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EMC Test Report

Class II Permissive Change

FCC Part 15 Subpart C

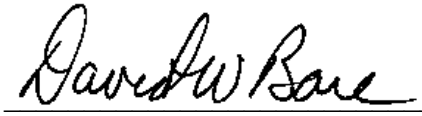
Model: MX7

FCC ID:	KHS800-0347
APPLICANT:	White's Electronics 1101 Pleasant Valley Road Sweet Home, OR 97386
TEST SITE(S):	National Technical Systems - Silicon Valley 41039 Boyce Road. Fremont, CA. 94538-2435
REPORT DATE:	July 28, 2017
RE_ISSUED DATE:	October 12, 2017
FINAL TEST DATES:	July 14, 2017
TOTAL NUMBER OF PAGES:	28

ACCREDITED
Testing Cert #0214.26

VALIDATING SIGNATORIES

PROGRAM MGR



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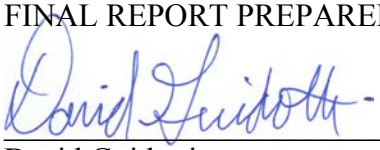

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REVISION HISTORY

Rev#	Date	Comments	Modified By
-	July 28, 2017	First release	
1	October 12, 2017	Added test site correlation statement	DWB

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SCOPE

An electromagnetic emissions test has been performed on the White's Electronics model MX7, pursuant to the following rules:

FCC Part 15 Subpart C

Conducted and radiated emissions data has been collected, reduced, and analyzed within this report in accordance with measurement guidelines set forth in the following reference standards and as outlined in National Technical Systems - Silicon Valley test procedures:

The intentional radiator above has been tested in a simulated typical installation to demonstrate compliance with the relevant Industry Canada performance and procedural standards.

Final system data was gathered in a mode that tended to maximize emissions by varying orientation of EUT, orientation of power and I/O cabling, antenna search height, and antenna polarization.

Every practical effort was made to perform an impartial test using appropriate test equipment of known calibration. All pertinent factors have been applied to reach the determination of compliance.

OBJECTIVE

The primary objective of the manufacturer is compliance with the regulations outlined in the previous section.

Prior to marketing in the USA, all unlicensed transmitters and transceivers require certification. Receive-only devices operating between 30 MHz and 960 MHz are subject to either certification or a manufacturer's declaration of conformity, with all other receive-only devices exempt from the technical requirements.

Certification is a procedure where the manufacturer submits test data and technical information to a certification body and receives a certificate or grant of equipment authorization upon successful completion of the certification body's review of the submitted documents. Once the equipment authorization has been obtained, the label indicating compliance must be attached to all identical units, which are subsequently manufactured.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product which may result in increased emissions should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing or I/O cable changes, etc.).

STATEMENT OF COMPLIANCE

The tested sample of White's Electronics model MX7 complied with the requirements of the following regulations:

FCC Part 15 Subpart C

Maintenance of compliance is the responsibility of the manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the device with respect to the standards detailed in this test report.

The test results recorded herein are based on a single type test of White's Electronics model MX7 and therefore apply only to the tested sample. The sample was selected and prepared by Chuck Prevost of White's Electronics.

DEVIATIONS FROM THE STANDARDS

No deviations were made from the published requirements listed in the scope of this report.

TEST RESULTS SUMMARY

DEVICES OPERATING UNDER THE GENERAL LIMITS

FCC Rule Part		Description	Measured Value / Comments	Limit / Requirement	Result
15.209		Transmitter Fundamental Signal Emissions, 13.9 kHz	31.8 dBµV/m	Refer to table in limits section	Complies
15.209		Transmitter Radiated Spurious Emissions, 0.009 - 30 MHz	-5.8 dBµV/m	Refer to table in limits section	Complies

GENERAL REQUIREMENTS APPLICABLE TO ALL BANDS

FCC Rule Part		Description	Measured Value / Comments	Limit / Requirement	Result (margin)
15.203		RF Connector	Integral Antenna	Unique or integral antenna required	Complies
15.207		AC Conducted Emissions	Not applicable – battery powered device		

MEASUREMENT UNCERTAINTIES

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level and were calculated in accordance with UKAS document LAB 34.

Measurement Type	Measurement Unit	Frequency Range	Expanded Uncertainty
Radiated emission (field strength)	dBµV/m	25 to 1000 MHz	± 3.6 dB
		1000 to 40000 MHz	± 6.0 dB

EQUIPMENT UNDER TEST (EUT) DETAILS

GENERAL

The White's Electronics model MX7 is a metal detector. Since the EUT could be placed in any position during operation, the EUT was treated as tabletop equipment during testing to simulate the end-user environment. The electrical rating of the EUT is 12 VDC from 8 AA cells.

The sample was received on July 14, 2017 and tested on July 14, 2017. The EUT consisted of the following component(s):

Company	Model	Description	Serial Number	FCC ID
White's Electronics	MX7	Metal detector (Part number 800-0350)	Pre-production	KHS800-0347
White's Electronics	-	9.5" concentric coil (Part number 801-3257)	9S/11 06	-
White's Electronics	-	13" Detech coil (Part number 801-3255)	99685	-

OTHER EUT DETAILS

The following EUT details should be noted: Various coils are available for use with the MX7 and MXSPORT detectors. See proposed modification details for the differences between the MX7 and the MXSPORT below.

ANTENNA SYSTEM

The antenna system consists of a replaceable coil.

ENCLOSURE

The EUT enclosure is primarily constructed of metal and plastic. It measures approximately 12 cm wide by 30 cm deep by 50 cm high. The attached coil extends 75 cm from the housing.

MODIFICATIONS

No modifications were made to the EUT during the time the product was at NTS Silicon Valley.

SUPPORT EQUIPMENT

The following equipment was used as support equipment for testing:

Company	Model	Description	Serial Number	FCC ID
White's Electronics	Prostar P/N 802-5323	Headphones	-	-

No remote support equipment was used during testing.

EUT INTERFACE PORTS

The I/O cabling configuration during testing was as follows:

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length(m)
Headphone	Headphones	Coiled Audio	Shielded	1.3
Coil	Coil	Multiconductor	Unshielded	1.0

EUT OPERATION

During emissions testing the EUT was actively scanning for metal objects.

PROPOSED MODIFICATION DETAILS

GENERAL

This section details the modifications to the White's Electronics model MX7 being proposed. All performance and construction deviations from the characteristics originally reported to the FCC are addressed.

ENCLOSURE

The MX7 enclosure is slightly modified from the MX SPORT for the batteries (waterproof vs. weather resistant), POD (waterproof vs. weather resistant) and the headphone jack location.

INTERNAL CABLING/WIRING

The internal system wiring is re-routed for the new position of the headphone jack.

ANTENNA

A larger 13” coil antenna will be used.

TEST SITE

GENERAL INFORMATION

Final test measurements were taken at the test sites listed below. Pursuant to section 2.948 of the FCC's Rules and section 3.3 of RSP-100, construction, calibration, and equipment data has been filed with the Commission and with industry Canada.

Site	Designation / Registration Numbers		Location
	FCC	Canada	
Chamber 5	US0027	2845B-5	41039 Boyce Road Fremont, CA 94538-2435

ANSI C63.4 recommends that ambient noise at the test site be at least 6 dB below the allowable limits. Ambient levels are below this requirement. The test site(s) contain separate areas for radiated and conducted emissions testing. The results from testing performed in this chamber have been correlated with results from an open area test site. Considerable engineering effort has been expended to ensure that the facilities conform to all pertinent requirements of ANSI C63.4.

RADIATED EMISSIONS CONSIDERATIONS

The FCC has determined that radiation measurements made in a shielded enclosure are not suitable for determining levels of radiated emissions. Radiated measurements are performed in an open field environment or in a semi-anechoic chamber. The test sites are maintained free of conductive objects within the CISPR defined elliptical area incorporated in ANSI C63.4 guidelines and meet the Normalized Site Attenuation (NSA) requirements of ANSI C63.4.

MEASUREMENT INSTRUMENTATION

RECEIVER SYSTEM

An EMI receiver as specified in CISPR 16-1-1 is used for emissions measurements. The receivers used can measure over the frequency range of 9 kHz up to 2000 MHz. These receivers allow both ease of measurement and high accuracy to be achieved. The receivers have Peak, Average, and CISPR (Quasi-peak) detectors built into their design so no external adapters are necessary. The receiver automatically sets the required bandwidth for the CISPR detector used during measurements. If the repetition frequency of the signal being measured is below 20Hz, peak measurements are made in lieu of Quasi-Peak measurements.

For measurements above the frequency range of the receivers, a spectrum analyzer is utilized because it provides visibility of the entire spectrum along with the precision and versatility required to support engineering analysis. Average measurements above 1000MHz are performed on the spectrum analyzer using the linear-average method with a resolution bandwidth of 1 MHz and a video bandwidth of 10 Hz, unless the signal is pulsed in which case the average (or video) bandwidth of the measuring instrument is reduced to onset of pulse desensitization and then increased.

INSTRUMENT CONTROL COMPUTER

Software is used to view and convert receiver measurements to the field strength at an antenna or voltage developed at the LISN measurement port, which is then compared directly with the appropriate specification limit. This provides faster, more accurate readings by performing the conversions described under Sample Calculations within the Test Procedures section of this report. Results are printed in a graphic and/or tabular format, as appropriate. A personal computer is used to record all measurements made with the receivers. The software used for radiated and conducted emissions measurements is NTS EMI Test Software (rev 2.10)

FILTERS/ATTENUATORS

External filters and precision attenuators are often connected between the receiving antenna or LISN and the receiver. This eliminates saturation effects and non-linear operation due to high amplitude transient events.

ANTENNAS

A loop antenna is used below 30 MHz. For the measurement range 30 MHz to 1000 MHz either a combination of a biconical antenna and a log periodic or a bi-log antenna is used. Above 1000 MHz, horn antennas are used. The antenna calibration factors to convert the received voltage to an electric field strength are included with appropriate cable loss and amplifier gain factors to determine an overall site factor, which is then programmed into the test receivers or incorporated into the test software.

ANTENNA MAST AND EQUIPMENT TURNTABLE

The antennas used to measure the radiated electric field strength are mounted on a non-conductive antenna mast equipped with a motor-drive to vary the antenna height. Measurements below 30 MHz are made with the loop antenna at a fixed height of 1m above the ground plane.

ANSI C63.10 specifies that the test height above ground for table mounted devices shall be 80 centimeters. Floor mounted equipment shall be placed on the ground plane if the device is normally used on a conductive floor or separated from the ground plane by insulating material from 3 to 12 mm if the device is normally used on a non-conductive floor as specified in ANSI C63.4. During radiated measurements, the EUT is positioned on a motorized turntable in conformance with this requirement.

INSTRUMENT CALIBRATION

All test equipment is regularly checked to ensure that performance is maintained in accordance with the manufacturer's specifications. All antennas are calibrated at regular intervals with respect to tuned half-wave dipoles. An exhibit of this report contains the list of test equipment used and calibration information.

TEST PROCEDURES

EUT AND CABLE PLACEMENT

The regulations require that interconnecting cables be connected to the available ports of the unit and that the placement of the unit and the attached cables simulate the worst case orientation that can be expected from a typical installation, so far as practicable. To this end, the position of the unit and associated cabling is varied within the guidelines of ANSI C63.10, and the worst-case orientation is used for final measurements.

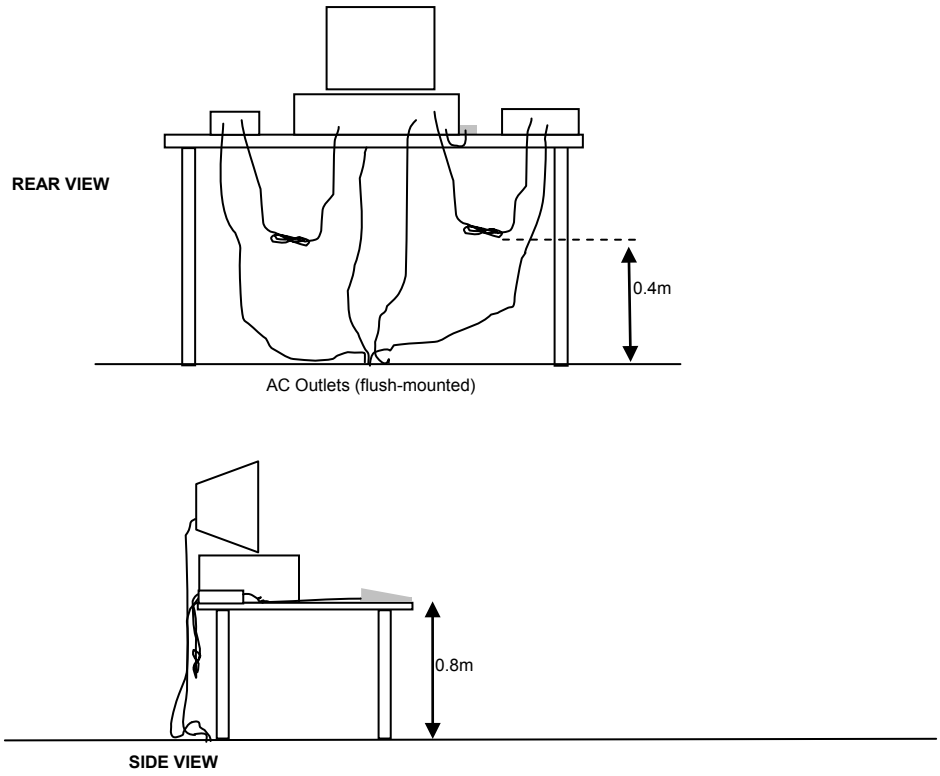
RADIATED EMISSIONS

A preliminary scan of the radiated emissions is performed in which all significant EUT frequencies are identified with the system in a nominal configuration. At least two scans are performed, one scan for each antenna polarization (horizontal and vertical; loop parallel and perpendicular to the EUT). During the preliminary scans, the EUT is rotated through 360˚, the antenna height is varied (for measurements above 30 MHz) and cable positions are varied to determine the highest emission relative to the limit. Preliminary scans may be performed in a fully anechoic chamber for the purposes of identifying the frequencies of the highest emissions from the EUT.

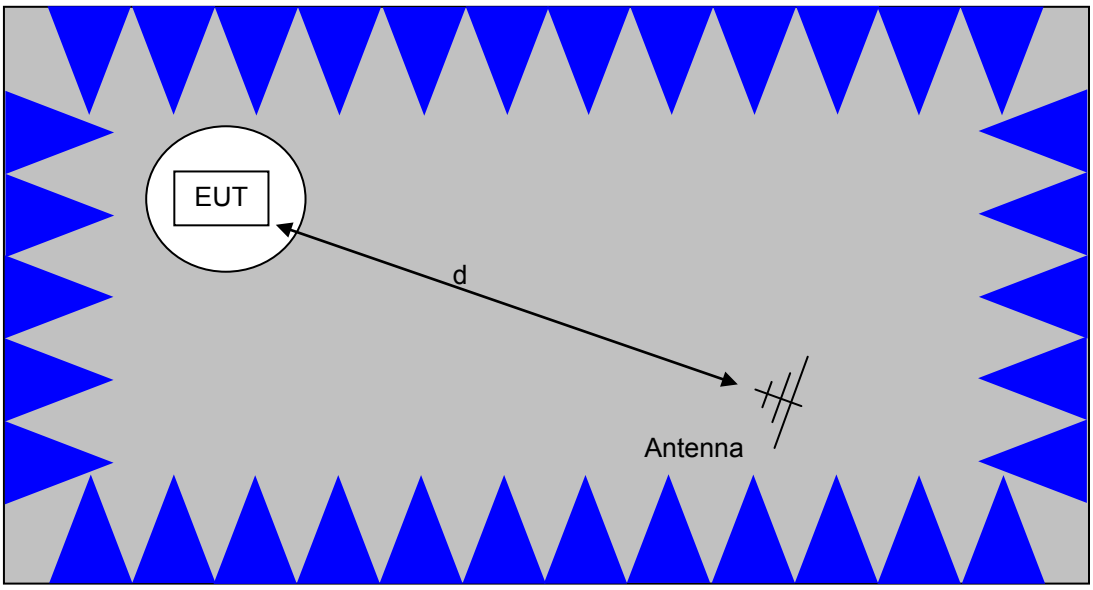
A speaker is provided in the receiver to aid in discriminating between EUT and ambient emissions. Other methods used during the preliminary scan for EUT emissions involve scanning with near field magnetic loops, monitoring I/O cables with RF current clamps, and cycling power to the EUT.

Final maximization is a phase in which the highest amplitude emissions identified in the spectral search are viewed while the EUT azimuth angle is varied from 0 to 360 degrees relative to the receiving antenna. The azimuth, which results in the highest emission is then maintained while varying the antenna height from one to four meters (for measurements above 30 MHz, measurements below 30 MHz are made with the loop antenna at a fixed height of 1m). The result is the identification of the highest amplitude for each of the highest peaks. Each recorded level is corrected in the receiver using appropriate factors for cables, connectors, antennas, and preamplifier gain.

When testing above 18 GHz, the receive antenna is located at 1meter from the EUT and the antenna height is restricted to a maximum of 2.5 meters.

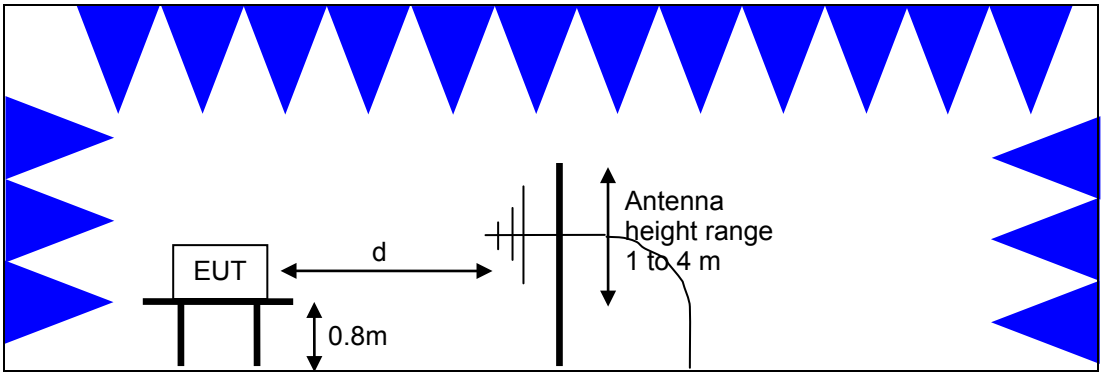


Typical Test Configuration for Radiated Field Strength Measurements



The anechoic materials on the walls and ceiling ensure compliance with the normalized site attenuation requirements of CISPR 16 / CISPR 22 / ANSI C63.4 for an alternate test site at the measurement distances used.

Floor-standing equipment is placed on the floor with insulating supports between the unit and the ground plane.



Test Configuration for Radiated Field Strength Measurements
Semi-Anechoic Chamber, Plan and Side Views

SPECIFICATION LIMITS AND SAMPLE CALCULATIONS

The limits for conducted emissions are given in units of microvolts, and the limits for radiated emissions are given in units of microvolts per meter at a specified test distance. Data is measured in the logarithmic form of decibels relative to one microvolt, or dB microvolts (dBuV). For radiated emissions, the measured data is converted to the field strength at the antenna in dB microvolts per meter (dBuV/m). The results are then converted to the linear forms of uV and uV/m for comparison to published specifications.

For reference, converting the specification limits from linear to decibel form is accomplished by taking the base ten logarithm, then multiplying by 20. These limits in both linear and logarithmic form are as follows:

GENERAL TRANSMITTER RADIATED EMISSIONS SPECIFICATION LIMITS

The table below shows the limits for the spurious emissions from transmitters that fall in restricted bands[1].

Frequency Range (MHz)	Limit (uV/m)	Limit (dBuV/m @ 3m)
0.009-0.490	$2400/F_{KHz}$ @ 300m	$67.6-20*\log_{10}(F_{KHz})$ @ 300m
0.490-1.705	$24000/F_{KHz}$ @ 30m	$87.6-20*\log_{10}(F_{KHz})$ @ 30m
1.705 to 30	30 @ 30m	29.5 @ 30m
30 to 88	100 @ 3m	40 @ 3m
88 to 216	150 @ 3m	43.5 @ 3m
216 to 960	200 @ 3m	46.0 @ 3m
Above 960	500 @ 3m	54.0 @ 3m

[1] The restricted bands are detailed in FCC 15.205 and RSS-Gen Table 6

SAMPLE CALCULATIONS - CONDUCTED EMISSIONS

Receiver readings are compared directly to the conducted emissions specification limit (decibel form) as follows:

$$R_r - S = M$$

where:
R_r = Receiver Reading in dBuV
S = Specification Limit in dBuV
M = Margin to Specification in +/- dB

SAMPLE CALCULATIONS - RADIATED EMISSIONS

Receiver readings are compared directly to the specification limit (decibel form). The receiver internally corrects for cable loss, preamplifier gain, and antenna factor. The calculations are in the reverse direction of the actual signal flow, thus cable loss is added and the amplifier gain is subtracted. The Antenna Factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

A distance factor, when used for electric field measurements above 30MHz, is calculated by using the following formula:

$$F_d = 20*LOG_{10} (D_m/D_s)$$

where:
F_d = Distance Factor in dB
D_m = Measurement Distance in meters
D_s = Specification Distance in meters

For electric field measurements below 30MHz the extrapolation factor is either determined by making measurements at multiple distances or a theoretical value is calculated using the formula:

$$F_d = 40*LOG_{10} (D_m/D_s)$$

Measurement Distance is the distance at which the measurements were taken and Specification Distance is the distance at which the specification limits are based. The antenna factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

The margin of a given emission peak relative to the limit is calculated as follows:

$$R_c = R_r + F_d$$

and

$$M = R_c - L_s$$

where:
R_r = Receiver Reading in dBuV/m
F_d = Distance Factor in dB
R_c = Corrected Reading in dBuV/m
L_s = Specification Limit in dBuV/m
M = Margin in dB Relative to Spec

Appendix A Test Equipment Calibration Data

Radiated Emissions, 9 kHz - 30 MHz, 14-Jul-17

Manufacturer	Description	Model	Asset #	Calibrated	Cal Due
Rohde & Schwarz	EMI Test Receiver, 20 Hz-40 GHz	ESI 40	2493	3/17/2017	3/17/2018
EMCO	Magnetic Loop Antenna, 9 kHz-30 MHz	AL-130	3003	8/9/2016	8/9/2018

Appendix B Test Data

T105431 Pages 20 – 27

Client:	White's Electronics	Job Number:	JD105194
Product	MX7	T-Log Number:	T105431
System Configuration:		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Emissions Standard(s):	FCC part 15.209	Class:	-
Immunity Standard(s):	-	Environment:	Radio

EMC Test Data

For The

White's Electronics

Product

MX7

Date of Last Test: 7/14/2017

Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A

Radiated Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT was located on the turntable for radiated emissions testing.
The test distance and extrapolation factor (if applicable) are detailed under each run description.
All the emissions were maximized by orientation of the EUT, orientation of the measurement antenna, and manipulation of the EUT's interface cables.

Ambient Conditions:

Temperature: 22 °C
Rel. Humidity: 45 %

Summary of Results

Run #	Test Performed	Limit	Result	Value / Margin
1	Transmitter Radiated Fundmental and Spurious Emissions, 9 kHz - 30 MHz	FCC 15.209	Pass	31.8 dBµV/m @ 0.014 MHz (-12.9 dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Detech 13" Coil p/n 801-3255

Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A

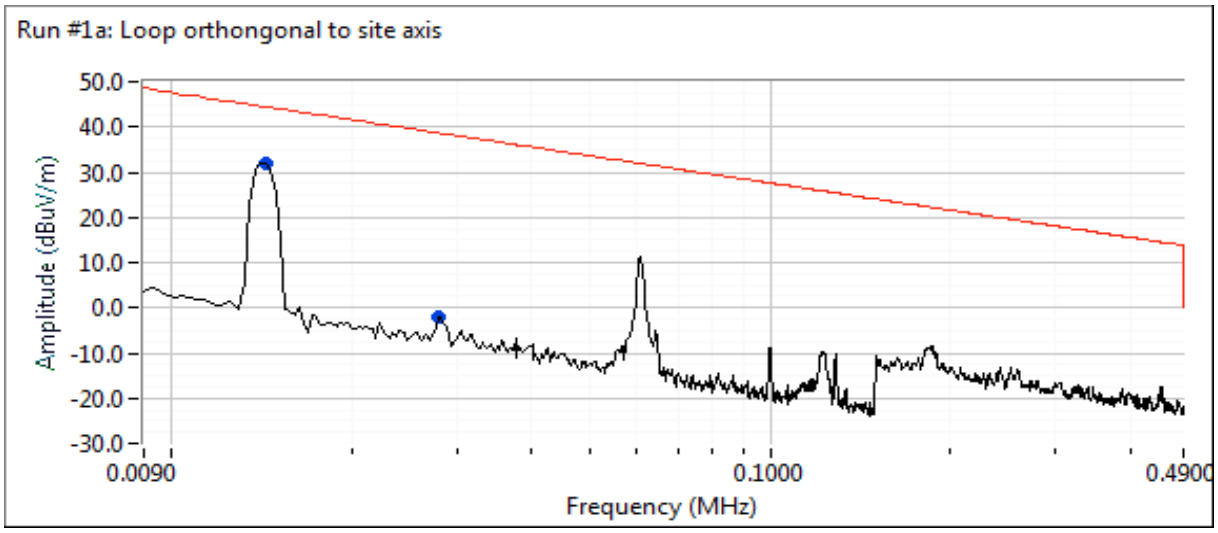
Run #1: Radiated Emissions, 9 kHz - 490 kHz, Transmitter Fundamental and Spurious Emissions

Date of Test: 7/14/2017
Test Engineer: David Bare
Test Location: Fremont Chamber #5

Config. Used: 1
Config Change: None
EUT Voltage: 12 VDC

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
9 kHz - 490 kHz	5	300	-71.1

Note:	Based on testing with the 9.5" concentric coil pickup, no emissions from the radio were observed above 490 kHz.



Loop orthogonal to site access

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.0139	31.8	-	44.7	-12.9	AVG	295	1.0	AVG (0.10s) Fundamental
0.0278	-5.8	-	38.3	-44.1	AVG	282	1.0	AVG (0.10s)

Note 1:	No other emissions within 20 dB of the limt were observed.

Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A

Loop along site axes

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.0139	28.6	H	44.7	-16.1	AVG	360	1.0	AVG (0.10s)
0.0278	-8.2	H	38.6	-46.8	AVG	5	1.0	AVG (0.10s)

Loop horizontal

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.0139	21.2	V	44.7	-23.5	AVG	314	1.0	AVG (0.10s)
0.0278	-13.9	V	38.6	-52.5	AVG	298	1.0	AVG (0.10s)

Note 1:	No other emissions within 20 dB of the limt were observed.

Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A

Radiated Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT was located on the turntable for radiated emissions testing.
The test distance and extrapolation factor (if applicable) are detailed under each run description.
All the emissions were maximized by orientation of the EUT, orientation of the measurement antenna, and manipulation of the EUT's interface cables.

Ambient Conditions:

Temperature: 22 °C
Rel. Humidity: 45 %

Summary of Results

Run #	Test Performed	Limit	Result	Value / Margin
1	Transmitter Radiated Fundmenatl and Spurious Emissions, 9 kHz - 30 MHz	FCC 15.209	Pass	20.4 dBµV/m @ 0.640 MHz (-12.5 dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

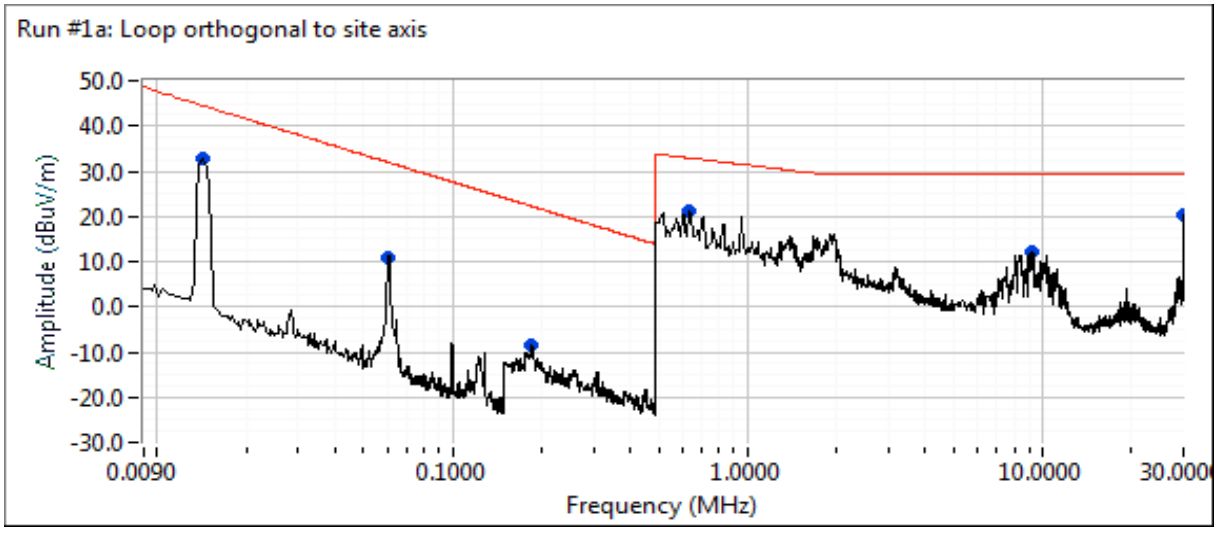
Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A

Run #1: Radiated Emissions, 9 kHz - 30 MHz, Transmitter Fundamental and Spurious Emissions

Date of Test: 7/14/2017
Test Engineer: David Bare
Test Location: Fremont Chamber #5

Config. Used: 1
Config Change: None
EUT Voltage: 12 VDC

Frequency Range	Test Distance	Limit Distance	Extrapolation Factor
9 kHz - 490 kHz	5	300	-71.1
490 kHz - 30 MHz	5	30	-31.1

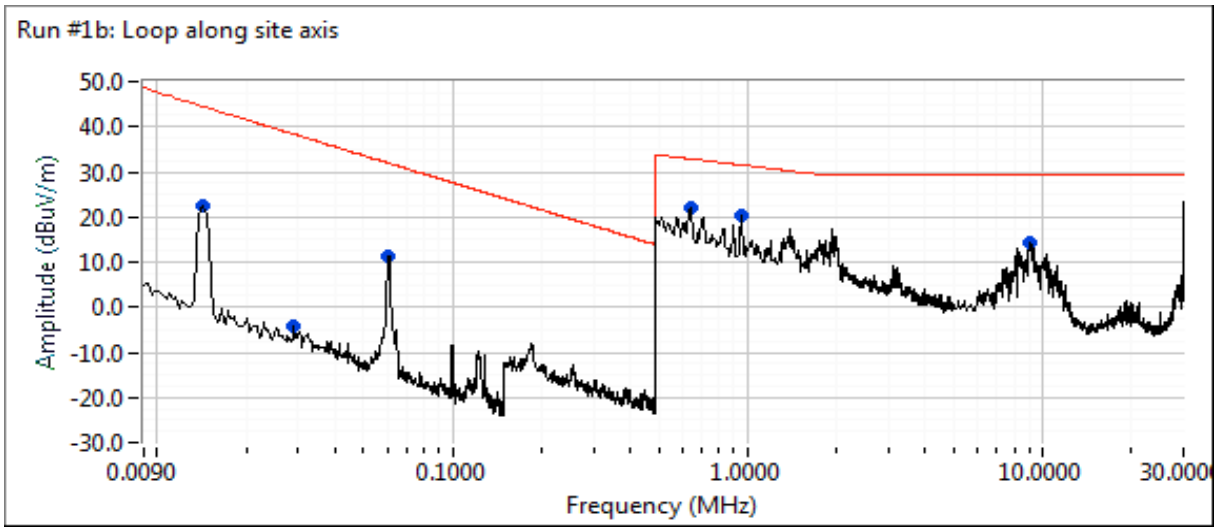


Loop orthogonal to site access

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.0139	31.2	-	44.7	-13.5	AVG	292	1.0	AVG (0.10s) Fundamental
0.185	-22.8	-	22.3	-45.1	AVG	141	1.0	AVG (0.10s)
0.060	-0.1	-	32.0	-32.1	AVG	25	1.0	AVG (0.10s)
0.640	20.4	-	32.9	-12.5	QP	302	1.0	QP (1.00s)
9.277	11.1	-	29.5	-18.4	QP	360	1.0	QP (1.00s)
30.000	28.2	-	29.5	-1.3	QP	88	1.0	QP (1.00s)
30.000	28.2	-	29.5	-1.3	QP	88	1.0	QP (1.00s) EUT switched off

Note 1:	The emission at 30 MHz is not from the EUT

Client:	White's Electronics	Job Number:	JD105194
Model:	MX7	T-Log Number:	T105431
		Project Manager:	Christine Krebill
Contact:	Chuck Prevost	Project Coordinator:	-
Standard:	FCC part 15.209	Class:	N/A



Loop along site axes

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.0139	21.6	-	44.7	-23.1	AVG	295	1.1	AVG (0.10s)
0.060	0.0	-	32.0	-32.0	AVG	152	1.1	AVG (0.10s)
0.029	-16.1	-	38.3	-54.4	AVG	164	1.1	AVG (0.10s)
0.644	14.9	-	32.9	-18.0	QP	66	1.1	QP (1.00s)
0.951	14.8	-	31.5	-16.7	QP	239	1.1	QP (1.00s)
9.084	11.4	-	29.5	-18.1	QP	234	1.1	QP (1.00s)

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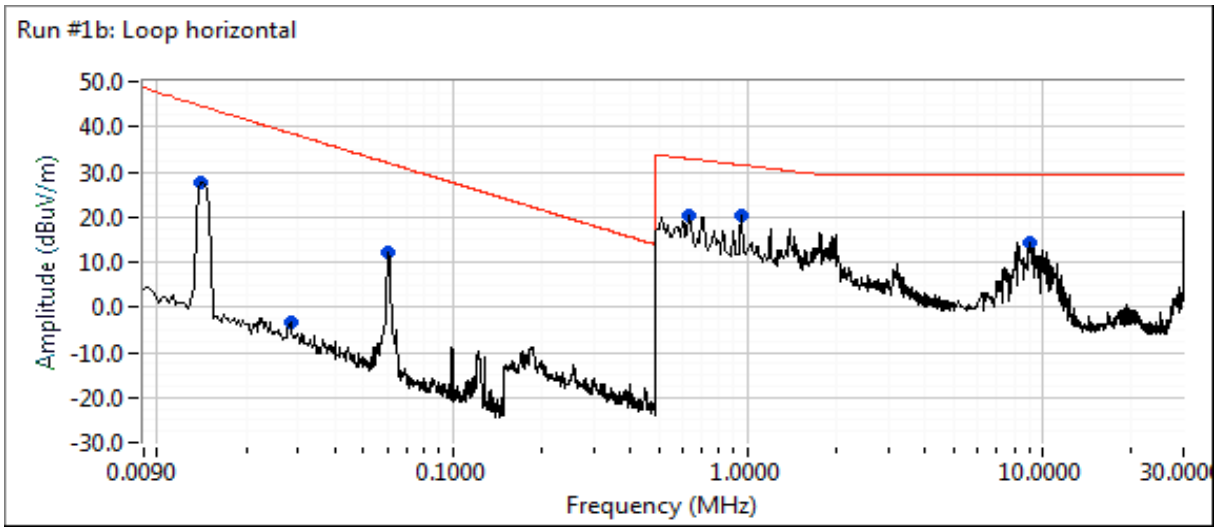
Standard:	FCC part 15.209	Class:	N/A



Loop horizontal

Frequency	Level	Pol	FCC 15.209		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
0.014	27.1	-	44.7	-17.6	AVG	244	1.1	AVG (0.10s)
0.028	-15.1	-	38.6	-53.7	AVG	276	1.1	AVG (0.10s)
0.060	6.5	-	32.0	-25.5	AVG	114	1.0	AVG (0.10s)
0.640	18.8	-	32.9	-14.1	QP	139	1.0	QP (1.00s)
0.955	18.6	-	31.5	-12.9	QP	49	1.0	QP (1.00s)
9.021	12.6	-	29.5	-16.9	QP	315	1.0	QP (1.00s)

End of Report

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