FCC PART 15, SUBPART B and C
TEST REPORT

for

RF MODULE XBEE 900 MHZ

MODEL: 79902

Prepared for

AEROVIRONMENT INC.
900 INNOVATORS WAY
SIMI VALLEY, CA 93063

Prepared by:_____

REYNALD O. RAMIREZ

Approved by:_____

RUBY A. HALL

COMPATIBLE ELECTRONICS INC.
1050 LAWRENCE DRIVE
NEWBURY PARK, CALIFORNIA 91320
(818) 480-4044

DATE: AUGUST 28, 2017

	REPORT BODY	APPENDICES					TOTAL
		A	***B***	***C***	***D***	***E***	
PAGES	20	2	2	2	17	34	**77**

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

NVLAP® TESTING
NVLAP LAB CODE 200528-0
ilac-MRA

TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	***4***
SUMMARY OF TEST RESULTS	***5***
1. PURPOSE	**6**
2. ADMINISTRATIVE DATA	**7**
2.1 Location of Testing	7
2.2 Traceability Statement	7
2.3 Cognizant Personnel	7
2.4 Date Test Sample was Received	7
2.5 Disposition of the Test Sample	7
2.6 Abbreviations and Acronyms	7
3. APPLICABLE DOCUMENTS	**8**
4. Description of Test Configuration	**9**
4.1 Description of Test Configuration – (Emissions)	9
4.1.2 Cable Construction and Termination	10
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	**11**
5.1 EUT and Accessory List	11
6. TEST SITE DESCRIPTION	**13**
6.1 Test Facility Description	13
6.2 EUT Mounting, Bonding and Grounding	13
7. CHARACTERISTICS OF THE TRANSMITTER	**14**
7.1 Channel Number and Frequencies	14
7.2 Antenna	14
8. Test Procedures	**15**
8.1 RF Emissions	15
8.1.1 Conducted Emissions Test	15
8.1.2 Radiated Emissions Test	16
8.1.3 RF Emissions Test Results	17
8.2 20 dB Bandwidth	18
8.3 Peak Output Power	18
8.4 RF Antenna Conducted Test	18
8.5 RF Band Edges	19
8.6 Carrier Frequency Separation	19
8.7 Number of Hopping Frequencies	19
8.8 Average Time of Occupancy Test	19
9. CONCLUSIONS	**20**

LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Additional Models 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	Layout of the Semi-Anechoic Test Chamber
2	Plot Map and Layout of Test Site

LIST OF TABLES

TABLE	TITLE
1	Radiated Emissions Test Results

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:	RF Module XBee 900 MHz Model: 79902 S/N: None
Product Description:	This is a RF Module XBee 900 MHz . (Dimensions: 1.37795"L x 1.9685"W).
Modifications:	The EUT was not modified during the testing to comply with the specifications.
Customer:	Aerovironment Inc. 900 Innovators Way Simi Valley, CA 93063
Test Dates:	July 27, 28, August 1 & 2, 2017

Test Specifications covered by accreditation:

CFR Title 47, Part 15, Subpart B; and Subpart C sections 15.205, 15.207, 15.209, and 15.247

NVLAP TESTING
NVLAP LAB CODE 200528-0

Test Procedures: ANSI C63.4: 2014 and ANSI C63.10: 2013

SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz	This unit is battery powered, therefore this test was deemed unnecessary and thus was not performed
2	Radiated RF Emissions, 10 kHz – 10000 MHz (Including Co-location RF Emissions)	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, 15.205, 15.209 and 15.247 (d) Highest reading in relation to spec limit: 53.06 dBuV @ 9152.00 MHz (*U = 1.04 dB)
3	20 dB Bandwidth	This test was performed to compare with the previous test data. The final results are similar.
4	Peak Power Output	This test was performed to compare with the previous test data. The final results are similar.
5	RF Conducted Antenna Test	This test was performed to compare with the previous test data. The final results are similar.
6	Carrier Frequency Separation	This test was performed to compare with the previous test data. The final results are similar.
7	Average Time of Occupancy	This test was performed to compare with the previous test data. The final results are similar.
8	Number of Hopping Frequencies	This test was performed to compare with the previous test data. The final results are similar.

1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the RF Module XBee 900 MHz Model: 79902. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and ANSI C63.10. The tests were performed 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 15.247. The purpose of this test is to verify that changing the transmitter antenna does not cause the module to fail the requirements and co-location with the Texas Instruments Model: WL18MODGI also meets the requirements.

2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 1050 Lawrence Drive, Newbury Park, CA 91320.

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

Aerovironment Inc.

Stuart Sechrist	Electrical Engineer Sr.

Compatible Electronics Inc.

Reynald O. Ramirez	Senior Test Engineer
Ruby A. Hall	Lab Manager

2.4 Date Test Sample was Received

The test sample was received on August 4, 2017.

2.5 Disposition of the Test Sample

The test sample was returned to Aerovironment Inc.

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
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 EUT was set-up in a table top configuration. The EUT was powered on and set to hopping or a specific channel depending on the test. The WIFI module and aircraft motors were turned off during this mode of operation. The EUT and WIFI module Texas Instruments Model: WL18MODGI were also tested and turned on to allow co-location between the two devices. All 3 orthogonal axis positions were tested. The EUT was tested with fresh batteries.

For the direct measurement portion of the test – The EUT was directly connected to the EMI receiver. A special program was used to control the channel of the transmitter or to commit the unit to channel hopping mode, depending on the nature of the specific test.

The final radiated as well as the conducted data for the EUT were taken in the worst-case configuration described above. Please see Appendix E for the data sheets.

4.1.2 Cable Construction and Termination

Cable 1

This is a 30 cm, coax cable that connects the EUT to the antenna. It has MMCX jacks at each end.

5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

#	EQUIPMENT TYPE	MANUFACTURER	MODEL	SERIAL NUMBER
1	RF MODULE XBEE 900 MHZ (EUT)	AEROVIRONMENT	79902	NONE FCC ID: PZR-79902
	ANTENNA (EUT)	AEROVIRONMENT	NONE	P/N: 78918
	QUANTIX AIRCRAFT	AEROVIRONMENT INC.	REV 13	S/N: NONE P/N: 77014
	WIFI AND BLUETOOTH MODULE	TEXAS INSTURMENTS	WL18MODGI	NONE FCC ID: Z64-WL18DBMOD

5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
TDK Emissions Lab Software	TDK RF Solutions, Inc.	TDK Emissions Lab	Version: 10.78	N/A	N/A
EMI Receiver	Keysight Technologies	N9038A	MY51100115	Jan. 10, 2017	Jan. 10, 2018
902-928 MHz 60 dB Notch Filter	Microwave Circuits	N0309154	495405-495406	Jul. 27, 2017	Jul. 27, 2018
3-20 GHz Highpass Filter	Microwave Circuits	H3G020G4	495523-4955-24	Jul. 27, 2017	Jul. 27, 2018
Loop Antenna	Com-Power	AL-130	17067	Jun. 09, 2017	Jun. 09, 2019
Combi-Log Antenna	Com-Power	AC-220	061097	Mar. 14, 2017	Mar. 14, 2018
Horn Antenna	Com-Power	AH-118	071370	Jul. 06, 2017	Jul. 06, 2018
Preamplifier	Com-Power	PAM-118A	551015	Feb. 14, 2017	Feb. 14, 2018
Turntable	EMCO	2088-2.03	None	NCR	NCR
Antenna Mast	EMCO	2075-2	None	NCR	NCR
Multi-Device Controller	ETS EMCO	2090	9511-1095	NCR	NCR
Temperature and Humidity Indicator	Abbeon	HTAB169B	3428	Jun. 09, 2017	Jun. 09, 2018
Barometer	Maximum	Predictor	3429	NCR	NCR
Computer	Dell	Vostro 3900	Asset# 3423	NCR	NCR

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.

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

The FHSS uses 50 channels and uses ISM modulation. The channel separation is 399.840 kHz.

Channel 1 = 902.4 MHz
Channel 2 = 915.2 MHz
Channel 3 = 927.6 MHz

7.2 Antenna

The antenna has a gain of 3.1 dBi.

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

Test Results: The EUT does not connect to the AC mains, therefore this test was deemed unnecessary and thus not performed.

The EMI Receiver was used as a measuring meter. The data was collected with the EMI Receiver in the peak detect mode with the "Max Hold" feature activated. The quasi-peak or average was used only where indicated in the data sheets. A 10-dB attenuation pad was used for the protection of the EMI Receiver input stage, and the EMI Receiver offset was adjusted accordingly to read the actual data measured. The EMI Receiver read the LISN output. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for the conducted emissions 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 initial test data was taken in manual mode while scanning the frequency ranges of 0.15 MHz to 1.6 MHz, 1.6 MHz to 5 MHz and 5 MHz to 30 MHz. The conducted emissions from the EUT were maximized for operating mode as well as cable placement. Once a predominant frequency (within 12 dB of the limit) was found, it was more closely examined with the EMI Receiver span adjusted to 1 MHz.

The final data was collected under program control by the computer in several overlapping sweeps by running the EMI Receiver at a minimum scan rate of 10 seconds per octave.

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 considers 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).

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 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 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 15.247 (d) for radiated emissions.

8.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS
RF MODULE XBEE 900 MHZ
Model: 79902

Frequency MHz	EMI Reading (dBuV)	Specification Limit (dBuV)	Delta (Cor. Reading – Spec. Limit) dB)
594.00(V)(Y Axis)	44.12QP	47.00	-2.88
9024.00(H)(X Axis)	52.31A	53.97	-1.66
9024.00(H)(Y Axis)	51.89A	53.97	-2.08
9152.00(H)(Y Axis)	53.06A	53.97	-0.91
9152.00(H)(Z Axis)	52.82A	53.97	-1.15
9276.00(H)(Y Axis)	51.87A	53.97	-2.10

Notes:

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

(H) Horizontal

(V) Vertical

(QP) Quasi Peak

(A) Average

8.2 20 dB Bandwidth

The 20 dB Bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was ≥ 1 % of the bandwidth and the video bandwidth was ≥ RBW.

Test Results:

This test was performed to compare with the previous test data. The final results are similar.

8.3 Peak Output Power

The Peak Output Power was measured using the EMI Receiver. The peak output power was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was greater than the 20-dB bandwidth and the video bandwidth was ≥ RBW. The cable loss was also added back into the reading using the reference level offset.

Test Results:

This test was performed to compare with the previous test data. The final results are similar.

8.4 RF Antenna Conducted Test

The RF antenna conducted test was performed using the EMI Receiver. The RF antenna conducted test measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The resolution bandwidth was 100 kHz, and the video bandwidth was 300 kHz. The spans were wide enough to include all the harmonics and emissions that were produced by the intentional radiator.

Test Results:

This test was not performed because the all the emissions were taken via radiated methods.

8.5 RF Band Edges

The RF band edges were taken at the edges of the ISM spectrum (902 MHz when the EUT was on the low channel and 928 MHz when the EUT was on the high channel) using the EMI Receiver. The RBW was set to 100 kHz and the VBW was set to 300 kHz. Plots of the fundamental were taken to ensure the amplitude at the band edges were at least 20 dB down from the peak of the fundamental emission. The plots were taken in both frequency hopping mode and single channel mode.

Test Results:

This test was performed to compare with the previous test data. The final results are similar.

8.6 Carrier Frequency Separation

The Channel Hopping Separation Test was measured using the EMI Receiver. The EUT was operating in its normal operating mode. The resolution bandwidth was approximately 30% of the channel spacing, and the video bandwidth ≥ RBW. The frequency span was wide enough to include the peaks of two adjacent channels.

Test Results:

This test was performed to compare with the previous test data. The final results are similar.

8.7 Number of Hopping Frequencies

The Number of Hopping Frequencies was measured using the EMI Receiver. The EUT was operating in its normal operating mode. The resolution bandwidth was set to approximately 30% of the channel spacing, and the video bandwidth was ≥ RBW. The frequency span was wide enough to include all the peaks in the frequency band of operation.

Test Results:

This test was performed to compare with the previous test data. The final results are similar.

8.8 Average Time of Occupancy Test

The Average Time of Occupancy Test was measured using the EMI Receiver. The EUT was operating in normal operating mode. The frequency span was taken to 0 Hz to determine the time for each transmission and the number of transmissions over a 20 second period. The RBW was set to be less than the channel spacing.

Test Results:
This test was performed to compare with the previous test data. The final results are similar.

9. CONCLUSIONS

The RF Module XBee 900 MHz Model: 79902, as tested, meets all the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247.

APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

LABORATORY ACCREDITATIONS AND RECOGNITIONS

NVLAP TESTING
NVLAP LAB CODE 200528-0

For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.
For the most up-to-date version of our scopes and certificates please visit http://celectronics.com/quality/scope/

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."

APPENDIX B

MODIFICATIONS TO THE EUT

MODIFICATIONS TO THE EUT

No modifications were made to the EUT during the testing.

APPENDIX C

ADDITIONAL MODELS COVERED UNDER THIS REPORT

ADDITIONAL MODELS COVERED UNDER THIS REPORT

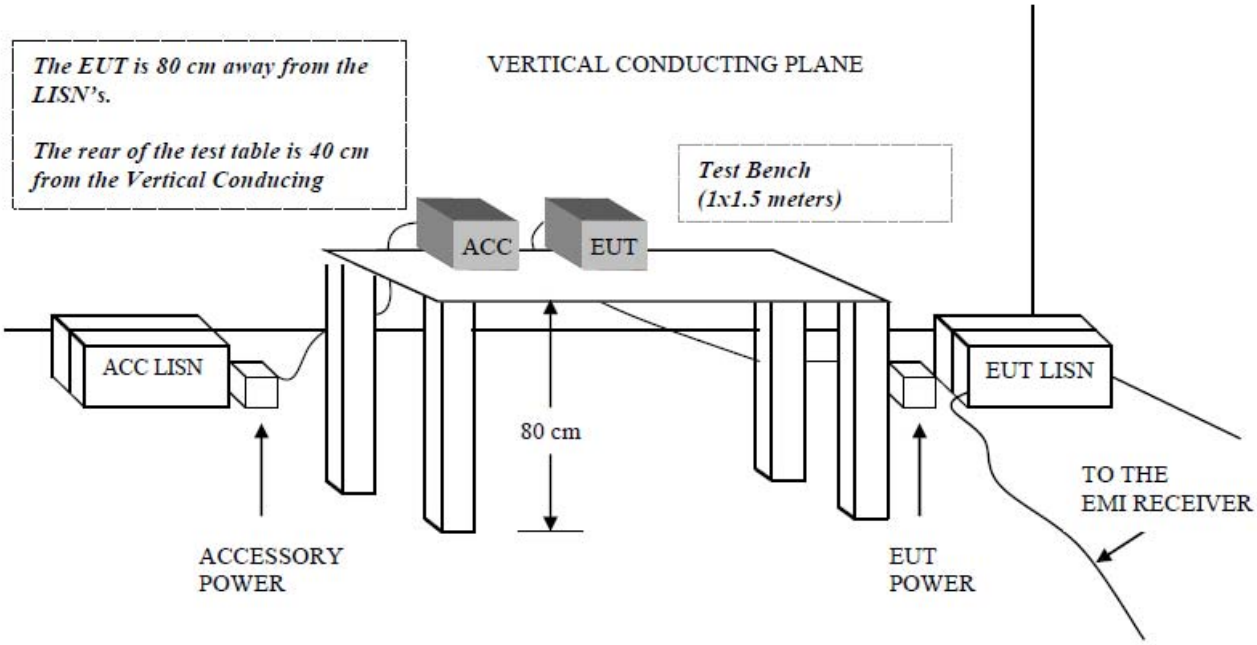
USED FOR THE PRIMARY TEST	RF Module XBee 900 MHz with XBee Antenna Model: 79902 S/N: None

There are no additional models covered under this report.

APPENDIX D

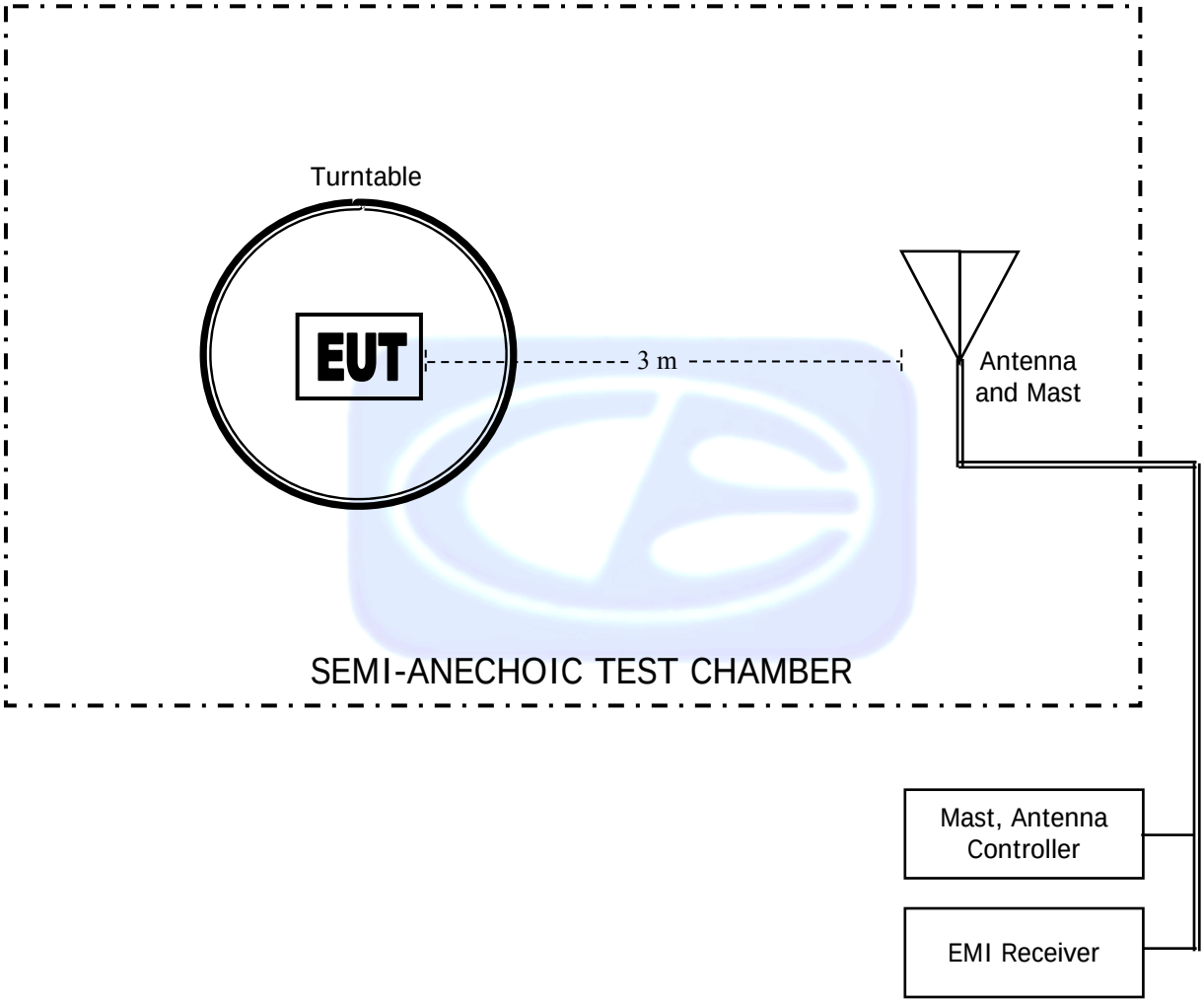
DIAGRAMS AND CHARTS

FIGURE 1: CONDUCTED EMISSIONS TEST SETUP



F

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



COM-POWER AL-130

ACTIVE LOOP ANTENNA

S/N: 17067

CALIBRATION DATE: JUNE 9, 2017

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
0.009	10.48	1	10.56
0.01	10.21	2	10.94
0.02	10.76	3	10.97
0.03	11.18	4	10.85
0.04	10.97	5	11.05
0.05	10.35	6	10.91
0.06	10.31	7	11.15
0.07	10.29	8	11.40
0.08	10.41	9	11.31
0.09	10.29	10	11.44
0.1	10.27	15	9.86
0.2	10.10	20	12.35
0.3	10.11	25	11.88
0.4	10.22	30	11.55
0.5	10.14		
0.6	10.15		
0.7	10.24		
0.8	10.45		
0.9	10.57		

COM-POWER AC-220

COMBI-LOG ANTENNA

S/N: 061097

CALIBRATION DATE: MARCH 14, 2017

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	
25	22.32	450	21.73
30	24.26	500	22.23
35	23.20	550	22.83
40	20.21	600	23.97
45	17.40	650	24.32
50	15.73	700	24.50
60	12.02	750	25.55
70	9.29	800	26.33
80	11.33	850	26.68
90	14.19	900	27.02
100	14.98	950	27.29
120	16.10	1000	27.32
140	14.83	1100	28.40
160	13.69	1200	29.17
180	14.56	1300	29.61
200	14.61	1400	29.44
225	15.73	1500	30.87
250	16.78	1600	30.68
275	18.12	1700	31.29
300	18.75	1800	32.45
350	19.42	1900	32.53
400	20.58	2000	33.98

AH-118

DOUBLE RIDGE HORN ANTENNA

S/N: 071370

CALIBRATION DATE: JULY 6, 2017

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
1000	24.70	10000	39.61
1500	26.83	10500	39.44
2000	27.90	11000	37.00
2500	27.99	11500	36.61
3000	29.24	12000	38.14
3500	30.39	12500	40.61
4000	31.69	13000	42.71
4500	32.30	13500	40.39
5000	33.03	14000	42.34
5500	33.51	14500	43.61
6000	34.14	15000	42.65
6500	35.04	15500	43.44
7000	36.19	16000	41.36
7500	36.73	16500	42.88
8000	36.86	17000	44.35
8500	37.85	17500	43.97
9000	37.47	18000	44.24
9500	38.10		

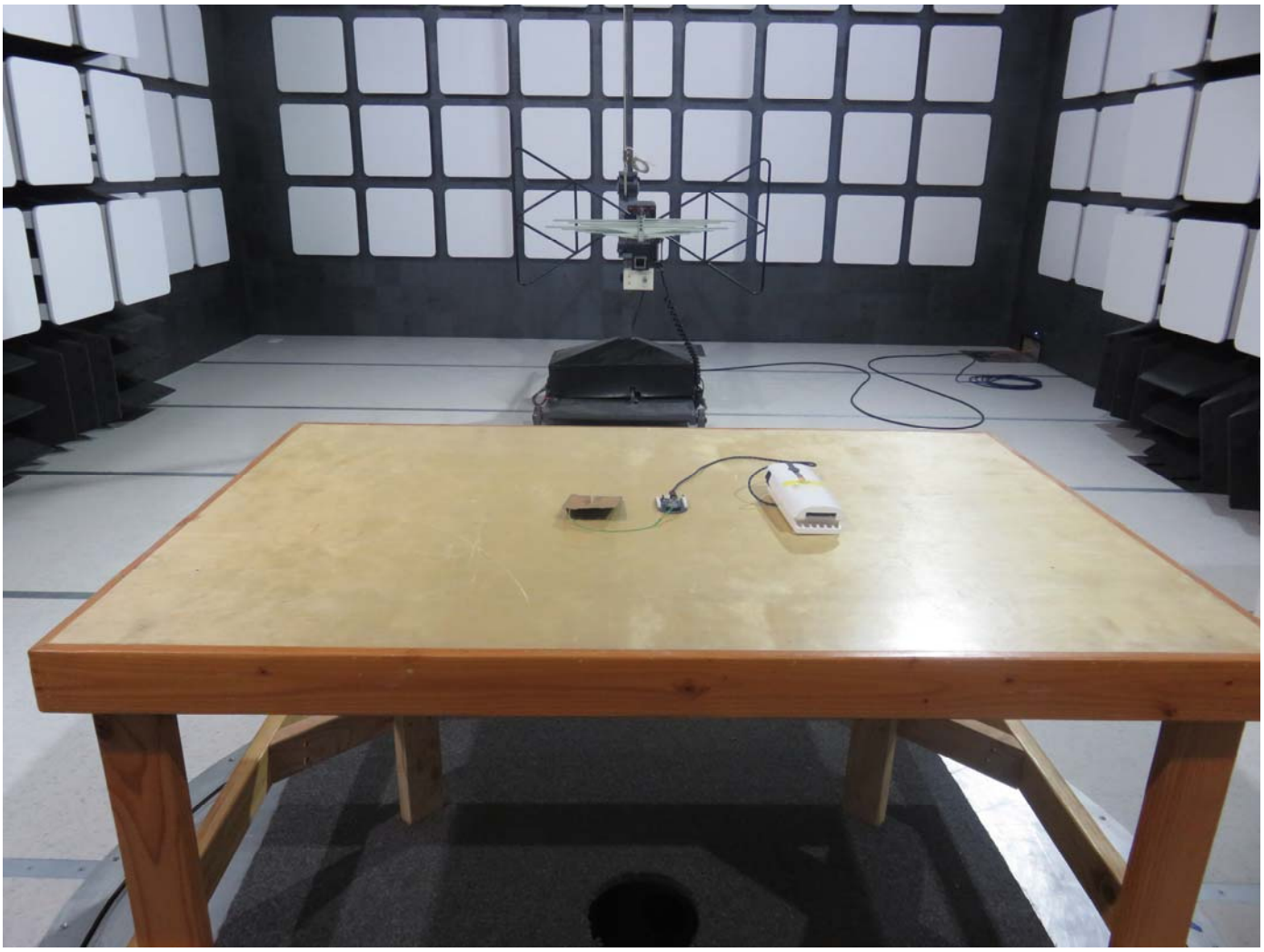
COM-POWER PAM-118A

PREAMPLIFIER

S/N: 551015

CALIBRATION DATE: FEBRUARY 14, 2017

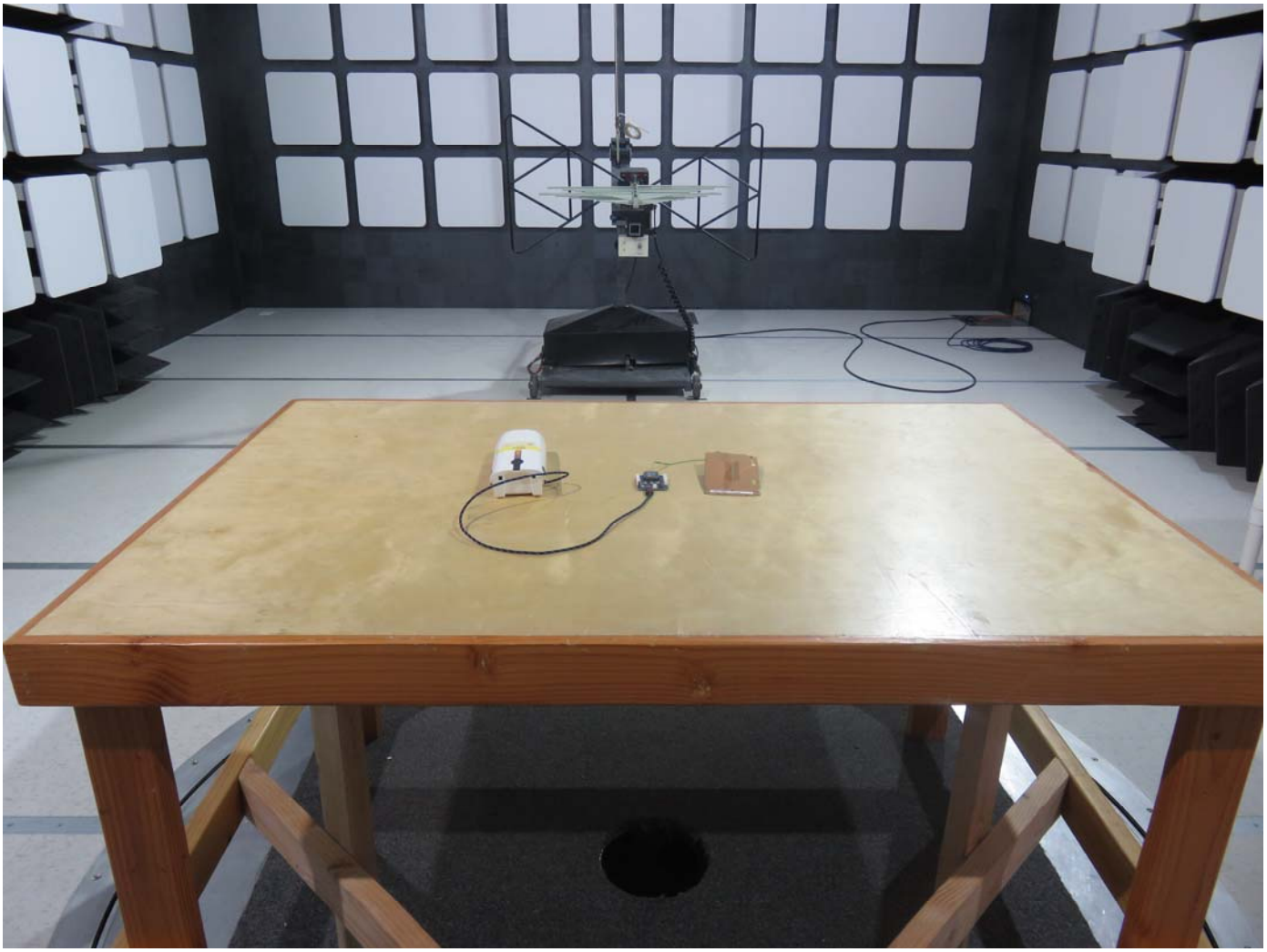
FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
500	40.33	6500	39.07
600	40.62	7000	39.22
700	40.74	7500	39.13
800	40.78	8000	39.04
900	40.80	8500	38.57
1000	40.89	9000	38.88
1250	41.07	9500	39.96
1500	41.23	10000	39.67
1750	41.40	10500	38.93
2000	41.53	11000	39.04
2250	41.65	11500	39.18
2500	41.79	12000	39.21
2750	41.91	12500	39.52
3000	42.02	13000	39.57
3250	42.10	13500	39.48
3500	42.01	14000	39.31
3750	41.90	14500	39.29
4000	41.69	15000	39.55
4250	41.34	15500	40.04
4500	40.97	16000	40.38
4750	40.64	16500	40.47
5000	40.28	17000	40.35
5250	39.99	17500	40.40
5500	39.65	18000	40.59
5750	39.32		
6000	39.05		



FRONT VIEW

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS

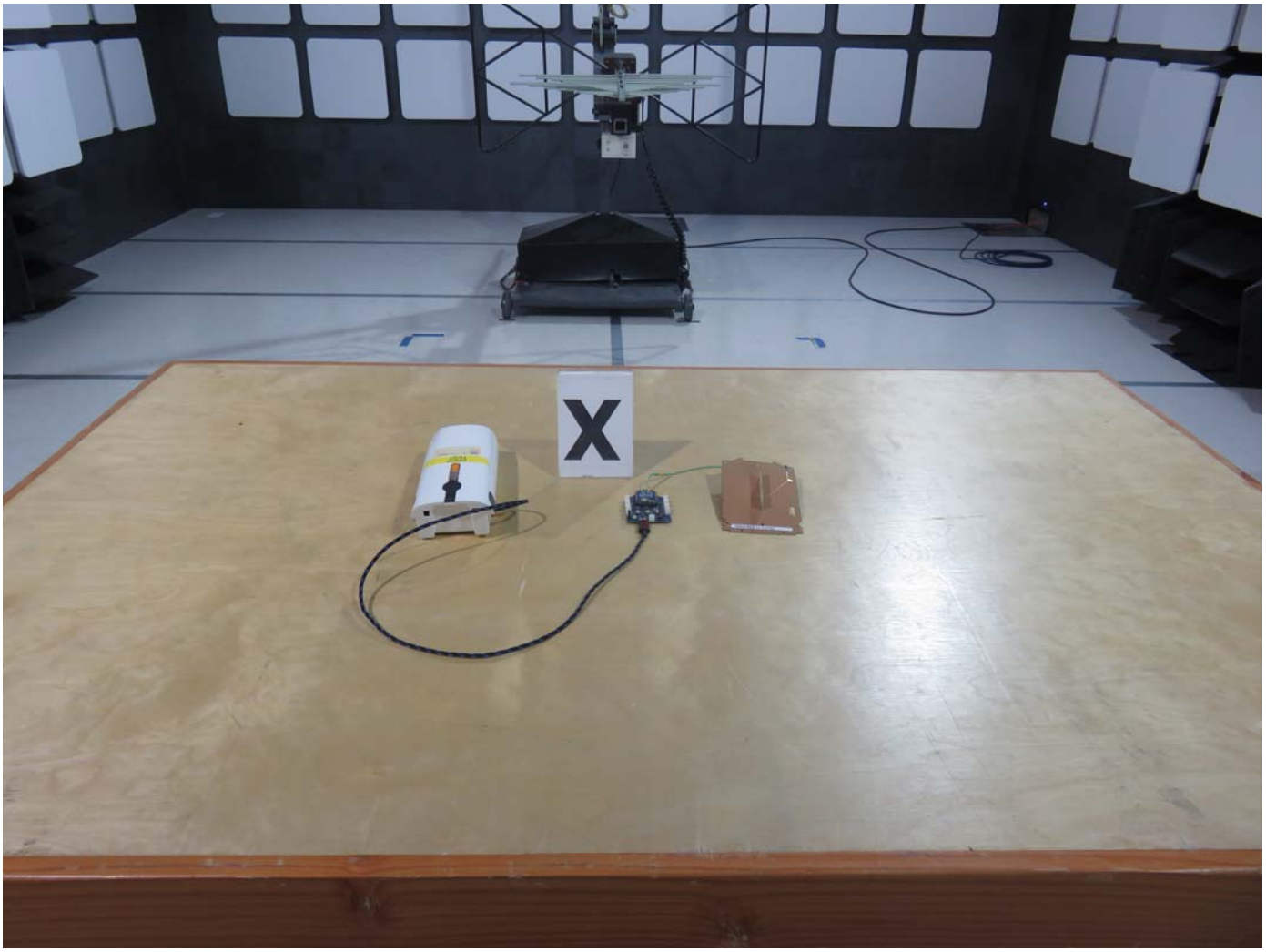
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS

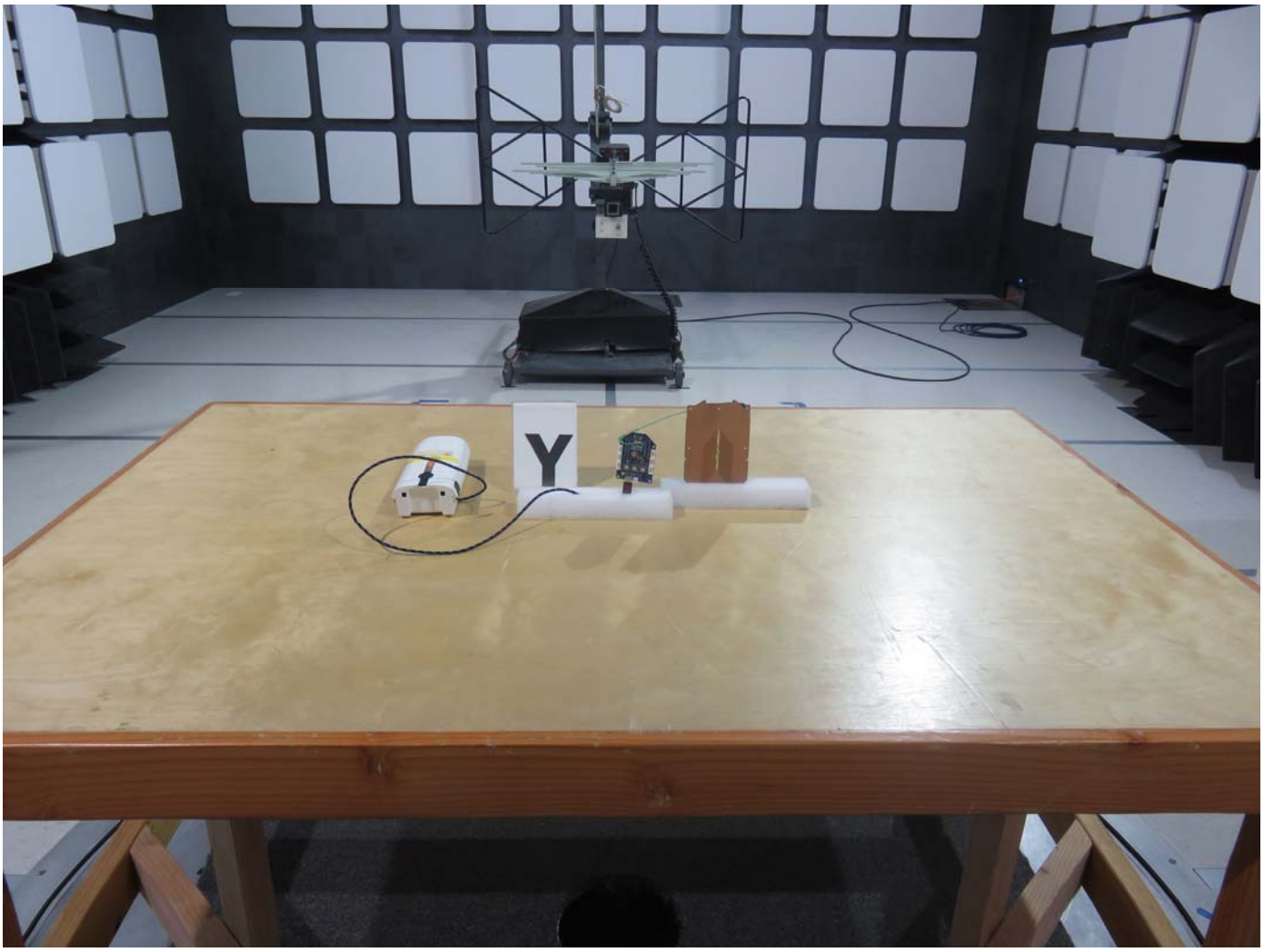
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



X AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS

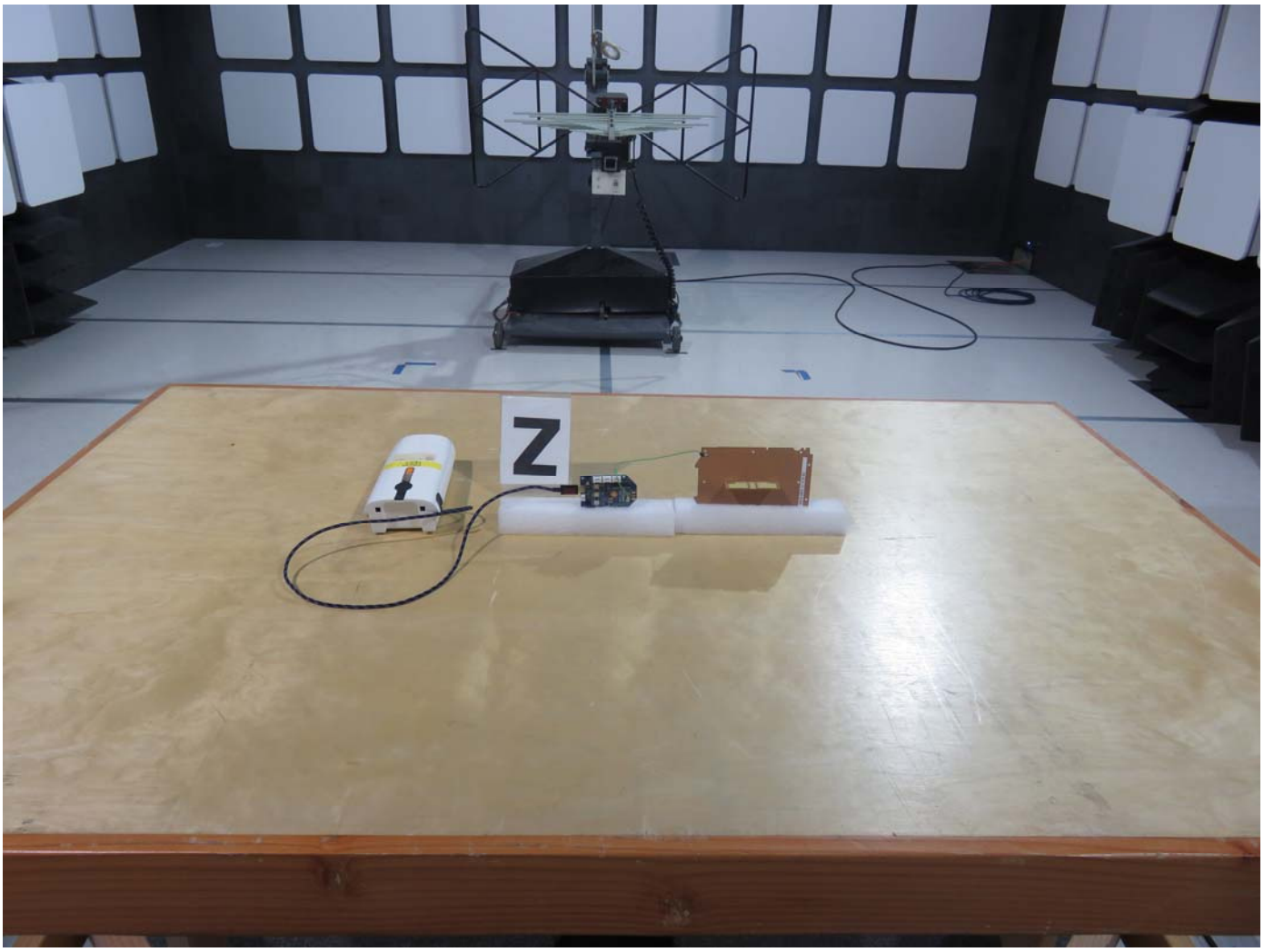
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



Y AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS

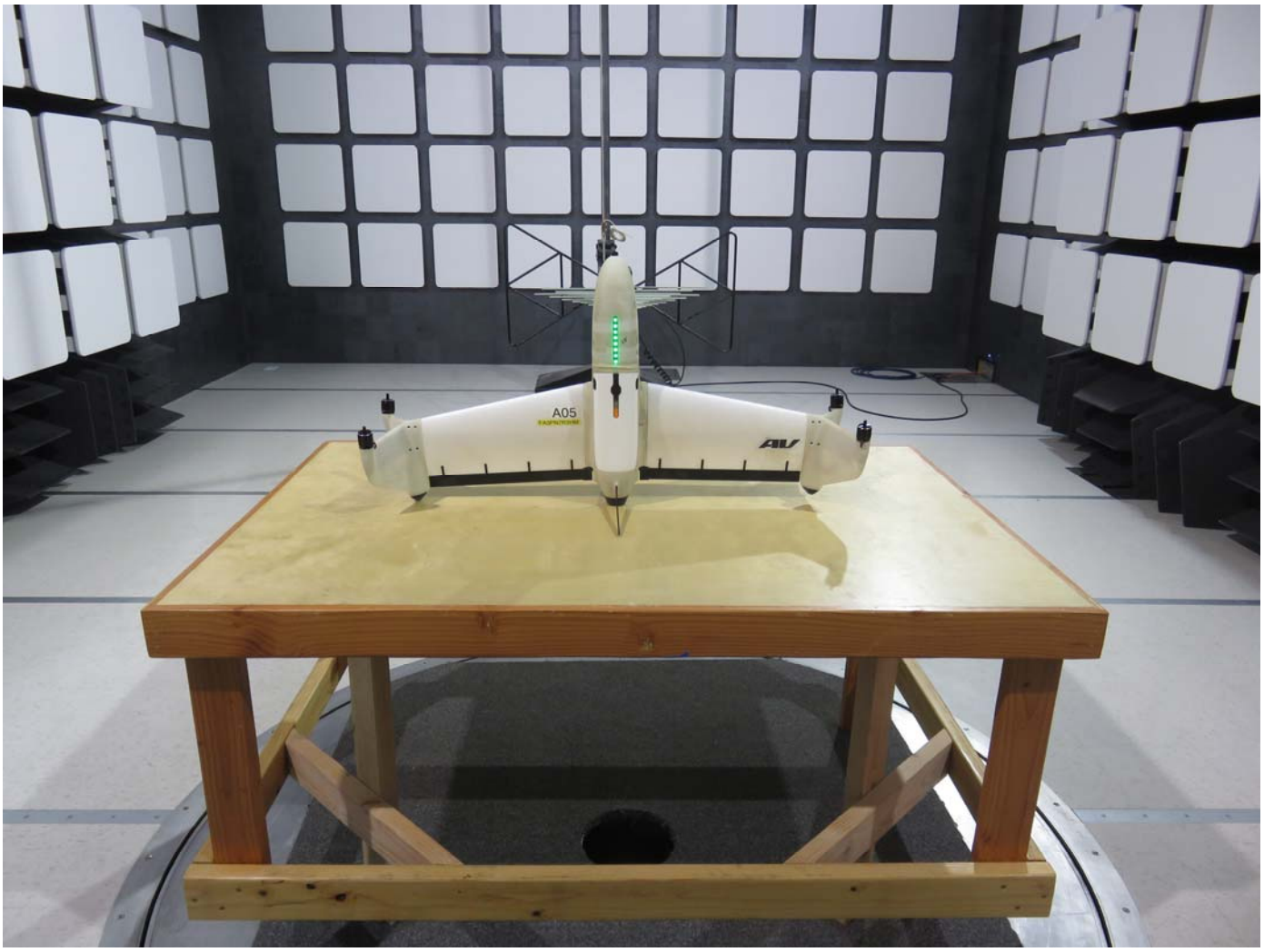
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



Y AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS

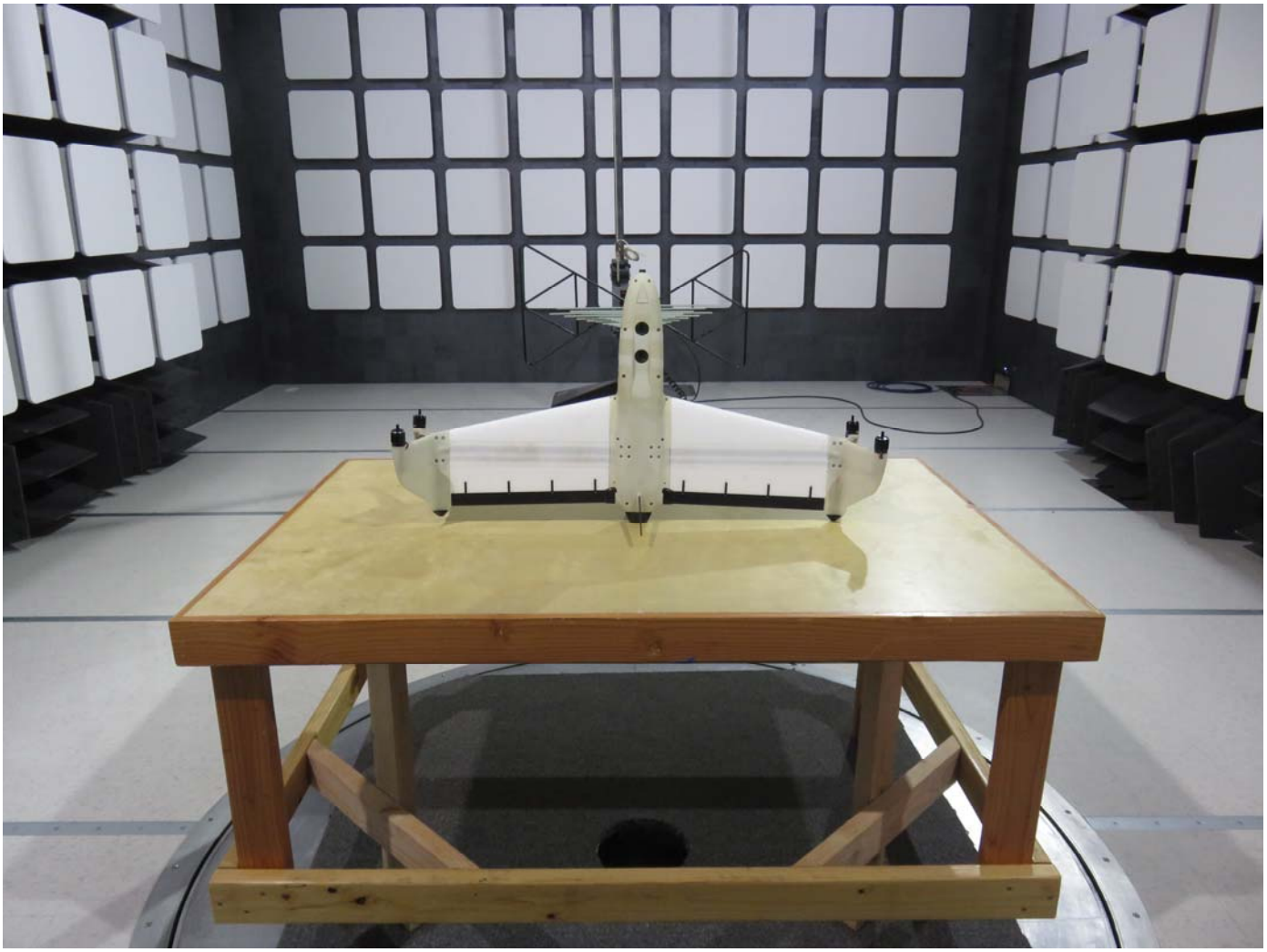
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



FRONT VIEW

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS –CO-LOCATION

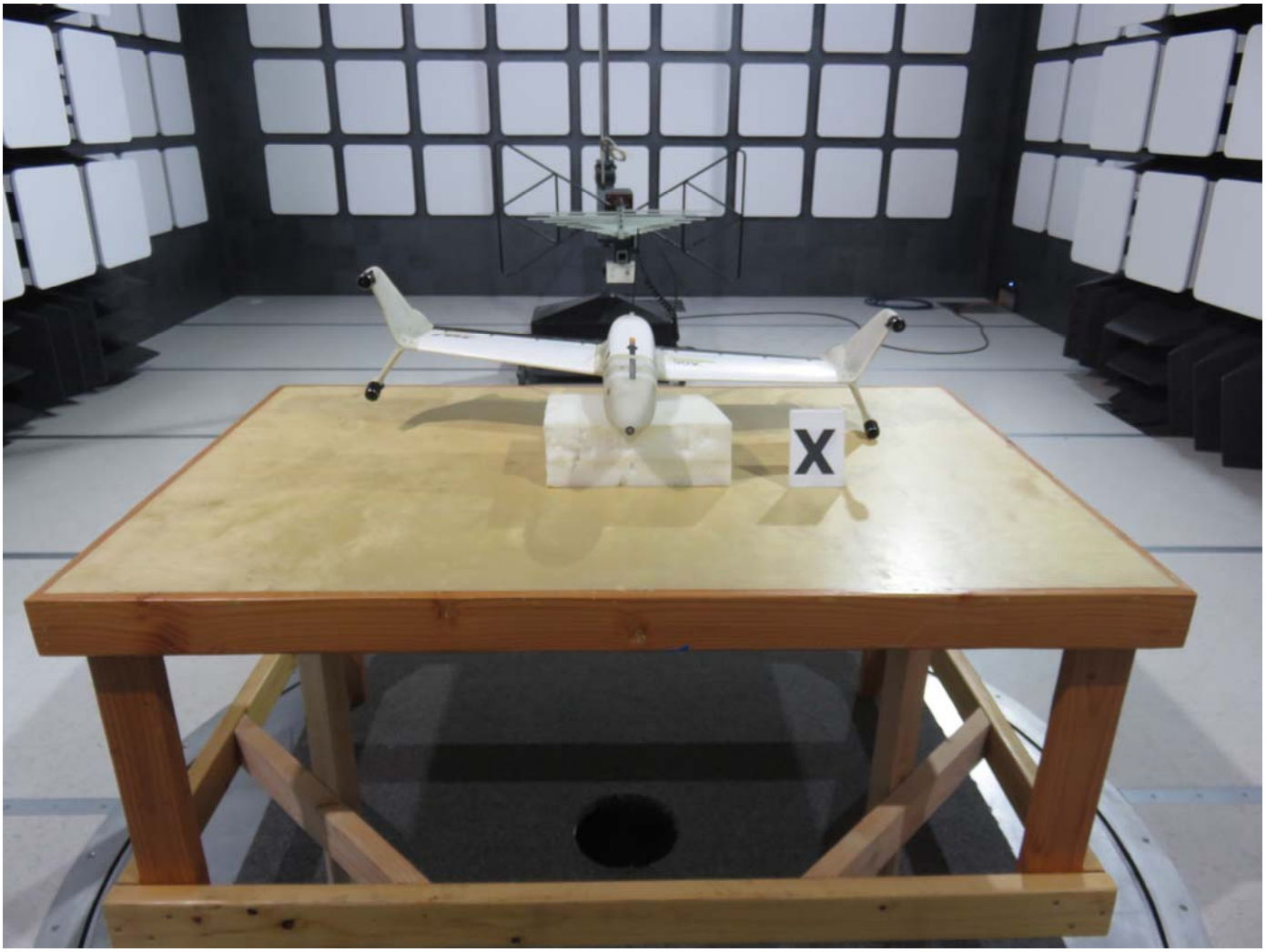
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



REAR VIEW

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS –CO-LOCATION

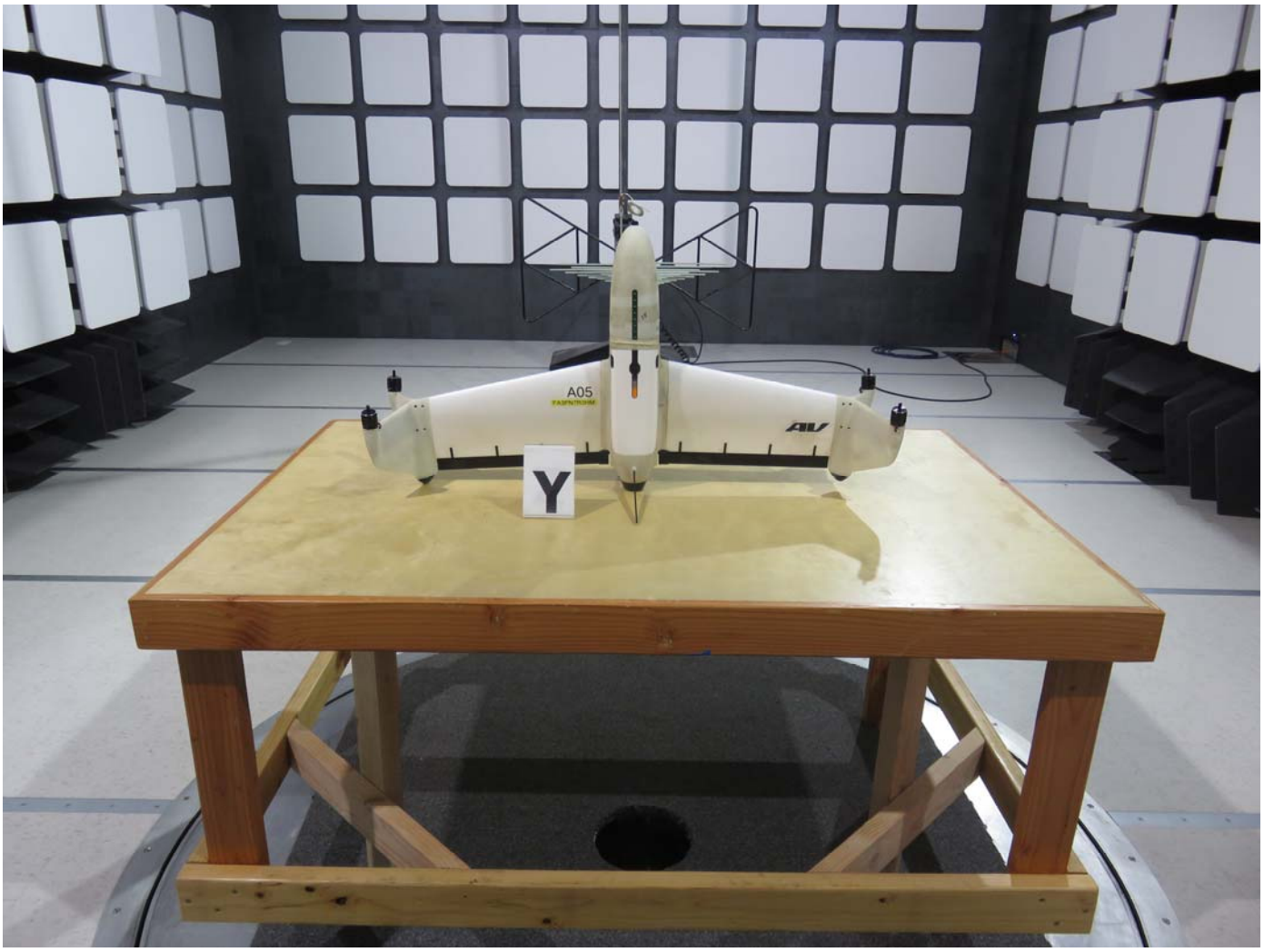
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



X AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS – CO-LOCATION

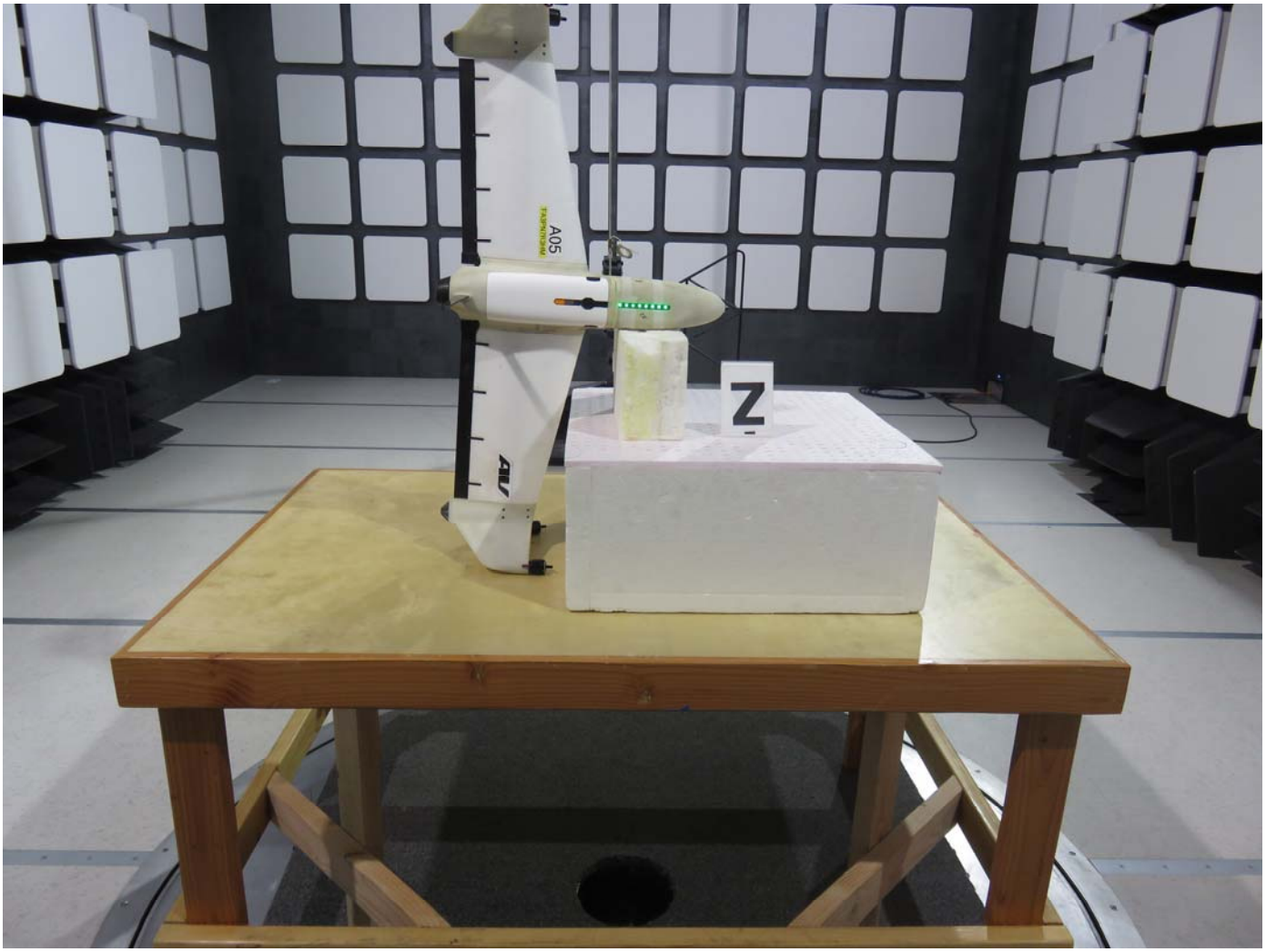
PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



Y AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS – CO-LOCATION

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS



Z AXIS

AEROVIRONMENT, INC.
RF MODULE XBEE 900 MHZ
MODEL: 79902
FCC SUBPART B AND C – RADIATED EMISSIONS – CO-LOCATION

PHOTOGRAPH SHOWING THE EUT CONFIGURATION FOR MAXIMUM EMISSIONS

APPENDIX E

DATA SHEETS

RADIATED EMISSIONS DATA SHEETS

HARMONIC EMISSIONS LOW CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		H	73.98	-73.98	Peak			
1804.80		H	53.97	-53.97	Avg			
2707.20	52.50	H	73.98	-21.48	Peak	1.19	267.1	**In Restricted Band**
2707.20	41.22	H	53.97	-12.75	Avg	1.19	267.1	**In Restricted Band**
3609.60	50.96	H	73.98	-23.02	Peak	2.48	0.7	**In Restricted Band**
3609.60	40.37	H	53.97	-13.60	Avg	2.48	0.7	**In Restricted Band**
4512.00	53.86	H	73.98	-20.12	Peak	3.48	187.7	**In Restricted Band**
4512.00	42.43	H	53.97	-11.54	Avg	3.48	187.7	**In Restricted Band**
5414.40	55.98	H	73.98	-18.00	Peak	2.91	126.3	**In Restricted Band**
5414.40	45.14	H	53.97	-8.83	Avg	2.91	126.3	**In Restricted Band**
6316.80		H	73.98	-73.98	Peak			
6316.80		H	53.97	-53.97	Avg			
7219.20		H	73.98	-73.98	Peak			
7219.20		H	53.97	-53.97	Avg			
8121.60	63.08	H	73.98	-10.90	Peak	1.02	174	**In Restricted Band**
8121.60	51.46	H	53.97	-2.51	Avg	1.02	174	**In Restricted Band**
9024.00	63.56	H	73.98	-10.42	Peak	3.04	300.1	**In Restricted Band**
9024.00	52.31	H	53.97	-1.66	Avg	3.04	300.1	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		V	73.98	-73.98	Peak			
1804.80		V	53.97	-53.97	Avg			
2707.20	56.43	V	73.98	-17.55	Peak	3.01	331.8	**In Restricted Band**
2707.20	45.27	V	53.97	-8.70	Avg	3.01	331.8	**In Restricted Band**
3609.60	43.24	V	73.98	-30.74	Peak	2.14	355.8	**In Restricted Band**
3609.60	32.27	V	53.97	-21.70	Avg	2.14	355.8	**In Restricted Band**
4512.00	46.18	V	73.98	-27.80	Peak	2.97	335.7	**In Restricted Band**
4512.00	35.45	V	53.97	-18.52	Avg	2.97	335.7	**In Restricted Band**
5414.40	48.90	V	73.98	-25.08	Peak	3.36	39.4	**In Restricted Band**
5414.40	37.01	V	53.97	-16.96	Avg	3.36	39.4	**In Restricted Band**
6316.80		V	73.98	-73.98	Peak			
6316.80		V	53.97	-53.97	Avg			
7219.20		V	73.98	-73.98	Peak			
7219.20		V	53.97	-53.97	Avg			
8121.60	53.30	V	73.98	-20.68	Peak	2.52	345.6	**In Restricted Band**
8121.60	43.06	V	53.97	-10.91	Avg	2.52	345.6	**In Restricted Band**
9024.00	56.69	V	73.98	-17.29	Peak	1.94	296.9	**In Restricted Band**
9024.00	45.22	V	53.97	-8.75	Avg	1.94	296.9	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		H	73.98	-73.98	Peak			
1830.40		H	53.97	-53.97	Avg			
2745.60	52.27	H	73.98	-21.71	Peak	1.91	10.5	**In Restricted Band**
2745.60	40.63	H	53.97	-13.34	Avg	1.91	10.5	**In Restricted Band**
3660.80	51.59	H	73.98	-22.39	Peak	3.64	327.8	**In Restricted Band**
3660.80	40.11	H	53.98	-13.87	Avg	3.64	327.8	**In Restricted Band**
4576.00	53.66	H	73.98	-20.32	Peak	1.83	90.4	**In Restricted Band**
4576.00	43.25	H	53.97	-10.72	Avg	1.83	90.4	**In Restricted Band**
5491.20		H	73.98	-73.98	Peak			
5491.20		H	53.97	-53.97	Avg			
6406.40		H	73.98	-73.98	Peak			
6406.40		H	53.97	-53.97	Avg			
7321.60	59.94	H	73.98	-14.04	Peak	1.71	63.63	**In Restricted Band**
7321.60	49.46	H	53.97	-4.51	Avg	1.71	63.63	**In Restricted Band**
8236.80	63.05	H	73.98	-10.93	Peak	2.14	169.6	**In Restricted Band**
8236.80	51.18	H	53.97	-2.79	Avg	2.14	169.6	**In Restricted Band**
9152.00	64.30	H	73.98	-9.68	Peak	3.17	34.2	**In Restricted Band**
9152.00	52.37	H	53.97	-1.60	Avg	3.17	34.2	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS MID CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		V	73.98	-73.98	Peak			
1830.40		V	53.97	-53.97	Avg			
2745.60	51.21	V	73.98	-22.77	Peak	1.28	219.4	**In Restricted Band**
2745.60	46.76	V	53.97	-7.21	Avg	1.28	219.4	**In Restricted Band**
3660.80	44.35	V	73.98	-29.63	Peak	3.04	139.6	**In Restricted Band**
3660.80	32.47	V	53.98	-21.51	Avg	3.04	139.6	**In Restricted Band**
4576.00	46.42	V	73.98	-27.56	Peak	1.77	310.2	**In Restricted Band**
4576.00	35.23	V	53.98	-18.75	Avg	1.77	310.2	**In Restricted Band**
5491.20		V	73.98	-73.98	Peak			
5491.20		V	53.97	-53.97	Avg			
6406.40		V	73.98	-73.98	Peak			
6406.40		V	53.97	-53.97	Avg			
7321.60	53.41	V	73.98	-20.57	Peak	2.58	269.8	**In Restricted Band**
7321.60	42.32	V	53.97	-11.65	Avg	2.58	269.8	**In Restricted Band**
8236.80	54.28	V	73.98	-19.70	Peak	3.66	2.5	**In Restricted Band**
8236.80	43.10	V	53.98	-10.88	Avg	3.66	2.5	**In Restricted Band**
9152.00	57.55	V	73.98	-16.43	Peak	1.57	178	**In Restricted Band**
9152.00	46.14	V	53.97	-7.83	Avg	1.57	178	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		H	73.98	-73.98	Peak			
1855.20		H	53.97	-53.97	Avg			
2782.80	53.04	H	73.98	-20.94	Peak	2.7	357.8	**In Restricted Band**
2782.80	42.28	H	53.97	-11.69	Avg	2.7	357.8	**In Restricted Band**
3710.40	51.73	H	73.98	-22.25	Peak	1.81	346.1	**In Restricted Band**
3710.40	40.14	H	53.98	-13.84	Avg	1.81	346.1	**In Restricted Band**
4638.00	54.16	H	73.98	-19.82	Peak	1.37	284.9	**In Restricted Band**
4638.00	43.68	H	53.98	-10.30	Avg	1.37	284.9	**In Restricted Band**
5565.60		H	73.98	-73.98	Peak			
5565.60		H	53.97	-53.97	Avg			
6493.20		H	73.98	-73.98	Peak			
6493.20		H	53.97	-53.97	Avg			
7420.80	61.06	H	73.98	-12.92	Peak	2.89	228.1	**In Restricted Band**
7420.80	50.01	H	53.97	-3.96	Avg	2.89	228.1	**In Restricted Band**
8348.40	63.18	H	73.98	-10.80	Peak	3.35	165.7	**In Restricted Band**
8348.40	52.14	H	53.97	-1.83	Avg	3.35	165.7	**In Restricted Band**
9276.00		H	73.98	-73.98	Peak			
9276.00		H	53.97	-53.97	Avg			

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL X AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		V	73.98	-73.98	Peak			
1855.20		V	53.97	-53.97	Avg			
2782.80	50.97	V	73.98	-23.01	Peak	1.26	237.2	**In Restricted Band**
2782.80	46.10	V	53.97	-7.87	Avg	1.26	237.2	**In Restricted Band**
3710.40	44.05	V	73.98	-29.93	Peak	3.7	301.1	**In Restricted Band**
3710.40	32.77	V	53.98	-21.21	Avg	3.7	301.1	**In Restricted Band**
4638.00	45.98	V	73.98	-28.00	Peak	1.7	347.2	**In Restricted Band**
4638.00	34.78	V	53.98	-19.20	Avg	1.7	247.2	**In Restricted Band**
5565.60		V	73.98	-73.98	Peak			
5565.60		V	53.97	-53.97	Avg			
6493.20		V	73.98	-73.98	Peak			
6493.20		V	53.97	-53.97	Avg			
7420.80	53.76	V	73.98	-20.22	Peak	2.96	112.7	**In Restricted Band**
7420.80	42.10	V	53.97	-11.87	Avg	2.96	112.7	**In Restricted Band**
8348.40	55.28	V	73.98	-18.70	Peak	3.7	165.8	**In Restricted Band**
8348.40	43.84	V	53.98	-10.14	Avg	3.7	165.8	**In Restricted Band**
9276.00		V	73.98	-73.98	Peak			
9276.00		V	53.97	-53.97	Avg			

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		H	73.98	-73.98	Peak			
1804.80		H	53.97	-53.97	Avg			
2707.20	51.90	H	73.98	-22.08	Peak	1.74	107.2	**In Restricted Band**
2707.20	43.30	H	53.97	-10.67	Avg	1.74	107.2	**In Restricted Band**
3609.60	50.65	H	73.98	-23.33	Peak	3.45	302.9	**In Restricted Band**
3609.60	40.42	H	53.97	-13.55	Avg	3.45	302.9	**In Restricted Band**
4512.00	54.21	H	73.98	-19.77	Peak	3.20	268.1	**In Restricted Band**
4512.00	42.31	H	53.97	-11.66	Avg	3.20	268.1	**In Restricted Band**
5414.40	55.86	H	73.98	-18.12	Peak	2.87	4.3	**In Restricted Band**
5414.40	44.60	H	53.97	-9.37	Avg	2.87	4.3	**In Restricted Band**
6316.80		H	73.98	-73.98	Peak			
6316.80		H	53.97	-53.97	Avg			
7219.20	60.79	H	73.98	-13.19	Peak			
7219.20	48.79	H	53.97	-5.18	Avg			
8121.60	62.84	H	73.98	-11.14	Peak	2.58	175.3	**In Restricted Band**
8121.60	51.42	H	53.97	-2.55	Avg	2.58	175.3	**In Restricted Band**
9024.00	63.01	H	73.98	-10.97	Peak	2.38	37	**In Restricted Band**
9024.00	51.89	H	53.97	-2.08	Avg	2.38	37	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		V	73.98	-73.98	Peak			
1804.80		V	53.97	-53.97	Avg			
2707.20	54.52	V	73.98	-19.46	Peak	1.25	25.9	**In Restricted Band**
2707.20	48.73	V	53.97	-5.24	Avg	1.25	25.9	**In Restricted Band**
3609.60	44.27	V	73.98	-29.71	Peak	2.89	166.7	**In Restricted Band**
3609.60	32.20	V	53.97	-21.77	Avg	2.89	166.7	**In Restricted Band**
4512.00	45.33	V	73.98	-28.65	Peak	1.93	154.9	**In Restricted Band**
4512.00	34.72	V	53.97	-19.25	Avg	1.93	154.9	**In Restricted Band**
5414.40	49.27	V	73.98	-24.71	Peak	1.86	81.6	**In Restricted Band**
5414.40	37.62	V	53.97	-16.35	Avg	1.86	81.6	**In Restricted Band**
6316.80		V	73.98	-73.98	Peak			
6316.80		V	53.97	-53.97	Avg			
7219.20		V	73.98	-73.98	Peak			
7219.20		V	53.97	-53.97	Avg			
8121.60	56.00	V	73.98	-17.98	Peak	3.29	112.9	**In Restricted Band**
8121.60	43.70	V	53.97	-10.27	Avg	3.29	112.9	**In Restricted Band**
9024.00	55.86	V	73.98	-18.12	Peak	3.69	243.5	**In Restricted Band**
9024.00	44.89	V	53.97	-9.08	Avg	3.69	243.5	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		H	73.98	-73.98	Peak			
1830.40		H	53.97	-53.97	Avg			
2745.60	54.54	H	73.98	-19.44	Peak	3.12	140.6	**In Restricted Band**
2745.60	41.64	H	53.97	-12.33	Avg	3.12	140.6	**In Restricted Band**
3660.80	50.86	H	73.98	-23.12	Peak	3.24	59.2	**In Restricted Band**
3660.80	39.81	H	53.97	-14.16	Avg	3.24	59.2	**In Restricted Band**
4576.00	54.60	H	73.98	-19.38	Peak	1.66	0.6	**In Restricted Band**
4576.00	43.56	H	53.97	-10.41	Avg	1.66	0.6	**In Restricted Band**
5491.20		H	73.98	-73.98	Peak			
5491.20		H	53.97	-53.97	Avg			
6406.40		H	73.98	-73.98	Peak			
6406.40		H	53.97	-53.97	Avg			
7321.60	61.16	H	73.98	-12.82	Peak	3.08	358.6	**In Restricted Band**
7321.60	50.11	H	53.97	-3.86	Avg	3.08	358.6	**In Restricted Band**
8236.80	62.16	H	73.98	-11.82	Peak	2.58	104.3	**In Restricted Band**
8236.80	50.89	H	53.97	-3.08	Avg	2.58	104.3	**In Restricted Band**
9152.00	63.45	H	73.98	-10.53	Peak	2.91	12.5	**In Restricted Band**
9152.00	53.06	H	53.97	-0.91	Avg	2.91	12.5	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS MID CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		V	73.98	-73.98	Peak			
1830.40		V	53.97	-53.97	Avg			
2745.60	50.69	V	73.98	-23.29	Peak	1.55	290.9	**In Restricted Band**
2745.60	46.75	V	53.97	-7.22	Avg	1.55	290.9	**In Restricted Band**
3660.80	44.64	V	73.98	-29.34	Peak	1.51	284.7	**In Restricted Band**
3660.80	32.69	V	53.97	-21.28	Avg	1.51	284.7	**In Restricted Band**
4576.00	46.39	V	73.98	-27.59	Peak	1.29	202.6	**In Restricted Band**
4576.00	35.01	V	53.97	-18.96	Avg	1.29	202.6	**In Restricted Band**
5491.20		V	73.98	-73.98	Peak			
5491.20		V	53.97	-53.97	Avg			
6406.40		V	73.98	-73.98	Peak			
6406.40		V	53.97	-53.97	Avg			
7321.60	53.20	V	73.98	-20.78	Peak	2.7	195.9	**In Restricted Band**
7321.60	42.13	V	53.97	-11.84	Avg	2.7	195.9	**In Restricted Band**
8236.80	54.62	V	73.98	-19.36	Peak	2.04	302.2	**In Restricted Band**
8236.80	43.67	V	53.97	-10.30	Avg	2.04	302.2	**In Restricted Band**
9152.00	56.49	V	73.98	-17.49	Peak	2.68	189.3	**In Restricted Band**
9152.00	45.37	V	53.97	-8.60	Avg	2.68	189.3	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		H	73.98	-73.98	Peak			
1855.20		H	53.97	-53.97	Avg			
2782.80	53.73	H	73.98	-20.25	Peak	1.39	244.5	**In Restricted Band**
2782.80	42.22	H	53.97	-11.75	Avg	1.39	244.5	**In Restricted Band**
3710.40	51.11	H	73.98	-22.87	Peak	2.76	276.4	**In Restricted Band**
3710.40	40.28	H	53.97	-13.69	Avg	2.76	276.4	**In Restricted Band**
4638.00	55.72	H	73.98	-18.26	Peak	1.74	62.1	**In Restricted Band**
4638.00	43.37	H	53.97	-10.60	Avg	1.74	62.1	**In Restricted Band**
5565.60		H	73.98	-73.98	Peak			
5565.60		H	53.97	-53.97	Avg			
6493.20		H	73.98	-73.98	Peak			
6493.20		H	53.97	-53.97	Avg			
7420.80	62.19	H	73.98	-11.79	Peak	2.71	230.2	**In Restricted Band**
7420.80	50.42	H	53.97	-3.55	Avg	2.71	230.2	**In Restricted Band**
8348.40	62.93	H	73.98	-11.05	Peak	3.27	316.9	**In Restricted Band**
8348.40	51.39	H	53.97	-2.58	Avg	3.27	316.9	**In Restricted Band**
9276.00	62.56	H	73.98	-11.42	Peak	3.11	259.8	
9276.00	51.87	H	53.97	-2.10	Avg	3.11	259.8	

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL Y AXIS

FCC 15.247

Company :	AeroViroment	Date:	7/28/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		V	73.98	-73.98	Peak			
1855.20		V	53.97	-53.97	Avg			
2782.80	53.73	V	73.98	-20.25	Peak	1.39	244.5	**In Restricted Band**
2782.80	42.22	V	53.97	-11.75	Avg	1.39	244.5	**In Restricted Band**
3710.40	51.11	V	73.98	-22.87	Peak	2.77	276.4	**In Restricted Band**
3710.40	40.28	V	53.97	-13.69	Avg	2.77	276.4	**In Restricted Band**
4638.00	55.72	V	73.98	-18.26	Peak	1.74	62.1	**In Restricted Band**
4638.00	43.37	V	53.97	-10.60	Avg	1.74	62.1	**In Restricted Band**
5565.60		V	73.98	-57.73	Peak			
5565.60		V	53.97	-48.38	Avg			
6493.20		V	73.98	-73.98	Peak			
6493.20		V	53.97	-53.97	Avg			
7420.80	62.19	V	73.98	-11.79	Peak	2.71	230.2	**In Restricted Band**
7420.80	50.42	V	53.97	-3.55	Avg	2.71	230.2	**In Restricted Band**
8348.40	62.93	V	73.98	-11.05	Peak	3.27	316.9	**In Restricted Band**
8348.40	51.39	V	53.97	-2.58	Avg	3.27	316.9	**In Restricted Band**
9276.00		V	73.98	-73.98	Peak			
9276.00		V	53.97	-53.97	Avg			

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		H	73.98	-73.98	Peak			
1804.80		H	53.97	-53.97	Avg			
2707.20	52.69	H	73.98	-21.29	Peak	1.04	238	**In Restricted Band**
2707.20	41.21	H	53.97	-12.76	Avg	1.04	238	**In Restricted Band**
3609.60	51.07	H	73.98	-22.91	Peak	3.06	152.9	**In Restricted Band**
3609.60	39.63	H	53.97	-14.34	Avg	3.06	152.9	**In Restricted Band**
4512.00	54.47	H	73.98	-19.51	Peak	1.88	101.1	**In Restricted Band**
4512.00	43.51	H	53.97	-10.46	Avg	1.88	101.1	**In Restricted Band**
5414.40	56.15	H	73.98	-17.83	Peak	2.51	300.7	**In Restricted Band**
5414.40	44.49	H	53.97	-9.48	Avg	2.51	300.7	**In Restricted Band**
6316.80		H	73.98	-73.98	Peak			
6316.80		H	53.97	-53.97	Avg			
7219.20		H	73.98	-73.98	Peak			
7219.20		H	53.97	-53.97	Avg			
8121.60	61.62	H	73.98	-12.36	Peak	3.70	107.8	**In Restricted Band**
8121.60	50.51	H	53.97	-3.46	Avg	3.70	107.8	**In Restricted Band**
9024.00	63.31	H	73.98	-10.67	Peak	2.14	11.1	**In Restricted Band**
9024.00	51.89	H	53.97	-2.08	Avg	2.14	11.1	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1804.80		V	73.98	-73.98	Peak			
1804.80		V	53.97	-53.97	Avg			
2707.20	50.37	V	73.98	-23.61	Peak	1.24	95.9	**In Restricted Band**
2707.20	45.16	V	53.97	-8.81	Avg	1.24	95.9	**In Restricted Band**
3609.60	43.53	V	73.98	-30.45	Peak	3.36	200.8	**In Restricted Band**
3609.60	32.43	V	53.97	-21.54	Avg	3.36	200.8	**In Restricted Band**
4512.00	47.23	V	73.98	-26.75	Peak	3.48	199.7	**In Restricted Band**
4512.00	35.47	V	53.97	-18.50	Avg	3.48	199.7	**In Restricted Band**
5414.40	47.96	V	73.98	-26.02	Peak	3.52	155.7	**In Restricted Band**
5414.40	36.95	V	53.97	-17.02	Avg	3.52	155.7	**In Restricted Band**
6316.80		V	73.98	-73.98	Peak			
6316.80		V	53.97	-53.97	Avg			
7219.20		V	73.98	-73.98	Peak			
7219.20		V	53.97	-53.97	Avg			
8121.60	54.22	V	73.98	-19.76	Peak	1.28	79.5	**In Restricted Band**
8121.60	43.05	V	53.97	-10.92	Avg	1.28	79.5	**In Restricted Band**
9024.00	57.01	V	73.98	-16.97	Peak	2.4	70.5	**In Restricted Band**
9024.00	45.28	V	53.97	-8.69	Avg	2.4	70.5	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS LOW CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		H	73.98	-73.98	Peak			
1830.40		H	53.97	-53.97	Avg			
2745.60	52.70	H	73.98	-21.28	Peak	1.23	235.1	**In Restricted Band**
2745.60	41.23	H	53.97	-12.74	Avg	1.23	235.1	**In Restricted Band**
3660.80	58.98	H	73.98	-15.00	Peak	2.01	318	**In Restricted Band**
3660.80	45.73	H	53.97	-8.24	Avg	2.01	318	**In Restricted Band**
4576.00	54.10	H	73.98	-19.88	Peak	2.63	118.1	**In Restricted Band**
4576.00	43.26	H	53.97	-10.71	Avg	2.63	118.1	**In Restricted Band**
5491.20		H	73.98	-73.98	Peak			
5491.20		H	53.97	-53.97	Avg			
6406.40		H	73.98	-73.98	Peak			
6406.40		H	53.97	-53.97	Avg			
7321.60	60.23	H	73.98	-13.75	Peak	3.56	72.1	**In Restricted Band**
7321.60	49.61	H	53.97	-4.36	Avg	3.56	72.1	**In Restricted Band**
8236.80	63.06	H	73.98	-10.92	Peak	2.80	281.8	**In Restricted Band**
8236.80	51.37	H	53.97	-2.60	Avg	2.80	281.8	**In Restricted Band**
9152.00	63.17	H	73.98	-10.81	Peak	2.72	253.6	**In Restricted Band**
9152.00	52.82	H	53.97	-1.15	Avg	2.72	253.6	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS MID CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1830.40		V	73.98	-73.98	Peak			
1830.40		V	53.97	-53.97	Avg			
2745.60	40.85	V	73.98	-33.13	Peak	1.35	344	**In Restricted Band**
2745.60	29.23	V	53.97	-24.74	Avg	1.35	344	**In Restricted Band**
3660.80	43.94	V	73.98	-30.04	Peak	1.72	311.7	**In Restricted Band**
3660.80	32.76	V	53.97	-21.21	Avg	1.72	311.7	**In Restricted Band**
4576.00	47.53	V	73.98	-26.45	Peak	3.25	185.5	**In Restricted Band**
4576.00	35.91	V	53.97	-18.06	Avg	3.25	185.5	**In Restricted Band**
5491.20		V	73.98	-73.98	Peak			
5491.20		V	53.97	-53.97	Avg			
6406.40		V	73.98	-73.98	Peak			
6406.40		V	53.97	-53.97	Avg			
7321.60	53.59	V	73.98	-20.39	Peak	2.42	21.6	**In Restricted Band**
7321.60	42.20	V	53.97	-11.77	Avg	2.42	21.6	**In Restricted Band**
8236.80	55.49	V	73.98	-18.49	Peak	2.48	302.3	**In Restricted Band**
8236.80	43.57	V	53.97	-10.40	Avg	2.48	302.3	**In Restricted Band**
9152.00	56.40	V	73.98	-17.58	Peak	1.45	27.7	**In Restricted Band**
9152.00	44.74	V	53.97	-9.23	Avg	1.45	27.7	**In Restricted Band**

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		H	73.98	-73.98	Peak			
1855.20		H	53.97	-53.97	Avg			
2782.80	58.32	H	73.98	-15.66	Peak	1.21	229.1	**In Restricted Band**
2782.80	52.02	H	53.97	-1.95	Avg	1.21	229.1	**In Restricted Band**
3710.40	50.78	H	73.98	-23.20	Peak	1.15	315	**In Restricted Band**
3710.40	40.04	H	53.97	-13.93	Avg	1.15	315	**In Restricted Band**
4638.00	55.73	H	73.98	-18.25	Peak	3.57	132.4	**In Restricted Band**
4638.00	43.36	H	53.97	-10.61	Avg	3.57	132.4	**In Restricted Band**
5565.60		H	73.98	-73.98	Peak			
5565.60		H	53.97	-53.97	Avg			
6493.20		H	73.98	-73.98	Peak			
6493.20		H	53.97	-53.97	Avg			
7420.80	61.13	H	73.98	-12.85	Peak	3.51	200.9	**In Restricted Band**
7420.80	49.32	H	53.97	-4.65	Avg	3.51	200.9	**In Restricted Band**
8348.40	62.35	H	73.98	-11.63	Peak	1.54	258.6	**In Restricted Band**
8348.40	51.55	H	53.97	-2.42	Avg	1.54	258.6	**In Restricted Band**
9276.00		H	73.98	-73.98	Peak			
9276.00		H	53.97	-53.97	Avg			

Test distance
3 meter

HARMONIC EMISSIONS HIGH CHANNEL Z AXIS

FCC 15.247

Company :	AeroViroment	Date:	8/1/2017
EUT:	X Bee Modem	Lab:	T
Model:	X Bee-Pro SX	Test ENG:	R. Ramirez

Compatible Electronics, Inc. FAC-3 (Lab T)

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
1855.20		V	73.98	-73.98	Peak			
1855.20		V	53.97	-53.97	Avg			
2782.80	47.01	V	73.98	-26.97	Peak	1.41	255.5	**In Restricted Band**
2782.80	40.81	V	53.97	-13.16	Avg	1.41	255.5	**In Restricted Band**
3710.40	43.53	V	73.98	-30.45	Peak	1.27	179.5	**In Restricted Band**
3710.40	32.99	V	53.97	-20.98	Avg	1.27	179.5	**In Restricted Band**
4638.00	46.57	V	73.98	-27.41	Peak	3.45	358.7	**In Restricted Band**
4638.00	35.89	V	53.97	-18.08	Avg	3.45	358.7	**In Restricted Band**
5565.60		V	73.98	-73.98	Peak			
5565.60		V	53.97	-53.97	Avg			
6493.20		V	73.98	-73.98	Peak			
6493.20		V	53.97	-53.97	Avg			
7420.80	53.55	V	73.98	-20.43	Peak	1.9	297.7	**In Restricted Band**
7420.80	42.09	V	53.97	-11.88	Avg	1.9	297.7	**In Restricted Band**
8348.40	55.21	V	73.98	-18.77	Peak	1.66	1.5	**In Restricted Band**
8348.40	43.92	V	53.97	-10.05	Avg	1.66	1.5	**In Restricted Band**
9276.00		V	73.98	-73.98	Peak			
9276.00		V	53.97	-53.97	Avg			

Test distance
3 meter

FCC Class B

Aeroviroment, inc.
RF Modul XBee 900
MHz

Model: 79902

Date: 07/28/2017

Lab: T

Tested By: R. Ramirez

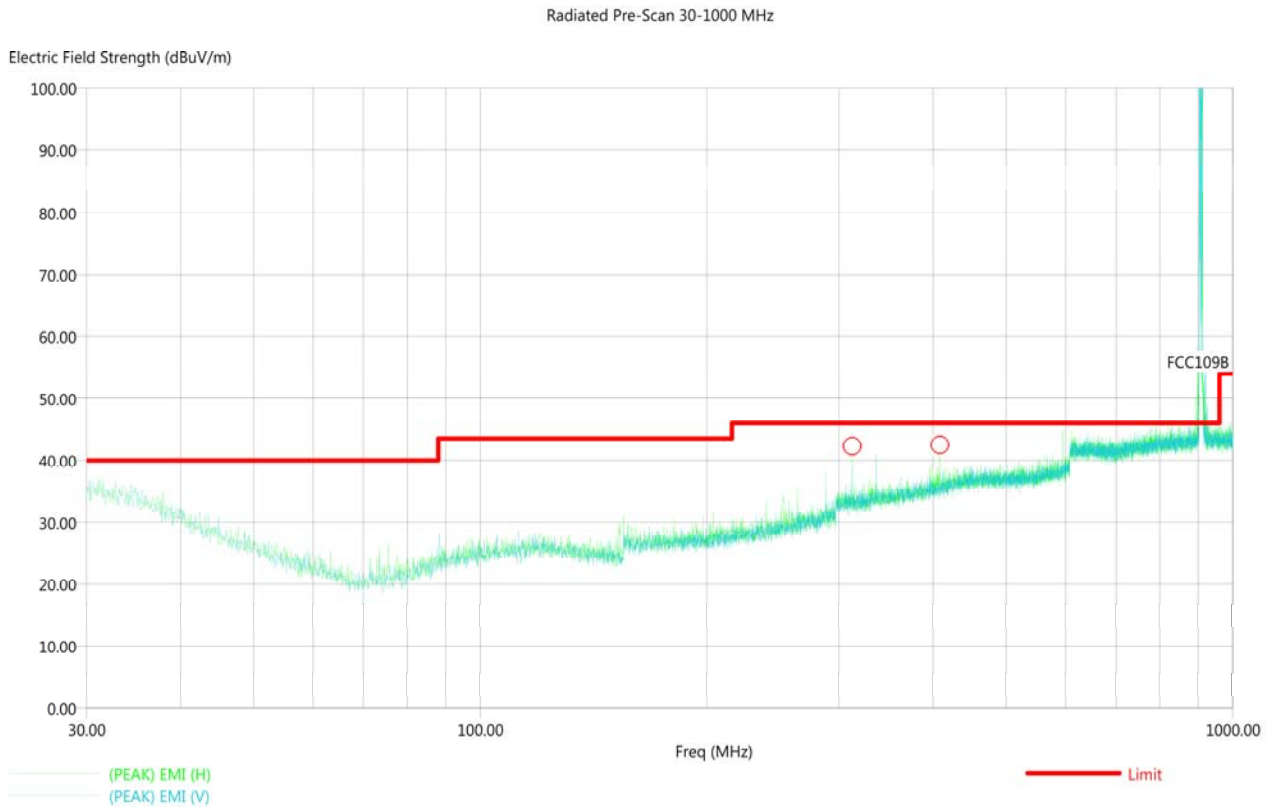
Polarization: Vertical & Horizontal
Axis: X, Y, Z
Channels: Low, Mid, High
Non Harmonic Emissions from the Tx - 10 kHz to 30 MHz and 1 GHz to 10 GHz

Digital Portion from the EUT - 10 kHz to 30 MHz and 1 GHz to 10 GHz

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Ant. Height (m)	Table Angle (deg)	Comments
								No Emissions Detected
								from the Non Harmonic Emissions
								from the Tx
								10 kHz to 30 MHz
								No Emissions Detected
								for the Non Harmonic Emissions
								from the Tx
								1 GHz to 10 GHz
								No Emissions Detected
								from the Digital Portion
								of the EUT from
								10 kHz to 30 MHz
								No Emissions Detected
								from the Digital Portion
								of the EUT from
								1 GHz to 10 GHz
								Tested in both Horizontal and
								Vertical Polarizations

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz X
Operator: R. Ramirez
EUT Type:
EUT Condition: X position
Comments: Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature:73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:36:51 PM
Sequence: Preliminary Scan



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz X
Operator: R. Ramirez
EUT Type: RF Module XBee 900 MHz
EUT Condition: X Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: 79902
Temperature: 73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:46:56 PM
Sequence: Final Measurements

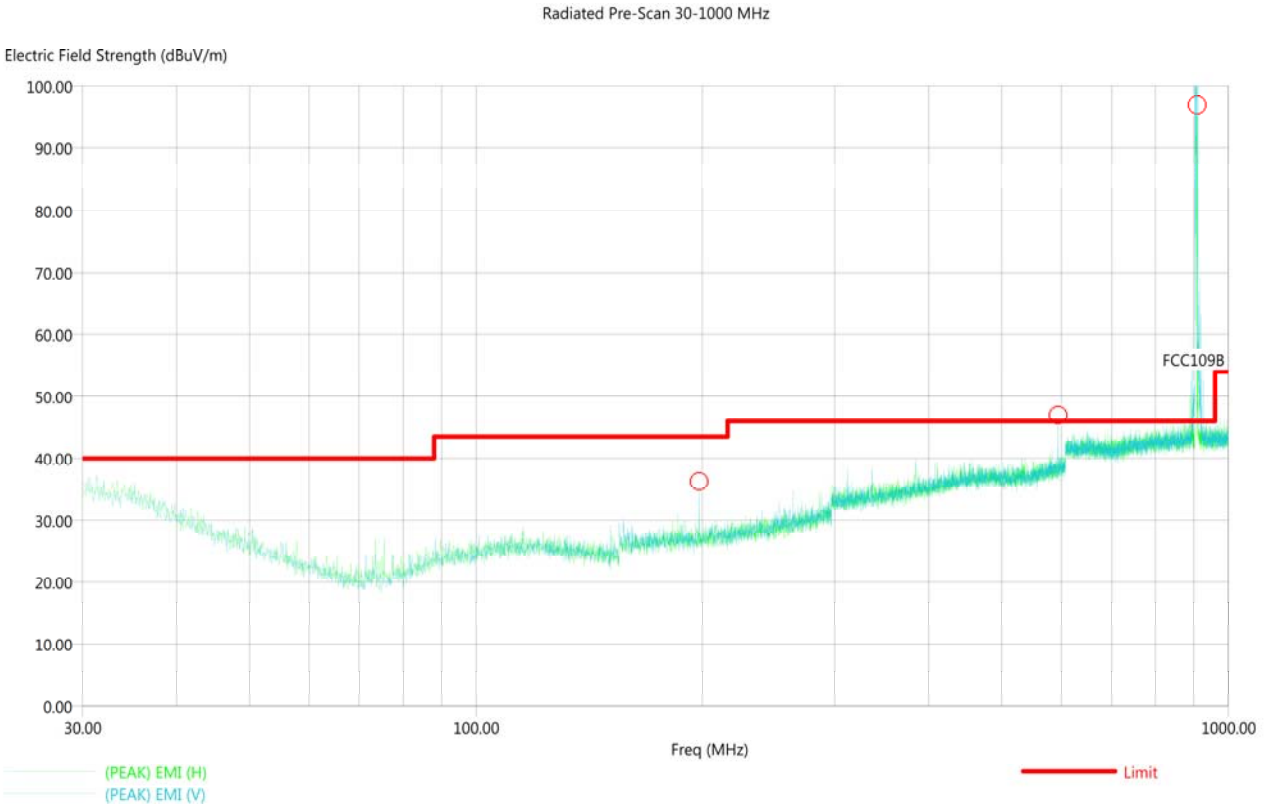
Data

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
312.00	H	43.89	42.70	47.00	-3.11	-4.30	100.10	277.70
408.00	H	44.34	43.06	47.00	-2.66	-3.94	177.20	253.70

1

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz Y
Operator: R. Ramirez
EUT Type: RF Module XBee 900 MHz
EUT Condition: Y position
Comments: Clock Oscillators:
Company: Aerovironment
Model: 79902
Temperature: 73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:19:30 PM
Sequence: Preliminary Scan



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz Y
Operator: R. Ramirez
EUT Type: RF Module XBee 900 MHz
EUT Condition: Y Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: 79902
Temperature: 73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:30:53 PM
Sequence: Final Measurements

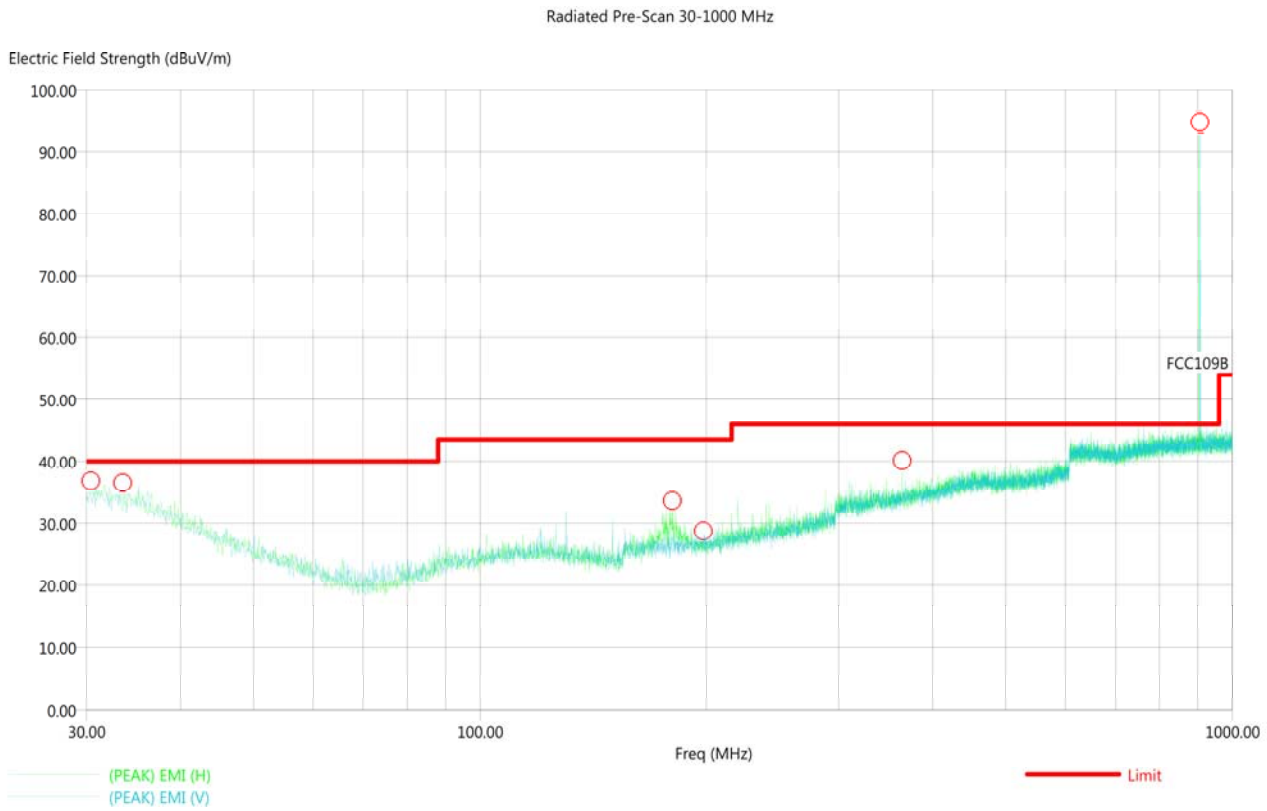
Data

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
198.00	V	22.44	19.95	40.00	-17.56	-20.05	214.70	235.90
594.00	V	46.95	44.12	47.00	-0.05	-2.88	168.40	1.20

1

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz Z
Operator: R. Ramirez
EUT Type: RF Module XBee 900 MHz
EUT Condition: Z position
Comments: Clock Oscillators:
Company: Aerovironment
Model: 79902
Temperature: 73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:00:52 PM
Sequence: Preliminary Scan



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz Z
Operator: R. Ramirez
EUT Type: RF Module XBee 900 MHz
EUT Condition: Z Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: 79902
Temperature: 73 F Humidity: 60 % Pressure: 29.9 inHg
Tested to: 10 GHz
No frequencies found from 1-10 GHz

8/1/2017 1:10:4 PM
Sequence: Final Measurements

Data

Freq (MHz)	Pol	(PEAK) EM (dBuV/m)	(QP) EM (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
30.40	H	31.42	26.62	40.00	-8.58	-13.38	305.90	152.90
33.50	V	30.48	25.86	40.00	-9.52	-14.14	370.10	282.60
180.10	H	33.13	31.07	40.00	-6.87	-8.93	102.20	0.00
198.10	H	22.90	20.40	40.00	-17.10	-19.60	111.40	0.90
364.00	H	40.38	39.88	47.00	-6.62	-7.12	185.70	221.60

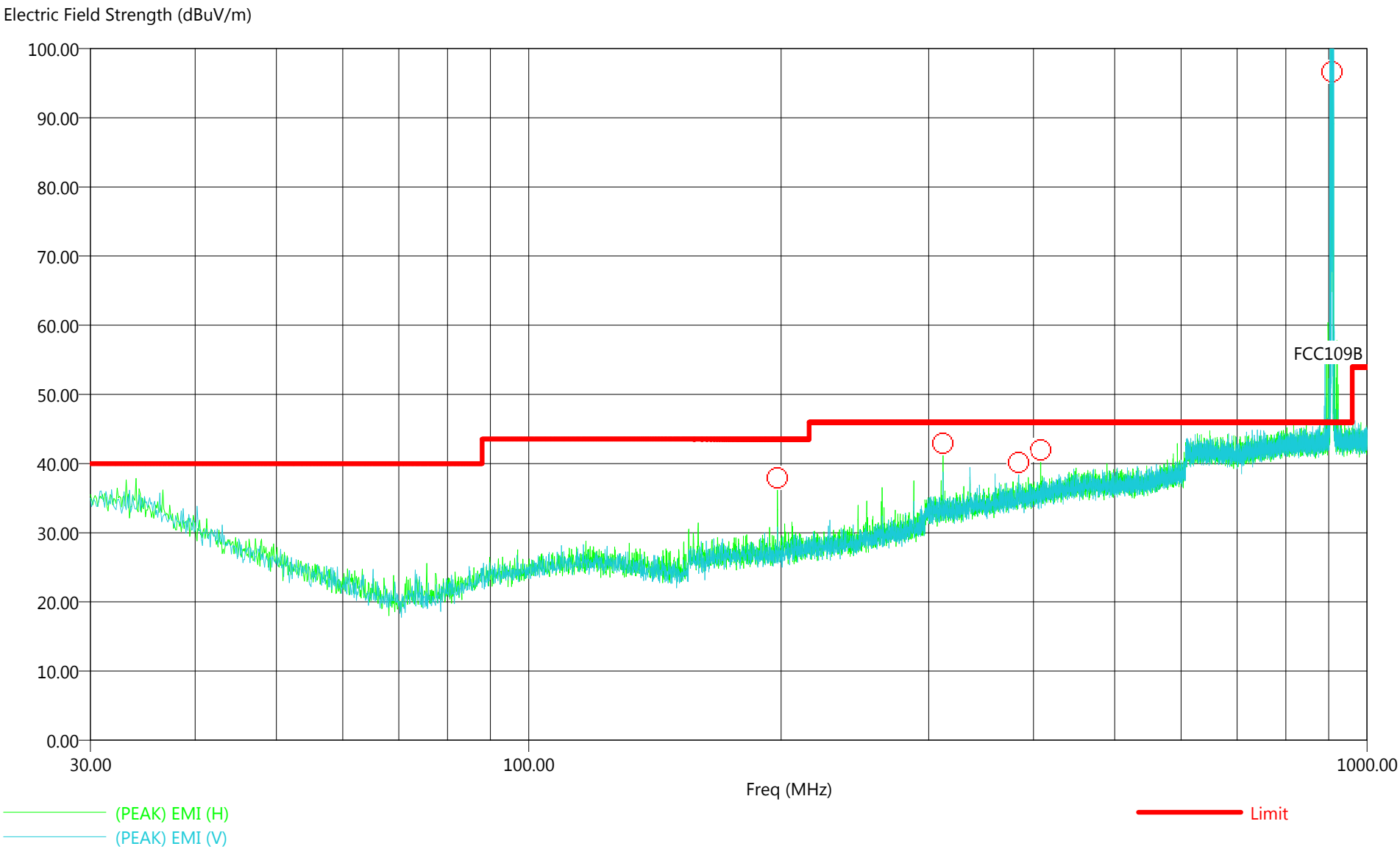
1

CO-LOCATION TEST DATA

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz X
Operator: R. Ramirez
EUT Type:
EUT Condition: X position, co location scan
Comments: Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 12:12:45 PM
Sequence: Preliminary Scan

Radiated Pre-Scan 30-1000 MHz



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz X
Operator: R. Ramirez
EUT Type: X Bee Modem
EUT Condition: X Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 12:23:57 PM
Sequence: Final Measurements

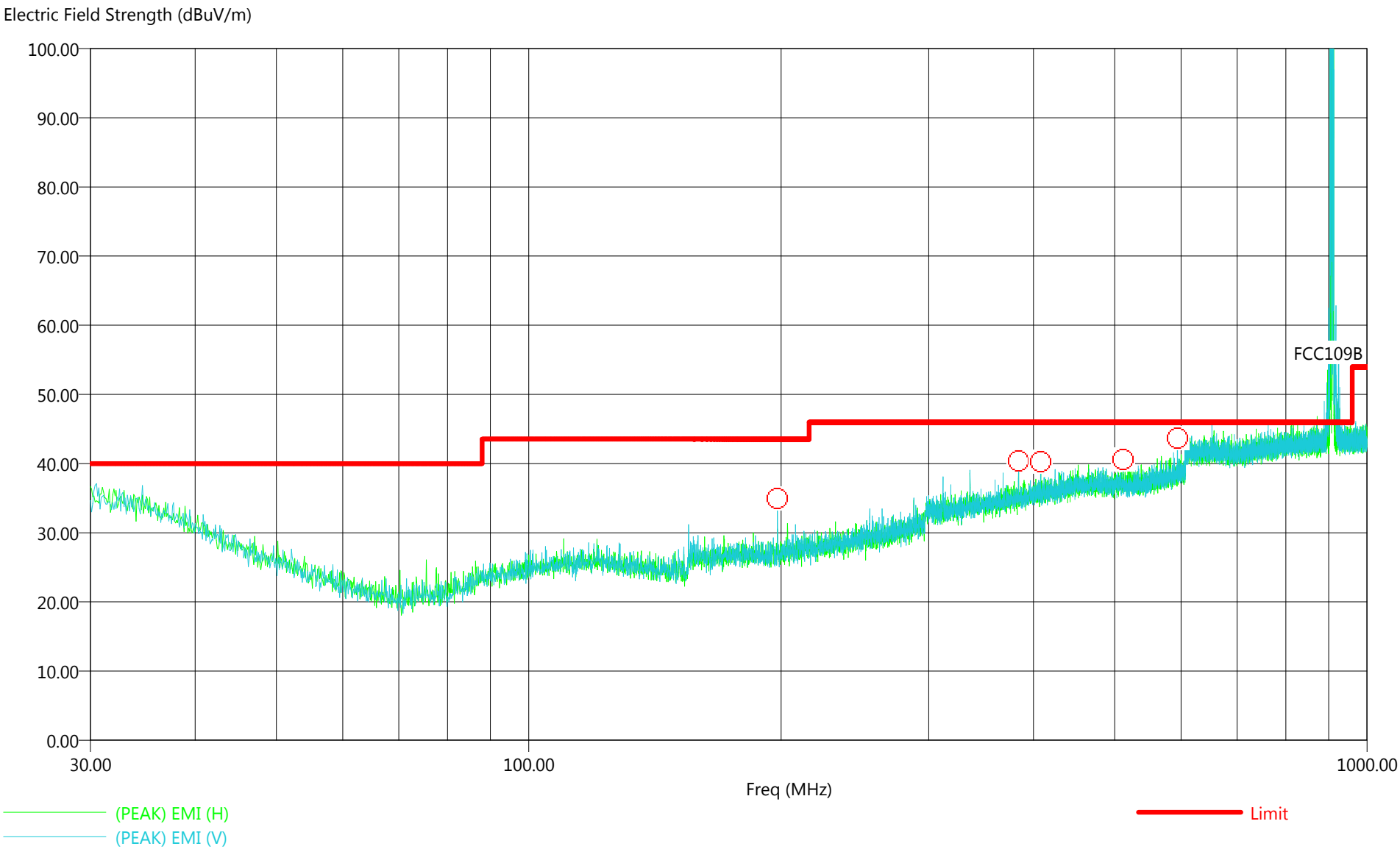
Data

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
198.00	H	27.51	34.32	40.00	-12.49	-5.68	139.90	266.70
312.00	H	43.96	42.85	47.00	-3.04	-4.15	101.00	270.20
384.00	V	36.54	33.22	47.00	-10.46	-13.78	121.20	192.10
408.00	H	41.54	40.93	47.00	-5.46	-6.07	194.70	272.90

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz Y axis
Operator: R. Ramirez
EUT Type:
EUT Condition: Y position, co location scan
Comments: Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 11:43:19 AM
Sequence: Preliminary Scan

Radiated Pre-Scan 30-1000 MHz



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz Y
Operator: R. Ramirez
EUT Type: X Bee Modem
EUT Condition: Y Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 11:54:49 AM
Sequence: Final Measurements

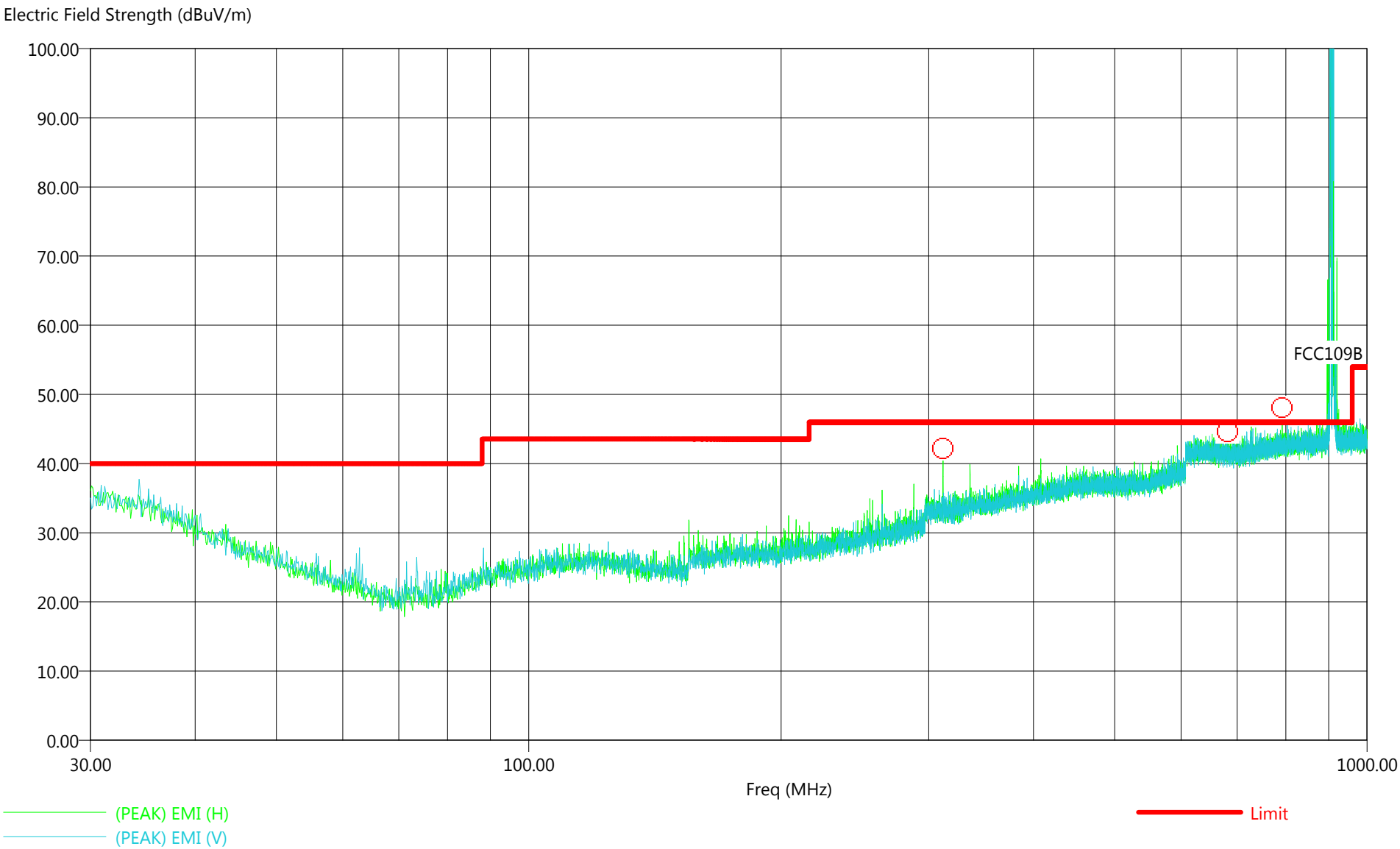
Data

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
198.00	V	24.88	22.14	40.00	-15.12	-17.86	186.90	334.20
384.00	H	40.53	39.39	47.00	-6.47	-7.61	100.00	245.10
408.00	V	42.44	41.16	47.00	-4.56	-5.84	136.50	121.70
511.70	V	32.24	28.18	47.00	-14.76	-18.82	183.40	113.00
594.00	V	32.88	29.86	47.00	-14.12	-17.14	192.80	252.40

Title: Radiated Pre-Scan 30-1000 MHz
File: Radiated Pre-Scan 30-1000 MHz Z
Operator: R. Ramirez
EUT Type:
EUT Condition: Z position, co location scan
Comments: Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 12:39:13 PM
Sequence: Preliminary Scan

Radiated Pre-Scan 30-1000 MHz



Title: Radiated Final 30-1000 MHz
File: Radiated Final 30-1000 MHz Z
Operator: R. Ramirez
EUT Type: X Bee Modem
EUT Condition: Z Position
Comments:
Clock Oscillators:
Company: Aerovironment
Model: X Bee-Pro SX
Temperature: F Humidity: % Pressure: inHg
Tested to: 24 GHz
No frequencies found from 1-24GHz

8/1/2017 12:49:06 PM
Sequence: Final Measurements

Data

Freq (MHz)	Pol	(PEAK) EMI (dBuV/m)	(QP) EMI (dBuV/m)	Limit (dBuV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Twr Ht (cm)	Ttbl Agl (deg)
312.00	H	41.63	40.41	47.00	-5.37	-6.59	192.40	25.40
681.10	V	35.45	32.73	47.00	-11.55	-14.27	296.60	305.00
792.00	H	37.89	35.23	47.00	-9.11	-11.77	121.00	208.00