

FCC PART 15 SUBPART B and C TEST REPORT

for

ALL CLEAR RADIO BOX

MODEL: 892439

Prepared for

ALL CLEAR SYSTEM, LLC 235 EAST CENTER STREET SUITE 200 KINGSPORT, TENNESSEE 37660

Prepared by:	
	KYLE FUJIMOTO
Approved by:_	
	JAMES ROSS

COMPATIBLE ELECTRONICS INC. 114 OLINDA DRIVE BREA, CALIFORNIA 92823 (714) 579-0500

DATE: MARCH 2, 2012

	REPORT	APPENDICES			TOTAL		
	BODY	\boldsymbol{A}	В	C	D	E	
PAGES	19	2	2	2	20	63	108

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

TABLE OF CONTENTS

Section	n / Title	PAGE
GENEI	RAL REPORT SUMMARY	4
SUMM	ARY OF TEST RESULTS	4
1.	PURPOSE	5
2.1 2.2 2.3 2.4 2.5 2.6	ADMINISTRATIVE DATA Location of Testing Traceability Statement Cognizant Personnel Date Test Sample was Received Disposition of the Test Sample Abbreviations and Acronyms	6 6 6 6 6 6
3.	APPLICABLE DOCUMENTS	7
4.1 4.1.1 5. 5.1 5.2	DESCRIPTION OF TEST CONFIGURATION Description of Test Configuration – EMI Cable Construction and Termination LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT EUT and Accessory List EMI Test Equipment	8 8 9 10 10
6.1 6.2 6.3	TEST SITE DESCRIPTION Test Facility Description EUT Mounting, Bonding and Grounding Facility Environmental Characteristics	12 12 12 12
7. 7.1 7.1.1 7.1.2 7.1.3 7.2	Radiated Emissions (Spurious and Harmonics) Test	13 13 13 14 16 17



LIST OF APPENDICES

APPENDIX	TITLE			
A	Laboratory Accreditations and Recognitions			
В	Modifications to the EUT			
С	Additional Models Covered Under This Report			
D	Diagram, Charts, and Photos			
	Test Setup Diagram			
	Antenna and Amplifier Factors			
	Radiated and Conducted Emissions Photos			
Е	Data Sheets			

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Plot Map And Layout of Radiated Test Site – 3 Meters

GENERAL REPORT SUMMARY

Compatible Electronics Inc. generates this electromagnetic emission test report, 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 without the written permission of Compatible Electronics, unless done so in full.

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

Device Tested: All Clear Radio Box

Model: 892439 S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was not modified in order to meet the specifications.

Customer: All Clear System

235 East Center Street

Suite 200

Kingsport, Tennessee 37660

Test Date(s): February 1, 2, 3, 6, and 28, 2012; and March 2, 2012

Test Specifications: Emissions requirements

CFR Title 47, Part 15, Subpart B

Test Procedure: ANSI C63.4

Test Deviations: The test procedure was not deviated from during the testing.

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions 150 kHz to 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and Subpart C section 15.207.
2	Radiated RF Emissions 10 kHz – 4180 MHz (Transmitter Portion)	Complies with the limits of CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.231.
3	Radiated RF Emissions 10 kHz – 4180 MHz (Receiver and Digital Portion)	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B.

^{*}U = Expanded Uncertainty with a coverage factor of k=2



PURPOSE

This document is a qualification test report based on the emissions tests performed on the All Clear Radio Box, Model: 892439. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. 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 CFR Title 47, Part 15, Subpart B for the digital and receiver portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.231 for the transmitter portion.

Model: 892439

FCC Part 15 Subpart B and FCC Section 15.231 Test Report
All Clear Radio Box

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California.

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

All Clear System, LLC

Gary McConnell President / COO

Compatible Electronics Inc.

Alex Benitez Test Engineer Kyle Fujimoto Test Engineer

2.4 Date Test Sample was Received

The test sample was received prior to the date of testing.

2.5 Disposition of the Test Sample

The test sample has not been returned to All Clear System, LLC as of the date of this report.

2.6 Abbreviations and Acronyms

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

FCC Federal Communications Commission

RF Radio Frequency

EMI Electromagnetic Interference EUT Equipment Under Test

P/N Part Number S/N Serial Number

ITE Information Technology Equipment
LISN Line Impedance Stabilization Network

NVLAP National Voluntary Laboratory Accreditation Program

CFR Code of Federal Regulations

N/A Not Applicable

LLC Limited Liability Company

Inc. Incorporated IR Infrared

COO Chief Operating Officer



3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions test report.

SPEC	TITLE
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4: 2009	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz



DESCRIPTION OF TEST CONFIGURATION

4.1 **Description of Test Configuration – Emissions**

The All Clear Radio Box, Model: 892439 (EUT) was connected to an antenna and laptop via its antenna and USB ports, respectively.

The laptop was also connected to an AC Adapter, mouse and external disk drive via its power and (2) USB ports, respectively.

The EUT was continuously transmitting and receiving. The EUT also received it power from the USB port of the laptop.

The following antennas were tested with the EUT

- 1. Raydome antenna with short cable
- 2. Raydome antenna with long cable.
- 3. Monopole Anenna with 12 foot cable

It was determined that the emissions were at their highest level when the EUT was operating in the above configurations. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.



4.1.1 **Cable Construction and Termination**

- Cable 1 This is a 2-meter unshielded cable connecting the AC Adapter to the laptop. The cable has a one pin power connector at the laptop end and is hard wired into the AC Adapter. The cable was bundled to a length of 1-meter.
- Cable 2 This is a 2-meter shielded cable connecting the laptop to the mouse. The cable has a USB type 'A' connector at the laptop end and is hard wired into the mouse. The shield of the cable was grounded to the chassis via the connector.
- Cable 3 This is a 3-meter braid shielded cable connecting the EUT to the laptop. The cable has a USB type 'A' connector at the laptop end and a USB type 'B' connector at the EUT end. The cable was bundled to a length of 1-meter. The shield of the cable was grounded to the chassis via the connectors.
- Cable 4 (Raydome Antenna with Long Cable) This is a 100-foot braid shielded cable connecting the Raydome antenna to the EUT. The cable has a reverse polarity SMA connector at the EUT end and is hard wired into the antenna. The cable was coiled so that it was 40-centimeters above the ground plane. The shield of the cable was grounded to the chassis via the connectors.
- Cable 5 (Raydome Antenna with Short Cable) This is a 20-centimeter braid shielded cable connecting the Raydome antenna to the EUT. The cable has a reverse polarity SMA connector at the EUT end and is hard wired into the antenna. The shield of the cable was grounded to the chassis via the connectors.
- Cable 6 (Monopole Antenna) This is a 12-foot braid shielded cable connecting the monopole antenna to the EUT. The cable has a reverse polarity SMA connector at the EUT end and is hard wired into the antenna. The shield of the cable was grounded to the chassis via the connectors.



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
ALL CLEAR RADIO BOX (EUT)	ALL CLEAR SYSTEM, LLC	892439	N/A	ZZK892439
DISK DRIVE – EXTERNAL	N/A	FD-05PUB	U356244	N/A
LAPTOP	HEWLETT PACKARD	G60-441US	2CE927RF3Q	N/A
AC ADAPTER FOR G60-441US LAPTOP	HEWLETT PACKARD	N/A	65AW9682BE6	N/A
MOUSE	LOGITECH	M-UAE96	N/A	N/A
LAPTOP (for MONOPOLE ANTENNA TESTING)	HEWLETT PACKARD	2760P	2CE14409SS	N/A
POWER SUPPLY FOR 2760P LAPTOP	N/A	N/A	WBGST0A1R1IAUZ	N/A



5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU- FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CALIBRATION DUE DATE		
	GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS						
Computer	Hewlett Packard	4530	US91912319	N/A	N/A		
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 27, 2011	May 27, 2012		
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 27, 2011	May 27, 2012		
Quasi-Peak Adapter	Hewlett Packard	85650A	2430A00424	May 27, 2011	May 27, 2012		
EMI Receiver	Rohde & Schwarz	ESIB40	100194	November 19, 2010	November 19, 2012		
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A		
	RF RA	DIATED EMIS	SIONS TEST EQ	QUIPMENT			
Biconical Antenna	Com-Power	AB-900	15250	June 8, 2011	June 8, 2012		
Log Antenna	Com-Power	AL-100	16252	June 8, 2011	June 8, 2012		
Preamplifier	Com-Power	PA-102	1017	December 28, 2011	December 28, 2012		
Loop Antenna	Com-Power	AL-130	17089	January 21, 2011	January 21, 2013		
Horn Antenna	Com-Power	AH-118	071175	March 18, 2010	March 18, 2012		
Microwave Preamplifier	Com-Power	PA-118	181656	December 28, 2011	December 28, 2012		
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A		
	RF CONDUCTED EMISSIONS TEST EQUIPMENT						
Emissions Program	Compatible Electronics	2.3 (SR19)	N/A	N/A	N/A		
LISN	Com Power	LI-215	12078	June 20, 2011	June 20, 2012		
LISN	Com Power	LI-215	12082	June 20, 2011	June 20, 2012		
Transient Limiter	Com Power	252A910	1	November 7, 2011	November 7, 2012		

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1.2 of this report for emissions 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 measurement receiver was used as a measuring meter. The data was collected with the measurement receiver in the peak detect mode with the "Max Hold" feature activated. The quasipeak was used only where indicated in the data sheets. A transient limiter was used for the protection of the measurement receiver's input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the measurement 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 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. 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 conducted emissions 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:

Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and Subpart C section 15.207.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver and spectrum analyzer were used as a measuring meter. Amplifiers were used to increase the sensitivity of the instrument. The Com Power Preamplifier Model: PA-102 was used for frequencies from 30 MHz to 1 GHz and the Com Power Microwave Preamplifier Model: PA-118 was used for frequencies above 1 GHz. The EMI Receiver and spectrum analyzer were used in the peak detect mode with the "Max Hold" feature activated. In this mode, the EMI Receiver and spectrum analyzer records the highest measured reading over all the sweeps.

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

The readings were averaged by a "duty cycle correction factor," derived from 20 log (total on time / 100 mS). The pulse train only transmits a maximum of one time in a 100 mS period.

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 300 MHz	120 kHz	Biconical Antenna
300 MHz to 1 GHz	120 kHz	Log Periodic Antenna
1 GHz to 4.18 GHz	1 MHz	Horn Antenna

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. 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 by the Radiated Emission Manual Test software. 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). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.



Radiated Emissions (Spurious and Harmonics) Test (continued)

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 the final test data.

Test Results:

The EUT complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.231.

Model: 892439

FCC Part 15 Subpart B and FCC Section 15.231 Test Report All Clear Radio Box

7.1.3 RF Emissions Test Results

Table 1.0 CONDUCTED EMISSION RESULTS – 115 VAC / 60 Hz All Clear Radio Box, Model: 892439

Frequency MHz	Emission Level* dBuV	Average Specification Limit dBuV	Delta (Spec limit-Emission) dB
0.641(WL)(Av) Raydome – Tx Mode	43.18	46.00	-2.18
2.384 (WL)(Pk)	41.58	46.00	-4.42
0.151 (BL)(Pk)	51.52	55.92	-4.43
0.151 (WL)(Av)	51.36	55.95	-4.59
0.641 (WL)(Av) Monopole – Tx Mode	41.33	46.00	-4.67
0.152 (BL) (Pk)	51.22	55.91	-4.69

Table 2.0 RADIATED EMISSION RESULTS – 115 VAC / 60 Hz All Clear Radio Box, Model: 892439

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
408.833 (V) (Qp)	44.44	46.00	-1.56
408.852 (V) (Qp)	44.41	46.00	-1.59
418 (H) (X-Axis) (Av) Raydome Short Cable	78.18	80.28	-2.1
418 (V) (Y-Axis) (Av) Raydome Short Cable	77.88	80.28	-2.4
418 (V) (Y-Axis) (Av) Raydome Short Cable	77.38	80.28	-2.9
432.882 (V) (Qp)	43.04	46.00	-2.96

Notes:

* The complete emissions data is given in Appendix E of this report.

Pk Peak Qp Quasi-Peak Av Average BL Black Lead

WL White Lead

Model: 892439

The -20 dB bandwidth was checked to see that it was within 0.25% of the fundamental frequency for the EUT. A plot of the -20 dB bandwidth is located in Appendix E.

Test Results:

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(c).

7.3 Five Second Rule

The EUT was checked to insured the transmitter shuts off within five seconds of being activated. Photographs showing compliance to the five second rule are located in Appendix E.

Test Results:

The EUT complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.231(a)(1) and section 15.231 (a)(2).

8. CONCLUSIONS

The All Clear Radio Box, Model: 892439 (EUT), as tested, meets all of the <u>Class B specification limits defined in CFR Title 47</u>, Part 15, Subpart B for the digital and receiver portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.231 for the transmitter portion.



COMPATIBLE ELECTRONICS

APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS



LABORATORY ACCREDITATIONS AND RECOGNITIONS



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

NVLAP listing links

Agoura Division / Brea Division / Silverado/Lake Forest Division

.Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."



ANSI listing CETCB



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

US/EU MRA list NIST MRA site



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). **APEC MRA list** NIST MRA site

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



VCCI Support member: Please visit http://www.vcci.jp/vcci_e/



FCC Listing, from FCC OET site

FCC test lab search 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

Model: 892439

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC 15.231 and/or FCC Class B specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modification were made to the EUT during the testing.



Model: 892439

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT



ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

All Clear Radio Box Model: 892439

ALSO APPROVED UNDER THIS REPORT:

There were no additional models covered under this report.

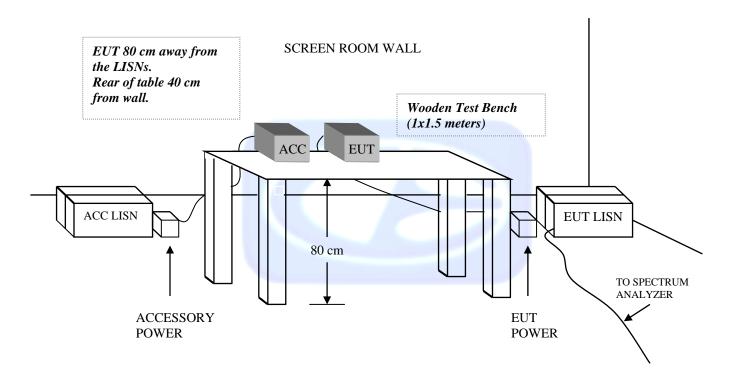




APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

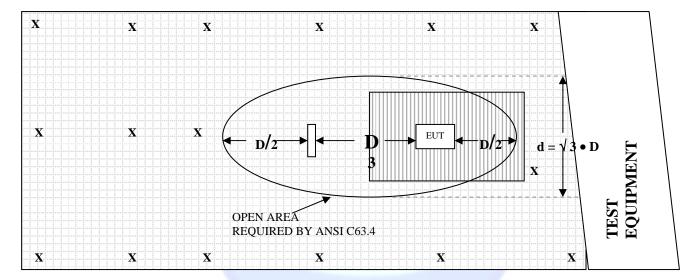
FIGURE 1: CONDUCTED EMISSIONS TEST SETUP



OPEN LAND > 15 METERS

FIGURE 2: PLOT MAP AND LAYOUT OF RADIATED SITE – 3 METERS

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

X = GROUND RODS = GROUND SCREEN

D = TEST DISTANCE (meters) = WOOD COVER



COM-POWER AB-900

BICONICAL ANTENNA

S/N: 15250

CALIBRATION DATE: JUNE 8, 2011

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
30	10.90	100	9.50
35	11.00	120	12.10
40	11.80	140	11.40
45	11.60	160	12.40
50	11.40	180	15.70
60	9.80	200	16.20
70	7.00	250	16.10
80	5.70	300	19.00
90	7.00		



COM-POWER AL-100

LOG PERIODIC ANTENNA

S/N: 16252

CALIBRATION DATE: JUNE 8, 2011

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
300	13.30	700	20.40
400	15.50	800	20.60
500	15.80	900	20.10
600	20.20	1000	22.80

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: MARCH 18, 2010

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	22.2	10.0	39.8
1.5	24.2	10.5	40.2
2.0	27.2	11.0	39.7
2.5	27.8	11.5	39.9
3.0	30.5	12.0	41.7
3.5	30.9	12.5	42.7
4.0	31.9	13.0	42.3
4.5	33.2	13.5	40.3
5.0	33.6	14.0	42.6
5.5	36.2	14.5	43.4
6.0	35.8	15.0	41.9
6.5	36.1	15.5	40.8
7.0	37.9	16.0	41.0
7.5	37.4	16.5	41.5
8.0	38.0	17.0	44.5
8.5	38.8	17.5	47.6
9.0	38.0	18.0	50.8
9.5	39.2		



COM-POWER PA-102

PREAMPLIFIER

S/N: 1017

CALIBRATION DATE: DECEMBER 28, 2011

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(MHz)	(dB)	(MHz)	(dB)
30	38.54	300	38.45
40	38.53	350	38.47
50	38.57	400	38.36
60	38.54	450	38.07
70	38.54	500	38.31
80	38.54	550	38.37
90	38.54	600	38.28
100	38.53	650	38.19
125	38.51	700	38.24
150	38.43	750	37.88
175	38.56	800	37.94
200	38.50	850	37.65
225	38.46	900	37.50
250	38.57	950	37.47
275	38.45	1000	36.86

COM-POWER PA-118

PREAMPLIFIER

S/N: 181656

CALIBRATION DATE: DECEMBER 28, 2011

FREQUENCY	FACTOR	FREQUENCY	FACTOR
(GHz)	(dB)	(GHz)	(dB)
1.0	23.22	10.0	24.66
1.5	26.31	10.5	25.22
2.0	27.40	11.0	25.17
2.5	26.52	11.5	24.47
3.0	27.35	12.0	25.29
3.5	29.02	12.5	26.03
4.0	28.51	13.0	24.11
4.5	26.62	13.5	24.28
5.0	27.13	14.0	25.81
5.5	27.29	14.5	25.45
6.0	26.72	15.0	25.36
6.5	25.62	15.5	26.76
7.0	25.25	16.0	28.09
7.5	24.23	16.5	23.23
8.0	23.72	17.0	26.58
8.5	24.91	17.5	27.45
9.0	25.73	18.0	27.53
9.5	24.79		

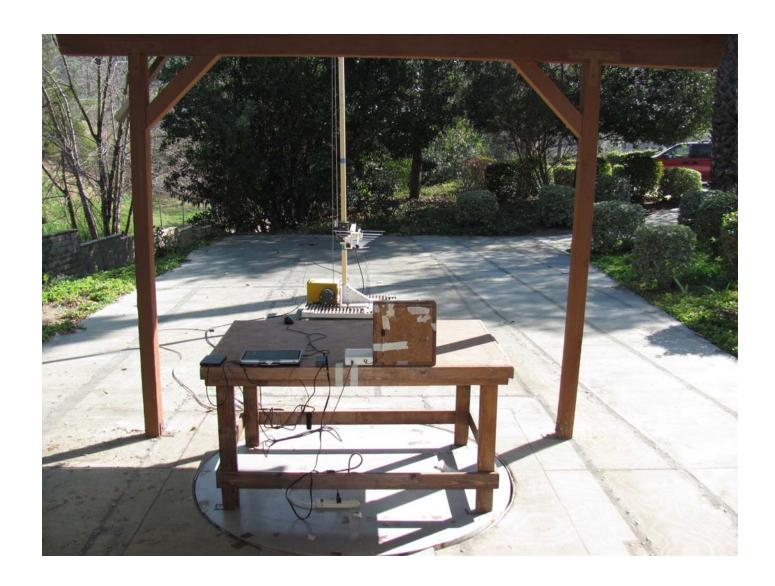


FRONT VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C - RAYDOME ANTENNA - SHORT CABLE - RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C - RAYDOME ANTENNA - SHORT CABLE - RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C – RAYDOME ANTENNA – LONG CABLE – RADIATED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C – RAYDOME ANTENNA – LONG CABLE – RADIATED EMISSIONS



FRONT VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C - MONOPOLE ANTENNA - RADIATED EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C - MONOPOLE ANTENNA - RADIATED EMISSIONS



FRONT VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C – RAYDOME ANTENNA – SHORT CABLE – CONDUCTED EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

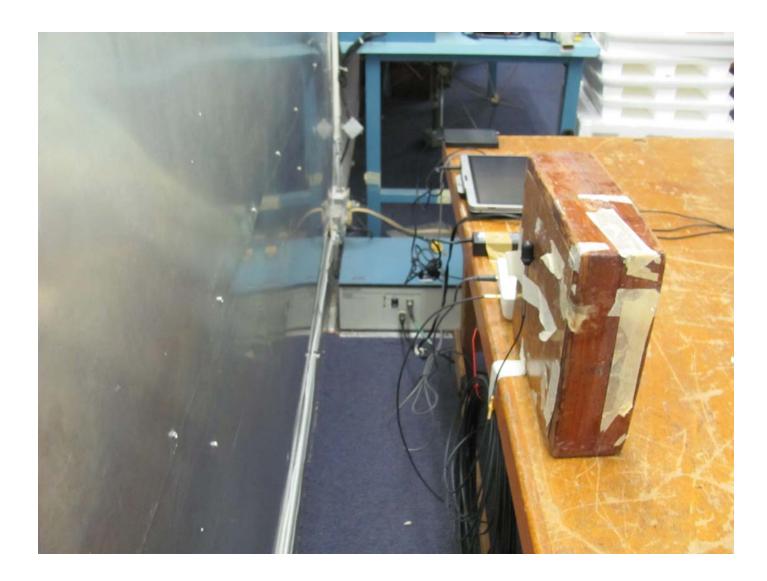
FCC SUBPART B AND C - RAYDOME ANTENNA - SHORT CABLE - RADIATED EMISSIONS



FRONT VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C - RAYDOME ANTENNA - LONG CABLE - CONDUCTED EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC ALL CLEAR RADIO BOX MODEL: 892439

FCC SUBPART B AND C – RAYDOME ANTENNA – LONG CABLE – RADIATED EMISSIONS



FRONT VIEW

ALL CLEAR SYSTEM, LLC
ALL CLEAR RADIO BOX
MODEL: 892439
FCC SUBPART B AND C – MONOPOLE ANTENNA – CONDUCTED EMISSIONS



REAR VIEW

ALL CLEAR SYSTEM, LLC
ALL CLEAR RADIO BOX
MODEL: 892439
FCC SUBPART B AND C – MONOPOLE ANTENNA – CONDUCTED EMISSIONS

APPENDIX E

DATA SHEETS

All Clear System, LLC All Clear Radio Box Model: 892439

Dates: 02/01/2012 and 02/02/2012

Labs: B and D

Tested By: Kyle Fujimoto

X-Axis - Raydome Antenna - Short Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	91.26	V	100.28	-9.02	Peak	1	135	
418	73.78	V	80.28	-6.5	Avg	1	135	
					J			
836	44.22	V	80.28	-36.06	Peak	1	135	
836	26.74	V	60.28	-33.54	Avg	1	135	
1254	38.32	V	74	-35.68	Peak	2	180	
1254	20.84	V	54	-33.16	Avg	2	180	
1672	44.25	V	74	-29.75	Peak	1.25	135	
1672	26.77	V	54	-27.23	Avg	1.25	135	
2090	48.17	V	80.28	-32.11	Peak	1	180	
2090	30.69	V	60.28	-29.59	Avg	1	180	
2508	41.61	V	80.28	-38.67	Peak	1.25	135	
2508	24.13	V	60.28	-36.15	Avg	1.25	135	
2926	39.26	V	80.28	-41.02	Peak	1.55	145	
2926	21.78	V	60.28	-38.5	Avg	1.55	145	
3344	44.47	V	80.28	-35.81	Peak	1.25	155	
3344	26.99	V	60.28	-33.29	Avg	1.25	155	
3762	41.01	V	74	-32.99	Peak	1.25	155	
3762	23.53	V	54	-30.47	Avg	1.25	155	
4180	41.61	V	74	-32.39	Peak	1	180	
4180	24.13	V	54	-29.87	Avg	1	180	

All Clear System, LLC All Clear Radio Box Model: 892439 Dates: 02/01/2012 and 02/02/2012

Labs: B and D

Tested By: Kyle Fujimoto

X-Axis - Raydome Antenna - Short Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	95.66	H	100.28	-4.62	Peak	1	180	
418	78.18	Н	80.28	-2.1	Avg	1	180	
836	70.52	Н	80.28	-9.76	Peak	1	180	
836	53.04	Н	60.28	-7.24	Avg	1	180	
1254	37.43	Н	74	-36.57	Peak	1.25	225	
1254	19.95	Н	54	-34.05	Avg	1.25	225	
1672	44.44	Н	74	-29.56	Peak	1.25	165	
1672	26.96	Н	54	-27.04	Avg	1.25	165	
2090	44.46	Н	80.28	-35.82	Peak	1.35	165	
2090	26.98	Н	60.28	-33.3	Avg	1.35	165	
2508	42.18	Н	80.28	-38.1	Peak	1.25	155	
2508	24.7	Н	60.28	-35.58	Avg	1.25	155	
2926	43.14	Н	80.28	-37.14	Peak	1.35	165	
2926	25.66	Н	60.28	-34.62	Avg	1.35	165	
3344	42.57	H	80.28	-37.71	Peak	1.25	175	
3344	25.09	Н	60.28	-35.19	Avg	1.25	175	
0700	44.00	11	7.4	20.74	Dest	4.05	405	
3762	41.26	H	74 54	-32.74	Peak	1.35	185	
3762	23.78	Н	54	-30.22	Avg	1.35	185	
4180	41.15	Н	74	-32.85	Peak	1.25	195	
4180	23.67	Н	54	-30.33	Avg	1.25	195	
						-		

All Clear System, LLC All Clear Radio Box Model: 892439 Dates: 02/01/2012 and 02/02/2012

Labs: B and D

Tested By: Kyle Fujimoto

Y-Axis - Raydome Antenna - Short Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	95.36	V	100.28	-4.92	Peak	1.25	45	
418	77.88	V	80.28	-2.4	Avg	1.25	45	
836	63.12	V	80.28	-17.16	Peak	1	90	
836	45.64	V	60.28	-14.64	Avg	1	90	
1254	39.31	V	74	-34.69	Peak	1.25	155	
1254	21.83	V	54	-32.17	Avg	1.25	155	
1672	47.91	V	74	-26.09	Peak	1.35	165	
1672	30.43	V	54	-23.57	Avg	1.35	165	
2090	42.96	V	80.28	-37.32	Peak	1.25	135	
2090	25.48	V	60.28	-34.8	Avg	1.25	135	
2508	40.16	V	80.28	-40.12	Peak	1.25	145	
2508	22.68	V	60.28	-37.6	Avg	1.25	145	
2926	44.08	V	80.28	-36.2	Peak	1.25	135	
2926	26.6	V	60.28	-33.68	Avg	1.25	135	
3344	45.81	V	80.28	-34.47	Peak	1.25	155	
3344	28.33	V	60.28	-31.95	Avg	1.25	155	
3762	42.79	V	74	-31.21	Peak	1.25	155	
3762	25.31	V	54	-28.69	Avg	125	155	
4180	44.93	V	74	-29.07	Peak	1.25	135	
4180	27.45	V	54	-26.55	Avg	1.25	135	

All Clear System, LLC All Clear Radio Box Model: 892439 Dates: 02/01/2012 and 02/02/2012

Labs: B and D

Tested By: Kyle Fujimoto

Y-Axis - Raydome Antenna - Short Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	92.36	Н	100.28	-7.92	Peak	1	135	
418	74.88	Н	80.28	-5.4	Avg	1	135	
836	37.73	Н	80.28	-42.55	Peak	1.25	155	
836	20.25	Н	60.28	-40.03	Avg	1.25	155	
1254	34.04	Н	74	-39.96	Peak	1.35	165	
1254	16.56	Н	54	-37.44	Avg	1.35	165	
1672	47.41	Н	74	-26.59	Peak	1.25	225	
1672	29.93	Н	54	-24.07	Avg	1.25	225	
2090	42.91	Н	80.28	-37.37	Peak	1.55	135	
2090	25.43	Н	60.28	-34.85	Avg	1.55	135	
2508	42.14	Н	80.28	-38.14	Peak	1.65	175	
2508	24.66	Н	60.28	-35.62	Avg	1.65	175	
2926	39.91	Н	80.28	-40.37	Peak	1.25	185	
2926	22.43	Н	60.28	-37.85	Avg	1.25	185	
3344	42.71	Н	80.28	-37.57	Peak	1.25	135	
3344	25.23	Н	60.28	-35.05	Avg	1.25	135	
3762	39.83	Н	74	-34.17	Peak	1.35	145	
3762	22.35	Н	54	-31.65	Avg	1.35	145	
4180	42.23	Н	74	-31.77	Peak	1.25	165	
4180	24.75	Н	54	-29.25	Avg	1.25	165	

FCC Class B and FCC 15.231

All Clear System, LLC

All Clear Radio Box

Labs: B and D

Model: 892439

Tested By: David Tran

Receiver, Digital Portion, and Non-Harmonic Emissions from the EUT – 1 GHz to 4.18 GHz Vertical and Horizontal Polarizations – Raydome Antenna – Short Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1375	39.42	V	54	-14.58	Peak	1.25	130	Receive Mode
1598	40.22	V	54	-13.78	Peak	1.5	130	Receive Mode
1641	38.3	V	54	-15.7	Peak	1.5	170	Receive Mode
3283	45.31	V	54	-8.69	Peak	2.3	180	Receive Mode
1125	37.19	Н	54	-16.81	Peak	1.1	180	Receive Mode
1375	39.72	Н	54	-14.28	Peak	1.3	170	Receive Mode
3000	43.69	Н	54	-10.31	Peak	1.2	20	Receive Mode
1198	45.44	Н	54	-8.56	Peak	1.3	130	Transmit Mode
1375	39.98	Н	54	-14.02	Peak	2.3	160	Transmit Mode
1625	37.29	Н	54	-16.71	Peak	2.5	170	Transmit Mode
3283	44.27	Н	54	-9.73	Peak	2.2	190	Transmit Mode
1375	39.11	V	54	-14.89	Peak	1.2	200	Transmit Mode
2493	43.36	V	54	-10.64	Peak	1.4	80	Transmit Mode

All Clear System, LLC All Clear Radio Box Model: 892439 Date: 02/01/2012

Lab: D

Tested By: Kyle Fujimoto

X-Axis - Raydome Antenna - Long Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	81.01	V	100.28	-19.27	Peak	1	135	
418	63.53	V	80.28	-16.75	Avg	1	135	
836	35.82	V	80.28	-44.46	Peak	1	135	
836	18.34	V	60.28	-41.94	Avg	1	135	
1254	37.18	V	74	-36.82	Peak	1.25	155	
1254	19.7	V	54	-34.3	Avg	1.25	155	
1672	41.22	V	74	-32.78	Peak	1.35	145	
1672	23.74	V	54	-30.26	Avg	1.35	145	
2090	44.53	V	80.28	-35.75	Peak	1.25	155	
2090	27.05	V	60.28	-33.23	Avg	1.25	155	
2508	40.37	V	80.28	-39.91	Peak	1.55	135	
2508	22.89	V	60.28	-37.39	Avg	1.55	135	
2926	38.42	V	80.28	-41.86	Peak	1.65	175	
2926	20.94	V	60.28	-39.34	Avg	1.65	175	
3344	38.31	V	80.28	-41.97	Peak	1.85	195	
3344	20.83	V	60.28	-39.45	Avg	1.85	195	
3762	36.91	V	74	-37.09	Peak	1.25	155	
3762	19.43	V	54	-34.57	Avg	1.25	155	
		_						
4180	38.16	V	74	-35.84	Peak	1.35	165	
4180	20.68	V	54	-33.32	Avg	1.35	165	

Date: 02/01/2012

Lab: D

FCC 15.231

All Clear System, LLC All Clear Radio Box

Model: 892439 Tested By: Kyle Fujimoto

X-Axis - Raydome Antenna - Long Cable

Freq.	Level	Pol			Peak / QP /	Ant. Height	Table Angle	
(MHz)	(dBuV)	(v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
418	87.91	Н	100.28	-12.37	Peak	1	180	
418	70.43	Н	80.28	-9.85	Avg	1	180	
836	44.72	Н	80.28	-35.56	Peak	1	180	
836	27.24	Н	60.28	-33.04	Avg	1	180	
1254	33.91	Н	74	-40.09	Peak	1.25	155	
1254	16.43	Н	54	-37.57	Avg	1.25	155	
1672	40.86	Н	74	-33.14	Peak	1.25	165	
1672	23.38	Н	54	-30.62	Avg	1.25	165	
2090	42.64	Н	80.28	-37.64	Peak	1.25	175	
2090	25.16	Н	60.28	-35.12	Avg	1.25	175	
2508	40.02	Н	80.28	-40.26	Peak	1.35	185	
2508	22.54	Н	60.28	-37.74	Avg	1.35	185	
2926	39.59	Н	80.28	-40.69	Peak	1.25	195	
2926	22.11	Н	60.28	-38.17	Avg	1.25	195	
3344	38.26	Н	80.28	-42.02	Peak	1.55	205	
3344	20.78	Н	60.28	-39.5	Avg	1.55	205	
3762	39.47	Н	74	-34.53	Peak	1.65	215	
3762	21.99	Н	54	-32.01	Avg	1.65	215	
4180	40.93	Н	74	-33.07	Peak	1.25	155	
4180	23.45	Н	54	-30.55	Avg	1.25	155	

Date: 02/01/2012

Lab: D

FCC 15.231

All Clear System, LLC
All Clear Radio Box

Model: 892439 Tested By: Kyle Fujimoto

Y-Axis - Raydome Antenna - Long Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	81.21	V	100.28	-19.07	Peak	1	180	
418	63.73	V	80.28	-16.55	Avg	1	180	
836	35.62	V	80.28	-44.66	Peak	1	180	
836	18.14	V	60.28	-42.14	Avg	1	180	
1254	36.87	V	74	-37.13	Peak	1.25	135	
1254	19.39	V	54	-34.61	Avg	1.25	135	
1672	45.21	V	74	-28.79	Peak	1.25	155	
1672	27.73	V	54	-26.27	Avg	1.25	155	
2090	43.48	V	80.28	-36.8	Peak	1.25	165	
2090	26	V	60.28	-34.28	Avg	1.25	165	
2508	38.97	V	80.28	-41.31	Peak	1.25	175	
2508	21.49	V	60.28	-38.79	Avg	1.25	175	
2926	44.21	V	80.28	-36.07	Peak	1.35	185	
2926	26.73	V	60.28	-33.55	Avg	1.35	185	
3344	41.43	V	80.28	-38.85	Peak	1.25	195	
3344	23.95	V	60.28	-36.33	Avg	1.25	195	
0700	00.04	.,		0.00		4.0=	40=	
3762	38.91	V	74	-35.09	Peak	1.35	185	
3762	21.43	V	54	-32.57	Avg	1.35	185	
4100	44.00	\/	74	20.70	Dools	1 05	155	
4180 4180	44.22 26.74	V	74 54	-29.78 -27.26	Peak	1.25 1.25	155 155	
4100	20.74	V	54	-21.20	Avg	1.25	100	

All Clear System, LLC

All Clear Radio Box

Date: 02/01/2012

Lab: D

Model: 892439 Tested By: Kyle Fujimoto

Y-Axis - Raydome Antenna - Long Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	87.51	Н	100.28	-12.77	Peak	1	180	
418	70.03	Н	80.28	-10.25	Avg	1	180	
836	39.32	I	80.28	-40.96	Peak	1	180	
836	21.84	Н	60.28	-38.44	Avg	1	180	
						7/33		
1254	34.74	Н	74	-39.26	Peak	1.25	135	
1254	17.26	Н	54	-36.74	Avg	1.25	135	
1672	39.43	Н	74	-34.57	Peak	1.35	155	
1672	21.95	Н	54	-32.05	Avg	1.35	155	
2090	37.64	Н	80.28	-42.64	Peak	1.25	155	
2090	20.16	Н	60.28	-40.12	Avg	1.25	155	
2508	43.21	Н	80.28	-37.07	Peak	1.25	165	
2508	25.73	Н	60.28	-34.55	Avg	1.25	165	
2926	42.65	Н	80.28	-37.63	Peak	1.25	175	
2926	25.17	Н	60.28	-35.11	Avg	1.25	175	
3344	38.27	Н	80.28	-42.01	Peak	1.25	185	
3344	21.58	Н	60.28	-38.7	Avg	1.25	185	
3762	38.73	Н	74	-35.27	Peak	1.35	145	
3762	21.25	Н	54	-32.75	Avg	1.35	145	
4180	43.9	Н	74	-30.1	Peak	1.25	155	
4180	26.42	Н	54	-27.58	Avg	1.25	155	

FCC Class B and FCC 15.231

All Clear System, LLC

All Clear Radio Box

Labs: B and D

Model: 892439

Tested By: David Tran

Receiver, Digital Portion, and Non-Harmonic Emissions from the EUT – 1 GHz to 4.18 GHz Vertical and Horizontal Polarizations - Raydome Antenna - Long Cable

Freq.	Level	Pol			Peak / QP /	Ant. Height	Table Angle	
(MHz)	(dBuV)	(v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
1375	40.84	V	54	-13.16	Peak	1.25	130	Receive Mode
1598	41.52	V	54	-12.48	Peak	1.55	145	Receive Mode
1641	39.64	V	54	-14.36	Peak	1.55	165	Receive Mode
3283	46.38	V	54	-7.62	Peak	2.35	180	Receive Mode
1125	39.82	Н	54	-14.18	Peak	1.15	180	Receive Mode
1375	41.58	Н	54	-12.42	Peak	1.35	170	Receive Mode
3000	44.53	Н	54	-9.47	Peak	1.25	45	Receive Mode
1198	46.21	Н	54	-7.79	Peak	1.35	130	Transmit Mode
1375	40.58	Н	54	-13.42	Peak	2.35	160	Transmit Mode
1625	38.59	Н	54	-15.41	Peak	2.55	170	Transmit Mode
3283	46.58	Н	54	-7.42	Peak	2.25	190	Transmit Mode
1375	40.38	V	54	-13.62	Peak	1.25	200	Transmit Mode
2493	44.57	V	54	-9.43	Peak	1.45	90	Transmit Mode

All Clear System, LLC

All Clear Radio Box

Date: 02/28/2012

Lab: D

Model: 892439 Tested By: Kyle Fujimoto

X-Axis - Monopole Antenna with 12 Foot RG-58 Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	93.66	V	100.28	-6.62	Peak	1	135	
418	76.18	V	80.28	-4.1	Avg	1	135	
					J			
836	61.32	V	80.28	-18.96	Peak	1	135	
836	43.84	V	60.28	-16.44	Avg	1	135	
1254	39.69	V	74	-34.31	Peak	1.25	135	
1254	22.21	V	54	-31.79	Avg	1.25	135	
1672	45.71	V	74	-28.29	Peak	1.25	165	
1672	28.23	V	54	-25.77	Avg	1.25	165	
2090	47.01	V	80.28	-33.27	Peak	1.25	155	
2090	29.53	V	60.28	-30.75	Avg	1.25	155	
2508	46.69	V	80.28	-33.59	Peak	1.25	155	
2508	29.21	V	60.28	-31.07	Avg	1.25	155	
2926	46.59	V	80.28	-33.69	Peak	1.35	165	
2926	29.11	V	60.28	-31.17	Avg	1.35	165	
3344	43.62	V	80.28	-36.66	Peak	1.25	175	
3344	26.14	V	60.28	-34.14	Avg	1.25	175	
3762	44.48	V	74	-29.52	Peak	1.25	185	
3762	27	V	54	-27	Avg	1.25	185	
4180	45.84	V	74	-28.16	Peak	1.35	195	
4180	28.36	V	54	-25.64	Avg	1.35	195	

All Clear System, LLC

All Clear Radio Box

Date: 02/28/2012

Lab: D

Model: 892439 Tested By: Kyle Fujimoto

X-Axis - Monopole Antenna with 12 Foot RG-58 Cable

Freq.	Level	Pol	Linett	84	Peak / QP /	Ant. Height	Table Angle	C ammanta
(MHz)	(dBuV)	(v/h)	Limit	Margin	Avg	(m)	(deg)	Comments
418	93.86	H	100.28	-6.42	Peak	1	180	
418	76.38	Н	80.28	-3.9	Avg	1	180	
836	54.72	Н	80.28	-25.56	Peak	1	180	
836	37.24	H	60.28	-23.04	Avg	1	180	
030	37.24	- ' '	00.20	-23.04	Avg	-	100	
1254	41.25	Н	74	-32.75	Peak	1.25	155	
1254	23.77	Н	54	-30.23	Avg	1.25	155	
1672	43.09	Н	74	-30.91	Peak	1.25	165	
1672	25.61	Н	54	-28.39	Avg	1.25	165	
2090	43.47	Н	80.28	-36.81	Peak	1.35	175	
2090	25.99	Н	60.28	-34.29	Avg	1.35	175	
2508	45.41	Н	80.28	-34.87	Peak	1.25	185	
2508	27.93	Н	60.28	-32.35	Avg	1.25	185	
2926	45.41	Н	80.28	-34.87	Peak	1.25	195	
2926	27.93	Н	60.28	-32.35	Avg	1.25	195	
3344	43.61	Н	80.28	-36.67	Peak	1.35	155	
3344	26.13	Н	60.28	-34.15	Avg	1.35	155	
3762	44.74	H	74	-29.26	Peak	1.25	165	
3762	27.26	Н	54	-26.74	Avg	1.25	165	
4180	44.99	Н	74	-29.01	Peak	1.25	165	
4180	27.51	Н	54	-26.49	Avg	1.25	165	
+100	21.01	11	J 4	-20.43	Avy	1.20	100	

All Clear System, LLC

All Clear Radio Box

Date: 02/28/2012

Lab: D

Model: 892439 Tested By: Kyle Fujimoto

Y-Axis - Monopole Antenna with 12 Foot RG-58 Cable

Freq.	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	94.86	V	100.28	-5.42	Peak	1	180	
418	77.38	V	80.28	-2.9	Avg	1	180	
836	51.92	V	80.28	-28.36	Peak	1	180	
836	34.44	V	60.28	-25.84	Avg	1	180	
1254	41.81	V	74	-32.19	Peak	1.25	135	
1254	24.33	V	54	-29.67	Avg	1.25	135	
1672	48.56	V	74	-25.44	Peak	1.25	135	
1672	31.08	V	54	-22.92	Avg	1.25	135	
2090	48.76	V	80.28	-31.52	Peak	1.35	155	
2090	31.28	V	60.28	-29	Avg	1.35	155	
2508	48.27	V	80.28	-32.01	Peak	1.25	155	
2508	30.79	V	60.28	-29.49	Avg	1.25	155	
2926	47.72	V	80.28	-32.56	Peak	1.25	165	
2926	30.24	V	60.28	-30.04	Avg	1.25	165	
3344	43.88	V	80.28	-36.4	Peak	1.25	155	
3344	26.4	V	60.28	-33.88	Avg	1.25	155	
3762	44.43	V	74	-29.57	Peak	1.35	165	
3762	26.95	V	54	-27.05	Avg	1.35	165	
4180	45.28	V	74	-28.72	Peak	1.25	135	
4180	27.8	V	54	-26.2	Avg	1.25	135	

All Clear System, LLC

All Clear Radio Box

Date: 02/28/2012

Lab: D

Model: 892439 Tested By: Kyle Fujimoto

Y-Axis - Monopole Antenna with 12 Foot RG-58 Cable

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	93.46	Н	100.28	-6.82	Peak	1	180	
418	75.98	Η	80.28	-4.3	Avg	1	180	
836	64.02	Н	80.28	-16.26	Peak	1	180	
836	46.54	Н	60.28	-13.74	Avg	1	180	
1254	41.68	Н	74	-32.32	Peak	1.25	135	
1254	24.2	Н	54	-29.8	Avg	1.25	135	
1672	44.56	Н	74	-29.44	Peak	1.25	155	
1672	27.08	Н	54	-26.92	Avg	1.25	155	
2090	46.19	Н	80.28	-34.09	Peak	1.55	165	
2090	28.71	Н	60.28	-31.57	Avg	1.55	165	
2508	44.85	Н	80.28	-35.43	Peak	1.25	175	
2508	27.37	Н	60.28	-32.91	Avg	1.25	175	
2926	44.01	Н	80.28	-36.27	Peak	1.35	185	
2926	26.53	Н	60.28	-33.75	Avg	1.35	185	
3344	43.37	Н	80.28	-36.91	Peak	1.25	195	
3344	25.89	Н	60.28	-34.39	Avg	1.25	195	
3762	45.85	Н	74	-28.15	Peak	1.35	205	
3762	28.37	Н	54	-25.63	Avg	1.35	205	
4180	44.42	Н	74	-29.58	Peak	1.25	135	
4180	26.94	Н	54	-27.06	Avg	1.25	135	

Model: 892439



FCC Class B and FCC 15.231

All Clear System, LLC Date: 02/28/2012
All Clear Radio Box Labs: B and D

Model: 892439 Tested By: Kyle Fujimoto

X-Axis (Worst Case)

Digital Portion and Non-Harmonic Emissions from the Transmitter – 1 GHz to 4.18 GHz Vertical and Horizontal Polarizations – Monopole Ant.

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1375	40.2	V	54	-13.8	Peak	1.25	130	Receive Mode
1598	13.58	V	54	-40.42	Peak	1.5	130	Receive Mode
1641	36.21	V	54	-17.79	Peak	1.5	170	Receive Mode
3283	42.5	V	54	-11.5	Peak	2.3	180	Receive Mode
1125	36.28	Н	54	-17.72	Peak	1.1	180	Receive Mode
1375	38.41	Н	54	-15.59	Peak	1.3	170	Receive Mode
3000	42.69	Н	54	-11.31	Peak	1.2	20	Receive Mode
1198	44.55	Н	54	-9.45	Peak	1.3	130	Transmit Mode
1375	41.26	Н	54	-12.74	Peak	2.3	160	Transmit Mode
1625	38.58	Н	54	-15.42	Peak	2.5	170	Transmit Mode
3283	45.26	Н	54	-8.74	Peak	2.2	190	Transmit Mode
1375	40.25	V	54	-13.75	Peak	1.2	200	Transmit Mode
2493	44.25	V	54	-9.75	Peak	1.4	80	Transmit Mode
	-							



Test Location : Compatible Electronics Page : 1/2

Customer : All Clear System, LLC Date : 2/01/2012
Manufacturer : All Clear System, LLC Time : 15:57:32

Eut name : All Clear Radio Box Lab : D
Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Short Cable Tx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHZ	dBuV	đВ	đВ	dB	dBu∨	dBuV/m	đВ
1V	47.138	53.80	0.83	11.51	38.56	27.58	40.00	-12.42
2H	60.005	59.60	0.90	9.80	38.54	31.76	40.00	-8.24
ЗV	60.019	58.30	0.90	9.79	38.54	30.45	40.00	-9.55
4H	72.006	59.30	1.12	6.72	38.54	28.61	40.00	-11.39
5V	75.095	50.30	1.15	6.32	38.54	19.23	40.00	-20.77
6V	80.140	59.70	1.20	5.72	38.54	28.08	40.00	-11.92
7H	84.067	54.50	1.24	6.25	38.54	23.45	40.00	-16.55
8H	108.123	52.10	1.23	10.61	38.52	25.43	43.50	-18.07
9H	110.788	54.60	1.25	10.96	38.52	28.29	43.50	-15.21
10V	112.000	50.80	1.25	11.12	38.52	24.65	43.50	-18.85
11H	118.671	55.10	1.28	11.94	38.51	29.80	43.50	-13.70
12V	140.250	49.90	1.49	11.41	38.46	24.34	43.50	-19.16
13V	243.570	44.50	2.05	16.11	38.54	24.12	46.00	-21.88
14H	247.092	46.90	2.08	16.11	38.56	26.53	46.00	-19.47
15H	311.969	52.50	2.25	13.77	38.46	30.07	46.00	-15.93
16V	312.645	61.80	2.25	13.79	38.46	39.39	46.00	-6.61
17V	336.665	59.10	2.35	14.30	38.46	37.29	46.00	-8.71
18H	336.682	59.70	2.35	14.30	38.46	37.89	46.00	-8.11
19V	360.735	58.20	2.45	14.78	38.45	36.98	46.00	-9.02
20H	384.041	55.40	2.54	15.22	38.39	34.76	46.00	-11.24
21V	384.768Qp	63.33	2.54	15.23	38.39	42.71	46.00	-3.29
22V	384.768	63.80	2.54	15.23	38.39	43.18	46.00	-2.82
23H	384.777	57.60	2.54	15.23	38.39	36.98	46.00	-9.02
24V	408.833	65.00	2.60	15.53	38.31	44.82	46.00	-1.18
25V	408.833Qp	64.62	2.60	15.53	38.31	44.44	46.00	-1.56
26V	408.852	65.30	2.60	15.53	38.31	45.12	46.00	-0.88
27V	408.852Qp	64.59	2.60	15.53	38.31	44.41	46.00	-1.59
28H	408.869	59.40	2.60	15.53	38.31	39.22	46.00	-6.78
29H	431.994	46.50	2.60	15.60	38.17	26.53	46.00	-19.47
30H	432.862	55.10	2.60	15.61	38.17	35.14	46.00	-10.86
31V	432.882Qp	63.00	2.60	15.61	38.17	43.04	46.00	-2.96
32V	432.882	64.80	2.60	15.61	38.17	44.84	46.00	-1.16
33H	432.894	57.20	2.60	15.61	38.17	37.24	46.00	-8.76
34V	474.450	49.30	2.70	15.73	38.19	29.54	46.00	-16.46
35V	485.580	55.20	2.74	15.76	38.24	35.46	46.00	-10.54





Test Location **Page:** 2/2 : Compatible Electronics

Customer : All Clear System, LLC **Date:** 2/01/2012 Manufacturer : All Clear System, LLC Time : 15:57:32

Eut name : All Clear Radio Box Lab: D ${ t Model}$ Test Distance: 3.0 : 892439

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Short Cable Tx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
36V	497.450	51.40	2.79	15.79	38.30	31.69	46.00	-14.31
37H	528.135	42.80	2.86	17.12	38.34	24.43	46.00	-21.57



Model: 892439



Test Location : Compatible Electronics Page : 1/1

Customer : All Clear System, LLC
Manufacturer : All Clear System, LLC
Time : 13:07:28

Eut name : All Clear Radio Box Lab : D

Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Short Cable Rx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1V	59.994	56.10	0.90	9.80	38.54	28.26	40.00	-11.74
2H	71.969	53.10	1.12	6.73	38.54	22.41	40.00	-17.59
3V	76.160	61.40	1.16	6.18	38.54	30.20	40.00	-9.80
4V	81.680	60.60	1.22	5.93	38.54	29.21	40.00	-10.79
5V	110.488	43.80	1.24	10.92	38.52	17.45	43.50	-26.05
6H	114.516	50.40	1.26	11.43	38.52	24.58	43.50	-18.92
7V	122.937	50.20	1.29	11.99	38.51	24.97	43.50	-18.53
8V	141.840	45.50	1.51	11.50	38.45	20.05	43.50	-23.45
9V	143.272	48.00	1.52	11.57	38.45	22.65	43.50	-20.85
10H	312.646	61.60	2.25	13.79	38.46	39.19	46.00	-6.81
11H 12V 13V 14V 15H	336.694 336.696 360.745 384.797 384.802	63.30 63.50 59.90 63.50 58.30	2.35 2.35 2.45 2.54 2.54	14.30 14.30 14.78 15.23 15.23	38.46 38.46 38.45 38.39 38.39	41.49 41.69 38.68 42.88 37.68	46.00 46.00 46.00 46.00	-4.51 -4.31 -7.32 -3.12 -8.32
16H 17V 18H 19V 20H	408.863 408.866 432.913 432.931 456.946	50.60 60.90 42.90 58.10 47.10	2.60 2.60 2.60 2.60 2.63	15.53 15.53 15.61 15.61 15.68	38.31 38.31 38.17 38.17 38.10	30.42 40.72 22.94 38.14 27.30	46.00 46.00 46.00 46.00	-15.58 -5.28 -23.06 -7.86 -18.70
21V	457.027	52.10	2.63	15.68	38.11	32.30	46.00	-13.70
22H	481.006	45.60	2.73	15.75	38.22	25.85	46.00	-20.15
23V	481.027	51.20	2.73	15.75	38.22	31.45	46.00	-14.55
24V	529.152	42.80	2.86	17.17	38.35	24.48	46.00	-21.52



All Clear Radio Box Model: 892439

Test Location : Compatible Electronics Page : 1/2

Customer : All Clear System, LLC Date : 2/02/2012
Manufacturer : All Clear System, LLC Time : 8:57:16

Eut name : All Clear Radio Box Lab : D
Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Long Cable Tx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHZ	dBuV	dB	dB	dB	dBuV	dBuV/m	dВ
1V	46.507	56.70	0.83	11.54	38.56	30.51	40.00	-9.49
2V	47.997	60.00	0.82	11.48	38.56	33.73	40.00	-6.27
3H	48.120	48.80	0.82	11.47	38.56	22.53	40.00	-17.47
4H	59.993	56.70	0.90	9.80	38.54	28.86	40.00	-11.14
5H	66.244	50.30	1.03	8.00	38.54	20.79	40.00	-19.21
6V	72.000	63.80	1.12	6.73	38.54	33.11	40.00	-6.89
7H	74.705	53.50	1.15	6.37	38.54	22.48	40.00	-17.52
8V	75.012	58.50	1.15	6.33	38.54	27.44	40.00	-12.56
9H	84.032	56.90	1.24	6.24	38.54	25.84	40.00	-14.16
10V	110.760	56.10	1.25	10.96	38.52	29.78	43.50	-13.72
11H	112.154	51.30	1.25	11.14	38.52	25.17	43.50	-18.33
12H	128.043	44.90	1.34	11.81	38.50	19.55	43.50	-23.95
13V	167.974	45.00	1.67	13.76	38.53	21.91	43.50	-21.59
14V	172.432	51.10	1.69	14.50	38.55	28.74	43.50	-14.76
15H	182.443	36.10	1.70	15.76	38.54	15.02	43.50	-28.48
16H	249.742	40.00	2.10	16.10	38.57	19.63	46.00	-26.37
17H	312.628	62.60	2.25	13.79	38.46	40.18	46.00	-5.82
18V	312.642	59.40	2.25	13.79	38.46	36.99	46.00	-9.01
19H	336.680	63.70	2.35	14.30	38.46	41.89	46.00	-4.11
20V	336.689	58.70	2.35	14.30	38.46	36.89	46.00	-9.11
21H	360.746	55.60	2.45	14.78	38.45	34.38	46.00	-11.62
22H	384.770	56.40	2.54	15.23	38.39	35.78	46.00	-10.22
23V	384.792	63.50	2.54	15.23	38.39	42.88	46.00	-3.12
24V	396.864	49.70	2.59	15.45	38.37	29.37	46.00	-16.63
25V	408.853	62.30	2.60	15.53	38.31	42.12	46.00	-3.88
26H	408.854	59.00	2.60	15.53	38.31	38.82	46.00	-7.18
27H	432.854	51.40	2.60	15.61	38.17	31.44	46.00	-14.56
28V	432.919	60.30	2.60	15.61	38.17	40.34	46.00	-5.66
29H	456.943	49.80	2.63	15.68	38.10	30.00	46.00	-16.00
3 0 V	456.961	55.10	2.63	15.68	38.10	35.30	46.00	-10.70
31V	462.561	48.50	2.65	15.70	38.13	28.71	46.00	-17.29
32V	474.450	50.40	2.70	15.73	38.19	30.64	46.00	-15.36
33H	480.943	44.80	2.73	15.75	38.22	25.05	46.00	-20.95
34V	486.450	56.50	2.75	15.76	38.25	36.76	46.00	-9.24
35H	486.585	54.70	2.75	15.76	38.25	34.96	46.00	-11.04

All Clear Radio Box Model: 892439

Test Location : Compatible Electronics Page : 2/2

Customer: All Clear System, LLCDate : 2/02/2012Manufacturer: All Clear System, LLCTime : 8:57:16

Eut name : All Clear Radio Box Lab : D
Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Long Cable Tx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
36V	497.450	54.10	2.79	15.79	38.30	34.39	46.00	-11.61
37V	528.104	42.20	2.86	17.12	38.34	23.83	46.00	-22.17





Test Location : Compatible Electronics Page : 1/2

Customer : All Clear System, LLC Date : 2/02/2012
Manufacturer : All Clear System, LLC Time : 10:31:14

Eut name : All Clear Radio Box Lab : D
Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Long Cable Rx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq	Rdng	Cable loss	Ant factor	Amp gain	Cor'd rdg = R	Limit = L	Delta R-L
	MHZ	dBuV	dB	dB	dB	dBuV	dBuV/m	dВ
1V	60.000	63.30	0.90	9.80	38.54	35.46	40.00	-4.54
2H	60.008	66.50	0.90	9.80	38.54	38.66	40.00	-1.34
3H	60.008Qp	61.34	0.90	9.80	38.54	33.50	40.00	-6.50
4 V	72.013	67.90	1.12	6.72	38.54	37.21	40.00	-2.79
5V	72.014Qp	61.24	1.12	6.72	38.54	30.55	40.00	-9.45
6H	72.017	71.80	1.12	6.72	38.54	41.10	40.00	1.10
7H	72.017Qp	65.08	1.12	6.72	38.54	34.38	40.00	-5.62
8H	83.994	64.40	1.24	6.24	38.54	33.34	40.00	-6.66
9H	110.761	65.40	1.25	10.96	38.52	39.08	43.50	-4.42
10V	110.812	52.80	1.25	10.96	38.52	26.49	43.50	-17.01
11H	118.679	59.10	1.28	11.94	38.51	33.80	43.50	-9.70
12V	118.684	52.10	1.28	11.94	38.51	26.80	43.50	-16.70
13V	122.871	53.50	1.29	11.99	38.51	28.27	43.50	-15.23
14H	126.574	50.50	1.32	11.86	38.50	25.17	43.50	-18.33
15V	135.125	38.90	1.43	11.56	38.48	13.41	43.50	-30.09
16H	137.773	52.40	1.46	11.47	38.47	26.87	43.50	-16.63
17H	147.194	58.00	1.57	11.78	38.44	32.91	43.50	-10.59
18H	156.000	53.50	1.63	12.21	38.46	28.87	43.50	-14.63
19H	168.000	53.10	1.67	13.77	38.53	30.01	43.50	-13.49
20V	312.660	57.90	2.25	13.79	38.46	35.49	46.00	-10.51
21H	312.660	57.90	2.25	13.79	38.46	35.49	46.00	-10.51
22V	336.688	59.00	2.35	14.30	38.46	37.19	46.00	-8.81
23H	336.718	59.80	2.35	14.30	38.46	37.99	46.00	-8.01
24V	360.757	59.80	2.45	14.78	38.45	38.58	46.00	-7.42
25H	384.786	62.10	2.54	15.23	38.39	41.48	46.00	-4.52
26V	384.788Qp	64.17	2.54	15.23	38.39	43.55	46.00	-2.45
27V	384.788	64.70	2.54	15.23	38.39	44.08	46.00	-1.92
28V	396.858	51.90	2.59	15.45	38.37	31.57	46.00	-14.43
29V	408.862	61.10	2.60	15.53	38.31	40.92	46.00	-5.08
30H	432.898	50.80	2.60	15.61	38.17	30.84	46.00	-15.16
31V	432.913	59.50	2.60	15.61	38.17	39.54	46.00	-6.46
32V	456.974	56.00	2.63	15.68	38.11	36.20	46.00	-9.80
33V	462.048	58.40	2.65	15.69	38.13	38.61	46.00	-7.39
34V	473.978	61.00	2.70	15.73	38.19	41.24	46.00	-4.76
35V	485.993	65.50	2.75	15.76	38.25	45.76	46.00	-0.24



Test Location : Compatible Electronics Page : 2/2

Customer: All Clear System, LLCDate : 2/02/2012Manufacturer: All Clear System, LLCTime : 10:31:14

Eut name : All Clear Radio Box Lab : D

Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Raydome Antenna - Long Cable Rx Mode - Y-Axis (Worst Case) Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
36V	485.994Qp	56.95	2.75	15.76	38.25	37.21	46.00	-8.79
37V	497.998	63.10	2.79	15.79	38.30	43.39	46.00	-2.61
38V	497.998Qp	53.88	2.79	15.79	38.30	34.17	46.00	-11.83
39V	505.058	47.50	2.81	16.04	38.32	28.04	46.00	-17.96



Report Number: **B20202D2 FCC Part 15 Subpart B** and **FCC Section 15.231** Test Report

All Clear Radio Box Model: 892439

Test Location : Compatible Electronics Page : 1/1

Customer : All Clear System, LLC Date : 2/28/2012
Manufacturer : All Clear System, LLC Time : 14:18:17

Eut name : All Clear Radio Box Lab : D
Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Monopole Antenna

Tx Mode - X-Axis - Worst Case

Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1V	76.280	51.80	1.16	6.16	38.54	20.59	40.00	-19.41
2H	123.260	50.20	1.29	11.98	38.51	24.96	43.50	-18.54
3V	124.180	58.30	1.30	11.94	38.51	33.03	43.50	-10.47
4V	223.800	45.30	1.89	16.15	38.46	24.88	46.00	-21.12
5H	232.280	60.70	1.96	16.13	38.49	40.30	46.00	-5.70
6H	384.799	63.50	2.54	15.23	38.39	42.88	46.00	-3.12
7V	384.836	58.90	2.54	15.23	38.39	38.28	46.00	-7.72
8V	432.877	56.20	2.60	15.61	38.17	36.24	46.00	-9.76
9H	432.910	52.40	2.60	15.61	38.17	32.44	46.00	-13.56
10V	480.973	48.80	2.73	15.75	38.22	29.05	46.00	-16.95
11H	507.415	49.60	2.82	16.16	38.32	30.25	46.00	-15.75
12V	527.969	45.50	2.86	17.11	38.34	27.13	46.00	-18.87



Test Location : Compatible Electronics Page : 1/1

Customer: All Clear System, LLCDate: 2/28/2012Manufacturer: All Clear System, LLCTime: 13:41:10

Eut name : All Clear Radio Box Lab : D

Model : 892439 Test Distance : 3.0

Serial # : N/A

Specification : FCC Class B

Distance correction factor (20 * log(test/spec) : 0.00

Test Mode : Radiated Emissions - 10 kHz to 1 GHz

Monopole Antenna

Rx Mode - X-Axis - Worst Case

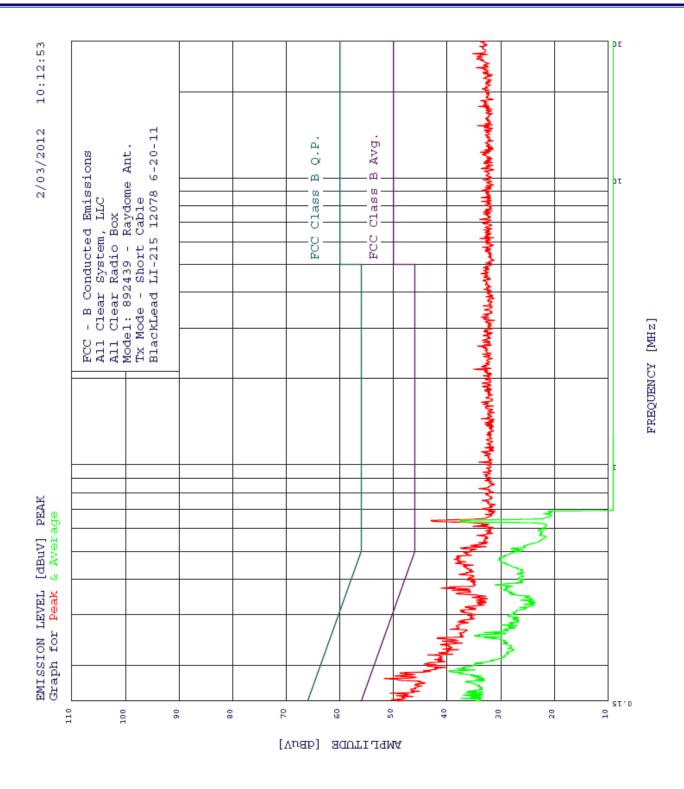
Tested By: Kyle Fujimoto

Pol	Freq MHz	Rdng dBuV	Cable loss dB	Ant factor dB	Amp gain dB	Cor'd rdg = R dBuV	Limit = L dBuV/m	Delta R-L dB
1H 2V 3V 4V 5H	68.700 110.766 130.110 166.110 311.200	60.10 62.40 46.90 51.10 44.90	1.08 1.25 1.37 1.67 2.25	7.34 10.96 11.73 13.45 13.75	38.54 38.52 38.49 38.52 38.45	29.98 36.08 21.51 27.70 22.45	40.00 43.50 43.50 43.50 46.00	-10.02 -7.42 -21.99 -15.80 -23.55
6V 7H 8H 9V 10H	360.700 360.761 384.797 384.820 408.850	49.10 58.20 63.60 60.30	2.45 2.45 2.54 2.54 2.60	14.78 14.78 15.23 15.23	38.45 38.45 38.39 38.39 38.31	27.88 36.98 42.98 39.68 40.12	46.00 46.00 46.00 46.00 46.00	-18.12 -9.02 -3.02 -6.32 -5.88
11H 12H 13V 14V 15V	420.977 432.909 432.914 444.910 480.981	51.60 53.30 59.50 47.50 47.20	2.60 2.60 2.60 2.60 2.73	15.57 15.61 15.61 15.64 15.75	38.23 38.17 38.17 38.10 38.22	31.53 33.34 39.54 27.65 27.45	46.00 46.00 46.00 46.00 46.00	-14.47 -12.66 -6.46 -18.35 -18.55
16V	784.281	35.30	3.70	20.57	37.92	21.65	46.00	-24.35

Model: 892439

CONDUCTED EMISSIONS

DATA SHEETS





2/03/2012 10:12:53

FCC - B Conducted Emissions All Clear System, LLC

All Clear Radio Box

Model: 892439 - Raydome Ant.

Tx Mode - Short Cable

BlackLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

					_	
				Class B Avg.		line
			urve : Peak	crabb b mig.	1111110	
Peak#		Amp (dBuV)		Delta(dB)		
1	0.180	51.72	54.50	-2.78**		
2	0.637	43.01	46.00	-2.99**		
3			54.33	-4.61**		
	0.183	49.72				
4	0.160	50.62	55.47	-4.85**		
5	0.188	48.82	54.10	-5.28**		
6	0.152	50.42	55.91	-5.49**		
7	0.157	49.42	55.64	-6.22**		
8	0.371	41.18	48.47	-7.30**		
9	0.469	38.71	46.53	-7.83**		
10	0.454	38.50	46.80	-8.30**		
11	0.165	46.82	55.20	-8.38**		
12	0.513	37.51	46.00	-8.49**		
13	0.375	39.58	48.38	-8.80**		
14	0.170	46.02	54.94	-8.92**		
15	0.494	36.91	46.09	-9.19**		
16	0.202	44.33	53.53	-9.21**		
17	0.217	43.63	52.91	-9.29**		
18	0.365	39.07	48.61	-9.53**		
19	0.192	44.42	53.97	-9.55**		
20	0.415	37.80	47.55	-9.75**		
21	0.200	43.82	53.62	-9.80**		
22	0.445	37.00	46.98	-9.97**		
23	0.248	41.84	51.82	-9.98**		
24	0.524	35.61	46.00	-10.39**		
25	0.356	38.37	48.82	-10.46**		
26	0.611	35.21	46.00	-10.79**		
27	2.156	35.11	46.00	-10.89		
28	0.210	42.33	53.23	-10.90**		
29	0.237	41.23	52.21	-10.98**		
30	0.243	40.94	52.00	-11.06**		
31	0.221	41.63	52.78	-11.15**		
32	0.398	36.39	47.90	-11.51**		
33	0.567	34.41	46.00	-11.59**		
34	2.596	34.32	46.00	-11.68		
35	0.228	40.83	52.52	-11.69**		
36	0.402	36.10	47.81	-11.72**		
37	0.267	39.44	51.20	-11.76**		
38	0.535	34.11	46.00	-11.89**		
39	0.826	34.10	46.00	-11.90		
40	1.021	34.10	46.00	-11.90		
41	4.648	33.69	46.00	-12.31		
42	3.277	33.64	46.00	-12.36		
43	0.618	33.61	46.00	-12.39**		
44	2.201	33.61	46.00	-12.39		
45	1.112	33.60	46.00	-12.40		
46	1.449	33.60	46.00	-12.40		
47	1.654	33.60	46.00	-12.40		
48	0.310	37.55	49.97	-12.41**		

^{*}Please See the Average Readings on the Next Page and on the Plot



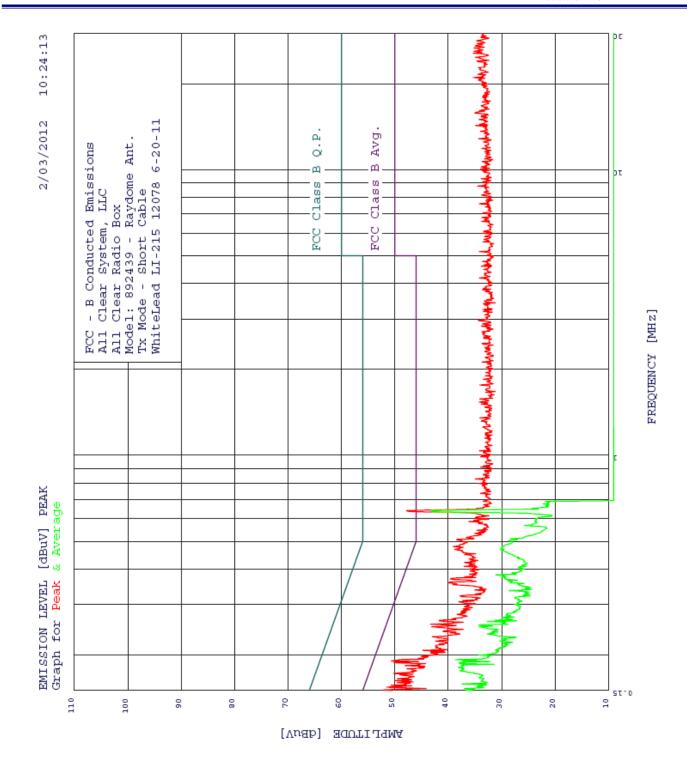
2/03/2012 10:12:53

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant. Tx Mode - Short Cable

BlackLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

					_
48 hig	hest peaks	above -50.	.00 dB of FCC	Class B Avg.	limit line
Peak c	riteria :	0.00 dB, C	Curve : Avera	ge	
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.637	37.57	46.00	-8.43	
2	0.192	39.64	53.97	-14.33	
3	0.195	38.15	53.84	-15.69	
4	0.474	30.30	46.45	-16.15	
5	0.187	37.90	54.15	-16.25	
6	0.466	30.32	46.58	-16.25	
7	0.461	30.06	46.67	-16.60	
8	0.197	37.14	53.75	-16.61	
9	0.254	34.96	51.64	-16.68	
10	0.481	29.54	46.32	-16.78	
11	0.457	29.80	46.76	-16.95	
12	0.381	31.11	48.25	-17.14	
13	0.256	34.15	51.55	-17.40	
14	0.452	29.21	46.85	-17.63	
15	0.510	28.16	46.00	-17.84	
16	0.175	36.63	54.72	-18.09	
17	0.260	33.15	51.42	-18.27	
18	0.502	27.70	46.00	-18.30	
19	0.153	37.38	55.82	-18.44	
20	0.157	37.07	55.60	-18.53	
21	0.202	35.00	53.53	-18.54	
22	0.184	35.62	54.28	-18.66	
23	0.204	34.72	53.44	-18.73	
24	0.250	33.04	51.77	-18.73	
25	0.160	36.54	55.47	-18.93	
26	0.367	29.46	48.56	-19.10	
27	0.162	36.21	55.34	-19.13	
28	0.183	35.12	54.37	-19.25	
29 30	0.375 0.371	29.05 29.08	48.38 48.47	-19.33 -19.40	
31	0.179	34.68	54.54	-19.86	
32	0.171	34.82	54.90	-20.08	
33	0.362	28.59	48.69	-20.10	
34	0.435	27.03	47.15	-20.12	
35	0.155	35.59	55.73	-20.12	
36	0.521	25.70	46.00	-20.30	
37	0.358	28.44	48.78	-20.34	
38	0.417	27.07	47.50	-20.44	
39	0.354	28.16	48.87	-20.71	
40	0.169	34.27	55.03	-20.76	
41	0.426	26.31	47.33	-21.02	
42	0.389	27.02	48.08	-21.06	
43	0.276	29.87	50.94	-21.06	
44	0.402	26.75	47.81	-21.07	
45	0.166	33.93	55.16	-21.23	
46	0.208	31.88	53.27	-21.39	
47	0.299	28.68	50.28	-21.60	
48	0.393	26.30	47.99	-21.69	







2/03/2012 10:24:13

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant. Tx Mode - Short Cable WhiteLead LI-215 12078 6-20-11

TEST ENGINEER : Kyle Fujimoto

					-
48 hig	hest peaks	above -50.0	00 dB of FCC	Class B Avg.	limit line
Peak c	riteria :	1.00 dB, Ct	ırve : Peak		
Peak#			Limit(dB)	Delta(dB)	
1	0.641	47.77	46.00	1.77**	
2	0.190	50.66	54.01	-3.36**	
3	0.151	52.10	55.95	-3.85**	
4	0.188	50.16	54.10	-3.95**	
5	0.154	51.51	55.78	-4.26**	
6	0.172	50.26	54.86	-4.60**	
7	0.157	50.72	55.64	-4.92**	
8	0.162	50.04	55.34	-5.30**	
9	0.165	49.54	55.20	-5.66**	
10	0.170	49.06	54.94	-5.88**	
11	0.160	49.53	55.47	-5.94**	
12	0.183	48.06	54.33	-6.27**	
13	0.179	47.76	54.54	-6.79**	
14	0.479	39.08	46.36	-7.28**	
15	0.508	38.41	46.00	-7.59**	
16	0.469	38.78	46.53	-7.76**	
17	0.195	45.66	53.84	-8.18**	
18	0.256	43.29	51.55	-8.27**	
19	0.207	44.76	53.31	-8.55**	
20	0.251	43.10	51.73	-8.63**	
21	0.198	45.06	53.71	-8.66**	
22	0.358	39.92	48.78	-8.86**	
23	0.182	45.56	54.41	-8.86**	
24	0.369	39.62	48.52	-8.89**	
25	0.516	36.61	46.00	-9.39**	
26	0.232	42.98	52.39	-9.41**	
27	0.263	41.67	51.33	-9.66**	
28	0.586	36.16	46.00	-9.84**	
29	0.449	36.96	46.89	-9.93**	
30	0.205	43.26	53.40	-10.14**	
31	0.203	43.26	53.49	-10.23**	
32	0.223	42.37	52.70	-10.32**	
33	0.421	36.94	47.42	-10.48**	
34	0.215	42.37	53.00	-10.64**	
35	0.409	37.03	47.68	-10.65**	
36	0.592	35.16	46.00	-10.84**	
37	0.532	35.02	46.00	-10.98**	
38	0.826	34.95	46.00	-11.05	
39	0.242	40.99	52.04	-11.05**	
40	0.605	34.87	46.00	-11.13**	
41	0.433	36.05	47.19	-11.14**	
42	0.547	34.63	46.00	-11.37**	
43	0.413	36.13	47.59	-11.46**	
44	0.375	36.92	48.38	-11.46**	
45	2.963	34.39	46.00	-11.61	
46	0.796	34.26	46.00	-11.74	
47	1.536	34.21	46.00	-11.79	
48	0.400	36.02	47.86	-11.83**	

^{*}Please See the Average Readings on the Next Page and on the Plot



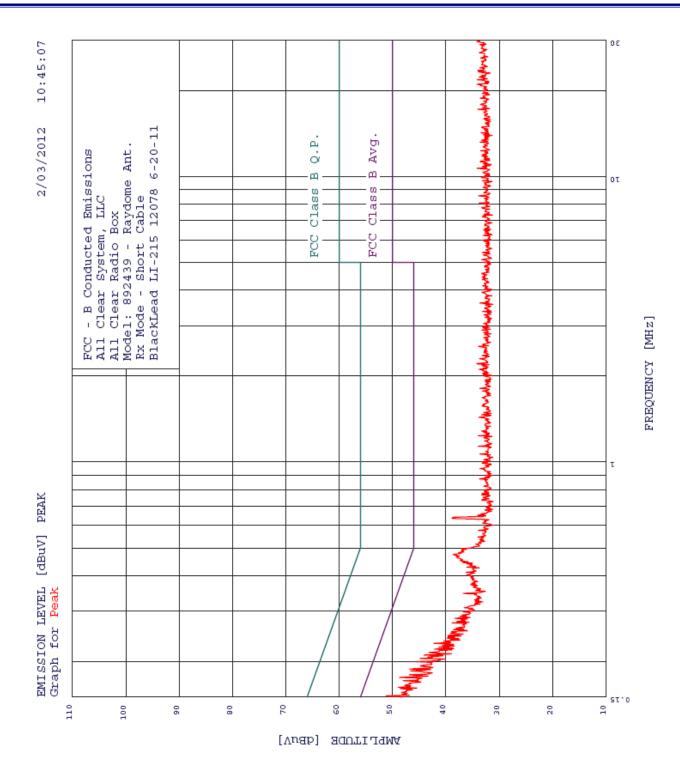
2/03/2012 10:24:13

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant.

Tx Mode - Short Cable

	ead LI-215 NGINEER :	Kyle Fuji	moto			
		0.00 dB,	.00 dB of FCC Curve : Avera		- limit	line
Peak#	Freq(MHz)	Amp(dBuV) Limit(dB)	Delta(dB)		
1	0.641	43.18	46.00	-2.82		
2	0.193	38.69	53.93	-15.24		
3	0.186	37.93	54.19	-16.27		
4	0.466	30.23	46.58	-16.34		
5 6	0.181 0.479	38.09 29.95	54.46 46.36	-16.37 -16.41		
7	0.471	30.04	46.49	-16.41		
8	0.184	37.64	54.28	-16.65		
9	0.190	37.22	54.01	-16.80		
10	0.176	37.83	54.68	-16.85		
11	0.179	37.49	54.54	-17.06		
12	0.381	31.09	48.25	-17.16		
13	0.502	28.68	46.00	-17.32		
14	0.255	34.26	51.60	-17.34		
15	0.251	34.25	51.73	-17.48		
16	0.510	28.34	46.00	-17.66		
17	0.158	37.46	55.56	-18.10		
18	0.375	29.98	48.38	-18.40		
19 20	0.262 0.152	32.70 37.02	51.38 55.86	-18.67 -18.85		
21	0.152	29.41	48.52	-19.10		
22	0.151	36.71	55.95	-19.24		
23	0.200	34.25	53.62	-19.38		
24	0.237	32.74	52.21	-19.47		
25	0.172	35.11	54.86	-19.75		
26	0.363	28.87	48.65	-19.78		
27	0.265	31.28	51.29	-20.01		
28	0.387	28.09	48.12	-20.02		
29	0.239	32.09	52.12	-20.04		
30	0.435	27.03	47.15	-20.12		
31	0.242	31.77	52.04	-20.27		
32 33	0.567 0.358	25.73 28.41	46.00 48.78	-20.27 -20.37		
34	0.336	28.64	49.31	-20.67		
35	0.406	26.83	47.72	-20.89		
36	0.167	34.18	55.11	-20.94		
37	0.270	30.02	51.11	-21.09		
38	0.197	32.66	53.75	-21.10		
39	0.156	34.55	55.69	-21.14		
40	0.154	34.61	55.78	-21.16		
41	0.391	26.82	48.03	-21.21		
42	0.428	25.95	47.28	-21.34		
43	0.413	26.19	47.59	-21.40		
44	0.398	26.48	47.90	-21.42		
45	0.162	33.86	55.34	-21.48		
46 47	0.424	25.78 29.91	47.37 51.51	-21.59		
48	0.258 0.651	24.40	46.00	-21.60 -21.60		
40	0.051	24.40	40.00	21.00		

All Clear Radio Box Model: 892439



2/03/2012 10:45:07

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box

Model: 892439 - Raydome Ant.

Rx Mode - Short Cable

BlackLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 1.00 dB, Curve : Peak Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB) 0.152 51.22 55.91 -4.69 2 0.176 48.72 54.68 -5.96 3 0.162 48.92 55.34 -6.42 54.90 0.171 48.02 -6.88 4 5 0.161 48.52 55.43 -6.91 46.00 6 38.81 -7.19 0.634

7 0.188 46.82 54.10 -7.28 0.156 -7.37 8 48.32 55.69 9 0.165 47.72 55.20 -7.48 10 55.82 0.153 48.22 -7.60 11 0.185 46.62 54.24 -7.62 -7.68 12 0.180 46.82 54.50 13 0.474 38.61 46.45 -7.84 14 0.200 45.72 53.62 -7.90 15 0.205 44.83 53.40 -8.57 16 0.211 44.13 53.18 -9.05 17 0.194 44.72 53.88 -9.16 18 0.215 43.13 53.00 -9.88 19 0.232 42.23 52.39 -10.15 20 0.221 42.13 52.78 -10.65 47.06 21 0.440 36.10 -10.96 22 0.428 36.10 47.28 -11.18 23 52.65 0.224 41.33 -11.3224 0.411 36.20 47.63 -11.44 47.81 -11.72 25 0.402 36.10 2.214 34.21 -11.79 26 46.00 27 0.235 40.43 52.25 -11.8228 0.228 40.63 52.52 -11.89 29 0.547 34.01 46.00 -11.99 30 0.651 34.00 46.00 -12.00 31 2.540 33.92 46.00 -12.0832 0.577 33.91 46.00 -12.09 33 46.00 1.136 33.90 -12.1034 1.236 33.90 46.00 -12.1035 0.273 38.84 51.02 -12.1836 33.80 46.00 2.111 -12.20 37 1.434 33.80 46.00 -12.20 38 0.247 39.64 51.86 -12.22 39 0.347 36.76 49.04 -12.28 40 2.298 33.71 46.00 -12.290.872 33.70 46.00 -12.3041 39.74 42 0.242 52.04 -12.3043 0.244 39.64 51.95 -12.31 33.65 44 3.605 46.00 -12.35 45 38.35 50.72 0.283 -12.37

47 1.066 33.60 46.00 -12.40 48 1.810 33.60 46.00 -12.40

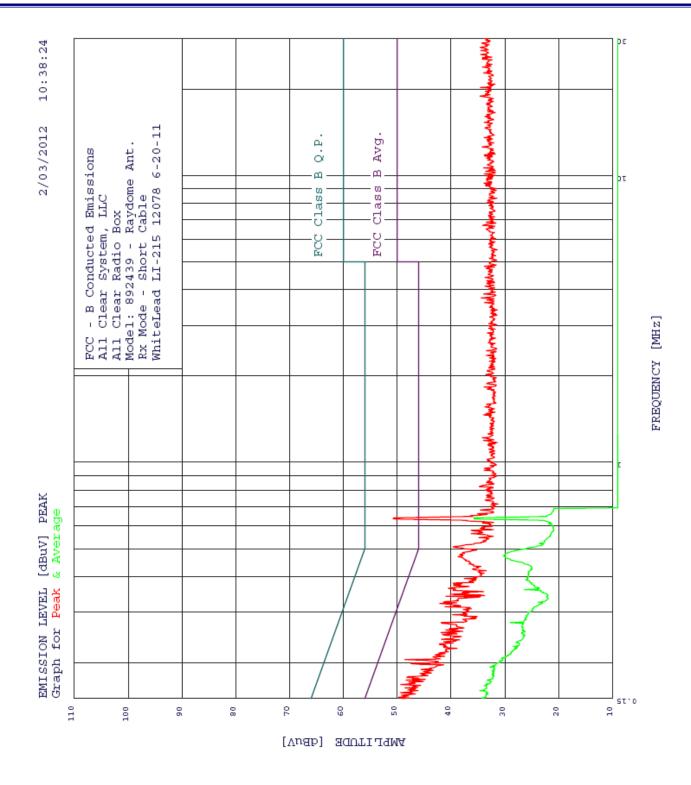
33.60

0.948

46

46.00

-12.40



2/03/2012 10:38:24

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant. Rx Mode - Short Cable WhiteLead LI-215 12078 6-20-11

TEST ENGINEER: Kyle Fujimoto

					_
48 hig	hest peaks	above -50.0	00 dB of FCC	Class B Avg.	limit line
		1.00 dB, Ct		crass s m.g.	
				D-16- (4D)	
Peak#			Limit(dB)		
1	0.637	50.77	46.00	4.77**	
2	0.205	48.56	53.40	-4.84**	
3	0.168	49.35	55.07	-5.72**	
4	0.157	49.42	55.60	-6.18**	
5					
	0.152	49.71	55.91	-6.20**	
6	0.199	47.46	53.67	-6.21**	
7	0.178	48.26	54.59	-6.33**	
8	0.508	39.61	46.00	-6.39**	
9	0.174	48.36	54.77	-6.41**	
10	0.154	49.21	55.78	-6.56**	
11	0.163	48.54	55.29	-6.75**	
12				-7.04**	
	0.171	47.86	54.90		
13	0.161	48.03	55.43	-7.40**	
14	0.176	47.16	54.68	-7.52**	
15	0.322	42.11	49.66	-7.55**	
16	0.469	38.68	46.53	-7.86**	
17	0.165	47.14	55.20	-8.06**	
18	0.363	40.52	48.65	-8.13**	
19	0.325	41.41	49.57	-8.16**	
20	0.341	40.92	49.18	-8.26**	
21	0.189	45.56	54.06	-8.50**	
22	0.183	45.76	54.33	-8.57**	
23	0.379	39.62	48.29	-8.67**	
24	0.313	41.11	49.88	-8.77**	
25	0.375	39.52	48.38	-8.86**	
26	0.347	40.12	49.04	-8.92**	
27	0.371	39.52	48.47	-8.95**	
28					
	0.186	45.16	54.19	-9.04**	
29	0.276	41.85	50.94	-9.09**	
30	0.255	41.89	51.60	-9.71**	
31	0.580	36.26	46.00	-9.74**	
32	0.564	36.25	46.00	-9.75**	
33	0.210	43.36	53.23	-9.86**	
34	0.213	42.97	53.09	-10.13**	
35	0.251	41.60	51.73	-10.13**	
36	0.232	42.18	52.39	-10.21**	
37	0.242	41.79	52.04	-10.25**	
38	0.260	40.98	51.42	-10.45**	
39	0.393	37.52	47.99	-10.47**	
40	0.216	42.27	52.96	-10.69**	
41	0.294	39.71	50.41	-10.70**	
42	0.237	41.39	52.21	-10.82**	
43	0.662	35.07	46.00	-10.93**	
44	0.352	37.92	48.91		
				-10.99**	
45	0.263	40.27	51.33	-11.06**	
46	0.547	34.83	46.00	-11.17**	
47	0.822	34.76	46.00	-11.24	
48	0.424	36.04	47.37	-11.33**	

^{*}Please See the Average Readings on the Next Page and on the Plot



2/03/2012 10:38:24

FCC - B Conducted Emissions

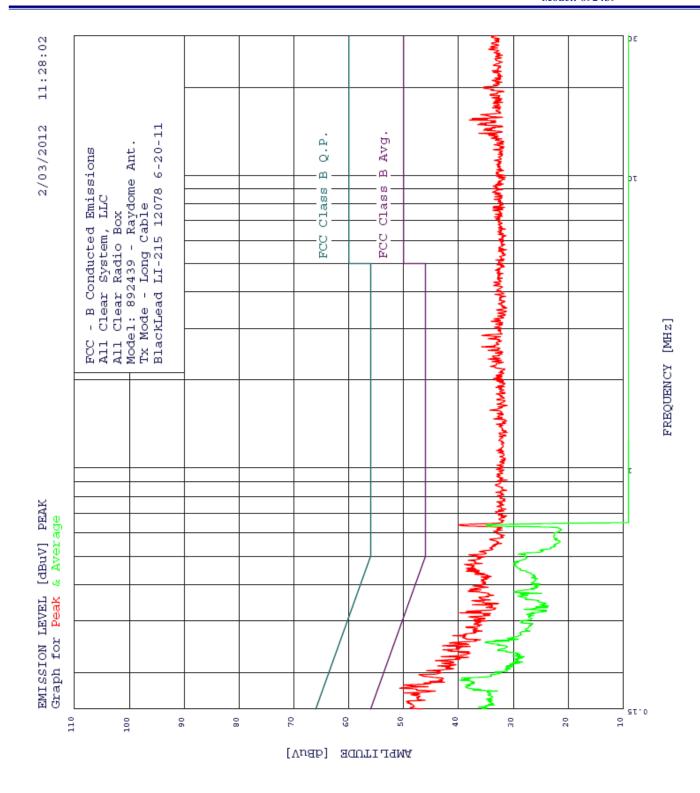
All Clear System, LLC All Clear Radio Box

Model: 892439 - Raydome Ant.

Rx Mode - Short Cable

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 0.00 dB, Curve : Average Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB) 0.641 35.77 46.00 -10.23 2 0.471 30.21 46.49 -16.283 0.160 34.69 55.47 -20.78 4 0.194 32.81 53.88 -21.08 5 0.167 33.83 55.11 -21.29 6 0.174 33.31 54.77 -21.460.196 32.27 53.80 -21.538 33.46 55.03 0.169 -21.5655.38 9 0.162 33.79 -21.59 0.187 32.37 54.15 -21.78 10 55.25 11 0.164 33.45 -21.80 12 0.151 34.15 55.95 -21.80 13 0.415 25.68 47.55 -21.87 0.189 14 32.14 54.06 -21.92 15 0.276 29.01 50.94 -21.9316 54.37 0.183 32.44 -21.93 17 0.185 32.29 54.24 -21.95 47.63 -21.96 18 0.411 25.67 19 0.389 26.08 48.08 -21.99 20 25.67 -22.05 0.406 47.72 21 0.396 25.87 47.95 -22.07 22 47.81 0.402 25.67 -22.1455.73 23 0.155 33.58 -22.15 33.47 55.64 24 0.157 -22.1725 0.421 25.23 47.42 -22.19 26 0.181 32.27 54.46 -22.19 27 0.426 25.12 47.33 -22.20 28 0.178 32.32 54.59 -22.2729 0.153 33.53 55.82 -22.29 30 0.360 26.38 48.73 -22.35 31 0.521 23.62 46.00 -22.38 32 0.203 30.99 53.49 -22.5033 0.207 30.63 53.31 -22.68 34 0.211 29.96 53.18 -23.22 35 0.377 25.10 48.34 -23.23 36 0.530 22.68 46.00 -23.32 37 0.213 29.39 53.09 -23.7138 0.216 28.95 52.96 -24.01 39 0.367 24.50 48.56 -24.06 40 0.219 28.80 52.87 -24.07 0.611 -24.07 41 21.93 46.00 42 0.228 28.43 52.52 -24.09 43 0.235 27.99 52.25 -24.27 44 0.221 28.50 52.78 -24.28 45 46.00 0.552 21.72 -24.28 46 0.267 51.20 -24.29 26.90 47 0.270 26.81 51.11 -24.30 48 0.273 26.70 51.02 -24.32



2/03/2012 11:28:02

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant. Tx Mode - Long Cable BlackLead LI-215 12078 6-20-11

TEST ENGINEER : Kyle Fujimoto

## highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria: 1.00 dB, Curve: Peak Peak Freq(MHz) 1					Class B Avg.	
Peak# Freg(MHz) Amp(dBuV) Limit (dB) Delta (dB) 1 0.177 50.72 54.63 -3.91** 2 0.182 49.92 54.41 -4.49** 3 0.170 49.92 54.94 -5.02** 4 0.159 49.52 55.51 -5.99** 5 0.641 40.01 46.00 -5.99** 6 0.168 48.62 55.07 -6.45** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.63** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 15 0.449 38.30 46.89 -8.59** 16 <t< td=""><td></td><td></td><td></td><td></td><td>crabb b Avg.</td><td>IIIIIC IIIIC</td></t<>					crabb b Avg.	IIIIIC IIIIC
2 0.182 49.92 54.41 -4.49** 3 0.170 49.92 54.94 -5.02** 4 0.159 49.52 55.51 -5.99** 5 0.641 40.01 46.00 -5.99** 6 0.168 48.62 55.07 -6.45** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.63** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.89 -8.59** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -11.35** 31 0.344 37.56 48.91 -11.35** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 0.286 38.65 50.63 -11.98** 45 15.478 38.04 50.00 -11.96* 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -11.98** 47 2.310 33.91 46.00 -11.98**					Delta(dB)	
3 0.170 49.92 54.94 -5.02** 4 0.159 49.52 55.51 -5.99** 5 0.641 40.01 46.00 -5.99** 6 0.168 48.62 55.07 -6.45** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.66** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.60 46.80 -8.20** 14 0.445 38.60 46.98 -8.37** 15 0.449 38.30 46.89 -8.37** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83	1	0.177	50.72	54.63	-3.91**	
4 0.159 49.52 55.51 -5.99** 5 0.641 40.01 46.00 -5.99** 6 0.168 48.62 55.07 -6.45** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.89 -8.59** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13	2	0.182	49.92	54.41	-4.49**	
5 0.641 40.01 46.00 -5.99** 6 0.168 48.62 55.07 -6.45** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.63** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.88** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.89 -8.37** 15 0.449 38.30 46.89 -8.50** 16 0.220 42.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 53.18 -9.35** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13	3	0.170	49.92	54.94	-5.02**	
6 0.168 48.62 55.07 -6.46** 7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.66** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.89 -8.37** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 24 0.215 43.03 53.00 -9.99** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.39 30 0.570 34.31 46.00 -11.39 31 0.341 37.46 49.18 -11.72** 44 3.175 34.04 46.00 -11.79 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	4	0.159	49.52	55.51	-5.99**	
7 0.197 47.22 53.75 -6.53** 8 0.469 38.91 46.53 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.60 46.80 -8.20** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.89 -8.37** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28	5	0.641	40.01	46.00	-5.99**	
8 0.469 38.91 46.53 -7.63** 9 0.203 45.83 53.49 -7.66** 10 0.505 38.11 46.00 -7.89** 11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.98 -8.37** 14 0.445 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28	6	0.168	48.62	55.07	-6.45**	
9	7	0.197	47.22	53.75	-6.53**	
10	8	0.469	38.91	46.53	-7.63**	
11 0.184 46.32 54.28 -7.96** 12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 14 0.445 38.30 46.89 -8.59** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04<	9	0.203	45.83	53.49	-7.66**	
12 0.484 38.21 46.27 -8.07** 13 0.454 38.60 46.80 -8.20** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.27 31 0.385 37.39<	10	0.505	38.11	46.00	-7.89**	
13 0.454 38.60 46.80 -8.20** 14 0.445 38.60 46.98 -8.37** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.28 31 0.385 37.39<	11	0.184	46.32	54.28	-7.96**	
14 0.445 38.60 46.98 -8.37** 15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.27 31 0.385 37.39 48.16 -10.28** 32 0.396 37.39	12	0.484	38.21	46.27	-8.07**	
15 0.449 38.30 46.89 -8.59** 16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.28** 32 0.396 37.3	13	0.454	38.60	46.80	-8.20**	
16 0.220 44.23 52.83 -8.60** 17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39	14	0.445	38.60	46.98	-8.37**	
17 0.247 42.94 51.86 -8.92** 18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.5	15	0.449	38.30	46.89	-8.59**	
18 0.186 45.22 54.19 -8.97** 19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.	16	0.220	44.23	52.83	-8.60**	
19 0.239 42.83 52.12 -9.29** 20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.37 36 2.527 34.6	17	0.247	42.94	51.86	-8.92**	
20 0.211 43.83 53.18 -9.35** 21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.37 36 2.527 34.62 46.00 -11.39 37 2.358 34.61	18	0.186	45.22	54.19	-8.97**	
21 0.227 43.13 52.57 -9.44** 22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.37 36 2.527 34.62 46.00 -11.39 37 2.358 34.61 46.00 -11.39 38 0.424 35.90<	19	0.239	42.83	52.12	-9.29**	
22 0.518 36.21 46.00 -9.79** 23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 40 1.577 34.	20	0.211	43.83	53.18	-9.35**	
23 0.320 39.75 49.71 -9.95** 24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.39 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 40 1.577 34.30 46.00 -11.70 41 0.341 37.4	21	0.227	43.13	52.57	-9.44**	
24 0.215 43.03 53.00 -9.98** 25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.70 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21	22	0.518	36.21	46.00	-9.79**	
25 0.379 38.28 48.29 -10.01** 26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.81** 44 3.175 34	23	0.320	39.75	49.71	-9.95**	
26 0.252 41.64 51.68 -10.04** 27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.81** 44 3.175 34.0	24	0.215	43.03	53.00	-9.98**	
27 0.267 41.04 51.20 -10.16** 28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04<	25	0.379	38.28	48.29	-10.01**	
28 2.596 35.82 46.00 -10.18 29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 </td <td>26</td> <td>0.252</td> <td>41.64</td> <td>51.68</td> <td>-10.04**</td> <td></td>	26	0.252	41.64	51.68	-10.04**	
29 0.433 37.00 47.19 -10.19** 30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.39 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 </td <td>27</td> <td>0.267</td> <td>41.04</td> <td>51.20</td> <td>-10.16**</td> <td></td>	27	0.267	41.04	51.20	-10.16**	
30 2.840 35.73 46.00 -10.27 31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	28	2.596	35.82	46.00	-10.18	
31 0.385 37.89 48.16 -10.28** 32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91	29	0.433	37.00	47.19	-10.19**	
32 0.396 37.39 47.95 -10.55** 33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	30	2.840	35.73	46.00	-10.27	
33 0.324 38.56 49.62 -11.06** 34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	31	0.385	37.89	48.16	-10.28**	
34 0.352 37.56 48.91 -11.35** 35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	32	0.396	37.39	47.95	-10.55**	
35 2.766 34.63 46.00 -11.37 36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	33	0.324		49.62	-11.06**	
36 2.527 34.62 46.00 -11.38 37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09		0.352	37.56	48.91	-11.35**	
37 2.358 34.61 46.00 -11.39 38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	35	2.766	34.63	46.00	-11.37	
38 0.424 35.90 47.37 -11.47** 39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09		2.527	34.62	46.00	-11.38	
39 0.570 34.31 46.00 -11.69** 40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
40 1.577 34.30 46.00 -11.70 41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09	38	0.424	35.90	47.37	-11.47**	
41 0.341 37.46 49.18 -11.72** 42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
42 2.226 34.21 46.00 -11.79 43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09		1.577				
43 0.310 38.15 49.97 -11.81** 44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
44 3.175 34.04 46.00 -11.96 45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
45 15.478 38.04 50.00 -11.96 46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
46 0.286 38.65 50.63 -11.98** 47 2.310 33.91 46.00 -12.09						
47 2.310 33.91 46.00 -12.09						
48 2.410 33.81 46.00 -12.19						
	48	2.410	33.81	46.00	-12.19	

^{*}Please See the Average Readings on the Next Page and on the Plot

2/03/2012 11:28:02

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Raydome Ant.

Tx Mode - Long Cable

BlackLead LI-215 12078 6-20-11

TEST ENGINEER : Kyle Fujimoto 48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 0.00 dB, Curve : Average Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB) 1 0.637 34.95 46.00 -11.05 2 0.188 39.81 54.10 -14.29 53.97 3 0.192 39.49 -14.48 4 0.182 38.65 54.41 -15.76 5 0.179 38.71 54.54 -15.83 35.17 0.254 -16.47 6 51.64 7 0.474 29.94 46.45 -16.51 8 37.73 54.28 0.184 -16.55 9 0.479 29.71 46.36 -16.65 10 0.466 29.87 46.58 -16.70 0.508 29.11 46.00 -16.89 11 54.77 12 0.174 37.38 -17.3913 0.500 28.00 46.01 -18.01 14 0.258 33.50 51.51 -18.01 15 0.449 28.81 46.89 -18.08 29.85 48.34 16 0.377 -18.49 17 0.248 32.90 51.82 -18.92 52.17 -19.32 18 0.238 32.84 19 0.442 27.65 47.02 -19.37 20 0.365 29.18 48.61 -19.42 21 0.152 36.38 55.86 -19.48 53.80 -19.62 22 0.196 34.17 -19.77 23 0.371 28.71 48.47 24 0.172 34.78 54.86 -20.08 25 0.201 33.41 53.58 -20.17 26 0.151 35.66 55.95 -20.29 27 31.07 51.38 0.262 -20.31 28 0.162 34.97 55.34 -20.37 29 0.168 34.66 55.07 -20.41 30 0.154 35.13 55.78 -20.64 26.70 47.42 -20.72 31 0.421 32 0.161 34.68 55.43 -20.75 33 0.524 25.20 46.00 -20.80 47.28 -20.82 34 0.428 26.46 52.25 -20.83 35 0.235 31.42 47.77 36 0.404 26.80 -20.97 37 -21.00 0.356 27.83 48.82 38 34.50 55.51 0.159 -21.01 55.69 39 0.156 34.56 -21.13 40 0.387 26.79 48.12 -21.33 41 0.400 26.50 47.86 -21.35 42 0.329 28.03 49.48 -21.46 47.55 43 0.415 26.01 -21.54 44 0.300 28.65 50.23 -21.5845 0.296 28.68 50.36 -21.69 46 0.205 31.53 53.40 -21.87 47 0.393 26.10 47.99 -21.89

0.211

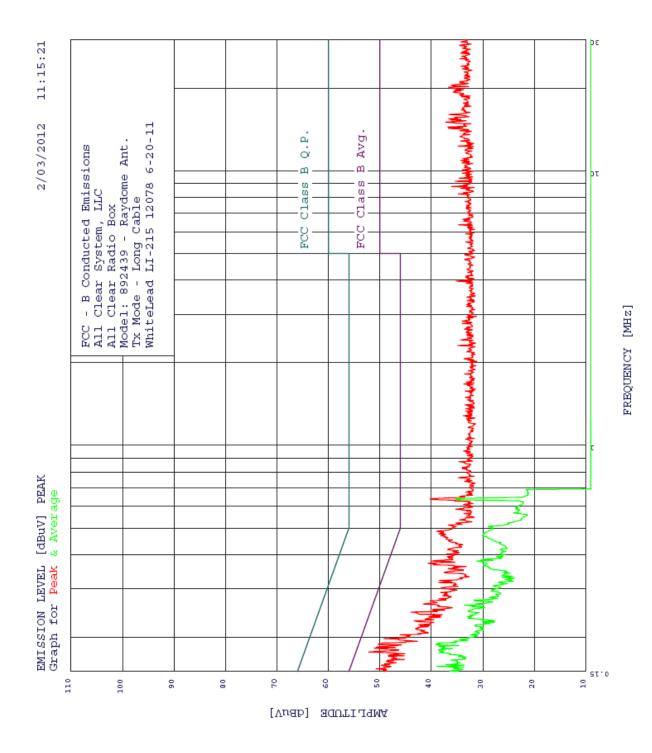
31.29

48

53.18

-21.89







2/03/2012 11:15:21

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box

Model: 892439 - Raydome Ant.

Tx Mode - Long Cable WhiteLead LI-215 12078 6-20-11

48 highest peaks above -50.00 dB of FCC Class B Avg. 1	limit	line
Peak criteria : 1.00 dB, Curve : Peak		
Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB)		
1 0.177 52.16 54.63 -2.47**		
2 0.183 51.06 54.37 -3.31**		
3 0.184 50.66 54.28 -3.63**		
4 0.188 50.36 54.10 -3.75**		
5 0.198 49.26 53.71 -4.46**		
6 0.153 50.71 55.82 -5.11**		
7 0.637 40.27 46.00 -5.73**		
8 0.158 49.73 55.56 -5.83**		
9 0.160 49.13 55.47 -6.34**		
10 0.172 48.36 54.86 -6.50**		
11 0.163 48.74 55.29 -6.55**		
12 0.170 48.36 54.94 -6.58**		
13 0.165 48.54 55.20 -6.66**		
14 0.486 38.99 46.23 -7.24** 15 0.204 46.06 53.44 -7.38**		
16 0.371 40.62 48.47 -7.85** 17 0.247 43.99 51.86 -7.86**		
18 0.379 39.92 48.29 -8.37**		
19 0.229 43.28 52.48 -9.20**		
20 0.513 36.71 46.00 -9.29**		
21 0.265 41.57 51.29 -9.72**		
22 0.215 43.07 53.00 -9.94**		
23 0.222 42.47 52.74 -10.27**		
24 0.627 35.47 46.00 -10.53**		
25 0.220 42.17 52.83 -10.65**		
26 0.417 36.84 47.50 -10.67**		
27 0.586 35.26 46.00 -10.74**		
28 0.402 37.03 47.81 -10.78**		
29 0.521 35.21 46.00 -10.79**		
30 0.272 40.26 51.07 -10.81**		
31 3.966 35.15 46.00 -10.85		
32 0.393 36.92 47.99 -11.07**		
33 2.310 34.88 46.00 -11.12		
34 0.233 41.18 52.34 -11.16**		
35 0.317 38.61 49.79 -11.18**		
36 0.763 34.76 46.00 -11.24		
37 0.322 38.41 49.66 -11.25**		
38 0.872 34.65 46.00 -11.35		
39 0.535 34.52 46.00 -11.48**		
40 0.345 37.52 49.09 -11.57** 41 0.238 40.49 52.17 -11.68**		
41 0.238 40.49 52.17 -11.68** 42 2.423 34.28 46.00 -11.72		
43 0.411 35.83 47.63 -11.80**		
44 0.252 39.79 51.68 -11.89**		
45 2.840 33.99 46.00 -12.01		
46 2.781 33.99 46.00 -12.01		
47 0.822 33.96 46.00 -12.04		
48 0.302 38.10 50.19 -12.09**		

^{*}Please See the Average Readings on the Next Page and on the Plot



2/03/2012 11:15:21

FCC - B Conducted Emissions All Clear System, LLC

All Clear Radio Box Model: 892439 - Raydome Ant.

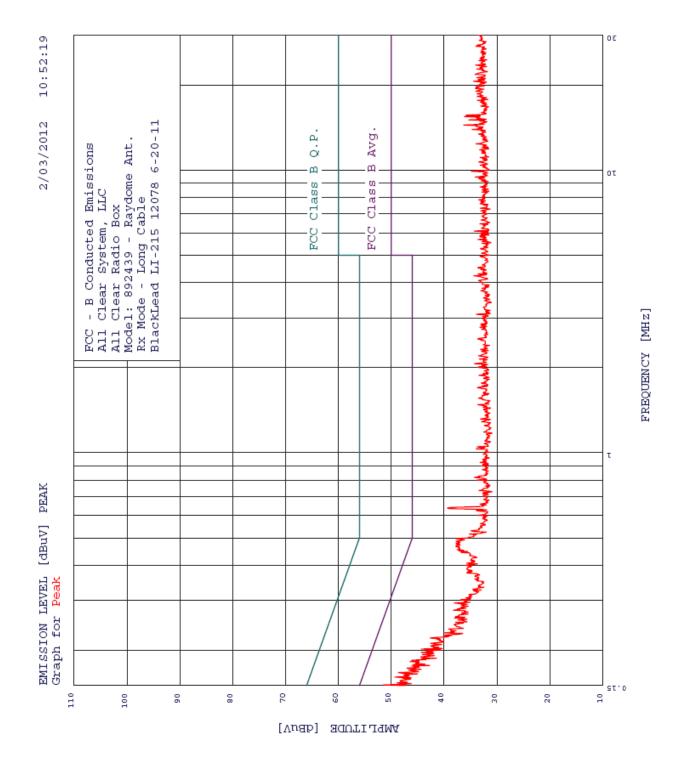
Tx Mode - Long Cable

WhiteLead LI-215 12078 6-20-11

TEST ENGINEER : Kyle Fujimoto 48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 0.00 dB, Curve : Average Amp(dBuV) Limit(dB) Peak# Freq(MHz) Delta(dB) 0.637 35.28 46.00 -10.72 1 0.188 2 39.16 54.10 -14.953 0.190 38.68 54.01 -15.34 0.185 4 38.54 54.24 -15.70 5 0.180 38.61 54.50 -15.89 0.176 6 38.50 54.68 -16.18 7 0.183 38.02 54.37 -16.35 8 0.469 30.11 46.53 -16.43 9 0.474 30.01 46.45 -16.44 10 29.65 -16.67 0.481 46.32 11 0.157 38.94 55.64 -16.70 12 0.379 31.23 48.29 -17.0613 0.505 28.91 46.00 -17.09 0.500 -17.76 28.25 46.01 14 15 0.262 33.57 51.38 -17.80 -18.02 16 0.383 30.18 48.21 17 0.173 36.51 54.81 -18.30 18 0.194 35.56 53.88 -18.33 19 0.159 37.18 55.51 -18.34 20 0.365 29.92 48.61 -18.68 21 0.250 32.80 51.77 -18.97 55.20 -18.99 22 0.165 36.21 23 0.197 34.60 53.75 -19.16 24 0.238 32.98 52.17 -19.19 25 0.259 32.26 51.47 -19.21 26 0.273 31.65 51.02 -19.37 27 0.234 32.83 52.30 -19.46 28 0.151 36.39 55.95 -19.56 29 0.240 32.42 52.08 -19.66 30 0.265 31.43 51.29 -19.86 31 0.358 28.79 48.78 -19.99 0.154 35.75 55.78 -20.02 32 33 0.170 34.73 54.94 -20.21 34 0.162 35.10 55.34 -20.24 35 0.440 26.80 47.06 -20.26 -20.38 36 0.243 31.61 52.00 37 0.161 34.96 55.43 -20.47 38 0.393 27.41 47.99 -20.58 39 0.199 32.88 53.67 -20.79 25.19 40 0.521 46.00 -20.81 41 0.419 26.64 47.46 -20.82 42 53.44 0.204 32.39 -21.05 43 0.389 27.00 48.08 -21.07 44 0.169 33.95 55.03 -21.07 45 0.415 26.35 47.55 -21.20 52.78 46 0.221 31.54 -21.2447 0.402 26.54 47.81 -21.27 48 0.406 26.44 47.72

-21.28





2/03/2012 10:52:19

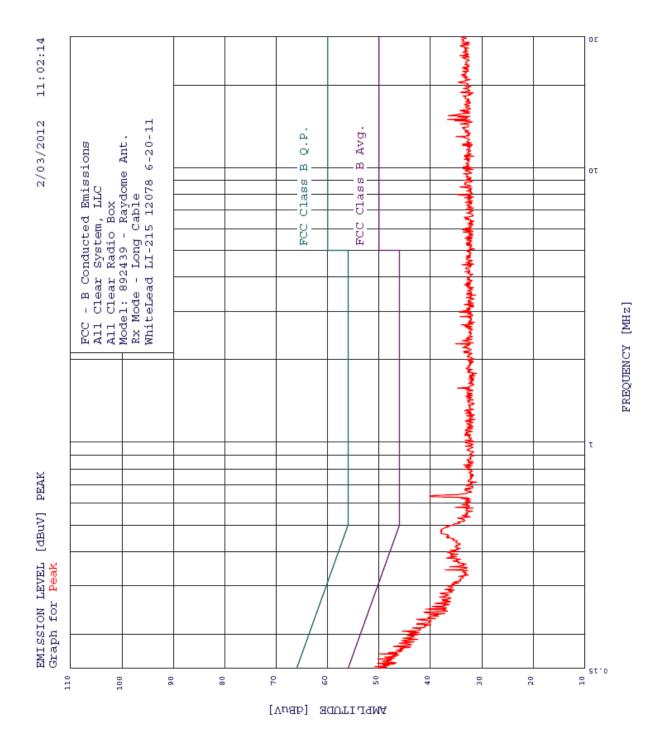
FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Raydome Ant.

Rx Mode - Long Cable

BlackLead LI-215 12078 6-20-11

TEST ENGINEER : Kyle Fujimoto 48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 1.00 dB, Curve : Peak Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB) 0.151 51.52 55.95 -4.43 1 2 0.161 49.32 55.43 -6.11 3 0.167 48.62 55.11 -6.50 4 0.637 39.41 46.00 -6.59 5 0.153 48.92 55.82 -6.90 55.69 6 0.156 48.32 -7.37 7 47.62 0.163 55.29 -7.67 47.82 8 55.51 -7.69 0.159 9 0.173 47.02 54.81 -7.79 10 0.183 46.42 54.37 -7.95 11 0.184 46.12 54.28 -8.16 0.170 46.72 54.94 -8.22 12 13 0.497 37.81 46.05 -8.24 14 0.176 46.12 54.68 -8.56 15 0.178 45.92 54.59 -8.67 16 0.466 37.80 46.58 -8.77 17 0.202 44.33 53.53 -9.21 18 0.197 44.32 53.75 -9.43 19 0.189 44.42 54.06 -9.64 20 0.194 44.12 53.88 -9.76 21 42.63 52.78 -10.15 0.221 22 0.445 36.80 46.98 -10.17 23 0.199 43.32 53.67 -10.34 24 0.212 42.53 53.14 -10.61 25 0.207 42.53 53.31 -10.78 26 0.516 35.21 46.00 -10.79 27 0.530 34.91 46.00 -11.09 28 4.227 34.37 46.00 -11.63 29 2.066 34.30 46.00 -11.70 30 -11.70 0.818 34.30 46.00 31 0.400 35.99 47.86 -11.86 35.70 32 47.72 0.406 -12.03 33 3.091 33.94 46.00 -12.06 34 33.91 46.00 -12.09 0.624 35 1.032 33.90 46.00 -12.10 36 0.801 33.80 46.00 -12.20 37 1.049 33.80 46.00 -12.2038 1.699 33.70 46.00 -12.30 39 0.294 38.05 50.41 -12.36 -12.38 40 2.527 33.62 46.00 33.61 41 0.601 46.00 -12.39 1.480 33.60 46.00 -12.40 42 43 4.504 46.00 33.58 -12.4244 4.294 33.58 46.00 -12.42 45 2.201 33.51 46.00 -12.49 46 0.230 39.93 52.43 -12.50 47 2.013 33.50 46.00 -12.50 48 1.560 33.50 46.00 -12.50







2/03/2012 11:02:14

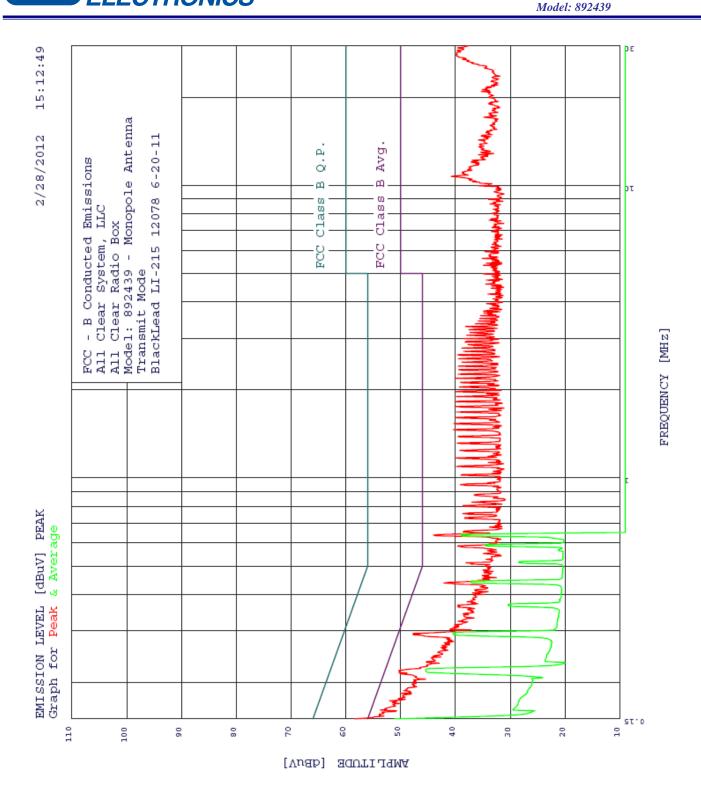
FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box

Model: 892439 - Raydome Ant. Rx Mode - Long Cable

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line

48 hig	hest peaks	above -50.	00 dB of FCC	Class B Avg.	limit lir
Peak c	riteria :	1.00 dB, Ct	urve : Peak		
Peak#	Freq(MHz)	Amp (dBuV)	Limit(dB)	Delta(dB)	
1	0.152	50.81	55.86	-5.06	
2	0.162	50.24	55.34	-5.10	
3	0.170	49.86	54.98	-5.13	
4	0.157	50.32	55.64	-5.32	
5	0.637	40.17	46.00	-5.83	
6	0.159	49.33	55.51	-6.19	
7	0.165	48.84	55.20	-6.36	
8	0.155	49.32	55.73	-6.41	
9	0.171	48.16	54.90	-6.74	
10	0.181	47.26	54.46	-7.20	
11	0.205	45.46	53.40	-7.94	
12	0.175	46.66	54.72	-8.06	
13	0.185	46.06	54.24	-8.18	
14	0.479	37.98	46.36	-8.38	
15	0.189	45.56	54.06	-8.50	
16	0.194	45.36	53.88	-8.53	
17	0.198	44.56	53.71	-9.16	
18	0.202	44.16	53.53	-9.37	
19	0.211	43.56	53.18	-9.62	
20	0.227	42.68	52.57	-9.89	
21	0.217	42.67	52.91	-10.24	
22	0.240	41.29	52.08	-10.79	
23	0.580	35.16	46.00	-10.84	
24	0.247	40.99	51.86	-10.86	
25	2.286	35.08	46.00	-10.92	
26	0.398	36.72	47.90	-11.18	
27	0.530	34.72	46.00	-11.28	
28	1.577	34.70	46.00	-11.30	
29	0.379	36.92	48.29	-11.37	
30	2.979	34.39	46.00	-11.61	
31	0.404	36.13	47.77	-11.64	
32	2.870	34.19	46.00	-11.81	
33	0.252	39.69	51.68	-11.99	
34	0.387	36.12	48.12	-11.99	
35	0.229	40.48	52.48	-12.00	
36	2.679	33.99	46.00	-12.01	
37	0.343	37.12	49.13	-12.02	
38	0.624	33.97	46.00	-12.03	
39	0.235	40.19	52.25	-12.07	
40	4.432	33.87	46.00	-12.13	
41	0.592	33.86	46.00	-12.14	
42	0.541	33.83	46.00	-12.17	
43	2.346	33.78	46.00	-12.22	
44	2.214	33.77	46.00	-12.23	
45	0.417	35.24	47.50	-12.27	
46	0.259	39.18	51.47	-12.29	
47	3.011	33.70	46.00	-12.30	
48	2.145	33.57	46.00	-12.43	





2/28/2012 15:12:49

FCC - B Conducted Emissions All Clear System, LLC All Clear Radio Box Model: 892439 - Monopole Antenna Transmit Mode BlackLead LI-215 12078 6-20-11

TEST ENGINEER: Kyle Fujimoto

					-	
48 high	nest peaks	above -50.0	0 dB of FCC	Class B Avg.	limit	line
Peak cr	riteria :	1.00 dB, Cu	rve : Peak	_		
Peak#	Freq(MHz)	Amp (dBuV)	Limit(dB)	Delta(dB)		
1	0.161	53.72	55.43	-1.71**		
2	0.637	44.01	46.00	-1.99**		
3	0.220	50.33	52.83	-2.50**		
4	0.294	47.75	50.41	-2.66**		
5	0.291	47.75	50.49	-2.75**		
6	0.173	52.02	54.81	-2.79**		
7	0.173	50.13	53.05	-2.79**		
8	0.176	50.42	54.68	-4.26**		
9			54.33	-4.41**		
	0.183	49.92				
10	0.187	49.42	54.15	-4.73**		
11	0.438	42.10	47.11	-5.01**		
12	1.464	40.40	46.00	-5.60		
13	1.536	40.30	46.00	-5.70		
14	2.190	40.11	46.00	-5.89		
15	1.820	40.10	46.00	-5.90		
16	1.754	40.00	46.00	-6.00		
17	1.172	39.90	46.00	-6.10		
18	1.611	39.90	46.00	-6.10		
19	1.971	39.90	46.00	-6.10		
20	1.094	39.80	46.00	-6.20		
21	1.680	39.80	46.00	-6.20		
22	1.899	39.80	46.00	-6.20		
23	1.318	39.70	46.00	-6.30		
24	2.637	39.62	46.00	-6.38		
25	0.586	39.61	46.00	-6.39**		
26	2.410	39.51	46.00	-6.49		
27	2.262	39.51	46.00	-6.49		
28	1.389	39.50	46.00	-6.50		
29	2.554	39.42	46.00	-6.58		
30	2.346	39.41	46.00	-6.59		
31	2.044	39.30	46.00	-6.70		
32	1.243	39.20	46.00	-6.80		
33	2.123	39.10	46.00	-6.90		
34	0.948	39.10	46.00	-6.90		
35	0.234	45.33	52.30	-6.96**		
36	1.021	39.00	46.00	-7.00		
37	2.781	38.83	46.00	-7.17		
38	2.488	38.82	46.00	-7.18		
39	0.755	38.70	46.00	-7.30		
40	0.655	38.60	46.00	-7.40		
41						
	0.805	38.60	46.00	-7.40		
42	2.995	38.53	46.00	-7.47		
43	2.707	38.52	46.00	-7.48		
44	0.728	38.30	46.00	-7.70		
45	0.246	44.14	51.90	-7.77**		
46	2.916	38.23	46.00	-7.77		
47	3.294	38.14	46.00	-7.86		
48	0.513	38.11	46.00	-7.89**		

^{*}Please See the Average Readings on the Next Page and on the Plot



2/28/2012 15:12:49

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

Transmit Mode

BlackLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria : 0.00 dB, Curve : Average Peak# Freq(MHz) Amp(dBuV) Limit(dB) Delta(dB) 46.00 0.641 38.98 -7.31 2 0.221 45.47 52.78 0.442 3 37.19 47.02 -9.83 4 0.294 40.48 50.41 -9.93 5 0.589 34.63 46.00 -11.37 6 0.516 28.44 46.00 -17.56 7 30.39 0.369 48.52 -18.138 0.567 21.24 46.00 -24.76 9 0.538 20.40 46.00 -25.60 10 0.544 20.40 46.00 -25.60 11 0.555 20.40 46.00 -25.60 12 0.608 20.30 46.00 -25.70 13 0.492 20.40 46.14-25.74 14 20.50 -25.82 0.481 46.32 15 0.162 29.55 55.38 -25.83 -25.99 20.58 46.58 16 0.466 17 0.471 20.50 46.49 -25.99 18 0.172 28.46 54.86 -26.40 19 28.58 54.98 0.170 -26.41 20 0.177 28.15 54.63 -26.48 21 0.417 20.68 47.50 -26.83 47.68 -27.00 22 0.409 20.68 23 0.402 20.77 47.81 -27.05 24 0.383 21.03 48.21 -27.17 25 0.206 26.09 53.35 -27.27 -27.29 26.81 26 0.188 54.10 27 0.389 20.76 48.08 -27.32 28 54.19 0.186 26.86 -27.33 29 0.192 26.52 53.97 -27.45 30 -27.46 0.204 25.99 53.44 31 0.201 26.04 53.58 -27.54 32 0.196 26.13 53.80 -27.66 -27.68 33 0.198 26.03 53.71 34 21.10 49.04 -27.94 0.347 49.18 -27.99 35 0.341 21.1936 0.334 21.28 49.35 -28.07 37 0.329 21.37 49.48 -28.1238 0.304 21.95 50.14 -28.19 39 0.325 21.37 49.57 -28.21 40 0.320 49.71 -28.25 21.45 22.58 50.94 41 0.276 -28.35 21.53 42 0.312 49.92 -28.3951.77 43 0.250 23.31 -28.46

0.240

0.238

0.244

0.252

0.273

23.58

23.64

23.38

23.10

22.42

44

45

46

47

48

52.08

52.17

51.95

51.68

51.02

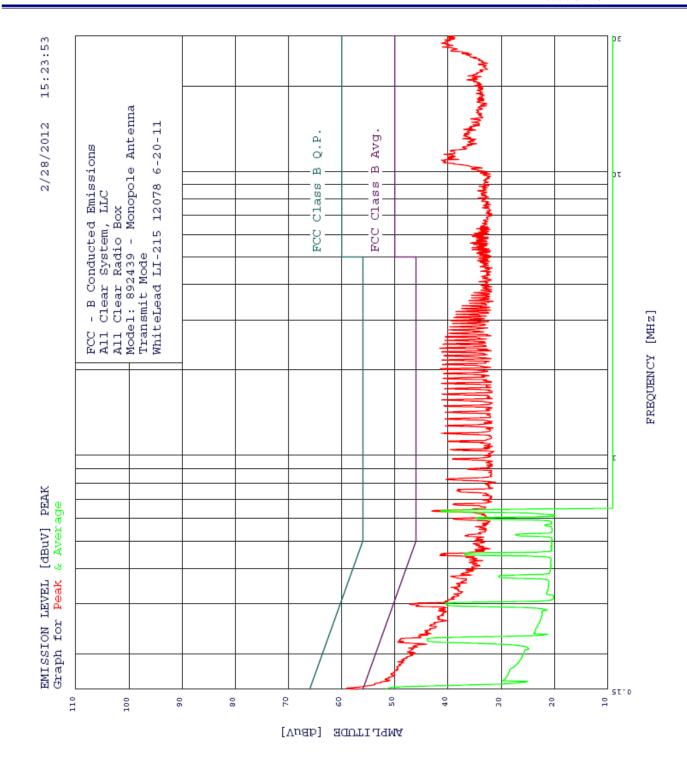
-28.51

-28.52

-28.57 -28.58

-28.60







2/28/2012 15:23:53

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

Transmit Mode

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line

48 nig	nest peaks	above -50.0	o as of FCC	Class B Avg.	limic lir
Peak c	riteria :	1.00 dB, Cu	rve : Peak		
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.152	59.01	55.91	3.10**	
2	0.637	43.07	46.00	-2.93**	
3	0.299	47.20	50.28	-3.08**	
4	0.220	49.47	52.83	-3.35**	
5	2.384	41.58	46.00	-4.42	
6	2.023	41.46	46.00	-4.54	
7	0.187	49.46	54.15	-4.69**	
8	1.790	41.28	46.00	-4.72	
9	1.197	41.28	46.00	-4.72	
10	1.569	41.20	46.00	-4.80	
11	2.310	41.18	46.00	-4.82	
12	2.168	41.17	46.00	-4.83	
13	1.646	41.10	46.00	-4.90	
14	2.089	41.06	46.00	-4.94	
15	2.462	40.98	46.00	-5.02	
16	1.869	40.97	46.00	-5.03	
17	1.939	40.87	46.00	-5.13	
18	1.496	40.81	46.00	-5.13	
				-5.23	
19	2.238	40.77	46.00		
20	1.717	40.69	46.00	-5.31	
21	1.345	40.59	46.00	-5.41	
22	2.540	40.59	46.00	-5.41	
23	0.445	41.56	46.98	-5.42**	
24	1.419	40.50	46.00	-5.50	
25	2.624	40.49	46.00	-5.51	
26	1.269	40.49	46.00	-5.51	
27	0.822	40.36	46.00	-5.64	
28	0.210	47.46	53.23	-5.76**	
29	0.203	47.66	53.49	-5.83**	
30	2.693	40.09	46.00	-5.91	
31	1.118	40.06	46.00	-5.94	
32	2.766	39.99	46.00	-6.01	
33	2.840	39.69	46.00	-6.31	
34	1.049	39.64	46.00	-6.36	
35	2.979	39.39	46.00	-6.61	
36	2.916	39.19	46.00	-6.81	
37	0.974	39.13	46.00	-6.87	
38	0.672	39.07	46.00	-6.93	
39	0.598	39.07	46.00	-6.93**	
40	0.234	45.28	52.30	-7.01**	
41	3.059	38.90	46.00	-7.10	
42	3.209	38.53	46.00	-7.47	
43	3.141	38.52	46.00	-7.48	
44	0.751	38.36	46.00	-7.64	
45	0.242	44.39	52.04	-7.65**	
46	0.251	43.50	51.73	-8.23**	
47	3.294	37.44	46.00	-8.56	
48	3.365	37.35	46.00	-8.65	

^{*}Please See the Average Readings on the Next Page and on the Plot



2/28/2012 15:23:53

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

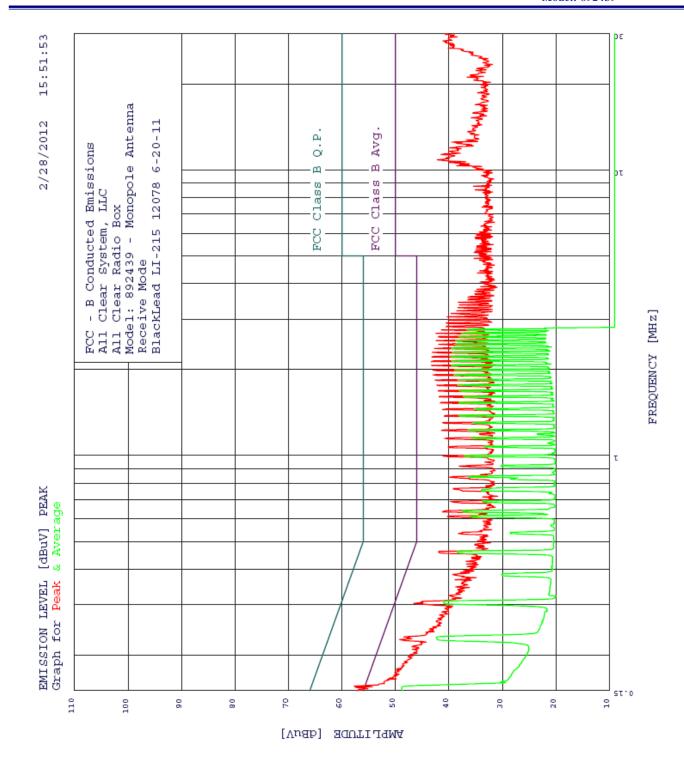
Transmit Mode

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

42 highest peaks above -50.00 dB of FCC Class B Avg. limit line

		above -50.0	00 dB of FCC	Class B Avg.	limit line
Peak c	riteria :		ırve : Averaç		
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.151	51.36	55.95	-4.59	
2	0.641	41.33	46.00	-4.67	
3	0.226	43.93	52.61	-8.68	
4	0.300	40.43	50.23	-9.80	
5	0.452	36.95	46.85	-9.89	
6	0.601	34.66	46.00	-11.34	
7	0.375	30.46	48.38	-17.92	
8	0.527	27.29	46.00	-18.71	
9	0.567	21.82	46.00	-24.18	
10	0.500	20.68	46.01	-25.33	
11	0.492	20.58	46.14	-25.56	
12	0.479	20.66	46.36	-25.70	
13	0.161	29.73	55.43	-25.70	
14	0.474	20.66	46.45	-25.79	
15	0.466	20.56	46.58	-26.01	
16	0.165	29.14	55.20	-26.06	
17	0.167	28.90	55.11	-26.22	
18	0.170	28.68	54.94	-26.26	
19	0.174	28.45	54.77	-26.32	
20	0.421	20.72	47.42	-26.70	
21	0.417	20.72	47.50	-26.79	
22	0.406	20.71	47.72	-27.01	
23	0.400	20.79	47.86	-27.06	
24	0.387	20.89	48.12	-27.22	
25	0.195	26.22	53.84	-27.62	
26	0.197	26.07	53.75	-27.69	
27	0.206	25.59	53.35	-27.76	
28	0.354	21.07	48.87	-27.79	
29	0.202	25.70	53.53	-27.83	
30	0.348	21.16	49.00	-27.84	
31	0.343	21.16	49.13	-27.98	
32 33	0.331 0.327	21.42	49.44	-28.01 -28.01	
34	0.327	21.51 21.25	49.53 49.31		
35		23.87		-28.06 -28.34	
36	0.237 0.283	22.28	52.21 50.72	-28.43	
37	0.242	23.60	52.04	-28.43	
38	0.242	23.39	51.86	-28.46	
39	0.279	22.37	50.85	-28.48	
40	0.251	23.18	51.73	-28.55	
41	0.251	22.47	51.11	-28.64	
42	0.266	22.47	51.24	-28.70	
44	0.200	22.55	31.24	20.70	

All Clear Radio Box Model: 892439





2/28/2012 15:51:53

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

Receive Mode

BlackLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

					_
				Class B Avg.	
			urve : Peak		
Peak#	Freq(MHz)	Amp (dBuV)		Delta(dB)	
1	0.156	57.72	55.69	2.03**	
2	0.154	57.52	55.78	1.75**	
3	2.134	43.30	46.00	-2.70**	
4	2.066	43.30	46.00	-2.70**	
5	2.214	43.21	46.00	-2.79**	
6	2.298	43.11	46.00	-2.89**	
7	1.918	43.00	46.00	-3.00**	
8	1.992	43.00	46.00	-3.00**	
9	2.371	42.71	46.00	-3.29**	
10	0.227	49.23	52.57	-3.34**	
11	1.840	42.60	46.00	-3.40**	
12	2.679	42.42	46.00	-3.58**	
13	2.527	42.42	46.00	-3.58**	
14	0.304	46.55	50.14	-3.59**	
15	1.763	42.30	46.00	-3.70**	
16	0.166	51.22	55.16	-3.94**	
17	0.232	48.43	52.39	-3.95**	
18	1.680	42.00	46.00	-4.00**	
19	2.610	41.92	46.00	-4.08**	
20	2.449	41.91	46.00	-4.09**	
21	1.603	41.80	46.00	-4.20**	
22	1.528	41.60	46.00	-4.40**	
23	2.751	41.43	46.00	-4.57**	
24	1.223	41.40	46.00	-4.60**	
25	0.461	41.90	46.67	-4.76**	
26	0.634	41.21	46.00	-4.79**	
27	1.304	41.20	46.00	-4.80**	
28	1.449	41.20	46.00	-4.80**	
29	0.995	41.10	46.00	-4.90**	
30	1.374	40.90	46.00	-5.10**	
31	1.148	40.80	46.00	-5.20**	
32	2.916	40.53	46.00	-5.47	
33	2.826	40.53	46.00	-5.47	
34	3.059	40.34	46.00	-5.66	
35	0.611	40.31	46.00	-5.69**	
36	2.979	40.13	46.00	-5.87	
37	1.066	40.10	46.00	-5.90**	
38	0.839	39.90	46.00	-6.10**	
39	0.214	46.93	53.05	-6.12**	
40	0.690	39.70	46.00	-6.30**	
41	3.141	39.64	46.00	-6.36	
42	0.763	39.20	46.00	-6.80**	
43	3.209	38.54	46.00	-7.46	
44	3.294	38.34	46.00	-7.66	
45	3.438	38.25	46.00	-7.75	
46	0.532	38.21	46.00	-7.79**	
47	10.851	42.15	50.00	-7.85	
48	0.919	38.10	46.00	-7.90**	

^{*}Please See the Average Readings on the Next Page and on the Plot

2/28/2012 15:51:53

FCC - B Conducted Emissions

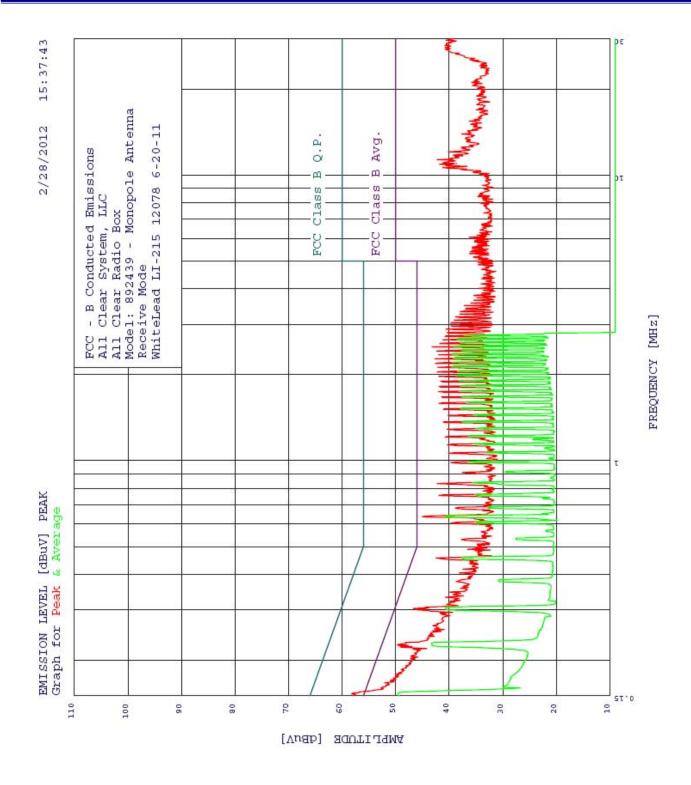
All Clear System, LLC

All Clear Radio Box Model: 892439 - Monopole Antenna

Receive Mode

BlackLead LI-215 12078 6-20-11 TEST ENGINEER: Kyle Fujimoto

				Class B Avg.	limit line	е
	riteria :		ırve : Avera			
Peak#	Freq(MHz)	Amp (dBuV)	Limit(dB)	Delta(dB)		
1	2.226	39.71	46.00	-6.29		
2	2.371	39.53	46.00	-6.47		
3	2.145	39.46	46.00	-6.54		
4	2.066	39.42	46.00	-6.58		
5 6	2.298	39.38	46.00	-6.62		
	1.918	39.06	46.00	-6.94		
7 8	0.153	48.86	55.82	-6.96		
	1.992	38.91	46.00	-7.09		
9	2.527	38.71	46.00	-7.29		
10 11	2.449 1.763	38.65 38.36	46.00 46.00	-7.35 -7.64		
12	1.840			-7.64 -7.70		
13	1.382	38.30 38.15	46.00 46.00	-7.85		
14	2.610	38.14	46.00	-7.86		
15	1.528	38.09	46.00	-7.91		
16	1.690	38.09	46.00	-7.91		
17	0.459	38.44	46.71	-8.27		
18	2.679	37.58	46.00	-8.42		
19	0.641	37.43	46.00	-8.57		
20	1.611	37.45	46.00	-8.75		
21	0.995	37.11	46.00	-8.89		
22	0.307	40.98	50.05	-9.07		
23	2.766	36.65	46.00	-9.35		
24	1.230	36.43	46.00	-9.57		
25	0.844	36.34	46.00	-9.66		
26	0.611	36.00	46.00	-10.00		
27	1.154	35.92	46.00	-10.08		
28	0.230	42.33	52.43	-10.10		
29	1.304	35.48	46.00	-10.52		
30	1.456	35.25	46.00	-10.75		
31	0.755	33.94	46.00	-12.06		
32	0.690	33.80	46.00	-12.20		
33	1.077	33.43	46.00	-12.57		
34	0.767	32.36	46.00	-13.64		
35	0.919	30.25	46.00	-15.75		
36	0.535	28.55	46.00	-17.45		
37	0.831	28.50	46.00	-17.50		
38	0.383	30.14	48.21	-18.06		
39	1.191	23.51	46.00	-22.49		
40	2.568	22.35	46.00	-23.65		
41	2.796	22.12	46.00	-23.88		
42	2.111	21.92	46.00	-24.08		
43	2.722	21.86	46.00	-24.14		
44	2.262	21.68	46.00	-24.32		
45	2.410	21.58	46.00	-24.42		
46	2.334	21.58	46.00	-24.42		
47	1.106	21.58	46.00	-24.42		
48	2.034	21.50	46.00	-24.50		



2/28/2012 15:37:43

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

Receive Mode

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line

40 1119	nesc peaks			Class b Avg.	TIULC TILE
Peak c	riteria :	1.00 dB, C	urve : Peak		
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)	
1	0.637	45.07	46.00	-0.93**	
2	2.501	43.19	46.00	-2.81**	
3	0.227	49.68	52.57	-2.89**	
4	0.224	49.48	52.65	-3.18**	
5	2.274	42.67	46.00	-3.33**	
6	2.190	42.57	46.00	-3.43**	
7	0.304	46.70	50.14	-3.44**	
8	2.423	42.38	46.00	-3.62**	
9	0.222	49.07	52.74	-3.67**	
10	2.044	42.26	46.00	-3.74**	
11	0.831	42.25	46.00	-3.75**	
12	2.123	42.17	46.00	-3.83**	
13	1.745	41.99	46.00	-4.01**	
14	2.346	41.98	46.00	-4.02**	
15	0.755	41.96	46.00	-4.04**	
16	1.971		46.00	-4.04**	
17		41.96	46.00	-4.04^^ -4.10**	
	1.586	41.90			
18	1.820	41.88	46.00	-4.12**	
19	0.300	46.10	50.23	-4.13**	
20	2.568	41.79	46.00	-4.21**	
21	0.457	42.47	46.76	-4.29**	
22	1.899	41.57	46.00	-4.43**	
23	1.671	41.39	46.00	-4.61**	
24	2.651	41.19	46.00	-4.81**	
25	1.512	41.11	46.00	-4.89**	
26	1.367	41.10	46.00	-4.90**	
27	2.722	40.79	46.00	-5.21**	
28	1.210	40.78	46.00	-5.22**	
29	2.885	40.59	46.00	-5.41	
30	2.811	40.39	46.00	-5.61	
31	1.290	40.39	46.00	-5.61**	
32	1.136	40.36	46.00	-5.64**	
33	1.441	40.20	46.00	-5.80**	
34	1.060	40.15	46.00	-5.85**	
35	0.219	46.77	52.87	-6.10**	
36	0.206	47.16	53.35	-6.19**	
37	0.984	39.73	46.00	-6.27**	
38	3.027	39.70	46.00	-6.30	
39	2.963	39.69	46.00	-6.31	
40	0.605	39.67	46.00	-6.33**	
41	3.107	39.11	46.00	-6.89	
42	0.683	38.87	46.00	-7.13**	
43	3.192	38.82	46.00	-7.18	
44	11.322	42.27	50.00	-7.73	
45	3.260	38.04	46.00	-7.96	
46	3.328	37.95	46.00	-8.05	
47	0.244	43.89	51.95	-8.06**	
48	10.910	41.85	50.00	-8.15	

^{*}Please See the Average Readings on the Next Page and on the Plot

2/28/2012 15:37:43

FCC - B Conducted Emissions

All Clear System, LLC All Clear Radio Box

Model: 892439 - Monopole Antenna

Receive Mode

WhiteLead LI-215 12078 6-20-11 TEST ENGINEER : Kyle Fujimoto

48 highest peaks above -50.00 dB of FCC Class B Avg. limit line Peak criteria: 0.00 dB, Curve: Average
Peak# Freg(MHz) Amp(dBuV) Limit(dB) Delta(dB)

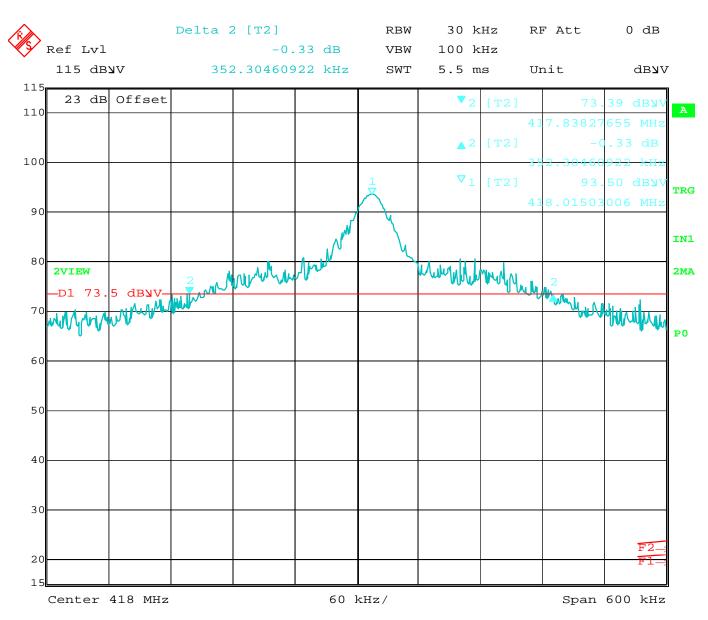
Peak c	riteria :	0.00 dB, Ct	ırve : Avera	age
Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.637	40.75	46.00	-5.25
2	0.152	49.57	55.86	-6.30
3	2.134	39.52	46.00	-6.48
4	2.371	39.42	46.00	-6.58
5	2.214	39.37	46.00	-6.63
6	2.514	39.23	46.00	-6.77
7	2.286	39.18	46.00	-6.82
8	1.981	38.67	46.00	-7.33
9	2.679	38.53	46.00	-7.47
10	2.055	38.42	46.00	-7.58
	1.908			-7.81
11		38.19	46.00	
12	2.596	37.99	46.00	-8.01
13	1.830	37.98	46.00	-8.02
14	1.754	37.95	46.00	-8.05
15	1.528	37.85	46.00	-8.15
16	2.449	37.67	46.00	-8.33
17	1.680	37.66	46.00	-8.34
18	1.374	37.62	46.00	-8.38
19	2.751	37.14	46.00	-8.86
20	1.603	37.01	46.00	-8.99
21	0.457	37.65	46.76	-9.11
22	0.229	43.27	52.48	-9.21
23	0.305	40.66	50.10	-9.44
24	1.223	36.38	46.00	-9.62
25	0.990	36.37	46.00	-9.63
26	0.839	35.61	46.00	-10.39
27	1.148	35.51	46.00	-10.49
28	1.449	35.43	46.00	-10.57
29	0.759	35.14	46.00	-10.86
30	0.608	34.96	46.00	-11.04
31	1.297	34.91	46.00	-11.09
32	1.066	33.15	46.00	-12.85
33	0.686	32.84	46.00	-13.16
34	0.914	29.60	46.00	-16.40
35	0.381	30.83	48.25	-17.42
36	0.530	27.60	46.00	-18.40
37	0.535	27.50	46.00	-18.49
38				
	1.184	24.41	46.00	-21.59
39	0.651	22.73	46.00	-23.27
40	0.739	22.50	46.00	-23.50
41	2.707	22.28	46.00	-23.72
42	2.554	22.28	46.00	-23.72
43	2.250	22.26	46.00	-23.74
44	1.106	22.25	46.00	-23.75
45	0.567	22.07	46.00	-23.93
46	2.100	21.93	46.00	-24.07
47	2.023	21.66	46.00	-24.34
48	1.869	21.49	46.00	-24.51

Model: 892439

-20 dB BANDWIDTH

DATA SHEET





2.MAR.2012 Date: 10:49:58

-20 dB of the Fundamental

Model: 892439

5 SECOND RULE

DATA SHEETS



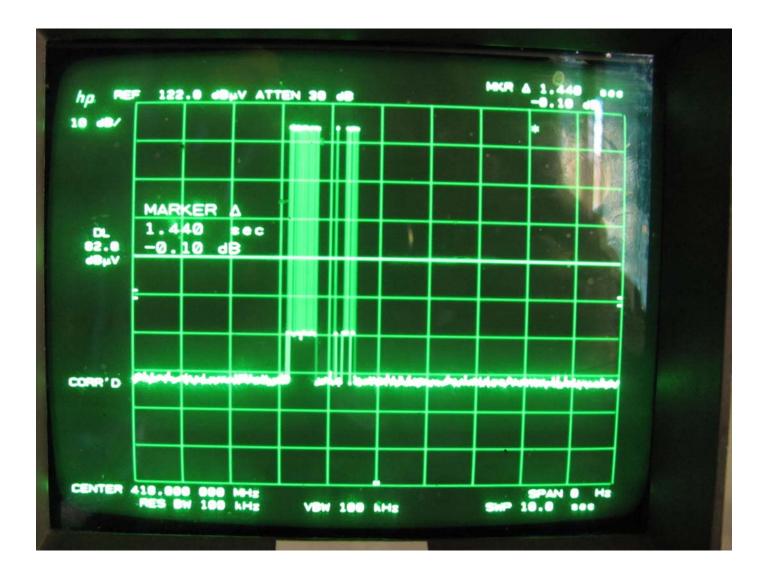


Photo showing the EUT turns off within 5 seconds of being activated.