

**FCC PART 15 SUBPART B and C
TEST REPORT**

for

**ALL CLEAR SYSTEM FOB
MODEL: 892263**

Prepared for

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

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

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DATE: FEBRUARY 14, 2012

REPORT BODY	APPENDICES					TOTAL
	A	B	C	D	E	
PAGES	18	2	2	10	13	47

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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 System FOB
 Model: 892263
 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): January 31, 2012
 February 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	The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.
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

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the All Clear System FOB, Model: 892263. 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.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions 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

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The All Clear System FOB, Model: 892263 (EUT) was tested as a stand alone unit and tested in three orthogonal axis. The EUT was continuously transmitting and receiving.

The EUT's antenna was soldered directly to the PCB.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. 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

There are no external cables connected to the EUT.

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

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
ALL CLEAR SYSTEM FOB (EUT)	ALL CLEAR SYSTEM, LLC	892263	N/A	ZZK892263

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANUFACTURER	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 RADIATED EMISSIONS TEST EQUIPMENT					
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

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 quasi-peak 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:

The EUT does not directly or indirectly connect to the AC mains, thus this test was not performed.

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 $20 \log (\text{total on time} / 100 \text{ mS})$. 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

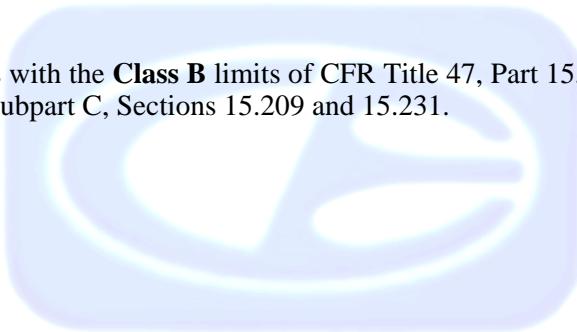
The open field test site of Compatible Electronics, Inc. was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. 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.



7.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
 All Clear System FOB, Model: 892263

Frequency MHz	Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
2508 (H) (Y-Axis)	55.86 (A)	60.28	-4.42
2508 (H) (X-Axis)	53.33 (A)	60.28	6.95
2508 (V) (Z-Axis)	53.08 (A)	60.28	-7.20
2508 (V) (Y-Axis)	49.86 (A)	60.28	-10.42
3762 (H) (Y-Axis)	43.01 (A)	54.00	-10.99
4180 (V) (Z-Axis)	42.65 (A)	54.00	-11.35

Notes:

- * The complete emissions data is given in Appendix E of this report.
- A Average Reading
- H Horizontal Polarization
- V Vertical Polarization

7.2**Bandwidth of the Fundamental**

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).



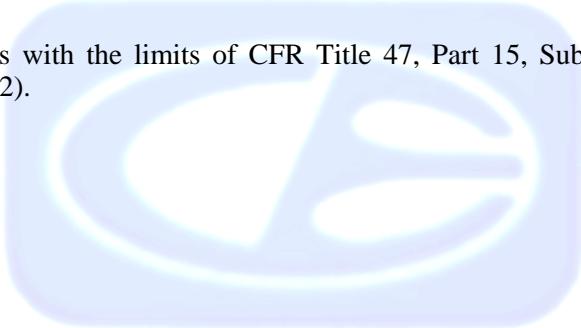
7.3**Five Second Rule**

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.

The EUT was tested in both standard operation and in panic mode.

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 System FOB, Model: 892263 (EUT), as tested, meets all of the **Class B** specification limits defined in 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.



APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

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

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

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

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

LABORATORY ACCREDITATIONS AND RECOGNITIONS


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

For US, Canada, Australia/New Zealand, 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

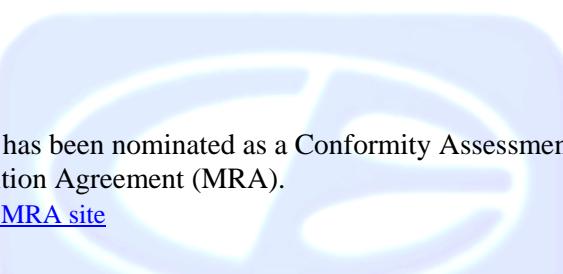
NVLAP listing links
[Agoura Division](#) / [Brea Division](#) / [Silverado/Lake Forest Division](#)

.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

<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>

 Brea Division
 114 Olinda Drive
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 (714) 579-0500

 Agoura Division
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 Agoura, CA 91301
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 Silverado Division
 19121 El Toro Road
 Silverado, CA 92676
 (949) 589-0700

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

APPENDIX B

MODIFICATIONS TO THE EUT

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Agoura Division
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Silverado Division
19121 El Toro Road
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(949) 589-0700

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

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.



APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

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

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

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

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

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

All Clear System FOB
Model: 892263

ALSO APPROVED UNDER THIS REPORT:

There were no additional models covered under this report.



APPENDIX D

DIAGRAMS, CHARTS, AND PHOTOS

Brea Division
114 Olinda Drive
Brea, CA 92823
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Agoura Division
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Silverado Division
19121 El Toro Road
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Lake Forest Division
20621 Pascal Way
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(949) 587-0400

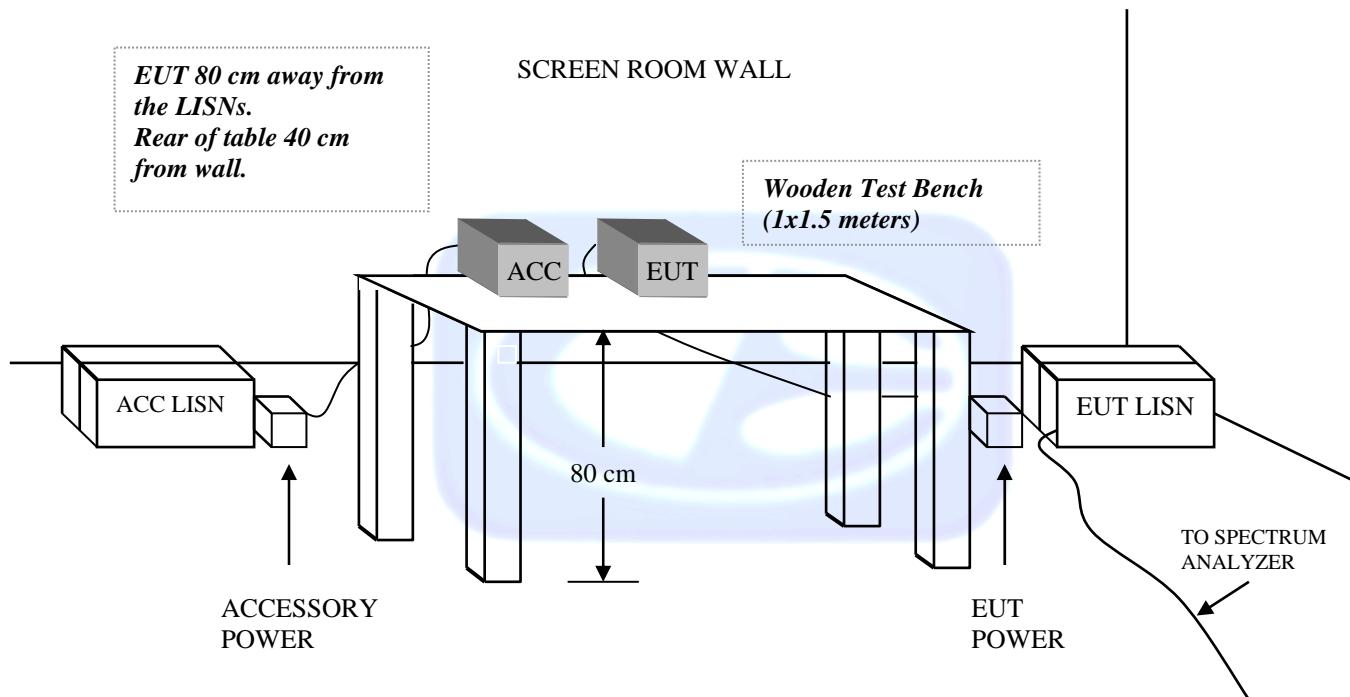
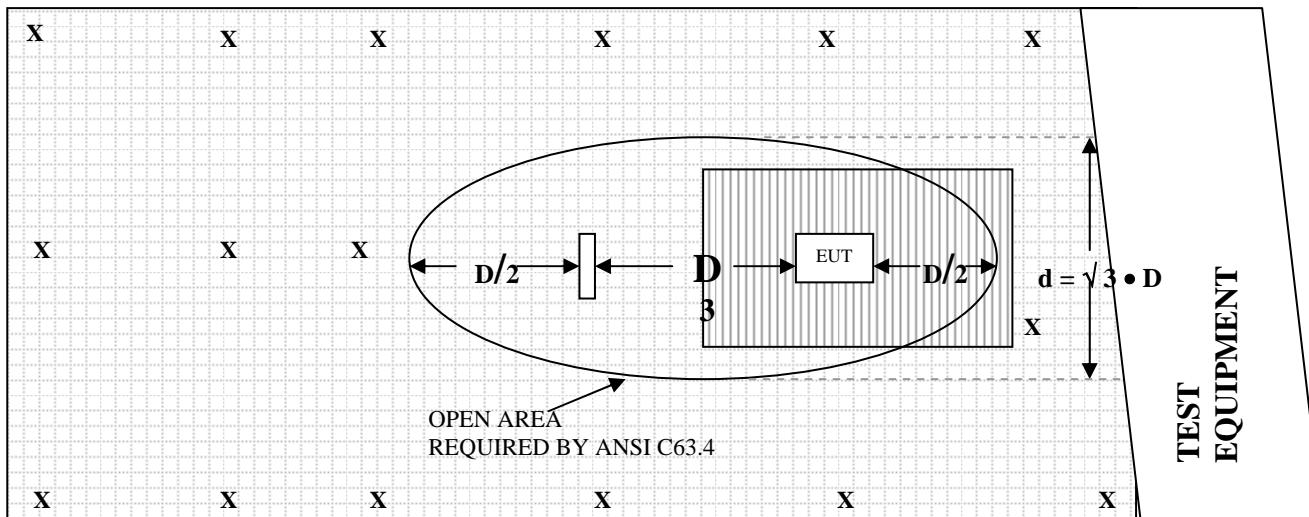
FIGURE 1: CONDUCTED EMISSIONS TEST SETUP


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

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

 = GROUND RODS	 = GROUND SCREEN
 = TEST DISTANCE (meters)	 = WOOD COVER

COM-POWER AB-900
BICONICAL ANTENNA
S/N: 15250
CALIBRATION DATE: JUNE 8, 2011

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (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 (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (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 (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (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 (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (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 (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (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**

INNOVISION DEVICES, LLC
ALL CLEAR SYSTEM FOB
MODEL: 892263
FCC SUBPART B AND C – RADIATED EMISSIONS

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

Brea Division
114 Olinda Drive
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(714) 579-0500

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Silverado, CA 92676
(949) 589-0700

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

**REAR VIEW**

INNOVISION DEVICES, LLC
ALL CLEAR SYSTEM FOB
MODEL: 892263
FCC SUBPART B AND C – RADIATED EMISSIONS

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

Brea Division
114 Olinda Drive
Brea, CA 92823
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2337 Troutdale Drive
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APPENDIX E

DATA SHEETS

Brea Division
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FCC 15.231

All Clear System, LLC
All Clear System FOB
Model: 892263

Dates: 01/31/2012 and 02/02/2012
Labs: B and D
Tested By: Kyle Fujimoto

X-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	66.69	V	100.28	-33.59	Peak	1	135	
418	55.73	V	80.28	-24.55	Avg	1	135	
836	40.83	V	80.28	-39.45	Peak	1	135	
836	29.87	V	60.28	-30.41	Avg	1	135	
1254	41.03	V	74	-32.97	Peak	1.25	155	
1254	30.07	V	54	-23.93	Avg	1.25	155	
1672	47.81	V	74	-26.19	Peak	1.25	165	
1672	36.85	V	54	-17.15	Avg	1.25	165	
2090	52.81	V	80.28	-27.47	Peak	1.25	175	
2090	41.85	V	60.28	-18.43	Avg	1.25	175	
2508	56.65	V	80.28	-23.63	Peak	1.35	185	
2508	45.69	V	60.28	-14.59	Avg	1.35	185	
2926	50.48	V	80.28	-29.8	Peak	1.25	175	
2926	39.52	V	60.28	-20.76	Avg	1.25	175	
3344	51.42	V	80.28	-28.86	Peak	1.35	185	
3344	40.46	V	60.28	-19.82	Avg	1.35	185	
3762	51.57	V	74	-22.43	Peak	1.25	185	
3762	40.61	V	54	-13.39	Avg	1.25	185	
4180	51.88	V	74	-22.12	Peak	1.25	135	
4180	40.92	V	54	-13.08	Avg	1.25	135	

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All Clear System, LLC
All Clear System FOB
Model: 892263

Dates: 01/31/2012 and 02/02/2012
Labs: B and D
Tested By: Kyle Fujimoto

X-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	77.09	H	100.28	-23.19	Peak	1	180	
418	66.13	H	80.28	-14.15	Avg	1	180	
836	43.33	H	80.28	-36.95	Peak	1	180	
836	32.37	H	60.28	-27.91	Avg	1	180	
1254	50.21	H	74	-23.79	Peak	1.25	135	
1254	39.25	H	54	-14.75	Avg	1.25	135	
1672	48.83	H	74	-25.17	Peak	1.25	155	
1672	37.87	H	54	-16.13	Avg	1.25	155	
2090	57.01	H	80.28	-23.27	Peak	1.25	165	
2090	46.05	H	60.28	-14.23	Avg	1.25	165	
2508	64.29	H	80.28	-15.99	Peak	1.25	155	
2508	53.33	H	60.28	-6.95	Avg	1.25	155	
2926	51.85	H	80.28	-28.43	Peak	1.25	155	
2926	40.89	H	60.28	-19.39	Avg	1.25	155	
3344	50.88	H	80.28	-29.4	Peak	1.25	165	
3344	39.92	H	60.28	-20.36	Avg	1.25	165	
3762	49.92	H	74	-24.08	Peak	1.35	175	
3762	38.96	H	54	-15.04	Avg	1.35	175	
4180	52.13	H	74	-21.87	Peak	1.25	185	
4180	41.17	H	54	-12.83	Avg	1.25	185	

FCC 15.231

All Clear System, LLC

Dates: 01/31/2012 and 02/02/2012

All Clear System FOB

Labs: B and D

Model: 892263

Tested By: Kyle Fujimoto

Y-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	73.95	V	100.28	-26.33	Peak	1	180	
418	62.99	V	80.28	-17.29	Avg	1	180	
836	28.38	V	80.28	-51.9	Peak	1	180	
836	17.42	V	60.28	-42.86	Avg	1	180	
1254	41.96	V	74	-32.04	Peak	1.25	155	
1254	31	V	54	-23	Avg	1.25	155	
1672	48.42	V	74	-25.58	Peak	1.35	45	
1672	37.46	V	54	-16.54	Avg	1.35	45	
2090	54.24	V	80.28	-26.04	Peak	1.25	155	
2090	43.28	V	60.28	-17	Avg	1.25	155	
2508	60.82	V	80.28	-19.46	Peak	1.25	225	
2508	49.86	V	60.28	-10.42	Avg	1.25	225	
2926	48.67	V	80.28	-31.61	Peak	1.35	165	
2926	37.71	V	60.28	-22.57	Avg	1.35	165	
3344	51.36	V	80.28	-28.92	Peak	1.25	175	
3344	40.4	V	60.28	-19.88	Avg	1.25	175	
3762	50.71	V	74	-23.29	Peak	1.35	185	
3762	39.75	V	54	-14.25	Avg	1.35	185	
4180	52.97	V	74	-21.03	Peak	1.25	135	
4180	42.01	V	54	-11.99	Avg	1.25	135	

FCC 15.231

 All Clear System, LLC
 All Clear System FOB
 Model: 892263

 Dates: 01/31/2012 and 02/02/2012
 Labs: B and D
 Tested By: Kyle Fujimoto

Y-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	73.89	H	100.28	-26.39	Peak	1	135	
418	62.93	H	80.28	-17.35	Avg	1	135	
836	43.33	H	80.28	-36.95	Peak	1.25	155	
836	32.37	H	60.28	-27.91	Avg	1.25	155	
1254	51.67	H	74	-22.33	Peak	1.25	165	
1254	40.71	H	54	-13.29	Avg	1.25	165	
1672	50.87	H	74	-23.13	Peak	1.35	175	
1672	39.91	H	54	-14.09	Avg	1.35	175	
2090	57.61	H	80.28	-22.67	Peak	1.25	185	
2090	46.65	H	60.28	-13.63	Avg	1.25	185	
2508	66.82	H	80.28	-13.46	Peak	1.25	135	
2508	55.86	H	60.28	-4.42	Avg	1.25	135	
2926	55.87	H	80.28	-24.41	Peak	1.35	145	
2926	44.91	H	60.28	-15.37	Avg	1.35	145	
3344	54.57	H	80.28	-25.71	Peak	1.25	155	
3344	43.61	H	60.28	-16.67	Avg	1.25	155	
3762	53.97	H	74	-20.03	Peak	1.35	165	
3762	43.01	H	54	-10.99	Avg	1.35	165	
4180	53.26	H	74	-20.74	Peak	1.25	175	
4180	42.3	H	54	-11.7	Avg	1.25	175	

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All Clear System, LLC
All Clear System FOB
Model: 892263

Dates: 01/31/2012 and 02/02/2012
Labs: B and D
Tested By: Kyle Fujimoto

Z-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	74.75	V	100.28	-25.53	Peak	1.25	135	
418	63.79	V	80.28	-16.49	Avg	1.25	135	
836	41.18	V	80.28	-39.1	Peak	1.25	155	
836	30.22	V	60.28	-30.06	Avg	1.25	155	
1254	51.33	V	74	-22.67	Peak	1.55	165	
1254	40.37	V	54	-13.63	Avg	1.55	165	
1672	50.22	V	74	-23.78	Peak	1.25	225	
1672	39.26	V	54	-14.74	Avg	1.25	225	
2090	56.32	V	80.28	-23.96	Peak	2.25	135	
2090	45.36	V	60.28	-14.92	Avg	2.25	135	
2508	64.04	V	80.28	-16.24	Peak	1.25	225	
2508	53.08	V	60.28	-7.2	Avg	1.25	225	
2926	53.93	V	80.28	-26.35	Peak	1.25	165	
2926	42.97	V	60.28	-17.31	Avg	1.25	165	
3344	53.21	V	80.28	-27.07	Peak	1.25	165	
3344	42.25	V	60.28	-18.03	Avg	1.25	165	
3762	52.21	V	74	-21.79	Peak	1.55	45	
3762	41.25	V	54	-12.75	Avg	1.55	45	
4180	53.61	V	74	-20.39	Peak	1.25	135	
4180	42.65	V	54	-11.35	Avg	1.25	135	

FCC 15.231

All Clear System, LLC
All Clear System FOB
Model: 892263

Dates: 01/31/2012 and 02/02/2012
Labs: B and D
Tested By: Kyle Fujimoto

Z-Axis
Duty Cycle: 28.31%

Freq. (MHz)	Level (dBuV)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
418	70.25	H	100.28	-30.03	Peak	1.25	155	
418	59.29	H	80.28	-20.99	Avg	1.25	155	
836	37.18	H	80.28	-43.1	Peak	1.25	155	
836	26.22	H	60.28	-34.06	Avg	1.25	155	
1254	39.35	H	74	-34.65	Peak	1.25	155	
1254	28.39	H	54	-25.61	Avg	1.25	155	
1672	50.16	H	74	-23.84	Peak	1.25	165	
1672	39.2	H	54	-14.8	Avg	1.25	165	
2090	48.24	H	80.28	-32.04	Peak	1.25	125	
2090	37.28	H	60.28	-23	Avg	1.25	125	
2508	58.55	H	80.28	-21.73	Peak	1.25	155	
2508	47.59	H	60.28	-12.69	Avg	1.25	155	
2926	46.74	H	80.28	-33.54	Peak	1.25	155	
2926	35.78	H	60.28	-24.5	Avg	1.25	155	
3344	49.66	H	80.28	-30.62	Peak	1.35	175	
3344	38.7	H	60.28	-21.58	Avg	1.35	175	
3762	49.66	H	74	-24.34	Peak	1.25	185	
3762	38.7	H	54	-15.3	Avg	1.25	185	
4180	52.27	H	74	-21.73	Peak	1.05	195	
4180	41.31	H	54	-12.69	Avg	1.05	195	

FCC Class B and FCC 15.231

All Clear System, LLC
All Clear System FOB
Model: 892263

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

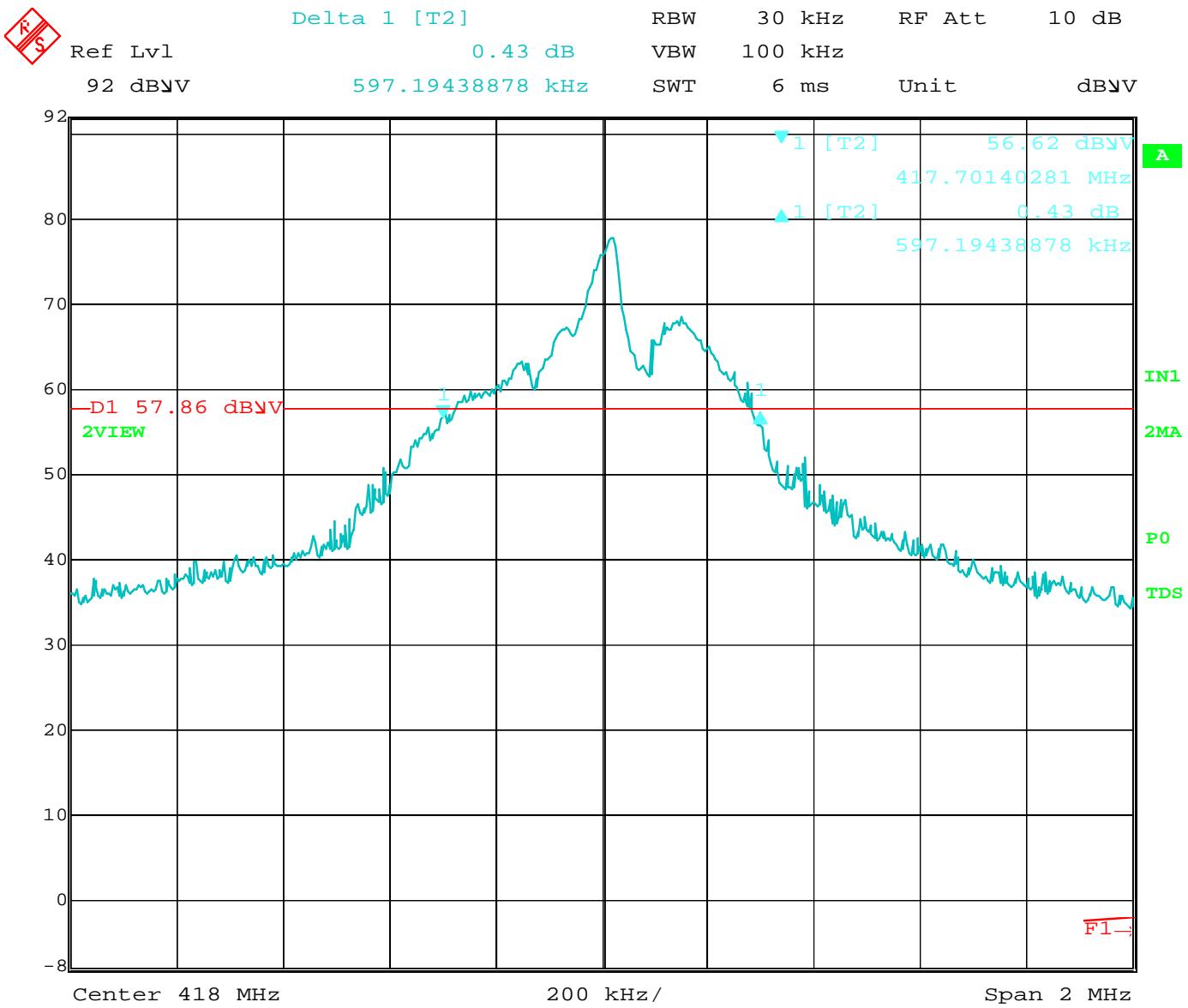
Labs: B and D

Tested By: Kyle Fujimoto

Receiver, Digital Portion and Non-Harmonic Emissions from the Transmitter Vertical and Horizontal Polarizations

-20 dB BANDWIDTH

DATA SHEET



-20 dB of the Fundamental

5 SECOND RULE

DATA SHEETS

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

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

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

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

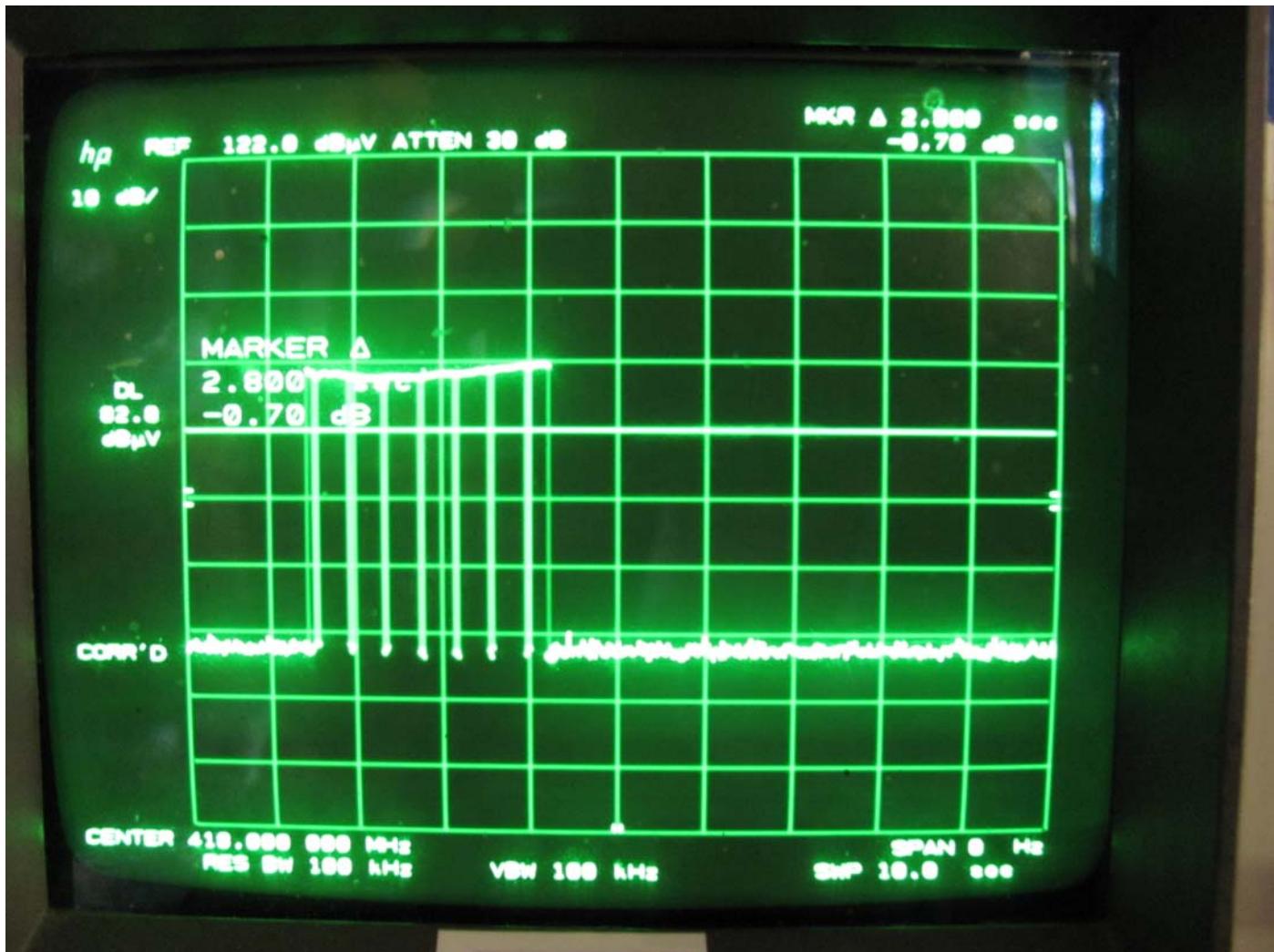
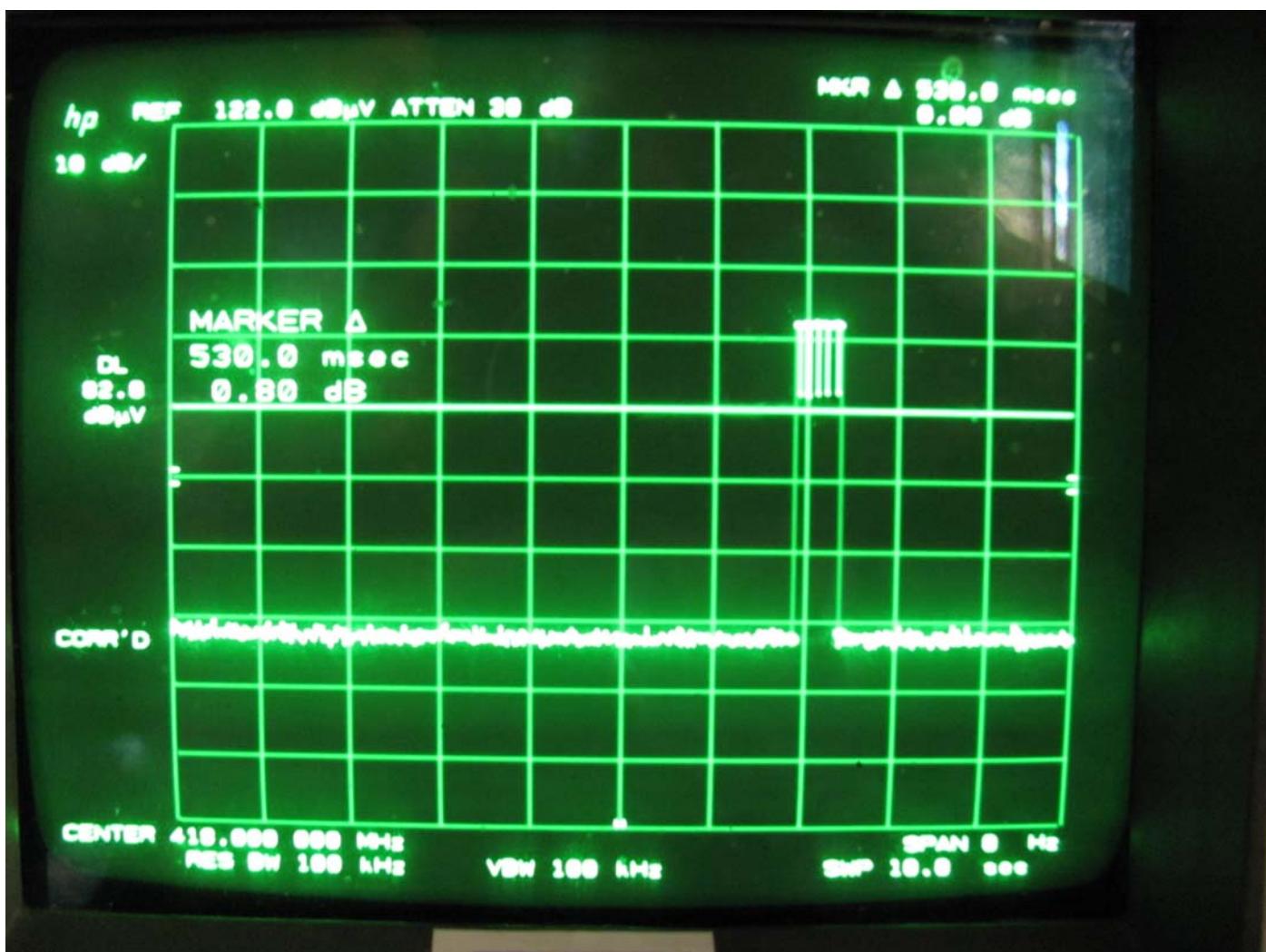


Photo showing the EUT turns off immediately after the button is released (Standard Mode)
 The button was held down for 2.8 seconds.



Photograph showing the EUT shuts off after 530 msec when it is automatically activated for panic mode.