FCC PART 15, SUBPART B and C
TEST REPORT

for

PET COLLAR TRANSMITTER

MODEL: 580628

Prepared for

APPLIED WIRELESS
1250 AVENIDA ACASO, UNIT F
CAMARILLO,CALIFORNIA 93012

Prepared by:_____

EDGAR VALENCIA

Approved by:_____

KYLE FUJIMOTO

COMPATIBLE ELECTRONICS INC.
114 OLINDA DRIVE
BREA, CALIFORNIA 92823
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DATE: JUNE 30, 2016

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
PAGES	17	2	2	2	11	16	**50**

TABLE OF CONTENTS

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Additional Model Covered Under This Report
D	Diagrams and Charts • Test Setup Diagrams • Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Layout of the Semi-Anechoic Test Chamber

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:	Pet Collar Transmitter Model: 580628 S/N: N/A
Product Description:	The EUT is a 900 MHz transmitter operating on a 3 volt coin cell battery..
Modifications:	The EUT was not modified in order to meet the specifications.
Customer:	Applied Wireless 1250 Avenida Acaso Unit F Camarillo, California 93012
Test Date:	May 2, 2016
Test Specifications:	Emissions requirements CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249
Test Procedure:	ANSI C63.4, ANSI C63.10
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 – 9300 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, 15.209 and 15.249 Highest reading in relation to spec limit: 42.88 dBuV @ 2748.96 MHz (*U = 3.70 dB)
2	Conducted RF Emissions, 150 kHz to 30 MHz	This device is battery powered only, thus this test was not performed.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the Pet Collar Transmitter, Model: 580628. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the **Class B** specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.

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

Applied Wireless

Mark Simon	VP Engineer
Dave Nichols	President

Compatible Electronics Inc.

Kyle Fujimoto	Test Engineer
Edgar Valencia	Test Engineer

2.4 Date Test Sample was Received

The test sample was received on May 2, 2016.

2.5 Disposition of the Test Sample

The test sample has not been returned to Applied Wireless as of the date of this test report.

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
ASK	Amplitude Shift Key
ITE	Information Technology Equipment
LISN	Line Impedance Stabilization Network
N/A	Not Applicable
Tx	Transmit
Rx	Receive

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
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation
ANSI C63.4 2014	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
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The Pet Collar Transmitter, Model: 580628 (EUT) was setup in a standalone configuration. The EUT was investigated in all three orthogonal axis. The EUT was continuously transmitting a data stream during the testing.

The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

The final radiated 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
PET COLLAR TRANSMITTER	APPLIED WIRELESS	580628	N/A	QY4-628

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DATE	CAL. CYCLE
GENERAL TEST EQUIPMENT USED IN LAB D					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A
EMI Receiver, 20 Hz – 26.5 GHz	Keysight	N9038A	MY51210150	December 29, 2015	1 Year
RF RADIATED EMISSIONS TEST EQUIPMENT					
CombiLog Antenna	Com-Power	AC-220	61060	September 3, 2015	1 Year
Preamplifier	Com-Power	PAM-118A	551024	May 12, 2016	1 Year
Loop Antenna	Com-Power	AL-130	17089	February 6, 2015	2 Year
Horn Antenna	Com-Power	AH-118	071175	February 26, 2016	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

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

For frequencies 1 GHz and below: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

For frequencies above 1 GHz: The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 meters above the ground plane.

The EUT was not grounded.

7. CHARACTERISTICS OF THE TRANSMITTER

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

7.1 Channel Number and Frequencies

There is one operating channel and the EUT uses ASK modulation.

Channel = 916.4 MHz

7.2 Antenna

A small one half loop wire serves as an integral antenna.

8. TEST PROCEDURES

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

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The EMI Receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. A transient limiter was used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT 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 63:4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

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

Test Results:

This device is battery powered only, thus this test was not performed.

8.1.2 Radiated Emissions Test

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 effective measurement bandwidth used for the radiated emissions test was according to the frequency measured (200 Hz for 10 kHz to 150 kHz, 9 kHz for 150 kHz to 30 MHz, 120 kHz for 30 MHz to 1 GHz and 1 MHz for 1 GHz to 9.3 GHz).

For frequencies above 1 GHz, the readings were average by a "duty cycle correction factor", derived from 20 log (total dwell time of one pulse train / time between pulse trains). This duty cycle correction factor was then subtracted from the peak reading.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with 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 gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

The EUT was tested at a 3-meter test distance. The six highest emissions are listed in Table 1.0.

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	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	CombiLog Antenna
1 GHz to 9.3 GHz	1 MHz	Horn Antenna

Test Results:

The EUT complies with the **Class B** limits of **CFR** Title 47, Part 15, Subpart B; and Subpart C sections 15.205, 15.209 and 15.249 for radiated emissions.

8.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
Pet Collar Transmitter
Model: 580628

Frequency MHz	EMI Reading (dBuV)	Specification Limit (dBuV)	Delta (Cor. Reading – Spec. Limit) dB)
2748.96 (V) (X-axis)	42.88 (A)	53.97	-11.10
2748.96 (H) (Y-axis)	42.86 (A)	53.97	-11.11
2748.96 (V) (Z-axis)	42.68 (A)	53.97	-11.29
40.40 (V) (Z-axis)	27.16 (QP)	40.00	-12.84
37.00 (V) (Z-axis)	27.12 (QP)	40.00	-12.88
33.40 (V) (Z-axis)	26.63 (QP)	40.00	-13.37

Notes:

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

9. CONCLUSIONS

The Pet Collar Transmitter, Model: 580628, as tested, meets all of the **Class B** specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.

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

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 15.249 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 modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODEL COVERED UNDER THIS REPORT

ADDITIONAL MODEL COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Pet Collar Transmitter
Model: 580628
S/N: N/A

There are no additional Model covered under this report.

APPENDIX D

DIAGRAMS AND CHARTS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

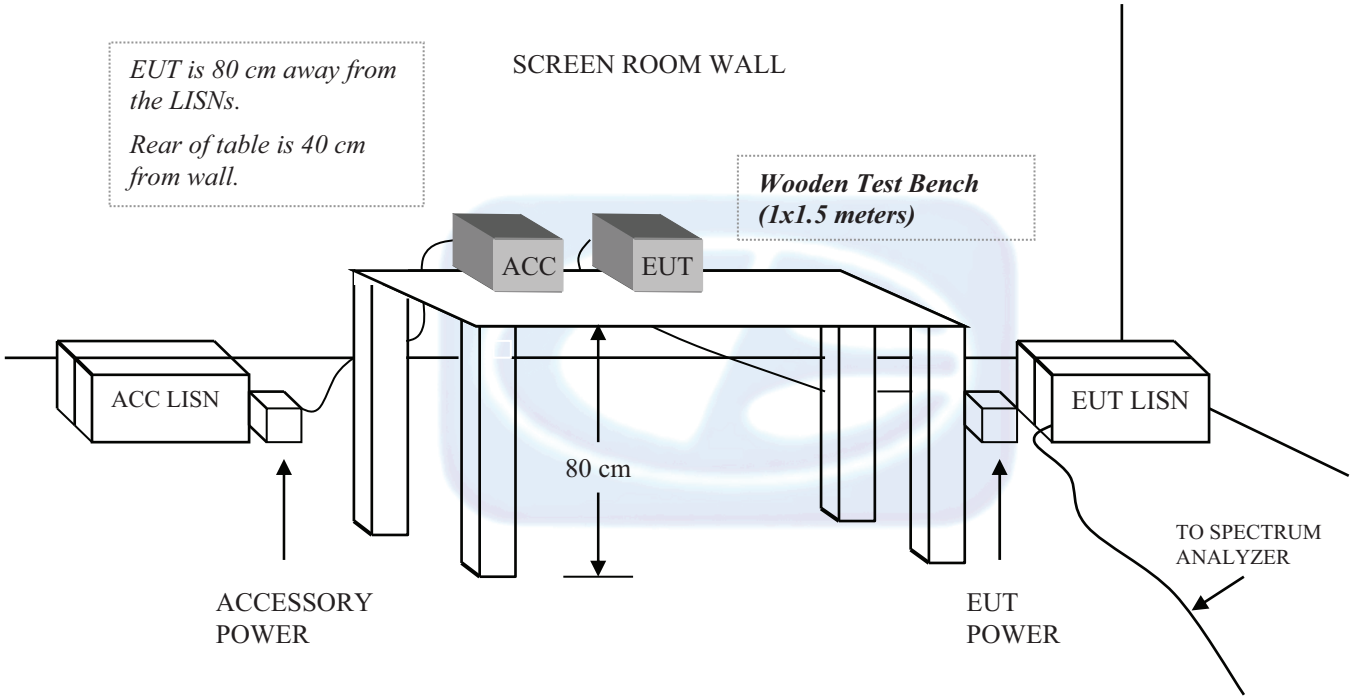
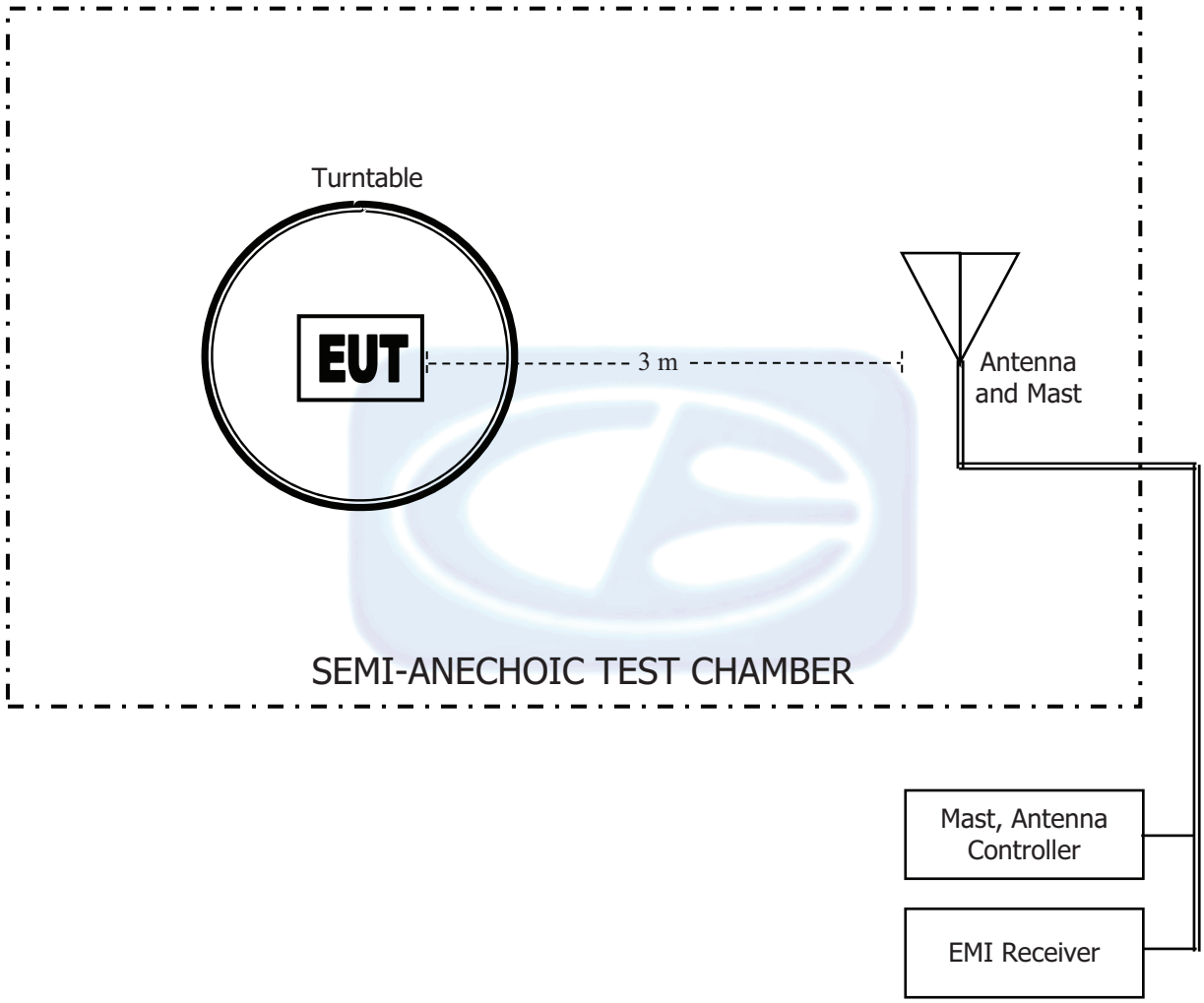


FIGURE 2: LAYOUT OF THE SEMI MI-ANECHOIC TEST CHAMBER



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: SEPTEMBER 3, 2015

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	24.00	200	13.00
35	24.30	250	15.30
40	25.40	300	18.20
45	21.50	350	17.90
50	22.50	400	18.60
60	15.40	450	19.80
70	12.70	500	21.60
80	11.10	550	22.40
90	13.40	600	23.70
100	13.80	650	24.30
120	15.40	700	24.00
125	15.40	750	24.50
140	13.10	800	24.30
150	17.20	850	26.30
160	13.20	900	26.90
175	14.20	950	26.00
180	14.30	1000	25.60

COM POWER AH-118

HORN ANTENNA

S/N: 071175

CALIBRATION DATE: FEBRUARY 26, 2016

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	23.93	10.0	39.33
1.5	25.54	10.5	39.64
2.0	28.09	11.0	41.04
2.5	30.21	11.5	44.29
3.0	30.15	12.0	41.22
3.5	30.17	12.5	41.50
4.0	31.90	13.0	41.62
4.5	33.51	13.5	40.63
5.0	33.87	14.0	39.94
5.5	35.08	14.5	41.84
6.0	34.81	15.0	42.69
6.5	34.26	15.5	39.03
7.0	36.33	16.0	39.07
7.5	37.03	16.5	41.40
8.0	37.56	17.0	43.18
8.5	40.07	17.5	47.01
9.0	38.92	18.0	46.48
9.5	38.21		

COM-POWER PA-118

PREAMPLIFIER

S/N: 551024

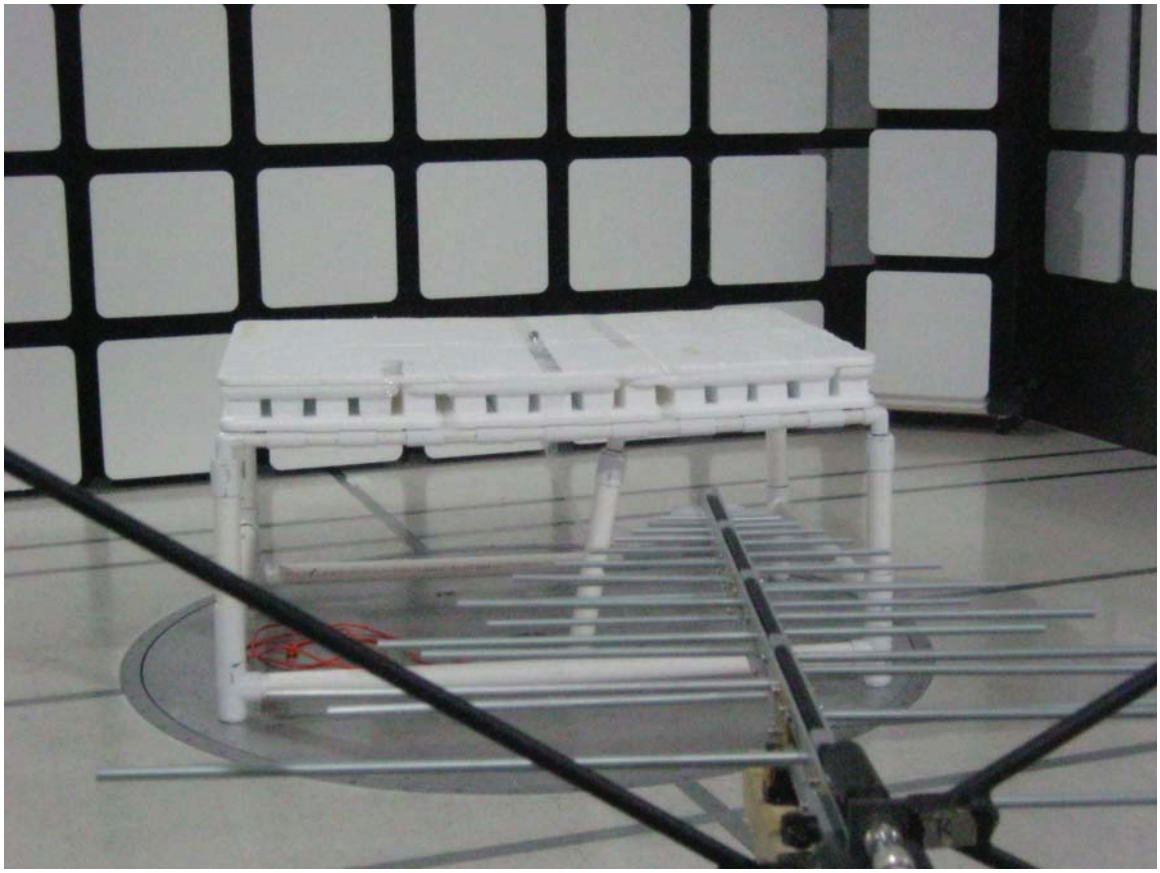
CALIBRATION DATE: MAY 12, 2016

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	39.84	6.0	39.05
1.1	39.40	6.5	38.94
1.2	39.58	7.0	39.25
1.3	39.68	7.5	39.09
1.4	39.91	8.0	39.01
1.5	39.78	8.5	38.60
1.6	39.50	9.0	38.64
1.7	39.81	9.5	39.67
1.8	39.89	10.0	39.30
1.9	39.94	11.0	39.15
2.0	39.57	12.0	39.24
2.5	40.39	13.0	39.49
3.0	40.63	14.0	39.44
3.5	40.80	15.0	39.94
4.0	40.86	16.0	40.09
4.5	39.94	17.0	40.06
5.0	34.47	18.0	39.76
5.5	39.32		

FRONT VIEW

APPLIED WIRELESS
PET COLLAR TRANSMITTER
MODEL: 580628
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

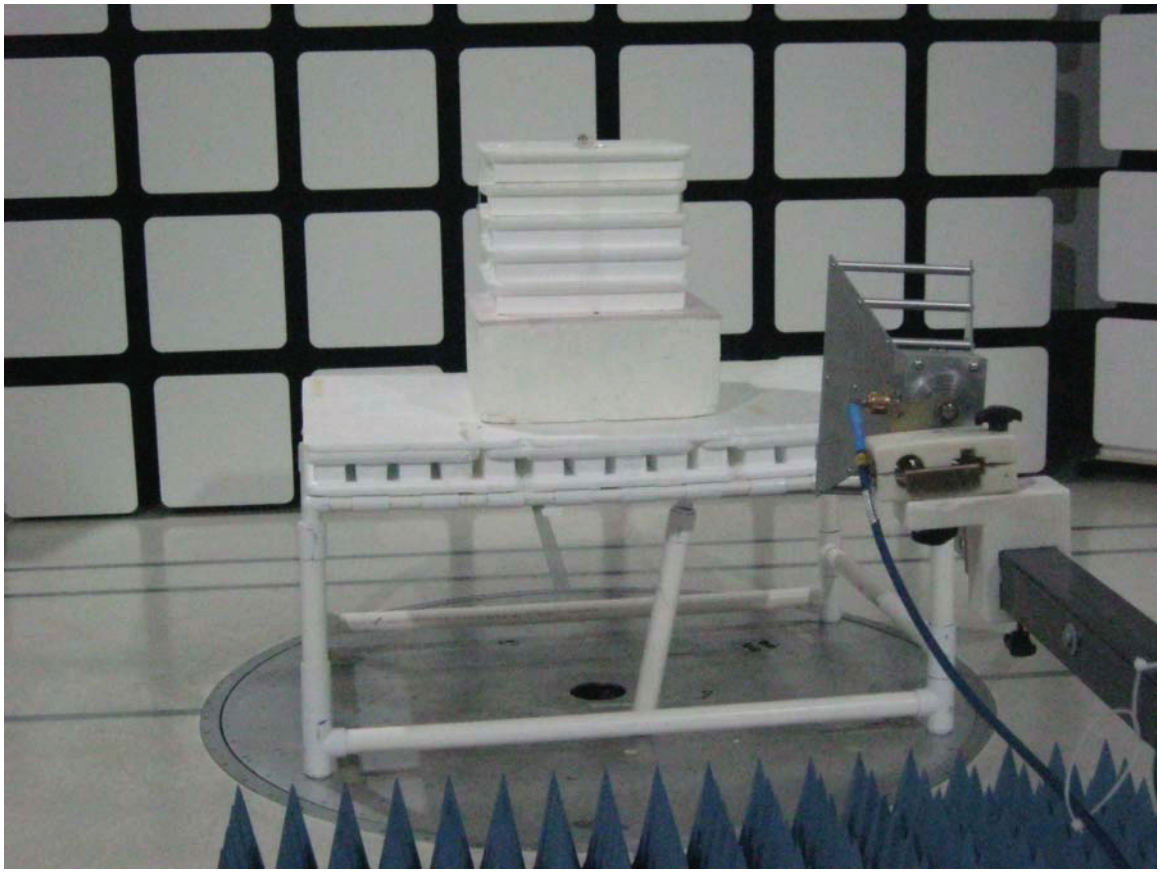
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

APPLIED WIRELESS
PET COLLAR TRANSMITTER
MODEL: 580628
FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

APPLIED WIRELESS
PET COLLAR TRANSMITTER
MODEL: 580628
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

REAR VIEW

APPLIED WIRELESS
PET COLLAR TRANSMITTER
MODEL: 580628
FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONs

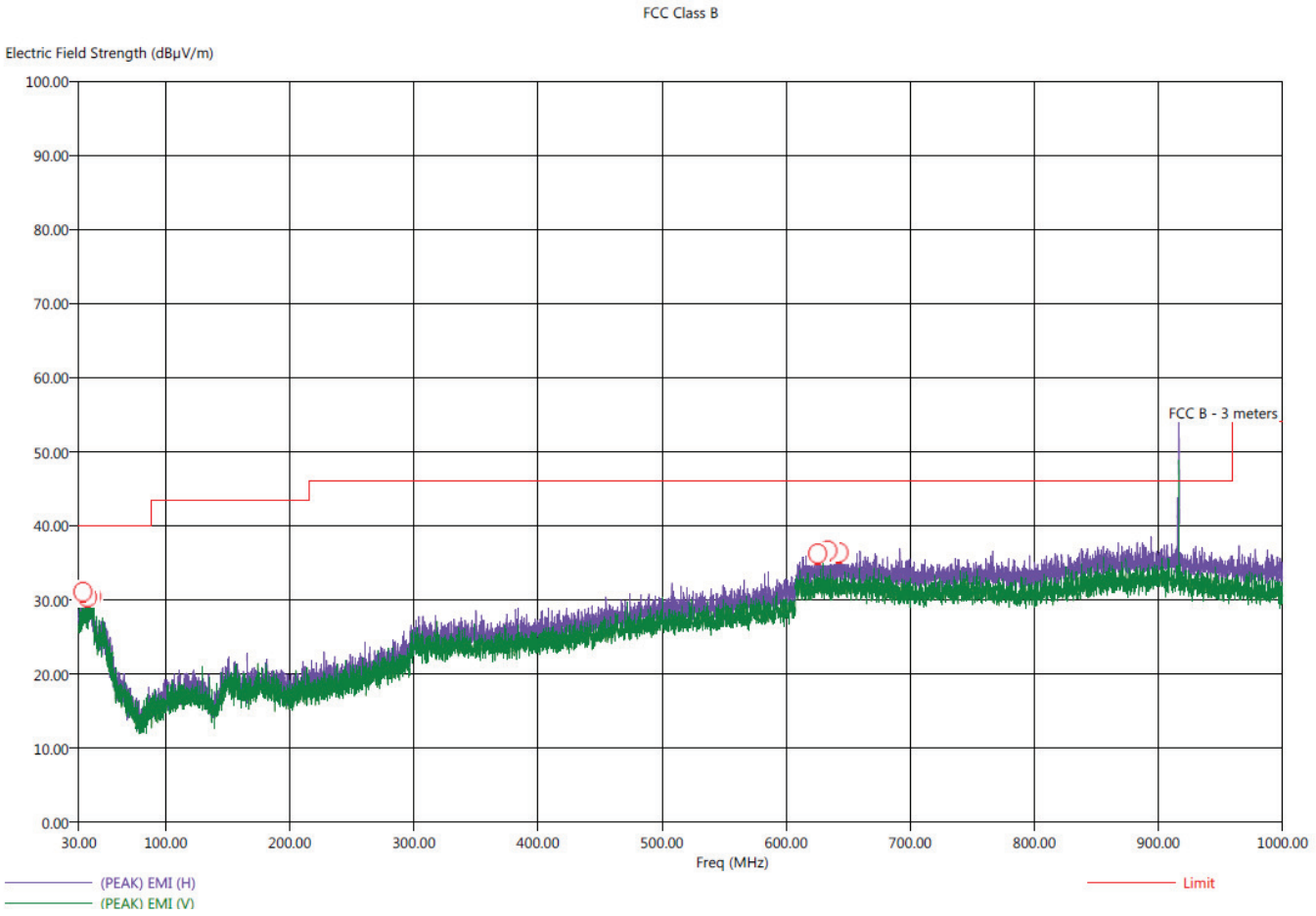
APPENDIX E

DATA SHEETS

RADIATED EMISSIONS DATA SHEETS

Title: Pre-Scan - FCC Class B
File: Agilent - Pre-Scan - FCC Class B - 05-02-2016.set
Operator: Kyle Fujimoto
EUT Type: Pet Collar Transmitter
EUT Condition: The EUT was continuously Transmitting - Z-Axis Worst Case
Comments: Company: Applied Wireless, Inc.
Model: 580628
Note: Frequency at 916.32 MHz is from Transmitter and subject to FCC 15.249 limits.

5/2/2016 9:59:46 AM
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class B
File: Agilent - Final Scan - FCC Class B - 05-02-2016.set
Operator: Kyle Fujimoto
EUT Type: Pet Collar Transmitter
EUT Condition: The EUT was continuously transmitting - Z-Axis Worst Case
Comments: Company: Applied Wireless, Inc.
Model: 580628
Note: The Frequency at 916.32 MHz is from the Transmitter and subject to FCC 15.249 limits.

5/2/2016 10:11:35 AM
Sequence: Final Measurements

FCC Class B

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)
33.40	V	31.66	26.63	-8.34	-13.37	40.00	24.20	0.36	62.25	351.67
37.00	V	32.49	27.12	-7.51	-12.88	40.00	24.81	0.38	64.50	111.37
40.40	V	32.74	27.16	-7.26	-12.84	40.00	25.04	0.39	232.75	383.55
625.40	H	36.84	31.34	-9.16	-14.66	46.00	24.01	2.04	264.25	399.73
633.60	H	36.24	31.45	-9.76	-14.55	46.00	24.11	2.06	57.75	268.86
642.60	H	36.77	31.82	-9.23	-14.18	46.00	24.21	2.09	86.25	174.23

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Fundamental Readings

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
916.32	57.14	V	93.97	-36.83	Peak	208.50	126.53	**X-Axis**
								Vertical Polarization
916.32	59.30	H	93.97	-34.67	Peak	102.76	159.79	**X-Axis**
								Horizontal Polarization
916.32	59.64	V	93.97	-34.33	Peak	5.00	140.02	**Y-Axis**
								Vertical Polarization
916.32	59.50	H	93.97	-34.48	Peak	218.25	100.19	**Y-Axis**
								Horizontal Polarization
916.32	56.81	V	93.97	-37.16	Peak	150.25	194.89	**Z-Axis**
								Vertical Polarization
916.32	61.75	H	93.97	-32.22	Peak	226.50	101.25	**Z-Axis**
								Horizontal Polarization

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	57.08	V	73.97	-16.89	Peak	35.75	198.17	
1832.64	39.07	V	52.97	-13.90	Avg	35.75	198.17	
2748.96	60.89	V	73.97	-13.09	Peak	235.50	132.08	
2748.96	42.88	V	53.97	-11.10	Avg	235.50	132.08	
3665.28	50.09	V	73.97	-23.88	Peak	122.00	209.82	
3665.28	32.08	V	53.97	-21.89	Avg	122.00	209.82	
4581.60	50.62	V	73.97	-23.35	Peak	117.50	240.50	
4581.60	32.61	V	53.97	-21.36	Avg	117.50	240.50	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	52.24	V	73.97	-21.73	Peak	323.00	115.55	
1832.64	34.23	V	53.97	-19.74	Avg	323.00	115.55	
2748.96	50.81	V	73.97	-23.16	Peak	355.00	188.68	
2748.96	32.80	V	53.97	-21.17	Avg	355.00	188.68	
3665.28	50.82	V	73.97	-23.15	Peak	204.00	196.62	
3665.28	32.81	V	53.97	-21.16	Avg	204.00	196.62	
4581.60	48.97	V	73.97	-25.00	Peak	355.00	198.52	
4581.60	30.96	V	53.97	-23.01	Avg	355.00	198.52	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	56.51	V	73.97	-17.46	Peak	258.25	211.97	
1832.64	38.50	V	53.97	-15.47	Avg	258.25	211.97	
2748.96	60.69	V	73.97	-13.28	Peak	127.00	244.08	
2748.96	42.68	V	53.97	-11.29	Avg	127.00	244.08	
3665.28	49.57	V	73.97	-24.40	Peak	148.50	193.76	
3665.28	31.56	V	53.97	-22.41	Avg	148.50	193.76	
4581.60	51.71	V	73.97	-22.26	Peak	120.75	219.91	
4581.60	33.70	V	53.97	-20.27	Avg	120.75	219.91	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

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Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	48.87	H	73.97	-25.11	Peak	310.00	197.64	
1832.64	30.86	H	53.97	-23.12	Avg	310.00	197.64	
2748.96	55.23	H	73.97	-18.74	Peak	14.75	217.58	
2748.96	37.22	H	53.97	-16.75	Avg	14.75	217.58	
3665.28	49.41	H	73.97	-24.56	Peak	316.00	261.58	
3665.28	31.40	H	53.97	-22.57	Avg	316.00	261.58	
4581.60	49.53	H	73.97	-24.44	Peak	131.75	235.85	
4581.60	31.52	H	53.97	-22.45	Avg	131.75	235.85	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	55.86	H	73.97	-18.11	Peak	230.75	223.91	
1832.64	37.85	H	53.97	-16.12	Avg	230.75	223.91	
2748.96	60.87	H	73.97	-13.10	Peak	187.50	111.07	
2748.96	42.86	H	53.97	-11.11	Avg	187.50	111.07	
3665.28	49.49	H	73.97	-24.48	Peak	67.25	200.02	
3665.28	31.48	H	53.97	-22.49	Avg	67.25	200.02	
4581.60	52.21	H	73.97	-21.76	Peak	233.00	175.25	
4581.60	34.20	H	53.97	-19.77	Avg	233.00	175.25	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
1832.64	54.71	H	73.97	-19.26	Peak	10.25	148.92	
1832.64	36.70	H	53.97	-17.27	Avg	10.25	148.92	
2748.96	55.70	H	73.97	-18.27	Peak	357.25	122.20	
2748.96	37.69	H	53.97	-16.28	Avg	357.25	112.20	
3665.28	50.94	H	73.97	-23.04	Peak	181.25	147.07	
3665.28	32.93	H	53.97	-21.05	Avg	181.25	147.07	
4581.60	52.87	H	73.97	-21.10	Peak	355.00	183.73	
4581.60	34.86	H	53.97	-19.11	Avg	355.00	183.73	
5497.92								**No Emission**
5497.92								**Detected**
6414.24								**No Emission**
6414.24								**Detected**
7330.56								**No Emission**
7330.56								**Detected**
8246.88								**No Emission**
8246.88								**Detected**
9163.20								**No Emission**
9163.20								**Detected**

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Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 10 kHz to 30 MHz
Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 9.3 GHz

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
								No Emissions Detected
								from 10 kHz to 30 MHz
								for the digital portion
								of the EUT
								No Emissions Detected
								from 10 kHz to 30 MHz
								for the Non-Harmonic Emissions
								of the Transmitter for the EUT
								No Emissions Detected
								from 1 GHz to 9.3 GHz
								for the digital portion
								of the EUT
								No Emissions Detected
								from 1 GHz to 9.3 GHz
								for the Non-Harmonic Emissions
								of the Transmitter for the EUT
								Investigated in the X-Axis,
								Y-Axis, and Z-Axis

BAND EDGES DATA SHEETS

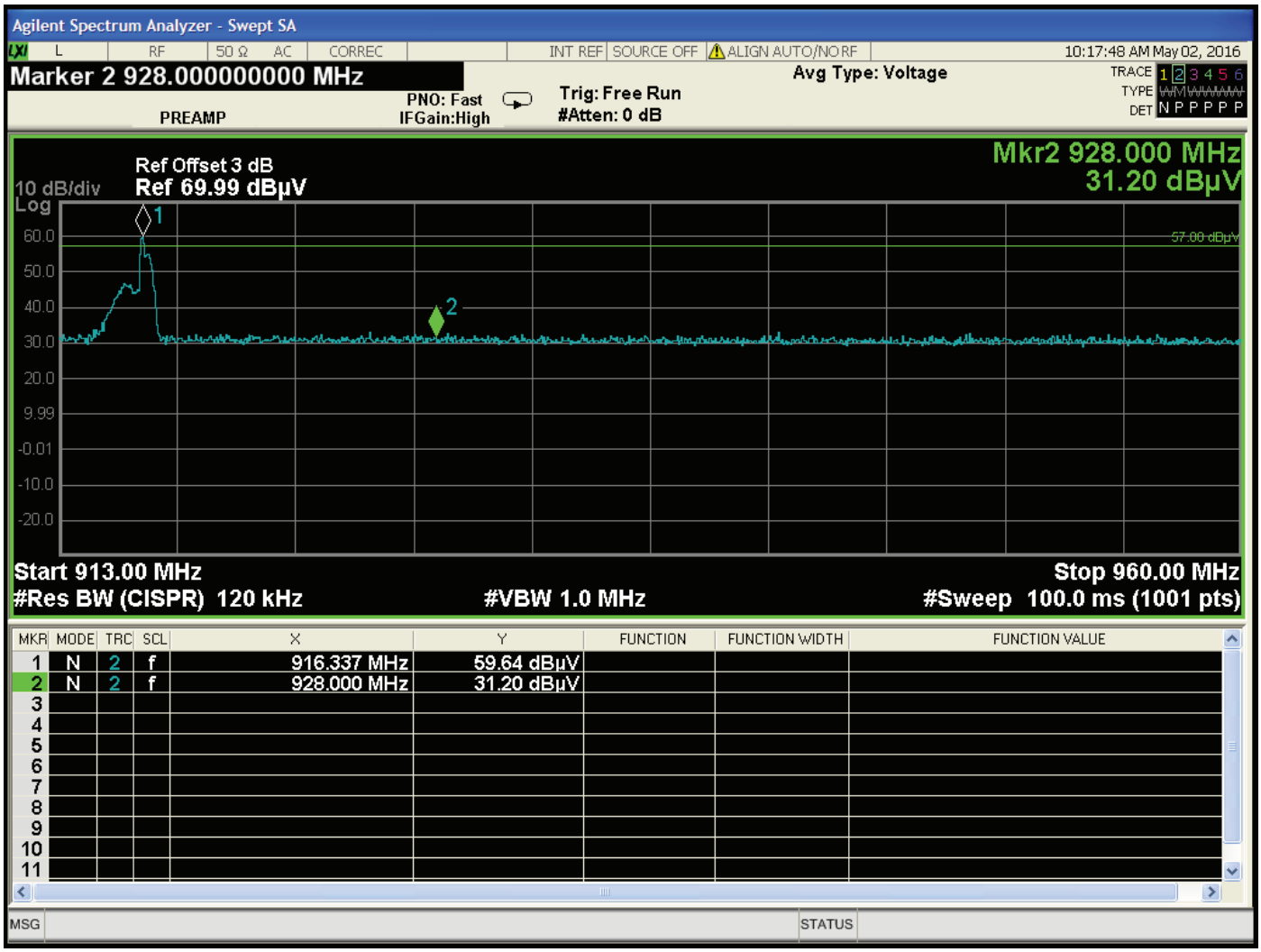
FCC 15.249

Applied Wireless, Inc.
Pet Collar Transmitter
Model: 580628

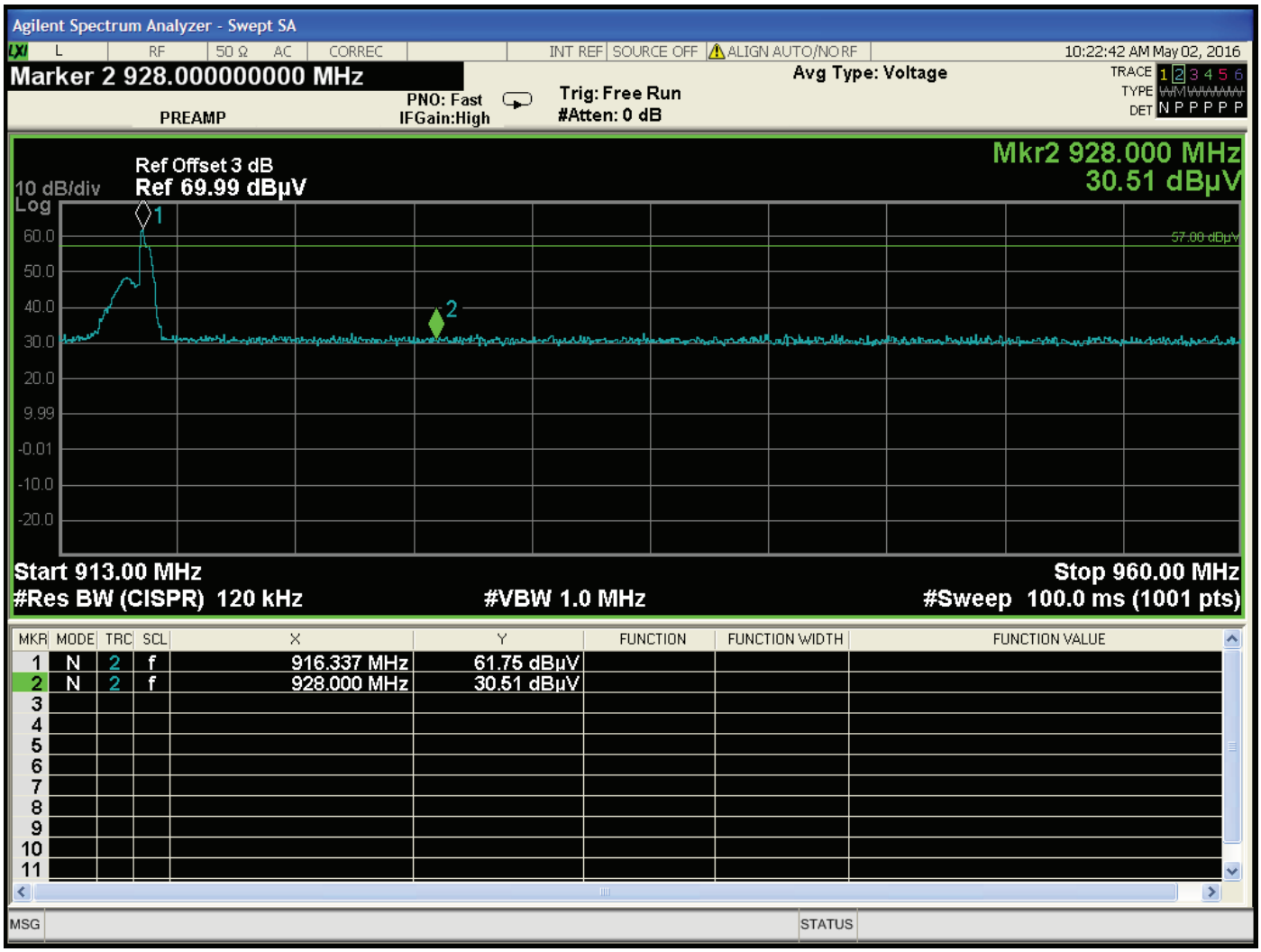
Date: 05/02/2016
Lab: D
Tested By: Kyle Fujimoto

Band Edges

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
916.32	61.75	H	93.97	-32.22	Peak	226.50	101.25	**Band Edge**
								Z-Axis
928.00	30.51	H	46.00	-15.49	Peak	226.50	101.25	**Worst Case**
916.32	59.64	V	93.97	-34.33	Peak	5.00	140.02	**Band Edge**
								Y-Axis
928.00	31.20	V	46.00	-14.80	Peak	5.00	140.02	**Worst Case**



Band Edge – Vertical Polarization-Y-Axis Worst Case



Band Edge – Horizontal Polarization-Z-Axis Worst Case