



FCC PART 15B TEST REPORT

For

Midland Radio Corporation

5900 Parretta Drive, Kansas City, Missouri, United States

FCC ID: MMAMXT115P

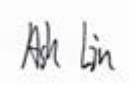
Report Type: Class II Permissive Change Report	Product Name: GMRS MOBILE RADIO
Report Number:	2607P33479E-EM-A1-01
Report Date:	2026-03-27
Reviewed By:	Ash Lin 
Approved By:	Miles Chen 
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue Science and Technology Innovation Park, Torch High Tech Zone Xiamen, People's Republic of China Tel: +86-592-3200111 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2607P33479E-EM-A1-01	R1V1	2026-03-27	Initial Release

Note: This is Class II Permissive Change report based on original report No.: 2502R04460E-RF-00B which was issued by Bay Area Compliance Laboratories Corp. (Dongguan).

Description of change:

1. Changed the RF power tube.
2. Change the antenna.

Above changes between the previous equipment and the current equipment is stated and guaranteed by the applicant. The difference between them will affect the results, we will re-test item "Radiated Emission" and update test photos and EUT photos. The other test data were not affected, please refer to the report 2502R04460E-RF-00B.

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Midland Radio Corporation
Product Name:	GMRS MOBILE RADIO
Tested Model:	MXT115P
Multiple Model(s):	N/A
Trade mark:	MIDLAND
Power Supply:	DC 13.8V from DC Source
Firmware Version:	N/A
Software Version:	N/A
★Highest Operating Frequency:	467.7250 MHz
EUT Received Status:	Good

Note:

1. The highest operating frequency is provided by the applicant.

2. All measurement and test data in this report was gathered from production sample serial number:

3GY8-1 (Assigned by the BACL (Xiamen). The EUT supplied by the applicant was received on 2026-01-29).

Objective

This report is prepared for *Midland Radio Corporation* in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15, Class B device.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on Unit 102, No. 902 Meifeng South Road, Binhai West Avenue Science and Technology Innovation Park, Torch High Tech Zone Xiamen, People's Republic of China.

Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the product as specified in CISPR 16-4-2. This uncertainty represents expanded uncertainty expressed at 95% confidence level using a coverage factor of k=2.

$$u_c(y) = \sqrt{\sum_i c_i^2 u^2(x_i)}$$

Item	Frequency Range	$U_{lab} = 2 u_c(y)$ (Confidence of 95%)
Radiated Emissions	30MHz~200MHz(Horizontal)	3.33 dB
	30MHz~200MHz(Vertical)	3.51 dB
	200MHz~1GHz(Horizontal)	4.87 dB
	200MHz~1GHz(Vertical)	4.99 dB
	1GHz~6GHz	4.88 dB

SYSTEM TEST CONFIGURATION**Test Mode and Voltage**

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Test Mode 1: Charging & UHF Receiving
Test voltage:	DC 13.8V from DC Source
Remark:	During all emission tests, the EUT was configured to measure its highest possible emission level and the worst case's test data was presented in this test report.

EUT Exercise Software

No exercise software was used to test.

Special Accessories

No special accessory was used.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

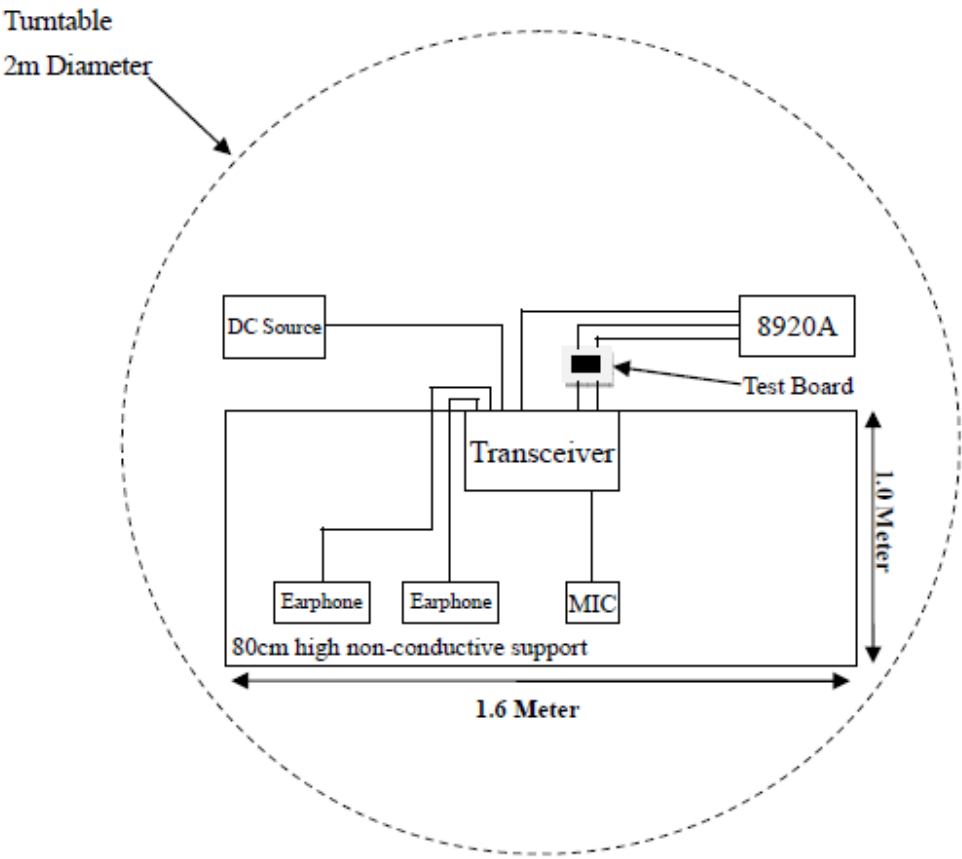
Manufacturer	Description	Model	Serial Number
HP	RF Communications test set	8920A	3524A07202
Unknown	Earphone	Unknown	Unknown
Unknown	Earphone	Unknown	Unknown
MAISHENG	DC Source	MS-606DS	1027453694
Unknown	Test Board	Unknown	Unknown

External I/O Cable

Cable Description	Length (m)	From Port	To Port
Coaxial Cable	1.0	8920A	EUT
Earphone Cable	1.0	Earphone	EUT
Earphone Cable	1.0	Earphone	EUT
DC Power Cable	3.0	DC Source	EUT

Block Diagram of Test Setup

Radiated Emission:



SUMMARY OF TEST RESULTS

FCC PART 15B			
Rule Part	Description of Test	Results	Remark
§15.107	Conducted Emission	Not Applicable (See note 1)	-
§15.109	Radiated Emission(30MHz-1000MHz)	Compliant	-
§15.109	Radiated Emission(Above 1GHz)	Compliant	-
FCC§15.111	Antenna power conduction limits for receivers	-	See note 2

Note:

1. The EUT is powered by DC Source.
2. The test data please refer to report 2502R04460E-RF-00B.

TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Below 1 GHz					
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2026/01/21	2027/01/20
Hybrid Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26
Amplifier	Sonoma	310B	120903	2026/01/22	2027/01/21
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2026/01/20	2027/01/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2026/01/20	2027/01/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2026/01/20	2027/01/19
Test Software	Audix	E3	18621a	N/A	N/A
Radiated Emission Above 1GHz					
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102051	2026/01/21	2027/01/20
Horn Antenna	A.H.Systems	3115	9002-3355	2023/07/28	2026/07/27
Preamplifier	GLOBAL	1313-A100M18G	4121301	2026/01/14	2027/01/13
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2026/01/20	2027/01/19
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2026/01/20	2027/01/19
Test Software	Audix	E3	18621a	N/A	N/A

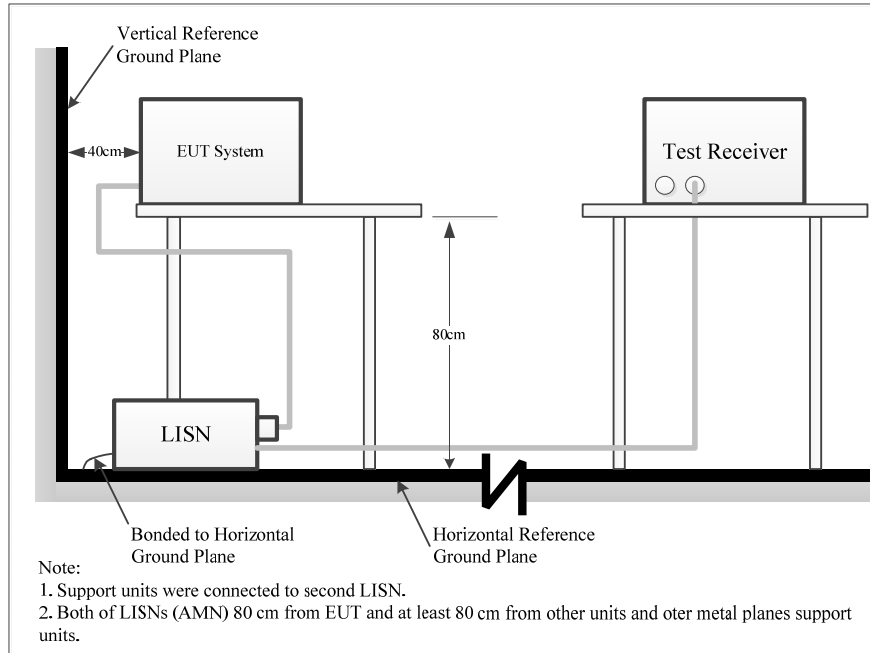
Statement of Traceability: Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.107 - CONDUCTED EMISSION

Applicable Standard

FCC §15.107

Test System Setup



The measurement procedure of test setup is according with ANSI C63.4-2014. The related limit was specified in FCC Part 15.107 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

If the maximum peak value of the emissions is below the average limit, the QP value and average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

Result & Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$

$$\text{Result (dB}\mu\text{V)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

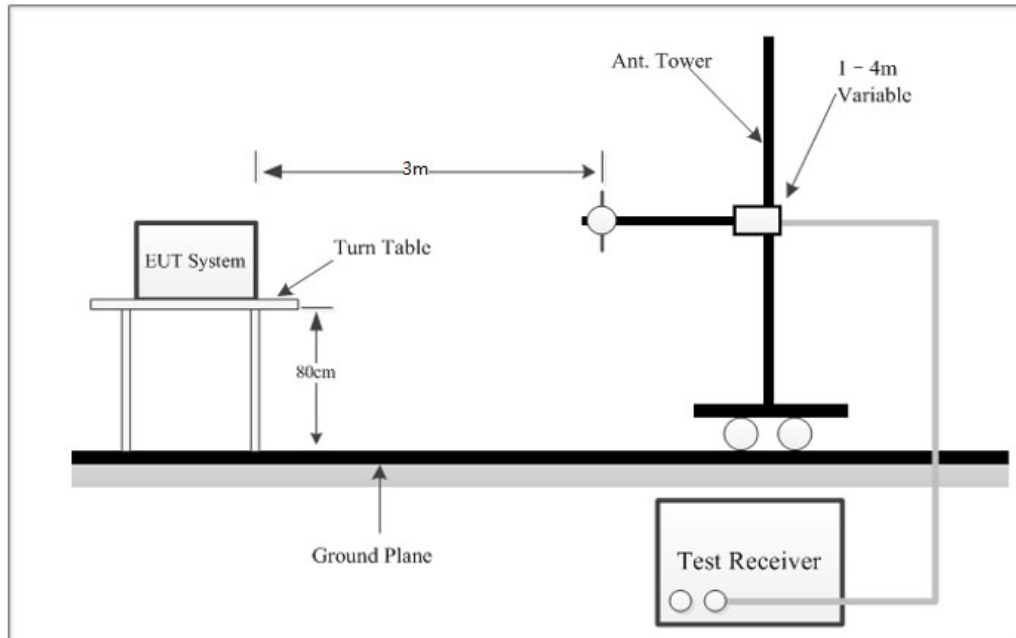
Test Data

Test result: N/A.

Note: The EUT is powered by DC Source.

FCC §15.109 - RADIATED EMISSION(30MHz-1GHz)**Applicable Standard**

FCC §15.109

Test System Setup

The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 1 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	VBW	Measurement	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	PK	PK
	120 kHz	/	QP	QP

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT complied with all installation combinations.

If the measured peak level of the emissions that the measuring receiver reading level plus corrected factor is at least 10 dB below the QP emission limit, there's no need to record the measured QP level of the emissions in the report.

Result & Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

$$\text{Result (dB}\mu\text{V/m)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB/m)}$$

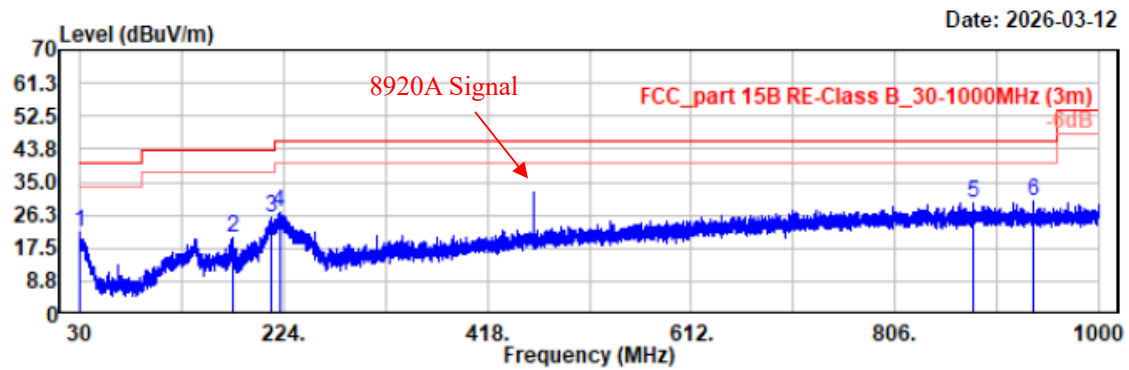
The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Result (dB}\mu\text{V/m)}$$

Test Data (Worst)

Project No.: 2607P33479E-EM-A1
Test Mode: Mode 1(462.625MHz)
EUT Model: MXT115P
Test distance: 3m

Temp/Humi/ATM: 22.6°C/46%/100.1kPa
Tested by: Apollo Luo
Power Source: DC 13.8V from DC source

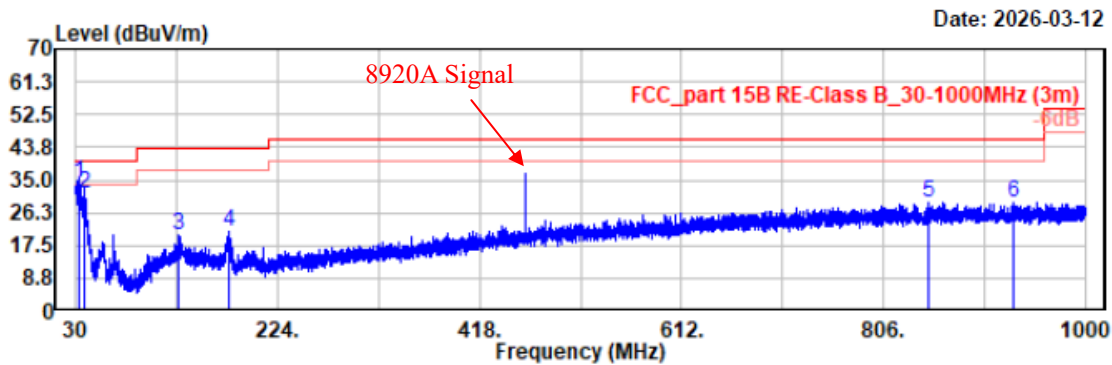


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.39	27.23	-5.68	21.55	40.00	18.45	Horizontal	Peak
175.89	32.16	-12.10	20.06	43.50	23.44	Horizontal	Peak
211.58	38.05	-12.66	25.39	43.50	18.11	Horizontal	Peak
219.83	39.84	-12.67	27.17	46.00	18.83	Horizontal	Peak
881.18	27.22	2.37	29.59	46.00	16.41	Horizontal	Peak
938.41	26.97	3.00	29.97	46.00	16.03	Horizontal	Peak

Project No.: 2607P33479E-EM-A1
Test Mode: Mode 1(462.625MHz)
EUT Model: MXT115P
Test distance: 3m

Temp/Humi/ATM: 22.6°C/46%/100.1kPa
Tested by: Apollo Luo
Power Source: DC 13.8V from DC source



Condition: PK RBW:100kHz VBW:300kHz SWT:auto

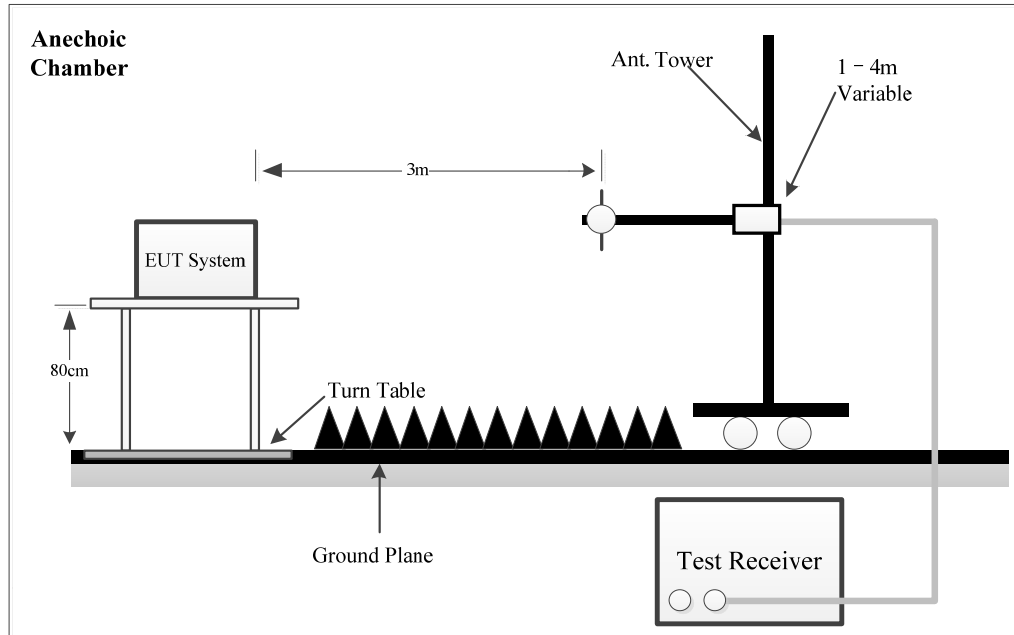
Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
33.88	41.52	-7.42	34.10	40.00	5.90	Vertical	QP
38.83	41.89	-10.75	31.14	40.00	8.86	Vertical	QP
128.94	30.17	-9.99	20.18	43.50	23.32	Vertical	Peak
178.02	33.30	-12.17	21.13	43.50	22.37	Vertical	Peak
849.26	27.17	1.93	29.10	46.00	16.90	Vertical	Peak
931.52	26.09	2.91	29.00	46.00	17.00	Vertical	Peak

FCC §15.109 - RADIATED EMISSION IN FREQUENCY ABOVE 1GHz

Applicable Standard

FCC §15.109

Test System Setup



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated above 1GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	VBW	Measurement	Detector
Above 1 GHz	1 MHz	3 MHz	PK	PK
	1 MHz	10 Hz	AV	PK

Test Procedure

Maximizing procedure was performed on the six (6) highest emissions to ensure that the EUT complied with all installation combinations.

If the maximum peak value of the emissions is below the average limit, the average value measurement will not need to be performed and only record the maximum peak measured value to meet the requirements.

Result & Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Amplifier Gain (dB)}$$

$$\text{Result (dB}\mu\text{V/m)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB/m)}$$

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V/m)} - \text{Result (dB}\mu\text{V/m)}$$

Test Data (Worst)

Project No.: 2607P33479E-EM-A1

Temp/Humi/ATM: 22.6°C/46%/100.1kPa

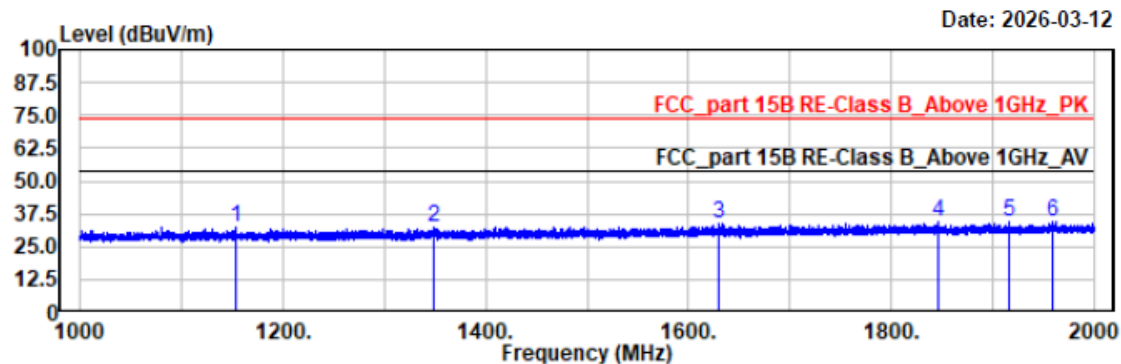
Test Mode: Mode 1(462.625MHz)

Tested by: Apollo Luo

EUT Model: MXT115P

Power Source: DC 13.8V from DC source

Test distance: 3m

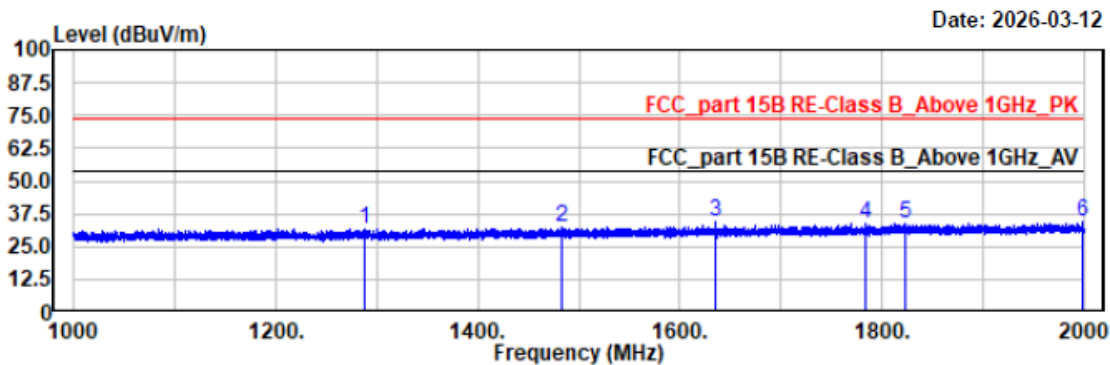


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1153.60	47.83	-15.30	32.53	74.00	41.47	horizontal	Peak
1348.10	47.29	-14.89	32.40	74.00	41.60	horizontal	Peak
1630.60	47.58	-13.86	33.72	74.00	40.28	horizontal	Peak
1845.80	47.25	-13.10	34.15	74.00	39.85	horizontal	Peak
1915.60	47.08	-12.90	34.18	74.00	39.82	horizontal	Peak
1959.50	47.42	-12.71	34.71	74.00	39.29	horizontal	Peak

Project No.: 2607P33479E-EM-A1
Test Mode: Mode 1(462.625MHz)
EUT Model: MXT115P
Test distance: 3m

Temp/Humi/ATM: 22.6°C/46%/100.1kPa
Tested by: Apollo Luo
Power Source: DC 13.8V from DC source



Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
1288.60	46.89	-15.03	31.86	74.00	42.14	vertical	Peak
1483.10	47.07	-14.43	32.64	74.00	41.36	vertical	Peak
1635.00	48.02	-13.85	34.17	74.00	39.83	vertical	Peak
1783.40	46.95	-13.32	33.63	74.00	40.37	vertical	Peak
1822.50	46.90	-13.16	33.74	74.00	40.26	vertical	Peak
1999.20	47.22	-12.55	34.67	74.00	39.33	vertical	Peak

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2607P33479E-RF-A1-EXP EUT EXTERNAL PHOTOGRAPHS and 2607P33479E-RF-A1-INP EUT INTERNAL PHOTOGRAPHS.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2607P33479E-EM-A1-TSP TEST SETUP PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk “★”.
2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.
3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95% confidence interval.
5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).
6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

******* END OF REPORT *******