
3660.0000		A	H			X	MED.	27.9	2.5	33.4					54.0	no emission found
3660.0000		A	H			Y	MED.	27.9	2.5	33.4					54.0	no emission found
3660.0000		A	H			Z	MED.	27.9	2.5	33.4					54.0	no emission found
3660.0000		A	V			X	MED.	27.9	2.5	33.4					54.0	no emission found
3660.0000		A	V			Y	MED.	27.9	2.5	33.4					54.0	no emission found
3660.0000		A	V			Z	MED.	27.9	2.5	33.4					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
4575.0000		A	H			X	MED.	29.6	2.5	33.7					54.0	no emission found
4575.0000		A	H			Y	MED.	29.6	2.5	33.7					54.0	no emission found
4575.0000		A	H			Z	MED.	29.6	2.5	33.7					54.0	no emission found
4575.0000		A	V			X	MED.	29.6	2.5	33.7					54.0	no emission found
4575.0000		A	V			Y	MED.	29.6	2.5	33.7					54.0	no emission found
4575.0000		A	V			Z	MED.	29.6	2.5	33.7					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
5490.0000		A	H			X	MED.	31.2	2.8	33.8					54.0	no emission found
5490.0000		A	H			Y	MED.	31.2	2.8	33.8					54.0	no emission found
5490.0000		A	H			Z	MED.	31.2	2.8	33.8					54.0	no emission found
5490.0000		A	V			X	MED.	31.2	2.8	33.8					54.0	no emission found
5490.0000		A	V			Y	MED.	31.2	2.8	33.8					54.0	no emission found
5490.0000		A	V			Z	MED.	31.2	2.8	33.8					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
6405.0000		A	H			X	MED.	32.1	3.1	35.2					54.0	no emission found
6405.0000		A	H			Y	MED.	32.1	3.1	35.2					54.0	no emission found
6405.0000		A	H			Z	MED.	32.1	3.1	35.2					54.0	no emission found
6405.0000		A	V			X	MED.	32.1	3.1	35.2					54.0	no emission found
6405.0000		A	V			Y	MED.	32.1	3.1	35.2					54.0	no emission found
6405.0000		A	V			Z	MED.	32.1	3.1	35.2					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
7320.0000		A	H			X	MED.	34.6	3.5	35.2					54.0	no emission found
7320.0000		A	H			Y	MED.	34.6	3.5	35.2					54.0	no emission found
7320.0000		A	H			Z	MED.	34.6	3.5	35.2					54.0	no emission found
7320.0000		A	V			X	MED.	34.6	3.5	35.2					54.0	no emission found
7320.0000		A	V			Y	MED.	34.6	3.5	35.2					54.0	no emission found
7320.0000		A	V			Z	MED.	34.6	3.5	35.2					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
8235.0000		A	H			X	MED.	35.3	3.5	33.9					54.0	no emission found
8235.0000		A	H			Y	MED.	35.3	3.5	33.9					54.0	no emission found
8235.0000		A	H			Z	MED.	35.3	3.5	33.9					54.0	no emission found
8235.0000		A	V			X	MED.	35.3	3.5	33.9					54.0	no emission found
8235.0000		A	V			Y	MED.	35.3	3.5	33.9					54.0	no emission found
8235.0000		A	V			Z	MED.	35.3	3.5	33.9					54.0	no emission found

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING

RADIATED EMISSIONS (FCC SECTION 15.249 AND 15.205)

COMPANY	Smart Labs	DATE	2/28/07
EUT	Remote Linc	DUTY CYCLE	N/A %
MODEL	2440	PEAK TO AVG	N/A dB
S/N	NONE	TEST DIST.	3 Meters
TEST ENGINEER	Joey Madlangbayan	LAB	H

Frequency MHz	Peak Reading (dBuV)	Average (A) or Quasi- Peak (QP)	Antenna Polar. (V or H)	Antenna Height (meters)	EUT Azimuth (degrees)	EUT Axis (X,Y,Z)	EUT Tx Channel	Antenna Factor (dB)	Cable Loss (dB)	Amplifier Gain (dB)	Distance Factor (dB)	Mixer Factor (dB)	*Corrected Reading (dBuV/m)	Delta ** (dB)	Spec Limit (dBuV/m)	Comments
9150.0000		A	H			X	MED.	36.7	4.3	33.5					54.0	no emission found
9150.0000		A	H			Y	MED.	36.7	4.3	33.5					54.0	no emission found
9150.0000		A	H			Z	MED.	36.7	4.3	33.5					54.0	no emission found
9150.0000		A	V			X	MED.	36.7	4.3	33.5					54.0	no emission found
9150.0000		A	V			Y	MED.	36.7	4.3	33.5					54.0	no emission found
9150.0000		A	V			Z	MED.	36.7	4.3	33.5					54.0	no emission found
		A	H													
		A	H													
		A	H													
		A	V													
		A	V													
		A	V													

* CORRECTED READING = METER READING + ANTENNA FACTOR + CABLE LOSS - AMPLIFIER GAIN
 ** DELTA = SPEC LIMIT - CORRECTED READING