

TEST REPORT**On behalf of****WUXI MOC TECHNOLOGY CO., LTD.****Product Name: Remote Control****Model No.: MRC01/MRC02****FCC ID: 2BT4P-MRCA**

Prepared For: WUXI MOC TECHNOLOGY CO., LTD.
No.208-9 Xixie Rd., Hongshan Street , Xinwu District,
Wuxi, Jiangsu, China

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Date of Test : 2026.01.29-05.25
Date of Report : 2026.05.28

The statement is based on a single evaluation of one sample of the above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab logo. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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TEST REPORT

Applicant : WUXI MOC TECHNOLOGY CO., LTD.
EUT Description : Remote Control
(A) Model No. : MRC01/MRC02
(B) Power Supply : DC3V from Battery
(C) Test Voltage : DC3V from Battery

Test Procedure Used:

*FCC RULES AND REGULATIONS PART 15 SUBPART C
AND ANSI C63.10-2020*

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report also shows that the EUT (M/N: Refer to Sec2.1), which was tested is technically compliance with the FCC limits.

This report applies to above tested Sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

Date of Test : 2026.01.26-05.28 Date of Report : 2026.05.28

Producer : Huimin Yan
HUIMIN YAN / Assistant

Review : Jareylu
JAREY LU / Deputy Assistant Manager


For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Kamp Chen
Authorized Signature(s) KAMP CHEN / Manager

1 SUMMARY OF STANDARDS AND RESULTS

1.1 Description of Standards and Results

The result is determined according to the decision rules of customer selection in the ASC-403 application service form.

1. According to IEC GUIDE 115 Procedure 2 and ILAC-G8, the uncertainties value is not used in determining the PASS/FAIL results.

2. If the required specification or standard already contains the decision rules, it will be carried out in accordance with the regulations or standard documents or the requirements of the competent units. If the required specification or standard does not contain a decision rule, the same paragraph 1.

3. If your company has a required decision rule, it will be implemented in accordance with the requirements and ISO/IEC Guide 98-4 specifications.

The EUT have been tested according to the applicable standards as referenced below:

Description / Test Item	Test Standard	Results	Meets Limit
EMISSION			
Conducted Emission	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	N/A	15.207 15.107(b)
Radiated Emission	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.209(a) 15.205(a)(c)
Periodic Operation Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.231(a)
Filed Strength of Fundamental Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.231(b)
Filed Strength of Spurious Emissions Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.231(b) 15.209(a)
Bandwidth Emissions Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.231(c)
Frequency Tolerance Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	N/A ^{Note2}	15.231(d)
Alternate Periodic Operation Measurement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	N/A	15.231(e)
Antenna Requirement	FCC RULES AND REGULATIONS PART 15 SUBPART C AND ANSI C63.10-2020	Pass	15.203

Note1: N/A is an abbreviation for Not Applicable.

Note2: Only applicable for devices operating with the frequency band 40.66-40.70MHz.

2 GENERAL INFORMATION

2.1 Description of Equipment Under Test

Description : Remote Control

Type of EUT : ☒ Production ☐ Pre-product ☐ Pro-type

Model Number : MRC01/MRC02

Note#1 : The only difference is the plastic casing structure; the internal motherboard components and circuit design are exactly the same. The manufacturer states that the above differences do not affect RF and EMC performance.

Test Model : MRC01

Radio Tech : TX 433.92MHz.

Antenna Info. : Antenna Type: PCB Antenna
Antenna Gain: -1.74 dBi.

Note : The Antenna information was provided by the customer.

Applicant : WUXI MOC TECHNOLOGY CO., LTD.
No.208-9 Xixie Rd., Hongshan Street , Xinwu District,
Wuxi, Jiangsu, China

2.2 Test Information

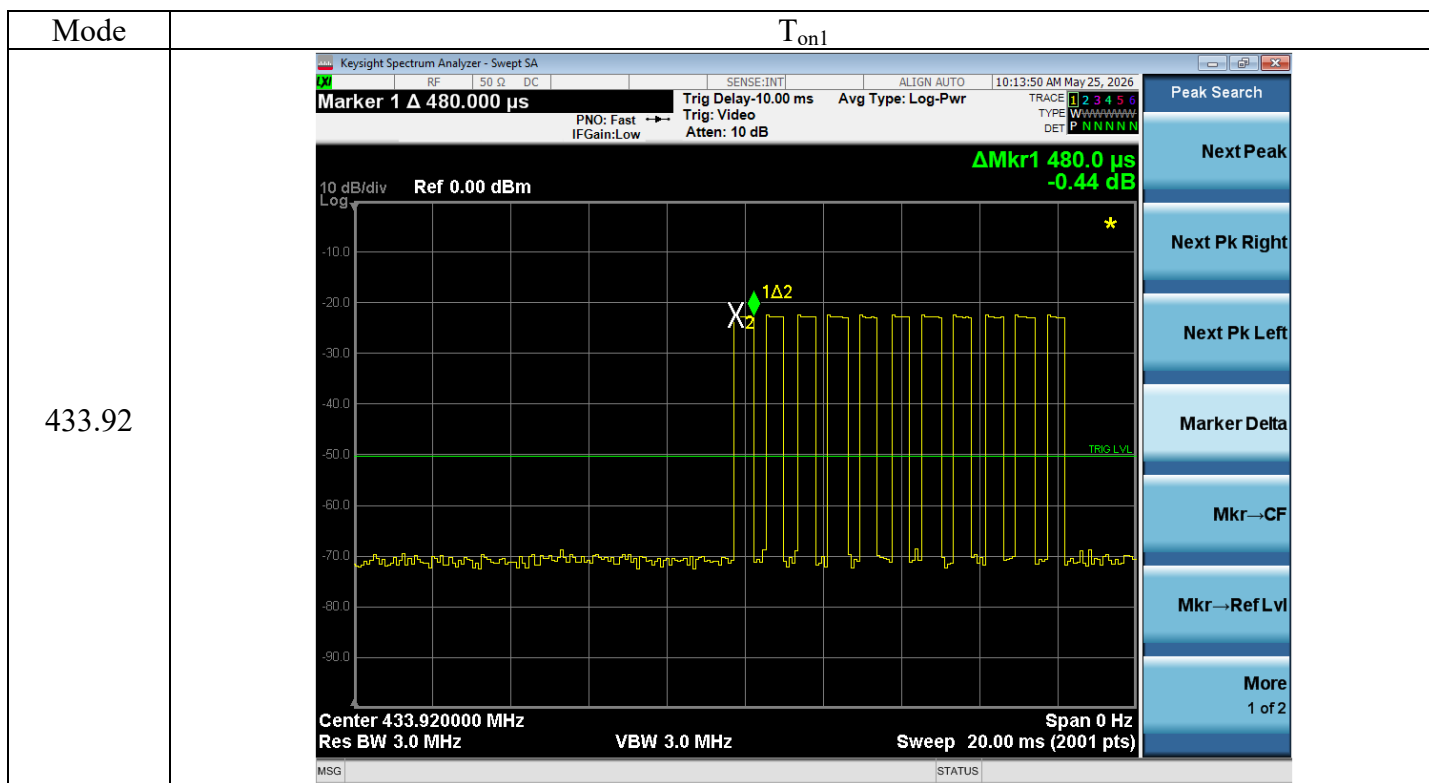
The EUT was one transmitter that press the button to make EUT work on test mode.

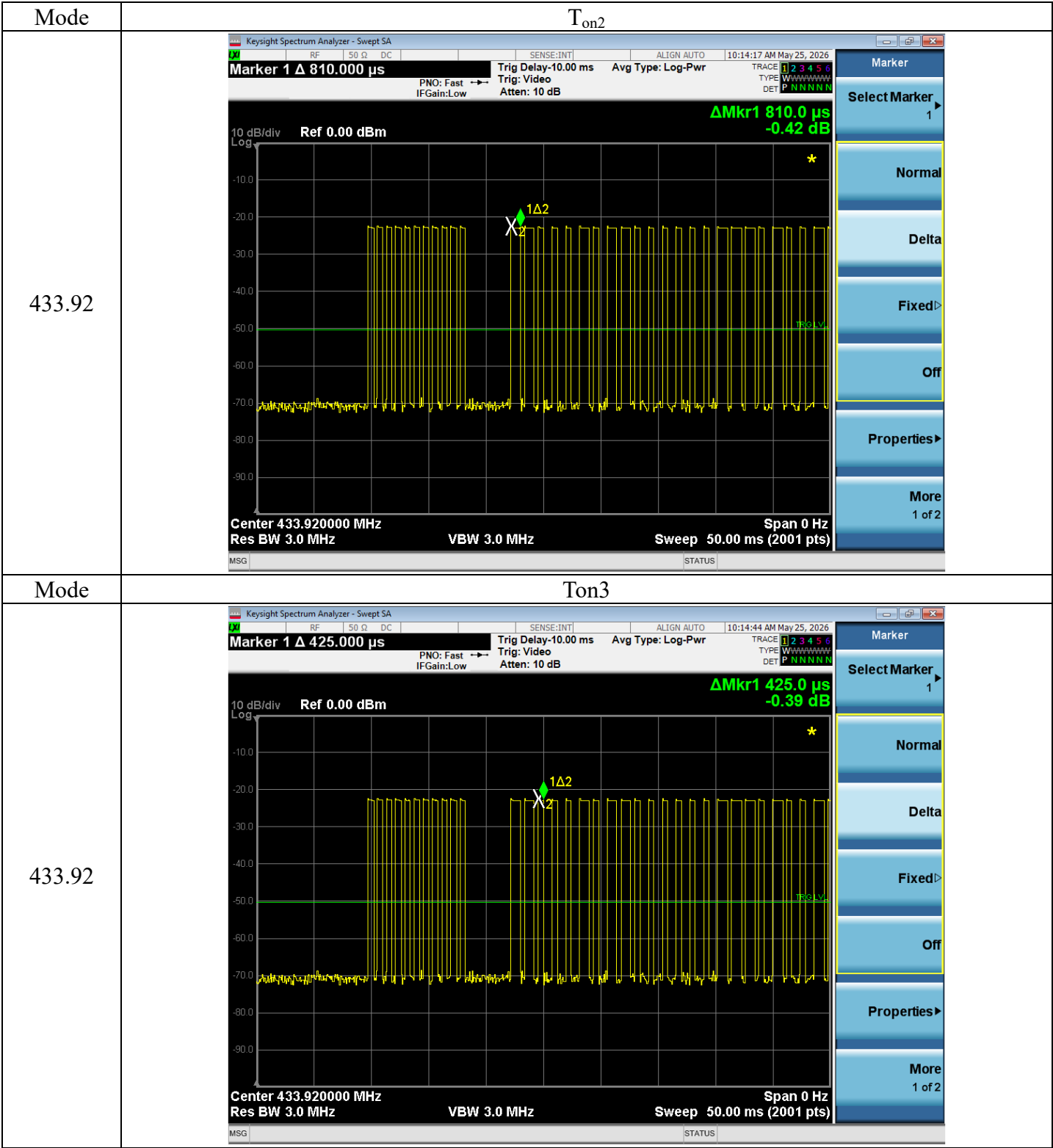
Mode	Frequency (MHz)
TX	433.92

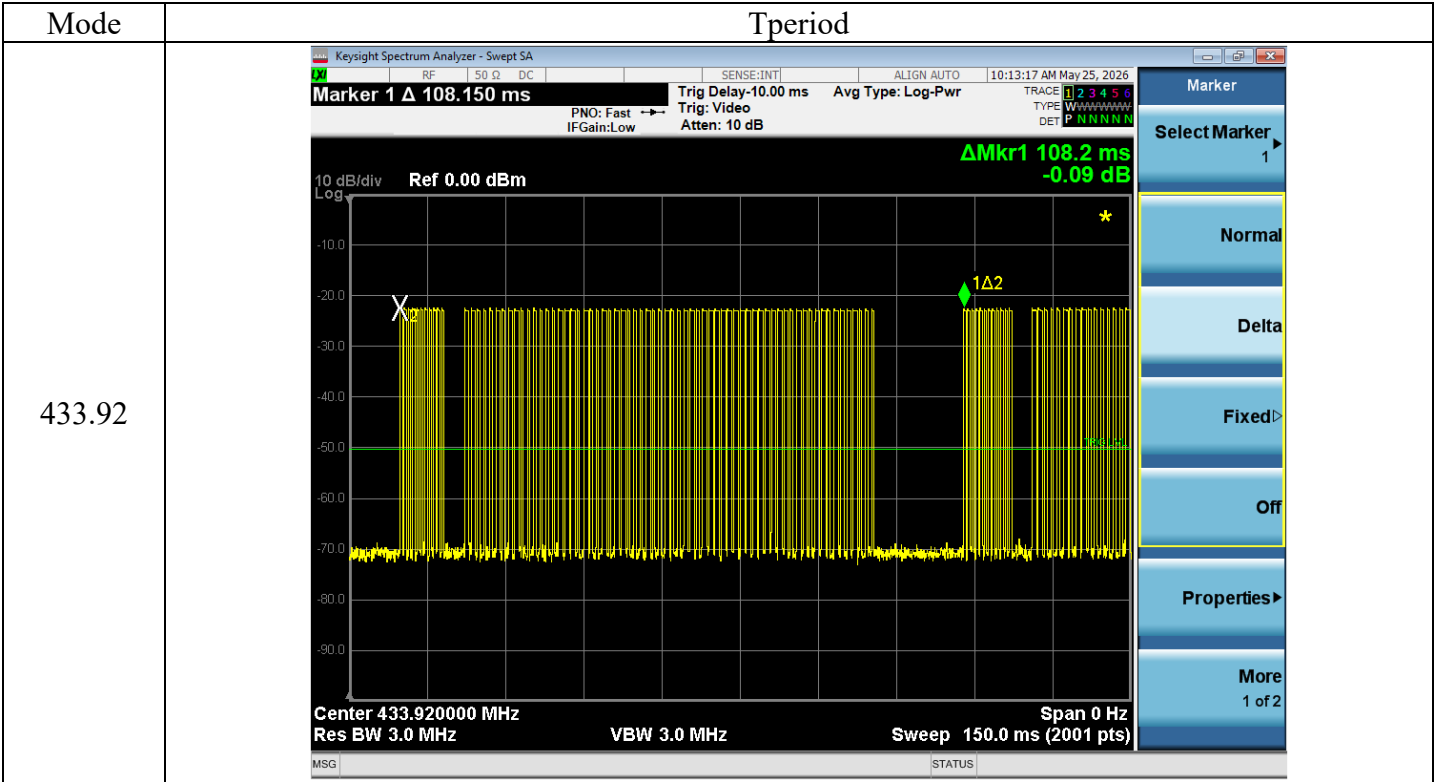
2.3 Duty Cycle Check

Mode	T _{on1} Duration (ms)	Number of T _{on1}	T _{on2} Duration (ms)	Number of T _{on2}	T _{on3} Duration (ms)	Number of T _{on3}	T _{on} Duration (ms)
433.92	0.48	24	0.81	35	0.425	18	47.52

Mode	T _{on} Duration (ms)	Transmission Period (ms)	Duty Cycle (%)	DCCF (dB)
433.92	47.52	108.2	43.9	7.15







Note: According to the Manufacturer, This Duty Cycle meets the shipped typical specification.

2.4 Sample Description

Test Item	Model Number	Sample Number	Date of receipted
All Test	MRC01	E20260109-05-01/01	2026.01.09

2.5 Supported equipment

N/A

2.6 Description of Test Facility

Name of Firm	: Audix Technology (Shanghai) Co., Ltd.
Site Location	: 3F, Building 34, No. 680 Guiping Rd., Caohejing, Hi-Tech Park, Shanghai 200233, China
Accredited by NVLAP, Lab Code	: 200371-0
FCC Designation Number	: CN5027
Test Firm Registration Number	: 954668

3 RADIATED EMISSION AND FILED STRENGTH OF SPURIOUS EMISSIONS

3.1 Test Equipment

The following test equipment are used during the radiated emission test in a semi-anechoic chamber:

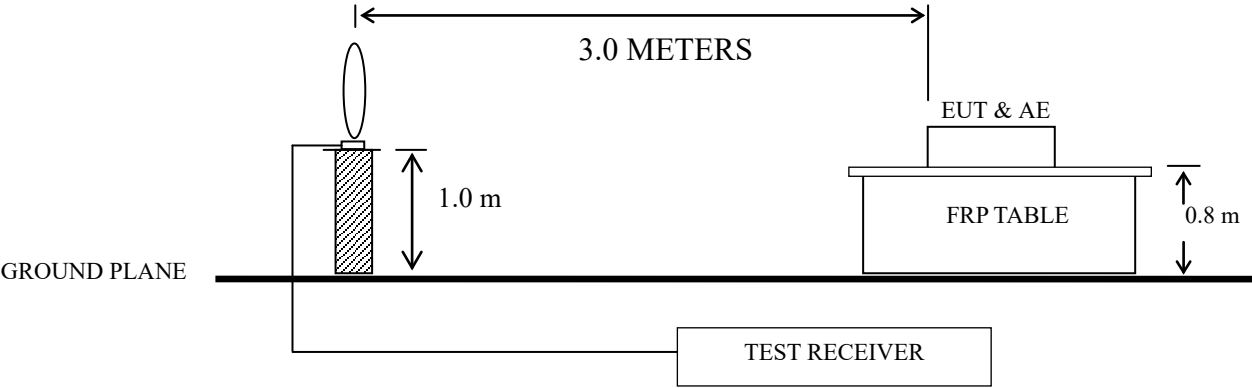
Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Preamplifier	Agilent	8447D	2944A10548	2026.02.24	1 Year
2.	Preamplifier	HP	8449B	3008A00864	2026.02.24	1 Year
3.	EXA Signal Analyzer	Agilent	N9010A	MY52221182	2025.07.03	1 Year
4.	Test Receiver	R&S	ESCI	101303	2026.02.24	1 Year
5.	Loop Antenna	Schaffner	HLA6120	1193	2025.08.04	1 Year
6.	Bilog Antenna+6dB Attenuator	Schwarzbeck	VULB 9168+EMCI-N-6-06	708+AT-N0638	2026.01.15	1 Year
7.	Horn Antenna	EMCO	3115	96074878	2025.08.13	1 Year
8.	RE Cable-5m	TIMES	SFT205-SMNM-5.0M	20250211-0001	2026.02.24	1 Year
9.	RE Cable-3m+Coaxial Switch	TIMES+ANRI TSU	LMR400-NMNM-3.0M+MP59B	20250211-0001+6200655086	2026.02.24	1 Year
10.	RE Cable-1m	TIMES	LMR400UF-NMNM-1.0M	20260303-001	2026.02.24	1 Year
11.	RE Cable-11m	TIMES	LMR400UF-NMNM-11.0M	20260303-001	2026.02.24	1 Year
12.	Software	Audix	e3	e3.v9.210616	--	--

3.2 Block Diagram of Test Setup

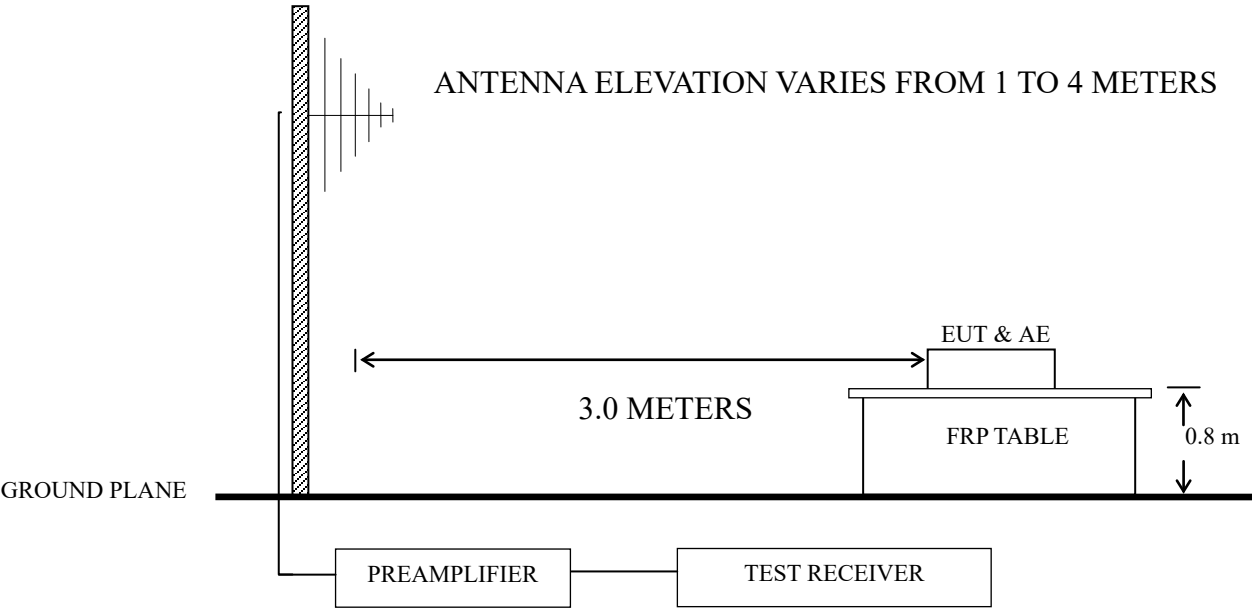
3.2.1 EUT & Peripherals



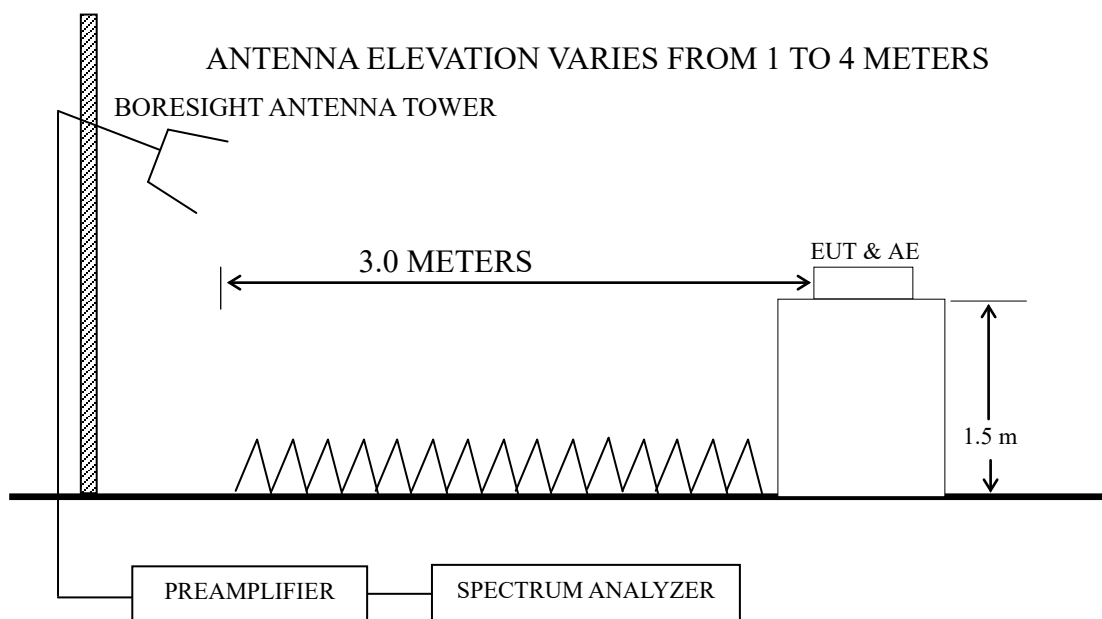
3.2.2 9kHz to 30MHz



3.2.3 Below 1GHz



3.2.4 Above 1GHz



3.3 Radiated Emission Limit

§15.209:

Frequency (MHz)	Distance (m)	Field strength limits (μV/m)	
		(μV/m)	dB(μV/m)
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
NOTE 1 - Emission Level dB (μV/m) = 20 log Emission Level (μV/m) NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system. NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz. NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT			

§15.205(a):

Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090–0.110	16.42–16.423	399.9–410	4.5–5.15
¹ 0.495–0.505	16.69475–16.69525	608–614	5.35–5.46
2.1735–2.1905	16.80425–16.80475	960–1240	7.25–7.75
4.125–4.128	25.5–25.67	1300–1427	8.025–8.5
4.17725–4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725–4.20775	73–74.6	1645.5–1646.5	9.3–9.5
6.215–6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775–6.26825	108–121.94	1718.8–1722.2	13.25–13.4
6.31175–6.31225	123–138	2200–2300	14.47–14.5
8.291–8.294	149.9–150.05	2310–2390	15.35–16.2
8.362–8.366	156.52475–156.52525	2483.5–2500	17.7–21.4
8.37625–8.38675	156.7–156.9	2690–2900	22.01–23.12
8.41425–8.41475	162.0125–167.17	3260–3267	23.6–24.0
12.29–12.293	167.72–173.2	3332–3339	31.2–31.8
12.51975–12.52025	240–285	3345.8–3358	36.43–36.5
12.57675–12.57725	322–335.4	3600–4400	(²)
13.36–13.41			

§15.231(b):

Fundamental frequency (MHz)	Distance (m)	Field strength of spurious emissions limits (μV/m)	
		(μV/m)	dB(μV/m)
40.66 ~ 40.70	3	225	47.0
70 ~ 130	3	125	41.9
130 ~ 174	3	125 to 375	41.9 to 51.5
174 ~ 260	3	375	51.5
260 ~ 470	3	375 to 1250	51.5 to 61.9
Above 470	3	1250	61.9
NOTE 1 - Emission Level dB (μV/m) = 20 log Emission Level (μV/m) NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system. NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz. NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT. NOTE 6 - The limits on the field strength of the spurious emissions in the above table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in § 15.209, whichever limit permits a higher field strength.			

3.4 Test Configuration

The EUT (listed in Sec.2.1) and the simulators (listed in Sec.2.2) were installed as shown on Sec.3.2 to meet FCC requirements and operating in a manner that tends to maximize its emission level in a normal application.

3.5 Operating Condition of EUT

3.5.1 Setup the EUT as shown in Sec. 3.2.

3.5.2 Turn EUT on.

3.5.3 According to section 2.2 to select the test mode, then test.

3.5.4 Repeat step 3.5.3, until the test of all modes finished.

3.6 Test Procedures

Radiated emission test applies to harmonics/spurs that fall in the restricted bands listed in Section 15.205. The maximum permitted average field strength is listed in Section 15.209. A pre-amp is necessary for this measurement. For measurement above 1 GHz, set RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. If the emission is pulsed, modify the unit for continuous operation; use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation.

The EUT was placed on a turntable. Below 1 GHz, the table height is 80 cm above the reference ground plane. Above 1 GHz, the table height is 1.5 m. The turntable rotated 360 degrees to determine the position of the maximum emission level. The EUT was set 3 meters away from the receiving antenna, which was mounted on an antenna tower. The antenna moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (Calibrated Bilog Antenna) or Horn antenna was used as receiving antenna. Both horizontal and vertical polarizations of the antenna were set on measurement. In order to find the maximum emission, all of the interference cables were manipulated according to ANSI C63.10-2020 requirements during radiated emission test.

The bandwidth of Test Receiver R&S ESCI was set at 200Hz from 9kHz to 150Hz, set 9kHz from 150kHz to 30MHz, and set 120 kHz from 30MHz to 1000MHz.

The bandwidth of Agilent N9010A was set at 1MHz for above 1GHz.

The frequency range from 30 MHz to 6 GHz (Up to 10th harmonics from fundamental frequency) was checked.

According to the ANSI C63.10 section 7.5 (Procedure for determining the average value of pulsed emissions), The average field strength may be found by measuring the peak pulse amplitude (in log equivalent units) and determining the duty cycle correction factor (in dB) associated with the pulse modulation as shown in Equation:

$$\delta(\text{dB}) = 20\log(\Delta)$$

where

δ is the duty cycle correction factor (dB)

Δ is the duty cycle (dimensionless)

So, For Pulse Emissions:

The Average field strength = Peak field strength – DCCF(dB).

The DCCF refer to the section 2.3.

All the test results are listed in Sec.3.7.

3.7 Test Results

<PASS>

The frequency and amplitude of the highest radiated emission relative the limit is reported. All the emissions not reported below are too low against the FCC limit.

Frequency range: below 1GHz (with restricted bands)

No.	Operation	Model Number	Mode	Frequency (MHz)	Data Page
1.	Transmitting	MRC01	TX	433.92	P16-17

Frequency range: above 1GHz

No.	Operation	Model Number	Mode	Frequency (MHz)	Data Page
1.	Transmitting	MRC01	TX	433.92	P18-19

NOTE 1 – Emission Level (dB μ V/m) = Read Level (dB μ V) + Antenna Factor (dB/m) + Cable Loss (dB) - Preamplifier Factor (dB)

Margin (dB) = Limits (dB μ V/m) - Emission Level (dB μ V/m).

NOTE 2 – “QP” means “Quasi-Peak” values.

NOTE 3 – “Spurious”/ “SpuriousPK” means the Average/Peak field strength of the spurious emissions based on the fundamental frequency of the intentional radiator, that apply to the table on section 15.231(b). If the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.

NOTE 4 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 5 – The emission levels which not reported are too low against the official limit.

NOTE 6 – The emission levels recorded below is data of EUT configured in Lying direction, for this direction was the maximum emission direction during the test. The data of Side & Standing direction are too low against the official limit to be reported.

NOTE 7 – All reading are Quasi-Peak values below or equal to 1GHz, Peak and Average values above 1GHz.

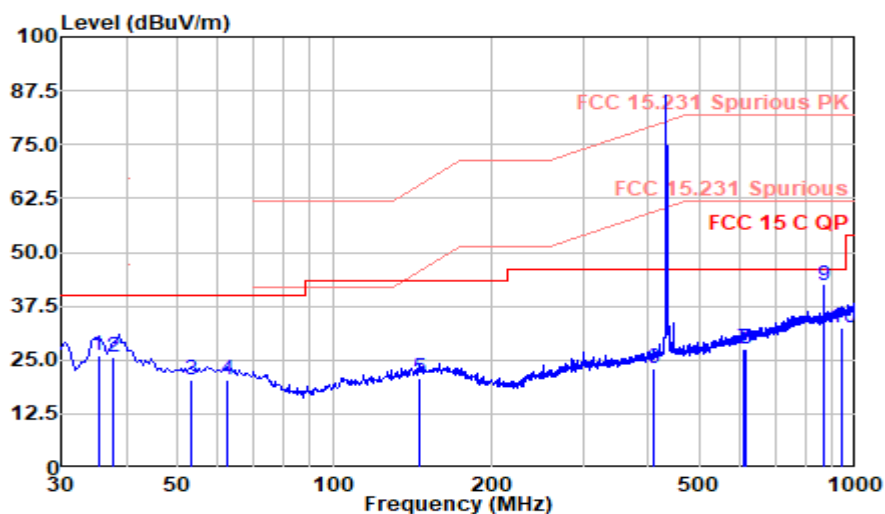
For above 1GHz test, if the peak measured value complies with the average limit, it is unnecessary to perform an average measurement.

NOTE 8 – The frequency range 399.9-410MHz & 608-614MHz were tested for Restricted bands.

NOTE 9 – For the Emission 9kHz to 30MHz, the emissions were too low against to the limit.

Radiated emission < 1GHz

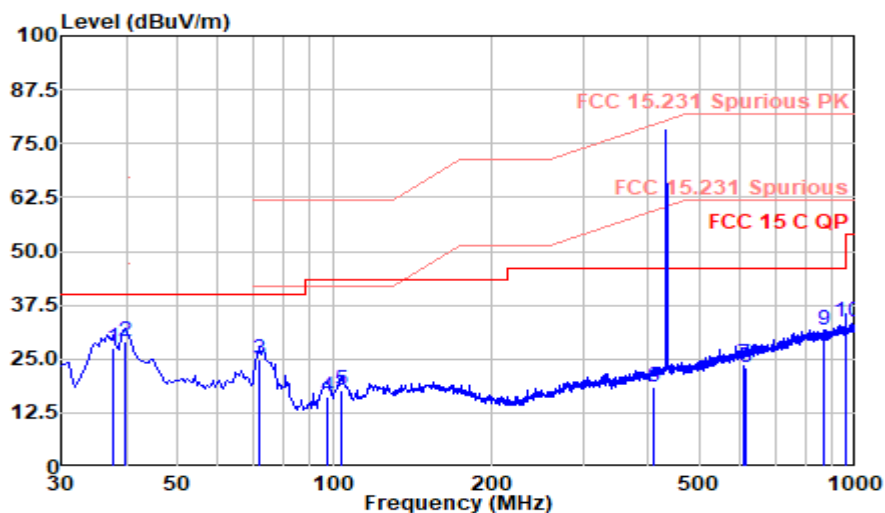
Test Date:	2026.05.24	Temp./Hum.:	22°C/51%RH	Test By:	JareyLu
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Mode: TX 433.92MHz

Polarization at Horizontal

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
35.335	35.40	19.47	0.58	29.57	25.88	40.00	14.12	QP
37.760	35.12	19.48	0.59	29.55	25.64	40.00	14.36	QP
53.280	29.56	19.77	0.65	29.49	20.50	40.00	19.50	QP
62.495	29.84	19.35	0.67	29.45	20.41	40.00	19.59	QP
145.430	29.68	19.14	0.91	29.06	20.68	43.50	22.82	QP
410.000	28.54	21.80	1.57	28.86	23.05	46.00	22.95	QP
608.000	28.59	25.82	1.91	28.85	27.47	46.00	18.53	QP
613.940	28.61	25.98	1.91	28.81	27.69	46.00	18.31	QP
868.080	38.96	28.54	2.32	27.69	42.12	81.90	39.78	Spurious PK
936.950	27.54	29.70	2.41	27.35	32.30	46.00	13.70	QP

Mode: TX 433.92MHz



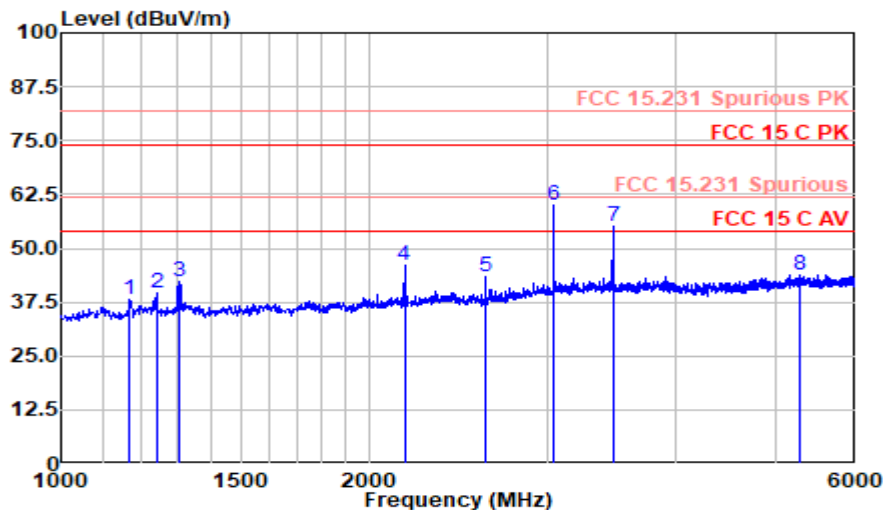
Polarization at Vertical

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
37.760	37.14	19.48	0.59	29.55	27.66	40.00	12.34	QP
39.700	38.72	19.33	0.60	29.55	29.10	40.00	10.90	QP
72.195	35.62	17.84	0.70	29.42	24.74	40.00	15.26	QP
97.415	29.56	15.34	0.79	29.49	16.21	43.50	27.29	QP
103.235	30.25	16.12	0.81	29.48	17.70	43.50	25.80	QP
410.000	24.00	21.80	1.57	28.86	18.51	46.00	27.49	QP
608.000	25.06	25.82	1.91	28.85	23.93	46.00	22.07	QP
614.000	23.81	25.98	1.91	28.81	22.89	46.00	23.11	QP
868.080	28.67	28.54	2.32	27.69	31.83	81.90	50.07	Spurious PK
959.745	28.71	29.51	2.45	27.16	33.50	46.00	12.50	QP

Radiated Emission > 1GHz

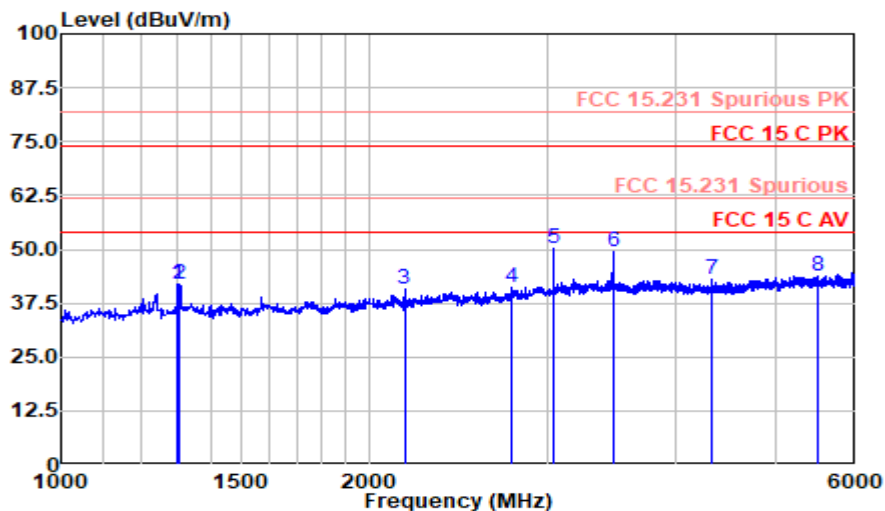
Test Date:	2025.05.24	Temp./Hum.:	22°C/51%RH	Test By:	JareyLu
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Mode: TX 433.92MHz



Polarization at Horizontal

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
1167.875	49.31	23.92	2.10	37.17	38.16	74.00	35.84	Peak
1240.125	50.11	24.46	2.17	37.11	39.63	74.00	34.37	Peak
1306.000	52.14	24.81	2.23	37.07	42.11	74.00	31.89	Peak
2168.750	52.91	26.80	2.82	36.44	46.08	81.90	35.82	Spurious PK
2602.250	48.61	27.71	3.04	35.86	43.50	81.90	38.40	Spurious PK
3035.750	62.73	29.52	3.27	35.43	60.08	81.90	21.82	Spurious PK
3471.375	56.73	30.60	3.56	35.76	55.14	81.90	26.76	Spurious PK
5281.875	42.82	33.06	4.54	36.59	43.84	74.00	30.16	Peak

Mode: TX 433.92MHz**Polarization at Vertical**

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
1299.625	51.84	24.80	2.22	37.07	41.79	74.00	32.21	Peak
1303.875	51.77	24.81	2.22	37.07	41.73	81.90	40.17	Spurious PK
2168.750	47.62	26.80	2.82	36.44	40.79	81.90	41.11	Spurious PK
2755.250	45.60	28.13	3.12	35.67	41.18	74.00	32.82	Peak
3035.750	52.91	29.52	3.27	35.43	50.27	81.90	31.63	Spurious PK
3471.375	51.12	30.60	3.56	35.76	49.52	81.90	32.38	Spurious PK
4327.750	43.74	31.54	4.01	36.24	43.05	74.00	30.95	Peak
5496.500	42.65	33.20	4.67	36.66	43.86	74.00	30.14	Peak

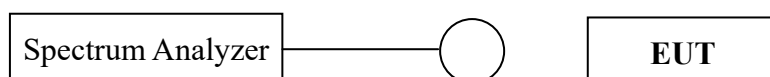
4 PERIODIC OPERATION MEASUREMENT

4.1 Test Equipment

The following test equipment was used during the Emission Bandwidth measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A	MY52221182	2025.07.03	1 Year

4.2 Block Diagram of Test Setup



4.3 Specification Limits (§15.231(a))

§15.231:

(a) The provisions of this section are restricted to periodic operation within the band 40.66–40.70 MHz and above 70 MHz. Except as shown in paragraph (e) of this section, the intentional radiator is restricted to the transmission of a control signal such as those used with alarm systems, door openers, remote switches, etc. Continuous transmissions, voice, video and the radio control of toys are not permitted. Data is permitted to be sent with a control signal. The following conditions shall be met to comply with the provisions for this periodic operation:

(1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

(2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.

(3) Periodic transmissions at regular predetermined intervals are not permitted. However, polling or supervision transmissions, including data, to determine system integrity of transmitters used in security or safety applications are allowed if the total duration of transmissions does not exceed more than two seconds per hour for each transmitter. There is no limit on the number of individual transmissions, provided the total transmission time does not exceed two seconds per hour.

(4) Intentional radiators which are employed for radio control purposes during emergencies involving fire, security, and safety of life, when activated to signal an alarm, may operate during the pendency of the alarm condition

(5) Transmission of set-up information for security systems may exceed the transmission duration limits in paragraphs (a)(1) and (a)(2) of this section, provided such transmissions are under the control of a professional installer and do not exceed ten seconds after a manually operated switch is released or a transmitter is activated automatically. Such set-up information may include data.

4.4 Operating Condition of EUT

The software as section 2.3 was used to enable the EUT to change the test mode one by one.

4.5 Test Procedure

For evaluation of periodic operation characteristics, the following procedure may be used:

- a) Trigger the spectrum analyzer sweep on the RF waveform of the unlicensed wireless device.
- b) Set the spectrum analyzer sweep time greater than the specified time for periodic operation.
- c) Manually activate and deactivate the unlicensed wireless device and confirm that it ceases transmission within the specified time of deactivation.
- d) Document the test results.
- e) Verify and document that periodic transmissions at regular predetermined intervals do not exist, except where regulatory requirements allow polling or supervision transmissions, including data, to determine system integrity. Compliance is addressed by an attestation supported by the equipment theory of operation.

The test procedure is defined in ANSI C63.10-2020 (the 7.4 Measurement Procedure “Procedure for determining compliance of unlicensed wireless devices having periodic operation” was used).

4.6 Test Results

PASSED.

All the test results are attached in next pages.

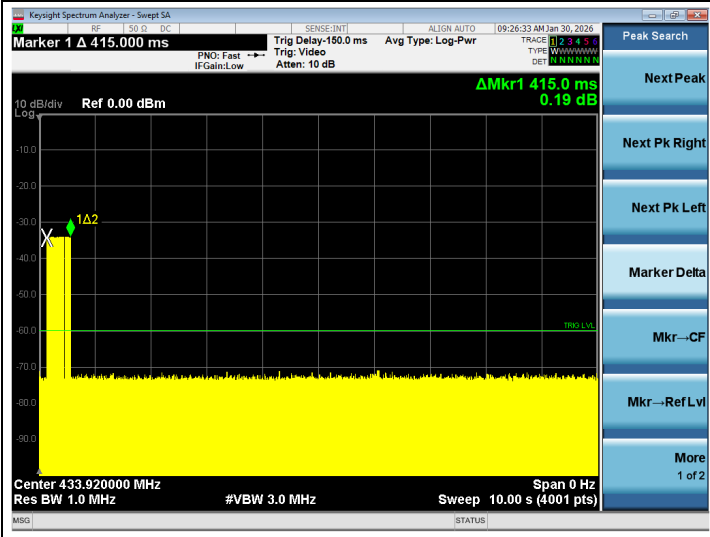
Test Date:	2026.01.29	Temp./Hum.:	23°C/51%RH	Test By:	JareyLu
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4.6.1 Apply to Section 15.231(a)(1):

The EUT transmit by press the button to active radio signal.
The deactivation time after button released:

Model Number	Mode	Frequency (MHz)	Deactivation time (s)	Limit
MRC01	TX	433.92	0.415	≤5s

TX 433.92MHz



4.6.2 Apply to Section 15.231(a)(2):

The EUT was not one automatically activated transmitter.
This requirement was Not Applicable.

4.6.3 Apply to Section 15.231(a)(3):

The EUT was not one transmitter that periodic transmissions at regular predetermined intervals.
This requirement was Not Applicable.

4.6.4 Apply to Section 15.231(a)(4):

The EUT was not one transmitter that can activate to signal an alarm.
This requirement was Not Applicable.

4.6.5 Apply to Section 15.231(a)(5):

The EUT meet section 15.231(a)(1) and 15.231(a)(2).
This requirement was Not Applicable.

5 FILED STRENGTH OF FUNDAMENTAL MEASUREMENT

5.1 Test Equipment

The Same as Section. 3.1.

5.2 Block Diagram of Test Setup

The Same as Section. 3.2.

5.3 Specification Limits ((§15.231(b))

§15.231(b):

Fundamental frequency (MHz)	Distance (m)	Field strength of fundamental limits (μV/m)	
		(μV/m)	dB(μV/m)
40.66 ~ 40.70	3	2250	67.0
70 ~ 130	3	1250	61.9
130 ~ 174	3	1250 to 3750	61.9 to 71.5
174 ~ 260	3	3750	71.5
260 ~ 470	3	3750 to 12500	71.5 to 81.9
Above 470	3	12500	81.9
NOTE 1 - Emission Level dB (μV/m) = 20 log Emission Level (μV/m) NOTE 2 - The tighter limit applies at the band edges. NOTE 3 - Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system. NOTE 4 - The limits shown are based on Quasi-peak value detector below or equal to 1GHz and Average value detector above 1GHz. NOTE 5 - Above 1 GHz, the limit on peak emission is 20 dB above the maximum permitted average emission limit applicable to the EUT.			

5.4 Operating Condition of EUT

The software as section 2.2 was used to enable the EUT to change the test mode one by one.

5.5 Test Procedure

The Same as Section. 3.6

5.6 Test Results

<PASS>

Filed Strength of Fundamental:

No.	Operation	Model Number	Mode	Frequency (MHz)	Data Page
1.	Transmitting	MRC01	TX	433.92	P26-27

NOTE 1 – Emission Level (dBμV/m) = Read Level (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Preamplifier Factor (dB)

Margin (dB) = Limits (dBμV/m) - Emission Level (dBμV/m).

NOTE 2 – “QP” means “Quasi-Peak” values.

NOTE 3 – “Fundamental”/ “Fundamental Peak” means the Average/Peak field strength based on the fundamental frequency of the intentional radiator, that apply to the table on section 15.231(b).

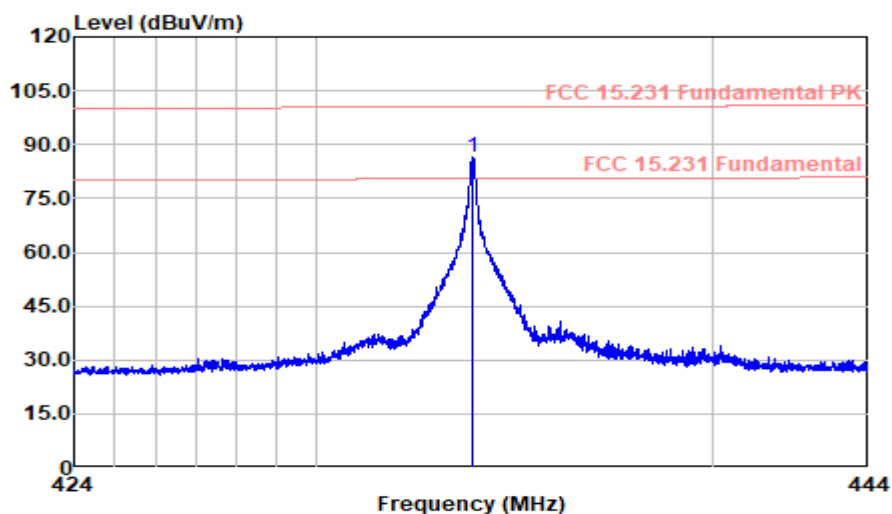
NOTE 4 – 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

NOTE 5 – The emission levels recorded below is data of EUT configured in Lying direction, for this direction was the maximum emission direction during the test. The data of Side & Standing direction are too low against the official limit to be reported.

Filed Strength of Fundamental

Test Date:	2026.05.24	Temp./Hum.:	22°C/51%RH	Test By:	JareyLu
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Mode: TX 433.92MHz

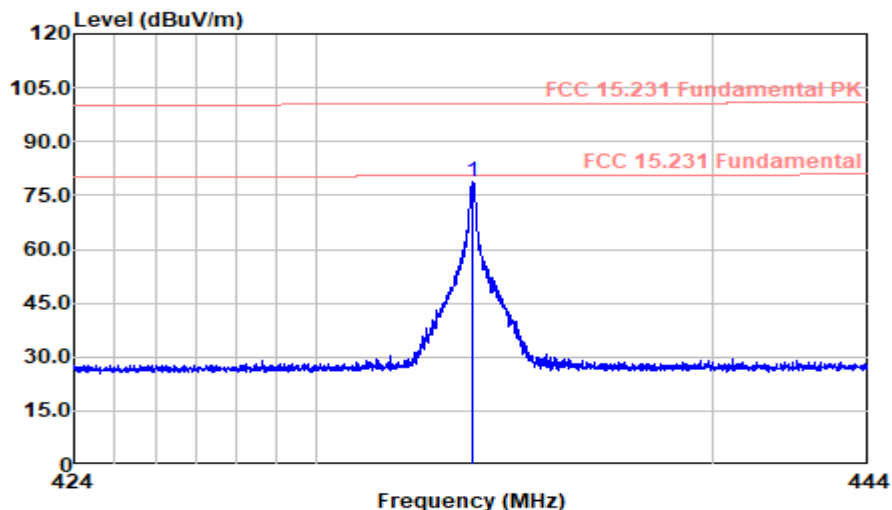


Polarization at Horizontal

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
433.920	91.11	22.68	1.62	29.01	86.40	100.50	14.10	Fundamental PK

The Average field strength of Pulsed Emissions:

Frequency (MHz)	Peak filed strength Emission Level dB (μV)	DCCF (dB)	Average filed strength Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
433.920	86.4	7.15	79.25	80.5	1.25	Fundamental Average

Mode: TX 433.92MHz**Polarization at Vertical**

Frequency (MHz)	Meter Reading dB (μV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
433.920	83.63	22.68	1.62	29.01	78.93	100.50	21.57	Fundamental PK

The Average field strength of Pulsed Emissions:

Frequency (MHz)	Peak field strength Emission Level dB (μV)	DCCF (dB)	Average field strength Emission Level dB (μV/m)	Limits dB (μV/m)	Margin (dB)	Remark
433.920	78.93	7.15	71.78	80.5	8.72	Fundamental Average

6 BANDWIDTH EMISSIONS MEASUREMENT

6.1 Test Equipment

The Same as Section. 4.1.

6.2 Block Diagram of Test Setup

The Same as Section. 4.2.

6.3 Specification Limits (§15.231(c))

§15.231(c):

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

6.4 Operating Condition of EUT

The software as section 2.2 was used to enable the EUT to change the test mode one by one.

6.5 Test Procedure

The bandwidth of the fundamental frequency was measure by spectrum analyzer with settings: RBW = 1% to 5% of the 20 dB Bandwidth, VBW approximately three times of RBW. Set detection mode to peak and trace mode to max hold. Set the “x dB” function to “-20 dB” on Spectrum Analyzer to measure 20 dB Bandwidth, record it.

The 20 dB bandwidth is defined as the total spectrum the power of which is lower than peak power minus 20 dB .

The test procedure is defined in ANSI C63.10-2020 (the 6.9.2 Measurement Procedure “ Occupied bandwidth—relative measurement procedure” was used).

6.6 Test Results

PASSED.

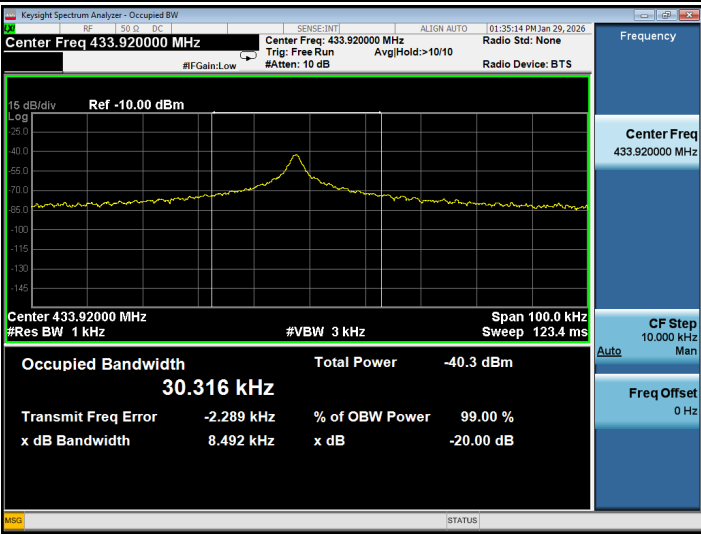
The test data was attached in the next pages.

Test Date:	2026.01.29	Temp./Hum.:	23°C/51%RH	Test By:	JareyLu
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Model Number	Mode	Frequency (MHz)	20 dB Bandwidth (kHz)	Limit (kHz)
MRC01	TX	433.92	8.492	≤1084.8

Note: The center of Fundamental frequency was 433.92MHz, the Limit of bandwidth emissions = $0.25\% \times 433.92\text{MHz} = 1.0848\text{MHz} = 1084.8\text{kHz}$

TX 433.92MHz



7 ANTENNA REQUIREMENT

7.1 Specification Limits (§15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

7.2 Result

According to KDB 353028 D1, the following describes the three ways that can be used to demonstrate compliance to Section 15.203:

- a) Antenna permanently attached.
- b) Unique (non-standard) antenna connector.
- c) Professional installation.

For this product, the antenna is:

- ☒ Antenna permanently attached
- ☐ Unique (non-standard) antenna connector
- ☐ Professional installation
- ☐ not meet any of ways list above

that

- ☒ compliant
- ☐ not compliant

with the requirement of Section 15.203.

8 DEVIATION TO TEST SPECIFICATIONS

None.

9 MEASUREMENT UNCERTAINTY LIST

The measurement uncertainty was estimated for test on the EUT according to CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage of K=2.

The uncertainties value is not used in determining the PASS/FAIL results.

Test Items/Facilities	Frequency/Equipment/Unit	Uncertainty
Conducted Emission No.1 Shielded Room	9kHz~150kHz	±3.1 dB
	150kHz~30MHz	±2.6 dB
Conducted Emission No.3 Shielded Room	9kHz~150kHz	±3.1 dB
	150kHz~30MHz	±2.6 dB
Radiated Emission	30MHz~200MHz, Horizontal	±3.8 dB
	30MHz~200MHz, Vertical	±4.1 dB
	200MHz~1000MHz, Horizontal	±3.6 dB
	200MHz~1000MHz, Vertical	±5.1 dB
	1GHz~6GHz	±5.3 dB
	6GHz~18GHz	±5.3 dB
	18GHz~40GHz	±3.5 dB
Output Power Test	50MHz~18GHz	0.77 dB
Power Density Test	9kHz~6GHz	1.08 dB
RF Frequency Test	9kHz~40GHz	6×10^{-4}
Bandwidth Test	9kHz~6GHz	1.5×10^{-3}
RF Radiated Power Test	30MHz~1000MHz	3.06 dB
Conducted Output Power Test	50MHz~18GHz	0.83 dB
AC Voltage(<10kHz) Test	120V~230V	0.04 %
DC Power Test	0V~30V	0.4 %
Temperature	-40°C~+100°C	0.52 °C
Humidity	30%~95%	2.6 %

-END OF TEST REPORT-