FCC PART 15, SUBPART B and C
TEST REPORT

for

58 kHz DEACTIVATOR

MODEL: USS-DEACTAM-BL-110-G

Prepared for

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
11172 ELM AVENUE
RANCHO CUCAMONGA, CALFORNIA 91730

Prepared by:_____

KYLE FUJIMOTO

Approved by:_____

JAMES ROSS

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DATE: APRIL 8, 2015

	REPORT BODY	APPENDICES					TOTAL
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GENERAL REPORT SUMMARY

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

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested:	58 kHz Deactivator Model: USS-DEACTAM-BL-110-G S/N: N/A
Product Description:	See Expository Statement.
Modifications:	The EUT was modified during the testing. Please see the list of modifications in Appendix B.
Customer:	Universal Surveillance Systems, LLC 11172 Elm Avenue Rancho Cucamonga, California, 91730
Test Date:	February 23, 2015
Test Specifications:	Emissions requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, and 15.209.
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	Spurious Radiated RF Emissions, 10 kHz – 1,000 MHz (Transmitter and Digital portion)	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, section 15.205 and 15.209
2	Conducted RF Emissions, 150 kHz to 30 MHz	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, section 15.207.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the 58 kHz Deactivator, Model: USS-DEACTAM-BL-110-G. The emissions 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; and Subpart C, sections 15.205, 15.207, and 15.209.

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 92823.

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

Universal Surveillance Systems, LLC

Marc Trincale	Product Manager

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
James Ross	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on February 23, 2015.

2.5 Disposition of the Test Sample

The test sample was returned to Universal Surveillance Systems, LLC on February 23, 2015.

2.6 Abbreviations and Acronyms

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

RF	Radio Frequency
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
BLE	Bluetooth Low Energy
USB	Universal Serial Bus

3. APPLICABLE DOCUMENTS

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

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules - Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules - Radio frequency devices (including digital devices) – Unintentional Radiators
ANSI C63.4 2009	Methods of measurement of radio-noise emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation
CISPR 22: 2008	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration - Emissions

The 58 kHz Deactivator, Model: USS-DEACTAM-BL-110-G (EUT) was connected to the AC public mains via its power cord.

The EUT was continuously transmitting at 58 kHz. The RJ-45 port is only used for diagnostic purposes to setup the system prior to normal operation.

The final radiated data as well as the conducted data for the EUT as was taken in the mode described above. Please see Appendix E for the data sheets.

4.1.1 Cable Construction and Termination

The EUT had no external cables.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID
58 kHz DEACTIVATOR (EUT)	UNIVERSAL SURVEILLANCE SYSTEMS, LLC	USS-DEACTAM-BL-110-G	N/A	X2TUSS-AMDEACT

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
RF RADIATED EMISSIONS TEST EQUIPMENT					
Computer	Compaq	CQ5210F	CNX9360CF9	N/A	N/A
Monitor	Hewlett Packard	HPs2031a	3CQ046N3MD	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 20, 2014	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 20, 2014	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	May 20, 2014	1 Year
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Agilent Technologies	N9038A	MY51100115	March 6, 2014	2 Year
CombiLog Antenna	Com-Power	AC-220	61060	May 20, 2014	1 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Antenna Mast	Com Power	AM-100	N/A	N/A	N/A
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A

Emissions test equipment (continued)

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
CONDUCTED EMISSIONS TEST EQUIPMENT					
Shield Room Test	Compatible Electronics	11CD	N/A	N/A	N/A
LISN	Com-Power	LI-215	12082	June 12, 2014	1 Year
LISN	Com-Power	LI-215	12090	June 12, 2014	1 Year
Transient Limiter	Com-Power	252A910	1	October 10, 2014	1 Year
Monitor	Hewlett Packard	D5258A	TW74500641	N/A	N/A
Computer	Hewlett Packard	4530	US91912319	N/A	N/A
Spectrum Analyzer – Main Section	Hewlett Packard	8566B	3638A08784	May 20, 2014	1 Year
Spectrum Analyzer – Display Section	Hewlett Packard	85662A	2648A14530	May 20, 2014	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650A	2811A01363	May 20, 2014	1 Year

6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 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 grounded through its AC power cable.

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 Radiated Emissions (Spurious and Harmonics) Test – Lab A

The spectrum analyzer was used as a measuring meter. The spectrum analyzer was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the spectrum analyzer records the highest measured reading over all the sweeps.

A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
10 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop 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: 2009. 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).

Radiated Emissions (Spurious and Harmonics) Test – Lab A (con't)

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 from 10 kHz to 30 MHz 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 15.205 and 15.209 for radiated emissions. Please see Appendix E for the data sheets.

7.1.2 Radiated Emissions (Spurious and Harmonics) Test – Lab D

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is set up according to ANSI C63.4, EN 50147-2 and CISPR 22. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT.

The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength).

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

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
30 MHz to 1 GHz	120 kHz	CombiLog Antenna

The EUT was tested at a 3-meter test distance to obtain the final test data. The six highest emissions are listed in Table 2.0.

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 15.205 and 15.209. Please see Appendix E for the data sheets.

7.1.3 Conducted Emissions Test

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI C63.4. 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 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.

The EUT was tested at 120 VAC. The six highest emissions are listed in Table 1.0.

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, section 15.207. Please see Appendix E for the data sheets.

7.1.4 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
58 kHz Deactivator, Model: USS-DEACTAM-BL-110-G

Frequency MHz	QP Corrected Reading* dBuV	Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
31.80 (V)	39.26	40.00	-0.74
32.60 (V)	37.42	40.00	-2.58
32.90 (V)	36.54	40.00	-3.46
38.40 (V)	32.93	40.00	-7.07
158.80 (H)	28.01	43.50	-15.49
376.90 (H)	27.55	46.00	-18.45

Table 2.0 CONDUCTED EMISSION RESULTS
58 kHz Deactivator, Model: USS-DEACTAM-BL-110-G

Frequency MHz	Average Corrected Reading* dBuV	Average Specification Limit dBuV	Delta (Cor. Reading – Spec. Limit) dB
0.751 (BL)	42.24	46.00	-3.76
0.634 (WL)	42.14	46.00	-3.86
0.979 (BL)	41.64	46.00	-4.36
0.862 (BL)	41.44	46.00	-4.56
1.100 (BL)	40.95	46.00	-5.05
4.552 (WL)	40.94	46.00	-5.06

Notes:

(H)	Horizontal
(V)	Vertical
(BL)	Black Lead
(WL)	White Lead
(QP)	Quasi Peak
*	The complete emissions data is given in Appendix E of this report.

8. CONCLUSIONS

The 58 kHz Deactivator, Model: USS-DEACTAM-BL-110-G, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, and 15.209.

APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

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
FCC test lab search https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm

Industry Canada Industrie Canada

Compatible Electronics IC listing can be found at:
http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.209 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.

1. Add a ferrite to the power cord on the EUT side (FairRite, P/N: 431167281).

APPENDIX C

ADDITIONAL MODELS

ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
S/N: N/A

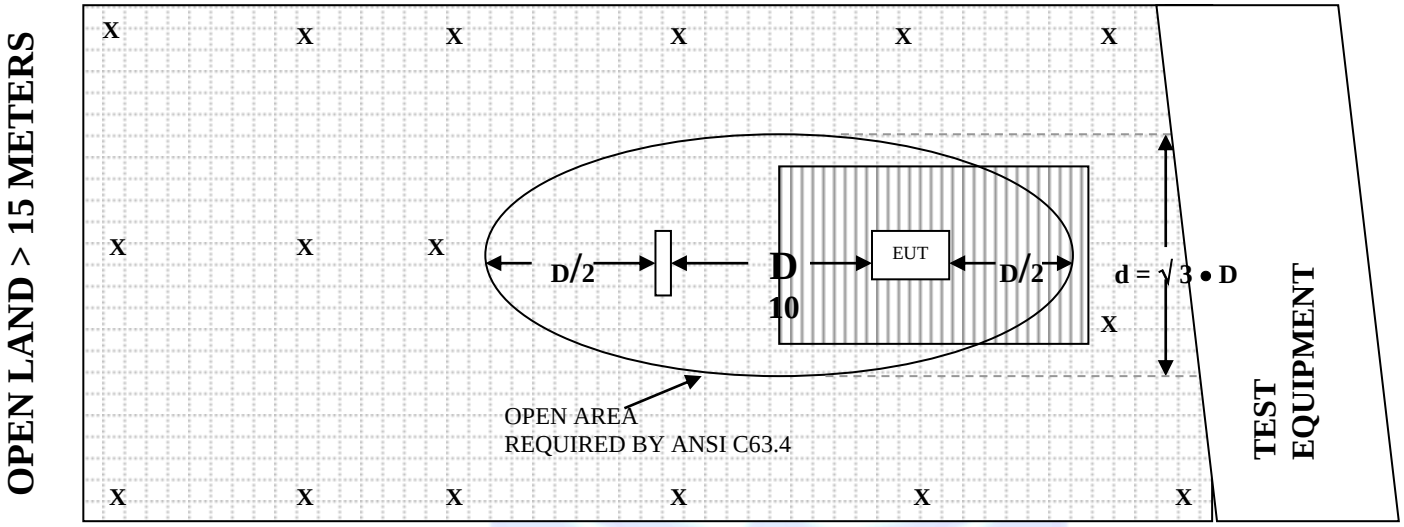
There were no additional models covered under this report.

APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED SITE

OPEN LAND > 15 METERS



OPEN LAND > 15 METERS

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

FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER

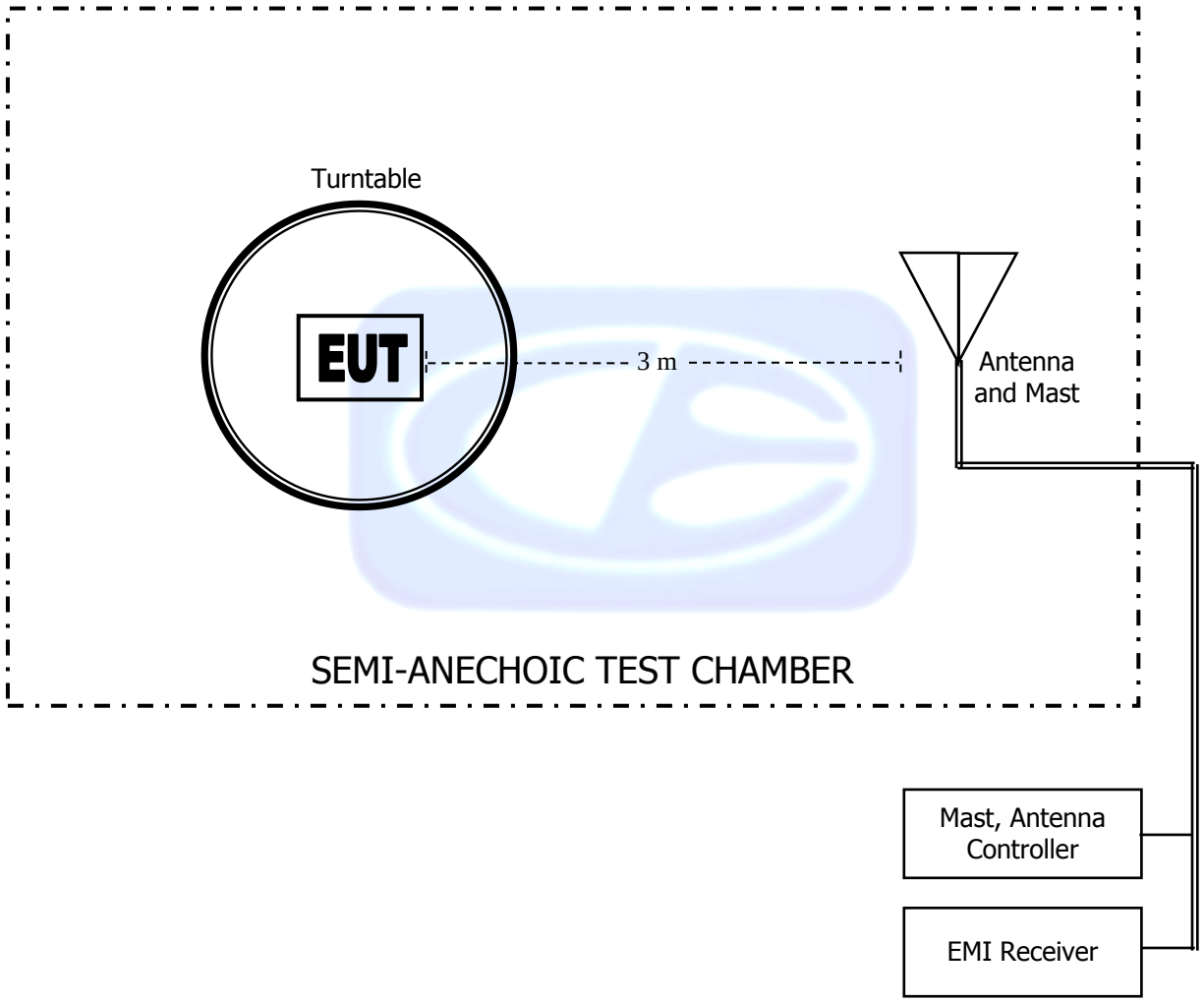
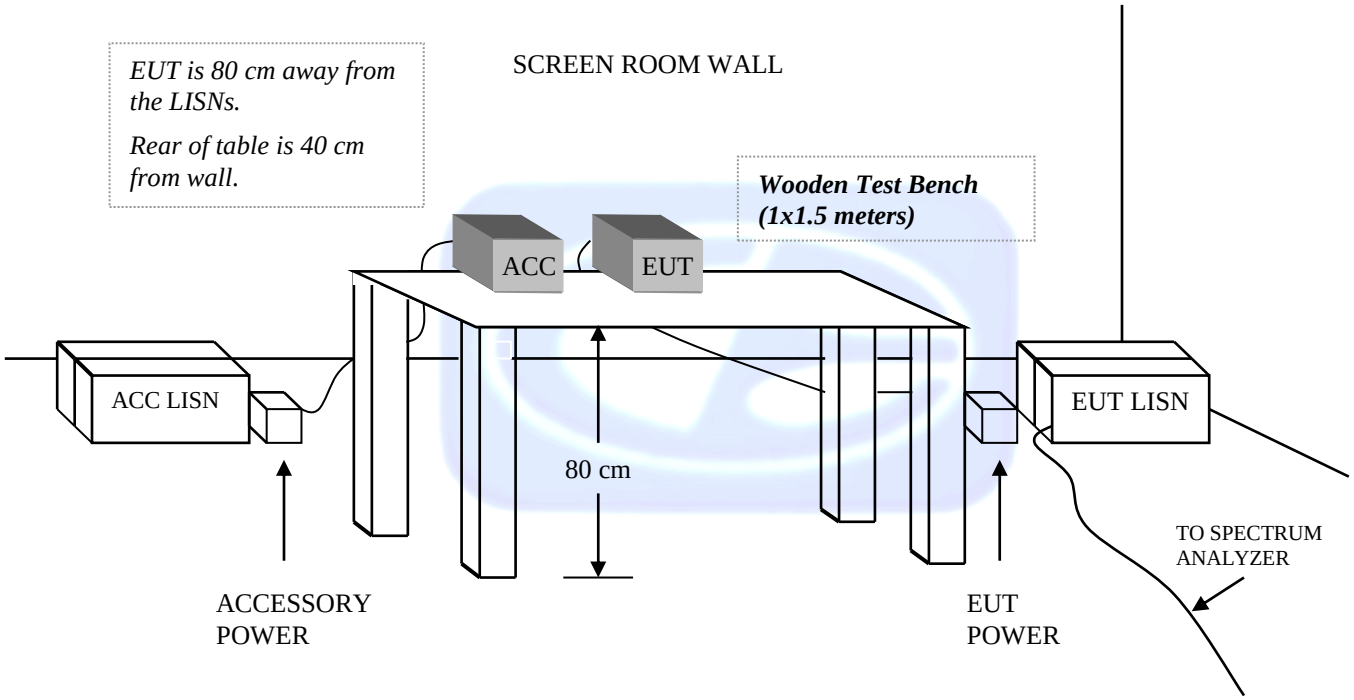


FIGURE 3: CONDUCTED EMISSIONS TEST SETUP



COM-POWER AL-130

LOOP ANTENNA

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	-33.18	18.32
0.01	-34.10	17.40
0.02	-38.65	12.85
0.03	-39.28	12.22
0.04	-40.09	11.41
0.05	-40.85	10.65
0.06	-40.88	10.62
0.07	-41.07	10.43
0.08	-41.04	10.46
0.09	-41.19	10.31
0.1	-41.20	10.30
0.2	-41.52	9.98
0.3	-41.53	9.97
0.4	-41.42	10.08
0.5	-41.53	9.97
0.6	-41.53	9.97
0.7	-41.43	10.07
0.8	-41.23	10.27
0.9	-41.13	10.37
1	-41.14	10.36
2	-40.80	10.70
3	-40.66	10.84
4	-40.61	10.89
5	-40.33	11.17
6	-40.53	10.97
7	-40.47	11.03
8	-40.48	11.02
9	-39.93	11.57
10	-39.81	11.69
15	-43.35	8.15
20	-39.16	12.34
25	-40.24	11.26
30	-43.18	8.32

COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61060

CALIBRATION DATE: MAY 20, 2014

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	23.40	200	14.40
35	23.70	250	16.40
40	24.20	300	17.90
45	22.60	350	15.60
50	22.10	400	19.90
60	17.90	450	20.40
70	12.70	500	21.60
80	11.60	550	21.50
90	12.20	600	22.30
100	13.20	650	23.50
120	15.70	700	23.70
125	15.80	750	25.90
140	13.60	800	25.90
150	16.90	850	26.40
160	14.20	900	27.00
175	14.90	950	27.70
180	15.00	1000	27.50

FRONT VIEW

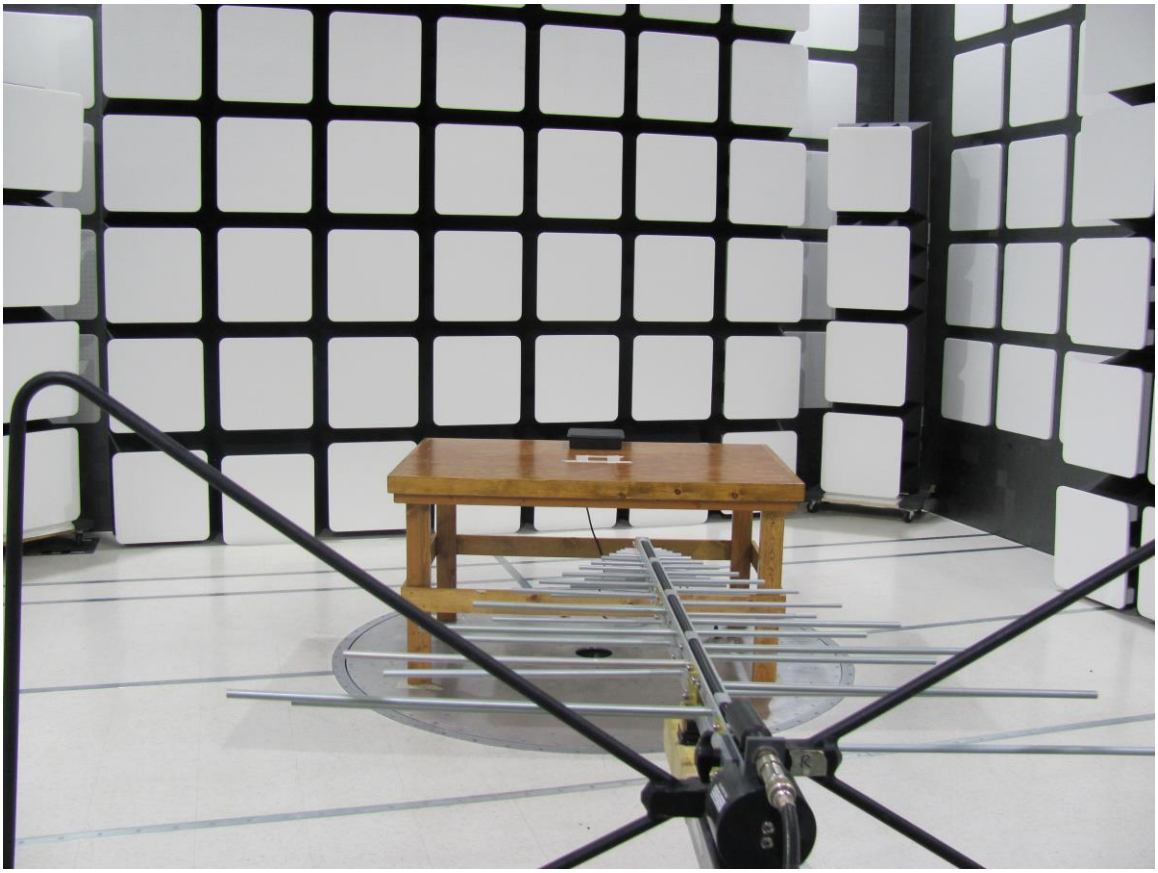
UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 30 MHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 30 MHz

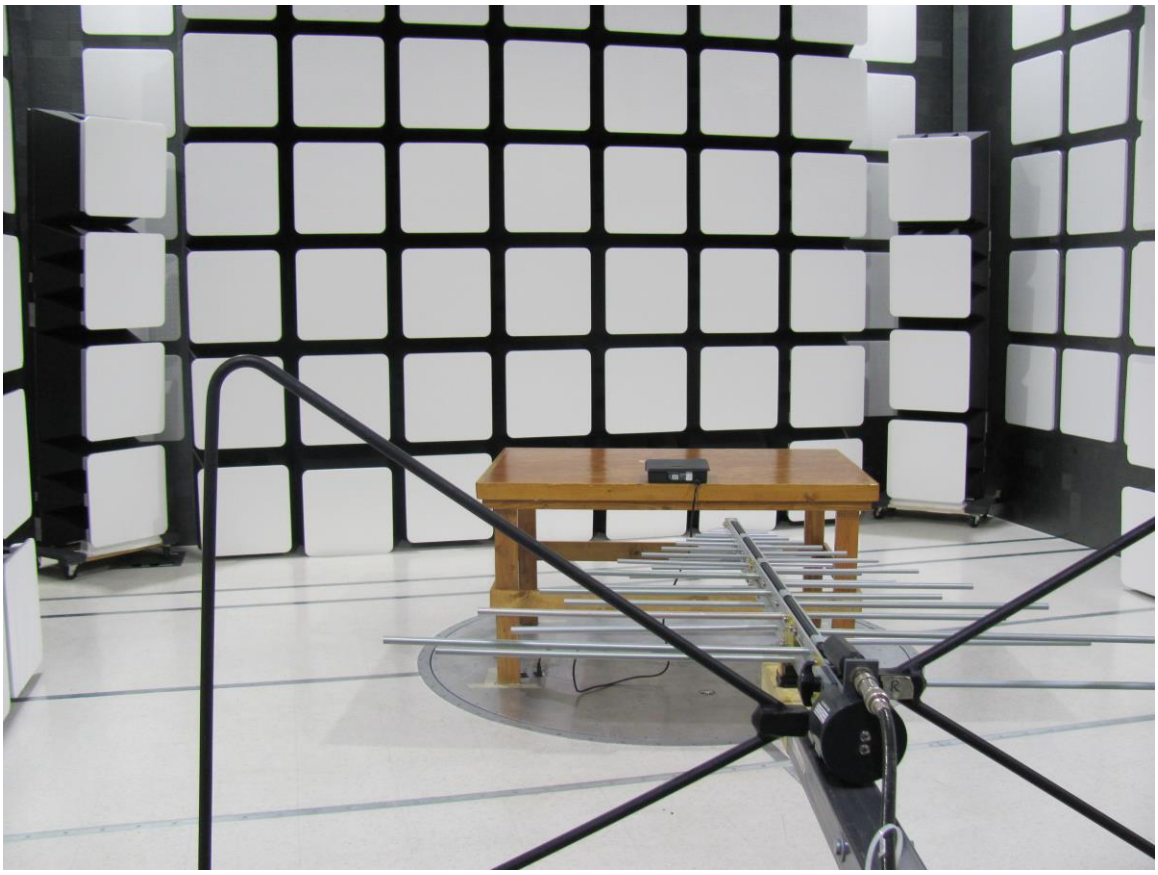
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – RADIATED EMISSIONS – 30 MHz to 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – RADIATED EMISSIONS – 30 MHz to 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

FRONT VIEW

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

UNIVERSAL SURVEILLANCE SYSTEMS, LLC
58 kHz DEACTIVATOR
MODEL: USS-DEACTAM-BL-110-G
FCC SUBPART B AND C – CONDUCTED EMISSIONS

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

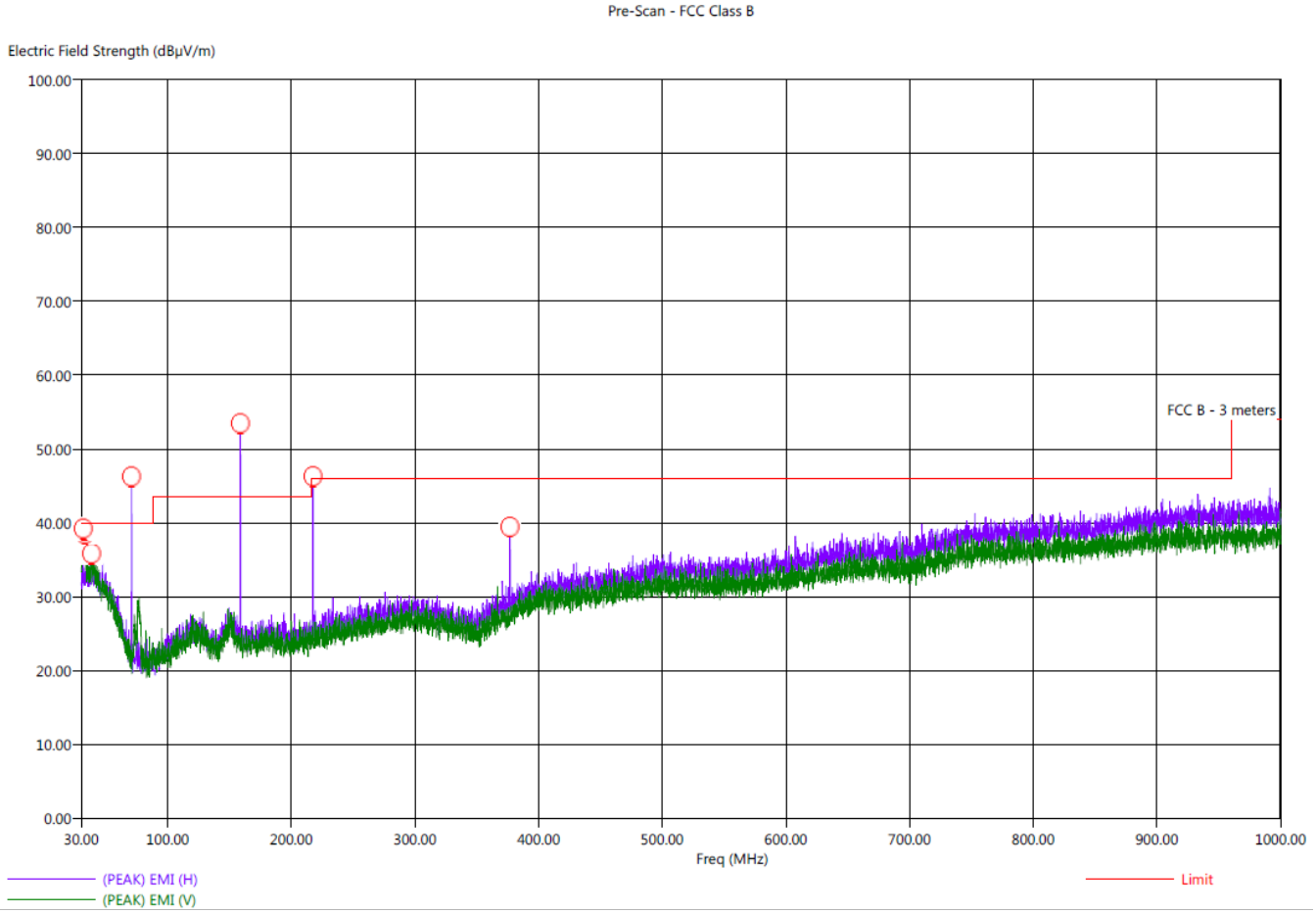
DATA SHEETS

RADIATED EMISSIONS

DATA SHEETS

Title: Pre-Scan - FCC Class B
File: Radiated Pre-Scan - 30 to 1000 MHz - With 0443625006 Ferrite - FCC Class B - 02-23-2015.set
Operator: Kyle Fujimoto
EUT Type: 58 kHz Deactivator
EUT Condition: The EUT is continuously transmitting at 58 kHz
Comments: Customer: Universal Surveilance Systems, LLC
Model: USS-DEACTAM-BL-110-G
Add P/N: 0431167281 Ferrite to Power Cord on EUT Side

2/23/2015 3:04:08 PM
Sequence: Preliminary Scan



Title: Radiated Final - 30-1000 MHz - FCC Class B
File: Radiated Final Scan - 30 to 1000 MHz - FCC Class B - 02-23-2015.set
Operator: Kyle Fujimoto
EUT Type: 58 kHz Deactivator
EUT Condition: The EUT is continuously transmitting at 58 kHz
Comments: Customer: Universal Surveillance Systems, LLC
Model: USS-DEACTAM-BL-110-G
Add P/N: 0431167281 Ferrite to Power Cord on EUT Side

2/23/2015 3:14:08 PM
Sequence: Final Measurements

FCC Class B - Final Scan

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
31.80	V	42.46	39.26	2.46	-0.74	40.00	23.52	0.37	358.25	110.95
32.60	V	41.02	37.42	1.02	-2.58	40.00	23.57	0.37	66.75	126.65
32.90	V	40.57	36.54	0.57	-3.46	40.00	23.57	0.37	56.25	142.83
38.40	V	37.33	32.93	-2.67	-7.07	40.00	24.04	0.42	267.50	143.37
70.70	H	40.36	20.61	0.36	-19.39	40.00	12.64	0.60	104.00	159.37
158.80	H	60.94	28.01	17.44	-15.49	43.50	14.50	0.92	287.25	237.64
217.60	H	37.92	25.33	-8.08	-20.67	46.00	15.16	1.09	265.75	126.95
376.90	H	39.20	27.55	-6.80	-18.45	46.00	17.99	1.53	1.50	189.82

FCC 15.209

Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G

Date: 02/23/2015
Lab: A
Tested By: Kyle Fujimoto

Transmit Mode

Test Distance: 10 Meters

Corrected Spec Limit at 10 Meters = [40 Log (spec test dist./actual test dist.)] + spec limit

Freq. (kHz)	Level (dBuV)	Pol (v/h)	Spec Limit (at 10 Meters)	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
58	61.5	V	91.42	-29.921	Peak	1	180	
116	45.7	V	85.40	-39.7	Peak	1	180	
174	56.8	V	81.88	-25.078	Peak	1	135	
232	60.2	V	79.38	-19.179	Peak	1	225	
290	53.5	V	77.44	-23.941	Peak	1	135	
348	55.4	V	75.86	-20.457	Peak	1	180	
406	52.1	V	74.52	-22.419	Peak	1	135	
464	50.6	V	73.36	-22.759	Peak	1	225	
522								No Emissions Detected
580								No Emissions Detected
								Note: No Other Emissions Detected from 10 kHz to 30 MHz

Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
Limit in uV/m = 30 at 30 Meters from 1705 kHz to 30 MHz

dBuV/m = 20 Log (uV/m)

FCC 15.209

Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G

Date: 02/23/2015
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Transmit Mode
Test Distance: 10 Meters

Corrected Spec Limit at 10 Meters = [40 Log (spec test dist./actual test dist.)] + spec limit

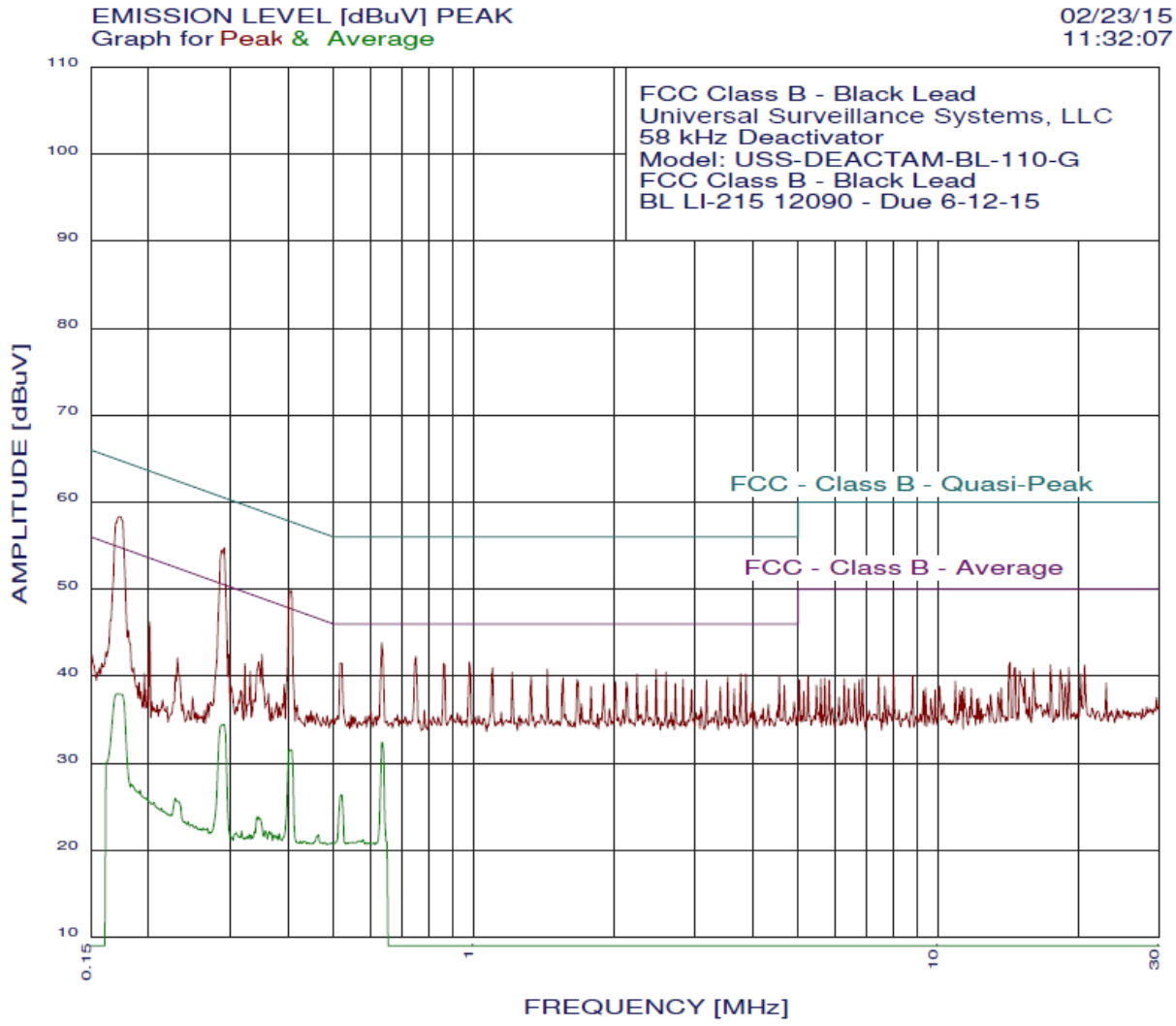
Freq. (kHz)	Level (dBuV)	Pol (v/h)	Spec Limit (at 10 Meters)	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
58	61.1	H	91.42	-30.321	Peak	1	135	Actual Reading @ 10m
116	50.1	H	85.40	-35.3	Peak	1	90	
174	46.2	H	81.88	-35.678	Peak	1	135	
232	59.6	H	79.38	-19.779	Peak	1	180	
290	38.7	H	77.44	-38.741	Peak	1	135	
348	41.3	H	75.86	-34.557	Peak	1	90	
406	51.8	H	74.52	-22.719	Peak	1	90	
464	51.8	H	73.36	-21.559	Peak	1	135	
522								No Emissions Detected
580								No Emissions Detected
								Note: No Other Emissions Detected from 10 kHz to 30 MHz

Limit in uV/m = 2400/F (kHz) at 300 Meters from 9 kHz to 490 kHz
Limit in uV/m = 24000/F (kHz) at 30 Meters from 490 kHz to 1705 kHz
Limit in uV/m = 30 at 30 Meters from 1705 kHz to 30 MHz

dBuV/m = 20 Log (uV/m)

CONDUCTED EMISSIONS

DATA SHEETS


EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average
02/23/15
11:32:07
FCC Class B - Black Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - Black Lead
BL LI-215 12090 - Due 6-12-15
FCC - Class B - Quasi-Peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

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02/23/15 11:32:07

FCC Class B - Black Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - Black Lead
BL LI-215 12090 - Due 6-12-15
Test Engineer : Kyle Fujimoto

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41 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.291	54.74	50.49	4.24**
2	0.172	58.32	54.86	3.46**
3	0.404	49.82	47.77	2.05**
4	0.634	43.84	46.00	-2.16**
5	0.751	42.24	46.00	-3.76
6	0.979	41.64	46.00	-4.36
7	0.516	41.44	46.00	-4.56**
8	0.862	41.44	46.00	-4.56
9	1.100	40.95	46.00	-5.05
10	1.441	40.78	46.00	-5.22
11	2.475	40.74	46.00	-5.26
12	1.210	40.46	46.00	-5.54
13	2.596	40.44	46.00	-5.56
14	3.862	40.25	46.00	-5.75
15	3.761	40.24	46.00	-5.76
16	2.250	40.24	46.00	-5.76
17	4.552	40.05	46.00	-5.95
18	1.331	39.97	46.00	-6.03
19	3.529	39.84	46.00	-6.16
20	1.560	39.80	46.00	-6.20
21	2.826	39.64	46.00	-6.36
22	1.671	39.61	46.00	-6.39
23	0.350	42.50	48.95	-6.45**
24	3.175	39.54	46.00	-6.46
25	2.134	39.34	46.00	-6.66
26	2.023	39.34	46.00	-6.66
27	2.722	39.14	46.00	-6.86
28	1.908	39.13	46.00	-6.87
29	4.672	38.95	46.00	-7.05
30	2.358	38.94	46.00	-7.06
31	1.790	38.82	46.00	-7.18
32	3.401	38.74	46.00	-7.26
33	0.201	46.20	53.58	-7.38**
34	3.644	38.54	46.00	-7.46
35	0.345	41.62	49.09	-7.47**
36	2.948	38.44	46.00	-7.56
37	0.297	42.51	50.32	-7.81**
38	0.322	41.42	49.66	-8.25**
39	14.293	41.57	50.00	-8.43
40	17.478	41.32	50.00	-8.68
41	20.716	41.27	50.00	-8.73

** Please See the Average Readings on the Next Page and on the Plot

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FCC Class B - Black Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - Black Lead
BL LI-215 12090 - Due 6-12-15
Test Engineer : Kyle Fujimoto

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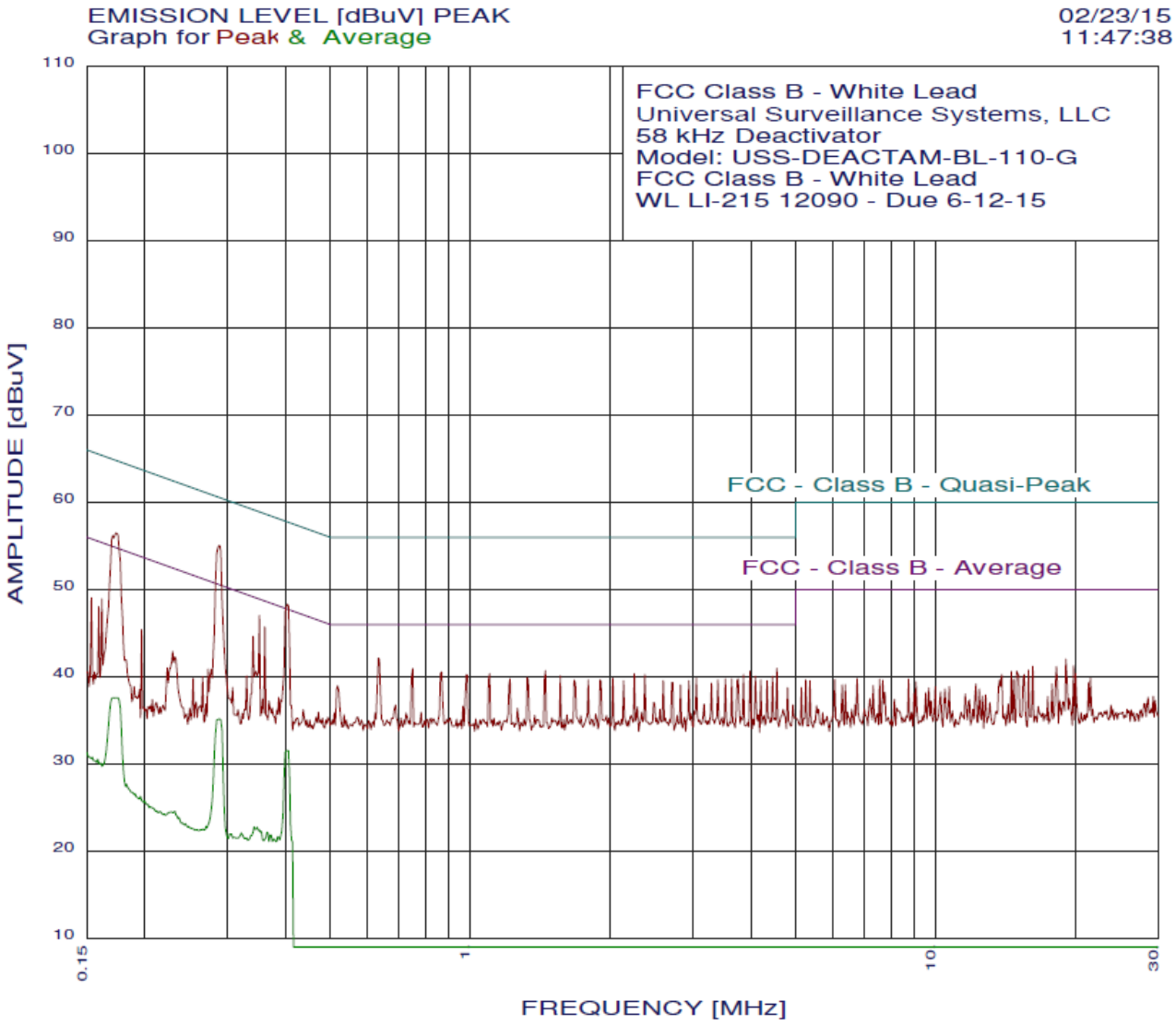
41 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.634	32.41	46.00	-13.59
2	0.290	34.41	50.54	-16.12
3	0.404	31.55	47.77	-16.22
4	0.174	37.93	54.77	-16.83
5	0.171	37.96	54.90	-16.93
6	0.518	26.34	46.00	-19.66
7	0.464	21.75	46.62	-24.87
8	0.577	21.12	46.00	-24.88
9	0.564	21.02	46.00	-24.98
10	0.505	20.94	46.00	-25.06
11	0.550	20.93	46.00	-25.07
12	0.532	20.83	46.00	-25.17
13	0.538	20.83	46.00	-25.17
14	0.586	20.83	46.00	-25.17
15	0.595	20.83	46.00	-25.17
16	0.611	20.83	46.00	-25.17
17	0.618	20.83	46.00	-25.17
18	0.494	20.83	46.09	-25.26
19	0.345	23.79	49.09	-25.30
20	0.341	23.81	49.18	-25.37
21	0.479	20.83	46.36	-25.53
22	0.471	20.83	46.49	-25.66
23	0.449	20.82	46.89	-26.07
24	0.442	20.82	47.02	-26.20
25	0.431	21.00	47.24	-26.23
26	0.435	20.91	47.15	-26.23
27	0.381	21.91	48.25	-26.34
28	0.424	21.00	47.37	-26.37
29	0.363	22.17	48.65	-26.48
30	0.228	25.97	52.52	-26.55
31	0.367	21.99	48.56	-26.58
32	0.356	22.24	48.82	-26.58
33	0.417	20.91	47.50	-26.59
34	0.377	21.64	48.34	-26.70
35	0.371	21.73	48.47	-26.74
36	0.183	27.58	54.33	-26.75
37	0.232	25.60	52.39	-26.78
38	0.385	21.18	48.16	-26.98
39	0.192	26.89	53.97	-27.08
40	0.338	22.12	49.26	-27.14
41	0.199	26.09	53.67	-27.58


EMISSION LEVEL [dBuV] PEAK
Graph for Peak & Average
02/23/15
11:47:38
FCC Class B - White Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - White Lead
WL LI-215 12090 - Due 6-12-15
FCC - Class B - Quasi-Peak
FCC - Class B - Average
AMPLITUDE [dBuV]
110
100
90
80
70
60
50
40
30
20
10
0.15
1
10
30
FREQUENCY [MHz]

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02/23/15 11:47:38

FCC Class B - White Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - White Lead
WL LI-215 12090 - Due 6-12-15
Test Engineer : Kyle Fujimoto

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41 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 1.00 dB, Curve : Peak

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.288	55.01	50.58	4.43**
2	0.173	56.49	54.81	1.68**
3	0.404	48.32	47.77	0.56**
4	0.352	47.01	48.91	-1.90**
5	0.362	45.71	48.69	-2.98**
6	0.634	42.14	46.00	-3.86
7	0.341	44.64	49.18	-4.54**
8	4.552	40.94	46.00	-5.06
9	0.751	40.94	46.00	-5.06
10	1.449	40.68	46.00	-5.32
11	3.987	40.64	46.00	-5.36
12	0.867	40.54	46.00	-5.46
13	1.100	40.35	46.00	-5.65
14	2.250	40.34	46.00	-5.66
15	3.862	40.24	46.00	-5.76
16	2.371	40.24	46.00	-5.76
17	0.979	40.24	46.00	-5.76
18	1.560	40.09	46.00	-5.91
19	4.092	40.04	46.00	-5.96
20	4.456	40.04	46.00	-5.96
21	1.325	39.87	46.00	-6.13
22	3.059	39.84	46.00	-6.16
23	2.023	39.84	46.00	-6.16
24	1.217	39.76	46.00	-6.24
25	3.761	39.74	46.00	-6.26
26	3.644	39.74	46.00	-6.26
27	3.529	39.74	46.00	-6.26
28	4.204	39.64	46.00	-6.36
29	3.401	39.64	46.00	-6.36
30	1.899	39.63	46.00	-6.37
31	1.790	39.62	46.00	-6.38
32	1.671	39.61	46.00	-6.39
33	0.162	48.93	55.38	-6.45**
34	4.339	39.54	46.00	-6.46
35	2.948	39.54	46.00	-6.46
36	2.596	39.54	46.00	-6.46
37	2.134	39.54	46.00	-6.46
38	2.722	39.34	46.00	-6.66
39	3.294	39.24	46.00	-6.76
40	0.153	49.06	55.82	-6.76**
41	2.826	39.04	46.00	-6.96

**Please See the Average Readings on the Next Page and on the Plot

page 1/1

02/23/15 11:47:38

FCC Class B - White Lead
Universal Surveillance Systems, LLC
58 kHz Deactivator
Model: USS-DEACTAM-BL-110-G
FCC Class B - White Lead
WL LI-215 12090 - Due 6-12-15
Test Engineer : Kyle Fujimoto

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41 highest peaks above -50.00 dB of FCC - Class B - Average limit line
Peak criteria : 0.00 dB, Curve : Average

Peak#	Freq(MHz)	Amp(dBuV)	Limit(dB)	Delta(dB)
1	0.288	35.14	50.58	-15.44
2	0.404	31.55	47.77	-16.21
3	0.173	37.59	54.81	-17.22
4	0.170	37.57	54.94	-17.37
5	0.154	30.78	55.78	-24.99
6	0.158	30.53	55.56	-25.03
7	0.161	30.11	55.43	-25.32
8	0.348	22.75	49.00	-26.25
9	0.343	22.77	49.13	-26.37
10	0.365	22.18	48.61	-26.43
11	0.352	22.41	48.91	-26.50
12	0.385	21.65	48.16	-26.51
13	0.356	22.25	48.82	-26.57
14	0.373	21.83	48.43	-26.60
15	0.183	27.70	54.37	-26.67
16	0.379	21.38	48.29	-26.92
17	0.190	26.57	54.01	-27.45
18	0.338	21.77	49.26	-27.49
19	0.196	26.27	53.80	-27.53
20	0.322	22.08	49.66	-27.58
21	0.232	24.57	52.39	-27.82
22	0.200	25.74	53.62	-27.88
23	0.331	21.53	49.44	-27.91
24	0.228	24.51	52.52	-28.01
25	0.307	21.96	50.05	-28.09
26	0.203	25.36	53.49	-28.12
27	0.226	24.45	52.61	-28.16
28	0.304	21.97	50.14	-28.17
29	0.270	22.84	51.11	-28.27
30	0.205	25.11	53.40	-28.29
31	0.237	23.85	52.21	-28.36
32	0.223	24.33	52.70	-28.37
33	0.310	21.59	49.97	-28.38
34	0.215	24.55	53.00	-28.45
35	0.212	24.63	53.14	-28.50
36	0.220	24.27	52.83	-28.56
37	0.266	22.52	51.24	-28.72
38	0.244	23.16	51.95	-28.79
39	0.240	23.24	52.08	-28.84
40	0.263	22.45	51.33	-28.88
41	0.248	22.83	51.82	-28.99
