intertek
Total Quality. Assured.

Rollease Acmeda Inc

RF TEST REPORT

Report Type:
FCC Part 15.231 & ISED RSS-210 RF report

Model:
MT02-0101-067029, MT02-0101-067030

REPORT NUMBER:
2605B0467SHA-001

ISSUE DATE:
Jun 2, 2026

DOCUMENT CONTROL NUMBER:
TTRF15.231_V1 © 2018 Intertek

Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Building No.86, 1198 Qinzhou Road (North)
Caohejing Development Zone
Shanghai 200233, China

Telephone: 86 21 6127 8200
www.intertek.com

Total Quality. Assured.

TEST REPORT

Report no.: 2605B0467SHA-001

Applicant:	Rollease Acmeda Inc 750 East Main Street, 7th Floor, Stamford CT 06902 United States
Manufacturer:	Rollease Acmeda Inc 750 East Main Street, 7th Floor, Stamford CT 06902 United States

FCC ID:	2AGGZ003B9ACA64
IC:	21769-003B9ACA64

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

47CFR Part 15 (2024): Radio Frequency Devices (Subpart C)

ANSI C63.10 (2020)+Cor.1(2023)+C63.10a(2024)+Errata to C63.10a(2024): American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

RSS-210 Issue 11 (June 2024): Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment

RSS-Gen Issue 5 (April 2018)+A1(March 2019)+A2(February 2021): General Requirements for Compliance of Radio Apparatus

PREPARED BY:	**REVIEWED BY:**
Teddy yin	
Project Engineer Teddy Yin	Reviewer Wakeyou Wang

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Content

REVISION HISTORY **4**

MEASUREMENT RESULT SUMMARY **5**

1 GENERAL INFORMATION **6**

1.1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT) 6
1.2 TECHNICAL SPECIFICATION 6
1.3 DESCRIPTION OF TEST FACILITY 7

2 TEST SPECIFICATIONS **8**

2.1 STANDARDS OR SPECIFICATION 8
2.2 MODE OF OPERATION DURING THE TEST 8
2.3 TEST SOFTWARE LIST 8
2.4 TEST PERIPHERALS LIST 8
2.5 TEST ENVIRONMENT CONDITION: 8
2.6 INSTRUMENT LIST 9
2.7 MEASUREMENT UNCERTAINTY 10

3 FUNDAMENTAL & SPURIOUS EMISSION & RESTRICT BAND RADIATED EMISSION **11**

3.1 LIMIT 11
3.2 MEASUREMENT PROCEDURE 12
3.3 TEST CONFIGURATION 13
3.4 TEST RESULTS OF RADIATED EMISSIONS 15

4 POWER LINE CONDUCTED EMISSION **19**

4.1 LIMIT 19
4.2 TEST CONFIGURATION 19
4.3 MEASUREMENT PROCEDURE 20
4.4 TEST RESULTS OF POWER LINE CONDUCTED EMISSION 21

5 EMISSION BANDWIDTH **22**

5.1 LIMIT 22
5.2 MEASUREMENT PROCEDURE 22
5.3 TEST CONFIGURATION 22
5.4 THE RESULTS 23

6 DEACTIVATING TIME **24**

6.1 TEST LIMIT 24
6.2 TEST CONFIGURATION 24
6.3 TEST PROCEDURE AND TEST SETUP 25
6.4 TEST PROTOCOL 25

7 ANTENNA REQUIREMENT **26**

Revision History

Report No.	Version	Description	Issued Date
2605B0467SHA-001	Rev. 01	Initial issue of report	Jun 2, 2026

Measurement result summary

TEST ITEM	FCC REFERANCE	IC REFERANCE	RESULT
Fundamental & spurious emission &Restrict band radiated emission	15.231(b) 15.209(a) 15.205	RSS-210 A.1.3 RSS-Gen Issue 5 Clause 8.9&8.10	Pass
Power line conducted emission	15.207	RSS-Gen Issue 5 Clause 8.8	NA
Emission bandwidth	15.231(c)	RSS-210 Issue 11 A.1.4 RSS-GEN Issue 5 6.7	Pass
Deactivating time	15.231(a)(1)	RSS-210 Issue 11 A.1.2(a)	Pass
Antenna requirement	15.203	-	Pass

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

3: Additions, Deviations and Exclusions from Standards: None.

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Remote
Type/Model/PMN/HVIN:	MT02-0101-067029, MT02-0101-067030
Description of EUT:	The EUT can transmit 433.92MHz signal. Both models have the fully same RF circuit. MT02-0101-067029 and MT02-0101-067030 are same except that MT02-0101-067029 is 1 channel remote, MT02-0101-067030 is 5 channel remote. 1 channel represents the remote can control 1 motor. 5 channel represents the remote can control 5 motors. MT02-0101-067030 was chosen to perform all tests after review.
Rating:	DC 3V
Category of EUT:	Class B
EUT type:	☒ Table top ☐ Floor standing
Software Version:	/
Hardware Version:	/
Sample Identification No.:	A260508-27-006
Sample received date:	May 11, 2026
Date of test:	May 11~19, 2026

1.2 Technical Specification

Operation Frequency:	433.92MHz
Type of Modulation:	FSK
Product Type:	☐ Mobile ☒ Portable ☐ Fix Location
Channel Number:	1
Antenna Information:	PCB antenna(declared by the manufacturer)

1.3 Description of Test Facility

Name:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L21189
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02

2 TEST SPECIFICATIONS

2.1 Standards or specification

47CFR Part 15 (2024)
ANSI C63.10 (2020)+Cor.1(2023)+C63.10a(2024)+Errata to C63.10a(2024)
RSS-210 Issue 11 (June 2024)
RSS-Gen Issue 5 (April 2018)+A1(March 2019)+A2(February 2021)

2.2 Mode of operation during the test

Within this test report, EUT was tested with modulation and tested under its rating voltage and frequency.
The EUT is a handheld device, so three axes (X, Y, Z) were observed while the test receiver worked as "max hold" continuously and the highest reading among the whole test procedure was recorded.
Compare with the test results that X axis is the worst case.

2.3 Test software list

Test Items	Software	Manufacturer	Version
Conducted emission	ESxS-K1	R&S	V2.1.0
Radiated emission	ES-K1	R&S	V1.71

2.4 Test peripherals list

Item No.	Name	Band and Model	Description
1	/	/	/

2.5 Test environment condition:

Test items	Temperature	Humidity
Fundamental & spurious emission & Restrict band radiated emission	22°C	55% RH
Power line conducted emission	/	/
Emission bandwidth & Deactivating time	22°C	55% RH

2.6 Instrument list

Radiated Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Test Receiver	R&S	ESIB 26	EC 3045	2026-08-05
☒	TRILOG broadband Antenna	Schwarzbeck	VULB9168	EC 6402	2027-04-06
☒	Pre-amplifier	Tonscend	tap01018050	EC 6432-1	2026-12-09
☒	Horn antenna	Tonscend	bha9120d	EC 6432-2	2027-04-10
☒	Semi-anechoic chamber	Albatross	-	EC 3048	2026-07-11
RF test					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Spectrum Analyzer	Keysight	N9030A	EC 5338	2026-05-25
☒	Coaxial cable	ETS	/	/	2026-05-25
Additional instrument					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
☒	Therom-Hygrograph	Testo	175h1	EC 6640	2026-08-29
☒	Therom-Hygrograph	Testo	175h1	EC 6641	2026-08-29
☒	Thermo-Hygrograph	Testo	175h1	EC6642	2026-08-29

2.7 Measurement uncertainty

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Test item	Measurement uncertainty
Maximum peak output power	± 0.74dB
Radiated Emissions in restricted frequency bands below 1GHz	± 4.90dB
Radiated Emissions in restricted frequency bands above 1GHz	± 5.02dB
Emission outside the frequency band	± 2.89dB
Power line conducted emission	± 3.19dB

3 Fundamental & Spurious Emission & Restrict band radiated emission

Test result: **Pass**

3.1 Limit

3.1.1 The emission shall test through the 10th harmonic or to 40GHz, whichever is lower. It must comply with the limits below:

Fundamental Frequency (MHz)	Fundamental limit (uV/m)	Spurious limit (uV/m)
☐ 40.66 – 40.70	2250	225
☐ 70 – 130	1250	125
☐ 130 - 174	1250 to 3750	125 to 375
☐ 174 - 260	3750	375
☒ 260 – 470	3750 to 12500	375 to 1250
☐ Above 470	12500	1250

The formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 56.81818(Frequency) - 6136.3636; for the band 260-470 MHz, uV/m at 3 meters = 41.6667(Frequency) - 7083.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.

For that the EUT use fundamental frequency of 433.925MHz, after calculation, the limit is:

Fundamental limit = 41.6667 * 433.925 - 7083.3333 = 10996.68 uV/m = 80.80dBuV/m
Spurious limit = 81 – 20 = 60.80dBuV/m

//

3.1.2 The radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) showed as below:

Frequency (MHz)	Field Strength (dBuV/m)	Measurement Distance (m)
30 - 88	40.0	3
88 - 216	43.5	3
216 - 960	46.0	3
Above 960	54.0	3

3.2 Measurement Procedure

For Radiated emission below 30MHz:

a) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
b) The EUT was set 3 meters away from the interference-receiving antenna. the lowest height of the magnetic antenna was 1 m above the ground.
c) Both X and Y axes of the antenna are set to make the measurement.
d) For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz:

a) The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b) The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c) The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e) The test-receiver system was set to peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.

2. The resolution bandwidth of test receiver/spectrum analyzer is 100kHz and the video bandwidth is 300kHz for Peak detection (PK) at frequency below 1GHz.

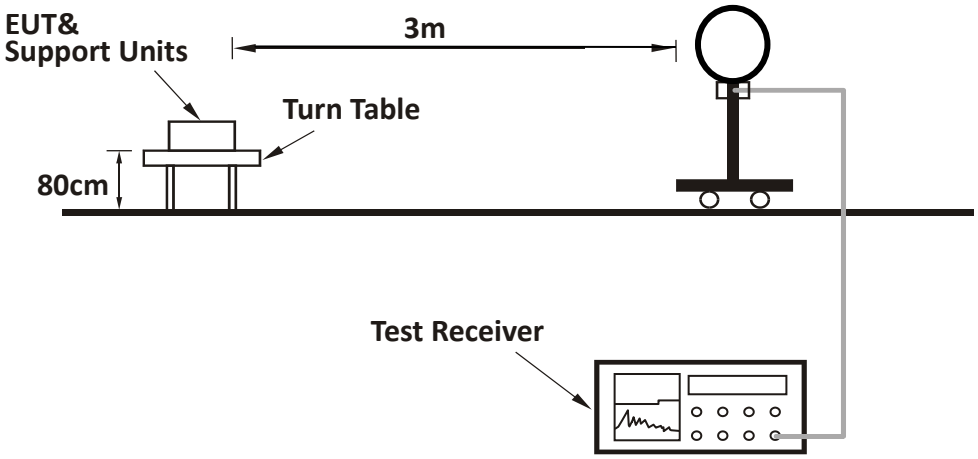
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.

4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 3 x RBW (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.

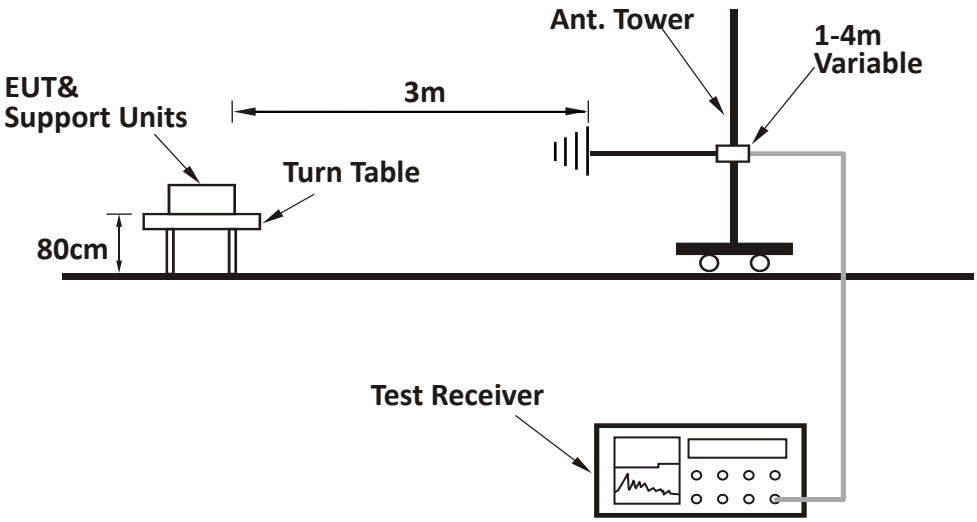
5. All modes of operation were investigated and the worst-case emissions are reported

3.3 Test Configuration

For Radiated emission below 30MHz:

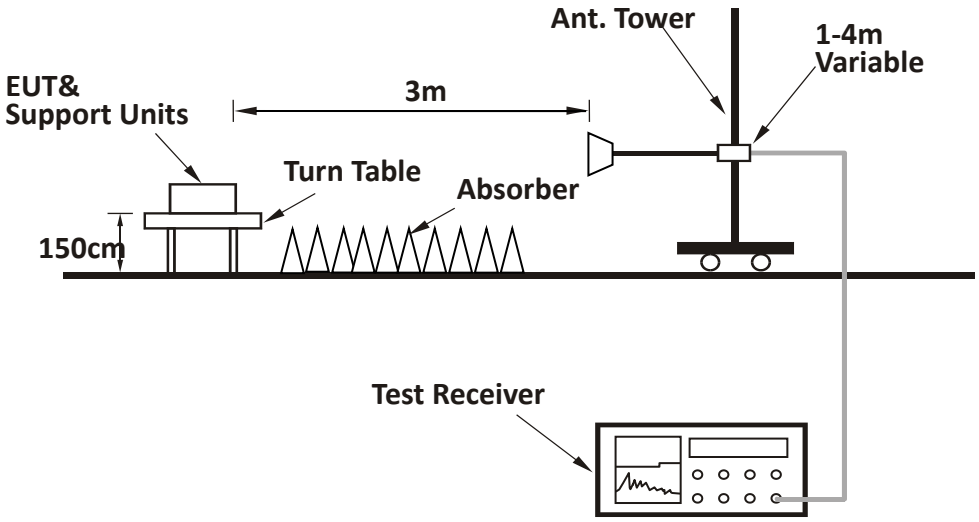


For Radiated emission 30MHz to 1GHz:



TEST REPORT

For Radiated emission above 1GHz:

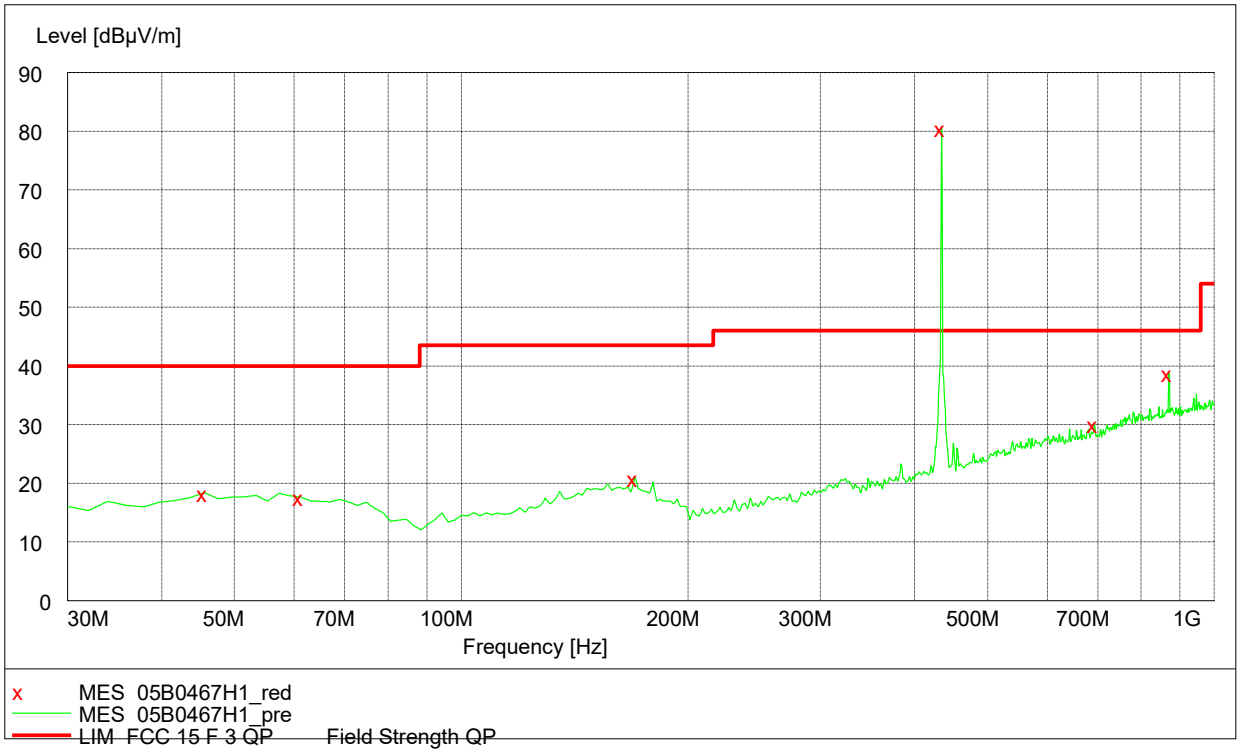


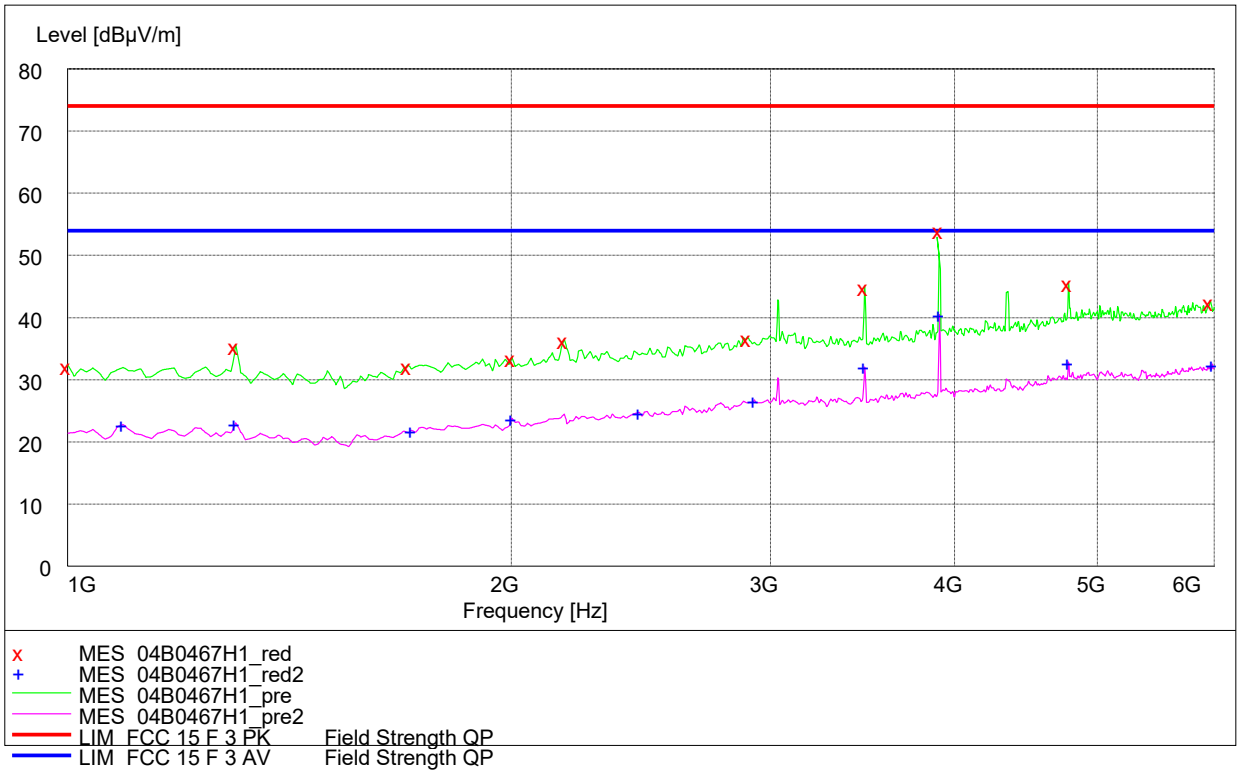
3.4 Test Results of Radiated Emissions

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

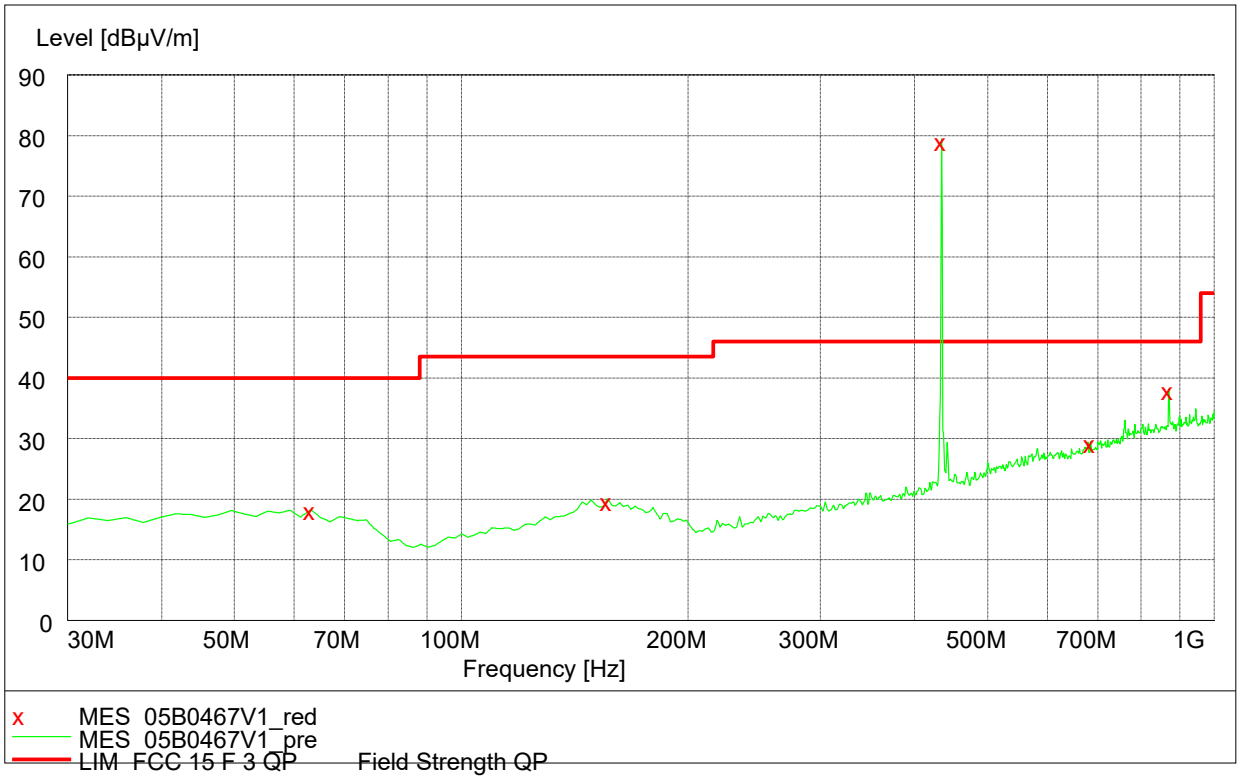
All keys were pre-tested, and the "^"key is the worst case.

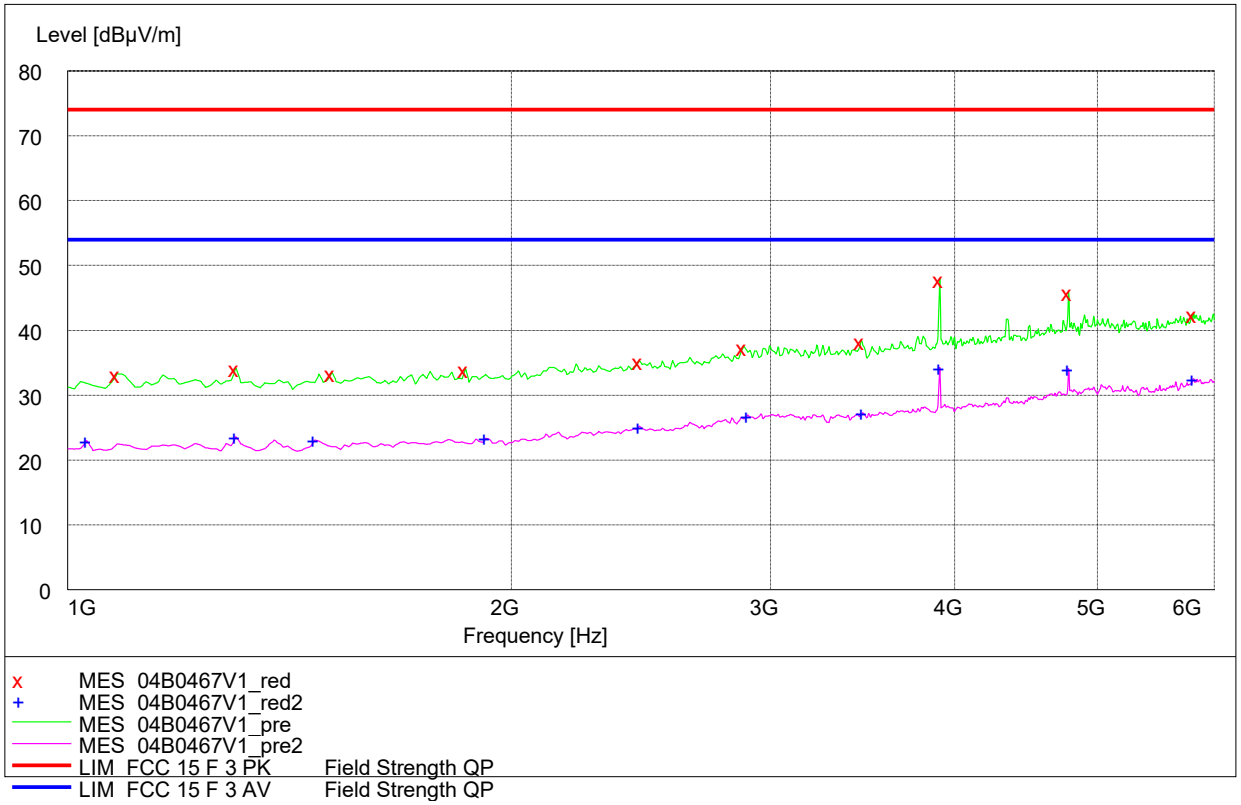
Horizontal





Vertical


Level [dBµV/m]
90
80
70
60
50
40
30
20
10
0
30M
50M
70M
100M
200M
300M
500M
700M
1G
Frequency [Hz]
MES 05B0467V1_red
MES 05B0467V1_pre
LIM FCC 15 F 3 QP Field Strength QP


Level [dBµV/m]
80
70
60
50
40
30
20
10
0
1G
2G
3G
4G
5G
6G
Frequency [Hz]
MES 04B0467V1_red
MES 04B0467V1_red2
MES 04B0467V1_pre
MES 04B0467V1_pre2
LIM FCC 15 F 3 PK Field Strength QP
LIM FCC 15 F 3 AV Field Strength QP

Test data:

Polarization	Frequency (MHz)	Corrected Reading (dBμV/m)	Correct Factor (dB/m)	Limits (dBμV/m)	Margin (dB)	Detector
H	433.92	80.50	18.50	100.80	20.30	PK
	867.84	38.80	26.00	80.80	42.00	PK
	3471.36	45.00	-17.30	80.80	35.80	PK
	3905.28	53.40	-16.00	74.00	20.60	PK
	4773.12	45.60	-13.00	74.00	28.40	PK
V	433.92	79.40	18.50	100.80	21.40	PK
	867.84	38.20	26.00	80.80	42.60	PK
	3905.28	48.10	-16.00	74.00	25.90	PK
	4773.12	46.30	-13.00	74.00	27.70	PK

Remark: 1. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz), the value was added to Original Receiver Reading by the software automatically.

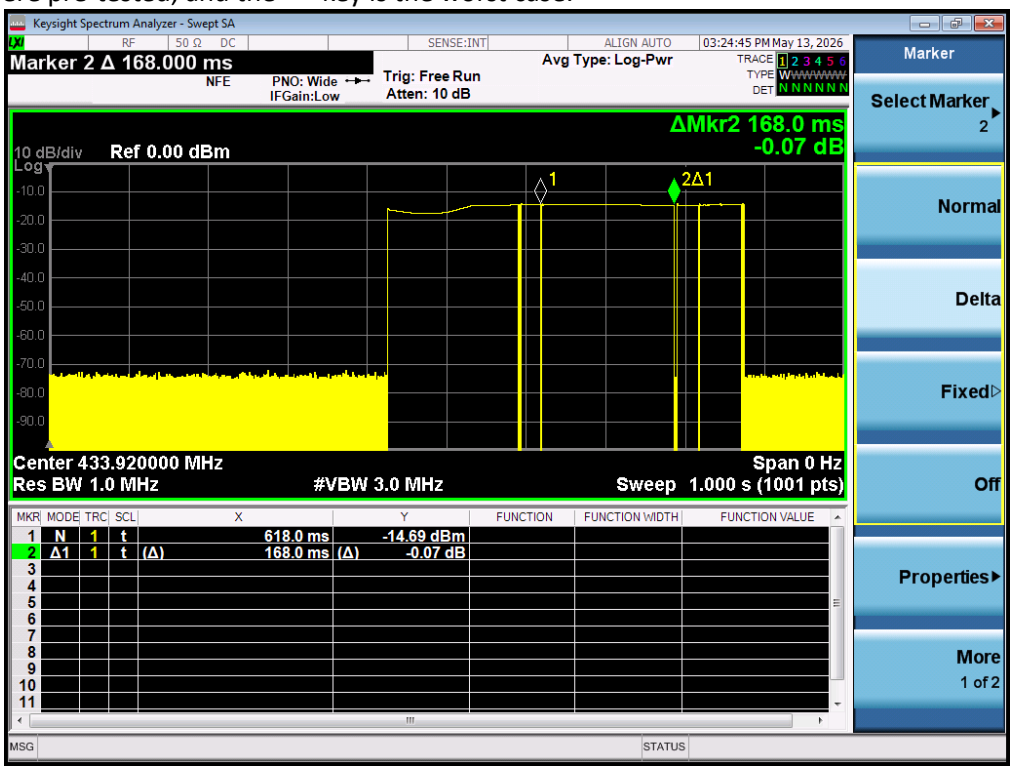
2. Corrected Reading = Original Receiver Reading + Correct Factor
3. Margin = Limit - Corrected Reading
4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10.00dBuV,
Limit = 40.00dBuV/m.
Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m;
Corrected Reading = 10dBuV + 0.20dB/m = 10.20dBuV/m;
Margin = 40.00dBuV/m - 10.20dBuV/m = 29.80dB.

TEST REPORT

Duty Cycle:

The test data with maximum duty cycle was listed below.
Because the pulse train is periodic with a period exceeding 100ms, and the maximum “on time” is over 100ms.
The worst Duty cycle =1
All keys were pre-tested, and the “^”key is the worst case.



Calculating the AV value according to the duty cycle

Antenna	Frequency (MHz)	PK Reading (dBuV/m)	Correct Factor (dB)	AV Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)
H	433.92	80.50	0	80.50	80.80	0.30
H	867.84	38.80		38.80	60.80	22.00
H	3471.36	45.00		45.00	60.80	15.80
H	3905.28	53.40		53.40	54.00	0.60
H	4773.12	45.60		45.60	54.00	8.40
V	433.92	79.40		79.40	80.80	1.40
V	867.84	38.20		38.20	60.80	22.60
V	3905.28	48.10		48.10	54.00	5.90
V	4773.12	46.30		46.30	54.00	7.70

Remark:
1. Correct Factor = 20lg (duty cycle) = 20lg (1) = 0;
2. AV Reading = PK Reading + Correct Factor;
3. Margin = limit - AV Reading.

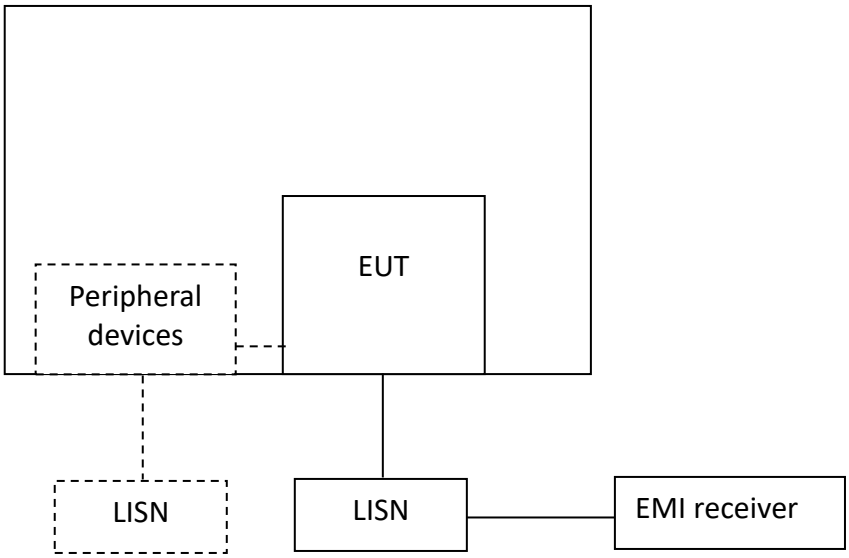
4 Power line conducted emission

Test result: **NA**

4.1 Limit

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	QP	AV
0.15-0.5	66 to 56*	56 to 46 *
0.5-5	56	46
5-30	60	50
* Decreases with the logarithm of the frequency.		

4.2 Test Configuration



4.3 Measurement Procedure

Measured levels of ac power-line conducted emission shall be the emission voltages from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), where permitted, terminated into a 50 Ω measuring instrument. All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer. For those measurements using a LISN, the 50 Ω measuring port is terminated by a measuring instrument having 50 Ω input impedance. All other ports are terminated in 50 Ω loads.

Tabletop devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor-standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

The bandwidth of the test receiver is set at 9 kHz.

4.4 Test Results of Power line conducted emission

Remark: 1. Factor = LISN Factor + Cable Loss, the value was added to Original Receiver Reading by the software automatically.
2. Level = Original Receiver Reading + Factor
3. Delta = Level- Limit
4. If the PK Corrected Reading is lower than AV limit, the AV test can be elided.

5 Emission Bandwidth

Test result: **Pass**

5.1 Limit

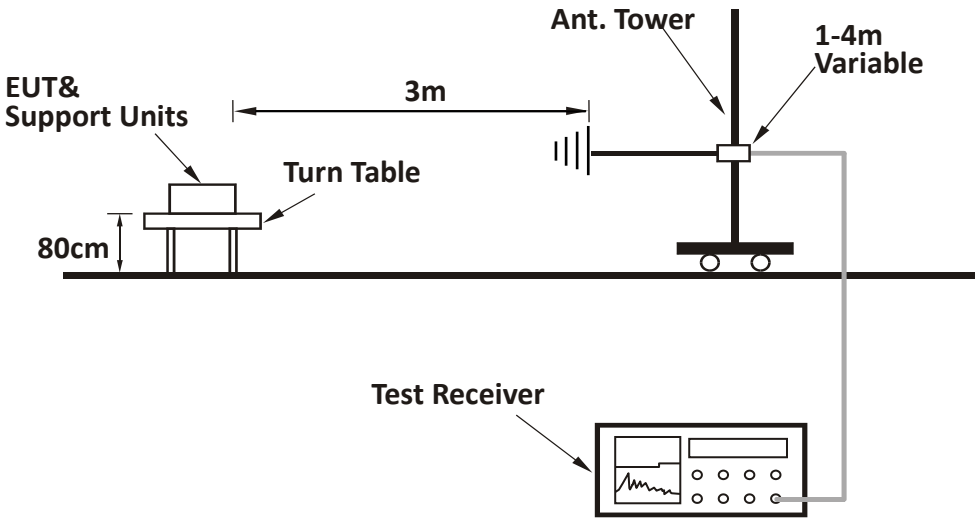
The bandwidth of the emission shall be no wider than 0.25 % of the center frequency for devices operating above 70MHz and below 900MHz. For devices operating above 900 MHz, the 99% bandwidth shall be less or equal to 0.5% of the center frequency.

The limit for the EUT = 0.25% * 433.92 MHz = 1085 kHz

5.2 Measurement Procedure

The EUT and simulators were placed on a 0.8m high wooden turntable above the horizontal metal ground plane. The turn table 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 mast. The antenna moved up and down between from 1meter to 4 meters to find out the maximum emission level.
The central frequency of test receiver was set near the operating frequency of EUT.
The test was conducted using the Spectrum Analyzer with the resolutions bandwidth set at 1kHz, the video bandwidth set at 3kHz.

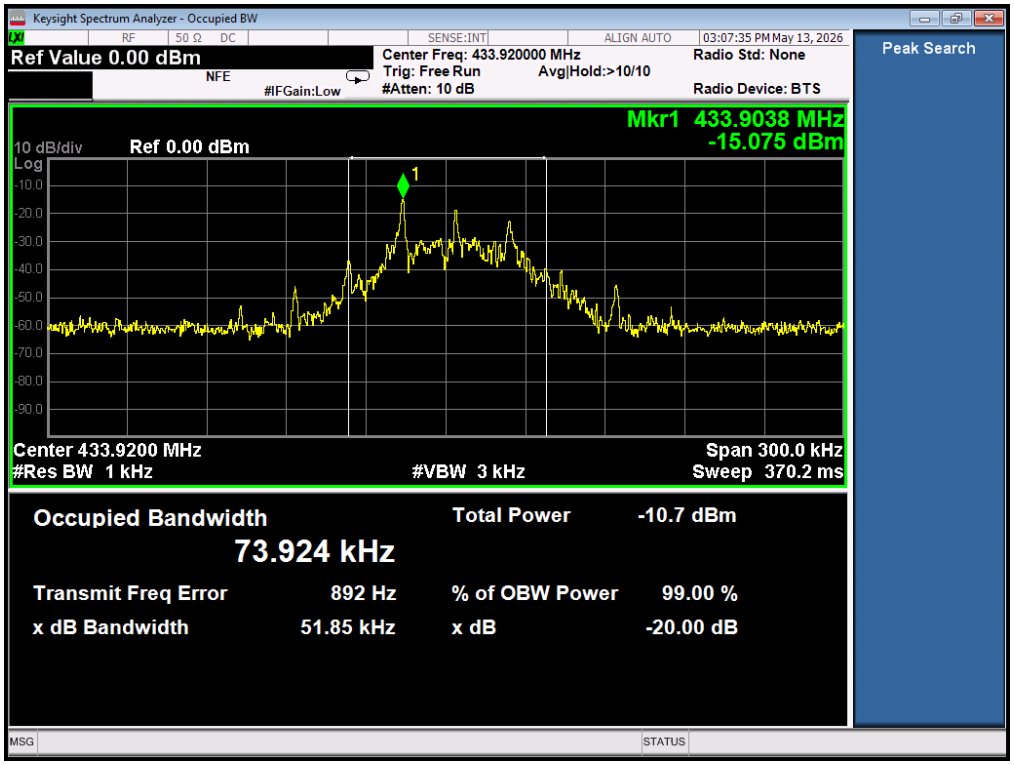
5.3 Test Configuration



5.4 The results

All keys were pre-tested, and the “^”key is the worst case.

Frequency (MHz)	20dB Bandwidth (kHz)	99% Bandwidth (kHz)
433.92	51.85	73.924
Limit	1085	1085
Result	**Complied**	**Complied**



6 Deactivating time

Test result: **Pass**

6.1 Test limit

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

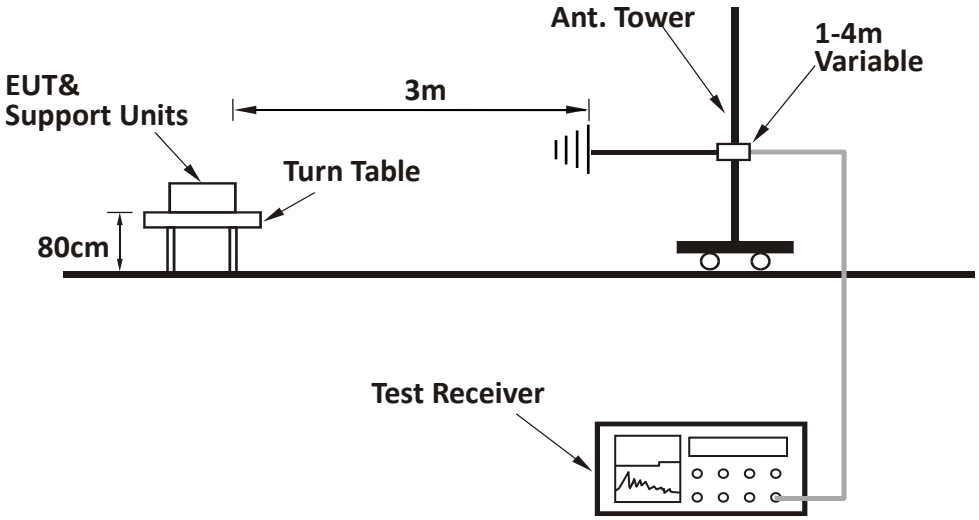
☐ (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.

☐ (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 (1) and (2) above, provided such transmission 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.

6.2 Test Configuration

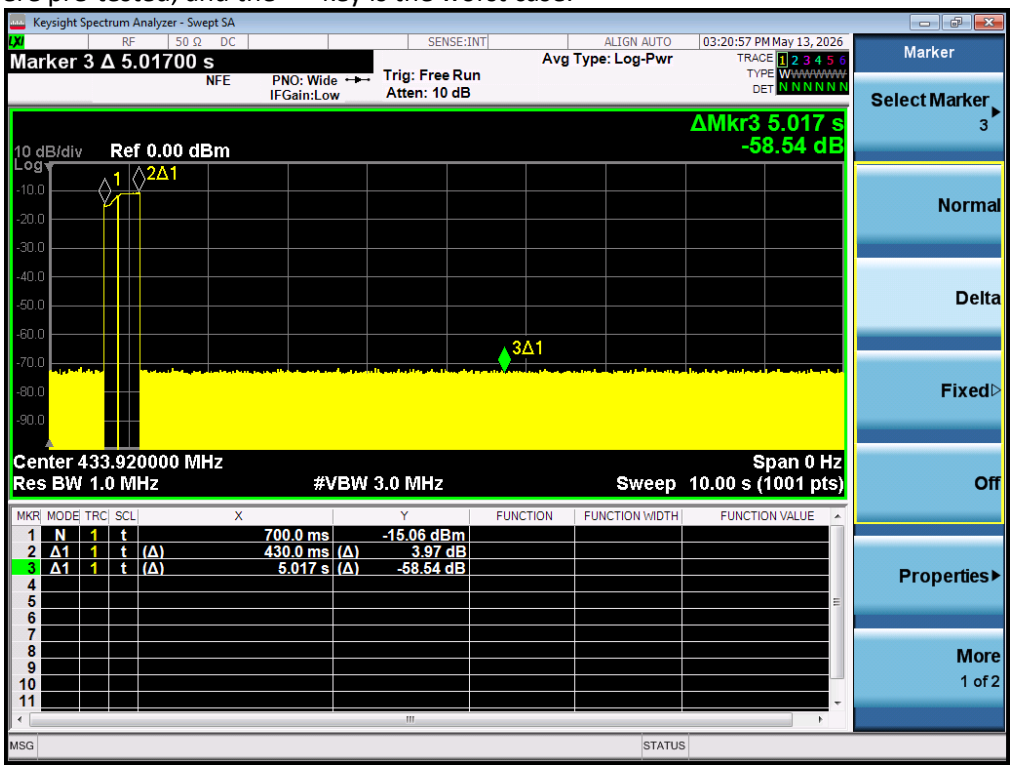


6.3 Test procedure and test setup

The measurement was applied in a semi-anechoic chamber.
The central frequency of test receiver was set as the operating frequency of EUT and the Span was set as 0.
The EUT was switched once. The test receiver recorded the whole time from the triggered moment to the time of stopping radiating. For manual switching, to avoid uncertainty, the operating above would be repeated five times and the worst data is recorded.

6.4 Test protocol

Whole time from the triggered moment to the time of stopping radiating: 430ms.
As a result, the EUT complies with the limit of 5s' deactivating time.
All keys were pre-tested, and the "^"key is the worst case.



7 Antenna requirement

Requirement:
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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

Result:
EUT uses permanently PCB antenna to the intentional radiator, so it can comply with the provisions of this section.

********** END **********